

Installation Instructions

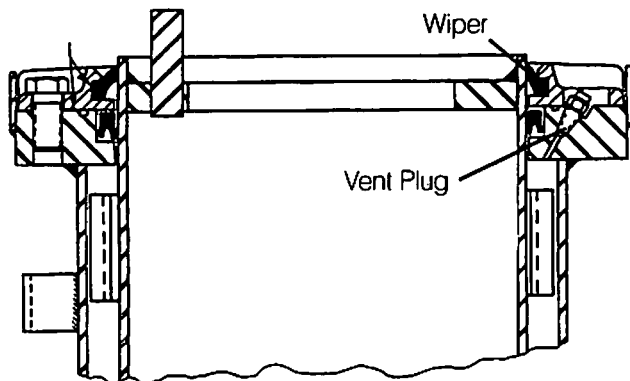
For all Gilbarco/Manitowoc In-Ground Lifts

BH-1717, BH-1717LS, BH-1707 for 7-1/2" Plungers

BH-1715, BH-1715LS for 8-1/2" Plungers

BH-1718, BH-1722, BH-1716, BH-1716LS, BH-1727, BH-1727S, BH-1718LS, BH-1785 for 10-5/8" Plungers

1. Any damage at all to the sealing edge of the seal will cause a leak. Take extreme care to avoid damaging the seal edge.
2. Thoroughly inspect plunger for any nicks or burrs. All nicks or burrs that can be felt must be polished out with #360 emery paper.
3. Remove Superstructure
4. Thoroughly clean the area around the top of the plunger and seal ring cover.
5. **WARNING:** Check to be sure that all air/oil pressure is exhausted from the cylinder. Wire the air valve in the exhaust position.
6. Remove the hex head bolts securing the seal ring cover to the bolt ring and remove the seal ring cover.
7. Thoroughly clean the bolt ring area and the underside of the seal ring cover. Take special care to remove any grit, sand or water from these areas to prevent damage to the plunger or new seal.
8. To remove the old seal, insert a dull screwdriver between the bolt ring and the seal and pull the seal out with a lifting motion. (Be sure the screwdriver or tool has no sharp edges or corners to damage the bolt ring seal cavity. Damage to the seal cavity can cause recurring leaking.)



MM Ring Style



LS Style with Fabric Reinforced U Cup



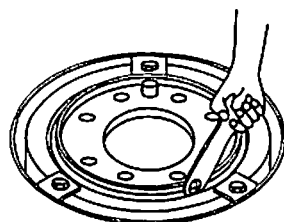
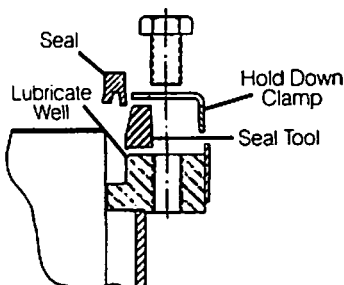
Ribbed Rubber U Cup Style



Polyurethane U Cup Style

9. With clean rag, thoroughly clean the seal cavity. Again, take special care to insure that no grit or foreign material falls down in the cylinder or seal area.
10. Inspect the bolt ring wall of the seal cavity for scratches or nicks. Remove any scratches from this area with #360 emery paper or suitable substitute. Take care not to damage the plunger while doing this.
11. Before installing the new seal, check to be sure there are no seal support rings in the seal cavity.
12. Lubricate plunger, seal and installation tool with STP, or similar product.
13. If using S V I offered installation tool, inspect to insure there are no nicks or burrs which might damage or cut the seal in installation.
14. If using tool, place on bolt ring with chamfer on bottom of tool engaging chamfer on bolt ring.
15. Insert seal over plunger taking care not to scrape the inner seal edge over the sharp plunger edge.

Installation Using Installation Tool



Using Flat Edge to work seal into cavity.

continued on other side

continued from other side

16. Start inserting seal all around the plunger and continue pressing seal down a little at a time, working around it several times. The seal may be pressed in with the rounded edge of wrench or similar object. If the seal is tapped in be sure that the drift has no sharp points or rough edges which may damage the seal.

If top of seal does not come flush (after insertion) with cylinder bolt ring, remove seal. Go back to step 11, checking again for seal support rings. If seal is not flush with the cylinder bolt ring the seal ring cover will be damaged when tightening cover bolts.

17. Be sure the plunger and seal installation tools are not nicked or marred. Remove tool.
18. The seal cover is fitted with a synthetic rubber wiper which should be replaced at the time the seal is replaced. Both the seal cover and the wiper should be thoroughly cleaned, and "blown out" before reassembling.

Make certain that wiper is clean. Apply bead of non-hardening gasket sealant (Permatex No. 2 or equivalent), or heavy grease on outside diameter of wiper. Insert wiper into seal cover, pressing wiper into recess.

19. Important: Before replacing seal cover pour STP or similar lubricant (Not grease) on top of seal all around plunger. This will prevent lift "chattering" during initial operation and prevent lift from sticking when unloaded. If lift does not raise and lower smoothly, add Metholardate to the oil.
20. Rotate Seal Ring Cover until cored hole, lines up with vent plug, and fit four cover bolts finger tight. Gradually tighten bolts, alternately in opposite quadrants, being careful to maintain central location.
21. Raise the plunger high enough to attach superstructure. On models having a pilot pin welded to the plunger bolt ring, align the pin with the proper hole in the superstructure. DO NOT elevate the plunger to or near top of stroke without the Automatic Lock Leg attached to the superstructure.
22. Vent all air from the lift either by the plug or the slotted vent screw provided. Check oil level in the oil tank on full hydraulic lift or by use of the dip stick attached to the plug located in the center of the upper bolting ring of the plunger on semi-hydraulic lifts. Refill as necessary.