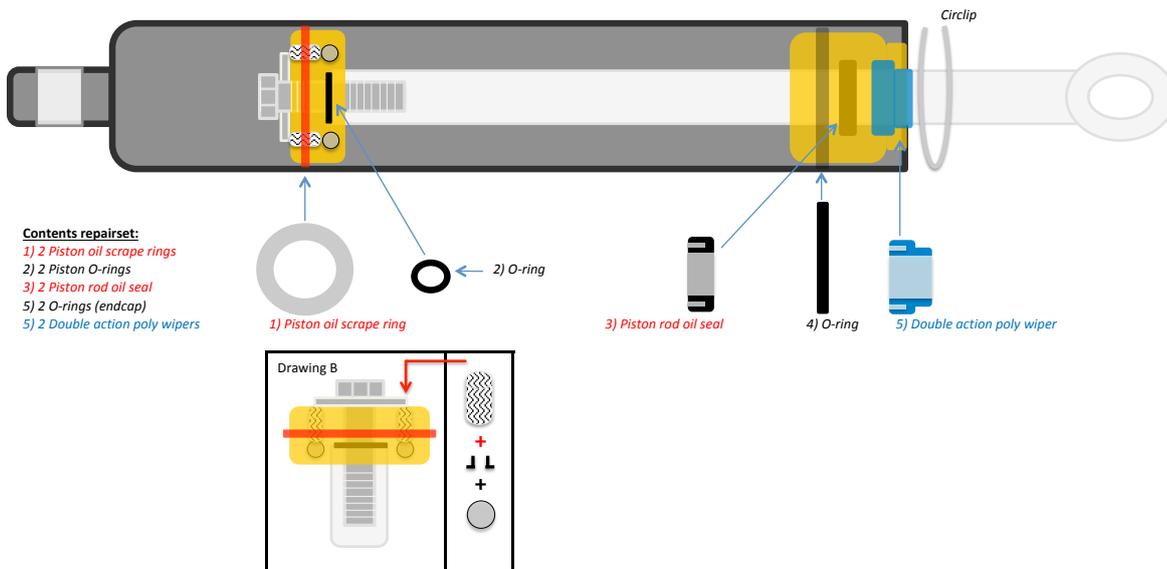


Volvo Penta power trim repairset for 2 cylinders.

This trim cylinder is at least mounted on the following drives: *SX-A, SX-B, DPS-A, DPS-B*
 Volvo Penta OEM nr.: 3889955, 21174758



Contents repairset:

- 1) 2 Piston oil scrape rings
- 2) 2 Piston O-rings
- 3) 2 Piston rod oil seal
- 5) 2 O-rings (endcap)
- 5) 2 Double action poly wipers

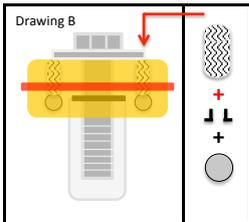
1) Piston oil scrape ring

2) O-ring

3) Piston rod oil seal

4) O-ring

5) Double action poly wiper



Instructions

1) Demounting

- a) Place the cylinder in a vice (if available) and remove the circlip. This can be a quit delicate job because the circlip is most of the time stuck caused by dirt. For cleaning the area around the circlip you can use brake cleaner or WD-40. Use a small and thin screwdriver to get under the circlip and lift it to remove the circlip. It can take some time to get it removed.
Tip: To loosen the circlip place a screwdriver to the outer end of the circlip and hit softly the screwdriver with a hammer till the circlip start turning so it will be easier to remove.
- b) Then the pistonrod should be pulled out of the cylinder. First try to pull the pistonrod out of the cylinder by hand. If this doesn't work place the upper end of the cylinder in a vice with the pistonrod faced down. Make sure that you place the vice at the end and not squeeze and harm the cylinder. Put a pin in the end of the pistonrod and hit carefully on the pin to get the pistonrod removed. Another option is to fix the pistonrod in a vice and try to get the cylinder removed by pulling it up and down by hand. Most of the time this will work if the piston is not to much stuck in the cylinder.
- c) Remove the bolt which fixes the piston to the piston rod with the piston facing up.
Take care! Inside the piston under the washer are fitted 4 springs, sping cups and rollerballs. You can easily loose them. See drawing B.
- d) When the piston is removed slide the endcap of the pistonrod.
- f) Remove oil scrape ring from the piston. Remove the O-ring on the outher side of the endcap. Remove the seals from the inner side of the endcap.
- g) Clean the endcap, piston and pistonrod and the cylinder thoroughly with scotchbrite. Do NOT use sandpaper. Any part of dirt or sand will cause leakage of the cylinder.

2) Mounting

- a) Mount the greyoil scrape ring on the outher side of the piston. Do NOT use sharp tools which might harm the oil scrape ring. Fit the small O-ring under the piston and around the threaded bolt.
- b) Mount the O-ring on the outher side of the endcap. Mount the black seal in the middle of the endcap. To get black seal into place you can use a stump tool to be sure the oil seal will not be harmed. Any overstretching or damage will make the seal worthless.
- c) Mount the poly wiper in the endcap.
Tip: To get the O-rings, oil scrape rings and poly wiper into place you can use some ATF-oil to make the job easier.
- d) Put some ATF-oil on the piston rod and slide the endcap on the piston rod.
- e) Mount the piston on the pistonrod with the bolt. Fix the bolt with (Loctite) threadlocker which is suitable for hydraulic applications.
- f) Put some ATF-oil in the cylinder, on the piston and endcap end slide the pistonrod into the cylinder. After that mount the circlip.

3) Testing

- a) You can test the rebuild cylinder by closing the threaded oil connections with a plastic bolt and try to move the pistonrod. If the plastic bolts do not leak air it must be very hard to move the pistonrod.

Any questions please do not hesitate to contact me!

