

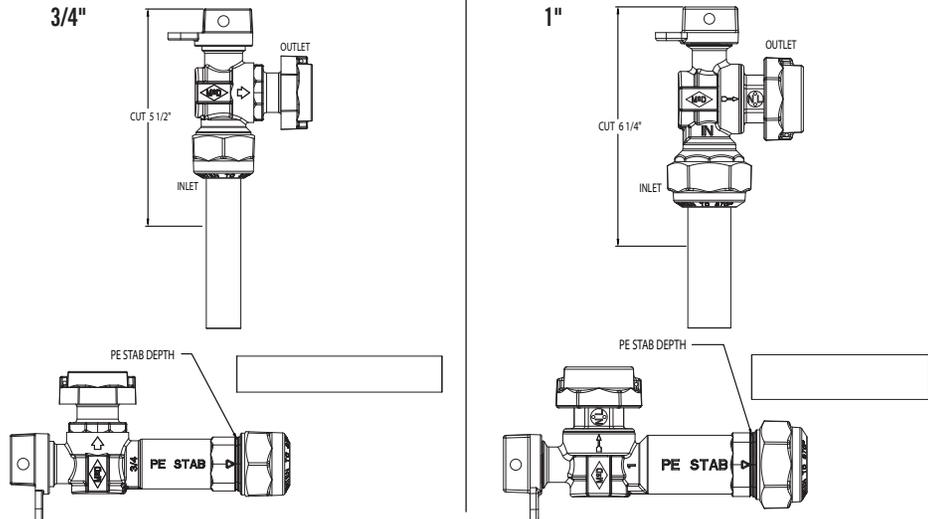


Repair Angle Ball Valves

1. Keep valve clean and free from dirt and debris.
 2. Protect valve from freezing, which may distort ball. In the event the valve does freeze, do not forcibly open or close the valve while the valve is frozen. This may destroy the valve.
 - 3A. For 3/4" polyethylene service, remove an overall of 5 1/2" from the top of the valve. For 1" polyethylene service, remove an overall length of 6 1/4" from the top of the valve. If service line is plastic, verify there is no remnant of insert stiffener left in it.
 - 3B. Cut-out length can be checked by sliding repair valve body onto a free end of the service line until hitting the internal stop, then referring to the PE stab depth marking on the valve endpiece. Plastic tube must not extend into the endpiece farther than the stab depth line in order to ensure the insert stiffener is engaged by the compression end.
- 3C. INSERT STIFFENERS MUST BE USED ON FLEXIBLE PLASTIC SERVICE TUBE OR PIPE.**
4. If valve has compression style connection, read appropriate connection instruction sheet prior to installation.
 5. Use a snug fitting smooth jaw wrench on the wrenching flat nearest the tightened end. Do not wrench across body/endpiece joint.
 6. Always use an approved sealant or teflon tape on tapered pipe threads.
 7. If the valve cap or stop box handle is perpendicular to the water line, the valve is closed. If the valve cap or stop box handle is in line with the water line, the valve is open. For standard valves with turning restraints (checks), turn the cap counter-clockwise to open and clockwise to close (unless otherwise indicated). Valves without turning restraints (checks) may be turned either direction to open or close.
 8. Ball valves generally require low operating torques. If valve turns hard, check turning direction before applying excess force. Excess force can damage or destroy the turning restraints (checks) in the ball valve cap and body assembly.
 9. All valves must be operated in the fully opened or fully closed position. Attempts to throttle flow by operating the valve in a partially open position may harm the valve.

10. PRESSURE TEST FOR LEAKS BEFORE BACKFILLING.

11. USE ONLY ON COLD WATER SERVICES.

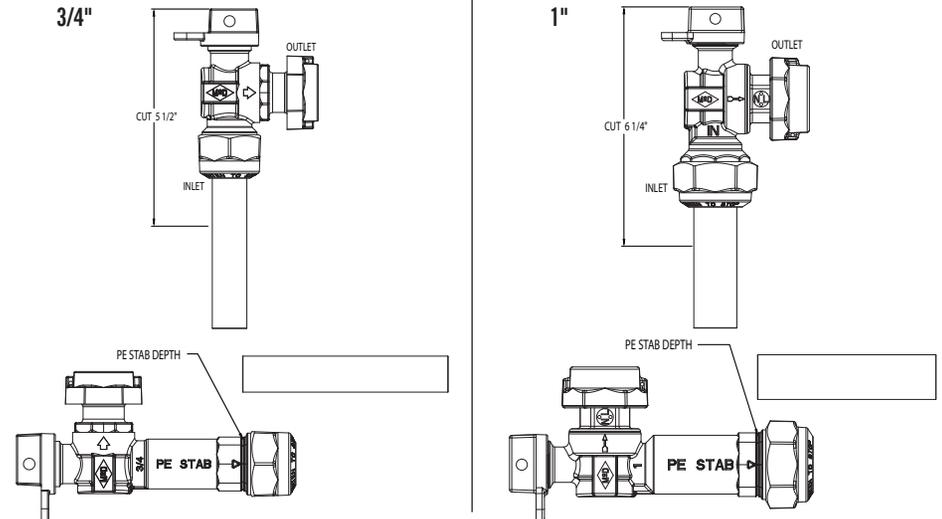


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Repair Angle Ball Valves

A.Y. McDonald waterworks products are designed for reliable service. Like all brass products, however, they can be damaged by improper handling and use.

CAUTIONS

1. Protect threads. Avoid loose-fitting wrenches. Do not drop or impact.
2. Use extra care with high water pressures (over 100 PSIG) and pipe or tubing over 1". Consult factory if desired.
3. Inspect and test all joints, valves and fittings before backfilling.
4. Backfill carefully so as to avoid damage to the service line and connections. Looping of the service lines are recommended to minimize strain.
5. DO NOT use Vaseline ®, plumber's grease, or any other petroleum based product on seals or o-rings.

Damage caused by improper use and/or handling will void our warranty.

(OVER)



WARNING: It is unlawful in CALIFORNIA & VERMONT (effective 1/1/2010); MARYLAND (effective 1/1/2012); LOUISIANA (effective 1/1/2013) and the UNITED STATES OF AMERICA (effective 1/4/2014) to use any product in the installation or repair of any public water system or any plumbing in a facility or system that provides water for human consumption if the wetted surface area of the product has a weighted average lead content greater than 0.25%. This prohibition does not extend to service saddles used in California, Louisiana or under USA Public Law 111-380.



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