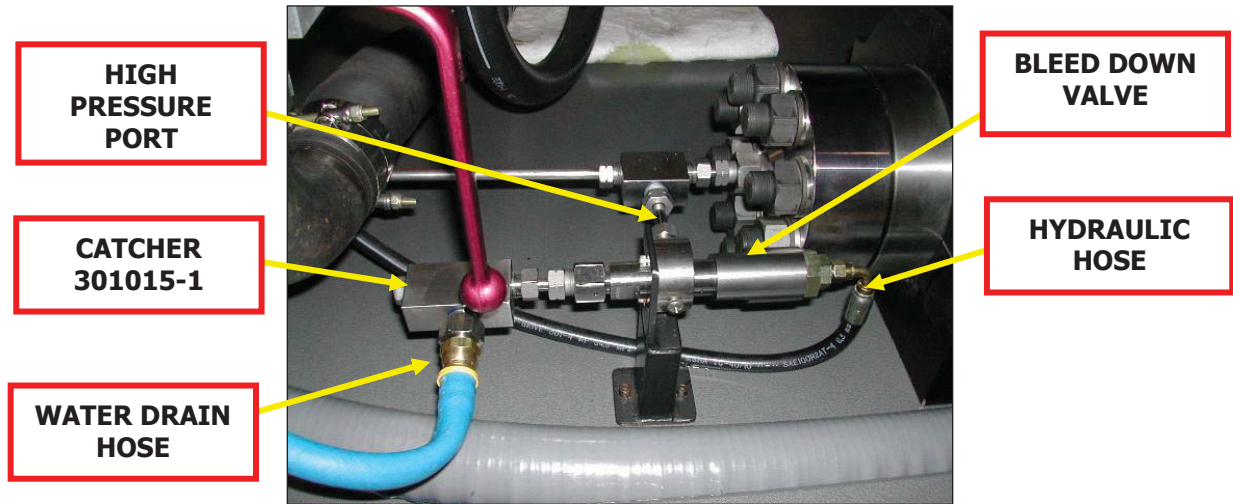


### 5. 11. Bleed-Down Valve Service [ HBDV ]

#### 5.11.1 Hydraulic Bleed Down Valve Service [HBDV]

This service procedure is for the Hydraulic Bleed-Down Valve [P/N 391013-1]. Before performing this service procedure, you will need to purchase the [P/N 392008-1] repair kit.

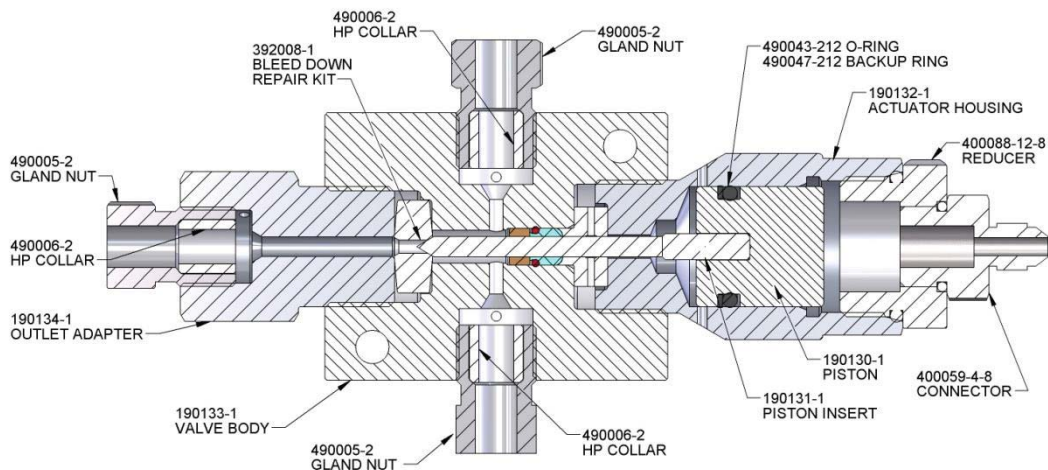


**HIGH-PRESSURE BLEED-DOWN VALVE  
[ HBDV ]**

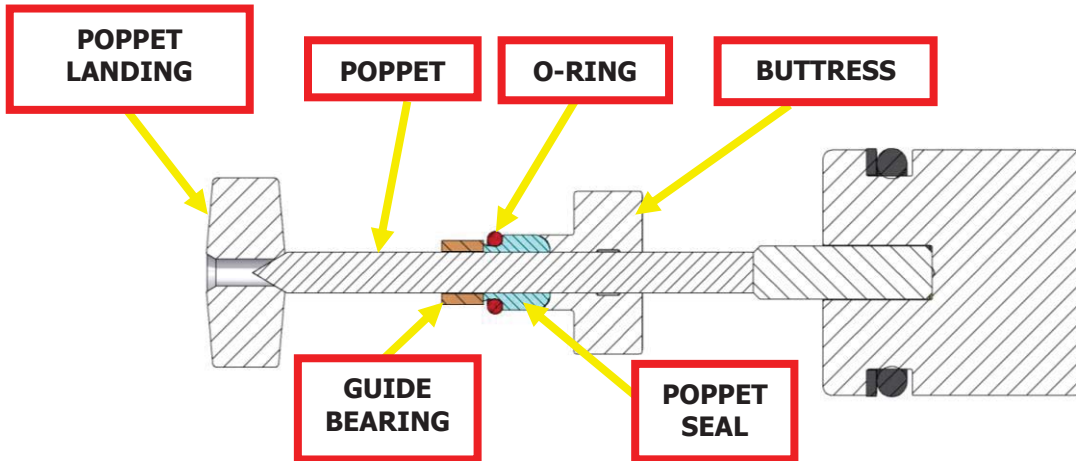


**Place the main electrical disconnect in the OFF position and bleed down all high-pressure lines. Place an “Out of Service” tag on the main electrical disconnect and lock it out. Failure to do so may result in damage to equipment or injury to personnel.**

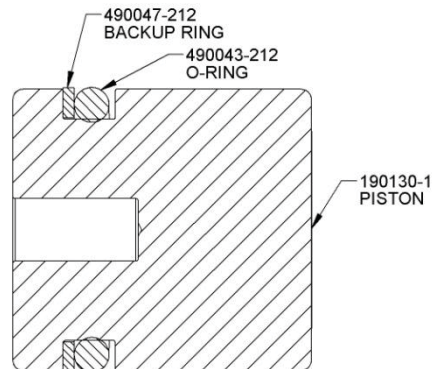
1. Shut down the system.
2. Remove the hydraulic hose from the oil port of the bleed-down valve.
3. Remove the gland nut connecting the water drain tubing to the bleed-down valve.
4. Remove the gland nut from the collar at the high-pressure port of the bleed-down valve.
5. Place the bleed-down valve on a clean workbench.
6. Separate the actuator housing [190132-1] from the high-pressure valve body [190133-1].



7. Remove the high-pressure gland nuts [490005-2] and collars [490006-2] from the high-pressure valve assembly.
8. Remove the adapter [190134-1] from the high-pressure valve body 190133-1].
9. Remove and discard the poppet landing [190084-1] from the high-pressure valve body.



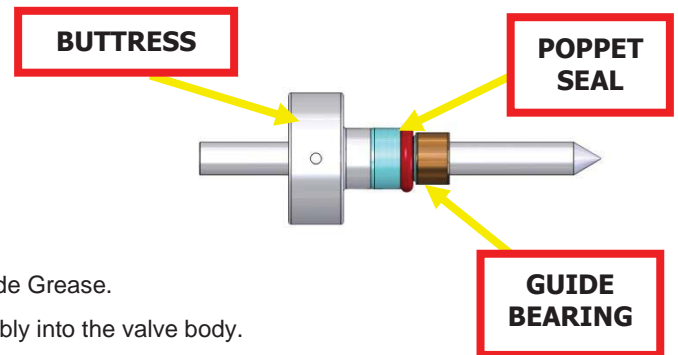
10. Remove and discard the high pressure seal assembly [Poppet [190083-1], Poppet Seal [190082-1], O-ring [490042-010], and Buttress [190081-1] by inserting a plastic or wood dowel and pushing on the high-pressure Poppet [190083-1].
11. Push the piston insert [190131-1] and piston [190130-1] out of the actuator body through the oil port by using a soft-faced ¼" dowel" [or similar item].
12. Remove and discard the O-ring [490043-212] and backup ring [490047-212] from the piston.
13. Clean the remaining parts with an ultrasonic cleaner. Check the parts for nicks and burrs. Replace as necessary.
14. Lubricate a new O-ring, backup ring and the inner surface of the actuator body with Parker Super O-Lube [P/N 400001-1] or equivalent.
15. Install the new O-ring and backup ring on the piston as shown. [dished side of backup O-ring faces O-ring] Install the piston insert and the piston assembly into the actuator body until seated.



**NOTE: Make sure the piston is aligned with the actuator body to prevent damage to the O-ring**

16. Lubricate the poppet, poppet seal, guide bearing, O-ring, and buttress with White Food Grade Grease.

17. Install the O-ring onto the high pressure seal.
18. Install the new guide bearing onto the poppet.
19. Install the poppet seal assembly onto poppet.
20. Install the buttress onto the poppet.
21. Lubricate the high-pressure stem with White Food Grade Grease.
22. Use a plastic or wood dowel to push the poppet assembly into the valve body.
23. Install the poppet landing into the high-pressure body.
24. Install the outer adapter. Torque to 125 ft-lbs [169 Nm]
25. Connect the high-pressure valve assembly to the actuator body.



**NOTE:** Remove the 4" high-pressure nipple from the tee and install on the collar to help align valve and collar. Then install the nipple in the tee.

26. Reinstall the bleed-down valve in the machine by attaching the gland nut to the high-pressure collar at the high pressure port of the valve. Torque the gland to 35 ft-lbs [48 Nm].
27. Install the gland nut connecting the water drain tubing to the bleed-down valve.
28. Reattach the hydraulic hose to the oil port of the bleed-down valve.
29. Place the intensifier pump in operation and check for water or hydraulic oil leaks. Correct leaks as necessary.