

JARECKI VALVES INSTALLATION AND MAINTENANCE MANUAL

2000 SERIES FLANGED ENDS UNI-DIRECTIONAL METAL SEATED BALL VALVE



INSTALLATION

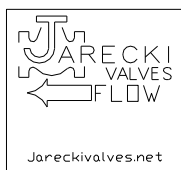
Before Installation, the piping system should be cleaned and flushed, to prevent damage to the seats. Next, ensure that the valve has not been damaged during shipment. All flange protectors and shipping materials must be removed to allow a thorough inspection.

If the valve has a V Port configuration, install with V on the downstream side.

The Limiting Stops on the Actuator are Factory Set. Operate the valve operator to ensure that the operator has not been damaged. There should be no hesitation or jerkiness to the stem movement.

The valve may be installed into the piping system with the valve stem oriented either vertically or horizontally depending on the piping arrangement. If the valve is installed horizontally, it is strongly recommended that the actuator be pointing upwards and not sideways. When hoisting the valve into position, **never pick up the valve by the operator.**

CAUTION: Pressure orientation is important. The valve must be installed with the flow arrow on the side of the body pointing towards the downstream side.



OPERATION

Jarecki 2000 Series Ball Valves are primarily used as shut-off valves. If the valves are to be used for control, it is strongly recommended that the factory be contacted.

If the valve is lever operated, turn the lever clockwise to close and counterclockwise to open. If the lever is perpendicular to the flow, the valve is closed. There are stops set on the valve for both the open and closed positions.

If the valve is operated by an actuator, the instruction manual for this equipment will need to be reviewed for proper operation.

MAINTENANCE

This valve does not require lubrication or maintenance. If a leak does occur at the body and tailpiece connection, tighten the body bolts to the specified torque value in Table 1. If the leaking persists the valve will need to be repaired.

No scheduled maintenance on the stem packing is required, however, regular inspection on the gland bolts is recommended. During maintenance, the gland bolting must be tightened uniformly to eliminate any extreme rocking of the compression plate. Care must be taken not to over torque the gland bolts. The gland bolting should be tightened just enough to stop the packing leak. This can be accomplished with the valve in line. It is imperative that the compression plate (13) stay level at all times. After the gland bolts have been tightened, and leaking persists, the stem packing should be changed. **There should be no pressure on the valve when the stem packing is changed.**

DISASSEMBLY

Jarecki Industries recommends returning metal seated valves to our factory concerning major repairs. A spare parts kit can be purchased for this valve. If

valve disassembly becomes necessary in the field, proceed as follows:

1. Before removing the valve from the line be certain the line pressure in the piping system has been depleted.
2. Cycle the valve while it is still in the line to remove any possible trapped pressure within the body cavity. Review Figure 1.
3. Remove valve from the line, setting the valve down horizontally. The valve should be supported in some fashion to prevent it from tipping over.
4. Match mark position of all mating parts prior to removal.
5. Mark the actuation with the serial number listed on the valve tag. Remove actuator assembly. With a wrench, stroke the valve so that it is in the open position.
6. Unfasten the gland nut (16). Take out the compression plate (13), Belleville washers (17), and compression ring (11).
7. Loosen the body nuts (5) in a star fashion to keep even load on the nuts.
8. Separate the tailpiece from the body.
9. From the valve body (4), remove the ball (1), valve stem (9), and thrust washer (10).
10. Next, remove the seat (2A), the seat spring (3C).
11. From the valve tailpiece (5), remove the sealing seat (2B) and the seat seals (3A).
12. Dislodge and extract the stem packing (14B) When removing packing, a nonmetallic pick should be used to prevent possible scratching of the packing box sealing surface.
13. Inspect all components and repair or replace as required. All seals should be replaced once disassembled.

ASSEMBLY

1. Thoroughly clean valve body and components with a solvent. Review Figure 1.
2. Place body (4) so that the body cavity is facing up. Place cardboard or some other material under the weld end in order to protect the area. The valve should be supported in some fashion to prevent it from tipping over. Then, insert the seat spring (3C) into the body seat cavity. Carefully place the spring seat ring (2A) into the body seat cavity and press it into place.
3. Insert the thrust washer (10), followed by the stem (9). Next, insert the ball (1) into the body cavity.
4. Place the tailpiece (5) so that the seat cavity is facing up. Place cardboard or some other material under the weld end in order to protect the area. Place the seat seal (3A) in the tailpiece. Next, insert the seat ring (2B) into the tail piece and press into place.
5. Insert the tailpiece into the valve body. Take care not to let the seat ring fall out of the seat pocket while this is being done.
6. Insert the Jarecki supplied stem packing (14B) into the packing box by installing each packing ring individually, and carefully pushing each ring into place with the compression ring (11).
7. Install the compression ring (11), compression plate (13), gland nuts (16) and Belleville washers (17) as shown in figure 1. Snug nuts down only finger tight at this point.
8. Cycle the valve to ensure it is functioning properly. There should be no sticking or jerking motion.
9. Tighten the body nuts (8) in a star pattern evenly so as not to tip the tailpiece. Torque values listed in Table 1.
10. Tighten the gland nut (16) just until the Belleville washers become flat. It is very important not to over torque the stem packing.
11. Carefully attach the actuation assembly taking care not to drive the stem down into the valve. Operate valve to ensure it is functioning properly.

FIGURE 1

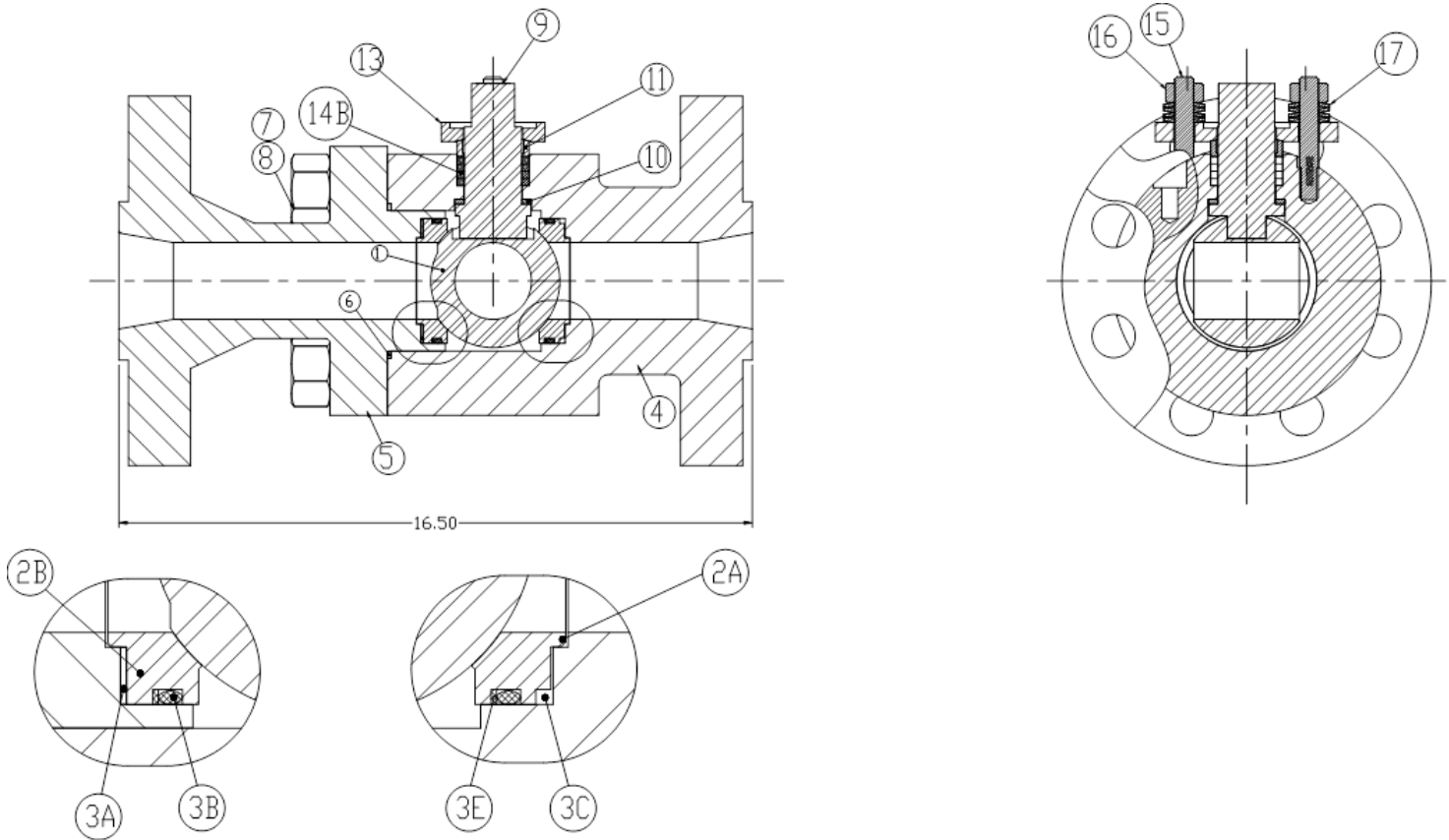


TABLE 1

BOLT SIZE	TORQUE FT.LBS
1/2"	50
5/8"	90
3/4"	160
7/8"	280
1"	410
1-1/8"	610
1-1/4"	850
1-3/8"	1,160
1-1/2"	1,530
1-5/8"	1,970
1-3/4"	2,490
1-7/8"	3,090

ITEM NO.	NAME
1	BALL
2	SEALING SEAT
2a	SPRING SEAT
3a	SEAT SEAL
3b	N/A
3c	SPRING
3e	N/A
4	BODY
5	TAILPIECE
6	BODY GASKET
7	BODY STUD
8	BODY NUT
9	STEM
10	THRUST WASHER
11	COMPRESSION RING
13	COMPRESSION PLATE
14	STEM PACKING
15	GLAND STUD
16	GLAND NUT
17	BELLEVILLE WASHER