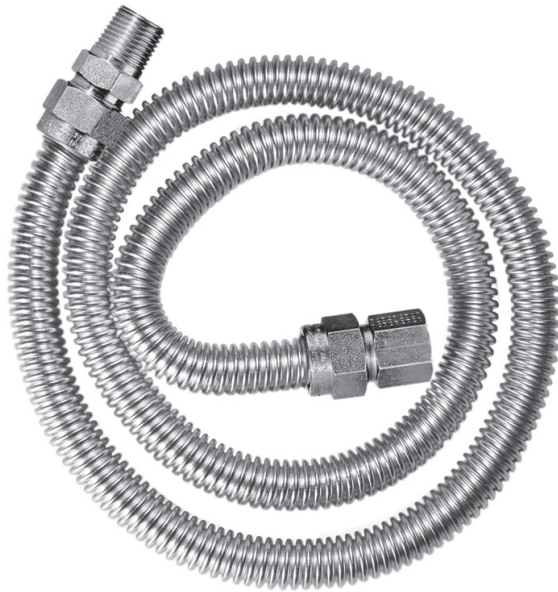


FLEX-CONNECT®

GAS APPLIANCE CONNECTOR Installation Instructions



SAFETY PRECAUTIONS

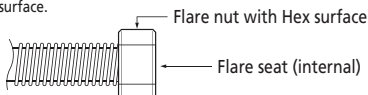
Read entirely before installing

To avoid injury (including death) or property damage, read and understand this entire instruction sheet before installing your gas connector. Follow all instructions and safety precautions during installation, use and maintenance. If you do not understand any of these instructions or precautions, call a licensed plumber. Any damage to the connector or product failures that occur as a result of improper installation or neglect to follow these instructions will void this limited warranty.

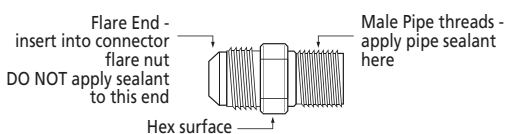
- WARNING!** To prevent corrosion, **DO NOT** allow strong cleaning solutions or chemicals to come in contact with the connector. These include acids, solvents, solder fluxes with zinc chlorides, ammonia, chlorinated chemicals and any liquid with chlorine such as laundry bleach or dish detergent.
- An accessible manual gas shut-off must be present on the gas supply ahead of the connector. **DO NOT PROCEED WITH THIS INSTALLATION IS A SHUT-OFF VALVE IS NOT PRESENT - CALL A LICENSED PLUMBER FOR ASSISTANCE.**
- DO NOT** assemble the connector nut directly to male pipe thread.
- DO NOT** install the gas connector so that it is concealed within or runs through any wall, floor or other partition. The gas outlet must be in the same room as the appliance. This is so it is visible for periodic inspection.
- The connector should be of adequate length to reach from the gas supply line to the appliance without stretching. **NEVER** join two or more connectors to make a longer connector.
- NEVER USE A GAS CONNECTOR** if a new appliance is purchased or an existing appliance is moved, a new connector **MUST** be used.
- Only the fittings supplied with this connector or those manufactured and recommended by Waterline Products Co., should be used.
- Connectors are designed for occasional movement after installation. Not for use on casters equipment. Repeated bending, flexing or extreme vibration will cause metal fatigue and must be avoided.
- This flexible gas connector is to be used on natural or LP/propane gas supply systems with operating pressures no higher than 1/2lb. per square inch.
- DO NOT KINK, TWIST OR BEND** the connector smaller than 1-1/2" internal diameter (approximately the diameter of a golf ball). Avoid sharp bends - no right angles.
- To avoid corrosion, do not allow connector to come in contact with foreign objects such as wall studs, electrical wiring, copper or iron pipe, paneling, sheet metal etc.
- DO NOT** use gas connector or gas supply line for the appliance ground.
- This product meets national building codes and the ANSI standard for gas connectors (ANSI Z21.24). However, local codes and regulations prevail. Contact your local municipality to verify applicable codes.
- Some Provinces in Canada require installations to be performed by a qualified or licensed contractor, plumber or gas fitter. Where the appliance is to be installed, contact your local Municipality to verify applicable code.

GLOSSARY

Flare: tapered (beveled) surface of connector nut or fitting where the seal occurs. Pipe thread sealant should **NEVER** be applied to the flare surface.



Male Pipe threads - the external pipe thread that protrudes from the fitting and fits into the female pipe thread. (also referred to as 'MIP' - Male Pipe Thread)



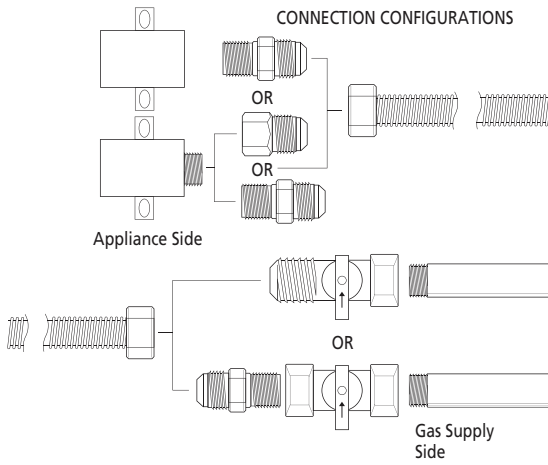
Female Pipe threads - the external pipe thread that receives a male pipe thread. (also referred to as 'FIP' - Female Pipe Thread)

Male Tapped Female - all male connector fittings are threaded to also function as a female fitting one thread size smaller.



GAS APPLIANCE CONNECTOR INSTALLATION INSTRUCTIONS

Read safety instructions before installing



- SHUT OFF THE GAS** with the shut-off valve near the appliance on the gas supply line. If a shut-off valve is not present on the gas line, it is recommended that you consult a licensed plumber for proper installation before completing connector installation.
- REMOVE EXISTING/OLD CONNECTOR AND FITTING** (if present) from the gas supply and appliance.
- UNCOIL NEW CONNECTOR.** This makes the installation easier and helps avoid twisting or kinking of the connector. Remove fittings if attached to new connector.
- CLEAN THE GAS SUPPLY PIPE OR VALVE** with a soft-bristle brush (i.e. scrub brush) to remove any debris.
- SELECT FITTINGS** by testing the fittings on both the gas line and appliance line prior to proceeding. If installing an appliance kit, it contains fittings to accommodate most standard appliances. **REMOVE AND SET ASIDE.**

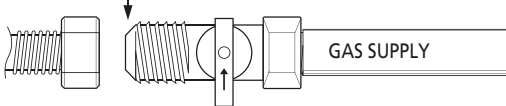
WARNING!

DO NOT USE PIPE THREAD SEALANT ON ANY FLARED ENDS, BECAUSE IT WILL NOT OBTAIN A LEAK-FREE SEAL. Keep flare end of fitting and flare seats of connector nut free of grease, oil, pipe thread sealant.

- Use a wrench only on the hex surfaces of the fittings.
- DO NOT USE A PIPE WRENCH OR CHANNEL LOCK PLIERS ON THE CONNECTOR FLARE NUT.** The nut can be damaged or you will not achieve sufficient tightening torque which will result in leaking gas. Use open-end or adjustable wrenches only.

- ATTACH FITTING TO GAS SUPPLY LINE** (choose scenario A or B)

Flared end - **DO NOT** use pipe thread sealant here

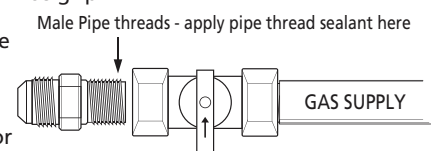


- If the shut-off valve has a female threaded end:
 - Open the pipe thread sealant packet. Hold the fitting in your hand, with the flare end in the hand. Apply a liberal amount of pipe sealant to the first half of the male pipe threads, starting at the opening of the fitting. Smooth with finger or small brush (if using finger, make sure to wipe so you don't get thread sealant on the flare threads.)

- ii. **ATTACH THE FITTING** onto the valve. Tighten by hand as tight as possible.
- iii. **ATTACH THE FITTING.** Hold valve with an open-end or adjustable wrench. Hold fitting with another open-end or adjustable wrench. Turn wrench on fitting clockwise to tighten while stabilizing the valve with a counter-clockwise grip.

B. If the shut-off valve has a flare end:

- i. Connect the connector flare nut directly to the valve without a fitting. **DO NOT USE PIPE THREAD SEALANT ON THE FLARE OF THE VALVE.**
- ii. **TIGHTENING THE FITTING.** Hold valve with an open-end or adjustable wrench. Hold connector flare nut with another open-end or adjustable wrench. Turn wrench on flare nut clockwise to tighten while stabilizing the valve with a counter-clockwise grip.

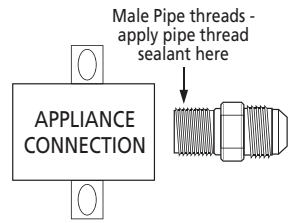


7. ATTACH FITTING TO APPLIANCE INLET.

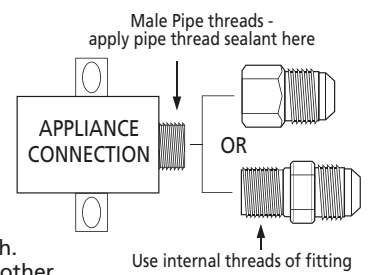
(choose scenario A or B).

A. If the appliance connection has a female thread end (or regulator):

1. Hold the fitting in your hand, with the flare in your hand and apply pipe sealant to the male threads as detailed in step 6.A.i.
- ii. **ATTACH FITTING.** Tighten by hand as tight as possible.
- iii. **TIGHTEN THE FITTING.** Hold regular with an open-end or adjustable wrench. Hold fitting with another open-end or adjustable wrench. Turn wrench on fitting clockwise to tighten while stabilizing the appliance inlet with a counter-clockwise grip.



- B. If the appliance has male pipe threads:
 - i. Apply pipe sealant to the male pipe threads of the appliance stub-out as detailed in step 6.A.i.
 - ii. **ATTACH FITTING.** Tighten by hand as tight as possible.
 - iii. **TIGHTEN THE FITTING.** Hold regular with an open-end or adjustable wrench. Hold fitting with another open-end or adjustable wrench. Turn wrench on fitting clockwise to tighten while stabilizing the appliance inlet with a counter-clockwise grip.



B. If the appliance has male pipe threads:

- i. Apply pipe sealant to the male pipe threads of the appliance stub-out as detailed in step 6.A.i.
- ii. **ATTACH FITTING.** Tighten by hand as tight as possible.
- iii. **TIGHTEN THE FITTING.** Hold regular with an open-end or adjustable wrench. Hold fitting with another open-end or adjustable wrench. Turn wrench on fitting clockwise to tighten while stabilizing the appliance inlet with a counter-clockwise grip.

- CONNECT CONNECTOR TO THE GAS SUPPLY SIDE.** To simplify installation, the end of the connector should be straight (a bend in the neck makes tightening difficult).

WARNING! DO NOT KINK, TWIST or BEND the connector smaller than 1-1/2" internal diameter (approximately the diameter of a golf ball). Avoid sharp bend - no right angles.

- A. Tighten by hand as tight as possible.
- B. Hold fitting with an open-end or adjustable wrench. Hold connector flare nut with another open-end or adjustable wrench. Turn wrench on connector clockwise to tighten while stabilizing the fitting with a counter-clockwise grip.

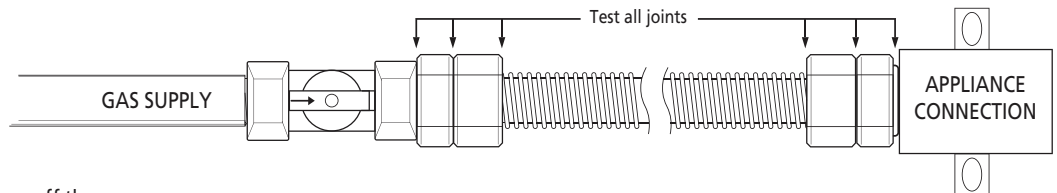
- CONNECT THE CONNECTOR TO THE APPLIANCE SIDE**

- A. Tighten by hand as tightly as possible.
- B. Hold fitting with an open-end or adjustable wrench. Hold connector flare nut with another open-end or adjustable wrench. Turn wrench on connector clockwise to tighten while stabilizing the fitting with a counter-clockwise grip.

TESTING THE SYSTEM

WARNING! MATCHES, CANDLES, OPEN FLAMES OR OTHER SOURCES OF IGNITION SHOULD NOT BE USED FOR LEAK TESTING.

IT IS RECOMMENDED THAT LEAK TESTING BE DONE USING NON-CORROSIVE GAS LEAK DETECTION FLUID. DISH WASHING DETERGENT, BATH SOAP OR OTHER HOUSEHOLD CHEMICALS SHOULD NOT BE USED.



1. Turn off the gas.
2. Apply enough leak test solution to each threaded joint (including the connector) so that it covers the entire circumference of the joint. Hold a towel or rag under the joints to catch any spill-over.
3. If there are any leaks, bubbling will appear at the joints. Use a small mirror to view obscured areas. A) if leak is detected, tighten the connection and retest. B) if a leak is not remedied by tightening, remove the fitting, clean fitting as detailed in step 4 of the installation instructions, reapply pipe thread sealant, reinstall and test. C) if leak is still not remedied or if the odor of gas is detected, turn off the gas to the appliance and have a licensed plumber correct the problem.
4. After testing, thoroughly rinse all joints with water and dry.

WARNING! IF YOU SMELL GAS, TURN OFF THE GAS AT THE MAIN VALVE AND CALL A LICENSED PLUMBER TO TEST FOR LEAKS AND FIX ANY PROBLEMS.

LIMITED WARRANTY AND DISCLAIMERS

- WATERLINE will replace, **FREE OF CHARGE**, during the warranty period, its warranted parts it deems defective in material and/or workmanship under normal installation, use and service. Replacement can be obtained by returning the product to the original place of purchase, along with the original receipt. **This warranty remedy is limited to product replacement only. Labour charges and/or damages incurred in installation, repair or replacement are excluded. This remedy is exclusive.**
- Any damage to this product as of a result of misuse, abuse, neglect, accident, improper installation, or any maintenance or use in violation of instructions furnished by us, **will void this limited warranty.**
- **OTHER THAN THE ABOVE LIMITED WARRANTY, WATERLINE PRODUCTS CO. MAKES NO ADDITIONAL WARRANTY OF ANY KIND, EXPRESS OR IMPLIED (INCLUDING WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE).**
- **Waterline disclaims responsibility for any failures due to improper installation, use or maintenance.** Product must be installed, used, repaired and maintained by the Buyer in accordance with local codes and regulations and standards set by the American National Standards Institute (ANSI).
- **WATERLINE SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THIS PRODUCT WHETHER THE CLAIM IS BASED ON BREACH OF WARRANTY OR CONTACT, NEGLIGENCE, STRICT LIABILITY OR TORT.**



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