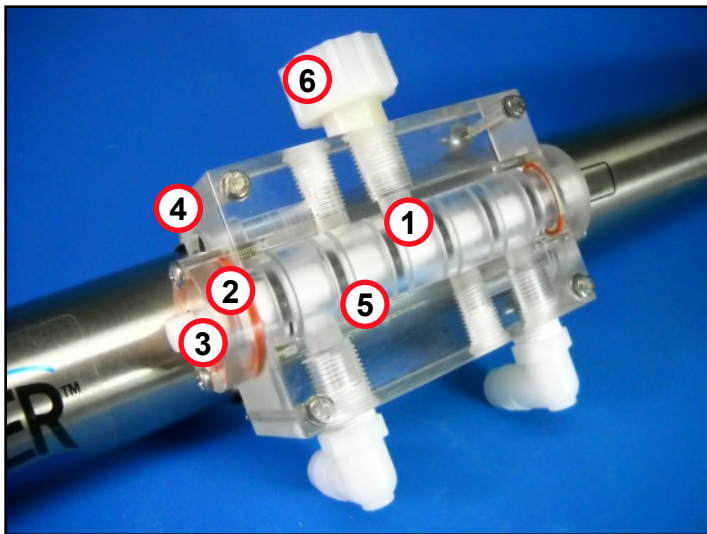


About High Lifter O-Rings

There are 9 kinds of o-rings in the High Lifter. These are available in 10-1310 O-Ring Assortment for 4.5:1 Pump, or 10-1312, O-Ring Assortment for 9:1 Pump. There is only one kind of o-ring that is replaced in a rebuild, the Spool Valve O-Ring. Most of the o-rings don't need replacing unless there are visible leaks from the pump.

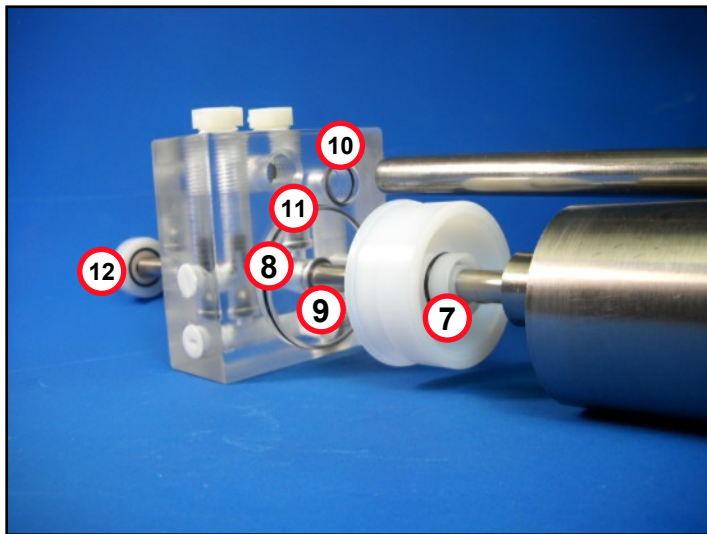
The O-Ring Kits are not rebuild kits because they don't have any pistons in them. Rebuild Kits with pistons are available from High Lifter Pump Service.

Put a little Silicone Grease on all the o-rings to improve sealing and make installation easier, except don't use it on the Spool Valve O-Rings, it makes them harder to install.



This view shows the following o-rings and one rubber washer:

1. Spool Valve O-Ring, qty 6, 10-1327, Standard, or 10-1332, Heavy Duty. These o-rings should be replaced at every rebuild.
2. Valve End Cap O-Ring, qty 2, 10-1331. These last for decades.
3. Valve Button O-Ring, qty 2, 10-1337. These wear out after a while, causing nuisance leaks which don't usually affect the operation of the pump.
4. Comm Tube O-Ring, qty 2 on the Valve Body, (also one on each Head), 10-1347. These get stiff after 10 years or so and cause nuisance leaks.
5. Pilot Hole O-Rings, qty 3, 10-1313. Never replace these, they last for the life of the pump and are very difficult to replace.
6. Garden Hose Washer. If it goes missing, a lot of water sprays out. Sometimes people try to fix the problem with teflon tape and overtightening the fitting. Just replace the washer.



This view shows the following o-rings:

7. Low Pressure Piston O-Ring, qty 2, 10-1369, 4.5:1 model, or 10-1371, 9:1 Model. Sometimes these pop or break. They are included with all rebuild kits. If it breaks, the pump loses pressure.
8. Head O-Ring qty 2, 10-1355. Sometimes these snap if the Head is carelessly shoved into the Barrel. Major leaks result.
9. Central Tube O-Ring, qty 2, 10-1353. These very rarely wear out, but when they do, the pump loses pressure.
10. Comm Tube O-Ring, qty 1 per Head. 10-1347. If they get stiff, it causes nuisance leaks.
11. Check Valve O-Rings, qty 2 per Head. These last for a very long time. Only replace if there is a problem with the Check Valves.
12. End Washer O-Rings, qty 2, 10-1369, same size o-ring as the Low Pressure Piston 9:1 O-Ring. Older pumps don't have End Washers with o-rings, but they improve sealing in that area.

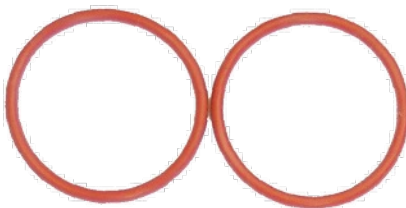
About High Lifter O-Rings, cont.

O-rings are shown actual size.



10-1313
Pilot Hole O-Ring
Qty 3

Do not use these unless there is a leak between the valve assembly and the barrel. See manual for details.



10-1331
End Cap O-Ring
Qty 2



10-1337
Button O-Ring
Qty 2



10-1345
Check Valve O-Ring
Qty 4



10-1347
Comm Tube O-Ring
Qty 4



10-1353
Central Tube O-Ring
Qty 2



10-1355
Head O-Ring
Qty 2



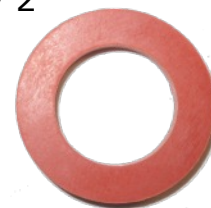
10-1369
Low Pressure Piston 4.5:1 O-Ring
Qty 2



10-1371
Low Pressure Piston 9:1 O-Ring
Qty 2



10-1332
Spool Valve EP O-Ring
Qty 6



Garden Hose Washer
Qty 1