PROPANE EQUIPMENT AND COMPRESSED GAS PRODUCTS EDITION 11

PROPANE INSTALLATION EQUIPMENT

- PLANT, FILL STATION,
 - **TRANSPORT & BOBTAIL**
- COMMERCIAL HEATING EQUIPMENT
- COMPRESSED GAS EQUIPMENT

FISHER® LOC 870



RAY MURRAY, INC. COMPLETE CUSTOMER CARE



RAY MURRAY, INC. GAS EQUIPMENT HEATING & HEARTH DISTRIBUTORS

Back Row: Jim Murray, Co-Chair, Michael Hopsicker, President & CEO Front Row: Raymond B. Murray, Co-Chair, John Murray

To Our Friends and Customers,

We are pleased to provide this new RMI warehouse catalog as a valuable resource for you and your company.

This new and improved catalog contains the largest selection of gas equipment products available to the propane industry. New this year, we have added an entire section that includes the largest selection of products for the industrial compressed gas, specialty gas and medical gases industries.

Please also refer to our online catalog where you can order products, check pricing and review delivery or stock status from your RMI account. This can be accessed through our website at www.raymurray.com.

At RMI we believe in continuous improvement and are working hard every day to be your #1 gas equipment supplier. By stocking over 19,000 products in 140,000 square feet of warehouse, we have the highest stocking levels and service rate of on time shipments in the industry!

Another benefit of doing business with RMI is access to our Technical and Installation Support, customer service and training resources. Our factory-trained team of hands-on, long-time industry professionals stands ready to assist you through any situation you face. The Customer Service staff is the most knowledgeable in the industry with weekly training on our products. Our highly experienced Sales Team continues to grow and regularly meet with you to help identify challenges you face and support your everyday gas equipment needs.

So you see, we at RMI are working hard to bring you the industry-best products and desirable value-added services. From customer service and technical support, state of the art systems and e-commerce capability to sales and marketing support, it is our goal to earn your business and friendship by meeting your needs each and every day. We call that Complete Customer Care! We thank you for your business, and all that we continue to accomplish together.

Sincerely,

Ray, Jim, John, Mike and the entire RMI team!

RMI'S LP PRODUCTS CATALOG IS THE MOST COMPREHENSIVE IN THE PROPANE INDUSTRY SEE OUR BRAND NEW COMPRESSED GAS PRODUCTS SECTION ON PAGES 196-258

FACILITIES

Our facilities have evolved into modern warehousing and inventory systems enabling us to act quickly in moving your order faster and more efficiently than anyone in the industry.



50 Limestone Road, Lee, MA



1443 Wells Drive, Bensalem, PA



4411 Pier N. Blvd, Flint, MI

THE RMI TEAM

PRINCIPAL OWNERS

Ray Murray Inc. is dedicated to proactively participating in the growth of:

- Our Customers' businesses
- The Propane, Hearth, Heating, Outdoor
- Living and Energy Industries
- Our Team and each Team member

We recognize that advancements in all three areas are critical to our company's success. Dedication and creativity of our loyal employees, many with 5, 10, 15, 20, 25 and over 35 years of service create the core of our achievements toward these goals.



Ray III, John, Jim Murray and Mike Hopsicker

PRODUCT MANAGEMENT & TECHNICAL SERVICES

Our Product Management and Technical Service Teams have a long list of licenses, degrees, certifications and recognitions. They provide professional product application information and complete installation support unmatched in the industries that we serve.



Materials Management From left: *Dennis, York* Bottom: *Brenda, Tina*



From left: Jon G, John M, Mark J

Bottom: Jack, Linsey



Technical Services From left: Dennis, Geoff, Jan, Keith

CUSTOMER SERVICE

Our Customer Service Team takes pride in their product knowledge, continual learning experiences and the challenges they face each day. Their substantial knowledge is balanced with helpful and friendly personalities focused on serving the Customer first and foremost.

Our founder, Ray Murray Sr., always said "If you're not helping a customer, help someone who is." Our Customer Service Team lives this philosophy every day.



Customer Service - Lee, MA From left: *Ken, Jessica, Debbie, Brenda, Burt, Jay,* Bottom: *Fran, Lynne*



Customer Service - Bensalem, PA From left: Tom, Lisa, Carol



Customer Service - Flint, MI From left: Stacey, Pam, Darla

THE RMI TEAM

SALES & MARKETING

Our Sales and Marketing Team partner with Customers in the mission to grow their business. Through decades in business, this group has developed a consistency and dependability that many Customers recognize as critical in their commitment together. It's a plus that they are just great people, too.





Pete Anderson Director of Sales MI



Cassandra Barry MA, CT, RI, E. LI



Paul Bolduc WI, IL, U.P. MI



IN, Chicago,

W. KY



IN, OH, KY



Greg Dengler NJ, MD E. Shore, DE, SE. PA



Mark Dennis VA, WV, W. MD



Larry Doughty ME, NH, VT OH, E. KY,



Woody Marcus Detroit, W. PA



Jim Mazur W. & C. NY, N. & W. PA



Bob Rosenbaum E. NY, W. LI, NYC



Neal Russell **OEM Sales**

WAREHOUSE

Our Warehouse Teams pride themselves on the accuracy and speed with which they move your order out the door. Our in-house goal is picking, packing and shipping within just four business hours from the time you order, and we measure it with every package we ship. We invite you to visit us and learn more about how we measure our performance in providing unmatched service to our Customers.



Lee. MA From left: Tony, Joe, BoB T., Scott, Vinnie, Mark, Bob J., Rob, Bruce

ADMINISTRATIVE SERVICES

Our Customer-dedicated Administrative Services Team offers responsive and accurate account information to fulfill any Customer needs.



Bensalem, PA From left: Dave, Beverly, Hank, Greg



Flint, MI From left: Bob, Tom, Matt, Doug



Administrative Services - Lee, MA From left: Kim, Keith, Chris C. Bottom: Sue, Kathy, Chris J. Inset: Debbie



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Fisher First Stage Regulators





R122H

FISHER R122H COMPACT REGULATOR

Designed for use as a first-stage regulator for domestic applications, the R122H's size makes it perfect for tight installations. Stainless steel internal parts and corrosion resistant coatings provide a Recommended Replacement Life of 20 years. Its non-adjustable set point makes the unit virtually tamper proof. Inlet and outlet gauge taps allow easy system testing. Large inlet and outlet wrench flats provide for easy installation, even in underground tanks. The design's superior relief performance exceeds UL requirements and provides double failure overpressure protection when used with a Fisher R600 second-stage regulator. The vent is threaded with 3/8 NPT for easy installation of vent piping. The large orifice assists in minimizing freeze problems.

FIRST STAGE REGULATORS, HIGH PRESSURE DOMESTIC-COMMERCIAL

RMI Part No.	Inlet Connection	Outlet Connection	Adjustment Range, PSIG	Pressure Setting, PSIG	Vent Location	Capacity BTU/hr	Internal Relief/Valve
R122H-AAJ	1⁄4" FNPT	½" FNPT	Non- adjustable	10	Above outlet w/ screen	1,100,000	Yes
R122H-AAXB	1⁄4" FNPT	½" FNPT	Non- adjustable	10	90° from outlet	1,100,000	Yes



FISHER R622H HIGH PERFORMANCE REGULATOR

Time proven design constructed of corrosion-resistant and wear-resistant materials, the R622H is designed to provide a Recommended Replacement Life of 20 years. Built-in $1/_8$ " FNPT gauge taps on both the inlet and outlet pressure sides allow for easy system checks. A large $3/_4$ " FNPT drip-lip vent reduces the chance of blockage by freezing rain or sleet when properly installed with the vent pointing down. Each R622H is equipped for overpressure protection with a corrosion-resistant internal relief valve that provides high capacity relief and a travel stop on the closing cap.



RMI Part No.	Inlet Connection	Outlet Connection	Adjustment Range, PSIG	Pressure Setting, PSIG	Vent Location	Capacity BTU/hr	Internal Relief/Valve	
R622H-HGK	FPOL	½" FNPT			¾" threaded	2,000,000		
R622H-JGK	FPOL	3⁄4" FNPT	4-6	6 5	& screened over outlet	2,250,000	Yes	
R622H-BGK	1⁄2" FNPT	½" FNPT				2,000,000		
R622H-HGJ	FPOL	1⁄₂" FNPT				2,100,000	Yes	
R622H-JGJ	FPOL	³ ⁄4" FNPT	8-12	10	³ / ₄ " threaded	2,250,000		
R622H-BGJ	¹⁄₂" FNPT	½" FNPT			& screened over outlet	2,100,000		
R622H-DGJ	34" FNPT	3⁄4" FNPT				2,400,000		

FIRST STAGE REGULATORS, HIGH PRESSURE DOMESTIC-COMMERCIAL

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance



Fisher Second Stage Regulators



FISHER COMPACT R222 REGULATOR

Recommended Replacement Life of 20 years.

The R222 Second-Stage regulator is a UL listed regulator designed to reduce the outlet pressure from a First-Stage regulator, to 11 inches WC in domestic installations. Vents are screened with standard orientation over the inlet. Fisher Second-Stage regulators are painted palm green for easy identification. The Fisher Type R222 is equipped with a stainless steel inlet screen to reduce the amount of debris entering the regulator.



R222

The R222 is designed for small domestic applications up to 650,000 BTU/HR.

FISHER COMPACT SECOND STAGE REGULATORS										
RMI Part No.	Inlet Connection	Outlet Connection	Adjustment Range	Pressure Setting	Vent Location	Orifice Size	Capacity BTU/HR*	High Capacity Relief		
R222-BAF	½" FNPT	½" FNPT	9.5 - 13" WC	11" WC	over inlet	.14"	650,000	Yes		







R642 **Right Angle Body Design**



Back Outlet Body Design

Tel: 800-628-5044



R600 SERIES HIGH PERFORMANCE SECOND-STAGE REGULATORS

The time-proven design, constructed from corrosion-resistant materials, provides a Recommended Replacement Life of 20 years.

- Type R600 Series contains an oversized relief valve and a large 3/4" screened vent to limit downstream pressure to less than 2 PSIG (0.14 bar) even in an overpressure situation as required by NFPA 58. The relief valve design exceeds the industry standard by limiting the downstream pressure to 2 PSIG (0.14 bar) even in double failure situation when used with a Fisher Type 622H or R122H First-Stage regulator.
- For easy system checks, the Type R600 has 1/8" built-in NPT gauge taps, orificed to a No. 54 drill size, on both the upstream and downstream sides.

FISHER DOMESTIC SECOND STAGE REGULATORS

Inlet Connection	Outlet Connection	Adjustment Range	Pressure Setting	Vent Location	Orifice Size	Capacity BTU/HR*	High Capacity Relief					
½" FNPT	½" FNPT				^{3/} 16"	875,000						
½" FNPT	¾" FNPT			over inlet ¾"								
¾" FNPT	3/4" FNPT					1 400 000						
½" FNPT	3/4" FNPT	0 5 12" M/C	0 5 12" WC	0 5 12" WC	0 5 10 100	0 5 10" WC	0 5 10" WC	11 100	over outlet		1,400,000	Yes**
½" FNPT	¾" FNPT	9.5 - 15 WU	II WO	90º, side	¹³ / ₆₄ "		res					
¾" FNPT	3/4" 90º SIDE					900,000						
½" FNPT	¾" BACK		over inlet ¾"		1 000 000							
34" FNPT	¾" BACK					1,000,000						
	Connection ½" FNPT ½" FNPT ¾" FNPT ½" FNPT	Inlet Connection Outlet Connection ½" FNPT ½" FNPT ½" FNPT ¾" FNPT ¾" FNPT ¾" FNPT ¾" FNPT ¾" FNPT ½" FNPT ¾" FNPT ½" FNPT ¾" FNPT ½" FNPT ¾" FNPT ½" FNPT ¾" FNPT ¾" FNPT ¾" SNPT ¾" FNPT ¾" SNPT ¾" FNPT ¾" SNPT ¾" FNPT ¾" BACK	Inlet Connection Outlet Connection Adjustment Range ½" FNPT ½" FNPT ½" FNPT ¾" FNPT ¾" FNPT ¾" FNPT ¾" FNPT ¾" FNPT ½" FNPT ¾" FNPT ¾" FNPT ¾" FNPT ¾" FNPT ¾" FNPT ¾" FNPT ¾" SNPT ¾" FNPT ¾" SNPT ¾" FNPT ¾" SNPT ¾" FNPT ¾" SNPT ¾" FNPT ¾" SNACK	Inlet Connection Outlet Connection Adjustment Range Pressure Setting ½" FNPT ½" FNPT ½" FNPT ½" FNPT ½" FNPT ¾" FNPT ¾" FNPT ¾" FNPT ¾" FNPT ½" FNPT ½" FNPT ¾" FNPT ½" FNPT ¾" FNPT ¾" FNPT ¾" FNPT ¾" FNPT ¾" SNPT ¾" FNPT ¾" SNPT ¾" FNPT ¾" SNPT ¾" FNPT ¾" SACK	Inlet ConnectionOutlet ConnectionAdjustment RangePressure SettingVent Location½" FNPT½" FNPT½" FNPT ½" FNPT 4" FNPT over inlet ¾"½" FNPT¾" FNPT¾" FNPT ¾" FNPT 9.5 - 13" WC Over outlet½" FNPT¾" FNPT¾" FNPT 90°, side¾" FNPT¾" SNPT¾" SNPT over inlet ¾"¾" FNPT¾" SACK over inlet ¾"	Inlet ConnectionOutlet ConnectionAdjustment RangePressure SettingVent LocationOrifice Size½" FNPT½" FNPT½" FNPT¾" FNPT¾" FNPT½" FNPT¾" FNPT¾" FNPT¾" FNPT¾" FNPT½" FNPT¾" FNPT¾" FNPT9.5 - 13" WC11" WCOver outlet 90°, side¾%4"¾" FNPT¾" 90° SIDE11" WCOver outlet 90°, side¾%4"½" FNPT¾" BACKover inlet ¾"	Inlet ConnectionOutlet ConnectionAdjustment RangePressure SettingVent LocationOrifice SizeCapacity BTU/HR*½" FNPT½" FNPT½" FNPT4" FNPT875,000½" FNPT¾" FNPT¾" FNPT9.5 - 13" WCover inlet ¾"11" WC0ver outlet 90°, side1,400,000½" FNPT¾" FNPT¾" FNPT9.5 - 13" WC0ver inlet ¾"90°, side900,000½" FNPT¾" SNPT¾" SACK0ver inlet ¾"1,000,000					

*Based on 10 PSI inlet - 20% droop.

**Full capacity relief limits delivery pressure to 2 PSI with a 20 PSI inlet pressure.

2

RAY MURRAY, INC. Order online at www.raymurray.com

or call for personal assistance

3 Fisher Integral Two Stage Regulators







R632A

RMI Part No.	Inlet Connection	Outlet Connection	Adjustment Range	Vent Size	Vent Location	Capacity BTU/HR*	High Capacity Relief		
R632A-BCF	1⁄4" FNPT	1/2" FNPT			Over Outlet	700,000			
R632A-HCF	FPOL	½" FNPT	9.5-13" WC	9.5-13" WC			Over Outlet	700,000	
R632A-JFF	FPOL	34" FNPT			¾" FNPT	Over Outlet	750,000	Yes**	
R632A-BCFXA	1/4" FNPT	½" FNPT			94 FINPI	90° Side	700,000	(See Below)	
R632A-CFF	1/4" FNPT	34" FNPT			Over Outlet	750,000			
R632A-CFFXA	1/4" FNPT	¾" FNPT			90° Side	750,000			

*Based on 30 PSI inlet-20% droop

**Full capacity relief limits delivery pressure to 2 PSI with a 20 PSI inlet pressure.

FISHER INTEGRAL TWO-STAGE REGULATORS

Integral two-stage units combine a first stage and second stage regulator into one compact unit. Recommended for installations where piping distance is short.

- Reduced freezing problems
- Improved regulation
- R632A typical uses: on-site cylinder, mobile homes, average domestic service.
- High capacity relief valve.
- First and second stage ¹/₈" pressure taps.
- 5 year warranty
- 20 year recommended replacement life





R232A



Compact two-stage regulator provides excellent performance for small domestic installations. Features include:

- Two 1/8" NPT taps for pressure checks
- Inlet screen reduces debris entering the regulator
- 1/2" outlet provides high BTU capacity for a compact regulator

FISHER DOMESTIC TWO STAGE REGULATO	FISHER	DOMESTIC	TWO	STAGE	REGULATOR	S
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RMI Part No.	Inlet Connection	Outlet Connection	Pressure Setting	Vent Location	Capacity BTU/HR*
R232A-BBF	¼" FNPT	¹ ⁄₂" FNPT	9.5 - 13" WC	outlet	
R232A-BBFXA	74 FINFI			side	450,000
R232A-HBF	FPOL			outlet	430,000
R232A-HBFXA	FPUL			side	





Package with R622H First Stage

FISHER TWO-STAGE REGULATOR PACKAGES

Convenient packaging of the regulators and connectors needed for most bulk installation. Also provides for simple inventory control.

RMI Kit No.	1st Stage Regulator	2nd Stage Regulator	Hogtail	Adapter	Kit BTU Capacity
R622-BCFPA		R622-BCF		858	875,000
R622H-BKP	R622H-HGJ	R622-BCF	1680-12		875,000
R622-CFFPB	R122H-AAJ	R622-CFF		858	1,400,000
R622-CFFPA	R622H-HGJ	R622-CFF	1680-12		1,400,000
R652-DFFPA	R122H-AAJ	R652-DFF		858	1,000,000

Fax: 800-243-8341

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

Fisher High Pressure Adjustable Regulators



ADJUSTABLE REGULATORS Basic high pressure regulator. Available with wrench or

handwheel adjustment for liquid or vapor service used for torches, heaters, flame cultivators.

Adjustment		Inlet Pressure Outlet Setting		Adjustable Range	Capacity BTU/HR	
Handwheel	Wrench	Uuliel	Setting	naliye	DIU/IIN	
67CH-751	67CW-683	14" FNPT	15#	3-20#	675,000	
67CH-743	67CW-684	14" FNPT	20#	3-35#	750,000	
67CH-742	67CW-685	14" FNPT	40#	30-60#	1,200,000	
67CH-741	67CW-701	14" FNPT	50#	50-135#	1,000,000	





FISHER TYPE 67 ADJUSTABLE REGULATOR KIT

Adjustable regulators include POL inlet adaptor & pressure gauge installed.

Fisher Part No.	Inlet	Outlet	Pressure Range	Capacity BTU/HR
67CH-90	MPOL	14" FNPT	3-35#	750,000
67CH-150*	MPOL	¹ /4" FNPT	30-60#	1,200,000
67CH-62	MPOL	14" FNPT	50-135#	950,000
*9/16" I H a	dantor in	kit		-

FISHER



FISHER TYPE 67CD ADJUSTABLE REGULATORS

- 67CD Outlet pressure calibrated on regulator side for easy adjustment.
- Pressure scale on handwheel
- 1/4" tap for pressure gauge.

Fisher Part No.	Inlet Outlet	Adjustable Range	Capacity BTU/HR
67CD-101	¹ /4" FNPT	5-30#	750,000
67CD-102	1/4" FNPT	20-50#	1,200,000
67CD-103	¹ /4" FNPT	40-100#	1,000,000

Tel: 800-628-5044

FISHER

FISHER TYPE 67 NON-ADJUSTABLE REGULATOR

67CN Non-adjustable outlet setting for tamper-proof adjustment.



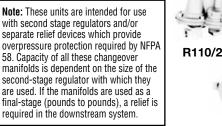
RMI Part No.	Inlet Outlet	Pressure Setting	Capacity BTU/HR
67CN-106	14" FNPT	10#	400,000
67CN-104	1/4" FNPT	15#	600,000
67CN-105	14" FNPT	20#	700,000

FISHER 25 LB. REGULATOR FOR USE W/ CONSTRUCTION HEATERS

RMI Part No.	Inlet	Outlet	PSI	Capacity BTU/HR	
67CW-120	POL	% ₁₆ " - 18LH	25#	750,000	67CW-120

AUTOMATIC CHANGEOVERS

Fisher changeover manifolds are designed for multi-tank installations and are combined with a second stage regulator to provide a complete unit for recreational, domestic, and commercial applications.





RMI Part No.	Inlet	Outlet	Supply	Outlet Reserve	Pressure Capacity
R110/21	¼" Inv. Fl.	1⁄4" FNPT	15 PSI	7 PSI	500,000
749B/21	¹½" FNPT	½" FNPT	15 PSI	5 PSI	1,500,000

SINGLE STAGE REGULATORS FOR **FISHER GRILLS & PORTABLE APPLIANCES**



FISHER "LITTLE JOE"

Fisher 'Little Joe' 912 series has been popular for years. Large orifice minimizes freeze-ups, rugged construction insures long dependable service life. For use on small portable appliances and outdoor cooking appliances.

RMI Part No.	Inlet	Outlet	Pressure Setting	Vent	Capacity BTU/HR*
912/101	1⁄4" NPT	3%" NPT	11'' WC	Over Outlet	220,000
912/122	MPOL	3%" NPT	11'' WC	Over Outlet	220,000

NOTE: Single stage regulators do not meet the code for use on RV's or domestic installations

ATORS

RAY MURRAY, INC.

Order online at www.raymurray.com or call for personal assistance

5 Fisher High Pressure Commercial Regulators

FISHER TYPE 64





Type 64 high pressure adjustable regulator used for high pressure burners as crop dryers or industrial burners. Suitable for liquid under 150° F. Does not have internal relief valve. Separate relief valve may be required by NFPA-58.

Type 64SR High pressure adjustable regulator with a built-in relief valve. Applications include high pressure burners in crop dryers and tobacco curers. Not suitable for liquid. May also be used as a first stage regulator when set at 10 PSIG or less.



FISHER TYPE 64 & 64SR REGULATORS

Standard RMI Part No.	Part No. w/ Relief Valve	iniet & Outlet	Pressure Setting	Pressure Range, PSI	Capacity* BTU/HR
64/33	64SR/21	½" FNPT	10	3-15	2,625,000
-	64SR/22	½" FNPT	15	5-20	3,000,000
64/35	64SR/23	½" FNPT	20	5-35	3,600,000
64/36		½" FNPT	40	30-60	4,150,000
64/222		1⁄₂" FNPT	50	35-100	5,250,000

*Based on inlet pressure 20# over outlet pressure with 20% droop.



FISHER 627

A popular regulator for many commercial and industrial loads. Field-proven over the years, reliable performance within their capacity range. Additional overpressure protection typically required.





FISHER 630 A high capacity regulator which offers reliable performance for large load commercial and industrial applications.



FISHER TYPE 99

A pilot-operated regulator, keeps constant outlet pressure with varying inlet pressure and flows, used as first, second or single stage service.

Fax: 800-243-8341

RMI Part No.	Inlet /Outlet Connection	Orifice Size	Pressure Range, PSI	Pressure Setting, PSI	Internal Relief Valve	Capacity BTU/HR
627/5810	3/4"	3⁄8"	5-20	10	No	6,080,000
627/6210	3/4"	1/2"	5-20	10	No	10,755,000
627R-117	3⁄4"	1/2"	5-20	10	Yes	10,755,000
627/7710	1"	1/2"	5-20	10	No	10,773,000
627R-197	1"	1/2"	5-20	10	Yes	10,773,000
630-104/78	2"	1/2"	8-20	10	No	14,000,000
99-513P	2"	7/8"	2-10	10	No	36,368,000
99-512P	2"	7/8"	5-15	15	No	37,950,000
99-515P	2"	7/8"	10-20	20	No	41,112,000
99-903P	2"	7/8"	10-65	30	No	44,275,000
99-504PH	2"	1 1/8"	5-15	15	No	63,250,000
99-901PH	2"	1 ¹ /8"	10-65	30	No	74,318,000

Capacity based on inlet pressure 20 PSI greater than setting pressure and 20% droop. Other spring ranges and orifice sizes available.

Tel: 800-628-5044

RAY MURRAY, INC.

Order online at www.raymurray.com or call for personal assistance





Commercial Monitor Regulators

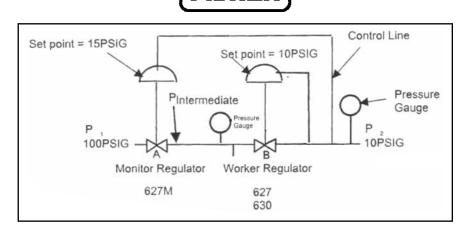
6

TYPICAL WIDE OPEN UPSTREAM MONITOR INSTALLATION

Monitor regulator system provides overpressure protection for jurisdictional accounts with no release of gas like a relief valve would.

A monitor system consists of two regulators in series. The "worker" regulator controls downstream pressure during normal operating conditions. If the "worker" allows the pressure to build up downstream, the "monitor" regulator takes over control by sensing the higher pressure through the pilot control line and keeping the downstream pressure to a safe maximum pressure.

The "worker" regulator is usually set at 8-10 psi and the "monitor" regulator set at 13-15 psi. Because the monitor regulator is sensing the 8-10 psi setting of the operating regulator, it remains wide open due to its 15 psi set pressure. The "monitor" regulator will remain wide open unless the operating regulator looses pressure control and its outlet pressure climbs to 15 psi. The "monitor" regulator will start to function and limit the downstream pressure to 15 psi.



FISHER

MONITOR REGULATORS RMI Inlet Internal Pressure Pressure **Orifice Size** Setting, PSI Part No. Connection Range, PS **Relief Valve** 627M-421 3/4" 5-20 1/2" 15 No 627M-471 1/2" 5-20 15 1" No 627M-267 1/2" 5-20 15 No 2" 99-504PHM 2" 1 1/6" 5-15 15 No

TYPICAL MONITOR SYSTEM

RMI Part No. Worker Regulator	Body Size NPT	Orifice Size Inches	Monitor Regulator	Body Size NPT	Orifice Size Inches	Regulating Capacity BTU - LP Gas*
627/5810	3/4"	³ /8"	627M-421	3/4"	1/2"	5,750,000
627/6210	³ / ₄ "	¹ /2"	627M-421	³ / ₄ "	1/2"	7,050,000
627/7710	1"	1/2"	627M-471	1"	1/2"	7,050,000
630-104/78	2"	¹ /2"	627M-267	2"	1/2"	8,400,000
630-104/78	2"	1/2"	99-504PHM	2"	1 ¹ /8"	13,500,000
99-504PH	2"	1 ¹ /8"	99-504PHM	2"	1 ¹ / ₈ "	42,650,000

^{*} Capacities Calculated at 30 PSIG in and 8 PSIG out w/20% droop.



FISHER LOW PRESSURE RELIEF VALVES

Diaphragm Relief Valves

Ray

Murray Inc.

Edition

Type 1805 relief valve is designed for installation between the First and Second Stage regulators or in the downstream line from a high pressure regulator used for a Final-Stage service. Available in 1" or 2" valve bodies.

Type 289H relief valve is designed for installation downstream of a large Second-Stage regulator. The larger diaphragm in this relief valve provides extremely sensitive operation.



RMI Part No.	Inlet/Outlet	Relief Setting PSI	Relief Range PSI
1805-19P	1"	30	10-60
1805-52	2"	30	10-50
289H/2	2"	1.5"	.5 - 2.25
289H/3	2"	1.5"	1.75 - 7
289H-43	1"	15	10-20

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FISHER HSRL

Type HSRL is an UL listed regulator designed for light commercial applications up to 2,100,000 BTU/HR. It utilizes a high strength cast iron body and a 3/4" NPT drip lip vent design with high capacity internal relief valve.

COMMERCIAL & INDUSTRIAL REGULATORS

RMI Part No.	Inlet/Outlet Size	Set Pressure	Outlet Adjustment	Orifice Size	Vent Location & Tap Size	Capacity** BTU/HR
HSRL-BFC*	34" FNPT	11" WC	9-13" WC	3/8"	Over Inlet side,	2.100.000
HSRL-CFC*	1"	11" WC	9-13" WC	78	3/4"	2,100,000

Includes high capacity relief valve.

** Capacity based upon 10 PSIG inlet and 20% droop, except PSIG regulators.



FISHER CS200, CS400 & CS800 SERIES COMMERCIAL / INDUSTRIAL REGULATORS







These direct-fired, springloaded regulators have been engineered to fit a multitude of pressure-reducing applications including commercial and industrial installations.

CS200 offers a full 360-degree of rotation of the actuator via the union ring connection between the body and casing, for ease of mainteneance and installation.

CS400 and CS800 provides flexibility with numerous body sizes, end connections, outlet pressure settings, orifice sizes, as well as the option for internal and external pressure regulation. In addition these models offer multiple overpressure protection options to meet the demands on many application requirements.

COMMERCIAL & INDUSTRIAL REGULATORS

RMI Part No.	Inlet/Outlet Size	Outlet Ac Range	ljustment Set	Orifice Size	Vent Size	Pressure Tap	Capacity @ 20% droop*	Capacity @ 1% droop
CS200IR-6EC1	3/4" FNPT	10-14" WC	11"wc	1/2"	1" FNPT	1/4" inlet	2,551,250	n/a
CS200IR-6EC3	1"	10-14" WC	11"wc	1/2"	1"	1/4" inlet	3,768,000	n/a
CS200IR-6EC6	1 1/4"	10-14" WC	11"wc	1/2"	1"	1/4" inlet	3,846,500	n/a
CS400IR-6EC6	1 1/4"	10-14" WC	11"wc	1/2"	1"	1/4" inlet	5,495,000	n/a
CS400IR-8EC6	1 1/4"	10-14" WC	11"wc	3/4"	1"	1/4" inlet	6,437,000	n/a
CS400IR-8EC7	1 1/2"	10-14" WC	11"wc	3/4"	1"	1/4" inlet	7,065,000	n/a
CS400IR-8EC8	2"	10-14" WC	11"wc	3/4"	1"	1/4" inlet	7,065,000	n/a
CS800IR-8CC7	1 1/2"	8-12" WC	11"wc	1"	1"	-	9,106,000	n/a
CS800IR-8CC8	2"	8-12" WC	11"wc	1"	1"	-	9,891,000	n/a
CS820IR-8GC7	1 1/2"	1.5-3.5 #	2 psi	1"	1"	-	15,040,600	8,242,500
CS820IR-9GC7	1 1/2"	1.5-3.5 #	2 psi	1-3/8"	1"	-	17,615,400	10,095,100
CS820IR-8GC8	2"	1.5-3.5 #	2 psi	1"	1"	-	21,477,600	14,491,100
CS820IR-9GC8	2"	1.2-3.5 #	2 psi	1-3/8"	1"	-	28,511,200	16,956,000
CS820IR-8HC7	1 1/2"	2.5-5.5 #	5 psi	1"	1"	-	15,291,800	3,752,300
CS820IR-9HC7	1 1/2"	2.5-5.5 #	5 psi	1-3/8"	1"	-	18,902,800	5,181,000
CS820IR-8HC8	2"	2.5-5.5 #	5 psi	1"	1"	-	16,563,500	3,752,300
CS820IR-9HC8	2"	2.5-5.5 #	5 psi	1-3/8"	1"	-	21,336,300	5,086,800

Capacities are based on 10 psig inlet pressure.

* For pounds-to-inches regulators, capacity is for 2" wc droop

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Fisher Industrial Low Pressure Regulator







Pilot-operated unit keeps outlet pressure constant despite varying flow rates and inlet pressures. A lightweight (19 lbs.), yet dependable regulator for applications from large commercial sites to smaller multi-dwelling establishments. Maximum inlet pressure 150 PSI.



FISHER TYPE 99

Pilot-operated regulator, keeps constant outlet pressure with varying inlet pressure and flows, used as first, second and single stage service.



FISHER TYPE 133

Self-operated 2nd stage regulator for either low pressure or pounds to pounds service. Maximum inlet pressure is 60 psig, and a downstream control line is required.

RMI Part No.	Inlet	Outlet	Orifice Size	Pressure Setting	Registration	Range	Capacity BTU/HR
299H-101	1 ¹ /2"	1 ¹ /2"			Internal		13,100,000
299H-102	2"	2"	3⁄4"	11" W.C.	Internal	9-20" W.C.	19,700,000
299H-105	1 ¹ /2"	1 ¹ /2"	94		9-20 W.C.	20,400,000	
299H-106	2"	2"			External		20,400,000
99-510P	2"	2"	7/8"			1/4 - 2 PSI	29,400,000
99-501P	2 ²	2	1 ¹ /8"	1 PSI			49,000,000
133L-4				8.5-18" W.C. Over outle 2" 1.5-3 PSIG N/A 1" FNPT	8.5-18" W.C.		70,875,000
133H-1	2"	2"	2"		1" FNPT	112 400 000	
133H-2				2-5 PSIG		Screened	113,400,000

COMMERCIAL AND INDUSTRIAL REGULATORS

8

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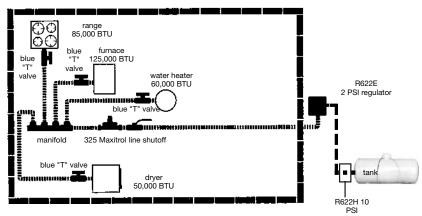
9 **Regulators - 2 PSI Systems**



DUAL PRESSURE SYSTEMS (2 PSI SYSTEMS)

Elevated pressure systems

(2 psi for residential and up to 5 psi for commercial installations) are usually piped with one or more house line regulators (poundsto-inches) followed by a manifold and runs to each of the appliances. It is possible that these runs to appliances may contain tee branching off to an additional appliance where gas loads permit.



FISHER RESIDENTIAL 2 PSI REGULATORS

2 PSI service regulators have an internal relief valve, and are designed to serve as intermediate regulators installed on the exterior of the building structure. These regulators supply propane to a manifold (located inside the structure) where piping such as corrugated stainless steel tubing (CSST) is routed to a line regulator supplying approximately 11" w.c. to appliances throughout the structure.



2 PSI INTEGRAL 2 STAGE

RMI Part No.	Inlet Connection	Outlet Connection	Outlet Pressure Range	Vent	Capacity BTU/hr Propane
R232E-BBH	1/4" FNPT	1/2" FNPT	2 psig	Over	500,000
R232E-HBH	F. POL	1/2" FNPT	0.14 bar	Outlet	500,000
R632E-BCH	1/4" FNPT	1/2" FNPT			850,000
R632E-HCH	F. POL	1/2" FNPT	2 psig	Over Outlet	900,000
R632E-CFH	1/4" FNPT	3/4" FNPT	0.14 bar		850,000
R632E-JFH	F. POL	3/4" FNPT			850,000

(1) Capacities based on 30 psig / 2.07 bar inlet pressure and 20% droop.

2 PSI 2nd STAGE

Inlet Connection	Outlet Connection	Outlet Pressure Range	Vent	Capacity BTU/hr Propane
1/2" FNPT	1/2" FNPT			1,250,000
3/4" FNPT	3/4" FNPT	1.5 - 2.5 psig	Over Inlet	1,500,000
3/4" FNPT	3/4" BACK			1,400,000
	Connection 1/2" FNPT 3/4" FNPT	Connection Connection 1/2" FNPT 1/2" FNPT 3/4" FNPT 3/4" FNPT	Connection Connection Pressure Range 1/2" FNPT 1/2" FNPT 3/4" FNPT 3/4" FNPT	Connection Connection Pressure Range Vent 1/2" FNPT 1/2" FNPT 1/2" FNPT 0ver Inlet 3/4" FNPT 3/4" FNPT 1.5 - 2.5 psig 0ver Inlet

MAXITROL 325 SERIES LINE REGULATORS Lever Acting Design - Line Certified

Used in 2 PSIG piping systems for propane installations. 325 Series can only be used as an appliance regulator with a maximum 2 PSIG inlet pressure. 325 Series does not have an internal relief valve and can not be used as a second stage regulator.

RMI Part No. w/vent limit installed	Vent Port	Inlet/ Outlet	Propane Spring Range	Spring Setting	Operating Inlet PSI**	BTU Capacity Single Appliance	BTU Capacity Total Combined All Appliances
325-3L-3/8	1%" limiter	3/8"				140,000	250,000
325-3L-1/2	included	1/2"				140,000	250,000
325-5AL-1/2	2/11/11/11/11	1/2"				300,000	425,000
325-5AL-3/4	%" limiter included	3⁄4"	7"-11" WC	11" WC	2 PSI	300,000	550,000
325-5AL-1	IIIciuueu	1"				300,000	550,000
325-7-1.25		11⁄4"	Ī			900,000	1,000,000
325-7-1.5	1/2" must vent to	1½"				900,000	1,000,000
325-7AL-1.25	atmosphere	11⁄4"				900,000	1,000,000

Regulator must be mounted in horizontal position and vent limiter must be mounted in upright position for best performance. Otherwise vent to outside building.

** Maximum inlet pressure is 10 PSI

325 Series

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MAXITROL GAS APPLIANCE REGULATORS

(Maximum Inlet Pressure ¹/₂ or 1 PSI.)

Designed for small & medium-sized main burner and pilot load applications where precise control of flows is essential. Not to be used as a line regulator.

"Straight-thru-flow" design provides accurate sensitive regulation at extremely low differential pressures. Used on all types of residential, commercial and industrial appliances and equipment.



RV20L



RV12L



RV47L RV48L



RV52 RV53



RV61



RV81 RV91

MAXITROL GAS APPLIANCE REGULATORS NOT TO BE USED AS AN IN-LINE REGULATOR

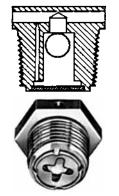
RMI Part No.	Vent Limiter*	Inlet/ Outlet	Propane Spring Range**	Spring Setting	Maximum Inlet PSI	App. Propane BTU Capacity
RV12L-1/8	Installed	1⁄8"	5"-12"	11" WC	½ PSI	25,000
RV20L-1/4	Installed	1⁄4"	8"-12"	11" WC	½ PSI	50,000
RV47L-3/8	Installed	3%"	8"-12"	11" WC	½ PSI	125,000
RV47L-1/2	Installed	1/2"	8"-12"	11" WC	½ PSI	125,000
RV48L-1/2	Installed	1/2"	5"-12"	11" WC	½ PSI	250,000
RV48L-3/4	Installed	3⁄4"	5"-12"	11" WC	½ PSI	250,000
RV52-1/2	12A04	1/2"	5"-12"	11" WC	½ PSI	530,000
RV52-3/4	12A04	3/4"	5"-12"	11" WC	½ PSI	530,000
RV53-3/4	12A04	3/4"	5"-12"	11" WC	½ PSI	755,000
RV53-1	12A04	1"	5"-12"	11" WC	½ PSI	755,000
RV61-1	12A04	1"	5"-12"	11" WC	1 PSI	1,325,000
RV61-1-1/4	12A04	11⁄4"	5"-12"	11" WC	1 PSI	1,325,000
RV81-1-1/4***		11⁄4"	5"-12"	11" WC	1 PSI	2,725,000
RV81-1-1/2***	Must be vented	1½"	5"-12"	11" WC	1 PSI	2,725,000
RV91-2***	to atmosphere	2"	5"-12"	11" WC	1 PSI	4,250,000
RV91-2-1/2***	1	21⁄2"	5"-12"	11" WC	1 PSI	4,250,000

* The letter "L" designates vent limiter installed. Regulators without "L" require either vent limiter to be added or to be vented to the atmosphere.

 ** Other spring ranges are available for all regulators. For natural gas setting with 3" W.C - 6"

W.C. Springs, add, "-36" to Part No. (e.g. RV12L-1/8-36)

*** Recommended for normal horizontal mounting position only.



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12A04, 12A09, 12A39

VENT LIMITER FOR MAXITROL REGULATORS

Automatic safety vent limiting device ball check permits free inhalation for fast regulator-diaphragm response on opening cycle, but limits gas escapement to non-hazardous amount should a diaphragm rupture. For proper operation regulator must be mounted in horizontal position with the vent limiter in the upright position.

VENT PROTECTOR

For outdoor applications. Must be mounted in upright position.



RMI Part No. Vent Limiter	Thread Size	For Uses On Maxitrol Regulators	RMI Part No. Vent Protector
12A04	1/8"	RV48, RV52, RV53, RV61	
12A09	1/8"	325-3	13A15
12A39	3%"	325-5	13A15-5

NOTE: Vent limiter must be ordered separately unless it is listed as installed.

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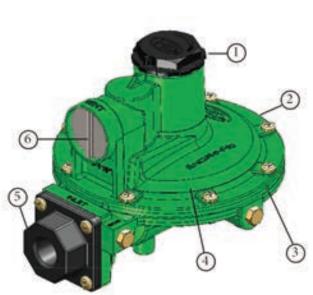
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Marshall Excelsior **10A** Excela-Flo Regulators

EXCLUSIVE FEATURES AND BENEFITS

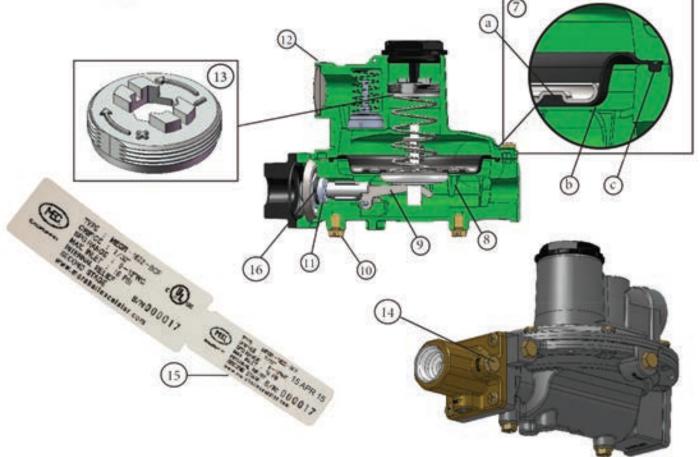




1. Dust Cap with Hex and Finger Grips

- 2. Full Round Flange for evenly distributed diaphragm compression
- 3. Locations tabs to ensure proper vent relocation
- 4. Premium Powder Coat finish inside & outside body
- 5. Large Wrench Flats that fit standard wrenches
- 6. Ribbed Vent Screen for Easy Removal
- Fabric Reinforced Molded Diaphragm

 Interlocking diaphragm and diaphragm plate
 Rounded edges on diaphragm plate
- c. Sealing and locating bead on diaphragm
- 8. Integrated Travel Stops to prevent damage to diaphragm
- 9. Stainless Steel Lever Design
- 10. Pre-Installed Mounting Screws for Installation Convenience
- 11. Large Precision Machined Aluminum Orifice
- 12. Large Drip Vent
- 13. Adjustment Direction Indicator
- 14. Plugged High Pressure Gauge Port on all Integral Two Stage Regulators
- 15. Tear off data label for installation records
- 16. GLT Viton Seats for maximum protection against contamination
- *Some Features Patent Pending



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Marshall Excelsior Excela-Flo Regulators 10B

FIRST STAGE DOMESTIC REGULATOR SERIES

MEGR-1222H Series



MEGR-1122H Compact Series

MEGR-1122H & MEGR-1222H Series

Offers a compact first stage regulator design perfect for tight applications such as underground tank domes. They feature an adjustment range from 9-12 PSIG (factory set @ 10 PSIG), stainless steel internal components, fluorocarbon (FKM) seat discs, molded lip fabric reinforced diaphragms and large aluminum precision machined orifice to minimize freeze ups while providing superior downstream regulation and maximum corrosion resistance against weather or contaminated gas.



MEGR-1622H Series

Offers all of the same features as the compact MEGR-1122H Series in a full size version. Our full size MEGR-1622H Series has a large fabric reinforced diaphragm fro superior downstream regulation, heavy duty wrench flats, and a large 3/4" FNPT tapped dripline vent to help prevent relief vent blockage.

MEGR-1622H Full Size Series

RMI Part No.	Туре	Inlet/ Outlet	Orifice	Outlet Pressure Range	Outlet Set Point (PSI)	Capacity in BTU/H LPG ¹
MEGR-1122H-AAJ	Compact	1/4" FNPT	.15"	9-12	10	1,000,000
MEGR-1122H-AAJXB ²	Compact	1/4" FNPT	.15"	9-12	10	1,000,000
MEGR-1622H-BGJ	Full Size	1/2" FNPT	.15"	9-12	10	2,200,000
MEGR-1622H-DGJ	Full Size	3/4" FNPT	.15"	9-12	10	2,500,000
MEGR-1622H-HGJ	Full Size	F. POL/1/2" FNPT	.15"	9-12	10	2,300,000
MEGR-1222H-BGF	Compact	F. POL/1/2" FNPT	.15"	9-12	10	2,750,000
MEGR-1622H-JGJ	Full Size	F. POL/3/4" FNPT	.15"	9-12	10	1,000,000
MEGR-1222H-BGFXB ²	Compact	F. POL/1/2" FNPT	.15"	9-12	10	1,000,000
1 Based on 30 PSIG inle		1				

2 Indicates vet orientation over pressure taps

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Molded Lip O-Ring Bonnet/Body Seal

 Bonnet/Body Material: Die Cast Aluminum

MEGR-1122H & MEGR-1222H SERIES SPECIFICATIONS Type: First-stage

 Max. Inlet Pressure: 250 PSIG Exterior Finish: Red Powder Coat Orifice Size: .15" compact

Seat Material: Fluorocarbon (FKM)

• Diaphragm: Fabric Reinforced NBR

Listings: UL listed/UL 144

Relief Type: Internal Relief -

Spring Loaded

- Mounting Holes: Standard 3 1/2" Center
- Pressure Taps: #54 Orifice 1/8" FNPT Plugged (2)
- Relief Travel Stop: Molded in Adjustment Cap - Gray (Compact)

MEGR-1622H SERIES SPECIFICATIONS

- Type: First-stage
- Max. Inlet Pressure: 250 PSIG
- Exterior Finish: Red Powder Coat
- Orifice Size: 7/32" Full
- Diaphragm: Fabric Reinforced NBR Molded Lip O-Ring Bonnet/Body Seal
- Relief Type: Internal Relief -Spring Loaded
- Bonnet/Body Material: Die Cast Aluminum
- Seat Material: Fluorocarbon (FKM)
- Listings: UL listed/UL 144
- Mounting Holes: Standard 3 1/2" Center
- Pressure Taps: #54 Orifice1/8" FNPT Plugged (2)
 - · Relief Travel Stop: Molded in Adjustment Cap - Black (Full Size)

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REGULATORS

Marshall Excelsior **10C** Excela-Flo Regulators







MEGR-1222 Compact Series



MEGR-1622 Full Size Series

MEGR-1622 & MEGR-1652 Series

Offers all of the same features as the compact MEGR-1222 Series but in a full size, high capacity version. Our full size second stage regulators have a large fabric reinforced diaphragm for superior downstream regulation, heavy duty wrench flats, and a large 3/4" FNPT tapped dripline vent to help prevent relief vent blockage. The MEGR-1622 Series have both the inlet and outlet in line where the MEGR-1652 series have a rear discharge back mount outlet for convenient wll mount applications.

SECOND STAGE DOMESTIC REGULATOR SERIES

MEGR-1222 Series

Offers a compact second stage regulator design perfect for lower BTU applications. They feature an adjustable range from 8-12" WC (factory set @ 11" WC), stainless steel internal components, fluorocarbon (FKM) seat discs, molded lip fabric reinforced diaphragms and large aluminum precision machined orifices providing superior downstream regulation and maximum corrosion resistance against weather or contaminated gas.



MEGR-1652 Back Mount Series



MEGR-1642 Full Size Series

MEGR-1642 Series

Our full size MEGR-1642 Series has all of the same features as the compact MEGR-1222 Series but in a full size, high capacity version. Our full size second stage regulators have a large fabric reinforced diaphragm for superior downstream regulation, heavy duty wrench flats, and a large 3/4" FNPT tapped dripline vent to help prevent relief vent blockage. The MEGR-1642 Series has the outlet at 90 degrees from the inlet making it ideal for vapor meter installations.

SERIES SPECIFICATIONS

- Type: Secnd Stage
- Max. Inlet Pressure: 10 PSIG
- Exterior Finish: Green Powder Coat
- Orifice Size: .14" Compact & 7/32" Full
- Diaphragm: Fabric Reinforced NBR Molded Lip O-Ring Bonnet/Body Seal
- Relief Type: Internal Relief -Spring Loaded
- Bonnet/Body Material: Die Cast Aluminum
- Seat Material: Fluorocarbon (FKM)
- Listings: UL listed/UL 144
- Mounting Holes: Standard 3 1/2" Center
- Pressure Taps: #54 Orifice 1/8" FNPT Plugged (2)
- Relief Travel Stop: Molded in Adjustment Cap Black (Full Size, Gray (Compact)

RMI Part No.	Туре	Inlet/ Outlet	Orifice	Outlet Pressure Range	Outlet Set Point (PSI)	Capacity in BTU/H LPG ¹
MEGR-1222-BAF	Compact	1/2" FNPT	.14"	9.5-13	11	500,000
MEGR-1622-BCF	Full Size	1/2" FNPT	.15"	9-13	11	710,000
MEGR-1622-CFF	Full Size	1/2"/3/4" FNPT	.15"	9-13	11	1,300,000
MEGR-1622-DFF	Full Size	3/4"/3/4" FNPT	.15"	9-13	11	1,300,000
MEGR-1652-CFF ²	Back Mount	1/2"/3/4" FNPT	.15"	9-13	11	1,000,000
MEGR-1652-DFF ²	Back Mount	3/4"/3/4" FNPT	.15"	9-13	11	1,000,000
MEGR-1642-DFF ³	Side Outlet	3/4"/3/4" FNPT	.15"	9-13	11	900,000
1 Based on 10 PSIG ir 2 Indicates back mour 3 Indicates side outlet	nt configuration					

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Marshall Excelsior Excela-Flo Regulators **10D**

2 PSI SERVICE REGULATORS



MEGR-1622E Series

MEGR-1622E Series

Offers a full size high capacity molded lip fabric reinforced diaphragm, stainless steel internal components, fluorocarbon (FKM) seat discs, precision machined aluminum orifices, and an adjustment range from 1-2.2 PSI (factory set @ 2 PSI) providing superior downstream regulation and maximum corrosion resistance against weather or contaminated gas.



MEGR-1652E Series

MEGR-1652E Series

Offers all the same features as the MEGR-1622E Series but with a rear discharge back mount outlet for convenient wall mount applications.

SERIES	SPECIFICATIO	ONS

- Type: 2 PSI
- Max. Inlet Pressure: 10 PSI
- Exterior Finish: White Powder Coat
- Orifice Size: 7/32" Full
- Diaphragm: Fabric Reinforced NBR Molded Lip O-Ring Bonnet/Body Seal
- Relief Type: Internal Relief -Spring Loaded
- Bonnet/Body Material: Die Cast Aluminum
- Seat Material: Fluorocarbon (FKM)
- Listings: UL listed/UL 144
- Mounting Holes: Standard 3 1/2" Center
- Pressure Taps: #54 Orifice 1/8" FNPT Plugged (2)
- Relief Travel Stop: Molded in Adjustment Cap – White

RMI Part No.	Туре	Inlet/ Outlet	Orifice	Outlet Pressure Range	Outlet Set Point (PSI)	Capacity in BTU/H LPG ¹
MEGR-1622E-BCH	Full Size	1/2" FNPT	7/32"	1-2.2	2	1,100,000
MEGR-1622E-DCH	Full Size	3/4" FNPT	7/32"	1-2.2	2	1,400,000
MEGR-1652E-DFH ²	Back Mount	3/4" FNPT	7/32"	1-2.2	2	1,300,000
1 Based on 10 PSIG inlet pressure and 20% droop						
2 Indicates back mour	nt configuration	า				

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Marshall Excelsior **10E** Excela-Flo Regulators





MEGR-1232E Compact Series

MEGR-1232E Compact Series

Offers a compact integral two-stage 2 PSI regulator design for lower BTU applications and confined spaces. They feature an adjustment range from 1-2.2 PSI (factory set @ 2 PSI). Stainless steel integral components, fluorocarbon (FKM) seat discs, molded lip fabric reinforced diaphragms, and large precision machined aluminum orifices providing superior downstream regulation and maximum corrosion resistance against weather or contaminated gas.



MEGR-1632E Full Size Series

MEGR-1632E Full Size Series

Offers all the same features as the MEGR-1232E Series in a full size high capacity version. The full size MEGR-1632E diaphragm provides superior downstream regulation, has heavy duty wrench flats and large 3/4" FNPT tapped drip lip vent to help prevent relief vent blockage.

SERIES SPECIFICATIONS

- Type: Two-Stage 2 PSI
- Max. Inlet Pressure: 250 PSIG
- Exterior Finish: White Powder Coat
- Orifice Size: .17"Compact & 7/32" Full
- Diaphragm: Fabric Reinforced NBR Molded Lip O-Ring Bonnet/Body Seal
- Relief Type: Internal Relief -Spring Loaded
- Bonnet/Body Material: Die Cast Aluminum
- Seat Material: Fluorocarbon (FKM)
- Listings: UL listed/UL 144
- Mounting Holes: Standard 3 1/2" Center
- Pressure Taps: #54 Orifice 1/8" FNPT Plugged (3)
- Relief Travel Stop: Molded in Adjustment Cap – Gray (compact), White (Full Size)

RMI Part No.	Туре	Inlet/ Outlet	Orifice	Outlet Pressure Range	Outlet Set Point (PSI)	Capacity in BTU/H LPG ¹			
MEGR-1232E-BBH	Compact	1/4"/1/2" FNPT	.17"	1-2.2	2	550,000			
MEGR-1232E-BBHXA ²	Compact	1/4"/1/2" FNPT	.17"	1-2.2	2	550,000			
MEGR-1232E-HBH	Compact	F.POL/1/2" FNPT	.17"	1-2.2	2	600,000			
MEGR-1232E-HBHXA ²	Compact	F.POL/1/2" FNPT	.17"	1-2.2	2	600,000			
MEGR-1632E-BCH	Full Size	1/4"/1/2" FNPT	7/32"	1-2.2	2	1,000,000			
MEGR-1632E-BCHXA ²	Full Size	1/4"/1/2" FNPT	7/32"	1-2.2	2	1,000,000			
MEGR-1632E-CFH	Full Size	1/4"/3/4" FNPT	7/32"	1-2.2	2	1,050,000			
MEGR-1632E-CFHXA ²	Full Size	1/4"/3/4" FNPT	7/32"	1-2.2	2	1,050,000			
MEGR-1632E-HCH	Full Size	F.POL/1/2" FNPT	7/32"	1-2.2	2	1,025,000			
MEGR-1632E-HCHXA ²	Full Size	F.POL/1/2" FNPT	7/32"	1-2.2	2	1,025,000			
MEGR-1632E-JFH	Full Size	F.POL/3/4" FNPT	7/32"	1-2.2	2	1,050,000			
MEGR-1632E-JFHXA ²	Full Size	F.POL/3/4" FNPT	7/32"	1-2.2	2	1,050,000			
		1 Based on 30 PSIG inlet pressure and 20% droop 2 Indicates regulator vents opposite pressure tap points							

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Marshall Excelsior Excela-Flo Regulators **10F**

INTEGRAL TWO-STAGE DOMESTIC REGULATORS



MEGR-1232 Compact Series

MEGR-1232 Compact Series

Offers a compact integral two-stage regulator design perfect for lower BTU applications and confined spaces. They feature an adjustment range from 9.5-13" WC (factory set @ 11" WC). Stainless steel integral components, fluorocarbon (FKM) seat discs, molded lip fabric reinforced diaphragms, and large precision machined aluminum orifices providing superior downstream regulation and maximum corrosion resistance against weather or contaminated gas.

SERIES SPECIFICATIONS

- Type: Integral Two-Stage
- Max. Inlet Pressure: 250 PSIG
- Exterior Finish: Gray Powder Coat
- Orifice Size: .17"Compact & 7/32" Full
- Diaphragm: Fabric Reinforced NBR Molded Lip O-Ring Bonnet/Body Seal
- Relief Type: Internal Relief -Spring Loaded
- Bonnet/Body Material: Die Cast Aluminum
- Seat Material: Fluorocarbon (FKM)
- Listings: UL listed/UL 144
- Mounting Holes: Standard 3 1/2" Center
- Pressure Taps: #54 Orifice 1/8" FNPT Plugged (3)
- Relief Travel Stop: Molded in Adjustment Cap – Gray (compact), Black (Full Size)



MEGR-1632 Full Size Series

MEGR-1632 Full Size Series

Offers all the same features as the MEGR-1232 Series in a full size high capacity version. The full size MEGR-1632 diaphragm provides superior downstream regulation, has heavy duty wrench flats and large 3/4" FNPT tapped drip lip vent to help prevent relief vent blockage.

RMI Part No.	Туре	Inlet/ Outlet	Orifice	Outlet Pressure Range	Outlet Set Point (PSI)	Capacity in BTU/H LPG ¹
MEGR-1232-BBF	Compact	1/4"/1/2" FNPT	.17"	9.5-13	11	450,000
MEGR-1232-BBFXA ²	Compact	1/4"/1/2" FNPT	.17"	9.5-13	11	450,000
MEGR-1232-HBF	Compact	F.POL/1/2" FNPT	.17"	9.5-13	11	450,000
MEGR-1232-HBFXA ²	Compact	F.POL/1/2" FNPT	.17"	9.5-13	11	450,000
MEGR-1632-BCF	Full Size	1/4"/1/2" FNPT	7/32"	9-13	11	700,000
MEGR-1632-BCFXA ²	Full Size	1/4"/1/2" FNPT	7/32"	9-13	11	700,000
MEGR-1632-CFF	Full Size	1/4"/3/4" FNPT	7/32"	9-13	11	950,000
MEGR-1632-CFFXA ²	Full Size	1/4"/3/4" FNPT	7/32"	9-13	11	950,000
MEGR-1632-HCF	Full Size	F.POL/1/2" FNPT	7/32"	9-13	11	700,000
MEGR-1632-HCFXA ²	Full Size	F.POL/1/2" FNPT	7/32"	9-13	11	700,000
MEGR-1632-JFF	Full Size	F.POL/3/4" FNPT	7/32"	9-13	11	900,000
MEGR-1632-JFFXA ²	Full Size	F.POL/3/4" FNPT	7/32"	9-13	11	900,000
1 Based on 30 PSIG in 2 Indicates regulator ve						

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Marshall Excelsior **10G** Excela-Flo Regulators

AUTOMATIC CHANGEOVER REGULATORS





MEGR-175CS61222-BAF Series

MEGR-175CS61222-BAF Series

Offers a compact two-stage regulator OPTION for lower BTU applications such as mobile or seasonal homes. They feature a second stage adjustment from 8-14" WC (factory set @ 11" WC), stainless steel internal components, fluorocarbon (FKM) seat discs, molded lip fabric reinforced diaphragms, and large precision machined aluminum orifices providing superior downstream regulation and maximum corrosion resistance against weather or contaminated gas.



MEGR-175CS61622-BCF Series

MEGR-175CS61622-BCFSeries

Offers all of the same features as the compact MEGR-175S61222 series but with a full size high capacity second stage regulator option. The full size second stage diaphragm provides superior downstream regulation, has heavy duty wrench flats and large 3/4" FNPT tapped drip lip vent to prevent relief vent blockage perfect for manifolding larger tanks together such as 420 LB cylinders.

SERIES SPECIFICATIONS

- Type: Automatic Changeover Two-Stage
- Max. Inlet Pressure: 250 PSIG
- Exterior Finish: Gold/Gray Powder Coat
- Orifice Size: .14"Compact & 7/32" Full
- Diaphragm: Fabric Reinforced NBR Molded Lip O-Ring/ Bonnet/Body Seal
- Relief Type: Internal Relief -Spring Loaded
- Bonnet/Body Material: Die Cast Zinc/Plastic 1st Stage Dies Cast aluminum 2nd Stage
- Seat Material: (NBR) 1st Stage, Fluorocarbon (FKM) 2nd Stage
- Listings: UL listed/UL 144 2nd Stage
- Mounting Holes: Standard 3 1/2" Center
- Pressure Taps: #54 Orifice 1/8" FNPT Plugged (1)
- Relief Travel Stop: Molded in Adjustment Cap Gray (compact), Black (Full Size)

RMI Part No.	Туре	Inlet/ Outlet	Orifice		Outlet Set Point (PSI)	Capacity in BTU/H LPG ¹	
MEGR-175CS61222-BAF	Compact	1/4" IF (2)/1/2" FNPT	.14"	9.5-13	11	400,000	
MEGR-175CS61622-BCF Full Size 1/4" IF (2)/1/2" FNPT 7/32" 9-13 11 650,000							
1 Based on 30 PSIG inlet pre	essure and 2	0% droop					

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Marshall Excelsior11 Single Stage Regulators



The MEGR-230 single-stage regulators are approved for use in small portable applications and outdoor cooking appliances utilizing low pressure. NOTE: Single-stage regulators are not approved for RV use.

MEGR-230 RMI Part No. Description Vent MEGR-218 SN FF POL w/Plastic Handwheel X 3/8" FNPT - 90° Vent 90° MEGR-230 1/4" FNPT Inlet X 3/8" FNPT Outlet Over Outlet SN .9 GPM Excess Flow POL Inlet X 3/8" FNPT Outlet MEGR-230-9 Over Outlet MEGR-230-90 1/4" FNPT Inlet X 3/8" FNPT Outlet - 90° Vent 90° MEGR-230-1618 Black F. QCC Inlet X 3/8" FNPT Outlet - 90° Vent 90°

Black F. QCC Inlet (100,000 BTU/H) X 3/8" FNPT Outlet

Hardnose FF POL Inlet X 3/8" FNPT Outlet - 90° Vent

The MEGR-1912 Series UL Listed regulators are direct-operated, springloaded models designed for use in a variety of service and industrial applications. These regulators have limited-capacity internal relief across the diaphragm to help minimize over pressurization.

MEGR-230-1326

MEGR-231

The MEGR-1912 Series with capacity ratings of less than 320,000 BTU/ hr (129 scfh), are often used on small portable outdoor appliances.

Underwriters Laboratories requires horizontally mounted regulators to be installed with vent opening protection to prevent blockage by freezing rain.

REGULATOR SPECIFICATIONS

Over Outlet

90°

- Type: Single-stage
- Max. Inlet Pressure: 250 PSI
- Vent Screen: Monel
- Gasket: CGR 2750
- Relief Valve: Brass and Zinc
- Control and Relief Valve Spring: Plated Steel
- Diaphragm Assembly: Nitrile (NBR) with Zinc disk

REGULATOR SPECIFICATIONS

9 W.C. delivery pressure)
Max. Inlet Pressure: 250 PSI
Inlet Connection: 1/4" FNPT
Outlet Connection: 3/8" FNPT
Exterior Finish: Green wet coat

Listings: UL listed/UL 144
Mounting Holes: 3 1/2" on center

Orifice Diameter: 0.059 Diameter

BTU Capacity: 140,000 BTU (based on 25 PSI inlet @

• Diaphragm Type: Molded with O-ring bonnet/Body seal

Bonnet/Body Material: Die Cast Aluminum

Type: Single-stage

- Spring Case: Die Cast Zinc
 - Spring Seat: Plated Steel
 - Diaphragm Plate: Plated Steel
 - Body Material/Lower Casting: Die Cast -Zinc
 - Listings: UL listed/UL 144



MEGR-1912 Series

RMI Part No.	Inlet X Outlet Connection Style	Orifice Sizes, Inches (mm)	Outlet Pressure Setting	Outlet Pressure Ranges, Inches W.C. (mbar)		BTU/H LPG @ 100 PSI Inlet
MEGR-1912/101	1/4" X 3/8" FNPT	0.073 (1,8)	11" w.c (27 mbar)	9.25 to 13 (23 to 32)	Over Outlet	242,953
MEGR-1912/104	1/4" X 1/4" FNPT	0.073 (1,8)	11" w.c. (27 mbar)	9.25 to 13 (23 to 32)	Over Outlet	242,953
MEGR-1912/109	1/4" X 3/8" FNPT	0.073 (1,8)	7" w.c. (17 mbar)	5 to 10 (12 to 25)	Over Outlet	242,953
MEGR-1912/197	1/4" X 3/8" FNPT	0.094 (2,4)	20" w.c. (50 mbar)	12 to 24 (30 to 60)	Over Outlet	313,488
MEGR-1912H/108	1/4" X 3/8" FNPT	0.094 (2,4)	1.5 PSI (103 mbar)	0.5 to 2.7 PSI (34 to 186mbar)	Over Outlet	297,814
MEGR-1912H/520	1/4" X 1/4" FNPT	0.094 (2,4)	3.5 PSI (241 mbar)	2.7 to 5 PSI (186 to 345 mbar)	Over Outlet	
MEGR-1912H/534	1/4" X 1/4" FNPT	0.073 (1,8)	1.5 PSI (103 mbar)	0.5 to 2.7 PSI (34 to 186 mbar)	Over Outlet	
MEGR-1912N/113	1/4" X 3/8" FNPT	0.073 (1,8)	5" w.c. (27 mbar)	3 to 7 (7 to 17)	Over Outlet	

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MARSHALL EXCELSIOR HIGH PRESSURE LP GAS REGULATORS

The MEGR-130 series fixed high pressure single-stage regulators are designed to provide an economical solution for pounds to pounds service applications. The MEGR-350 is a single-stage, adjustable high pressure regulator. The body and bonnet of both the fixed and adjustable regulators are precisely machined and feature a crimped design and fabric reinforced rubber diaphragm creating a positive seal for leak-free performance.

RMI Part No.	Description	Pressure
MEGR-130-05	1/4" FNPT inlet X 1/4" FNPT outlet, fixed	5 PSI
MEGR-130-10	1/4" FNPT inlet X 1/4" FNPT outlet, fixed	10 PSI
MEGR-130-20	1/4" FNPT inlet X 1/4" FNPT outlet, fixed	20 PSI
MEGR-350	1/4" FNPT inlet X 1/4" FNPT outlet, adjustable	0-10 PSI
MEGR-350-20	1/4" FNPT inlet X 1/4" FNPT outlet, adjustable	0-20 PSI
MEGR-350-30	1/4" FNPT inlet X 1/4" FNPT outlet, adjustable	0-30 PSI
MEGR-351	POL inlet X 1/4" FNPT outlet, adjustable	0-10 PSI

MARSHALL EXCELSIOR HIGH PRESSURE REGULATORS

The MEGR-6120 & MEGR-6121 series are UL listed as high pressure, non-relief regulators that meet a variety of applications for liquid or vapor service. The compact body design makes these regulators particularly useful in installations with space limitations. The basic MEGR-6120 series regulator comes equipped with a handwheel adjustment. The nonadjustable MEGR-6121 Series provides a tamper-resistant spring case. The MEGR-6120 & MEGR-6121 series regulators contain brass materials that are not compatible with anhydrous ammonia service.

RMI Part No.	Description	Pressure
MEGR-6120-30	1/4" FNPT inlet X 1/4" FNPT outlet, adjustable	1-30 PSI
MEGR-6120-60	1/4" FNPT inlet X 1/4" FNPT outlet, adjustable	1-60 PSI
MEGR-6120-100	1/4" FNPT inlet X 1/4" FNPT outlet, adjustable	1-100 PSI
MEGR-6121-15	1/4" FNPT inlet X 1/4" FNPT outlet, fixed	15 PSI
MEGR-6121-20	1/4" FNPT inlet X 1/4" FNPT outlet, fixed	20 PSI
MEGR-6121-60	1/4" FNPT inlet X 1/4" FNPT outlet, fixed	60 PSI

CAPACIT	IES: BTU/H LPG (\	/APOR)				
Outlet Set Point	Inlet Pressure	BTU / HR				
15 PSI	50 PSI	850,000				
15 PSI	100 PSI	1,700,000				
15 PSI	150 PSI	2,500,000				
20 PSI	50 PSI	900,000				
20 PSI	100 PSI	1,800,000				
40 PSI	100 PSI	1,500,000				
40 PSI	150 PSI	2,000,000				
50 PSI	100 PSI	1,300,000				
50 PSI	150 PSI	1,800,000				
50 PSI	200 PSI	2,300,000				
*approximate BTU/H vapor capacities taking 10-20% drop into consideration						
Note: side outlet o	Note: side outlet connection style (plugged): 1/4" MNPT, pressure gauge (MEJ500 Series)					

MARSHALL EXCELLSIOR SECOND STAGE / LOW PRESSURE INDUSTRIAL REGULATORS

The MEGR-S1202/MEGR-CS1200 Series commercial/industrial regulators are large capacity, low pressure second stage units for installation at schools, bakeries, and other similar applications. They contain a limited internal relief valve and can be used in conjunction with either MEGR-1627 or MEGR-1630 Series high-pressure regulators.



RMI Part No.	Inlet/ Outlet	Orifice	Outlet Pressure Range	Outlet Pressure Setting	Maximum Operating Inlet Pressure	BTU/H LPG @ 25 PSI Inlet	BTU/H LPG @ 10 PSI Inlet
MEGR-CS1200IR6EC1	3/4" FNPT	1/2"	6-14" WC	11" WC	25 PSIG	2,100,000	1,600,000
MEGR-CS1200IR6EC3	1" FNPT	1/2"	6-14" WC	11" WC	25 PSIG	2,500,000	1,900,000
MEGR-CS1200IR6EC6	1-1/4" FNPT	1/2"	6-14" WC	11" WC	25 PSIG	3,100,000	2,800,000
MEGR-S1202G-BNC	1-1/2" FNPT	1"	9-18"WC	11" WC	25 PSIG	14,700,000	10,800,000
MEGR-S1202G-CNC	2" FNPT	1"	9-18"WC	11" WC	25 PSIG	30,000,000	23,000,000
MEGR-S1202H-CNK	2" FNPT	1"	1.5 - 3.25 PSI	2 PSI	25 PSIG	22,200,000	10,300,000

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EGULATORS

MEGR-6120

13 **Meter Bars & Accessories**



19¹

PREFAB REGULATOR ASSEMBLIES **RPM-MB-750 RPM-MB-750**

- LV-8050-34 locking service valve with insulated union
- Includes Fisher Regulator w/High **Capacity Relief**
- 3/4" x 8" Nipples
- MB-730 Meter Bar
- Painted & Pressure Tested
- For AC meter model, top connections

RMI Part No.	Inlet/Outlet Size	For Meter	Regulator Included
RPM-MB-750	3/4"	AC-250TC-CF	R642-DFF
RPM-MB-750A	3/4"	AC-250TC-CF	R652-DFF

Meter & Mounting Bracket NOT Included

RP-750

- LV-8050-34 locking service valve with insulated union
- Includes Fisher Regulator w/High Capacity Relief
- 3/4" x 4" Nipples
- Painted & Pressure Tested
- For AM meter model, side connections

LOCKING SERVICE VALVES WITH INSULATED UNION

RP-750

RMI Part No.	Inlet/Outlet Size	For Meter	Regulator Included
RP-750	3/4"	AM-250TC-CF	R642-DFF
RP-750A	3/4"	AM-250TC-CF	R652-DFF





RMI Part No.	Inlet/Outlet	Meter Connection	For Meter
MB-701*	1 / ³ / ₄ "	1"	AC-250TC-CF
MB-730	3/4"	1"	AC-250TC-CF
MB-740	1 ¹ /4"	1 ¹ /4"	AL-425TC-CF
*The MD 701 is		امسمع فعلقا	الموارنية ومسرنوه

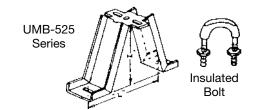
The MB-701 is a meter bar with an integral locking service valve & insulated union outlet.

MULTIPLE METER BAR ASSEMBLY



RMI Part No.	Meter Bar	Manifold Pipe Size	Length	For Meter
MB-701-2*	Double	1 ¹ / ₄ "	32"	AC-250TC-CF
MB-701-3*	Triple	1 ¹ / ₄ "	48"	AC-250TC-CF

*Note: Mount on bracket UMB-525H using center bolt hole.



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REGULATOR/METER BRACKETS

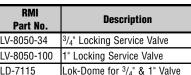
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RMI Part No.	I x L Size	U-Bolt Size	For Pipe Size	Insulated	For Meter
UMB-525-H	5 ¹ / ₂ " x 8"	1 ¹ / ₄ "	³ / ₄ " - 1	Yes	AC-250TC-CF
UMB-525-H114	5 ¹ / ₂ " x 8"	2"	1 ¹ / ₄ " - 1 ¹ / ₂ "	Yes	AC-425TC-CF
UMB-525-N200	5 ¹ / ₂ " x 9"	2 ¹ / ₂ "	2"	No	AC-425TC-CF
*Note: When using bracket with meter bars, use center hole bolt					

Note: When using bracket with meter bars, use center hole bolt.



- High security Maintenance free

 Tamper resistant • Fire resistant



JOMAR SAFE BALL WITH BY-PASS

- Perform periodic meter change-out, in service,
- without interupting service

LV-8050

NOTE: Maximum allowable operating

pressure 100 lbs.

• Use barrel or pad lock-see Service Tools

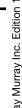
RMI Part No.	Description	
243-004B	³ / ₄ " Safe Ball w/By-Pass Valve Insulated Union	

	RMI Part No.	Description
	SWIVELSET-250	Nut, nipple, gasket for AC250
VAPOR METER	SWIVELSET-425	Nut, nipple, gasket for AL425
REPLACEMENT	SWIVELSET-800	Nut, nipple, gasket for AL800
PARTS	INDEX-250/425	Index for 250/425 series
	INDEX-10#/425	10# Index for AL-425TCH
	INDEX-10#/800	10# Index for 800/1000 series
	INDEX-BOX	Index box for 250/425 series

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Lok-Dome



DOMESTIC AND COMMERCIAL METERS

American Meter has a full line of vapor meters. Domestic and commercial meters are compact, lightweight, rugged die-cast aluminum alloy construction. Meters are temperature compensated for accurate measurement.





AM-250TC-CF

AC-250TC-CF

DOMESTIC AND COMMERCIAL METERS

RMI	Meter Con	nection	Meter Working	Index**	SCFH*	BTU/Hr*
Part No.	Connection	Position		Available	Propane	Propane
AM-250TC-CF	3⁄4" FNPT	Side	5#	Cubic Feet	160	404,000
AC-250TC-CF	1" MC	Тор	5#	Cubic Feet	160	404,000
AL-425TCL-CF	1¼" MC	Тор	10#	Cubic Feet	270	694,000

@60ºF., 11" W.C. Inlet

Must have Special Index or factor index reading when operating pressure is greater than 11" W.C. Adjustment must be made when operating at altitudes greater than 1000 feet above sea level. Cubic foot indexes only per National Board of Weights & Measures.

AL-5000TC-CF AL-1000TC-CF

COMMERCIAL & INDUSTRIAL METERS

Large commercial and industrial vapor meter has rugged construction, lightweight and ample capacity for all sizes of propane installations.

Nº and									
AL-800TC-CF	RMI Part No.	Meter Con	nection	Meter Working	Index#	@ 60ºF,	11" W.C. **	@ 60 º	F, 10# PSIG
AL-425TCH-CF	NIVII PAIL NU.	Connection	Position	Pressure	Available	CFH	BTU	CFH	BTU
	AL-425TCH-CF	1¼" MC	Тор	24#	Cubic Feet	270	694,000	840	2,124,000
	AL-425TCH-CFH	1¼" MC	Тор	24#	10# Index			840	2,124,000
Real Providence	AC-630TC-CF	1½" MC	Тор	25#	Cubic Feet	395	989,,000	1,070	2,684,000
(and the second s	AL-800TC-CF	1½" MC	Тор	25#	Cubic Feet	515	1,299,000	1,620	4,086,000
	AL-1000TC-CF	11/2" MC	Тор	25#	Cubic Feet	645	1,627,000	2,140	5,392,000
	AL-1400TC-CF	3" FNPT	Side	100#	Cubic Feet	900	2,270,000	2,850	7,190,000
	AL-2300TC-CF	4" FNPT	Side	100#	Cubic Feet	1,475	3,758,000	4,730	11,929,000
	AL-5000TC-CF	4" FNPT	Side	100#	Cubic Feet	3,225	8,171,000	10,370	26,148,000

RAY MURRAY, INC.

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Rebuilt meters available upon your request

Must have Special Index or factor index reading when operating pressure is greater than 11" W.C.

Adjustment must be made when operating at altitudes greater than 1000 feet above sea level.

** Capacity based on $\frac{1}{2}$ " W.C. drop. Capacity will double if based on 2" drop across meter.

AMERICAN METER ROTARY METER

Features heavy duty housing, vertical or horizontal mounting, mechanical counter, battery temperature compensation with six month data storage and high accuracy at low flows.

AC-630TC-CF



0

Ray Murray Inc. Edition

RMI Part No. with Temperature	Pipe Size Inlet/Outlet	Capacity Range % Accuracy ² at Various Operating Pressures Thousands of BTU/HR			
Compensation ³		11" WC	5 PSI	10 PSI	
RPM-9.0 CTC	1 ¹ / ₂ " FNPT ¹	75-2,500	99-2,960	124-3,722	
RPM-1.5 TC	1 ¹ / ₂ " FNPT ¹	94-3,750	123-4,930	155-6,205	
RPM-3.5 TC	2" FNPT ¹	116-8,750	153-11,500	193-14,500	
RPM-5.5 TC	2" FNPT ¹	114-13,750	150-18,000	189-22,700	

2" Flange is also available.

2 - Meters will record lower flow rates but at a lower degree of accuracy.

3 - Also available without temperature compensation.

Tel: 800-628-5044

GAS TURBINE METERS

Compact, high-performance turbine meter for accurate totalizing of gas volumes in the flow range of 800 to 10,000 cfh and working pressures of up to 275 psig with aluminum housing.

- Magnetic drive–eliminates leaks
- Versatile mounting-can be mounted vertically or horizontally
- Capable of handling pressure surges without internal damage

Contact RMI technical service for application assistance.

RMI	Description	Capacity	(Millions	of BTU/HR*)
Part No.	Description	@11" WC	@5 PSIG	@10 PSIG
3GTS-275	3" Flange Mount Meter	2.1-25	2.4-32.5	2.6-42.5
4GTS-175	4" Flanged Meter	3-45	3.5-60	2.2-75

3GTS-275

Fax: 800-243-8341

EGULATORS

15 Pigtails, Hogtails & Tees



P456A

PIGTAILS ¹ / ₄ " O.D. COPPER TUBING					
1660,	1662, 1	664 SERIES,	POL	x POL	
		= =		=ť	
1661, 1663,	1665 SI	ERIES, POL x	¹ / ₄ " Ir	nvertec	I Flare
_					1
	69 SFR	IES, POL x ¹ / ₄		====⊌µ PT	10
		,,, ,_			
RMI Part No.	Length	Connection	POL Hex	Nipple	
1660-20	20"				
1660-30	30"		1%" Lo	1	
1660-40	40"	POL x POL		Long	
1660-48	48"				
1661-20	20"				
1661-30	30"	POL x ¼" Inv. FI.	1%"	Long	
1661-40	40"				
1662-12	12"			Long	
1662-20	20"				
1662-30	30"	POL x POL	7/8"		
1662-40	40"				
1662-48	48"				
1663-20	20"				
1663-40	40"	POL x ¼" Inv. Fl.	7/ ₈ "	Long	
1663-48	48"				
1669-6	6"				
1669-12	12"		⁷ /8"	Short	
1669-20	20"	POL x ¼" MNPT			
1679-12	12"		7/8"	Long	
1679-20	20"		/8	Long	
1690-20	20"		11/8"	Long	
FLEXIBLE HOSE PIGTAILS					
1675 Series					

RMI Part No.	Length	Connection	POL Hex	Nipple
1675-15	15"	POL x ¼" Inv. FI.	7/ ₈ "	Long
1675-18	18"	POL x 1/4" Inv. Fl.	7/ ₈ "	Long
1675-24	24"	POL x 1/4" Inv. Fl.	7/ ₈ "	Long
1675-30	30"	POL x ¼" Inv. Fl.	7/ ₈ "	Long
1670-20EX	20"	POL x POL	7/8"	W/ EXCESS FLOW CHECK

TEE MANIFOLDS

1	C Inlet
	1700B

Outlet



utlet

RMI Part No.	Check	Inlet	Outlet
1700A	Yes	¼" Inv. Flare	1/4" MNPT
1700B	No	¼" Inv. Flare	1/4" MNPT
P456A	Manual Throwover	¹ ⁄4" Inv. Flare	1⁄4" MNPT
BMT-4LP	No	1/4" FNPT	1/4" MNPT

Can be used with R232 Series to create a changeover regulator.



RMI Part No.	Check	Inlet	Outlet
1701A	Yes	FPOL	MPOL 7/8"
1701B	No	FPOL	MPOL 7/8"
1702A	Yes	FPOL	MPOL 1 ¹ /8"
1702B	No	FPOL	MPOL 1 ¹ /8"
P403	No	FPOL	FPOL

Tee block with excess flow check in male POL; ideal for construction site manifolding.

RMI Part No.	Check	GPM	POL
1701X	Excess Flow Check	.8	⁷ /8" Male

HOGTAILS 3/8" O.D. COPPER TUBING

	_	1680-20		-1	
RMI Part No.	Length	Connection	POL Hex	Nipple	
1680-12	12"	POL x POL	7/8"	Short	
1680-20	20"	POL x POL	7/8"	Short	
1684-12	12"	POL x 1/2" NPT	7/8"	Short	
1684-20	20"	POL x 1/2" NPT	7/ ₈ "	Short	

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance



Pigtails, Brackets and Vents 16

MOUNTING BRACKETS



1776-25

P100A

RMI Part No.	For Regulator Type
1776-25	800, 1776, 920
P100A	R622 Series
P100A	R122H, R232 Series

VENT ASSEMBLIES







Y602-1

Y602-13

Vent-3/4

These units attach directly to the regulator vent connection or to a regulator vent line. Units with a stabilizer assembly are intended for regulators with stability problems, giving a restricted breathing rate under normal conditions, opening for rapid discharge when necessary.

RMI Part No.	Vent Style	Size	Stabilizer
Y602-13	Angle Type	1/4" FNPT	No
Y602-5	Angle Type	³ /8" FNPT	No
Y602-7	Angle Type	¹ / ₂ " FNPT	No
Y602-8	Angle Type	¹ / ₂ " FNPT	Yes
Y602-9	Angle Type	³ / ₄ " FNPT	No
Y602-1	Umbrella Type	¹ / ₄ " FNPT	No
Y602-2	Umbrella Type	¹ / ₄ " FNPT	Yes
Vent-3/4		³ / ₄ " FNPT	No
Vent-1		1" FNPT	No



H-200P

Tel: 800-628-5044

RMI Part No.	Description
H-200P	2nd Stage Regulator Cover, polyethylene

MEC. Flex-Vent Kit



Application:

The MEC Flex-Vent provides a safe and easy solution to vent LP Gas regulators away from openings, sources of ignition or other potential fire hazards. Meets all requirements of the new flexible material allowance in the 2011 NFPA-58, section 5.8.3.1 (3).

Features:

- Durable hose constructed of flexible PVC material suitable for use with LP Gas vapor
- UV stabe for maximum resistance to outdoor exposure
- 3/4" NPT swivel inlet for easy installation
- Standard 90° vent assembly with screen
- Mounting clamps and coated masonary screws supplied
- Crimped ends for maximum durability

RMI Part No.	Description
ME960-36	MEC Flex-Vent Kit - Fixed Ends - 3 ft.
ME960-48	MEC Flex-Vent Kit - Fixed Ends - 4 ft.
ME960-72	MEC Flex-Vent Kit - Fixed Ends - 6 ft.
ME960-120	MEC Flex-Vent Kit - Universal Outlet (Not Crimped) - 10 ft.
ME960-120C	MEC Flex-Vent Kit - Universal Outlet (Crimped) - 10 ft.

* Custom Lengths available upon request

REGULATORS

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

Polyethylene Pipe, Location Material 17



POLYETHYLENE PIPE

Polyethylene pipe has been approved for use with propane since 1979. It may be fusion welded or mechanically connected, and used only underground with 30 pounds maximum pressure. Polyethylene piping is a safe and economical method of satisfying industrial, commercial & residential customers' needs for long runs of underground piping. No worry of corrosion.



Size	SDR / Wall Thickness	500' Roll	1000' Roll
½" IPS	SDR 9.3; 0.090"		PE2406-12
½" CTS	SDR 7.0; 0.090"	PE2406-12CTS*	
	-		250' Roll
¾" IPS	SDR 11.0; 0.095"	PE2406-34	PE2406-34-250*
1" IPS	SDR 11.0; 0.119"	PE2406-100	
1" CTS	SDR 11.5; 0.099"	PE2406-100CTS	PE24061CTS250*
1¼" IPS	SDR 10.0; 0.166"	PE2406-114	
			40' Straight Lengths
2" IPS	SDR 11.0; 0.216"	PE2406-200	PE2406-200-40**
3" IPS	SDR 11.5; 0.304"	PE2406-300	PE2406-300-40**
4" IPS	SDR 11.5; 0.391"		PE2406-400-40**
6" IPS	SDR 11.5; 0.567"		PE2406-600-40**
8" IPS	SDR 11.5; 0.750"		PE2406-800-40**
* UPS sh	ippable package		

**Minimum of five 40' lengths. Non stock. FOB factory.

TRACER SPACER

The TracerSpacer is a simple, low cost, snap-on device designed to provide a consistent separation between plastic pipe and its tracer wire.



RMI Part No.	Description	
TS 150X6	TRACER SNAP WIRE RETAINER 1-1/2"x6"	
TS 2X12	TRACER SNAP WIRE RETAINER 2"x12"	
TS 2X6	TRACER SNAP WIRE RETAINER 2"x6"	
TS-0.75X6	TRACER SNAP WIRE RETAINER 3/4"x6"	
TS-1X2	TRACER SNAP WIRE RETAINER 1"x2"	
TS-1X6	TRACER SNAP WIRE RETAINER 1"x6"	
TS-1"X6'	TRACER SNAP WIRE RETAINER 1"x6 ft	
TS-1-1/4"X2"	TRACER SNAP WIRE RETAINER 1-1/4"x2"	
TS-1-1/4"X12"	TRACER SNAP 1-1/4"X12"	
TS-1.25X6	TRACER SNAP WIRE RETAINER 1-1/4"x6"	
TS-1IDX6	TRACER SNAP 1"X6" WITH EFV TAG	
TS-2-1/2"X12"	TRACER SNAP 2-1/2"X12"	
TS-3/4"X12"	TRACER SNAP 3/4"X12"	
TS-3/4"X2"	TRACER SNAP RETAINER 3/4"x2"	
TS-3/4"X6'	TRACER SNAP WIRE RETAINER 3/4"x6 ft	
TS1-1/2"X12"	TRACER SNAP 1-1/2"X12"	
TS050	TRACER SPACER 1/2"	
TS075	TRACER SPACER 3/4"	
TS100	TRACER SPACER 1"	
TS125	TRACER SPACER 1-1/4"	
TS200	TRACER SPACER 2"	
TS300	TRACER SPACER, 3"	
TS400	TRACER SPACER, 4"	

POLY COATED TRACER WIRE "COPPERHEAD"

Copperhead Reinforced Tracer Wire, the intelligent choice for tracer wire. Copperhead Reinforced Tracer Wire combines the strength of hi-carbon steel with the conductivity and corrosion resistance of copper through a metallurgical bonding process. The result: a more cost-effective composite with superior performance characteristics over traditional 100% copper wire.

RMI Part No.	Description
14-1	14 gauge poly tracer wire - 500' spool
12-1	12 gauge poly tracer wire - 500' spool
	Copperhead Tracer Wire
14-1-CCS	14 gauge tracer wire - 500' spool
12-1-CCS	12 gauge tracer wire - 500' spool
90120	GEL-LUG



LOCATOR TAPE & FLAGS "CAUTION GAS LINE LINE BELOW"



Bury locator tape 6" below grade directly above polyethylene pipe. Metalic and non-metalic tape is available.

RMI Part No.	Description	
GT-3	Metallic Locator Tape	
NT-3	Non-metallic Locator Tape	
CST-3	3" Non-metallic Yellow Tape w/"Caution" Marking Only	
78-004	Yellow marking flags, 4" x 5" - 100 Count	

Tel: 800-628-5044

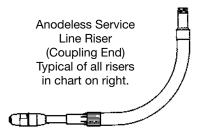
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ANODELESS SERVICE LINE PERMASERT MECHANICAL RISERS

Perfection anodeless riser with Permasert coupling installed, which allows for fast, easy, and reliable mechanical connection.

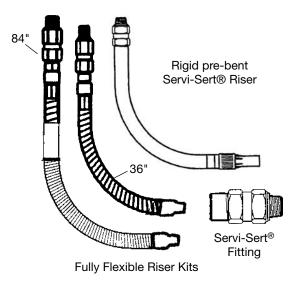




Anodeless w/ Permasert	Anodeless w/ Permasert	Si	ze
30" Vert. x 24" Horiz.	18" Vert. x 18" Horiz. (For underground tanks)	Plastic (Inlet)	Pipe (Outlet)
77253	77205	½" CTS	1/2"
75192*	77195**	½" CTS	3⁄4"
79206*		¾" IPS	3⁄4"
77120*		1" CTS	3⁄4"
78442*		1" IPS	1"
75901*		1¼" IPS	11/4"
75906*		2" IPS	2"

IAPMO listed version; required in Canada.

** Also available in 22" Vert. x 18" Horiz. (Part # 77201)



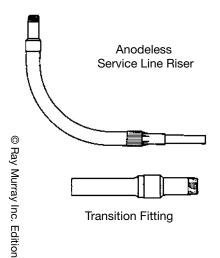
ANODELESS SERVI-SERT FIELD-ASSEMBLED RISERS W/ LINERS

Riser allows the installer to run the polyethylene pipe to a Permasert connector located at the service head adapter. Choice of pre-bent epoxy coated pipe, flexible with stub riser, or fully flexible kit. Complies with NFPA-58, 1995 Edition and CAN/CGA-B149.2-M95. The fully flexible riser kit can be used to connect the plastic service line to the tank. No more need to have a coupling, fusion, transition or copper fitting below ground.

	Fully Flexible Riser Kit*		Stub Flexible Riser w/ Liner	Rigid Pre-Bent Riser w/ Liner	Servi-Sert Fitting**	Siz	e
36"	60"	84"	36" Flex w/ Nipple	30" Vert. x 24" Horiz.	ritung	Plastic	Pipe
71354		71353	71351	71350	71110	½" CTS	1/2"
71356		71355	71463	71453	71100	½" CTS	3⁄4"
71410	71411	71412	71721	71304	71161	¾" IPS	3⁄4"
			71731		71160	1" IPS	1"
			71600	71720	71151	1" CTS	1"

*Conforms to requirements of NFPA58.

** Servi-Sert fitting for use with pipe only. Not used with risers.



ANODELESS RISERS

Service risers are pre-bent to 30" vertical x 24" horizontal. Anodeless risers require no cathodic protection, since the outside epoxy coated casing is not the gas carrier-plastic runs all the way through. Risers and transition fittings can be used with mechanical or fusion fittings

TRANSITION FITTINGS

Transition fitting is epoxy coated and should be cathodically protected.

Size		Anodeless Riser	Transition Fittings	
Pipe	Plastic	30" Vert. x 24" Horiz.	Straight 18"	
1/2"	½″ IPS		TF-12X12	
1/2"	½" CTS		TF-12X12CTS	
3⁄4"	½" IPS	TRA-34X12	TF-34X12	
3⁄4"	½" CTS	TRA-34X12CTS	TF-34X12CTS	
3⁄4"	¾" IPS	TRA-34X34	TF-34X34	
3⁄4"	1" CTS	TRA-34X100CTS**	TF-34X100CTS	
1"	¾" IPS	TRA-100X34		
1"	1" IPS	TRA-100X100	TF-100X100	
1"	1" CTS	TRA-100X100CTS**	TF-100X100CTS	
11⁄4"	1¼" IPS	TRA-114X114	TF-114X114	
2"	2" IPS	TRA-200X200*	TF-200X200	
3"	3" IPS	TRA-300X300*	TF-300X300	
4"	4" IPS	TRA-400X400*	TF-400X400	

Stub risers-with fused polyethylene 90° elbow and polyethylene pipe pigtail. ** Non Stock

Tel: 800-628-5044

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Fax: 800-243-8341

or call for personal assistance

Permasert Mechanical Couplings 19



PE100 PERMASERT MECHANICAL COUPLINGS

Perfection offers a complete, mechanically joined polyethylene LP gas distribution system that complies with NFPA-58. In addition, the Perfection line of products meet or exceeds the applicable requirements of: ASTM D-2513; US DOT Part 192; CSA B137.4 and IAPMO.

New PE100 material fused on all Perfection fittings offer

several significant performance enhancements including ability to join PE2406 and PE3408 pipe, superior resistance to Rapid Crack Propagation and superior resistance to Slow Crack Growth. PE100 has been used around the world for over 20 years.

The heart of the system is the non-corrosive mechanical fitting. These fittings are available in sizes 1/2" & 1" CTS; $1/_2$ " through 8" IPS.

The mechanical coupling makes service line installations safe and simple. The coupling is not only "pull-out proof", it is also incredibly easy to install.





Permasert[®] Mechanical Coupling

MECHANICAL COUPLING

RMI Part No.	PE Pipe Size	SDR Size	Wall Thickness		
50100	1/2" CTS	SDR7	0.090"		
50701A	½" IPS	SDR9.3	0.090"		
50030	¾" IPS	SDR11	0.095"		
50103	1" CTS	SDR11.5	0.099"		
50601	1" IPS	SDR11	0.119"		
50035010	1¼" IPS	SDR10	0.166"		
50314	2" IPS	SDR11	0.216"		

Coppersert[™] Transition Coupling

COPPERSERT **COPPER TO PE FITTING**

RMI Part No.	PE Pipe Size	Copper Size	Wall Thickness
41007	½" CTS	%" 0.D.	0.090"
41013	½" CTS	½" 0.D.	0.090"
41002	½" CTS	%" O.D.	0.090"
41130	¾" IPS	%" O.D.	0.090"
41150	1" CTS	%" O.D.	0.090"
41153	1" CTS	½" 0.D.	0.090"

The self-contained steel stiffener guarantees proper alignment, provides support, and further promotes sealing power and pullout resistance.

NOTE: Installer must be certified.

RMI Part No.	Size	SDR/Wall	Size	SDR/Wall
50751	1/2" CTS	SDR7.0 (0.090")	¹⁄₂" IPS	SDR9.3 (0.090")
50969	½" CTS	SDR7.0 (0.090")	3⁄4" IPS	SDR11 (0.095")
50149	½" CTS	SDR7.0 (0.090")	1" CTS	SDR11.5 (0.099")
50641	½" CTS	SDR7.0 (0.090")	1" IPS	SDR11 (0.119"
50756	1⁄2" IPS	SDR9.3 (0.090")	3⁄4" IPS	SDR11 (0.095")
50148	¾" IPS	SDR11 (0.095")	1" CTS	SDR11.5 (0.099")
51432	¾" IPS	SDR11 (0.095")	1" IPS	SDR11 (0.119")
50195010	¾" IPS	SDR11 (0.095")	1¼" IPS	SDR10 (0.166")
50623	1" CTS	SDR11.5 (0.099")	1" IPS	SDR11 (0.119")
50192	1" CTS	SDR11.5 (0.099")	1¼" IPS	SDR10 (0.166")
50343010	1" IPS	SDR11 (0.119")	1¼" IPS	SDR10 (0.166")
50333010	11/4" IPS	SDR10 (0.166")	2" IPS	SDR11 (0.216")

REDUCING COUPLINGS

PE100



Permasert[®] **Reducing Coupling**

PE100 WYES & REDUCING WYES

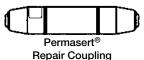
• Creates a "branch" in each dwelling service line for the installation of multiple service lines.



 Use of a blind end cap allows installation of a full piping system to a housing development.

RMI Part No.	Description	Size	SDR/Wall
51702	WYE	1/2" CTS	.090
51701Y	WYE w/blind end caps	1/2" CTS	.090
51704Y	WYE	1 CTS	.099
51766Y	Reducing WYE	3/4" IPS X 1/2" CTS	.090

PE100 REPAIR COUPLINGS



Locate and inspect a damaged pipe and simply and easily repair damaged section with size of coupling required. No need for fusion, welding, or taping. Save on repair time.

RMI Part No.	Size	Length	SDR / Wall Thickness	
50056	½" CTS	12"	SDR7 (0.090")	
50740	½" IPS	12"	SDR9.3 (0.090")	
50175	¾" IPS	12"	SDR11 (0.095")	
50172	1" CTS	12"	0.099" / 0.103"	
50640	1" IPS	13"	SDR11 (0.119")	
50320100	1¼" IPS	13¼"	SDR10 (0.166")	
50341*	2" IPS	15½"	SDR11 (0.216")	
*IMPORTANT	*IMPORTANT: 11/4" and 2" have special			

installation instructions provided on packaging.

PE100 BLIND END CAPS / STUBS

Permasert® Blind End Cap/Stub Used to safely shut

off service or to close the end of a service line. Only open end of "stub" is functional. Both ends of blind "cap"

RMI Part No.	Size	SDR / Wall	Туре	
50016	1/2" CTS	0.090"	Сар	I
50716	1/2" IPS	0.090"	Сар	I_
50026	³⁄₄" IPS	SDR11	Сар	Edition 11
50045	1" CTS	0.099"/ 0.103"	Сар	itior
50033	11/4" IPS	SDR10	Сар	В
50317	2" IPS	SDR11	Сар	с.
50612	1" IPS	SDR11	Stub	Murray Inc.
may be used as a coupling.				

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

Permasert Mechanical Couplings, Valves 20

SDR / Wall

0.090"

0.090"

0.090"

0.090"

0.090"

SDR 11

SDR 11

0.099"/ 0.103"

0.099"/ 0.103"

SDR 10



PE100 PERMASERT MECHANICAL TEE COUPLINGS

Remarkably easy to use. Available in same size Tee or a 3-way reducing configuration. Same lasting grip as in mechanical couplings. No need for tools, fusion or wrenches.

SDR / Wall

SDR 9.3

0.090"

SDR 11

SDR 11

0.099"/ 0.103"

SDR 11

SDR 10

SDR 10

SDR 11

SDR 11

PE100 REDUCING TEES

Size

1/2" IPS

1/2" CTS

¾" IPS

1" IPS

1" CTS

1" IPS

11/4" IPS

11/4" IPS

2" IPS

2" IPS

SDR / Wall

SDR 9.3

0.090"

SDR 11

SDR 11

0.099"/ 0.103

SDR 11

SDR 10

SDR 10

SDR 11

SDR 11

Size

1/2" CTS

1" CTS

1/2" CTS

1/2" CTS

1/2" CTS

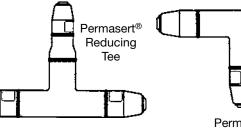
3⁄4" IPS

3/4" IPS

1" CTS

1" CTS

11/4" IPS



Permasert® Straight Tee

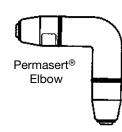
PE100 STRAIGHT TEES

RMI Part No.	Size	SDR / Wall
50199	1/2" CTS	0.090"
50730100	½" IPS	SDR 9.3
50929	¾" IPS	SDR 11
50292	1" CTS	0.099" / 0.103"
50634	1" IPS	SDR 11
50327010	1¼" IPS	SDR 10
50316	2" IPS	SDR 11



PE100 PERMASERT 90° ELBOW COUPLING

As with other Perfection mechanical connections. elbows are easy to use and reliable. No tools or fusion are required.



RMI

Part No

50731

51335

50461

50632

50451

50635

51325

50328100

50348100

51323100

Size

1/2" IPS

1/2" CTS

¾" IPS

1" IPS

1" CTS

1" IPS

11/4" IPS

11/4" IPS

2" IPS

2" IPS

RMI Part No.	Size	SDR / Wall
50294	½" CTS	0.090"
50732100	½″ IPS	SDR 9.3
51620	¾" IPS	SDR 11
51333	1" CTS	0.099"/ 0.103"
50636	1" IPS	SDR 11
50325010	1¼" IPS	SDR 10
50315	2" IPS	SDR 11

PERFECTION EFV VALVES

To help accomplish this fundamental task, more and more utilities are taking safeguards to minimize occurrences of blowing gas due to pipe line breaks caused by third party damage and natural disasters. And the easiest, most dependable, and economical way is with an EFV excess

flow valve from Elster Perfection.

0



RMI Description			
51474	1/2" CTS Coupling w/EFV		
50584	3/4" IPS Coupling w/EFV		
51476	1" CTS Coupling w/EFV		
51636	1" IPS Coupling w/EFV		
*Other configurations available			

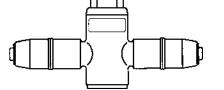
Tel: 800-628-5044

Perfection Corporation

PE100 PERMASERT SHUT-OFF VALVES

Polyethlene shut-off valve is compatible with all PE gas distribution systems. Valve is rated equivalent to the maximum allowable operating pressure of PE piping to which it is connected.

RMI Part No.	Size	SDR / Wall	
45051	½" CTS	0.090"	
45100	3⁄4" IPS	SDR 11	
45071	1" CTS	0.099"/ 0.103"	
45200	1" IPS	SDR 11	
45170100	1¼" IPS	SDR 10	
46011	2" IPS	SDR 11	



Permasert® Polvethvlene Shut-off Valve

PERMASERT ASSEMBLY ASSIST TOOLS

Assist tool allows for easy installation of 11/4" and 2" Permasert fittings.

RMI Part No.	Description
51055	1¼" Assist Tool
51050	2" Assist Tool



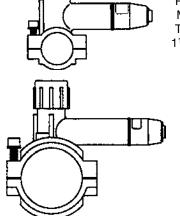
Fax: 800-243-8341

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance



PERFECTION PERMALOCK SELF TAPPING TEE

Permalock mechanical tapping tee provides a simple gas tight, non-heat fusion polyethylene service line connection. No special tools required for installation. (Standard socket set and Allen wrenches needed.)



Permalock[®] Mechanical Tapping Tee 1¹/₄" & 2" IPS

> Permalock[®] Mechanical Tapping Tee 4" IPS

DMI			
RMI Part No.	Main Size	Outlet*	SDR / Wall
54201	1¼" IPS	½" CTS	0.090"
55702	2" IPS	½" CTS	0.090"
55901	2" IPS	¾" IPS	SDR 11
55951A	2" IPS	1" IPS	SDR 11
55990	2" IPS	2" IPS	SDR 11
54102	3" IPS	½" CTS	0.090"
54150	3" IPS	2" IPS	SDR 11
55902	4" IPS	¾" IPS	SDR 11
55992	4" IPS	2" IPS	SDR 11

* Outlet is a Permasert mechanical fitting.



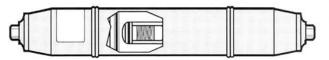
PERMASERT® XL LARGE DIAMETER MECHANICAL COUPLINGS



RMI Part No.	Size				
55161	2" IPS - SDR 11				
55131	3" IPS - SDR 11/11.5				
55101	4" IPS - SDR 11/11.5				
55182	6" IPS - SDR 11.5				
55196	8" IPS - SDR 11.5				

IN-LINE EXCESS FLOW VALVE

Permasert couplings with built-in excess flow valve meets the requirements for jurisdictional piping systems under US DOT CFR Title 49, Part 192.381. Used primarily at each branch off a main line feeding a residence or small commercial building.



		Excess Flow Rate			
RMI Part No.	Permasert Coupling	SCFH Propane	BTU Propane		
51474	1/2" CTS.SDR 0.090	250	630,000		
50584	3/4" IPS SDR 11.0		630,000		

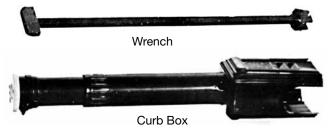


PRESSURE TEST CAP AND TOOL KIT

Adaptor threads to top of saddle tee for testing branch line.

55651

HANDLEY FUSION UNDERGROUND SERVICE VALVE



WRENCHES FOR VALVES

RMI Part No.	Valve Size	Description
PWCBL3.5	³ ⁄4"- 3"	Wrench for curb box lid
SRVW15	³ /4"- 1 ¹ /4"	15" Rod wrench for valve
SRVW24	³ ⁄4"- 1 ¹ ⁄4"	24" Rod wrench for valve

CURB BOXES

RMI Part No.	Description	Valve Size	Adj. Height
445-S	Curb Box w/support	1⁄2"- 11⁄4"	24"
445-L	Curb Box	2"	24"
445EXT	15" Extension for 445-S	-	
GHA4-3	4" ID Heavy Duty	2"- 3"	32"- 44"
GHAB6-3	6" ID Heavy Duty	4"	32"- 44"

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance



ELECTROFUSION MACHINE AND EQUIPMENT

Electrofusion is an automated method of joining PE pipe with integral heating elements. Electrofusion offers several advantages over traditional heat fusion procedures. Electrofusion will create a fusion that is stronger than the surrounding pipe. While using a computerized processor to determine the fusion requirements of the particular fitting removes "human" element. If anything interferes with the completion of the fusion joint, the processor will detect the problem and alert the operator. The processor allows for documentation that every fusion was completed properly. Ray Murray, Inc. offers a full line of electrofusion equipment and fittings - contact RMI for assistance in laying out and quoting of your job.

ELECTROFUSION MACHINE

- Robust, cast aluminum housing
- Intuitive user guidance menu
- Protective transport box and pouch for barcode pen
- USB interface for memory download and software update
- Prevention of electrical damage
- Clear and explicit error messages
- Worldwide training, support and service network
- Water resistant design to IP54 standards



RMI Part No.	Description
VISA340	Easy Fuse 115V Electrofusion machine w/GPS

RAY MURRAY, INC. OFFERS A FULL LINE OF ELECTROFUSION EQUPMENT AND FITTINGS – CONTACT RMI FOR ASSITANCE IN LAYING OUT AND QUOTING OF YOUR JOB.



- Compatible for fusion to either PE2406/PE2708 or PE3408/PE4710 and other similar pipe
- Cross-fusion compatible without special fusion instructions
- Pressure rated for natural gas and potable water applications
- Available in many different sizes; including metric





Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

Fax: 800-243-8341

PIPING



SOCKET FUSION FITTINGS / REDUCER COUPLINGS

"Highest Quality"... Meets ANSI & ASTM standards and requirements.









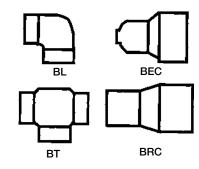
				31					
Size/	RMI Part No.						RMI Part No.		
		IPS x IPS Couplings						CTS x CTS Couplings	
Style	½" IPS	3⁄4" IPS	1" IPS	1¼" IPS	2" IPS	3" IPS	½" CTS	1" CTS	
Coupling	SC-12	SC-34	SC-100	SC-114	SC-200	SC-300	SC-12CTS	SC-100CTS	
90∘ Elbow	SL-12	SL-34	SL-100	SL-114	SL-200	SL-300	SL-12CTS	SL-100CTS	
Тее	ST-12	ST-34	ST-100	ST-114	ST-200	ST-300	ST-12CTS	ST-100CTS	
End Cap	SEC-12	SEC-34	SEC-100	SEC-114	SEC-200	SEC-300	SEC-12CTS	SEC-100CTS	
				IPS x CTS Reduc	er Couplings				
½" CTS	SRC-12X12CTS	SRC-34X12CTS	SRC-100X12CTS	SRC-114X12CTS				SRC-100CX12CT	
1" CTS				SRC-114X100CT	SRC-200X100CT				
			IPS x IPS	6 Reducers					
½" IPS		SRC-34X12	SRC-100X12	SRC-114X12					
¾" IPS			SRC-100X34	SRC-114X34					
1" IPS				SRC-114X100	SRC-200X100				
1¼" IPS					SRC-200X114				
2" IPS						SRC-300X200			

IPS = Iron Pipe Size (An I.D. measurement)

CTS = Copper Tubing Size (An O.D. measurement)

BUTT FUSION FITTINGS / REDUCER COUPLINGS (IPS ONLY)

	RMI Part No.								
Size/Style	IPS x IPS Couplings								
	¾" IPS	1" IPS	1¼" IPS	2" IPS	3" IPS	4" IPS	6" IPS		
90º Elbow	BL-34	BL-100	BL-114	BL-200	BL-300	BL-400	BL-600		
Тее	BT-34	BT-100	BT-114	BT-200	BT-300	BT-400	BT-600		
End Cap	BEC-34	BEC-100	BEC-114	BEC-200	BEC-300	BEC-400	BEC-600		
		IPS x IPS Reducer Couplings							
¾" IPS	BRC-100x34								
1" IPS			BRC-114x100						
1¼" IPS				BRC-200x114					
2" IPS					BRC-300x200	BRC-400x200	BRC-600x200		





Ray Murray Inc. Edition 11 0

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Socket Fusion Equipment and Accessories 24

ELECTRIC HEATING TOOL

Thermostatically heats to 500 degrees. Requires 115 volts. Extension handle is available for easier fusion.



EB3000 w/EB0000

RMI Part No.	No. Description	
EB3000	Model 2 Electric Fusion, 1000 watts	1/2"-2"
EB0000	Extension handle, Models 2 & 4	

RMI Part No.	Pipe Size
SP2620CTS	½" CTS
SP2750	¾" IPS
SP2010	1" IPS
SP2110CTS	1" CTS
SP2120	1¼" IPS
SP2020	2" IPS

HEATER SOCKET FUSION FACES

Required on the EB3000 and HH3000 for each size pipe.



CHAMFERING TOOL DEPTH GAUGE COMBINATION



Handy tool for accurate sizing to proper depth on pipe. One tool is required for each size of pipe.

DGCH34

RMI Part No.	Pipe Size	Description
DGCH12CTS	1/2" CTS	Chamfer tool / Depth Gauge
DGCH34	¾" IPS	Chamfer tool / Depth Gauge
DGCH100	1" IPS	Chamfer tool / Depth Gauge
DGCH100CTS	1" CTS	Chamfer tool / Depth Gauge
DGCH114	11/4" IPS	Chamfer tool / Depth Gauge
DGCH200	2" IPS	Chamfer tool / Depth Gauge

PERMASERT CHAMFER TOOLS

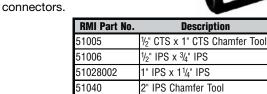
1/2 " CTS x 3/4" IPS

Chamfering tool permits the tubing to be completely stabbed without damaging the internal seals on Permasert

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Ray Murray Inc. Edition



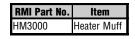


Tel: 800-628-5044

51016

HEATER MUFF

For keeping the heating tool warm between fusions. Excellent protection for the fusion faces to prevent any damage during use.





PIPING

COLD RING

Used for rounding out pipe and prevents the socket fitting from sliding on to the pipe too far. One for each size pipe is required.

CR0750

RMI Part No.	Pipe Size
CR0620CTS	½" CTS
CR0750	¾" IPS
CR0010	1" IPS
CR0110CTS	1" CTS
CR0120	1¼"IPS
CR0020	2" IPS

SHEARS

Ratchet type to clean cut plastic pipe up to 2".



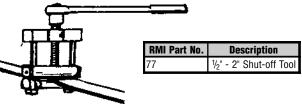




RMI Part No.Description55190Plastic cutter ½" - 1"SHEARS½" - 1¼" Plastic pipe shearsSHEARS-2½" - 2" Plastic pipe shearsBLADEReplacement blade for SHEARSBLADE-2Replacement blade for SHEARS-2

PLASTIC PIPE SHUT-OFF TOOL

Designed to stop gas flow at any accessible point. Useable up to 2" PE Pipe.



RAY MURRAY, INC.

Order online at www.raymurray.com or call for personal assistance FLOPPY Series



TRACPIPE® COUNTERSTRIKE® PROTECTION DEVICES

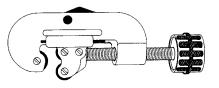
FLEXIBLE STEEL CONDUIT

Provides protection for CSST at termination fittings and horizontal runs between wall studs. Also ideal for situations where extra protection would be beneficial.

|--|

RMI Part No.	Description	Size	Pkg. Qty.	Lb.
FPY-375CT	Floppy - fits 3/8" Cut 1 ft.	3/4"	50 Box	11
FPY-500CT	Floppy - fits 1/2" Cut 1 ft.	1"	50 Box	15
FPY-750CT	Floppy - fits 3/4" Cut 1 ft.	1 1/4"	25 Box	17.5
FPY-1000CT	Floppy - fits 1" Cut 1 ft.	1 1/2"	25 Box	24
FPY-375-50	Floppy - fits 3/8"	3/4"	50 ft/coil	9
FPY-500-50	Floppy - fits 1/2"	1"	50 ft/coil	13
FPY-750-25	Floppy - fits 3/4"	1 1/4"	25 ft/coil	15.5
FPY-1000-25	Floppy - fits 1"	1 1/2"	25 ft/coil	22
FPY-1250-25	Floppy - fits 1 1/4"	2"	25 ft/coil	28.5
FPY-1500-25	Floppy - fits 1 1/2"	2 1/2"	25 ft/coil	46
FPY-2000-25	Floppy - fits 2"	3"	25 ft/coil	51
Tape	Tape - Outdoor Silicone	1" x 12 yd.	Roll 12 yd.	.3
Tape-2	Tape - Outdoor Silicone	2" x 12 yd.	Roll 12 yd.	.6
Tape-Black	Tape - Black	1" x 12yd.	Roll 12 yd.	.3

CSST TUBE CUTTERS



RMI Part No.	Size	Description
TC-15	³ /8"- 1"	Cutter No. 15
TC-151	³ /8"- 1 ¹ /4"	Cutter No. 151
TC-152	1 ¹ /4" - 2"	Cutter No. 152
FGP-E-5272	1 ¹ / ₄ " - 2"	Cutter Wheel

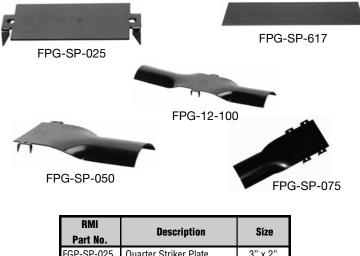
BONDING CLAMPS



RMI Part No.	TP/CS	Iron Plate
GC-1	3/8", 1/2"	1/2", 3/4", 1"
GC-2	3/4", 1", 1 1/4"	1 1/4", 1 1/2", 2"
GC-3	1 1/2", 2"	2 1/2"- 4"

STRIKER PLATES/BRACKET

Provides protection for CSST against penetration where tubing is fixed or movement is restricted by the wood framing.

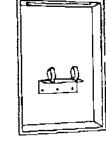


Part No.	Description	Size
FGP-SP-025	Quarter Striker Plate	3" x 2"
FGP-SP-050	Half Striker Plate	3" x 7"
FGP-SP-075	Three Quarter Striker Plate	3" x 9"
FGP-SP-100	Full Striker Plate	3" x 12"
FGP-SP-617	6 1/2" x 17" Stiker Plate	6 1/2" x 17"

MANIFOLDS

Pre-engineered and fabricated multiport manifolds for ease of installation. Pressure tested and suitable for CSST installations where appliance distribution lines are separated. Provides central distribution point for individual runs to each appliance.

Portman 3, 4 & 5 Multiport



GLC1

RMI Part No.	Description	Size
MI-PC	Coated Manifold	3/4" x 1/2" x 1/2" (4)
MB2	Manifold Bracket	
MI-ST-500	Stackable Manifold	1/2"F - M x 1/2" (2)
MI-ST-750	Stackable Manifold	3/4" F - M x 1/2" (2)
MI-PC-1X	Large Coated Manifold	1 1/4" x 1" x 3/4" (4)
MI-PC-2X	Large Coated Manifold	2" x 1 1/2" x 1" (4)

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TracPipe CSST Gas Piping and Fittings 26

TracPipe TRACPIPE[™] CSST TUBING

TracPipe is a flexible stainless steel piping material with enhanced lightning protection for natural gas and propane installations. TracPipe's superior corrugated tubing coupled with AutoFlare fittings combine to make the best CSST product available. **TECH NOTE:** System must be electrically bonded to earth ground.



RMI Part No.	Size	Reel Length	Lb./Reel
CS-375-250	3/8"	250	37
CS-375-100	3/8"	100	17
CS-500-500	1/2"	500	98
CS-500-250	1/2"	250	52
CS-500-100	1/2"	100	24
CS-500-50	1/2"	50	14
CS-750-250	3/4"	250	70
CS-750-100	3/4"	100	31
CS-750-50	3/4"	50	18
CS-100-180	1"	180	70
CS-100-100	1"	100	40
CS-100-50	1"	50	22
CS-125-250	1 1/4"	250	129
CS-125-150	1 1/4"	150	78
CS-150-250	1 1/2"	250	182
CS-150-250	1 1/2"	150	103
CS-200-150	2"	150	137

AUTOFLARE[™] BRASS TEE FITTINGS





T500-750



RMI	Description	Carton
Part No.	Description	Qty.*
T500-750	(2) $\frac{1}{2}$ " FNPT x $\frac{3}{4}$ " MNPT TEE for TracPipe	12
T500-500	1/2" FNPT TEE for TracPipe	14
T750-750	³ ⁄4" FNPT TEE for TracPipe	12
T750-500	³ ⁄ ₄ " x ¹ ⁄ ₂ " FNPT TEE for TracPipe	12
T1000-1000	1" FNPT TEE for TracPipe	10

CP CP CP CP CP

RMI Part No.	Description	Carton Qty.
LG-375	%" Coupling for TracPipe	24
LG-500	$\frac{1}{2}$ " Coupling for TracPipe	24
LG-750	³ / ₄ " Coupling for TracPipe	16
LG-1000	1" Coupling for TracPipe	16
LG-1250	1¼" Coupling for TracPipe	6
LG-1500	1 ¹ / ₂ " Coupling for TracPipe	4
LG-2000	2" Coupling for TracPipe	4

AUTOFLARE™ BRASS COUPLINGS



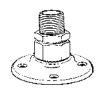
CLPG-500

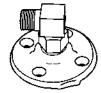
STRAIGHT MECHANCIAL AUTOFLARE BRASS FITTINGS



RMI	Description	Carton	
Part No.	• • • •	Qty.	
FST-375*	%" Straight for TracPipe	24	
FST-500	1/2" Straight for TracPipe	24	
FST-750	3/4" Straight for TracPipe	16	
FST-1000	1" Straight for TracPipe	16	
FST-1250	T-1250 1 ¹ / ₄ " Straight for TracPipe		
FST-1500	1½" Straight for TracPipe	4	
FST-2000	FST-2000 2" Straight for TracPipe		
* 3/8" size fit	tings have ½" NPT threads.		

FLANGE MOUNT AUTOFLARE[™] BRASS FITTINGS





PIPING

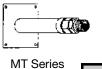
Straight Flange Mount

90° Flange Mount

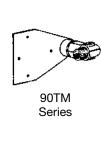
12 12
10
12
8
8
4
8
8

%" size straight fittings have ½" NPT threads.

TERMINATION MOUNTS & METER TERMINATORS







	·		
RMI Part No. Description			Carton Qty.
TM-375*	Termination mount	3%"	12
TM-500	Termination mount	1/2"	12
TM-750	Termination mount	3⁄4"	8
TM-1000	Termination mount	1"	8
90TM-375*	Termination mount	3%"	8
90TM-500	Termination mount	1/2"	8
MT6-500	6" Meter Termination	1/2"	1
MT6-750	6"Meter Termination	3⁄4"	1
MT6-1000	6" Meter Termination	1"	1
MT12-500	12" Meter Termination	1/2"	1
MT12-750	12" Meter Termination	3⁄4"	1
MT12-1000	12" Meter Termination	1"	1

3/8" size fittings have 1/2" NPT threads. (Does not apply to 90°)

Tel: 800-628-5044

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27 TracPipe PS-II Underground Gas Piping



TracPipe



A pre-sleeved, "one-step" gas installation system for underground, rooftop, or exterior wall applications. TracPipe PS-II can be installed under buildings, slab, roads, driveways - it's perfect for gas installations in a variety of applications where speed, reliability and safety are paramount.

TRACPIPE PS-II TUBING

RMI Part No.	Description	Size	Reel Length (Ft.)	Weight (Lbs./Reel)
UGP-375-250	TracPipe PS -II ¾"	3/8"	250	57.5
UGP-500-250	TracPipe PS-II ½"	1/2"	250	82.5
UGP-750-250	TracPipe PS-II ¾"	3/4"	250	107.5
UGP-100-250	TracPipe PS-II 1"	1"	250	142.5
UGP-125-150	TracPipe PS-II 1¼"	1¼"	150	137
UGP-150-150	TracPipe PS-II 1½"	1½"	150	150.5
UGP-200-150	TracPipe PS-II 2"	2"	150	220

THE SAFETY OF YOUR CUSTOMER IS IN YOUR HANDS

After 9 years, millions of feet, and tens of thousands of installations, we can safely say "If you're not using Counterstrike® then you're not using the safest gas piping product!"

OmegaFlex

TracPipe @CounterStrike Finalde Gas Paring by Omegafies.

Visit our new website at www.tracpipe.com © Copyright Omega Flex 2013

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TRACPIPE[™] PS-II COUPLINGS

RMI Part No.	Description	Size	Package Quantity	Weight (Lbs.)
UGC-375	TracPipe PS-II Coupling	3/8" T/P Coupling	25/box	.65
UGC-500	TracPipe PS-II Coupling	1/2" T/P Coupling	20/box	.70
UGC-750	TracPipe PS-II Coupling	³ / ₄ " T/P Coupling	16/box	1.05
UGC-1000	TracPipe PS-II Coupling	1" T/P Coupling	9/box	1.40
UGC-1250	TracPipe PS-II Coupling	1¼" T/P Coupling	9/box	2.50
UGC-1500	TracPipe PS-II Coupling	$1^{1}\!\!/_{2}"$ T/P Coupling	8/box	4.25
UGC-2000	TracPipe PS-II Coupling	2" T/P Coupling	5/box	6.90



TracPipe PS-II fittings are constructed from TracPipe patented Autoflare® fittings with a plastic containment coupling and 1/4"

TRACPIPE PS-II MALE ADAPTORS

NPT vent port. Fittings assemble without special tools.

	Description	Size	Package Quantity	Weight (Lbs.)
UGF-375	TracPipe PS-II Male Adaptor	3%" NPT Male	25/box	.45
UGF-500	TracPipe PS-II Male Adaptor	1/2" NPT Male	20/box	.50
UGF-750	TracPipe PS-II Male Adaptor	34" NPT Male	16/box	.65
UGF-1000	TracPipe PS-II Male Adaptor	1" NPT Male	9/box	.90
UGF-1250	TracPipe PS-II Male Adaptor	1 ¹ /4" NPT Male	9/box	1.60
UGF-1500	TracPipe PS-II Male Adaptor	1 ¹ / ₂ " NPT Male	8/box	2.65
UGF-2000	TracPipe PS-II Male Adaptor	2" NPT Male	5/box	4.30

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance



Poly Coated Copper Tubing 28

RMI Part No

100 Ft. Coil

RCT38-100-C

RCT12-100-C

RCT58-100-C

50 Ft. Coil

RCT38-50-C

RCT12-50-C

RCT58-50-C

LCT34-60-C

REFRIGERATION/GENERAL PURPOSE

Nominal

Size O.D

3/8'

1/2"

5/8'

__ ...

Flare

Copper I.D.

3/8"

1/2'

5/8"

7_{/8},

Wall

Thickness

.032

.032

.035

.045

Kam₆

COPPER-TEC POLYETHYLENE COATED COPPER TUBING - YELLOW COATING

EASY TO IDENTIFY

- Permanent yellow polyethylene coating
- Continuous line marking
- Traceable back to origin of manufacturing
- Mill test reports available upon request

EASY TO INSTALL

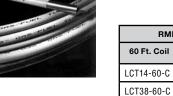
- No additional training required for installation
- Flexible Easy to join Compact size
- Requires smaller and fewer tools than steel pipe
- Cleaner than threaded steel pipe

COST EFFICIENT

- Most economical line-marked tubing on the market
- Minimal labor costs due to quick and easy installation
- No on-site sleeving required for underground gas lines

RECYCLABLE

Copper is fully recyclable



TYPE "L"					
RMI Part No		Nominal	Flare	Wall	
60 Ft. Coil	100 Ft. Coil	Size O.D.	Copper I.D.e	Thickness	
LCT14-60-C	LCT14-100-C	1/4"	3 _{/8} "	.030	
LCT38-60-C	LCT38-100-C	3/8"	1 _{/2} "	.035	
LCT12-60-C	LCT12-100-C	1 _{/2} "	5 _{/8} "	.040	
LCT58-60-C		5 _{/8} "	3 _{/4}	.042	

3/4"

TYPE "K"

RMI Part No		Nominal	Flare	Wall
60 Ft. Coil	100 Ft. Coil	Size O.D.	Copper I.D.e	Thickness
KCT14-60-C	LCT14-100-C	1/4"	3/8"	.030
KCT38-60-C	LCT38-100-C	3/8"	1 _{/2} "	.049
KCT12-60-C	LCT12-100-C	1 _{/2} "	5 _{/8} "	.049
KCT58-60-C		5 _{/8} "	3/4	.049
KCT34-60-C		3/4"	7 _{/8} "	.049



GROOVED POLYETHYLENE-COATED ORANGE COPPER TUBING

Oil Pro-Tec™ features a revolutionary concept in fuel oil tubing. The uniquely-designed polyethylene coating protects both the environment from the oil contaminants and the copper tubing from corrosion. The coating features special grooves that contain the fuel oil in the event of a line failure and provides for early leak detection.







RMI Part No.	Description
30385	3/8" OD Oil Tubing - 50' Coil
30125	1/2" OD Oil Tubing - 50' Coil

COPPER TUBING TERMINATION FLANGE

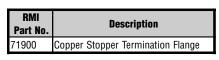
The Copper Stopper termination flange transitions the copper tube back to standard pipe.

Protects line from damage

0

Ray Murray Inc. Edition

- · Eliminates the several feet of excess tube that is required while waiting for final appliance hook-up.
- Complete installation in one visit.
- Fits all 3/8", 1/2" and 5/8" flare MIP fittings and can easily be joined to standard FIP fittings.





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Copper Tubing





COPPER REFRIGERATION TUBING

Refrigeration tubing is commonly sold by the O.D. LP usage should be limited to interior applications, originating from the second stage regulator to the appliance. NOTE: Not suitable for use underground.

RMI P	RMI Part No.		Wall	Wt. Per	
50 Ft. Coil	100 Ft. Coil	0.D.	Thickness	100 Ft.	
RCT18-50		1/8"	.030"	3.48 lbs	
RCT14-50		1⁄4"	.030"	8.04 lbs	
RCT38-50	RCT38-100	3⁄8"	.032"	13.40 lbs	
RCT12-50	RCT12-100	1/2"	.032"	18.20 lbs	
RCT58-50	RCT58-100	5⁄8"	.035"	25.10 lbs	
RCT34-50		3⁄4"	.035"	30.50 lbs	

COPPER TUBING SHIELDS

TYPE "L"

COPPER TUBING

Type "L" tubing is commonly sold by the I.D. It is typically used for both internal, external, & inground applications. LP usage is acceptable downstream of the first stage regulator. Type "L" may also be used downstream of the second stage regulator if desired.

RMI Part No.		Nominal Size		Wall
60 Ft. Coil	100 Ft. Coil	I.D.	0.D.	Thickness
LCT14-60	LCT14-100	1/4"	3/8"	.030"
LCT38-60	LCT38-100	3/8"	1/2"	.035"
LCT12-60	LCT12-100	1/2"	5%"	.040"
LCT58-60	-	5⁄8"	3/4"	.042"
LCT34-50	-	3/4"	7/8"	.045"

TYPE "K"

Type "K" tubing is commonly sold by the I.D. It is typically used for both internal, external, & in-ground applications. LP usage is acceptable for tank vapor pressure and liquid applications (i.e. Fill station bypass lines).

RMI P	art No.	Nomina	Wall	
50 Ft. Coil	100 Ft. Coil	I.D.	0.D.	Thickness
KCT14-60	KCT14-100	1/4"	3/8"	.035"
KCT38-60	KCT38-100	3/8"	1/2"	.049"
KCT12-60	KCT12-100	1/2"	5/8"	.049"
KCT58-60	-	5/ ₈ "	3/4"	.049"
KCT34-50	-	3⁄4"	7/ ₈ "	.065"

Flexible plastic coated steel conduit to protect copper tubing at tank and service end of installation. SSP 1 Series RMI Description Part No. SSP300 3' Copper Tubing Protective Shield SSP400 4' Copper Tubing Protective Shield

J-CLIPS

6' Copper Tubing Protective Shield

- Steel & copper coated, or plastic
- JCL-1 Fastens 3/8" & 1/2" OD Tubing
- JCL-2 Fastens 5/8" OD Tubing

Plastic J-Clip for 1/2"



RMI Part N JCL-1 JCL-2 16036

SSP600

0.	Description	Package
	Metal J-Clip for $\frac{3}{8}$ " & $\frac{1}{2}$ "	Bag of 100
	Metal J-Clip for 5/	Bag of 100

JCL-1/JCL-2

Bag of 50

Plastic inserts prevent galvanic action, grips in all masonry. All Material is rust resistant. Case is unbreakable, water and spillproof. **GK-135** Instructions 1. Drill hole in masonry, brick, etc. flush with wall.

Special size of drill and J-Clip shank grips tight.

GAS-KIT MASONRY KIT

2. Install plastic insert in material

3. Hammer in J-Clip device to hold tubing, pipe or cable.

RMI Part No.	Description		
GK-135	Drill, plastic inserts, JCL-1 Clips & carrying case		

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Flare Fittings **30**

SHORT FORGED NUT Jo. NS4Jo. NS4İmari Noİmari Noİmari NoImari NoImari NoNEULING NUTS Jo. NRS4Imari Noİmari NoImari NoImari NoImari NoNRS4FEJo. NRS4Imari NoImari No	CON	MALE NECTOR Jo. 48 No. FL x MNPT $1/4" x 1/4"$ $1/4" x 3/6"$ $1/4" x 3/6"$ $1/4" x 3/6"$ $1/4" x 3/6"$ $1/4" x 3/6"$ $3/6" x 1/2"$ $3/6" x 3/4"$ $3/6" x 3/4"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $1/2" x 3/8"$ $3/6" x 3/4"$ $3/6" x 3/4"$ $3/6" x 3/4"$		MALE EL No. 49 FO 49CA 49CC 49CF 49EC 49EC 49EF 49EF 49FF 49FF 49FF 49FF 49FF 49FK 49IE 49IF 49IK 49IK 49KK	RGED	
Part No. Flare 42C $1/4^a$ 42E $3/6^a$ 42F $1/2^a$ 42I $5/6^a$ 42K $3/4^a$ BEDUCING UNION REDUCING UNION REDUCING UNION 42E $3/4^a$ 42K $3/4^a$	CONI N	$\begin{array}{c} \textbf{MALE} \\ \textbf{NECTOR} \\ \textbf{o. 46} \\ \hline \textbf{No. Fl. x FNPT} \\ \hline 14^{''} x 16^{''} \\ \hline 36^{''} x 16^{''} \\ \hline 36^{''} x 16^{''} \\ \hline 36^{''} x 36^{''} \\ \hline 12^{''} x 36^{''} \\ \hline 56^{''} x 36^{''} \\ \hline 56^{''} x 12^{''} \\ \hline 56^{''} x 34^{''} \\ \hline 56^{''} x 34^{''} \\ \hline 56^{''} x 34^{''} \\ \hline \end{array}$		Part No. 54EC % 54EE % 54EF % 54EK % 54FE 1 54FF 1 54FF 1 54FF 5 54FF 5 54FF 5 54IE 5 54IF 5		
$\begin{array}{c} 2 \text{ WAY TEE} \\ \text{No. 45 FORGED} \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ $	2		Sway TEE . 44 FORGED Flare 1/4" 3%" ½" 5%" 3/4"	2	REDU No. 4	WAY CING TEE 4 FORGED FI. x FI. x MNPT 1 x 2 x 3 $\frac{3}{6}^{*} \times \frac{3}{6}^{*} \times \frac{1}{4}^{*}$ $\frac{3}{6}^{*} \times \frac{3}{6}^{*} \times \frac{1}{2}^{*}$ $\frac{1}{2}^{*} \times \frac{3}{6}^{*} \times \frac{1}{2}^{*}$ $\frac{1}{2}^{*} \times \frac{3}{6}^{*} \times \frac{1}{2}^{*}$ $\frac{1}{2}^{*} \times \frac{1}{2}^{*} \times \frac{3}{6}^{*}$ $\frac{1}{2}^{*} \times \frac{1}{2}^{*} \times \frac{1}{2}^{*}$ $\frac{1}{2}^{*} \times \frac{1}{2}^{*} \times \frac{1}{2}^{*}$

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Flare Ball Valves and Fittings 31



	RMI Flare Part No. 55E 3%" x 3%" 55F 1/2" x 1/2" 55FE 3%" x 5%" 55I 5%" x 5%" 55IE 5%" x 3%" 55IE 5%" x 3%" 55IE 5%" x 3%" 55IF 5%" x 1/2"	2 WAY ELBOW No. 55 FORGED	SAE FLARE CROSS No. C-1 FORGED	6	FLARE CAI No. N-5		Flare 3%" ½" 5%" 3¼"
PIPING	RMI Flare Part No. VS4E US4E %" × %" US4EC %" × 1/4" US4F 1/2" × 1/2"	SWIVEL NUT No. US4	RMI Flare Part No. C1E C1E 3/8" C1F 1/2" C1I 5/8"		SAE COPP SEAL BONN No. B-1		$1/4^{"}$ $3/8^{"}$ $1/2^{"}$ $5/8^{"}$ $3/4^{"}$
	T 7 1/ " D	PLASTIC FLARE PLUG irt Seal Only. o Not Use inder Pressure.	C1EEEF %" x %" x %" x ½" FLARE PLUG No. P-2 P2C P2E P2F P2I P2K	$\begin{array}{c c} \hline Flare \\ \hline 1/4" \\ \hline 3/8" \\ \hline 1/2" \\ \hline 5/8" \\ \hline 3/4" \\ \hline \end{array}$	FILTER Gas Traps sediment before entering regulators and controls. Fits into common flare fittings	R FLARE FLOW RMI Part Descrip No. Descrip 72FF-3/8 3%" Flare 72FF-1/2 1½" Flare 72FF-5/8 5%" Flare	Filter Filter
			JOMAR "BLUE CAP BRASS GAS BALL VAL		RMI	GROUP Part No.	
				3/8" x 3/ 1/2" x 1/ 5/8" x 5/ 3/8" x 3/ 1/2" x 1/ 3/4" x 3/ 1" x 1	Flare x Flare Kain B2002FF-3/8 V2" B2002FF-1/2 Kain B2002FF-5/8 FNPT x FNPT Vain B2002-3/8 V2" B2002-1/2 V4" B2002-3/4	Pressure Port BT2002FF-3/8 BT2002FF-1/2 BT2002FF-5/8 BT2002-3/8 BT2002-1/2 BT2002-3/4 BT2002-1	- - - - - - -
		600 psi ¹ Blue "T" H AGA Design Certi Hich or Low Va	Handle fied, UL Listed	¹ / ₂ " x ³ / ¹ / ₂ " x ¹ /		 BT2002F-1/2	idition 11

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High or Low Vapor Pressure Temperature Range - 40°F to 300°F Handle Can Be Reversed To Lockable Position Available with 1/8" Port

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Fax: 800-243-8341 Order online at www.raymurray.com

MPT x Flare

--

B2002MF-3/8

B2002MF-1/2

¹/₂" x ³/₈"

¹/₂" x ¹/₂"

Stainless Steel Appliance Connectors



10 SERIES - 3/8" OD (1/4" ID)

RMI Part No. 1/2" MIP x 1/2" MIP	RMI Part No. 1/2" MIP x 1/2" FIP	Length	BTU Capacity (LP)
10-3131-12	10-3132-12	12"	76,800
10-3131-18	10-3132-18	18"	70,080
10-3131-24	10-3132-24	24"	64,000
10-3131-30	10-3132-30	30"	58,240
10-3131-36	10-3132-36	36"	53,440
10-3131-48	10-3132-48	48"	45,280
10-3131-60	10-3132-60	60"	39,840
10-3131-72	10-3132-72	72"	36,960

20 SERIES - 1/2" OD (3/8" ID)

RMI Part No. 1/2" MIP x 1/2" MIP	RMI Part No. 1/2" MIP x 1/2" FIP	Length	BTU Capacity (LP)
20-3131-12	20-3132-12	12"	163,200
20-3131-18	20-3132-18	18"	148,960
20-3131-24	20-3132-24	24"	136,000
20-3131-30	20-3132-30	30"	123,360
20-3131-36	20-3132-36	36"	113,760
20-3131-48	20-3132-48	48"	96,800
20-3131-60	20-3132-60	60"	85,120
20-3131-72	20-3132-72	72"	78,560

30 SERIES - 5/8" OD (1/2" ID)

RMI Part No. 1/2" MIP x 1/2" MIP	RMI Part No. 1/2" MIP x 1/2" FIP	Length	BTU Capacity (LP)	
30-3131-12	30-3132-12	12"	288,000	
30-3131-18	30-3132-18	18"	262,720	
30-3131-24	30-3132-24	24"	240,000	
30-3131-30	30-3132-30	30"	217,600	
30-3131-36	30-3132-36	36"	200,000	
30-3131-48	30-3132-48	48"	169,600	
30-3131-60	30-3132-60	60"	149,120	
30-3131-72	30-3132-72	72"	137,600	





PIPING

32

APPLICATIONS

Indoor Range And Dryer Water Heater Garage Heater Space/wall Heater Outdoor Rooftop Units Outdoor Dryer Stationary Outdoor Grill Gas Fire Pits

Manufactured Homes

Mobile Home Gas Meter Crossover Gas Connection Kits

FITTINGS FOR OTHER OPTIONS

RMI Part No.*	Description			
90-1022	3/8" OD Flare x 3/8" FIP			
90-2022	1/2" OD Flare x 3/8" FIP			
90-2031	1/2" OD Flare x 1/2" MIP (tapped 3/8" FIP)			
90-2032	1/2" OD Flare x 1/2" FIP			
90-3031	5/8" OD Flare (5/16"-16) x 1/2" MIP (tapped 3/8" FIP)			
90-3032	5/8" OD Flare (5/16"-16) x 1/2" FIP			
90-3041	5/8" OD Flare (5/16"-16) x 3/4" MIP (tapped 1/2" FIP)			
91-3032	5/8" OD Flare (5/16"-16) x 1/2" FIP connector valve			
*Coulos indiantes	hu digit offer deeb in part number			

*Series indicated by digit after dash in part number



Black Epoxy Coated Stainless Steel Gas Connectors For gas logs and gas fireplace inserts

- Designed to reduce glare and hide the connector from view to enhance the beauty of the fire
- Hi-temperature black epoxy coating hides the connector while withstanding up to 350° F
- Black adaptors and flare nuts are plated with zinc di-chromate to further reduce the visibility of the gas connection



10A SERIES BLACK 3/8" O.D. CONNECTORS					
RMI Part No. 3/8" MIP x 1/2" MIP	Length	BTU Capacity (LP)			
10A-2131-12	12"	76,800			
10A-2131-18	18"	70,080			
10A-2131-24	24"	64,000			
10A-2131-36					

20A SERIES BLACK 1/2 " O.D. CONNECTORS

RMI Part No. 3/8" MIP x 1/2" MIP	Length	BTU Capacity (LP)
20A-2131-12	12"	163,200
20A-2131-18	18"	148,960
20A-2131-24	24"	136,000
20A-2131-36	36"	113,760
RMI Part No. 3/8" MIP x 1/2" FIP	Length	BTU Capacity (LP)
20A-2132-18	18"	148,960
20A-2132-24	24"	136,000

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Dormont Ultraflow and Safety System 33 **Moveable Gas Connectors**



Dormont Ultraflow Connectors For Large BTU Flow Installations

APPLICATIONS

- Boilers
- Gas Meters
- Furnaces
- Commercial Water Heaters
- C units Gas
- Tank



CONNECTORS

 Gas Packs/Rooftop HVAC
 Tankless Water Heaters
ADVANTAGES
• PVC coating will not chip

- PVC coating will not chip or crack
- Unmatched corrosions and UV protection
- Ideal for outdoor installations (can be used inside)
- Coating includes antimicrobial agent
- · Coating will not hold a flame

41-4142-24						
41 SERI	ES - 1 OD	(3/4" ID)				
RMI Part No. 3/4" MIP x 3/4" FIP	Length	BTU Capacity (LP)				
41-4142-24	24"	465,440				
41-4142-36	36"	409,440				
41-4142-48 48" 344,000						
51 SERIES CONN	ECTORS -	1 1/4" OD (1" ID)				
BMI Part No						

RMI Part No. 1" MIP x 1" FIP	Length	BTU Capacity (LP)
51-5152-24	24"	930,880
51-5152-36	36"	825,440
51-5152-48	48"	708,320

Dormont Safety System Moveable Gas Connectors Used Primarily in Food Service Installations

AGA Listed connector features stainless steel corrugated tube with stainless braid reinforcement, outer coating for easy cleaning and quick disconnects with fusible link.

Adjustable restraining device protects connector when appliance is moved.

1" or 1 1/4" moveable connectors available upon request



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RMI Part Number			Thread	Length	
w/out quick disconnect	BTU	w/quick disconnect	BTU	BTU Size	
1650BP-36	120,000	1650BPQ-3	77,000	¹ / ₂ " FNPT	36"
1650BP-48	106,000	1650BPQ-4	68,000	¹ / ₂ " FNPT	48"
1650BP-60	93,000	1650BPQ-5	60,000	¹ / ₂ " FNPT	60"
1650BP-72	87,000	1650BPQ-6	55,000	¹ / ₂ " FNPT	72"
1675BP-3	256,000	1675BPQ-3	218,000	³ / ₄ " FNPT	36"
1675BP-4	225,000	1675BPQ-4	180,000	³ / ₄ " FNPT	48"
1675BP-5	198,000	1675BPQ-5	158,000	³ / ₄ " FNPT	60"
1675BP-6	175,000	1675BPQ-6	139,000	³ / ₄ " FNPT	72"

RESTRAINING DEVICES

RMI Part No.	Description
RDC-36	36" Restraining Device
RDC-48	48" Restraining Device
RDC-60	60" Restraining Device

THERMAL QUICK CONNECT COUPLINGS

RMI	Description
Part No.	Description
A50	1650BPQ (1/2") complete
A75-M/F	1675BPQ (3/4") complete
add "N" fo	or nipple or "C" for coupling only

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Standard (Black Malleable) Schedule 40 Fittings and Sediment Traps



SCHEDULE 40 FITTINGS

		1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
KEY	Description	RMI Part No.						
1	90º Elbow	40-104-08	40-104-12	40-104-16	40-104-20	40-104-24	40-104-32	
2	45° Elbow	40-103-08	40-103-12	40-103-16	40-103-20	40-103-24	40-103-32	
3	Street Elbow	40-110-08	40-110-12	40-110-16				
4	Tee	40-108-08	40-108-12	40-108-16	40-108-20	40-108-24	40-108-32	
5	Cross	40-102-08	40-102-12	40-102-16				
6	Union	40-109-08	40-109-12	40-109-16	40-109-20	40-109-24	40-109-32	
7	Coupling	40-100-08	40-100-12	40-100-16				
8	Plug	40-105-08	40-105-12	40-105-16				
9	Сар	40-114-08	40-114-12	40-114-16	40-114-20	40-114-24	40-114-32	

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SCHEDULE 40 REDUCERS FITTINGS

		1/2" x 3/8"	3/4" x 1/2"	1" x 1/4"	1" x 1/2"	1" x 3/4"	1 1/4" x 1"	1 1/4" x 3/4"	1 1/2" x 1 1/4"	1 1/2" x 1"	2" x 1 1/2"	2" x 1 1/4"
KEY	Reducer						RMI Part No.					
10	Bushing		40-106-1208	40-106-1604	40-106-1608	40-106-1612	40-106-2016	40-106-2012	40-106-2420	40-106-2416	40-106-3224	40-106-3220
7	Coupling	40-107-0806	40-107-1208	40-107-1604	40-107-1608	40-107-1612	40-107-2016	40-107-2012	40-107-2420	40-107-2416	40-107-3224	40-107-3220
1	90º Elbow	40-104-0806	40-104-1208									

Nipple Tray with Nipples Included



RMI Part No.	Pipe Size
GK-TRAYRUN-12	1/2"
GK-TRAYRUN-34	3/4"
GK-TRAYRUN-1	1"

75ST

SCHEDULE 40 NIPPLES

	LENGTH						
PIPE	Close	1 1/2"	2"	2 1/2"	3"	3 1/2"	
Size			RMI P	art No.			
1/2"	40-123-00	40-123-015	40-123-02	40-123-025	40-123-03	40-123-035	
3/4"	40-124-00	40-124-015	40-124-02	40-124-025	40-124-03	40-124-035	
1"	40-125-00		40-125-02	40-125-025	40-125-03	40-125-035	
1 1/4"	40-126-00	40-126-015	40-126-02		40-126-03	40-126-035	
1 1/2"	40-127-00		40-127-02		40-127-03	40-127-035	
2"	40-128-00				40-128-03	40-128-035	
				LEN	GTH		
PIPE	4"	4 1/2"	5"	LEN 5 1/2"	GTH 6"	12"	
PIPE Size	4"	4 1/2"	5"	5 1/2"		12"	
	4 " 40-123-04	4 1/2" 40-123-045	5" 40-123-05	5 1/2"	6"	12" 40-123-12	
Size				5 1/2" RMI Pa	6" art No. 40-123-06	1	
Size 1/2"	40-123-04	40-123-045	40-123-05	5 1/2" RMI P 40-123-055	6 " art No. 40-123-06 40-124-06	40-123-12	
Size 1/2" 3/4"	40-123-04 40-124-04	40-123-045 40-124-045	40-123-05 40-124-05	5 1/2" RMI P 40-123-055 40-124-055	6 " art No. 40-123-06 40-124-06	40-123-12 40-124-12	
Size 1/2" 3/4" 1"	40-123-04 40-124-04 40-125-04	40-123-045 40-124-045	40-123-05 40-124-05 40-125-05	5 1/2" RMI P 40-123-055 40-124-055	6 " art No. 40-123-06 40-124-06 40-125-06	40-123-12 40-124-12	

(Note: Schedule 80 fittings and pipe shown on pages 130 & 131)

STANDARD SEDIMENT TRAP KITS

Don't be caught short! Basic components (tee, nipples and cap) come packaged together for convenience and assurance of having the correct parts at the job.

-	
RMI Part No.	Description
75ST-06	3%" sediment trap
75ST-08	1/2" sediment trap
75ST-12	³ ⁄ ₄ " sediment trap

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3"

min.

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Sealants and Lubricants 35





RECTORSEAL NO. 5

Slow dry, soft set sealant. Brushable to plus 20°F., yellow color.

RMI Part No.	Description			
25431	1 pt. Brush Top Can			
25551	½" pt. Brush Top Can			
25631	¼" pt. Brush Top Can			



PB04



JC04



TT41

JOHN CRANE **PIPE THREAD & GASKET SEALER**

PLS-2 paste type pipe thread sealer for natural and LP-Gas. Note: Now lead free.

RMI Part No.	Description
PB04	¹ / ₄ " pt. (1 lb.) Brush Top Can
PB16	1pt. (4 lb.) Brush Top Can

TFE PIPE THREAD SEALER

JC-30 Teflon paste lead free type sealer, will not stain hands or clothing.

RMI Part No.	Description	
1004	Teflon Paste Sealer	
JC04	¹ ⁄ ₄ " pt. Brush Top Can	

TEFLON TAPE

Teflon tape type pipe thread sealer, heavy duty type.

RMI Part No.	Description	
TT41	1/2" Tape, 520" roll	
TT33	³ ⁄ ₄ " Tape, 576" roll	



400-104



JOMAR® SEAL

RMI Part No. Description	
400-104	1 pint - Brush Top Can
400-102	¹ ⁄4" pint - Brush Top Can



LA-CO PIPETITE-STICK

Sealant in handy stick form.





GASOILA SOFT-SET

Smooth, non-hardening sealant with Teflon. Brushable to -50°F.

RMI Part No.	Description	
SS16	1 pt. Brush Top Can	
SS08	½" pt. Brush Top Can	
SS04	¼" pt. Brush Top Can	

SS04



3115627

RMI Part No.	Description	
3115627	14 oz. Tube - NLGI #2	

THIXOGREASE® MULTI-PURPOSE **EXTREME PRESSURE** SINGLE PHASE GREASE

- Non-hardening formulation
- Wide Use Temperature Range -40°F to 575°F
- Superior Chemical Resistance methane, acids, NH₃
- Dramatic Wear Reduction



JOHN CRANE "FREE ALL"

Penetrates rust and saves time and labor.

RMI Part No.	Description
FA06	6 oz. Aerosol Can
FA12	12 oz. Aerosol Can

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance



SHERWOOD 2030BC MULTIVALVE WITH DOUBLE CHECK FILLER VALVE

Sherwood multivalve permits filling of DOT cylinders up to 200 lbs. propane capacity from bulk truck. Features teflon coated stem for added operating life and a positive back seat. Double check filler valve provides extra protection against leakage. Safer, faster filling due to spray fill cooling effect. ³/₄" NGT inlet has Everseal coating for direct installation into cylinder without additional sealant.



RMI Part Filler Cylinder Inlet Outlet No.* Valve Capacity ¾" NGT 2030BC11.6E 13/4" ACME 100# POL w/Everseal 2030BC10.6E ¾" NGT 1¾" ACME 200# POL 2030BC8.6E 3⁄4" NGT 1¾" ACME 60# POL

Bulk packages of 500 valves are available for additional savings: add -B suffix to part no.



Multivalves

2030BC Series

36

Sherwood

SHERWOOD MULTIVALVES

Sherwood has now standardized on new 1/8" tapping after shut-off on all multi-valves and service valves for 100 gallon through 1990 gallon tanks. This allows direct access for "gas-check" leak testing of piping system without breaking connections in gas tight line.

SHERWOOD 2035AP 1" MULTIVALVE

Sherwood multivalve for use on DOT or ASME containers 420 & 300 lbs. or 125 gallons capacity. 1" NGT inlet thread has Everseal coating for direct installation into cylinder without additional sealant.

Caution: Order 375 PSI relief for DOT containers, 250 PSI relief for ASME containers.



© Ray Murray Inc. Edition

2035AT11.7E

2035AT10.3E

ŢŢ	2035A Series	F	A COLUMN
1		G	a

Cylinder Relief **RMI Part No.** Inlet Outlet Description Setting Type 375 420# DOT 1" NGT POL 1/8" Tap Plugged 300# DOT 1" NGT POL 375 1/8" Tap Plugged 100 Gal 1" NGT 2035AT25011.6E 250 POL 1/8" Tap Plugged ASME

SHERWOOD 2033 3/4" ASME MULTIVALVE

SHERWOOD 2033CLT 3/4" STANDARD MULTIVALVE



Sherwood multivalve for use on ASME tanks. Standard 15" dip tube may easily be cut to required length by customer. Now with either 1/8" tap.

RMI Part No.	Outlet	Vapor Return	Description
2033CLT15.0	POL	1 1/4" ACME	1/8" Tap Plugged



SHERWOOD 2033CLDBT DUAL BONNET MULTIVALVE

Sherwood Dual Bonnet multipurpose valve features a one piece bonnet and stem assembly for easy repair while valve is open - so gas service is not interrupted. Now with 1/8" tap.

Gas Check **Ready Valve**

RMI Part No.			
2033CLDBT15.0	POL	1 1/4" ACME	1/8" Tap Plugged

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

37 Valves





Sherwood

SHERWOOD STANDARD CYLINDER VALVE

Sherwood valve for 100 lb. capacity cylinders, complete with integral relief, rugged forged brass body, swivel nylon seat and 10% liquid level vent valve. New teflon coated stem assures long operating life and provides positive back seat. ³/₄" NGT inlet.

3250CLG

RMI Part No.	OUTLET	Features	Relief Settings
3250CLG-11.6	POL	Standard Valve w/11.6" D.T.	375
3250CLG-10.6	POL	Standard Valve w/10.6" D.T.	375
3250CLG-8.6	POL	Standard Valve w/8.6" D.T.	375



3250ALM11.6

SHERWOOD LIQUID WITHDRAWAL VALVE

Sherwood

Sherwood valve for 100 lb. capacity cylinder. Used for torch & liquid tar kettle applications. Excess flow check provides added safety. Dip pipe "T" dimension of 44" standard. Dip tube of 11.6 enables filling by volume. 3/4" inlet thread.

RMI Part No.	Outlet		
3250ALM11.6	982 MALE, CGA 555		

SHERWOOD PROPANE/PROPYLENE CYLINDER VALVE

Our new 3250R series valve is a multi-purpose cylinder valve with a unitized pressure relief valve and a start to discharge pressure for both 4BW240 and 4BW260 cylinders for propane and propylene service.

- Replaceable CG-7 Pressure Relief Device (PRD) set to 435-480 PSI
- Conforms to UL Standard 1769
- Compliant with CGA Technical Bulletin TB27-2007 for propylene cylinders
- Tampers resistant pinned bonnet

3250C375

3250C435

· For use in up to 100 lb LPG capacity cylinders





RMI Part No.	OUTLET	Features	Relief Settings
3250CLG435-10.7	POL	Standard Valve w/10.7" DT	435
3250CLG435-10.2	POL	Standard Valve w/10.2" DT	435
3250CLG435-10.0	POL	Standard Valve w/10.0" DT	435

375

435



RMI Part No.	OUTLET	Features
3250BC312	POL	312 PSIG ASME Valve

Ray Murray Inc. Edition 11

Tel: 800-628-5044 Order

3/4" Valve - No Dip Tube

3/4" Valve - No Dip Tube

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Bulk Tank Valves 38





3250AD7

Sherwood

SHERWOOD VALVE WITHOUT RELIEF

This valve is used where a separate safety relief is provided on container, inlet 3/4" NGT. Now available with 1/8" tapping for easy "Gas Check" leak testing.

RMI Part No.	Outlet	Description	Features	Relief Settings
3250AD7	POL	Standard		NO
3250ALG7T11.0	POL	10% Valve, 11" Dip Tube	1/8" Plug	NO
3329BDBT	POL	Underground Multivalve	1/8" Plug	NO

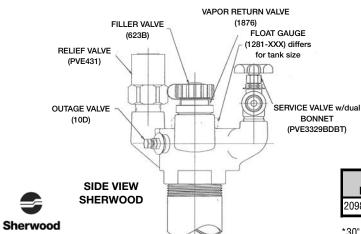


SHERWOOD **AFV10 FILLER VALVE**

Sherwood

Double back check filler valves for ASME tanks. Sizes 120 through 1000 gallon. Filling rates are approximately 105 GPM.

RM Part No.	ACME Thread	Tank Conn.
AFV10	1 ³ / ₄ " ACME	1 ¹ / ₄ " NPT







BULK TANK RELIEF VALVES

Sherwood internal relief valve for ASME bulk tanks 120-1000 WG. and new style DOT 420 lb. cylinder with separate relief valve.

Rain

E 143AM	
4	45AM

ティー	RMI	Container	Relief	Rain
<u>,</u> ∎	Part No.	Connection	Setting	Cap
jji i	445AM	1"	250	P206
45AM	445AT	1"	375	P206
	433AM	3/4"	250	433-45
	443AM	1"	250	443-45
	453AM	11/4"	250	453-45

453AM	1¼"	250	453-45	ASME 1000 WG	
-					-
UNDERGROUND 1 VALVE REMO			R	MEC	

CYLINDER VALVES

Tank Capacity

ASME 100 Gal. Vert

DOT 420 lb.

ASME 120-320 WG

ASME 500 WG

Durable cast steel construction

- Powder coat finish for maximum corrosion protection
- 3/4" drive



UNDERGROUND VALVE

Sherwood valves have ductile iron body, Cavagna valves have brass body. Both contain standard valves for the individual components of service valve, filler valve, relief valve, vapor return and 10% outage valve. Suitable for underground tanks up to 300 sq. ft of surface area (1000 underground tank).

RMI Part No.	Brand	Inlet	Outlet	Surface Area of Underground Container
2098AT30.0*	Sherwood	POL	2 1⁄2" FNPT	300 sq. ft.

*30" Standard DIP tube, must be cut to DIP tube length specified on tank.

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

Bulk Tank Valves 39







2341 TRANSFER VALVES

For use in liquid withdrawal from bulk system tanks. High rise seat and large port make for low pressure drop and maximum flow when PA5133 adaptor is used on valve inlet. Excellent for activating check lock type liquid fitting on tanks. 3/4" NPT inlet.

RMI Part No.	Outlet	
2341	3⁄4" NPT	
2341A	1/2" NPT	
2341C	1 ³ / ₄ " ACME Male	
2341X*	³ ⁄4" NPT	
* Includes excess flow check 19.5		

GPM. Alternate combination: No. 2341 & F101.

2341 Series





built-in hydrostatic relief. Does
not relieve gas to atmosphere.
When down stream pressure
exceeds tank pressure by

Liquid transfer valve with

50 PSI, relief valve opens and bleeds it back into tank. New excess flow valve assures positive checking at rated flow.

A1596R

TRANSFER VALVE

A1596R,

RMI Part No.	Inlet	Outlet	Excess Flow
A1596R	1 ¹ /4"	1"	35 GPM
A1597R	1 ¼"	1"	55 GPM



CYLINDER VALVES





\$	
Sherwood	

CHECKMATE ADAPTORS **Check Mate Adaptor** with Nylon Gasket

RMI Part No.	Special Inlet	Outlet	
PA5133	3/4" MNPT	3⁄4" FNPT	
PA5133M	3/4" MNPT	34" MNPT	
5133-10	Replacement Gasket Only		



Accommodates permanent installation

· Rated for high on liquid



VAPOR RETURN VALVE

Vapor return and excess-flow valve for vapor return outlet allowing fast filling of ASME supply tanks.

RMI Part No.	Tank Connection	ACME Thread
1876	3⁄4" NPT	11/4" ACME











RMI Part No.	Description	Inlet	Outlet	Tank Connectio	
5138	CheckMate Adaptor	1" F NPS	¾" FNPT		
5136	CheckMate Valve		1" M NPS	3/4"	
5137	CheckMate Valve	-	1" M NPS	1 1⁄4"	
458-3	458-3 Teflon Gasket for Cap				
458-4	O-Ring for PA5138				

CHECKMATE ADAPTOR & VALVES Improved gas tight seal during connect and disconnect operations

Tel: 800-628-5044

RAY MURRAY, INC.

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OPD Valves 40

OPD TYPE 1 VALVE WITH OVERFILL PROTECTION DEVICE



•	Double O-ring stem seal provides extra safety and protection from	
	stem leaks.	

- Rugged handwheel easily identifies OPD valve.
- All valves come with sealant on tank threads for direct installation into cylinder.
- TYPE 1 connections offer flow restriction and thermal protection when attached to coupling.
- Positive back check prevents accidental release of gas when coupling is not attached.

RMI Part No.	Tank Connection	DipTube Length	Standard Cylinder Size	Cylinder I.D.	Cylinder Water Capacity
80-8107	³ ⁄4"-14 NPT w/Everseal	4.0"	20# Steel	12"	47.6
80-8109		4.8"	30# Steel	12"	71.4
80-8110	W/LVersear	6.5"	40# Steel	12"	95.2

Note: Valves with other dip tube lengths will be added as the valves become available.

CYLINDER VALVES

OPD REPLACEMENT VALVES

RMI Part No.	OPD Size (LBS)	Material	Recomended Cylinder (Inches)	Cylinder Water Cap. (LBS)	Dip Tube Length (Inches)
294012	4.25	Steel	8.9	10.2	2.2
V21113	5	Steel	7.8	11.9	3
N/A	6	Steel	7.5	15.5	3.2
V21130	10	Steel	8.9	26.1	3.6
V21113	11	Steel	8.9	26.2	3
N/A	11.5	Steel	12	27.3	3.2
80-8107	20	Steel	12	47.6	4
N/A	25	Steel	12	59.7	4.8
80-8109	30	Steel	12	71.5	4.7
80-8110	40	Steel	12	95.3	6.4
299480	6	Aluminum	6	15	4.8
V21130	10	Aluminum	10	23.6	3.6
V20691	20	Aluminum	12	47.6	4.7
295178	30	Aluminum	12	71.5	6
295179	40	Aluminum	12	95.2	7

Tel: 800-628-5044

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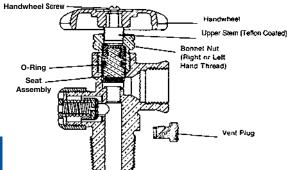
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41 Sherwood Valve Repair Parts



SHERWOOD: CYLINDER, MULTI & PLUMBER'S POT VALVES



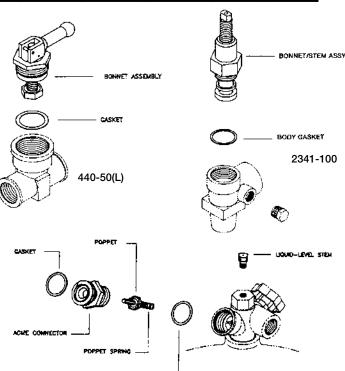
	Valve Model				
	3329, 1427C 2030C, CP 2033, 1445C	2035A 2035AP 3250A, ALM	1447D 1446D	3359AS 3359ASW	
Description	RMI Part No.				
Handwheel Screw	3740-13	3740-13	3740-13	3740-13	3740-13
Handwheel	3329-7	1901	1901S	1901S	1901S
Dip Tube-Specify Length	1929-23	1929U-23			
L.H. Bonnet, Stem, O-Ring & Seat Ass'y	3329-13LH	3250-8LH	3250-8LH	3250D-8LH	3250-8ALH
Vent Plug	1931-24A	1931-24A			

Sherwood

SHERWOOD VALVE MODELS

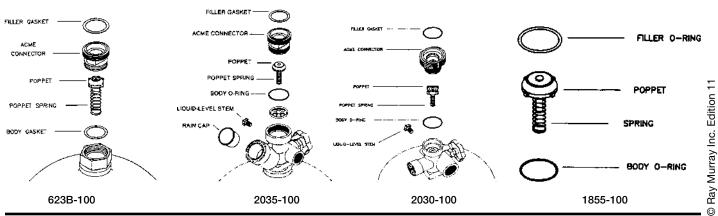
REPLACEMENT KITS/PARTS FOR SHERWOOD VALVES

Valve Type	RMI Part No.	Description	Valve Model			
Quick Acting	440-50	Bonnet Assy. Kit	440 Series			
Valves	440-50L	Bonnet Assy. Kit	440L			
Dual Bonnet	6775-60	Replacement Bonnet	2033CLDB15.0 Only			
Dual Bonnet	3429-100	Conversion Kit	2033CLDB15.0			
Transfer Valve	2341-100	Replacement Kit	2341 Series			
Multivalve	2030-100	Filler Section Replacement Kit	2030BC			
2030BC	U701-19	Protective Cap	2030BC Relief Valve			
	1850-3	1¾" ACME Cap	2030BC Filler			
ASME Tank Valve	2033-100-KIT	Repair Kit	2033 Series			
ASIVIE TATIK VAIVE	1875-3A	1¼" ACME Cap	2033 Filler			
Multivalve	2035-100	Filler Section Replacement Kit	2035 Series			
2035	UT12X	Protective Cap	2035 Relief Valve			
	1850-3	1¾" ACME Cap	2035 Filler			
Filler Valve	1855-100	Repair Kit	1855 Series			
1855	1850-3	1¾"ACME Cap	1855 Filler			
Filler Valve	623B-100	Repair Kit	623 Series			
623	1850-3	1¾"ACME Cap	623 Filler			



BODY GASKET -

2033-100-KIT



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Fax: 800-243-8341

2-834-



Fork Lift Valves and Connectors



1427E

SHERWOOD DOT VALVE

Sherwood service valve is designed for DOT lift truck cylinders. New internal excess flow provides consistent flow check on all cylinders and low temperatures. 1449 is low profile version of 1427B.

Liquid or vapor service.

RMI Part No.	Tank Connection	Outlet	Excess Flow Valve
1427B	3/4"	3%" MNPT	1.7 GPM
1449	3/4"	3%" MNPT	1.7 GPM

SHERWOOD LIFT TRUCK CONNECTORS







Sherwood 11/4" ACME lift truck safety check connectors are interchangeable with all 11/4" ACME lift truck adaptors. (Max working pressure 250 PSI)

RMI Part No.	Inlet	Outlet	
1428F	11/4" F ACME	1⁄4" FNPT	
1428M	3%" FNPT 11/4" M ACN		
W-4	Outer Gasket for 1428M		
0-114	Inner O-ring for 1	428M	



Universal Float Gauges

(Horizontal & Vertical Mount)



ROCHESTER FLOAT GAUGES/LIFT TRUCK CYLINDERS

Junior 4-Bolt Flanged	1¼" Screw Threaded Type	³ / ₄ " Screw Threaded Type	Replacement Dial	Cylinder Size (lb.)		
6284-33	7284-33	7384-15	5-01815	20		
1284-001*	2284-001*	7384-16	5-01791	33½		
6284-35	7284-35	7384-17	5-01824	43½		
	HORIZONTAL ONLY FLOAT GAUGES					
6284-24	7284-24	7384-18	5-01789	20, 331/2,431/2		
* Brass mo	unting head					

SHERWOOD DOT RELIEF VALVES







435-45 435-45C

Sherwood relief valves with 375 PSI setting for DOT lift truck cylinders. New 435L is designed with shorter projection for use in older cylinders where 435A bottoms out against cylinder coupling. 435L may also be used with new cylinders.

Sherwood

AFV6

435A

RMI Part No.	Description
435A	¾" NPT Relief Valve-375 PSI
435L	3/4" NPT for Old Style Cylinders
435-45	45° Pipe Away Adaptor
435-90	90º Pipe Away Adaptor
435-45C	Rain Cap

FILLER VALVES

1³/₄" ACME filler valves for DOT and ASME cylinders and tanks. · Low-profile design for bulk tank and

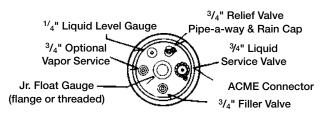
- engine fuel applications Optimized fill spray pattern and high filling capacity
- · Improved piston alignment and seal
- Durable, mechanically assembled poppet and seal design
- Low differential shutoff



Sherwood

RMI Part No.	Tank Connection	Outlet
AFV6	3/4"	13/4" ACME
AFV6-30	3/4"	30° ACME
1850-10	Replacement C	Cap & Chain
W-2	1¾" ACME WA	SHER
0-216	1¾" 0-RING	

DIAGRAM OF TYPICAL FORKLIFT CYLINDER



CYLINDER VALVES

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Tel: 800-628-5044

RAY MURRAY, INC.

ASME Motor Fuel Valves 43





1447B ASME VALVE

Sherwood

Sherwood Service Valve is designed for ASME motor fuel tanks. Internal excess flow provides consistent flow check at 1.7 GPM (tests for 550 cubic inches engines on full load is 1.08 GPM)

1447B



	Part No.	Connn.	Outlet	Flow	Relief
14	447B	3/4"	³%" Flare	1.7 GPM	Yes
	LOW PROFILE				
14	447C	3/4"	³‰" Flare	1.7 GPM	Yes

1447C (Low Profile)



1447D VALVE



Sherwood Motor Fuel Valve has internal back to tank hydrostatic relief valve allowing trapped line pressure back to tank instead of to atmosphere.

RMI	Tank	Outlet	Excess	Built-in
Part No.	Connn.		Flow	Relief
1447D	3⁄4"	∛₃" Flare	1.7 GPM	Yes

1447D

REMOTE FILLER VALVES





1855SPD

1855SD-90

Sherwood double check filler valves with rubber seats for use in remote filling on ASME motor fuel tanks. Filling rate 20 GPM.

RMI Part No.	Tank Conn.	Outlet
1855SPD	34" MNPT	¾" female NPT
1855SD-90	34" MNPT	90° - $\frac{1}{2}$ " male flare

Tel: 800-628-5044



ASME MOTOR FUEL RELIEF VALVES

Sherwood relief valves for ASME motor fuel tank with 1" male pipe-a-way adaptors designed for minimum flow restrictions.





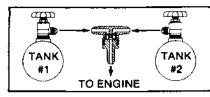
RMI Part No.	Container Connection		Pipeway Adaptors	Rain Cap	Tank Type
445AM	1"	250	445-21	P206	ASME Motor Fuel
445AR	1"	312	445-21	P206	ASME Motor Fuel



For DOT cylinders and ASME motor fuel tanks. No. 54 drill orifice in valve limits liquid flow when no orifice is in tank.

RMI Part No.	Inlet	Dip Tube Length
12B 6.9	1⁄4"	5.7" for 33# cylinder
10B 12.0	1/4"	Must be cut to length
10A	1/4"	None
10ARF	1/4"	None
1931-24A	Replace	ment Bleeder Screw

SHERWOOD 3866 T-CONNECTOR



Combination bulkhead fitting, two tank backcheck valves and hydrostatic relief valve for dual tank motor fuel systems. Backcheck valves provide required protection by preventing flow from one tank to other during filling operation.

RMI Part No.	2 Inlets	Outlet
3866	³%" flare	¾" flare
3865	¹ / ₄ " Ext. Relief Valve (400 PSI)	



Ray Murray Inc. Edition 11 3865

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Cylinder, Engine and Fuel Valves and Accessories

ASME / DOT 100# CONTAINER SERVICE VALVES

The following service valves are intentended for use in vapor withdrawal service for ASME and DOT containers or as fuel line shutoff valves.

- One piece forged brass body construction
- Industry best fill flow rate
- Dual O-ring packing design
- Factory applied thread sealant
- Easy to repair / replace bonnet assembly
- · Heavy duty replaceable zinc hand wheel
- Universal bonnet assembly

ME9101C1-102

ME9101P5-109



CYLINDER VALVES

RMI Part No.	Description	Dip Tube Length	DOT CON	NTAINER SERVICE VALVE REPAIR PAP	RTS
/IE9101C1	3/4" MNPT X FPOL 100# cylinder Service valve	n/a			
NE9101D-11.1	3/4" MNPT X FPOL 100# cylinder Service valve	11.1"	RMI Dant No	Description	
/IE9101D-11.7	3/4" MNPT X FPOL 100# cylinder Service valve	11.7"	Part No.		
IOTE: These valves do not incorporate an integral pressure relief valv		of valvo	ME9101C1BRK	100# Service valve bonnet assembly w/ handwheel	
NOIL. INCSE VA	ives uo not incorporate all'integral pressure rein		ME010101-102	Poplacement POL convice valve bandwheel	

and are intended for use in containers that have a separate stand alone pressure relief valve sized to properly handle the container's capacity.

DOUBLE CHECK FILL VALVES

Designed for DOT forklift, engine fuel and ASME residential tanks, these double check filler valves automatically open with pump pressure providing maximum product flow rates. Once flow ceases, both upper and lower check mechanisms close to prevent product loss from the container. The lower check serves as a secondary seat to limit product loss in the evenet that the primary upper seats fails to operate properly due to damage.

- Resilient bonded main valve seal
- Industry best flow rate
- Integral break away feature leaves primary check intact in the event of delivery truck rollaway
- Field repairable upper check seat
- Factory applied thread sealant

Tel: 800-628-5044





Replacement POL service valve handwheel

Replacement Hand Wheel Screw #10-32

ME601-6

RMI	Description	Flow Rate		
Part No.	Description	10 PSI	20 PSI	
ME601-6	1-34"M ACME X 34" MNPT Forklift tank valve	11	24	
ME601-10	1-34"M ACME X 1-14" MNPT ASME tank valve	22	36	

DOUBLE CHECK FILL VALVE REPAIR PARTS

RMI Part No.	Description
ME601-902	1-34" F ACME Replacement cap & lanyard, plastic
ME601-10SRK	Complete seal repair kit for ME601-10

RMI Part No.	Description	Excess Flo GPM
ME9101H6	³ / ₄ " MNPT X " m flare Motor fuel service valve	2.6 GPM

NOTE: This valve does not incorporate an integral pressure relief valve and are intended for use in containers that have a separate stand alone pressure relief valve sized to properly handle the container's capacity. This valve incorporates an excess flow valve at the tanks inlet endand for that device to perform properly the service valve must be in the full open and back seated position.

ENGINE FUEL SERVICE VALVE REPAIR PARTS

RMI Part No.	Description
ME9101P5BRK	Engine fuel & forklift service valve bonnet assembly w/ handwheel
ME9101P5-105	Replacement motor fuel service valve handwheel
ME9101P5-109	Replacement Hand Wheel Screw #10-32
MEP125	Wrench for Forklift & Engine fuel service valves

ENGINE FUEL SERVICE VALVES

The following service valves are intentended for use in vapor or liquid service on engine fuel containers.

- One piece forged brass body construction
- Industry best fill flow rate
- Dual O-ring packing design
- Factory applied thread sealant
- Easy to repair / replace bonnet assembly
- Heavy duty replaceable zinc hand wheel

RAY MURRAY, INC.

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Marshall Excelsior Motor Fuel Valves and Accessories

ENGINE FUEL REMOTE FILL SERVICE VALVES

Specifically designed for remote filling applications where a standard tank type filler valve is not practical. Perfectly suited for motor fuel applications or other hard to reach rmote tank applications. This single check fill valve is degned to provide maximum product fill rates along with an automatic shutoff once product flow ceases.

RMI Part No.	Description	Replacement Cap & Lanyard	
ME602-8	1- 3 /"M ACME X 1 /2" m flare remote fill valve with cap and lanyard	ME601-902	

- · Single check design allows maximum flow rate
- Single piece main valve body
- Integral break away feature leaves primary check intact in the event of delivery truck rollaway
- Rear bulkhead mounting with quarter panel jam nut and lock washer



ME602-8

FORKLIFT CYLINDER VALVE

- The following service valves are intentended for use in vapor or liquid service on DOT forklift containers.
- One piece forged brass body construction
- Industry best fill flow rate
- Dual O-ring packing design
- Factory applied thread sealant
- Easy to repair / replace bonnet assembly
- Heavy duty replaceable zinc hand wheel
- Universal bonnet assembly



RMI Part No.	Description	Excess Flow GPM
ME9101P5H	3/4" MNPT 3/8" MNPT Forklift service valve	2.6 GPM

FORKLIFT CYLINDER VALVE REPAIR PARTS

RMI Part No.	Description					
ME9101P5BRK	Forklift & Engine fuel service valve bonnet assembly w/ handwheel					
ME9101P5-105	Replacement motor fuel service valve handwheel					
ME9101P5-109	Replacement Hand Wheel Screw #10-32					
MEP125	Wrench for Forklift & Engine fuel service valves					

NOTE: This valve does not incorporate an integral pressure relief valve and are intended for use in containers that have a separate stand alone pressure relief valve sized to properly handle the container's capacity. This valve incorporates an excess flow valve at the tanks inlet endand for that device to perform properly the service valve must be in the full open and back seated position.

during connection and a gasket (W-4) to seal the connection

FORKLIFT CYLINDER VALVE CONNECTORS

ME220F features:

- Knurled body on fuel line connector allows for easy hand tight Has two seals an O-ring (O-114) to minimize product loss connection
- Durable riveted stem, chrome plated body and wrench flats for · Works in conjunction with all mating forklift connectors and easy install
- · Works in conjunction with all mating forklift connectors and filler valves

RMI Part No.	Inlet	Outlet	Application			
ME220F	1-¼" F ACME	1⁄4" FNPT	Fuel line			
ME220M	3/8" FNPT	1-1⁄4" F ACME	Service valve			
W-4	Replacement washer for ME220M					
0-114	Replacement O-ring for ME220M					



filler valves

ME220M features:

during filling operations



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45



FULL INTERNAL PRESSURE RELIEF VALVE

Designed for use on forlift cylinders and other DOT removable cylinders up to 122 pounds of LP-Gas capacity. The working components of this valve are located inside the tank reducing possible malfunction caused by outside debris and other foreign materials.

- Stainless steel spring
- Non-adjustable, tamper resistance design
- 45 and 90 degree discharge vents available

RMI Part No.	Container Type	Connection	Seal Material*	Start-to-Discharge	UL Flow Capacity SCFM/Air** per CGA S1.1 @ 480 PSIG	Application
MEV75FIR*	DOT	3/4" MNPT	Viton®	375	368	LPG

*UL Listed in accordance with Compressed Gas Association Pamphlet S-1.1, Pressure Device Standard for Cylinders; meets requirements for use on DOT containers with 242 lbs. or less of water or 122lbs or less of LP-Gas.

** Flow rates are shown for bare relief valves, pipeaways will reduce flow. Viton® is a trademark of DuPont Performance Elastomers

FULL INTERNAL PRESSURE RELIEF **VALVE ACCESSORIES**

RMI Part No.	Description
MEP175C	Protective cap for MEV75FIR
MEP175P	Relief valve plug for MEV75FIR
MEP175-45	45° Angle discharge vent for MEV75FIR
MEP175-90	90° Angle discharge vent for MEV75FIR





MEV75FIR

FIXED MAXIMUM LIQUID LEVEL GAUGES

Designed to provide a way to visually determine that a tank has reached maximum allowable fill capacity. The dip tube end of a fixed liquid level gauge should be set equal to 80% of the liquid level tank capacity and installed in the vapor space of the tank. The vent valve should be opened before filling begins during which time vapor will be discharged. Once the tank reaches maximum liquid fill capacity (80% of tank capacity), liquid will begin to discharge from the vent valve telling the operator the tank has reached maximum allowable fill capacity and the filling operation shoul cease immediately.

RMI Part No.	Description	Dip Tube Length
MEJ410/72-5.7	Liquid level gauge, brass, low emission # 72 orifice	
MEJ410-5.7	Liquid level gauge, brass, # 54 orifice	5.7"
MEJ410-120	Liquid level gauge, brass, # 54 orifice	12.0"

*Other dip tube lengths available



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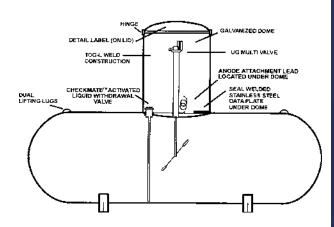
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RAY MURRAY, INC.

47 Underground Propane Tanks - 120-1990 Gallon



American Welding & Tank



Coatings: An epoxy polyamide primer is applied and cured in a gas fired oven. This primer forms a strong bond with the metal and starts building the thickness of coating that is required for underground protection. A finish coat of green acrylic urethane is applied and cured in another gas fired oven to form a hard tough outer covering. Excellent corrosion protection can be expected as a consequence of this coating formulation, as verified by test results.

Anode Protection: Each tank comes with the anode lead already attached. Simply attach the wire from the anode bag by crimping a copper ferrule between the two wires.

CYLINDERS & TANKS

Supplying New and Refurbished ASME Tanks and DOT Cylinder 12 Year Recertification's

Contact AWT Customer Service @ 800-568-2657



Tank Size	Multivalve*	Check Lock Valves Top	AWT Float Gauge 24" Riser	Trinity Float Gauge 28" Riser	AWT Riser Dome & Cover
			RMI P	art No.	
120 WG	2095A30.0	5136	1281-005	JB340A	Please Call
250 WG	2095A30.0	5136	1281-006	JB376A	AWT Dome - UG
320 WG	2095A30.0	5136	1281-006	JB376A	AWT Dome - UG
500 WG	2095A30.0	5136	1281-007	JB404D	AWT Dome - UG
1000 WG	2095A30.0	5136	1281-008	JB424C	AWT Dome - UG
1450 WG	2095A30.0	5137	JB400H	_	AWT Dome - UG
1990 WG	2095A30.0	5137	JB400H		AWT Dome - UG

REPLACEMENT PARTS FOR UNDERGROUND ASME TANKS

*Must cut dip tube to D.T. length stamped on tank.

AWT UNDERGROUND TANKS

RMI Part No.	Number/ Stack	Capacity in W.G.	Overall Length	Leg Spacing	Outside Diameter	Height w/Hood	Weight (Lbs)
AWT120UGLR	6	120	5' 9"	45 ¹ / ₄ "	24"	4' 1"	257
AWT250UGLR	5	250	7' 10"	60"	30"	4' 7"	483
AWT325UGLR	5	325	9' 11"	60"	30"	4'7"	597
AWT500UGLR	5	500	9' 11"	60"	37"	5' 2"	949
AWT850UGLR	5	850	13' 9"	86"	41"	5'6"	1440
AWT1000UGLR	5	1000	16'0"	121"	41"	5'6"	1760
AWT1450UGLR	4	1450	17' 7"	139 ¹ /2"	46"	5' 11"	2658
AWT1990UGLR	4	1990	23' 11"	192"	46"	5' 11"	3400

* Std. 24" Riser; Short riser is available on special request.

Tel: 800-628-5044

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American Welding & Tank

500 GALLON PROPANE TANK

APOR SERVICE VALV ILL VALVE



- Epoxy primer with urethane finish for greater rust protection
- Galvanized domes
- Stainless steel seal-welded data plates
- Factory direct, dependable, on-time delivery
- RMI stocking locations for convenient pick up
- Vacuum purged for ease and safety
- New multivalve has 1/8" tapping for easy "gas check" leak testing. Optional Presto-Tap PT-RV valve installed.

HORIZONTAL	ABOVEGROUND	TANKS
------------	-------------	-------

RMI Part No.	Number/ Stack	Capacity in W.G.	Overall Length	Leg Spacing	Outside Diameter	Height w/Hood	Weight (Lbs)
AWT120AGW	16	120	5' 9"	45 ¹ / ₄ "	24"	4' 1"	257
AWT250AGW	9	250	7' 10"	60"	30"	4'7"	483
AWT325AGW	9	325	9' 11"	60"	30"	4'7"	597
AWT500AGW	8	500	9' 11"	60"	37"	5' 2"	949
AWT850AGW	5	850	13' 9"	86"	41"	5'6"	1440
AWT1000AGW	5	1000	16' 0"	121"	41"	5'6"	1760
AWT1450AGW	4	1450	17' 4"	139 ¹ /2"	46"	5' 11"	2659
AWT1990AGW	4	1990	23' 11"	192"	46"	5' 11"	3400

STANDARD REPLACEMENT FLOAT GAUGES FOR ASME BULK TANKS & DOT CYLINDERS ABOVEGROUND TANKS

	R	MI PART NO.			
Jr. Flan	ge	Jr. 1¼" T	hreaded	1" Screw	Tank Size
Rochester	Squibb	Sherwood	Squibb	Squibb	
6281-12-24	JA124I	2281-001	TA130A	HA130A	24" dia., 120 gal.
6281-15-30	JA154I	2281-002	TA160A	HA160A	30" dia., 250 gal.
6281-15-30	JA154I	2281-002	TA160A	HA160A	30" dia., 320 gal.
6281-19-37	JA192J	2281-003	TA194A	HA194A	37" dia., 500 gal.
6281-21-41	JA2061	2281-004	TA210A	HA210A	41" dia.r, 1000 gal.
6281-85	JA250J		TA254S	HA254J	420# vertical
6281-89B	JA176B		TA180A	HA180A	200# vertical
			TA240A		45" dia., 1450/1990 gal

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LIFTING LUG Å

PLUGGED OP

- white urethane finish for great protection



COLLAR STYLE

DOMED STYLE

Tel: 800-628-5044

NEW 60 & 120 GALLON TANKS-AMERICAN WELDING & TANK

VERTICAL ABOVEGROUND TANKS RMI Part No. Number/ Capacity Outside Approx. Weight Dome Style Collar Style Stack in W.G. Diameter Height (Lbs) No. No. AWTV60 AWTV60C 60 24" 16 3' 3" 150 AWTV120 AWTV120C 9 120 30" 4' 260

VERTICAL TANK REPLACEMENT PARTS

Tank Size	Service Valve	Filler Valve Relief			Float Gauge	Optional Liquid Valve			
3126	Valve	Bottom ¾"	Top 1¼"	Valve	uauye	Liquiu vaive			
	RMI Part No.								
60	6555R9	9.1 Multival	ve	445AM	HA180A				
120	3250ALG711.0	1855SD	623B	443AM	3891-00	5136			
*Must.cu	it din tube to F) T length s	stamned o	n tank					

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HORIZONTAL TANK REPLACEMENT PARTS

LESS STE

Taula	Check Lock Valves		F 111	B		
Tank Size	Multivalve*	New Style		Relief Valve	Filler Valve	Dome Cover
Size		Bottom Top		valve	valve	Cover
		11⁄4"	³ /4"			
		RMI	Part N	lo.		-
120 WG						
250 WG				433AM		
325 WG			5136			
500 WG			5150	443AM		
850 WG	2033CLT15.0	5137			623B	AWTDOME-AG
1000 WG				453AM		
1450 WG						
1990 WG			5137	(2) 453AM		

*Must cut dip tube to D.T. length stamped on tank.

- · Epoxy primer with
- · Phenolic epoxy coated bottom

49

200# and 420# Cylinders 60# and 100# Cylinders

A ..





DOT & ASME STATIONARY CYLINDERS

200 & 400 LB DOT - 60 & 120 GALLON ASME

RMI Part No.	Tank Capacity	Tank Type	Tank Valving	Outside Diameter	Height (inches)	Weight (Lbs)
100ASME	30 gal.	ASME		18"	29.8	85
200DOT	200 lb.	DOT	Multivalve & Gauge	24"	42.2	147
200ASME	60 gal.	ASME		24"	42.2	172
420D0T	420 lb.	DOT	Service w/10% outage, relief, ³ /4"	30"	53.25	278
420ASME	100 gal.	ASME	filler, and float gauge	30"	53.25	326

100ASME

• Armor Clad III - New stateof-the-art powder coating improves durability 150%

200 DOT/200ASME 420 DOT/420ASME

REPLACEMENT COMPONENTS FOR 200 & 420 LB & 120 GALLON CYLINDERS

Tank	Tank		VALVING	RMI	Part No.	
Size	тапк Туре	RMI Part No.	Description	Float Gauges	Replacement Dial	
200 Lb.	DOT	2030BC10.6	Double check Multivalve, ³ / ₄ " inlet, POL outlet, 1 ³ / ₄ " ACME filler	HA180A	2722-CV	
		3250ALG711.0	10% Valve 3/4" inlet, POL outlet, 11" Dip tube			
420 Lb.	DOT	445AT	1" Relief Valve 375 psi	HA254J	0705 01/	
420 LD.	DUI	1855SD	5SD Filler valve 3/4" inlet, 13/4" ACME outlet		2765-CV	
		623B	Filler valve $1^{1}/_{4}$ " tank connection, $1^{3}/_{4}$ " ACME outlet			
420 Lb .	DOT	2035A11.7	1" Multivalve w/375 psi relief valve	HA254J	2765-CV	
60 Gal.Vertical	ASME	6555R9.1	Double check Multivalve, ³ /4" inlet, POL outlet, 1 ³ /4" ACME filler	HA180A	2722-CV	
		3250ALG711.0	10% Valve 3/4" inlet, POL outlet, 11" Dip tube			
120 Gal. Vertical	445AM 1" Relief Valve 250 psi		1" Relief Valve 250 psi	HA254J	2765-CV	
120 Gal. Vertical	ASIVIE	1855SD	Filler valve ³ / ₄ " tank connection, 1 ³ / ₄ " ACME outlet			
		623B	Filler valve $1^{1}/_{4}$ " tank connection, $1^{3}/_{4}$ " ACME outlet			
120 Gal. Vertical	ASME	2035A25011.6E	1" Multivalve w/250 psi relief valve	HA254J	2765-CV	
Covers	DOT &	A73035.2	16" White metal cover			
COVEIS	ASME	A79959	16" Black plastic cover			



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DOT CYLINDERS Standard (high collar) 4BW240 Cylinders

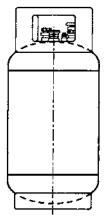
Excellent for both stationary and portable cylinder installations. Lightweight & rugged for either domestic or construction applications.

RMI Part No.	Propane Capacity(lbs.)	Valve Type	Approx. Diameter	Approx. Height	Approx. Tare Weight (lbs.)
50HC-10	50	POL 10%	14.5"	281/2"	46
60HC-10	60	POL 10%	12.2"	43½"	46
100HC-10	100	POL 10%	15.1"	46½"	71
100HC-M	100	Multivalve	15.1"	461/2"	71

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20/33/43MF-F-A Series

UNIVERSAL STEEL LIFT **TRUCK CYLINDERS**

Standard valves include liquid service valve, relief valve, universal float gauge, 10% valve. Universal lift truck cylinders can be used in vertical or horizontal service. Cylinders include 1428M ACME Connector installed.

UNIVERSAL ALUMINUM LIFT TRUCK CYLINDERS

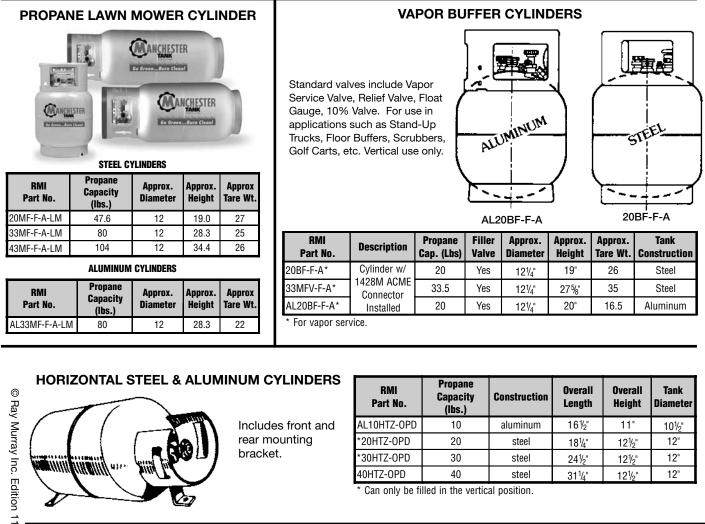
Standard valves include liquid service valve, relief valve, universal float gauge, 10% valve. Universal lift truck cylinders can be used in vertical or horizontal service. Cylinders include 1428M ACME Connector installed.

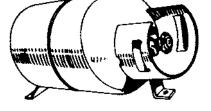
HORIZONTAL STEEL CYLINDERS

RMI Part No.	Propane Capacity (lbs.)	Filler Valve	Approx. Diameter	Approx. Height	Approx Tare Wt.
20MF-F-A	20	Yes	121⁄4"	201/8"	25.5
33MF-F-A	331/2"	Yes	121⁄4"	27%"	35
43MF-F-A	431/2"	Yes	121⁄4"	33%"	41

HORIZONTAL ALUMINUM CYLINDERS

RMI Part No.	Propane Capacity (Ibs.)	Filler Valve	Approx. Diameter	Approx. Height	Approx Tare Wt.
AL20MF-F-A	20	Yes	121/4"	201/8"	19
AL33MF-F-A	331/2"	Yes	121⁄4"	28¾"	23.5
AL43MF-F-A	431⁄2"	Yes	121⁄4"	341/8"	26.5





RMI Part No.	Propane Capacity (lbs.)	Construction	Overall Length	Overall Height	Tank Diameter
AL10HTZ-0PD	10	aluminum	16½"	11"	10½"
*20HTZ-0PD	20	steel	18¼"	12½"	12"
*30HTZ-0PD	30	steel	241/2"	12½"	12"
40HTZ-OPD	40	steel	31 ¹ ⁄4"	12 ¹ / ₂ "	12"

* Can only be filled in the vertical position.

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51 Portable Cylinders

1 LB. REFILLABLE

- Complies with DOT specifications for a refillable cylinder
- Proprietary valve design with positive on-off valve, relief & fixed maximum liquid level gauge
- 2 sizes for multiple applications
- Empty cylinder filling time is 50-70 seconds using drift method
- UL listed filling adapters and drifting dispensers available
- · Safety fill valve prevents disposable container connection and refilling
- · Recycled powder paint for maximum rust protection

RMI Part No.	Description
13000	3.0" Diameter
13003	3.8" Diameter



MANCHEST

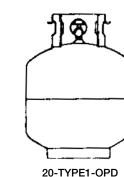
GASOLINE TO PROPANE CONVERSION BENEFITS

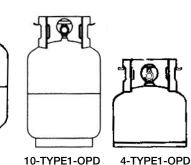
- Lower fuel cost per operating hour
- Run times comparable to gasoline (1 1/2-2 hours)
- Easy installation and operation
- Improved engine life and performance
- Reduce equipment maintenance
- · Significantly reduces air pollution
- Reduce noise pollution
- No fuel contamination
- Eliminates fuel theft

RMI Part No.	Description
A94880	Mount to 420
A94856	Mount to 33MF

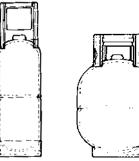
STANDARD STEEL PORTABLE CYLINDERS

Meet or exceed specifications 4BA-240 or 4BW-240. Durable white powdercoat finished cylinder is excellent for grills, RV and torch installations.





RMI Part No.	Valve	Propane Cap. (Lbs.)	Approx. Diameter (inches)	Height (inches)	Approx. Tare Wt.
4-TYPE1-OPD	Type 1 w/OPD	4¼	9.1	11.6	11.9
5-TYPE1-OPD	Type 1 w/OPD	5	8.0	12.0	10
10-TYPE1-OPD	Type 1 w/OPD	10	8.9	17.4	15
11-TYPE1-OPD	Type 1 w/OPD	11	12.2	12.4	14
20-TYPE1-OPD	Type 1 w/OPD	20	12.2	17.6	18
20-TYPE1-OPD-SF	Type 1 w/OPD	20	12.2	17.6	18
30-TYPE1-OPD	Type 1 w/OPD	30	12.2	23.4	26
40-TYPE1-OPD	Type 1 w/OPD	40	12.2	29.4	31
		•			• • •



AL6-OPD AL20-OPD

ALUMINUM PORTABLE CYLINDERS

These meet or exceed DOT specifications 4E-240. Clear aluminum finish cylinder is used on many torch, RV and grill installations.

RMI Part No.	Propane Capacity (Lbs.)	Valve	Approx. Diameter	Approx. Height	Approx. Tare Wt.
AL6-OPD	6		6 ⁵ / ₁₆ "	221/2"	7.5
AL10-OPD	10		10%"	16¾"	10
AL20-OPD	20	Type 1 w/OPD	121⁄2"	20%"	12
AL30-OPD	30	WOID	121⁄2"	261/2"	17
AL40-OPD	40		121⁄2"	32"	19

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CYLINDERS & TANKS



Cylinder Blocks and Maintenance Tools **52**

DANDI-BLOCK

High density recycled polyethylene UV protection added to resin prevents deterioration of blocks.

- Extremely lightweight and durable reusable
- Reduces back & hand injury
- Can be attached to tank
- Minimizes Workman's Comp. claims
- Does not hold moisture
- Minimizes rust & corrosion

MODEL 22626

Designed for 200# and 420# cylinder. Can also accomodate smaller cylinders.



NIMI Part NU.	Description		
2626	Polyethylene Block for 200# and 420# Cylinders		

MODEL 81230

Designed for horizontal ASME tanks up to 1,000 gwc. It measures 7 inches high with a base measurement of 11 inches by 30 inches. Model 81230 requires only one block for each end of the tank.



RMI Part No.	Description
	Polyethylene Block for 120-1000 gal. ASME Tanks
51026	Polyethylene Block for 120-500 gal. ASME Tanks

PIT GAUGE



For accurate and convenient measuring of cylinder rust pits, gouges and dents as required for DOT visual inspection of gas cylinders. Highly polished stainless steel gauge comes with pocket size leather case.

RMI Part No.	Description
PG-100	Pit gauge with case

SK-09E	

CYLINDER STAMPING ANVIL

STEEL STAMPS

Heavy duty

stamping

dates on

cylinders.

re-

steel dies for

qualification

RMI

Part No.

SK-09E/316

SK-09E/14

SK-09E/38

SK-AZ-3/16

SK-AZ/14

SK-AZ/38

Description

346" Dies; 0-9 & "E"

1¼" Dies; 0-9 & "E"

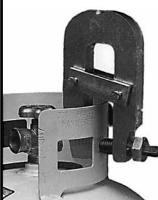
3%" Dies; 0-9 & "E"

3/16" Dies; Letters A-Z

¹/₄" Dies; Letters A-Z

%" Dies; Letters A-Z

By holding the stamping surface rigid, sturdy anvil prevents damage to the cylinder collar. Takes $3/_{16}$ "



stamp set. It also has :

- An adjustable height bar which easily aligns the stamping dies.
- Actual Size: 4" width x 7" length Weight: 5 lbs.
- Stamps sold separately.

RMI Part No.	Description
CSA7	Anvil only
SK-09E/316	³ / ₁₆ " Dies; 0-9 & "E"
SK-AZ-3/16	3/16" Dies; Letters A-Z

Cylinder with CSA7

E-Z STAMP

Stamps the date clearly as required by D.O.T. regulations. Takes less than 30 seconds to stamp complete date on a cylinder. Dies are $^{3}/_{8}$ " square and print $^{1}/_{4}$ " characters. E-Z STAMP requires only 60 psi air pressure for operation.



CP-71

CP-711

CP-A/Z

CP-711-14

RMI Part No.

Description

Gun, Head, 0-9 w/ "E"

Stamp Set, 0-9 w/ "E"

Stamp Set, Letters A-Z

AIR SCRIBE

Complete kit—air operated lightweight tool for dating requalified DOT cylinders.

	RMI Part No.	Description
	CP9361-1	Air Scribe Kit
F	P-054177	Replacement stylus for air scribe

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53 Cathodic Protection & Anode Bags



TYPICAL UNDERGROUND TANK INSTALLATION

CATHODIC PROTECTION REGULATIONS AND PRINCIPLES

NFPA 58 requires the protecting of underground tanks in accordance with good engineering practice.

Cathodic protection is the accepted method of protecting underground metal structures.

Tanks should be protected by installing anode bags to the factory installed anode pad using the Cadweld method. They should be coated completely, and isolated electrically with the installation of insulated unions.

TYPICAL TANK ANODE REQUIREMENTS

Tank Size	17 Lb. Anodes Required
500 Gallons	1
1000 Gallons	2
1990 Gallons	3
3000 Gallons	4
4000 to 5000 Gallons	6
10,000 Gallons	8
15,000 Gallons	10
20,000 Gallons	12
25,000 to 30,000 Gallons	14

Soil conditions and other variables may affect number of anodes required. Consult engineer or other appropriate professional.

Ande to be located at or below the bottom level of the tank and 2 to 5 test from the side of the tank	Insulated union at copper/steel transition Locate anode 2 to 5 feet to the side and 1 foot below the gas line 5 ib Magnesium alloy anode Cadwelded to iron pipe 17 lb Magnesium alloy anode with copper pigtail Cadwelded to Cadweld plate on tank
IRON PIPE	ANODE REQUIREMENTS

Pipe Size	Install One 5 lb. Anode For This Length of Pipe	Pipe Size	Install One 17 lb. Anode For This Length of Pipe
³ /4"	500'	3"	700'
1 ¹ /4"	450'	4"	500'
11/2"	425'	6"	400'
2"	400'	8"	350'

ANODE BAGS

Cathodic Protection is the accepted method of protecting underground metal structures. Tanks should be protected by installing anode bags to tank anode bracket or lifting lug by Cadweld method or by connecting wire directly to anode lead provided by tank manufacturer.

They should be coated completely and isolated electrically with the installation of insulated unions.

Magnesium Anode Bags are:

CYLINDERS & TANKS

91% magnesium, 3% zinc, 6% aluminum alloy.

The anodes are prepackaged in cloth bags with low resistivity, quick wetting prepared back fill consisting of 75% hydrated gypsum, 20% bentonite, and 5% sodium sulphate.

Anode bag is placed into wet hole at least 2' from the tank and at a depth greater than that of the tank. Wet area above anode.

SPIKE ANODES

Spike Anode is for protection of small underground gas lines such as copper tubing. Comes standard with 36" cable and stainless steel adjustable pipe clamp.

RMI Part No.	Description
MG-DR-1.0	1 Pound anode 3/4" x 12" w/cable and clamp
MG-DR-1.5	1.5 Pound anode 3/4" x 18" w/cable and clamp
MG-DR-Clamp	Anode Clamp

Anode connection and testing equipment listed in service tools section

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

RMI Part No.	High Potential	Size
MG-17	MG-17-HP	17#
MG-9	MG-9-HP	9#
MG-5	MG-5-HP	5#

NFPA 58 REQUIRES THE PROTECTION OF UNDERGROUND TANKS IN ACCORDANCE WITH GOOD ENGINEERING PRACTICE.





Corrosion Protection

CORROSION PROTECTION TAPES

TAPECOAT® CT 10/40W is a white cold-applied coating in tape form that consists of a heavy polymer film and synthetic elastomeric coating that bonds immediately to its own backing to provide a moisture proof seal.

SCOTCHRAP® 50 is a tough PVC plastic tape with special high tack adhesive, formulated to resist corrosion. Easy to apply - does not use a removable plastic release film.

COLD PRIMES prepare metal surfaces for the application of cold applied tapes.

MM50-2

CT-200

1U-150-034

CORROSION PROTECTION TAPES

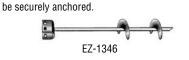
RMI Part No.	Description	
CT-200	TAPECOAT - 2" x 75 FT roll of tape	
CT-400	TAPECOAT - 4" x 75 FT roll of tape	
TC-1	TAPECOAT - Cold Prime; 1 gallon	
MM50-2	SCOTCHRAP - 2" x 100 FT roll of tape	
MM50-4	SCOTCHRAP - 4" x 100 FT roll of tape	
MM110	SCOTCHRAP - Rubber Based Primer; 1 gal.	

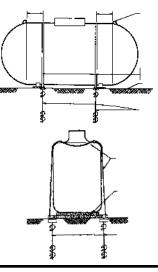
Minute Mananchors,

PROPANE TANK STABILIZATION SYSTEM E Z One Step Anchoring System

•Stainless Steel Strapping •Heavy Duty Anchors •Compacting Discs •Anchor Drive Machines

NFPA 58 Section 3.2.2.6(h) 2001 Edition: Where necessary to prevent floatation due to possible high flood waters around above ground or mounded containers, or high water table for those underground and partially underground containers shall





INSULATING UNION

O-Ring for Underground Piping

	RMI Part No.	
Thread	150-175 Working	3000#
Size	Pressure for Vapor Lines Working Pressu	
1/2"	1U-150-012	1U-3000-012
3/4"	1U-150-034	1U-3000-034
1"	1U-150-100	1U-3000-100
1 1/4"	1U-150-114	1U-3000-114
1 1/2"	1U-150-112	1U-3000-112
2"	1U-150-200	1U-3000-200

Tapecoat Table Coverage

Lineal feet of pipe coated per roll with minimum		
overlap (does not	include fittings, be	nds, etc.)
Pipe Size	2" Wide	4" Wide
3/4"	26.5	
1"	21.1	
1 1/4"	16.7	
2"	11.7	25.1
2 1/2"	9.6	20.7
3"	7.9	17.0

MINUTE MAN ANCHORS

RMI Part No.	Description
EZ-1346	36" Double Helix Anchor
EZ-1284	50" Double Helix Anchor
EZ-2375	Galvanized Steel Strapping (100' per roll)
EZ-2382	Covering for EZ 2375 Strapping (150' per roll)
EZ-2010	Bolts to Tie Strapping to Anchor
	(2 bolts needed per anchor, sold as each)
EZ-2370	Stainless Steel Sling w/Straps for 420# Cyl.
EZ-2730	Anchor Drive Machine
EZ-2741	Adaptor for Anchor Drive Machine

E-Z CONCRETE ANCHORS

INFORMATION: CONCRETE PADS FOR UNDERGROUND TANKS

Concrete pads can be used to offset the buoyancy of tanks in high water table areas. Propane tanks may float to the ground surface if not properly anchored. In order to assure sufficient protection, the weight of the tank and pad must be greater than the buoyancy of the empty tank.

Depth

Calculations

- Multiply Tank Gallons x 8.34 (weight
- of water)
- Subtract weight of empty tank • Total equals weight to offset
- 1 CU. FT of Concrete Weighs 155 lbs.
- 1 Yard of Concrete Weighs 4200 lbs. 1 SQ. FT 1" Thick = 13 lbs
- Murray Inc.

0

Ray

Edition

<u>+</u>

Concrete base should be approximately 1' larger than tank on each side and reinforced

1000 with rebars. Tank may be bolted or strapped to pad. Tank should be protected and insulated from strapping. Back fill with sand for maximum protection. IMPORTANT: This information is meant as a guideline only for installation and reinforcement. Contact a mechanical engineer for exact specifications and installation.

325

<u>500</u>

Tank Size



" Hole in oncrete

RMI Part No.	Description	
EZ-1450	EZ-1450 Anchor to be installed in wet concrete	
EZ-2391	Anchor for 5/8" drill hole in dry concrete	

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

Length

Sample Pad Size

Width

6'

7'

7'

Depth

2

3"

4"

Lenath

14'

14'

20'

, Heiaht

Weiaht

2185 lbs.

<u>3825 lbs.</u>

7280 lbs.

2391 for

EZ-1450 for Poured Wet Concrete	EZ- 5/8 Co

RMI Part No.	Description	
EZ-1450	Anchor to be installed in wet concrete	
EZ-2391	Anchor for 5/8" drill hole in dry concrete	

55 Dielectric Products

MEC SPACE SAVER DIELECTRIC UNION

The ME690 dielectric union would typically be installed at the ASME tank directly downstream of the first stage regulator but prior to underground piping and/or at the inlet of the second stage regulator above ground at the dwelling there by protecting the underground metallic piping from corrosion and electrical current.

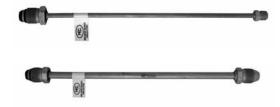
- · Heavy duty brass construction
- Convenient male NPT x male SAE flare connection to minimize potential piping leak points and extra fittings
- · Compact size for tight spaces
- · Wide wrench flas for easy installation
- Will not conduct an eletrical charge from one side of the union to the other



RMI Part No.	Description	OAL
ME690-4-6	Dielectric Union 1/2" MNPT x 3/8" Male Flare	3 3/8"
ME690-6-6	Dielectric Union 3/4" MNPT x 3/8" Male Flare	3 1/2"
ME690-4-8	Dielectric Union 1/2" MNPT x 1/2" Male Flare	3 1/2"
ME690-6-8	Dielectric Union 3/4" MNPT x 1/2" Male Flare	3 5/8"
ME690-4-10	Dielectric Union 1/2" MNPT x 5/8" Male Flare	3 5/8"
ME690-6-10	Dielectric Union 3/4" MNPT x 5/8" Male Flare	3 3/4"

MEC DIELECTRIC PIGTAILS & HOGTAILS

The ME1600 series dielectric pigtails & hogtails are intended to isolate metallic piping from sources of electrical current and to help prevent galvanic corrosion when used on underground containers. The dielectric pigtail would typically be installed at the ASME tank directly upstream of the first stage regulator prior to underground piping there by isolating the underground metallic piping from electrical current.



Heavy duty brass construction

NDERS & TANKS

- Available in 1/4" & 3/8" copper tubing sizes in 12" or 20" length configurations
- Will not conduct an eletrical charge from one side of the pigtail/ hogtail to the other

RMI Part No.	Description	Nipple Length	Tubing Size	Length
ME1664D-12	Dielectric Pigtail POL x POL	Short	1/4"	12"
ME1664D-20	Dielectric Pigtail POL x POL	Short	1/4"	20"
ME1669D-12	Dielectric Pigtail POL x 1/4" MNPT	Short	1/4"	12"
ME1669D-20	Dielectric Pigtail POL x 1/4" MNPT	Short	1/4"	20"
ME1680D-12	Dielectric Hogtail POL x POL	Long	3/8"	12"

JOMAR BALL VALVE WITH DIELECTRIC UNION

1/4-turn, hot forged brass, 2-piece design, standard port, with dielectric union, appliance type gas ball valves. Made in Italy. 100% tested.

- Reversable tamper-proof. lockable handle
- Pressure rating: 600 WOG/150 WSP
- Temp range: -40°F to 300°F
- Double Viton® O-ring stem design

RMI Part No.	Description
101-513DU	1/2" NPT x 1/2" FL
101-403DU	1/2" x 1/2" FNPT
101-404DU	3/4" x 3/4" FNPT



Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance



Cathodic Protection Tools 56

HALF CELL



Illustrated means of check potential of cathodic protection of buried tanks; piping has the advantage over a Potential meter:

- Gives direct reading of potential for OPS compliant documentation vs. Go/No Go dial
- Utilizes standard digital multimeter
- Use with mulit test meter

RMI Part No.	Description
Model 6B	Half Cell

JCP-100 CATHODIC PROTECTION TEST KIT



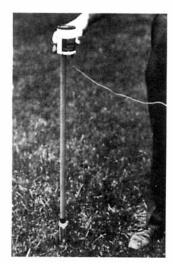
CP Test Kit Includes:

JCP100

- Voltmeter
- Half Cell
- Test Leads
- Carrying Case

This test kit allows fast and accurate pipe to soil potential to determine anode effectiveness

POTENTIAL METER - TESTING CATHODIC PROTECTION



Picture above shows optional electrode extension -16203 C. P. MINI BOX TEST STATION

MCM-1A

For testing anode potential (output)



Standard Scale

- be in contact with moist soil. Grass should not be allowed to come between plug & soil.)
- at least -0.85 volts.
- 5. Replace protective cap at lower end of electrode.

on installed anodes. The MCM-1A makes this test very simple. Touch wire to tank and ground half cell to earth. Test can be made in minutes.

RMI Part No.	Description
MCM-1A	Meter with Case
	Extension Electrode
17105	Antifreeze Solution
16906	Copper Sulfate



Blocks secured in place beneath cover.



Heavy cast iron cover (locking)

Fax: 800-243-8341

0 Ray Murray Inc. Edition

MINIBOX Cathodic Protection Test Station 2 1/8" 18" Non-corrosive ABS Pipe	RMI Part No.	Description	I.D.	Shaft Length
	MINIBOX	Cathodic Protection Test Station	2 1/8"	18" Non-corrosive ABS Pipe

Cathodic protection test station allows for the testing of anode

potential without disturbing the ground. Leads are attached to terminal block in the cap and securely fastened down. The entire

cap assembly is easily lifted and tilted for testing.

Tel: 800-628-5044

Order online at www.raymurray.com or call for personal assistance

RAY MURRAY, INC.

For Checking The Output Of An Anode 1. Remove protective caps from meter and electrode.

- 2. Connect orange negative lead to tank.
- 3. Contact earth with electrode (the porous plug should
- 4. Take and record reading & polarity. Reading should be

DOT requires a yearly test



Cylinder Maintenance 57



SUMTER TOOLS & ACCESSORIES





RMI Part No.	Description
KM-1009	Empty 5 Gal. Metal Bucket
SC-BC003	Bucket Cover (3 pack)
SC-BG001	Bucket Grid w/dimple
SC-CR063	Contour Roller 7" Complete
SC-CR006	Contour Roller 7" Refill
SC-TR09K	Tank Roller 9" Complete
SC-LCV16	Lambswool refill for SC-TR09K
SC-TTB002	Tank Trim Brush w/12" handle
SW-WB042	Wire Brush w/metal scraper
SC-AP024	Aluminum Extension Pole 2'-4'
34-700	Box of 100 Disposable Gloves

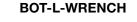
UNDERGROUND TANK CLUSTER VALVE **REMOVAL TOOL**

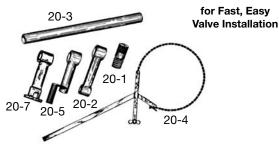
Universal design for convenient removal of underground tank cluster valves using a standard 3/4" drive socket wrench.

TOOL FEATURES:

- Durable cast steel construction
- Powder coat finish for maximum corrosion protection
- 3/4" drive







BOT-L-WRENCH KIT PARTS	
RMI Part No.	Description
20-1	POL Plug
20-2	Valve Wrench
20-3	Handle
20-4	Chain Vise
20-5	Plumber Pot Wrench
20-7	Motor Fuel/Wrench
	BOT-L-WRENCH KITS
RMI Kit No.	Parts Included
F100-1	Complete kit less 20-7
F100-2	Kit includes 20-1, 20-2, 20-3, 20-4
F100-3	Kit includes 20-1, 20-2, 20-3
F100-7C	Complete kit less 20-4
F100-8	Complete kit

CYLINDER VALVE WRENCH KIT

The TW-3 quickens installation and removal of QCC-1 cylinder valves from DOT containers. The wrench works on all style 1 (QCC-1) valves.

A bleed orifice safety feature will indicate any pressure remaining in the cylinder before removing the valve by simply opening the valve slightly prior to loosening.



RMI Part No.	Description
MEP121	For Pol Valves
MEP122	For QCC-I Valves

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance



Paint and Mastics 58

TANK/CYLINDER ENAMELS

Sumter

Coatings

SC 1000 ALUMINUM TANK PAINT

888S2005

Description

SC 2110 Strontium Chromate Aluminum

SC 2000 Aluminum Tank Paint

SC 2151 Cylinder Tank Enamel

SUMTER COATING ENAMELS



Long Life

Bright Finish

Durability

Excellent Weather

RMI Part No.

888S2005

888S2006

888S2007

- PRIMERS
- Excellent Corrosion

855W1370

RMI Part No.	Description
855D1373	Uni-Pox Gray Primer
855W1370	Uni-Pox Off White
855G1368	Uni-Pox Gray Green



856X2210

Tel: 800-628-5044

Tel oatings

UNI-POX WHITE PRIMER

855W1370

ON CATER LITE

Fast Coat Time Great Coverage

Resistance

RMI Part No.	Description
855D1373	Uni-Pox Gray Primer
855W1370	Uni-Pox Off White
855G1368	Uni-Pox Gray Green



MASTICS Seagraves Coatings

- Durable Rust and Corrosion Protection
- Excellent for Foot Rings, Cylinders, Tank Bottoms, Underground Tanks and Piping



PRO-CHEM-5

RMI Part No.	Description	Size
PRO-CHEM-5	Non-hardening Heavy Fluffy Compound for Brush Application. Excellent Rust Protection	5 gal.

RAY MURRAY, INC.

Fax: 800-243-8341

Order online at www.raymurray.com or call for personal assistance

Grinders - Brushes - Abrasives 59



DEWALT GRINDERS

Heavy duty grinder for industrial applications. Use 4 1/2" wheels and 5/8" spindle.



RMI Part No.	Description
115-28402	9 Amp 4 1/2" Grinder w/Paddle
115-DC411KA	18V 4 1/2" Cordless Grinder Kit

WIRE BRUSHES

Durable heavy duty wire brushed mount on grinder for paint removal, scale and rust removal, metal cleaning for welding and surface preparation for painting.

CRIMPED VS. KNOTTED WIRE

& TANKS

CYLINDERS

Crimped wire brushes are more flexible and appropriate for working on uneven surfaces for uniform and fine finishing.

Knotted wire brushes offer longer working life, higher capacity and rough finishing.

WIRE BRUSHES VS. HARD ABRASIVES

Wire brushes act as an impact tool removing oxide, paint or other adherence without damaging the base material; hard abrasives may eventually damage the base material.

BRUSH USAGE RECOMMENDATIONS

Brushing must be done with the wire ends. Greater pressure will cause over-bending of the wire, heat build-up, wire fatigue and reduced brush life.





GUARDED CUP MODELS

TWIST KNOT CUP MODEL

RMI Part No.		Box Quantity
31052	4" Regular Knot Wheel, 20 knots, .020" steel, ⁵ / ₈ " - 11 A.H.	6
78050	4 ¹ /2"" Regular Knot Wheel, .020" steel, ⁵ /8" - 11 A.H.	6
72950	W/GUARD 2 ³ / ₄ " Twist Knot Cup, .020" steel, ⁵ / ₈ " - 11/M 14 A.H.	1
73000	3" Crimped Cup, .012" steel, ⁵ / ₈ " - 11/M 14 A.H.	1
73900	W/GUARD 3" Crimped Cup, .012" steel, 5/8" - 11/M 14 A.H.	1
54050	4" Twist Knot Cup, .020" steel, 5/8" - 11/M 14 A.H.	1
64050	4" Crimped Cup, .012" steel, 5/8" - 11/M 14 A.H.	1

FLAP DISCS

Ideal for surface preparation and cleaning of scale, rust and excess weld material before and after welding operations. Rapid stock removal with excellent finish in one operation.



Type 29 Discs

TYPE 29 ZIRCONIUM FLAP DISCS (STANDARD & HIGH DENSITY)

RMI Part No.	Description
37624	Type 29 Zirconium Flap Discs 4 1/2" x 5/8" - 11 (40 Grit)
37626	Type 29 Zirconium Flap Discs 4 1/2" x 5/8" - 11 (60 Grit)
37628	Type 29 Zirconium Flap Discs 4 1/2" x 5/8" - 11 (80 Grit)
37634	Type 29 HIGH PROFILE Zirconium Flap Discs 4 1/2" x 5/8" - 11 (40 Grit)
37636	Type 29 HIGH PROFILE Zirconium Flap Discs 4 1/2" x 5/8" - 11 (60 Grit)
37638	Type 29 HIGH PROFILE Zirconium Flap Discs 4 1/2" x 5/8" - 11 (80 Grit)

GRINDING WHEELS

Ideal for heavy duty aggressive grinding of steel and standard grinding of stainless steel. Zirconium grain is specifically designed for light grinding and cutting for pipeline industry.



Type 27 Depressed Center **Grinding Wheels**

TYPE 27 DEPRESSED CENTER GRINDING WHEELS

RMI Part No.	Description
14407	Type 27 Depressed Center Cutting Wheel Zirconium 4 1/2" x .040 x 7/8" (ZA60T)
14467	Type 27 Depressed Center Grinding Wheel 4 1/2" x 1/4" x 7/8" (ZA24R)
14468	Type 27 Depressed Center Grinding Wheel 4 1/2" x 1/4" x 5/8" - 11 (ZA24R)
14607	Type 27 Depressed Center Cutting Wheel Zirconium 6" x .040 x 7/8" (ZA60T)
20761	Type 27 Depressed Center Grinding Wheel 7" x 1/4" x 7/8" (A60R)
20768	Type 27 Depressed Center Grinding Wheel 7" x 1/4" x 5/8" - 11 (A24R)
24467	Type 27 Depressed Center Grinding Wheel 4 1/2" x 1/4" x 7/8" (A24R)
28467	Type 27 Depressed Center Grinding Wheel 4 1/2" x 1/4" x 5/8" - 11 (A24R)

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com

Fax: 800-243-8341

or call for personal assistance



Compressors / Evacuation Pumps 60 and Tank Inverters

TANK EVACUATION VAPOR COMPRESSOR

Save your expensive truck pump from damage when evacuating tanks in the field at an 8 to 15 GPM flow rate. Uses include on-site upgrading or downgrading size of storage in the field, emptying cylinders or tanks in need of repair and emergency filling of bobtails.

This compressor transfers liquid by increasing vapor pressure on tank being emptied and decreasing it on tank being filled. The liquid can be moved into a bulk truck or another bulk tank.

COMPRESSORS

RMI Part No.	MI Part No. Description		Inlet/Outlet
K-LPG	Compressor Assy.	Propane	½" NPT
K-GAS	Compressor Assy.	Gasoline	1⁄₂" NPT
K-ELECTRIC	K-LPG & 1HP Motor	Electric	½" NPT

COMPONENTS FOR COMPRESSORS

RMI Part No. Description		Fuel
K-COMP	Compressor Only	
K-MOTOR	R Motor for K-LPG	
K-MOTOR-GAS	Motor for K-GAS	Gasoline
K-K2	25' Hose & Valve Kit	

RMI Part No.

Complete Kit Rack Only

PCCE-2R

PCCE-4R

Safe Cylinder Purging

Precise 15# Vapor Purging

Save Time & Avoid Injury

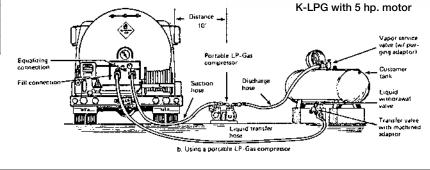
Allows for Easy Purging

(especially QCC-1 valves)

Vents Vapor Away from Operator

CYLINDER PURGE SYSTEM (Assembled)

QUICK, EASY, AND EXACT PURGING



"LITTLE GIANT" STATIONARY TANK INVERTER



Safe and easy one man operation. Easily mounted to floor, dock or concrete pad. Available in 2 or 4 cylinder manifold. Accepts small cylinders with adaptor which is included. Complete kit includes hoses, gauges and POL adaptors.

Description

2 100# Cylinder Inverter

4 100# Cylinder Inverter

PCCE-2

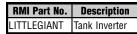
PCCE-2

PCCE-4

	ł
-	
-	1
-	

LITTLEGIANT

- · Capable of lifting and inverting full 420# cylinders
- · Versatile; handles single or dual cylinders, 100# through 420#
- · Comes completely assembled from factory
- Small footprint, saves valuable dock space

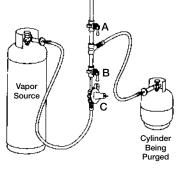


RMI Part No.	Descripti
LITTLEGIANT	Tank Invert

- **Purge-1 Includes:**
- Regulator w/ Gauge (C)
- Dual Positive Snap Valves (A & B)
- Elbow, Tee & Connections
- One-8' Length of 3/8" LP Hose for Vapor Inlet w/ POL Coupling (not assembled)
- One-10' Length of 3/8" LP Hose for Cylinder Purge w/ POL Coupling (not assembled)
- One-1/2" 90° Elbow (E)
- One-4' Threaded Vent Pipe(D)

NOTE: Can be mounted horizontally, but would require additional vent pipe and/ or elbow.

MI Part No.	Description
URGE-1	POL X POL Purging System
′602-7	$\frac{1}{2}$ " FNPT Angle Type Vent Assy.
PURGE-2	Similar to PURGE-1 w/ lower cost regulators, valves - unassembled
URGE-3	Purge w/ 3-way valve economy kit,



Е₿

D

NOTE: Cylinders not included

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

Fax: 800-243-8341

& TANKS

CYLINDERS

61 Methanol Equipment





RECOMMENDED METHANOL USE: 3 OZ. FOR 100 LB. CYLINDERS 12 OZ. FOR 420 LB. CYLINDERS

Prevents and overcomes freeze ups. Holds 5 oz. of methanol. Empties in 5-10 strokes. Check valves prevent back flow of propane pressure.

For use in the field on containers suspected of containing moisture or with which regulator freeze ups have occurred.

RMI Part No.	Description
ABJ-2	Methanol injector with O-ring and wing nut for hand tight connection.
ABJ-AA	Adaptor female POL x 1¾" ACME for connection from injector to filler valve.
ABJ-RK	Repair kit for ABJ-2
ABJ-POL	Replacement POL connecting adaptor w/ check

PREPURGED METHANOL HOSE

Hose assembly to add methanol into vacuum purged tanks

CYLINDERS & TANKS

 RMI Part No.
 Description
 Length

 MTH-HOSE
 Hose for Prepurged Cylider
 6'

 MTH-HOSE
 MTH-HOSE
 MTH-HOSE

99.99% DEHYDRATED METHANOL

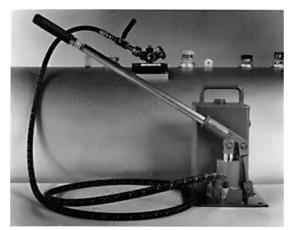


METHANOL-5

RMI Part No.	Description	
METHANOL-5	5 Gallon Container	
METHANOL-55	55 Gallon Drum, factory drop ship	

Tel: 800-628-5044

METHANOL INJECTOR



INJECT-1

- Heavy Gauge Steel Construction
- One Gallon Reservoir
- Self-Venting Cap
- 500 psi Maximum Injection Pressure
- Unit Weight–Approx. 38 lbs.
- •24" Handle with cushion grip
- (6 Strokes = 1 Pint)

RMI Part No.	Description
INJECT-1	1 Gallon Methanol Injector w/Hose Assembly
STD-MK1990	Repair Kit for Inject-1

VAC FILL



All in one filling adaptor. This completely assembled unit allows verification of vacuum on vacuum purged tanks, introduce methanol and fill the tank. Can be used on any size tank. Includes combination gauge, hose, POL adaptor, 1 3/4" ACME adaptor and isolating valves.

RMI Part No.DescriptionVAC-FILLAssembled filling adaptor

KRUG HAND PUMP



Simple piston hand pump for uses in filling portable and motor fuel cylinders. Six gallon capacity at 40 strokes per minute. Can also be used to pump methanol into systems.

RMI Part No.	Inlet	Outlet
K-HP	1" FNPT	34" FNPT
K-HPRK	Pump Repair I	Kit - Old Style
K-HPRK-A	Pump Repair	Kit - New Style



Tank Handling Equipment 62

MOTOR FUEL CYLINDER CART

Safely transports four cylinders. Does not require straps or chains. Practical for delivery trucks, industry, shipping docks.



RMI Part No.		
RTC33M	Motor Fuel Cylinder Cart	

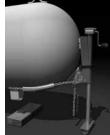
MUSCLE MAN TANK DOLLY



- operation
- evervwhere
- Shipped fully assembled & ready to go!

Compensation related injuries are COSTLY! Consider your investment in personnel! This piece of equipment is one that your company should not be without.

RMI Part No.	Description	
RTC420M	Manually Operated - Non Powered	200
RTC420G	Powered Unit - 3 HP (Forward Only)	235
RTC420H	Hydrostatic Unit - 5 HP (Forward/Reverse)	265



FISK TANK LIFTING JACK

Lifts end of ASME propane tanks up to 1000 gal for leveling and supporting.



Tel: 800-628-5044

HAND TRUCKS

Strong steel frame, 12" air tires, and safety chain.

RMI Part No.	Description
7325-S	100# Cylinder Handtruck
7-900-4P	420# & 100# H.D. Handtruck
MW-2001	Tire & Wheel for Both Trucks

7-900-4F

HEAVY DUTY CARGO STRAP (10,000 LBS.)

2" PVC impregnated webbing, chain and hook ends; 10,000 lb. capacity.

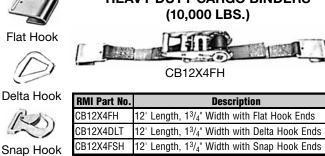
10R13CG

RMI Part No.	Description	Capacity
10R13CG	13' Long Strap, OAL, w/ 91/2" ratchet	10,000 lbs.
10R20CG	20' Long Strap, OAL	10,000 lbs.
RS-100	2" Nylon webbing, 20 long, steel "S" hook attachment ends	3,000 lbs.

HEAVY DUTY RATCHET STRAP (3,000 LBS.)

Powerful 9 to 1 mechanical advantage cargo binder, ratchet holds tightly yet releases easily. Excellent for light duty tie downs.





- V50CB12EC One-piece automatic spring loaded trigger; easy to use.
- V50CB12EC-3 Three-piece E-clip construction, manual trigger

V50CB12EC

INTERNAL VAN STRAPS

CYLINDERS & TANKS

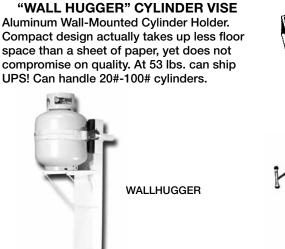
RMI Part No.	Length	Color	End Fitting	WLL
V50CB12EC	12 Ft.	Yellow	E-Clip (#1265)	1,000
				lbs.
V50CB12EC-3	12 Ft.	Yellow	3-Piece E-Clip	1,000
			(#1825)	lbs.
1803	Ratche	t Buckle,	4000# MBS capacity	, 2" wide

Fax: 800-243-8341

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

63 Cylinder Vises & Cylinder Equipment

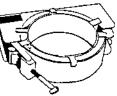




WALLHUGGER CYLINDER VISE

WALLHUGGER Wall-mounted cylinder holder

Description



CVM-200

CVM-BASE

CYLINDER VISE

Firmly holds 12" to 14" diameter cylinders and comes with inserts for 5 gallon cylinders. Other inserts are available upon request, down to 4 inches. The easily adjustable snap-action latch locks cylinders securely into place.

MOUNTING STAND

Mounting Stand has a sturdy 20" x 24" base and stands approximately 3 feet tall, for easy working access. As an additional feature to the stand, a four-level adjustable height support has been added as a safety precaution. This model also comes with a built on work tray for your convenience.

CYLINDER VISE & Mounting Stand

RMI Part No.	Description
CVM-200	Cylinder Vise
CVM-BASE	Mounting Stand for Vise

CYLINDER CAPS, COLLARS AND PLUGS



RMI

Part No.

PROTECTIVE COLLARS For use on cylinders in transit and on

construction sites to conform with DOT and OSHA requirements. Use S-501 for easy fit over multivalves.





PROTECTIVE CAPS

For use on cylinders in transit. Fits over standard cylinder valve.

Plastic rain plug for cylinders without

CYLINDER PLUGS

valve. (Not a gas tight seal.)

CC-100



PT-3/4

RMI Part No.	Description
CC-100	Standard 3 ¹ / ₂ " cap
CC-101	Old style 3 ¹ / ₈ " cap
S-501	Collar, 3 ¹ / ₂ " neck for multivalves
PT-3/4	³ / ₄ " thread plug

HEAVY DUTY REGULATOR SHIELD

For use in snow areas. Protects regulator and piping from large snowfalls.



RMI Part No.	Description
RSG	Heavy Duty Regulator Cover

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance



CENTERON by ROBERTSHAW REMOTE TANK MONITORING SYSTEMS

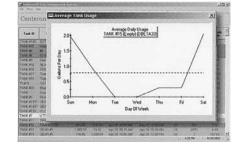
CELLULAR PROPANE MONITOR

- · Single devise that easy to install with no entry into house/structure needed.
- Utilizes GPRS technology International STD for machine to machine cellular communication.
- Communicates with CENTERON Data Center. on user defined schedule - and/or under user defined alert conditions.
- The Cellular Monitor wakes up every (10) ten minutes and analyzes the level with preset tank conditions.
- Alerts All USER defined. Not off the shelf
 - (2) two set point alerts
- Fill report
- Abnormal usage alerts
- Theft alerts
- 5 year battery life @ 1 call/day
- Email and/or text page notificationa of any or ALL alerts
- A single user
- A group

RMI Part No.	Description
DG0001-A	Cell propane monitor for Class 1 Div. 2*
DG0001-A-IS	Cell propane monitor for Class 1 Div. 1*
*Includes 5' ha	rness

CENTERON DATA CENTER

Centeron Data Center offer complete security, redundant backup, simple setup and complete control of your customer information. The unique web-based interface allows you to remotely configure Centeron Monitors and Controllers. Customized reports allow you to extract the information important to you. End users may view tank data with your approval. Data Center Demo Site is available at www.centeron.net/demo. Data Center receives calls directly from controllers each time controller transmitts information. Blocks of calls are purchased to cover cost of the Data Center.



RMI Part No.	Description
DCB-1000	1000 Call Block
DCB-5000	5000 Call Block

TANK MONITOR/GAUGE-**BASED TRANSMITTER**

Centeron monitors accurately measure tank fuel level and send information to Centeron Controller via radio signal. Fast and easy installation. Up to 500 feet obstructed radio range. Intrinsically safe Class I Group D for hazardous locations. Suitable for above ground or underground tanks. Centeron monitors are also available for large bulk storage tanks and for other fuels such as heating oil, diesel, gasoline and motor oil.

Standard monitor comes with 5 ft. cable to attach to remote ready dial on tank. If remote ready dial is not on tank, a replacement dial must be ordered for the float gauge.

RMI Part No.	Description
GM-060-B-H	1 Hour transmit frequency, 5' cable
GM-240-B-H	4 Hour transmit frequency, 5' cable
2 ft and 10 ft	cable lengths are also available

CENTERON CONTOLLERS



Centeron Residential Controller wirelessly receive transmitted tank level data on a one, or four hour basis (you choose). Controller processes the data and sends it to the Centeron Data Center or to your own computer. These transmissions are sent via phone lines on a regular basis or immediately if liquid level drops below a predetermined critical level.

RMI Part No.	Description	
TC-A-N-N	Single Tank Monitor	
TC-A-N-T	Single Tank Monitor w/temperature transmitter	
TC-B-N-N	4 Monitor inputs at one location	
TC-C-N-N	20 Monitor inputs at one location	
Interface Cables to Update Controller		
SIC86640	Serial interface cable for P.C.	
SIC86642	Serial interface cable for Palm Pilot	

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65 **Remote Monitors and Gauge Dials**

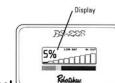




REMOTE FUEL LEVEL MONITOR

Remote monitor displays the propane level for both above ground and underground tanks. A multi-colored bar graph is easy to read. Ready to install kit includes display monitor (operated on 120V AC), and dial for tank. Outside grade 2-conductor 18/22 gauge cable is needed to connect tank to monitor.

RMI Part No.	Description
136619	Commercial/industrial, % reading w/alarm and dry contacts



TANK LEVEL METER Monitor Your LP level from your home!

RS-223

WIRELESS LP GAS

Get accurate, up-to-the-minute LP gas readings in your home.

Place the base station in a convenient location such as the kitchen or bedroom. Then place the wireless tank monitor on your LP tank.

Base Station

· Battery powered wireless system

& TANKS

INDERS

- Displays accurate LP gas tank level readings numerically and graphically
- Base station requires 2 AAA alkaline batteries

Remote Monitor Weather-tight – suitable for continuous

RMI Part No.	Description	
RS-228	Indoor Tank Monitor	

 Intrinsically Safe – suitable for mounting anywhere on your LP tank

outdoor exposure

- Wireless Operation can be placed up to 100 feet from the inside base station
- Remote tank monitor requires 2 AA alkaline or lithium batteries.

SQUIBB NON-REMOTE READY DIALS				
RMI Part No.	Style	Tank	Range	Dial Face #
2-JR	Jr.	Old Obsolete	5-94%	2701
2-SR	Sr.	Old Obsolete	5-94%	2201
2701-CV	Jr.	Horiz AG	5-94%	2701
2700-CV	Jr.	Chemi-Trol UG	5-94%	2700
2700-CV-TOP	Jr.	Trinity & American UG	5-94%	2700
2733U-CV	Jr.	33# Lift Truck	13-40% or 5-20%	2733U
2743U-CV	Jr.	43# Lift Truck	13-40% or 5-15%	2743U
2765CV	Jr.	420#	10-70%	2765
2722-CV	Jr.	200#	5-90%	2722







REMOTE READY DIALS

Dial Dial Style			Tank Size	
Size	Dial Style	Horiz. AG	Horiz. UG	Vertical
JR	Std (2 ear)	5909S02733	5909S02799	5909S02772
JR	Capsule A	5987S02787	5-2876	5-2873
JR	Capsule B	5988S02788	5-2824	5988S02889
JR	Snap On	5AAAS02733	n/a	5AAAS02772
SR	Std (2 ear)	5986S02733	n/a	5986S02772

REMOTE READY BULK STORAGE DIALS

	RMI Part No.	Description
Г	GSLRH10I00	8" Rochester Dial w/10' cable
Γ	GSLSH10I00	4" Rochester Dial w/10' cable
	GSLTH10I00	8" Taylor Dial w/10' cable

ROCHESTER NON-REMOTE DIALS

RMI Part No.	Style	Tank	Range	Dail Face #
5-00434	Sr.	420# Vert.	10-80%	5-434
5-01852	Jr.	200# Vert.	5-85%	5-1852

SQUIBB REMOTE READY DIALS

RMI Part No.	Style	Tank	Range	Dial Face #
5987S02787	Capsule A	Horiz AG	E-90%	5-2787
5-2876	Capsule A	Horiz UG	5-94%	5-2876
5-2873	Capsule A	Vertical	10-80%	5-2873
5988S02788	Capsule B	Horiz AG	E-90%	5-2788
5-2824	Capsule B	Horiz UG	5-94%	5-2824
5988S02889	Capsule B	Vertical	10-80%	5-2889

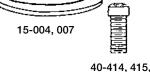
UNIVERSAL DIAL KITS FOR OLD OBSOLETE GAUGES

RMI Part No.	Style	Tank	Range
3181-01749	Jr.	Horizontal	5-95%
3180-S17-1	Sr.	Horizontal	5-95%

416

RMI

SCREWS AND GASKETS



Description Part No. 40-414 Screw for Jr. head 40-415 Screw for Sr. head 40-416 Screw for dial Jr. or Sr. 15-004 Senior gauge gasket 15-007 Junior gauge gasket

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

Fax: 800-243-8341

Front of base station 73-226



Small Diameter Hose, Ferrules and Tools 66

RUBBER SMALL DIAMETER HOSE				
RMI Part No.	I.D.	0.D.	Weight (Lbs.) per 100 Foot	
LPGH-1/4	1/4"	.610"	14	
LPGH-3/8	3/_"	750"	22	

ACCUFLEX THERMOPLASTIC HOSE

RMI Part No.		U.D.	hei inn Loor
LPGH-5/16	⁵ ⁄16"	.580"	16



GRILL & HEATER HOSE

SMALL DIAMETER RUBBER BRAIDED HOSE

Small diameter hose for grills, recreation appliances, constrution heaters and torches. Available in cut lenghts or economical bulk reels.

- UL-21 Approved Hose
- 350 PSI Working Pressure with 1750 PSI Minimum Burst Pressure
- For Use with Crimped Ferrules and Hose Barbed Fittings

7329	.687"	1"
7330-B	.718"	1"
7331	.750"	1"
7332	.781"	1"
7333	.812"	1"
HOS	E BARI	3S & F
		T T H
Provides stand either ¼" or ¾ Kits include the Flare; ¾" Male ¾" MNPT; POI	" double e followi Flare; ¹ /	e braid ng fittir 4" FNP
RMI Pa	rt No. D	escripti
HBFK-1/2	4 Fi	tting &
HBFK-3/	B Fi	tting &
Tel: 800-62	28-5	044

BRASS HOSE FERRULES



RMI	Incide	Farmula	Formula	RMI Hose
	Inside	Ferrule	Ferrule	
Part No.	Diameter	Length	Thickness	Part No.
7325	.562"	1"	.024"	
7326	.593"	1"	.024"	LPGH-5/16
7327	.625"	1"	.024"	LPGH-1/4
7328	.656"	1"	.024"	
7329	.687"	1"	.024"	
7330-B	.718"	1"	.024"	
7331	.750"	1"	.024"	
7332	.781"	1"	.024"	LPGH-3%
7333	.812"	1"	.024"	

BS & FERRULE KITS



se barb fittings and ferrules for e braid hose. ving fittings: 9/16" LH; 3/8" Female 1/4" FNPT; 1/4" MNPT; 3/8" FNPT;

RMI Part No.	Description
HBFK-1/4	Fitting & Ferrule Kit; 1/4" Hose
HBFK-3/8	Fitting & Ferrule Kit; 3/8" Hose



Fast, easy and clean. Cuts through 3/4" hose. Replaceable blades available.

RMI Part No.	Description.
MCT-4	Hose Cutter
MCB-4	Pkg. of 2 Blades

CRIMPING TOOLS



HAND CRIMP TOOL To be used with $3/_{16}$ ", $1/_{4}$ " and $3/_{8}$ "

I.D. hose ferrules. Press with a vise.

BENCH MODEL HOSE CRIMPER

Low cost, portable and easy to

use. Rugged construction.

HOSE & FITTINGS





CR-100

RMI Part No.	Description			
C-3	Hand Crimp Tool (¾,",¼", ¾,6" &¾, I.D. Hose)			
CR-100	Bench Crimper (¾16",¼", ¾16" & ¾", I.D. Hose)			

Fax: 800-243-8341

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67 POL Adaptors, POL Caps and Plugs



MALE NPT BY HOSE BARB CONNECTOR Image: Stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars of the stars	
102 0102 1/4 1/8 1/1 541 1/4" 1/4" NPT 543 3/8" 1/4" NPT 537 537 1/4" 3/8" NPT 516-3/8 5/1/6" 3/8" NPT 539 3/8" 3/8" NPT 102-0608 3/8" 1/2" NPT 102-0612 3/8" 3/4" NPT KIMI Part No. Hose ID Outlet ME517-25H 1/4" QCC Nut x 1/4", Barb, 140,000	
102-0608 98° 92° NPT 102-0612 38" 34" NPT RMI Part No. Hose ID Outlet ME517-25H 14" QCC Nut x 14", Barb, 140,000	ł
%6"-18 L.H. FEMALE ME518-25H 1/4" QCC Nut x 1/4", Barb, 200,000 BY HOSE BARB CON- ME518-38H 3%" QCC Nut x 3/4", Barb, 200,000	BTU
NECTOR 8-17 <u>RMI Part No. Hose I.D. Thread Size</u> 8-17 <u>RMI Part No. Hose I.D. Thread Size</u> 8-17 <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-17</u> <u>8-16</u> <u>8-17</u> <u>14-16</u> <u>9/16</u> <u>9/16</u> <u>9/16</u> <u>14-164335F</u> <u>14-164335F</u> <u>14-164335F</u> <u>14-164335F</u> <u>14-164335F</u> <u>14-164335F</u> <u>14-164335F</u>	BTU 1.D. Thread Size 1/4" O.D. 3/6" O.D. 3/6" O.D. 3/6" O.D.
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RMI Thread Size HC-4835 HC-4857 %" 31 %16"-18LH X %16"-18LH 14" NPT X %16"-18LH 14" MALE INVERTED FLARE \ BY HOSE BARB CONNECTOR 31 %8" NPT X %16"-18LH 143 %8" NPT X %16"-18LH 14" 14"	½" 0.D.
1"-20 SWIVEL ADAPTOR HC-5133 HMI Part No. Hose I.D. I HC-5133 1/4" 1/4" 1/4" 1/4" 1/4"	Thread Size Male Inv. Flare United Size $x \frac{1/4}{9}$ I.D. $x \frac{3}{9}$ I.D. $x \frac{5}{16}$ I.D.

Tel: 800-628-5044

HOSE & FITTINGS

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POL Adaptors and Fittings 68

MALE POL ADAPTORS



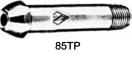
858 or 858A

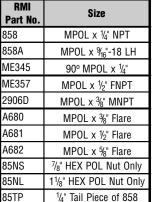












FEMALE POL ADAPTORS

DMI

ME301 - ME305



Par	t No.	Size			
Fisher	Marshall Excelsior				
M301	ME301	FPOL X ¹ /4" FNPT			
M303	ME303	FPOL X ¹ / ₂ " FNPT			
	ME304	FPOL X ³ /4" FNPT			
	ME305	FPOL X FPOL			
M284	ME284	FPOL X ¹ /4" MNPT			
M285	ME285	FPOL X ³ /8" MNPT			
M286	ME286	FPOL X 1/2" MNPT			
M287	ME287	FPOL X ³ /4" MNPT			







	RMI Part No.	Size
~	A-1691	MPOL Plug - 7/8
	M412	MPOL Plug - 1/4"
	A-1699	FPOL Cap

Hex

Allen

PLASTIC POL PLUGS

Required safety plug for all cylinders filled at your plant, and dispensing units that are subsequently transported by car or stored at a residence.



PLASTIC POL PLUGS				
RMI Part No.	Description			
	POL Safety Plug w/ stra			

Safety Plug w/ st 87P-S (O-ring style)

CGA 555 LIQUID PROPANE ADAPTORS (formerly A982 Connection)





Female 555 X FPOL

RMI Part No.	Valve Connection	Outlet Thread		
72-76	FEM. 555	1/4" MNPT		
M307	FEM. 555	%₀"-18 LH		
802	FEM. 555	FPOL		
A841	MPOL	M. 555		
672	Brass Hand Nut	CGA 555		
663	Nipple Hand Tight	1⁄4" NPT		
972	FEM. 555 Cap & Chain Assembly			

HOSE & FITTINGS

© Ray Murray Inc. Edition



Excess

Flow

Х

Х

Full

Flow

Х

Х

60

Orifice

105-4

	RMI Part No.	
	A-48W	1⁄4" NP
	P499	1⁄4" N
and the second	A116	
A-116	P500	

105-4

RAY MURRAY, INC.

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4444 A-48W

ME1645 ME1654

ME1653

RMI Part No

ME1645

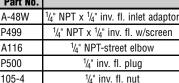
ME1653

ME1654

ME475

ME1654AR





Hand Wheel

ME475

Description

%16"-18LH x Soft Nose POL

1/4" MNPT x Soft Nose POL

1/4" MNPT x Soft Nose POL

¼" MNPT x Soft Nose POL

1"-20 Male x Soft Nose POL w/

Outlet





MPOL X M555



Hand Nut and Nipple

85NS

MALE POL WITH SOFT NOSE (O-RING) SEAL AND HAND WHEEL ADAPTORS

Hand

Wheel

Х

Х

Х

Brass

Х

PLUGS & ADAPTORS

Tel: 800-628-5044

Brass Pipe Fittings 69

RMI Part No.

RMI Part No.

BCR-4LP

RMI Part No.

RMI Part No.

RMI Part No.

RMI Part No.

BA-4-2HP

BA-4HP

BA-6-4HP

BF-2HP

BF-4HP

BF-6HP

BF-6-4HP

BF-8-4HP

P-2HP

P-4HP

P-6HP



WESTERN



BL-4-4LP



BCR-4LP



P-4HP



BF-6-4HP



BF-4HP



90° Female to Female NPT				
BEL-4HP	1/4" x 1/4"			
90º Female	e to Male NPT: (Street)			
BL-4-4LP	1/4" x 1/4"			
45º Female	e to Male NPT: (Street)			
BSL-4HP	1/4" x 1/4"			

BRASS PIPE THREAD CROSSES 4-WAY FEMALE

BRASS PIPE THREAD PLUGS

Description

1/4" NPT

Description

HEX Plug, 1/8" NPT

HEX Plug, 1/4" NPT

HEX Plug, %" NPT

BRASS PIPE THREAD REDUCER COUPLINGS FEMALE TO FEMALE

Description

%"NPT x ¼" NPT

1/2" NPT x 1/4" NPT

BRASS PIPE THREAD COUPLINGS, FEMALE TO FEMALE

Description

1%" NPT x 1%" NPT

1/4" NPT x 1/4" NPT

3%" NPT x 3%" NPT

BRASS PIPE THREAD ADAPTORS

FEMALE TO MALE

Description

1/4" NPT x 1/8" NPT

1/4" NPT x 1/4" NPT

3%" NPT x 1/4" NPT

HEX

⁷/₁₆"

5%'

¹¹/₁₆"

Length HEX

7/8"

1%

HEX

⁹/16

3/4"

7/8"

HEX

3⁄4"

3/4"

7%"

1.281

1.671

Length

0.800

1.187

1.180

Length

1.062

1.281

1.312

BRASS PIPE THREAD ELBOWS

Description



BRASS PIPE THREAD TEES					
RMI Part No. Description					
3-Way Female					
BFT-4LP	1/4" NPT				
BFT-6HP	3/8" NPT				
Female x Male					
BMT-4HP	1/4" NPT (Branch)				
BST-4HP	1/4" NPT (Street)				



BN-2-25HP



BRASS PIPE THREAD NIPPLES- MALE

RMI Part No. Description Length

1/8" NPT

1/4" NPT

2 1/2"

2"

BRASS	PIPE	TH	RE/	D	HEX	NIPPLES
	MA	۱LE	TO	Μ	ALE	

RMI Part No.	Description	Length	HEX
B-4HP	1/4" NPT x 1/4" NPT	1.437	5%"
B-6HP	3%" NPT x 3%" NPT	1.500	¹¹ / ₁₆ "

B-4HP



RMI Part No.	Description	Length	HEX
BB-2-4HP	1%" NPT x 14" NPT	0.875	5%"
BB-4-6HP	1/4" NPT x 3/8" NPT	0.968	3⁄4"
BB-4-8HP	1/4" NPTx 1/2" NPT	1.125	⁷ /8"
BB-6-8HP	3%" NPT x 1⁄2" NPT	1.125	⁷ /8"
BB-8-12HP	1/2" NPT x 3/4" NPT	1.168	11//8"

BRASS PIPE THREAD REDUCER BUSHINGS MALE TO MALE

RMI Part No.	Description	Length	HEX
B-6-4HP	%" NPTx ¼" NPT	1.467	¹¹ / ₁₆ "
B-8-4HP	½" NPT x ¼" NPT	1.687	7%"
B-8-6HP	½" NPT x ⅔" NPT	1.718	7/8"

NEEDLE VALVE

Carbon steel valve with stainless steel needle provides high quality accurate flow adjustment and shut-off. Ideal for pressure gauges, bleed valve and shut-off.

RMI Part No.	Description
N20SK	¹ /4" FNPT Straight Valve
N20-10S	¼" FNPT 90° Angle Valve
NMF20BK	1/4" MNPT + 1/4" FNPT Brass Valve

Fax: 800-243-8341

SHUT-OFF	VALVES	RMI Part No.	Inlet	Outlet
	211	208	%16"-18LH Male	1/4" MNPT
		211	¹ ⁄4" MNPT	1/4" MNPT
A human		218	1⁄4" FNPT	1/4" MNPT
		208-F	%16"-18LH Male	1⁄4" FNPT
-	TR	217	¹ ⁄4" MNPT	1⁄4" FNPT
217				



Tel: 800-628-5044

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BN-2-25HP

BN-4-20HP

BRASS PIPE THREAD BUSHINGS

	FEMALE TO MALE		
	Description		
2-4HP	1%" NPT x 14" NPT	0.875	;
4-6HP	1/4" NPT x 3/4" NPT	0 968	

	BB·
BB-2-4HP	BB·
-	

B-6-4HP

HOSE & FITTINGS



Type 1 (QCC) Fittings, Safety Locks 70

TYPE 1 (QCC) COUPLINGS

- · Used for connecting regulators or hoses to Type 1 (QCC) cylinder valve
- 3 Flow capacities for greater protection in all types of applications
- Thermal sensitive sleeve protects against uncontrolled release in a fire

RMI Part No.	Description	Flow Restriction	Color
ME517	QCC Nut x ¼" NPT	140,000 BTU	Black
ME518	QCC Nut x ¼" NPT	200,000 BTU	Green
ME519	QCC Nut x ¼" NPT	400,000 BTU	Red
EVACUATION COUPLING			
ME517EV	QCC Nut for Evacuation Only	Full Flow	Black

POL X TYPE 1 (QCC ADAPTOR)

Converts POL cylinder valve to Type 1 (QCC) Outlet



ME398

RMI Part No.	Description	
ME398	MPOL x Male QCC	
94QC1	Push-On Dust Cap and Strap	

TYPE 1 (QCC) ADAPTORS

Adapts Type 1 swivel connector to 1/4" male or female thread.





RMI Part No.	Description	Shut-Off Devise
ME399	Male QCC x 1/4" MNPT	Quick Close
ME393-1	Male QCC x 1/4" FNPT	Quick Close
ME393-EX	Male QCC x 1/4" MNPT w/Excess Flow	Quick Close

PAD & BARREL LOCK KEY





RAY MURRAY, INC.

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RMI Part No.	Description
500BRK	Break-away lock; keyed alike
8509950	High security barrel lock
8610005	Barrel lock key

Tel: 800-628-5044

© Ray Murray Inc. Edition

RV TYPE 1 ACME PIGTAILS

Heat-sensitive bushing melts between 240° F. & 300° F. allowing spring-loaded module in valve to push brass nipple back, closing the module and stopping the flow of gas from the container. Inside brass nipple, a flow limiting device senses excessive gas flow & shuts flow down to a maximum of 10 SCFH. UL-CGA

RMI Part No.	Description
/IER425-1	Type 1 ACME x ¹ / ₄ " inverted flare pigtail 12"
/IER425-1	Type 1 ACME x ¹ / ₄ " inverted flare pigtail 18"
/IER425-2	Type 1 ACME x 1/4" inverted flare pigtail 24"
/IER426-1	Type 1 ACME x ¼" MNPT pigtail 20"



Tvpe1 Acme fitting

MER425

SAFETY LOCK POL VALVE LOCK

- · Easy To Install
- Tamper Resistant •
- **Reduces Pilferage** •
- No Padlock Required
- Interchangeable Parts



ME530

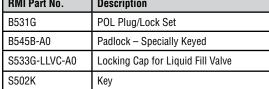
The easy to install ME530 securely locks POL service valves to help prevent unauthorized hookups, reduce pilferage and increase security.

The tamper-resistant ME530 is effective for credit control, tanks and cylinders in storage, and out of service vessels. Properly installed, the ME530 assists safe turn-on and gas check for "out-of-gas" calls and new customers.

RMI Part No.	Description
ME530	SAF-T-LOK Cylinder Valve Lock (Brass POL plug w/
IVIEDOU	0 -ring seal/Plated Steel Lock Collar/Tamper Seal Plug)
ME530-03	Key for Part No ME530 Lock

*One key free with purchase of (12) ME530

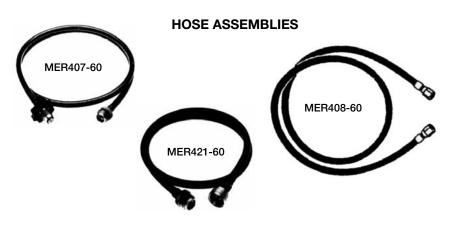
POL LOCKS The industry's first true POLock[™] Every dealer has his own registered key · Can be keyed alike to other lock styles • Over 60,000 usable key combinations • 7 pin anti-pick tubular mechanism B545B-A0 Rust resistant solid brass construction S533G-LLVC-A0 B531G RMI Part No. Description B531G POL Plug/Lock Set B545B-A0 Padlock - Specially Keyed



Hose Assemblies and 1"-20 Fittings 71



TRANSFER SWITCHES					
RMI Part No. Length Description					
MER421-60	5 ft.	1"-20 Male x 1"-20 Female			
MER421-144	12 ft.	1 -20 Male X 1 -20 Female			
MER407-36	3 ft.				
MER407-48	4 ft.				
MER407-60	5 ft.	POL x 1"-20 Male			
MER407-72	6 ft.				
MER407-144	12 ft.				
MER408-60	5 ft.	9/16 - 18 LH x 9/16 - 18 LH			
MER408-144	12 ft.	9/10 - 10 LH X 9/10 - 10 LH			
MER410-24	24 in.				
MER410-30	30 in.	3/8" MNPT x 3/8" Female Flare			
MER410-48	48 in.				



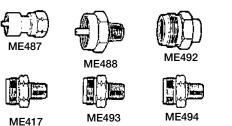
ADAPTOR TEES, CONNECTORS AND CAPS



RMI Part No.	Description		
G-432P	MPOL x 15/16" ACME and 1" 20 Male		
ME412	Fem 1 5/16" ACME x 1"-20 Male x 1" 20 Male		
ME413	MPOL x 1"-20 Male (2)		
ME414	1"-20 Female x 1"-20 Male (2)		
ME415	FPOL x MPOL x 1"-20 Male		
ME420	ME415 w/1/4" fem inv. flare side outlet		
ME475	Softnose handwheel POL x 1"-20 Male		
ME483	1"-20 Female Cap		
SECOND CHANCE GRILL ADAPTOR			
ME480	Female 1"-20 x 1 5/16" M ACME		

RMI Part No.	Description
ME487	FPOL x 1"-20 Female
ME488	1"-20 Female x 1/4" MNPT
ME492	1"-20 Male x 1/4" FNPT
ME417	1"-20 Male x 1/4" MNPT w/check and o-ring
ME493	1"-20 Male x 9/16" - 18LH w/check and o-ring
ME494	1"-20 Male x 9/16" - 18LH w/check w/o o-ring

BRASS FITTINGS





Part No.	Adaptor Kit	Kit Contains
MER470	Flow Longer Kit	ME415 tee and ME421-144
MER471	Flow Longer-Plus Kit	G-423P and ME421-144
MER472	Stay-Longer Kit	ME420 tee and 5' pigtail w/MPOL x 1/4" inv flare rods
MER473	Stay-Longer-Plus Kit	ME420 tee, 5' pigtail w/MPOL x 1/4" inv flare rods and ME421-144

STAY LONGER KIT

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Gas Convenience Outlets and Quick Connectors

STURGIS FUEL GAS OUTLET CONNECTION FOR INDOOR & OUTDOOR USE

AGA Certfied

•Capacity: 42,000 BTU/Hr.

- •Built-in thermal protection prevents gas flow if connection is exposed to temperatures in excess of 200°F.
- •1/2 PSI max inlet pressure.





Model 3/375

RMI Part No.	Description	iniet	Outlet
103028	Model 3/375	1/2" FNPT 90° & Plug	1/2" M SAE
103029	Model 3/375	1/2" FNPT 90° & Plug	3%" FNPT
103030	Model 3/375	1/2" FNPT 90°	48" x ³ ⁄ ₈ " ID Indoor Appliance Connector & Plug
103031	Model 3/375	½" FNPT 90°	144" x ³ / ₈ " ID Outdoor Appliance Connector w/ Integral Plug
103040	Model 3/375 Dual	1/2" FNPT 90°	Two ¾" FPT





Outdoor Appl. Conn. 12 ft. P/N 100013

P/N 206001

day connection accessing kits				
RMI Part No.	Description	Inlet Outlet		
104406	Quick Connector (outdoor)	%" FPT	CSN-375 F.	
104007	Quick Connector Socket/Valve	%" FPT	3/375 F.	
104014	Quick Connector Socket/Valve	½" FPT 90º	3/375 F.	
401207	Connector Plug	3/375M	3⁄8" FPT	
401213	Connector Plug	3/375M	1/2" SAE (M)	
302001	Dust Cap	-		
302003	Dust Plug			
206001	Cover Kit	For use w/all outlets		
206003	Enclosure Kit	For use in enclosed space		
100013	Outdoor Appl. Conn. 12'	3/375M	¾" SAE (F)	
100462-144	Outdoor Appl. 12' S/S Braid	3/375M	¾" SAE (F)	

GAS CONNECTION ACCESSORIES KITS

GAS-MATE II QUICK CONNECT AGA Approved



6330 (kit)

Changes standard POL valve to quick connect outlet. Easy to install kit includes adaptor regulator fitting and dust cap.

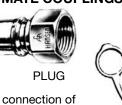
5LPA-FPC

72

RMI Part No.	Description
6330	Gas Mate Kit (Type 2 assembly w/socket & fill adapter)
6334	Gas Mate II Socket only
5LPA-7	Gas Mate II Plug only
6330-CAP	Gas Mate II dust cap
5LPA-FPC	Fill Adapter, POL to Gas Mate II (Type 2)
5LPA11C	Gas Mate Plug only (with limiter)

HANSEN GAS-MATE COUPLINGS





AGA approved couplings for connection of cooking appliances and hose assemblies for natural or LP gas up to 12" W.C.

DUST PLUG

Female	Mala Diur	Thread	Plastic	Metal
Socket	Male Plug	Size	Dust Plug	Dust Cap
HAN100-006	6 HAN100-506	3/8"	HANPSDC-2HK	HANPDC-2-HK
HAN100-008	3 HAN100-508	1/2"	HANPSDC-3HK	HANPDC-3-HK
HAN100-01) HAN100-510	3/4"	HANPSDC-4HK	HANPDC-4-HK
HAN100-012	2 HAN100-512	1"	HANPSDC-6HK	

HANSEN ONE-WAY SHUT-OFF QUICK HOSE COUPLING

LP gas only-high or low pressure.

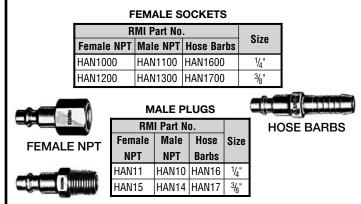




Fax: 800-243-8341

FEMALE NPT

MALE NPT HOSE BARBS



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73 Outlet Boxes



BARBEQUE GAS OUTLET BOXES



BBQ-4W

STAINLESS STEEL GAS OUTLET BOX

- Constructed of weather durable brushed stainless steel
- Direct connection to existing residential gas system
- Choice of recessed or surface mount single outlet or surface mount double outlet
- Recessed model has lockable door that swings out with "gas" identification
- Surface mount models has flip-open door that swings up for access
- Easy access kwik disconnect safety shut-off
- Compatible with Hansen fittings only
- 75,000 btu's Natural gas / 118,000 btu's LP gas per outlet

RMI Part No.	Description
BBQ-4SS	Recessed, single outlet, lockable, box w/swing open door
BBQ-4SM	Surface mount, single outlet box with flip open door
BBQ-DBL-SS	Surface mount, double outlet box with flip open door
BBQ-4HOSE	3/8" M X 3/8" F 10 foot hose
HAN100-506	Hansen 3/8" Male plug

PVC GAS OUTLET BOX

- Constructed of weather durable UV rated PVC in either white or grey
- Direct connection to existing residetial gas system
- PVC models has flip-open door that swings up for access
- Easy access kwik disconnect safety shut-off
- Comes with standoffs for siding installations
- Compatible with Hansen fittings only
- 75,000 btu's Natural gas / 118,000 btu's LP

RMI Part No.	Description
BBQ-4G	Surface mount, GREY, single outlet box with flip open door
BBQ4W	Surface mount, WHITE, single outlet box with flip open door
BBQ-4HOSE	3/8"M X 3/8"F 10 foot hose
HAN100-506	Hansen 3/8" Male plug



MEC GAS BOX

APPLICATION

Utilizes standard LP Gas outdoor appliance regulator and connector. Both models provide full capacity operation at 10 PSI or higher inlet pressures for all outdoor appliances without modification of the hassles of a 20 lb. cylinder. Simply thread the Type I QCC or POL connector onto the MEC Gas Box, turn on the shutoff valve, and enjoy continuous LP Gas flow.

FEATURES

- Universal 1 5/16" M. ACME/F. POL Outlet Connection
- Universal 1/2" FNPT Inlet Connection
- Primary Shutoff Valve for each Outlet Connection
- Secondary Safety shutoff Poppet at each Outlet for Zero Discharge at Disconnect
- For Use with 0-350 PSI Inlet Pressure
- Universal Mounting Hardware
- Hinged Cover with Latching Mechanism
- Weather Resistant Nylon Case

RMI Part No.	Description	Color
ME951BLK	Single 1 ⁵ /16" M. ACME/F. POL with ¹ /2" FNPT Inlet	Black
ME951GRY	Single 1 ⁵ /16" M. ACME/F. POL with ¹ /2" FNPT Inlet	Grey
ME951IVY	Single 1 ⁵ /16" M. ACME/F. POL with ¹ /2" FNPT Inlet	Ivory
ME952BLK	Dual 1 $\frac{5}{16}$ " M. ACME/F. POL with $\frac{1}{2}$ " FNPT Inlet	Black
ME952GRY	Dual 1 $\frac{5}{16}$ " M. ACME/F. POL with $\frac{1}{2}$ " FNPT Inlet	Grey
ME952IVY	Dual 1 $^{5}/_{16}$ " M. ACME/F. POL with $^{1}/_{2}$ " FNPT Inlet	lvory

MEC GAS BOX ACCESSORIES

RMI Part No.	Description	Length
MER428-60	Extension Hose Assembly (M. QCC/F. POL x F. QCC)	60"
MER428-120	Extension Hose Assembly (M. QCC/F. POL x F. QCC)	120"

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Bobtail and Smart Hose 74



BOBTAIL DELIVERY HOSE WITH FACTORY CRIMPED PRO-SUR BRASS ENDS

RMI Part No.	I.D.	0.D.	Length	Shipping Weight (Lbs.) per Length
TLPGH-1-100CT*	1"	1½"	100'	63
TLPGH-1-125CT	1"	1½"	125'	77
TLPGH-1-150CT	1"	1½"	150'	92
TLPGH-1-175CT	1"	1½"	175'	102
TLPGH-¾-125CT	3⁄4"	11⁄4"	125'	59
TLPGH-¾-150CT	3⁄4"	11⁄4"	150'	70
TLPGH-¾-175CT*	3⁄4"	1¼"	175'	80

* Available as Special Order.

POLAR FLEX LOW-TEMP (-50°F) DELIVERY HOSE WITH FACTORY PRESSURE TESTED CRIMPED BRASS ENDS

RMI Part No.	I.D.	0.D.	Length	Shipping Weight (Lbs.) per Length	
TLPGH-1-125CTPF	1"	11/2"	125'	77	
TLPGH-1-150CTPF	1"	1½"	150'	92	

- UL-21 approved
- 350 max. WP 1750 min. burst
- Smooth cover, Thermalon
- Oil resistant and flame retardant
- -40° to 180° F
- Four-spiral reinforcement
- Tested to DOT requirements

SMART-HOSE PASSIVE SHUTDOWN SYSTEM -**DOT & FACILITY HOSE**

The Smart-Hose meets the requirements of the DOT standards and additions to NFPA for a passive shutdown system. The patented system features an internal cable connected to normally unseated "valve plungers or wedges" located on each end of the cable. In the event of coupling-to-hose separation, stretching to the point of an unsafe condition or hose severance, the valve "wedges" are released and instantly seat, stopping the flow in both directions.

- Complies with HM-225
- · Provides advanced safety
- Prevents loss of product
- Prevents property damage
- · No added field maintenance beyond normal hose inspection

RN

G-LF CG-LF

Factory recoupling program available

LIFELINE BREAK-AWAY FEATURE

- Available for 2" dot or facility hose
- Murray Inc. · Engineered break-away point
 - · Factory rebuildable

0 Ray

Edition



PARKER BOBTAIL HOSE

UL-21 approved

 -40° to 180° F · Four-spiral reinforced • Tested to DOT requirements

• 350 max. WP 1750 min. burst • Smooth cover, Thermalon · Oil resistant and flame retardant

> -65° to 180° F Neoprene cover

BOBTAIL DELIVERY HOSE WITH FACTORY PRESSURE TESTED CRIMPED ENDS

RMI Part No.	I.D.	0.D.	Length	Shipping Weight (Lbs.) per Length
LPGH-1-125CT	1"	1½"	125'	80
LPGH-1-150CT	1"	1½"	150'	95
LPGH-3/4-125CT	3/4"	1¼"	125'	70
LPGH-3/4-150CT	3⁄4"	1¼"	150'	83

PARKER EXTREME BOBTAIL HOSE

PARKER EXTREME LOW TEMPERATURE HOSE

RMI Part No.	I.D.	0.D.	Length	Shipping Weight (Lbs.) per Length
EXLPGH-1-125CT	1"		125'	80
EXLPGH-1-150CT	1"		150'	95



1¹/₄" SMART-HOSE ASSEMBLIES

Smart-Hose shown during normal delivery operation

21 10 De-coupling

Smart-Hose shown in failure situations, instantly shutting down the flow

RMI

CG-LP

CG-LP

CG-LPC

CG-LP

CG-LPC

1" SMART-HOSE ASSEMBLIES

RMI Part No.	Description
CG-LPG-16-R10	1" x 10' Smart-Hose
CG-LPG-16-R15	1" x 15' Smart-Hose
CG-LPG-16-R20	1" x 20' Smart-Hose
CG-LPG-16-R25	1" x 25' Smart-Hose
CG-LPG-16-R30	1" x 30' Smart-Hose

2" SMART-HOSE	ASSEMBLIES	WITH	BREAK	AWAY

RMI Part No.	Description
CG-LPG-32-BR15-3	1" x 10' Smart-Hose
CG-LPG-32-BR20-3	1" x 15' Smart-Hose

FACILITY HOSE			
RMI Part No.	Description		
CG-LPG-32-R10-3F	2" x 10' Facility-Hose*		
CG-LPG-32-R15-3F	2" x 15' Facility-Hose*		
*Not for DOT applic	*Not for DOT applications.		

E	WITH	BREAK	AWAY	

FACILITY HOSE WITH BREAK AWAY			2" SMART-
MI Part No.	Description		RMI Part No.
LPG-32-BR12-3F	2" x 12' Facility Hose		CG-NH3-32-R20-3
LPG-32-BR15-3F	2" x 15' Facility Hose		CG-NH3-SS-32-R18.5-3

Part No.	Description
G-20-R10	1 ¹ / ₄ " x 10' Smart-Hose
G-20-R15	1 ¹ / ₄ " x 15' Smart-Hose
G-20-R20	1 ¹ / ₄ " x 20' Smart-Hose
G-20-R25	11/4" x 25' Smart-Hose
G-20-R30	1 ¹ / ₄ " x 30' Smart-Hose

2" SMART-HOSE ASSEMBLIES

RMI Part No.	Description
CG-LPG-32-R10-3	2" x 10' Lifeline 3
CG-LPG-32-R15-3	2" x 15' Lifeline 3
CG-LPG-32-R20-3	2" x 18.5' Lifeline 3
CG-LPG-32-R25-3	2" x 25' Lifeline 3
CG-LPG-32-R30-3	2" x 30' Lifeline 3

2" SMART-HOSE ASSEMBLIES FOR NH3

RMI Part No.	Description
CG-NH3-32-R20-3	2" X 18.5 Smart-Hose for NH3
CG-NH3-SS-32-R18.5-3	2" X 18.5' Smart-Hose S/S Braid for NH3

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HOSE & FITTINGS

75 Propane Hose, Fitttings and Wrap





- **HOSE INFORMATION**
- Hose manufacturers do not recommend the use of screw-in type reusable couplings.
- The cover of all LP-gas hose must be perforated to prevent gas build-up among the various layers of the hose.
- LP-gas hose can be used for natural gas service in outdoor applications only, and at a maximum pressure of 50 PSI.



DAYCO/PARKER BRAND HOSE

- UL-21 approved350 max. WP 1750
- min. burst
- Smooth cover, Thermalon
- Abrasive resistant
- -40° to 180° F

RMI Part No.	I.D.	0.D.	Weight (Lbs.) per 100 Foot
LPGH-1/4	1/4"	.610"	14
LPGH-3/8	3⁄8"	.750"	22
LPGH-1/2	1/2"	.937"	30
LPGH-3/4	3⁄4"	11⁄4"	53
LPGH-1	1"	1½"	66
NOTE: Bulk hose reel lengths can be up to 3 random lengths totaling approximately			

3 random lengths totaling approximately 500-700 feet.

ACCUFLEX THERMOPLASTIC HOSE

RMI Part No.	I.D.	0.D.	Weight (Lbs.) per 100 Foot
LPGH-5/16	⁵ / ₁₆ "	.580"	16

I.D. 0.D.

1 1/4" 17/8"

1¹/₂" 1²⁵/₃₂

2" 23/4"

DAYCO BULK TRANSFER HOSE



RMI Part No.

LPGH-1 1/4

LPGH-1 1/2

LPGH-2

- UL 21 Approved
- 350 maximum working pressure
- 1750 min. burst
- Wrapped impression
- neoprene cover
- 3-braid reinforcement

PROWRAP HOSE PROTECTION

- Easy to install
- •Tight grip prevents sliding
- -70° F 180° F
- UV resistant

HOSE & FIT

Description
66 ft. length ¹ / ₄ " - ³ / ₄ " Hose
66 ft. length 1" - 1 ¹ / ₄ " Hose
12.5 ft. length 1 ¹ / ₂ " x 2" Hose



Weight (Lbs.)

per 100 Foot

95

125

170

RMI CRIMPED HOSE ASSEMBLIES

RMI factory trained personel will make crimped hose assemblies to your requirements.

RMI Part No.	Hose I.D.	Thread Size	Min. Length
1/4 Hosekit	1⁄4"	1⁄4"	6"
3/8 Hosekit	3/8"	3/8"	6"
1/2 Hosekit	1/2"	1/2"	6 ³ /4"
3/4 Hosekit	³ /4"	3/4"	6 ³ /4"
1 Hosekit	1"	1"	7"
1 1/4 Hosekit	11/4"	11/4"	9"
1 1/2 Hosekit	1½"	1 1/2"	91⁄2"
2 Hosekit	2"	2"	11¼"



If you require a hose assembly to be tested to DOT requirements, they can be made up to the sizes listed below.

RMI Part No.	Hose I.D.	Thread Size	Min. Length	Max. Length
3/4 Hosekit-Tested	3⁄4"	3⁄4"	6 ¾"	50 ft.
1 Hosekit-Tested	1"	1"	7"	50 ft.
1¼ Hosekit-Tested	11/4"	11/4"	9"	40 ft.
1 ¹ / ₂ Hosekit-Tested	11/2"	11/2"	9 1⁄2"	30 ft.
2 Hosekit-Tested	2"	2"	11¼"	30 ft.

(note: custom wire braid flex connectors can be made)

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance



Hose Couplings, Motor Fuel Hose 76



SWIVEL ACME HOSE COUPLING

ME3162 SERIES

RMI Pa		Hose	F. ACME		
Marshall Excelsior	Fisher	Material	I.D.	Size	
ME3162-32S	M3162-32S	Steel	2"	31/4"	
ME3162-32B	M3162-32B	Brass	2"	31/4"	

RMI offers Fisher parts and, in some cases, Marshall Excelsior as a competively priced alternative.

PIPE TO HOSE SWIVEL ADAPTORS



107 MALE ADAPTOR

RMI	NPT Pipe	
Male Adaptor	Female Adaptor	x NPS Swivel
107-8-8	207-8-8	1/2"
107-12-12	207-12-12	3/4"
107-16-16	207-16-16	1"
107-20-20	207-20-20	11⁄4"
107-24-24	207-24-24	11/2"
107-32-32	207-32-32	2"

207 FEMALE ADAPTOR

LPG STAILESS STEEL BRAID HOSE WITH CLOTH

Seamless oil resistant synthetic rubber high temperature tube. One stainless steel wire braid and two polyester braids. The cloth cover is impregnated with fir-and mildew-resistant compounds



RMI Part No.	I.D.	0.D.	Working Pressure	Burst Pressure
SS25UL-4	³ / ₁₆ "	.52	350	1750
SS25UL-5	1/4"	.58	350	1750
SS25UL-6	⁵ / ₁₆ "	.67	350	1750
SS25UL-8	¹³ / ₃₂ "	.77	350	1750
SS25UL-10	1/2"	.92	350	1750
SS25UL-12	5⁄8"	1.08	350	1750

	ļ
BH-38	BHT-38

BRASS BULKHEAD FITTINGS			
RMI Part No.	Description		
BH-38	3/8" Flair Straight Through		
BHT-38	3/8" Flare x (2) 1/4" NPT Tee		
BHT-14	1/4" Flare x (2) 1/4" NPT Tee		

.*.*. .**..**

TWO-BOLT CLAMP TYPE HOSE COUPLING



ME3162 Series

RMI P	Hose	Thread	
Marshall Excelsior	Fisher	I.D.	Size
ME3162-08	M3162-08	1/2"	1/2"
ME3162-12	M3162-12	3⁄4"	3⁄4"
ME3162-16	M3162-16	1"	1"
ME3162-20	M3162-20	11/4"	11/4"
ME3162-24	M3162-24	1½"	1½"
ME3162-32	M3162-32	2"	2"
	M3162-48	3"	3"

FEMALE ANGLE FLARE FITTING FOR STAINLESS BRAID MOTOR HOSE

27920-6 27720-6

RMI Part No.	Hose I.D.	Female Flare Size	Angle
27720-6	⁵ / _{16"}	³ /8"	45°
27920-6	⁵ / _{16"}	³ /8"	90°

HOSE ENDS FOR STAINLESS BRAID FOR **MOTOR FUEL HOSE**

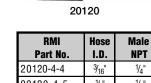




20820

1.000	STREET, STREET, ST.	- 100
	ALC: NO.	
	201	20

RMI Part No.	Hose I.D.	Female 45° Flare
20820-4	³ / ₁₆ "	1/4"
20820-5	1⁄4"	1/4"
20820-6	⁵ / ₁₆ "	1/4"
20820-8	¹³ / ₃₂ "	1/2"
20820-8-10	1/2"	1/2"
20820-10	1/2"	5⁄8"
20820-12-12	5⁄8"	3⁄4"



Part No.	I.D.	NPT
20120-4-4	³ / ₁₆ "	1/4"
20120-4-5	1⁄4"	1/4"
20120-4-6	⁵ / ₁₆ "	1⁄4"
20120-8-8	¹³ / ₃₂ "	1/2"
20120-8-10	1/2"	1/2"
20120-12-10	1/2"	3⁄4"
20120-12-12	5⁄8"	3⁄4"

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Acme Filler Couplings and Wear Gauges 77





ACME BRASS FILLER COUPLINGS

Fisher Part No.	Marshall Excelsior Part No.	Type of Acme Nut	Description
M100	ME100		1 1/4" F Acme x 3/8" MNPT
M101	ME101	Knurled	1 1/4" F Acme x 1/2" MNPT
M110	ME110	Brass	1 3/4" F Acme x 1/2" MNPT
M111	ME111	Nut	1 3/4" F Acme x 3/4" MNPT
M112	ME112		1 3/4" F Acme x 1" MNPT
-	ME110C		1 3/4" F Acme x 1/2" MNPT
-	ME111C		1 3/4" F Acme x 3/4" MNPT
-	ME112C	EZ Grip	1 3/4" F Acme x 1" MNPT
-	ME120	Brass	2 1/4" F Acme x 1 1/4" MNPT
M120	ME120S	Nut	2 1/4" F Acme x 1 1/4" MNPT – Steel Nipple
M130	ME130		3 1/4" F Acme x 2" MNPT – Steel Nipple
-	ME130A		3 1/4" F Acme x 2" MNPT w/Screen
M664-24	-		4 1/4" F Acme x 3" MNPT

ACME BRASS VAPOR COUPLINGS

Fisher Part No.	Marshall Excelsior Part No.	Description
M140	ME140	1 1/4" F Acme x 3/8" MNPT Vapor Return
M394	-	1 1/4" F Acme x 3/8" MNPT – 6 1/4" Long
M141	ME141	1 1/4" F Acme x 1/2" MNPT Vapor Return
M150	ME150	1 3/4" F Acme x 3/4" MNPT Vapor Return
M151	ME151	1 3/4" F Acme x 1" MNPT Vapor Return
M160	-	2 1/4" F Acme x 1 1/4" MNPT Vapor Return
-	ME160S	2 1/4" F Acme x 1 1/4" MNPT Vapor Return – Brass Nt/Steel Nip

ME121S



ME635-6

rn

ACME STEEL FILLER COUPLINGS

Fisher Part No.	Marshall Excelsior Part No.	Type of Acme Nut	Description
-	ME635-4	Heavy	1 3/4" F Acme x 1/2" MNPT
M653-6	ME635-6	Duty	1 3/4" F Acme x 3/4" MNPT
M635-8	ME635-8	Grip	1 3/4" F Acme x 1" MNPT
-	ME635-10	Steel	1 3/4" F Acme x 1 1/4" MNPT
M631-6	ME111S	Knurled	1 3/4" F Acme x 3/4" MNPT
M631-8	ME112S	Steel	1 3/4" F Acme x 1" MNPT
-	ME111SC		1 3/4" F Acme x 3/4" MNPT
-	ME112SC	EZ Grip	1 3/4" F Acme x 1" MNPT
-	ME113SC	Brass	1 3/4" F Acme x 3/4" FNPT
M121	ME121S	Nut	2 1/4" F Acme x 1 1/4" MNPT
M133	ME130S		3 1/4" F Acme x 2" MNPT
M634-24	-		4 1/4" F Acme x 3" MNPT



ACME STEEL VAPOR COUPLINGS

Fisher Part No.	Marshall Excelsior Part No.	Description
-	ME140S	1 1/4" F Acme x 3/8" MNPT Vapor Return Coupling
M640-4	ME141S	1 1/4" F Acme x 1/2" MNPT Vapor Return Coupling
-	ME150S	1 3/4" F Acme x 3/4" MNPT Vapor Return Coupling
-	ME646-4	1 3/4" F Acme x 1/2" MNPT Vapor Return Coupling – 7" O.A.L.
M646-6	ME646-6	1 3/4" F Acme x 3/4" MNPT Vapor Return Coupling – 7" O.A.L.
M646-8	ME646-8	1 3/4" F Acme x 1" MNPT Vapor Return Coupling – 7" O.A.L.
-	ME646-10	1 3/4" F Acme x 1 1/4" MNPT Vapor Return Coupling – 7" O.A.L.
M641-8	ME151S	1 3/4" F Acme x 1" MNPT Vapor Return Coupling – 3 1/4" O.A.L.
-	ME160S	2 1/4" F Acme x 1 1/4" MNPT Vapor Return Coupling – 3 3/8" O.A.L.

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HOSE & FITTINGS



M646-8



ACME BRASS MALE ACME X MNPT ADAPTORS

Fisher Part No.	Marshall Excelsior Part No.	Description
M498-4/2*	ME498-4/2*	1 1/4" M Acme x 1/2" MNPT x 1/4" FNPT Adaptor
M498-6/3*	ME498-6/3*	1 1/4" M Acme x 3/4" MNPT x 3/8" FNPT Adaptor
-	ME215	1 3/4" M Acme x 3/4" MNPT Adaptor
-	ME216	1 3/4" M Acme x 1" MNPT Adaptor
-	ME217	1 3/4" M Acme x 1 1/4" MNPT Adaptor
-	ME217A	1 3/4" M Acme x 1 1/4" MNPT Adaptor w/Screen
-	ME233	2 1/4" M Acme x 1 1/4" MNPT Adaptor
-	ME502-12/8*	2 1/4" M Acme x 1 1/2" MNPT x 1" FNPT Adaptor
-	ME502-16/10*	2 1/4" M Acme x 2" MNPT and 1 1/4" FNPT Adaptor
-	ME502-16/12*	2 1/4" M Acme x 2" MNPT and 1 1/2" FNPT Adaptor
-	ME503-16	3 1/4" M Acme x 2" MNPT Adaptor
-	ME503A-16	3 1/4" M Acme x 2" MNPT Adaptor w/Screen
-	ME503-20	3 1/4" M Acme x 2 1/2" MNPT Adaptor
-	ME262	3 1/4" M Acme x 3" MNPT Adaptor
-	ME262A	3 1/4" M Acme x 3" MNPT Adaptor w/Screen

*NPT Pipe threads are dual threaded, male & female.

ME503JB-16



ACME BRASS ADAPTORS WITH VENT VALVES

RMI Part No.	Description
ME252JB-16	3 1/4" M Acme x 2" FNPT Brass Vent Valve
ME252AJB-16	3 1/4" M Acme x 2" FNPT w/Screen Brass Vent
ME503JB-16	3 1/4" M Acme x 2" MNPT Brass Vent
ME503AJB-16	3 1/4" M Acme x 2" MNPT w/Screen Brass Vent

ACME SS ADAPTORS WITH VENT VALVES

RMI Part No.	Description
ME252JS-16	3 1/4" M Acme x 2" FNPT SS Vent Valve
ME252SJS-16	3 1/4" M Acme x 2" FNPT SS Vent
ME252AJS-16	3 1/4" M Acme x 2" FNPT w/Screen SS Vent
ME503SJS-16	3 1/4" M Acme x 2" MNPT SS Vent
ME503JS-16	3 1/4" M Acme x 2" MNPT SS Vent
ME503AJS-16	3 1/4" M Acme x 2" MNPT w/Screen SS Vent

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ACME BRASS MALE X FNPT ADAPTORS

Fisher Part No.	Marshall Excelsior Part No.	Description
M192	ME192	1 1/4" M Acme x 1/2" FNPT Adaptor
M193	ME193	1 1/4" M Acme x 3/4" FNPT Adaptor
-	ME210	1 3/4" M Acme x 1/4" FNPT Adaptor
M211	ME211	1 3/4" M Acme x 3/8" FNPT Adaptor
-	ME212	1 3/4" M Acme x 1/2" FNPT Adaptor
-	ME213	1 3/4" M Acme x 3/4" FNPT Adaptor
-	ME214	1 3/4" M Acme x 1" FNPT Adaptor
-	ME250	3 1/4" M Acme x 1 1/4" FNPT Adaptor
-	ME250A	3 1/4" M Acme x 1 1/4" FNPT Adaptor w/Screen
-	ME251	3 1/4" M Acme x 1 1/2" FNPT Adaptor
-	ME252-16	3 1/4" M Acme x 2" FNPT Adaptor
-	ME252A-16	3 1/4" M Acme x 2" FNPT Adaptor w/Screen
M498-4/2*	ME498-4/2*	1 1/4" M Acme x 1/4" FNPT Adaptor x 1/2" MNPT Adaptor
M498-6/3*	ME498-6/3*	1 1/4" M Acme x 3/8" FNPT Adaptor x 3/4" MNPT Adaptor
-	ME502-12/8*	2 1/4" M Acme x 1" FNPT Adaptor x 1 1/2" MNPT Adaptor
-	ME502-16/10*	2 1/4" M Acme x 1 1/4" FNPT Adaptor x 2" MNPT Adaptor
-	ME502-16/12*	2 1/4" M Acme x 1 1/2" FNPT Adaptor x 2" MNPT Adaptor
-	ME508-24	3 1/4" M Acme x 3" FNPT Adaptor
-	ME508A-24	3 1/4" M Acme x 3" FNPT Adaptor w/Screen



ME252-16

*NPT Pipe threads are dual threaded, male & female.

ACME STEEL MALE X MNPT ADAPTORS

Marshall Excelsior Part No.	Description
ME520S-8	1 1/4" M Acme x 1" MNPT
ME521S-4	1 3/4" M Acme x 1/2" MNPT
ME215S	1 3/4" M Acme x 3/4" MNPT
ME216S	1 3/4" M Acme x 1" MNPT
ME217S	1 3/4" M Acme x 1 1/4" MNPT
ME233S	2 1/4" M Acme x 1 1/4" MNPT
ME502S-16/10	2 1/4" M Acme x 2" MNPT x 1 1/4" FNPT
ME503S-16	3 1/4" M Acme x 2" MNPT
ME262S	3 1/4" M Acme x 3" MNPT
-	4 1/4" M Acme x 3" MNPT



ME503S-16

ACME STEEL MALE X FNPT ADAPTORS

Marshall Excelsior Part No.	Description
ME213S	1 3/4" M Acme x 3/4" FNPT
ME214S	1 3/4" M Acme x 1" FNPT
ME502S-16/10*	2 1/4" M Acme x 1 1/4" FNPT x 2" MNPT
ME252S-16	3 1/4" M Acme x 2" FNPT
ME508S-24	3 1/4" M Acme x 3" FNPT
-	4 1/4" M Acme x 3" FNPT



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ACME BRASS MALE ACME ADAPTORS

Marshall Excelsior Part No.	Description
ME270	1 1/4" M Acme x 1 1/4" M Acme
ME273	1 3/4" M Acme x 1 3/4" M Acme
ME275	2 1/4" M Acme x 2 1/4" M Acme
ME277	3 1/4" M Acme x 3 1/4" M Acme

ACME STEEL MALE ACME ADAPTORS

Marshall Excelsior Part No.	Description			
ME273S	1 3/4" M Acme x 1 3/4" M Acme			
ME275S	2 1/4" M Acme x 2 1/4" M Acme			
ME277S	3 1/4" M Acme x 3 1/4" M Acme			



ME270



ME277S



ME612



BRASS ADAPTOR

Fisher Part No.	Marshall Excelsior Part No.	Description
M611	ME611	2 1/4" F Acme x 1 3/4" M Acme
M612	ME612	3 1/4" F Acme x 1 3/4" M Acme
M442	ME442	3 1/4" F Acme x 1 1/4" FNPT
-	ME614	3 1/4" F Acme x 2 1/4" M Acme
M613	-	4 1/4" F Acme x 3 1/4" M Acme

STEEL ADAPTOR

Fisher Part No.	Marshall Excelsior Part No.	Description
-	ME611S	2 1/4" F Acme x 1 3/4" M Acme
M622	ME612S	3 1/4" F Acme x 1 3/4" M Acme
-	-	3 1/4" F Acme x 1 1/4" FNPT
-	-	3 1/4" F Acme x 2 1/4" M Acme
M623	-	4 1/4" F Acme x 3 1/4" M Acme

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81 **ACME** Caps



METAL ACME CAPS

Fisher Part No.	Marshall Excelsior Part No.	Type of Acme Nut	Description
-	ME220FP	Knurled Brass	1 1/4" F Acme Cap
M229	ME229	Knurled Brass	1 3/4" F Acme Cap
M229-1	ME229-1		1 3/4" F Acme Cap w/Ring & Chain
M219	ME229S	Knurled Steel	1 3/4" F Acme Cap
M219-1	ME229S-1		1 3/4" F Acme Cap w/Ring & Chain
-	ME229F	Wing Nut Brass	1 3/4" F Acme Cap
-	ME229F-1		1 3/4" F Acme Cap w/Ring & Chain
-	ME229F-1C	Knurled Brass	1 3/4" F Acme Cap w/Cable
-	ME229FS	Wing Nut Steel	1 3/4" F Acme Cap
-	ME229FS-1		1 3/4" F Acme Cap w/Ring & Chain
-	ME229FS-1C	Knurled Steel	1 3/4" F Acme Cap w/Cable
M431	ME431	Wing Nut Brass	2 1/4" F Acme Cap w/Knob Plug
-	ME431F-1		2 1/4" F Acme Cap w/Knob Plug, & Chain
M432	ME431FS	Wing Nut Steel	2 1/4" F Acme Cap w/Knob Plug
-	ME431FS-1		2 1/4" F Acme Cap w/Knob Plug, & Chain
M441	ME441F	Wing Nut Brass	3 1/4" F Acme Cap w/Knob Plug
-	ME441F-1		3 1/4" F Acme Cap w/Knob Plug, Ring & Chain
-	ME441F-1C	Wing Nut Brass	3 1/4" Acme Cap w/ Cable
M443	ME441FS	Wing Nut Steel	3 1/4" F Acme Cap w/Knob Plug
-	ME441FS-1		3 1/4" F Acme Cap w/Knob Plug, Ring & Chain
M605-34	-	Wing Nut Brass	4 1/4" F Acme Cap w/Knob Plug
M625-34	-	Wing NUt Steel	4 1/4" F Acme Cap w/Knob Plug



Fisher Part No.	Marshall Excelsior Part No.	Description
-	ME106	3 1/4" F Acme Dust Cap – Yellow Plastic
-	ME106-1	3 1/4" F Acme Cap w/Chain Assembly – Yellow Plastic
M108	ME108	1 1/4" F Acme Cap – Yellow Plastic
-	ME108-1	1 1/4" F Acme Cap w/Ring & Chain – Yellow Plastic
M109	ME109	1 3/4" F Acme Cap – Yellow Plastic
-	ME109-1	1 3/4" F Acme Cap w/Ring & Chain – Yellow Plastic
-	ME109-NH3	1 3/4" F Acme Cap – Anhydrous Service
-	ME109-NH3-1	1 3/4" F Acme Cap and Chain Assembly– Anhydrous Service

ACME CAPS WITH FLANGE

Cap with

Flange

ME229FS5

ME441FS8

Steel

Cap with Flange &

Chain

ME229FS5-1

ME441FS8-1

Part No.

Cap with Flange &

Cable

ME229F5-1C

ME441F8-1C

-



ME229

ME441F-1C



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Brass

Cap with

Flange &

Chain

ME229F5-1

ME441F8-1

ME441R8-1

Cap with

Flange

ME229F5

ME441F8

ME441R8

HOSE & FITTINGS

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Cap with Flange & Cable

ME229FS5-1C

ME441FS8-1C

Flange

Diameter

5"

8"

8"

F. Acme

1 3/4"

3 1/4"

3 1/4"



ACME 82

HEAVY DUTY SPANNER WRENCH

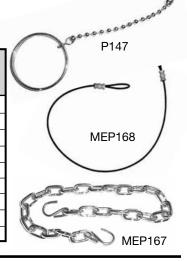
CHAINS FOR CAPS AND PLUGS

Aluminum Acme spanner wrench for 1 3/4", 2 1/4", 3 1/4" and 4 1/4" female Acme caps.



Part No.	Length
MEP120B	17 1/2"

Fisher Part No.	Marshall Excelsior Part No.	Description
P147	MEP147	1 1/4" F Acme Cap & Plug
P147*	MEP147*	1 3/4" Acme Plug
P148*	MEP148*	1 3/4" Acme Plug & Cap
P148	MEP148	2 1/4" Acme Plug
P167	MEP167	2 1/4" Acme Cap
P183	MEP183	3 1/4" Acme Plug
P167	MEP167	2 1/4" Acme Cap
P167	MEP167	4 1/4" Acme Plug
-	MEP168	Cable



ME179

	ACME DUST PLUGS								
Part No.									
	Aluminum Brass Plastic								
Plug Only	Chain Only	Plug w/Chain	Plug Only	Chain Only*	Plug w/Chain	Plug Only	Chain Only*	Plug w/Chain	M. Acme
-	-	-	ME178B	MEP148	ME178B-1	ME178	MEP147	ME178-1	1 1/4"
ME239	MEP148	ME239-1	ME179	MEP148	ME179B-1	ME179	MEP148	ME179-1	1 3/4"
-	-	-	ME180B	MEP167	ME180B-1	ME180	MEP148	ME180-1	2 1/4"
-	-	-	ME181B	MEP167	ME181B-1	ME181	ME183	ME181-1	3 1/4"

*MEP147 ring fits over 3/4" MNPT – MEP148 ring fits over 1 1/4" MNPT

ACME WEAR GAUGES "GO-NO-GO GAUGE"



906467KIT

RMI Part No.	Description
253566	3 1/4" Acme Ring Gauge for Male ACME Adaptor
253570	2 $^{1}\!/_{4}$ Acme Ring Gauge for Male ACME Adaptor
253568	1 $^{3}/_{4}$ " Acme Ring Gauge for Male ACME Adaptor
253578	3 $^{1}\!/_{4}^{\!\!}$ Acme Plug Gauge for Female ACME Coupling
253581	2 $^{1}\!/_{4}^{\!\!}$ Acme Plug Gauge for Female ACME Coupling
253569	1 $^{3}/_{4}$ " Acme Plug Gauge for Female ACME Coupling
906467KIT	Complete set with carrying case

*Order ring gauges to test male Acmes and plug gauge to test female Acmes.

The importance of secure ACME connections during the transfer of gas cannot be over emphasized.

Whereas transfer hoses are covered by statutory inspection, no such provision exists for the connectors, yet they are subjected to constant use and sometimes abuse. As a result, the point when they should be changed becomes very subjective.

Acme couplings should be regularly checked for:

- Wear
 Ovality
- Splits
 Corrosion
- Cracks

To measure wear, the gauges have a suitable wear allowance built in. If the gauge can be threaded more than one turn on (or into), the coupling has reached or exceeded the acceptable wear limits and should be changed.

Available as boxed sets or individual items.

Full instructions included.

RH sets include 1 3/4", 2 1/4", and 3 1/4" plugs and rings for checking right hand threads.

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Hose End Valves/Toggle Valves 83



ME791 TOGGLE VALVE



Marshall Excelsior quick acting hose end valve features standard or locking device on handle, positive shut-off and maximum flow.

RMI Part No.				
Without Lock With Lock		Inlet	Outlet	Vent Valve
ME791C	ME792C	1/2"	1/4"	No
ME791CJ	ME792CJ	1/2"	1/4"	Yes
ME791D	ME792D	1/2"	1/2"	No
ME791DJ	ME792DJ	1/2"	1/2"	Yes



SQUIBB TAYLOR HOSE END VALVE

- Minimum bleed at disconnect .6cc
- Quick jaw version 1/8 turn to connect/disconnect
- All valve have heavy duty handle

RMI Part No.	Description
AL343	Bobtail Hose End Valve
AL364	3/4" x 1 3/4" Quick Jaw
AL363	1" x 1 3/4" Quick Jaw
AL366	1 1/4" x 1 3/4" Quick Jaw

MARSHALL EXCELSIOR HOSE END VALVE



• Pi	ressure	tested	to 600	PSIG

- User friendly handle
- · Quick opening and closing action with locking mechanism

AL343

- Extremely low gas loss
- All steel and stainless construction

RMI Part No.	Inlet	Outlet			
ME800	1"	1 3/4"			
ME800WS	With Factory Ins	With Factory Installed Swivel			
ME800C	Composite Hand	lle			
ME800CWS	Composite with Swivel				
ME800G	Fluted Handle (Rego style)				
ME800GWS	Fluted with Swivel				
ME800EXT	Extended Version				
ME800EXTWS	Extended Version w/Swivel				
ME800-SARK	Stem Assembly	Repair Kit			
ME800-LSRK	Lower Seal Repair Kit				

MARSHALL EXCELSIOR TOGGLE VALVE

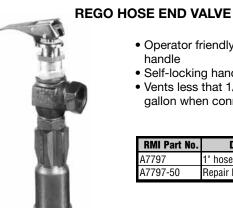
- All Stainless Components
- Self Locking Handle
- Stainless Bleed Valve Included



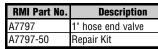
RMI Part No. Angle Globe		Size	Ports	Bleed Valve Installed
ME810-4	ME820-4	1/2"	1	Yes
ME810-6	ME820-6	3/4"	1	Yes
ME810-8	ME820-8	1	1	Yes

ECONOMY VERSION (GLOBE ONLY)

RMI Part No.	Size	Ports	Bleed Valve Installed
ME821-4	1/2"	2	No
ME821-6	3/4"	2	No
ME821B-4	1/2"	2	Yes
ME821B-6	3/4"	2	Yes



- Operator friendly contoured
- Self-locking handle
- Vents less that 1/500th of gallon when connected



Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

Fax: 800-243-8341

ME800G



84 **Filler Couplings and Adaptors**

FILLER HOSE ADAPTOR



ME571H



Hose end check adapters which may be left on the tank filler valve in case of valve failure. All models have an integral breakaway feature in case of truck roll away that will leave the check intact on the tank.

ME571H is a high flow adapter - up to 86GPM

RMI Part No.	Style	Swivel	Installed Vent	
ME570	Compact	No	No	
ME571	Tall	Yes	No	
ME572	Compact	Yes	No	
ME574	Tall	Yes	Yes	
ME571H* Tall		Yes	No	

EXTENDED FILL ADAPTORS FOR U/G TANKS

- 7" Extension
- · Eliminates unsafe stacking of multiple checks
- Integral bread-a-way feature



RMI Part No.	Description
ME572EXT	Standard Handle
ME572EXTHD	Heavy Duty Handle
ME574EXT	Standard Handle w/Bleeder
ME574EXTHD	Heavy Duty Handle w/Bleeder

FLO-MAX FULL FLOW FILL ADAPTOR

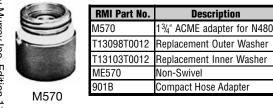
- Up to 30% higher flow rates through full port body
- · Includes key for shut-off valve



RMI Part No.	Description
ME578	$1^{3}/_{4}$ " F. Acme Swivel x $1^{3}/_{4}$ "" M. Acme
ME578-02	Spare Key

FILLER HOSE ADAPTOR

Intended for the outlet of bobtail truck filling hose. The M570 enables the filling hose to be removed if the filler valve fails to ര close. Designed for N480 valve, although usable with all brands.





POL FILLER COUPLINGS

Soft Nose POL Coupling for Handtight O-Ring Seal.



RMI	Tank	Hose	Length	Туре	
Part No.	Conn.	Conn.	Longin	ithe	
ME390	POL	1/4" MNPT	6"	Heavy Duty	
ME390S	POL	1/4" MNPT	6"	Heavy Duty	
M390	POL	1/4" MNPT	6"	Std. Long	
M388	POL	¹ ⁄4" MNPT	2½"	Short	

All brass shafts, except ME390S, which has a steel shaft.



Adapts POL filler coupling to 1 3/4" ACME or QCC.

RMI Part No.	Description
ME568	F POL X 1 ³ / ₄ " ACME adaptor
ME392	Adaptor FPOL x 1 5/16"QCC
ME394	F POL X 15⁄16" M QCC

TYPE 1 FILLER COUPLING

RMI Part No.	Description	
ME515	1/4" x Type 1 w/knurled handle	
ME516	1/4" x Tyle 1 w/forged handle	
ME516S	1/4" x Type 1 w/ss nipple	
ME796	Quick fill QCC Fill Adapter	



TYPE I (QCC) FILLER ADAPTORS

Adapts Type I (QCC 1 5/16") filler coupling to POL, Fork Lift or 1 3/4" ACME valves.



RMI Part No.	Description
ME393	Male QCC x MPOL w/ Hand Wheel
ME394	Male QCC x Female 11/4" Fork Lift
ME569	Male QCC x Female 1 ³ /4" ACME

LIFT TRUCK FILLER COUPLING

Extended motor fuel filling connector permits fast, easy connection through cylinder collar. Available with F. POL inlet.

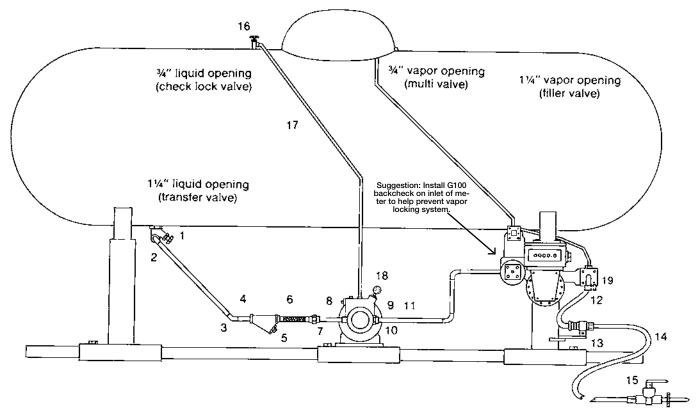
MSA-70	0			
	RMI Part No.	Inlet	Outlet	
	MSA-790	1/4" MNPT	11/4" ACME M.F.	
	MSA-700P	F. POL	11/4" ACME M.F.	

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Fill Station Design and Tank Sizing 85



GENERAL DESIGN PRINCIPLES FOR FILL STATIONS

- 1. An adequate size storage tank free of sediment and scale must be supported by a stable and sturdy mounting stand mounted as high above the pump as practical. The assembly must be properly grounded.
- 2. Heavy duty schedule 80 pipe and fittings are required with an excess flow valve at the tank, and a strainer and a flex connector in the line to protect the piping and pump.
- 3. The pump should be located under the tank with a short, direct line of adequate size to supply the pump. This inlet line should never rise up to the pump.
- 4. The pump and motor must be properly sized to provide the capacity desired. A by-pass valve set at approximately 100 psi must be used and the by-pass line must have sufficient capacity to handle flow returning to tank.
- 5. Proper selection of a meter requires many considerations including capacity of the system and the meter features desired. Vapor line from vapor eliminator on the meter to a vapor opening on the tank must be free of scale and have no dips in the pipe.
- 6. Sufficiently sized hose and hose valve are necessary for the capacity required and must be protected by an excess flow valve. Filler couplings and adaptors must be selected to allow filling of the various type containers.
- 7. Safety considerations at the fill station should include a break-a-way coupling, fire extinguisher and proper warning and instructional signs.

TANKS FOR FILL STATIONS

Tanks must be cleaned and free of scale and sediment and properly purged before using for a fill station. The maximum delivery rate from a tank is about 2.5% of the tank's capacity per minute.

TANKS FOR FILL STATIONS					
Tank Size W.C.	Nominal Length	Nominal Diameter	Liquid Openings	Top Vapor	Output Capacity
500	9'-11"	37½"	1 ¹ / ₄ "	3⁄4"	12.5 GPM
1000	16'-1½"	41"	1 ¹ /4"	3⁄4"	25 GPM

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Tel: 800-628-5044

FILL STATIONS

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

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KITS FOR PORTABLE CYLINDER AND SMALL MOTOR FUEL FILLING REQUIREMENTS DESIGNED TO BE USED WITH BLACKMER LGF1-1 HP 10 GPM PUMP AND SMITH DWIZM-3 AND EGIZM-3

	PK-11 COMPLETE VALVING KIT		
Key*	RMI Part No.	Description	
1	C407M-10-03	Tank Valve w/ Relief	
5	ME652S	Strainer	
6	FLEX 1-12	Flex Connector	
10	ME880-6/22	Excess Flow Valve	
14	FH-1218	1/2" Hose w/ ends 18 ft.	
15	ME791C	Hose End Valve	
15	ME390	POL Filler Coupling	
15	901H	Adaptor	
15	ME392	Adaptor	
16	ME449	Transfer Valve	
16	ME880-6/14	Excess Flow Valve	
16	MEH225	Relief Valve	
18	ME202	Snubber	
18	GB-400	Pressure Gauge	

PK-11B VALVE KIT W/ BREAK A WAY

Same as PK-11 Valve Kit, plus:		
Key* RMI Part No. Description		
13	ME860S-6	Break-A-Way Coupling

* See diagram on preceeding page.

PF-11 FITTING AND PIPE NIPPLE KIT** Includes the following:

FILL STATIONS

		ca the following.
Key*	RMI Part No.	Description
2	104-16	1" - 90° Elbow
2	125-02	1" X 2" Nipple
3	103-16	1" 45° Elbow
4	125-03	1" X 3" Nipple
7	109-16	1" Union
8	125-09	1" X 9" Nipple
8	150-2016	1-1/4" X 1" Concentric Swage
9	106-1612	1" X ¾" Hex Bushing
11	124-03	³ ⁄4" X 3" Nipple
11	107-1208	3/4" X 1/2" Reducer Coupling
17	(2) 48IK	⁵ /8" X ³ /4 " Flare Fittings
17	KCT12-10	Copper Tubing-Type K, 10 ft.
17	(2) NS4I	⁵ /8" Flare Nuts

PF-11B FITTING KIT USED W/BREAK-A-WAY

Key*	RMI Part No.	Description
12	LPGH-3/4-3C	34" X 3 ft. Hose w/ Ends
13	106-1208	³ / ₄ " X ¹ / ₂ " Hex Bushing
19	108-12	³ 4" Tee
19	106-1204	34" X 14" Hex Bushing
19	125-06	1" X 6" Nipple
19	TSS3169	Vent Valve

KITS FOR LARGER MOTOR FUEL FILLING REQUIREMENTS DESIGNED FOR USE WITH BLACKMER LGF1P-1.5 HP 15 GPM PUMP AND SMITH DWHZM-5 AND ECHZM-5

PK-153 COMPLETE VALVING KIT

Key*	RMI Part No.	Description
1	C407M-10-03	Tank Valve w/ Relief
5	ME652S	Strainer
6	FLEX 1-12	Flex Connector
10	ME880-6/22	Excess Flow Valve
14	LPGH-3/4-15C	3/4" Hose w/ ends 15 ft.
15	ME820-6	Hose End Valve
15	ME635-6	1-¾" Acme Coupling
15	ME210	Adaptor
15	ME390	Adaptor
15	G-820	Adaptor
16	ME449	Transfer Valve
16	ME880-6/14	Excess Flow Valve
16	MEH225	Relief Valve
18	ME202	Snubber
18	GB-400	Pressure Gauge
19	10AXXX	Liquid Level Gauge

PK-153B VALVE KIT W/ BREAK A WAY Same as PK-153 Valve Kit, plus: **RMI Part No.** Description ME860S-6 Break-A-Way Coupling

13 See diagram on preceeding page.

NOTE:

For the addition of either the Liquid Control or Neptune 3/4" meter the following items must be ordered separately-3/4" union, elbows for alignment between pump and meter, $\frac{1}{2}$ " tubing (K or L) for vapor eliminator line and coupling to connect line to multivalve on top of tank.

PF-15 FITTING & PIPE NIPPLE KIT**

Key*	RMI Part No.	Description
2	104-16	1" - 90° Elbow
2	125-02	1" X 2" Nipple
4	(2) 125-03	1" X 3" Nipple
7	109-16	1" Union
8	125-09	1" X 9" Nipple
8	150-2016	1-1/4" X 1" Concentric Swage
9	106-1612	1" X ¾" Hex Bushing
11	150-1612	1" X 3/4" Concentric Swage
17	(2) 48IK	⁵ /8" X ³ /4 " Flare Fittings
17	KCT12-10	Copper Tubing-Type K, 10 ft.
17	(2) NS4I	⁵ /8" Flare Nuts

PF-15B FITTING KIT USED W/ BREAK AWAY Same as PF-15 Fitting Kit, plus:

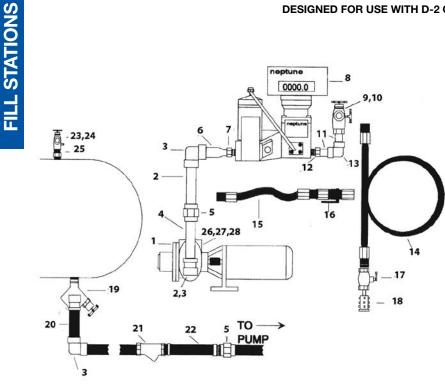
Key*	RMI Part No.	Description
12	LPGH-3/4-3C	³ ⁄4" X 3 ft. Hose w/ Ends
19	124-03	³ ⁄4" X 3" Nipple
19	106-1204	³ ⁄4" X ¹ ⁄4" Hex Bushing
19	108-12	³ ⁄4" Tee
19	125-06	1" X 6" Nipple
19	TSS3169	Vent Valve

Kev³

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BLACKMER FILL STATION DESIGNED FOR USE WITH D-2 CABINET



PK-D2 FITTING PACKAGE*

RMI Part No.	Description	
C407M-10-03	Tank Valve w/ Relief	
ME652S	Strainer	
105-12	34" Hex Plug	
FLEX 1-12	Flex Connector	
ME202	Snubber	
GB-400	Pressure Gauge	
ME870-6	34" Back Check	
ME880-6/22	Excess Flow Valve	
MEN401-06	3/4" Angle Valve	
MEH225	1/4" External Relief Valve	
MEJ602H	1/4" Elbow w/ Relief & Bleed	
ME449	Transfer Valve	
ME880-6/14	Excess Flow Valve	
ME791CJ	Toggle w/bleeder	
FH-1218	1/2" Hose w/1/2" x 3/4" ends 18 ft.	
LPGH-3/4-3C	3/4" X 3 ft. Hose w/ Ends	
ME860S-6	3/4" Break-A-Way Coupling	
BL-4-4LP	1/4"F X 1/4"M Street Elbow	
A680	MPOL X 3/8"" FI Adaptor	
G-820	POL Filler Coupling	
ME393	1 ⁵ /16" ACME Adapter	
ME569	1 ¾" ACME Fill Adapter	

PF-D2 FITTING PACKAGE

Description	Quantity
1" 90º Elbow	3
1" Union	2
1" x ¾" Concentric Swage	1
¾" Close Nipple	2
¾" 90° Elbow	1
5%" x ½" Flare Adapter	2
⁵ %" Flare Nut	2
1/2" Copper Tubing-Type K	20 ft.
¾" Flare Nut	2
¹ / ₄ " Copper Tubing-Type L	20 ft.
1" X 5" Nipple	2
1-1/4" X 1" Concentric Swage	1
1" X 6" Nipple	1
	1" 90° Elbow 1" Union 1" x ¾" Concentric Swage ¾" Close Nipple ¾" 90° Elbow 5%" x ½" Flare Adapter 5%" Flare Nut ½" Copper Tubing-Type K %" Flare Nut ¼" Copper Tubing-Type L 1" X 5" Nipple 1-¼" X 1" Concentric Swage

FILL STATION This package is available assembled with a steel or aluminum cabinet. Contact RMI Customer Service for details.

D-2 CABINET

BLACKMER FILL STATION Designed for Use w/ D-2 Cabinet

Key*	RMI Part No.	Description	PK-D2	PF-D2
1	LGF1P-1.5HP	Pump and Motor	~	~
2	125-05	1" X 5" Nipple	~	Х
3	104-16	1" 90° Elbow	~	Х
4	125-06	1" X 6" Nipple	~	Х
5	109-16	1" Union	~	Х
6	150-1612	1" X 3/4" Concentric Swage	~	Х
7	ME870-6	³ ⁄4" Back Check	Х	٢
8	400051-001	Neptune Meter	~	~
9	MEN401-06	3/4" Angle Valve	Х	٢
10	MEJ602H	1/4" Elbow w/ Relief & Bleed	Х	٢
11	124-00	3/4" Close Nipple	~	Х
12	ME880-6/22	Excess Flow Valve	Х	٢
13	104-12	3/4" 90° Elbow	~	Х
14	FH-1218	1/2" Hose w/ 1/2" X 3/4" ends 18 ft.	Х	~
15	LPGH-3/4-3C	3/4" X 3 ft. Hose w/ Ends	Х	2
16	ME860S-6	3/4" Break-A-Way Coupling	Х	٢
17	ME791CJ	Toggle w/bleeder	Х	۰
18	G-820	POL Filler Coupling	Х	٢
19	C407M-10-03	Tank Valve w/ Relief	Х	٢
20	150-2016	1-1/4" X 1" Concentric Swage	~	Х
21	ME652S	Strainer	Х	٢
22	FLEX 1-12	Flex Connector	Х	٢
23	ME449	Transfer Valve	Х	۰
24	MEH225	1/4" External Relief Valve	Х	٢
25	ME880-6/14	Excess Flow Valve	Х	٢
26	BL-4-4LP	1/4"F X 1/4"M Street Elbow	Х	~
27	ME202	Snubber	Х	۲
28	GB400	Pressure Gauge	Х	~
n/s	1124	Scale	~	~

All items listed above come in assembled cabinet, scale needs to be ordered separately

Tel: 800-628-5044

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88 **Fill Station Valve Kits**

FILL STATIONS



1¹/₄" BLACKMER PACKAGE

	Pump Bypass b	
1¼" Pump Suct		

PKV-125 VALVE KIT

Key*	RMI Part No.	Description
3	C407M-10-3	Angle Valve plus Hydrostatic
5	ME653S	Strainer plus Plug
6	FLEX-1-1/4-14	Flex Connector
9	GB-400, NMF20BK, GS20S	Pressure Gauge plus Valve plus Snubber
10	A8013D	Excess Flow Valve
17	LPGH-3/4-15C	Hose with Ends
18	ME820-6	Snap Valve
19	ME210	Snap Valve
19	ME390	Snap Valve
19	G-820	Snap Valve
19	ME635-6	Fill Connector
20	ME880-6/14	Excess Flow Valve
21	ME449, MEH225	Service Valve plus Hydrostatic
*See dia	agram above.	

PKF-125 FITTINGS KIT

Key*	RMI Part No.	Description
2	126-03	1¼" x 3" Nipple
4	104-20 (2)	1¼" 90º Elbow
7	109-20 (2)	1¼" Union
8	126-06 (2)	1¼" x 6" Union
11	108-12	³ ⁄4" Tee
12	124-08	¾" Nipple
13	124-03	¾" Nipple
22	KCT12, 48IK (2), NS4I (2)	Copper Tubing for By-Pass
*See d	iagram above.	

PKB-125 BREAK-A-WAY RMI Part No. Description Key* MEN401-06 3/4" Angle Valve plus 14 MEJ602H Bleeder plus Hydrostatic 15 LPGH-3/4-3C Hose w/ Ends 16 ME860S-6 Break-A-Way Coupling *See diagram above.



1¹/₄" CORKEN PACKAGE

· (100 / / / / / / / / / / / / / / / / / /	<u></u>	
(i) Pump Bypass (i) (i) (i) (i) (i) (i) (i) (i) (i) (i)		

PKV-C1012 VALVE KIT

Key*	RMI Part No.	Description	
3	C407M-10-3	Angle Valve plus Hydrostatic	
5	ME653S	Strainer plus Plug	
6	FLEX-1-1/4-14	Flex Connector	
9	GB-400, NMF20BK, GS20S	Pressure Gauge plus Valve plus Snubber	
12	ME880-6/22	Excess Flow Valve	
16	LPGH-1/2-15C	Hose with Ends	
17	ME791CJ	Snap Valve	
18	ME390	Fill Connector	
19	ME880-6/14	Excess Flow Valve	
20	ME449, MEH225	Service Valve plus Hydrostatic	

*See diagram above.

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N ey"	RIVIT Part NU.	Description
2	126-03	1¼" x 3" Nipple
4	104-20 (2)	1¼" 90º Elbow
7	109-20	1¼" Union
8	126-06	1¼" x 6" Nipple
10	150-1612	1" x ¾" Swage Nipple
11	108-12	³ / ₄ " Tee
21	KCT12, 48IK (2),	Copper Tubing
21	NS4I (2)	for By-Pass
*See dia	agram above	

PKF-C1012 FITTING KIT**

	PKB-C1012 BREAK-A-WAY			
Key*	Key* RMI Part No. Description			
1.5		¾" Angle Valve plus Bleeder plus Hydrostatic		
14	LPGH-3/4-3C	Hose w/ Ends		
15	ME860S-6 106-1208	Break-A-Way Coupling, ¾" x ½" Bushing		

**For C12 order 151-2420 Swage

Fax: 800-243-8341

*See diagram above.

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89 Cabinets - Fill Station and Exchange



STORAGE CABINETS



20LB EXCHANGE CABINETS

RMI Part No.	Capacity	Dimension	# of Shelves
20LBEX04	4	30 x 30 x 33	1
20LBEX12	12	44 x 30 x 53	2
20LBEX18	18	44 x 30 x 68	3

ALL Cabinets Feature:

- 2" Structural Angle Iron Frame
- Electrostatic Powder Coating
- Galvanized Top and Back
- Doors Can Be Mounted Right or Left Handed
- Decals and Signs Included
- * Other Sizes and Configurations are Available

FILL STATION CABINETS

33LB LIFT TRUCK STORAGE CABINETS

RMI Part No.	Capacity	Dimension	# of Shelves
33MF04	4	30 x 30 x 38	2
33MF06	6	30 x 30 x 53	3
33MF09	9	44 x 30 x 53	3
33MF12	12	44 x 30 x 68	4
33MF16	16	58 x 33 x 65	4

Not Assembled

D-2

- 14 & 16 Gauge Steel Construction
- 3 Windproof Doors

STATIONS

- Secured with One Lock (Not Included)
- D-2 Cabinet will enclose meter, pump and scale for a secure storage facility.

D-2A

- Same as D-2, but made of .100 diamond plate Aluminum.
- *Available as an assemble package

CAB-2

- 14 Gauge Steel Construction
- Open Area for Pump
- Locking Latch & Tamperproof Hinges
- Mounts on "MT-PUMP" Bracket



CAB-1

- 14 & 16 Gauge Steel Construction
- Rolled Steel Shelf for Meter
- Locking Latch & Tamperproof Hinges
- Mounts on "MT-PUMP-2" Bracket





CAB-3

- 14 Gauge Steel Construction
- Door Lock
- Separate Pedestal (included)
- "MT-TANK" Stands



FILL STATION CABINETS

RMI Part No.	Style	Encloses Items	H	W	D	OAH	Mounting Locations
D-1A	Enclosed Cabinet	Meter/Pump/Hose	48"	22"	45"	48"	Concrete Pad or 2" runners
D-2	Enclosed Cabinet	Meter/Pump/Scale/Hose	52"	48"	41"	52"	Concrete Pad or 2" runners
D-2A	Aluminum	Meter/Pump/Scale/Hose	53"	47"	45"	53"	Concrete Pad or 2" runners
D-4A	Enclosed Walk-In	Meter/Pump/Scale/Hose	78"	48"	48"	78"	Concrete Pad or 2" runners
CAB-1	Enclosed Cabinet	Meter/Pump//Hose	46"	36"	18"	46"	Concrete Pad or MT-PUMP-2
CAB-2	Cabinet & Stand	Meter/Hose	27"	24"	24"	55"	Concrete Pad or MT-PUMP-2
CAB-3	Cabinet w/Pedestal	Meter	19½"	24"	9"	45" - 50"*	Side of MT-TANK-2

Overall height varies by selection of mounting location.

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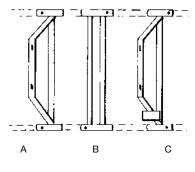
or call for personal assistance

Fax: 800-243-8341

Ray Murray Inc. Edition 11



Fill Station Equipment and Accessories 90



TANK MOUNTING STANDS AND SKIDS

Our heavy duty stand includes 18" bracket feet for additional stability. The entire mount slides onto 2" pipe (not included).

_	HORIZONTAL TANK STANDS								
RMI Part No.	Description	Item							
MT-TANK-2	Heavy Duty Stand 18" tall x 40" wide	A & C							
MT-PUMP-2	Heavy Duty Pump Bracket	В							
MT-TANK-3*	Reinforced Stand for 1450, 1850, 1990 Gal. Tank	A & C							
*Special order	only.								



CAVANGA AUTO FILLING GUN



Automatically Fills: **OPD Valves** Forklift Cylinder **POL Cylinder Valves**

- · Filling is initiated simultaneously with connection to the valve.
- · Insignificant loss of product.
- Air-release and gas flow. Stoppage in one guick motion
- Fits easily into any tank collar.
- Balanced jig for easy suspension.

RMI Part No.	Inlet	Pneumatic Connection	ltem			
129A003	3/8" FNPT	1/4" FNPT-Air	Female POL, Standard Valve			
129A006	3/8" FNPT	1/4" FNPT-Air	1 1/4" ACME Forklift Adaptor			
129A009	3/8" FNPT	1/4" FNPT-Air	OPD Type I ACME			
BA-8-4HP	1/4" Male FNPT x 1/2" female NPT - Hose to Valve Adaptor					

FAIRBANKS PORTABLE SCALES

- Model 1124
- Rugged, Durable Design
- Cast Iron Base & Platform
- Platform is 17³/₄" x 23¹/₂"
- Bronze Beam Assembly w/ Etched Numbers for Easy to Read Measurements
- 1000# Capacity: S Model for 20# Cylinder L Model for 100# Cylinder

E I
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1124 1

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RMI Part No.	Style	Height
1124	Standard Pillar	43"
1124-S	Short Pillar - 20#	28"
1124-L	Tall Pillar - 100#	66"
1124-100	100# Counterweigh	t (1 lb)
1124-200	200# Counterweigh	t (2 lb)
1124-400	400# Counterweigh	t (4 lb)

AUTOMATIC CYLINDER FILLING VALVE

Used on cylinder filling manifold. Shuts off gas supply when specified cylinder weight is reached. Operates on propane vapor or air. No electricity required.1/2" FNPT inlet **RMI Part No.** N201

and outlet. For beam scales only. Description

P	N201	Filling Valve
	N201RK	Repair Kit for N201
	N201HA	Hose Assembly Only



The "User Friendly" **Dispensing Nozzle**

- Stationary Tanks
- Lightweight &
- Well Balanced
- Valve While Lever in Open
- in Nozzle
- Long Swivel Nut for Fork Lift Truck Filling

RMI Part No.	Description			
LG.20S	3/4" FNPT x 13/4" ACME			

Fax: 800-243-8341

Tel: 800-628-5044

RAY MURRAY, INC.

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GASGUARD LP NOZZLE

• Fill Mobile &

- Will Not Disconnect From Filler
- Position Fine Filter Incorporated

91 Blackmer Cylinder Filling Pumps



LGF1 FILL STATION PUMP

Excellent for small fill stations, vaporizer installations and low capacity transfer.

- Two pump capacities available:
 10 GPM or 15 GPM
- Complete kit includes explosion proof motor & switch
- Integral bypass valve and safety relief valve (circulates back to pump inlet).

LGF1-1HP

8 Gallon capacity is best suited for cylinder and small motor fuel fill systems.

LGF1

LGF1P-1.5HP

13 Gallon capacity is excellent for motor fuel fill systems.

RMI Part No	Capacity (GPM)		Inlet/	Motor &	Dunasa	
Pump, Motor & Switch Assembly	Pump Only	50lb Dif.	100lb Dif	Outlet		Bypass Valve
LGF1-1HP	LGF1	8	4.4	1"	1HP, 115/230V, 1PH	Built-In
LGF1P-1.5HP	LGF1P	13	8.0	1"	1.5HP, 115/230V, 1PH	Built-In
LGF1-1HPV**	LGF1	8	4.4	1"	1HP, 115/230V, 1PH	Built-In
LGF1P-1.5HPV**	LGF1P	13	8.0	1"	1.5HP, 115/230V, 1PH	Built-In

* Other motor service available.

** "V" designated motor equipped with condensation drain

LGRLF FILL STATION PUMP

Economical large capacity flange mounted pump assembly for motor fuel and large cylinder fill operation. Provides greater flow capacity while maintaining high differential pressure. Features removable cavitation supression liner for longer pump life.

RMI Part No.		Dumana	Inlet		Comico	Capacity, (GPM)		
Pump Only	Motor*	Bypass	Outlet HP	Service	Approx 50lb	100lb	Max.Diff. Pr.	
	EMC-2			2	115/230, 1PH	16	14	80#
I GRI F-1-1/4	EMCT-2	BV-3/4	1¼"	2	230/460, 3PH	16	14	80#
	EMC-1.5**			1½	115/230, 1PH	15	12.5	50#
	EMCT-1.5			11/2	230/460, 3PH	15	12.5	50#

See Motors & Starters page for switches & overload starters.

** Can be ordered with condensation drain.

LGL & LGLF MEDIUM CAPACITY PUMP AND BASE ASSEMBLY

Excellent for small transfer jobs and multiple scale fill operations.

- Integral safety relief valve (circulates back to pump, inlet).
- Assembly includes pump, mounting base, coupling and guard (everything but motor & switch.
- Motors available, sized determined by differential pressure and GPM requirements.
- Cavitation Supression Liner.

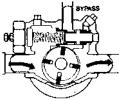
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• Must specify motor frame size when ordering.

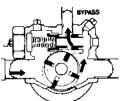
RMI Pa	Inlet	Motor	Approx. Ca	Approx.Max.			
Base & Pump Assembly	lase & Pump Pumn Only Out		Size*	50lb	100lb	Diff. (lbs)	
	LGL-1-1/4		1¼"	2 HP	21	18	60
		174	3 HP	21	18	120	
LGL-1-1/2-DM	LGL-1-1/2	1½"	3 HP	33	29	80	

*See Motors & Starters page for proper motor, switch and bypass valve part numbers.

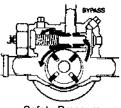
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Normal Operation



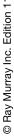
Back-to-Tank Bypassing



Safety Pressure



LGRLF-1-1/4



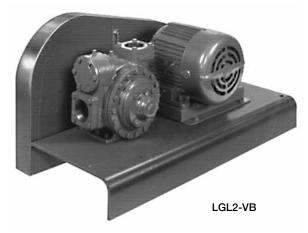
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LGL-1-1/4-DM

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Blackmer Bulk Plant 92 **Pumps and Compressors**





LGL LARGE FILL SYSTEM PUMPS

High capacity pumps for large multiple scale systems and medium liquid transfer systems for loading transports and delivery trucks.

- Integral safety relief valve.
- Replaceable cylinder liner & end disc for inexpensive rebuilding.
- Assemblies include pump mounting base, V-belts, guards and sheaves. (Everything but motor.)
- Motors available size determined by pressure differential and • GPM requirements. Sheave sizes determined by RPM requirements.
- Cavitation suppression liner.

RMI Part No.		rt No.		1	Capacity @ 640 RPM	
Pump, Base & Drive Assembly	Pump Only	•		Drive	50lb Dif.	100lb Dif.
LGL2-VB	LGLD2E	2" NPT	2" NPT	V-Belt	67 GPM	157 GPM
LGL3-VB	LGLD3E	3" NPT	3" NPT	V-Belt	133 GPM	112 GPM
LGLD4E-VB	LGL4	4" WELD	3" WELD	V-Belt	270 GPM	220 GPM

*Weld connection optional.

CONTINUOUS DUTY HIGH PRESSURE PUMP

Excellent for high differential applications:

- Single and dual hose dispensers
- Cylinder carousels
- Underground tanks
- Aerosol filling

- FEATURES:
- Sliding vane construction
- Cavitation suppression liner
- · Flanged inlet and outlet

RMI Pump Part No.	Mounting Configuration	Max Differential	GPM	Motor HP
LGL154A-F	C-Face Mounted Pump	140	11	3
LGL156A-F	C-Face Mounted Pump	160	21	5
LGL158B-F	C-Face Mounted Pump	200	32	7.50



RMI Pa	MI Part No.		Motor	Typical Pipe Size		
Complete Compressor Transfer Unit *	Compressor & Flywheel Only	Range Horse (GPM) Power		Vapor	Liquid	
LB161-LU	LB161-CO	45-95	3-71/2"	11⁄4"	2"	
LB361-LU	LB361-CO	115-205	7½"-15	2"	3"	
LB601-LU	LB601-CO	240-365	15-25	21/2"	4"	
LB942-LU	LB942-CO	360-650	20-50	3"	6"	

*Transfer unit includes compressor, gauges, base, piping, strainer, 4-way valve, liquid trap, belt guards and sliding base (motor is not included).

COMPRESSOR REP	AIR	KITS
----------------	-----	------

Compressor	RMI Part No.					
Model No.	Kit - Top End	Kit - Intermediate				
LB161-LU	792229	792230				
LB361-LU	793229	793230				
LB601-LU	794237	794238				

TOP END:	includes	piston	rinas	and	expanders,	packing.	
valves, ga					- p ,	1	

INTERMEDIATE: includes Top End plus wrist pin and bushing, connecting rod bearings and crossheads.

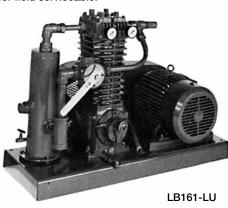
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High performance for liquid transfer and vapor recovery of propane, butane and other liquified gases.

- · Design improvements promote longer service life and efficient performance.
- Vapor recovery from unloading operation provides significant savings.
- Durable construction and simplified parts installation make compressor field serviceable.



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93 Blackmer Pumps for Mobile Applications



LGL SERIES TRUCK PUMPS

Excellent pump for bobtails and transports, the standard workhorse pump.

- LGLD2E has double shaft extension permitting left or right hand PTO.
- LGLD3E has been engineered for a high flow and increased durability.
- Integral safety relief valves.
 Replaceable cylinder liner and end disc for fast and inexpensive rebuilding.
- Cavitation suppression liner.



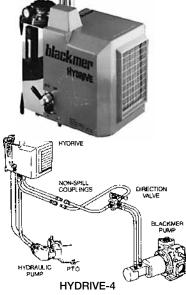
RMI				Capacity - 640 RPM Capac			
Part No.	Outlet	50 lb Dif.	100 lb Dif.	50 lb Dif.	100 lb Dif.		
LGLD2E	2" NPT	67 gpm	57 gpm				
LGLD3E	3" NPT	133 gpm	112 gpm	160 gpm	150 gpm		

BLACKMER HYDRIVE HYDRAULIC DRIVE PACKAGE

Blackmer's new Hydrive is a fully integrated hydraulic drive system that is designed for use on bobtails and transports.

The Hydrive lightweight system provides for lower idle speed, longer pump life and added safety with no exposed shafts. Factory engineers match the hydraulic pump and motor to the vehicle transmission.

*Note: Hydrive package must be sized and quoted. Call for sizing asistance and quotations.



RMI Part No.	Description
*	Complete Package for TLGLF3
*	Complete Package for TLGLF4B
Y512823	Hydrive Cooler Only - 2010
Y512929	Hydrive Cooler Only - 2020
Y219185	Return Filter - 2010
Y219612	Return Filter - 2020
889601	Hydraulic Motor
895136	Hydraulic Motor Mounting Kit, TLGLF3
892037	Hydraulic Motor Mounting Kit, TLGLF4B

TLGLF3 TRUCK PUMPS



Excellent pump for the modern large capacity bobtail truck.

- 3" Direct flange mounting.
- Double shaft extension is suitable for right or left hand PTO.
- Pump has auxiliary 2" intake for emergency pumping.
- Cavitation suppression liner.

BMI		Auxi	liary	Capacity, 650 rpm Capacity, 870		, 870 rpm	
Part No.	Intake	Intake	Outlet	50 lb Dif.	100 lb Dif.	50 lb Dif.	100 lb Dif.
TLGLF3	3" Flange	2" NPT	2" NPT	93 gpm	83 gpm	129 gpm	129 gpm
300/0300		3" Flange Mounting Gasket for TGLF3					

TLGLF4B TRANSPORT TRUCK PUMP B



The most common transport pump on the road, ideal intake condition assures maximum pumping rate.

- 4" Direct flange mounting.
- Auxiliary 3" intake for emergency unloading of another tank or truck.
- Rated up to 380 gpm.
- Integral safety relief valve.
- Double shaft extension is suitable for right or left hand.
- Cavitation suppression liner.

RMI	Intelie	Auxiliary	Outlet	Capacity, 650 rpm		Capacity	, 870 rpm
Part No.	Intake	Intake	(Dual)	50 lb Dif.	100 lb Dif.	50 lb Dif.	100 lb Dif.
TLGLF4B	4" Flange	3" NPT	2" NPT	250 gpm	245 gpm	380 gpm	350 gpm
300/0400	4" Flange mounting gasket for TLGLF4B						

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BLACKMER BYPASS VALVES





Simple trouble free construction. This Blackmer compact valve has only three moving parts. Designed to open precisely at its pressure setting and prevent leakage below the setting.

RMI Part No.	Body Size	Pump Size	PSI Setting*	PSI Range*	Cap. (GPM)
BV-3/4	34" NPT	11/4" to 11/2"	95	70-100	50
BV-1	1" NPT	11⁄4" to 11⁄2"	95	70-100	50
BV-1 1/4	1¼" NPT	1½" to 2"	115	90-125	125
BV-1 1/2	1½" NPT	2" to 3"	115	90-125	125
BV-2	2" NPT	3" to 4"	95	90-125	225

Other pressure ranges and settings are available.

FISHER

FISHER ANGLE BYPASS VALVE FOR LARGE PUMPS

Features help to give rapid, stable liquid transfer and reduce dangerous pressure pulsations, includes 1/4" tapping for gauge or relief valve.



RMI	Pump	Pressure	Pressure
Part No.	Size	Setting, (PSI)	Range, (PSI)
N100A-08-2	1"	115	50-150
N100A-10-2	11/4"	115	50-150
N100A-12-2	1½"	115	50-150
N100-16-1	2"	50	25-75
N100-16-2	2"	115	50-150

N100 Series



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Ray Murray Inc.

Edition

	STRAIGHT BYPASS VALVE							
	Fisher straight bypass valve for small pumps (5-40 GPM).							
RMI Part Pump Pressure Pressure								

FISHER

N110 Series

RMI Part No.	Pump Size	Pressure Setting (PSI)	Pressure Range (PSI)
N110-06-1	3/4"	50	25-75
N110-06-2	3/4"	115	75-150
N110-08-1	1"	50	25-75
N110-08-2	1"	115	75-150

MARSHALL EXCELSIOR 3" HIGH FLOW BYPASS VALVE

Specifically designed for bulk plants where maximum bypass flow is necessary to protect pumps from rapid pressure changes. Perfectly suited for 4" or larger pumps.

- or larger i	sumps.		
RMI Part No.	Description	Cap. @ 125 psi	
ME840-24-200	3" High Flow Bypass Valve 0-200 PSI	451-1,038	

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MARSHALL EXCELSIOR BYPASS VALVES

Marshall Excelsior bypass valves for dispenser and autogas applications. Utilize a "check ball" mechanism that helps eliminate vapor from the liquid while keeping the pump flooded and properly primed.



ME840-6-150

MARSHALL EXCELSIOR HIGH FLOW BYPASS VALVE

Description

3/4" Bypass valve 50-150 PSI

3/4" Bypass valve 100-225 PSI

1" Bypass valve 50-150 PSI

1" Bypass valve 100-225 PSI

Marshall Excelsior bypass valves are designed to protect plant and truck pumps from damage due to excessive pressure.

• Ductile Iron Body and Bonnet

RMI Part No.

ME840-6-150

ME840-6-225

ME840-8-150

ME840-8-225

- Stainless Steel wetted components
- · Wide open flow channels for increased flow rates



RMI Part No.	Description	Cap. @ 150 psi
ME840-10-125	1 1/4" Bypass Valve 90-125 PSI	186-319
ME840-12-125	1 1/2" Bypass Valve 90-125 PSI	199-372
ME840-16-125	2" Bypass Valve 90-125 PSI	201-399
ME840-125	Bypass Body Only 90-125 PSI	

Inlet/Outlet flanges allow for various configurations to meet specific installation requirements. Use with the ME840-125 Bypass Body.

	Bernstellen
RMI Part No.	Description
ME841-10F	1 1/4" Socket Weld Flange Kit
MEP840-10	1 1/4" Threaded 90° Flange Kit
MEP841-10	1 1/4" Socket Weld 90° Flange
MEP841-12F	1 1/2" Socket Weld Flange Kit
MEP840-12	1 1/2" Threaded 90° Flange Kit
MEP841-12F 1 1/2" Socket Weld 90° Flang	
ME841-16F	2" Socket Weld Flange Kit
MEP840-16	2" Threaded 90° Flange Kit
MEP841-16	2" Socket Weld 90° Flange

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95 By-Pass Valves





CORKEN CORKEN BYPASS VALVE

Dual purpose automatic priming and differential bypass valve. Allows vapor to return to tank keeping line primed.

RMI Part No.	MI Part No. Description	
B166-75	3/4" Bypass Valve 50-150 PSI	30
B166-1	1" Bypass Valve 50-150 PSI	40
T166-1.25	1 1/4" Bypass Valve 50-150 PSI	80
T166-1.5	1 1/2" Bypass Valve 50-150 PSI	100



N120-06-3

FISHER E	BACK PRE	SSURE	VALVE
Valve is ins	stalled after m	neter and	remains

FISHER

Valve is installed after meter and remains closed until vapor is forced back to tank through vapor eliminator.

RMI	Size	Diff. Press.	Diff. Press.
Part No. N120-06-3	3/4"	Setting, (PSI) 12	Range (PSI) 10-20
N120-08-3	1"	12	10-20



CORKEN 2" HIGH CAPACITY BYPASS VALVE

Low pressure build-up bypass valve for truck and stationary applications. Specifically designed for protecting pumps with capacities up to 250GPM. The continuous internal bleed will assist in the operation with pneumatically operated internal valves.

RMI Part No.	Description	Cap. (GPM)
ZV200	2" Bypass 91-125 PSI	180-250



CASH ACME DIAPHRAGM TYPE BACK PRESSURE VALVE

A true continous acting diaphragm constant pressure valve. Excellent for vaporizer/propane air pump systems.

RMI Part No.	Size	PSI Range	Temp.
FR-10/1.00	1"	50-250	450º F.

FR-10/1.00

WW-114

SMITH BYPASS VALVE

Chatter free due to unique guidepiston design. Stainless steel piston and sprin All valves have 25-125 PSIG range.

)	RMI Part No.	Inlet/Outlet	Capacity
-	WW-120	1/2"	10
	WW-340	3/4"	15
	WW-100	1"	35
ıg.	WW-114	1 ¹ /4"	50
	WW-112	11/2"	100
	WW-200	2"	150
	WW-212	2 ¹ /2"	250

RELIEF VALVE FOR LIQUID SERVICE



The Type 98H is a self-operated relief valve for use on relief and back pressure applications involving large liquid propane pumping systems and vaporizers. Internal pressure registration eliminates the need for a control line.

RMI Part No.	,,	Relief Pressure Setting	
98H-17*	1/2" FNPT	25-75 PSIG	50 PSIG
98H-18*	1/2" FNPT	70-140 PSIG	100 PSIG
98H-22**	³ ⁄4" FNPT	70-140 PSIG	100 PSIG
98H-30**	1" FNPT	70-140 PSIG	100 PSIG

98H Series

*Metal diaphragm & seat **Composition diaphragm & seat

MARSHALL EXCELSIOR BACKPRESSURE REGULATORS/RELIEF VALVES

Marshall Excelsior liquid service valves are direct operated relief valves for use on relief and backpressure applications involving large LPG pumping systems and vaporizors.

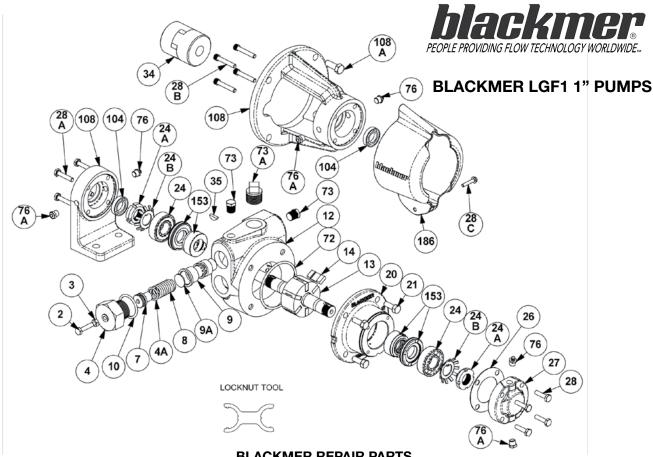


RMI Part No.	Size	Range	Setting	Relief Capacity 10 PSI 50 PSI Over Set Over Set	
MEGR-198H/22	3/4"	70-140 PSI	100	49	93
MEGR-198H/30	1"	70-140 PSI	100	49	93

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BLACKMER REPAIR PARTS

Ref. No.	Description	Parts Per Pump	Part No.	Ref. No.	Description	Parts Per Pump	Part No.
2	Adjusting Screw – Relief Valve (R/V)	1	² 443901	28A	Bracket Mounting Screws	4	920090
3	Locknut – Adjusting Screw	1	² 922811	28B	Bracket Mounting Screws	4	920101
4	Cover – R/V	1	412901	28C	Guard Screw	1	920026
4A	O-Ring – Spring Guide	1	^{1,2} 711940	34	Coupling Half – Pump	1	LO-90- 11/1
7	Spring Guide – R/V	1	² 422901	1	Coupling Half – Motor (56C)		LO-90-5/8
8	Spring – R/V	1	² 472901	1	Coupling Half – Motor (143-145TC/184C)		L0-90-7/8
9	Valve – R/V	1	² 452901	1	Coupling Spider		L0-90195
9A	Disc. – R/V	1	² 442901	35	Key – Shaft	1	1909126
10	O-Ring – R/V Cover	1	^{1,2} 701965	72	O-Ring – Head	1	1711941
12	Cylinder – LGF1, LGB1	1	022914	73	Gage Plug (1/4")	2	908198
	Cylinder – LGF1P, LGB1P	1	022915	73A	Gage Plug (3/4")	1	908225
13	Rotor & Shaft Assembly, Six Vane	1	262907	76	Grease Fitting	2	317815
	(Includes Ref. Nos. 24A & 24B)			76A	Grease Relief Fitting	2	701992
14	Vane – Duravane (Std.)	6	^{1,3} 092913	104	Grease Seal	1	1 331934
20	Head	1	032905	108	Bracket - (base mount) - LGB1(P)E	1	832913
21	Capscrews – Head	4	920178		Bracket (C-faced footless) - LGF1(P)E		832912
24	Ball Bearing	2	¹ 903405	108A	Capscrews – Bracket	4	920331
24A	Locknut – Bearing	2	903531	108B	Bracket (C-faced footed)		see pg. 2
24B	Lockwasher – Bearing	2	¹ 903532	153	Seal Kit	2	1 332920
26	Gasket – Bearing Cover	1	¹ 383075	186	Guard	1	804120
27	Bearing Cover	1	043071		Tool - Locknut		903090
28	Capscrews – Bearing Cover	4	920080		Kit – RV Maintenance		899094
					Kit – Maintenance (6-Vane)		898994

¹Included in Maintenance Kit. ²Included in RV Kit ³Install the vanes with the lot facing the direction of rotation.

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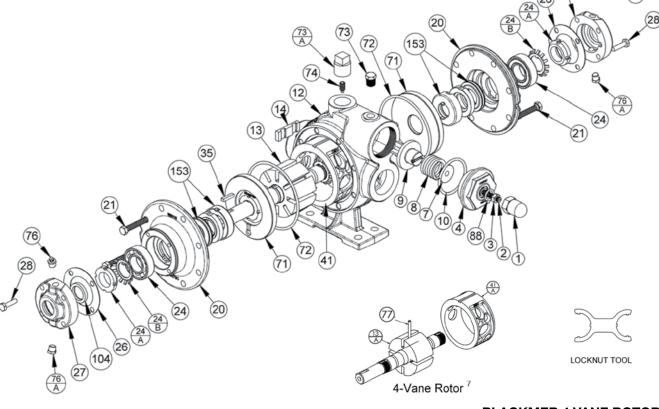
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PUMP MODELS: LGRL1.25, LGRLF1.25A, LGL1.25, LGLF1.25A, LGL1.5, LGLF1.5A and discontinued models: LGRLF1.25, LGLF1.25 Keep instructions 501-B00 for installation, Operation and Maintenance





BLACKMER REPAIR PARTS

BLACKMER 4 VANE ROTOR SHAFT REPAIR PARTS

Ref. No.	Description	Parts Per Pump	Part No.	Ref. No.	Description	Parts Per Pump	Part No.	Ref. No.	Description	Parts Per Pump	Part No.
1	Cap – Relief Valve (R/V)	1	413200	28	Capscrews – Bearing Cover ⁴	4-8	920080	13A	Rotor & Shaft	1	¹ 263076
2	Adjusting Screw – R/V	1	433909	35	Shaft Key ¹	1	¹ 909152	41A	Liner – LGRL(F)1.25	1	² 183003
3	Locknut – Adjusting Screw	1	922923	28C	Guard Screw	1	920026	41A	Liner – LGL(F)1.25	1	² 183004
4	Cover – R/V	1	413076	41	Liner – LGRL(F)1.25 (8 Vane Only)	1	² 183019	41A	Liner – LGL(F)1.5	1	² 183301
7	Spring Guide – R/V	1	423955		Liner – LGL(F)1.25 (8 Vane Only)	1	² 183020		Push Rod LGRL(F)1.25	2	¹ 123004
8	Spring – R/V (81-125 psi)	1	471428		Liner – LGL(F)1.5 (8 Vane Only)	1	² 183310	77	Push Rod LGL(F)1.25	2	¹ 123076
9	Valve – R/V	1	453077	71	Disc	2	¹ 063075		Push Rod LGL(F)1.5	2	1 123401
9A	Disc. – R/V	1	² 442901	72	O-Ring – Head	2	¹ 701918		Kit – Maintenance LGRL(F)1.25A		898917
10	0-Ring – R/V Cover	1	¹ 711924	73	Gage Plug (1/4")	1	908198		Kit – Maintenance LGL(F)1.25A		898918
12	Casing with feet (1.25)	1	013075	73A	Gage Plug (3/4")	1	⁶ 908225		Kit – Maintenance LGL(F)1.5A		898919
	Csing with feet (1.5)	1	013376	74	Setscrew – Liner	1	922088		Kit – Rebuild LGRL(F)1.25A		899017
13	Rotor & Shaft Assembly, Eight Vane	1	² 262300	76	Grease Fitting	2	317815		Kit – Rebuild LGL(F)1.25A		899018
	(with Ref. Nos. 24A & 24B)			76A	Grease Relief Fitting	2	701992		Kit – Rebuild LGL(F)1.5A		899019
14	Vane – Duravane	8	1 093088	88	O-Ring – R/V Cap	1	1 701949	Ilneli	ided in Maintenance Kit. ² Included in I	Pobuild k	lite.
20	Head	2	033073	104	Grease Seal	1	¹ 331927				
21	Capscrews – Head	16	920276	153	Seal Assembly	2	¹ 333045	3, 4, 0 <u>4</u> 3	pplies to LG(R)LF pump models only: se one outboard ⁴ Use four outboard ⁵ I	lse none	
24	Ball Bearing	2	¹ 903114		Tool - Locknut		903090				
24A	Locknut – Bearing	2	² 903534		Kit – Maintenance (8-Vane)		898976	or 1/	Vo. 73A: Older pumps may use a 1/4" p 2" plug (pn 908215)	ind (bua	J8198)
24B	Lockwasher – Bearing	2	1 903533		Kit - Rebuild LGRL(F)1.25(A) (8 Vane)		899076		D TO ADDRESS THIS NOTE		
26	Gasket – Bearing Cover ³	1-2	¹ 383075		Kit - Rebuild LGL(F)1.25(A) (8 Vane)		899077				
27	Bearing Cover – Inboard ⁵	0-1	043070		Kit - Rebuild LGRL(F)1.5(A) (8 Vane)		899078	Note: Earlier model pumps used taper pins, which are no longer required. Previous pumps used Woodruff Key 901925			no 901925
27A	Bearing Cover – Outboard	1	043071					longe			00.020

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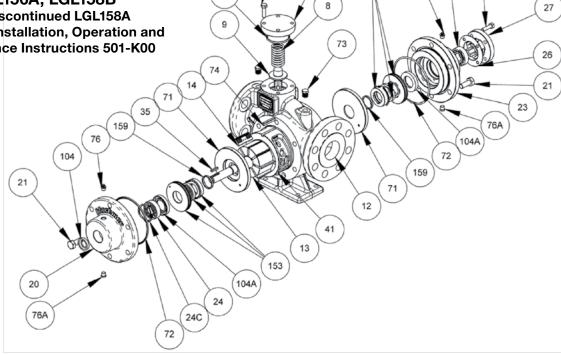
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PUMP MODELS: LG154A, LGL156A, LGL158B and discontinued LGL158A Keep with installation, Operation and Maintenance Instructions 501-K00



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10

BLACKMER REPAIR PARTS

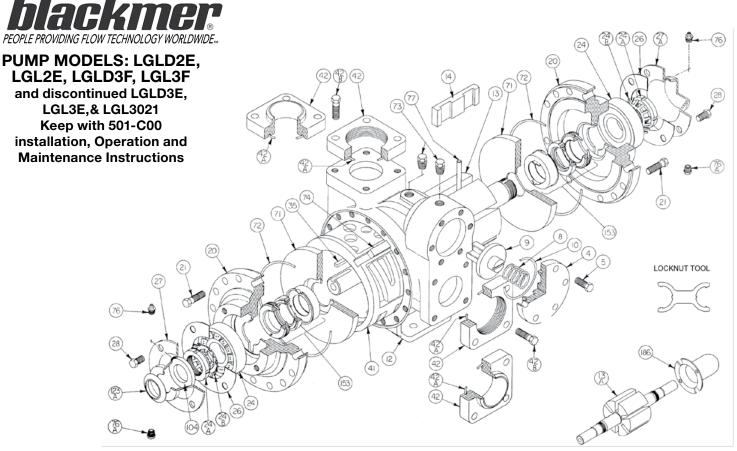
Ref. No.	Description	Parts Per Pump	Part No.	Ref. No.	Description	Parts Per Pump	Part No.
4	Cover – Relief Valve (R/V)	1	415701	35	Key – Shaft (for shaft 265702)	1	¹ 909153
5	Capscrews – R/V Cover	4	920122	1	Key – Shaft (for older shaft 265701)	1	¹ 909152
8	Spring – R/V (225 psi)	1	471400	41	Liner (LGL158)	1	185701
9	Valve – R/V	1	455701		Liner (LGL156)	1	185710
10	0-Ring – R/V Cover	1	¹ 711924	1	Liner (LGL154)	1	185711
12	Casing	1	015701	71	Disc	2	1 065701
13	Rotor & Shaft Assembly	1	265702	72	O-Ring – Head	2	¹ 702169
	Rotor & Shaft Asy. (LGL158A only) ²	1	² 265701	73	Gage Plug	2	908198
14	Vane – Duravane	8	¹ 094860	74	Key – Liner	1	909177
20	Head – Inboard	1	035701	76	Grease Fitting	2	317815
21	Capscrews – Head	12	920468	76A	Grease Relief Fitting	2	701992
23	Head Outboard	1	035703	104	Grease Seal – Outer	1	1 331921
24	Ball Bearing	2	¹ 903148	104	Grease Seal – Inner	2	¹ 335702
24C	Bearing Spring	1	¹ 903187	153	Mechanical Seal	2	¹ 335703
26	Shim Kit (6 ea.L .002", .005" & .010")	Varies	¹ 905172	159	Seal Spacer Ring	2	375701
27	Bearing Cover	1	045701		Kit – Maintenance		899222
28	Capscrews – Bearing Cover	4	920122		Priming Valve		455750
				1	(for Underground Tank Installation)		

Included in Maintenance Kit. 2The 265702 will fit the LGL158A, but will require baseplate modifications as it is 1.41" longer than the 265701 shaft.

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BLACKMER REPAIR PARTS

Ref. No.	Description	Parts Per Pump	LGL2 Part No.	LGL3 Part No.	LGL3021 Part No.	Ref. No.	Description	Parts Per Pump	LGL2 Part No.	LGL3 Part No.	LGL3021 Part No.
4	Cover – Relief Valve (R/V)	1	414401	415113	415115	35	Key – Shaft, 1/4" Square	1	1,7 909209	1.7 909209	¹ 909209
5	Capscrews – R/V Cover	6	920331	920331	920379	41	Liner	1	² 184405	² 185111	² 185111
8	Spring – R/V	1	¹ 471423	¹ 475135	¹ 475135	42	Flange – NPT	2	654401	655112	655132
9	Valve – R/V	1	454405	455129	455129		Flange – Weld	2	654405	655102	
10	0-Ring – R/V Cover	1	¹ 701919	1701925	1711941	42A	O-Ring – Flange	2	¹ 702004	¹ 702002	¹ 712245
12	Casing	1	014405	015127	015131	42B	Capscrew – NPT Flange	8	920384	920547	920379
13	Rotor & Shaft Asy. – LGL	1	264443	265149	² 265190		Capscrew – Weld Flange	8	920351	920510	
	(Includes Ref. Nos. 24A & 24B)					71	Disc	2	¹ 064412	¹ 065112	1 065112
13A	Rotor & Shaft Asy. – LGLD⁵	1	² 264445	² 265148	² 265190	72	O-Ring – Head	2	¹ 702022	¹ 702041	¹ 702041
	(Includes Ref. Nos. 24A & 24B)					73	Gage Plug	2	908198	908198	908198
14	Vane – Duravane (Std.)	6	¹ 091419	1 095131	1 095131	74	Key – Liner	1	^{2,8} 183991	² 185191	² 185191
20	Head	2	034416	035128	035128	76	Grease Fitting	2	317815	317815	317815
21	Capscrews – Head (Size 2)	32	920351	N/A	920379	76A	Grease Relief Fitting	2	701992	701992	701992
	Capscrews – Head (Size 3)	40	N/A	920369	920379	77	Push Rod	3	1,6 123905	^{1,6} 125110	¹ 125110
24	Ball Bearing	2	¹ 903156	¹ 903166	¹ 903166	104	Grease Seal	1	1,3 331918	^{1,3} 331908	¹ 331908
24A	Locknut – Bearing	2	² 903521	² 903523	² 903523	123A	Dirt Shield	1	1,3 701480	N/A	N/A
24B	Lockwasher – Bearing	2	¹ 903522	¹ 903524	1 903524	153	Mechanical Seal	2	¹ 334439	¹ 335225	¹ 335225
26	Gasket – Bearing Cover	2	¹ 383940	¹ 385125	1 385125	186	Shaft Protector	1	341601	341801	341801
27	Bearing Cover (Inboard) ³	1	041431	041815	041815		(LGLD Models Only)				
27A	Bearing Cover (Outboard) 4	1	041433	041817			Tool – Locknut		903091	903091	903091
28	Capscrews – Bearing Cover	8 - 12	920285	920285	920285		Kit – Maintenance		898979	898981	899195
							Kit – Rebuild		899079	899081	899095

¹Included in Maintenance Kit and Rebuild Kit. ²Included in Rebuild Kit.

The Following Applies to double end shaft pumps (IGLD): ³Use two ⁴Use none.

⁵Double-Ended Rotor & Shaft. ⁶2" pushrod is metal, 3" is composite.

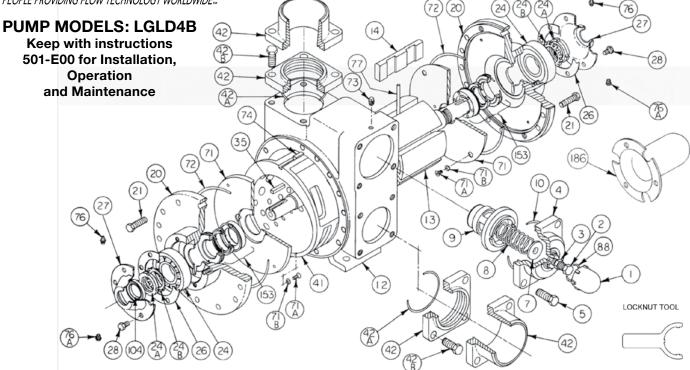
⁷ Pumps before April 2008 used Woodruff key 909130, included in maintenance kits. ⁸Pump before 1995 require liner key 184407.

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BLACKMER REPAIR PARTS

Ref. No.	Description	Parts Per Pump	Part No.	Ref. No.	Description	Parts Per Pump	Part No.
1	Cap – Relief Valve (R/V)	1	413957	42	Flange – 3" NPT	1-2	652012
2	Adjusting Screw – R/V	1	436310	1	Flange – 3" Weld	1-2	652007
3	Locknut – Adjusting Screw	1	432039]	Flange – 4" Weld	1-2	652005
4	Cover – (R/V)	1	412001	42A	O-Ring – NPT, Weld Flange	2	¹ 701937
5	Capscrews – R/V Cover	4	920633	42B	Capscrew – NPT Flange	8	920663
7	Spring Guide – R/V	1	426355]	Capscrew – Weld Flange	8	920640
8	Spring – R/V	1	¹ 472039	71	Disc	2	1 062039
9	Valve – R/V	1	452001	71A	Machine Screw – Disc.	8	² 920015
10	0-Ring – R/V Cover	1	¹ 701946	71B	Lockwasher – Machine Screw	8	² 909634
12	Casing	1	012019	72	O-Ring – Head	2	¹ 702039
13	Rotor & Shaft Assembly, Dbl. End	1	² 262041	73	Gage Plug	2	908198
	(Includes Ref. No. 24A & 24B)			74	Key – Liner	1	² 182040
14	Vane – Duravane	6	¹ 092019	76	Grease Fitting	2	317815
20	Head	2	032041	76A	Grease Relief Fitting	2	701992
21	Capscrews – Head	28	920532	77	Push Rod – Composite – LGLD4B	3	¹ 122009
24	Ball Bearing	2	¹ 903166	88	O-Ring – R/V Cap	1	1 701926
24A	Locknut – Bearing	2	² 903541	104	Grease Seal – LGLD4B	2	1 331908
24B	Lockwasher – Bearing	2	¹ 903542	153	Mechanical Seal	2	1 332050
26	Gasket – Bearing Cover	2	1 385125	186	Shaft Protector	1	341801
27	Bearing Cover – LGLD4B	2	041815		Tool – Locknut		903092
28	Capscrews – Bearing Cover	12	920285		Kit – Maintenance		898922
35	Key – Shaft	1	¹ 909183		Kit – Rebuild – LGLD4B		899022
41	Liner (LGL158)	1	¹ 182000				

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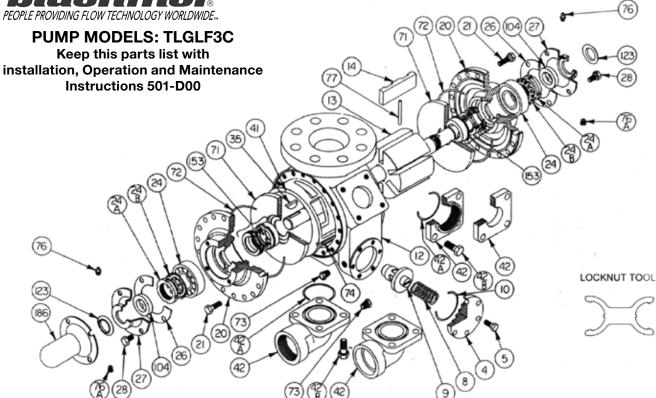
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PUMPS, COMPRESSORS & BY-PASS VALVES



BLACKMER REPAIR PARTS

Ref. No.	Description	Parts Per Pump	Part No.	Ref. No.	Description	Parts Per Pump	Part No.
4	Cover – Relief Valve (R/V)	1	415108	42A	0-Ring – Flange 2 5/8" x 2 7/8" (current)	2	^{1,3} 702004
5	Capscrew – R/V Cover	6	920331		O-Ring – Flange 2 1/2" x 2 3/4" (older pumps)	2	¹ 701919
8	Spring – R/V	1	² 471428	42B	Capscrew – Flanges	8	920491
9	Valve – R/V	1	² 451417	71	Disc.	2	¹ 065121
10	O-Ring – R/V Cover	1	¹ 701919	72	O-Ring – Head	2	¹ 711923
12	Casing	1	015128	73	Gage Plug	2	908198
13	Rotor & Shaft Assembly ⁵	1	² 265147	74	Key – Liner	1	² 185193
14	Vane – Duravane	6	¹ 095132	76	Grease Fitting	2	317815
20	Head	2	035132	76A	Grease Relief Fitting	2	701992
21	Capscrews – Head	36	920351	77	Push Rod	3	¹ 121607
24	Ball Bearing	2	¹ 903156	104	Grease Seal	2	¹ 331918
24A	Locknut – Bearing	2	² 903521	123	Dirt Shield	2	¹ 701480
24B	Lockwasher – Bearing	2	¹ 903522	153	Mechnical Seal	2	¹ 334439
26	Gasket – Bearing Cover	2	¹ 383940	186	Shaft Protector	1	341601
27	Bearing Cover	2	041431		Tool - Locknut		903091
28	Capscrews – Bearing Cover	8	920285		Kit – RV Maintenance		899225
35	Key – Shaft	1	¹ 909130		Kit – Rebuild with R/V		899125
41	Liner	1	² 185101	1Inclu	ded in Maintenance Kit and Rebuild Kit.		
	Flange – 2" NPT		652010	² Inclu	ded in Rebuild Kit		
	Flange – 2" Slip-on Weld		652024	³ Larg	er O-Ring introduced October 2002		
42	Flange Elbow – 2" NPT	1-2	655100	· ·	des Ref. No. 24A & 24B		
	Flange El – 2" Socket Weld		655109	1			
	Blank Flange for Auxilliary Inlet		652036	1			

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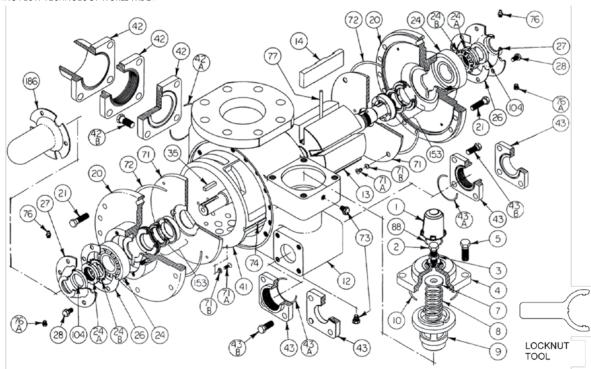
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PUMP MODELS: TLGLF4B Keep with instructions 501-E00 for Installation, Operation and Maintenance



BLACKMER REPAIR PARTS

Ref. No.	Description	Parts Per Pump	Part No.	Ref. No.	Description	Parts Per Pump	Part No.
1	Cap – Relief Valve (R/V)	1	413957	42A	O-Ring – Aux. Inlet Flanges	1	701937
2	Adjusting Screw – R/V	1	436310	42B	Capscrew – 3" NPT Flange	4	920663
3	Locknut – Adjusting Screw	1	432039		Capscrew 3", 4"-		920640
4	Cover – (R/V)	1	412001		Weld Flange; Blank Flange		
5	Capscrews – R/V Cover	4	920633		TWIN DISCHARGE PORT 0	PTIONS	
7	Spring Guide – R/V	1	426355	43	Flange – 2" NPT	2	652010
8	Spring – R/V	1	¹ 472039		Flange – 2" Slip-on Weld		652024
9	Valve – R/V	1	452001	43A	O-Ring – 2" Discharge Flanges	2	1 702004
10	0-Ring – R/V Cover	1	¹ 701946	43B	Capscrew – Discharge Flange	8	920491
12	Casing	1	012041	71	Disc	2	1 062039
13	Rotor & Shaft Assembly	1	² 262041	71A	Machine Screw – Disc.	8	² 920015
	(Includes Ref. No. 24A & 24B)			71B	Lockwasher – Machine Screw	8	² 909634
14	Vane – Duravane	6	¹ 092019	72	O-Ring – Head	2	¹ 702039
20	Head	2	032041	73	Gage Plug	2	908198
21	Capscrews – Head	28	920532	74	Key – Liner	1	² 182040
24	Ball Bearing	2	¹ 903166	76	Grease Fitting	2	317815
24A	Locknut – Bearing	2	² 903541	76A	Grease Relief Fitting	2	701992
24B	Lockwasher – Bearing	2	¹ 903542	77	Push Rod – Composite	3	1 122009
26	Gasket – Bearing Cover	2	¹ 385125	88	O-Ring – R/V Cap	1	1 701926
27	Bearing Cover	2	041815	104	Grease Seal	2	1 331908
28	Capscrews – Bearing Cover	12	920285	153	Mechanical Seal	2	1 332050
35	Key – Shaft	1	¹ 909183	186	Shaft Protector	1	341801
41	Liner	1	² 182000		Tool – Locknut		903092
	AUXILIARY INLET OPTI	ONS			Kit – Maintenance		898922
42	Flange – 3" NPT	1	652012		Kit – Rebuild – LDLD4B		899022
	Flange – 3" Weld		652007	¹ Incl	uded in Maintenance and Rebuild Kit.		
	Flange – 4" Weld		652005	² Incli	uded in Rebuild Kit		
	Flange – Blank		652000	1			

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103 Motors and Starters





EXPLOSION-PROOF ELECTRIC MOTORS



1 PHASE - C FACE 1725 RPM

RMI Part No.	HP	Frame Size	Shaft	Voltage	Amp Rating		
nimi rait nu.	nr	France Size	Shart	vullage	115v	230v	
EMC-1	1	56C	5/8"	115/230	11.2	5.6	
EMC-1.5	1.5	56C	5/8"	115/230	12	6	
EMC-2	2	184C	7/8"	115-208/230	22	11.6	
EMC-3	3	215C	1 1/8"	115/230	30	15	
EMC-5	5	2150	1 1/8"	230		21	

3 PHASE - C FACE 1725 RPM

RMI Part No.	HP	Frame Size	Shaft	Voltage	Amp I 115v	Rating 230v
MCT-1	1	56C	5/8"	208-230/460	3.6	1.8
MCT-1.5	1.5	56C	5/8"	208-230/460	4.6	2.3
MCT-2	2	56C	5/8"	230/460	6	3
MCT-3	3	182TC	1 1/8"	230/460	8.2	4.1
MCT-5	5	184TC	1 1/8"	230/460	13.6	6.8
MCT-7.5	7.5	213TC	1 3/8"	230/460	20.2	10
MCT-10	10	215TC	1 3/8"	230/460	26	13

C FACE 3600 RPM for Corken C Model Pumps

RMI Part No.	HP	Frame Size Phase Voltage		Amp I	Rating	
RIVIT Part NU.	пр	Frame Size	rnase	voltage	115v	230v
2556	1	C10/C12	1	115-208/230	12	6
4261	2	C12/C13	1	115-208/230	20	10
2557	3	C14	3	230/460	4	8

1 PHASE Rigid Base 1725 RPM

RMI Part No.	HP	Frame Size	Shaft	Voltage	Amp Rating		
nivii Fait NU.	nr	FIAILE SIZE	Silait	vullaye	115v	230v	
EMS-1	1	143T	5/8"	115/230	14.0	7.0	
EMS-1.5	1.5	184	7/8"	115/230	19.0	9.5	
EMS-2	2	182T	1 1/8"	115/230	22.0	11.0	
EMS-3	3	215	1 1/8"	115/230	30.0	15.0	
EMS-5	5	215	1 1/8"	115/230		26.0	

1 PHASE Rigid Base 3450 RPM

RMI Part No.	HP	Frame Size	Shaft	Voltage	Amp Rating		
NIVII FAIL NU.	nr	FIAILE SIZE	ənan	vullaye	115v	230v	
EMSF-1	1	56	5/8"	115/230	12	6	
EMSF-2	2	145T	7/8"	115-208/230	23	11.5	
EMSF-3	3	184T	1 1/8"	115/230	29	14.5	
EMSF-5	5	184T	1 1/8"	230		28	

3 PHASE Rigid Base 1725 RPM Amp Rating RMI Part No. HP Frame Size Shaft Voltage 115v | 230v EM-1 1 56 5/8" 208-230/460 3.6 1.8 EM-1.5 1.5 145T 7/8" 230/460 4.4 2.2 EM-2 2 7/8" 230/460 145T 5.8 2.9 230/460 EM-3 3 182T 1 1/8' 4.2 8.4 EM-5 230/460 5 184T 1 1/8" 13.4 6.7 EM-7.5 7.5 213T 1 3/8' 230/460 17.2 8.6 EM-10 10 215T 1 3/8" 230/460 24 12 EM-15 15 1 5/8' 230/460 18 254T 36 EM-20 20 256T 1 5/8' 230/460 48 24 EM-25 25 284T 1 7/8' 230/460 61 30.5 EM-30 30 286T 1 7/8' 230/460 72 36

3 PHASE Rigid Base 3600 RPM

		o i linor ling				
RMI Part No.	HP	Frame Size	Shaft	Voltage	Amp 115v	Rating 230v
EMF-1	1	56	5/8"	208-230/460	3.6	1.8
EMF-2	2	145T	7/8"	230/460	4.8	2.4
EMF-3	3	145T	7/8"	230/460	7.2	3.6
EMF-5	5	184T	1 1/8"	230/460	11.8	5.9
EMF-7.5	7.5	184T	1 1/8"	230/460	16.8	8.4
EMF-10	10	215T	1 3/8"	230/460	23.6	11.8

STARTERS



- Standard on-off switch with explosion proof box for motors with low ampere electric service (does not provide over-load protection).
- Manual starter provides overload starter protection, explosion proof enclosure with lever lock and pad lock feature. Economical control for medium ampere electrical service range.
- Magnetic starter provides starter protection, explosion proof enclosure, and magnetic circuit contacts. Excellent control for larger motor installations.

SWITCHES AND STARTERS FOR EXPLOTION PROOF AREA CLASS I GROUP D FOR PROPANE INSTALLATIONS SINGLE PHASE SERVICE

Motor	Switch	, On-Off	Manual	Starter	Magnetic Starter		
HP	115V	230V	115V	230V	115V	230V	
1	XS-52C	XS-52C	609-AHX	609-AHX	509-AHXD	509-AHXA	
1.5			609-BHX	609-AHX	509-BHXD	509-AHXA	
2			609-BHX	609-AHX	509-BHXD	509-AHXA	
3			609-XHX	609-BHX	509-XHXD	509-BHXA	
5				609-XHX		509-XHXA	

THREE PHASE SERVICE

Motor	Switch, On-Off		Manual	Starter	Magnetic Starter		
HP	230V	460V	230V 460V		230V	460V	
1-1.5	XS-58C	XS-58C					
2			609-AHW	609-AHW	509-AHA	509-AHB	
3			609-AHW	609-AHW	509-AHA	509-AHB	
5			609-BHW	609-AHW	509-BHA	509-AHB	
7.5			609-BHW	609-BHW	509-BHA	509-BHB	
10				609-BHW	509-CHA	509-BHB	
15					509-CHA	509-CHB	

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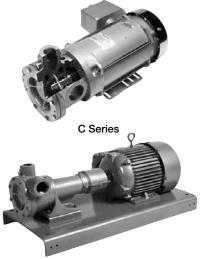
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Regenerative turbine pumps. Ductile iron casing, balance type mechanical seal, and free floating bronze impeller provide years of service and quiet operation.



F Series

*Must Specify Motor When Ordering



CORO-FLO CYLINDER FILLING PUMPS

- C10 ideal for the one scale bottle filling operation. Fills 20# cylinders in 30 seconds.
- Fills 100# cylinders in 2.5 minutes, and fuels through a meter at 7 GPM.
- C12 for those who want to do it faster. Especially recommended for motor fueling and "batch" fork lift filling. Fills 20# cylinders in 15 seconds, 100# cylinders in 2 minutes. Perfect for motor fueling through a meter at 15 GPM.

C MODEL CLOSE COUPLED SERIES											
RMI PA	RT NO.	Canacity	Capacity								
Pump, Starter & By Pass	Pump & Starter	GPM 50 PSID	GPM 75 PSID	Inlet	Outlet	Max PSID	H.P. Rating	Motor Phase			
C10JD-SM-B	C10JD-SM	6.5	2.5	1¼"	1"	75	1.0	1			
C12JD-SM-B	C12JD-SM	15	11	1½"	1"	85	1.0	1			
C13JD-SM-B	C13JD-SM	22	17	1½"	1"	100	2.0	1			
C14HD (Starter not included)		32	25	1½"	1"	100	3.0	3			

	PUMP					
RMI P	Part No.					
Frame	e Mount	Capaci	ty - GPM			
Pump, Baseplate & Coupling	Pump Only	50 PSID	75 PSID	Inlet	Outlet	Max PSID
F9CD-101	F9CD	4.5 w/ 1HP	2.25 W/ 1 HP	11⁄4"	1"	100
F10CD-101	F10CD	6.5 W/ 1HP	2.5 W/ 1HP	11⁄4"	1"	90
F12CD-101	F12CD	15 w/ 2HP	11 w/ 2HP	1½"	1"	115
F14CD-101	F14CD	31 w/ 3 HP	25 w/ 3 HP	1½"	1"	125

AUTOGAS PUMP

The Corken Autogas pump achieves new levels of performance with higher flows at high differential pressures, non-pulsating and quiet transfer longer pump life and a design that is easy to repair. The pump is also versatile enough to be used in applications such as cylinder filling, vaporizer feeding, or bulk transfer.

RMI Part N	GPM	Diff.	Motor	
Pump on Base	Pump Only	Pressure		HP
FF060CD6A-101-184T	FF060CD6A	8.5	145	5
FF075CD6A-101-215T	FF075CD6A	22.5	145	7.5
FF150CD6A-101-215T	FF150CD6A	33.8	145*	10

*200psig maximum differential pressure with 20HP motor

High Differential Pressure Packages							
RMI Part No.	Description						
HDPFF060-3P53	Pump, Base Plate, Bypass and 5HP 3PH motor						
HDPFF075-3P75	Pump, Base Plate, Bypass and 7.5HP 3PH motor						
HDPFF150-3P10	Pump, Base Plate, Bypass and 10HP 3PH motor						

Prepackaged pump assemblies with motor and bypass valve

	Options								
RMI Part No.	Description								
4204-1	10hp Variable Frequency Drive for use with 5HP motors								
4204	15hp Variable Frequency Drive for use with 7.5HP motors								
4204-2	20hp Variable Frequency Drive for use with 10HP motors								

Variable frequency drives allow the use of 3 phase motors on single phase electric service. Can also be used instead of a starter with 3 phase service.



- Ideal for dual hose dispensers and multiple dispensers
- ANSI Flanges 1 1/2" inlet X 1" outlet
- Continuous Duty Capability

FF150 Base Mounted

• Self-aligning, free-floating impeller

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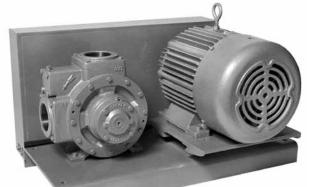
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105 **Corken Bulk Plant and Truck Pumps**



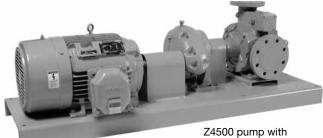
Z200-103

reducer



CORO-VANE BULK FILL PUMPS

- Sliding vane design with internal safety relief valve.
- Large diameter non-metalic pins are not speed sensitive to allow for higher **RPM** operation
- High Tech materials used on cam and blades to extend life of pump
- · Easy maintenance



RMI Part No.		Inlet/Outlet	Capacity @ 50 PSID			
Pump & Base	Pump Only	IIIIet/Outlet	GPM @ 640 RPM	GPM @ 780 RPM		
Z2000-103	Z2000	2" NPT	69	82		
Z3500-103	Z3500*	3" NPT	143	177		
Z4500-103	Z4500	4" x 3" FLNG	309	382		

*Easy retrofit with 1021 or other 3" pumps.

CORO-VANE BASE MOUNTED TRUCK PUMPS

- Double Shaft Extension for LH or RH PTO
- Hydraulically Actuated Blades



TRUCK AND TRANSPORT PUMPS • Reversible side plates

CORO-VANE FLANGE MOUNTED

- Anti-cavitation cam
- rated for up to 4,000 lbs. Z3200

RMI	Inlat	0	Capacity (@ 50 PSID
Part No.	Inlet	Outlet	GPM @ 640 RPM	GPM @ 780 RPM
Z3200	3" Flange	2" NPT	95	112
Z4200	4" Flange	Dual 2"	278	369

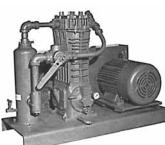
RMI Part No. Inlet		Outlet	Capacity	
Z2000	2" NPT Flange	2"	40-85 GPM	

Z2000

- Hydraulic motor mounting adapters • RMI part number 4496-X1
- **RMI** Part Pump Model No. 4496-X1 Z3200 4496-1X1 Z4500

DRY CYLINDER COMPRESSORS

- · Designed for liquid transfer and residual vapor recovery.
- · Contamination-free, oil-free delivery.
- · Fully engineered design.



M3FBA Series

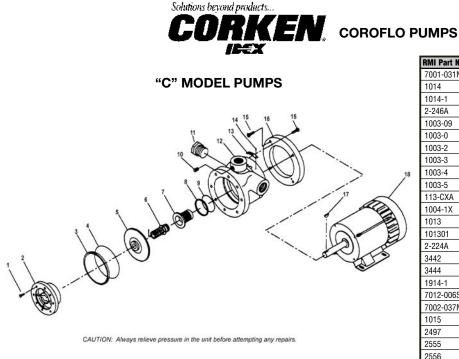
RMI Part No.						Standard Pipe Size	
Complete Bulk Plant	Compressor			Motor HP	RPM		
Transfer Unit*	& Fly Wheel Only	GPM	CFM	nr		Vapor	Liquid
91M3FBA-107	91M3FBA	50	8.3	5	600	1"	11⁄4"
291M3FBA-107	291M3FBA	88	16	7.5	780	11⁄4"	2"
491M3FBA-107	491M3FBA	198	36	15.0	825	2"	3"
691M3FBA-107	691M3FBA	330	60	25.0	822	3"	4"
*Transfer Unit in	cludes compres	sor. daud	ies, bas	e, pipina	ı. strai	ner. 4-wa	V

valve, liquid trap, belt guards and sliding base. Motor is not included.

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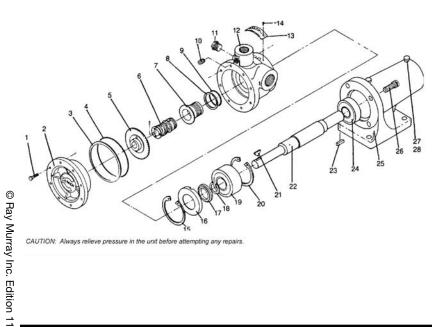




RMI Part No.	Ref No.	Description	Qty.
7001-031NC100A	1	Hex head cap screw	8
1014	3	Case clearance shim (.002" red)	As req.
1014-1	1 [Case clearance shim (.003" green)	As req.
2-246A	4	Case O-rung (non-teflon)	1
1003-09		Impeller, brass - model 9	1
1003-0	1 [Impeller, brass - model 10	1
1003-2	5	Impeller, brass - model 12	1
1003-3		Impeller, brass - model 13	1
1003-4		Impeller, brass - model 14	1
1003-5	1 [Impeller, brass - model 15	1
113-CXA	6	Seal Assembly	1
1004-1X	7	Seal Housing, steel (non-teflon O-rings)	1
1013	8	Housing adjustment shim (.010")	As req.
101301		Housing adjustment shim (.020")	As req.
2-224A	9	Housing O-ring	1
3442	10	Pipe plug, 1/4" NPT	1
3444	11	Pipe plug, 3/4' NPT	1
1914-1	13	Nameplate	1
7012-006SF019E	14	Phillips head screw 6-32 x 1/4"	2
7002-037NC087A	15	Socket head cap screw	8
1015	16	Adapter ring	1
2497	17	Woodruff key, steel	1
2555		Motor 3/4 hp models 9, 10	1
2556		Motor 1 hp model 12	1
2557⁵	18	Motor 3 hp models 14, 15	1
2895⁵		Motor 3/4 hp, obsolete models 9E, 10	1
2896 ⁵		Motor 1 1/2 hp, obsolete model 12E	1
4261 ⁴		Motor 2 hp model13	1

RMI Part No.	Ref No.	Description	Qty.
7001-031NC100A	1	Hex head cap screw	8
1014	3	Case clearance shim (.002" red)	As req.
1014-1	1 1	Case clearance shim (.003" green)	As req.
2-246A	4	Case O-rung (non-teflon)	1
1003-09		Impeller, brass - model 9	1
1003-0	1 1	Impeller, brass - model 10	1
1003-2	5	Impeller, brass - model 12	1
1003-3	1	Impeller, brass - model 13	1
1003-4	1 1	Impeller, brass - model 14	1
1003-5	1 1	Impeller, brass - model 15	1
113-CXA	6	Seal Assembly	1
1004-1X	7	Seal Housing, steel (non-teflon O-rings)	1
1013	8	Housing adjustment shim (.010")	As req.
1013-1	1 1	Housing adjustment shim (.020")	As req.
2-224A	9	Housing O-ring	1
3442	10	Pipe plug, 1/4" NPT	1
3444	11	Pipe plug, 3/4' NPT	1
1914-1	13	Nameplate	1
7012-006SF019E	14	Phillips head screw 6-32 x 1/4"	2
5002-281	15	Bearing retainer ring	1
1238	16	Bearing cap	1
1006	17	Grease seal	1
5102-118	18	Bearing retainer ring	1
2758	19	Ball bearing	1
5000-281	20	Bearing retainer ring	1
2497	21	#5 Woodruff key, steel	1
1234	22	Shaft	1
3226	23	key	1
2759	24	Ball bearing	1
1010-2	25	Frame	1
7002-037NC087A	26	Socket headscrew	4
2158	27	Grease zerk	2
2159	28	Lubricap	2

"F" MODEL PUMPS

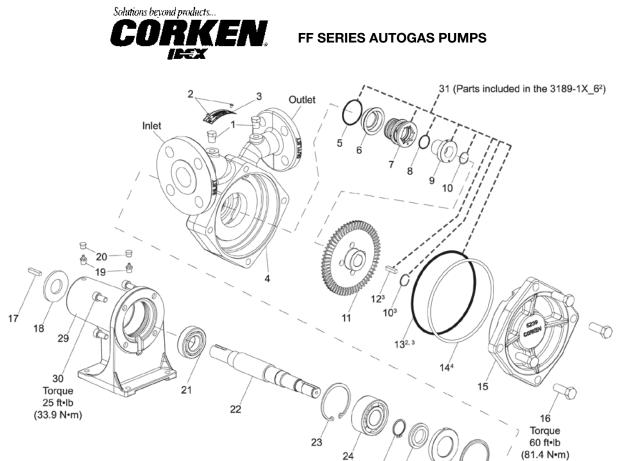


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RMI Part No.	Ref No.	Description	Qty.
3442	1	1/4" pipe plug	2
7012-0065F019E	2	Nameplate screw	2
1914-1	3	Nameplate	1
5238-060		060 Case – ANSI flange (FF)	1
5238-75		075 Case – ANSI flange (FF)	1
5238		150 Case – ANSI fange (FF)	1
5238-061	4	060 Case – DIN flange (FD)	1
5238-751		075 Case – DIN flange (FD)	1
5238-1		150 Case – DIN flange (FD)	1
2-133A	5	Seal Housing O-ring	1
5244-1X	6	Seal Housing assembly	1
Not sold separately	7	Seal sub assembly	1
2-108A	8	Seal sleeve O-ring	1
Not sold separately	9	Seal sleeve assembly	1
2760-88	10	7/8" retainer ring	1
5240-060		060 Impeller (bronze)	1
5240-75		075 Impeller (bronze)	1
5240	11	150 Impeller (bronze)	1
5240-061		060 Impeller (stainless steel)	1
5240-751		075 Impeller (stainless steel)	1
5240-1		150 Impeller (stainless steel)	1
5240-062		060 Impeller (steel)	1
5240-752		075 Impeller (steel)	1
5240-2		150 Impeller (steel)	1
4244	12	Impeller key	1

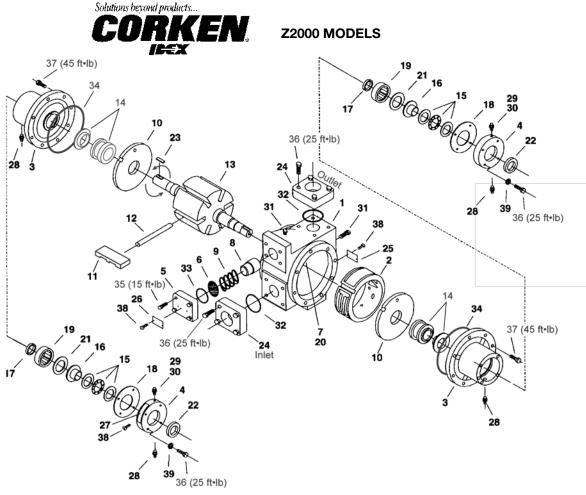
RMI Part No.	Ref No.	Description	Qty.
2-260A	13	Case O-ring	1
5248	14	Case clearance shim	1
5239-060		060-Cover	1
5239-75	15	075-Cover	1
5239		150-Cover	1
7301-140MC040A	16	M14-2 x 40mm hex head bolt	4
3226	17	Shaft key	1
3227	18	Bearing plate	1
2158	19	Grease zerk	2
2159	20	Lubricap	2
2759	21	Single row ball bearing	1
5241-1	22	Shaft	1
5000-281	23	Retainer ring	1
2758	24	Double row ball bearing	1
5102-118	25	Retainer ring	1
1006	26	Grease seal	1
1238	27	Bearing cap	1
5002-281	28	Retainer ring	1
1010-3	29	Mounting frame	1
7302-100MC020A	30	M10-1.5 x 22mm Allen head bolt	4
3189-1X_6	31	Seal assembly	1

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RMI Part No.	Ref No.	Description	Qty.
4413	1	Case	1
4414**	2	Cam	1
4416	3	Head	2
4417	4	Bearing Cap	2
1174-3	5	Relief valve cap	1
4282	6	Shim (Z2000, ZH2000)	1
4424	7	Cam key	1
4425	8	Relief valve	1
4426		Relief valve spring (Z2000, ZH2000)	1
1240	9	Relief valve spring (ZX2000, ZXH2000)	1
4427**	10	Sideplate	1
4428*	11	Vane	6
4262-X*	12	Vane driver (Push Rod)	3
4430-X2R	13	Rotor-shaft assembly	1
4431-XA2*	14	Mechanical seal assembly	2
4432*	15	Thrust bearing assembly	2
4435*	16	Bearing race mounting ring	2
4438	17	Grease seal	2
4439*		Bearing cap shim (.002) red	As req.
4439-1*	18	Bearing cap shim (.010) brown	As req.
4439-2*		Bearing cap shim (.020) yellow	As req.
2754-X*	19	Bearing	2
3253	20	Cam key pin	2

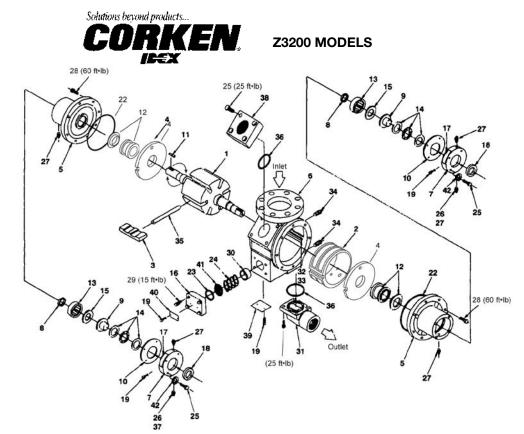
RMI Part No.	Ref No.	Description	Qty.
2760-244	21	Retainer ring	2
4441*	22	Grease seal	2
2270*	23	Shaft key–1/4" x 1 9/16"	2
4479-2	24	Flange–2" NPT	2
4479-2S		Flange–2" welded	
2649	25	Nameplate	1
4248	26	Relief valve nameplate (Z2000, ZH2000)	1
4248-1		Relief valve nameplate (ZX2000, ZXH2000)	1
1359	27	Lubrication instruction plate	2
1343	28	1/8" NPT relief fitting	4
2158	29	1/8" NPT grease zerk	2
2159	30	Lubricap	2
3442	31	1/4" NPT pipe plug	2
2-231A*	32	O-ring – flange*	2
2-224A*	33	O-ring – relief valve cap*	1
2-261A	34	O-ring – case	2
7001-031-NC125A	35	Bolt – hexagon head	4
7001-037-NC150A	36	Bolt – hexagon head	16
7001-043-NC125A	37	Bolt – hexagon head	16
7012-006-SF025E	38	Screw	8
7206-037A	39	Lockwasher	8
3193-X1		Repair Kit	1
3194-X1		Rebuild Kit	1

* Included in repair kit ** Included in rebuild kit, plus all item in repair kit

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RMI Part No.	Ref No.	Description	Qty.
4495-X2R	1	Rotor shaft assembly	1
4242**	2	Cam	1
4232*	3	Vane	6
4231**	2	Sideplate	2
4488	5	Head	2
4239	6	Case	1
4417	7	Bearing cap	2
4438	8	Grease seal	2
4435*	9	Mounting ring	2
4439*		Bearing shim (.002) red	As req.
4439-1*	10	Bearing shim (.010) brown	As req.
4439-2*	1	Bearing shim (.020) yellow	As req.
2270*	11	Shaft key	2
4431-XA2*	12	Mech. seal assembly	2
2754**	13	Bearing outer race	2
4432*	14	Thrust bearing assembly	2
2760-244	15	Retainer ring	2
1174-2	16	Relief valve cap	1
1359	17	Lubrication instruction plate	2
4441*	18	Grease seal	2
7012-006SF019E	19	Screw	8
-	20	Not shown	-
-	21	Not shown	-
2-262A	22	O-ring – Case	2
2-224A*	23	O-ring – relief valve cap	1
1240	24	Relief valve spring	1
7001-037NC150A	25	Bolt 3/8"-16 x 1 1/2" hex head	16
2158	26	1/8" NPT grease zerk	2

RMI Part No.	Ref No.	Description	Qty.
1343	27	1/8" NPT relief fitting	4
7001-050NC150A	28	Bolt-1/2-13 x 1 1/2" hex head	16
7001-031NC125A	29	Bolt–5/16-16 x 1 1/4" hex head	4
1241	30	Relief valve	1
1172-1.5		Outlet flange – 1.5" NPT	1
1172-1.5S		Outlet flange – 1.5" WF	1
1172-2	31	Outlet flange – 2" NPT	1
1172-2S		Outlet flange – 2" WF	1
1947		Outlet flange – 1.5" NPT ell	1
4243		Outlet flange – 2" NPT ell	1
4241	32	Cam key	1
3253	33	Cam key pin	1
3442	34	1/4" NPT pipe plug	1
4262-X*	35	Vane driver	3
2-234A*	36	O-ring–flange	1
2159	37	Lubricap	2
1172-1.5		Aux. inlet flange – 1.5" NPT	1
1172-15S		Aux. inlet flange – 1.5" WF	1
1172-2		Aux. inlet flange – 2" NPT	1
1172-2S	38	Aux. inlet flange – 2" WF	1
1920-3		Aux. inlet flange – blind	1
4243		Aux. inlet flange – 2" NPT ell	1
2649	39	Nameplate	1
4248	40	Relief valve nameplate	1
4242	41	Relief valve shim	As req.
7206-037A	42	3/8" Lockwasher	8
3195-X1		Repair kit	1
3196-X1		Rebuild kit	1

* Included in repair kit ** Included in rebuild kit, plus all item in repair kit

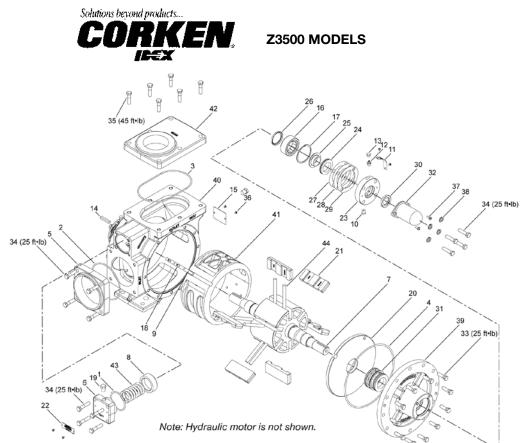
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RMI Part No.	Ref No.	Description	Qty.
2-228A*	1	O-ring	1
2-254A	2	O-ring	1
2-259A	3	O-ring	1
2-268A	4	O-ring	2
1206-3		Inlet flange – 3" NPT	1
1206-4	5	Inlet flange – 4" NPT	1
1206-3S		Inlet flange – 3" WF	1
1206-4S		Inlet flange – 4" WF	1
1207-2	6	Relief valve cap	1
1208-1X6R	7	Rotor shaft assembly	1
1224	8	Relief valve	1
13009	9	Cam key	1
1343	10	Grease relief fitting	4
1359	11	Lubrication plate	2
2158	12	Grease zerk	2
2159	13	Lubricap	2
2270*	14	Shaft key – 1/4" 1	
2649	15	Nameplate	1
2754**	16	Outer bearing	2
2760-244	17	Retainer ring	2
3253	18	Cam key pin	2
3442	19	Pipe plug – 1/4" NPT	2
3935**	20	Sideplate	2
3936*	21	Vane	6
4248	22	Relief Valve warning tag	1

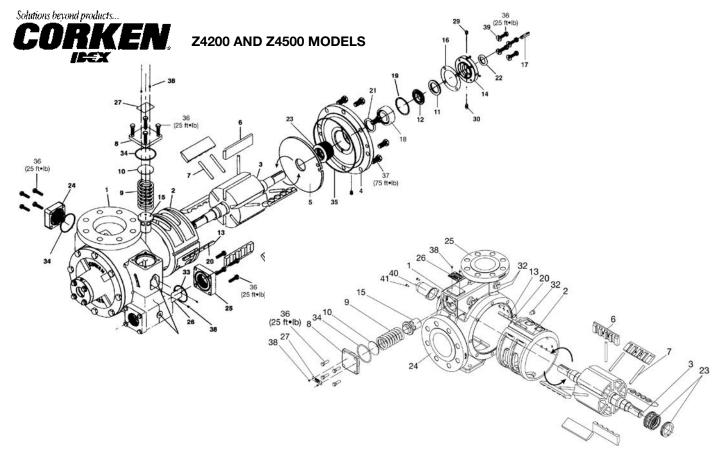
RMI Part No.	Ref No.	Description	Qty.
4417	23	Bearing cap	2
4432*	24	Thrust bearing assembly	2
4435*	25	Thrust bearing mounting ring	2
4438	26	Grease seal / Oil seal	2
4439*	27	Bearing cap shim – 0.002"	2
4439-1*	28	Bearing cap shim – 0.010"	2
4439-2*	29	Bearing cap shim – 0.020"	2
4441*	30	Grease seal	2
4431-XA2	31	Mechanical seal assembly	2
4985	32	Coro-Vane shaft cover	1
7001-037NC125A	33	Hex head bolt	24
7001-037NC150A	34	Hex head bolt	16
7001-043NC150A	35	Hex head bolt	6
7012-006SF019E	36	Screw	9
7012-010SF050E	37	Screw	2
7206-037A	38	Lockwasher – 0.375"	8
5534	39	Head	2
5537	40	Case	1
5539**	41	Cam	1
5538	42	Outlet flange – 3" NPT Elongated	1
5538-3S	1	Outlet flange – 3" WF Elongated	1
5548	43	Spring	1
5554-X*	44	Vane driver	6
3195-X2		Repair Kit	1
3196-X2		Rebuild Kit	1

* Included in repair kit ** Included in rebuild kit, plus all item in repair kit

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RMI Part No.	Ref No.	Description	Qty.
5522	1	Case Z4500	1
4442	1	Case Z4200	1
4443**	2	Cam	1
4444-X2R	3	Rotor-shaft assembly	1
4445	4	Head	2
4446**	5	Sideplate	2
4448*	6	Vane	6
4449-X*	7	Vane driver	5
4450	8	Relief valve cap	1
4451	9	Relief valve spring	1
4452	10	Shim	1
4453*	11	Thrust bearing assembly	2
4454*	12	Bearing race mounting ring	2
4455	13	Cam key	1
4456	14	Bearing cap	2
4457	15	Relief valve	1
4458*		Bearing cap shim (.002) red	As req.
4458-1*	16	Bearing cap shim (.010) brown	As req.
4458-2*		Bearing cap shim (.020) yellow	As req.
4459*	17	Shaft key—5/16 x 1-3/4	1
4460-X*	18	Roller bearing	2
2760-283	19	Retainer ring	2
3253	20	Cam key pin	5
4462	21	Grease seal	2
4463*	22	Grease seal	2
4464-XA2*	23	Mechanical seal assembly	2

RMI Part No.	Ref No.	Description	Qty.
1172-2		Aux. inlet flange—2" NPT	1
1172-2S	24	Aux. inlet flange—2" WF	1
1920-3		Aux. inlet flange—blind	1
4479-2S	25	Discharge flange—2" WF	2
4981-2		Discharge flange—2" NPT	2
2649	26	Nameplate	1
4248	27	Relief valve nameplate	1
1359	28	Lubrication instruction plate	2
1343	29	1/8 NPT relief fitting	4
2158	30	1/8 NPT grease zerk	2
2159	31	Lubricap	2
3442	32	1/4 NPT pipe plug	2
2-231A*	33	O-ring—discharge flange	2
2-234A*	34	O-ring—auxiliary inlet flange	1
2-270A	35	O-ring—case	2
7001-037NC150A	36	Bolt—hexagon head	24
7001-062NC125A	37	Bolt—hexagon head	16
7012-006SF019E	38	Screw	8
7206-037A	39	Lockwasher	8
4985	40	Shaft cover	1
7012-010SF050E	41	Screw	2
3197-X1		Repair Kit	1
3198-X1		Rebuild Kit	1

* Included in repair kit ** Included in rebuild kit, plus all item in repair kit

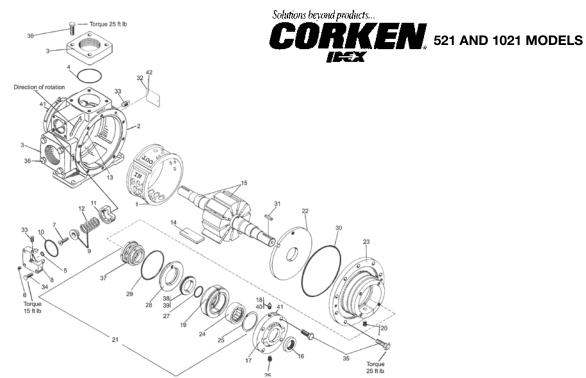
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RMI Part No.	Ref No.	Description	Qty.	RMI Part No.	Ref No.
1162-2	1	Cam (521)	1	1769-XA*	21
1201-2		Cam (1021)	1	1769-XRA*]
2832	2	Case (521)	1	1163-2*	22
2841		Case (1021)	1	1209-1*	
1172-2.5		2.5 Flange (521)	1	1161-4	23
1172-2	3	2" Flange (521)	1	1206-4]
1206-3		3" Flange (1021)	2	2754-X*	
2-234A*		Flange O-ring (521)	2	2755	24
2-245A*	4	Flange O-ring 3" (1021)	2	2754	1
2-249A*		Flange O-ring 4" (1021)	2	2760-244	25
2-112A*	5	Adjusting screw O-ring	1	1343	26
2590	6	Flush steel plug 1/8" NPT	1	2-128A	27
2252	7	Relief valve adjusting screw	1	1822	28
1174	8	Valve cap (521)	1	2-240A	29
1207		Valve cap (1021)	1	2-261A*	30
1242-X	9	Relief valve spring & guide (521)	1	2-268A*	
1227		Relief valve spring guide (1021)	1	2270	31
2-224A*	10	Relief valve cap O-ring (521)	1	2949	32
2-228A*		Relief valve cap O-ring (1021)	1	3442	33
1241	11	Relief valve (521)	1	7001-031NC125A	34
1224		Relief valve (1021)	1	7001-037NC125A	
1242	12	Relief valve spring (521)	1	7001-037NC125A	35
1226		Relief valve spring (1021)	1	7001-037NC125A	
1170	13	Cam key (521)	1	7001-037NC150A	36
1309		Cam key (1021)	1		37
1168-7*	14	Blade (521)	10		38
1308-9*		Blade (1021)	10	2-227A*	39
1166-1X1R	15	Rotor & shaft assembly (521)	1	2159	40
1208-1X1R		Rotor & shaft assembly (1021)	1	1359	41
1358*	16	Grease seal	2	7003-004DR0198	42
1164-1	17	Bearing cap	2	2904-X2	
2158	18	Grease zerk 1/8" NPT	2	2906-X2	
1769	19	Bearing housing	2	* Included in repair	Lit
1343	20	Relief fitting (seal vent)	2	** Included in repair ** Included in rebui	

RMI Part No.	Ref No.	Description	Qty.
1769-XA*	21	Seal assembly	2
1769-XRA*		Seal assembly – replacement	2
1163-2*	22	Side plate (521)	2
1209-1*		Sideplate (1021)	2
1161-4	23	Head (521)	2
1206-4		Head (1021)	2
2754-X*		Roller bearing – complete	2
2755	24	Bearing inner race	2
2754		Bearing outer race	2
2760-244	25	Retainer ring	2
1343	26	Relief filling (grease)	2
2-128A	27	Shaft O-ring	2
1822	28	Seat adapter plate	2
2-240A	29	O-ring BUNA	2
2-261A*	30	Case O-ring (521)	2
2-268A*		Case O-ring (1021)	2
2270	31	1/4" key	2
2949	32	nameplate	1
3442	33	1/4" NPT plug	1
7001-031NC125A	34	Hex head bolt 5/16-18 x 1 1/4" (521)	4
7001-037NC125A		Hex head bolt 3/8-16 x 1 1/4" (1021)	4
7001-037NC125A	35	Hex head bolt 3/8-16 x 1 1/4 (521)	28
7001-037NC125A		Hex head bolt 3/8-16 x 1 1/4" (1021)	32
7001-037NC150A	36	Hex head bolt 3/8-16 x 1 1/2"	8
	37	Retainer	2
	38	Seal seat	2
2-227A*	39	Seal seat O-ring	2
2159	40	Lubricap #2	2
1359	41	Lubrication instruction tag	2
7003-004DR0198	42	Round head plated drive screw 4 x 3/16	2
2904-X2		Repair Kit for 521	1
2906-X2		Repair Kit for 1021	1

us all item in repair kit

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance



SMITH D SERIES CYLINDER FILLING PUMPS

Economical pump for low volume filling applications.

- Built in Bypass (Set@90PSID)
- Built in Strainer
- Super Seal Mechanical Seal



DW1ZM-3

RMI Part No.			Capacity			
Pump, Motor & Switch	Pump Only	Motor Only	40 PSID	70 PSID	Inlet/ Outlet	Motor
DW1ZM-3	DW-1Z	EM-1-3	8.5	7	3/4"	1 HP 1 PH 115/230V
DWHZM-5	DW-HZ	EM-1.5-3	13.5	12	1"	1.5 HP 1 PH 115/230V

SMITH MEDIUM AND LARGE CAPACITY PUMPS

Higher capacity pumps for multiple cylinder filling or truck filling applications.

- Balanced 3-Gear Design
- Super Seal Technology
- No Lubrication Required
- Direct Coupled No Belts



MCZZ-B

RMI Pa	Capa	city	Inlet/		
Pump and Base Plate	Pump Only	40 PSID	70 PSID	Outlet	Motor
MC1044Z-B	MC1044Z	17	14	1 1/2"	2 HP
MC1044HZ-B	MC1044HZ	30	25	1 1/2"	3 HP
MC2Z	MC2Z	42	35	2 1/2"	5 HP
MC2QZ	MC2QZ	48	38	2 1/2"	7.5 HP
MC3Z-B	MC3Z	84	70	2 1/2"	7.5 HP

*Recommended for applications over 125 PSID

SMITH E SERIES

Economical cylinder pump for low volume liquid transfer. Can be used with internal combustion engines for portable liquid transfer applications. Can be used with built in by-pass or utilize separate external by-pass.

- Built in Bypass (set at 90 PSID)
- Built in Strainer
- Super Seal Mechanical Seal



EG1Z-7H

RMI Part No.			Capacity			
Pump & Motor	Pump Only	Motor Only	40 PSID	70 PSID	Inlet/ Outlet	Motor
EG1ZM-1-3DR	EG-1Z	EM-1-3B	8.5	7	3/4"	1HP 1PH
EG1Z-7H	EG-1Z	GAS-7H	8.5	7	3/4"	3.5HP Honda
ECHZM-5DR	EC-HZ	EM-1.5-3B	13.5	12	1"	1.5HP 1PH
ECHZ-5	EC-HZ	EM-1.5-3	13.5	12	1"	3.5HP Honda

SMITH AUTOGAS PUMP



- Developed for autogas vehicles requiring higher than normal differential pressure.
- Balanced loading design with hardened gears
- Superseal is standard
- 3/4" inlet and outlet allows for economical installation
- 1HP and 1.5HP motors only require single phase power

RMI F	Capacity						
Pump & Motor	Pump Only	Motor Only	40 PSID	70 PSID	Inlet/ Outlet		
GC1ZL-1-3DR	GC-1ZL	EM-1-3B	8.5	7	3/4"	1HP 1PH	
GC1ZL-1-5DR	GC-1ZL	EM-1.5-3B	8.5	7	3/4"	1.5HP 1PH	

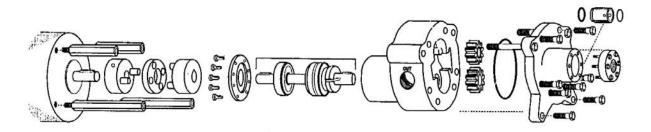
* Can not maintain high differntial with 1HP motor for extended periods. RMI recommends the 1.5HP motor when using for dedicated Autogas applications.

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RECOMMENDED SPARE PARTS FOR SMITH PUMPS



	Pump Model						
Description	DW-1Z	DW-HZ	EG-1Z	EC-HZ	GC-1ZL	MC-1044Z	MC-1044HZ
Shaft Seal Assembly	E-100Z	E-100HZ	E-100Z	E-100HZ	MC-100Z	MC101Z	MC-101Z
Drive Gear	EG-5	EG-5H	EG-5	EG-5H	649-5LZ	1044-89-8	1044-89-6
Idler Gear w/Bushing	EG-6	EG-6H	EG-6H	EG-6H	649-6LZ	1044-90-8	T-6
By-Pass Valve Cartridge	E-20 ASSY	E-20 ASSY	E-20 ASSY	E-20 ASSY	Х	Х	Х
Strainer Screen	D-21	D-21	E-21	E-21	Х	Х	Х
Cover O-Ring	6230-14	6230-14	6230-28	6230-28	Х	Х	Х
Shaft Bushing	Х	Х	Х	Х	649-11	TS-11	TS-11
O-Ring for Shaft Bushing	Х	Х	Х	Х	Х	6227-19	6227-19
Complete Drive Coupling	VC-20	VC-20	VC-20	VC-30	VC-20	Х	Х
Coupling Insert	FD-20	FD-20	FD-20	FD-30	FD-20	Х	Х

Must Specify Serial Number when ordering parts.

Contact RMI Customer Service for details on our exchange program on Smith pumps and seal assemblies. When ordering a replacement Smith pump, you will receive a factory rebuilt unit with one (1) year warranty.

Order the Following Exchange Pump Part Number	Return the Following for Credit Core Part Number
DW1Z-EX (DW-1Z)	DW1Z-RTV
DWXZ-EX (DW-HZ)	DWXZ-RTV
EG1Z-EX (EG-1Z)	EG1Z-RTV
ECHZ-EX (EC-HZ)	ECHZ-RTV
MC1044Z-EX (MC-1044Z)	MC1044Z-RTV
MC1044HZ-EX (MC-1044HZ)	MC1044HZ-RTV
MC2Z-EX (MC2Z)	MC2Z-RTV
MC2QZ-EX (MC2QZ)	MC2QZ-RTV
MC3Z-EX (MC3Z)	MC3Z-RTV
MCAT3R-EX (MCAT-3XR)	MCAT3R-RTV
MCAT3L-EX (MCAT-3LX)	MCAT3L-RTV
SEAL	KITS
E100Z-EX	E100Z-RTV
E100HZ-EX	E100HZ-RTV

Factory rebuilt exchange pump

Tel: 800-628-5044

RAY MURRAY, INC.

Order online at www.raymurray.com or call for personal assistance

115 **Neptune Meters and Registers**



FILL STATION METERS





• New 1" size with 3/4" FNPT flanges

CK & PLANT METERS AND REELS

- New aluminum design
- New type 4D MD is 40% lighter than previous ductile • iron design
- Available with ATC Temperature Control

400051 Series

RMI Part No.	Inlet Outlet	Capacity	ATC	Register	Weight (Lbs.)
400051-001	3/4"	3-18 gpm	no	631 Non Print	24
400051-002	3/4"	3-18 gpm	yes	631 Non Print	29
400051-801	3/4"	3-18 gpm	no	833 Print	41

NEPTUNE DISPENSER METER WITH **ELECTRONIC REGISTERS**

RMI Part No.	Inlet Outlet	Register	ATC
RL100-208AMMBS	3/4"	E1000	NO
RL100-10M0MMFS0		MIDCOM LT	NO
RL100-10M0MMES0		MIDCOM LT	YES

BULK TRUCK / PLANT METERS 11/2" AND 2"



Neptune 1-1/2" and 2" liquid meter for bulk trucks and plants. Standard meter comes with ticket print register and ATC - temperature compensating unit.

1-1/2" TYPE 4D

RMI Part No.	Size	Capacity	ATC	Register	Weight
90041-101	11/2"	12-60 gpm	yes	print	133 lbs.

2"	TΥ	Έ	4D
----	----	---	----

RMI Part No.	Size	Capacity	ATC	Register	Weight
400069-101	2"	20-100 gpm	yes	print	137 lbs.

Tel: 800-628-5044

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or call for personal assistance



Model 833



Model E4000

RMI Part No.	Model	Size	Meter Register Type
880010-000	831	1¼", 1½", 2"	Direct Read
880030-000	833	1", 1¼", 1½", 2"	Ticket Printing
100498-009	631	3/4"	Code AEAAD
100498-016	631	1"	Code AAAAD
100553-201	631	M	ask

ELECTRONIC REGISTERS WITH METERS



E4000-SISRSAS1M

Electronic Register

- Printer
- Solenoid Valve Electronic Temperature
- Compensator Adapter **Print Priced Invoices**

Fax: 800-243-8341

- · Can be used with
- handheld devices

NEPTUNE METER WITH ELECTRONIC REGISTER

RMI Part No.	Model	Size	Meter Register Type
E4000-SISRSAS1M	E4000	11⁄2"	Electronic
E4000-SISRSASAM	E4000	2"	Electronic



Repair Service / Registers, Meters, Pumps and Compressors **116**

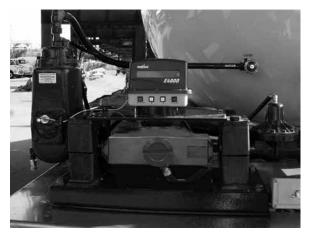


NEPTUNE/SCHLUMBERGER MASS FLOW METERS (PLANT OR TRUCK)



Bulk Plant Application

Provides continuous and accurate direct measurement of mass, density, temperature, volume and percent solids over the flow range of 15-10,000 lbs/min (3.5-2,365 GPM). Measures mass flow of liquids, therefore, density, pressure, temperature, viscosity, and flow profile variations have no effect on the accuracy of the meter's measurement. When the mass flow meter is combined with a vapor eliminator, flow control valve and electronic register, it has weights and measure approval for custody transfer of refined fuels such as LPG, NH3, Fuel Oils, and others.



Truck Application

ADVANTAGES

- No weigh scales, and installation costs
- Faster vehicle on-loading and off loading
- No volumetric temperature compensation needed
- Precise delivery of costly products under varying conditions
- Multi-compartment loading with high accuracy (0.15% of rate)
- Reduced maintenance, no moving parts (in flow meter)



FACTORY AUTHORIZED PUMP AND WARRANTY METER REPAIR SERVICE BLACKMER/NEPTUNE/CORKEN/LIQUID CONTROLS REGISTER REPAIR SERVICE

REPAIR: Fast and expert repair of your old register with an average turn around of 4 days. Temperature compensators repaired and updated. Calibration after repair must be handled by the customer.

NEPTUNE & VEEDEROOT REGISTER EXCHANGE PROGRAM: Receive a rebuilt register - Return the old register. Pay a standard exchange fee only. Upon placing an order for a rebuilt register, RMI will invoice for parts below:

RMI Part No.	Description
833EX	Neptune Register Exchange
833CORE	Register Core - returned by customer
D3311EX	Veederoot Register Exchange
D3311CORE	Register Core - returned by customer

When the customer register is returned, the account will be credited for RMI part # 833CORE or D3311CORE.

Note: Customer is responsible for shipping costs in & out. PARTS: Full stock of parts for the repair of pumps, meters, registers, and compressors, and valves. (Blackmer/Neptune/Corken/Liquid Controls/Fisher)

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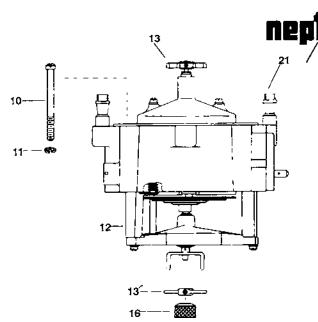
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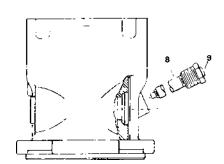
Fax: 800-243-8341

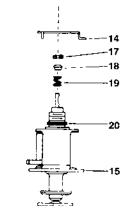
TRUCK & PLANT METERS AND REELS

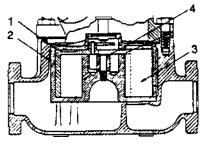
117 Neptune Meter Parts - 11/4-2" Type 4D & 4D-MT

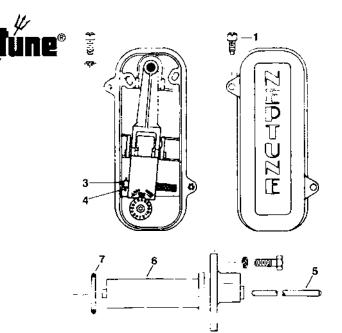












TEMPERATURE COMPENSATOR

_							
K	Deut Description	RMI Part No.					
Key	Part Description	1¼"	1½"	2"			
1	Screw, Cover	9287-003	9287-003	9287-003			
2	Mounting Plate and Lever Arm Assy.	86665-000	86665-000	86665-000			
3	Pin. Lever Arm Lock	86661-001	86661-001	86661-001			
4	Cotter Pin¼6" dia. x ¾", Brass	86973-000	86973-00	86973-000			
5	Pin, Thermostat	86648-000	86648-000	86648-000			
6	Thermostat	86646-000	86646-000	86646-000			
7	O-ring	100139-005	100139-005	100139-005			
8	Thermometer Well, Complete	86666-702	86666-702	86666-702			
9	Cover	83732-000	83732-000	83732-000			
10	Screw,1/4", 20 x 21/2, Fil Hd Steel	8302-107	8302-107	8302-107			
11	Lockwasher, ¼" Steel, Small	88721-000	88721-000	88721-000			
12	Adaptor Unit Complete	86602-005	86602-005	86602-005			
13	Star Assy.	82976-001	82976-001	82976-001			
14	Adaptor	85006-000	85006-000				
15	Gear Train Complete	83501-000	84981-000	83502-000			
16	Nut Stuffing Box	83536-000	83536-000	83536-000			
17	U-Cup, Shaft Seal	100025-002	100025-002	100025-002			
18	Expander	83539-000	83539-000	83539-000			
19	Stuffing Box Spring	83540-000	83540-000	83540-000			
20	0-ring	100138-003	100138-003	100138-003			
21	Mounting Stud	84435-000	84435-000	84435-000			
1-21	Compensator Complete	86600-201	86600-204	86702-301			

MEASURING CHAMBER

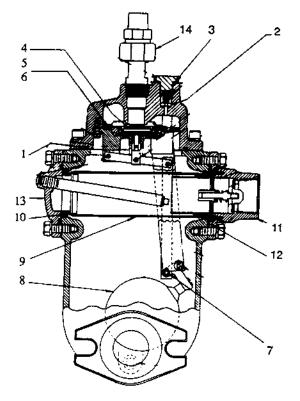
Van	Part Description	RMI Part No.			
Key		1 ¹ /4"	1½"	2"	
1	Gasket	4862-008	4862-008	84806-000	
2	Measuring Chamber Complete	43260-101	83271-101	45806-101	
3	Diaphragm	43271-000	83277-000	42312-001	
4	Roller, Control	43275-000	43275-000	42316-001	

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Neptune Meter Parts -118 1 1/4-2" Type 4D & 4D-MT



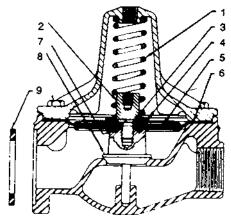
Vapor Release and Strainer



VAPOR RELEASE AND STRAINER

VAPOR RELEASE AND STRAINER

Key	Description	RMI Part No.			
Rey	Description	1¼"Đ1½"	2" (4D)	2" (4D-MT)	
1	Gasket O-ring	100139-022	100139-022	100139-022	
2	Valve Assembly Bypass	100237-001	100237-001	100237-001	
3	0-ring,1/16" Sect x 11/16" ID	100138-006	100138-006	100139-006	
4	Main Valve Complete	89274-006	89274-006	89274-006	
5	Sleeve, Valve	82446-005	82446-005	82446-005	
6	Piston, Seal	83179-000	83179-000	83179-000	
7	Cotter Pin,¼6" dia x½", Brass	41402-000	41402-000	41402-000	
8	Float, Complete	82476-001	82476-001	82476-001	
9	Strainer and Gasket Assembly (80-mesh)	101433-704	101405-004	101405-004	
10	Gasket, Strainer, O-ring	100139-032	100139-038	100139-038	
11	Inlet Check Valve, Complete (soft seal)	84983-704	84813-702	84813-702	
12	Gasket, O-ring	100139-010	84818-000	100139-018	
13	Strainer Cover (with thermometer well)	83485-702	84811-701	400074-001	
14	Valve, Vapor Return Check (straight type)	84828-000	84828-000	84828-000	
	Strainer cover (without thermometer well)	83486-705	84812-702		
	Complete Gasket Kit	101757-001	101758-001		



Differential Valve

Tel: 800-628-5044



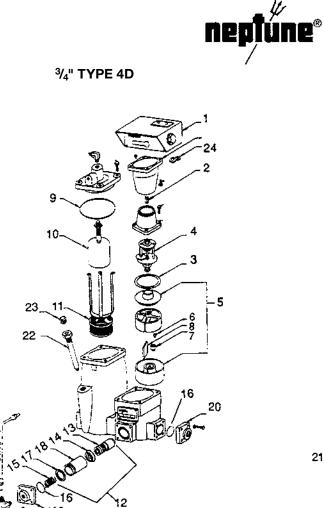
DIFFERENTIAL VALVE

Kow	Decorintion	RMI Part No.			
Key	Description	1¼"Ð1½"	All 2"		
1	Spring, Valve	83775-000	83775-000		
2	Screw, Diaphragm	83774-002	83774-002		
3	Lockwasher, ⁷ / ₁₆ " Steel	41012-002	41012-002		
4	Retainer, Spring	83773-000	83773-000		
5	Retainer, Diaphragm	83772-002	83772-002		
6	Diaphragm	1000624	1000624		
7	Gasket, O-ring	100139-001	100139-001		
8	Valve Stem Assembled	83768-002	83927-002		
9	Gasket, Flange	82060-000	84818-000		
	Diaphragm Complete	83946-006	1001569		

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119 Neptune Meter Parts - 3/4" - 1"

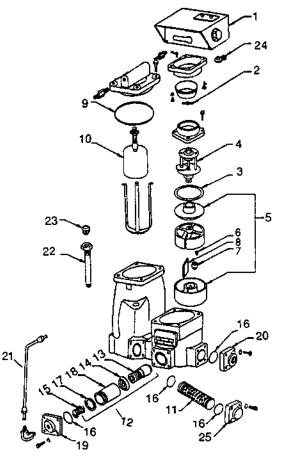




PARTS - NEPTUNE METERS

Van	Description	RMI F	Part No.
Key	Description	3/4"	1"
1 2 3 4 5 6 7 7 8 9 10	Register Complete 600 Series/Gal.	100498-009	100498-016
2	Coupling and Key Assembly	100711-004	82976-001
3	Main Case Gasket	4861-016	4861-016
4	Gear Train Complete	80905-012	80905-017
5	Measuring Chamber Complete	42075-101	101748-001
6	Seal Pin	42792-000	42792-000
7	Control Roller	42086-000	42086-000
8	Diaphragm	42791-000	42791-000
9	0-Ring	100139-012	100139-012
	Float Assembly	87188-001	87188-001
11	Strainer	87185-000	101738-001
12	Differential Valve Kit Complete	100028-001	100028-001
13	Piston	100160-002	100160-00

1" WITH ³/₄" FPT CONNECTIONS TYPE 4D AND TYPE 4D-MD



PARTS - NEPTUNE METERS

Van	Description	RMI F	Part No.	
Key	Description	³ /4"	1"	
14	U Cup, Seal	100025-008	100025-008	
15	Spring	100024-001	100024-001	
16	Cover O-Ring	100139-007	100139-007	
17	Sleeve Sealing O-Ring	100139-006	100139-006	
18	Valve Sleeve	100027-003	100027-003	
19	Cover Flange	400020-702	400020-702	
20	Flange, Inlet or Outlet	87180-700	87180-700	
21	Tube Assembly	N/A	87196-001	
22	Thermometer Well Assy.	86666-702	86666-702	
23	Cover, Thermometer Well	83732-000	83732-000	
24	Change Gears (Give Number of Teeth to Designate Last 2 Digits of Part #)	81230-0	81230-0	
25	Strainer Cover	N/A	400020-701	
	Complete Gasket Set	101756-001	101756-001	

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LIQUID CONTROLS COUNTERS

COL
C
COMERCIES



Counter/Printer



D1111Counter w/P7785 Pulser

0000



MA15/MSA30

RMI Part No.	Description	MA4	MA5	MA7	MA15
D3311	Printer Counter	Х	Х	Х	Х
D1111	Non-Print Counter	Х	Х	Х	Х

MA5/MA7 METERS

MA5 and MA7 are designed for LP gas and NH_3 truck and bulk loading applications. Gallon Register with totalizer, strainer, differential valve, vapor eliminator, temperature volume compensator and ticket printer standard.

MA5/MA7 METERS

RMI Part Numbe	r Inlet/ Outlet	Maximum Capacity	Minimum Capacity	Ticket Printer	Temp. Comp.
MA5-GY10-1.5	11/2"	60	12	Yes	Yes
MA7-GY10-2	2"	100	20	Yes	Yes
MA7-GY10-LCR2	2"	100	20	Slip	ETVC

MA15/MSA30 METERS

MA15 and MSA30 meters have large capacity for bulk plant metering. Includes vapor eliminator, strainer, temperature volume compensator and differential valve. Ticket printer optional.

MA15/MSA30 METERS

	RMI Part	Inlet/Outlet	Maximum	Minimum	Ticket
	Number	iniet/outiet	Capacity	Capacity	Printer
I	MA15-GY10-3	3" x 2" NPT	200	40	Yes
ľ	MA15-CY10-3	3" x 2" NPT	200	40	No
I	MSA30-G10	3" 300# Flange	350	15	Yes
I	MSA30-C10	3" 300# Flange	350	15	No

TEST METER W/CART & ACCESSORIES

Accuracy is assured— Meters are NIST Certified.
Complete Operator's

Manual and Reference Meter Test Report Included.

• LC's 2" MA-7 LPG (20-100

TEST METER W/CART & ACCESSORIES

Description

Meter / Cart / Accessories

GPM) Meter Standard.Optional Reference Meters

Available.

RMI Part No.

MA7MM

<image>

MSA30GY10



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Fax: 800-243-8341

MA7MM

TRUCK & PLANT METERS AND REELS

Liquid Controls - MA7, MA15 and MA30 Meters 121



0627 Screw, .375-16 X 1.75 (11 Per cover)

0125 Cover, Rea

0611 Screw, .250-20 X 1.00 (8 Per plate)

NOTE:

Numbers shown are ITEM numbers, not Part Numbers. Refer to the Bill of Materials supplied in the red Owner's Information Packet to locate the PART NUMBER associated with these ITEM NUMBERS.

NOTE: Meter components may appear different between models.

0 0 0 0153 Rotor, Blockin 0528 Key, Woodruff (1 Per rotor) 0202 Adjuster Assy O-Ring, 12" I.D. BUNA N (2) 0364 Plate Adjuster Mountin 0161 Gear Blocking Roto 0609 Screw, #6-32 X .25 (2) 0326 Driver Packing gland 0606 Screw, .250-20 X .375 0110 Housing 0382 Shaft, Adjuster Drive 155 Rotor ent (2) 0574 Ring. Retaining 0144 Plate, Bearing (2) 0362 Plate Assy 163 Gear, Displace otor; tapered (2) 0771 Washer, Rotor gear (2) 0773 Washer, Lock, .250 (3) 0673, Screw ,250-20 X 1.00 (3) 123 Co .0566 Pipe Plug. .375-18 NPT (1 Per cover) 0850 Label 0630 Screw #10-24 X .38 (4) Packing Gland Assy. 0310 Bushing, Adjuster Drive

		RMI Part No.			
Item No.	Description	MA7	MA15	MSA30	
0310	Adjuster Drive Bushing	41786	41786	41786	
0630	Screw	09093	09093	04494	
0850	Label	49444	49444	49444	
0362	Plate Assembly	49390	49390	46169	
0574	Retaining Ring	02188	02188	02188	
0382	Adjuster Drive Shaft	48287	48287	48540	
0606	Screw	07295	07295	07295	
0609	Screw	00362	00362	00362	
0364	Adjuster Mounting Plate	42660	42660	42660	
0202	Adjuster Assembly	49403	49403	49403	
0566	Pipe Plug	06790	06790	04759	
0250	Packing Gland	49561	48616	48616	
0123	Cover	48301	501033	44103	
0673	Screw	09027	09084	07483	
0773	Washer	49348	49348	06174	
0771	Washer	48348	48348	48348	
0163	Gear	47646	47422	47388	
0326	Driver Packing Gland	48756	48756	48844	
0161	Gear	47633	47421	47385	
0144	Bearing Plate	47668	46732	44102	
0528	Woodruff Key	48332	501030	07229	
0155	Displacement Rotor	48366	501028	47575	
0153	Blocking Rotor	48306	501027	47574	
0110	Housing	49445	501154	501184	
0430	0-Ring	09258	09200	09324	
0611	Screw	09079	09079	09098	
0125	Rear Cover	48302	501034	501183	
0627	Screw	09080	09080	09085	

Tel: 800-628-5044

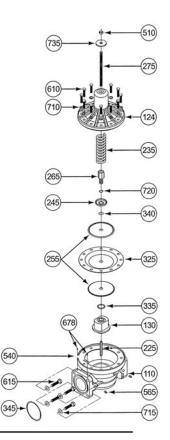
RAY MURRAY, INC.

Order online at www.raymurray.com or call for personal assistance



A2843 DIFFERENTIAL VALVE

A2843 DIFFERENTIAL VALVE						
Item No.	Description	RMI Part No.				
110	Valve Housing Assembly	47096				
124	Valve Cover	47302				
130	Piston	49947				
235	Spring	47305				
245	Spring Retainer	47307				
255	Back-up Plate	47308				
265	Stand Off	47309				
275	Rod Assembly	47098				
325	Diaphragm	47306				
335	0-Ring	06856				
340	0-Ring	07900				
345	0-Ring	07838				
510	Nut	06055				
565	Plug	04759				
610	Screw	04655				
615	Screw	06851				
678	Screw	00306S				
710	Washer	04656				
715	Washer	04498				
720	Lock Washer	06070				
735	Washer	06663				



A2885 INLET CHECK VALVE

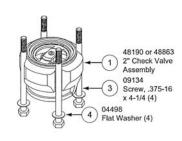
Model A2885 (For LPG)

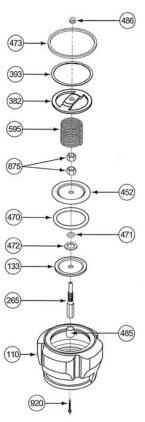
(Used on meter sold after December 19,1991 beginning with Serial No. 225233)

2" Check Valve Assembly

A2885 CHECK VALVE PARTS

Item No.	Description	RMI Part No.
486	Bearing	N/A
473	O-Ring	06854
393	Retaining Ring	09137
382	Spring Holder	48337
595	Compressor Spring	09138
875	Lock Nut	09143
452	O-Ring Retainer	47974
470	0-Ring	09131
471	0-Ring	09140
472	Spacer	47295
133	Piston	47975
265	Valve Stem	N/A
485	Bushing	07867
110	Housing	47973
920	Valve Core	N/A





TRUCK & PLANT METERS AND REELS

Tel: 800-628-5044

RAY MURRAY, INC.

Fax: 800-243-8341

Order online at www.raymurray.com or call for personal assistance RMI Part No.

42987

06847

48497

A3430

A3431

A3432

A3439

06798

42987

06057

04474

A3340 A3366A

Х

09335

09204

A3430

A3431

A3432

A3439

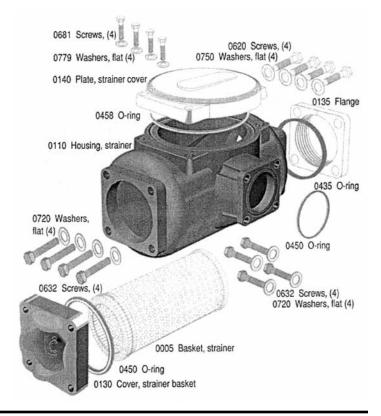
09201

44423

07292

04474

STRAINER ASSEMBLY



Common Strainer Assembly Parts

A2343A

48299

06847

04498

A2430

A2431

A2432

A2439

09338

45420

04444

06854

Description

Strainer Cover

Strainer 40 Mesh

Strainer 80 Mesh

Strainer 100 Mesh

Strainer 200 Mesh

Cover-Thermowell

0-Ring

Washer

0-Ring

Screws

0-Ring

Item No.

0140

0458

0720

0005

0005

0005

0005

0450

0130

0620

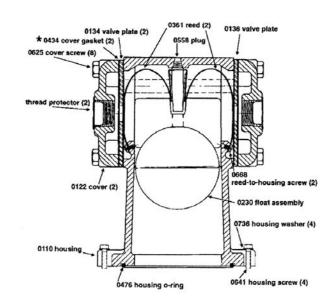
0435

ALUMINUM HIGH MOUNT AIR AND VAPOR ELIMINATORS

Common vapor Emmator Parts							
Item No.	Description	RMI Part No.					
0110	Housing	49490					
0136	Valve Plate	42822+42824					
0434	Cover Seal	42823					
0122	Cover	48329					
0618	Screw	06797					
0218	Baffle Cup	48421					
0230	Float Assembly	501040					
0625	Screw	09080					
0134	Valve Plate	42822					
0361	Reed	48571					
*not shown	Relief Valve	H124					

Common Vanor Eliminator Parts

Item numbers shown. Refer to Bill of Material supplied with your meter/air eliminator for Part Numbers. Always use Part Numbers (not item numbers) when ordering replacement parts.



Ray Murray Inc. Edition 11 0

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance



Electronic Metering Systems -Truck Mounted



8000 Register

Cab mounted computer printer and data transfer stystem allows access of up to 50,000 complete customer records.



MID-COM 8000 Computer



TRUCK MOUNTED ELECTRONIC METERING SYSTEMS



E:COUNT

Can be mounted on any model meter. Works with 8,000 or Smartlink Systems

- Large easy to read display
- Self-contained calibration and setup





Offers real solutions for pump and print applications.

- Easy to use, run, stop, print, shift print rotary switch.
- 4 Product selections.
- Operates with or without lap pad.
- Increased accuracy with electronic temperature control.

LCR-3

Offers all the advantages of the LCR-II plus the following:

- 24 Product calibration factors.
- Price extended delivery ticket.
 - Allows download of customer information and upload to backoffice system.





LIQUID CONTROLS Lectro-Count LCR System LCR-11





Tel: 800-628-5044

RAY MURRAY, INC.

LIQUID CONTROLS

Lectro Count 3 TM

RAM System

(2 components)

Order online at www.raymurray.com or call for personal assistance Fax: 800-243-8341

TRUCK & PLANT METERS AND REELS

Master Distributor for 125 **All Hannay Reel Products**







Voltage for electric rewind

• 90° or straight swivel joint

Size and thread of outlet riser

HOW TO ORDER: SPECIFY ALL ITEMS

- Complete series and model number
- All assemblies are also available in stainless Location of inlet/outlet
- and rewind motor when facing hose connection
- steel (SS prefix) or aluminum (SB prefix) construction

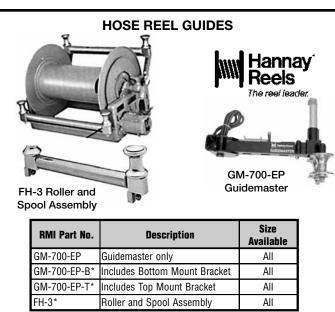
motor



he reel leader.



Standard Guide-Master Guide-Ma Electric Bottom Too			_ I RMI Part		Hose Capacity of Reel in Feet			Reel Dimensions in Inches																						
Reel	Mount	Top Mount	Number	I.D.	³ /4"	1"		Dimensi	ons E, F	and G a	re overa	ll envelo	ope dime	ensions																
neer	WOUIIL	WOUIIL		0.D.	1 ⁹ / ₃₂ "	1 ⁹ / ₁₆ "	A	В	C	E	F	G	H	J	K															
			28-23-24	2	25	140	25 ¹ / ₂ "	20"	10 ¹ / ₂ "	23"	32"	23"	12"	19"	6 ¹ / ₂ "															
		EPBGMT			30-23-24	2	50	150	27 ¹ / ₂ "	22"	10 ¹ / ₂ "	23"	34"	23"	12"	19"	6 ¹ / ₂ "													
			32-33-24	2	75	175	29 ¹ / ₂ "	24"	10 ¹ / ₂ "	23"	36"	23"	12"	19"	6 ¹ / ₂ "															
			22-28-29	2	75	200	19 ¹ / ₂ "	13 ¹ / ₂ "	10 ¹ /2"	28"	26"	30	14 ³ /4"	26 ¹ / ₂ "	6 ¹ / ₂ "															
EPB	EPBGMB		22-25-26	2	10	130	19 ¹ / ₂ "	13 ¹ /2"	10 ¹ /2"	25"	26"	27"	15"	25"	6 ¹ / ₂ "															
								1	1										24-25-26	2	30	150	21"	15 ¹ / ₂ "	10 ¹ /2"	24"	24 ¹ / ₈ "	27"	15"	25"
	1 +	26-25-26	2	75	175	23"	17 ¹ /2"	10 ¹ /2"	25"	30"	27"	15"	25"	6 ¹ / ₂ "																
		22-33-34	2	50	150	19"	13 ¹ /2"	10 ¹ /2"	31 ³ /4"	26 5/8"	33 ⁵ / ₈ "	17 ³ /4"	31"	6 ¹ / ₂ "																
			18-33-34	2	10	130	15"	9 ¹ / ₂ "	10 ¹ /2"	31 ³ /4"	22 ⁵ / ₈ "	33 ⁵ / ₈ "	17 ³ /4"	31"	6 ¹ / ₂ "															



*Specify reel frame dimensions and RMI Reel Model No. for proper match

Tel: 800-628-5044

STATIC GROUNDING REELS



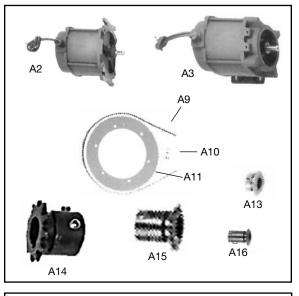
- · Safe & reliable for grounding bobtails & transports.
- Heavy Duty Reel for extended life & durability

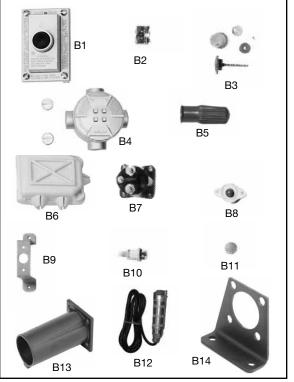
HGR-50-50

RMI Part No.	Tuno	Cable	Diameter	Diam	eter
NIVII PAILINU.	Type	Type Length		Height	Width
HGR-50-50	Heavy Duty	50'	1/8"	17 ¹ /2"	14 ¹ /2"
HGR-100-100	Heavy Duty	100'	¹ / ₈ "	17 ¹ / ₂ "	16 ³ /4"



Hannay Reel Parts 126





HOSE REEL CONTROL SWITCH COVERS

0 Ray Murray Inc. Edition 11 These covers are intended to protect Hannay® Hose Reel Control Switches from moisture and/or other contaminants during over-the-road transit. The MEP-GMC1 is specifically designed to fit Hannay® Guidemaster® control switches while MEP-RDC1 is specifically designed to fit Hannay® red DOT EPS style control switches. Both of these cover fit snuggly over the control to help prevent damage due to oisture or other contaminants thereby increasing the longevity of the control switch.

Tel: 800-628-5044

RS, SPR	Hannay Reels The reel leader	
art No.	Description	
103	12V Flange Mount Explosion-Proof Motor	

Item No.	RMI Part No.	Hannay Part No.	Description
A2	001	9915.0003	12V Flange Mount Explosion-Proof Motor
A3	002	9915.0013	12V Base Mount Explosion-Proof Motor
A9	35C10	9912.0001	10' Length #35 Chain w/Connecting Link
A10	HR-35	9912.0010	Connecting Link for #35 Chain
A11	138T35	9910.1423	138T35 Disc Sprocket, 16 ⁵ / ₈ " Diameter (E-Coated)
A13	11T35A	9910.1116	11T35 Motor Sprocket, ¾" Long
A14	11T35D	9910.1117	11T35 Motor Sprocket, 1½16" Long
A15	11T35B	9910.1118	11T35 Motor Sprocket, 15⁄ ₁₆ " Long
A16	11T35C	9910.1119	11T35 Motor Sprocket, 1¾" Long
	9915.0283	9915.0283	12V Flange Mount w/ Drain
	180T35	9910.1526	Disc Sprocket 21¾ Dia.
	HR-27	9916.0080	Motor Key
	9910.0917	9910.0917	9T40 Sprocket 1 ⁵ / ₁₆ " long
Not Shown	9910.0919	9910.0919	9T40 Sprocket 1 ³ / ₄ " long
	9910.3121	9910.3121	104T40 Disk Sprocket 16.85" diameter
	9910.3125	9910.3125	134T40 Disk Sprocket 21.62" long
	9915.0009	9915.0009	12V DC Flange 2/3 HP Motor
	9912.0008	9912.0008	#40 Chain per foot
		SWITCHES AN	ID ELECTRICAL
ltem No.	RMI Part No.	Hannay Part No.	Description
B1	EXPB-2A	9917.0001	Red Dot EXPB-2A Switch (12 Volt)
B2	800T-XDI	9917.0014	Red Dot Internal Switch for EXPB-2A
B3	HR-34	9917.0015	Red Dot Repair Kit
B4	JBC-1	9917.0060	Red Dot 5-Port Round Junction Box/Cover
B5	9917.0062	9917.0062	#6 Wire Nut (For Red Dot Junction Box)
B6	9917.0063	9917.0063	Insulated "Bug" Connector
B7	S-12V	9917.0025	12 Volt Solenoid (Diode-Suppressed)
B8	CDLM-50	9917.0021	CDLM Circuit Breaker (Specify Amperage)
B9	9917.0026	9917.0026	CB-1 Mounting Bracket (for Circuit Breaker)
B10	90018	9917.0006	Push-Button 12 Volt Switch (Less Cap)
B11	83280	9917.0008	Rubber Cap (For Push Button Switch)
B12	EPS-1	9917.0203	EPS-1 Switch (Used with Guidemaster)
B13	9917.0207		Mounting Bracket
B14	9917.0206		GH-1565 Extension Bracket
	9917.0030	9917.0030	Square Jct. Box Complete

MOTOR



Strain Relief Connector

Weather Cover for EPS-1

Weather Cover for EXPB-2A

MEP-GMC1 Hose Reel Control Switch Cover for Guidemaster® Control Arm

9955.0008

MEP-RDC1 Hose Reel Control Switch Cover for Red DOT EPS

HR-45

MEP-GMC1

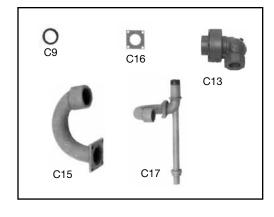
MEP-RDC1

Not Shown

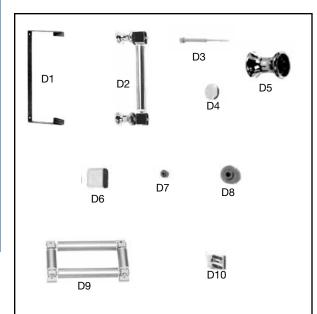
127 Hannay Reel Parts





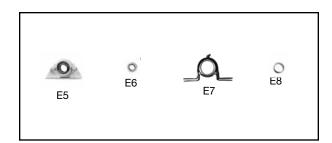


SWIVEL JOINTS, RISERS, HUB ASSEMBLIES							
Item No.	RMI Part No.	Hannay Part No.	Description				
C9	PK-1	9936.0640	1 ¹ / ₂ " PK-1 Packing (Buna Seal)				
C13	SMAC-1-1/2	9930.0531	1 ¹ / ₂ " 90° FxF Full-Circle Swivel				
C15	HR-76	9901.3760	1½" FIPT-Iron Flanged Riser				
C16	H-150G	9965.0021	H-150G Gasket for 1½" Riser				
C17	HR-78	9901.2840	1 ¹ / ₂ " Hub Assy Complete (Specify Model)				
Not Shown	3115627		Thixogrease HP Lubricant 14 oz.				



ROLLER ASSEMBLIES, C	ABLE GUIDES,	HOSE STOPS
-----------------------------	--------------	------------

Item No. RMI Part No. Hannay Part No.			Description
D1	GM-TCB	9941.0003	Top Wind FH-3 Mtg. Brkt. (Specify Model)
D2	FH-3	9939.0042	FH-3 Roller & Spool Assy. (Specify Model)
D3	FH-307	9940.0012	FH-307 Delrin-Over-Steel Step Bolt
D4	FH-309	9940.0004	FH-309 Chrome Snap Cap
D5	FH-301	9940.0005	FH-301 Spool
D6	FH-302	9940.0006	FH-302 Block
D7	FH-303-15	9940.0007	FH-303-15 (1.5") Trunion Bearing
D8	FH-303-2	9940.0008	FH-303-2 (2") Trunion Bearing
D9	9939-0062	9939.0062	Utility Hose Roller Assy. "C" (Spec. Model)
D10	EH-650	9940.0076	EH-650 Mounting Block (Plated)
	UR-A	9939.0060	Utility Roller Assembly (Spec. Model)
	HR-95	9904.5300	7/ ₁₆ " Hex Nut
Not Shown	HR-96	9954.0027	7/ ₁₆ " Lock Washer
	HR-97	9940.0014	7/ ₁₆ " Nylon Washer
	HR-98	9954.0009	7/ ₁₆ " Flat Washer



BEARINGS						
Item No.	RMI Part No.	Hannay Part No.	Description			
E5	HR-25	9902.1400	1" S.A. Ball Bearing Complete			
E6	HR-23	9902.1500	1" S.A. Ball Bearing Insert			
E7	9902.1610	9902.1610	1 ¹ / ₂ " S.A. Ball Bearing Complete			
E8	996	9902.1700	1 ¹ / ₂ " S.A. Bronze Ball Bearing Insert			
Not Shown	9902.1630	9902.1630	1 Complete w/Grease Fitting			
	9902.1730	9902.1730	1 Bronze Insert w/Gease Fitting			

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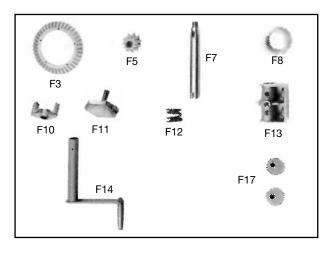
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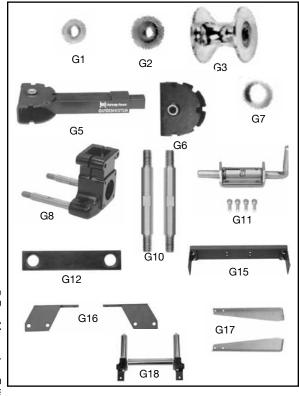
Hannay Reel Parts 128



The reel leader.



REWIND ASSEMBLIES, BRAKES, RATCHETS							
Item No. RMI Part No. Hannay Part No. Description							
F3	H-26	9914.0372	H-26 Ring Gear				
F5	H-27	9914.0393	H-27 Pinion Gear				
F7	HR-05	9914.0250	Pinion Shaft				
F8	9914.0351	9914.0351	Pinion Shaft Collar				
F10	H-2A	9914.0243	H-2A Pinion Shaft Bearing				
F11	H-30A	9914.0413	H-30A Brake Wheel				
F12	H-31	9914.0451	H-31 Brake Spring				
F13	H-3	9914.0433	H-3 Brake Pad				
F14	H-18	9914.0011	H-18 Hand Crank				
F17	9947.0035	9947.0035	Comet Brake Assembly (IV-Style)				
Not	HR-06	9954.0003	Spacer Washer				
Shown	HR-08	9904.5600	%" Hex Nut				



	GUIDEMIASTEN FANTS AND DNAGRETS						
Item No.	RMI Part No.	Hannay Part No.	Description				
G1	GM-608	9945.0026	GM Ball Bearing (For GM-609 Roller)				
G2	GM-108	9945.0044	GM-108 Ball Bearing (For GM-109 Roller)				
G3	GM-609	9945.0019	GM-609 Roller w/GM Bearing				
G5	9944.0040	9944.0040	GM-700 Guide Arm Body Assy w/Mtg. Yoke				
G6	GM-611	9945.0009	GM Mounting Yoke w/Bronze Bushing				
G7	GM-616	9945.0011	GM Oil-Impregnated Bronze Bushing				
G8	9945.1001	9945.1001	GM Roller Body w/Mtg. Bolts				
G10	9945.1005	9945.1005	GM Roller Mtg. Bolts				
G11	9945.1003	9945.1003	Pinlock assy for GM 700				
G12	9945.1004	9945.1004	GM Roller Bolt Mounting Plate				
G15	GM-BMB	9945.0035	GM Cross Member Assembly (3 Pieces) (Specify Model)				
G16	9945.0036	9945.0036	GM Bottom-Wind Brackets (Pair)				
G17	9945.0037	9945.0037	GM Top-Wind Brackets (Pair)				
G18	9939.0069	uusu nnku	Assy. B-Roller (w/Spl. Mtg. Brackets) for Bottom-Wind Guidemaster Reels				

GUIDEMASTER PARTS AND BRACKETS

Tel: 800-628-5044

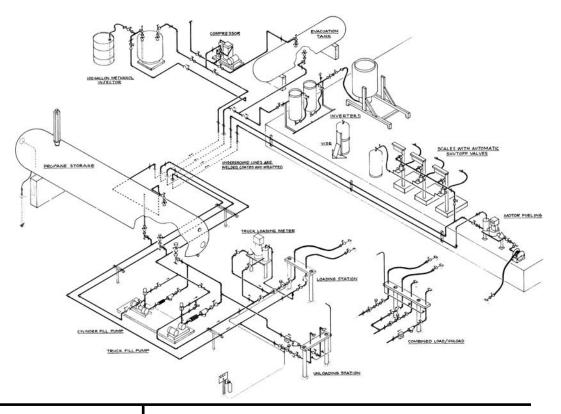
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Pro-Chem Services 129 **Stanchions - Rail Towers - Loading Arms**



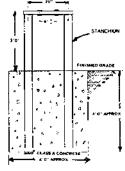
PRO-CHEM SERVICES ASSISTANCE WITH PROJECT MANAGEMENT

- Bulk Storage Plants Design
- Pump & Compressor Systems
- Methanol Injectors
- **Cylinder Evacuation Systems** ٠
- Scale Fill Systems
- Propane Vaporizer-Mixers



PRO-CHEM BULK TRUCK & TRANSPORT TRANSFER STANCHION





Heavy duty bulkhead constructed with 4" diameter uprights, 6" wide cross pieces and 3000# couplings. Bushings available to reduce to smaller sizes while maintaining break-a-way feature.

RMI Part No.	Openings	Typical Application
PC3168-2	2" x 2"	Standard Bulk Truck
PC3168-3	3" x 2"	High Capacity
PC3168-2S	2" x 2" x 2" x 2"	Combo Load / Unload
PC3168-2C	2" x 2" x 2"	Combo Common Vapor
PC3168-3C	3" x 2" x 2"	Combo Common Vapor

RAIL CAR UNLOADING TOWER

Safe, reliable car access tower. The tower and platform are of primed steel construction with a slip resistant work surface. The aluminum gangway accommodates most tank car configurations. Gangway is extendable from 53" to 75". An optional safety ring is available. Tower size is verified through the completion of an easy to follow application data sheet. Please call for information.

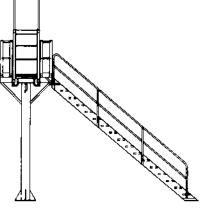
UNLOADING ARMS

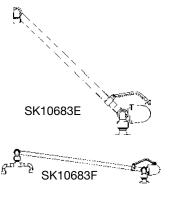
SK10683E

Spring balanced loading arm for vapor line in railcar unloading. 2" 300# RF inlet flange with 2" MNPT outlet. Arm is 112" OAL.

SK10683F

Spring balanced siamese loading arm for liquid line in railcar unloading. 3" 300# RF inlet flange with two (2) 2" MNPT outlet. Arm is 112" OAL.





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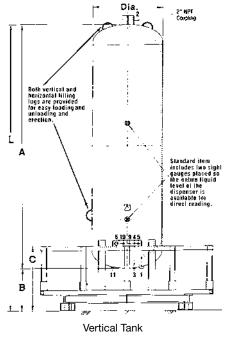
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Vertical / Horizontal Bulk Storage Tanks 130



VERTICAL BULK STORAGE TANKS



RMI	W.C.	LP Cap.	Diamotor	Dimensions				W.P.	T.W.	
Part No.	W.C.	(lbs)	Diameter	L	A	В	C	D	W.P.	I.W.
VT 660	660	400	3'-6"	11'-10"	9'-111/2"	1'-8¾"	3'-10"	10"	250	2025
VT1150	1150	920	4'-0"	14'-11¾"	13'-3"	1'-8¾"	3'-77/8"	10"	250	2878
VT1600	1600	1280	4'-0"	20'-41/2"	18'-0"	2'-41/2"	3'-10"	10"	250	4015
VT1999	1999	1600	4'-6"		18'-7½"				250	4540

Vertical 1999 can not be used with steel base

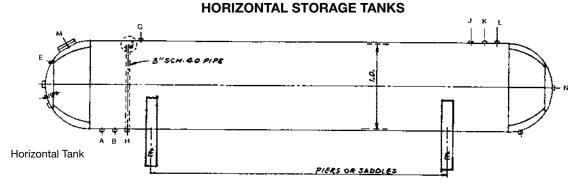
VALVE & FITTINGS FOR TANK

	VALVE & FILLINGS FUR LANK							
Key	Size	RMI Part No.	Description					
1	11/4"	C407-10-05	Liquid Internal Valve; 500/1150					
4	2"	C477-16-10	Liquid Internal Valve; 1600					
1	2	or F191	Liquid Excess Flow Valve; 1600					
2	1¼"	453AM	Internal Relief Valve; 500/1150					
2	2"	H282-250	Internal Relief Valve; 1600					
3	3⁄4"	F101	Excess Flow Valve,					
4	1/4"	TSS3169	Vent Valve, 10% Outage					
5	3/4"	105-12	Hex head, Plug Fitting					
6	1 ¹ /4"	623B	Filler Valve					
8	Flange	6281	Float Gauge (2 needed)					
9	1/4"	GSM-300	Pressure Gauge - 300#					
10	1/2"	J701	Thermometer - 6"					
11	3/4"	F101	Excess Flow Valve, Vapor or					
11	74	FIVI	Bypass Return					

- Designed to save time & money
- High visibility/excellent for advertising
- Fast installation/small footprint
- Pre-engineered for Zone 4 seismic & 120 mph wind

MOUNTING BASES (OPTIONAL)

RMI Part No.	Description	Weight (Ibs)
00707	10 ft. x shape steel dispenser base, fits 660 & 1600 w.c.	702
00774	Crash posts and protective railing will fit either base	305



HORIZONTAL STORAGE TANKS

Capacity	I.D.	O.A. Length	Weight (lb.)
30,000 wg	130"	46'-10%"	51,253
30,000 wg	108"	65'-10%"	51,470
18,000 wg	108"	40'-11¾"	35,862
12,000 wg	84"	44'-9½"	22,369
9,000 wg	84"	35'-31/2"	17,305
6,565 wg	84"	25'-9 ¹ /4"	12,243

ADDITIONAL EQUIPMENT

SADDLES—Flat based for 84", 108", 130" diameter tanks. Mounts on top of poured cement piers for easy tank installation. LADDER & PLATFORM—are designed for easy and safe access to top of tank. Meets OSHA requirements. LADDER and PLATFORM are available as an assembly or separately.

VALVES AND FITTINGS FOR HORIZONTAL BULK STORAGE TANKS

Key	RMI Part No. for Valve	Use	Size
Α	C477-24, 990-2A	Liquid Opening	3" FNPT
В	C477-16, ME990-16	Liquid Opening	2" FNPT
Н	F190, C477-16	Vapor Opening	2"FNPT
Ν	J31L-3	Rotary Gauge	1" FNPT
J,K,L	ME9035-4F	Multiport	4" Flange
J,K,L	ME9035-3F	Multiport	3" Mod.Flange
J,K,L	H282-250, MEV200SIR-2590	Relief Valve	2" FNPT
G	C477-16, ME990-16	Vapor Opening	2" FNPT
М	150/1800, 150/2000	Manway Gasket	
E	ME830, 105/300	85% & Pressure Gauge	¾" FNPT
D	ME930-XXX, ME931	Float Gauge	21/2" FNPT
С	MEJ701	Thermometer	½" FNPT
Р	TP10	Asphaltic Tank Pad	3⁄4" x18"x10'

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Tel: 800-628-5044

Bulk Tank Gauges & Thermometers 131





FISHER ROTARY GAUGE

J31L Series-Heavy duty gauge for either stationary or mobil tanks over 1200 gallons. 1" NPT container connection. Shipped in straight length, can be bent to fit all tank.

ROTARY GADGE LENGTH

1311

Series

FISHER

Description / Length (Tank I.D.)
Fisher Rotary Gauge, 68"
Fisher Rotary Gauge, 69"-92"
Fisher Rotary Gauge, 93"-108"
Fisher Rotary Gauge, 109"-140"
Dial Face
Replacement Vent Cap
O-Ring

THERMOMETERS

T1095606162 Packing



RMI Part No.	Stem Length	Dial Size	Connection
J700	4"	2"	
J701	6"	2"	
MEJ700	4"	2"	
MEJ701	6"	2"	½" NPT
MEJ702	4"	3"	
MEJ703	6"	3"	
T-Well			³ 4" MNPT x ½" FNPT



COMBINATION VALVES

Designed for installation on bulk storage containers, the valve combines a pressure gauge and a liquid level gauge.

	J415-1
--	--------

Tel: 800-628-5044



RMI Part No.	Container Connection	Dial Size	Vent Valve	Gauge Included
ME830	3/4"	Ductile	Yes	No
MEJ415	3/4"	Steel	No	No
MEJ415G	3/4"	Steel	Yes	Yes
J415	3/4"	Steel	No	No
J415-1	3/4"	Steel	Yes	Yes

MARSHALL EXCELSIOR ACCU-MAX FLOAT GAUGES

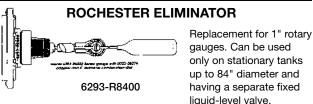


RMI Part No.	Description		
ME930-905	4" Glow Dial		
ME930C-905	4" Non-Glow Dial		
ME940-905	8" Globe Dial		
ME940C-905	8" Non-Glow Dial		
ME930-240	4" Dial Glass		
ME930-211	4" Dial Seal		
ME930-222	4" Dial Mounting Bracket		
ME940-210	8" Dial Glass		
ME940-211	8" Dial Seal		
ME940-206	8" Dial Mounting Bracket		
ME930-212	Spiral Gasket		
ME930-244	Dial Screw		
ME930-243	Dial Nut		
ME930-223	Mounting Stud		
ME930-224	Mounting Nut		

Replacement parts for float gauges. Parts are compatible with other manufacturer's gauges.

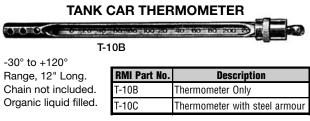
Designed to measure liquid levels in horizontal DOT and stationary ASME tanks. All gauges feature an easy to read glow in the dark dial DOT type features an integral spring loaded float arm for maximum life in mobile applications. * Other sizes are available as a special order

RMI Paı No.	Type	Dial Size	Tank Diameter	
ME930-72	DOT	4"	72"	
ME930-79	DOT	4"	79"	
ME930-82	DOT	4"	82"	
ME930-84	DOT	4"	84"	
ME930-86	DOT	4"	86"	
ME940-105	ASME	8"	105"	
ME940-108	ASME	8"	108"	
ME940-114	ASME	8"	114"	
ME940-130	ASME	8"	130"	
ME931	2 1/2" MNPT Mounting Flange			



only on stationary tanks up to 84" diameter and having a separate fixed liquid-level valve.

RMI Part No. Description 6293-R8400* 4" Dial Face, End Mount for 1" FNPT Must specify tank diameter.



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Ray Murray Inc. Edition 11

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132 **Swivels and Break-A-Way Couplings**

FULL CIRCLE HOSE SWIVELS

- Stainless Steel Housing
- Compact Design
- UL Standard: 567
- Field Repairable
- 350 PSIG Working Pressure

• Full Port



RMI Part No.	Size	Diameter	Length
JO-34FC	3⁄4"	21/2"	3%"
JO-1FC	1"	21/2"	3%"
JO-1SK/RK	Rep	bair kit for ¾	" & 1"

	-		
0-1SK/RK	Rep	air kit for ¾	" &
0-1FC	1"	21/2"	3
0-34FC	°⁄4"	2 1/2"	

MARSHALL E-Z TURN SWIVEL



 All Stainless Steel
Construction
 UL Listed for LP & NH₃

RMI Part No.	Description
ME850SS-6	3/4" Swivel
ME850SS-6/8	3/4" x 1" Swivel
ME850SS-8	1" Swivel

ME850SS-6

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	PA																							

OPW ENGINEERED SYSTEMS SWIVELS

The full line of swivels/configurations from OPW are available. RMI can still provide swivels and repair parts from FMC.





3220-01XX 3230-01XX Style 20 Style 30 1 plane of rotation 1 plane of rotation

Tel: 800-628-5044



3240-01XX Style 40 1 plane of rotation

RMI Part No.	Size	Style	Repair Kit	Ball Bearing
3220-0101	1"	20		
3230-0101	1"	30	3001K-1000	
3240-0101	1"	40		
3220-0121	1 1/4"	20		
3230-0121	1 1/4"	30	33001K-1100	
3240-0121	1 1/4"	40		H-6712-M
3420-0201	2"	20		11-07 12-10
3430-0201	2"	30	3001K-1200	
3440-0201	2"	40		
3420-0301	3"	20		
3430-0301	3"	30	3001K-1300	
3440-0301	3"	40		

FULL CIRCLE SWIVEL

- Zero Maintenance Design
- Pre-Tapped for Relief Valve
- Field Repairable
- UL Listed

RMI Part No.	Size	Description
SMAC-1-1/4	11⁄4"	90° Swivel
SMAC-1-1/2	11/2"	90° Swivel
SMAC-200	2"	90° Swivel
SMAC-112ST	11/2"	Straight Swivel
SMAC-200ST	2"	Straight Swivel
SMAC-112SK/RK	1½"	Repair Kit



SMAC-1-1/2

BREAKAWAY COUPLING

Safety coupling provides protection for fill station, hose and vehicle. Coupling disconnects and closes instantly if hose is pulled away.



ME861S-6 Lanyard Style

RMI Part No.	Description
ME860S-6	¾" Bracket
ME861S-6	¾" Lanyard
ME860S-8	1" Bracket
ME861S-8	1" Lanyard
ME860S-10	1¼" Bracket
ME861S-10	1¼" Lanyard

OPW BREAKAWAY COUPLING FOR BULKHEADS/STANCHIONS

- Stainless steel construction
- · Easliy re-assembled after separation
- No shear pins
- Separation occurs with direct or angular pull

RMI Part No.	Description	Seal Kit
NTSPUTS0202	2" SS Breakaway Coupling	NTSPUSRK0202

BULK PLANT & TRUCK EQUIPMENT

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

Schedule 80 Forged Steel Fittings 133







45° Elbow

90° Elbow

Tee



90° Street Elbow

2/11 1/11 4



Coupling

FORGED STEEL FITTINGS (SCHEDULE 80 PIPE) 3/1 * Pressure (PSI) 1/4" * 3%"* 1/2" * 1" * 1¼" * 11/2" * 2" * 21/2" * 3" * Description **RMI Part No** Elbow, 90... 2000 104-04 104-06 104-08 104-12 104-16 104-20 104-24 104-32 104-40 104-48 Elbow, 45. 2000 103-04 103-06 103-08 103-12 103-16 103-20 103-24 103-32 103-40 103-48 Elbow, Street 3000 110-04 110-06 110-08 110-16 110-20 110-24 110-32 110-12 2000 108-04 108-06 108-32 108-48 Tee 108-08 108-12 108-16 108-20 108-24 108-40 2000 102-04 102-06 102-08 102-12 102-16 102-20 102-24 102-32 102-40 102-48 Cross 109-06 3000 109-04 109-16 109-20 109-24 109-32 109-40 109-48 Union 109-08 109-12 Coupling 3000 100-04 100-06 100-08 100-12 100-16 100-20 100-24 100-32 100-40 100-48 Plug 3000 105-04 105-06 105-08 105-12 105-16 105-20 105-24 105-32 105-40 105-48 3000 114-04 114-20 114-24 114-32 114-40 114-48 Сар 114-06 114-08 114-12 114-16





Union



Hex Bushing



Reducer Coupling



Concentric Swage



Ray Murray Inc. Edition 11

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Eccentric Swage

SCREWED REDUCING FITTINGS, FORGED STEEL * = PIPE SIZE 2/11 1/11 +

Description	1/4" x 1/8" *	3%" x 1⁄4" *	½" x ½" *	1⁄2" x 1⁄4" *	½" x ¾" *	3⁄4" x 1⁄4" *	3⁄4" x 3⁄8" *	³ ⁄ ₄ " x 1∕ ₂ " *
Description				RMI	Part No.			
Bushing	106-0402	106-0604	106-0802	106-0804	106-0806	106-1204	106-1206	106-1208
Reducer Coupling	_	107-0604	_	107-0804	107-0806	107-1204	107-1206	107-1208
Swage, Concentric	_	—	_	_	_	150-1204	—	150-1208
Swage, Eccentric	—	—	—	—	—	—	—	_
Description	1" x ¼" *	1" x %" *	1" x ½" *	1" x ¾" *	1¼" x ¼" *	1¼" x %" *	1¼" x ½" *	1¼" x ¾" *
Description		-	-	RMI	Part No.			
Bushing	106-1604	106-1606	106-1608	106-1612	106-2004	106-2006	106-2008	106-2012
Reducer Coupling	—	—	107-1608	107-1612	_		107-2008	107-2012
Swage, Concentric	150-1604	—	150-1608	150-1612			150-2008	150-2012
Swage, Eccentric	—					_		—
D	1¼" x 1" *	1½" x ¼" *	1½" x ¾" *	1½"" x ½" *	1½" x ¾" *	1½" x 1" *	1½" x 1¼" *	2" x ¼" *
Description				RMI	Part No.			
Bushing	106-2016	106-2404	106-2406	106-2408	106-2412	106-2416	106-2420	106-3204
Reducer Coupling	107-2016	—	_	_	_	107-2416	107-2420	—
Swage, Concentric	150-2016	—	_	—	150-2412	150-2416	150-2420	
Swage, Eccentric	151-2016	—	—	—	—	151-2416	151-2420	—
Description	2" x ¾" *	2" x ½" *	2" x ¾" *	2" x 1" *	2" x 1¼" *	2 "x 1½" *	2½" x 2" *	3" x ¾" *
Description				RMI	Part No.			
Bushing	106-3206	106-3208	106-3212	106-3216	106-3220	106-3224	106-4032	106-4804
Reducer Coupling	—	107-3208	107-3212	107-3216	107-3220	107-3224	107-4032	—
Swage, Concentric	—	150-3208	150-3212	150-3216	150-3220	150-3224	150-4032	_
Swage, Eccentric	—	—	—	151-3216	151-3220	151-3224	—	—
Description	3" x ½" *	3" x ¾" *	3" x 1" *	3" x 1¼" *	3 "x 1½" *	3" x 2" *	3" x2½" *	4" x 3" *
Description				RMI	Part No.			
Bushing	106-4808	106-4812	106-4816	106-4820	106-4824	106-4832	106-4840	106-6448
Reducer Coupling	_	<u> </u>		—		107-4832	107-4840	—
Swage, Concentric	_	<u> </u>		—		150-4832	150-4840	
Swage, Eccentric	—			—			—	—

(Note: Schedule 40 fittings shown on page 35)

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SCHEDULE 80 PIPE NIPPLES

		LENGTH											
	Close	11⁄2" *	2" *	3" *	4" *	5" *	6" *	7" *	8" *	9" *	10" *	11" *	12" *
IPS	RMI Part No.	RMI Part	RMI Part	RMI Part	RMI Part	RMI Part	RMI Part	RMI Part	RMI Part	RMI Part	RMI Part	RMI Part	RMI Part
	nimi ratt NU.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1⁄4"	121-00	121-015	121-02	121-03	121-04	121-05	121-06	—	121-08	—	—	_	—
3%"	122-00	122-015	122-02	122-03	122-04	122-05	122-06	—	122-08	—	—		—
1/2"	123-00	123-015	123-02	123-03	123-04	123-05	123-06	—	123-08	—	—	_	123-12
3⁄4"	124-00	—	124-02	124-03	124-04	124-05	124-06	124-07	124-08	124-09	124-10	124-11	124-12
1"	125-00	—	125-02	125-03	125-04	125-05	125-06	125-07	125-08	125-09	125-10	125-11	125-12
11⁄4"	126-00	—	126-02	126-03	126-04	126-05	126-06	126-07	126-08	126-09	126-10	126-11	126-12
1½"	127-00	—	127-02	127-03	127-04	127-05	127-06	127-07	127-08	127-09	127-10	127-11	127-12
2"	128-00	—	-	128-03	128-04	128-05	128-06	128-07	128-08	128-09	128-10	128-11	128-12
21/2"	129-00	_	-	_	129-04	_	129-06	_	—	129-09	129-10	_	
3"	130-00		_	130-03	130-04	130-05	130-06	130-07	130-08	130-09	130-10	130-11	130-12

Pipe Size



RMI Part No.	Description
632-36475	Exposed ratchet threader kit 1/2" - 2"
632-36505	Exposed ratchet threader kit 1/8" - 2"
632-41935	Model 700 115V Power Head Only 1/8" - 2"

Die Heads not included with 632-41935

ACCESSORIES

RMI Part No.	Description
632-38625	Metal Case - holds 6 Die Heads
632-97375	Metal Case - holds 9 Die Heads
632-42950	Metal Case for 700 Threader

DIE HEADS AND REPLACEMENT DIES

Description	RMI Part No.	Description
1/8" 12R Die Head	632-37810	1/8"-27 NPT Die Only
1/4" 12R Die Head	632-37815	1/4"-18 NPT Die Only
3/8" 12R Die Head	632-37820	3/8"-8 NPT Die Only
1/2" 12R Die Head	632-37825	1/2"-14 NPT Die Only
3/4" 12R Die Head	632-37830	3/4"-14 NPT Die Only
1" 12R Die Head	632-37835	1"-11 1/2 NPT Die Only
1 1/4" 12R Die Head	632-37840	1 1/4"-11 1/2 NPT Die Only
1 1/2" 12R Die Head	632-37845	1 1/2"-11 1/2 NPT Die Only
2" 12R Die Head	632-37850	2"-11 1/2 NPT Die Only
	1/8" 12R Die Head 1/4" 12R Die Head 3/8" 12R Die Head 1/2" 12R Die Head 3/4" 12R Die Head 1" 12R Die Head 1 1/4" 12R Die Head 1 1/2" 12R Die Head	1/8" 12R Die Head 632-37810 1/4" 12R Die Head 632-37815 3/8" 12R Die Head 632-37820 1/2" 12R Die Head 632-37825 3/4" 12R Die Head 632-37830 1" 12R Die Head 632-37835 1 1/4" 12R Die Head 632-37840 1 1/2" 12R Die Head 632-37845

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SCHEDULE 80 PIPE

(Note: Schedule 40 fittings shown on page 35)

RMI Part Number	Description
224-12	3/4" Sch 80 Pipe
224-16	1" Sch 80 Pipe
224-20	1 1/4" Sch 80 Pipe
224-24	1 1/2" Sch 80 Pipe
224-32	2" Sch 80 Pipe
224-48	3" Sch 80 Pipe



Pipe is available with a two week lead time, std. length is 21 ft., non-threaded, plain end.

RIGID 300 POWER DRIVE THE STANDARD IN PIPE THREADING

Includes:

- 300 Power Drive
- 1206 Stand
- Reamer and Cutter
- Set 1.2" 3.4" Dies
- Set 1" 2" Dies
- Oiler
- Foot Switch

 RMI Part No.
 Description

 632-15682
 Complete Threading System

MILWAUKEE BAND SAW

RMI Part No.	Description
495-6238	120V Band Saw Kit
495-6238	28V Cordless Band Saw Kit
433-80098	10TPI 5-Pack of Band Saw Blades
433-80107	14TPI 5-Pack of Band Saw Blades
433-38424	14TPI 25-Pack of Band Saw Blades



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SCH 80 Pipe, Flex Connectors, 135 **Flanges and Gaskets**



FLEXIBLE CONNECTORS

Double braided, stainless steel for liquid propane. Prevents piping damage from vibration, thermal expansion, and misalignment not exceeding 3/4" offset. 350 PSI working pressure.



THREADED

RMI Part No.	Description	Length
FLEX 1/2-12	1/2"	12"
FLEX 3/4-12	3/4"	12"
FLEX 1-12	1"	12"
FLEX 1 1/4-14	1 1/4"	14"
FLEX 1 1/2-18	1 1/2"	18"
FLEX 2-18	2"	18"
FLEX 2-24	2"	24"
FLEX 3-18	3"	18"
FLEX 3-24	3"	24"

WITH UNIONS

RMI Part No.	Description	Length
FLEX 1-12-U	1" NPT w/union	12"
FLEX 1 1/4-14-U	1 1/4" NPT w/union	14"
FLEX 2-18-U	2" NPT w/union	18"
FLEX 3-18-U	3" NPT w/union	18"

WITH 300# FLANGES

RMI Part No.	Description	Length
FLEX 1 1/4F-12	1 1/4"	12"
FLEX 1 1/4F-18	1 1/4"	18"
FLEX 2F-12	2"	12"
FLEX 2F-18	2"	18"
FLEX 3F-18	3"	18"
FLEX 3F-24	3"	24"
FLEX 4F-12	4"	12"
FLEX 4F-18	4"	18"

FLEXIBLE HOSE CONNECTORS



RMI will fabricate to order flex connectors with crimped male pipe thread ends and pressure test to D.O.T. specifications. Just order the hose kit you need and specify O.A.L.

RMI Pa	Hose	Minimum	
SS Braid Hose	STD. LPG Hose	& Thread	Length
-	3/4 HOSEKIT- TESTED	3/4"	7 ¹ /4"
-	1 HOSEKIT- TESTED	1"	8 ¹ /4"
1-1/4 HOSEKIT-SB-TESTED	1 1/4 HOSEKIT- TESTED	1 ¹ /4"	9 ¹ /2"
1-1/2 HOSEKIT-SB-TESTED	1 1/2 HOSEKIT- TESTED	1 ¹ /2"	10"
2 HOSEKIT-SB-TESTED	2 HOSEKIT- TESTED	2"	12"

300 LB. STANDARD FORGED STEEL FLANGES





Blind Flange

Screwed Flange

Slip-On Flange

RMI Part No.	Flange Size & Type	Flange Diameter	Thread/ Pipe Size	Type of Flange		
			•			
20/3R/SC	1¼" RF	5¼"	1¼" NPT	Screwed		
20/3R/S0	1¼" RF	5¼"	11/4" PIPE	Slip-on		
24/3R/SC	1½" RF	6½"	1½" NPT	Screwed		
32/3F/SC	2" FF	6½"	2" NPT	Screwed		
32/3R/SC	2" RF	61⁄2"	2" NPT	Screwed		
32/3R/S0	2" RF	61⁄2"	2" PIPE	Slip-on		
32/3R/BL	2" RF	61⁄2"		Blind		
40/3R/SC	21/2" RF	7½"	21/2" NPT	Screwed		
40/3R/SC32	21/2" RF	7½"	2" NPT	Screwed		
48/3R/SC	3" RF	8¼"	3" NPT	Screwed		
48/3R/S032	3" RF	8¼"	2" PIPE	Slip-on		
48/3F/BL	3" FF	8¼"		Blind		
48/3R/SC32	3" RF	8¼"	2" NPT	Screwed		
48/3F/S0	3" FF	8¼"	3" PIPE	Slip-on		
48/3R/BL	3" RF	8¼"		Blind		
64/3F/S0	4" FF	10"	4" PIPE	Slip-on		
Note: Other s	Note: Other sizes and styles available.					

STUDS W/ NUTS

No. of

ohut?

300# FLANGE REQUIREMENTS

Stud Size

Flange

RMI

· B7 studs with two (2) 2H nuts for ANSI Flange Assembly

Fall NU.	3126		ວເບບຣ		0	,	
132-08250	1/2"	1/2" x 21/2"	4	150# MAN	WAY RE		INTS
132-10300	3⁄4"	5%" x 3"	4		Flange/		No.
132-10300	1"	5%" x 3"	4	RMI	Manway	Stud Size	of
132-10300	11⁄4"	5%" x 3"	4	Part No.	Size		Studs
132-12350	1 ½"	³ ⁄ ₄ " x 3 ¹ ⁄ ₂ "	4	132-16500	14"	1" x 5"	12
132-10350	2"	5%" x 31⁄2"	8	132-16550	16"	1" x 5½"	16
132-12400	3"	³ ⁄4" x 4"	8	132-18600	18"	11//8" x 6"	16
132-12450	4"	³ / ₄ " x 4 ¹ / ₂ "	8	132-18600	20"	11//8" x 6"	20

FLANGED GASKETS FLEXITALLIC SPIRAL WOUND



RMI Part No.	Size	Weight	ID	OD
300/0200	2"	300#	2¾"	4¾"
300/0300	3"	300#	4"	5 ⁷ /8"
300/0300M	3" modified	300#	4 ¹ /4"	5 ⁷ /8"
300/0400	4"	300#	5"	71/8"
150/1400	14"	150#	141/8"	17¾"
SG15M	15" manway	150#	15"	16¾"
150/1600	16"	150#	16%"	20¼"
150/1800	18"	150#	18 ¹¹ / ₁₆ "	21%"
150/2000	20"	150#	20 ¹¹ / ₁₆ "	23 ⁷ /8"

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Globe, Angle & Ball Valves 136

UL LISTED, LP-GAS 250 PSI, 400 PSI W.O.G.

FISHER VALVES

- Ductile Iron Body
- TFE Chevron Packings
- Slip Joint Disc Seats
- Valve has ¹/₄" plugged opening
- (For relief valve, bleeder valve or gauge.)



FISHER **RMI Part No.** FNPT Globe Angle Size Valve Valve N301-04 N401-04 1/2" 3⁄4" N301-06 N401-06 N301-08 N401-08 1"

N410-10

N410-12

N410-16

N410-24

N410F-24

N450-04

N450-06

N350 & N450 ECONOMY

11/4

11/2"

2"

3"

3" Flange

1/2" 3/4"

SERIES

N310-10

N310-12

N310-16

N310-24

N310F-24

N350-04

N350-06



MARSHALL EXCELSIOR GLOBE AND ANGLE VALVE

Size

1/2"

3/4"

1"

1 1/4"

1 1/2'

2"

2"

3"



- All stainless steel internal components
- Double stem seal design
- 1 1/4" and larger globe valves have 35° seat angle for maximum flow
- 1 1/4" and larger globe valves ergonomically designed

Side Port

1 x 1/4"

1 x 1/4"

1 x 1/4"

2 x 1/4"

2 x 1/4"

2 x 1/4"

2 x 1/2"

2 x 1/4"

E-Z Turn Knob

х

х

Х

ME829

ME829

ME829

ME829

Included

SQUIBB-TAYLOR FLANGED GLOBE AND ANGLE VALVES

- Spring loaded chevron packing
- 1/4" NPT plugged side port
- Self-aligning seat disc retainer



RMI Pa	Size	
GLOBE	ANGLE	
AL316FP	AL317FP	2"
AL320FP	AL321FP	3"

Ray
Murray
Inc.
Edition

-

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		_		
Γel	• 8N	0-62	8-50	44

RMI Part No.

ANGLE

ME815-4

ME815-6

ME815-8

ME815-10

ME815-12

ME815-16

ME825-24

GLOBE

ME825-4

ME825-6

ME825-8

ME825-10

ME825-12

ME825-16

ME824-16

ME825-24

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

Fax: 800-243-8341

BULK PLANT & TRUCK EQUIPMENT

137 Ball Valves



APOLLO BALL VALVES



600 PSI WOG, 250 PSI LP Gas UL Listed economical valve for both liquid and vapor LP Gas service. Teflon packing and bearing, blow-out proof stem, chromium plated ball, cast bronze construction, large port opening.

RMI Part No.	Thread Size	Port Diameter	Valve Length
80-101	1/4"	3/8"	21/ ₁₆ "
80-102	3/8"	3/8"	21/ ₁₆ "
80-103	1/2"	1/2"	2 ¹ / ₄ "
80-104	3/4"	¹¹ / ₁₆ "	3"
80-105	1"	7/ ₈ "	3%"
80-106	11/4"	1"	4"
80-107	11/2"	1 ¹ /4"	4 %"
80-108	2"	11/2"	4 ¹¹ / ₁₆ "
80-100	3"	21/2"	6¾"

JOMAR UNION END BALL VALVES

Jomar valves feature full port flow, Teflon seats, Buna-N seals, and union ends for easy installation and low service and maintenance costs. Carbon steel body with forged carbon steel union ends. UL listed, LP-Gas 250 PSI, 400 PSI W.O.G.

RMI Part No.	Thread Size	Port	Length
100-991	1/4"	0.437	3.543
100-992	³ /8"	0.437	3.543
100-993	1/2"	0.622	3.543
100-994	3/4"	0.807	3.701
100-995	1"	1.00	4.252
100-996	11⁄4"	1.25	4.567
100-997	11/2"	1.50	5.197
100-998	2"	1.969	5.669

JOMAR FULL-PORT BALL VALVES



Forged brass body with chrome plated ball. AGA & UL Listed. 500 PSI WOG 1"- 2 size 600 PSI WOG $1/_4$ "- $3/_4$ " size

RMI Part No.	Thread Size	Port Diameter	Valve Length
100-701	1/4"	3/8"	1 ¹³ / ₁₆ "
100-702	3/8"	3/8"	1 ⁷ /8"
100-703	1/2"	1/2"	2 ⁷ / ₁₆ "
100-704	3/4"	3/4"	2 ¹¹ / ₁₆ "
100-705	1"	1"	3 ⁵ / ₁₆ "
100-706	11⁄4"	11/4"	3 ¹³ / ₁₆ "
100-707	11⁄2"	11/2"	4¾ ₁₆ "
100-708	2"	2"	5"
100-710	3"	3"	7.08"

JOMAR 3-PIECE FULL PORT BALL VALVE



316 SS Body, ball and stem, pressure rated 1000 psig, UL listed for flammable liquids, propane, natural gas and anhydrous ammonia with locking handle.

RMI Part No.	Thread Size	Length
500-301	1/4"	2.36
500-302	3/8"	2.36
500-303	1/2"	2.76
500-304	3/4"	3.03
500-305	1	3.62
500-306	1 1/4"	4.13
500-307	1 1/2"	4.72
500-308	2	5.43
500-310	3	7.52
500-311	4	8.50

* Carbon steel with threaded or socket weld ends are available (1/2" - 2"). © Ray Murray Inc. Edition 11

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance



138 **Ball Valves**

BULK PLANT & TRUCK EQUIPMENT

MARPAC UNION END **BALL VALVES**



Marpac valves feature full port flow, Teflon seats, Buna-N seals, and union ends for easy installation and low service and maintenance costs.

Carbon steel body with forged carbon steel union ends.

Thread Size	Port Diameter	Valve Length
3/4"	¹³ / ₁₆ "	4½"
1"	1"	5 ¹⁵ / ₁₆ "
1 ¹ /4"	1¼"	5 ³ /8"
11/2"	1 ⁷ / ₁₆ "	5 ⁷ /8"
2"	1 ¾"	5 ⁷ /8"
3"	2 ⁵ /8"	7 ³ /8"
	Size 3/4" 1" 1 ¹ /4" 1 ¹ /4" 1 ¹ /2" 2"	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

Screwed ends - not union type.

JOMAR SINGLE UNION END VALVE

- Forged brass body
- 3/8" 1" have 1/8" tap
- 1 1/4" 2" have 1/4" tap
- FM and CSA approved



RMI Part No.	Thread Size	Port Diameter	Valve Length
160-102	3/8"	0.39	2.93
160-103	1/2"	0.59	3.17
160-104	3/4"	0.79	3.52
160-105	1"	1.00	4.19
160-106	1 1/4"	1.26	5.01
160-107	1 1/2"	1.57	5.57
160-108	2"	2.00	6.31

Tel: 800-628-5044

JOMAR STAINLESS STEEL VALVES

- Stainless Steel full port ball valve
- 316 SS ball and stem
- 1000psig pressure rating
- UL listed



RMI Part No.	Thread Size	Port Diameter	Valve Length
100-961	1/4"	0.43	2.21
100-962	3/8"	0.43	2.21
100-963	1/2"	0.56	2.60
100-964	3/4"	0.61	2.99
100-965	1"	1.00	3.54
100-966	1 1/4"	1.25	3.94
100-967	1 1/2"	1.50	4.41
100-968	2"	1.97	5.00

APOLLO BALL VALVE WITH SPRING RETURN HANDLE

- Excellent for bleed lines and blow offs
- All components of lever are stainless steel
- · Brass valves are rated for 600psig
- Stainless valves are rated for 200psig up to 1" and 1500psig 1 1/4" - 2"



RMI I		
Brass Stainless		Size
71-501-01	76-501-01	1/4"
71-502-01	76-502-01	3/8"
71-503-01	76-503-01	1/2"
71-504-01	76-504-01	3/4"
71-505-01	76-505-01	1"
71-506-01	76-506-01	1 1/4"
71-507-01	76-507-01	1 1/2"
71-508-01	76-508-01	2"

RAY MURRAY, INC.

Fax: 800-243-8341

Order online at www.raymurray.com or call for personal assistance



JOMAR CARBON STEEL FLANGED BALL VALVE

1/4 turn, WCB Carbon Steel body, 316 Stainless Steel ball and stem, 100% full port, blowout proof stem, 2-piece body design.

Features:

- Full Port
- PTFE Seats
- API 607 (fire tite)
- 316 Stainless Ball and Stem
- 150# Flanged Valves
- are available
- Available up to 8"
- Stainless Steel Valves are Available



Do not lock valve handle in **OPEN** position on natural gas hazardous service.

RMI Part No.	Description
600-228	2" Full Port 300# Ball Valve
600-230	3" Full Port 300# Ball Valve
600-231	4" Full Port 300# Ball Valve

SOLENOID VALVES

Magnetrol solenoid valves are available as a special order. These heavy-duty valves are available in sizes from $1/2^{"}$ - 3", are explosion proof and have operating pressures to 500PSIG.

When requesting a quote for the valves, please specify the following five variables:

- Line size
- Voltage
- Normally open or closed
- Service
- Operating Pressure



APOLLO 300 LB. FLANGED FULL-PORT BALL VALVES



- Full-port body
- Antistatic grounded stem
- Cast bosses for bleed/ drain ports
- Slot vent for thermal expansion
- Two-position locking device

Also available:

- Other sizes
- 150 lb flanges
- Standard port valves316SS ball and stem
- Fire Safe (graphite packing and seal)

RMI Part No.	Flange Size	Port Diameter	Length
88A-908-01	2"	2.00	8.50
88A-900-01	3"	3.00	11.12
88A-90A-01	4"	4.00	12.00

3-WAY VALVE



RMI Part No.	Description
MPT-365-1/2*	1/2" 3-Way Ball Valve
MPT-1/075	3/4" 3-Way Ball Valve
MPT-1/100	1" 3-Way Ball Valve
MPT-1/125	1 1/4" 3-Way Ball Valve
MPT-1/150	1 1/2" 3-Way Ball Valve
MPT100-L	2" 3-Way Ball Valve

*Brass Construction

Tel: 800-628-5044

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BULK PLANT & TRUCK EQUIPMEN

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Internal Valves - Threaded 140

THREADED INTERNAL VALVES THESE VALVES ACT AS PRIMARY SHUT-OFF, EXCESS FLOW

Fisher offers the widest variety of threaded internal valves in the industry. The valves operate the same even though the body style or size may vary. While their most frequent use is in the liquid and vapor openings of bobtail and transport trucks, the valves can also be used in stationary storage tanks, complying with NFPA 58 requirements for protection of transfer hose or piping at bulk plants. The valves are designed with a safety feature that allows the shut-off assembly to remain intact in the event that the lower body is sheared off in an accident. These are steel and stainless steel construction throughout with total stainless steel construction available.

All Fisher internal valves are suitable for LP-Gas or NH_3 (ammonia) service. Special construction is available for other compressed gases. Threaded units have a compact one-piece body design. They can be actuated manually, by cable control, or with an air cylinder.

SPECIFICATIONS

Pressure Rating: 400 psig WOG Temperature: Up to 150°F Body: Ductile Iron–C471/C477 Cast Steel–C402/C407 Seat Discs: Synthetic Rubber Stub Shaft & Stem: Stainless Steel





C471 C471 internal valve with two outlets, bottom and side. The side outlet permits installing horizontal piping immediately adjacent to the tank. The C471 is used primarily on bobtails and transports.

CONNECTIONS	RMI PART NO.		CLOSING FLOW GPM		VAPOR CAPACITY	
CONNECTIONS	STRAIGHT BODY	TEE BODY	HALF Coupling	FULL Coupling	25 PSIG	100 PSIG
1 1/4" MNPT x	C407-10-05		50	35	7800	13200
1 1/4" FNPT	C407-10-08		80	65	11200	19200
2" MNPT x	C477-16-10	C471-16-10	100	60	22000	37600
2 WINPT X 2" FNPT	C477-16-15	C471-16-15	150	80	32000	54500
	C477-16-25	C471-16-25	250	130		
	C477-24-16	C471-24-16	160	120	29200	49700
3" MNPT x	C477-24-26	C471-24-26	265	230	44400	75400
3" FNPT	C477-24-37	C471-24-37	375	320	52600	89400
	C477-24-46	C471-24-45	460	380	81800	139000

BULK PLANT & TRUCK EQUIPMENT

C407

C407 1^{1}_{4} " NPT valve is excellent for the main valve on small capacity pumping systems, in-line installations, and vapor lines on bobtail trucks that gives compliance with MC-331 specifications.



C477 2" and 3" valves with straight through flow (one outlet) is the most economical unit in the series. It can be used on bobtail, transport, stationary tank and in-line installations.

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FLANGED INTERNAL VALVES These Valves are for Direct Pump Mounting

Fisher Flanged Valves provide a sturdy and compact means of direct pump or piping connection. Special stud bolts, weakened with a groove on the outside diameter, are furnished with the valves in order to help permit the pump or piping to shear off in the event of accident, leaving the valve intact. The valves can be activated manually, by cable control or with an air cylinder. All of the valves have an internal screen for pump protection which can be removed if the valve is used for filling.

SPECIFICATIONS

Pressure Rating:	400 psig WOG
Temperature:	Up to 150°F.
Body:	Cast Steel -
	WCB-C403/C404-24
	Stainless Steel -
	C404-32
Seat Discs:	Synthetic Rubber
Stub Shaft & Stem:	Stainless Steel
Gaskets:	Non-asbestos spiral
	wound graphite



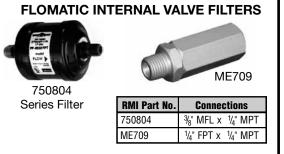
C484-24 Single flange unit that is widely used on bobtails with direct connected pumps. Another application for the C404-24 is on in-line installations.

is intended for special truck applications where the pump must be lowered to clear the truck frame or other obstacles.

trucks and large storage tanks. Valve operation can be accomplished by cable (C404-32), by air (C404A-32), or manually with a remote release device (C404M-32).

RMI Part No.			Tank	Outlet	UL Rated		
Single Flange Manual Oper.	Double Flange Manual Oper.	Cable Operation	Single Flange Air Operation	Manual Operation	Connection	Connection	Closing Flow* GPM Propane
C484-24-16	C483-24-16						150
C484-24-25	C483-24-26				3" 300 lb. ANSI	3" 300 IN ANSI	
C484-24-40	C483-24-40				RF Mod. Flange (4 ¹³ / ₁₆ " dia.bore)	RF Flange	400
		C404-32-400	C404A-32-400	C404M-32-400	4" 300 lb. ANSI	4.000	400*
		C404-32-600	C404A-32-600	C404M-32-600	RF Mod. Flange	4" 300 lb. ANSI RF Flange	600*
		C404-32-800	C404A-32-800	C404M-32-800	(5 ⁷ / ₈ " dia.bore)	in nange	800*

* Closing flow vertical-down.



Valve Flange		RMI Part No.			
Model			Bottom Gasket Pump/Valve	Studs	Nuts
C404/C484-24	3"	T13603T0012	1P877699152	1P790832982 (8)	1A368124112 (16)
C403/C483-24	3"	T13603T0012	300/0300	1N946228982 (16)	1A368124112 (16)
C404-32	4"	1P110799152	1P877699152	T1118131032 (8)	1A368124112 (16)
A7883FK	3"	A7883-29	3-29 300/0300 A7560-56 (8)-Tank/Valve (Studs/Nuts) 3-29 (Studs/Nuts)		-T Valve/Pump

(PRE 1990 and later use 1P877799122. If unsure, order both. Gaskets are non-returnable.)

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Fax: 800-243-8341

Tel: 800-628-5044

RAY MURRAY, INC.

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142 **Emergency Shutoff Valves**

SNAPPY JOE EMERGENCY SHUTOFF VALVES FOR BULK PLANTS



Type N550 emergency shutoff valves are designed for in-line installation near a bulkhead. The valve provides a means to shut off gas in the event of hose rupture or piping break in the transfer area. Snappy Joe's are manually or pneumatically operated at the installed location or remotely. A thermal release is built in.

VALVES BULK PLANT

RMI Part No.	Inlet / Outlet	Flow Rate
N550-10	1 ¼"	125 gpm
N550-16	2"	150 gpm
N550-24	3"	280 gpm

REPLACEMENT PARTS - N550 VALVES

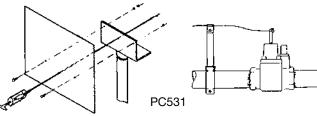
RMI Part No.	Description
P551	Retrofit Closure Kit for N550
T13090T0012	Packing Kit for N550 Series
T20714T0012	Handle for N550 Series

ACCESSORIES-PNEUMATIC OPERATION

RMI Part No.		
P327D	Air Release Assembly	
P539	Pneumatic Cylinder for N550	
ME551	MEC open/close Cylinder	

REMOTE VALVE KITS

Complete kits for release of emergency shut-off valves.



MANUAL CONTROL KITS

PNEUMATIC RELEASE KIT

MI Part No.	
C530-1	1-Valve P
C530-2	2-Valve P
C530-3	3-Valve P
20064	100' x ¼"
	C530-1 C530-2 C530-3

RMI Part No.	Description		
PC531	Manual Release Kit		

alve	RMI Part No.	Description
,	PC530-1	1-Valve Pneumatic Kit
	PC530-2	2-Valve Pneumatic Kit
	PC530-3	3-Valve Pneumatic Kit
	020064	100' x $\frac{1}{4}$ " plastic tubing for air

MARSHALL EXCELSIOR EMERGENCY SHUTOFF VALVES

MEC ESVs are designed to provide rapid and positive shutdown of gas lines should a down stream rupture or piping break occur.

- Powder Coated Body
- All Stainless Internal Components
- · Valves can be ordered with pneumatic release installed





ME980-16-2F

Description
1 1/4" ESV Pneumatic
1 1/4" ESV Cable
2" ESV Pneumatic
2" ESV Cable
3" ESV Pneumatic
3" ESV Cable
2" Flanged ESV Pneumatic
3" Flanged ESV Pneumatic
4" Flanged ESV Pneumatic

Repair Parts		
RMI Part No.	Description	
ME980-10SRK	1 1/4" Seal Kit	
ME980-16SRK	2" Seal Kit	
ME980-24SRK	3" Seal Kit	

ESV ACCESSORIES

P327D	

RMI Part No.		Description
Fisher	MEC	Description
-	ME980-905-25	25 ft. Cable Release
P164B	ME980-905-50	50 ft. Cable Release
P164C	ME980-905	Release Only - No Cable
P327D		Pneumatic Release
P539	ME551	Pneumatic Actuator
-	ME552	Rotary Pneumatic Actuator





Fax: 800-243-8341

Murray Inc. Inclu mour plast Edition fitting

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Ray

Tel: 800-628-5044

Includes release valve and 50' cable, mounting bracket,

and hardware, signs, and

accessories.

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

Internal Valve and Emergency 143 **Shutoff Valve Accessories**



PNEUMATIC ACTUATOR ACCESSORIES

BRASS TUBE FITTINGS

Brass push-in tube fittings are DOT approved for use in air-brake systems. Simple push-in connections are virtually leak free. All male threads are coated with Loctite 516 sealant. Working pressure vacuum to 150 psig.

RMI Part No.	Description
AQ62D0T4	¹ ⁄4" Tube x Tube Union
AQ64D0T4	1⁄4" Tube Tee
AQ68D0T4X2	1/8" MNPT x 1/4" Tube Adaptor
AQ68D0T4X4	¹ ⁄ ₄ " MNPT x ¹ ⁄ ₄ "Tube Adaptor
AQ69D0T4X2	1/8" MNPT x 1/4" Tube Elbow
AQ69D0T4X4	¹ ⁄ ₄ " MNPT x ¹ ⁄ ₄ "Tube Elbow
AQ72D0T4X2	1%" MNPT x 1/4" Tube Branch Tee
AQ72D0T4X4	¹ ⁄4" MNPT x ¹ ⁄4"Tube Branch Tee

POLY TUBING

Black polyethylene tubing is extruded from high molecular weight resin for increased stability and long term strength. Tubing contains an ultra-violet inhibitor for protection against sunlight.





RMI Part No.	Description
020064	100' coil of 1/4" tubing
020064-500	500' coil of 1/4" tubing
020064-1000	1000' spool of $\frac{1}{4}$ " tubing

REGULATOR

Regulator for use in pneumatic systems. 0-100 psig delivery pressure, dual gauges.

RMI Part No.	Description
REB-4-3	CO ₂ Regulator
REB-7-3	N ₂ Regulator

INTERNAL VALVE ACCESSORIES

CABLE CONTROL SYSTEMS

ULK PLANT & TRUCK EQUIPMEN

The P650 primary cable control system will actuate all internal valves, except the 4" series.

100 LEE	D P134		P650
\sim		II Part No.	Description
	Fisher	MEC	
	P650	MEP650	Open/Close Release w/50 ft. of Cable
	P651	MEP651	Cable Release Only
	P134	-	Fuse Link - 212°F
	P163A	-	25' Auxiliary Release
	P164A	-	50' Auxiliary Release

LATCH & REMOTE RELEASES

Internal valve lever can be latched open and closed by pulling the cable attached to release pull ring.



l Part No.	Description	
MEC	Description	
ME990-10-902	Release for 1 1/4" Internal Valves	
-	Bi-Directional Release for 1 1/4" Internal Valves	
MEP990-24	Manual LAtch for 2" and 3" Internal Valves	
MEP990-4F	Latch Release for 4" Internal Valves	
	ME990-10-902 - MEP990-24	

PNEUMATIC ACTUATORS

All internal valves can be fitted with an air operated cylinder for remote valve operation.





RMI Part No.		Value Cine	Description
Fisher	MEC	Valve Size	Description
P389	-	1 1/4"	Pnuematic Cylinder
P631	ME205	1 1/4"	Airbrake Style
-	ME225	1 1/4"	Rotary Actuator
P639	ME206	2" - 3"	Airbrake Style
-	ME226	2" - 3"	Rotary Actuator
P623	ME207	3" DBL Flange	Airbrake Style
-	ME227	3" DBL Flange	Rotary Actuator
P613	ME207SF	3" SNGL Flange	Airbrake Style
P614	ME208SF	4" Flanged	Airbrake Style
-	ME228	4" Flanged	Rotary Actuator
-	ME707	All Valves	Quick Release Valve
-	ME205R	1 1/4"	Rego 1 1/4" Internal
-	ME710	Flomatic	Actuator for 3-Way Valve

4" VALVE ACCESSORIES P315 manual remote release allows

closing of valve. Cable linkage and mounting hardware are included.

RMI Part No.	Description	
P315	Remote release for 4" Internal Valve	
P314	40 ft. Cable for use with cable release	



ALLEGHENY UNIVERSAL MECHANICAL OPERATOR

RMI Part No.	Number of Levers
40397A	1
40397B	2
40397C	3
20040A001	Adjusting Bolt Assy.





RMI Part No.		Description
Fisher	isher MEC Description	Description
P341	ME990-10-902	Release for 1 1/4" Internal Valves
P342	-	Bi-Directional Release for 1 1/4" Internal Valves
P340	MEP990-24	Manual LAtch for 2" and 3" Internal Valves
P313	MEP990-4F	Latch Release for 4" Internal Valves

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FISHER BACK CHECK VALVES

MARSHALL EXCELSIOR BACK CHECK VALVES



G100

Back check valves provide flow protection to container openings or liquid lines where flow is intended for one direction. The valve is normally closed until pressure activates the valve when flow is directed into piping or containers causing the back check to open. When flow stops or reverses, the check returns to the closed position.



ME870S-16

RMI Part No.		Inlet	Outlet	Or al Ormalization	Propane	
Brass	Steel	Connection	Connection	Seat Construction	Flow GPM	
G100		34" FNPT	3/4"	Metal	21	
G101		11/4" FNPT	11⁄4"	Metal	55	
G102	G112	2" FNPT	2"	Metal	150	
G109		2" FNPT	2"	Metal	150	
G104		3" FNPT	3"	Metal	250	
	G105	2" MNPT & 1¼" FNPT	2"	Soft	137.5	
	G106	3" FNPT	3"	Soft	254	
	G107	3" MNPT & 2" MNPT	3"	Soft	254	

FISHER G200 & G201 BACK CHECK VALVES

G200 BACK CHECK VALVES W/ FLOW INDICATOR

The G200 series back check valves are specifically intended for heavy, in-line service at the bulk plant's transfer area. The G200 series permits flow in one direction only.



G201

RMI Part		Inlet/Outlet	Flow	
Flow Indicator	Standard	illiet/Outlet	FIUW	
G201-10	G200-10	1¼" FNPT	125 gpm	
G201-16	G200-16	2" FNPT	200 gpm	
G201-24	G200-24	3" FNPT	300 gpm	

CORKEN FLO-CHECK VALVE WITH FLOW INDICATOR

contruction.

FC300

FC400

FC200

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RMI Part No.	Pipe Size	Length
FC125	1 ¹ /4"	5 ¹ / ₁₆ "
FC150	1 ¹ /2"	5 ¹ / ₁₆ "
FC200	2"	8 ¹ /2"
FC250	2 ¹ / ₂ "	8 ¹ / ₂ "

3'

4"

9¹/₄

9 ¹/₄"

Flow indicating and soft seat back

check valve features all ductile iron

RMI Part No.		Inlet	Outlet	Outlet Removable		
Brass	Steel	Connection	Connection	Soft Seat	Flow GPM	
ME870-6	ME870S-6	3/4" FNPT	3/4"	Yes	24	
ME870-10	ME870S-10	1¼" FNPT	11/4"	Yes	61	
ME870-16	ME870S-16	2" FNPT	2"	Yes	187	
	ME870S-16	2" FNPT	2"	Yes	187	
	ME870S-24	3" FNPT	3"	Yes	449	
	ME870SBN-24	3" FNPT	3"	Bonded Seat	449	
	ME872S-24	3" MNPT & 2" FNPT	3"	Yes	449	
	ME872SBN-24	3" MNPT & 2" FNPT	3"	Bonded Seat	449	



SWING CHECK VALVES

RMI	Size	Length	Weight
Part No.	SIZE	Lengin	Lbs.
SVC050	1/2"	2.63"	0.7
SVC075	3⁄4"	3.13"	1.1
SVC100	1"	3.75"	1.7
SVC125	1 ¹ /4"	4.75"	3.2
SVC150	11/2"	4.94"	4.8
SVC200	2"	5.81"	8.5

Swing check valves are used for multiple pump installations and certain vaporizer installation.

• 600 PSIG screwed bronze.

Horizontal swing type.

MARSHALL EXCELSIOR SWING CHECK VALVES

Heavy duty soft seated check valves provide positive seal to prevent reverse product flow. Installation of a flow indicating swing check upstream of the pump allows the operator to

observe product flow and make pump adjustments for maximum flow without cavitation.



RMI Part No.	Size	Flow Indicator
ME981-6	3/4" FNPT	YES
ME981-8	1" FNPT	YES
ME981-10	1 1/4" FNPT	YES
ME981-16	2" FNPT	YES
ME981-24	3" FNPT	YES
ME982-10	1 1/4" FNPT	NO
ME982-16	2" FNPT	NO
ME982-24	3" FNPT	NO
ME981-16-2F	2" 300# FLANGE	YES
ME981-24-3F	3" 300# FLANGE	YES
ME981-24-4F	4" 300# FLANGE	YES
ME982-16-2F	2" 300# FLANGE	NO
ME982-24-3F	3" 300# FLANGE	NO
ME982-24-4F	4" 300# FLANGE	NO

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145 Strainers, Sight Flows and Electric Control Switches



BULK PLANT & TRUCK EQUIPMENT

LARGE FILLER VALVE

Type D138-D141 filler valves are for use on bobtails and transports as well as bulk plant storage tanks. The D138 and D139 single back check valves require either a supplementary back check ("G" Series) or manual shut-off valve.



D138, D139

RMI	Container	Line	Back	Filling	Use w/Steel Back
Part No.	Connection	Connection*	Check	Capacity**	Check Valve
D140	2" MNPT	21/4"	Double	100 gpm	
D138	2 WINPT	M. Acme	Single	105 gpm	G112/G107
D141	3" MNPT	31⁄4"	Double	225 gpm	
D139	3 MINPI	M. Acme	Sinale	275 apm	G104

* For ring and chain assembly, order Part No. P167

** Capacity @ 10 PSIG differential pressure.

SIGHT FLOW

Length

4¹/₈"

4¹/₈"

5¹/,

3/," & 1"

11/,"

- Cast Bronze Body
 ¾"-450 psi Workin
 - $\frac{3}{4}$ "–450 psi Working Pressure
- 1"–400 psi Working Pressure
- Low Pressure Drop

RMI Part No.

1532-0240

1532-0250

1532-0260

1500RK-0100B

1500RK-0200B

Does NOT Have a Back Check

Description

3/4" Sight Flow

1" Sight Flow

Repair Kit*

*Includes top and bottom seals, glass,

gaskets and instructions

11/4" Sight Flow

VISI OP+ FLO	
Annel O	
1500 Series	

MARSHALL EXCELSIOR VALVE

Description

2" Sight Flow

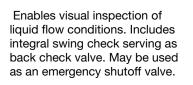
3" Sight Flow

RMI Part No.

ME875S-16

ME875S-24

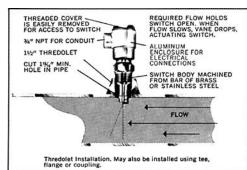
SIGHT FLOW INDICATOR



Tel: 800-628-5044

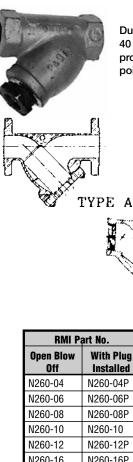
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ELECTRIC OPERATED ACTUATOR



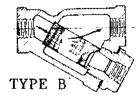
Explosion proof vane-operated switch that detects product flow in piping. Especially useful on bobtails when wired to solenoid-type control on carburetor to advance engine throttle during product transfer operations. V6EPBSS60 installation diagram

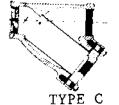
RMI Part No.	Description
V6EPBSS60	Flotect Switch



STRAINERS

Ductile Iron Body, Stainless Steel 40 mesh screen for recommended protection of pumps and meters and point of transfer as per NFPA 58.





RMI P	art No.			Blow
Open Blow Off	With Plug Installed	Size	Туре	Off
N260-04	N260-04P	1/2"	В	1/2"
N260-06	N260-06P	3/4"	В	1/2"
N260-08	N260-08P	1"	В	3/4"
N260-10	N260-10	1 ¹ / ₄ "	В	3/4"
N260-12	N260-12P	1 ¹ / ₂ "	В	1"
N260-16	N260-16P	2"	В	1"
N260-16C		2"	C	1"
N260-24C	N260-24P	3"	C	1 ¹ / ₄ "
N260-24F		3" FLANGED	Α	1 ¹ /4"
N260-24F		4" FLANGED	А	1 ¹ / ₄ "

Fax: 800-243-8341

Ray Murray Inc. Edition 11



Remote Shut-Off Systems 146

BASE ENGINEERING

BASE BOBTAIL REMOTE SHUTDOWN SYSTEMS

LDS60

- · Compact polycatbonate receivers are easily installed using prewired electrical harness.
- External antenna provides up to 1000 ft. operating range.
- Internal diagnostics monitor battery levels, signal connection and wiring faults for easy troubleshooting.
- Systems are available with up to five (5) functions including querry feature.

RMI Part No.	Description
ASKWD100F	1 Function System for REGO Flomatic
ASKWD100A	1 Function System for Pneumatic Internal Valves
ASKWD200F	2 Function System for REGO Flomatic
ASKWD200A	2 Function System for Pneumatic Internal Valves
	*Replacement Transmitters
ASKW100TX	1 Function Transmitter
ASKW200TX	2 Function Transmitter

*ASKW series is not compatible with the original RVC series system.

LDS100



LDS200AQRF

BASE ENGINEERING TRANSPORT PASSIVE SHUTDOWN SYSTEMS

Leak detection systems to be used on transports to comply with DOT requirements for passive shut off. The system continually monitors the off-loading procedures for a rapid change in discharge pressure.

RMI Part No.	Description
LDS60	Transport Leak Detection System
LDS100	System with Engine Shut Down
LDS200AQRF	System with Querry Function

BASE ENGINEERING DRIVER AUTHORIZATION SYSTEMS

Driver authorization systems are designed for commercial vehicles and prevent unauthorized engine start or movement.

SYSTEM INCLUDES:

- · Keypad unit with hidden enclosure screws
- · Sealed engine kill relay
- · Components are pre-wired with quick connect electrical fitings.



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RMI Part No.	Description	
DAS1000-AB	Security system for vehicle with air switch	
DAS1000-AT	Security system for vehicle with automatic transmission	
DAS1000-IG	Security system for any vehicle	

BULK PLANT WIRELESS SHUTDOWN

Bulk plant wireless emergency shutdown allows for the addition of additional shutdown locations without the need to run additional pneumatic tubing. System can be ordered with solenoid factory installed in receiver.





Standard wall mount E-Stop sw

p switch	available for any syste	
RMI Part No.	Description	
ASKF100-AC	Battery operated wireless emergency bulk plant shutdown	

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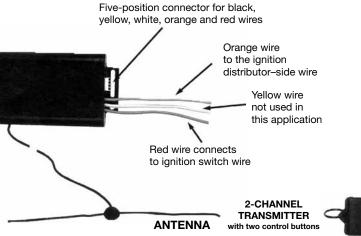
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3200 SERIES PROPANE TECHNOLOGIES REMOTE SHUTOFF SYSTEM



wired with standard two relays and lockout feature



- An easy to use and install system that meets or exceeds current DOT requirements
- Automatically shuts off the flow of gas without human intervention
- Provides an off truck remote to close internal valve during unloading process
- · Works with any hose, even where a facility hose is utilized

• Economical system that is easy to install

- Transmitter operates up to 300ft from Bobtail
- 2nd Channel option allows for operation of throttle, hose reel control or querry feature

BOBTAILS

RMI Part No.	Description	
3200-FGL Remote shutoff for REGO Flomatic		
3200-FTGL Shutoff for Flomatic with 2 transmitters		
3200-FGLB	Remote shutoff for PNEUMATIC internal transmitters	
3200-FTGL	Shutoff for PNEUMATIC valves with transmitters	

REPLACEMENT PARTS - ACCESSORIES

	RMI Part No.	Description
	VAP227G	Replacement transmitter
33P012DC Solenoid valve with bracket		Solenoid valve with bracket
	VAP338BR	2nd channel relay kit

BREAKGUARD PASSIVE SHUTOFF SYSTEM

RMI Part No.	Description
3200-PA	Breakguard passive shutoff system
3200-PA-VELCRO	Replacement velcro
BREAKGUARD-1	Replacement transmitter

SMART-HOSE PASSIVE SHUT-DOWN SYSTEM - DOT & FACILITY LIFELINE 1 AND LIFELINE 3

The Smart-Hoses meets the requirements of the DOT standards and additions to NFPA for a passive shutdown system. The patented system features an internal cable connected to normally unseated "valve plungers or wedges" locatedon each end of the cable. In the event of coupling-to-hose separation, stretching to the point of an unsafe condition or hose severance, the valve "wedges: are released and instantly seat, stopping the flow in both directions.

- Complies with HM-225
- Provides advanced safety
- Prevents loss of product
- Prevents property damage
- Possible insurance savings
- Low yearly cost due to long service life
- An added field maintenance beyond normal hose inspection
- Recovery recoupling program available

Prowrap Hose Protection

- Extreme duty protection for 2" hoses
- Install without disconnecting any lines
- Tight grip prevents sliding
- 70-120° temperature range

Tel: 800-628-5044



instantly shutting down the flow



Hose break

1" SMART-HOSE ASSEMBLIES			
RMI Part No.	Description		
CG-LPG-16-R10	1" x 10' Smart-Hose		
CG-LPG-16-R15	1" x 15' Smart-Hose		
CG-LPG-16-R20	1" x 20' Smart-Hose		
CG-LPG-16-R25	1" x 25' Smart-Hose		
CG-LPG-16-R30	1" x 30' Smart-Hose		

FACILITY HOSE

CG-LPG-32-R10-3F 2" x 10' Facility-Hose*

CG-LPG-32-R15-3F 2" x 15' Facility-Hose

Description

CG-LPG-20-R30

~		
Ζ.	SMAKI-HUSE	ASSEMBLIES

1¹/₄" SMART-HOSE ASSEMBLIES

Description

11/4" x 10' Smart-Hose

1¹/₄" x 15' Smart-Hose

11/4" x 20' Smart-Hose

1¹/₄" x 25' Smart-Hose

11/4" x 30' Smart-Hose

RMI Part No.	Description			
CG-LPG-32-R10-3				
CG-LPG-32-R15-3	2" x 15' Lifeline 3			
CG-LPG-32-R20-3	2" x 18.5' Lifeline 3			
CG-LPG-32-R25-3	2" x 25' Lifeline 3			
CG-LPG-32-R30-3	2" x 30' Lifeline 3			

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2" SMART-HOSE ASSEMBLIES FOR NH3

s es	RMI Part No.	Description	RMI Part No.	Description	Irra)
52			CG-NH3-32-R20-3	2" X 18.5 Smart-Hose for NH3	Σ
	PWLD-32	12.5' Length	CG-NH3-SS-32-R18.5-3	2" X 18.5' Smart-Hose S/S Braid for NH3	Ray

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ILK PLANT & TRUCK EQUIPMEN

normal delivery

normal delivery operation Smart-Hose shown in failure situations,

	Smart-Hose shown in failure si
/	

RMI Part No.

CG-LPG-20-R10

CG-LPG-20-R15

CG-LPG-20-R20

CG-LPG-20-R25

WLD-32 12.5' Length CG-

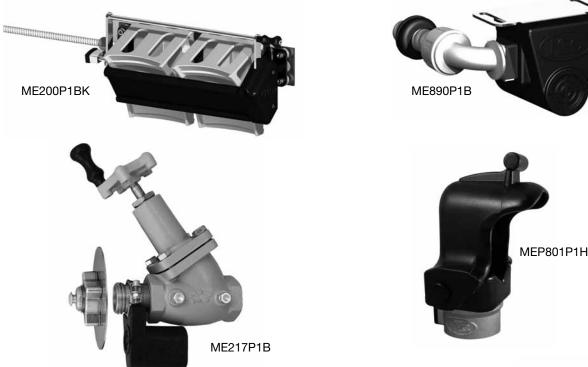
PROWRAP HOSE PROTECTION

RMI Part No.

Not for DOT applications.

rmi

Passive Shut-Down Systems 148





RMI Part No.	Description	Temp. Range	Accessories
ME200P1B	Sensor Bracket Assembly for ME200 Wheel Chocks	-20° to +160°F.	ME200EXT
ME200P1BK	Sensor Bracket Assembly with ME200 Wheel Chocks	-20° to +160°F.	(Standoff Extension Kit)
ME217P1B	Sensor Bracket Assembly for ME217 Series	-20° to +160°F.	
ME503P1B	Sensor Bracket Assembly for ME503-16 & ME252-6	-20° to +160°F.	MEP801PC/20
ME868P1B	Sensor Bracket Assembly for ME868 Valve Series	-20° to +160°F.	(20' Proximity Cable)
ME801P1H	Sensor Bracket Assembly with MEP801 Hose		
	End Valve Holster	-20° to +160°F.	MEP801PC/30
ME801P11K	Interlock Retro Fit Kit for MEP801 Hose End		(30' Proximity Cable)
	Valve Holster	-20° to +160°F.	
ME801P1KL	Low Temperature Interlock Retro Fit Kit for MEP801		Includes Water Tight
	Hose end Valve Holster	-20° to +160°F.	Recepticle Plug
ME890P1B	Universal Sensor Bracket Assembly for Enclosures	-20° to +160°F.	

SMART INTERLOCK TECHNOLOGY WIRING HARNESS KITS

)	RMI Part No.	Description	No. of Relays	LED Power Indicator	Inline Fuse	Cable Length	Accessories
	MEP801PCK/20	Wiring Harness Kit	1	Yes	Yes	20'	MEP801PC/20
	MEP801PCK/30	Wiring Harness Kit	1	Yes	Yes	30'	(20' Proximity Cable)
	MEP802PCK/20	Wiring Harness Kit	2	Yes	Yes	20'	MEP801PC/30 (30' Proximity Cable)
-	MEP802PCK/30	Wiring Harness Kit	2	Yes	Yes	30'	, , , , , , , , , , , , , , , , , , ,
1	MEP803PCK/30	Wiring Harness Kit	3	Yes	Yes	30'	Includes Water Tight Recepticle Plug



MEP802PCK/20

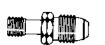
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Excess Flow Valves 149

Excess flow check valves are designed to close upon excessive discharge of liquid or vapor resulting from a break in the piping system. When the flow rate exceeds the valve setting, the valve closes and remains closed until the system pressure equalizes. If the flow does not exceed the setting the valve will not close. Careful consideration should be given to valve selection.

















A8013 Series

2723 Series

F173 Series							2723 Ser
Service	RMI Part No.	Inlet	Outlet	1		Vapor(SCFH 25 PSIG Inlet)	
	F173	MPOL	1/4" MNPT	Brass	0.7	120	204
	F173A	Soft Nose MPOL	1/4" MNPT	Brass	0.7	120	204
HOSE	F181	MPOL	1/4" MNPT	Brass	1.5	335	570
CONNECTION	F110	MPOL	⁹ / ₁₆ "-18LH	Brass	0.7	120	204
JUNNEGTION	F110A	Soft Nose MPOL	^{9/} 16"-18LH	Brass	0.7	120	204
	F183	MPOL	^{9/} 16"-18LH	Brass	1.5	335	570
	F202	MPOL	1/2" FLARE	Brass	1.9	634	1100
	ME355EX18	MPOL	1/2" FLARE	Brass	1.8	Not Rated	Not Rated
N-LINE	ME356EX18	MPOL	5%" FLARE	Brass	1.8	Not Rated	Not Rated
	ME354EX18	MPOL	1/2" MNPT	Brass	1.8	Not Rated	Not Rated
	F138	1/4" MNPT	1/4" FNPT	Brass	1.8	377	641
	ME880-4/1.8	1/4" MNPT	1⁄4" FNPT	Brass	1.8	Not Rated	Not Rated
	ME880-6/4.6	¾" MNPT	34" FNPT	Brass	4.6	Not Rated	Not Rated
	F170	¾" MNPT	34" FNPT	Brass	6.6	1184	2012
	ME880S-6/4.6	¾" MNPT	¾" FNPT	Steel	4.6	Not Rated	Not Rated
	F100	¾" MNPT	¾" FNPT	Brass	8.4	2010	3417
	ME880-6/14	¾" MNPT	¾" FNPT	Steel	14	Not Rated	Not Rated
	ME880S-6/14	34" MNPT	¾" FNPT	Steel	14	Not Rated	Not Rated
	ME880-6/17	34" MNPT	¾" FNPT	Brass	17	Not Rated	Not Rated
	ME880S-6/17	34" MNPT	3/4" FNPT	Steel	17	Not Rated	Not Rated
TANK & IN-LINE	F101	34" MNPT	34" FNPT	Brass	20	3459	5880
	ME880-6/22	34" MNPT	3/4" FNPT	Brass	20	Not Rated	Not Rated
	ME880S-6/22	¾" MNPT	¾" FNPT	Steel	22	Not Rated	Not Rated
	ME880-6/28	¾" MNPT	¾" FNPT	Brass	28	Not Rated	Not Rated
	ME880S-6/28	¾" MNPT	34" FNPT	Steel	28	Not Rated	Not Rated
PRESSURE GAUGE	2884D	¾" MNPT	¼″ FNPT	Brass		60	110
N-LINE	41FFD	1" MNPT	1" MNPT x1/2" FNPT	Steel	20	3400	5800
TANK	2723C	11/4" MNPT x 3/4" FNPT	34" MNPT	Brass	20	3900	6900
	ME880-10/32	11/4" MNPT	11/4" FNPT	Brass	32	Not Rated	Not Rated
	ME880S-10/32	1¼" MNPT	1¼" FNPT	Steel	32	Not Rated	Not Rated
	F102	1¼" MNPT	1¼" FNPT	Brass	33	6300	10630
TANK & IN-LINE	ME880-10/42	1¼" MNPT	1¼" FNPT	Brass	20	Not Rated	Not Rated
	ME880S-10/42	1¼" MNPT	1¼" FNPT	Steel	42	Not Rated	Not Rated
	F105	11/4" MNPT	1¼" FNPT	Brass	55	9982	16967
	A8013D	11/4" MNPT	34" MNPT	Steel	39	8700	14700
	A8013DA	11/4" MNPT	1" MNPT	Steel	44	8700	14700
	A8013DB	11/4" MNPT	11/4" MNPT	Steel	55	10900	19300
	A8525	11/4" MNPT	11/4" MNPT	Steel	35	12540	21560
	7574	11/2" MNPT	1½" FNPT	Brass	90	15200	28100
	ME880-16/80	2" MNPT	2" FNPT	Brass	80	Not Rated	Not Rated
	ME880S-16/80	2" MNPT	2" FNPT	Steel	80	Not Rated	Not Rated
	F106	2" MNPT	2" FNPT	Brass	85	18513	31467
TANK	F107	2" MNPT	2" FNPT	Brass	100	20796	35349
	ME880-16/105	2" MNPT	2" FNPT	Brass	105	Not Rated	Not Rated
	ME880S-16/105	2" MNPT	2" FNPT	Steel	105	Not Rated	Not Rated
	ME880-16/114	2" MNPT	2" FNPT	Brass	114	Not Rated	Not Rated
	ME880S-16/114	2" MNPT	2" FNPT	Steel	114	Not Rated	Not Rated
	ME880S-24/265	3" MNPT	3" FNPT	Steel	265	Not Rated	Not Rated
	ME880S-24/350	3" MNPT	3" FNPT	Steel	350	Not Rated	Not Rated

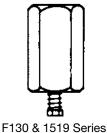
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150 **Excess Flow Valves**













2137, 2139 Series

A3500 Series

BULK PLANT & TRUCK EQUIPMENT

Excess flow check valves are designed to close upon excessive discharge of liquid or vapor resulting from a break in the piping system. When the flow rate exceeds the valve setting, the valve closes and remains closed until the system pressure equalizes. If the flow does not exceed the setting the valve will not close. Careful consideration should be given to valve selection.

Service	RMI Part No.	Inlet	Outlet	Construction	Liquid, GPM	Vapor, SCFH 25 PSIG Inlet	Vapor, SCFH 100 PSIG Inlet
	F130	1" FNPT	1" FNPT	Brass	25	5,287	8,986
	A1519A2	1" FNPT	1" FNPT	Steel	25	5,000	8,800
	F131	11/2" FNPT	11/2"FNPT	Brass	60	11,694	19,877
IN-LINE	F132	2" FNPT	2" FNPT	Brass	95	19,874	33,877
	F133	2" FNPT	2" FNPT	Brass	155	29,202	49,718
	A1519A4	2" FNPT	2" FNPT	Steel	100	19,000	34,500
	A1519B4	2" FNPT	2" FNPT	Steel	133	27,700	50,300
	1519C4	2" FNPT	2" FNPT	Brass	170	28,590	48,600
	F134	11/2" MNPT x 1" FNPT	1" FNPT	Brass	28	5,181	8,806
	F135	21/4" MNPT x 11/2" FNPT	11/2" FNPT	Brass	60	12,000	20,290
	F190	2" MNPT	2" MNPT x 11/4" FNPT	Steel	80	15,400	26,250
	ME882S-16/80	2" MNPT	2" MNPT	Steel	80	Not Rated	Not Rated
	F191	2" MNPT	2" MNPT x 1¼" FNPT	Steel	105	18,800	32,000
	ME882S-16/105	2" MNPT	2" MNPT	Steel	105	Not Rated	Not Rated
	ME882S-16/114	2" MNPT	2" MNPT	Steel	114	Not Rated	Not Rated
	A7537P4F	2" MNPT	2" MNPT x 11/4" FNPT	Steel	150	30,500	52,000
	A2137	2" M x 1¼" F	2" M x 1¼" F	Steel	50	10,000	17,000
	A2137A	2" MNPT x 11/4"" FNPT	2" MNPT x 11/4" FNPT	Steel	70	14,000	25,000
TANK	A3500L4	2" MNPT		Steel	75	13,000	22,500
	A3500N4	2" MNPT		Steel	125	25,000	42,500
	A3500P4	2" MNPT		Steel	150	30,500	52,000
	40KI	3" MNPT	2" FNPT	Steel	172		
	F194	3" MNPT	2" MNPT	Steel	165	32,800	55,950
	F195	3" MNPT	2" MNPT	Steel	260	50,650	86,350
	ME880S-24/265	3" MNPT	3" MNPT	Steel	265	Not Rated	Not Rated
	ME880S-24/350	3" MNPT	3" MNPT	Steel	350		
	F198	3" MNPT	3" MNPT x 2" FNPT	Steel	165	33,000	56,250
	ME882S-24/265	3" MNPT	3" MNPT x 2" FNPT	Steel	265	Not Rated	Not Rated
	F199	3" MNPT	3" MNPT x 2" FNPT	Steel	260	49,500	84,350
	ME882S-24/350	3" MNPT	3" MNPT x 2" FNPT	Steel	350	Not Rated	Not Rated
	A1519A6	3" FNPT	3" FNPT	Steel	225	45,000	82,000
IN-LINE	2139	3" M x 2"F	3" M x 2" F	Brass	125	26,500	46,000
	2139A	3" M x 2" F	3" M x 2" F	Brass	160	32,700	57,200
	A3500R6	3" MNPT		Steel	150	32,100	55,500
TANK	A3500T6	3" MNPT		Steel	200	39,400	68,300
	A3500V6	3" MNPT		Steel	250	51,100	88,700

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

151 Relief Valves

H722-250



Type

Bobtail

Bobtail

Transport

Transport

Transport

Installation

Wrench

P304

P304

P305

P305

P305



FISHER[®] FLANGED RELIEF VALVES FOR TRANSPORTS

Flanged version of the H732 series valve.

- Leak free flanged tank connection
- Improved 300 series SS spring

Fisher bobtail and transport

stainless steel tank relief

valves have low profile to

reduce possible damage.

New spring material more

resistant to impurities.

• Also available with Kalrez, Neoprene and Viton O-rings.

RMI	Tank	Relief	Rain
Part No.	Connection	Setting	Cap
H732F-250	3" Flanged	250	P298
H732F-265	3" Flanged	250	P298

THREADED TRUCK RELIEF VALVES

Rain

Cap

P297

P297

P298

P298

P298

Relief

Setting

250

265

250

265

265

RMI

Part No.

H722-250

H722-265

H732-250

H732-265

H832N-3-265

Tank

Connection

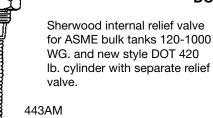
2'

2"

3"

3"

3"



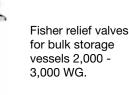
DOMESTIC TANK RELIEF VALVES

Sherwood

FISHER

RMI	Container	Relief	Rain	Tank Capacity
Part No.	Connection	Setting	Cap	Talik Gapacity
445AM	1"	250	P206	ASME 100 Gal. Vert.
445AT	1"	375	P206	DOT 420 lb.
433AM	3/4"	250	433-45	ASME 120-320 WG
443AM	1"	250	443-45	ASME 500 WG
453AM	11/4"	250	453-45	ASME 1000 WG





STORAGE TANK RELIEF VALVES

RMI Part No.	Tank Connection	Relief Setting	Construction	Rain Cap	Pipeaway Adaptor
H282-250	2"	250	Brass	AN11011	MEP104-24
H5112-250	2"	250	Stainless	AN11011	MEP104-24
H5112-265	2"	250	Stainless	AN11011	MEP104-24

BPS FLANGE MOUNT RELIEF VALVES ACF TYPE

RMI Part No.	Description	Inlet Connection	Pipe-A-Way Thread	Flow Capacity
3MBF-A-250	Flange mount relief valve- 250psig	3" Flange	3"FNPT	9347
3MBF-A-265	Flange mount relief valve- 265psig	3" Flange	3"FNPT	9881
4MBF-A-250	Flange mount relief valve- 250psig	4" Flange	3"FNPT	15452
4MBF-A-265	Flange mount relief valve- 265psig	4" Flange	3"FNPT	16336

Tel: 800-628-5044

3MBF-A Series

RAY MURRAY, INC.

Order online at www.raymurray.com or call for personal assistance



MARSHALL EXCELSIOR THREADED TRUCK RELIEF VALVES

- Designed for use in mobile LPG & NH3 containers
- Stainless Steel body construction
- Full internal construction



RMI Part No.	Tank Connection	Relief Setting	Seat Material	Service	Rain Cap	Installation Wrench
MEV200FIR/250	2"	250	Nitrile	LPG/NH3	MEV200FIR-09	MEP200FIR
MEV200FIR/265	2"	265	Nitrile	LPG/NH3	MEV200FIR-09	MEP200FIR
MEV200FIRV/250	2"	250	Viton	LPG	MEV200FIR-09	MEP200FIR
MEV200FIRV/265	2"	265	Viton	LPG	MEV200FIR-09	MEP200FIR
MEV200FIRK/250	2"	250	Kalrez	LPG/NH3	MEV200FIR-09	MEP200FIR
MEV200FIRK/265	2"	265	Kalrez	LPG/NH3	MEV200FIR-09	MEP200FIR
MEV300FIR/250	3"	250	Nitrile	LPG/NH3	MEV300FIR-09	MEP300FIR
MEV300FIR/265	3"	265	Nitrile	LPG/NH3	MEV300FIR-09	MEP300FIR
MEV300FIRV/250	3"	250	Viton	LPG	MEV300FIR-09	MEP300FIR
MEV300FIRV/265	3"	265	Viton	LPG	MEV300FIR-09	MEP300FIR
MEV300FIRK/250	3"	265	Kalrez	LPG/NH3	MEV300FIR-09	MEP300FIR
MEV300FIRK/265	3"	265	Kalrez	LPG/NH3	MEV300FIR-09	MEP300FIR

MARSHALL EXCELSIOR FLANGED RELIEF VALVES FOR TRANSPORTS/BOBTAILS

- Designed for use in mobile LPG & NH3 containers
- Flanged version of the MEV300FIR series valve
- Leak free flanged tank connection
- All stainless internal components



RMI Part No.	Tank Connection	Relief Setting	Seat Material	Service	Rain Cap
MEV300FIR-3F/250	3" 300#	250	Nitrile	LPG/NH3	MEV300FIR-09
MEV300FIR-3F/265	3" 300#	265	Nitrile	LPG/NH3	MEV300FIR-09
MEV300FIRV-3F/250	3" 300#	250	Viton	LPG	MEV300FIR-09
MEV300FIRV-3F/265	3" 300#	265	Viton	LPG	MEV300FIR-09
MEV300FIRK-3F/250	3" 300#	250	Kalrez	LPG/NH3	MEV300FIR-09
MEV300FIRK-3F/265	3" 300#	265	Kalrez	LPG/NH3	MEV300FIR-09

MARSHALL EXCELSIOR BULK STORAGE TANK RELIEF VALVES

- Designed for use in large stationary containers
- Steel and Stainless Steel internal coponents
- Stainless steel body for NH3 applications
- Also available with Nitrile, Viton or Kalrez seats



RMI Part No.	Tank Connection	Relief Setting	Construction	Rain Cap	Pipeaway Adaptor
MEV200SIR/250	2"	250	Brass	MEV200SIR-106	MEP104-24
MEV200SIR/265	2"	265	Brass	MEV200SIR-106	MEP104-24
MEV200SSIR/250	2"	250	Stainless	MEV200SIR-106	MEP104-24
MEV200SSIR/265	2"	265	Stainless	MEV200SIR-106	MEP104-24

MARSHALL EXCELSIOR QUAD-PORT RELIEF VALVE MANIFOLD



- Designed for large bulk storage containers with flanged relief expension
- flanged relief openings
- Durable Teflon packing stem seals
- Valves have integral breakaway groove
- Stocked models are for LPG service., NH3 service (Nitrile) available.

RMI Part No.	Flange Size	Relief Setting	Service	Bolt Kit
ME904S-3F/250	3" 300#	250	LPG	ME904SK
ME904S-4F/250	4" 300#	250	LPG	ME904SK

Replacement Valves

RMI Part No.	Thread Size	Relief Setting	Service		
MEV250/250VM	2 1/2"	250	UL		
A3149G	2 1/2"	250	ASME/UL		
MEP250	Installation Tool				
MEP 170	2" x 2 1/2"	Threaded	Adapter		

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153 Relief Valves and Weather Caps





HYDROSTATIC RELIEF



VALVES

- Small motor fuel
- Bulk plant liquid lines
- Bobtail trucks

RMI Part No.	Thread Size	Relief Setting	Material	Pipeaway Adaptor	Rain Cap
3865	1/4"	400psi	Brass	-	P205
MEH225SS/400	1/4"	400psi	Stainless	-	MEH501437
MEH225	1/4"	440psi	Brass	-	MEH501437
MEH225SS/440	1/4"	440psi	Stainless	-	MEH501437
H124	1/4"	450psi	Brass	-	P205
MEH25/450	1/4"	450psi	Brass	MEP173	MEH501812
H144	1/2"	450psi	Brass	P174	P206
MEH50/460	1/2"	460psi	Brass	MEP174	MEH501-1.062
H174	3/4"	450psi	Brass	P174	P206
MEH75/460	3/4"	460psi	Brass	MEP174	MEH501-1.062

Pipe-away thread size MEP173 1/4" P174 and MEP174 1/2"

REGO RELIEF VALVES

- Underground Tanks
- ASME style tanks
- Multi-port replacements

Relief Valve	Thread	Relief	RMI P	art No.	Annliegtion
RMI Part No.	Size	Setting	Pipe-away	Rain Cap	Application
MV3132G	1¼"	250 lb		3132-54	G8475W Multivalve
M3131G	3⁄4"	250 lb		3131-54	G8475V Multivalve
AA3130UA250	3⁄4"	250 lb	AA3131-10	AA3130-40	Anhydrous Ammonia
AA3135UA250	1¼"	250 lb	AA3135-10	AA3135-40	Anhydrous Ammonia
W3132G	1"	250 lb	3131-10	3132-54	ASME Tanks
3132G	1¼"	250 lb	3132-10	3132-54	ASME Tanks
3135G	11/4"	250 lb	3135-10	3135-54	Lg. ASME Tanks
3133G	1½"	250 lb	3135-10	3133-54	ASME Tanks
A3149MG	21/2"	250 lb	3" Pipe	3149-40	Rego Multi-port

EXTERNAL RELIEF VALVES

 DOT Cylinders ASME Tanks

RMI Part No.

H120-30

MEV25/60

H110-250

MEV25/250

MEV25/312

MEV25/375

MEV50/250

MEV50/375

MEV75/250

MEV75/312

MEV75/375

H173

H185-250

H125-250

H123

H148

Thread

Size

1/4"

1/4"

1/4"

1/4"

1/4'

1/4"

1/4"

1/2'

1/2"

1/2'

1/2'

3/4'

3/4"

3/4"

3/4'

3/4'

Relief

Setting

30psi

60psi

250psi

250psi

312psi

375psi

375psi

250psi

250psi

375psi

375psi

250psi

250psi

312psi

375psi

375psi

Pipe-Away thread size MEP173 1/4" P174 and MEP174 1/2"

Pipe-away

MEP173

MEP173

MEP173

MEP173

P174

MEP174

P174

MEP174

MEP174

MEP174

P174

MEP174

Rain Cap

P206

MEH501-.812

P206

MEH501-.812

MEH501-.812

P206

MEH501-.812

P206

MEH501-1.062

P206

MEH501-1.062

P145

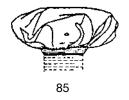
MEH501-1.062

MEH501-1.062

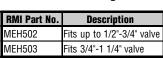
P206

MEH501-1.062

UNIVERSAL RAIN CAP



Fits all standard relief valves. Has new sealed elastomer band with ozone and ultra-violet inhibitors. Fits tightly to protect valve from foreign material.



PLASTIGAGE WEATHER CAP

Sturdy aluminum base and tough, durable plastic cover resists corrosion for long life. Includes "Heli-Coil" Spring.

Tel: 800-628-5044

	RM
	Part I
	HWC01
	HWC02
-	HWC03
. 11	HCW04

	RMI Part No.	Pipe Size
	HWC0100	1"
	HWC0200	2"
1	HWC0300	3"
	HCW0400	4"

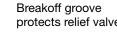
ANTHES WEATHER CAP

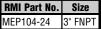
Economical steel cap closes tightly due to high hinge & counter balance. Stainless steel bushing & case hardened bolt protect against rust.



RMI	Pipe	Cap
Part No.	Size	No.
AN11001	3⁄4"	#0
AN11002	1"	#1
AN11003	1¼"	#2
AN11004	1½"	#3
AN11006	2"	#5
AN11007	21/2"	#6
AN11011	3"	#10
AN11015	4"	#14

PIPE AWAY ADAPTOR





MEP104-24

Fax: 800-243-8341

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protects relief valve.

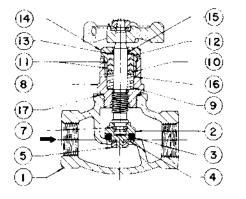
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Valve Repair Parts 154



ſ	FISHER	
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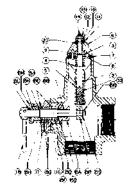
FISHER GLOBE AND ANGLE VALVES



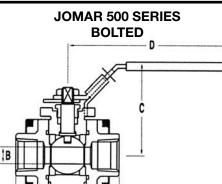
		RMI Part No.		
Valve No.	Size	Repair Kit Key #'s	Complete Bonnet, Stem Seals	
		3,10,11,12,15,17	& Seat Ass'y.Key #'s 2-17	
N350, N450	1/2", 3/4"	RN350T00012		
N301, N401	$\frac{1}{2}$ ", $\frac{3}{4}$ ", 1"	RN30008T012	T12690T0012	
N310, N410	1¼", 1½"	RN30012T012	T20838T0012	
N310, N410	2"	RN30016T012	T20818T0012	
N310, N410	3"	RN30024T012	T40259T0012	



FISHER INTERNAL VALVE REPLACEMENT PARTS KITS



		RMI P	art No.
Valve No.	Size	Complete	Packing Gland
		Repair Kit	Repair Kit
C421, C427	2" NPT	RC40016T012	T20377000A2
C421, C427	3" NPT	RC40024T012	T20430000A2
C404-43	4" Flange	RC20443T012	T11396000A2
C403-24	3" Flange	RC40324T012	
C404-24	3" Flange	RC40424T012	
C407-10	1¼" NPT	RC40710T012	
C208	1¼" NPT	RC208T00012	



A			
Valve Size	Valve Dort No.	RMI Pa	
	Part No.	Repair Kit	SW End
1/4"	500-301	899-911	N/A
3/8"	500-302	899-912	N/A
1/2"	500-303	899-913	500-323
3⁄4"	500-304	899-914	500-324
1"	500-305	899-915	500-325
11⁄4"	500-306	899-916	500-326
11/2"	500-307	899-917	500-327
2"	500-308	899-918	500-328
3"	500-310	899-920	500-330
4"	500-311	899-9211	500-331

16 15 13 12 0 10

JOMAR 600 SERIES

FLANGED

Valve Size	Valve Part No.	RMI Part No.	
	Fall NU.	Repair Kit	
2"	600-228	600-136	
3"	600-230	600-138	
4"	600-231	600-139	

JOMAR UNION END

SOCKET
END

Valve Size	Valve	RMI Part No.		
valve Size	Part No.	Repair Kit	SW End	
1/4"	100-981	899-981	100-981SWE	
3/8"	100-982	899-982	100-982SWE	
1/2"	100-983	899-983	100-983SWE	
3/4"	100-984	899-984	100-984SWE	
1"	100-985	899-985	100-985SWE	
11⁄4"	100-986	899-986	100-986SWE	
11/2"	100-987	899-987	100-987SWE	
2"	100-988	899-988	100-988SWE	

BULK PLANT & TRUCK EQUIPMENT

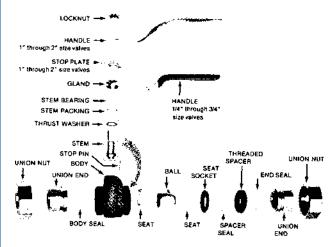
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155 Valve Repair Parts



REPAIR PARTS FOR MARPAC BALL VALVES

B790 & DI-800 KITS			
RMI Part No.			
Valve	Old Style Valve	Service Kit	Size
B790-TT	CS-790TT	5807-ATT	1/4"-1/2"
B790-TT	CS-790TT	5807-DTT	3⁄4"
B790-TT	CS-790TT	5807-ETT	1"
B790-TT	CS-790TT	5807-FTT	1¼"
B790-TT	CS-790TT	5807-GTT	11/2"
B790-TT	CS-790TT	5807-HTT	2"
DI-800-TT		9109-KIT	3"

B790 Kit Includes: 1 stem bearing, 1 thrust washer, 1 stem packing, 1 spacer seal, 2 seats, 1 body seal, and 1 end seal. DI-800 Kit Includes: 1 thrust washer, 1 stem packing set, 2 end seals, & 2 seats.

R

CSE790 & CSEFP3 KITS

OUL/JU & OULITU KITU				
RMI Part	Size			
New Style Valve Service Kit		3120		
CSE-790TTU	5807-EATT	¹ / ₄ "- ¹ / ₂ "		
CSE-790TTU	5807-EDTT	3/4"		
CSE-790TTU	5807-EETT	1"		
CSE-790TTU	5807-EFTT	11⁄4"		
CSE-790TTU	5807-EGTT	11/2"		
CSE-790TTU	5807-EHTT	2"		
CSEFP3-12TT	5826-HTT	2" Flanged		
CSEFP3-12TT	5826-KTT	3" Flanged		
CSEFP3-12TT	5826-LTT	4" Flanged		

CSE790 Kit Includes: 1 stem seal set, 1 spacer seal, 2 seats, 1 body seal, and 1 grounding washer. CSEFP3 Kit Includes: 2 seats, 1 stem seal, 1 body seal, 1 grounding washer.

Kit

A7505-50

A7507-50

A7509A-50

A7509-50

A7511-50

A7513-50

A7515-50

A7705-50

APOLLO FLANGED REPAIR KITS

Kits Include:

 Male Adaptor Seat Disc

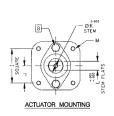
Body Gasket

Packing Spring

Packing

Gasket

O-Ring



REPAIR PARTS FOR SQUIBB-TAYLOR

GLOBE & ANGLE VALVES

Size

3/4"

1"

11/4

11/2"

2"

3"

1/2"

3⁄4"

Valve Size	Valve Part	RMI Part No.
valve Size	No.	Repair Kit
2"	88A-908-01	87A-028-01
3"	88A-900-01	87A-020-01
4"	88A-90A-01	87A-02A-01

Repair

Kit No.

308-22

310-22

312-22

314-22

316-22

320-22

410-22

410-22

RMI Part No.

Valve No.

AL308, AL309

AL-310, AL311,

A1592, A1596R

AL312, AL313

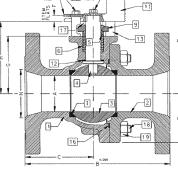
AL314, AL315

AL316, AL317

AL320, AL321

AL410, AL411

AL412, AL413

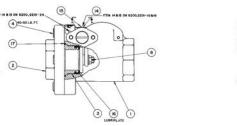


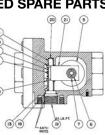
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REGO SHUTOFF VALVE REPAIR KITS

-		
	RMI Part N	lo.
	Valve	
	A7505AP, A7506AP,	A7
	A8016A, A7016A	AI
	A7507AP, A7508AP	A7
	A7509AP, A7510AP	A7
	A7509BP, A7510BP	A7
	A7511AP, A7511FP,	A7
	A7512AP, A7512FP	A
	A7513AP, A7513FP,	
Constant of the second	A7514AP, A7514FP,	A7
	A7515AP, A7516AP	
	A7517AP, A7517FP,	A7
	A7518AP, A7518FP	AI
	A7704, A7705,	A7
	A7704, A7706	

G200 AND G201 SERIES RECOMMENDED SPARE PARTS





RMI Part No. 1 1/4" Description 2" 3" G200 G201 G200 G201 G200 G201 T12857T0012 T12857X0012 T12887T0012 Seat Ring T12547X0012 Disk T12858T0012 T12891T0012 0-Ring 10A3800X032 1H8762X022 T12759T0012 T12857T0012 T12857T0012 T12782T0012 Gasket X-Ring T12786T0012 T12786T0012

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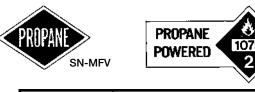
or call for personal assistance

T12786T0012



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	PETF	JEFIED IOLEUM SAS 1075 PLAMMABLE GAS 2 YLINDER DECALS PLAIN & IMPRINTED		Hendre Fran // Serginal is ment of is preferation Company is funding of Theorem Company is funding of the preferation
	RMI Part No.	Description	AFRI TO ALL PORTAGE CONTAINERS USE	Country Country
	SN-LPG	2" x 3 ³ ⁄ ₄ " DOT Cylinder Decal	Forugo	on Fork Lift Culindoro
	SN-LPG-SPEC*	SN-LPG Decal w/ customer's name imprinted	For use	on Fork Lift Cylinders
	* Minimum ord	er - 3500 pieces	"RIG	HT TO KNOW" DECAL
			RMI Part No.	Description
		CURVED CYLINDER DECAL		21/2" x 5" Decal - "Right To Know"
			RMI Part No.	Description
		ANING ALAMMAPLE COMPRESSED DA		$\frac{1}{2}$ " x 7 ¹ / ₂ " Diamond NFPA Hazard De
			SN-OSHA-LARGE 1	5" x 15" Diamond NFPA Hazard Dec
	RMI Pa SN-WAI		PROPANE	PROPANE POWERED 1075 2
		NAMETUNG PROPANE MONTHER LOUGHPED	RMI Part No.	Description
	500 E		SN-MFV	National Decal for Propane Vehicle
	: =	FLAMMABLE GAS	SN-LPG-NYS	Propane Vehicle Decal - New York S
	2 Bygingto Consequences (consecution) francos() - and the secure of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the security of the securi			
			VISUAL REQUALIFIER IDENTIFICATION KIT Special Order Specify your RIN	This tank has be visually reinspected in a with 49 CFR 180.20 V100000 Visual Required Identification
	•3-in-1 l	abel	Number to be printed	12 /06E Date/Typ Visual In
0	• DOT 10		on decal.	DSP 1-800-8
		lazard rating g ANSI/NFPA Pamphlet 48		
Ray Murray Inc. Edition		3 ³ / ¹ Vinyl	Date Decal must be ordered separately by	RMI Part No. Descri
ırra		ue, Yellow, Black	monthly quarters, 8 of	SN-RIN-Q1 01, 02, 03 Mo SN-RIN-Q2 04, 05, 06 Mo
y In			each month.	SN-RIN-Q3 07, 08, 09 M
о́ П		3-IN-1 HAZARD LABEL		SN-RIN-Q4 10, 11, 12 M
diti	RMI Part N	· · · · · · · · · · · · · · · · · · ·		SN-RIN-SPEC Visual Inspecti
ion 1	SN-HAZZARI	0-1 4 ³ / ₄ " x 6 ³ / ₄ " Three-in-One Hazard Decal		SN-RIN-SPEC-M Silver Mylar RI
			-	

RMI Part No.	Description
SN-OSHA-MED	7 ¹ / ₂ " x 7 ¹ / ₂ " Diamond NFPA Hazard Decal
SN-OSHA-LARGE	15" x 15" Diamond NFPA Hazard Decal





RMI Part No.	Description
SN-MFV	National Decal for Propane Vehicles
SN-LPG-NYS	Propane Vehicle Decal - New York State

s been in accordance 80.209(g) Requalifier cation Number te/Type of sual Inspection 5-C86

RMI Part No.	Description
SN-RIN-Q1	01, 02, 03 Month Decals
SN-RIN-Q2	04, 05, 06 Month Decals
SN-RIN-Q3	07, 08, 09 Month Decals
SN-RIN-Q4	10, 11, 12 Month Decals
SN-RIN-SPEC	Visual Inspection Decal Kit
SN-RIN-SPEC-M	Silver Mylar RIN Decal

Fax: 800-243-8341

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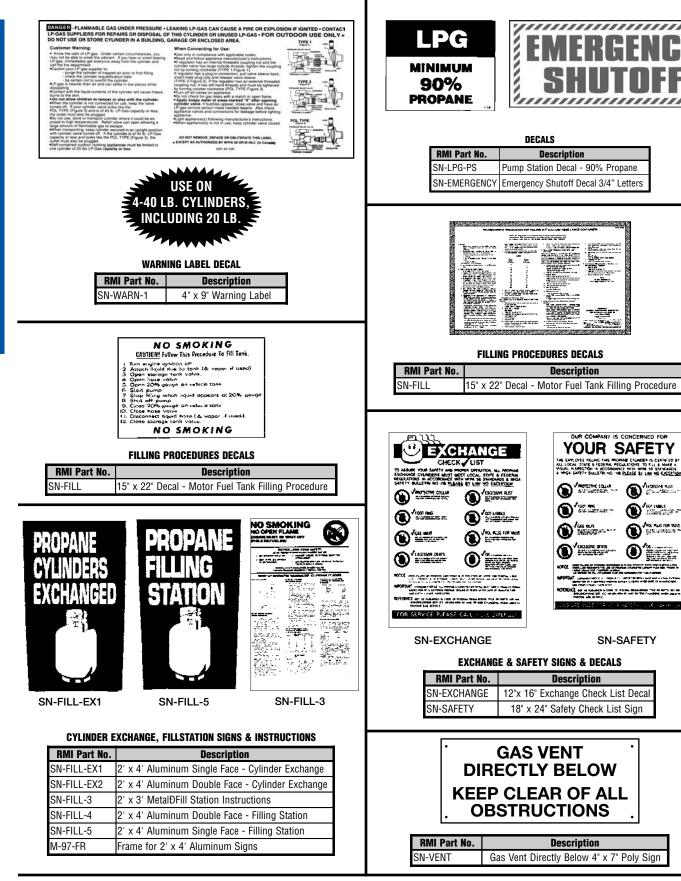
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TRUCK EQUIPMENT

BULK PLANT &

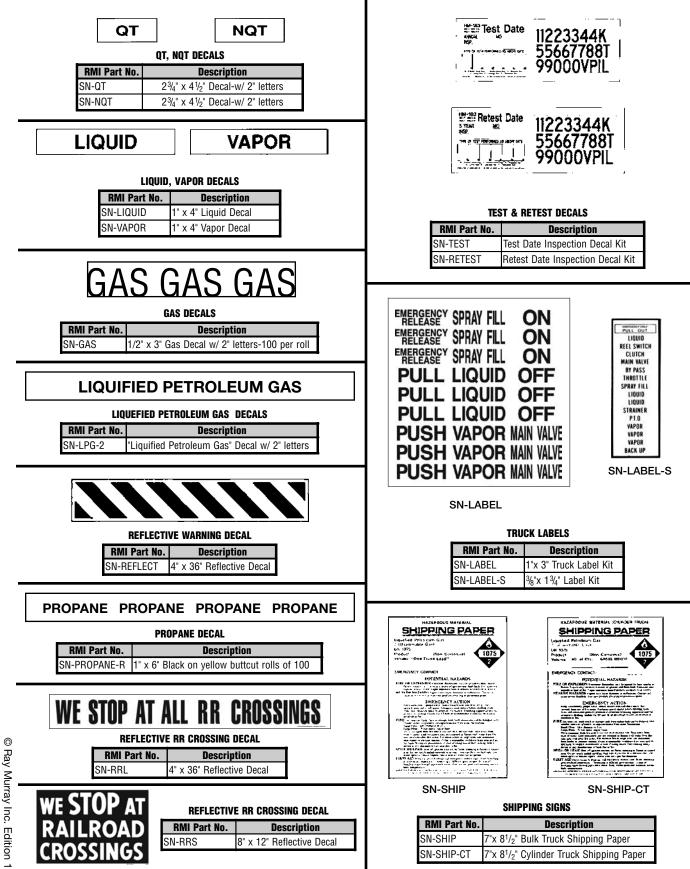




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NO SMOKING SN-NSD8	FLAMMABLE GAS 2 SN-FLAME-2 3
NO SMOKING METAL SIGNS & DECALS	
RMI Part No. Description	SN-FLAMMABLE SN-FLAME-R1
SN-NS2 4" x 22" Aluminum Sign	PROPANE DECALS & PLACARDS
SN-NSD2 5" x 22" Decal, 4" Letters SN-NSD8 3" x 141/2" Decal, 2" Letters	RMI Part No. Description SN-PROPANE 2¾" x 10 ¹ / ₂ " Decal - w/ 2" red letters
SN-NSD9 $2\frac{1}{2}$ x $10\frac{1}{2}$ Decal, 2 Letters	SN-PROPANE 2¾" x 10½" Decal - w/ 2" red letters SNL-PROPANE 5" x 18" Decal - w/ 4" red letters
SN-SS110 10" x 14"—Danger Metal Sign	SN-FLAMMABLE 10 ¹ / ₂ " Diamond Decal - "Flammable Gas"
SN-SS311 20" x 28"—Danger Metal Sign	SN-FLAME-R1 10 ¹ / ₂ " Diamond "Flammable" Placard (Poly)
	SN-FLAME-2 6" x 27" "Flammable Gas" Decal (4" letters)
CANGER NO SMOKING NO SMOKING SN-NSD7 SN-NSD7 SN-NSD5 RMI Part No. Description SN-NSD7 RMI Part No. Description SN-NSD5 RMI Part No. Description SN-NSD5 SN-NSD5 SN-NSD7 7" x 17" Decal SN-NS5 SN-NS7 SN-NS6 7" x 17" Poly Sign	1075 2 5N-1075 SN-1075
	DECALS, MAGNETS, MOUNTING HOLDERS, FLIP PLACARDS
	RMI Part No. Description
NO SMOKING OR OPEN FLAMES NO SMOKING	SN-1075 101/2" Diamond Decal-red w/ white letters SN-1075R 101/2" Diamond Sign-rigid vinyl
WITHIN 50 FEET FLAMMABLE PROPANE GAS	SN-MOUNT Placard Mounting Holder
SN-NSD3	SN-MAGNET 101/2" Diamond Vinyl Magnet
SN-NSDFPG	SN-1075F Aluminum "Easy-Flip" Placard-contains 1075, 1005 & Blank
NO SMOKING/FLAMMABLE GAS SIGNS & DECALS RMI Part No. Description	יעעיעיעיעיעיעיעיע אייייעיעיעיע
SN-NS3 24" x 36" Aluminum Sign-w/ 50 Feet	
SN-NSD3 12" x 18" Decal-w/ 50 Feet	
SN-NSD3-M 12" x 18" Metal Sign-w/ 50 Feet	
SN-NSDFPG 9" x 27" Deca-w/ Flammable Propane Gas	
	SN-PUSH-V SN-PULL-V
TRANSPORT TRUCK UNLOADING PROCEDURE	PUSH/PULL SIGNS
 Check the liquid level in storage tank(s) with the magnetic gauge or the rotary gauge and record these readings. 	RMI Part No. Description
 Be sure the entire load on the transport will fit into the container without exceeding the 85% maximum liquid fill level. 	SN-PULL-V Pull to Close Sign, Vinyl Plastic
3. Verify liquid level in transport.	SN-PUSH-V Push to Close Sign, Vinyl Plastic
4. Connect the truck liquid and vapor hoses to the unloading builthead Acme connectors. TRANSPORT TRUCK UNLOADING PROCEDURE SIGN/DECAL	
5. Open the liquid fill valve and vapor return valve under the tank(s). RMI Part No. Description	NOTICE STOD
Count the valves at the buildhead and on the truck to equalize pressure between the truck and tank(s). SN-Unload-P 22" x 15" Poly Sign	PERSONS EXTERING THIS EACLOSURE
7. Open the emergency shutoff valve (ESV) in the vapor line at the buildhead. Check remote cable and ESV for proper operation.	RUST UNLOCK AND OPIN EACH CATE TANK CAR
8. Start truck pump.	ANY DUTY WITHIN THE ENCLOSURE
 When transport truck has completed gumping all liquid into storage tank(s), turn off pump and verify truck is empty. 	SN-GATE-M GSTCC-B
 Close valves on truck and bulkhead. Depressurize hoses before disconnecting. 	RMI Part No. Description
 Check liquid levels in storage tank(s) again and record this reading. 	SN-GATE-M* NOTICE: Open Gates, Metal Sign - 10" x 14"
	6STCC-B Stop Car Connected 12" x 15"

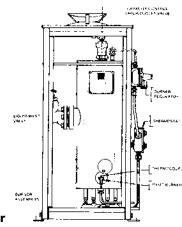
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ALGAS DIRECT FIRED VAPORIZERS RECOMMENDED SPARE PARTS





BULK PLANT & TRUCK EQUIPMENT

All units equipped with 9V Pilot Relighter

Description	RMI Part No.		
Description	40/40H	80/40H	120/60H
Master Spare Parts Kit	Pre 10/02 451-504-01	Pre 10/02 452-504-01	Pre 10/02 ??????
(includes * kits below)	Post 10/02 81111	Post 10/02 81112	Post 10/02 ????
*Thermocouple & Pilot Kit	3-0014	3-0013	41041
*Liquid Inlet Valve Kit	3-0016	3-0016	3-0016
*Capacity Control Valve Kit	3-0017	3-0017	3-0017
*Thermostat	41073	41073	41073
Pilot Assembly Pre '02		3-0644	
Pilot Assembly Post '02	42008	41021	41021
Burner Tips Pre '02	40C14-6	40C14-6	
Burner Tips Post '02	33581-10	33581-10	33581-10
Burner Regulators	34800	34800	34800

40/4	40H 8	£ 8	30/40H	DIRECT	FIRED	VAPURI	ZERS	

RMI	Capacity	Capacity	Dimensions		Liquid	Vapor	Weight	
Part No.	GPH	MM BTU/HR	Depth	Width	Height	Inlet	Outlet	(Lbs.)
40/40H	40	3.64	22	21	41	3/4"	1"	155
80/40H	80	7.28	35	21	41	3⁄4"	1"	220
120/60H	120	10.92	35	21	50	3⁄4"	1"	275
160H	160	14.5	20	30	70	3⁄4"	1"	450
320H	320	29.1	34	30	74	2"	2"	900
480H	480	43.6	49	30	74	2"	2"	1350
640H	640	58.2	63	30	74	2"	2"	1800
800H	800	72.8	78	30	74	2"	2"	2250

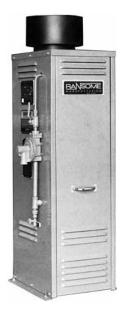
RANSOME DIRECT FIRED VAPORIZERS

	RANSOME DIRECT FIRED VAPORIZERS								
RMI	w/ Electric	Capacity	Capacity	Dimensions		Dimensions Liquid		Vapor	Weight
Part No.	Relight	GPH @ 0ºF.	BTU/HR	Depth	Width	Height	Inlet	Outlet	(Lbs.)
RH50	RH50-E	50	4,580,000	20.5"	16.6"	31"	3/4"	1"	205 lbs.
RH80	RH80-E	80	7,340,000	20.5"	16.6"	41"	3⁄4"	1"	245 lbs.
RH120	RH120-E	120	11,000,000	20.5"	16.6"	48.5"	3/4"	1"	285 lbs.
RH200	RH200-E	200	18,340,000	20.5"	16.6"	67.5"	1"	1"	380 lbs.
RH400	RH400-E	400	36,680,000	26.3"	34"	64"	1"	2"	920 lbs.
	RH600-E	600	54.9	26.5"	42"	69.5"	1"	2"	1300 lbs.
	RH800-E	800	73.2	26.5"	56"	69.5"	1"	2"	2050 lbs.
	RH100-E	1000	91.5	26.5"	70"	69.5"	1"	2"	2500 lbs.

Units available to accept 3/4" or 1" ESV. add "-ESV" to part number. Ex.: RH80-ESV

RANSOME REPAIR PARTS

RMI Part No.	Discription
(F-120F	Replacement Temperature Switch
R632-HCF	Replacement Regulator RH50-R200
R632-JFF	Replacement Regulator RH400
JC-KIT	Pilot Assembly
IW-Q313A	Thermal Generator
HW-VS820A	Gas Valve
1285-250	Relief Valve



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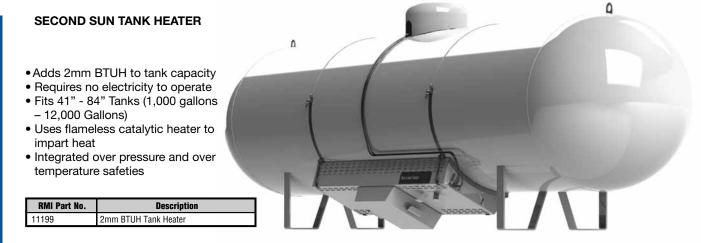
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Vaporizers - Tank Heaters and Electric 161





TOREXX VERTICAL EXPLOSION PROOF ELECTRIC VAPORIZER

- Proprietary Liqui-Safe valve positively prevents liquid carry over
- 98% Thermal efficiency
 - Hazardous area classification Class1, Div. 1
 - 92% Thermal Efficiency
 - Withstands momentary power interruptions without service disruption

RMI	RMI Vaporization		Capacity Liquid		Di	Weight		
Model No.	Gallon/Hr.	BTU/Hr.	Inlet	Outlet	D	W	H	(lbs.)
TX25	12.5	1.14 MM	3/4" FNPT	1" FNPT	111/4"	91/ ₈ "	41"	50
TX50	25	2.28 MM	3/4" FNPT	1" FNPT	111/4"	91/ ₈ "	41"	65
TX100	50	4.55 MM	3/4" FNPT	1" FNPT	11¼"	91/ ₈ "	41"	70
TX160	80	7.28 MM	3/4" FNPT	1" FNPT	11¼"	91/ ₈ "	41"	110
TX240	120	10.93 MM	¾" FNPT	1" FNPT	111⁄4"	91/ ₈ "	41"	140
TX320	160	14.57 MM	¾" FNPT	1" FNPT	111⁄4"	91/ ₈ "	41"	160



TOREXX INSTALLATION ACCESSORIES

RMI Part No.	Description
41051	Economy Operation Valve (up to 160 GPH)
36923	Valve & Strainer Package
20437	Stand to Raise Unit 12'
5010-3003	Drain Valve Kit
64004	Balancing Orifice

ZIMMER ELECTRIC VAPORIZER

- 20 Gallons per hour capacity • 1.82 MM BTUH
- Operates on 100-240 volts AC or DC Can utilize 100# and 420# cylinders with liquid withdrawal valves

7IMMER VAPORIZER & ACCESSORIES

21141141	EN VAFUNIZEN & AUGESSUNIES
RMI Part No.	Description
Z40P	20 GPH Electric Vaporizer Accessories
X1584MN	High Temperature 1/2" Regulator
80887	Tank oounting Kit
80888	Tank Mounting Valve & Regulator Kit
80885	Wall Mount Kit
80892	Strainer & Piping Kit for Wall Mount



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AQUAVAIRE VERTICAL WATERBATH VAPORIZERS

The AQUAVAIRE waterbath vaporizer safely and efficiently vaporizes LPG for commercial, industrial and utility gas consumption applications.

- Factory Mutual System APPROVED
- · Two electrically operated fuel shut-off valves
- Water circulation pump increases heat transfer

Note: Larger units are available.

RMI	Vaporizatio-	Capacity Liquid Vapor Electrical Data				Din	nensi	Weight			
Part No.	n Gallon/Hr.	BTU/Hr.	Inlet	Outlet	Phase	Voltage	Amps	D	W	H	(lbs.)
Q320V	320	29,120,000	¾" NPT	2" NPT	1	120	8.9	69"	27"	70"	1,150
Q480V	480	43,680,000	¾" NPT	2" NPT	1	120	8.9	72"	27"	79"	1,350
Q640V	640	58,240,000	¾" NPT	2" NPT	1	120	10.4	74"	39"	75"	2,100
Q800V	800	72,800,000	1" NPT	2" NPT	1/3	120/240	9.1/4.8	74"	39"	88"	2,300
Q960V	960	87,360,000	1" NPT	2" NPT	1/3	120/240	11.5/6.2	74"	39"	88"	2,400
Q1120V	1,120	101,580,000	1" NPT	2" NPT	1/3	120/240	14.5/8.3	92"	55"	83"	7,100
Q1375V	1,375	125,520,000	1" NPT	2" NPT	1/3	120/240	15.0/8.5	92"	55"	83"	7,200



Q320V

INDIRECT VAPORIZER/HYDRONIC BOILER PACKAGE

RMI Part no.	GPH	Capacity
HXB320	160	14.5 MM BTUH
HXB500	250	22.9 MM BTUH
HXB640	320	28.8 MM BTUH
HXB1000	500	45.2 MM BTUH

Packaged hot water vaporizer with a prepiped hydronic boiler. The hydrex is prepiped, pre-wired, and ready for installation.



RANSOME WATERBATH VAPORIZERS

RMI	w/ Electric	Capacity	Capacity	Depth	Width	Height	Liquid	Vapor	Weight
Part No.	Relight	GPH @ O;F.	BTU/Hr	nehru			Inlet	Outlet	(Lbs.)
RW100	RW100-E	100	9,170,000	20.5"	14"	48.5"	3/4"	1"	450
RW180	RW180-E	180	16,500,000	20.5"	14"	67.5"	3/4"	1"	750
RW360	RW360-E	360	33,010,000	21.5"	28"	69"	1"	2"	1390
RW540	RW540-E	540	49,510,000	21.5"	42"	69"	1"	2"	1950
RW720	RW720-E	720	66,020,000	21.5"	56"	69"	1"	2"	2510

Note: Larger units and IRI controls available.



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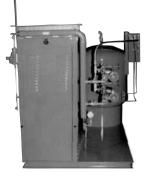
Propane Air Systems 163



PACKAGED **VAPORIZING/MIXING SYSTEMS**

- Direct fired or electric vaporizer
- Venturi type mixer
- All controls pre-wired
- Surge/accumulator tank included
- Skid mounted for ease of installation
- FM approved

ULK PLANT & TRUCK EQUIPMENT



ENERGY SYSTEMS • Direct fired vaporizer • 5-10 PSIG delivery pressures (*see note) 2.5 - 42MM BTU Capacity



SAM DICK INDUSTRIES Electric vaporizer

- 4-12 PSIG delivery pressures (*see note)
- 2.5MM-28MM BTUH capacity

MODULE TYPE VAPORIZING/MIXING SYSTEMS

- Direct fired or water bath vaporizer
- Venturi type mixer ٠
- All controls pre-wired ٠
- FM approved



RANSOME PAM SERIES

- Direct fired vaporizer
- 5-9 PSIG delivery pressure (*see note)
- 14.75MM-73-75MM BTUH Capacity
- Infinite turndown ratio •



SAM DICK QM SERIES

- Water bath vaporizer
- 5-15 PSIG delivery pressures (*see note)
- 28MM-125MM BTUH capacity
- Self diagnostic system

PROPORTIONING PROPANE/AIR MIXER

- 16MM-870MM BTUH
- 10-150 PSIG
- Extremely accurate
- Local or remote mounted controller



TYPICAL SURGE/ACCUMULATOR VESSEL

ASME code vessel

• For component type systems

All controls pre-wired

7MM-250MM BTUH capacity

- Sized to load/capacity
- Valving packages available



NOTE: **HIGHER PRESSURES AVAILABLE WITH THE** ADDITION OF HIGH PRESSURE AIR.

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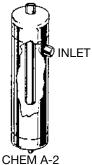
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VENTURI PROPANE/AIR MIXER Need to supply correctly sized vaporizer 4-15 PSIG delivery pressure (*see note)



164 Separators, Filters and Additives

OUTLET



For use with vaporizerssingle stage design. Helps remove heavy end particles and solid material by centrifugal action in the chamber. All welded construction

- Openings for drain valve & relief
- valve Also available in two stage design with filter
- 100 psi working pressure.

CHEM GAS SEPARATOR

RMI Part No.	Capacity @ 10 PSIG	Inlet	Outlet	Drain Opening	Diameter	Height	Weight (Lbs.)
CHEM A-1	4,528,800 BTU/hr	1" FNPT	1" FNPT	1/2"	5"	13"	33#
CHEM A-2	15,096000 BTU/hr	2" FNPT	2" FNPT	1/2"	8"	25½"	64#
CHEM A-3	135,864,000 BTU/hr	3" FNPT	3" FNPT	1/2"	12"	40"	120#

ALGAS FILTAIRE

Filtering device to trap heavy end 5 commonly present in vaproized LP gas. Includes pressure gauges to monitor efficiency of filtaire.

RMI Part No.	Capacity @ 20 PSIG	Size
F0.5	20 GPH	
F4	102 GPH	1 1/2"
F6	230 GPH	2"
F8	405 GPH	3" 300 # FLANGE
F12	920 GPH	6" 300# FLANGE



BLUE MOON FILTERS

A multi stage filter system that can extract 90-97% of impurities from the liquid phase of propane - before it gets into vaporizers, regulators and engine systems

RMI Part No.	Size	Description	Filter Life	Replacement Element
BMF-FST26	3/8'	15GPM Disposable Filter	100,000	Х
BMF-FST42	3/8"	15GPM Filter Assembly	100,000	BMF-RF2
BMF-FST63	1"	50GPM Diposable Filter	150,000	Х
BMF-FST634	1"	50GPM Filter Assembly	250,000	BMF-RF6
BMF-FST124	2"	65-85GPM Filter Assembly	500,000	BMF-RF4
BMF-FST418	3" Flange	170GPM Filter Assembly	500,000	BMF-RF8



PRO2000-V PROPANE VAPORIZER FUEL TREATMENT

PRO2000-V is a highly effective liquid Ray Murray Inc. additive to help eliminate heavy ends in liquid propane. The solvents in Pro200-V allow the heavy ends to be carried into the combustion chamber without creating deposits in control valves and regulators.

RMI Part No.	Description			
208L-5	5 Gallon Container PR02000-V			
208L-55	55 Gallon Drum PRO2000-V			

*Use at recommended dosage of 1 gallon per 2000 gallons of propane.

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Edition

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Hand Tools 165





Think of RMI for all of your **Ridgid tools and equipment!**

Tools for the Professional

RIDGID STEEL AND ALUMINIUM PIPE WRENCHES

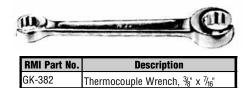
RMI Part No.	Length
31020-14	14" Steel Pipe Wrench
31025-18	18" Steel Pipe Wrench
31030-24	24" Steel Pipe Wrench
31035-36	36" Steel Pipe Wrench
31040-48	48" Steel Pipe Wrench
31045-60	60" Steel Pipe Wrench
31100-814	14" Aluminum Pipe Wrench
31105-824	24" Aluminum Pipe Wrench
31110-836	36" Aluminum Pipe Wrench
31115-848	48" Aluminum Pipe Wrench



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THERMOCOUPLE WRENCHES

Alloy steel open end HEX wrench.



N

P

Beryllium alloy, non-magnetic, and corrosion resistant.

NON-SPARKING TOOLS

RMI Part No.	Description	Size	Length
M-2	Mallet	1 lb. 14 oz.	12"
W-211	Pipe Wrench	1" max	10"
W-212	Pipe Wrench	1½" max	14"
W-214	Pipe Wrench	21/2" max	24"
W-71	Adjustable	¹⁵ / ₁₆ " max	8"
W-72	Adjustable	11//8" max	10"
W-73	Adjustable	1%" max	12"
P-39	Pliers	1½"" max	9½"
S-49	Screw Driver	6" Blade	101%"
S-50	Screw Driver	8" Blade	13"
S-51	Screw Driver	12" Blade	17"
S-1100	Philips Screw Driver	6" Blade	101//8"
WB-40	Wire Brush		14"

HANDI-LITE

6" Match clip extends to 24" for easy lighting of pilots, burners and grills. Available with or without magnet.

RMI Part No.	Description	
HANDI-LITE	Extendable Match Holder & Magnet	

Extendable Match Holder - No Magnet

Tel: 800-628-5044

Z6-413

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ΗС



Adjustable Reamer Kit - #31 to #50

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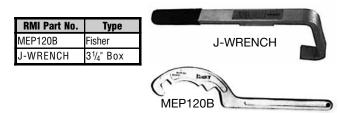
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SPANNER WRENCH/J-WRENCH

For tightening and loosening 2¹/₄", 3¹/₄", 4¹/₄" ACME Couplings.



DRILL KITS

Various combinations of drills with handles in a plastic case. See part no. and description for kit make-up.



RMI Part No.	Description		
G1939	(21) Gauging Drills #19 - #39;		
01939	RMH-90 Reamer w/ Handle; Plastic Case		
G4080	(41) Gauging Drills #40 - #80;		
	RMH-90 Reamer w/ Handle; Plastic Case		

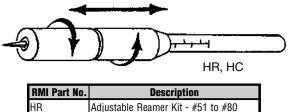
INDIVIDUAL REPLACEMENT DRILLS



RMI Part No.	Description
DH-19 thru DH-80	Individual Replacement Drills; #19 - #80 w/ Handles
RMH-80; RMH-90	Individual Replacement Reamer; #80 & #90 w/Handles

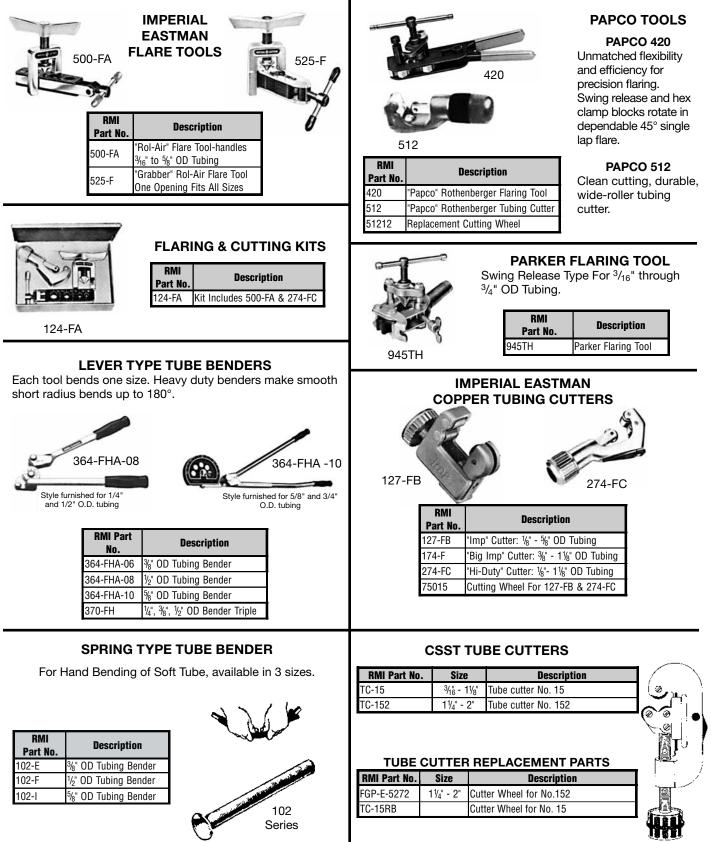
ADJUSTABLE REAMER KIT

Adjustable orifice reamer can ream, enlarge or measure orifices used on LP-Gas appliances.





Copper Flaring Tools 166



Ray Murray Inc. Edition

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167 Orifice Kits and Tools

RMI Part No.

MI-100K

MI-100

TL-061

TL-062

TL-063

TL-064

TL-070

TL-074



GAS CONTROL TAP KIT

Kit provides taps to refurbish damaged or cross threaded gas connections. The three taps will rework standard thermocouple, main burner and pilot outlets. Thread gauge determines proper tap selection.

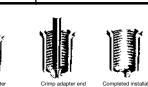
RMI Part No. Description		
TPK-1	Complete Gas Control Tap Kit	
Individual Parts		
TP-11/32DL	Thermocouple Tap - $^{11}\!\!/_{32}$ " x 32 NS	
TP-3/8-18	Main Burner Tap - ¾" x 18 NPT	
TP-7/16-24	Pilot Tap - 7/ ₁₆ " x 24 NS	
TP-TG	Thread Gauge - 18 Blade	

GAS-KIT MI-100K ORIFICE ADAPTOR KIT

Kit will renew 80–90% of all orifices to use higher BTU gases.

Instructions: Remove existing orifice. Insert into anvil. Ream out orifice in conjunction with handpiece. Remove orifice from anvil, insert adaptor. Place orifice on end of anvil. Use driving tool & strike with hammer to set adaptor. Insert crimping tool into anvil Strike with hammer & flare adaptor.





GAS-KIT ORIFICE KITS

GK-201: Contains 10 each of standard cap orifices and 10 each of plug types to cover most conversion applications plus those "hard to get" taps and drills to refurbish thread connections.



RAY MURRAY, INC.

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TPK-

Description

Complete Orifice Adaptor Kit

INDIVIDUAL PARTS

Adaptor

Hand Piece

Driving Tool

Adaptor Crimping Tool

Crimping

Reamer

Anvil

GK-202: Contains 20 each of standard cap orifices and 20 each of 5 plug types.

RMI Part No.	Description		
GK-201	Complete Orifice Kit, 10 each and taps and drills		
GK-202	Orifice Kit, selected orifices, no taps or drills		

To install specific orifice, use Drill and Tap as shown in chart below. DRILLS & TAPS FOR USE WITH GAS-KIT ORIFICE KITS

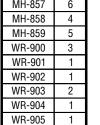
Orifice			Drill		Tap	
RMI Part No.	Туре	Thread	RMI Part No.	Size	RMI Part No.	Size
CO-400/80	Сар	%" x 27				
PO-512/80	Plug	∜ ₁₆ " x 32	GK-180D	⁹ / ₃₂ "	GK-180T	5⁄ ₁₆ " x 32
PO-518/80	Plug	¹¹ / ₃₂ " x 32	GK-188D	⁵ / ₁₆ "	GK-188T	¹¹ / ₃₂ "" x 32
PO-508/80	Plug	¼" x 28	GK-185D	#3	GK-185T	1⁄4" x 28
PO-501/80	Plug	¹⁷ / ₆₄ " x 36	GK-187D	ÒB"	GK-187T	¹⁷ / ₆₄ " x 36
PO-511/80	Plug	⁷ /₁ ₆ " x 27	GK-182D	ÒΥÓ	GK-182T	⁷ / ₁₆ " x 27

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ANDERSON & FORRESTER ORIFICE KITS

- MI-131: 23 Most Common Sizes & Chart (Over 300 Pieces) MI-132: 32 Most Common Pilot Orifices & Chart (Over 100 Pieces)
- MI-135: 23 Most Popular LP Orifices & Chart (Nearly 300 Pieces)

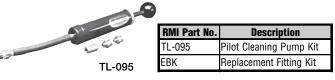
RMI Orifice Kit Part No.						
MI-13	2	MI-13	31	MI-135		
Pilot Orifice Kit		Serviceman's Orifice Kit		LP Plug & Cap Orifice K		
Contai	ns	Contains		Contains		
Part No.	Pcs.	Part No.	Pcs.	Part No.	Pcs.	
BA-701	3	CO-400	25	CO-400	25	
BA-702	2	MI-100	30	CO-401	10	
BA-703	3	MI-108	10	CO-402	10	
BA-718	6	P0-501	12	CO-403	10	
BA-719	3	P0-505	5	CO-405	5	
BA-720	4	P0-508	20	MI-100	30	
GE-751	1	P0-511	10	MI-108	10	
GE-752	2	PO-515	12	PO-501	10	
GE-753	3	PO-518	20	PO-505	5	
GE-757	9	P0-519	15	PO-508	15	
GR-801	7	P0-520	10	P0-511	10	
GR-803	5	P0-523	12	PO-518	10	
GR-804	4	P0-529	15	PO-519	15	
GR-805	3	P0-530	12	P0-520	10	
GR-806	3	P0-533	10	P0-523	10	
GR-807	3	P0-536	8	P0-527	10	
GR-813	5	P0-538	10	P0-529	15	
GR-818	6	P0-539	15	PO-531	10	
GR-820	5	P0-543	10	PO-533	15	
GR-821	4	P0-554	8	PO-536	10	
MH-851	3	P0-557	10	PO-538	10	
MH-854	4	P0-558	10	PO-539	15	
MH-856	4	P0-559	10	PO-543	10	
MH-857	6					
MH-858	4	and the set of the set of the				
	E	19				



MI-131

PILOT CLEANING PUMP

Heavy-duty construction for years of dependable service. Attaches quickly to hot water heater, furnace, stove and dryer. Fits easily into tool box or pocket. Eliminates the replacement of orifices. Useful in cleaning moisture, carbon and lint from orifices and in removing water from flooded lines. Includes fittings for 1/8" - 3/16" and 1/4" pilot tubing nuts.



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Ray Murray Inc. Edition 11

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Gas-Kit Serviceman's Kit 168

wrench head.

RMI Part No.

GK-140A

GK-140B

GK-140C

GK-140B-1

RMI Part No.

GK-140

COMBINATION MIDGET WRENCH

Removes/Installs hood orifices. Set

Description

Description

Combination Midget Wrench Set

CM-13 Ratchet Only

Wrench Head Only

#1 Phillips Head Only

INDIVIDUAL

ITEMS ON THIS PAGE INCLUDED IN

GK-100 KIT

#2 Phillips Head Only

includes 20 tooth offset ratchet, 2

Phillips head screw slot drivers, 1

APPLIANCE LEVEL

Automatically levels anv surface in all directions (360°) at one time.



RMI Part No. Description GK-001 Appliance Level

DRILLS

Sixteen (16) special length high speed drills cover definite orifice capacities.

RMI Part No.	BTU/HR*	
D-45	48,659	
D-47	44,604	
D-48	41,839	
D-50	35,480	
D-52	29,214	
D-53	25,619	
D-54	21,933	
D-55	19,537	
D-56	16,548	
D-59	12,164	
D-62	10,450	
D-65	8,865	
D-68	6,957	
D-70	5,627	
D-72	4,524	
D-80	1,317	
*Measured @	0 11" W.C.	

FILES

Files held in flip-out partition for quick & easy handling.Four files, each with specific functions.

	GK-FF
	GK-LF
	GK-SF
	GK-HF
RMI Part No.	Description
GK-FF	Flat File - Cleans slotted standby pilots, burners& ribbon burners.
GK-LF	Large Round File - Cleans ports on the following burners: star, top,oven broilers, water heater, space heater, etc.
GK-SF	Small Round File - Cleans ports on the following burners: star, top, oven broilers, water heater, space heater, etc.

Hook File - Cleans entrainment port on

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side of burner head.

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Edition

GK-HF

SERVICEMAN'S KIT



A compact unit with features created to meet the demands of the "on the road" gas serviceman. Contains reamers, drills, midget wrench, files, orifice hole reducer kit, leveler, and miscellaneous tools as listed below.

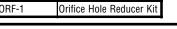
RMI Part No.	Description
GK-100	Gas-Kit Serviceman's Kit

ORIFICE HOLE REDUCER KIT



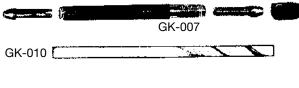
Emergency method for shrinking oversize holes in an orifice quickly and accurately. The adjustable orifice reamer can ream, enlarge or measure orifices used on LP-Gas appliances, drill size #31 to #80. Includes 2 reducers: $1/_{16}$ " and $5/_{32}$ ".



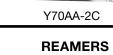


MISCELLANEOUS TOOLS GAS GREASE) & GAS COCK GREASE Specialty tools for the gas serviceman tool kit.

Gas cock grease will not break down in hydrocarbon gases or temperatures up to 185°F.

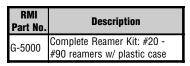


GK-003



Five cornered reamers-clean pilots, orifices, burners and parts. Permit true orifice reaming without drifting, plus burnished finish.

AS VALVE GREAS



GK-010	S/S Slot Cleaner - Cleans slotted portions in burners pilot heads.			
Y70AA-2C	Gas Co	ck Gre	ase - 2½"	0Z.
* This item	n not inc	luded	in GK-100	l ki
				_
RMI Pa	art No.	Des	cription	
RM-20		# 20	Reamer	

RMI Part No.	Description
RM-20	# 20 Reamer
RM-30	# 30 Reamer
RM-40	# 40 Reamer
RM-50	# 50 Reamer
RM-60	# 60 Reamer
RM-70	# 70 Reamer
RM-80	# 80 Reamer
RM-90	# 90 Reamer

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SERVICE TOOLS

C

RMI Part No.	Description	
	Chip Brush - Loosens & removes chips in drilled hoods.	
	Double Collet Pin Vise - Holds drills, reamers and chip brush.	

169 Safety Equipment



SPECIAL LIGHT (NO. 2117) FOR USE IN HAZARDOUS AREAS



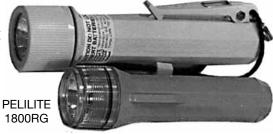
2 "D" Carbon Zinc Batteries (not Included)

RMI Part No.	Description	
2117	Orange Color with Circuit Breaker	

Compact, explosion-proof, high intensity flashlights (Class 1, Groups A, B, C, and D) flashlight with focused beam. Excellent for any work where propane gas is present for hazardous location. Four times brighter than ordinary.

3 "C" Alkaline Batteries (not Included)





2 "C" Alkaline Batteries (not Included)

MITYLITE SL-1900

2 "AAA" Batteries Included

FM APPROVED CLASS 1, 2 & 3 SERVICEMAN'S FLASHLIGHTS

RMI Part No.	Description	Diameter	Color	Length	Bulbs
SL-1900	Mitylite	⁵ /8"	Yellow	4 ³ / ₄ "	1900LM
1800RG	Pelilite	1 ⁵ /8"	Orange	6"	1800LM
2000Y	Sabrelite	1 ⁷ /8"	Yellow	7 ¹ / ₂ "	2000LM



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MONKEY GRIP GLOVES

Provides warmth, protection and comfort, good grip for handling tools, couplings, and driving. Fleece jersey lined, foam insulation and tough orange vinyl outer coating. Safety cuff.

23-173

RMI Part No.	Size	Style
23-193	Men's	Winter Monkey Grip
23-173	IV/Ien's	Raised Finish Winter Monkey Grip

TUF-DUK GLOVES

Most popular protective general glove. Fit and flexibility for non-slip handling of cylinders, couplings, and for driving. Jersey lined for comfort. Vinyl impregnated.

RMI Part No.	Size	Style
31-791M	Medium	TUF-DUK Winter Drivers
31-791L	Large	TUF-DUK Winter Drivers

31	-791L	

WORK GLOVES

Leather or Nitro palm continuous thumb, tips, knuckle strap and elastic top-grade leather.



78-150

RMI Part No.	Size	Style	
Z1310	M/L	Leather Palm	
52-547L	M/L	Nitrile Palm	
78-150	White insulator warmth protector		
34-715	Nitrile Gloves		

Z1310

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SERVICE TOOLS

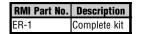


170 **Safety Equipment**

EMERGENCY RESPONSE KIT



A complete package in a special toolbox that improves your ability to respond to propane emergencies. It is recommended for placement with key personnel in your company so that emergency response time is kept to a minimum.





01-15-80

FIRST AID KITS

Designed to comply with recent OSHA regulations for trucks and plants. Each kit contains OSHA Inspection Form.

RMI Kit No.	Size	Case Material
01-15-60	10 unit	Metal
01-15-80	16 unit	Metal
01-16-10	24 unit	Metal

STATIC GROUNDING REELS

- Safe & reliable for grounding bobtails & transports
- Heavy Duty Reel for extended life & durability

RMI Part No.	Cable Length
SD-50	50 ft.

Tel: 800-628-5044





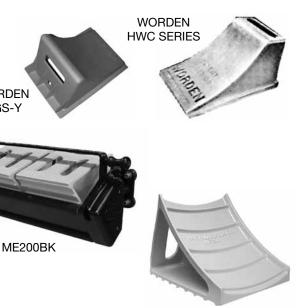
WORDEN HGS-Y

RED DRAGON PROPANE FLARE

Allows for fast and safe evacuation of tanks and trucks. Complete assembly includes hoses, flare torch for vapor or liquid, pilot w/ re-ignitor, safety control valve and electronic on/off switch.

		Vapor	Liquid
RMI Kit No.	Description	Capacity	Capacity
		BTU/HR	Gallons/HR
PF-12-LPS		6,900,000	75
PF-14-LPS		38,000,000	416
PF-16-LPS		48,300,000	529
PFM-16-LPS	1/2" Propane Flare Manual		529

CHOCK BLOCK



ME200

RMI Part No.	Description	H	L	W
HGS-Y	Worden Yellow Chock	71/2"	10"	7"
HWC	Heavy Duty Chock	8¼"	151⁄4""	81⁄2"
HWCVB	H.D. Mounting Bracket			
MWC	Medium Size Chock	7"	12"	6¼"
MWCB	Medium Mounting Bracket			
LWC	Small Size Chock	5"	7"	6"
HRQ	Rubber Chock - Black	8"	10"	7"
ME200	Aluminum Chock	7"	10"	7"
ME200B	Chock Block Holder w/o Chock	7¾"	20"	7"
ME200BK	Chock Block Holder w/Chock	9¾"	20"	8"

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KOCH & ASSOCIATES INC. LEAK CHECK AND REGULATOR TESTING EQUIPMENT

All KV Multi-Point and SKV Universal gauge kits are supplied with a tool box, twelve 1/8 valves, six 1/4 valves, a high pressure test block and user instructions on a laminated card.

RMI Part No.	Description
KVA-KIT	KVA and KVB gauge assemblies incorporate a GA-30 gauge. The KVA has a HSA hose swivel for connection to type VA
KVB-KIT	valves and the KVB has a HSB hose swivel for connection to the type VB valves.
SKVA-KIT	SKVA and SKVB gauge assemblies incorporate a GA-35" W.C
SKVB-KIT	gauge. The SKVA is used with type VA valves and the SKVB is used with type VB valves.

TGA AND TGB SINGLE POINT LEAK CHECK GAUGE WITH A GA-30 GAUGE



RMI Part No.	Description
HSA-CONN	TGA has a HSA female hose swivel connection
HSB-CONN	TGB has a HSB female hose swivel connection

VALVES

SERVICE TOOLS

RMI Part No.	Description
VA1-VALVE	1/8" MNPT x m .305
VA2-VALVE	1/4" MNPT x m .305
VB1-VALVE	1/8" MNPT x m flare
VB2-VALVE	1/4" MNPT x m flare

NA1





RMI Part No.	Description
AD-A-B	Converts hose connection with a HSA
	hose swivel to a type VB valve
AD-B-A	Converts hose connection with a HSB
	hose swivel to a type VA valve





SKVA & SKVB

KVA & KVB

HOSE SWIVEL



RMI Par	t No.	Description
HCBXX		1/4" FNPT hose connection X female flare
		connection to type VB valve



AD-A-B

Ħ

AD-B-A

TEST BLOCKS

RMI Part No.	Description
TBA	Test Block w/type A valve
TBB	Test block w/type B valve



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1331

1332

TL-051

NFPA 54 7.1.4.2 2002 Ed.

pressurizing the system.

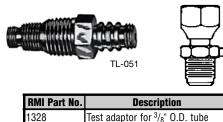
PTK-5

RMI Part No.

Testing Equipment - Leak & Pressure 172

LOW PRESSURE TEST ADAPTOR

Flare fitting unit for testing pressure in copper tubing lines, when test connection on appliance is not accessible.



Test adaptor for 1/2" O.D. tube

Test adaptor for $\frac{5}{8}$ " O.D. tube

Description

Pressure Test Kit

Servel Servicemans Friend

PTK-5 LOW PRESSURE TEST KIT

Assembled to facilitate preliminary testing

The kit incorporates a 1/2" NPT pipe nipple

as well as an isolated Schrader valve for

of low-pressure gas lines in compliance with

GK	PT-	ΚΙΤ

For use with1/4" Flarex 1/8" test port fittings. Tank, Supply line gauges and adapter for manometer or low pressure gauge, 6-1/8" test ports included.

RMI Part No.	Description	
GKPT-KIT	High & low pressure line test kit	
VBI-VALVE	Additional test port valve	

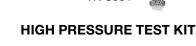


ME-SLT: SYSTEM LEAK TESTER

Designed to be inserted between the LP Gas supply tank valve and the supply POL fitting. Charge the system for 20-30 seconds, bleed down approx. 10 psi, and close ball valve. If the system test shows no loss within 3 minutes, it is considered tight. (NFPA 54, 2002 Ed. 7.2.3;D.3.2a)

ME-SLT





MPOL x FPOL /test block with 300 psi gauge.

RMI Part No.	Description
TK-J601	Basic Test Block
ME-SLT	System Tester

BRUSH, SQUEEZE & SPRAY BOTTLE

• Wide Neck bottle and brush for easy application.

- Pint bottle with spray nozzle.
- Handy squeeze bottles.



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LEAK DETECTOR



1328

Gas Kit 5-second leak detector is fast and dependable, and finds even the smallest leaks. Available in regular or low temperature for sub-freezing temperatures.

Available in 55 gallon drums -drop shipped from factory.

RMI Part No.	Description	Color
GASKIT-REG	Regular (27º) - 1 Gallon	Green
GASKIT-LT	Lo Temp (-10º) - 1 Gallon	Red
GASKIT-XL	Extra Lo Temp (-50º) - 1 Gallon	Pink
GASKIT-CG	For O ₂ (27º) - 1 Gallon	Blue
GASKIT-TYPE II	Lo Temp Oxy (-65º) - 1 Gallon	Lt. Blue

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Order online at www.raymurray.com or call for personal assistance

RAY MURRAY, INC.

173 **Pressure Gauges**



PRESSURE GAUGES



STEEL CASE

Black drawn steel case, 1/4" NPT brass inlet socket, 2" dial with plate glass crystal.

RMI Part No.	Range	NH
GS-15	0-15 lbs	Gau
GS-30	0-30 lbs	RM
GS-60	0-60 lbs	N 000
GS-100	0-100 lbs	GSS GSS
GS-160	0-160 lbs	GSS
GS-300	0-300 lbs	
GS-400	0-400 lbs	

ige		hydrous
lbs	Gauges	5
lbs	RMI Part	Range
lbs	No.	
	GSS-60	0-60 lbs
) Ibs	GSS-150	0-150 lbs
) Ibs	GSS-400	0-400 lbs
lha		

5	RMI Part No.	Range
	GB-30	0-30 lbs
	GB-60	0-60 lbs
	GB-100	0-100 lbs
	GB-300	0-300 lbs
	GB-400	0-400 lbs

BRASS CASE

GB-100

beveled plate glass.

Polished drawn brass case with $\frac{1}{4}$ " inlet. 2" dial with





DIAPHRAGM TYPE GAUGE

2¹/₂" Dial, ¹/₄" NPT inlet. Diaphragm type gauge.

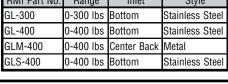
RMI Part No.	Range
GS-35WC	0-35" W.C.
GS-5	5 PSI



LIQUID FILLED GAUGE

Dampens pulsation and vibration from compressors and pumps. Outlasts standard gauges-virtually indestructible. 21/2" dial, 1/4" NPT inlet.

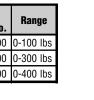
RMI Part No.	Range	Inlet	Style
GL-300	0-300 lbs	Bottom	Stainless Steel
GL-400	0-400 lbs	Bottom	Stainless Steel
GLM-400	0-400 lbs	Center Back	Metal
GI S-400	0-400 lbs	Bottom	Stainless Steel

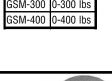


BACK MOUNTED STEEL GAUGES

2" dial, 1/4" NPT inlet. Center back mount inlet.







1/8" PRESSURE GAUGES 1 1/2" FACE

GSM-400

RMI Part No.	Description
MGS-30	0-30 lbs. bottom mount
MGSM-300	0-300 lbs. rear mount

ME295SN-1-PRESSURE GAUGE ADAPTER



Features: · Provides and inexpensive way to permanently install a pressure tap upstream from the first stage regulator. • 1/8" FNPT allows for easy installation of

pressure test monitoring devices.

RMI Part No. Description ME295SN-1 Soft Nose MPOL x FPOL Adaptor w/Tap



LARGE "EASY TO READ" **DURO-PRESSURE GAUGE** 41/2" BOLD FACE DIAL

Gauge features 1% accuracy, stainless steel movement, balanced micrometer pointer and standard turret type Phenol case with 1/4" MNPT bottom connection.

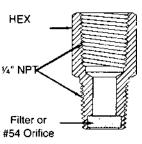
HIGH QUALITY DURABLE GAUGE

RMI Part No.	Description
105/300	0-300 lbs Propane gauge
105/400	0-400 lbs Propane gauge

STANDARD STEEL LARGE STEEL

RMI Part No. Description GSL-300 0-300 lb gauge

PRESSURE GAUGE SNUBBER



Porous element pressure snubber protects gauge from damaging violent surges and moderates pulsating at the gauge.

	0 0
RMI Part No.	Description
	¹ ⁄4" x ¹ ⁄4" Pressure Snubber, Filter
GS20S	¹ ⁄4" x ¹ ⁄4" Pressure Snubber, #54 Drill

Tel: 800-628-5044

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Manometers & Gauge Adaptors 174





WATER MANOMETER

Features 16" W.C. clear plastic tube, magnetic holder with flexible strap, sliding scale and quality Neoprene tubing.

RMI Part No.	Description
GKST-1	Standard 16" Manometer
GKST-2	Self Totalizing Manometer
GKST-5A	Neoprene Manometer Hose (sold per foot)



ELECTRONIC MANOMETERS

- Positive/Negative Pressure Measurements
- Auto Power Off
- Rubber Boot with Magnet
- 1-Year Warranty

RMI Part No.	Description
EM151	Single input Manometer 20"
EM201	Dual input Manometer 60"
AC319	Soft carrying case
BF100	Brass fitting (Hose barb 1/8" NPT

MAGNEHELIC® GAUGES







The 2025-A432 Kit includes:

- 2025 Magnehelic® Gauge
- Connections ¹/₈" N.P.T. high and low pressure taps, duplicated – one pair side and one pair back.
- Two 1/8" N.P.T. plugs.

Tel: 800-628-5044

 Rubber Tubing and Adaptors — One 9 ft. length of 3/16" I.D. tubing, terminal tube and two pipe thread to tubing adaptors.

RMI Part No.	Pressure Range (in W.C.)
2025	0-25WC, Gauge Only
2025-A432*	0-25WC, Complete Kit
*Other ranges	available by special order.

50P-2

Kit includes 0-35 W.C. gauge, rubber hose with bell end for easy fit on orifice, and plastic protective case.

SPRING GAUGE KIT

2	RM	l Part No.	
2	Marshall Excelsior	Fisher	Description
05	TK-35WC	50P-2	Complete Test Kit
-35		50P-5	Gauge & hose only
/ith isy ind		1D497606992	Bell end (may be used with both test kits listed)
tive		1E484006992	3' Hose only

DWYER DUAL RANGE FLEX-TUBE® U-INCLINED MANOMETER

Versitile and useful manometer designed for installation with the serviceman in mind. A sturdy clear plastic manometer, it offers single, direct readings in two ranges: A u-tube, it reads from 0 to 16" of water; as an inclined gage, it reads from -.20 to 0 to 2.6" of water. "How-touse" instructions are printed directly on the scale.



MANOMETER

RMI Part No.	Description
96-INMAN	Flex-Tube® U-inclined manometer

MANOMETER ACCESSORIES

RMI Part No.	Description
A126	Green Manometer Fluid 3/4 oz.
RED-007	Pink Anti-Freeze Fluid 3/4 oz. (-20°)
Violet-008	Pink Anti-Freeze Fluid 3/4 oz. (-40°)
RED826	Gauge Oil

RAY MURRAY, INC.

Order online at www.raymurray.com or call for personal assistance

Combustable Gas Measurement 175



J&N ENTERPRISES • SENSIT GOLD CGI INSTRUMENTS

SERVICE TOOLS

- Display up to 4 Gases - Natural & Propane LEL & % Gas
 - Oxygen
 - Carbon Monoxide
- Weather Resistant
- Internal Pump
- Infrared Download to Printer
- Low Cost, Long Life Sensors
- LED Warning Lights
- Loud Audible Alarm
- UL 913 Listed
- Upgraded Display

RMI	SENSING FEATURES					
Part No.	Leak Detector	%LEL Display	% Gas Display	Carbon Monoxide	Oxygen	Hydrogen Sulfide
911-00000-51	•	•	•			
911-00000-52	•	•	•	•		
911-00000-53	•	•	•		•	
911-00000-55	•	•	•	•	•	
911-00000-57	•	•	•		•	•
911-00000-58	•	•	•	•	•	•

SENSIT P400 PERSONAL MONITOR



RMI Part No.	Description
923-00000-10	LEL w/o pump
923-00000-16	LEL/CO w/o pump
923-00000-30	LEL/CO/02 w/o pump
925-00000-10	LEL w/pump
925-00000-16	LEL/CO w/pump
925-00000-30	LEL/CO/02 w/pump

Tel: 800-628-5044



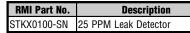
Features

- The high sensitivity tool that can help:
- Heating, air-conditioning and plumbing contractors quickly find leaks
- · Fire and Police Departments with safety and arson investigations
- · Municipalities check manholes and confined spaces
- Industry check for hazardous conditions
- Home owners make minor repairs
- · Perform highly reliable furnace heat exchanger testing
- Solid state sensor-highly reliable
- Ultra sensitive-as little as 10ppm methane
- Wide range nullable tick detection
- Adjustable alarm level

S0156	RMI Part No.	Description
	S0156	10 PPM HXG-2 Leak Detector
	S0157-1	Calibration Kit

J&N ENTERPRISES SENSIT®TKX-7 COMBUSTIBLE GAS LEAK DETECTOR

- · Find leaks quickly and economically
- Unique low power sensor
- · Requires virtually no
- maintenance • Uses 3 "C" alkaline
- batteries
- Protective sensor cap







- Padded Carry Pouch
 - Natural & LP Gas LEL & % Gas
 - Carbon

Gases

- Combustible

- Monoxide
- Probe Assembly Date/Time Display
 Upgraded Display
- Operation Memory
 UL 913 Listed
- Calibration Memory

RMI	SENSING FEATURES			
Part No.	Leak Detector	%LEL Display	% Gas Display	Carbon Monoxide
920-00000-50	•	٠	•	
920-00000-51	•	•	•	•
AJN02035	42" Plunge	r bar for t	est hole	



Fax: 800-243-8341

- Durable Stainless
 Display up to 4
 - Steel Housing
 - Internal Pump Water/Dust Filter





DM383B DIGITAL MULTI-TESTER

- Min/Max & Hold Settings
- Volts AC & DC Measures Thermocouple & Thermopile output
- Microamps for Flame Proving Systems
- Magnetic Boot
- 5 Year Warranty

DM383B

000

RMI Part No.	Description
DM383B	Digital Multitester
	ACCESSORIES
AC519	Soft-Pouch Carrying Case
AC506	Hard Carrying Case
ATL55	Test Leads
AF155	Fuse 0.5 Amp
AF160	Fuse 12.5 Amp

DC & ImA r .75" (1 BNC (10) (DMM) Measu Applie

CA30MA LOW AMP CLAMP ADAPTOR

- DC & AC Current measurement to 30A with 1mA resolution
- .75" (19mm) Conductor Capacity
- BNC (Oscilloscpoe) and Banana Jack Adapter (DMM) Included
- Measure load and parasitic current on most
 Applications

CA30MA

Dual Display

Magnetic MountWork Light

Non-Contact Voltage

RMI Part No.	Description
CA30MA	Low Amp Clamp Adaptor

DM384 DIGITAL MULTI-TESTER

- Autoranging
- Min/Max & Hold Settings
- Volts AC & DC Measures Thermocouple & Thermopile output
- Microamps for Flame Proving Systems
- Magnetic Boot
- 5 Year Warranty

DM384

384

CD F3 F3

RMI Part No.	Description
DM384	Digital Multitester
	ACCESSORIES
AC519	Soft-Pouch Carrying Case
AC506	Hard Carrying Case
ATL55	Test Leads
AF155	Fuse 0.5 Amp
AF160	Fuse 12.5 Amp

MULTIMETER CARRYING CASE



Empty hard carrying case for the LP Gas or HVAC/R Service Technician



Measures Temperature

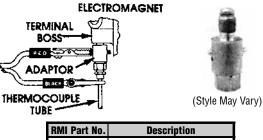
DL379: HVAC/R DIGITAL CLAMP-ON MULTITESTER



Description
gital Clamp on Multitester

TEST ADAPTERS

for Thermocouples & Thermopiles



RMI Part No.	Description		
10-038	Thermocouple Test Adaptor		
10-238	Thermopile Test Adaptor		

RAY MURRAY, INC.

Fax: 800-243-8341

Combustion Test Equipment 177



C155KIT - COMBUSTION ANALYZER KIT

EOS TECHNOLOGY:

The new EOS CO2 sensor takes direct CO2 measurements and calculates the O2 level. This CO2 sensor has no physical contact with the gas, so there is no deterioration of the sensor overtime. This exclusive EOS sensor has a 5 year limited warranty and an unmatched industry-leading life expectancy of 10 years!



Xtended LIFECO SENSOR:

The Eagle X also offers a new Xtended Life CO Sensor, which has a life expectancy of 5 years and is backed by a 5 year limited warranty. Reducing the sensor's replacement frequency helps to minimize the analyzer's cost of ownership to just the CO sensor calibration. Most manufacturers recommend annual calibration to maintain sensor specifications.

RMI Part No.	Description
C155KIT	Includes: C155 Analyzer, Flue Probe, IR Printer, (2) K-Type Temp Probes, (2) Static Pressure Hoses, (1) True Draft Probe, Gas Tap and Hose, AC Adapter/ Charger, Hard Case, (2) Printer paper rolls, (2) Particle Filters, Batteries, Quick Start Guide, & Owners Manual
C1550ILKIT	Includes: C155 Analyzer, Flue Probe, Smoke Pump Tester, Smoke Test Paper & Chart, IR Printer, (2) K-Type Temp Probes, (2) Static Pressure Hoses, (1) True Draft Probe, Gas Tap and Hose, AC Adapter/ Charger, Hard Case (2) Printer paper rolls, (2) Particle filters Batteries, Quick Start Guide, & Owners Manual

SERVICE TOOLS

Worklight 4 line backlit LCD display 179 memory positions • User customizable parameters view Individual report printouts **UEI DG1** UEI DG1 Draft Gauge measures -2.5~+.05 In H2O. This draft gauge contains an Extended Flue probe.. **RMI Part No.** Description

SAFETY SIREN™ PRO SERIES WALL PLUG DETECTOR

UEI –DG1

- UL listed
- 110 Volt
- 85 db alarm
- LED indicator

RMI Part No.	Description
HS80501	LP/Methane Detector
HS78512	Radon Detector
HS80504	CO/Methane/LP - 3 in 1

Tel: 800-628-5044

HS78512

Draft Gauge With Probe

C125KIT - COMBUSTION ANALYZER KIT

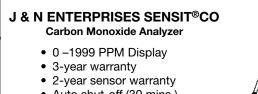
The C125KIT is 4 instruments in 1. Designed to offer advanced system analysis and productivity this kit includes the ground-breaking Eagle 2 Combustion Analyzer. This multi-functional instrument is a superior combustion analyzer with unmatched simplicity and a unique combination of features to enhance a technician's efficiency and safety. The EAGLE 2 is perfect for combustion efficiency analysis but also doubles as a differential thermometer. differential manometer, and an ambient CO detector.



Features:

- Measures: Differential flue temperature, oxygen, flue & ambient carbon monoxide (CO), & Differential Pressure
- Calculates: Carbon dioxide, gross/net efficiency, excess air, & CO air free
- Unique DMM style rotary selector
- · Protective boot w/integral magnet
- · Real time clock
- CO readings to 1 ppm
- 3 year limited warranty (2 year warranty on sensor)

RMI Part No.	Description
C125KIT	Includes: Combustion Analyzer,KMIRP2 Infrared Thermal Printer.Flue Probe, (1) K-Type Temperature Probe,AACA4 AC adapter,AC75 soft carrying case w/protective foam interior,Particle filter,Thermal printer paper roll,Quick start manual, wners guide
C1250ILKIT	Includes: C125 Analyzer, KMIRP2 Printer, Flue Probe, Smoke Pump Test Kit,(2) K-Type Temp. Probes, AC Adapter, AC75 Soft Carrying Case, Particle filter, Thermal Printer Roll Paper, Quick Start Manual, & Owners Guide.



- Auto shut-off (30 mins.)
- · Comes with case, flue probe, 5' tubing &
- particle filter

RMI Part No. Description SC00500-SN Sensit CO Flue Gas Analyzer w/pump AJOSC0705-110 Calibration Kit - complete CM0139-100 Calibration Gas 100 PPM CO

SSCO0500-SN

Ray Murray Inc. Edition 11

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or call for personal assistance



Pipe Locating Instruments 178



RYCOM TRACER WIRE DETECTORS

When you are looking for lines quickly, rycom finds them. Keep line tracing in-house for economy and quick response when you need it.



STKPLS

- Multiple frequencies options avaiable on both transmitter and receiver
- Multiple active frequencies allow accurate tracing in congested areas
- 1 watt transmitter for direct connection, transmitter and coupled induction
- Digital LCD displays on both transmitter and receiver
- Triangulation depth
- Weather proof membrane buttons
- Peak antennae
- Made in the U.S.A.



Each 8869 Cable, Pipe, Line and Fault Locator comes complete with a 1 watt transmitter, multi-function digital receiver, red/black test leads, ground rod, batteries, locating basics video, manual and carrying case.

- 2 passive frequencies of 56/60 and RF (radio frequency) locate live utilities without the use of a transmitter
- 3 active frequencies of 815 HZ, 8 kHz and 82 kHz allow accurate tracing in congested areas or the length of a single line.
- Powerful 1 watt tracing signal is reliable for direct connection, transmitter and coupled induction.
- Backlit digital display for low-light reading.
- Triple antenna with push button depth and current measurement.
- Weather proof membrane buttons.
- Push button depth.

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RMI Part No.	Description
8869	Triple Frequency Wire Detectors
STKPLS	Pathfinder Locator System

Tel: 800-628-5044

RAY MURRAY, INC.

Fax: 800-243-8341

179 Torches - Burners



FLAME ENGINEERING TORCH PAKS

Versatile "Red Dragon" utility torch kits. Torch operates on tank pressure. Kit comes complete with torch, shut-off, 10' hose and POL safety fitting. Excellent for burning, melting, heating, weed burning, and other home and commercial uses.



RMI Kit No.	Torch Only	Capacity BTU/Hr.	Torch Length	Diameter	Operating PSI
VT1-1/2-12C	VT 1-1/2-12	50,000	15"	1½"	5-25#
VT2-1/2-30C	VT 2-1/2-30	200,000	33"	21/2"	5-90#
VT3-30C	VT3-30	500,000	331/2"	3"	5-90#
HT1-1/2-10C	HT 1-1/2-10	50,000	15"	11/2"	5-25#



"RED DRAGON" ROOFING TORCHES

Complete "Red Dragon" kits for all types of roofing. Small torch for flashing and detail work. Long torch for stand-up work. Kit comes complete with torch, 25' of hose and fittings, regulator and spark lighter.

RMI Kit No.	Capacity BTU/Hr.	Torch Length	Diamotor	Operating PSI
RT2.5-20C	200,000	29"	21/2"	5-50#
V-880P	Squeeze Valve Only, Replacement			

WESTERN ENTERPRISES TORCH KIT

Kit includes: Torch, 10' Hose, Tank Adaptor, Shut-off Valve, Leak Test Fluid, Spark Lighter

RMI	BTU	Torch	Diameter	Operating
Part No.	Capacity	Length		Pressure
WB-101	500,000	31½"	2"	Tank

L.B. WHITE CAST IRON PROPANE TORCHES

FOR HEATING AND BURNING APPLICATIONS



RMI Part No.	Description	BTU/Hr.	Operating Pressure	Handle Length	Burner Head
LB-112	Big Bertha Torch & Valve	500,000	25 psig	11"	Cast
LB-162	Torch with Safety Control	400,000	25 psig	11"	Cast



BURNERS INC. TORCH PAKS

Complete Torch Kit–Ready to use 500,000 or 300,000 BTU torches operate on tank pressure. Includes hose, excess flow valve, torch and display pack. Great for ice thawing in drains, snow melting, drying for construction site, and weed burning. FV-10 features non-extinguishable (no snuff-out) remote air

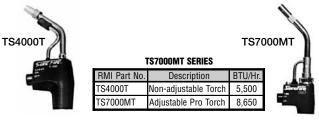
		Capacity BTU/Hr.		Diameter	Operating PSI
FV-10TP	FV-10	500,000	421/2"	3"	Tank
FV-11TP	FV-11	300,000	30"	2¾"	Tank

TS4000T SERIES

Ignitor/Bernz-o-matic's top of the line non-adjustable torch. Ideal for both home & professional use. Trigger on/off button.

TS7000MT SERIES

Ignitor/Bernz-o-matic's "very best" torch features adjustable flame control. Designed for heavy duty professional brazing and soldering.





AGGESSURIES & PARIS		
Description		
Propane/MAPP Burn Tube Assembly (TS4000 & TS7000)		
Pencil Flame Burn Tip & Orifice Kit		
Swirl Flame Burn Tip & Orifice Kit		
General Purpose Flame Burn Tip & Orifice Kit		

LIQUID BURNERS



FOR TAR KETTLES, COOK-ING, HEATING, AND SPE-CIAL APPLICATIONS

Liquid coil straight type for most applications.

RMI Part No.	Description	BTU Rating	Operating Pressure
FL-1	Liquid Propane Burner	500,000	5-30 #
FL-4	Liquid Propane Burner	2,000,000	5-30 #
* Available with optional 100% safety and thermocouple.			

* Additional burners available - ask for a BURNERS INC. catalog.

0

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance



Heat Wrapping Gun 180

SHRINKFAST MODEL 998

The leading heat tool for both shrink-wrapping and shrink-film processing. When time is of the essence the power of the 998 will get the job done - quickly and efficiently.

- POWERFUL: 15% more power than leading competitors. 212,000 BTUs of power shrink wrap a 40" x 48" x 60" pallet in less than 2 minutes.
- LIGHTWEIGHT: Sleek design and weighs only 2.2 lbs.
- SAFE: Automatically shuts off the flame once the trigger is released. Nozzle remains cool even after extensive use. Regulator has an automatic safety POL that shuts off propane supply if hose gets cut or leaks.
- DURABLE: Full 1 year manufacturer's warranty on all parts and labor. Full service repair facility to answer questions and rebuild any heat tool or extension.
- Runs on LP Gas.
- · Many applications including pallets, outdoor kitchens & Islands, and marine.







SERVICE TOOLS

RMI Part No.	Description	
998	Heat Wrapping Gun Only	
998-KIT	Complete Kit Including Hose Regulator and Gun	

SHRINK WRAP AVAILABLE IN DIFFERENT SIZES AND THICKNESS. CALL RMI FOR ASSISTANCE AND ORDERING.



Order online at www.raymurray.com or call for personal assistance

181 Pilot Burners / Pilot Orifices



JOHNSON CONTROLS

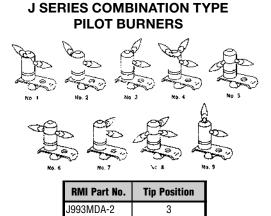
J SERIES MULTI-MOUNT UNIVERSAL PILOT BURNER

- Mounting bracket on all four sides
- 3 Tapped holes in each bracket end for vertical adjustment
- LP & Natural Gas orifice supplied
- Nuts & bolts furnished in each package





RMI Part No.	Description
J999MHA-2	Universal Pilot Burner
J999MKA-2	Universal Pilot Burner
J999MYA-2	Universal Pilot Burner



J996MDA-2

J998MDA-2

J999MDA-2

HONEYWELL	

Q345A IGNITER-SENSOR









RMI PART NO.	POSITION
Q345A 1305	Straight
Q345A 1313	Left
Q345A 1321	Right

6

8

9

Q345A Pilot assemblies are factory set for natural gas. LP orifices are below.

LP ORIFICES					
RMI Part No. OEM # Size					
390686-1	BBR10	.010			
390686-25	BBR12	.012			

ROBERT SHAW PILOT ORIFICES

-	
1890	(#11EA)

RMI Part No.	Pilot Usage	Gas Type	Tube Size	Orifice Size
10-067	#11EA	LP		.010



RMI Part No.	Pilot Usage	Gas Type	Tube Size	Orifice Size	
10-067	#70 & #71	LP		.010	
10-045	#40	LP		.013	



1820, 1830 (2C, 2CH)

	, (-,	-	
RMI Part No.	Gas Type	Tube Size	Orifice Size
10-114	LP	1/4"	.010
10-210	LP	1/4"	.016
10-211	LP	1/4"	.011



1898 (#40, #70 & #71)

(MP100, 400, #54, #55, #63, #64, #65)					
RMI Part No.	Pilot Usage	Gas Type	Tube Size	Orifice Size	
10-035	#54, MP100	LP	1/4"	.010	

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Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance



Pilot Tubing & Fittings 182

FERRULE COMPRESSION SLEEVE

RMI Part No.	Description
600-1/8	¹ /8" Ferrule Sleeve
600-3/16	³ / ₁₆ " Ferrule Sleeve
600-1/4	¹ / ₄ " Ferrule Sleeve
600-3/8	³ / ₈ " Ferrule Sleeve



COMPRESSION NUT

RMI Part No.	Description
610-1/8	¹ / ₈ " Compression Nut
610-3/16	³ / ₁₆ " Compression Nut
610-1/4	¹ / ₄ " Compression Nut
610-3/8	³ / ₈ " Compression Nut
4590-817	¹ / ₄ " Extended Nut



Standard Nut



Extended Nut

UNION **TUBE TO TUBE**

RMI Part No.	Description
62-2	¹ /8" Compression Union
62-3	³ / ₁₆ " Compression Union
62-4	¹ / ₄ " Compression Union
62-6	³ /8" Compression Union

BREAKAWAY FERRULES



Standard Breakaway



RMI Part No.	Description
620- ¹ / ₈	¹ / ₈ " x ¹ / ₈ " Tube
620- ³ / ₁₆	³ / ₁₆ " x ³ / ₁₆ " Tube
620- ¹ / ₄	¹ / ₄ " x ¹ / ₄ " Tube
620- ³ /8	³ / ₈ " x ³ / ₈ " Tube
R-4669	¹ / ₄ " x ³ / ₁₆ " Tube
R-1633-1/8	$^{1}/_{4}$ " x $^{1}/_{8}$ " Extended
R-2972	$^{1}/_{4}$ " x $^{1}/_{4}$ " Extended

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PILOT TUBING

ALUMINUM TUBING-50 Ft. Coils

RMI Part No.	Description
11-191	¹ /8" Aluminum Tube–50 Ft. Coil
11-192	³ / ₁₆ " Aluminum Tube–50 Ft. Coil
11-193	¹ / ₄ " Aluminum Tube–50 Ft. Coil
11-194	⁵ / ₁₆ " Aluminum Tube–50 Ft. Coil
11-195	³ / ₈ " Aluminum Tube–50 Ft. Coil
11-198	¹ / ₂ " Aluminum Tube–50 Ft. Coil

PILOT TUBING KIT ALUMINUM TUBING-5 Ft. Coils w/nuts, sleeves & breakaway ferrules

RMI Part No.	Description
ALUM-1/8-5	¹ /8" Aluminum Tubing Kit
	³ / ₁₆ " Aluminum Tubing Kit
	¹ / ₄ " Aluminum Tubing Kit
ALUM-5/16-5	⁵ / ₁₆ " Aluminum Tubing Kit
	³ /8" Aluminum Tubing Kit
ALUM-7/16-5	⁷ / ₁₆ " Aluminum Tubing Kit

COMPRESSION FITTING KIT



Contains 20 popular fittings. Kit box included for storage of fittings.

Kit Includes:

12 ea.-R-1633-1/8; R-2972 12 ea.-600-1/4; 600-1/8; 600-3/16; 600-3/8 12 ea.-610-1/4; 610-1/8; 610-3/16; 610-3/8 12 ea.-620-1/4; 620-1/8; 620-3/16; 620-3/8 12 ea.-62-2; 62-3; 62-4 6 ea.-62-6

> RMI PART NO. COMPFITKIT-1

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com

Fax: 800-243-8341

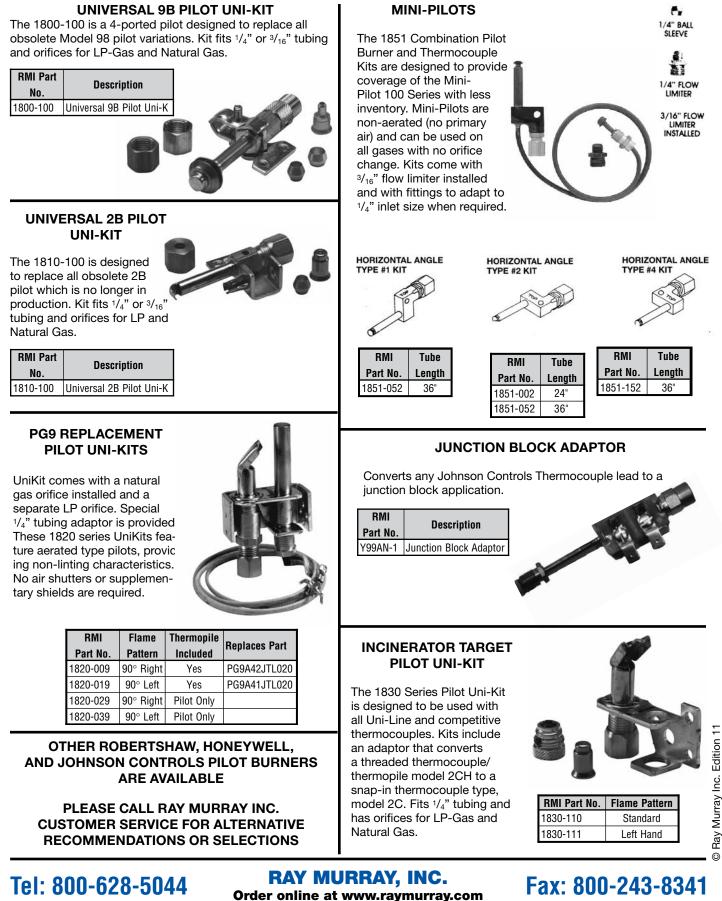
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183 Pilot Burners

& PILOTS

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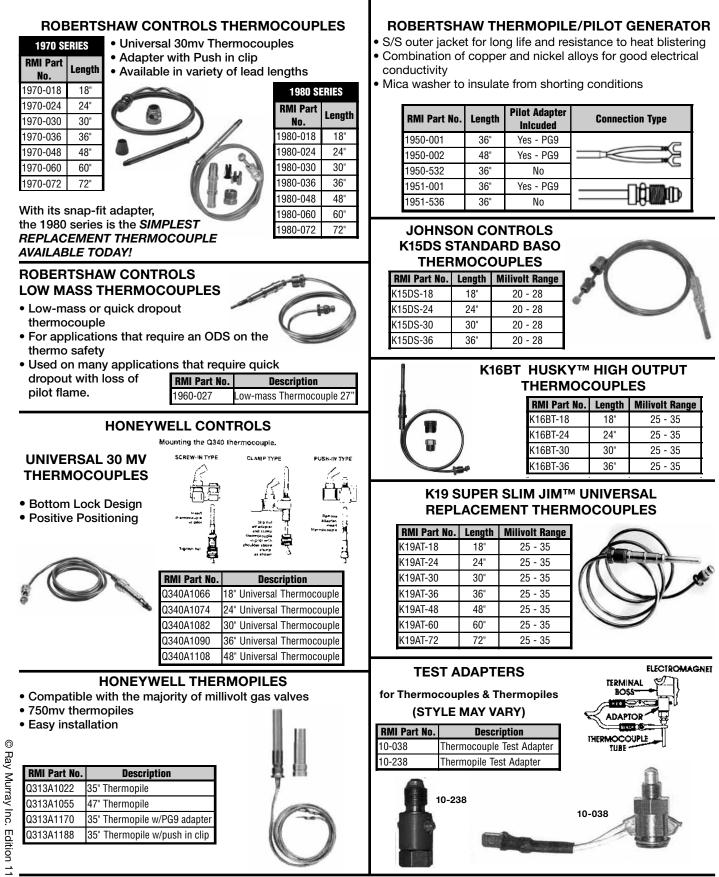




or call for personal assistance



Thermocouples/Thermopiles 184



Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

Fax: 800-243-8341

CONTROLS & PILOTS



- 720 Series Dual Valve Gas Control can be used to replace MOST constant pilot valves
- · Designed for a wide variety of 24V heating applications
- · Available with or without pressure regulator
- Uni-Kits are factory set at 3.5" w.c. for natural gas
- · Can be converted to LP gas by installing regulator conversion kit included

RMI Part No.	Robert Shaw OEM Part No.	Inlet	Outlet	Straight Thru	Side Outlet w/ 1/2" plugs	Pressure Regulator	BTU Capacity Nat / LP*
720-400	7200ER	1/2"	3/4"	yes	no	UniKit*	150,000 / 240,000
720-402	7200ER	1/2"	3/4"	yes	yes	UniKit*	150,000 / 240,000
720-404	7200ER	3/4"	3/4"	yes	yes	UniKit*	150,000 / 240,000
720-406	7200ER	3/4"	3/4"	yes	no	UniKit*	150,000 / 240,000



ROBERTSHAW INTERMITTENT PILOT, DIRECT SPARK OR H.S.I. GAS VALVE

- 720 Series Pilot Ignition Gas Valve designed for all three applications.
- Designed for a wide variety of 24V heating applications.
- Uni-Kits are factory set at 3.5" w.c. for natural gas
- · Can be converted to LP gas by installing regulator conversion kit included

	Robert Shaw OEM Part No.			Straight Thru	Side Outlet w/ 1/2" plugs	Pressure Regulator	BTU Capacity Nat / LP*
720-079	7200IPER	1/2"	3/4"	yes	yes	UniKit*	150,000 / 240,000

ROBERTSHAW 710 SERIES LOW PROFILE GAS VALVES

- Series 710 Low profile gas heating valves are designed for recreational vehicles and other applications with limited space.
- Maximum capacity is 70,000 for natural gas and 112,000 for LP gas.
- · Combines manual gas cock, automatic pilot safety valve and pilot outlet
- (2) 1/2" X 3/8" reducer bushings included with the 710-203, 710-401, 710-501 & 710-502

RMI Part No.	Robert Shaw OEM Part No.	Valve Type	Inlet	Outlet		3 Position Side Outlet	Pressure Regulator	BTU Capacity LP	TP or TC
710-203	7000SLC	hydraulic	1/2"	1/2"	yes	yes	none	70,000 / 112,000	TC
710-401	7000ELC	24 volt	1/2"	1/2"	yes	yes	none	70,000 / 112,000	TC
710-501	7000MVLC	millivolt	1/2"	1/2"	yes	yes	none	70,000 / 112,000	TP
710-502	7000MVRLC	millivolt	1/2"	1/2"	yes	yes	3.5" w.c. nat gas	70,000 / 112,000	TP
710-508‡	7000MVRLC	millivolt	3/8"	3/8"	yes	no	3.5" w.c. nat gas	70,000 / 112,000	TP & TC
710-511**‡	7000MVRB-4-LC	millivolt	1/2"	3/8"	yes	no	Hi-Lo adjustable 1.7" to 3.5" Nat	70,000 / 112,000	TP & TC



ROBERTSHAW 700

- 700 Series Millivolt Gas Valves are wall thermostat actuated.
- Valve combines a manual gas cock, automatic pilot safety and a millivolt operator.
- Automatic pilot safety is separate from gas cock and provides gas shutoff in case of pilot outage.

RMI Part No.	Robert Shaw OEM Part No.	Inlet	Outlet	•	3 Position Side Outlet	Pressure Regulator	Capacity	TP or TC
700-501	7000AMV	1/2"	1/2"	yes	yes	none	100,000	TP
700-503	7000BMV	1/2"	3/4"	yes	yes	none	240,000	TP
700-505	7000BMV	3/4"	3/4"	yes	no	none	240,000	TP
700-508	7000BMVR	1/2"	1/2"	yes	no	3.5" w.c. nat gas	240,000	TP
700-511	7000BMVR-S7C	3/4"	3/4"	yes	no	UniKit*	300,000	TP
700-515	7000BMVR-LP	3/4"	3/4"	yes	no	10" w.c. LP	485,000	TP



*LP conversion kit use part no. 1751-013 *Natural gas conversion kit use part no. 1751-003 *UniKit comes set for Nat w/ LP conv kit in box ** 710-511 use conversion kit 1751-021 to convert to LP gas.

Tel: 800-628-5044

† Valves can be used as either Natural or LP. However, if no pressure reg is part of valve and conversion kit is not used-there must be a regulator installed before valve to regulate gas. + Both the 710-508 & 710-511 valve have special quick dropout safety magnet to meet specifications used with quick dropout pilot assembly 1819-100 and also require the use of 1960-027 low mas thermocouple.

TP = thermopile TC = thermocouple

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J	,,,	
-Lo adjustable 1.7" to 3.5" Nat	70,000 / 112,000	TP & TC
0 SERIES MILLIVO	OLT GAS VA	LVES





Mercury Free Room Thermostats 186

HONEYWELL MECHANICAL THERMOSTATS

The 'Round' One

 T87K Round[™] available as heat only or 1 heat/ 1 cool (3 11/16" dia x 1 3/4")



• T827K rectangular for single stage heat only (4 3/4" x 2 7/8" x 1 3/8")

RMI Part No.	Temperature Range	Voltage	Stages
T87K1007	40°F to 90°F	24Vac	1 Heat
T87N1000	40°F to 90°F	24Vac	1 Heat/ 1 Cool
T827K1009	45°F to 95°F	12Vdc; 750mV	1 Heat

LUXPRO MECHANICAL THERMOSTATS

- Snap action mechanism
- · Adjustable heat anticipator
- PSM30 is heating only
- PSM40 is heating and cooling
- 3 1/2" x 3" x 1 3/8"

50 + 60 • 70 • 80 • 90
LLIXPAD

RMI Part No.	Temperature Range	Voltage	Stages	
PSM30	45°F to 90°F	millivolt or 24Vac	1 Heat	
PSM40	45°F to 90°F	millivolt or 24Vac	1 Heat / 1 Cool	

WHITE-ROGERS 90 SERIES "BIG BLUE" UNIVERSAL THERMOSTAT

- Large 12 square inch touchscreen display with 10 second backlight
- Extra large touch keys for easy operation
- 7 day, 5+1+1 day Programmable or Non-programmable
- Unique color-coded temperature touch keys for quick adjustments
- Intuitive menu-driven programming, with audio prompt
- Programmable fan & comfort circulating fan
- 4.6" x 5.9" x 1.2"



Voltage

45°F to 99°F battery: mV to 24Vac

RMI

Part No.

1F95-1277

1F97-1277

Temperature

Range

45°F to 99°F

ROBERTSHAW 200 SERIES MECHANICAL THERMOSTATS

- All models have Uni-Line's famous sealed-in-glass switch feature which requires no leveling
- 2 13/16" rounded square x 1 5/16"

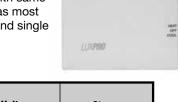


RMI	Temperature		
Part No.	Range	Voltage	Stages
200-401	48°F to 86°F	24Vac	1 Heat
200-402	48°F to 86°F	24Vac	1 Heat w/ positive off
200-403	39°F to 77°F	24Vac	1 Heat - energy conserving
200-501	48°F to 86°F	millivolt	1 Heat
200-502	48°F to 86°F	millivolt	1 Heat w/ positive off
200-503	39°F to 77°F	millivolt	1 Heat - energy conserving

LUXPRO DIGITAL NON-PROGRAMMABLE THERMOSTAT

- Battery powered only
- Large illuminated digital display
- Attractive slim design with soft touch buttons
- PSD010B is compatible with most 24V, millivolt (both with no fans) and 2-wire hydronic heat systems
- PSD022B is compatible with same

 up to 2 stages as well as most air conditioning systems and single stage heat pumps
- 5.05" x 3.25" x 1.10"



RMI Part No.	Temperature Range	Voltage	Stages
PSD010B	45°F to 90°F	millivolt or 24Vac	1 Heat
PSD022B	45°F to 90°F	millivolt or 24Vac	up to 2 Heat / 2 Cool

ROBERTSHAW DIGITAL PROGRAMABLE THERMOSTAT

- 7 day programmable allows four settings per day
- Pop-up wizard launches instant installation menu for thermostat settings
- Bigger brighter backlight with nightlight option
- Circulating fan maintains optimal air circulation between demand cycles for improved comfort and minimal energy use
- 6.75" x 4.375" x 1.625"

RMI Part No.	Temperature Range	Voltage	Stages
RS6110	45°F to 90°F	24Vac	1 Heat / 1 Cool

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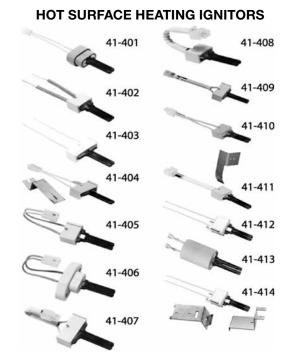
Stages

single

battery: mV to 24Vac single/multi/heat pump

187 Ignition Modules / Hot Surface Ignitors





RMI Part No.	Factory No.	RMI Part No.	Factory No.
41-401	271A	41-408	271N
41-402	2714W	41-409	271
41-403	271M	41-410	271N
41-404	271M	41-411	271N
41-405	271D	41-412	271NM
41-406	271Y	41-413	271C
41-407	271	41-414	271NM

We have inventory on a wide range of the following manufacturers' gas controls:

- Robertshaw
- Honeywell
- White-Rodgers
- ITT-General
- Johnson Controls

We Also Have Next Day Air Direct Shipment available on many non-stocked and special order controls direct from the above manufacturers

PARTS TIP

When replacing a control or valve, get the following information from the original part in order to speed the process of finding the replacement part:

- Manufacturer's Name
 Inlet/Outlet Size
- Numbers from
 - Original Part Appliance Model Number
- Voltage Listing
- Inlet/Outlet Direction
- Appliance Serial Number
 Mounting Type if Applicable

• BTU of Appliance

Applicable

Tel: 800-628-5044

ROBERTSHAW HOT SURFACE IGNITION MODULE REPLACEMENT UNI-KIT®

The 780-910 Uni-Kit is a must for service truck stock in that it will easily replace the widest variety of hot surface ignition modules found in the field today, including systems using:

- Local (sense through the Hot Surface Ignitor) or Remote Flame Sensors
- Single or Three Ignition Attempts
- 4 or 7 Second Ignition Trial Time
- 17 or 34 Second Ignitor Warm-Up Time
- 34 Seconds Pre-Purge or Non-PrePurge
- Natural or LP Gas Controls
 - 120 VAC Hot Surface Ignitors



RMI Part No.	Length
	Universal Hot
780-910	Surface Ignitor
	Module

ROBERTSHAW UNIVERSAL PILOT IGNITION MODULE REPLACEMENT UNI-KITS®



780-001 (NONLOCKOUT)

Automatic recycle features assure that in the event of flame failure main gas is disabled and the spark repetition sequence is restarted until pilot gas is ignited. Only after pilot ignition has been reestablished can main gas be returned to the burner.

780-002 (LOCKOUT)

Lockout feature shuts off all gas to the furnace, should pilot ignition fail to occur after a pre-determined time period. The 780-002 provides 3 tries for ignition, each ignition period is 60 seconds followed by a 5 minute time delay between ignition attempts. After 3 tries, if no pilot flame is sensed, unit goes into lockout and must be reset at the thermostat.

FEATURES

- Replaces one rod and/or two rod systems.
- Reduces truck stock inventory, saving space and money.
- Includes vent damper adapter assembly.
- Easy to install with complete in-depth installation instructions.

RMI Part No.	Length
780-001	Universal Intermittent Module (Natural Gas - Non Lockout)
780-002	Universal Intermittent Module (LP w/Lockout)

620 TRANSFORMERS

The 620 Series Transformers are available in a wide variety of models from universal enclosed to single voltage open frame. Refer to the ordering chart to select a transformer to meet your needs. Component recognized by Underwriter Laboratories Inc. • UL Approved • Ther

c.
Thermal Fuse Protection
Made in USA

Meets NEMA Standards
 Made in USA

Fax: 800-243-8341

Ray Murray

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RAY MURRAY, INC.



Heating Control Modules 188

S8610 UNIVERSAL INTERMITTENT PILOT MODULES

- Provides ignition sequence, flame monitoring and safety shut-off for intermittent pilot central furnaces and heating appliances
- One or two rod intermittent pilot control
- Continuous retry with configurable lockout timing
- For use with Natural or LP gas
- Includes spark cable adapters to allow field replacement of both Honeywell and competitive controls without replacing existing spark cable

RMI Part No.DescriptionS8610U3009Universal Intermittent Pilot Module



Y8610 RETROFIT INTERMITTENT IGNITION SYSTEM

- Retrofit kit is complete kit converting conventional standing pilot system to intermittent pilot system
- For use with 24Vac gas fired atmospheric furnaces, boilers and heating appliances
- Kit includes S8610U3009 control module, VR8304M3558 combination gas control and (2) ³/₄" and (2) ¹/₂" reducing bushings
- Use with single rod or dual rod/remote flame sensing applications
- For use with Natural or LP gas
- Includes spark cable adapters and installation hardware

RMI Part No	Description
Y8610U6006	Retrofit I.P. gas burner ignition system

S8910 UNIVERSAL INTERMITTENT PILOT CONTROL

- Provides operating control of a direct ignition system using a 120Vac hot surface ignitor
- For local (single rod) or remote (dual rod) rectification type flame sensing applications
- Contains easy-to-use instructions plus accessories required to adapt the existing HSI module



ST9120 UNIVERSAL ELECTRONIC FAN TIMER

- Integrates control of all combustion blower and circulating fan operations in a gas warm-air appliance
- DIP switch selectable heat and cool delay on and off times
- Diagnostic LED and continuous EAC and HUM terminal connections



RMI Part No.DescriptionS8910U1000Universal Hot Surface Ignition Control

HONEYWELL SMARTVALVE™ SYSTEM CONTROLS



- Intermittent HSI pilot control combines gas flow control with electronic sequencing
- Pilot and main gas control functions
- Electrode flame sensor
- Continuous retry
- SmartValve[™] replacement only

:	RMI Part No.	Inlet	Outlet	Straight Thru	Opening Characteristics	3/4" x 1/2" Reducer Bushings	Natural to LP conversion kit
	SV9501M2528	1/2"	1/2"	yes	standard	no	yes
•	SV9501M8129	1/2"	1/2"	yes	fast	no	yes
1	SV9502H2522	1/2"	1/2"	yes	slow	no	yes
	SV9602P4832	3/4"	3/4"	yes	step	two	no (LP only)
	SV9602P4840	3/4"	3/4"	yes	step	two	no (LP only)

Hot Surface Pilot / Sensor Assembly (for SmartValve™ Systems)

Description

Universal electronic fan timer

Unique Keyed Plug Connector
Replace without Removing

the Pilot Burner

RMI Part No.

T9120U1011

,

CONTROLS & PILOTS





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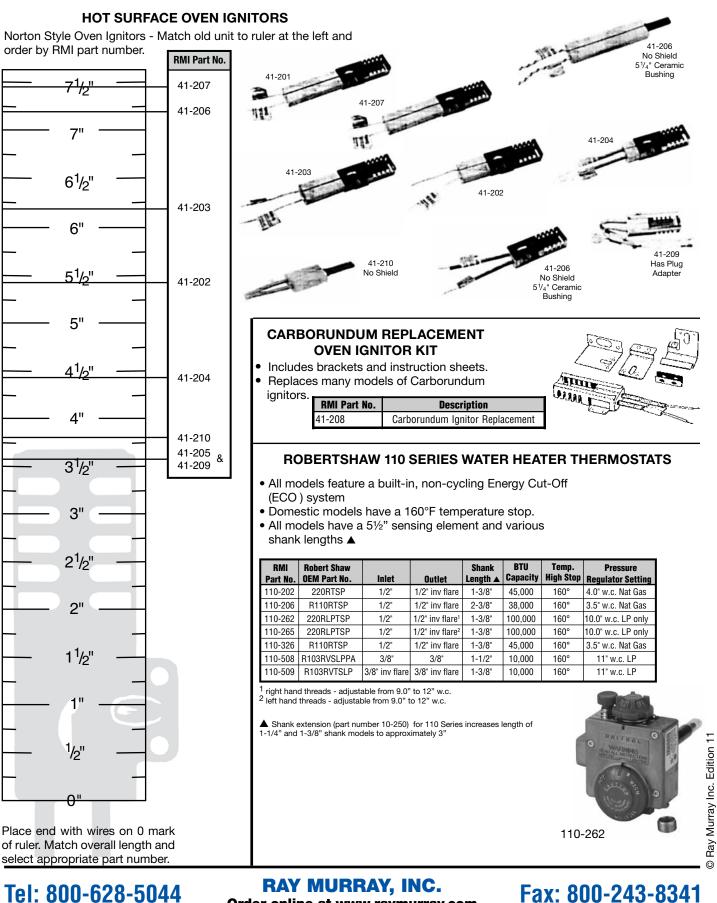
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RAY MURRAY, INC.

189 Water Heater Thermostat









WORKMAN AND NORSEMAN HEATERS

- Unique top design provides superior distribution of heat
- One piece barrel adds to strength and durability, no assembly required
- Norseman design offers heavy gauge steel body, rugged cast iron burner and horizontal model has low ceiling clearance
- Workman design offers aluminized steel body and enclosed stainless steel burner
- 10 ft. hose and regulator included (LP gas models only)
- CSA Certified (WORKMAN & NORSEMAN 200 PLUS)
- 1-Year warranty



•	ir	
an'225	Plus	

Fuel Type	RMI Part Number	Capacity BTU/HR	Operating Pressure	lgnition Type	Burner	Fuel Usage LBS/HR	Case Material
LP	WORKMAN 225 PLUS	225,000	10.2 psig	Piezo	Stainless Steel	10.4	Aluminized Steel
NG	WORKMAN 100N PLUS	100,000	7" w.c.	Piezo	Stainless Steel	100 cu ft/hr	Aluminized Steel
LP	NORSEMAN 200 PLUS	200,000	23 psig	Piezo	Cast Iron	9.3	Heavy Gauge Painted Steel
LP	NORSEMAN 250	250,000	23 psig	Manual	Cast Iron	11.6	Heavy Gauge Painted Steel
LP	NORSEMAN 200 HORIZONTAL	200,000	23 psig	Manual	Cast Iron	9.3	Heavy Gauge Painted Steel

HEATSTAR BY ENERCO CONVECTION HEATERS

- Aluminized steel construction
- "Insta-Lock" telescoping design system for easy assembly
- 20 ft. hose and regulator included (LP gas models only)
- CSA Certified
- 1-Year limited warranty

Fuel Type	RMI Part Number	Capacity BTU/HR	Operating Pressure	lgnition Type	Burner	Fuel Usage LBS/HR	Case Material
LP	HS80CV	80,000	11" w.c.	Piezo	Aluminized Steel	3.7	Aluminized Steel
NG	HS80CVN	80,000	4" w.c.	Piezo	Aluminized Steel	55.5 cu ft/hr	Aluminized Steel
LP	HS200CV	200,000	10 psig	Piezo	Aluminized Steel	9.3	Aluminized Steel

L.B. WHITE TRADESMAN PORTABLE FORCED AIR HEATERS

- Rugged construction with Tri-Shield coating provides protection against abrasion and corrosion
- Unique 3-trial electronic spark ignition system
- Variable output control for maximum fuel efficiency
- ULTRA models include self diagnostic service saver for convenient trouble-shooting
- 10 ft. hose and regulator included (LP gas models only)
- CSA Certified
- 1-Year warranty
- © Ray Murray Inc. Edition 11

Fuel Type	RMI Part Number	Capacity BTU/HR	Operating Pressure	lgnition Type	Air Output (CFM)	Fuel Usage LBS/HR	T-Stat
LP	TRADESMAN 100	100,000	11" w.c.	electronic spark	350	4.6	n/a
LP	TRADESMAN 170 ULTRA	170,000	11" w.c.	electronic spark	625	7.2	Standard
NG	TRADESMAN 170N ULTRA	170,000	7" w.c.	electronic spark	625	155 cu ft/hr	Standard
LP	TRADESMAN 400 ULTRA	400,000	5.2 psig	electronic spark	1,582	18.5	Standard



Tradesman 170 ultra



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HS80CV

HS200C

191 Construction Heaters



HEATSTAR BY ENERCO PORTABLE FORCED AIR HEATERS

- Durable steel construction
- Heavy-duty high output fan
- High temperature limit switch
- Heater shuts off with loss of flame or power supply
- 20 ft. hose and regulator include (LP gas models only)
- CSA Certified
- 1-Year limited warranty



HS35FA



HS85FAV

Fuel Type	RMI Part Number	Capacity BTU/HR	Operating Pressure	lgnition Type	Air Output (CFM)	Fuel Usage LBS/HR	T-Stat
LP	HS35FA	35,000	10 psig	Piezo	100	1.6	n/a
LP	HS60FAV	60,000	28" w.c.	Continuous	300	2.08	n/a
LP	HS85FAV	85,000	28" w.c.	Continuous	300	3.9	n/a
LP	HS125FAV	125,000	28" w.c.	Continuous	350	5.8	n/a
LP	HS170FAVT	170,000	28" w.c.	Automatic	450	7.8	built-in
NG	HS170NG	150,000	4" w.c.	Automatic	450	138 cu ft/hr	built-in
LP	HS400FAVT	400,000	20 psig	Automatic	1,400	18.5	built-in

Operating

Pressure

38" w.c

36" w.c



HEATSTAR BY ENERCO CORDLESS PORTABLE FORCED AIR HEATERS

- Built-in battery and battery charger
- Replaceable 12Volt sealed lead acid battery
- Runs up to 8 hrs. (HS35CLP) & 4 hrs. (HS60CLP) on a single charge
- Charges in 5 hours

Fuel

Type

LP

LP

• Quiet burn technology - 50% quieter than standard models

Fuel

Usage

LBS/HR

1.6

1.39

T-Stat

n/a

n/a

- Operates while charging
- 10 ft. hose and regulator included
- ETL Certified

lanition

Type

Piezo

Electronic

• 1-Year limited warranty

Air

Output

(CFM)

117

300



HEATSTAR BY ENER	CO PORTABLE	E RADIANT	HEATERS

• Durable steel construction

RMI Part Number

HS35CLP

HS60CLP

- Fully assembled ready to use
- · Folding handle and transport wheels included
- Safety shut-off
- 20 ft. hose and regulator included (LP gas models only)

Capacity

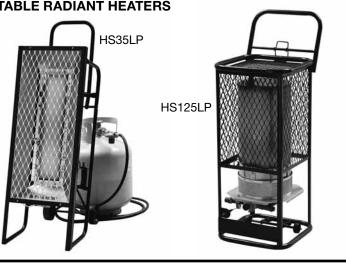
BTU/HR

35,000

60,000

- Tip-over switch included on HS35LP
- CSA Certified
- 1 Year limited warranty

Fuel Type	RMI Part Number	Capacity BTU/HR	Operating Pressure	lgnition Type
LP	HS35LP	35,000	27.5" w.c.	Piezo
LP	HS125LP	125,000	11" w.c.	Piezo
NG	HS125NG	125,000	7" w.c.	Piezo



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Construction Heaters 192

CSA Certified (MH15T & MH30T only)

Automatic safety shut-off

1-year limited warranty



MR. HEATER BY ENERCO TANK TOP HEATERS

- · Made of durable materials and quality construction
- Polished chrome reflector
- · Economical- costs pennies per hour to operate

Fuel Type	RMI Part Number	Capacity BTU/HR	Tank Size	lgnition Type	Description
LP	MH15	8-15,000	1#	manual	single basic
LP	MH15C	8-15,000	1# or 20#	manual	heater / cooker
LP	MH15T	8-15,000	5-20#	manual	single tank mount
LP	MH15TS	8-15,000	5-20#	piezo	single tank mount w/ piezo
LP	MH30T	8-30,000	20#	manual	double tank mount
LP	MH30TS	8-30,000	20#	piezo	double tank mount w/piezo
LP	MH45T	8-45,000	20-100#	manual	triple tank mount

RE-VERBER-RAY TANK TOP HEATERS

- Rugged ceramic burner
- UL Listed hose, regulator and excess flow fitting included
- Adjustable mounting bracket
- · Patented safety tip-over device
- CSA design certified safety control and thermocouple
- 90 day limited warranty

F	
U	Ų

Fuel Type		Capacity BTU/HR	Tank Size	lgnition Type	Description
LP	P-16T	16,000	20#	manual	basic compact burner
LP	P-32T	32,000	20#	manual	basic full size burner

MR. HEATER PORTABLE CABINET HEATER

- Four easy-roll caster wheels
- Heavy duty steel cabinet-20# cylinder rests securely inside
- Tip over safety shut-off safety switch
- · Hose and regulator included
- Low oxygen safety shut-off system (ODS)

Multi-position heat settings (Lo-Med-Hi)

- Hi-Med-Low Heat settings
- CSA Certified
- 1-year limited warranty

CSA Certified



- Tank lanition Fuel Capacity Description **RMI Part Number BTU/HR** Size Type Type MH18CH LP 6-18,000 20# piezo radiant portable heater
- · Dual ceramic burner tiles wit absorbing insulation
- Heavy-duty safety wire guard
- 0

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- installati
- Easy car

Ray Mu		tallation easy sy carry handle	with built-	-in blower	fan	 1-year limited warranty 	
-	Fuel Type	RMI Part Number	Capacity BTU/HR	Tank Size	lgnition Type	Description	
Edition	LP	MH18B	18,000	(1or2) 1# (1or2) 20#	piezo	dual heat system combines radiant heat with convection heat air flow	*smaller sizes available 4,000 & 9,000 - different designs

RAY MURRAY, INC.

Fax: 800-243-8341

	MR. HEATER BIG BUDDY© HEATER
th shock	 Low-oxygen safety shut-off (ODS)
	 Tip over safety shut-off

- Swivel regulator mount makes cylinder

tion easy	 1-year limited warranty
arry handle with built-in blower fan	



193 Tent Heaters



L.B. WHITE PREMIER DUCTABLE UNIT HEATERS

- Rugged construction with tri-shield coating provides protection against abrasion and corrosion
- High volume of air output for maximum heat distribution with versatile indoor placement for heat or air circulation or ducted in from outdoors
- Remote start weather-proof thermostat with 20ft cord and built-in "GO" or "NO GO" diagnostic system
- Dual Fuel units include dual fuel regulator and can be easily switched from one fuel to the other by the turn of a valve handle
- 15ft. hose and regulator included
- 1-year warranty

COMMERCIAL SPACE HEATING



Fuel Type	RMI Part Number	Capacity BTU/HR	Electrical Supply	lgnition Type	Air Output (CFM)	CSA Certified
LP	PREMIER 80	80,000	115/60/1	Direct Spark	450	yes
NG	PREMIER 80N	80,000	115/60/1	Direct Spark	450	yes
LP	PREMIER 170	170,000	115/60/1	Direct Spark	1,200	yes
NG	PREMIER 170N	170,000	115/60/1	Direct Spark	1,200	yes
LP/NG	PREMIER 170 DF	170,000	115/60/1	Direct Spark	1,200	yes
LP	PREMIER 350	350,000	115/60/1	Direct Spark	2,400	yes
NG	PREMIER 350N	350,000	115/60/1	Direct Spark	2,400	yes
LP/NG	PREMIER 350 DF	350,000	115/60/1	Direct Spark	2,400	yes

RMI Part Number	Premier® Air Distribution Equipment
26347	Distribution ducting, white, 12 in. X 12 ft., Premier 80 & 170
22696	Distribution ducting, white, 12 in. X 16.5 ft., Premier 80 & 170
26346	Distribution ducting, gray, 12 in. X 12 ft., Premier 80 & 170
26348	Distribution ducting, plastic, light duty, 12 in. X 12 ft., Premier 80 & 170
22835	Distribution ducting, white, 18 in. X 12 ft., Premier 350
24442	Distribution ducting, plastic, light duty, 18 in. X 12 ft., Premier 350
08979	Duct adapter, Premier 80 & 170
23050	Duct adapter, Premier 350
26350	End diffuser, small, Premier 80 & 170
23189	End diffuser, large, Premier 350

RMI Part Number	Premier® Parts
09454	Thermostat, NEMA 4X with 20 ft. cord - Premier 80 & 170
22920	Thermostat, 2 stage, NEMA 4X with 20 ft. cord - Premier 350
08990	Regulator Premier 80
09911	Regulator Premier 170
09795	Regulator Premier 80N, 170N
25108	Regulator Premier 350, 350N
24600	Gas hose ½" X 15 ft universal with adapters (Premier 80, 80N, 170, 170N)
23078	Gas hose 3/4" X 15 ft female quick coupling (Premier 350& 350N)

Tel: 800-628-5044

RAY MURRAY, INC.

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L.B. WHITE THERMA GROW™ GREENHOUSE HEATERS

- Lower fuel costs, greater efficiency 99+% Fuel conversion efficiency 20% better fuel efficiency than traditional heaters
- Superior heat management Quick response on demand heat Powerful long reaching blower fan Two-stage temperature control (PLUS models) Heating and air circulation models (PLUS models)
- Indoor or outdoor Installation Cabinet design offers multiple indoor location options Easy to install outdoor mounting kit saves growing space
- Trouble-free performance backed by a 10 year warranty Fully enclosed electronic controls, gas valve and motor

Safety features include a fully enclosed flame, built-in temperature protection and air flow safety devices

Heat treated corrosion resistant components

Galvanized steel cabinet (THERMAGROW) and white steel case w/ tri-shield coating (THERMAGROW PLUS)

1-year product warranty and 10-year warrant against heat chamber and case corrosion



COMMERCIAL SPACE HEATING

Fuel Type	RMI Part Number	Capacity BTU/HR	Electrical Supply	lgnition Type	Air Output (CFM)
LP	THERMA GROW 120	120,000	115/60/1	Hot Surface	1,100
LP	THERMA GROW 120 PLUS	65,000 & 120,000	115/60/1	Hot Surface	1,100
NG	THERMA GROW 120N	120,000	115/60/1	Hot Surface	1,100
NG	THERMA GROW 120N PLUS	65,000 & 120,000	115/60/1	Hot Surface	1,100
LP	THERMA GROW 220	220,000	115/60/1 or 230/60/1	Hot Surface	1,750
LP	THERMA GROW 220 PLUS	120,000 & 220,000	115/60/1 or 230/60/1	Hot Surface	1,750
NG	THERMA GROW 220N	220,000	115/60/1 or 230/60/1	Hot Surface	1,750
NG	THERMA GROW 220N PLUS	120,000 & 220,000	115/60/1 or 230/60/1	Hot Surface	1,750

RMI Part Number	Therma Grow $^{\mathrm{TM}}$ Greenhouse Complete Installation and Ventilation Kits
25995	Indoor kit for Therma Grow 120 include: motorized inlet shutter, shuttered
	exhaust fan, air inlet transition kit, air inlet hood, eyebolts and chains
25985	Indoor kit for Therma Grow 220 include: motorized inlet shutter, shuttered
	exhaust fan, air inlet transition kit, air inlet hood, eyebolts and chains
24690	Outdoor kit for Therma Grow 120 include: Exhaust shutter and outdoor mount kit
24688	Outdoor kit for Therma Grow 220 include: Exhaust shutter and outdoor mount kit

Tel: 800-628-5044

RMI Part Number	Therma Grow™ Greenhouse Ventilation Kits
24742	Exhaust fan with shutter, indoor mount, Therma Grow 120
24741	Exhaust fan with shutter, indoor mount, Therma Grow 220
25994	Inlet shutter with motor, indoor mount, Therma Grow 120
25984	Inlet shutter with motor, indoor mount, Therma Grow 220
23689	Exhaust shutter, outdoor mount, Therma Grow 120
23864	Exhaust shutter, outdoor mount, Therma Grow 220

RMI Part Number	Therma Grow™ Greenhouse Accessories
23651	Indoor mount kit, Therma Grow 120
23652	Indoor mount kit, Therma Grow 220
08748	Eyebolts and chains for indoor mount
23578	Outdoor mount kit, Therma Grow 120
23579	Outdoor mount kit, Therma Grow 220
09381*	Thermostat kit, NEMA 4X single stage
23778*	Thermostat kit, NEMA 4X 2-stage for PLUS models
06553*	Regulator, LP
24414*	Regulator, NG
20714*	Gas hose, ½" X 10 ft. with adapters
08752*	Piping hardware
*roquiro	d for installation, refer to installation manual

required for installation, refer to installation manual

RAY MURRAY, INC.

Fax: 800-243-8341

195 Agricultural Heaters

L.B. WHITE GUARDIAN™ HSI FORCED AIR HEATERS

- Bottom air draw design
- Advanced Service Saver™ with easy-to-see display for monitoring heater's performance
- Indoor or outdoor installations
- Air proving switch and totally enclosed motor for safe, dependable operation
- Galvanized steel cabinet
- Highly efficient direct-fire design
- 115v / 60 cycle / single phase (GUARDIAN 60,100,250)
- 220v / 60 cycle /single phase (GUARDIAN 325)
- 1-Year warranty
- CSA Certified

COMMERCIAL SPACE HEATING



Fuel Type	RMI Part Number	Capacity BTU/HR	Air Output (CFM)	Fuel Usage	Eye Bolt & Chain	Air Diverter 2 pc Snap-in	Outdoor Mntg. Kit	NEMA 4X T-Stat
LP	GUARDIAN 60	30-60,000	411	2.8 lbs/hr	08748	20111	09810	09454
NG	GUARDIAN 60N	30-60,000	411	60 cu.ft./hr	08748	20111	09810	09454
LP	GUARDIAN 100	50-100,000	686	4.6 lbs/hr	08748	23127	09811	09454
NG	GUARDIAN 100N	50-100,000	686	100 cu.ft./hr	08748	23127	09811	09454
LP	GUARDIAN 250*	160-250,000	1885	11.6 lbs/hr	08748	20048	24097	09454
NG	GUARDIAN 250N*	160-250,000	1885	250 cu.ft./hr	08748	20048	24097	09454
LP	GUARDIAN 325	200-325,000	1700	15.1 lbs/hr	08748	09177	24098	09454
NG	GUARDIAN 325N	200-325,000	1700	325 cu.ft./hr	08748	09177	24098	09454
*can als	*can also be set up using a "t" duct diverterpn#25678							

*can also be set up using a "t" duct diverter pn#25678

L.B. WHITE CLASSIC™ PILOT IGNITION FORCED AIR HEATERS

- Side air draw design
- Fully protected gas valve
- Indoor installations only
- Internal gas pressure trap
- Steel cabinet with tri-shield coating
- 115v / 60 cycle / single phase
- 1-Year warranty



Fuel Type	RMI Part Number	Capacity BTU/HR	Air Output (CFM)	Fuel Usage	Eye Bolt & Chain	Air Diverter 2 pc Snap-in	Air Diverter 1pc Spot weld	NEMA 4X T-Stat
LP	CLASSIC 60	60,000	250	2.8 lbs/hr	standard	07742	00810	09454
NG	CLASSIC 60N	60,000	250	60 cu.ft./hr	standard	07742	00810	09454
LP	CLASSIC 115	115,000	480	5.3 lbs/hr	standard	07434	00808	09454
NG	CLASSIC 115N	115,000	480	115 cu.ft./hr	standard	07434	00808	09454
LP	CLASSIC 170	170,000	700	7.9 lbs/hr	standard	07434	00808	09454
NG	CLASSIC 170N	170,000	700	170 cu.ft./hr	standard	07434	00808	09454

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RAY MURRAY, INC.

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Gas Kit-196 Leak Detector, Applicators



LEAK DETECTOR

Lab proven "stainless-friendly" leak detector. Stainlessfriendly (chloride and fluoride free). All leak detectors are not the same - GasKit formula was developed to NOT corrode and cause pin holes especially in flexible CSST also others may have. RMI exclusive.

BRUSH, SQUEEZE & SPRAY BOTTLES

Also available in 55 gallon drums - drop shipped from factory.

GAS KIT LEAK DETECTOR

RMI Part No.	Description	Color
GASKIT-REG	Regular (27°)–1 Gallon	Green
GASKIT-LT	LoTemp (10°)–1 Gallon	Pink
GASKIT-XL	Extra Lo Temp (-50°)–1 Gallon	Red
GASKIT-CG	Green for O2 (27°)-1 Gallon	Blue
GASKIT-TYPE II	Lo Temp Oxy (-65°)–1 Gallon	Lt. Blue

GASKIT - REG





OC-3

Use Oxygen compatible OC Three to seal threaded connections on cylinder valves more effectively and safely than Teflon tape.

OC-5

Use Oxygen compatible OC Five to seal threaded connections on high pressure cylinder valves or cryogenic applications. OC Five will also seal threaded connections on large diameter pipes or more course threads.



LD-BOTTLE

O2TT-1/2

RMI PART NO.	DESCRIPTION
OC-3	PTFE Paste 4 oz. Tube
OC-5	PTFE Paste 2 oz. Jar
OC-5-16	PTFE Paste 16 oz. Jar
OC-7	PTFE Grease 2 oz. Jar
OC-7-16	PTFE Grease 16 oz. Jar
O2TT-1/2	Green oxygen Teflon thread seal tape 1/2" x 520
O2TT-3/4	Green oxygen Teflon thread seal tape 3/4" x 520



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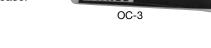
RAY MURBAY INC

 Wide neck bottle and brush for easy application.

- Pint bottle with spray nozzle.
- Handy squeeze bottles.

RMI Part No.	Description
LD-BOTTLE	Empty Pint Bottle & Brush
LD-SPRAY	Empty Pint Bottle w/ Sprayer
LD-DAUBER	8 oz. Bottle and Dauber
WP110	4 oz. Empty Squeeze Bottle
WP120	8 oz. Empty Squeeze Bottle

RMI PART NO.	DESCRIPTION			
OC-3	PTFE Paste 4 oz. Tube			
OC-5	PTFE Paste 2 oz. Jar			
OC-5-16	PTFE Paste 16 oz. Jar			
OC-7	PTFE Grease 2 oz. Jar			
OC-7-16	PTFE Grease 16 oz. Jar			
O2TT-1/2	Green oxygen Teflon thread seal tape 1/2" x 520			
O2TT-3/4	Green oxygen Teflon thread seal tape 3/4" x 520			



Tel: 800-628-5044

Order online at www.raymurray.com or call for personal assistance

RAY MURRAY, INC.

Use Oxygen compatible OC Seven to lubricate O-rings, gaskets, bearings, stop cocks and more. OC Seven can be used as a high vacuum grease.

Edition All OC products are approved by the major industrial gas providers.

/ Murray I **OC-7** Inc.

0

Ray

197 Manifolds – Flashback Arrestors



WITT FLASHBACK ARRESTORS

For reliable protection against dangerous reverse gas flow and flashbacks according to EN 730/ISO 5175-1. Every arrestor 100% tested.

THE BEST FLASHBACK ARRESTORS IN THE WORLD

- A large surface area flame arrestor FA of stainless steel construction extinguishes and dangerous flashback entering the device in any direction.
- A temperature sensitive cut-off valve TV extinguishes sustained flashbacks long before the internal temperature of the arrestors reaches a dangerous level.
- A spring loaded non-return valve NV prevents slow or sudden reverse gas flow forming explosive mixtures in the gas supply.
- A filter at the gas inlet protects the arrestor against dirt contamination, extending the service life (only 85-10 and 85-30)

OPERATION/USAGE

- Flashback Arrestors are used to protect gas cylinders and pipeline outlet points (hoses and any equipment) against dangerous reverse gas flow and flashbacks
- For pipeline outlets an single cylinders with high users for example supply units for gas cutting machines: Models 850-10 and 85-30
- For torches of burners with high flow: Model 85-10NU
- For cutting machines with high flow: Model 85010U
- WITT Flashback Arrestors may be mounted in any position/ orientation
- Only one piece of equipment may be connected to a single Flashback Arrestor
- The maximum ambient/working temperature is 70°C/158°F

MAINTENANCE

- Annual testing of the non-return valve, body leak tightness and flow capacity is recommended
- WITT is happy to supply special test equipment
- Flashback Arrestors are only to be serviced by manufacturer. The dirt filter may be replaced by competent staff.

APPROVALS

Company certified according to ISO 9001:2000 and ISO 14001 CE-marked according to: PED 97/23/EC

RMI Part No.	Gas	Inlet	Outlet
85-30/F	FUEL GAS	1" FNPT	1" FNPT
85-30/O2	OXYGEN	1" FNPT	1" FNPT
FBA135-045	FUEL GAS	9/16-18LH MALE	9/16-18LH FEMALE
FBA135-048	OXYGEN	9/16-18LH MALE	9/16-18LH FEMALE
FBA135-SET	FUEL/OXYGEN	9/16-18LH MALE	9/16-18LH FEMALE

WITT-GASETECHNIK

WITT-Flashback Arrestor

^{730 /} ISO 5175-1 XBAM

Max. working pressures: 1.5 bar, Citygas (C) and Methane (M) ^{5 t} Hydrogen (H) and Ethylene (E) 4 bar.

LPG (P) 3.5 bar

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'LINDER ACCESSORIES



Body, bonnet, stem, and seat retainer, stem seal retaining rings and washer......Brass

Stem O-ring......Viton Handwheel washer.....PTFE

REGO 9560 SERIES

APPLICATION

The HP9560 Series high pressure brass valves are used on cylinder filling panels, tube trailers, and other high pressure manifolds and piping systems. The HP9560 Series exhibits a very low operating torque under pressure for ease of manual operation. **MATERIALS**

FEATURES

- 4200 psig maximum working pressure with a 5 to 1 safety factor.
- 5600 PSi maximum working pressure with a 4 to 1 safety factor.
- Non-rising stem design with O-Ring Seal for durable service.
- Large brass handwheel for easy low torque operation under pressure.
- All valves cleaned for use in oxygen per CGA-4.1.
- Temperature range -40° to +165°F.
- 100% factory tested

SOFT SEAT OPTION

The soft seat valves use a CTFE seat disc in the seat retainer to create a "bubble-tight" seal against a machined seat surface on the brass body. Valve Cv is 2.6. The soft seat option is especially useful for small molecule gases like hydrogen and helium, but can be used for a variety of non-corrosive industrial gases including oxygen, argon, nitrogen, carbon dioxide, nitrous oxide and acetylene.

METAL SEAT OPTION

A copper seat disc is used in the seat retainer to create a seal against a Monel body seat which is installed into the body and can be replaced. Valve Cv is 2.3. The metal seat option minimizes the possibility of seat decomposition or ignition in oxygen and can be used in other non-corrosive industrial gases. The metal seat option is not to be used for acetylene due to the copper seat. Not to be applied in hydrogen or helium service or where "bubble-tight" seal is essential (Note: "C" in part number)

RMI Part No.		Inlet Connection	Outlet Connection	Height A	Height B	Height C
Soft Seat	Metal Seat					
HP9560A	HP9560CA	1/2" FNPT	1/2" FNPT		3.25"	
HP9560B	HP9560CB	3/4" FNPT	3/4" FNPT		3.25"	
HP9561R	HP9561CR	1" - 11 1/2" NPSM RH	1"-11 1/2" RH F. Swivel	4.36" or	5.27"	
HP9561RL	HP9561CRL	1" - 11 1/2" NPSM RH	1"-11 1/2" NPF LH F. Swivel	*(6.19 for	5.27"	
HP9561L	HP9561CL	1" - 11 1/2" NPSM LH	1"-11 1/2" RH F. Swivel	panel mount	5.27"	5.5"
HP9563R	HP9563CR	1" - 11 1/2" NPSM RH	1"-11 1/2" NPSM RH	version)	3.79"	
HP9563L	HP9563CL	1" - 11 1/2" NPSM LH	1"-11 1/2" NPSM LH		3.79"	
HP9560ASE	HP9560CASE	.843847	.843847		3.25"	
HP9560BSE	HP9560CBSE	1.053 - 1.057	1.053 - 1.057		3.25"	
HP9560BSE-B	HP9560CBSE-B	1.053 - 1.057	3/4" FNPT		3.25"	

Place "P" at end of part number for panel mount version. 1.625 diameter panel hole required for mounting. *Call for complete REGO catalog





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199 Valves – Shut Off



SHERWOOD TYPE 430C FOR MANIFOLD PIPING

HIGH PRESSURE MASTER SHUT-OFF VALVES

Designed specifically for all non-corrosive high pressure compressed gas manifold piping requirements.

- Forged brass body with brass trim designed for use with non-corrosive gases.
- Pressure seal bonnet design assures positive seal.
- "O" ring moisture seal on stem.
- Kel-F seat and Teflon packing.
- Aluminum-Silicon Bronze lower stem for extra long life (Brass if furnished for acetylene).
- Large bar handle for easy operation
- Satisfactory for 6000 psi service (non-corrosive) with exception of oxygen which is 4840 psi at -7° F maximum.
- May be used with gaseous oxygen without additional cleaning.

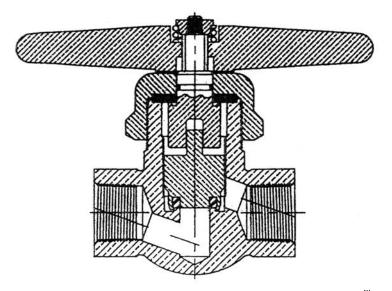
RMI Part No.	Inlet Thread	Outlet Thread
430C-F	1"-11 1/2 NPS RH (male)	1"-11 1/2 NPS RH (male)
430C-M	1/2" NPT (female)	1/2" NPT (female)
430C-MS	1/2" Pipe Socket Weld	1/2" Pipe Socket Weld
430C-N	3/4" NPT (female)	3/4" NPT (female)
430C-NS	3/4" Pipe Socket Weld	3/4" Pipe Socket Weld
430CX7-M	1/2" Pipe Socket Weld	1/2" NPT (female)
430CX7-N	3/4" Pipe Socket Weld	3/4" NPT (female)
430CX9-FM	1"-11 1/2 NPS RH (male)	1/2" NPT (female)

REPLACEMENT PARTS

RMI Part No.	Description
P430C-32	Complete Kit - contains one of each below:
P430-13	Handwheel gasket
P1200-7	Handwheel nut
P1200-11	Handwheel spring
P430B-6T	Teflon packing
P430CX12-21K	Lower Stem & seal insert assembly
P430B-27-13	Stem "O" ring







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200 Valves - Cylinder/Brass

PRESSURE RELIEF DEVICE SELECTION CHART FOR SHERWOOD GV VALVE SERIES

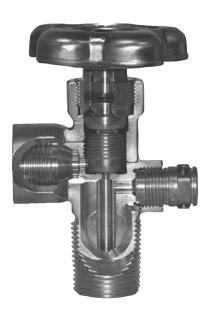
C	Cylinder Service Pressure			ure Range 165° F	Pressure Relief
-XX SUFFIX	D.O.T. Spec. 3A, 3AA, 3AL Cylinders in psig	D.O.T. Exemption Cylinders in psig	Minimum	Maximum	Device Cap Stamping
-26	1665		2500	2775	2775
-28	1800		2700	3000	3000
-32	2015		3025	3360	3360
-35	2265		3400	3775	3775
-38	2400		3600	4000	4000
-39			3915	4350	4350
-43	2670		4005	4450	4450
-46	2900		4350	4833	4833
-47	2950		4425	4917	4917
-48	3000		4500	5000	5000
-50		3600	4860	5600	5600
-55	3500/3600		5250	5833	5833
-63	4000		6000	6665	6665
-65		4500	6075	6750	6750
-78	5000		7500	8333	8333
-85		6000	8100	9000	9000
-95	6000		9000	10000	10000

- * For natural gas service, the Pressure Relief Device Assembly must have a nickel alloy rupture disc. To order CG-4 and CG-5 style Pressure Relief Device with a nickel alloy rupture disc, add the letter F (before the "9") to the CG-4 and CG-5 Pressure Relief Device part number listed above. For example: P625-19C9-32M becomes P625-19C9-32W.
- * For GVHM series valves part number becomes P625-19N9H-XX

For chrome assemblies, add "1-" in front of RMI Part #. For example: P625-19N9-32 becomes 1- P625-19N9-32.









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201 Valves- Cylinder/Brass





Sherwood

SHERWOOD GV SERIES INDUSTRIAL & CHROME PLATED VALVES

- Robust, durable forged brass body and precisely machined internal components enable design to meet the most stringent international valve performance standards from around the world.
- Direct drive stem design with optimized single o-ring seal reduces friction and provides exceptional low operating torque.

ALVES

- Unitized plug style, Pressure relief Device (PRD) offers excellent flow, robust thread design and a unique Sherwood exclusive Webbed Washer design to protect burst disc during handling.
- 100% Helium Leak testing up to 5400 PSIG.
- Leak Rate: internal/External: 1 x 10 -3 atm cc/s @ 5400 PSIG
- For chrome plated values, add "A" after "GV" in RMi Part No.

TORQUE VALUES FOR GV SERIES

Closing Torque @ 5400 PSIG Inlet Pressure 20 - 30 in. lbs. Operating Torque @ 5400 PSIG Inlet Pressure 10 - 20 in. lbs.

PLEASE CALL RMI FOR ASSISTANCE WITH VALVES NOT LISTED HERE INCLUDING FOUR & SEVEN THREAD OVERSIZED VALVES.

XX: denotes Pressure Relief Device burst disc rupture pressure.

RMI Part No.	Gas Service	CGA Outlet	Outlet thread size	NGT INLET
GV28061-XX	Med. Breath Mix	280	.745-14NGO RH EXT	3/4
GV29661-XX	Ind. Oxygen Mix.	296	.803-14UNS-2B RH INT	3/4
GV32041-XX	Carbon Dioxide	320	.825-14 NGO RH EXT	1/2
GV32061-XX	Carbon Dioxide	320	tapped for a ring	3/4
GV32081-XX	Carbon Dioxide	320	seal adapter	1
GV32641-XX	Nitrous Oxide	326	.825-14 NGO RH EXT	1/2
GV32661-XX	Nitrous Oxide	326	.825-14 NGO RH EXT	3/4
GV32681-XX	Nitrous Oxide	326	.825-14 NGO RH EXT	1
GV34641-XX	Air (0-3000 PSI)	346	.825-14 NGO RH EXT	1/2
GV34661-XX	Air (0-3000 PSI)	346	.825-14 NGO RH EXT	3/4
GV34681-XX	Air (0-3000 PSI)	346	.825-14 NGO RH EXT	1
GVHM34761-XX	Air (3001 - 5500 PSI)	347	.825-14 NGO RH EXT	3/4
GVHM34761-XX-24	Air (3001 - 5500 PSI)	347	.825-14 NGO RH EXT	3/4-24
GV35045-XX	Hydrogen	350	.825-14 NGO LH EXT	1/2
GV35065-XX	Hydrogen	350	.825-14 NGO LH EXT	3/4
GV35085-XX	Hydrogen	350	.825-14 NGO LH EXT	1
GV50061-XX	Med. Gas Mix	500	.825-14 NGO LH EXT	3/4
GV54041-XX	Oxygen	540	.903-14NGO RH EXT	1/2
GV54061-XX	Oxygen	540	.903-14NGO RH EXT	3/4
GV54081-XX	Oxygen	540	.903-14NGO RH EXT	1
GV55541-XX	Liq. Withdrawl of propane/butane	555	.903-14NGO LH EXT	1/2
GV55561-XX	Liq. Withdrawl of propane/butane	555	.903-14NGO LH EXT	3/4
GV55581-XX	Liq. Withdrawl of propane/butane	555	.903-14NGO LH EXT	1
GV57761-XX	Oxygen (3001-4000 PSI	577	.903-14NGO RH EXT	3/4
GV58041-XX	Inert Gases	580	.965-14NGO RH INT	1/2
GV58061-XX	Inert Gases	580	.965-14NGO RH INT	3/4
GV58081-XX	Inert Gases	580	.965-14NGO RH INT	1
GV59041-XX	Air, Sulphur-Hexafloride	590	.965-14NGO LH INT	1/2
GV59061-XX	Air, Sulphur-Hexafloride	590	.965-14NGO LH INT	3/4
GV59081-XX	Air, Sulphur-Hexafloride	590	.965-14NGO LH INT	1
GV66061-XX	Nitrous Oxide	660	1.030-14NGO RH EXT	3/4
GVHM67761-XX	Inert Gases (5501-7500 PSI)	677	1.030-14NGO LH EXT	3/4
GVHM67781-XX	Inert Gases (5501-7500 PSI)	677	1.030-14NGO LH INT	1
GVHM68061-XX	Inert Gases (3001-5500 PSI)	680	1.045-14NGO RH INT	3/4
GVHM70161-XX	Oxygen (5001 - 5500 PSI)	701	1.103-14 NGO RH EXT	3/4
GVHM70261-XX	Air (5501-7500 PSI)	702	1.125-14 NGO RH INT	3/4
GVHM70365-XX	Flamables (5500-7500 PSI)	703	1.125-14 NGO LH INT	3/4

RMI Part No.	Gas Service	CGA Outlet	Outlet thread size	STRAIGHT THREAD INLET
GV32051-XXLX75	Carbon Dioxide	320	.825-14 NGO RH EXT	.750-16 UNF2A
GV32051-XXLX	Carbon Dioxide	320	.825-14 NGO RH EXT	1.125-12 UNF2A
GV32651-XXLX75	Nitrous Oxide	326	.825-14 NGO RH EXT	.750-16 UNF2A
GV32651-XXLX	Nitrous Oxide	326	.825-14 NGO RH EXT	1.125-12 UNF2A
GV34651-XXLX75	Air	346	.825-14 NGO RH EXT	.750-16 UNF2A
GV34651-XXLX	Air	346	.825-14 NGO RH EXT	1.125-12 UNF2A
GV35055-XXLX75	Flammable Gases	350	.825-14 NGO LH EXT	.750-16 UNF2A
GV35055-XXLX	Flammable Gases	350	.825-14 NGO LH EXT	1.125-12 UNF2A
GV50051-XX	Med. Gas Mix	500	.885-14 NGO RH EXT	1.125-12 UNF2A
GV54051-XXLX75	Oxygen	540	.903-14 NGO RH EXT	.750-16 UNF2A
GV54051-XXLX	Oxygen	540	.903-14 NGO RH EXT	1.125-12 UNF2A
GV58051-XXLX75	Inert Gases	540	.965-14 NGO RH EXT	.750-16 UNF2A
GV58051-XXLX	Inert Gases	540	.965-14 NGO RH EXT	1.125-12 UNF2A
GV59051-XXLX75	Air, Sulphur-Hexafluoride	590	.965-14 NGO LH EXT	.750-16 UNF2A
GV59051-XXLX	Air, Sulphur-Hexafluoride	590	.965-14 NGO LH EXT	1.125-12 UNF2A
GV66051-XXLX	Nitrous Oxide	660	1.030-14 NGO RH EXT	3/4

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Valves - Cylinder/Brass 202

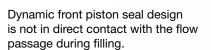
SHERWOOD GRPV SERIES FEATURES

Sherwood GRVP valves are designed to retain approximately 30 to 50 psig pressure, maintaining the integrity of the cylinder contents against contaminants, even if the valve is left open.

The unique combination of innovative design and quality construction offers protection of cylinder contents without the expense of a time-consuming purge and clean cycle.



Durable forged brass body, precisely machined internal components and design elements meet the most stringent international valve performance standards. Automated assembly and testing processes ensure exceptional quality. All Sherwood GRPV valves are 100% leak tested.





DESIGN SPECIFICATIONS

Maximum Working Pressure	6,000 PSIG
	413 BAR
Burst Pressure	15,000 PSIG
	1,035 BAR
Operating Temperature	Min: -50°F -45°C Max: 130°F 55°C
Storage Temperature	Min: -65°F -54°C Max: 155°F 68°C
Leak Rate Internal/External	1X10 ⁻³ atm cc/s
Minimum Cycle Life	5,000 Cycles
Cv Flow Factor	Standard: .28 CO2/Manifold: .50

RMI Part No.	Gas Service @ 120°F	CGA Outlet	Outlet thread size	NGT INLET	OPTIONS
GRPV34641-XX	Air 0 psi TO 3,000 psi	346	.825 – 14 NGO RH Ext.	1/2 – 14 NGT	4 & 7 & 24 Threads oversize inlets: To order, add -4 or -7 or -24 to the end of the part number
GRPV34661-XX	Air 0 psi TO 3,000 psi	346	.825 – 14 NGO RH Ext.	3/4 – 14 NGT	e.g. GRPV58061-XX becomes GRPV58061-XX-7
GRPV58041-XX	Argon 0 psi TO 3,000 psi	580	.965 – 14 NGO RH Int.	1/2 – 14 NGT	Chrome Plating: To order, add letter "A" after letters GV in
GRPV58061-XX	Argon 0 psi TO 3,000 psi	580	.965 – 14 NGO RH Int.	3/4 - 14 NGT	the part number.
GRPV68061-XX	Argon 3,001 psi TO 5,500 psi	680	1.045 - 14 NGO RH Int.	3/4 - 14 NGT	e.g. GRPV58061-XX becomes GRPVA58061-XX
GRPV32041-XX	Carbon Dioxide 0 psi TO 3,000 psi	320	.825 - 14 NGO RH Ext.	1/2 – 14 NGT	Fusible backed pressure relief devices in 165°F or 212°F
GRPV32061-XX	Carbon Dioxide 0 psi TO 3,000 psi	320	.825 - 14 NGO RH Ext.	3/4 - 14 NGT	nominal melting temperatures: To order, change 1 in the
GRPV32041-XX	Carbon Dioxide 0 psi TO 3,000 psi	320	.825 – 14 NGO RH Ext.	1.125-12 UNF	part number to 4 (165°F) or to 5 (212°F) e.g. GRPV35061-XX becomes GRPV35064-XX for 165°F,
GRPV58041-XX	Helium 0 psi TO 3,000 psi	580	.965 – 14 NGO RH Int.	1/2 – 14 NGT	or GRPV35065-XX for 212°F
GRPV58061-XX	Helium 0 psi TO 3,000 psi	580	.965 – 14 NGO RH Int.	3/4 – 14 NGT	NOTE: GRPV Valves are nor approved for
GRPV68061-XX	Helium 3,001 psi TO 5,500 psi	680	1.045 - 14 NGO RH Int.	3/4 - 14 NGT	CNG service.
GRPV35045-XX	Hydrogen 0 psi TO 3,000 psi	350	.825 – 14 NGO LH Ext.	1/2 – 14 NGT	
GRPV58041-XX	Nitrogen 0 psi TO 3,000 psi	580	.965 – 14 NGO RH Int.	1/2 – 14 NGT	Not all valves are available in all
GRPV58061-XX	Nitrogen 0 psi TO 3,000 psi	580	.965 – 14 NGO RH Int.	3/4 - 14 NGT	configurations. Contact RMI for availability.
GRPV68061-XX	Nitrogen 3,001 psi TO 5,500 psi	680	1.045 - 14 NGO RH Int.	3/4 - 14 NGT	Orders may be subject to minimum
GRPV54041-XX	Oxygen 0 psi TO 3,000 psi	540	.903 - 14 NGO RH Ext.	1/2 – 14 NGT	quantities.
GRPV54061-XX	Oxygen 0 psi TO 3,000 psi	540	.903 - 14 NGO RH Ext.	3/4 - 14 NGT	
GRPV59041-XX	Sulfur Hexafluoride 0 psi TO 3,000 psi	590	.965 – 14 NGO LH Int.	1/2 – 14 NGT	
GRPV59061-XX	Sulfur Hexafluoride 0 psi TO 3,000 psi	590	.965 – 14 NGO LH Int.	3/4 – 14 NGT	

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Valves-Cylinder/Brass 203

SHERWOOD GRPV SERIES ADAPTERS



ADAPTER WITH RETRACTABLE PIN

Adapter provides maximum operating flexibility to fill or evacuate a cylinder with either a conventional valve or a GRPV. Engage the Pin Locking Tool (see below), rotate the tool clockwise to depress the pin for use with a conventional valve. Or, rotate the tool counterclockwise to release the pin for use with a GRPV valve. The adapter incorporates an 0-ring seal for a hand tight connection.



* Adapters can be used with TV RPV also.

RMI Part No.	Description
TLG580SLW*	CGA 580
TLG590SLW*	CGA 590



GRPV valves.

TLG=Tool for Global Valve B=Bagged and O₂ Cleaned L=Spring Loaded S=Stainless Steel W=Washer or O-ring Seal

PART NUMBERS:

ers can be used with TV RPV also.		
RMI Part No.	Description	
TLG320W	CGA 320	
TLG346S	CGA 346	
TLG350S	CGA 350	
TLG540S	CGA 540	
TLG580D*	CGA 580	
TI G590D*	CGA 590	

ADAPTER WITH FIXED PIN

manifolds dedicated to filling cylinders with Sherwood

Adapter Features a rigid-mounted pin for use on



PIN LOCKING TOOL

Used with retractable pin adapter.*

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RMI Part No.	Description
TL580B	Pin Locking Tool



Gas cylinders can be checked for content-integrity by simply inserting the checking rod and pushing against the resistance of the check valve. The sound of escaping gas indicates residual cylinder pressure.

RMI Part No.	Description
TL580C	Checking Rod



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Valves - Cylinder/Brass 204

SHERWOOD NGV SERIES VALVES

The Sherwood Global Valve® is world renowned for quality and reliability. A variety of options including residual pressure valves are offered to meet the needs of the industrial gas market. Our new NGV Series is specially designed for all flammable gases.

FEATURES

- Heavy-duty, industrial strength
- Reduced internal stress zones
- Innovative valve core design
- Durable Buna N O-Ring and Teflon
- Backup Ring compatible with flammable gases • Low-pressure (NGV, NGRPV) and
- Low-pressure (NGV, NGRPV) and high-pressure (NGVH) applications

ASSEMBLY TORQUES:

- NGV Bonnet: 55 ft.-lbs.
- NGV Safety Assembly: 30 ft.-lbs.
- NGVH Bonnet: 65 ft.-lbs.
- NGVH Safety Assembly: 45 ft.-lbs.
- RPV Cap: 20 ft.-lbs.



DESIGN SPECIFICATIONS

NGV and NGRPV Max. Working Pressure: 3,000 PSIG

NGVH Max. Working Pressure: 6,000 PSIG

Burst Pressure: 15,000 PSIG

Operating Temperature: Min.: -50° F Max.: 130° F

Leak Rate Internal/External: 1x10-3 atm cc/s

Minimum Cycle Life: 2,000 Cycles

Cv Flow Factor Standard: .690

STANDARDS CONFORMANCE

CGA V-9: Standard for Gas Cylinder Valves

CGA S1.1: Standard for Pressure-Relief Devices

CGA V-1: Compressed Gas Cylinder Valve Outlet and Inlet Specifications

ISO 10297: International Standard for Cylinder Valves Design Specifications

ISO 11363-1 25E: Inlet Thread Specifications

METHYL FLUORIDE

RMI Part No.	Gas @ 120°F	Safety Type	CGA Outlet	Inlet Thread
NGV35064-XX	0 PSI - 3,000 PSI	CG-4	350	3⁄4"-14 NGT
NGRPV35064-XX	0 PSI - 3,000 PSI	CG-4	350	3⁄4"-14 NGT
ETHANE & ETHYLENE				
BMI Part No	Gas @ 120°F	Safety Type	CGA Outlet	Inlet Thread

RMI Part No.	Gas @ 120°F	Safety Type	CGA Outlet	Inlet Thread
NGV35061-XX	0 PSI – 3,000 PSI	CG-1	350	3⁄4"-14 NGT
NGRPV35061-XX	0 PSI - 3,000 PSI	CG-1	350	3⁄4"-14 NGT

METHANE & NATURAL GAS				
RMI Part No.	Gas @ 120°F	Safety Type	CGA Outlet	Inlet Thread
NGV3504X-XX	0 PSI – 3,000 PSI	CG-1, -4, or -5	350	1/2"-14 NGT
NGV3506X-XX	0 PSI – 3,000 PSI	CG-1, -4, or -5	350	3⁄4"-14 NGT
NGV3505X-XX	0 PSI – 3,000 PSI	CG-1, -4, or -5	350	1 1/8"-12 UNF
NGV35025EX-XX	0 PSI – 3,000 PSI	CG-1, -4, or -5	350	25E ISO
NGV3508X-XX	0 PSI – 3,000 PSI	CG-1, -4, or -5	350	1"-11 1/2" NGT
NGRPV35045X-XX	0 PSI – 3,000 PSI	CG-1, -4, or -5	350	1/2"-14 NGT
NGRPV3506X-XX	0 PSI – 3,000 PSI	CG-1, -4, or -5	350	3⁄4"-14 NGT
NGRPV35025EX-XX	0 PSI – 3,000 PSI	CG-1, -4, or -5	350	25E ISO
NGVH6956X-XX	3,001 PSI - 5,500 PSI	CG-1, -4, or -5	695	3⁄4"-14 NGT
NGV6955X-XX	3,001 PSI - 5,500 PSI	CG-1, -4, or -5	695	1 1/8"-12 UNF
NGVH69525EX-XX	3,001 PSI - 5,500 PSI	CG-1, -4, or -5	695	25E ISO
NGT NGVH7036X-XX	5,501 PSI – 7,500 PSI	CG-1, -4, or -5	703	3⁄4"-14
NGVH70325EX-XX	5,501 PSI – 7,500 PSI	CG-1, -4, or -5	703	25E ISO

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205 Valves – Stainless Diaphragm



6074 SERIES 303 STAINLESS STEEL

- Proven leak-tight diaphragm seal capable of conforming to very low leak rates.
- · Forged 303 stainless steel body to withstand severe service conditions.
- Low operating torque design for ease of operation during filling and venting.
- Especially suitable in applications where purging of the cylinder under high vacuum is required.
- Available with unitized pressure relief device having fuse-metal backed or unbacked rupture disc.
- FDA approved for INO medical applications.

303 STAINLESS STEEL DIAPHRAGM

RMI Part No.	Description
6074-(CGA)	3/4"-14 NGT inlet; no PRD
6074-(CGA)Sx	3/4"-14 NGT inlet; CG-1 Stainless Steel PRD
6074-(CGA)SxM	3/4"-14 NGT inlet; CG-4 Stainless Steel PRD
6074-(CGA)PxM	3/4"-14 NGT inlet; CG-4 Platinum PRD
6074X15-(CGA)Sx	1 1/8"-12 UNF inlet, CG1 Stainless Steel PRD
6074X15-(CGA)SxM	1 1/8"-12 UNF inlet, CG4 Stainless Steel PRD
6074X15-(CGA)PxM	1 1/8"-12 UNF inlet, CG4 Stainless Steel PRD



6674 SERIES 316L STAINLESS STEEL

- Proven leak-tight diaphragm seal capable of conforming to very low leak rates.
- Forged 316L stainless steel body to withstand severe service conditions.
- Low operating torque design for ease of operation during filling and venting.
- Externally electropolished (internal optional)
- Especially suitable in applications where purging of the cylinder under high vacuum is required.
- Available with unitized pressure relief device having fuse-metal backed or unbacked rupture disc.

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(CGA)

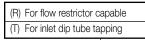
R= Tapped for Flow Restrictor

T= Tapped for Inlet Dip Tube

Large X=

FDA approved for INO medical applications.

ADDERS



6674 OR 6074

RMI Part No. Description 6674-(CGA) 3/4"-14 NGT inlet; no PRD 6674-(CGA)Sx 3/4"-14 NGT inlet; CG-1 Stainless Steel PRD 6674-(CGA)SxM 3/4"-14 NGT inlet; CG-4 Stainless Steel PRD 6674-(CGA)PxM 3/4"-14 NGT inlet; CG-4 Platinum PRD Ρ Х Μ small X= A=3000 PSIG B=3360 PSIG X15= 1 1/8" -12 UNF Inlet (straight Thread) C=3775 PSIG D=4000 PSIG

316L STAINLESS STEEL DIAPHRAGM

P= Platinum Burst Disc. S= Stainless Burst Disc.

6674 CGA

Edition 11

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Valves - Cylinder/Medical 206

SHERWOOD POST TYPE MEDICAL VALVES

KVA SERIES POST MEDICAL VALVES

- Strong, durable brass body made from brass rod.
- Durable lower plug made of tough naval brass resists wear.
- Lower plug is Teflon-coated to add lubricity.
- Internally threaded chamber design promotes longer life and helps protect valve body chamber threads from damage.
- Oxygen-cleaned with aqueous detergent to CGA Specification G 4.1.
- For toggle, add "TG" to end of RMI Part No.

RMI Part No.	Inlet Thread Size	Pin Indexing Hole Numbers	CGA Outlet	Gas Service
KVAB95044F-32 KVAB95054-32	1/2 - 14 NGT .750-16 UNF-2A	Pins #1 & #5	950	
KVAB94041-32 KVAB94051-32	1/2 - 14 NGT .750-16 UNF-2A	Pins #1 & #6	940	Carbon Dioxide
KVAB93044F-32 KVAB93054-32	1/2 - 14 NGT .750-16 UNF-2A	Pins #4 & #6	930	Helium
KVAB97344F-32 KVAB97354-32	1/2 - 14 NGT .750-16 UNF-2A	Pins #11 & #24	973	Medical Gas Mixtures
KVAB96044F-32 KVAB9654-32	1/2 - 14 NGT .750-16 UNF-2A	Pins #1 & #4	960	Nitrogen
KVAB91041-32 KVAB91051-32	1/2 - 14 NGT .750-16 UNF-2A	Pins #3 & #5	910	Nitrous Oxide
KVAB96541-32 KVAB96554-32	1/2 - 14 NGT .750-16 UNF-2A	Pins #7	965	Nitrous Oxide & Oxygen Mixtures
KVAB87044F-32 KVAB87054-32R	1/2 - 14 NGT .750-16 UNF-2A	Pins #2 & #5	870	Oxygen
KVAB88044F-32 KVAB88054-32	1/2 - 14 NGT .750-16 UNF-2A	Pins #2 & #6	880	Oxygen & CO2 Mixtures
KVAB89044F-32 KVAB89054-32	1/2 - 14 NGT .750-16 UNF-2A	Pins #2 & #4	890	Oxygen & Helium Mixtures

KVM SERVICE - MRI MEDICAL VALVES

	RMI Part No.	Inlet Thread Size	Pin Indexing Hole Numbers	CGA Outlet	Gas Service
	KVMB87054-32R	.750-16UNF-2A	Pins #2 & #5	870	Oxygen
)	KVMB95054-32R	.750-16UNF-2A	Pins #1 & #5	950	Air
J	KVMB91051-32R	.750-16UNF-2A	Pins #3 	910	Nitrous Oxide

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Sherwood





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SHERWOOD OXY-GEN I INTEGRATED VALVE-REGULATOR COMBINATION

The Sherwood Oxy-Gen I represents the most advanced oxygen delivery system available.

Convenient: Pressure gauge located at the top of the unit is protected by the shroud-handle and provides good visibility through a full range of cylinder positions.

Capable: Protective shroud does not require removal during the filling process. Fill and evacuation rates are equivalent to standard medical post valves and deliver substantial time and money savings on the fill line.

Durable: Shroud material is a high performance nylon ABS polymer blend and exhibits excellent toughness and chemical and UV resistance.

Compact: 35% lower profile than comparable models provides more efficient racking and storage capabilities. 20% - 40% lighter weight than comparable models improves mobility and reduces user fatigue. Shroud circumference is sized to fit within the footprint diameter of standard Medical-E cylinders.

Confidence: Flow rate accuracy within 10% of dial setting. Regulator adjustment knob with positive flow detents guards against inadvertent flow setting changes. All units are 100% helium leak-tested. Each Oxy-Gen I unit is assigned a unique serial number for positive identification.





RMI PART NO.	for Cylinder	Valve Inlet
*VRM 20515	aluminum	3/4" - 16 UNF
*VRM 20616	steel	1/2" - 14 NGT

*Available with shut-off; 0-15 LPM or 0-25 LPM; with DISS connection; custom logo available on carry handle.

PLEASE CALL RMI TO ORDER.

*Ask about cylinder/valve packages.





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Valves - Cylinder/Acetylene 208

SHERWOOD GV SERIES FOR ACETYLENE

PACKED PRESSURE SEAL STYLE BRASS CYLINDER VALVES FOR ACETYLENE

KEY FEATURES

- Strong, durable forged brass body manufactured by Sherwood to specifications stricter than most commercial forging specifications.
- High temperature aluminum alloy hand wheel with large drainage holes.
- Integral stainless steel tang helps prevent internal stem breakage.
- Durable lower plug made of tough naval brass resists wear.
- Lower plug is Teflon-coated to add lubricity, which minimizes seizing and galling especially under high pressure operation.
- Internally threaded chamber design promotes longer life and helps protect valve body chamber threads from damage.
- Precise, quality machining results in exceptional finishes for low torque sealing and long packing life.
- Inert Teflon packing provides leak-free stern seal, long cycle life and resistant to corrosion.
- Secondary O-Ring seal located above Teflon packing helps provide secure seal under vacuum purging and low pressure operation.
- Hand wheel nut coated with corrosion resistant chromate/zinc organic plating.

Part No.	Gas Service	CGA Outlet	CGA Outlet Thread	NGT Inlet	Handwheel
GV30040	Acetylene	300	.825-14 NGO RH EXT	1/2"	Y
GV30060	Acetylene	300 Top Outlet	.825-14 NGO RH EXT	3/4"	Y
GVT30060	Acetylene	300 Top Outlet	.825-14 NGO RH EXT	3/4"	Y
GV30080	Acetylene	300	.825-14 NGO RH EXT	1"	Y
GV51040	Acetylene	510	.885-14 NGO LH INT	1/2"	Y
GV51060	Acetylene	510 Top Outlet	.885-14 NGO LH INT	3/4"	Y
GVT51060	Acetylene	510 Top Outlet	.885-14 NGO LH INT	3/4"	Y
GV51080	Acetylene	510	.885-14 NGO LH INT	1"	Y
AV5160WB	Acetylene ("Y" valve)	510	.885-14 NGO LH INT	3/4"	
AVB521	Acetylene	520	.895-18 NGO RH EXT	3/8"	
AVB521HW	Acetylene	520	.895-18 NGO RH EXT	3/8"	Y
AVMC201	Acetylene	200	.625-20 NGO RH EXT	3/8"	
AVMC201HW	Acetylene	200	.625-20 NGO RH EXT	3/8"	Y





AV5160WB





AVMC201

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Fax: 800-243-8341

Sherwood

209 Valves - Brass/Diaphragm



5074 SERIES BRASS DIAPHRAGM PACKLESS VALVES FOR SPECIALTY GASES

- Standardized Anti-Extrusion pin feature prevents seat extrusion and cold flow of the polymeric seat
- Available in multiple seat material configurations to accommodate all high purity gas applications
- Increased flow (Cv) to aid in reducing vent and purge times
- Low operating torque design to ensure ease of operation during filling and use

VALVES

- Available with unitized pressure relief device which is equipped with a webbed washer design to protect the burst disc from damage during transportation and replacement
- Optional inlet threads for dip tube assembly
- Available with standard CGA connections as well as International inlets and outlets



SPECIFICATIONS

		ckless Diaphragm Valves			
Valve Series	5074 Series	5074x15 Series	5074 International Series		
Inlets	3/4" - 14NGT		BS 341, DIN 477, JIS,		
	3/8" - 14NGT	1 1/8" 1 12 UNF- 2A	All other available upon request		
	1/2" - 14NGT				
Outlets	CGA	CGA	CGA, DISS, BS 341, DIN 477, JIS		
Seat Material	Nylon 6/6	Nylon 6/6	Nylon 6/6		
	PCTFE	PCTFE	PCTFE		
	PVDF	PVDF	PVDF		
	Vespel®	Vespel®	Vespel®		
	Pre	essure Relief Device			
Burst Pressure @ 165°F		A - 3000 PSIG			
		B - 3360 PSIG			
	C - 3775 PSIG				
		D - 4000 PSIG			
Burst Disc Material	Nickel 200				
		Copper			
		Stainless Steel			
Туре		None, where prohibited			
(per to CGA S1.1	CG-1 Burst Disc Only				
latest edition)		G-2 Fuse Plug 165°F Fusen			
	CG-4 Burst Disc w/ 165°F Fusemetal CG-5 Burst Disc w/ 212°F Fusemental				
			Inenta		
		Optional Features			
Outlet: Tapped for 5/16 - 2		ſ			
Inlet Tap – Available in 1/4	- INPLOTIUMM				
		Specifications			
Max Service Pressure:		3000 PSIG	200 Bar		
Temperature Range:		-50°F to 120°F	-45°C to 49°C		
Leak Rate @ 2000 PSIG (138 Bar):	1x10 ⁻⁷ atm cc/sec	1x10 ⁻⁷ bar mL/sec		
Closing Torque:		50 in-lbs @ 2000 PSIG	5.6 N-m @ 138 bar		
Cv:		.635	.635		

RMI Part No.	Description
5074T-320xx	CGA 320 outlet,3/4" NGT inlet 1/4 tap
5074-350xM	CGA 350 outlet, 3/4" NGT inlet, 165°F
5074-350xW	CGA 350 outlet, 3/4" NGT inlet, 212°F
5074-540x	CGA 540 outlet, 3/4" NGT inlet
5074-580x	CGA 580 outlet, 3/4" NGT inlet
5074-590x	CGA 590 outlet, 3/4" NGT inlet
5074-660x	CGA 660 outlet, 3/4" NGT inlet
5074X15-350x	CGA 350 outlet, 1 1/8" UNF inlet
5074X15-350xM	CGA 350 outlet, 1 1/8" UNF inlet, 165°F
5074X15-350xW	CGA 350 outlet, 1 1/8" UNF inlet, 212°F
5074X15-580x	CGA 580 outlet, 1 1/8" UNF inlet
5074X15-590x	CGA 590 outlet, 1 1/8" UNF inlet

All other CGA's not listed above

RMI Part No.	Description
5074-CGA	All CGA outlets: 3/4" NGT inlet NO PRD
5074-CGAx	All other CGA outlets: 3/4" NGT inlet
5074X15-CGAx	All other CGA outlets, 1 1/8" UNF inlet
5074X75-CGAx	All other CGA outlets, 3/4" UNF inlet

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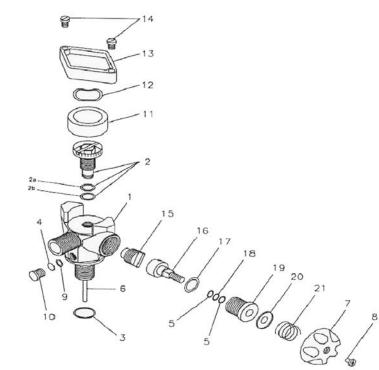
Valves - Cylinder 210



ALUMINUM SCUBA VALVES

Sherwood's aluminum life support valve is made of forged anodized aluminum. Its combined components meet the stringent material and performance requirements of NIOSH and NFPA. Our aluminum valve is a popular component used by many life support systems manufacturers and has seen extensive service in firefighting and hazardous material removal applications, as well as life support ingress and egress units.

RMI Part No.	Description
YV2300	LSV CGA346 180° 0.750" - 16 UNF-2A 2265 psi small lock handwheel black
YV2301	LSV CGA346 180° 0.750" - 16 UNF-2A 2265 psi small handwheel black
YV2301A	LSV CGA346 180° 0.750" - 16 UNF-2A 2265 psi diamond shape handwheel
YV2302	LSV CGA346 90° 0.750 - 16 UNF-2A 2265 psi small handwheel black
YV2303	LSV CGA346 180° 0.750 - 16 UNF-2A 3000 psi small handwheel black
YV4500	LSV CGA347 180° 0.875 - 16 UNF-2A 4500 psi small lock handwheel black
YV4501	LSV CGA347 180° 0.875 - 16 UNF-2A 4500 psi small handwheel black
YV4501A	LSV CGA347 180° 0.875 - 16 UNF-2A 4500 psi lg diamond shape handwheel
YV4502	LSV CGA347 180° 0.875 - 16 UNF-2A 4500 psi sm handwheel Cu Gasket
YV4700HP	LSV CGA347 90° 0.875 - 16 UNF-2A 4500 psi sm handwheel black
YV4700AHP	LSV CGA347 90° 0.875 - 16 UNF-2A 4500 psi lg diamond shape handwheel black
YV4700HPL	LSV CGA347 90° 0.875 - 16 UNF-2A 4500 psi sm lock handwheel black
YV4700LP	LSV CGA346 90° 0.750 - 16 UNF-2A 2265 psi sm handwheel black
YV4700ALP	LSV CGA346 90° 0.750 - 16 UNF-2A 2265 psi lg diamond shape handwheel black
YV4522HP	LSV CGA347 150° 0.875 - 14 UNF-2A 4500 psi small handwheel
YV4522HPB	LSV CGA347 150° 0.875 - 14 UNF-2A 4500 psi small handwheel; w/bracket
YV4522HPBA	LSV CGA347 150° 0.875 - 14 UNF-2A 4500 psi non-locking handwheel; w/bracket
YV4522HPH	LSV CGA347 150° 0.875 - 14 UNF-2A 4500 psi Tri-lobed handwheel; w/bracket
YV4522LP	LSV CGA346 150° 0.750 - 16 UNF-2A 2265 psi small handwheel black
YV4522LPB	LSV CGA346 150° 0.750 - 16 UNF-2A 2265 psi small handwheel; w/bracket
YV4522LPBA	LSV CGA346 150° 0.750 - 16 UNF-2A 2265 psi non-locking handwheel
YV4522LPH	LSV CGA346 150° 0.750 - 16 UNF-2A 2265 psi Tri-lobed handwheel; w/bracket





RMI Part No.	Description	Item No.
G007EPY	O-ring	2B
G010A	O-ring	18
G010H	O-ring	18
G210A-9	O-ring	3
G212A-9	O-ring	3
G2200-350A	O-ring	3
1-3506-8	Stem Nut	8
221-40	Gage Assembly	2
33-450-5	Handwheel	7
33-450-50	Handwheel Assembly	7
39-450-13	Tube, Drain	6
3506-9	Plug Assembly	15
3506-9V	Plug Assembly	15
3506-10	Gasket	17
3506-13	Packing	5
450-14	Ring	2A
450-21	Gage Assembly	2
450-30FR	Bumper Guard Assembly	13
450-4	Screw	14
450-40	Gage Assembly	2
450-8	Gage Cover	11
450-9	Washer	12
4522-5	Bracket, 150° Aluminum Valve	Not shown
DR460-50HP	Gauge Assembly High Pressure	2
DR460-50LP	Gauge Assembly Low Pressure	2
61-3506-14	Packing Nut	19
61-450-2	Bonnet	19
61-450-5A	Handwheel	7
6509-34	Safety Disc	4
6509-35	Safety Disc	4
6509-45	Safety Disc	4
6509-48	Safety Disc	4
6509-72	Safety Disc	4
6510N	Gasket	9
9-3506-12	Stem	16
9-4000-6	Safety Plug 10	
19-450-10	Spring 21	
19-450-11	Washer	20

Fax: 800-243-8341

Tel: 800-628-5044

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211 **Cylinder Accessories**

GAS KIT CAPS, CARRY HANDLES, O-RINGS, SCREENS, FELTS

CYLINDER SIPHON TUBES

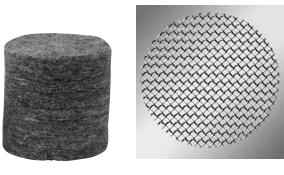
RMI Part No.	Description		
TUBE-53	siphon tube, 53" OAL (standard length)		
TUBE-53-OXY	siphon tube, 53" OAL, O2 cleaned (standard length)		

CYLINDER CAPS - REPLACEMENT

RMI Part No.	Description
CYLCAP1	Course thread, high pressure
CYLCAP2	Fine thread, high pressure
CYLCAP3	Course thread, acetylene
CYLCAP4	Fine thread, acetylene

CYLINDER SCREENS & FELTS (ACETYLENE)

RMI Part No.	Description
SCREEN-1/2	stainless steel acetylene screen 1/2 "
SCREEN-3/4	stainless steel acetylene screen 3/4 "
SCREEN-1	stainless steel acetylene screen 1 "
FELT-1/2	felt filter for 5/8" plug
FELT-3/4	felt filter for 15/16" plug
FELT-1	felt filter for 1 3/16" plug



FELT-1

SCREEN-1

CARRY HANDLES FOR ALUMINUM CYLINDER

RMI PART NO.	DESCRIPTION		
CATALINA-VPCH	Carry handle - Catalina		
CATALINA-RING	Retainer ring - Catalina		
LUXFER-VPCH	Carry handle - Luxfer		
LUXFER-RING	Retainer ring - Luxfer		
Threaded-VPCH	Carry Handle 3 1/8" - Course		



CATALINA VPCH





O-RINGS FOR CYLINDER VALVES

RMI Part No.	Description		
450-17T	.750-16UNF2A Teflon o-ring		
G216T	1.125-12UNF2A Teflon o-ring		
G210A9	.750-16UNF2A Buna o-ring		
G216A9	1.125-12UNF2A Buna o-ring		



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Cylinder Accessories 212

CYLINDER VALVE ACCESSORIES

RMI Part No.	Description	
RM320DC	plastic CGA 320 dust cap	
RM540DC	plastic CGA 540 dust cap	
RM870PI	post valve push-in washer	
RM870PIPT	post valve push-in washer, pull tap	
RMCO2W	plastic CO2 washer	
RMO2W	plastic O2 large washer green	
RMPW	plastic post valve wrench	
RMYDCTR	tamper resistant post valve dust cap	
RMYWG	green yoke washer CGA 870	





RM320DC



RM540DC



RM87OP1

RM870PIPT



RMI Part No.

10010C

RMYDCTR

RMPW

REPLACEABLE OUTLET SEALS -CO2 VALVES

Description

Brass valve conversion kit



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blank or "P"

REGO RELIEF VALVES FOR GAS & CRYOGENIC SYSTEMS

9400 SERIES BRASS OR STAINLESS STEEL, NON-ASME

All valves are cleaned and packaged for oxygen service per CGA G-4.1.

FLOW PERFORMANCE PRV and SS style flow at 0.783 SCFM Air/PSIA at 110% of set pressure. B-9425N has a flow at 6.7 SCFM Air/PSIA at 120% of set pressure. B-9426N has a flow at 11.0 SCFM Air/PSIA at 120% of set pressure.

blank or "P" 350

(style) (size) (seat material) (drain hole) (set pressure) (pipe-away option)

This example part number indicates: 1/4" PRV style brass relief valve with

- Bubble tight at 95% of set pressure.
- Easy to read color coded psig/bar labels.
- Unique tamper resistant adjusting screw.
- Adapters provide standard pipe thread connections for venting gas to the outdoors.
- Repeatable performance.
- 100% factory tested.
- Temperature range -320 to + 165 degrees.

Materials	SS style	PRV and B style		
Body	stainless steel	brass		
Spring	stainless steel	stainless steel		
Seat Retainer	stainless steel	brass		
Adjusting Screw	stainless steel	brass		
Pipe-Away Adapter	stainless steel	brass		



PTFE seat, set at 350psig and no pipe-away adaptor.

Style	Size	Inlet A	Body and Valve Material	Pressure Setting Range PSIG	Height B	Wrenching Hex C	Orifice Size Sq. Inch	Pipe-Away Adapter P/N	Pipe-Away Outlet F.N.P.T
PRV	9432	1/4"	brass	17-600	2.6"	7/8"	.062	B-9412-2	3/8"
SS	9432	1/4"	SS	17-600	2.6"	7/8"	.062	SS-9412-4	1/2"
PRV	9433	3/8"	brass	17-600	2.6"	7/8"	.062	B-9412-2	3/8"
SS	9433	3/8"	SS	17-600	2.6"	7/8"	.062	SS-9412-4	1/2"
PRV	9434	1/2"	brass	17-600	2.6"	7/8"	.062	B-9412-2	1/2"
SS	9434	1/2"	SS	17-600	2.6"	7/8"	.062	SS-9412-4	1/2"
B-	9425	3/4"	brass	50-300	3.4"	1 3/4"	.43	B-3131-10	1"
B-	9426	1"	brass	100-300	5.5"	2 3/8"	.62	B-3132-10	1 1/4"

ORDERING INFORMATION

PRV 9432 T

Fill in the blanks with options below:

SEAT MATERIAL OPTION

F for Fluorosilicone for PPV and SS styles for 15-139 psi.

T for PTFE for PRV and SS styles for 140-600 psi.

N for B-9425 and B-9426, Fluorosilicone seat, all set pressures.

SET PRESSURE

Specify set pressure within range specified for style and size. The B-9426N is available in select settings only. Special order.

PIPE-AWAY OPTION

P - Pipeaway included and attached. No drain hole in relief valve. For example PRV9432TP350P. Leave blank for relief valve without pipeaway attached. For example: PRV9432T 350.

For Easy Identification, the following standard settings have color coded labels for all PRV and SS Style sizes and settings marked in PSIG and bar:

22 psig - yellow 35 psig - purple 50 psig - white 100 psig - gray 150 psig - red

230 psig - blue 350 psig - orange 500 psig - light blue 450 psig - pink

DRAIN HOLE OPTION

Relief valves without pipe-away typically provided with drain holes, leave blank. P - for relief valves without drain hole, for example RPV9432TP350.



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RELIEF VALVES

- Packaged and cleaned for oxygen service per CGA G-4.1
- Bubble tight at 95% of set pressure.
- 100% factory tested
- Repeatable performance.
- Temperature range -320 to + 165°F.
- Easy to read color coded psig/bar labels.
- Adapters provide standard pipe thread connections for venting gas to the outdoors.



Materials	SS style	PRV and B style		
Body	stainless steel	brass		
Spring	stainless steel	stainless steel		
Seat Retainer	stainless steel	brass		
Adjusting Screw	stainless steel	brass		
Pipe-Away Adapter	stainless steel	brass		

NOISE REDUCTION ORDERING INFORMATION

RMI Part No.	Seat Material	Inlet Connections (F.NPT)	"B"	"C"	Orifice Size In	Factory Pressure Setting (PSIG)	Pipe-Away Adapter
NR009432F022	Fluorosilicone	1/4"	2.60"	7/8"	.062	22	B-9412-2
NR009432F050	Fluorosilicone	1/4"	2.60"	7/8"	.062	50	B-9412-2
NR009432F100	Fluorosilicone	1/4"	2.60"	7/8"	.062	100	B-9412-2
NR009432F230	PTFE	1/4"	2.60"	7/8"	.062	230	B-9412-2
NR009432F250	PTFE	1/4"	2.60"	7/8"	.062	250	B-9412-2
NR009432F300	PTFE	1/4"	2.60"	7/8"	.062	300	B-9412-2
NR009432F350	PTFE	1/4"	2.60"	7/8"	.062	350	B-9412-2
NR009432F360	PTFE	1/4"	2.60"	7/8"	.062	360	B-9412-2

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Fax: 800-243-8341

VALVES



VALVES RELIEF

APPLICATION:

The ASME approved 90° relief valves AR series, provide precise control set points which protect cryogenic vessels and piping systems for over-pressurization.

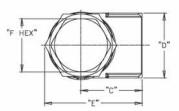
FEATURES:

- High flow rates are approved by ASME rigorous testing to Code VIII.
- The ninety degree configuration provides relief of cryogenic gases directly avoiding flow through the spring
- Bubble tight seat provides 100% shut off when resealing or static mode.
- A variety of inlets and pressure settings assure adherence to application requirements.
- Temperature Range: -320°F (-196C) to +165°F (+74°C)
- Cleaned for Liquid Oxygen Service per CGA G-4.1
- 100% Facory Tested.

MATERIALS:

ALVES

Body	Bronze ATM B61
Upper Body	
Seat & Stem	
Poppet Guide	Brass ASTM B16
Spring Retainer	
Adjusting Screw	Brass ASTM B16
Сар	Brass ASTM B16
Bushing	Hostaflon TFM1600 (Teflon)
Ball	Stainless Steel
Upper Gasket	PTFE ASTM D4894
Lower GAsket	
Spring	Stainless Steel ASTM A 313
Screw	Brass ASTM B16
Grooved Pin	Stainless Steel ASTM A581
Cable & Tie Assy	Stainless Steel & Lead





RMI Part No.	Inlet Inches DN	Outlet Inches DN	Ends	A	в	с	D	E	ASME Flow Capacity SCFM/Air @ 250 PSI	Weight Lbs
AR4106A	3/4"	1"	Thread NPT	6.03"	1.97"	1.63"	1.63"	2.49"	450	2.75
AR4108A	1"	1 1/4"	Thread NPT	6.88"	2.37"	2.00"	1.90"	3.01"	1,003	3.75
AR4112A	1 1/2"	2"	Thread NPT	9.64"	3.20"	2.45"	2.60"	3.89"	2,277	8.00

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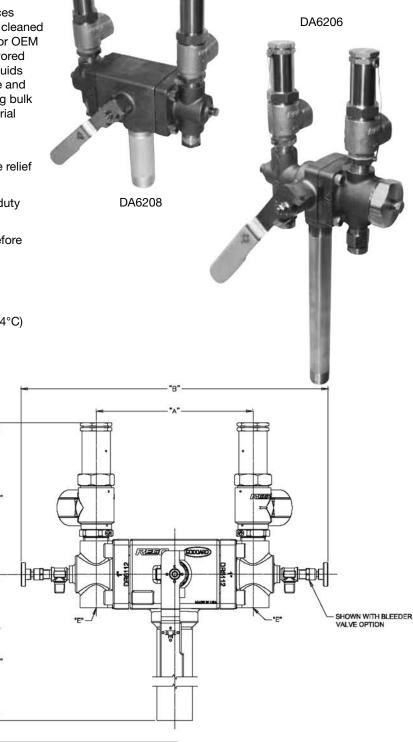
VALVES RELIEF

APPLICATION:

Provides a complete solution for pressure relief devices assembled in a factory setting, pressure and oxygen cleaned ready for attachment to cryogenic bulk tanks. Ideal for OEM applications where pre-fabricated assemblies are favored to streamline constructions. Ideal for all cryogenic liquids including Liquified Nitrogen, Oxygen and Argon. Safe and reliably used in LNG Systems. Excellent for protecting bulk cryogenic liquid vessels, transport trailers and industrial pipelines.

FEATURES:

- High flow rates complement our AR series pressure relief valves and burst disc.
- Valve side selection is accomplished with a heavy duty control arm clearly labeled for positive isolation.
- · Needle valves accessorize for easy bleed of gas before removing pressure relief devices.
- Cleaned for Liquid Oxygen Service per CGA G-4.1
- Pressure Rating: 725 PSI (50 bar)
- Temperature Rating: -325°F (-198°C) to +165°F (+74°C)



av Inc	RMI Part No.	Inlet Inches DN	Connection Type	A	в	с	D	E
	DA6206	1"	Thread NPT	4.76"	13.08"	9.75"	7.00"	3/4" NPT
Edition	DA6208	1 1/2"	Thread NPT	8.33"	16.30"	15.75	8.06	1" NPT

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RAY MURRAY, INC.

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VALVES RELIEF

APPLICATION:

The Diverter Valve DR Series, provide a simple solution for the isolation of pressure relief devices during routine change out of a Relief Valve without evacuating the cryogenic vessel. Ideal for all cryogenic liquids including Liquified Nitrogen, Oxygen and Argon. Safe and reliably used in LNG Systems. Excellent for protecting bulk cryogenic iquid vessels, transport trailers and industrial pipelines.

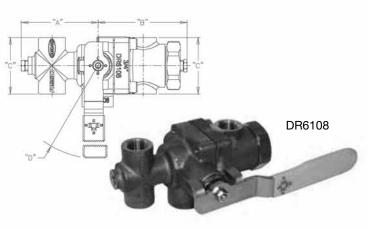
FEATURES:

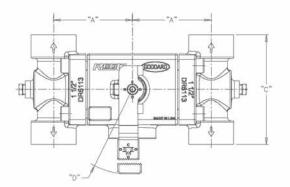
- High flow rates compliment our AR series pressure relief valves.
- Valve side selection is accomplished with a heavy duty control arm clearly labeled for positive isolation.
- Needle valves accessorize for easy bleed of gas before removing pressure relief devices.
- Fitted with threaded top Relief Valve ports and bottom Burst Disk connections.
- Cleaned for Liquid Oxygen Service per CGA G-4.1
- Pressure Rating: 600 PSI (41.37 bar) CWP
- Temperature Rating: -320°F (-196°C) to +165°F (+74°C).
- 100% Factory tested

MATERIALS:

VALVES

Body	Bronze ASTM B61 UNS C92200
Bushing, End Cap	Brass B16 C36000
	Brass
Thread Ring	Brass ASTM B16 C36000
Seat Rings	PCTFE ASTM D1430
	PTFE
	Stainless Steel
Pipe Plug	Brass ASTM B16 UNS C360000
	Stainless Steel
Spacer	Brass ASTM B16 UNS C360000
Lever	Cadmium Plated Steel
Packing	PTFE
Stem	Stainless Steel ASTM A582 UNS S30300
Packing Nut	Brass ASTM B16 UNS C36000
Lock Washer	Stainless Steel







RMI Part No.	Inlet Inches DN	Outlet Inches DN	Connection Type	А	В	с	D	Height	Weight Lbs
DR6108	1"	3/4"	Thread NPT	4"	4.65"	2.94"	R 7.36"	5.18"	10
DR6112	1 1/2"	1"	Thread NPT	5.94"	-	5.70"	R 7.36"	5.77"	28
DR6113	1 1/2"	1 1/2"	Thread NPT	5.94"	-	5.70"	R 7.36"	5.770"	30

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Valves - Shut Off Cryogenic 218

MANIFOLD

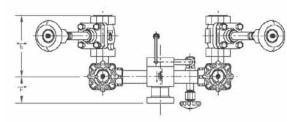
APPLICATION:

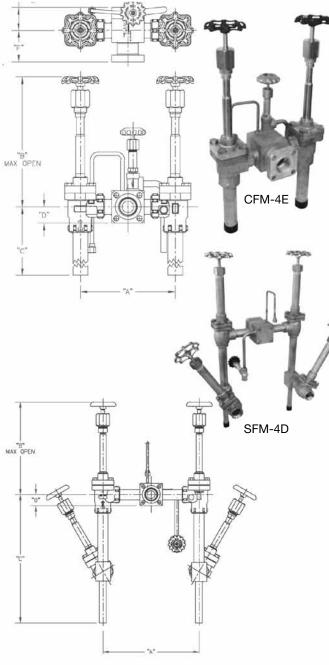
High quality brazed and welded assemblies are ideally suited for the original equipment manufacturer of bulk cryogenic vessels. A wide variety of valve types including union or bolted bonnet, bronze or stainless steel bodies & top works and piping of stainless steel or copper onstruction are available as production unit.

Ideal for all cryogenic liquids including Liquified Nitrogen, Oxygen and Argon. Safe and reliably used in LNG systems. In addition we can custom design configurations that are welded and brazed in a factory setting.

FEATURES:

- Unitized construction eliminates leaks and provides easy fitup to tank piping.
- Modules commonly include top and bottom fill valves, fill check with strainer and hose bleed and relief valve.
- Many options are available which include redundant isolation valves or specific end user dimensions and specifications.
- Our valve products stand up to high cycle environments, without the need for field adjustment of valve packing.
- Available alone or as a unitized welded assembly for bulk tank filling.
- Repeatable performance and geometry.
- Precision silver brazed and welded assembly.
- Cleaned for Liquid Oxygen Service per CGA G-4.1
- Pressure Rating: SFM Series 725 PSI (50 bar) CFM Series 600 PSI (41 bar)
- Temperature Rating: -320°F (-196°C) to +165°F (+74°C)
- 100% Factory tested





RMI Part No.	Size	Bonnet Type	Pipe Material	A	В	С	D	E	F
CFM00002D	1"	Union	Stainless Steel	10.25"	14.64"	7.5"	1.75"	2.5"	3.4"
CFM00004D	1 1/2"	Union	Stainless Steel	10.25"	15.00"	9.5"	1.75"	2.5"	3.4"
CFM00004E	1 1/2"	Bolted	Stainless Steel	10.25"	13"	9.5"	1.75"	2.5"	3.4"
AFM00004D	1 1/2"	Bolted	Stainless Steel	10.25"	13"	9.5"	1.75"	8"	3.4"
PFM00004D	1 1/2"	Bolted	Copper	15.00"	14.63"	20"	1.75"	8"	3.4"
SFM00004D	1 1/2"	Bolted	Stainless Steel	15.00"	14.63"	20"	1.75"	2.54"	3.4"

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VALVES

219 Valves - Check Valves



REGO HORIZONTAL CHECK VALVES

The Rego 8500 series are designated for use as a check valve on large cryogenic bulk stations and cryogenic pipelines.

- Replaceable Kel-F seat discs.
- Self-centering cap holds plunger in position.
- Each Valve is cleaned and packaged for liquid oxygen service per CGA G-4.1.
- Working temperature range is -320 degrees F to +165 degrees F.
- Maximum working pressure is 600 PSIG CWP.
- 2 PSI crack pressure.

REGO HORIZONTAL CHECK VALVES

RMI Part No.	Inlet/Outlet Connection	Mid-Inlet to Top of Valve	Lenght	Cv
BK8508S	1.128" - 1-1.30"	2 1/4"	4 5/16"	10
BK8508T	1" FNPT	2 1/4"	4 5/16"	10
BK8512S	1.6929" - 1.631"	3 14"	5 3/16"	27
BK85112T	1 1/2" FNPT	3 14"	5 3/16"	27

REGO INLINE CHECK VALVES

Inline check valves with metal seat opton for cryogenic service or with soft seat option for leak free operation in gas service.

- One directional flow indicated by arrow on body.
- Large Cv for high flow capacity and low pressure drop.
- Working temperature range:
- -320° F to +165° F for metal seats
- -20°F to +165°F for soft seats
- 1 psig cracking pressure
- Cleaned for use in oxygen service per GCA G-4-1









REGO INLINE CHECK VALVES

RMI Part No. Connections FNPT	Seating Option	Inlet/Outlet	Lenght HEX Size	Wrenching	Cv	Max Operating Pressure
Stainless Steel Check Val	ves					
CG250SS	METAL	1/4"	2 3/8"	13/16"	.87	5000 PSIG
CG375SS	METAL	3/8"	2 1/2"	1"	2.3	5000 PSIG
CG500SS	METAL	1/2"	3"	1 1/8"	3.5	5000 PSIG
CG750SS	METAL	3/4	3 5/8"	1 1/2"	5.2	5000 PSIG
CG250SSS	SOFT	1/4"	2 3/8"	13/16"	.87	250 PSIG
CG375SSS	SOFT	3/8"	2 1/2"	1"	2.3	250 PSIG
CG500SSS	SOFT	1/2"	3"	1 1/8"	3.5	3000 PSIG
CG750SSS	SOFT	3/4	3 5/8"	1 1/2"	5.2	3000 PSIG
Brass Body Check Valves	3			ł	1	ł
CG250B	METAL	1/4"	2 3/8"	13/16"	.87	5000 PSIG
CG375B	METAL	3/8"	2 1/2"	1"	2.3	5000 PSIG
CG500B	METAL	1/2"	3"	1 1/8"	3.5	5000 PSIG
CG750B	METAL	3/4	3 5/8"	1 1/2"	5.2	5000 PSIG
CG250BL	SOFT	1/4"	2 3/8"	13/16"	.87	250 PSIG
CG375BL	SOFT	3/8"	2 1/2"	1"	2.3	250 PSIG
CG500BL	SOFT	1/2"	3"	1 1/8"	3.5	3000 PSIG
CG750BL	SOFT	3/4	3 5/8"	1 1/2"	5.2	3000 PSIG

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Valves -Shut Off/Cryogenic **220**



SERIES 322 BRONZE GATE VALVE FOR CRYOGENIC SERVICE

Top Entry: Union bonnet valve can be permanently installed in the line and serviced from the top.

Soft Seated: Bronze cast body and internals. Rugged construction for long life.

Construction: Bronze cast body and bonnet. Rugged construction for long life.

Sizes: 1/2" through 3" (15mm through 80mm)

Ends: Threaded (FNPT), Sil braze tube (SBT) or with stainless steel pipe nipples brazed in.

Service: Liquefied and vaporized atmospheric gases, LNG.

Temperature Rating: -325° F to 100° F (196° C to + 38° C).

Pressure Rating (cold, non-shock): 300 psig (20 bar) also available in 400 psig (27 bar) and 600 psig (40 bar) see series 326.

UPDATES:

1/4" - 2" has been changed to the 326 Series (see above description). 2.5" and 3" remain 322 series which tested at 400 PSI (only major difference).





SERIES 840 - SWING CHECK VALVE FOR CRYOGENIC SERVICE

840

Top Entry: Can be permanently installed in the line and serviced from the top.

Soft Seated: Replaceable PCTFE seat for enhanced seating.

Construction: Bronze body and internals designed to prevent back-flow in cryogenic systems. Higher fluid capacity (Cv) than poppet or Lift-Check Valves.

Sizes: 1/2" through 2" (15mm through 50mm)

Ends: Threaded (FNPT) or with stainless steel nipples brazed in.

Service: Liquefied and vaporized atmospheric gases, LNG.

Temperature Rating: -325° F to 100° F (196° C to + 38° C).

Pressure Rating: 400 psig (27 bar).

UPDATES:

0

Ray

Murray Inc.

Edition

Same valve. Also available 846M series, which tested at 600 PSI and has a metal seat.

* Call for complete Goddard catalog



SERIES 886 - CHECK VALVE FOR CRYOGENIC SERVICE

Top Entry: Can be permanently installed in the line and serviced from the top.

Soft Seated: Replaceable PCTFE disc provides a high performance seal. The disc/arm assembly is easily replaced. Metal -to-metal seating also available.

Construction: 316L stainless steel investment cast body, cap and arm.

Sizes: 1/2" through 1 1/2" SW, BW Schedule 10; 2" through 4" as BW Schedule 10 and BW Schedule 40.

Ends: Threaded (FNPT) or with stainless steel nipples brazed in.

Service: Liquefied and vaporized atmospheric gases, LNG.

Temperature Rating: -325° F to 100° F (196° C to + 38° C).

Pressure Rating (non-shock cold): 1/2" through 2" 300 psig (20 bar) 400 psig (27 bar); 3" and 4" 105# Class 275 psig (19 bar); 3" and 4" 300# Class 720 psig (50 bar).

UPDATES:

Same valve with some nomenclature changes for end connection designators.

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Fax: 800-243-8341

Order online at www.raymurray.com or call for personal assistance

Valves -221 Cylinder/Cryogenic



GO CRYO-FLOW PRODUCTS

REGO EXTENDED STEM CRYOGENIC VALVES

ES8450 SERIES EXTENDED STEM VALVES

BK9450 & BK9470 SERIES EXTENDED STEM VALVES

These valves are designed for use as a trycock valve or hose drain valve on cryogenic tanks. Another application is as a use, liquid fill or vent valve on mini bulk cryogenic tanks. These valves can be used likewise for other cold gas applications requiring extended stem valves.

- Union Bonnet
- One piece stainless steel stern
- Conical seat design
- Maximum working pressure is 600 psig
- Working temperature is -320°F to +165°F
- Cleaned for oxygen per CGA G-4.1
- ES8450 Series also features manual torque compression packing.
- BK9450 and BK9470 features extended bonnet and spring loaded package.
- BK9470 features 304 stainless steel tube brazed into one or both ends.

RMI Part No.	Inlet/Outlet	Height	Body width	Width with inlet/outlet tubes	Cv
ES 8452	1/4" FNPT	4"	2.5"	does not apply	0.70
ES 8453	3/8" FNPT	4"	2.5"	does not apply	1.10
ES 8454	1/2" FNPT	4"	2.5"	does not apply	1.10
BK 9452	1/4" FNPT	6.5"	2.5"	does not apply	0.70
BK 9453	3/8" FNPT	6.5"	2.5"	does not apply	1.10
BK 9454	1/2" FNPT	6.5"	2.5"	does not apply	1.10
BK 9453FA	5/8" OD tubing x 3/8" FNPT	6.5"	2.5"	4.0"	1.10
BK 9475A	5/8" OD tubing both ends	6.5"	2.5"	5.5"	1.10

*Call for complete REGO catalog.

REGO SHORT STEM CRYOGENIC VALVES

9450 SERIES

9460 SERIES

- The 9450 and 9460 series valves are designed for use on portable cryogenic and other in-line shut-off valve applications.
- Spring loaded stem seal automatically adjusts fo any gasket wear, eliminating the need to constantly retighten the packing nut.
- Non-rising stem and low profile allow the valve to fit into tight areas and still provide easy access.
- Unique pressure-sealed moisture barrier helps prevent freeze up at cryogenic temperatures.
- Conical swivel seal design helps prevent seat galling from over-torque tightening.
- Cleaned for liquid oxygen service per CGA G-4.1.
- Maximum working pressure is 600 psig.
- Working temperature range is -320°F to +165°F.

RMI Part No.	Inlet	Outlet	Orafice	Length	Height (app.)	Tube	Cv
T9452	1/4" FNPT	1/4" FNPT	.250	2 1/2"	2 3/4"	none	.72
T9453	3/8" FNPT	3/8" FNPT	.406	2 1/2"	2 3/4"	none	1.08
T9454	1/2" FNPT	1/2" FNPT	.406	2 1/2"	2 3/4"	none	1.10
T9464CA	.675 Tube	3/8" FNPT	.406	2 1/2"	2 3/4"	1 1/8"	1.08
T9464DA	.675 Tube	3/8" FNPT	.406	2 1/2"	2 3/4"	2 1/8"	1.08
T9464ADA	.675 Tube	3/8" FNPT	.406	2 1/2"	2 3/4"	3 3/8"	1.08

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Valves -Shut Off/Cryogenic **222**



Goddard valves have created a standard that industry veterans know. If you are familiar with Goddard, you will probably request them. If not, please call on us for additional information.



SERIES 110 - GATE VALVE FOR CRYOGENIC SERVICE

Top Entry: Can be permanently installed in the line and serviced from the top.

Soft Seated: Replaceable PCTFE seat provides a virtually bubble-tight seal.

Construction: Stainless steel investment cast body and bonnet.

Sizes: 1/2" through 6" (15mm through 150mm)

Ends: RF flange, butt weld, socket weld, threaded (FNPT).

Service: Liquefied and vaporized atmospheric gases, LNG.

Temperature Rating: -325° F to 100° F (196° C to + 38° C).

Pressure Rating (cold, non-shock): Class 150 valve to 275 psig. (19 bar) Class 300 valve to 720 psig (50 bar).

UPDATES: Same valve with some nomenclature changes. Most valves (except flanged connections) are offered only in Class 300# (check with us on Class 150# as some sizes are available).





212

SERIES 202/212 - BRONZE GLOBE VALVE FOR CRYOGENIC SERVICE

Top Entry: Union-bonnet can be permanently installed in the line and serviced from the top.

Construction: Bronze cast body and bonnet. Rugged construction for long life. 202: non-extended silicon brass stem; 212: extended silicone steel stem.

Sizes: 1/4" through 2" (202 and 212 Series).

Ends: Threaded (FNPT), Sil braze tube (SBT) or with stainless steel pipe nipples brazed in.

Service: Liquefied and vaporized atmospheric gases, LNG.

Temperature Rating: -325° F to 100° F (196° C to + 38° C).

Pressure Rating (cold, non-shock): 300 psig (20 bar) also available in 400 psig (27 bar) for a series 202 and 600 psig (40 bar) see series 206.

UPDATES:

202 to 206 - New valve has live loaded packing and is tested at 600 PSI. Older version was tested at 300 or 400 PSI.

212 to 226 - 212 was an extended stem/short bonnet and is no longer available. It has been replaced with an extended stem and extended bonnet (looks much like Goddard's 222 series). New valve has live loaded packing and is tested at 600 PSI. Old valve tested at 300 or 400 PSI.

SERIES 222 - BRONZE GLOBE VALVE FOR CRYOGENIC SERVICE

Top Entry: Union-bonnet can be permanently installed in the line and serviced from the top. Stainless tube prevents excessive stem distortion.

Construction: Bronze cast body and bonnet. Rugged construction for long life.

Sizes: 1/4" to 3" FNPT ends (8mm to 80mm); 3/8" to 3" SPT Ends (10mm to 80mm).

Ends: Threaded (FNPT), Sil braze tube (SBT) or with stainless steel pipe nipples brazed in.

Service: Liquefied and vaporized atmospheric gases, LNG.

Temperature Rating: -325° F to 100° F (196° C to + 38° C).

Pressure Rating (cold, non-shock): 300 psig (20 bar) also available in 400 psig (27 bar) for a series 202 and 600 psig (40 bar) see series 226.

UPDATES:

Replaced with 226 Series. See description above. 222X series valve is still available. This valve is different because it has a conical seat (used primarily in trailer valves).

* Call for complete Goddard catalog

222

Order online at www.raymurray.com or call for personal assistance

RAY MURRAY, INC.



Valves -Shut Off/Cryogenic





Goddard valves have created a standard that industry veterans know. If you are familiar with Goddard, you will probably request them. If not, please call on us for additional information.

210

SERIES 210 - GLOBE VALVE FOR CRYOGENIC SERVICE

Top Entry: This valve can be permantly installed in the line and serviced from the top.

Soft Seated: PCTFE disc in stainless steel globe assembly provides a virtually bubble-tight seal. Stem/globe assembly is replaceable

Construction: Stainless Steel investment cast body and bonnet to match your piping requirements.

Sizes: 1/2" through 6" (15mm through 150mm).

Ends: RF flange, butt weld, socket weld, threaded (FNPT).

Service: Liquefied and vaporized atmospheric gases, LNG.

Temperature Rating: -325° F to 100° F (196° C to + 38° C).

Pressure Rating (cold, non-shock): Class 150 valve to 275 psig (19 bar); class 300 valve to 720 psig (50 bar).

UPDATES: Same valve with nomenclature changes. Most valves (except flanged connections) offered only in Class 300# (Class 150# available in some sizes).



SERIES 302/312 - BRONZE GATE VALVE FOR CRYOGENIC SERVICE

Top Entry: Union bonnet valve can be permanently installed in the line and serviced from the top.

Soft Seated: Bronze cast body and bonnet. Rugged construction for long life.

Construction: Bronze cast body and bonnet. Rugged construction for long life.

Sizes: 1/2" through 3" (15mm through 80mm)

* Call for complete Goddard catalog

Ends: Threaded (FNPT), Sil braze tube (SBT) or with stainless steel pipe nipples brazed in.

Service: Liquefied and vaporized atmospheric gases, LNG.

Temperature Rating: -325° F to 100° F (196° C to + 38° C).

Pressure Rating (cold, non-shock): 300 psig (20 bar) also available in 400 psig (27 bar) for a series 302 and 600 psig (40 bar) see series 306.

UPDATES:

302 has changed to 306. Only difference is 306 is tested at 600 PSI and 302 is tested at 300 or 400 PSI.

312 has changed to 326 series. 312 was an extended stem/short bonnet and is no longer available. It has been replaced with extended stem/short bonnet and is no longer available. It has been replaced with extended stem/extended bonnet. It looks like Goddard's 332 series. New valve is tested at 600 PSI while old valve tested at 300 or 400 PSI.

312

Ray Murray Inc. Edition 11

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EXTENDED BONNET CRYOGENIC GLOBE VALVES

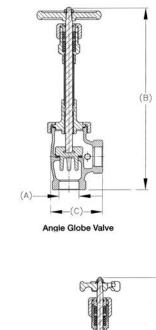
The BK and BKA series valves are designed exclusively for the handling of cryogenic liquids on bulk storage tanks, transports and pipelines. These globe valves provide positive shutoff and offer a long, low maintenance service life. The valves are available with a variety of inlet and outlet connections and stem lengths. Certain BK valves are offered with brazed-in SCH 5 Stainless Steel Pipe Stubs.

FEATURES

- CTFE seat disc and swivel seat design offer positive shut-off, minimal seat wear and a long service life.
- Unique spring-loaded, upper packing provides extended service life without constant packing adjustment.
- One piece slip-on seat assembly for easy replacement.
- Each valve is pressure tested to be leak free.
- Each valve is cleaned and packaged for oxygen service per CGA G-4.1.
- Maximum working pressure is 600 psig CWP.
- Working Temperature Range is -320° F to +165° F
- Union Bonnet for 1/2", 3/4" and 1" valve sizes and on both the 1" model BKA8408S and 1 1/2" model BKA8412S angle valves. Bolted Bonnet design is used on the BK9410, BK9412 and BK9416 models.



RMI Part #	Inlet/Outlet Connections	Height Open	Length	Cv Factor
	A	B (app.)	С	
Straight Body	Style			
BK8404S	.631"634"	9 5/32"	3 11/16"	4.7
BK8404T	1/2" F.NPT	9 5/32"	3 11/16"	4.7
BK8404ST	.631"634" x 1/2" F.NPT	9 5/32"	3 11/16"	4.7
BK9404S	.631"634"	14 1/2"	3 11/16"	4.7
BK9404T	1/2" F.NPT	14 1/2"	3 11/16"	4.7
BK9404ST	.631"634" x 1/2" F.NPT	14 1/2"	3 11/16"	4.7
BK8406S	.881"884"	9 5/32"	3 11/16"	6.7
BK8406T	3/4" F.NPT	9 5/32"	3 11/16"	6.7
BK9406S	.881"884"	14 1/2"	3 11/16"	6.7
BK9406T	3/4" F.NPT	14 1/2"	3 11/16"	6.7
BK8408S	1.131"-1.134"	9 1/8"	4 5/16"	11.2
BK8408T	1" F.NPT	9 1/8"	4 5/16"	11.2
BK9408S	1.131" - 1.134"	14 1/2"	4 5/16"	11.2
BK9408T	1" F.NPT	14 1/2"	4 5/16"	11.2
BK9048AA	1" Sch5 pipe	14 1/2"	10 5/16"	11.2
BK9410S*	1.378"-1.380"	16 7/16"	5 3/16"	17.5
BK9412S*	1.631"-1.634"	16 9/16"	5 3/16"	25.1
BK9412T*	1 1/2" F.NPT	16 9/16"	5 3/16"	25.1
BK9412AA	1 1/2" Sch5 pipe	16 9/16"	11 3/16"	25.1
BK9416S*	2.131"-2.134"	16"	6"	41
BK9416T*	2" F.NPT	16"	6"	41
ANGLE BODY	STYLE			
BKA8404S	1.131-1.134" x 1.631"-1.634"	11 1/4"	3 1/4"	14.5
BKA9408S	1.131-1.134" x 1.631"-1.634"	14 5/8"	3 1/4"	14.5
BKA8412S	1.631"-1.634"	13"	4 1/4"	30.0



(B)

Straight Globe Valve

Straight Globe Valve with Stubs

*Valves with bolted body design.

Tel: 800-628-5044

Fax: 800-243-8341

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Regulators 225



FEATURES:

- Maintains a steady downstream pressure across a range of inlet pressure commonly provided by a cryogenic bulk tank.
- Large seat and diaphragm areas provide high capacity with sensitive control of delivery pressure with low fall-off.
- Two 1/4" FNPT delivery pressure gauge ports are located (plugged) on each side of the valve.
- Two bonnet drain/vent holes to allow for different mounting orientation.
- T Handle adjusting screw.
- Maximum inlet pressure is 400 psig.
- Available in three delivery pressure ranges.
- Temperature range: -40 degrees F to 165 degrees F.
- Cleaned per CGA G-4.1 for oxygen service.

For Carbon Dioxide and Nitrous Oxide Service: Specify EPDM material for seat disc and O-Rings, add "E" to the end of part number.

DIMENSIONS:

The 1780 Series regulators have inlet and outlet connection dimensions similar to the popular 1680 Series aluminum regulators. This means you can replace the respective size 1680 Series regulator with the new 1780 Series Regulator and have the improved balanced seat performance.

RMI Part No.	Delivery Pressure Range	Range (PSI)	Pressure Gauge* P/N	Inlet * Outlet (FNPT)
1784A	5-55 psig	1-100	1286	1/2"
1784B	40-110 psig	1-200	S1679	1/2"
1784C	100-200 psig	1-400	15578	1/2"
1786A	5-55 psig	1-100	1286	3/4"
1786B	40-110 psig	1-200	S1679	3/4"
1786C	100-200 psig	1-400	15578	3/4"
1788A	5-55 psig	1-100	1286	1"
1788B	40-110 psig	1-200	S1679	1"
1788C	100-200 psig	1-400	15578	1"

*Regulator sold without gauge. Order gauge separately.



1780 Series

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Fax: 800-243-8341

REGULATORS





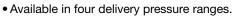
EGO CRYO-FLOW PRODUCTS



REGO BR-1780 SERIES

FEATURES:

- Maintains a steady downstream pressure across a range of inlet pressure commonly provided by a cryogenic bulk tank.
- Large seat and diaphragm areas provide high capacity with sensitive control of delivery pressure with low falloff.
- Two 1/4" FNPT delivery pressure gauge ports are located (plugged) on each side of the valve.
- Two bonnet drain/vent holes to allow for different mounting orientation.
- Bonnet cap to cover adjusting screw for tamper protection.
- Maximum inlet pressure is 400 psig.



- Temperature range: -40 degrees F to 165 degrees F.
- Cleaned per CGA G-4.1 for oxygen service.

For Carbon Dioxide and Nitrous Oxide Service: Specify EPDM material for seat disc and O-Rings, add "E" to the end of part number.

	Delivery		Pressure Gauge*		Inlet & Outlet
RMI Part No.	Pressure Range	Range (PSI)	RMI Part No.	FNPT	Cv
BR-1784A	5-55psig	1-100	1286	1/2"	3.1
BR-1784B	40-110psig	1-200	S1679	1/2"	3.1
BR-1784C	100-200psig	1-400	15578	1/2"	3.1
BR-1786A	5-55psig	1-100	1286	3/4"	4.8
BR-1786B	40-110psig	1-200	S1679	3/4"	4.8
BR-1786C	100-200psig	1-400	15578	3/4"	4.8
BR-1788A	5-55psig	1-100	1286	1"	5.5
BR-1788B	40-110psig	1-200	S1679	1"	5.5
BR-1788C	100-200psig	1-400	15578	1"	5.5

MAINTENANCE & OPTION KITS

Regulator Model	BR-1784	BR-1786	BR-1788
Repair Kit Part No.	BR-1784-80	BR-1786-80	BR-1788-80
Spring Kit Part No.			
"A" spring 5-55 psig	BR-1784-7SKA	BR-1786-7SKA	BR-1788-7SKA
"B" spring 40-110 psig	BR-1784-7SKB	BR-1786-7SKB	BR-1788-7SKB
"C" spring 100-200 psig	BR-1784-7SKC	BR-1786-7SKC	BR-1788-7SKC
T-Handle Screw Thread Option Kit	BR-1784-7ST	BR-1786ST	BR-1788ST



BR-1780 Series

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REGULATORS

227 Regulators



REGO CRYOGENIC LIQUID CYLINDER REGULATOR

FEATURES

- Minimum Linet Pressure: 550 psig
- Temporary Range: -320 degrees F to 165 degrees F
- Brass body & diaphram
- PFTE seat
- Stainless Steel springs, adjusting screw & nut
- Stainless Steel Inlet Filter

RMI Part No.	Gas	Liquid Cylinder Connection	Delivery Pressure Range	
LCR-B580	LCR-B580 Nitrogen/Argon		25-250 psig	
LCR-B540	LCR-B540 Oxygen		25-250 psig	
LCR-B320	LCR-B320 Carbon Dioxide		25-250 psig	
LCR-C580	LCR-C580 Nitrogen/Argon		100-350 psig	
LCR-C540 Oxygen		CGA 540	100-350 psig	
LCR-C320	Carbon Dioxide	CGA 320	100-350 psig	





REGO AUTOMATIC CHANGEOVER REGULATORS

FEATURES:

EGULATORS

- Automatically withdraws from reserve cylinder after exhausting the "service" cylinder.
- Cylinder pressure gauges let you know at a glance which cylinder is in use. There is no need to shutdown the system to replace empty cylinders.
- Nickel plated.
- Porous bronze filters are installed in each inlet to minimize the entry of foreign particles.
- Back pressure check valves are installed in each inlet to help assure positive shut-off in case of reverse flow.
- Each unit comes with mounting bracket and a special delivery pressure adjustment wrench.
- Factory set at 50 PSIG on service side. CO2 and N2O regulators are factory set at 100 PSIG on service side.

OUTLET CONNECTION: 1/4" FNPT WIDTH: 7 3/4" HEIGHT: 5 1/8"

RMI Part No.	Gas Service	CGA Inlet Connection	Maximum Inlet Pressure (PSIG)	Delivery Pressure Range (PSIG)
M2523HP320	Carbon Dioxide	320	1800	30-130
M2523HP326	Nitrous Oxide	326	1800	30-130
M2523HP350	Hydrogen	350	3000	30-130
M2523HP540	Oxygen	540	3000	30-130
M2523HP580	Nitrous, Argon, Helium	580	3000	30-130
M2523HP59 0	Industrial Air	590	3000	30-130

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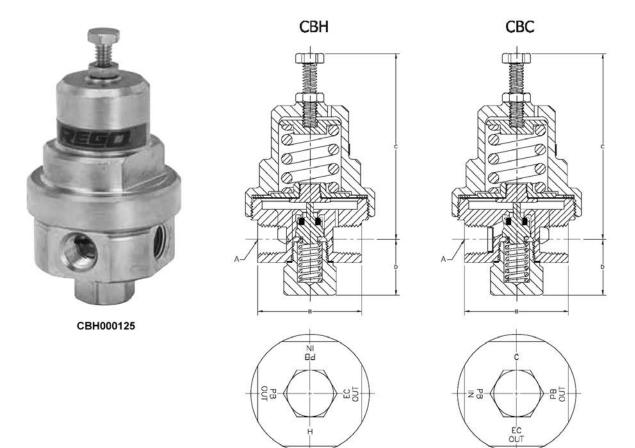


REGO COMBINATION PRESSURE BUILD/ECONOMIZER REGULATOR CBH & CBC SERIES

Combines the function of RG and ECL Pressure Building and Economizer functions in one compact unit. Available in Chart and Taylor-Wharton piping geometries and a variety of pressure ratings.

FEATURES:

- Precision silver brazed assembly
- Repeatable performance and geometry
- 100% factory tested
- Temperature range -320° to +165°F



-

RMI Part No.	Inlet/Outlet Connections FNPT	A	В	с	D	Pressure Setting (PSIG)	Operating Range (PSIG)
CBH000125	1/4"	1/4"	1.82"	3.245"	.966"	125	25-250
CBH000300	1/4"	1/4"	1.82"	3.245"	.966"	300	150-350
CBH000325	1/4"	1/4"	1.82"	3.245"	.966"	325	150-350
CBC000125	1/4"	1/4"	1.82"	3.245"	.966"	125	25-250
CBC000300	1/4"	1/4"	1.82"	3.245"	.966"	300	150-350
CBC000325	1/4"	1/4"	1.82"	3.245"	.966"	325	150-350

*Call for complete REGO catalog.

Tel: 800-628-5044

RAY MURRAY, INC.

Fax: 800-243-8341

Order online at www.raymurray.com or call for personal assistance

REGULATORS

229 Regulators - Cryogenic



FEATURES:

- All parts are copper alloy (brass), PTFE and stainless steel materials selected specifically for compatibility with cryogenic temperatures down to -320 degrees F.
- Body & bonnet machined from solid brass bar stock.
- PTFE seat helps assure a positive shut-off at cryogenic temperatures down to -320 degrees F.
- High & low pressure regulators are the same compact size designed to fit in close quarters. The compact high pressure design has no loss of flow capacity.
- Interchangeable with existing cryogenic regulator units.
- Inlet filter helps prevent foreign material form entering the regulator.
- Lock nut is provided to maintain adjusting screw setting.
- Maximum inlet pressure of 550 PSIG.
- Cleaned for liquid oxygen service per CGA G-4.1.

RMI Part No.	Inlet/Outlet Connections FNPT	Width	Pressure Setting (PSIG)	Operating Range (PSIG)
RG125	1/4"	2 1/4"	125	25-250
RG300	1/4"	2 1/4"	300	125-350

rees F. rters.

RG Series

REGO ECL SERIES - CRYOGENIC ECONOMIZERS

- All parts are copper alloy (brass), PTFE and stainless steel materials selected specifically for compatibility with cryogenic temperatures down to -320 degrees F.
- Body & bonnet machined from solid brass bar stock.
- The ECL Series utilizes a stainless steel needle seat design that provides a very sensative flow control at lower pressure settings.
- High & low pressure economizers are the same compact size designed to fit in close quarters. The compact high pressure design has no loss of flow capacity.
- Interchangeable with existing cryogenic economizer units.
- Inlet filter helps prevent foreign material form entering the economizer.
- Lock nut is provided to maintain adjusting screw setting.
- Maximum inlet pressure of 550 PSIG.

EGULATORS

• Cleaned for liquid oxygen service per CGA G-4.1.

RMI Part No.	Inlet/Outlet Connections FNPT	Width	Pressure Setting (PSIG)	Operating Range (PSIG)
ECL22	1/4"	2 1/4"	22	10-150
ECL70	1/4"	2 1/4"	70	10-150
ECL140	1/4"	2 1/4"	140	10-150
ECL325	1/4"	2 1/4"	325	150-350



*Call for complete REGO catalog.



ECL Series

Tel: 800-628-5044

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Beverage Regulators 230

PRIMARY REGULATOR SERIES 3000

Series 3000 Primary Regulators (for direct cylinder mount) have an integral safety, stainless steel ball check valves and a self-relieving diaphragm. In the event of a failure of the regulator seat, this safety will respond instantaneously protecting anything downstream from potentially dangerous high pressure. The maximum down stream pressure the system will see will not exceed 143 psig in accordance with NSDA guidelines.

REGULATOR:

Test Pressure: 3300 psig (227.59 bar.)

Maximum Inlet Pressure: 300 psig (206.90 bar.)

Operating Range: 0-130 psig (0-8.97 bar.)

Temperature Range: -40F/+200F (-40C/+93C)

Safety: Preset 130 psig (8.97 bar.)

Mounting: Wall or Bottle

HP ports: 1/4" FPT = Left

LP Ports: 1/4" FPT = Right

14	P

RMI Part No.	Description
3741	1P X 1P, 160 lb & 2000lb gauge, CO2 tank fitting, 1/4" flare with check valve outlet

ACCESSORIES

RMI Part No.	Description	
6603	0-3000 psi gauge left hand thread	
740-12 CGA 320 Nipple 1/4" MNPT Left hand threa		
740-18NB CO2 Hex wrench		

PRIMARY REGULATOR SERIES 7400

Our Regulators continue to meet the various demands of the beverage industry. Robust design delivers performance and reliability. Extremely durable and user friendly polycarbonate bonnets make adjustments a snap! Pull cap to adjust the pressure and push back to lock it in.

- High CO2 volumetric flow provides continuity in product dispensing
- Primary regulators connect directly to gas source
- Recommended operating pressure should be limited to 2/3 of the gauge range for maximum accuracy
- UL approved per UL252 class IV rating for CO2
- Polycarbonate bonnet will not chip, break or fade
- 10 Micron filter built in to keep contaminents out of regulator
- One repair kit for primary and secondary
- Used primarily for Beer but can be used for other applications.



RMI Part No.	Description			
T742	CO2, 60# & 2000# Gauge, 5/16B Shutoff (w/ck valve)			

Tel: 800-628-5044

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Fax: 800-243-8341

REGULATORS

231 Regulators



GASKIT SERIES 3000 HIGH PRESSURE REDUCING REGULATORS

- Features:
 - Size (2.12" diameter x 7" high)
 - Very competitive pricing
 - 15 micron sintered 316 SS inlet filter
- Machined bar stock body, bonnet and piston eliminates porosity found incastings
- Numerous optional features are available
- Specifications:
 - Maximum inlet pressure (brass): 6000 PSIG
 - Maximum inlet pressure (SS): 10,000 PSIG
 - Control pressure ranges:
 0-500, 0-800, 10-1500, 15-2500,
 25-4000, 50-6000 or 100-10000 PSIG
- Materials of Construction:
- Body: SAE 360 brass, 316L SS, or aluminum
- Bonnet: SAE 360 Brass, 303 SS or 316L SS
- Piston: 316L SS
- Wetted Parts: 316L SS
- Seals: Viton® is standard, with
- numerous other compounds available Valve Seat: Vespel®, PEEK or PCTFE

- Porting:
- Standard Inlets: 1/4" FNPT @ 0° & 55°
- Standard Outlets: 1/4" FNPT @ 125°
- & 180°
- Port Options: Type (SAE J1926), number, size & orientation
- Optional Items:
- Gauges
- CGA fittings



RMI Part No.	Outlet Pressure	Ports	Body Material	Oring Material	Seat Material
GK10000-1462020	50-6000 PSIG	4 (1/4" fnpt)	BRASS	VITON	VESPEL
GK10000-1262021	50-6000 PSIG	2 (1/4" fnpt)	BRASS	VITON	VESPEL

* other configurations and materials available please call with your requirements

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BLACKMER LIQUEFIED GAS PUMPS

Blackmer Liquefied Gas Pumps specifically designed for liquid CO2 service. High efficiency sliding vane, positive displacement pumps offer the best combined characteristics of sustained high level performance, energy efficiency, trouble free operation and low maintenance cost.

Motor Speed Recirculation Pumps offer capacities from 5 to 22 GPM (depending on differential pressure) and are ideal for loop systems and low volume transfer applications.

Bulk transfer and recirculation Pumps offer capacities from 25 to 300 GPM (depending on differential pressure). These heavy-duty pumps are widely used for bulk transfer and recirculation applications, which include industrial and food preparation systems, refrigeration, process plants and transport loading and unloading.

Blackmer Transfer Pumps for mobile/over the road applications with capacities from 150 to 300 GPM (depending on differential pressure). This pump mounts directly to a commercial control valve in combination with the tank of the transport. Direct mounting eliminates the need for inlet pipes, shutoff valves and external strainer, which can restrict flow and cause vaporization problems.

PUMPS						
RMI Part No. Pump & base	Pump only	Inlet/Outlet	НР	Capacity GPM 50# 90#		
CRLR1.25-DM	CRLR1.25	1 1/4"	2	6 GPM	Х	
CRL1.25-DM	CRL1.25	1 1/4"	3	11 GPM	7.5 GPM	
CRL1.5-DM	CRL1.5	1 1/2"	3	17 GPM	15 GPM	
Pump & base	Pump only	Inlet/Outlet		Capacity GPM 50# 90#		
CRL2-DM	CRL2	2"		62	55	
CRL3-DM	CRL3	3"		120	95	
CRL4-DM	CRL4	4" - 3"		275	245	
Transport Pump		Inlet/Outlet		Capacity GPM 50# 90#		
TCRLF4		4" 300# flange/ Twin 2" NPT		275	245	





BLACKMER BYPASS VALVES © Ray Murray Inc.

Blackmer Bypass Valves are designed to protect pumps and system components from excessive pressure damage. In operation, Blackmer valves provide exceptional close pressure control, even under widely varying bypass conditions.

BYPASS VALVES

RMI Part No.	Size	Pump Size	STD PSI Range
BV-3/4	3/4"	1 1/4 - 1 1/2	70-100
BV-1	1"	1 1/4 - 1 1/2	70-100
BV-1 1/4	1 1/2"	1 1/2 - 2"	70-100
BV-1 1/2	3/4"	2 - 3"	90-125
BV-2	3/4"	3 - 4	90-125

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Edition

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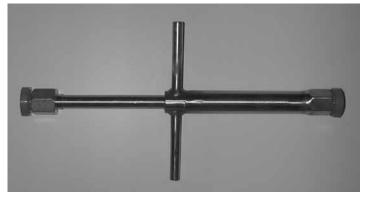
233 Hoses/Cryogenic



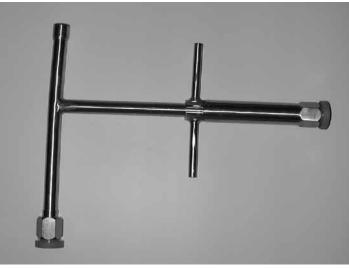
1/2" inner diameter extremely flexible stainless steel hose to provide the most durable hose for your cryogenic transfer applications. Machine flare ends and stainless steel hex nuts are standard on these hoses.



RMI Part No.	Description
TCHISS048G	CGA 295 1/2" FX 1/2" F 48" with armor
TCHISS072G	CGA 295 1/2" FX 1/2" F 72" with armor
TCHOSS048G	CGA 440 5/8" FX 5/8" F 48" with armor
TCHOSS072G	CGA 440 5/8" FX 5/8" F 72" with armor
FA50090	Liquid Cylinder QC CGA 295 90 degree 1/2" SS
FA500S	Liquid Cylinder CGA 295 straight 1/2" SS
FA62590	Liquid Cylinder QC CGA 440 90 degree 5/8" SS
FA625S	Liquid Cylinder QC CGA 440 straight 5/8" SS
FA625T	Liquid Cylinder QC T Adapter CGA 440 5/8" SS



FA500S



PUMPS, HOSES & FITTINGS

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Hoses - Pigtail Assemblies 234

HOSES - PIGTAIL ASSEMBLIES

TEFLON LINED STAINLESS STEEL BRAIDED PIGTAILS - 3000 PSIG

Teflon core pigtails surpass the requirements of CGA E.9. Constructed with a smooth core of white PTFE and exterior 300 series stainless steel braid. Highly flexible and lightweight. Each pigtail is pressure tested to 1 1/2 times working pressure.



TSC, 3000 PSIG RATED, 1/4" FEMALE NPT BRASS END FITTINGS WORKING PRESSURE 3000 PSIG/BURST PRESSURE 12,000 PSIG

RMI Part No.	LENGTH	SERVICE	ID	OD (no armor)	OD (w/armor)	# BRAIDS	DYNAMIC BEND RADIUS
PF2-4-12	12"	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"
PF2-4-18	18"	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"
PF2-4-24	24"	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"
PF2-4-36	36"	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"
PF2-4-48	48"	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"
PF2-4-72	72"	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"
PF2-4-84	84"	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"
PF2-4-120	120"	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"
PF2-4-240	240"	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"

"SAFETY PIGTAIL" TSC W/ ANTI-WHIP, ANTI-KINK, STAINLESS STEEL ARMOR CASING, 1/4" FEMALE NPT ENDS WORKING PRESSURE 3000 PSIG/BURST PRESSURE 12,000 PSIG

RMI Part No.	SERVICE	ID	OD (no armor)	OD (w/armor)	# BRAIDS	DYNAMIC BEND RADIUS
5TSC-144-144-XX-A	Inert	1/4"	0.375"	0.54"	1	3.0"
5TSC-144-144-XX-A-CCB	Oxygen Clean	1/4"	0.375"	0.54"	1	3.0"



PIGTAIL OPTIONS (fitting part number change in parenthesis):

CALL RMI FOR ASISTANCE

Brass male NPT (114) end fitting instead of female NPT (144)

Brass street elbow installed and pressure tested (PL-4HP)

Brass CGA Nut and Nipple installed and pressure tested

Brass CGA Handtight Nut and soft-tip nipple installed and pressure tested

Brass CGA Nut and Check Valve nipple installed and pressure tested

Brass CGA NUT and Check Valve Nipple installed and pressure tested

Brass extension Adapter (BE-4-3HP)

316SS MNPT fitting-per end (214)

316SS FNPT fitting-per end (244) 316 FNPA special swivel fitting (244S)



Tel: 800-628-5044

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235 Pressure Gauges









2 1/2" Gauge Series

2" Gauge Series

2 1/2" DIAMETERS X 1/4" NPT

RMI PART No.	Gauge Type
G-25-30RLW	30 PSIG Red Line
G-25-30W	30 PSIG
G-25-60W	60 PSIG
G-25-100W	100 PSIG
G-25-200W	200 PSIG
G-25-400W	400 PSIG
G-25-600W	600 PSIG
G-25-1000W	1000 PSIG
G-25-4000W	4000 PSIG
G-25-CW	Lexan crystal

2" DIAMETERS X 1/4" NPT

RMI PART No.	Gauge Type
G-2-30RLW	30 PSIG Red Line
G-2-30W	30 PSIG
G-2-60W	60 PSIG
G-2-100W	100 PSIG
G-2-200W	200 PSIG
G-2-400W	400 PSIG
G-2-600W	600 PSIG
G-2-1000W	1000 PSIG
G-2-4000W	4000 PSIG
G-2-CW	Lexan crystal

IMPORTANT: Installation requires Teflon tape or oxygen-safe compound to guard against leakage.

PUMPS, HOSES & FITTINGS

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance



High quality fill yokes to accommodate CGA 870, CGA 880 or CGA 940 service. Manufactured to 3000PSI service pressure. T-handle or plastic knob available in each service.

MEDICAL FILL YOKES

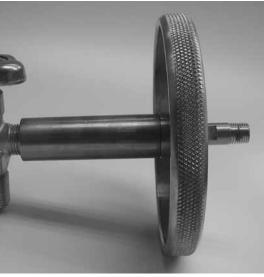
RMI Part No.	Service	Description
M87-4	CGA 870	Yoke x 1/4 MNPT, T-Handle
MFY-870-4H	CGA 870	Yoke x 1/4 MNPT, plastic knob
M88-4	CGA 880	Yoke x 1/4 MNPT, T-Handle
MFY-880-4H	CGA 880	Yoke x 1/4 MNPT, plastic knob
M94-8	CGA 940	Yoke x 1/4 MNPT, T-Handle
MFY-940	CGA 940	Yoke x 1/4 MNPT, plastic knob



Fill Yoke

EXTENDED CO2 FILL CONNECTOR

RMI Part No.	Service	Description
CO2-EF	CGA 320	Handtight fill connector 6" diameter handwheel



CO2-EF

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RAY MURRAY, INC.

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237 Fill Connectors

rmi

Replacement Seals

SG540

The FasTest MediMate 870 is a yoke style connector used for medical oxygen applications. MediMate is simple to use with a no twist, no turn approach to filling. Simply connect our product onto you valve and lock into place with a forward movement of the actuator lever and you are ready to fill the cylinder in seconds.

It has an aluminum body and stainless seal actuator piston to maximize product performance and service life. Each MediMate is supplied with a straightflow 180 degree termination port and FDA grade Viton elastomer seals. The

FASTEST MEDIMATE 870

elastomer compound used is based upon industry approval and performance characteristics for the application. FasTest offers other elastomer compounds upon request.

- Rated to 3600 psi
- Aluminum body, Delrin actuator lever & Stainless steel actuator piston
- FDA grade Viton elastomer seals
- Cleaned for O2 service
- Weight 15.2 oz.



RMI Part No.	Description	Replacement Seals	
FC870A	CGA 870 Connector, 1/4" MNPT Inlet	SG870-5	

Description

CGA 540, #1 Handle, 1/4" MNPT Inlet

CGA 540 STANDARD CONNECTOR WITH BAIL HANDLE STYLE #1 USED FOR INDUSTRIAL OXYGEN APPLICATIONS

The FasTest's Industrial G540 gas connector is simple to use with a no twist, no turn approach to filling. Simply connect our product onto your valve and lock into place with a forward movement of the bail handle roller actuator and you are ready to fill the industrial oxygen cylinder in a matter of seconds. Features and benefits include:

- Stainless steel and brass body wetted components
- Stainless steel bail handle for strength and operator safety under pressure
- Heavy duty "through body" design at bail handle connection point
- Simple, one hand operation bail handle roller actuation
- 3600 psi rating, 40 ounce weight
- Cleaned for O2 service

CGA 580 STANDARD CONNECTOR WITH BAIL HANDLE STYLE #1 USED FOR INERT GAS APPLICATIONS

RMI Part No.

G540-0411-IND

The FasTest's G580 inert gas connector is simple to use with a no twist, no turn approach to filling. Simply connect our product onto your valve and lock into place with a forward movement of the bail handle roller actuator and you are ready to fill the inert gas cylinder in a matter of seconds. Features and benefits include:

- Stainless steel and brass body wetted components
- Stainless steel bail handle for strength and operator safety under pressure
- Heavy duty "through body" design at bail handle connection point
- Simple, one hand operation bail handle roller actuation
- 3600 psi rating, 40 ounce weight

RMI Part No.	Description	Replacement Seals
G580-0411	CGA 580, #1 Handle, 1/4" MNPT Inlet	SG580

CGA 580 RPV STANDARD CONNECTOR WITH BAIL HANDLE STYLE #1 USED FOR INERT GAS APPLICATIONS

The FasTest's G580 RPV inert gas connector is simple to use with a no twist, no turn approach to filling. Simply connect our product onto your valve and lock into place with a forward movement of the bail handle roller actuator and you are ready to fill the inert gas cylinder in a matter of seconds. Features and benefits include:

- Stainless steel and brass body wetted components
- Stainless steel bail handle for strength and operator safety under pressure
- Heavy duty "through body" design at bail handle connection point
- Simple, one hand operation bail handle roller actuation
- 3600 psi rating, 46 ounce weight

MPS. HOSES & FITTINGS

RMI Part No. Description		Replacement Seals
G580-0411-RPV	CGA 580 RPV, #1 Handle, 1/4" MNPT Inlet	SG580RPV
RMI Part No.	Description	Replacement Seals
G580RPVP	Pin Retraction Tool	G580RPVPT



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238 Fittings - Pipe, Threaded

SMALL PIPE THREAD FITTINGS

PIPE THREAD ELBOWS

RMI Part No.	Desc. (In.)	Metal	PSI MAX (kPa)
90° Female To Fer	nale NPT:		
BEL-2-2 LP	1/8" x 1/8"	brass	1000 (6,900)
BEL-4-4 LP	1/4" x 1/4"	brass	1000 (6,900)
BEL-4HP	1/4" x 1/4"	brass	3,000 (20,700)
BEL-6HP	3/8" x 3/8"	brass	3,000 (20,700)
BEL-8HP	1/2" x 1/2"	brass	3,000 (20,700)
BEL-8SS	1/2" x 1/2"	st. steel	6,000 (41,300)
90° Female To Ma	le NPT: (Street)		
BL-2-2 LP	1/8" x 1/8"	brass	1000 (6,900)
BL-2HP	1/8" x 1/8"	brass	3,000 (20,700)
BL-4-2 LP	1/4" x 1/4"	brass	1000 (6,900)
BL-4-4 LP	1/4" x 1/4"	brass	1000 (6,900)
BL-4SS	1/4" x 1/4"	st. steel	6,000 (41,300)
BL-4HP	1/4" x 1/4"	brass	3,000 (20,700)
BL-6HP	3/8" x 3/8"	brass	3,000 (20,700)
BL-8HP	1/2" x 1/2"	brass	3,000 (20,700)
45° Female To Ma	le NPT: (Street)	•	
BSL-2HP	1/8" x 1/8"	brass	3,000 (20,700)
BSL-4-4 LP	1/4" x 1/4"	brass	1000 (6,900)
BSL-4HP	1/4" x 1/4"	brass	3,000 (20,700)

PIPE THREAD EXTENSION ADAPTORS, FEMALE TO MALE

BRASS - PRESSURES TO 3,000 PSI (20,700 kPa)						
RMI Part No.	RMI Part No. Desc. (In.) Length Hex					
BE-2-25HP	1/8" NPT	2-1/2"	9/16			
BE-4-3HP	1/4" NPT	3"	3/4			

PIPE THREAD TEES

RMI Part No.	Desc. (In.)	Metal	PSI MAX (kPa)		
3-Way Female					
BFT-2LP	1/8" NPT	brass	1000 (6,900)		
BFT-2HP	1/8" NPT	brass	3,000 (20,700)		
BFT-4LP	1/4" NPT	brass	1000 (6,900)		
BFT-4HP	1/4" NPT	brass	3,000 (20,700)		
T347	1/4" NPT	steel	5,000 (34,000)		
BFT-4SS	1/4" NPT	st. steel	6,000 (41,300)		
BFT-6HP	3/8" x 3/8"	brass	3,000 (20,700)		
BFT-8HP	1/2" x 1/2"	brass	3,000 (20,700)		
BFT-8SS	1/2" x 1/2"	st. steel	6,000 (41,300)		
BFT-12HP	3/4" x 3/4"	brass	3,000 (20,700)		
Female x Male					
BMT-2HP	1/8" NPT (branch)	brass	3,000 (20,700)		
BMT-4LP	1/4" NPT (branch)	brass	1000 (6,900)		
BST-4LP	1/4" NPT (street)	brass	1000 (6,900)		
BMT-4HP	1/4" NPT (branch)	brass	3,000 (20,700)		
BST-4HP	1/4" NPT (street)	brass	3,000 (20,700)		

PIPE THREAD CROSSES

RMI Part No.	Desc. (In.)	Metal	PSI MAX (kPa)
4-Way Female			
BCR-2LP	1/8" NPT	brass	1000 (6,900)
BCR-2HP	1/8" NPT	brass	3,000 (20,700)
BCR-4LP	1/4" NPT	brass	1000 (6,900)
BCR-4HP	1/4" NPT	brass	3,000 (20,700)
BCR-4SS	1/4" NPT	st. steel	6,000 (41,300)



BCR-4H

PIPE THREAD REDUCER COUPLINGS, FEMALE TO FEMALE

BRASS, PRESSURES TO 3000 PSI (20,700 kPa)					
RMI PART NO. Desc. (In.) Length Hex					
BF-4-2HP	1/4" NPT x 1/8" NPT	1.093	3/4		
BF-6-4HP	3/8" NPT x 1/4" NPT	1.281	7/8		
BF-8-4HP	1/2" NPT x 1/4" NPT	1.671	1-1/8		
BF-12-8HP	3/4" NPT x 1/2" NPT	1.700	1-3/8		

BFT-4HP



BMT-4L

PIPE THREAD REDUCER BUSHINGS, MALE TO MALE

BRASS, PRESSURES TO 3000 PSI (20,700 kPa)					
RMI PART NO.	Desc. (In.)	Length	Hex		
B-4-2HP	1/4" NPT x 1/8" NPT	1.250	5/8		
B-6-2HP	3/8" NPT x 1/8" NPT	1.281	11/16		
B-6-4HP	3/8" NPT x 1/4" NPT	1.467	11/16		
B-8-4HP	1/2" NPT x 1/4" NPT	1.687	7/8		
B-8-6HP	1/2" NPT x 3/8" NPT	1.718	7/8		

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B-4-2HP

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or call for personal assistance

Fittings - Pipe, Threaded 239



SMALL PIPE THREAD FITTINGS



BF-4HP

BF-4SS



B-4HP





Tel: 800-628-5044



PIPE THREAD COUPLINGS, FEMALE TO FEMALE PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Desc. (In.)	Material	Length	Hex
BF-2HP	1/8" NPT x 1/8" NPT	brass	.800	9/16
BF-4HP	1/4" NPT x 1/4" NPT	brass	1.187	3/4
BF-6HP	3/8" NPT x 3/8" NPT	brass	1.180	7/8
BF-8HP	1/2" NPT x 1/2" NPT	brass	1.500	1-3/8
BF-12HP	3/4" NPT x 3/4" NPT	brass	1.520	1-3/8
PRESSURES TO 6000 PSI (41,300 kPa)				
BF-4SS	1/4" NPT x 1/4" NPT	st. steel	1.187	3/4

PIPE THREAD HEX NIPPLES, MALE TO MALE PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Desc. (In.)	Material	Length	Hex
B-2HP	1/8" NPT x 1/8" NPT	brass	.937	7/16
B-4HP	1/4" NPT x 1/4" NPT	brass	1.437	5/8
B-6HP	3/8" NPT x 3/8" NPT	brass	1.500	11/16
B-8HP	1/2" NPT x 1/2" NPT	brass	1.875	7/8
B-12HP	3/4" NPT x 3/4" NPT	brass	1.937	1-1/8
PRESSURES TO 6000 PSI (41,300 kPa)				
B-4SS	1/4" NPT x 1/4" NPT	st. steel	1.437	5/8

PIPE THREAD BUSHINGS, FEMALE TO MALE BRASS, PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Desc. (In.)	Length	Hex
BB-2-4HP	1/8" NPT x 1/4 NPT	.937	5/8
BB-2-6HP	1/8" NPT x 3/8" NPT	1.437	11/16
BB-4-6HP	1/4" NPT x 3/8" NPT	1.500	3/4
BB-4-8HP	1/4" NPT x 1/2" NPT	1.875	7/8
BB-6-8HP	3/8" NPT x 1/2" NPT	1.937	7/8
BB-4-12HP	1/4" NPT x 3/4" NPT	1.437	1-1/8
BB-8-12HP	1/2" NPT x 3/4" NPT	1.437	1-1/8

PIPE THREAD ADAPTORS, FEMALE TO MALE

RMI Part No.	Desc. (In.)	Material	Length	Hex
BA-2HP	1/8" NPT x 1/8" NPT	brass	.875	9/16
BA-4-2HP	1/4" NPT x 1/8" NPT	brass	1.062	3/4
BA-4HP	1/4" NPT x 1/4" NPT	brass	1.281	3/4
BA-6-4HP	3/8" NPT x 1/4" NPT	brass	1.312	7/8
BA-8-4HP	1/2" NPT x 1/4" NPT	brass	1.500	1-1/8
BA-8-6HP	1/2" NPT x 3/8" NPT	brass	1.562	1-1/8
BA-4SS	1/4" NPT x 1/4" NPT	st. steel	1.281	3/4

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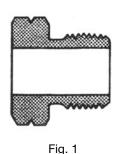


HEAVY DUTY BRASS ADAPTERS & FITTINGS

BRASS UNION CONNECTION NUTS -USE WITH BRASS TAILPIECES PRESSURES TO 3000 PSI - SAFETY FACTOR 5:1

RMI Part No.	Description	Thread connection	Wrench Flats
970W-1	figure 1	CGA 580	1 1/8"
968-4	figure 2	CGA 300, 320	1 1/8"
983-4	figure 2	CGA 350	1 1/8"
967-4	figure 2	CGA 540	1 1/8"
1302-1	figure 2	9/16" - 18-LH	11/16"
1271-1	figure 2	7/8" - 14-RH	1 1/8"
1371-1	figure 2	7/8" - 14-LH	1 1/8"
2223-6	figure 2	1" - 11 1/2" NPS-RH	1 3/4"
2223-6A	figure 2	1" - 11 1/2" NPS-LH	1 3/4"

External Threads



Internal Threads

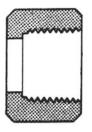
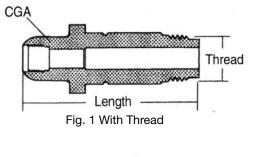


Fig. 2



BRASS MANIFOLD TAILPIECES PRESSURES TO 3000 PSI - SAFETY FACTOR 5:1

RMI Part No.	CGA Connection	Description	Thread/bore for tubing	Length
5-60W	320	figure 2	1/4" O.D.	1 1/8"
983-1A	350, 550	figure 1	1/4" NPS	2 1/8"
801-24	350, 550	figure 2	1/4" O.D.	1 5/8"
2603-2U	510, 580, 590	figure 1	1/4" NPT	2 3/8"
801-25	510, 580, 590	figure 2	1/4" O.D.	1 9/16"

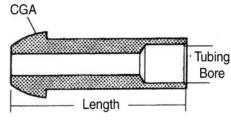
Length

3 7/16'

2 1/8"

2 7/16"

2 7/16"





RMI Part No.

2233-3A

1138X-2

1381-8

2670-35

Description

figure 1

figure 1

figure 2

figure 2

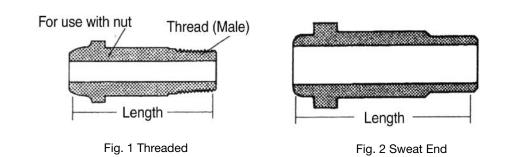
 1" - 11 1/2" NPS
 1/2" NPT

 1" - 11 1/2" NPS
 7/8"-14NF

 1" - 11 1/2" NPS
 .736 I.D.

 1" - 11 1/2" NPS
 .542 I.D.

Use with nut (RH or LH) | Pipe thread or I.D. pipe



MISCELANEOUS TAILPIECES

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Fax: 800-243-8341

PUMPS, HOSES & FITTINGS

241 Fittings - CGA



NUTS & NIPPLES – HANDTIGHT & WRENCHTIGHT



NON-CORROSIVE GASES IN SMALL CYLINDERS

Pressures to 3000 PSI (20,000 kPa)					
RMI Part No.	Service	Part	Description		
180-2	CGA-180	nut	brass, .625-18 UNF-2B, RH female		
180-3	CGA-180	nipple	brass, 1/8 NPT, 1 3/4" long		
180-4	CGA-180	washer	teflon		
180-5	CGA-180	adaptor	brass, CGA-180 to 1/4" NPT male		

"MC"TANK - ACETYLENE

Pressures to 500 PSI (3,400 kPa)				
RMI Part No.	Service	Part	Description	
305-2	CGA-200	nut	brass, "MC" T, .628-20 NGO, RH female	
305-3	CGA-200	nipple	brass, 7/16-20, 1 1/4 long	
305-3A	CGA-200	nipple	brass, 1/8 NPT, 1 1/4 long	

MEDICAL BREATHING MIXTURES

Pressures to 3000 PSI (20,700 kPa)				
RMI Part No.	Service	Part	Description	
284	CGA-280	nut	brass, .750-14 NGO, RH female	
283	CGA-280	nipple	brass, 1/4 NPT, 2" long	

INDUSTRIAL MIXTURES OF OXYGEN

Pressures to 3000 PSI (20,700 kPa)				
RMI Part No.	Service	Part	Description	
29-2	CGA-296	nut	brass, .803-14 UNS-2A, RH male	
29-3	CGA-296	nipple	brass, 1/4 NPT, 3" long	
29-3CV	CGA-296	nipple	brass, 1/4 NPT, 2" w/ck. valve	
29-4	CGA-296	nipple	brass, 9/16-25, 3" long	

COMMERCIAL ACETYLENE

Pressures to 500 PSI (3,400 kPa)				
RMI Part No.	Service	Part	Description	
16-2	CGA-300	nut	brass, .830-14 NGO, RH female	
16-3	CGA-300	nipple	brass, 1/4 NPT, 1 15/16" long	
16-8	CGA-300	nipple	brass, 1/4 NPT, 2 1/2" long	
16-8CV	CGA-300	nipple	brass, 1/4 NPT, 2 1/2" long w/ck. valve	
16-4	CGA-300	nipple	brass, 1/2-27, 2 1/4" long	
16-6	CGA-300	nipple	brass, 19/16-25, 3" long	
16-3M1	CGA-300	nipple	recessed for 1/4" OD tube	
616-2	CGA-300	nut	hand-tight brass, RH female	
616-2P	CGA-300	nut	h-tight, plastic grip, RH female	
616-3	CGA-300	nipple	h-tight, 1/4 NPT, 2 1/2" L	
616-3M2	CGA-300	nipple	h-tight, recessed for 5/16" tube	
616-PT	CGA-300	tip	soft tip replacement	





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PUMPS, HOSES & FITTINGS

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HANDTIGHT & WRENCHTIGHT NUTS & NIPPLES

CGA-300 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Part	Description
334	CGA-300	nut	brass, .830-14 NGO, LH female
333	CGA-300	nipple	brass, 1/4 NPT, 2 " long
333-A	CGA-300	nipple	brass, 1/4 NPT, 2 1/2" long
333-ACV	CGA-300	nipple	brass, 1/4 NPT, 2 1/2" long w/check valve
333-B	CGA-300	nipple	brass, 1/2-27, 2 1/2" long
CO-6N	CGA-300	washer	nylon, snap-in
SS-334	CGA-300	nut	SS, .830-14 NGO, LH female
SS-333	CGA-300	nipple	SS, 1/4 NPT, 2 " long
SS-333-M1	CGA-300	nipple	recessed for 1/4 OD tube
335	CGA-300	washer	Teflon



CGA 320 FOR CARBON DIOXIDE PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Part	Description
CO-2	CGA-320	nut	brass, .830-14 NGO RH female
CO-3	CGA-320	nipple	brass, 1/4 NPT, 2" long
CO-4	CGA-320	nipple	brass, 1/4 NPT, 2 1/2" long
CO-4CV	CGA-320	nipple	brass, 1/4 NPT, LH, 2 1/2" long w/check
CO-8	CGA-320	nipple	brass, 1/4 NPT LH, 2" long
CO-7	CGA-320	nipple	brass, 1/2 -27, 2 1/2" long
CO-3M1	CGA-320	nipple	recessed for 1/4 OD tube
CO-3M2	CGA-320	nipple	recessed for 5/16 OD tube
6-CO-2	CGA-320	nut	hand tight, brass, RH female
6-CO-2P	CGA-320	nut	hand tight, plastic grip, RH female
6-CO-4	CGA-320	nipple	hand tight, 1/4 NPT, 2 1/2" long
6-CO-4M1	CGA-320	nipple	recessed for 1/4 OD tube
SS-CO-2	CGA-320	nut	SS, .830-14 NGO RH female
SS-CO-3	CGA-320	nipple	SS, 1/4 NPT, 2" long
SS-CO-3M1	CGA-320	nipple	recessed for 1/4 OD tube
CO-1TW	CGA-320	washer	Teflon,snap-in
CO-5	CGA-320	washer	fiber, flat
CO-6	CGA-320	washer	Teflon, flat
CO-6N	CGA-320	washer	nylon,snap-in

GGA 326 FOR NITROUS OXIDE PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Part	Description
13-2	CGA-326	nut	brass, .830-14 NGO RH female
13-3	CGA-326	nipple	brass, 1/4 NPT, 2 1/2" long
13-3CV	CGA-326	nipple	brass, 1/4 NPT, 2 1/2" long w/ck valve
13-4	CGA-326	nipple	brass, 1/2 -27, 2 1/2" long
13-6	CGA-326	nipple	brass, 9/16-25, 2" long
13-3M2	CGA-326	nipple	recessed for 5/16 OD tube
613-2	CGA-326	nut	hand tight, brass, RH female
613-2P	CGA-326	nut	hand tight, plastic grip, RH female
613-5	CGA-326	nut	hand tight, 1/4 NPT, 2 1/2" long
613-KPT	CGA-326	tip	soft tip, replacement
SS-13-2	CGA-326	nut	SS, .830-14 NGO RH female
SS-13-3	CGA-326	nipple	SS, 1/4 NPT, 2 1/2 " long
SS-13-3M1	CGA-326	nipple	recessed for 1/4 OD tube



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243 Fittings - CGA



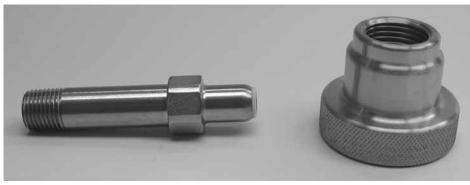
HANDTIGHT & WRENCHTIGHT NUTS & NIPPLES

14-2

CGA-346 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Part	Description
14-2	CGA-346	nut	.830-14 NGO-RH-INT, wrenchtight
SS-14-2	CGA-346	nut	.830-14 NGO-RH-INT, wrenchtight, SS
614-2	CGA-346	nut	.830-14 NGO-RH-INT, handtight, brass
614-2P	CGA-346	nut	.830-14 NGO-RH-INT, handtight, plastic
14-3	CGA-346	nipple	1/4" NPT, 2 1/2" long
SS-14-3	CGA-346	nipple	SS 1/4" NPT, 2 1/2" long
14-3M1	CGA-346	nipple	1/4 OD tube x nipple
SS-14-3M1	CGA-346	nipple	SS 1/4 OD tube x nipple
14-3M2	CGA-346	nipple	5/16" OD tube x nipple
614-5	CGA-346	nipple	1/4" NPT x 2 1/2" nipple w/Kel-F tip
614-KPT	CGA-346	tip	Replacement Kel-F tips

14-3



SS-6347-3

SS-6347-2

CGA-347 - PRESSURES TO 5500 PSI (37,950 KpA)

RMI Part No.	Service	Part	Description
347-2	CGA-347	nut	brass, .830-14 NGO, LH female
347-3	CGA-347	nipple	brass, 1/4" NPT, 3 " long
6347-2	CGA-347	nut	hand-tight, RH female
6347-3	CGA-347	nipple	hand-tight, 1/4" NPT, 3 " long
SS-347-2	CGA-347	nut	SS, .830-14 NGO, LH female
SS-347-3	CGA-347	nipple	SS, 1/4" NPT, 3 " long
SS-6347-2	CGA-347	nut	hand-tight, SS RH female
SS-6337-3	CGA-347	nipple	hand-tight, SS, 1/4 NPT, 3 " long
SS-6347-3-2	CGA-347	screw	retaining screw
6337-3-3	CGA-347	o-ring	replacement



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Fittings-CGA 244



500-2



RMI Part No.	Service	Part	Description
82	CGA-350	nut	brass, .830-14 NGO, LH female
83	CGA-350	nipple	brass, 1/4" NPT, 2 1/2 " long
83-CV	CGA-350	nipple	brass, 1/4" NPT, 2 1/2" long, w/check valve
87	CGA-350	nipple	brass, 1/4" NPT, 3" long
86	CGA-350	nipple	brass, 1/2" - 27, 2 1/2" long
84	CGA-350	nipple	brass, 9/16-25, 2 1/2 long
83-M1	CGA-350	nipple	recessed for 1/4 OD tube
83-M2	CGA-350	nipple	recessed for 5/16 OD tube
83-M3	CGA-350	nipple	recessed for 3/8 OD tube
682	CGA-350	nut	hand-tight, brass, LH female
682-P	CGA-350	nipple	hand-tight, plastic grip, LH female
683	CGA-350	nipple	hand-tight, 1/4 NPT, 2 1/2" long
683-M1	CGA-350	nipple	hand-tight, recessed for 1/4 tube
683-PT	CGA-350	tip	soft tip, replacement
SS-82	CGA-350	nut	SS, .830-14 NGO, LH female
SS-83	CGA-350	nipple	SS, 1/4" NPT, 2 1/2 " long
SS-83M1	CGA-350	nipple	recessed for 1/4 OD tube

CGA 350 - PRESSURES TO 3000 PSI (20,700 KpA)



RMI Part No.	Service	Part	Description
500-2	CGA-500	nut	880-14 NGO-RH-EXT, wrenchtight
15-8	CGA-500	nipple	1/4" NPT x 2 1/2"
15-3	CGA-500	nipple	1/4" NPT x 3"
15-4	CGA-500	nipple	1/4" NPT x 4"
15-8M1	CGA-500	nipple	1/4 OD tube
15-8M2	CGA-500	nipple	5/16" OD tube
15-8CV	CGA-500	nipple	1/4" NPT x 2 1/2" w/check valve

CGA 510 - PRESSURES TO 500 PSI (3,400 KpA)

15-8

RMI Part No.	Service	Part	Description
85NL	CGA-510	nut	brass, .880-14 NGO, LH male
85TP	CGA-510	nipple	brass, 1/4" NPT, 2 1/2 " long
15-8CV	CGA-510	nipple	brass, 1/4" NPT, 2 1/2" long, w/check valve
15-3	CGA-510	nipple	brass, 1/4" NPT, 3" long
15-4	CGA-510	nipple	brass, 1/4" NPT, 3 1/2" long
15-11	CGA-510	nipple	brass, 1/4" NPT, 4 1/2 long
15-9	CGA-510	nipple	brass, 1/2" - 27, 3" long
15-8M1	CGA-510	nipple	recessed for 1/4 OD tube
15-8M2	CGA-510	nipple	recessed for 5/16 OD tube
15-8M3	CGA-510	nipple	recessed for 3/8 OD tube
615-2	CGA-510	nut	brass, handtight LH male
615-2P	CGA-510	nut	plastic grip, handtight nut, LH male
615-3	CGA-510	nipple	handtight, brass, 1/4" NPT, 3 1/2" long w/o ring
615-3T	CGA-510	nipple	handtight, brass, 1/4" NPT, 3" long w/o ring
615-O	CGA-510	o-ring	replacement
615-PT	CGA-510	tip	soft tip replacement
SS-15-2	CGA-510	nut	SS, .880-14 NGO, LH male
SS-15-3	CGA-510	nipple	SS, 1/4" NPT, 3" long
SS-15-3CV	CGA-510	nipple	SS, 1/4" NPT, 3" long, w/check valve
SS-15-8M1	CGA-510	nipple	SS, recessed for 1/4 OD tube



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245 Fittings - CGA







RMI Part No.	Service	Part	Description
300-2	CGA-520	nut	brass, .899-18 NGO, RH female
300-3	CGA-520	nipple	brass, 1/4" NPT, 1 3/4" long
300-3A	CGA-520	nipple	brass, 1/2" - 27, 1 3/4" long
300-3M1	CGA-520	nipple	recessed for 1/4 OD tube

CGA 540 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Part	Description
62	CGA-540	nut	brass, .908-14 NGO, RH female
63-CV	CGA-540	nipple	brass, 1/4" NPT, 2" long w/check valve
63	CGA-540	nipple	brass, 1/4" NPT, 2 1/16" long
66	CGA-540	nipple	brass, 1/4" NPT, 2 1/2" long
69	CGA-540	nipple	brass, 1/4" NPT, 3" long
67	CGA-540	nipple	brass, 1/2" - 27, 2 1/6" long
64	CGA-540	nipple	brass, 9/16" - 25, 2 1/6" long
65	CGA-540	nipple	brass, 1/4" NPT, 2 1/2" long
68	CGA-540	nipple	brass, 1/4" NPT, 3" long
63-M1	CGA-540	nipple	recessed for 1/4 OD tube
63-M2	CGA-540	nipple	recessed for 5/16 OD tube
63-M3	CGA-540	nipple	recessed for 3/8 OD tube
662	CGA-540	nut	brass, handtight RH female
662P	CGA-540	nut	handtight, plastic grip, RH female
663	CGA-540	nipple	handtight, brass, 1/4 NPT, 3 1/2" long w/o ring
663-M1	CGA-540	nipple	handtight, recessed for 1/4" tube
663-M2	CGA-540	nipple	handtight, recessed for 5/16" tube
663-KPT	CGA-540	tip	soft tip replacement
SS-62	CGA-540	nut	SS, .908-14 NGO, RH female
SS-63	CGA-540	nipple	SS, 1/4 NPT, 2 1/2" long
SS-63CV	CGA-540	nipple	SS, 1/4 NPT, 3" long, w/check valve
SS-63M1	CGA-540	nipple	SS, recessed for 1/4 tube, 1 5/32" long



CGA 555 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Part	Description
72	CGA-555	nut	brass, .908-14 NGO, RH female
63-CV	CGA-555	nipple	brass, 1/4" NPT, 2" long w/check valve
73	CGA-555	nipple	brass, 1/4" NPT, 2 1/16" long
76	CGA-555	nipple	brass, 1/4" NPT, 2 1/2" long

CGA 577 - PRESSURES TO 4000 PSI (20,700 KpA)

RMI Part No.	Service	Part	Description
577-2	CGA-577	nut	brass, .908-14 NGO, RH female
577-4SF	CGA-577	nipple	brass w/filter., 1/4" NPT, 3" long
577-6577	CGA-577	nut	handtight (use with 577-4SF nipple)

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15-4

246 Fittings - CGA

Description

CGA 580 - PRESSURES TO 3000 PSI (20,700 KpA)

Somioo Dort

	RMI Part No.	Service	Part	Description
	92	CGA-580	nut	brass, .908-14 NGO, RH female
	15-3	CGA-580	nipple	brass, 1/4" NPT, 3" long
	15-4	CGA-580	nipple	brass, 1/4" NPT, 3 1/2" long
BA	15-8	CGA-580	nipple	brass, 1/4" NPT, 2 1/2" long
	15-8CV	CGA-580	nipple	brass, 1/4" NPT, 2 1/2" long w/check v
	15-11	CGA-580	nipple	brass, 1/4" NPT, 41/2" long
	15-9	CGA-580	nipple	brass, 1/2 - 27, 3" long
92	15-5	CGA-580	nipple	brass, 1/2 - 27, 4" long
	15-6	CGA-580	nipple	brass, 9/16" x 25, 3" long
and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s	15-7	CGA-580	nipple	brass, 9/16" x 25, 3 1/2" long
	15-6	CGA-580	nipple	brass, 9/16" x 27, 3" long
	15-8-M1	CGA-580	nipple	recessed for 1/4 OD tube
	15-8-M2	CGA-580	nipple	recessed for 5/16 OD tube
	15-8-M3	CGA-580	nipple	recessed for 3/8 OD tube
	692	CGA-580	nut	handtight, brass, RH male
	692P	CGA-580	nut	handtight, plastic grip, brass, RH mal
12262-111	615-3	CGA-580	nipple	handtight, brass, 1/4" NPT, 3 1/2" long w
	615-3T	CGA-580	nipple	handtight, brass, 1/4" NPT, 3" long w/o

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		-	
15-8CV	CGA-580	nipple	brass, 1/4" NPT, 2 1/2" long w/check valve
15-11	CGA-580	nipple	brass, 1/4" NPT, 41/2" long
15-9	CGA-580	nipple	brass, 1/2 - 27, 3" long
15-5	CGA-580	nipple	brass, 1/2 - 27, 4" long
15-6	CGA-580	nipple	brass, 9/16" x 25, 3" long
15-7	CGA-580	nipple	brass, 9/16" x 25, 3 1/2" long
15-6	CGA-580	nipple	brass, 9/16" x 27, 3" long
15-8-M1	CGA-580	nipple	recessed for 1/4 OD tube
15-8-M2	CGA-580	nipple	recessed for 5/16 OD tube
15-8-M3	CGA-580	nipple	recessed for 3/8 OD tube
692	CGA-580	nut	handtight, brass, RH male
692P	CGA-580	nut	handtight, plastic grip, brass, RH male
615-3	CGA-580	nipple	handtight, brass, 1/4" NPT, 3 1/2" long w/o ring
615-3T	CGA-580	nipple	handtight, brass, 1/4" NPT, 3" long w/o ring
615-8M1	CGA-580	nipple	handtight, recessed for 1/4 tube w/soft tip
615-8M1T	CGA-580	nipple	handtight, recessed for 1/4 tube w/soft tip
615-8M2T	CGA-580	nipple	handtight, recessed for 5/16 tube w/soft tip
615-0	CGA-580	o-ring	replacement
615-PT	CGA-580	tip	soft tip replacement
SS-92	CGA-580	nut	SS, .960-14 NGO, RH male

CGA 590 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Part	Description
93	CGA-590	nut	brass, .960 -14 NGO, LH male
15-8	CGA-590	nipple	brass, 1/4" NPT, 2 1/2" long
15-8CV	CGA-590	nipple	brass, 1/4" NPT, 2 1/2" long w/check valve
15-3	CGA-590	nipple	brass, 1/4" NPT, 3" long
15-4	CGA-590	nipple	brass, 1/4" NPT, 3 1/2" long
15-11	CGA-590	nipple	brass, 1/4" NPT, 4 1/2" long
15-9	CGA-590	nipple	brass, 1/2 - 27, 3" long
15-5	CGA-590	nipple	brass, 1/2 - 27, 4" long
15-6	CGA-590	nipple	brass, 9/16" x 25, 3" long
15-7	CGA-590	nipple	brass, 9/16" x 25, 3 1/2" long
15-10	CGA-590	nipple	brass, 9/16" x 27, 4 1/2" long
15-8-M1	CGA-590	nipple	recessed for 1/4 OD tube
15-8-M2	CGA-590	nipple	recessed for 5/16 OD tube
15-8-M3	CGA-590	nipple	recessed for 3/8 OD tube
693	CGA-590	nut	handtight, brass, LH male
693P	CGA-590	nut	handtight, plastic grip, brass, LH male
615-3	CGA-590	nipple	handtight, brass, 1/4" NPT, 3 1/2" long w/o ring
615-3T	CGA-590	nipple	handtight, brass, 1/4" NPT, 3" long w/soft tip
615-8M1	CGA-590	nipple	handtight, recessed for 1/4 tube w/o-ring
615-8M1T	CGA-590	nipple	handtight, recessed for 1/4 tube w/soft tip
615-8M2T	CGA-590	nipple	handtight, recessed for 5/16 tube w/soft tip
615-O	CGA-590	o-ring	replacement
615-PT	CGA-590	tip	soft tip replacement
SS-93	CGA-590	nut	SS, .960-14 NGO, LH male
SS-15-3	CGA-590	nipple	SS, 1/4 NPT, 3" long
SS-15-3CV	CGA-590	nipple	SS, 1/4 NPT, 3" long w/check valve
SS-15-8M13	CGA-590	nipple	SS, recessed for 1/4 OD tube

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CGA 660 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Part	Description
604	CGA-660	nut	brass, 1.035-14 NGO, RH female
603	CGA-660	nipple	brass, 1/4 NPT, 1 3/4" long
603-A	CGA-660	nipple	brass, 1/4 NPT, 2 1/4" long
665	CGA-660	washer	Teflon

CGA 677 - PRESSURES TO 7500 PSI (41,300 KpA)

RMI Part No.	Service	Part	Description
SS-60-2	CGA-677	nut	SS, 1.035-14 NGO, LH female
SS-60-3	CGA-677	nipple	SS, 1/4 NPT, 2 1/2" long
SS-60-4	CGA-677	nipple	SS, 3/8 NPT, 3" long
SS-60M1	CGA-677	nipple	Recessed for 1/4 OD tube

CGA 680 - PRESSURES TO 5500 PSI (20,700 KpA)

RMI Part No.	Service	Part	Description
680-2	CGA-680	nut	brass, 1.040-14 NGO RH male
680-3SF	CGA-680	nipple	brass w/filter, 1/4" NPT, 3" long
680-4SF	CGA-680	nipple	brass w/filter, 1/4" NPT, 3 1/2" long
6680	CGA-680	nut	handtight (use with 680-4SF nipple)

CGA 695 - PRESSURES TO 5500 PSI (20,700 KpA)

RMI Part No.	Service	Part	Description
695-2	CGA-695	nut	brass, 1.040-14 NGO LH male
680-3SF	CGA-695	nipple	brass w/filter, 1/4" NPT, 3" long
680-4SF	CGA-695	nipple	brass w/filter, 1/4" NPT, 3 1/2" long
6695	CGA-695	nut	handtight (use with 680-4SF nipple)

CGA 701 - PRESSURES TO 5500 PSI (27,600 KpA)

RMI Part No.	Service	Part	Description
701-2	CGA-701	nut	brass, 1.008-14 NGO RH female
701-4SF	CGA-701	nipple	brass w/filter, 1/4" NPT, 3" long

CGA 702 - PRESSURES TO 7500 PSI (20,700 KpA)

RMI Part No.	Service	Part	Description
702-2	CGA-702	nut	brass, 1.040-14 NGO LH male
680-3SF	CGA-702	nipple	brass w/filter, 1/4" NPT, 3" long
680-4SF	CGA-702	nipple	brass w/filter, 1/4" NPT, 3 1/2" long

CGA 705 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Part	Description
SS-705	CGA-705	nut	SS, 1.125-14 UNS-2A LH female
SS-705-3	CGA-705	nipple	SS w/filter, 1/4" NPT, 2 1/2" long
705	CGA-705	washer	Teflon

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CGA 280 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Description
WMS1-64	CGA-280	brass, .745" - 14 NGO RH male,
		check valve; outlet to 1/2" NPT

CGA 347 - PRESSURES TO 5500 PSI (37,950 KpA)

RMI Part No.	Service	Description
B-348	CGA-347	brass, .825" - 14 NGO RH male to 1/2" NPT
SS-347-4	CGA-347	SS, .825" - 14 NGO RH male to 1/4" NPT

CGA 300 - PRESSURES TO 500 PSI (3,400 KpA)

RMI Part No.	Service	Description
B-10	CGA-300	brass, .825" - 14 NGO RH male to 1/4" NPT
B-12	CGA-300	brass, .825" - 14 NGO RH male to 1/2" NPT
B-13	CGA-300	brass, .825" - 14 NGO RH male to 3/4" NPT

CGA 350 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Description
B-30	CGA-350	brass, .825" - 14 NGO LH male to 1/4" NPT
B-32	CGA-350	brass, .825" - 14 NGO LH male to 1/2" NPT
B-33	CGA-350	brass, .880" - 14 NGO LH male to 3/4" NPT

CGA 320 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Description
B-20	CGA-320	brass, .825" - 14 NGO RH male to 1/4" NPT
B-21	CGA-320	brass, .825" - 14 NGO RH male to 3/8" NPT
B-22	CGA-320	brass, .825" - 14 NGO RH male to 1/2" NPT
B-23	CGA-320	brass, .825" - 14 NGO RH male to 3/4" NPT

CGA 326 - PRESSURES TO 3000 PSI (20,700 KpA)

Description

brass, .825" - 14 NGO RH male to 1/4" NPT

brass, .825" - 14 NGO RH male to 3/8" NPT

brass, .825" - 14 NGO RH male to 1/2" NPT

brass, check valve outlet to 1/2" NPT

CGA 500 - PRESSURES TO 3000 PSI (37,950 KpA)

RMI Part No.	Service	Description
B-500	CGA-500	brass, .880" - 14 NGO RH female to 1/4" NPT

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 CGA 346 - PRESSURES TO 3000 PSI (20,700 KpA)

 No.
 Service
 Description

 CGA-346
 brass, .825" - 14 NGO RH male to 1/4" NPT

RMI Part No.	Service	Description
B-1340	CGA-346	brass, .825" - 14 NGO RH male to 1/4" NPT
B-1342	CGA-346	brass, .825" - 14 NGO RH male to 1/2" NPT
WMS-1-62	CGA-346	brass, check valve outlet to 1/2" NPT
B-1340SS	CGA-346	SS, .825" - 14 NGO RH male to 1/4" NPT

CGA 510 - PRESSURES TO 500 PSI (3,400 KpA)

RMI Part No.	Service	Description	
B-40	CGA-510	brass, .885" - 14 NGO LH female to 1/4" NPT	
B-42	CGA-510	brass, .885" - 14 NGO LH female to 1/2" NPT	
B-43	CGA-510	brass, .885" - 14 NGO LH female to 3/4" NPT	

04000

RMI Part No.

B-1320

B-1321

B-1322

WMS-1-59

Service

CGA-326

CGA-326

CGA-326

CGA-326

Tel: 800-628-5044

RAY MURRAY, INC. Order online at www.raymurray.com or call for personal assistance

249 Fittings - CGA



CGA 540 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Description	
B-50	CGA-540	brass, .903" - 14 NGO RH male to 1/4" NPT	
B-51	CGA-540	brass, .903" - 14 NGO RH male to 3/8" NPT	
B-52	CGA-540	brass, .903" - 14 NGO RH male to 1/2" NPT	
WMS1-53	CGA-540	check valve; outlet to 1/2" NPT	
B-53	CGA-540	brass, .903" - 14 NGO RH male to 3/4" NPT	
B-50SS	CGA-540	SS, .903" - 14 NGO RH male to 1/4" NPT	

CGA 590 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Description	
B-80	CGA-590	brass, .965" - 14 NGO LH female to 1/4" NPT	
B-82	CGA-590	brass, .965" - 14 NGO LH female to 1/2" NPT	
B-83	CGA-590	brass, .965" - 14 NGO LH female to 3/4" NPT	

CGA 660 - PRESSURES TO 3000 PSI (20,700 KpA)

CGA 555 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Description
B-60	CGA-555	brass, .903" - 14 NGO LH male to 1/4" NPT
B-62	CGA-555	brass, .903" - 14 NGO LH male to 1/2" NPT

RMI Part No. Service		Description	
B-660SS	CGA-660	SS, 1.030" - 14 NGO RH male to 1/4" NPT	

CGA 577 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Description	
B-578	CGA-577	brass, .960" - 14 NGO RH male to 1/2" NPT	

CGA 677 - PRESSURES TO 7500 PSI (41,400 KpA)

RMI Part No.	Service	Description	
B-677SS	CGA-677	SS, 1.030" - 14 NGO LH male to 1/4" NPT	
B-678SS	CGA-677	SS, 1.030" - 14 NGO LH male to 1/2" NPT	
B-679SS	CGA-677	SS, 1.030" - 14 NGO LH male to 3/4" NPT	

CGA 580 - PRESSURES TO 3000 PSI (20,700 KpA)

RMI Part No.	Service	Description	
B-70	CGA-580	brass, .965" - 14 NGO RH female to 1/4" NPT	
B-71	CGA-580	brass, .965" - 14 NGO RH female to 3/8" NPT	
B-72	CGA-580	brass, .965" - 14 NGO RH female to 1/2" NPT	
WMS1-54	CGA-580	check valve; outlet to 1/2" NPT	
B-73	CGA-580	brass, .965" - 14 NGO RH female to 3/4" NPT	

CGA 680 - PRESSURES TO 5500 PSI (41,400 KpA)

RMI Part No.	Service	Description	
B-682	CGA-680	brass, 1.045" - 14 NGO RH female to 1/2" NPT	

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FEMALE NPT ADAPTORS FOR MANIFOLD PIPELINE

500 PSIG (3400 KPA), 3000 PSIG (20,700 KPA), 6000 PSIG (41,300 KpA)

RMI Part No. Service		Description		
15-1	CGA-300	brass, RH male, .825" - 14 NGO to 1/4" NPT female Commercial Acetylene, to 500 PSIG		
CO-2-1	CGA-320	brass, RH male, .825" - 14 NGO to 1/4" NPT female Carbon Dioxide, to 3000 PSIG		
1321-1	CGA-326	brass, RH male, .825" - 14 NGO to 1/4" NPT female Nitrous Oxide, to 3000 PSIG		
1341-1	CGA-346	brass, RH male, .825" - 14 NGO to 1/4" NPT female Air, to 3000 PSIG		
SS-1341-1	CGA-346	SS, RH male, .825" - 14 NGO to 1/4" NPT female Air, to 3000 PSIG		
347-1	CGA-347	brass, RH male, .825" - 14 NGO to 1/4" NPT female Air, to 5500 PSIG		
SS-347-1	CGA 347	SS, brass, RH male, .825" - 14 NGO to 1/4" NPT female Air, from 3001 to 5500 PSIG		
800-1	CGA-350	brass, LH male, .825" - 14 NGO to 1/4" NPT female Hydrogen, Natural Gas, to 3000 PSIG		
500-1	CGA-500	brass, RH female, .885" - 14 NGO to 1/4" NPT female Medical Mixtures, to 3000 PSIG		
16-1	CGA-510	brass, LH male, .885" - 14 NGO to 1/4" NPT female POL Acetylene, Propane to 500 PSIG		
300-1	CGA-510	brass, 90 degree LH female nut, .885" - 14 NGO to 1/4" NPT female POL Acetylene, Propane to 500 PSIG		
415-1	CGA-540	brass, RH male, .903" - 14 NGO to 1/4" NPT female Oxygen, to 3000 PSIG		
SS-415-1	CGA-540	SS, RH male, .903" - 14 NGO to 1/4" NPT female Oxygen, to 3000 PSIG		
414-1	CGA-555	brass, LH male, .903" - 14 NGO to 1/4" NPT female Butane, Propane Liquid, 3000 PSIG		
416-1	CGA-580	brass, RH female, .965" - 14 NGO to 1/4" NPT female Argon, Helium, Nitrogen, to 3000 PSIG		
417-1	CGA-590	brass, LH female, .965" - 14 NGO to 1/4" NPT female Industrial Air, to 3000 PSIG		
660-1	CGA-660	brass, RH male, 1.030" - 14 NGO to 1/4" NPT female Nitrous plus & Refrigerant Gases, to 3000 PSIG		
SS-660-1	CGA-660	SS, RH male, 1.030" - 14 NGO to 1/4" NPT female Nitrous plus & Refrigerant Gases, to 3000 PSIG		
SS-667-1	CGA-677	SS, LH male, 1.030" - 14 NGO to 1/4" NPT female Argon, Helium, Nitrogen from 5501 to 7500 PSIG		

CGA VALVE OUTLETS TO FEMALE PIPE THREADS

Tel: 800-628-5044

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BRASS & STAINLESS STEEL CGA VALVE OUTLET ADAPTERS X NPT

RMI Part No.	Service Description		
B-695	CGA-695	brass, 1.045-14 NGO, LH female to 1/2" NPT Flammable Gases, pressures to 5500 PSIG	
B-701-2	CGA-701	brass, 1.103-14 NGO, RH male to 1/2" NPT Oxygen, pressures to 5500 PSIG	
B-705SS	CGA-705	SS, 1.125-14 UNS-2A, RH male to 1/4" NPT Ammonia, pressures to 5500 PSIG	

CGA DUST CAP ASSEMBLIES

IMPORTANT: Dust Cap Assemblies DO NOT make Gas Tight Seal

RMI Part No.	Service	Description
P1100-23-320	CGA 320	for carbon dioxide
DC-346	CGA 346	for breathing air
P1100-23-350	CGA 350	for hydrogen
P1100-23-510	CGA 510	for acetylene
P1100-23-540	CGA 540	for oxygen
P1100-23-580	CGA 580	for nitrogen, argon, helium
P1100-23-590	CGA 320	for industrial air

CGA MANIFOLD COUPLER TEES (WITH & W/O CHECK VALVES) COUPLER TEES - 2 CGA OUTLETS, ONE CGA NUT & NIPPLE

RMI Part No. w/o check valve	RMI Part No. with check valve	Service	Description
T-16	T-16CV	CGA-300	brass, RH female
T-15	T-15CV	CGA-510	brass, LH male
T-296		CGA-296	brass, RH male
T-CO-2	T-CO-2CV	CGA-320	brass, RH female
T-CO-2SS		CGA-320	SS, RH female
T-326	T-326CV	CGA-326	brass, RH female
T-346	T-346CV	CGA-346	brass, RH female
T-346SS	T-346SS-CV	CGA-346	SS, RH female
T-82	T-82CV	CGA-350	brass, LH female
T-82SS	T-82SS-CV	CGA-350	SS, LH female
T-62	T-62CV	CGA-540	brass, RH female
T-62SS	T-62SS-CV	CGA-540	SS, RH female
T-72	T-72CV	CGA-555	brass, LH female
T-92	T-92CV	CGA-580	brass, RH female
T-92SS	T-92SS-CV	CGA-580	brass, RH female
T-93	T-93CV	CGA-590	brass, LH male
T-577		CGA-577	brass, RH female
T-347		CGA-347	brass, RH female
T-347SS		CGA-347	SS, RH female
T- 680		CGA-680	brass, RH male

CHAIN & PLUG ASSEMBLIES, BRASS & STAINLESS STEEL

RMI Part No.	RMI Part No.	Service	Description	
w/o check valve	with check valve			
927		CGA-022	brass, 9/16-18, RH female nut & plug	
928		CGA-023	brass, 9/16-18, LH female nut & plug	
C-907		CGA-024	brass, 7/8-14, RH female nut & plug	
C-909		CGA-025	brass, 7/8-14, LH female nut & plug	
921			brass, 5/8 - 18, RH female nut (AW-7) & nipple	
922			brass, 5/8 - 18, RH male nut (AW-14A) & nipple	
923			brass, 5/8 - 18, LH male nut (AW-14) & nipple	
916		CGA-300	brass, RH female nut & nipple	
9326		CGA-326	brass, RH female	
9346		CGA-346	brass, RH female	
9347		CGA-347	SS, RH female	
982		CGA-350	brass, LH female nut & nipple	
915		CGA-510	brass, LH male nut & nipple	
962		CGA-540	brass, RH female nut & nipple	
992		CGA-580	brass, RH female nut & nipple	

PUMPS, HOSES & FITTINGS

RAY MURRAY, INC.

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Roepex 252

ROEPEX COMPOSITE PRESSURE PIPE

Roepex pipe is a five-layer composite pipe. The inside and outside layers are made of high density polyethylene (HDPE) tightly bonded with heating adhesive to the mid-layer of longitudinally welded aluminum core. All layers are extruded by one step. The pipe is manufactured to product standards. U.S. ASTM F1281 F1282 and meets OSHA requirements for above ground piping.

NOT FOR FLAMMABLES

ROEPEX X MALE THREAD ADAPTER

One end connected to composite pipe, the other to female threads.

RMI Part No.	Size
RW808	1/2" X 1/2" MPT
RW727	3/4" X 1/2" MPT
RW228	3/4" X 3/4" MPT
RW208	1" X 1" MPT
RW478	1 1/2" X 1 1/2" MPT



ROEPEX X ROEPEX X 90° ELBOW

Both ends connected to composite pipe of same size.

RMI Part No.	Size
RW918	1/2" wall mount elbow
RW958	1/2"
RW978	3/4"
RW988	1"
RW448	1 1/2"



ROEPEX X ROEPEX X ROEPEX TEE

Three ends connected to composite pipe of same size

RMI Part No.	Size	
RW068	1/2"	_
RW088	3/4"	
RW148	1"	1
RW468	1 1/2"	



ROEPEX X ROEPEX X ROEPEX REDUCING TEE

Three ends connected to composite pipe with one or two ends different in size from the other ends.

RMI RW0

RW9 RW1 RW4 RW4

Part No.	Α		В		С	
98	3/4"	Х	3/4"	Х	1/2"	
08	1"	Х	1"	Х	1/2"	
58	1"	Х	1"	Х	3/4"	
38	1 1/2"	X	1 1/2"	'х	3/4"	
27	1 1/2"	'x	1 1/2"	'х	1"	



	RMI Part No.	Size	Description
	RW 451-CUT	1/2"	Roepex Pipe 1/2" custom cut
RW 451-50M 1		1/2"	Roepex Pipe 50M/164 ft.
	RW 451-100M	1/2"	Roepex Pipe 100M/328 ft.
1	RW 551-CUT	3/4"	Roepex Pipe 3/4" custom cut
	RW 551-50M 3/4"		Roepex Pipe 50M/164 ft.
	RW 551-100M	3/4"	Roepex Pipe 100M/328 ft.
	RW601-50M	1"	Roepex Pipe 1" 50M/164 ft.
	RW401	1 1/2"	Roepex Pipe 1 1/2" 16.4 ft straight length

ROEPEX X ROEPEX COUPLING

Both ends connectioned to composite pipe of same size.

RMI Part No.	Size
RW008	1/2"
RW928	3/4"
RW288	1"
RW428	1 1/2"



ROEPEX REDUCING COUPLING

Both ends connected to composite pipe of different sizes.

RMI Part No.	Size
RW178	1" x 1/2"
RW198	3/4" x 1/2"
RW558	1" x 3/4"
RW458	1 1/2" x 1"



ROEPEX X CAP

The end connected to composite pipe to seal the composite pipe.

RMI Part No.	Size
RW168CAP	1/2"
RW188CAP	3/4"
RW180CAP	1"

ROEPEX REPLACEMENT PARTS AND ACCESSORIES

RMI Part No.	Size	Description
RW308	1/2"	Clic Hanger
RW328	3/4"	Clic Hanger
RW338	1'	Clic Hanger
RWLAB	Specify Gas	Pipe Labels
55190		Pipe cutter
RW887		Pipe Reamer
RW005		O-Ring Lubricant
RW001	Oxygen	Station Drop
RW002	Acetylene	Station Drop
RW003	Fuel Gas	Station Drop
RW004	Inert Gas	Station Drop

Tel: 800-628-5044

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Fax: 800-243-8341

or call for personal assistance

Air-Acetylene Equipment 253



GOSS TARGET® KITS & TIPS - "SNAP-IN STYLE"

Kits feature the adjustable Target Tips for professional soldering and brazing applications. These tips are very hot and have a compact flame. Kits also include a quick disconnect handle, 12 ft. hose and UL listed regulator. Choose from a wide selection of kits below.

- Max performance turbine flame
- Adjustable flame feature
- · Unique mixer design reduces brazing time over conventional tips
- Tips have a filler and removeable orifice
- Interchangeable with other quick disconnect style tips and equipment
- Made of heavy gauge stainless steel and brass



GKX-3B (shown)

KITS

RMI Part No.	Tip No.	Reg. FTG
GKX-3B	GA-3, GA-11	"B" Cylinder
GKX-4B	GA-5, GA-14	"B" Cylinder
GKX-5B	GA-5	"B" Cylinder
GKX-5MC	GA-5	"MC" Cylinder
GKX-6MC	GA-3, GA-8	"MC" Cylinder
GKX-7B	GA-8	"B" Cylinder

Contents: HA3-12 hose, GG-4 handle, tip(s), MA-2 wrench and regulator.

TIPS

TIF 5							
RMI Part No.	Tip Size	Soft Solder	Silver Braze				
GGA-2	1/4"	1/8" - 1/2"	1/8" - 1/4"				
GGA-3	5/16"	1/4" - 1"	1/8" - 1/2"				
GGA-5	3/8"	3/4" - 1 1/2"	1/4" - 3/4"				
GGA-8	3/8"	1" - 2"	1/2" - 1"				
GGA-11	7/16"	1 1/2" - 3"	7/8" - 1 5/8"				
GGA-14	1/2"	2" - 4"	1" - 2"				
GGA-32	3/4"	4" - 6"	1 1/2" - 4"				

GOSS FEATHER FLAME® KITS & TIPS - "SCREW-IN STYLE"

These kits include our most economically priced air-acetylene tips. Their design makes them inexpensive while still producing excellent flame characteristics.

- Pencil Point/Feather Flame
- Adjustable flame feature
- Tips have a filter and removeable orifice
- Heavy-duty UL listed regulator





KITS

RMI Part No.	Tip No.	Reg. FTG
GKA-1H	BA-3	"B" Cylinder
GKA-2H	BA-3	"MC" Cylinder
GKA-31*	BA-2, BA-3, BA-4	"B" Cylinder
GKA-32*	BA-2, BA-3, BA-4	"MC" Cylinder
GKA-37H*	BA-4	"B" Cylinder
GKA-38H*	BA-4	"MC" Cylinder

Contents: HA3-12 hose, regulator, AA-1 handle, MP-1 lighter and

MA-2 wrench. * These kits DO NOT include lighter.

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*Cal

RMI Part No.	Tip Size	Soft Solder
GBA-1	1/16"	1/16" - 1/8"
GBA-2	1/8"	1/8" - 1/4"
GBA-3	3/16"	1/4" - 1/2"
GBA-4	1/4"	1/2" - 1"
GBA-5	5/16"	1" - 1 1/2"
GBA-6	7/16"	2" - 4"

TIPS

Ray Murray Inc. Edition 11

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	GBA-4	1/4	1/2 - 1			
	GBA-5	5/16"	1" - 1 1/2"			
	GBA-6	7/16"	2" - 4"			
ll fc	Il for complete GOSS catalog.					
				•		

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254 **Air-Propane Equipment**

GOSS PROPANE KITS WITH PENCIL AND BRUSH TIPS

Kits contain a complete selection of high quality soldering and heating equipment. KITS

- · Quiet, adjustable brush flame
- Fits AP-1 handle

	-	
RMI Part No.	Tip No.	
GKP-102	BP-2	
GKP-105	BP-5	

		THE S		
RMI Part No.	Flame	Diameter	Soft Solder	BTU's @ 40 psi
GBP-1	Pencil	5/8"	To 1/2"	6,000
GBP-2	Pencil	1"	To 1 1/2"	11,000
GBP-3	Brush	7/8"	To 2"	14,000
GBP-4	Brush	1 1/8"	To 3"	43,000
GBP-5	Brush	1 3/8"	To 4"	57,000
GBP-6	Brush	2"	To 6"	300,000

TIPS



TORCHES

GOSS TARGET PROPANE/PROPYLENE KITS AND TIPS - "SNAP-IN STYLE"

Snap-in style feature the very hot, compact Taget Tips for professional soldering and brazing applications. Kits also include a quick disconnect handle, UL listed regulator and accessories. KITS

RMI Part No.

GKLP-2

GKLP-4

GKLP-4L*

Tip No.

GT-3, GT-5

GT-4

GT-4L*

- MaxPerformance Turbine Flame
- Tips have a filter and removeable orifice Interchangeable with other quick
- disconnect style tips and equipment • Tips for GH-4 handle
- Color-coded O-rings

TIPS

RMI Part No.	Flame Dia.	Soft Solder	Silver Braze
GGT-2	5/16"	Up to 1/2"	Up to 1/4"
GGT-2J	5/16"	Up to 1/2"	Up to 1/4"
GGT-3	7/16"	Up to 1"	Up to 1/2"
GGT-4	1/2"	Up to 1 1/2"	Up to 3/4"
GGT-4L*	1/2"	Up to 1 1/2"	Up to 3/4"
GGT-5	3/4"	Up to 2 1/2"	Up to 1 1/4"

GOSS OUTDOOR FURNACES

Floor furnace* GFP-540

A well constructed melting furnace with brush flame burner.

BTUs Gas Usage Height 8 in. Weight 8 lbs. 8 1/2" Diameter

Approx. 43,200 Approx. 2 lb./hr

· Hose and regulator required or use.

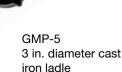
* For propane only



GOSS MELTING POT AND LADLE



GMP-3 7 in. diameter cast iron pot. Holds 50 lb. of lead



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or call for personal assistance

Tel: 800-628-5044

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Ray Murray Inc.

Edition

Kits include: GH-4 handle, HP3-12 hose, EP-45G regulator and torch tip(s). *Instant Igniter.



GKLP-4 (shown)

255 Air-Propane Equipment

GOSS BLAZEBURNER TORCH KITS & TORCHES

This equipment can be used for weed burning, drying, heating, melting and other applications requiring large volumes of outdoor heat. Each uses vapor propane fuel and has a durable handle with rear on/off control valve. Used by contractors, farmers, fabricators as well as road, railway and industrial maintenance crews.

RMI Part No.	Description
GKP-320A	Contents: AP-20 Torch, MP-1 Lighter, HPX-10, 10 ft. hose with Cylinder Adapter
GKP-320MA	Contents: AP-20 Torch with Piezoelectric Ignighter Tip, HPX-10, 10 ft. hose with Cylinder Adapter



GKP-320MA (shown)

CYLINDER CADDY

This cart is ideally suited to for 20# LP Gas cylinders. The user can operate the torch safely and move the cart simultaneously. When the torch is not in use, it can be stored in the convenient torch bracket and hooks.

The cart features:

- Corrosion resistant zinc coating
- 1/2" solid steel axle
- Rugged tubular steel construction
- Cylinder restraints
- Cylinder and torch are not included



GKTC20

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- Specifications: DOT-3AL & TC-3ALM designed. ISO design cylinders are available
- Alloy: Manufactured from high strength aluminum alloy 6061-T6
- ALUMINUM CYLIDERS FOR MEDICAL USES
 - Markings: As required by specification. additional markings available upon request
 - Finish: Standard fnish is brushed body with green crown (white crown for Canada) and clear paint
- Graphics: Logos or labels in silkscreen or Duragrafix available upon request.
- Accessories: Valves installed upon request. M60 and larger are available with either a carrying handle or protective caps and collars.



RMI Part No.		vice sure	Wa Capa		Diar	neter	Ler	ngth	-	nder ight	Ox	ygen
	psi	bar	lbs	liters	in	mm	in	mm	lbs	kgs	cu ft	liters
M74	3000	207	22.0	10.0	7.25	184.2	23.8	605	28.4	12.9	77	2167
M32	3000	207	9.1	4.1	4.38	111.3	25.5	648	10.8	4.9	32	906
M20	3000	207	5.7	2.6	4.38	111.3	16.8	427	7.3	3.3	20	566
M12	3000	207	3.4	1.5	4.38	111.3	10.9	277	5.1	2.3	12	340
M7.8	3000	207	2.1	1.0	4.38	111.3	7.8	198	3.9	1.8	7.8	221
M7.5	3000	207	2.1	1.0	3.21	81.5	11.8	300	2.9	1.3	7.5	212
M265	2216	153	102.2	46.4	9.80	248.9	51.7	1313	84.7	38.4	265	7503
M150	2015	139	63.7	28.9	8.00	203.2	47.2	1198	49.2	22.3	150	4248
M122	2216	153	47.1	21.4	8.00	203.2	36.2	919	40.3	17.9	122	3455
M90	2216	153	34.7	15,7	7.25	184.2	32.7	830	30.4	13.7	90	2549
M60	2216	153	23.2	10.5	7.25	184.2	23.1	587	22.3	10.1	60	1699
ME	2015	139	10.2	4.6	4.38	111.3	25.4	645	7.8	3.5	24	680
M22	2216	153	8.5	3.9	5.25	133.4	16.3	414	8.2	3.7	22	623
MD	2015	139	6.4	2.9	4.38	111.3	16.7	424	5.4	2.5	15	425
M9	2015	139	3.8	1.7	4.38	111.3	10.9	277	3.8	1.7	9.0	255
M7	2015	139	3.0	1.4	4.38	111.3	9.1	231	3.2	1.5	7.0	198
ML6	2015	139	2.5	1.2	4.38	111.3	7.9	200	2.9	1.3	6.0	170
M6	2216	153	2.3	1.0	3.21	81.5	11.8	300	2.3	1	6.0	170
M4	2216	153	1.5	0.7	3.21	81.5	8.7	221	1.7	0.8	4.0	113
M2	2216	153	0.6	0.3	2.50	63.5	5.9	149	0.75	0.34	1.6	45

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GASKIT® FIXED FLOW PRESSURE REDUCING REGULATORS

TYPICAL APPLICATIONS:

Compact, fixed flow, piston regulator used for calibration gases and indutrial hygiene monitors. GASKIT® regulators are capable of regulating a broad range of media compatible with materials of construction.

The model shown is all brass with a C-10 inlet connection, a 3/16" hose barb outlet and shut off valve.

GASKIT® PRESSURE REDUCING REGULATORS OFFER:

- Compact size (1.18" diameter x 3.43" high)
- Factory preset flow settings from 0.25 liters/min to 9.0 liters/min
- Models are available for both corrosive and non-corrosive service
- Machined bar stock body, bonnet and piston eliminates porosity found in castings
- Numerous optional features are available

SPECIFICATIONS:

CALIBRATION EQUIPMENT

- Standard Preset Control Pressure: 60 PSIG
- Other preset control pressures optional
- Maximum Inlet Pressure: 3500 PSIG
- Leak Rate: Bubble tight
- Standard Shut Off Valve: None
- Roatary/Multi-turn optional
- Bayonet/Toggle optional

PORTING:

- Inlet Porting:
- C10 (5/8-18 UNF)
- 1/8" FNPT
- 1/8" MNPT
- 1/4" FNPT
- All CGA Connections Available: CGA 165, 180, 320, 510, 580, 600, etc.
- Outlet Porting:
- 3/16" Hose Barb
- 1/4" hose barb
- 1/8" FNPT
- 1/8" MNPT

OPTIONAL ITEMS:

- Gauges
- Annodized Colors for Aluminum bodies
 & Bonnets
- Private Label



GK10454-01

RMI Part No.	Flow	Inlet	Outlet	Metal
GK-10454-01	0.3 LPM	C10	3/16 HOSE BARB	Brass/NI-PL
GK-10454-02	0.5 LPM	C10	3/16 HOSE BARB	Brass/NI-PL
GK-10454-03	1.0 LPM	C10	3/16 HOSE BARB	Brass/NI-PL
GK-10454-04	1.5 LPM	C10	3/16 HOSE BARB	Brass/NI-PL
GK-10454-05	2.0 LPM	C10	3/16 HOSE BARB	Brass/NI-PL
GK-10454-06	2.5 LPM	C10	3/16 HOSE BARB	Brass/NI-PL
GK-10454-07	5.0 LPM	C10	3/16 HOSE BARB	Brass/NI-PL
GK-10454-08	6.0 LPM	C10	3/16 HOSE BARB	Brass/NI-PL
GK-10454-09	9.0 LPM	C10	3/16 HOSE BARB	Brass/NI-PL
GK-10454-10	0.3 LPM	C10	3/16 HOSE BARB	303SS
GK-10454-11	0.5 LPM	C10	3/16 HOSE BARB	303SS
GK-10454-12	0.7 LPM	C10	3/16 HOSE BARB	303SS
GK-10454-13	1.0 LPM	C10	3/16 HOSE BARB	303SS
GK-10454-14	1.5 LPM	C10	3/16 HOSE BARB	303SS
GK-10454-15	2.5 LPM	C10	3/16 HOSE BARB	303SS
GK-10454-16	5.0 LPM	C10	3/16 HOSE BARB	303SS
GK-10454-17	7.0 LPM	C10	3/16 HOSE BARB	303SS

RMI Part No.	Flow	Inlet	Outlet	Metal
GK-10576-01	0.3 LPM	CGA 600	3/16 HOSE BARB	Brass/NI-PL
GK-10576-02	0.5 LPM	CGA 600	3/16 HOSE BARB	Brass/NI-PL
GK-10576-03	1.0 LPM	CGA 600	3/16 HOSE BARB	Brass/NI-PL
GK-10576-04	1.5 LPM	CGA 600	3/16 HOSE BARB	Brass/NI-PL
GK-10576-05	2.0 LPM	CGA 600	3/16 HOSE BARB	Brass/NI-PL
GK-10576-06	2.5 LPM	CGA 600	3/16 HOSE BARB	Brass/NI-PL
GK-10576-07	5.0 LPM	CGA 600	3/16 HOSE BARB	Brass/NI-PL
GK-10576-08	6.0 LPM	CGA 600	3/16 HOSE BARB	Brass/NI-PL
GK-10576-09	9.0 LPM	CGA 600	3/16 HOSE BARB	Brass/NI-PL
GK-10576-10	0.3 LPM	CGA 600	3/16 HOSE BARB	303SS
GK-10576-11	0.5 LPM	CGA 600	3/16 HOSE BARB	303SS
GK-10576-12	0.7 LPM	CGA 600	3/16 HOSE BARB	303SS
GK-10576-13	1.0 LPM	CGA 600	3/16 HOSE BARB	303SS
GK-10576-14	1.5 LPM	CGA 600	3/16 HOSE BARB	303SS
GK-10576-15	2.5 LPM	CGA 600	3/16 HOSE BARB	303SS
GK-10576-16	5.0 LPM	CGA 600	3/16 HOSE BARB	303SS
GK-10576-17	7.0 LPM	CGA 600	3/16 HOSE BARB	303SS

Tel: 800-628-5044

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Fax: 800-243-8341

or call for personal assistance



Calibration Equipment 258

C10 VALVES

The C10 valves for calibration applications are commonly used on small portable cylinders that can be disposable or refillable. Both valve designs a burst disc style PRD for increased reliability. We can also supply versions designed to mate with different inlet thread connections for special applications.





C10 Aluminum

RMI Part No.	Body Material/Sealsflow	Inlet	Outlet	Pressure Rating
GK-11553-1	BRASS/BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	1000 PSIG
GK-11553-2	303 SS /VITON	1-14 UNS-2A	5/8-18 UNF-2B	1000 PSIG
GK-11553-3	ALUMINUM/BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	1000 PSIG
GK-11553-4	BRASS/NI-PLATED/BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	1000 PSIG
GK-11553-5	ALUMINUM/NI-PLATED/BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	1000 PSIG
GK-11553-6	ALUMINUM/NI-PLATED/VITON	1-14 UNS-2A	5/8-18 UNF-2B	1000 PSIG
GK-11553-7	ALUMINUM/VITON	1-14 UNS-2A	5/8-18 UNF-2B	1000 PSIG
GK-11553-8	303 SS /BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	1000 PSIG
GK-11597-1	BRASS/BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	500 PSIG
GK-11597-2	303 SS /VITON	1-14 UNS-2A	5/8-18 UNF-2B	500 PSIG
GK-11597-3	ALUMINUM/BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	500 PSIG
GK-11597-4	BRASS/NI-PLATED/BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	500 PSIG
GK-11597-5	ALUMINUM/NI-PLATED/BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	500 PSIG
GK-11597-6	ALUMINUM/NI-PLATED/VITON	1-14 UNS-2A	5/8-18 UNF-2B	500 PSIG
GK-11597-7	ALUMINUM/VITON	1-14 UNS-2A	5/8-18 UNF-2B	500 PSIG
GK-11597-8	303 SS /BUNA-N	1-14 UNS-2A	5/8-18 UNF-2B	500 PSIG

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