Installation

The following must be performed during installation to ensure proper valve function:

⚠ **WARNING:** ***Without an actuator attached to the valve, the disc may open or close at any time, which may cause injury to persons or damage to valve and other property. The shaft/disc clamping device, when furnished, is intended for temporary use during shipping, handling and valve installation only. DO NOT subject valve to flow conditions before actuator is mounted and tested for performance, and clamping device is removed.***

⚠ **WARNING:** ***It is recommended that valves be installed into piping system in accordance with AWWA M11 in order to prevent any undue piping stress, deflection or bending that might adversely affect the performance or physical structure of the valves.***

• Carefully place valve into position, avoiding contact or impact with other equipment, vault walls or trench walls.

• Valve is to be installed in accordance with the General Arrangement Drawings furnished with the order.

• Foreign material in valve can damage the seat when valve is operated. Be sure valve interior and adjacent piping are clear of foreign material prior to mating valve to pipe joint.

• Prepare pipe ends and install valve in accordance with the pipe manufacturer's instruction for joint end (see special note under "Mechanical Joint Installation"). DO NOT deflect pipe/valve joint. DO NOT use valve as jack to pull pipe into alignment.

• DO NOT subject valve or valve connection to bending stress from pipe loading or movement.

• In the case of wafer-type valves, concentrically center the valve body between the mating flanges.

• Make sure valve disc, when opened, will not contact pipe port (see special note under "Mechanical Joint Installation"). This is especially important on pipe with linings, or when wafer style or mechanical joint style valves are used. Check with Mueller Co. Customer Service for minimum pipe I.D. required for clearance.

• Buried valve with a valve box must be installed such that valve box does not transmit shock or stress to the valve actuator as a result of shifting soil or traffic load.

• When valve is installed in a vault, the vault design must provide space for purposed of repair. The valve operating nut should be accessible from the top opening of the vault with a tee wrench. For recommended bolt size and torque range please contact fastener/hardware supplier.

Mechanical Joint Installation

The successful operation of the mechanical joint requires that the plain end of the pipe be centrally located in the valve bell end, and that adequate anchorage be provided where abrupt changes in direction and dead ends occur. The rubber gasket will seal more effectively if the surfaces with which it comes in contact are thoroughly cleaned (for example, with a wire brush) just prior to assembly in order to remove all loose rust or foreign material. Lubrication and additional cleaning should be performed by brushing the gasket and the inside of the bell with soapy water or pipe lubricant just prior to slipping the gasket onto the pipe and assembling the joint.

The recommended range of bolt torque to be applied is given in the table below for mechanical joint end valves.

SIZE	BOLT SIZE	RANGE OF TORQUE ft.-lb.	LENGTH OF WRENCH*
3"	5/8"	45 – 60	8"
4" – 24"	3/4"	75 – 90	10"
30" – 36"	1"	100 – 120	14"
42" – 48"	1 1/4"	120 – 150	16"

*Torque loads may be applied with torque-measuring or torque-indicating wrenches, which may all be used to check the application of approximate torque loads applied by a person trained to give an average pull on a definite length of regular socket wrench.