

GS2000 First Stage Disassembly



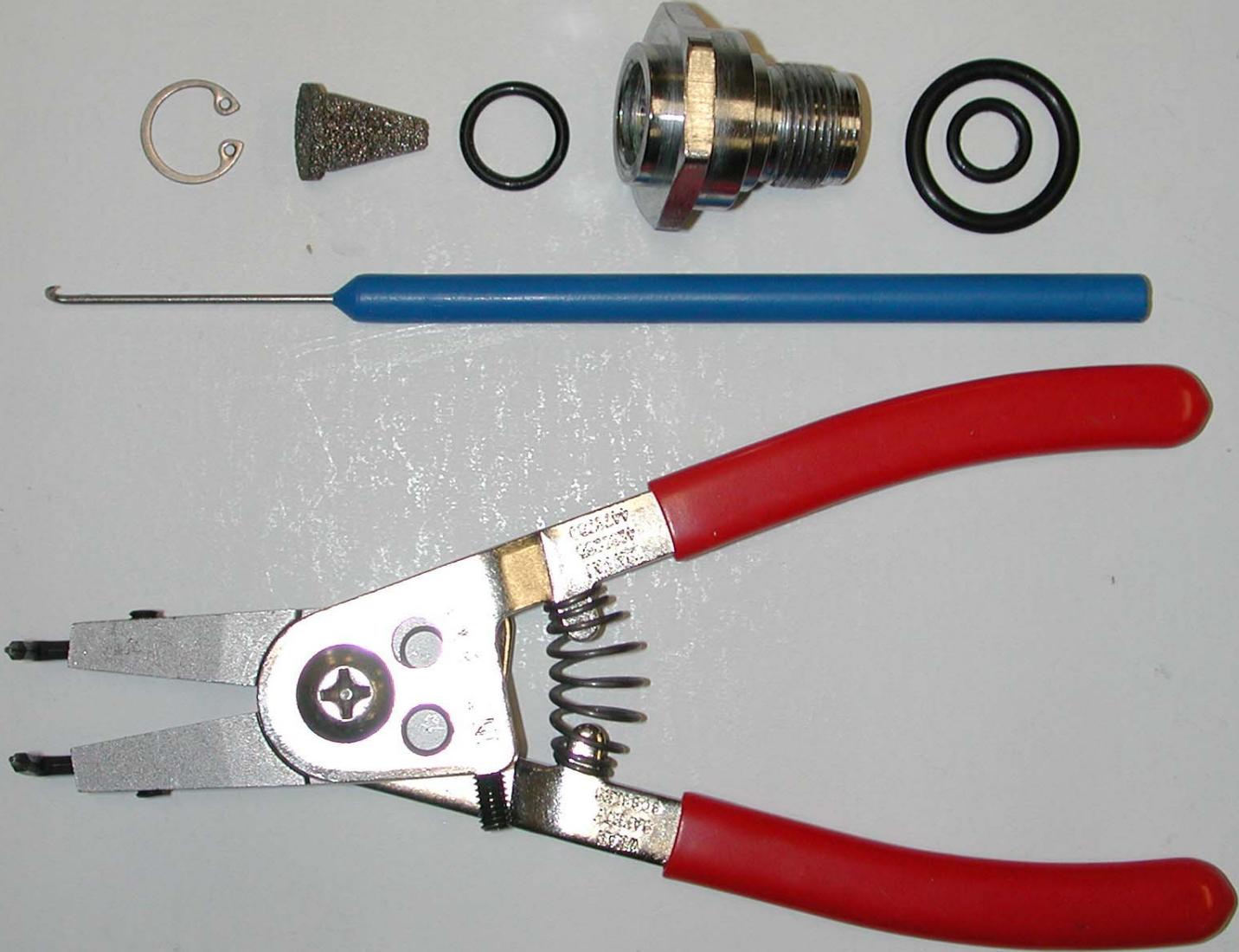
Remove & Inspect Hoses & Port Plugs



Remove Yoke & Retainer



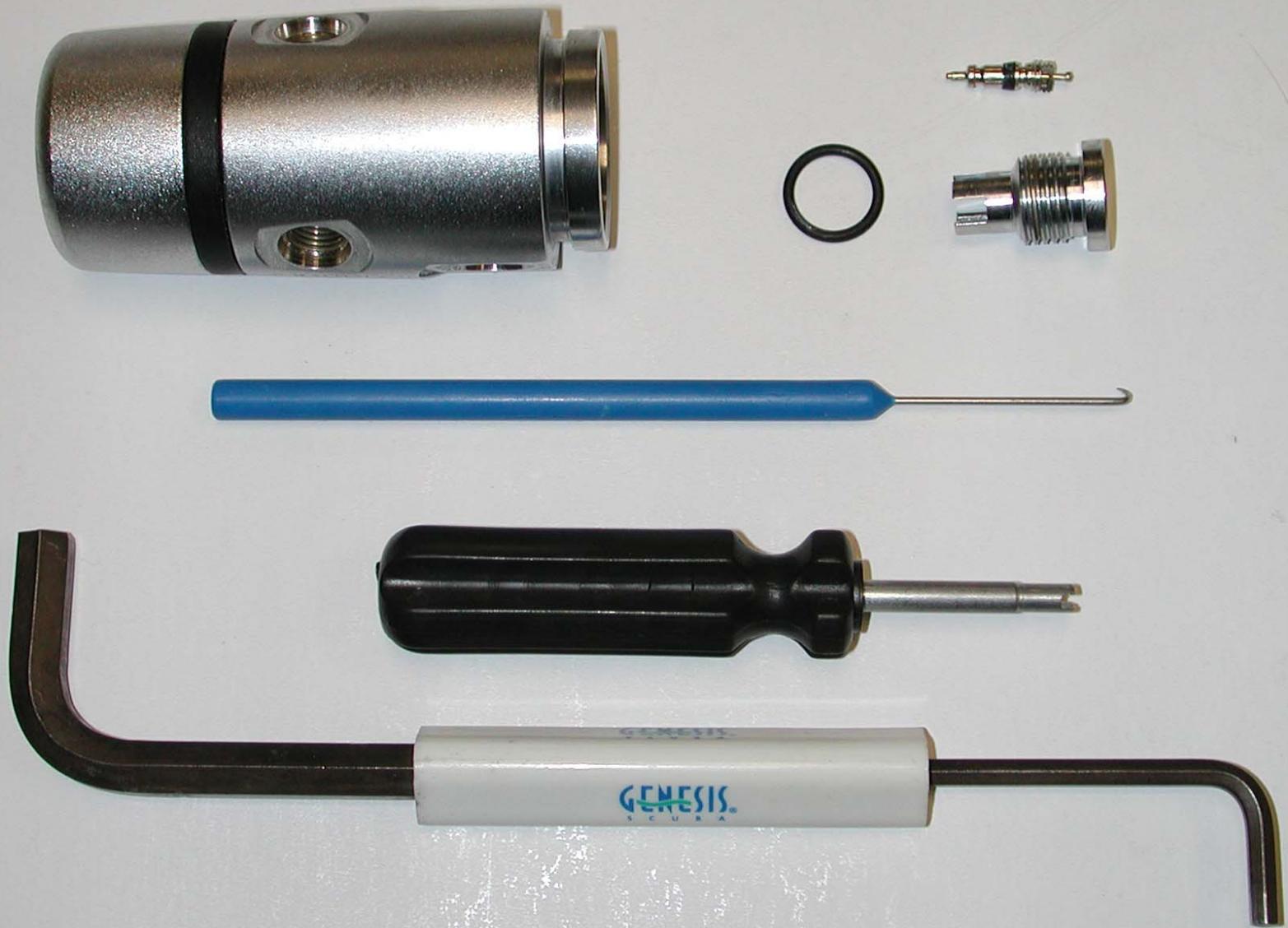
Disassemble Retainer & Filter Assembly



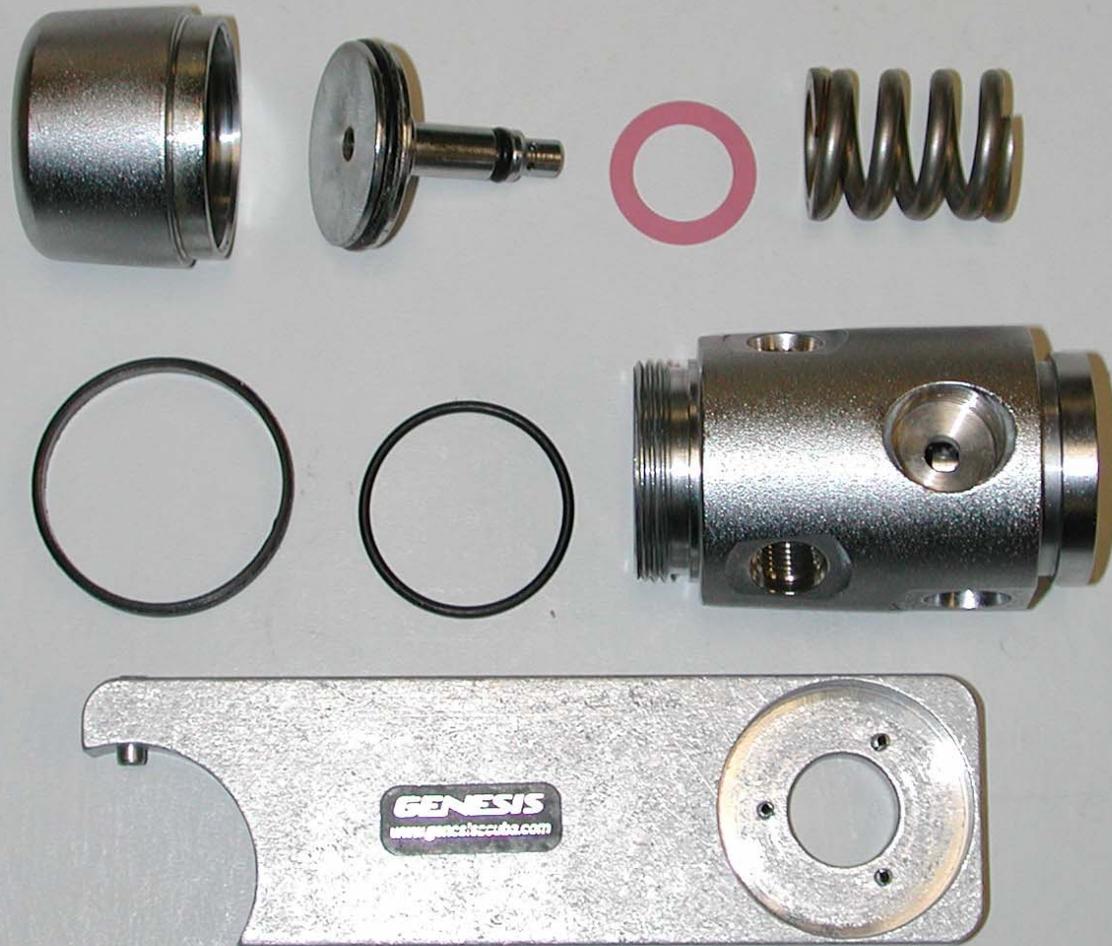
Remove Saddle, Diaphragm, & Vent Valve



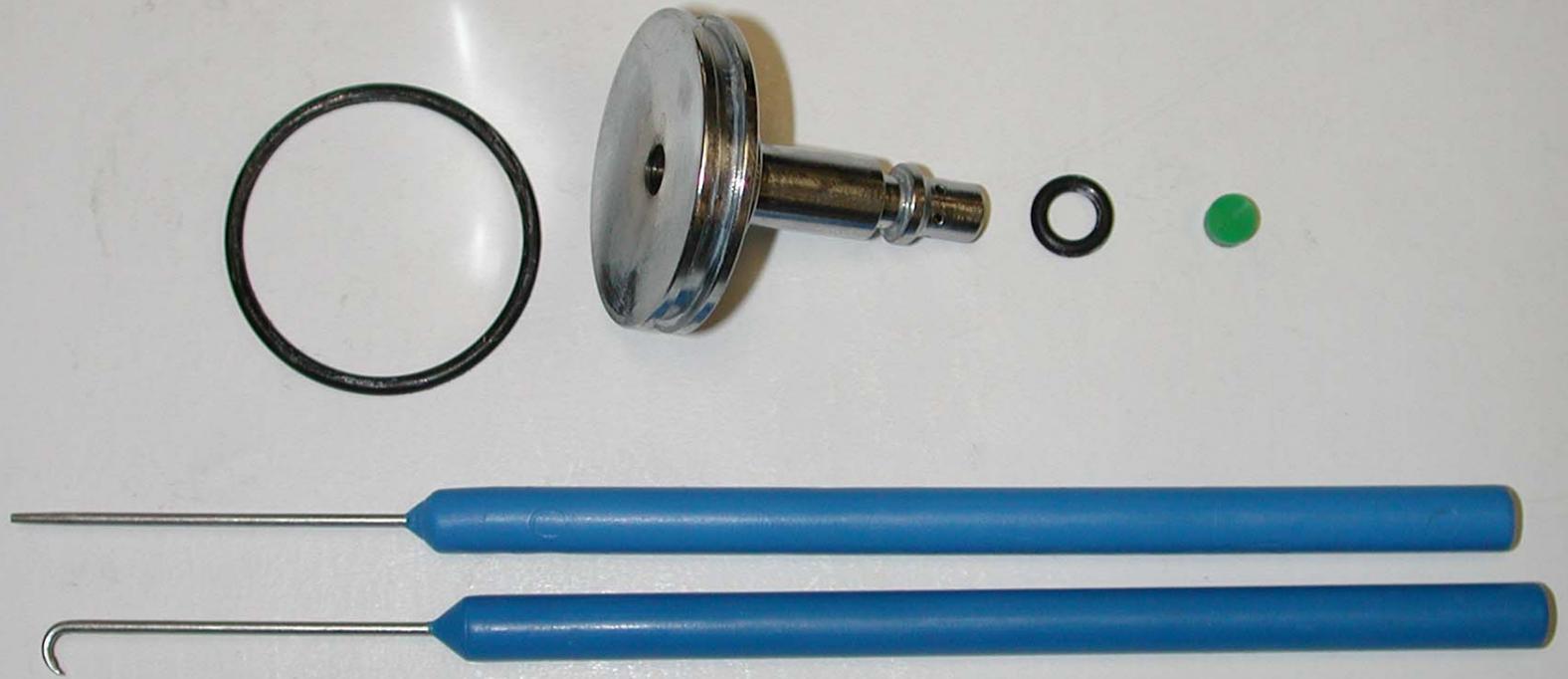
Remove Orifice Retainer & Schraeder Valve



Remove End Cap, Piston & Spring



Disassemble Piston Assembly



Remove Orifice & Belleville Washers



Inspect and clean all metal parts.

Clean the orifice assembly separately from other metal parts.

Genesis recommends an ultrasonic cleaner and Lawrence Factor Wash (LFW) cleaning solution for 5 -10 minutes.

Neutralize the cleaning solution with 1:100 baking soda / water for 1-2 minutes.

Inspect and clean all hoses, fittings and soft parts.

Use a nylon brush, mild dish soap and warm water to clean soft parts.

Replace all parts included in the service kit.

GS2000 First Stage Assembly



**Lightly lubricate all O-rings,
the internal bore of the piston
end cap, and the orifice bore.**



**Pinnacle recommends using
Christo-Lube P/N 451277**

Assemble Orifice Assembly



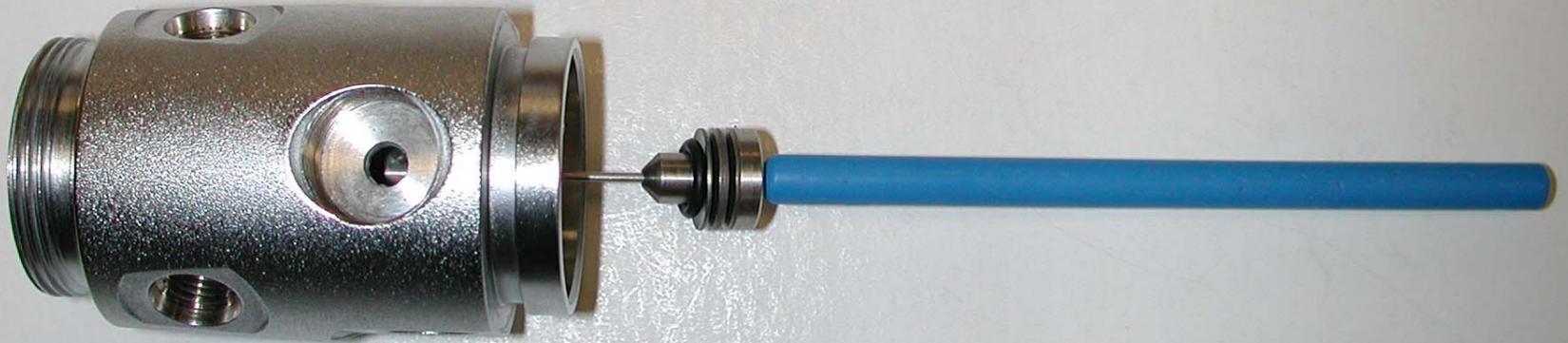
Verify The Belleville Washer Orientation



Install the Orifice Backup Ring



Install The Orifice Assembly



Install The Orifice Retainer 90 in. lbs.



Install The Schraeder Valve 6-6.5 in. lbs.



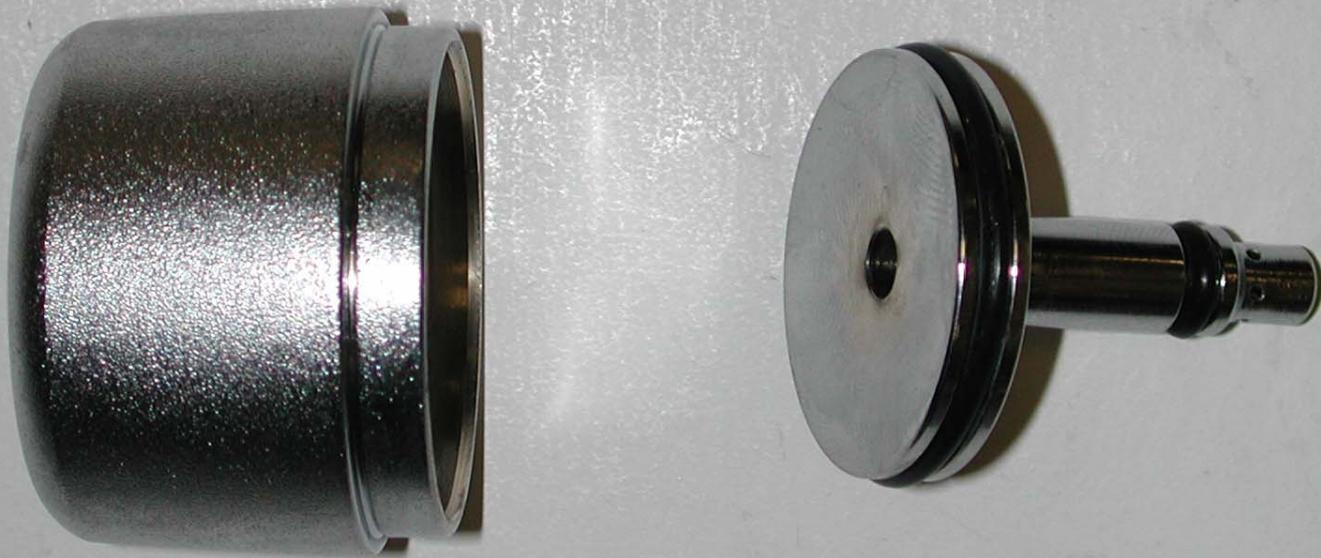
Install The Vent Valve & Diaphragm



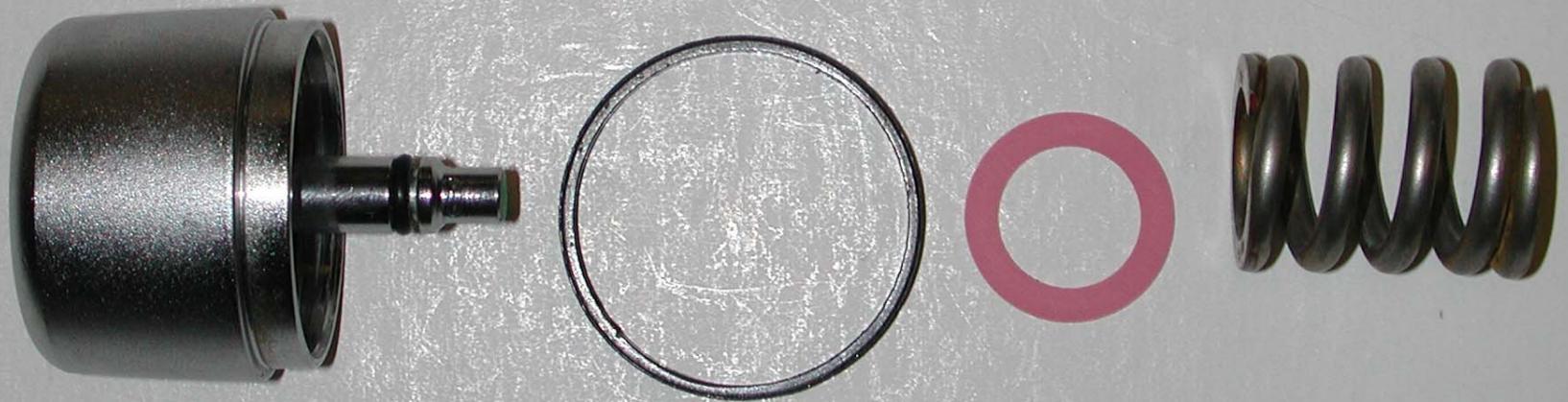
Assemble The Piston Assembly



Insert The Piston Assembly Into The End Cap



Install The Styling Ring, Any Extra Shims, And The Spring



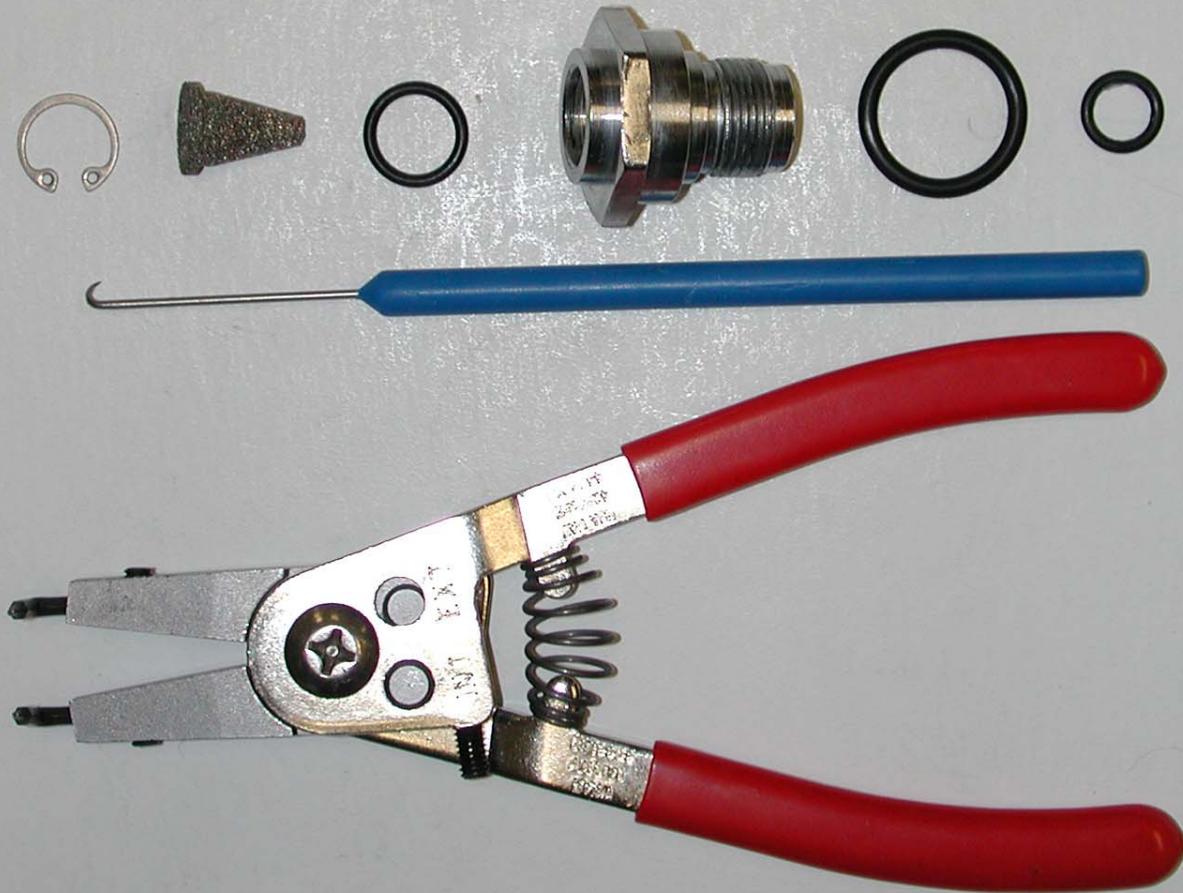
**Attach The End Cap, Piston & Spring
Assemblies To The Body
120-140 in. lbs.**



**Install The Port Plugs & O-rings
35-40 in. lbs.**



Assemble Yoke Retainer & Filter Assembly



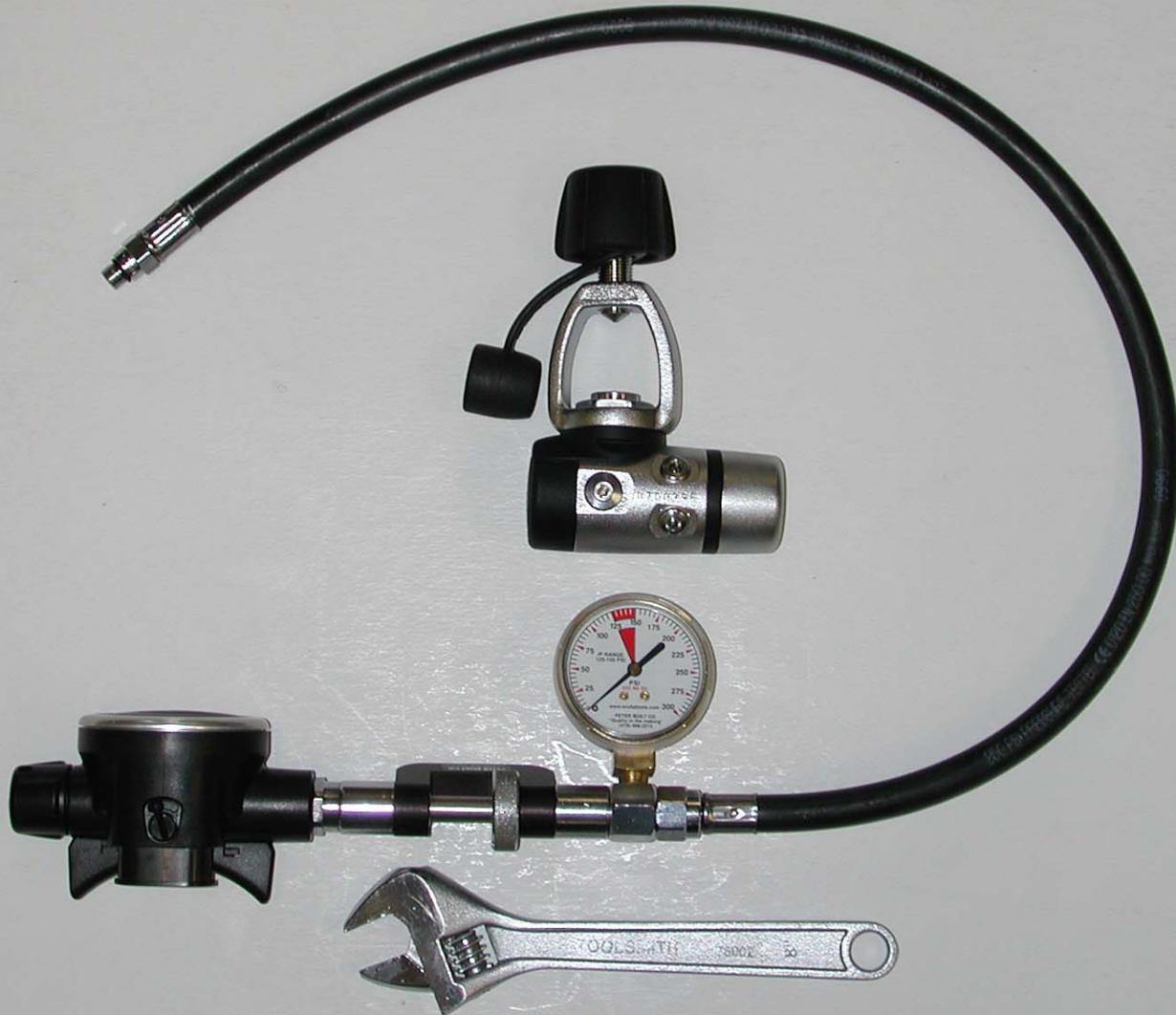
Install The Saddle, Yoke & Yoke Retainer Assembly. 23-25 ft. lbs.



Install The Handwheel & Dust Cap



Attach To An Intermediate Pressure Gauge And Relief Valve



**Test The Intermediate Pressure
140 psi \pm 5 On A Cylinder Filled To 300 psi
And Then On A Full Cylinder**



Test The Schraeder Valve



Testing Schrader Valve Activation:

- Install the first stage onto a high pressure source so that the black plastic boot is pointing upward
- Pressurize the first stage. Supply pressure is not critical, but should be greater than 500 psi. Observe the IP to be sure that it is locked up and stable.
- Pull the syringe plunger outward to approximately 3/4 stroke.
- Place the tool onto the black plastic boot so that the lip of the tool indexes with the groove in the boot.

Testing Schrader Valve Activation

- Push down "hard" on the tool to insure an airtight seal between the tool o'ring and the boot.
- Rapidly push the plunger into the syringe. This action will momentarily apply a positive pressure of 10-15 psi on the diaphragm under the boot. This diaphragm movement will depress the Schrader valve stem allowing air to flow to the ambient piston chamber. This air surge will open the piston and increase the intermediate pressure approximately 5-10 psi.

**If No Tool Is Available,
Manually Test The Schraeder Valve**

