

Rebuilding the Power Steering Pump for a 2007 Honda Accord 4CYL

Disclaimer: I have benefited greatly from others who have taken the time to post auto repair videos/tutorials online. To try and return the favor, I have documented a few of my recent repairs. I try to perform the work conscientiously in accordance with the Honda service manual, but I am not a professional technician by any stretch so please use this material at your own risk. I hope this information might benefit others who are preparing to do this job.

Honda 2007 4CYL Power Steering Pump



For under \$20 in parts, you can rebuild your power steering pump, including replacement of the front bearing, front seal, all O-Rings and the slipper seals. OEM replacement parts are readily available online.

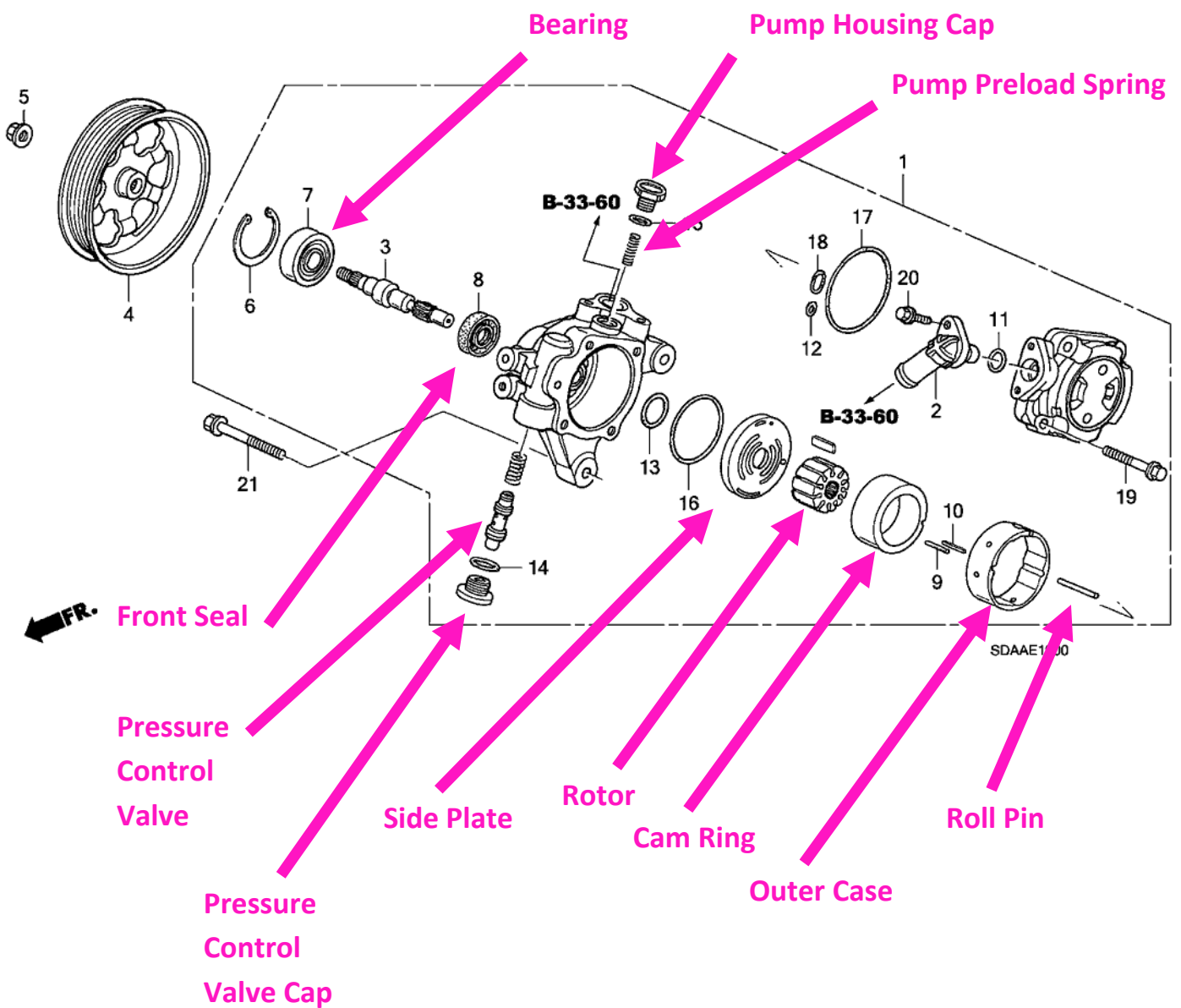
Here is a blow-up showing the different parts of the PS pump. I replaced the following items:

Front Bearing (7)

Front Seal (8)

All O-Rings (13, 14, 15, 16, 17, 18, 12, 11)

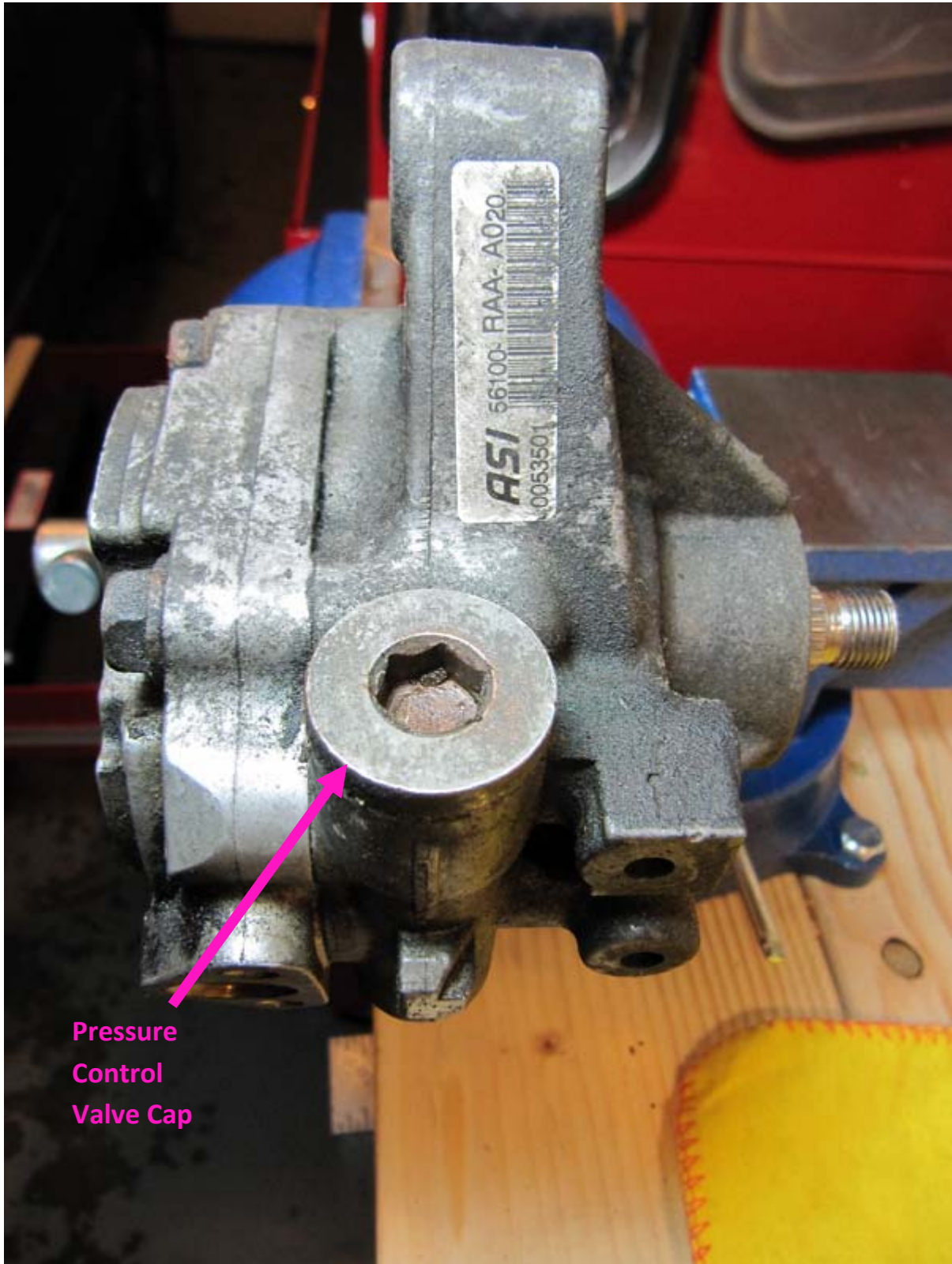
Rubber Seal and Slipper Seal (9, 10)



#1 – Remove the pulley locknut using a strap wrench and breaker bar or an impact wrench. It is a standard thread (CCW to loosen).



#2 – Remove the Pressure Control Valve Cap (10mm Hex).



Pressure
Control
Valve Cap

#3 – Remove the Pressure Control Valve Spring and Pressure Control Valve.



#4 – Remove the Pump Housing Cap.



#5 – And remove the Pump Preload Spring.



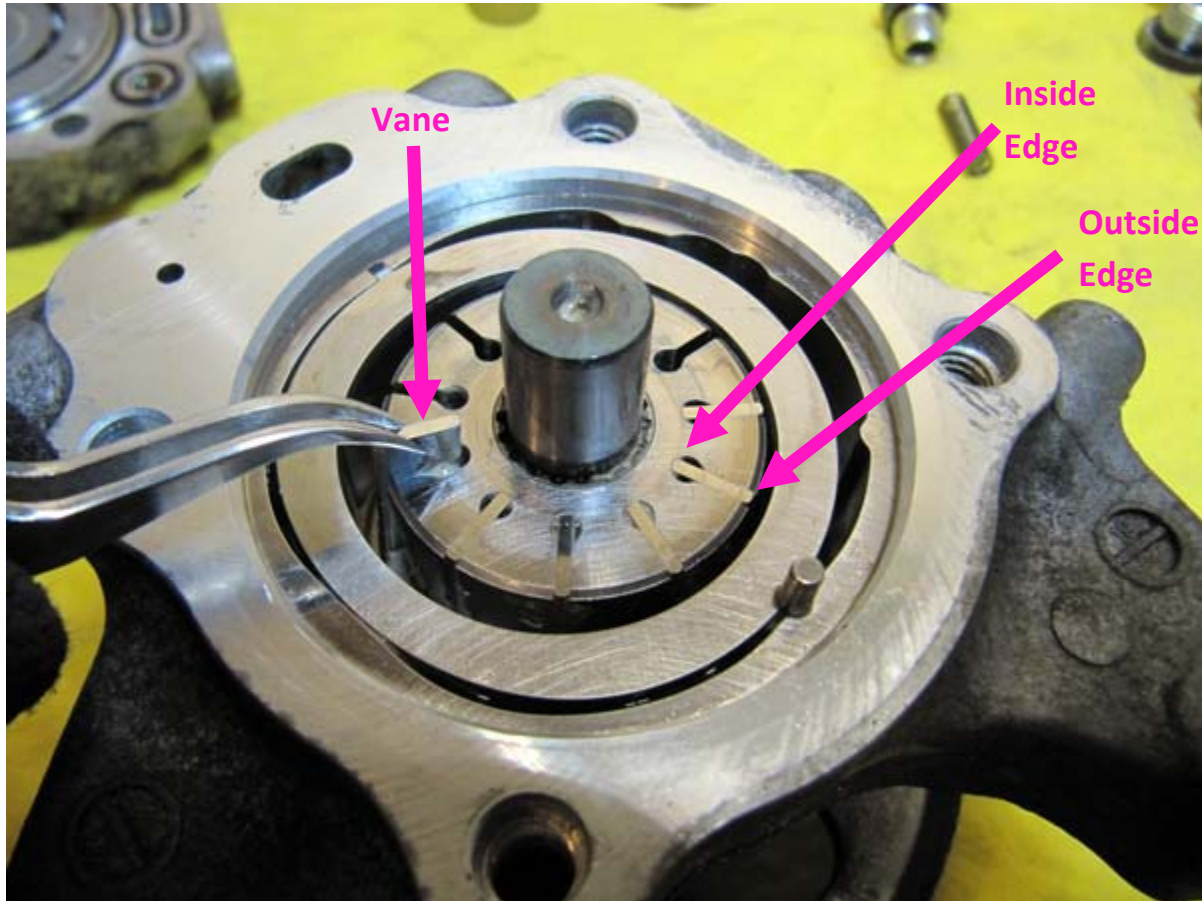
#6 – Remove the four bolts holding on the rear pump cover.



#7 – And here is what it looks like inside!



#8 – Pull out the pump vanes. The vanes must be installed in the correct orientation, so as you take out each vane, keep track of which edge is the outside edge. (The outside edge is more rounded, but it is REALLY hard to see which edge is rounded with the naked eye – better to just keep note of the proper orientation of each vane).



#9 – I placed the vanes on a piece of paper with one side marked “Outside” in order to keep track of the proper orientation of the vanes. The outside edges all point to the right.



#10 – Slide out the Roll Pin.



#11 – Pull out the Cam Ring.



#12 – Pull out the Rotor.



#13 – Pull out the Outer Case.



#14 – Pull out the Side Plate. I tipped the pump upside down and shook it a little to get the Side Plate out.



#15 – Now you are left with an empty pump housing except for the drive shaft.



#16 – And here are all the pieces that were pulled out.



#17 – To remove the front bearing and drive shaft, first remove the 40mm Snap Ring.



#18 – Now, push the drive shaft and bearing out of the pump housing. The service manual says that this can be done by hitting the shaft with a plastic hammer. I didn't try that, but it did come out quite easily on the press so it wouldn't surprise me if a hammer would be quite effective. If you do use a hammer, just make sure you don't damage the shaft. Don't hammer directly on the shaft (hammer on a punch inserted into the dimple on the end of the drive shaft).



#19 – And here's what it looks like with the drive shaft and front bearing removed. This exposes the front seal which should be replaced.



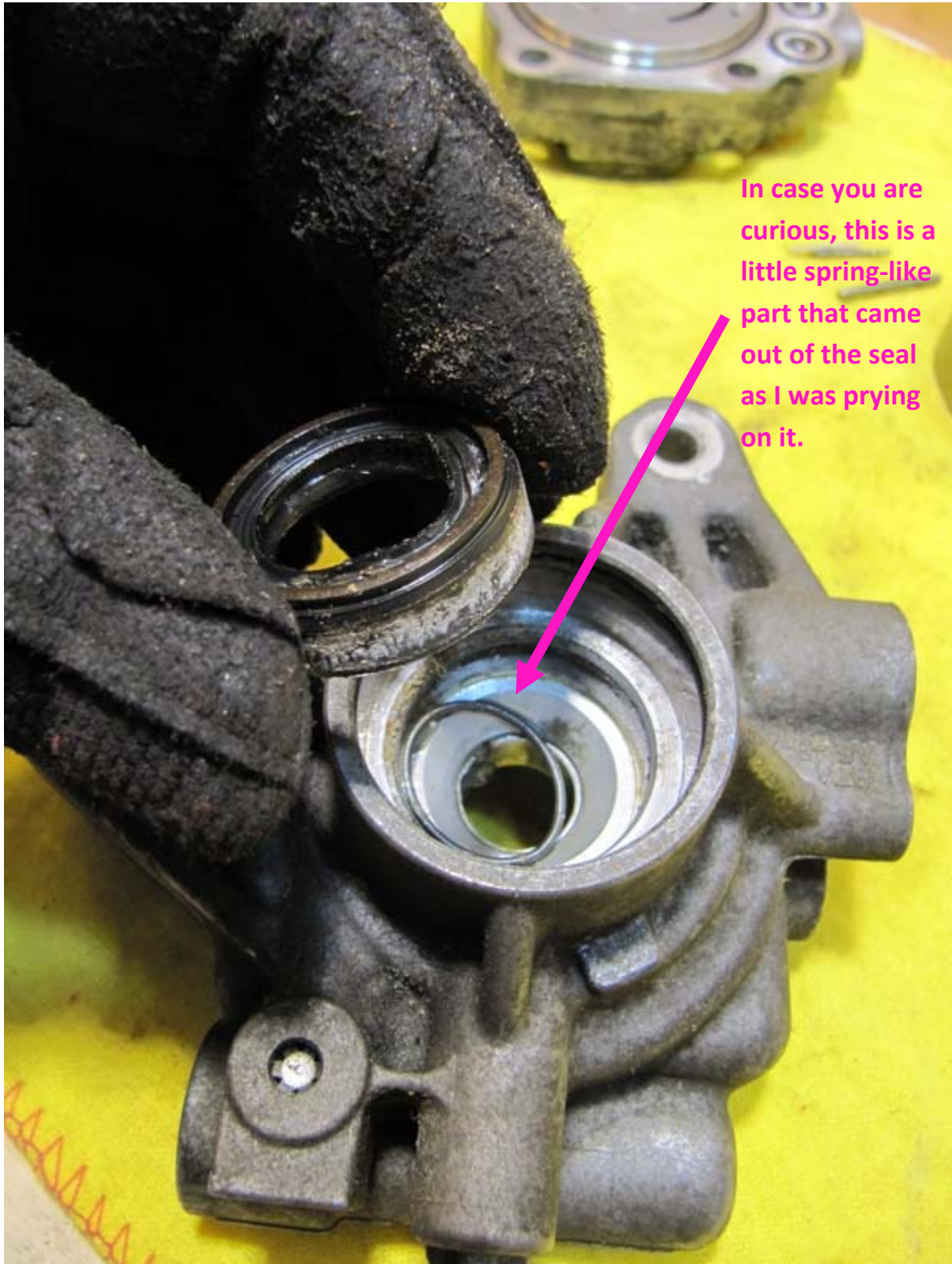
#20 – The seal is in there pretty tight and can be a bit of a bugger to get out. I used the handy little seal puller shown below which made the job quite easy.



#21 – I gradually pried up on the seal going around in a circle until it started to move. It took a few minutes of working at it. You might also be able to use a screwdriver and push the seal out from the back side. Whatever you use, just be careful to not scrape up the housing where the seal seats or the new seal might not seal properly.



#22 – And finally the seal pulls out!



In case you are curious, this is a little spring-like part that came out of the seal as I was prying on it.

#23 – Next, push the drive shaft out of the old bearing.

