



## Bypass Meter Bar

Valve Rating 5 PSIG

### Plug Style Instructions (3-port plug)

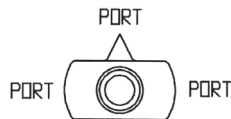
**NOTE: These valves are designed for use with natural, manufactured or LP gas only.**

**All A.Y. McDonald plug style gas valves are factory set. DO NOT TAMPER WITH BOTTOM NUT.**

1. Read instructions and reference pressure rating on integral valves before valve installation or maintenance of meter bar.
2. Inspect valves for foreign material. Remove any foreign material, being careful not to disturb grease on the plug face.
3. Always apply a quality grade pipe thread sealant to the pipe before installation - do not use teflon tape. Excess pipe sealant contacting the plug surface may cause the valve to leak.
4. Always wrench nearest to connection point. Never insert a tool into the port area of the valves to thread bar onto the pipe. Incorrect tightening or overtightening of the bar on installation can cause valve failure.
5. Installation torques should be reduced when using pipe heavier than schedule 40.
6. Reference the bypass procedure shown below and on reverse side. DO NOT INSTALL IN A CONFINED SPACE.
7. Lock the valves to prevent unwanted operation or access.

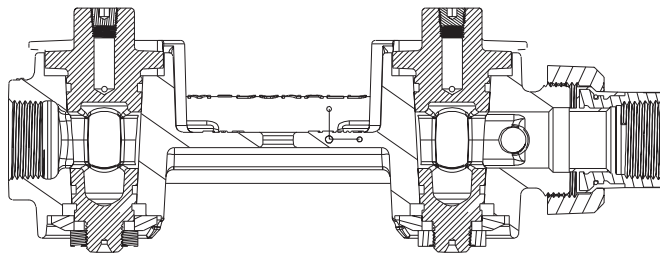
### INTEGRAL VALVE FEATURES

1. Valves can be locked in "NORMAL FLOW" (through the meter) or in "BYPASS MODE" to prevent unwanted operation.



2. Arrow notches on top of the plugs indicate the direction (or location) of the third (odd) port in the plugs.
3. The bypass meter bars are designed to provide uninterrupted gas service to a home during gas meter maintenance. The ability to maintain gas flow to the home comes from the valves' oversized ports, which allow for a minimum-flow condition during valve operation.

### RELUBRICATION INSTRUCTIONS



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

1. Bypass meter bar valves may be re-lubricated in any full open or full closed position when the valve is pressurized or unpressurized.
2. Remove the 1/8" NPT Allen Head pipe relube plug from the re-lubrication port in the head of the valve plug.
3. Fill the lube port with A.Y. McDonald approved lubricant and re-tighten the 1/8" pipe relube plug to move grease into the lubrication channels of the valve. Repeat as required to allow the valve to turn freely.

*NOTE: Replacing the 1/8" relube plug with a standard 1/8" grease zerk will also allow easy re-lubrication of these valves. In either event, care should be taken to prevent over-lubrication.*

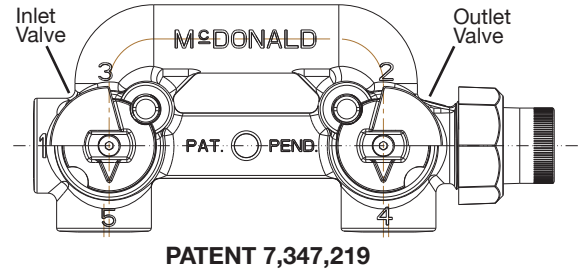
4. After re-lubrication, the 1/8" Allen Head pipe relube plug should be securely replaced in the relube port in the head of the valve plug.
5. A small amount of gas leakage may be observed during this procedure, depending on the amount of lubrication already in the valve body.

*NOTE: Other commercially available relube tools may be used. Check with A.Y. McDonald before using.*

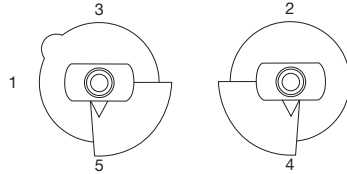
# BYPASS PROCEDURE

**NOTE:** Failure to follow this procedure will result in interrupted gas service and loss of pilot lights.

**NOTE:** It is recommended that a manometer be installed at the downstream pressure tap prior to operating the bypass. The manometer will monitor the downstream pressure. In the event the pressure drops below your stated system requirements, an improper sequence may have occurred. The valves should be returned to normal operation immediately to restore flow of gas. Once pressure is restored, the bypass procedure can then be started again. If the pressure drops below your stated system requirements at any time, pilots need to be checked and possibly relit.

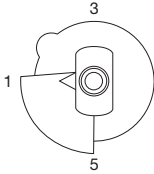


- Bypass application only at regulated pressure.
- Follow all applicable codes and procedures.
- Normal flow through the meter = inlet valve at position 5, outlet valve at position 4 (both arrows toward meter ▽).

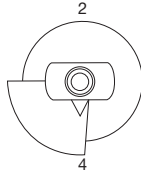


- To move valve to bypass mode, perform the following steps:

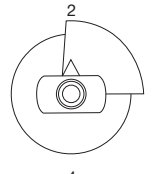
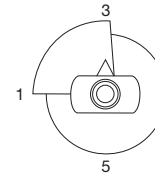
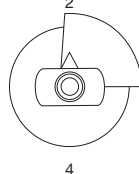
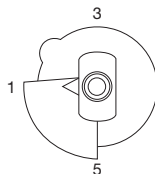
Step 1. Turn inlet valve clockwise 90° to Position 1



Step 2. Turn outlet valve counterclockwise 180° to Position 2

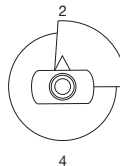
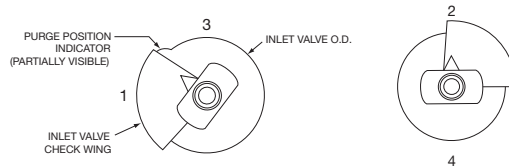


Step 3. Turn inlet valve clockwise 90° to Position 3

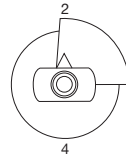
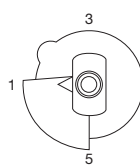


- Bypass mode = inlet valve at Position 3, outlet valve at Position 2. (Both  $\Delta$  arrows pointing toward bypass)
- Perform required maintenance to the meter, when the meter change out or meter maintenance has been completed, purge the air out of the new meter before taking the meter bar out of bypass mode. Do this by attaching the meter inlet swivel nut to the meter inlet, hand tight only. Then attach the meter outlet swivel nut to the meter outlet, but very loosely, 1-2 turns. This will allow an exit for the air/gas mixture to leave the meter during purging.

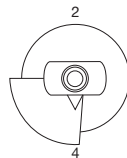
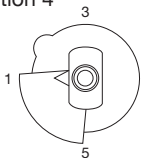
Step 4. **Slowly** turn the inlet valve counterclockwise 45° to the hashmark (raise bump on the iron bar between positions 3 and 1 until you see the 1/2 cubic foot dial on the meter start to turn. This means that gas is now starting to enter the meter and will push the air in the meter to the meter outlet nut where it can escape to atmosphere. Once you see the 1/2 cubic foot dial on the meter begin to move, continue to purge the meter for 20-30 seconds. **DO NOT PURGE IN A CONFINED SPACE!** Once the meter is purged, tighten both inlet and outlet meter nuts completely to the meter.



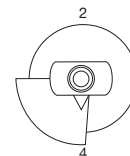
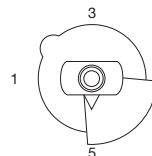
Step 5. Then turn the inlet valve 45° counterclockwise, to position 1.



Step 6. Turn outlet valve 180° clockwise to Position 4



Step 7. Turn inlet valve 90° counterclockwise to Position 5



## SHUT OFF POSITION

To stop the flow of Gas to meter and structure, turn the valves to Positions **3 & 4**.

**WARNING:** This position will shutoff the flow of gas and require all pilots to be re-lit.

