

**IPS144 - Installation instructions for Power Steering
Pulley Kit for 1996 to 2002 Viper**



WARNING

Modification of your vehicle with the parts identified above may alter its stock performance; the buyer hereby expressly assumes all risks associated with any such modification.

DISCLAIMER OF WARRANTY

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1. Remove power steering pump from car as detailed in the OEM manual. While this conversion can be done in the car, it is much easier to do on a bench.
2. Remove factory pulley from pump using a pulley puller as listed in the OEM manual or one from your local parts dealer. The puller should be one that engages the groove at least $\frac{3}{4}$ of the way around. There is a great deal of press fit on the factory pulley hub and pump shaft, using a two-jaw puller may break the groove on the factory hub. If this happens you will need to have the hub cut or machined off the shaft.

****** Note: Do not to pry or pound on the pulley or pump shaft when removing pulley from shaft as this may cause the pump shaft to move in the pump bearing changing the location of the shaft causing pulley misalignment issues. ******



Photo #2 (Sample Pulley Pullers)

3. Separate the pulley from the mounting hub as shipped from factory. To do this remove three M8 socket head cap screws using a 6mm metric Allen wrench. Be careful not to lose the two washers on each screw. Using the three screws (no washers) install them into the threaded holes that are between the pocketed holes the screws just came out of as shown in Photo #3. Put a little pressure on each screw a little at a time and the pulley will release from the hub.

***** Note: There is some Anti-Seize lubricant on the hub and pulley contact surfaces – Do not remove, as this will keep the two parts from welding them selves together once clamped. *****



Photo #3 (Location of screws for hub/pulley separation)

4. Using a small screwdriver, tap the screwdriver into the end slot of the new pulley hub as shown in the photo #4 below. This will expand the slot to allow the hub to slide over the pump shaft. If the hub does not slide easily onto the pump shaft, tap the screwdriver a little deeper into the slot.



Photo #4 (Using small screwdriver to spread hub slot)

5. Next slide the new pulley hub onto pump shaft, if the hub does not slide easily tap the screwdriver into the slot a little more to open up the slot. Install finger tight the supplied 3/8-16 button head socket screw and 3/8 washer into the pump shaft. Slide the hub up to the washer and remove the screwdriver from the slot. The hub will now clamp itself onto the shaft. Check the gap between the backside of the hub and the pump housing (Photo #5). This should be approximately .070 - .100 plus or minus .010", if it is not or the hub is rubbing the housing the shaft has been pushed into the pump and will need to be pulled back out using a puller. (Call DVS for instruction to do this if needed).



Photo #5 (Hub alignment with pump shaft and Housing)

6. Install the three pump mounting bolts with washers back into the pump as shown in Photo #6. **DO NOT FORGET** to do this step, as you will not be able to install the bolts once the pulley is mounted to the hub.



Photo #6 (Pump Mounting Bolts installed into Housing)

7. Once pump has been mounted, assemble the three 8mm X 1.25 socket head cap screws with the lock washer and flat washer in that order. Lock washer crown should be towards the head of the cap screw. Place the new pulley onto the hub and rotate to align the pocketed holes of the pulley with the threaded holes of the hub. Install the three 8mm screws and washers into the hub. Using a 6mm Allen wrench tighten each screw a little at a time in a circular pattern so you draw the hub into the pulley evenly until all three screws are tight. At this point the face of the pulley and the hub should be flush and there should be no gap between the hub and pulley on the backside. You can place the pump assembly on the edge of your workbench so that the pulley is hanging over the edge. Using the edge as a reference rotate the pulley. The pulley should not wobble (in & out) when rotated. If it does the pulley is not installed on the hub correctly.

8. Remove 3/8-16 button head cap screw and washer installed in step 5 and check to make sure the hub and pump shaft ends are flush. Apply a small drop of Loctite Thread Locker onto the 3/8-16 screws and reinstall the screw and washer into the pump shaft. Tighten using 7/32 Allen wrench.
9. Reinstall pump into the car, and attach both hoses.
10. Install belt and fill pump with oil as per OEM manual.



Photo #7 (Installed Pulley)