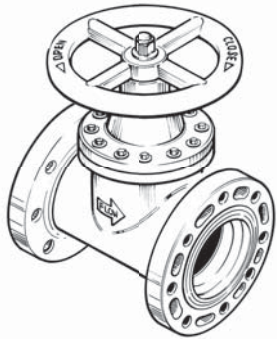




# GLOBE VALVE Installation Instructions

GBV-3A-1207



This instruction covers general installation for all Spears® PVC & CPVC Globe Valves. All applicable instructions and procedures should be read thoroughly before starting.

Spears® Globe Valves require *user supplied* bolts, nuts, washers & rubber gaskets. Flange bolt pattern conforms to ANSI Class 125/150. Attention to direction of flow is required in all installations.

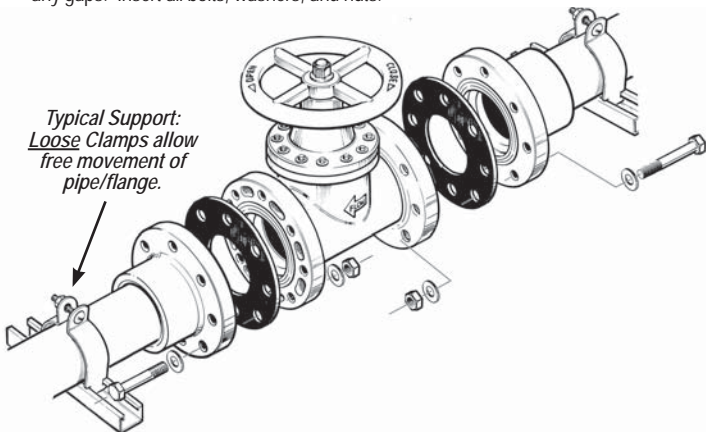
## BOLT PREPARATION FOR ASSEMBLY

Once a flange is attached to the pipe, the method of joining two flanges is as follows:

**STEP 1** Use of well lubricated bolts & flat washers are required. An anti-seize thread lubricant (IMS Copperflake or equivalent) is highly recommended.



**STEP 2** With a 1/8" gasket having a shore "A" durometer of approximately 60 in place, align the bolt holes of the mating flanges. Move pipe to close any gaps. Insert all bolts, washers, and nuts.

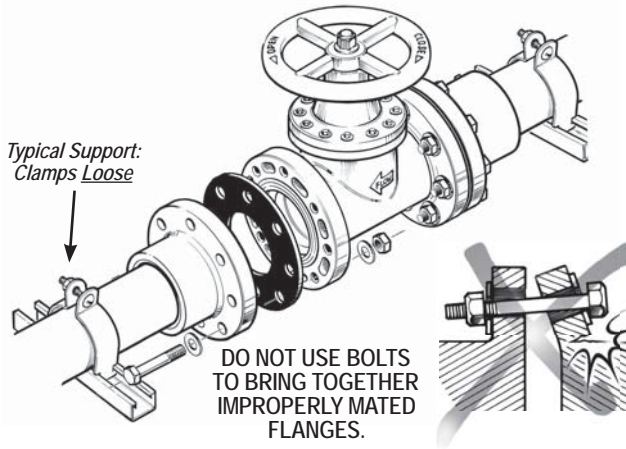


Typical Support:  
Loose Clamps allow  
free movement of  
pipe/flange.

Tighten the nuts by hand until they are snug.

AT THIS TIME, BE SURE THAT THE FLANGE AND GASKET SURFACES ARE FLUSH AND SQUARELY ALIGNED.

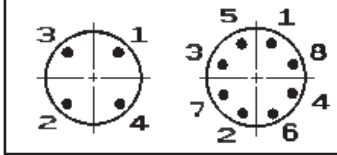
**STEP 3** Tighten Bolts - Establish a uniform pressure over the flange face by tightening the bolts in 5 ft. lbs. increments following a 180° opposing sequence as shown in the table.



Typical Support:  
Clamps Loose

DO NOT USE BOLTS TO BRING TOGETHER IMPROPERLY MATED FLANGES.

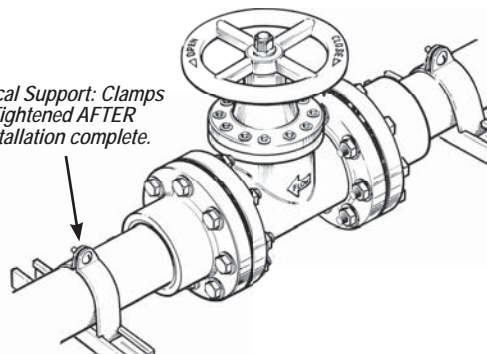
## BOLT TIGHTENING SEQUENCES



## BOLT SPECIFICATIONS

Flange Size (in.)	No. of Bolt Holes	Recommended Torque (ft. lbs.)
2-1/2	4	25
3	4	25
4	8	25
6	8	40

Typical Support: Clamps Tightened AFTER installation complete.



## PRECAUTIONS AND WARNINGS

Suitability of the intended service application should be determined before installation. Plastic piping systems should be engineered, installed, operated & maintained in accordance with accepted standards and procedures for plastic piping systems.

**CAUTION:** The system must be designed and installed so as not to pull the components in any direction. Pipe system must be cut and installed in such a manner as to avoid all stress loads associated with bending, pulling, or shifting. All piping systems must be supported.

### DO NOT ATTEMPT TO DRAW TOGETHER ANY GAPS

WITHOUT ALLOWING FREE MOVEMENT TO ONE SIDE OF THE SYSTEM CONNECTION. ADJUST VALVE POSITION AS NECESSARY.

**LUBRICATION WARNING:** Some Lubricants, including vegetable oils, are known to cause stress cracking in thermoplastic materials. Formulation changes by lubricant manufacturers may alter compatibility of previously acceptable materials and are beyond our control.

### NOT FOR DISTRIBUTION OF COMPRESSED AIR OR GAS.

All air must be bled from the system during the initial fluid fill. Pressure testing of the system must not be made until all solvent cement joints have properly cured. Initial pressure testing must be made at approximately 10% of the system hydrostatic pressure rating to identify potential problems prior to testing at higher pressures.



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