

JARECKI VALVES INSTALLATION AND MAINTENANCE MANUAL

HSVP SERIES TRUNNION MOUNTED 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. Reinstall flange protectors until the valve is ready to be installed.

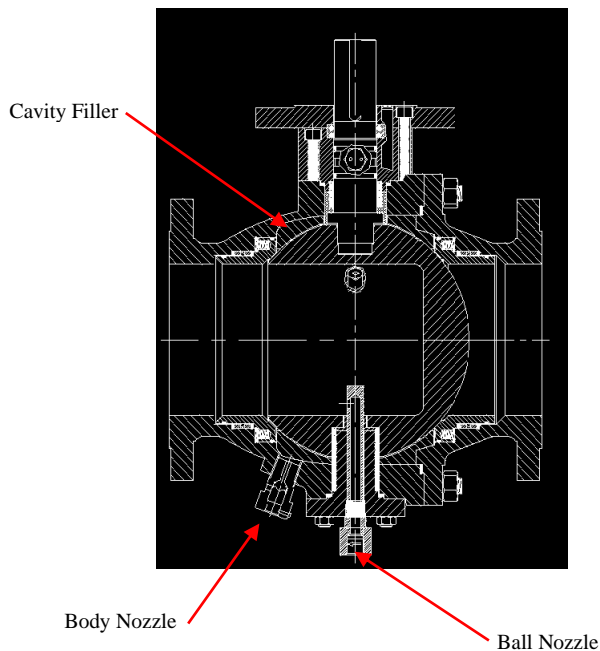
The Limiting Stops are factory set. Operate the valve to ensure that the valve has not been damaged in shipment.

Never pick up the valve by the Actuator.

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.



The valve is equipped with three cleaning nozzles designed to blow the media out of the valve body.



The body nozzle is available to flush sand and other media from the body cavity. The TFE cavity filler fills up most of the void in the body cavity so there is very little area to flush out. It is recommended that this port be used to flush the body once per month. To flush, first remove the set screw that is located in the Body nozzle with an allen wrench. Water or air can than be connected to perform the flush.

The ball nozzle is the main cleaning nozzle for the valve. This nozzle should be activated on every dump to help ensure most media is blown from the valve. It is recommended that some pressure be kept in the nozzle during the fill to prevent media from clogging the nozzle tip.

The ball nozzle must be facing opposite the direction as the flow arrow on the body name plate.

OPERATION

The Jarecki HSVP Series Ball Valves turns 180 degrees. There is no stop on the valve itself. The stop is set by the actuation.

During the fill the media will fall into the ball pocket. It is recommended that some pressure be kept in the body nozzle during the fill to prevent media from clogging the nozzle tip.

Activate the valve operator to cycle the valve. The stops on the operator should be set to turn 180 degrees

During the dump operation, media will fall out of the valve. The ball nozzle is the main cleaning nozzle for the valve. This nozzle should be activated on every dump to help ensure most media is blown from the valve. The Ball Nozzles purpose is to blow into the ball pocket and help force out the media.

MAINTENANCE

This valve does not require lubrication or maintenance. However, valve sealant may be injected in the seat injection port (32) if a leak in the valve seats is detected. This is a temporary fix.

No scheduled maintenance on the stem packing is required. However, if a stem leakage does occur, sealant may be injected in the stem seal area through the (33) emergency sealant injection. This part can also act as a drain plug. If the stem packing is to be replaced, **there must be no pressure in the valve or in the line during this repair.**

1. Remove the actuation from the valve.
2. Remove the actuation coupler from the stem.
3. Remove the bonnet (20) from the valve by loosening and removing the socket head screws (25). **Never remove the bonnet (20) when there is pressure in the line.** Note: the stem is blow-out proof and will not exit through the bonnet area.
4. Remove old packing a replace with a new set purchased from Jarecki Valves.

If a leak does occur at the body and tailpiece connection, the valve will need to be repaired.

If a leak occurs around the bonnet or the Trunnion cap, the gaskets for these will need replaced. **There should be no pressure on the valve when the gaskets are being changed.**

If internal parts, such as the seat seal, the seat insert, etc..., need replaced, the valve must be removed from line and disassembled.

DISASSEMBLY

Jarecki Valves 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. There is a pressure relief port in the base of the valve body to relieve trapped pressure. Back off the set screw slowly to relieve pressure in the valve body.
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. Put the ball in the dump position. Remove actuator assembly.
7. Place the valve with the tailpiece (5) facing up. Remove the Trunnion cap (28) and the Bonnet (20). Remove
6. Unfasten the bonnet bolts (25) and Trunnion cap screws (29).
7. Next, from the valve body, remove the Retainer Bolt (23) and the Retainer (24).
8. Next, remove the stem (9), Stem Trunnion (26), Stem Bearing (22), Trunnion (21) and Trunnion Bearing (30).
9. Separate the tailpiece (5) from the body (4).
10. From the valve body (4), remove the ball (1).
11. Next, from the valve body, remove the Body Cavity (27), Seats (3A), Seat Seals (3B) and Spring (3C).
12. Dislodge and extract the stem packing (14A, 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) and Replace all seals.

2. Place body (4) so that the body cavity is facing up. Place cardboard or some other material under the gasket area on the flange in order to protect the area. The valve should be supported in some fashion to prevent it from tipping over. Install Seat Seals (3B) in proper locations. Carefully insert the Seat (3A), (3C) into the body seat cavity.
3. Place tail (5) so that the tail cavity is facing up. Place cardboard or some other material under the gasket area on the flange in order to protect the area. Install Seat Seals (3B) in proper locations. Carefully insert the Seat (3A), (3C) into the body seat cavity.
4. Install Body side of Cavity Filler (27).
5. Insert the ball (1) into the body cavity. Line the ball stem slot up with the stem opening in the body. Note: the seat springs are pushing the ball up and off center. You cannot put the stem and the trunnion in the ball until the ball is centered.
6. Install the Tailpiece Side Cavity Filler (27). Install The Body Gasket (6).
7. Assemble the tailpiece to the valve body. Take care not to let the seat ring fall out of the seat pocket while this is being done. Insert the body studs (7). Once the body studs (7) have been installed, evenly tighten the body (4) to the tail (5) using the body nuts (8)
8. The trunnion (21) and Trunnion Bearing (30) can then be installed into the ball (1).
9. Install Stem Seals (14B). Install the Stem (9), Stem Trunnion (26), Steam Bearing (22).
10. Install Bonnet Gasket (24) and Trunnion Gasket (31).
11. Install The Stem Retainer (24) and Stem Retainer Bolts (23). Torque Stem Retainer Bolts.
12. Install Stem Packing (14A).
13. Next, the bonnet (20). Insert and lightly tighten the bonnet bolts (25) and the trunnion cap screws (29).
14. Cycle the valve to ensure it is functioning properly. There should be no sticking or jerking motion. If torque is above 200 ft.lbs then the valve has not been assembled properly.
15. Now, firmly tighten all bolting evenly and properly torque all bolts.
16. Install the Operator. Operate valve to ensure it is functioning properly and set stops.

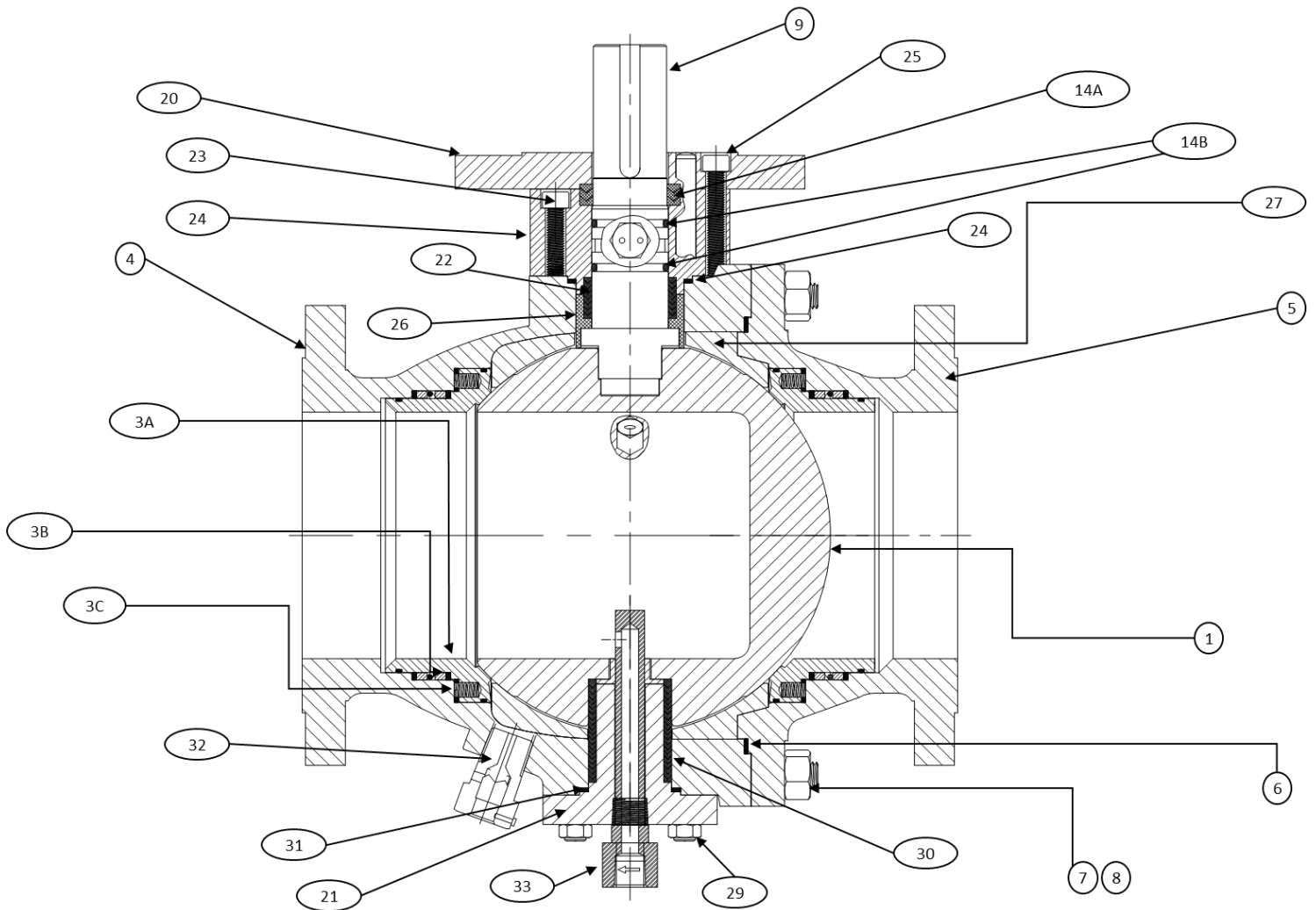


Figure 1

ITEM	DESCRIPTION
1	BALL
3A	SEAT RING
3B	SEAT SEAL
3C	SEAT SPRING
4	BODY
5	TAILPIECE
6	BODY GASKET
7	BODY STUD
8	BODY NUT
9	STEM
14A	STEM PACKING
14B	STEM SEALS
20	BONNET

ITEM	DESCRIPTION
21	TRUNNION
22	STEM BEARING
23	RETAINER BOLT
24	STEM RETAINER
25	RETAINER GASKET
26	STEM TRUNNION
27	CAVITY FILLER
29	TRUNNION PLATE BOLTS
30	TRUNNION BEARING
31	TRUNNION GASKET
32	BODY NOZZLE
33	BALL NOZZLE