

SVX Power Steering Pump / Bearing and O-Ring Replacement—

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Symptoms:

If there is any grinding noise coming from the pump while the engine is running or if you feel sudden little jerks or stiffness in the steering while steering, the pump may need to be repaired. First, check to see if the O-Ring on the power steering fluid tank needs to be replaced. Many times this is the problem instead of the pump. See the How-To Documents on how to do that. If the O-Ring is good, continue with these procedures.

Parts required:

Refer to Pump Picture from Subaruparts.com (figure 1)

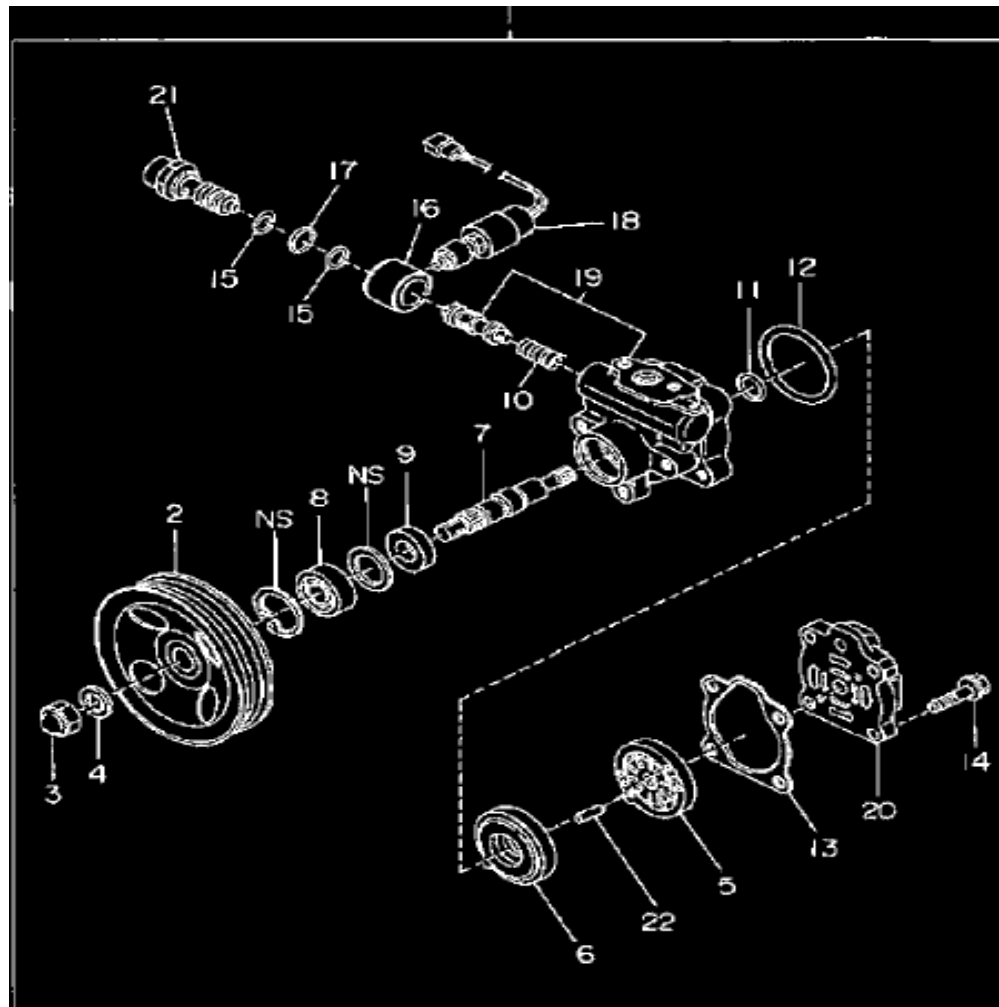


Figure 1

- | | |
|--------------------|---------------------|
| # 8 – Bearing Ball | Part No. 31263GA840 |
| #11 – O-Ring | Part No. 31263GA890 |
| #12 – O-Ring | Part No. 31263GA900 |
| #13 – Gasket | Part No. 34425AA000 |

Tools Required:

- 1) Metric Socket Set
- 2) Metric End Wrenches
- 3) Screw Driver
- 4) Locking Ring Pliers

Procedure:

Step-1

Remove the oil tank as shown in the How-to Documents of replacing O-Ring at SVX World Network.

Step-2

Loosen the belt by rotating the Bolt Idler in clockwise direction until you are able to remove the belt from the pulley. (figure 2)

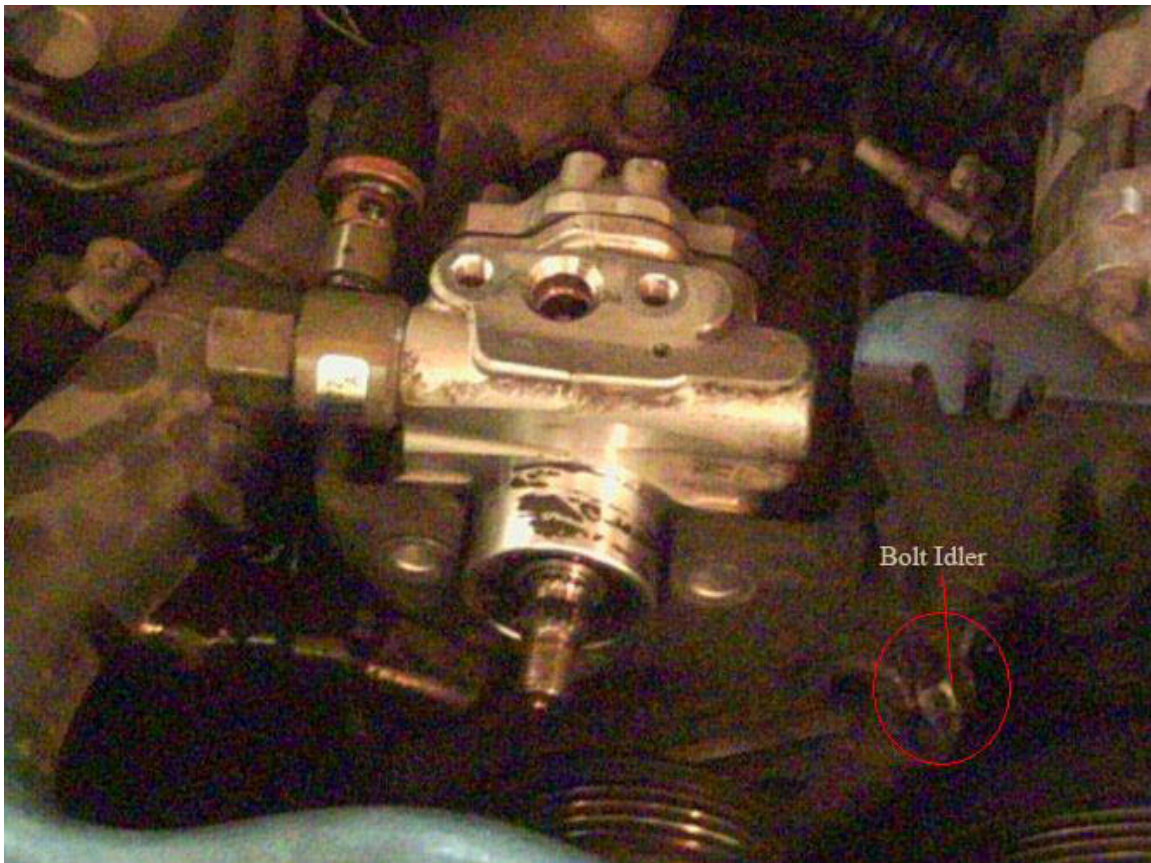


Figure 2

Step-3

Remove the 3 bolts and electrical connector shown in the picture. (figure 3)

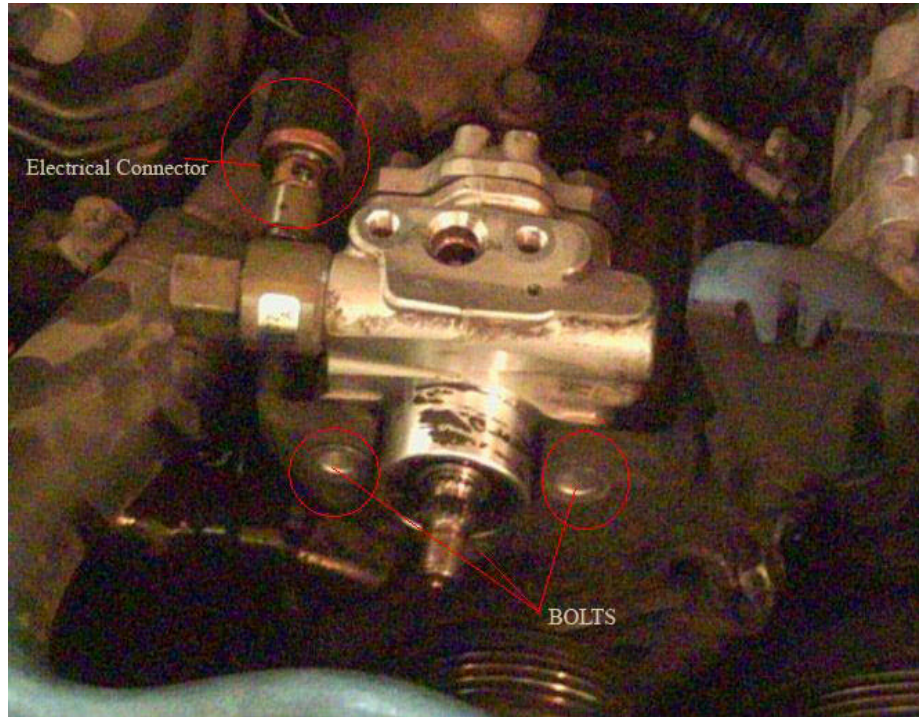


Figure 3

Step-4

Remove the pump. It should look like the one in figure 4.



Figure 4

Step 5

After the pump is removed, unscrew the 4 bolts on the back. (figure 5)

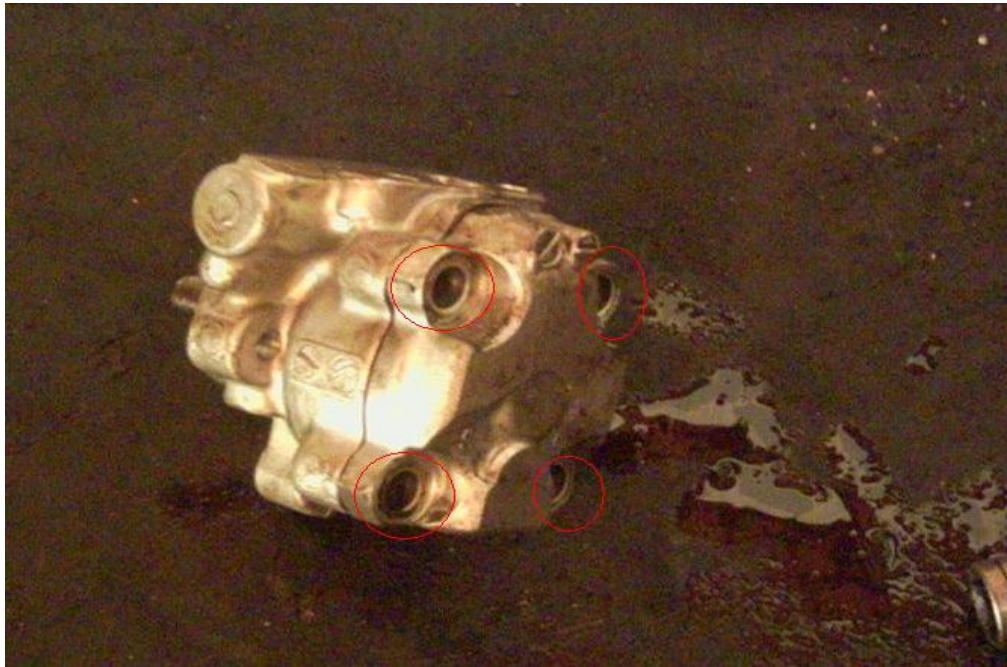


Figure 5

Step-6

After the bolts are removed, take the back plate off the pump as shown in figure 6.

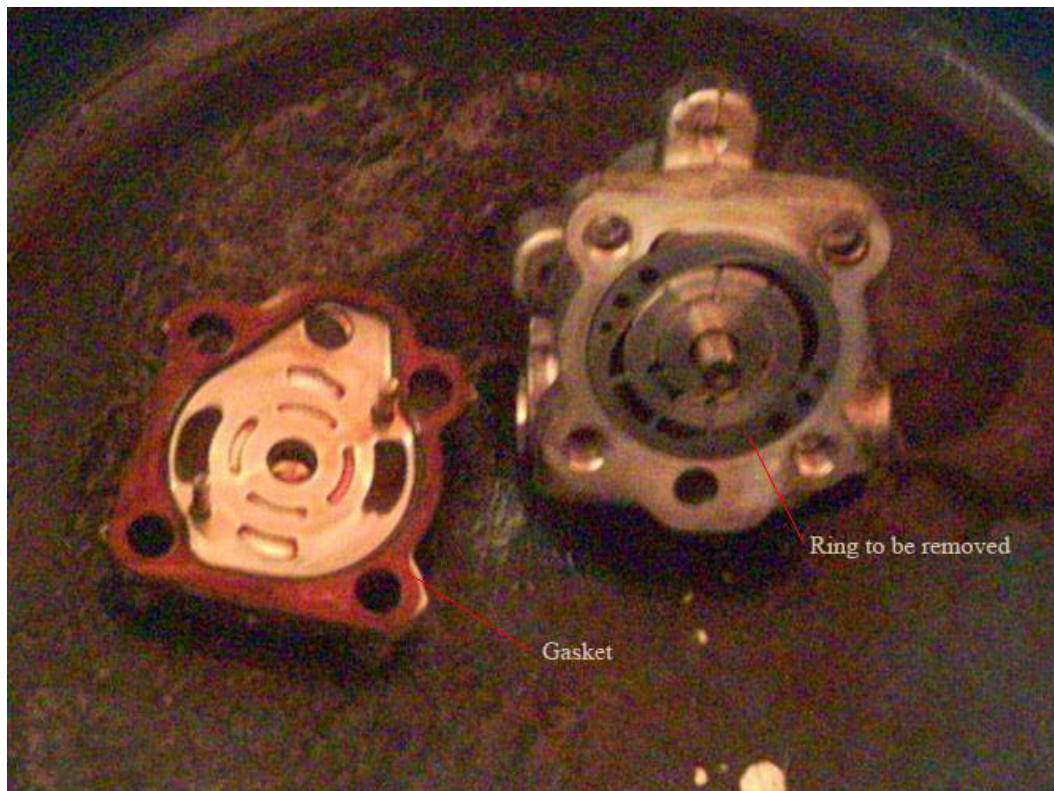


Figure 6

Step 7

Be very careful when removing the ring with holes in it. It is shown on the right piece that looks like a gasket. Also be careful when you remove the cartridge assembly (figure 8), because it has small metal plates sticking to the outside and touching the inner part of the removed ring. The metal plates, (around 10 in number), can be easily lost because they are small and loose. Remove carefully and put in a safe place.

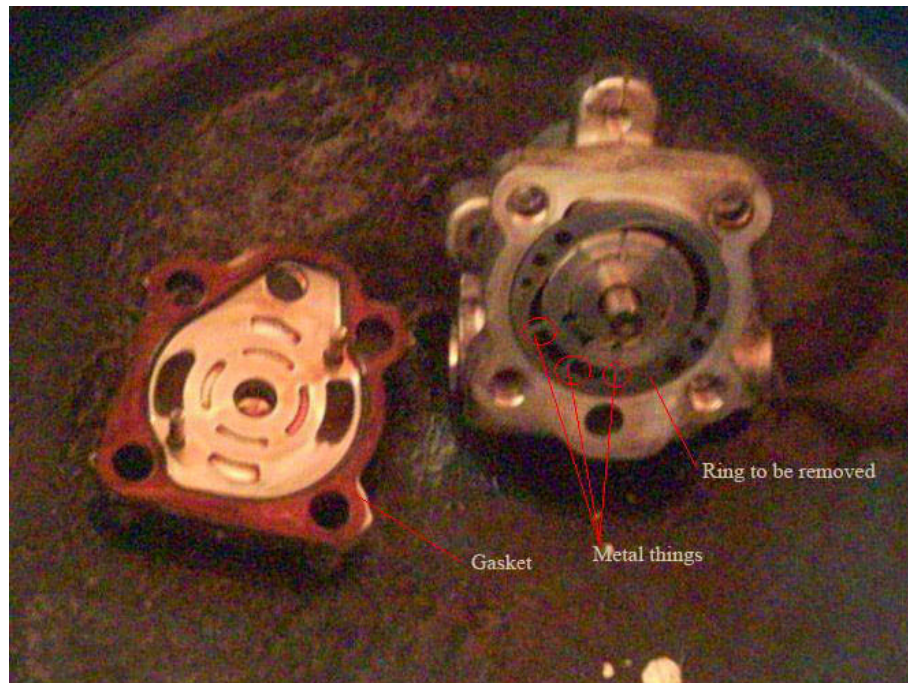


Figure 7

The ring after removal and cartridge assembly can be seen in Figure 8 below.



Figure 8

Step 8

Take out the two O-Rings (which will be replaced later) along with the locking ring using a piler. (Figure 9)



Figure 9

Step-9

After taking out the O-Rings, carefully push the shaft rod outward to allow the bearings to come out from the front. The pump should look like Figure 10 when it is torn down all the way. (note: see locking ring pliers)

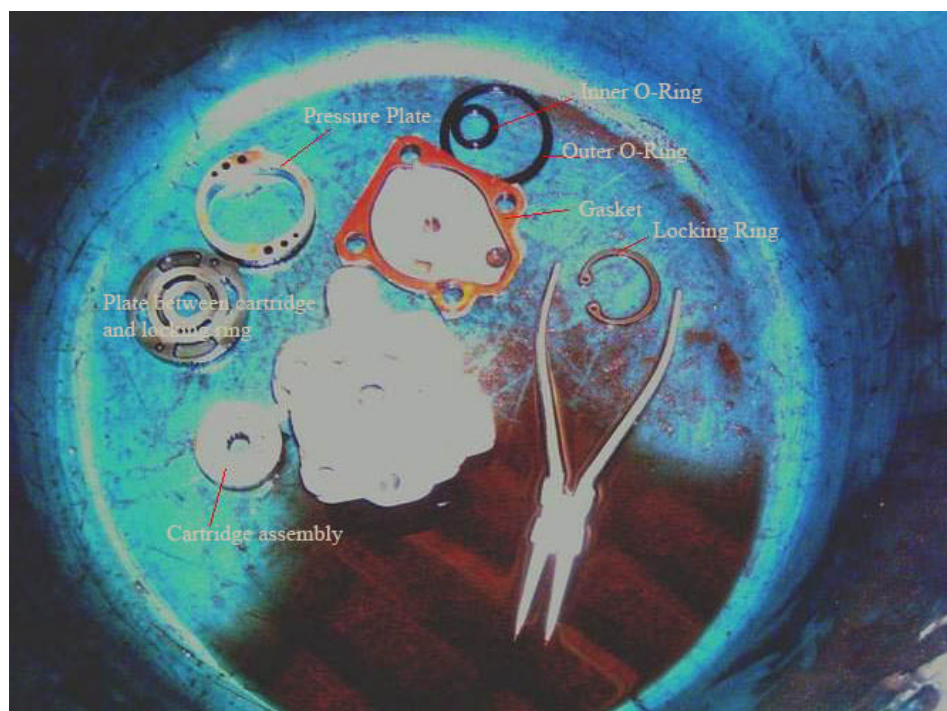


Figure 10

Step-10

It is now time to replace the bearing, the two inner O-Rings, and install everything in reverse order. Be sure to put the plates in the right place before putting in the ring. Be sure to install a new gasket, and tighten the 4 bolts on the back.



Figure 11

In the above picture you can see both old and new bearings. The new bearing is KBC brand and the # is 620200. Refer to Figure 1 for the order of parts installed. The order is very important. The outer NS should also fit exactly in its place or the bearing is not properly mounted.

When the pump is assembled, mount the pump back into its place and attach with the 3 bolts to the pump bracket and connect the electrical connector. Replace the pulley and tighten the pulley nut and adjust the belt tension using the bolt idler. Rotate it in a counter-clockwise direction to tighten the belt.

Step-9

Follow the steps for putting the oil tank back as shown in the how-to doc that you used before. When installed, fill the tank with new transmission fluid and start the engine. Turn the steering wheel lock-to-lock slowly 4 or 5 times to remove the air in the lines. Recheck the level in the fluid tank to make sure it is full.