

ROBERTSHAW 24 VOLT DUAL COMBINATION GAS VALVES

- 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 SERIES MILLIVOLT GAS VALVES

- 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 |



Fax: 800-243-8341

NOTES for page 180:

*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.

† 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

Tel: 800-628-5044

Ray Murray Inc. Edition 11



Mercury Free Room Thermostats

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"



| 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"

Ray Murray Inc.

Edition



| RMI Part No. | Temperature Range | Voltage | Stages |
|-----------------|----------------------|----------------------|------------------------|
| 1F95-1277 | 45°F to 99°F | battery: mV to 24Vac | single/multi/heat pump |
| 1F97-1277 | 45°F to 99°F | battery: mV to 24Vac | single |

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 Part No. | Temperature 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 |
|---|-----------------|----------------------|---------|-----------------|
| ı | RS6110 | 45°F to 90°F | 24Vac | 1 Heat / 1 Cool |

Tel: 800-628-5044

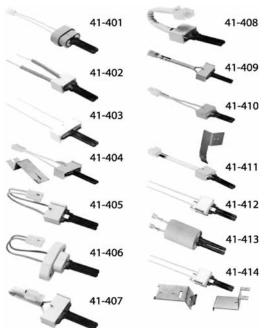
RAY MURRAY, INC.

Fax: 800-243-8341

Ignition Modules / Hot Surface Ignitors 187



HOT SURFACE HEATING IGNITORS



| RMI Part No. | Factory No. |
|--------------|--------------------|
| 41-401 | 271A |
| 41-402 | 2714W |
| 41-403 | 271M |
| 41-404 | 271M |
| 41-405 | 271D |
| 41-406 | 271Y |
| 41-407 | 271 |

| RMI Part No. | Factory No. |
|--------------|-------------|
| 41-408 | 271N |
| 41-409 | 271 |
| 41-410 | 271N |
| 41-411 | 271N |
| 41-412 | 271NM |
| 41-413 | 271C |
| 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

Tel: 800-628-5044

- Numbers from **Original Part**
- Voltage Listing
- Inlet/Outlet Direction
- BTU of Appliance
- Appliance Model Number
- Appliance Serial Number
- Mounting Type if **Applicable**

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
- 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.

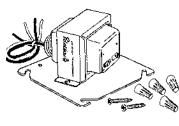
| RMI Part No. | Length | | | |
|--------------|---|--|--|--|
| 780-001 | Universal Intermittent Module (Natural Gas - Non Lockout) | | | |
| 780-002 | Universal Intermittent Module (LP w/Lockout) | | | |

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 Thermal Fuse Protection
- Meets NEMA Standards
 Made in USA



RAY MURRAY, INC.

Fax: 800-243-8341



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

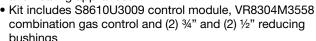
| RMI Part No. | Description | | | |
|--------------|-------------------------------------|--|--|--|
| S8610U3009 | Universal Intermittent Pilot Module | | | |



Y8610 RETROFIT INTERMITTENT IGNITION SYSTEM

Heating Control Modules

- · 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

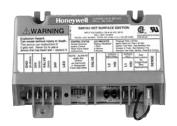


- Use with single rod or dual rod/remote flame sensing applications
- · For use with Natural or LP gas
- Includes spark cable adapters and installation hardware

| 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



| ST9 | 120 U | NIVE | RSAL E | ELECTR | ONIC F | AN TIM | ER |
|-----|-------|------|--------|--------|--------|--------|----|
| | | | | | | _ | |

- · 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. | Description | | | | |
|--------------|--------------------------------|--|--|--|--|
| ST9120U1011 | Universal electronic fan timer | | | | |

RMI Part No. **Description** S8910U1000 Universal Hot Surface Ignition Control

HONEYWELL SMARTVALVE™ SYSTEM CONTROLS



© Ray Murray Inc. Edition 11

- 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

Hot Surface Pilot / Sensor Assembly (for SmartValve™ Systems)

- Unique Keyed Plug Connector
- Replace without Removing the Pilot Burner

| RMI Part No. | Description |
|--------------|---------------------|
| Q3400A1024 | Ignitor/Sensor/Lead |

| 100 | | | | | | |
|--------------|-------|--------|------------------|----------------------------|---------------------------------|------------------------------|
| 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 |
| 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) |

Tel: 800-628-5044

RAY MURRAY, INC.

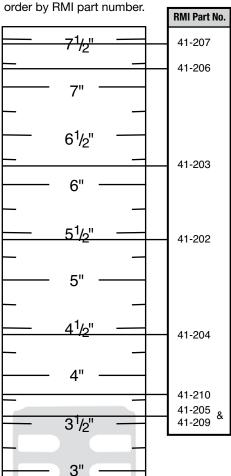
Fax: 800-243-8341

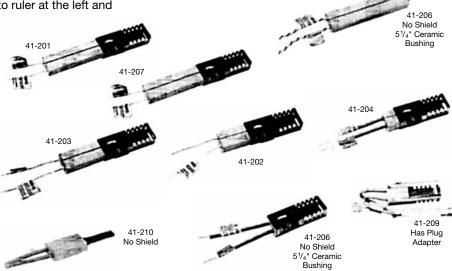
Cooking Controls & Water Heater Thermostat 189



HOT SURFACE OVEN IGNITORS

Norton Style Oven Ignitors - Match old unit to ruler at the left and

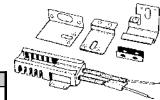




CARBORUNDUM REPLACEMENT OVEN IGNITOR KIT

- Includes brackets and instruction sheets.
- Replaces many models of Carborundum ignitors.

| RMI Part No. | Description |
|--------------|---------------------------------|
| 41-208 | Carborundum Ignitor Replacement |



ROBERTSHAW 110 SERIES WATER HEATER THERMOSTATS

- All models feature a built-in, non-cycling Energy Cut-Off (ECO) system
- Domestic models have a 160°F temperature stop.
- All models have a 51/2" sensing element and various shank lengths A

| RMI Part No. | Robert Shaw OEM Part No. | Inlet | Outlet | Shank Length ▲ | BTU Capacity | Temp. High Stop | Pressure Regulator Setting |
|-----------------|-----------------------------|----------------|-----------------|-------------------|-----------------|--------------------|-------------------------------|
| 110-202 | 220RTSP | 1/2" | 1/2" inv flare | 1-3/8" | 45,000 | 160° | 4.0" w.c. Nat Gas |
| 110-206 | R110RTSP | 1/2" | 1/2" inv flare | 2-3/8" | 38,000 | 160° | 3.5" w.c. Nat Gas |
| 110-262 | 220RLPTSP | 1/2" | 1/2" inv flare1 | 1-3/8" | 100,000 | 160° | 10.0" w.c. LP only |
| 110-265 | 220RLPTSP | 1/2" | 1/2" inv flare2 | 1-3/8" | 100,000 | 160° | 10.0" w.c. LP only |
| 110-326 | R110RTSP | 1/2" | 1/2" inv flare | 1-3/8" | 45,000 | 160° | 3.5" w.c. Nat Gas |
| 110-508 | R103RVSLPPA | 3/8" | 3/8" | 1-1/2" | 10,000 | 160° | 11" w.c. LP |
| 110-509 | R103RVTSLP | 3/8" inv flare | 3/8" inv flare | 1-3/8" | 10,000 | 160° | 11" w.c. LP |

1 right hand threads - adjustable from 9.0" to 12" w.c. 2 left hand threads - adjustable from 9.0" to 12" w.c.

▲ Shank extension (part number 10-250) for 110 Series increases length of 1-1/4" and 1-3/8" shank models to approximately 3"



Ray Murray Inc. Edition 11

Place end with wires on 0 mark of ruler. Match overall length and select appropriate part number.

Tel: 800-628-5044

2¹/2"

1¹/2"

RAY MURRAY, INC.