

Power Steering Pump Removal & Installation

Document created by FTE member bdpotts ([FTE public profile link](#))

Tools and supplies required

- Sockets (1/4" and 3/8") drive – 8mm, 11mm, 13mm, 17mm, 18mm, 21mm, 24mm, 5/8", 9/16"
- Various pliers
- Standard (slotted) screwdriver
- Shop towels
- Working lamp/light
- Up to 2 quarts of ATF
- Pulley removal tool ([Performance Tool W87020](#))
- Power steering (PS) pump ([Motorcraft F1TZ3A674DBRM](#))
- PS pump pulley if required ([Motorcraft F8TZ3A733AA](#))

Instructions

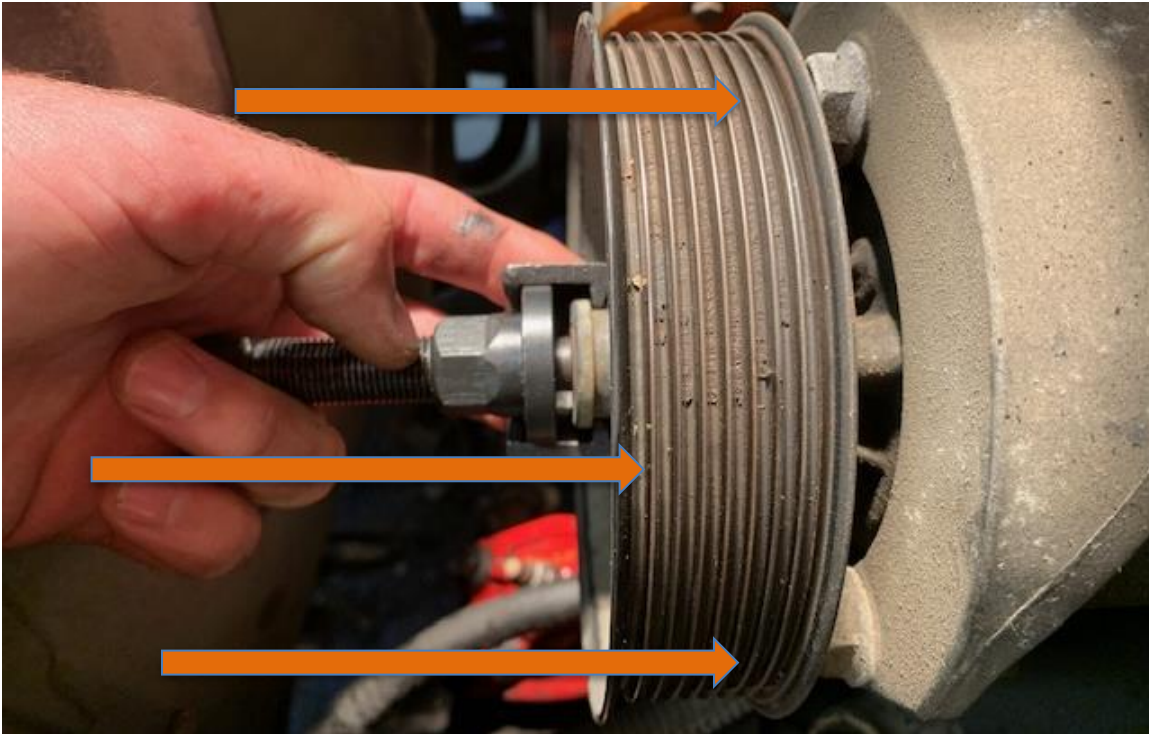
1. Remove air intake filter and assembly as needed.
2. Remove battery, battery tray and intercooler pipe.
 - 8mm for battery terminal clamps
 - 13mm for battery tray bolts
 - 11mm for intercooler boot clamps



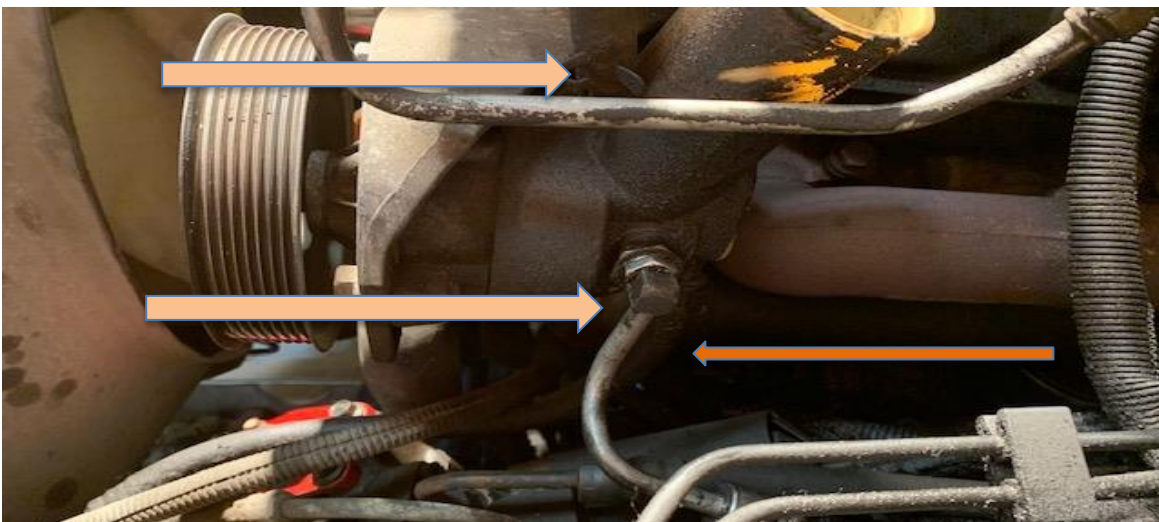
3. Loosen and remove drive belt with 1/2" drive ratchet and breaker bar.



4. Install the pulley removal tool on the PS pulley. ([Tool reference video](#))
5. Use 5/8" socket to tighten the threaded portion.
6. Use adjustable (crescent) wrench to hold pulley flange nut.



7. Once the pulley is removed from the PS pump shaft, disconnect and remove the inlet/outlet lines and high pressure line. Inlet/outlet line clamps require a squeeze to move. High pressure line req's 24mm and 18mm sockets.



8. Once all lines have been removed and are out of the way, come back and remove the (3) mounting bolts (hold on to the pump!!)

Old vs. new pump



9. Clean mounting bracket and surface of the bracket for the PS pump.



10. Install the PS pump and high pressure line.



11. Install the (3) mounting bolts through the bracket and into the PS pump. Now the PS pump is ready for the pulley install which is pictured below.



12. Install pulley on PS pump shaft.
13. Check all lines, clamps and B-nuts to pump.
14. Install Intercooler pipe, battery tray, battery, air filter assembly and air filter.
15. Fill PS pump with fresh ATF and follow bleeding procedures below.
 - Start engine, turn wheel left and right, but not to full stop. Do this until ATF is dark with no bubbles or appearance of foam when looking into the fill tube.
 - I preferred to jack up the front end for this ops check. I like having no “load” on the tires when turning them at a standstill.



PS pump, pulley tool, and high pressure line.
- Thank you Riffraff Diesel!! -

