Originally Posted by camodown 03-31-2008 Pics re-linked on 3-16-2009

URL http://www.ford-trucks.com/forums/showthread.php?p=8649519#post8649594

<u>Thanks camodown</u>

I just got done replacing my power steering pump on my 2002 7.3 and figured someone may benefit from pictures and a written how to...

Disclaimer: Ford-trucks and I are not responsible for anything which can result from miss installation or other issues that may arise from following this tutorial.

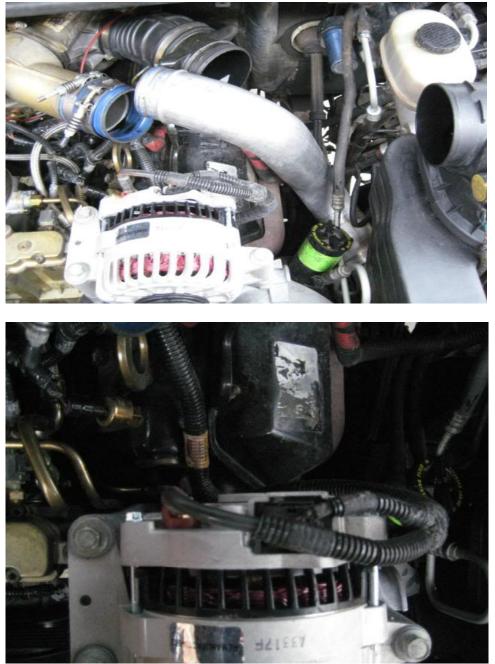
With that said, you will need a 1/2" drive torque wrench capable of 60 lb-ft, an 11/16" socket, a 3/8 to 1/2" drive socket adapter, a 7/16" socket with extension, a power steering pulley remover and installer kit, 1 qt Type F Ford transmission/power steering fluid, a 5/8" open end wrench, a new teflon seal for the high pressure line, a crescent wrench, adjustable wrench for removing clips, a flat bladed screwdriver, a drain pan with rags, and of course a Motorcraft or equivalent power steering pump.

*Just as an update, Ford recommends replacing the pulley after being removed 2 times. Look for some sort of marking on the back and if there are 2, then replace the pulley. It is a friction fit.

First remove the air cleaner hose from the main housing using a flat bladed screwdriver. Set aside.



Then, loosen the 7/16" spring clamps for the intercooler boots, you do not need to remove them completely. Set the pipe aside. CAUTION: be careful when removing the intercooler pipe as the always hot feed to the alternator is near where you will be removing the pipe.



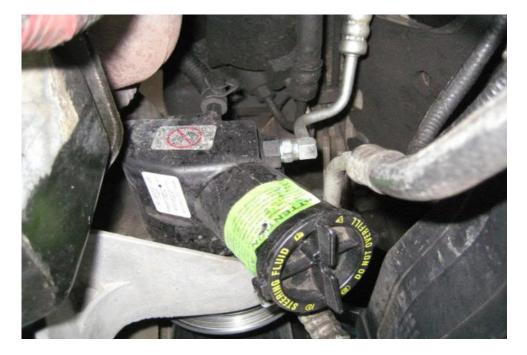
[^]Hot side for alternator. Watch out so the pipe doesn't hit back of alternator!

Put your 1/2" square drive in the tensioner adjuster hole, and loosen the belt off the power steering pump pulley.

Next, use your adjustable wrench and remove the overflow hose by clamping down on the two tangs on the spring clamp. You will use the same procedure on the lower feed line on the pump's bottom.



Now, remove the high pressure line from the pump, positioning your drain pan below pitman arm as fluid will start to drain out.



Since you broke the teflon seal while removing the high pressure line, install a new seal by either working the seal by hand slowly and carefully expanding it with your fingers, or by using the special Ford teflon seal installer. I worked it on by hand and have no problems.





You should now get your pulley puller ready to work. Following are pictures of how to remove the pulley...







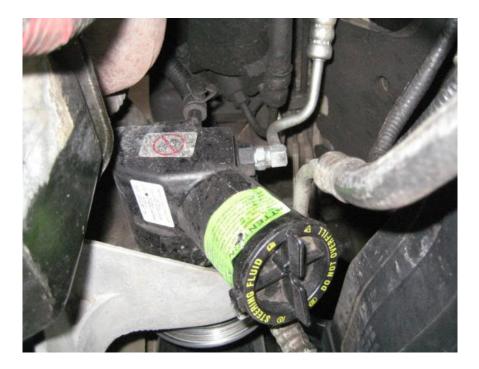
It takes quite a few cranks to get the pulley assembly off, but make sure that you always have your hand under the pulley as if it fell, the pulley could get damaged.



Now remove the three main bolts holding the pump to the bracket. These are 11/16" bolts and are pretty snug.



Once those three bolts are taken out, you can remove the lower clamp and hose from the old pump, and transfer it all to the new pump.



Position the new pump where to old one was, making sure you put the return line, high pressure line, and drain hoses on. Tighten the three bolts back in. Ford spec was 60lb-ft for the three large bolts, however, mine were really snug at 45lb-ft. Take it as you please.

Now you can install the pulley. Make sure you drive it on straight. Using the tool, thread the inner bolt all the way into the pulley until it bottoms out, so you have as much threads in the shaft as possible. Now, just crank the installer down until it stops going. This will align the shaft perfectly flush with the face.



You can now reapply tension and route the belt how it was originally. Fill the reservoir on the pump with your Type F fluid. Start the truck and apply the brakes while steering lock to lock, paying attention not to hold the wheel at lock for too long. Do this a few times, then shut the truck off. Check the fluid level and top off accordingly.



