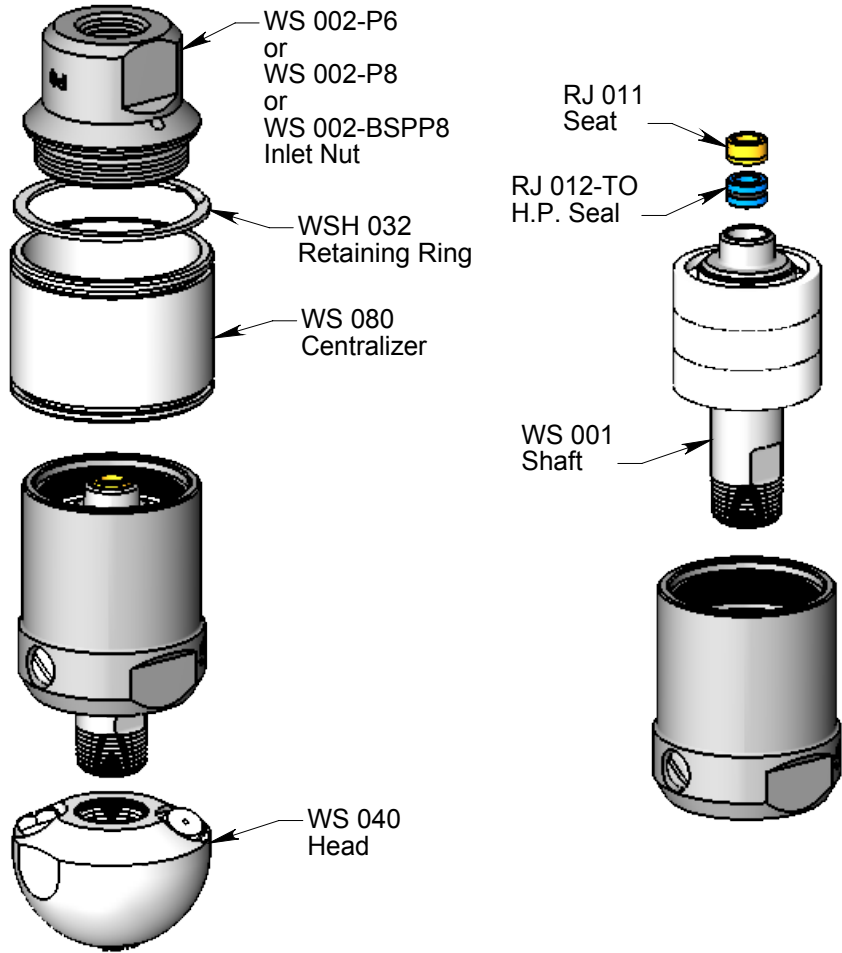


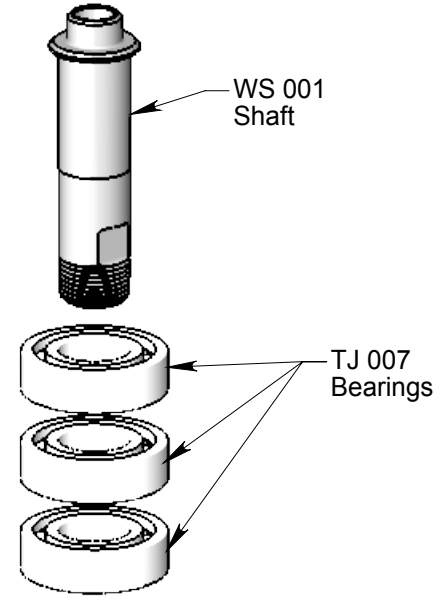
StoneAge® WARTHOG® Rotary Sewer Nozzle (WS-P6, WS-P8, WS-BSPP8)

Disassembly:

1. Remove the Head (WS 040) from the Shaft.
2. Unscrew the Inlet Nut (WS 002) from the Body.
3. Remove the Centralizer (WS 080) and Retaining Ring (WSH 032).
4. Remove the Seat (RJ 011) and H.P. Seal (RJ 012-TO) from the Shaft bore.
5. Push the Shaft (WS 001) with bearings out of Body.

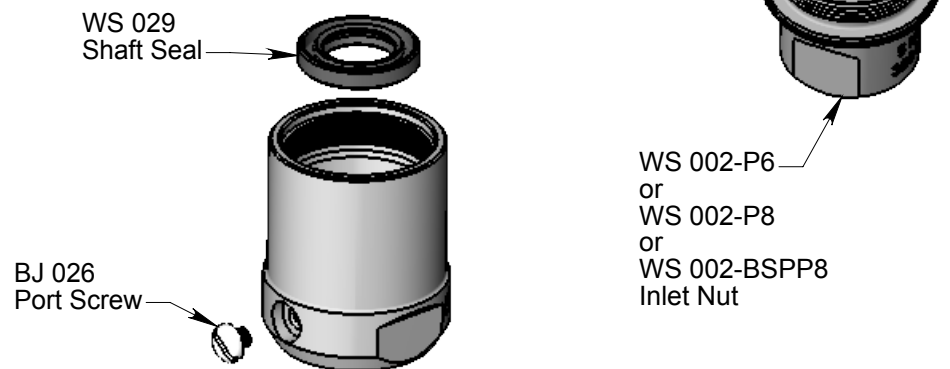


6. Press Shaft (WS 001) out of Bearings (TJ 007). If bearings feel rough to turn, replace them.



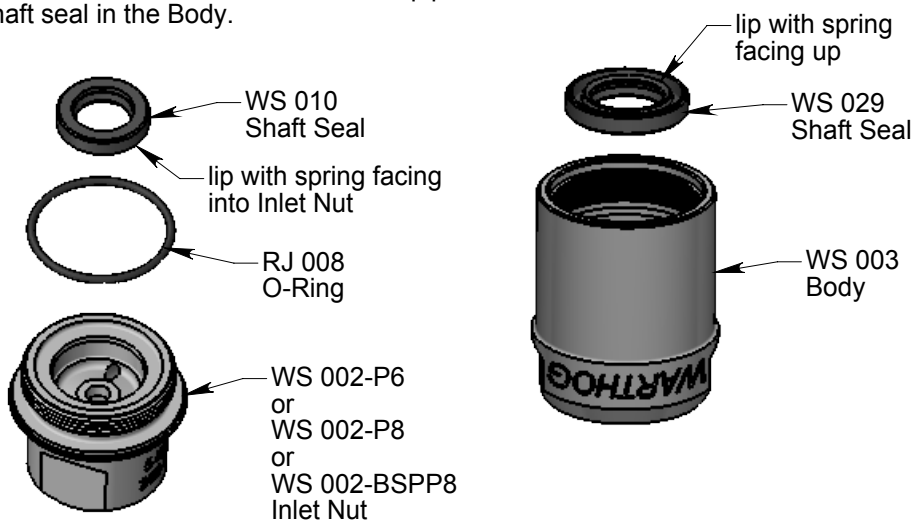
7. If Shaft Seals (WS 029, WS 010) in Body and Inlet Nut appear damaged, remove them.

8. Remove Port Screw (BJ 026) from Body. Remove O-Ring (RJ 008) from Inlet Nut if it is damaged.



Assembly:

1. Install Shaft Seal (WS 010) in Inlet Nut (WS 002) oriented as shown. Place O-Ring (RJ 008) over threads of Inlet Nut.
2. Install Shaft Seal (WS 029) into Body, oriented as shown.
3. Press the Bearings (TJ 007) one at a time onto the Shaft. It is best to push only on the inner race of the bearing.
4. Push Shaft/bearing stackup into Body. It is easiest to turn the shaft clockwise to thread the pipe threads thru the shaft seal in the Body.



5. Slide Centralizer (WS 080) over the Body.

6. Apply grease to the H.P. Seal (RJ 012-TO) and insert seal into Shaft bore, until flush with end of shaft.

7. Place the Seat (RJ 011) onto the Seal, with the flat face against the seal. (See detail in the Maintenance Section). Push both Seat and Seal a little way into the Shaft bore.

8. Place the Retaining Ring (WSH 032) against the shoulder past the threads of the Inlet Nut and thread into Body, tighten to 30 ft-lb.

9. Fill tool with syringe as shown in the Maintenance Section; install Port Screw (BJ 026).

