#### IMPORTANT NOTICE - READ CAREFULLY

### **Angle Gas Ball Valve Operating Instructions**

#### NOTE: These valves are designed for use with natural, manufactured or LP gas only.

- 1) Read instructions before valve installation or maintenance.
- 2) Inspect valves for foreign material. Remove any foreign material, being careful not to damage the ball surface or the port seals.
- 3) Always apply a quality grade pipe thread sealant to the pipe before installation **DO NOT USE TEFLON TAPE**. Excess pipe sealant contacting the ball surface may cause the valve to leak.
- 4) Always use wrenching flats nearest to connection point. Never insert a tool into the ball area of the valve to thread it onto the pipe. Incorrect or over-tightening of the valve on installation can cause valve failure.
- 5) Installation torques should be reduced when using pipe heavier than schedule 40.
- **6)** Do not exceed the pressure rating on the valve.

#### CAUTION

Soaps, solvents or fluids containing Glycol that are used for testing or cleaning the valve are  $\underline{NOT}$  to have any contact with ball or port seals.

Never try to disassemble an A.Y. McDonald valve. If the valve is damaged or otherwise not functional, immediately remove the valve and replace it with a new one.

#### **Valves with Insulated or Non-Insulated Union Ends**

NOTE: These valves are designed for use with natural, manufactured or LP gas only.

A.Y. McDonald's o-ring design union end assures positive sealing and long lasting service.

The **union end** is properly assembled to the valve by tightening the union nut hand tight plus 1/4 to 1/2 turns. **CAUTION** - Excessive tightening could cause damage.

If the o-ring is removed from the end piece, it can easily be replaced as follows:

1) Lay o-ring in groove - don't force it in with your fingers.

**CAUTION**: O-ring and groove must be free of foreign material. A coat of petroleum jelly should be applied to the o-ring after assembly.

- 2) Hand tighten the union nut onto the valve to uniformly press the o-ring into the groove.
- 3) This uniform pressure of the meeting of the valve and end piece will properly seat the o-ring.

(OVER)



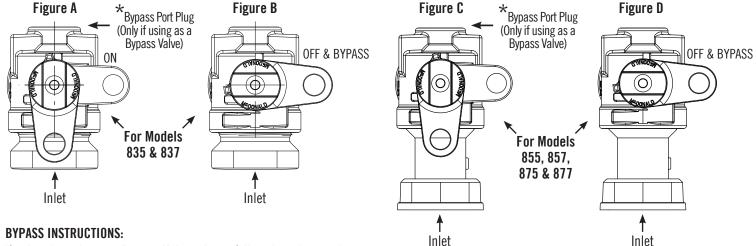
## IMPORTANT NOTICE - READ CAREFULLY

# A.Y. McDonald Mfg. Co. Angle Gas Ball Valve Operating Instructions

A.Y. McDonald Angle Gas Ball Valves can be used simply as a Meter Set Outlet Shut-Off Valve, or they can be used as a Bypass Valve that will keep the customer supplied with gas, using an alternate source, while the maintenance procedure is performed.

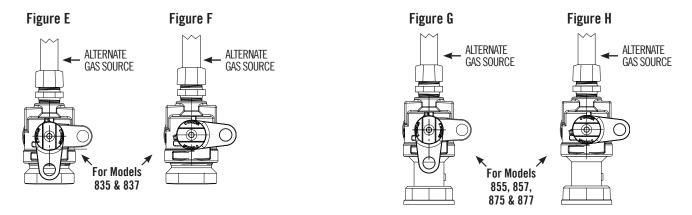
If using the valve as a **Meter Set Outlet Shut-Off Valve**, please follow these instructions:

- 1) Do NOT turn valve past checks. Operate only at regulated pressure. Follow all applicable codes and procedures.
- 2) The position shown in "Figures A & C" shows normal flow through the valve, attached after meter.
- To shut the valve off, turn cap 90° counter-clockwise, toward the lockwing, to the position shown in "Figures B & D" (OFF position).
- 4) To turn the valve on, turn cap 90° clockwise, toward the inlet, to the position shown in "Figures A & C".



If using the valve as a **Bypass Valve**, please follow these instructions:

- 1) Do NOT turn valve past checks. Operate only at regulated pressure. Follow all applicable codes and procedures.
- 2) The position shown in "Figures A & C" shows normal flow through the valve, with the valve's inlet connection attached after the meter.
- 3) With valve still in normal flow mode (Figures E & G), remove the Bypass Port Plug\* from the valve, and loosely attach a regulated alternate gas supply line to this access port (Figures E & G). Purge this alternate gas line of air, tighten alternate gas source connections, and then turn the cap 90° counter-clockwise, toward the lockwing, to the position shown in "Figures F & H" (This position shuts off the primary gas supply from the meter and opens up the bypass access port).



The Meter Set is now in Bypass mode and the riser Gas Valve (ahead of regulator) can now be shut off. The Meter can then be removed for service and/or replacement.

- 6) To return to normal flow mode, re-attach the meter, inlet snugly, and loosely attach outlet. Re-open riser gas valve (ahead of regulator) slowly and purge any air from the re-installed meter per company procedures.
- 7) Tighten swivel nuts on meter inlet and outlet.
- 8) Turn cap 90° clockwise, toward the inlet, to position shown in "Figures E & G", remove alternate gas supply line and purge, replace Bypass Port Plug. Meter Set is now back in normal flow mode. Bypass is complete. (OVER)