

## INSTALLATION INSTRUCTIONS

# FALCON BIG RED"

Gas hose for movable gas appliances

#### A CSW Industrials Company

# **Cautions and Warnings**

- 1. The installation MUST BE in compliance with the National Fuel Gas Code (ANSI Z223.1—latest edition) and all local gas installation codes.
- 2. Installation and testing MUST BE performed by qualified personnel. Ensure that the gas supply and all the appliance control knobs are turned off before connecting to the gas supply.
- 3. Gas outlet shall be in same room as appliance and the connector must not be concealed within or run through any wall, floor or partition. Flexible gas connections shall not come into contact with surfaces at temperatures in excess of 110°C (230°F), sharp edges or wiring.
- 4. The final assembly shall be tested for leaks. CAUTION: Open flame or other sources of ignition shall not be used for this purpose. Leak test solutions may cause corrosion. WATER RINSE AFTER TEST. To check gas supply piping system for leakage, see National Fuel Gas Code Z223.1 latest edition. If odor of gas is detected, turn off the gas to the appliance and have a qualified professional correct the source of the leak.
- 5. **WARNING** STRONG CLEANING SOLUTIONS OR CHEMICAL SUBSTANCES MUST NOT COME IN CONTACT WITH THE CONNECTOR. These may include acids, solvents, fluxes with zinc chloride, or other chlorinated chemicals. In case of contact, rinse down the connector with water and dry thoroughly.
- 6. An accessible manual shut-off valve must be installed at the outlet of the gas supply piping system upstream of the connector.
- 7. Contact with foreign objects, wiring or substances shall be avoided.
- 8. Avoid movement after installation on fixed appliances.
- 9. Bending and flexing of connectors on moveable appliances (e.g. those factory equipped with casters) should be limited to pulling and pushing the appliance in or out for cleaning or maintenance.
- 10. Connectors are for use only on piping systems having fuel gas pressure not in excess of 1/2 psi (3.5 kPa).
- 11. All parts of the flare union, supplied with the connector, must be utilized and no attempt will be made to assemble union flare nuts directly to IPS pipe threads.
- 12. DO NOT REUSE FOR ANOTHER APPLIANCE OR AT ANOTHER LOCATION.
- 13. In addition to the main gas supply shut-off valve, an approved accessible manual gas shut-off valve MUST BE installed upstream of the gas connector (within 6 feet of the equipment it serves). Each piece of equipment must have its own shut-off valve. The guick-disconnect coupling is NOT TO BE USED as the primary gas shut off.
- 14. A WARNING THE QUICK-DISCONNECT MUST BE INSTALLED SO THAT THE GAS ENTERS THE COUPLING HALF AND EXITS THE NIPPLE HALF. YOU MUST FOLLOW THE FLOW DIRECTION ARROWS THAT ARE PERMANENTLY MARKED ON THE COUPLER.
- 15. NEVER INSERT screwdrivers, probes, etc. into the quick-disconnect coupling. The valve's seat can be damaged or forced off center.
- 16. The connector shall not be kinked, twisted, or torqued when installed.
- 17. DO NOT USE pipe sealant, teflon tape, or any other sealing compound in the flare seat of gas connector.
- 18. Make sure that all fittings are tightened properly. When installing the connector, two (2) 14-inch crescent wrenches (minimum size) are recommended as installation tools.
- 19. A restraining device is REQUIRED for all types of moveable gas appliances. (ANSI Z223.1 & ANSI Z21.69). Installation instructions for this product are part of this booklet. This "restrainer" should be inspected as part of the regular maintenance and safety procedures.
- 20. When installing an equipment line-up with dual-fed front manifold gas inlets, DO NOT use a quick disconnect coupling.
- 21. Appliance MUST BE disconnected prior to maximum movement. WARNING: DO NOT OVER EXTEND the gas connector assembly.

#### Installation Instructions

#### **BEFORE INSTALLATION:**

- 1. Carefully read this full set of instructions, including the caution and warnings section and the installation examples section of this instruction booklet.
- 2. The manual gas shut off ball valve, located in the gas manifold line, must be in the fully closed (off) position. If there is no gas shut-off valve in the manifold line, the main gas supply line valve must be turned off. DO NOT CONTINUE unless the gas is turned off.
- 3. The location of the two connection end points of the gas appliance connector,—the gas supply line and the equipment stub-out,—can vary greatly. It is not possible to show every possible installation combination. The most common are shown. The installer must always take great care to ensure the connector is not kinked, twisted or torqued when installed,—and that the end fittings of the connector are not subjected to sharp bends. (Please refer to Installation Examples). For installations that may result in a sharp bend, swivel gas connectors are recommended.
- 4. It is recommended that the main gas supply manifold be located 24"-30" off the ground. There should be pipe tees pointed in the downward direction.
- 5. To facilitate moving equipment as close to the wall as possible, the two ends of the gas connector should be offset to the side from each other.

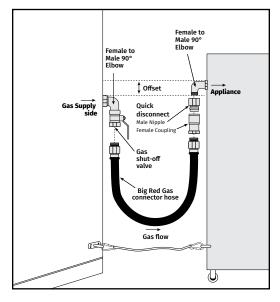
## **OPTION 1 Installation: Quick Disconnect on Appliance**

#### **APPLIANCE**

- 1. Apply pipe sealant or thread tape to the appliance stub out.
- Thread the included female to male 90° elbow to the stub out and use wrench to tighten.
- 3. Apply pipe sealant or thread tape to the male end of the 90° elbow.
- 4. Separate the quick-disconnect female coupling from the male nipple.
- 5. Thread the male nipple piece of the quick disconnect to the 90° elbow and use wrench to tighten. Verify proper gas flow direction.
- 6. Apply pipe sealant or thread tape to the male threads of the gas connector hose.
- 7. Thread the gas connector adapter to the quick-disconnect female coupling.

#### **GAS SUPPLY LINE**

- 1. Apply pipe sealant or thread tape to the gas supply nipple.
- 2. Install optional threaded gas shut-off valve and use wrench to tighten. Use female to male 90° elbow in between gas supply and valve if better positioning is needed.
- 3. Apply pipe sealant or thread tape to the other male threads of the gas connector hose.



(option 1)

- 4. Thread the gas connector adapter into the gas shut-off valve and use wretch to tighten.
- 5. Fully connect the female coupling to the male nipple of the quick disconnect and test to be sure of full engagement. Verify proper gas flow direction printed on coupling.
- 6. Continue to Final Steps for remaining required steps. Be sure to perform a leak test before completion.

Gas hose for movable gas appliances

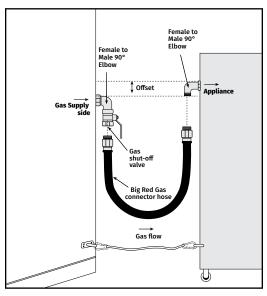
# **OPTION 2 Installation: No Quick Disconnect**

#### **APPLIANCE**

- 1. Apply pipe sealant or thread tape to the appliance stub out.
- 2. Thread a female to female 90° elbow to the stub out and use wrench to tighten.
- 3. Apply pipe sealant or thread tape to the male threads of the gas connector hose
- 4. Thread the gas connector adapter to the female to female 90° elbow.

#### **GAS SUPPLY LINE**

- 1. Apply pipe sealant or thread tape to the gas supply nipple
- 2. Install optional threaded gas shut-off valve and use wrench to tighten. Use included female to male 90° elbow in between gas supply and valve if better positioning is needed.
- Apply pipe sealant or thread tape to the other male threads of the gas connector hose.
- 4. Thread the gas connector adapter into the gas shut-off valve and use wretch to tighten.
- 5. Continue to Final Steps for remaining required steps. Be sure to perform a leak test before completion.



(option 2)

#### FINAL STEPS:

- 1. Verify all connections have been wrenched tight.
- 2. Perform a leak test following National Fuel Code ANSI Z233.1, NFPA 54, or SCA B149.1. CAUTION: Open flame or other sources of ignition shall not be used for this purpose. Leak test solutions may cause corrosion water rinse after test.
- 3. Once appliance is in permanent location verify that the connector is positioned correctly (Please refer to Installation Examples).

# FALCON BIG RED™

Gas hose for movable gas appliances

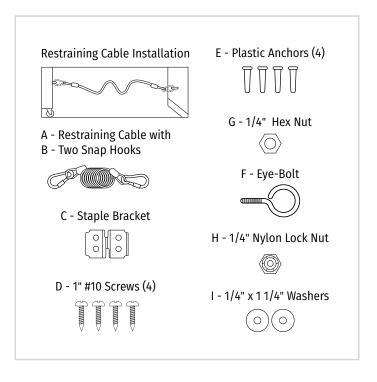
# **Restraining Cable Installation Instructions**

# This restraining device must always be connected when the appliance is in service.

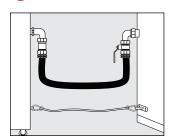
Disconnect for movement such as servicing or cleaning. Then reconnect this restraint when appliance has been returned to its normal position.

# **Restraining Cable:**

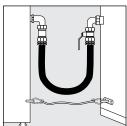
- 1. Restraining device should be installed parallel (in line with the gas appliance connector).
- 2. Attach the staple bracket (C) to a stud in the wall, using the four 1" #12 screws (D) and the plastic anchors (E) if needed.
- 3. Locate a structural area (frame) on the rear side of the equipment that is in line with the wall attachment. Drill a 1/4" diameter hole. Please use caution when drilling hole, so that the internal components are not damaged.
- 4. Thread the hex nut (G) and slide one washer (I) onto the eye bolt (F). Slide the eye-bolt through the drilled hole and place a washer (I) and the nylon lock nut (H) onto the eye-bolt on the inside frame of the equipment and tighten securely.
- 5. Attach one of the snap hooks (B) to the staple bracket on the wall (step 2 above) and the other to the eye-bolt (Steps 3 and 4 above).









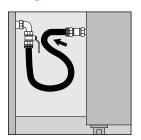


Note: For adjustable restraining devices, the cable is manufactured to be shorter than the length of the gas connector.

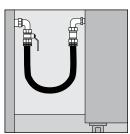
# Gas hose for movable gas appliances

#### **Installation examples**



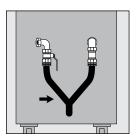




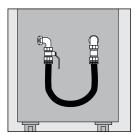


**Sharp Bends** The correct way to install metal hose for vertical traverse is with a single, natural loop. Avoid sharp bends that strain and twist the metal hose to a point of early failure at the coupling.



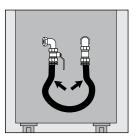




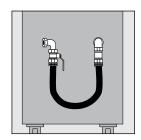


**Twisting Couplings** and hose should be installed in the same vertical plane. Failure to do so causes torsional twisting and undue strain causing premature failure.



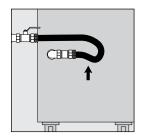




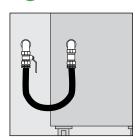


**Fatigue** Maintain the minimum or larger bending diameter between the couplings. Exceeding the minimum diameter creates double bends causing work fatigue at the fittings.









**Self Draining** In all installations where "self draining" is not necessary, connect metal hose in a vertical loop. Do not connect metal hose horizontally unless "self draining" is necessary, then use support on lower plane.

# **Limited Warranty**



For more information on our product warranty, visit RectorSeal.com







# **Approvals**

Pending NSF and CSA Multiple listings

- · Complies to ANSI Z21.69 / CSA 6.16
- NSF 51 listed PVC sleeve
- ICC listed, tested & certified
- · UPC, IRC, IFGC compliant



# RectorSeal, LLC

to www.P65Warnings.ca.gov.

2601 Spenwick Drive, Houston, TX 77055, USA • 800-231-3345 • Fax 800-441-0051 • rectorseal.com 3255 Wyandotte St. East, Windsor, ON N8Y 1E9, Canada • 519-966-4901

WARNING • This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information, go