

### **Step 1 – Disconnecting the battery terminal**

For safety measures, disconnect the negative battery terminal as shown below.



### **Step 2 – Removing the service screw/clip**

Using a small socket wrench, remove the service screw from the shaft of the supercharger snout.



**NOTE:** Depending on the model of your vehicle, you may find that a plastic christmas tree clip is used instead of a nut or screw, such as on this VY series 2 model pictured above-right which by using a fine flat headed screw driver can be easily removed. You may also find that some models feature an open shaft thread and require no screw or clip to be removed.

### **Step 3 – Removing the belts**

Remove the supercharger belt first. Tension is released by turning the 15mm nut on the idler pulley anticlock-wise, as shown below.

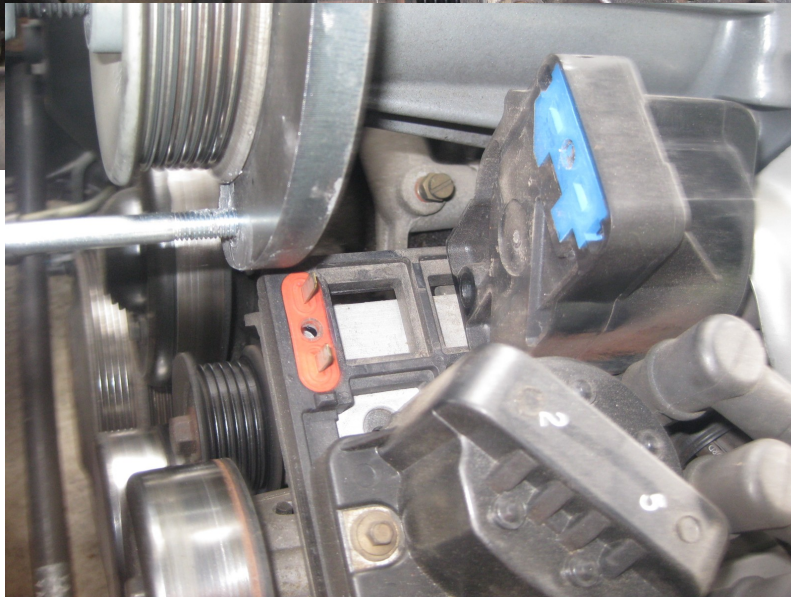
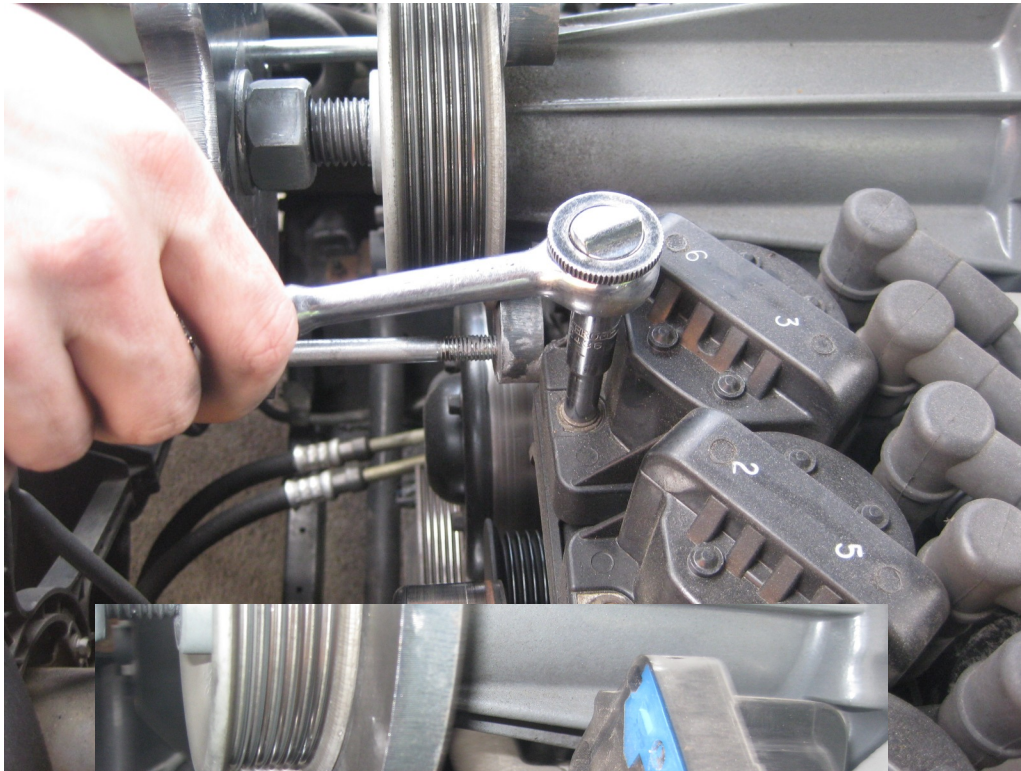


Proceed by removing the drive belt. Tension is released by turning the 15mm nut on the idler pulley anticlock-wise, as shown below.



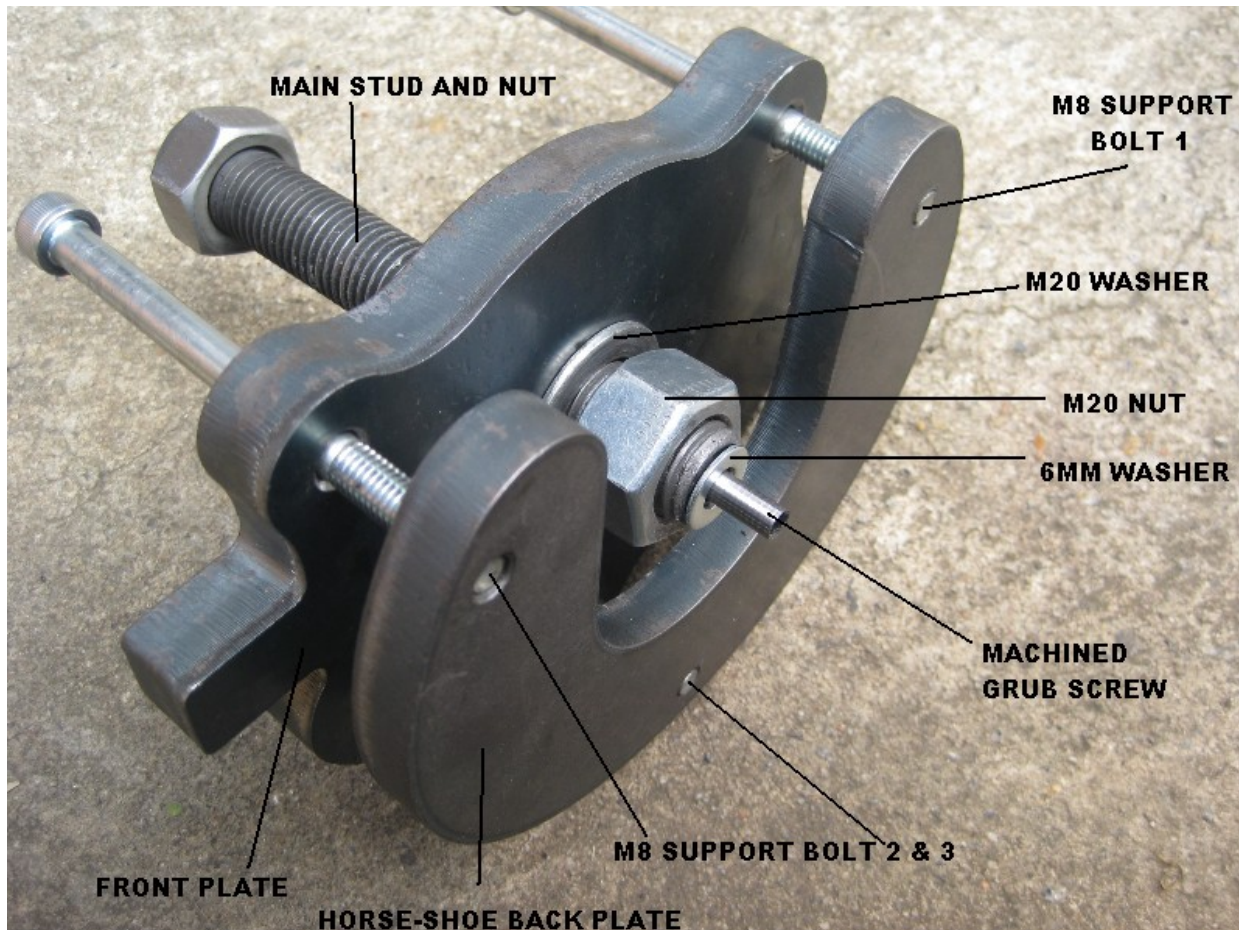
#### **Step 4 – Removing the coils**

To create sufficient working space, remove coils 6/3 by loosening the two coil screws on each side as shown. **NOTE: Removing the entire coil pack is not necessary.**



### **Step 5 – Assembling the tool**

In order to remove the factory pulley, assemble the removal tool as shown below.



Insert the grub screw into the main stud until no more thread is visible and only the machined section is exposed. The machined grub screw enables accurate alignment.

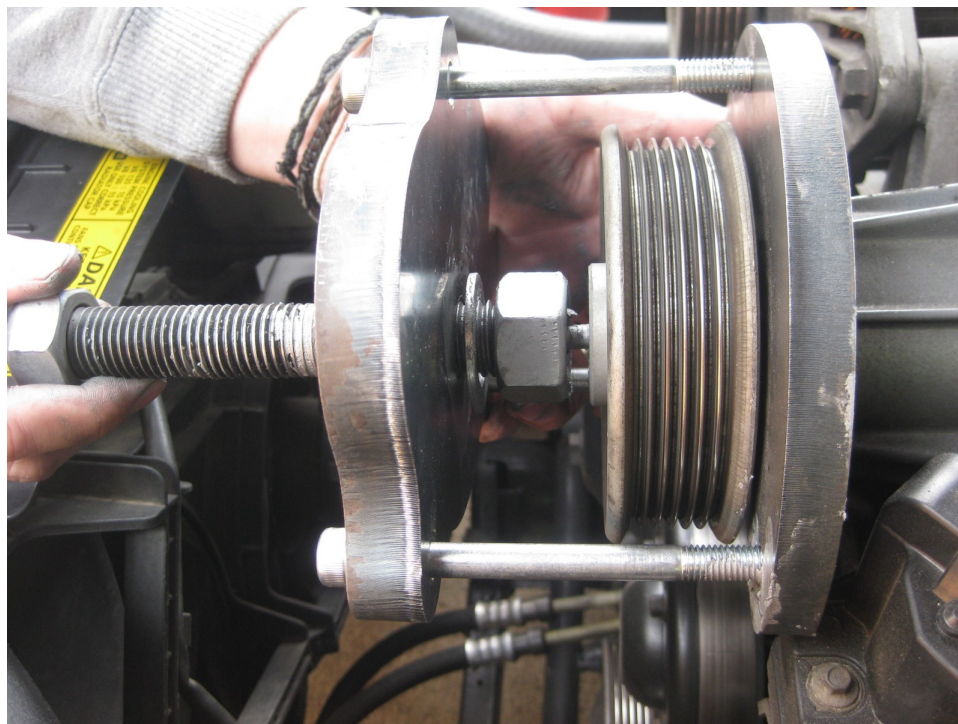
**NOTE: It is essential to apply anti-seize to all contacting surfaces including all threads.**





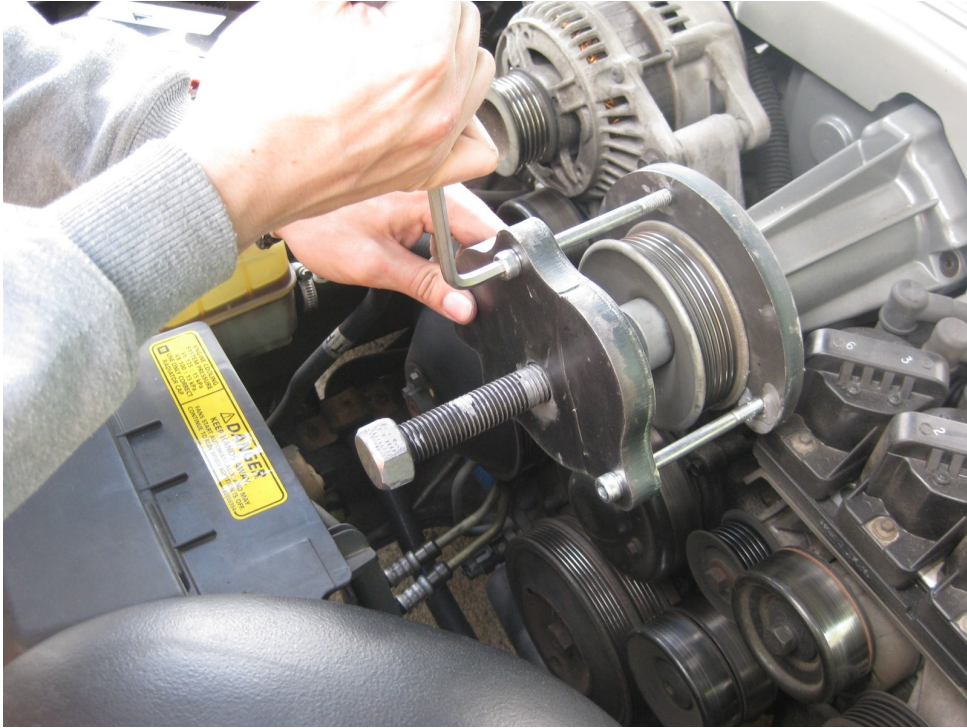
**Step 6 – Removing the pulley**

Place the pulley removal tool over the pulley. It may be necessary to remove one of the 8mm support bolts before placing the tool over the snout and replacing it again.

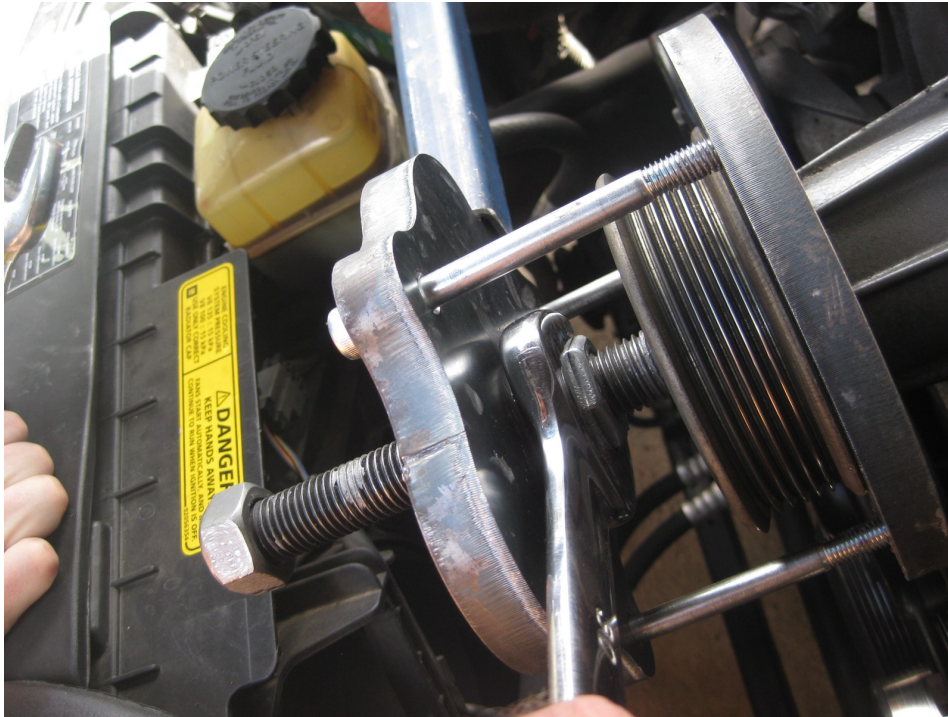


The horse-shoe back plate must be placed behind the pulley and the main stud aligned and fastened. The support bolts must then be fastened, keeping the two plates parallel.

**NOTE: The closer the two plates are to being parallel the easier the removal will be.**



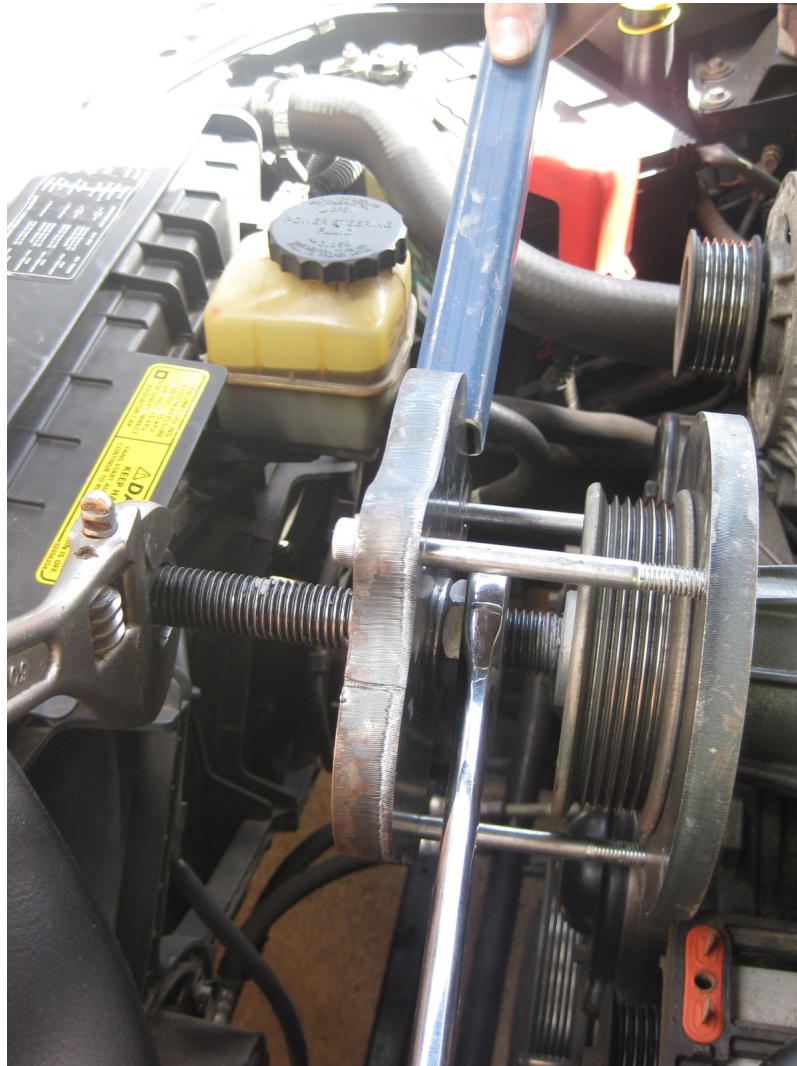
Making sure the main stud, nut and support bolts are fastened, place the square bar section over the front plate handle (this will keep the plate in place).



Using a wrench or shifter on the stud nut, restrict the stud from rotating while the main nut is turned counter-clockwise against the front plate. Turning the main nut will remove the pulley. **NOTE: Removing the pulley can require a lot of force so having a second person helping can be ideal, although not critical.**







It is common to hear a loud pop once the pulley breaks free, from here the job becomes much easier. Once the pulley is removed, clean the shaft and apply anti-seize to it.



### **Step 7 – Installing the hub**

Apply anti-seize to the inside of the hub to assist in applying the hub to the shaft.



Also apply anti-seize to the non-machined grub screw.

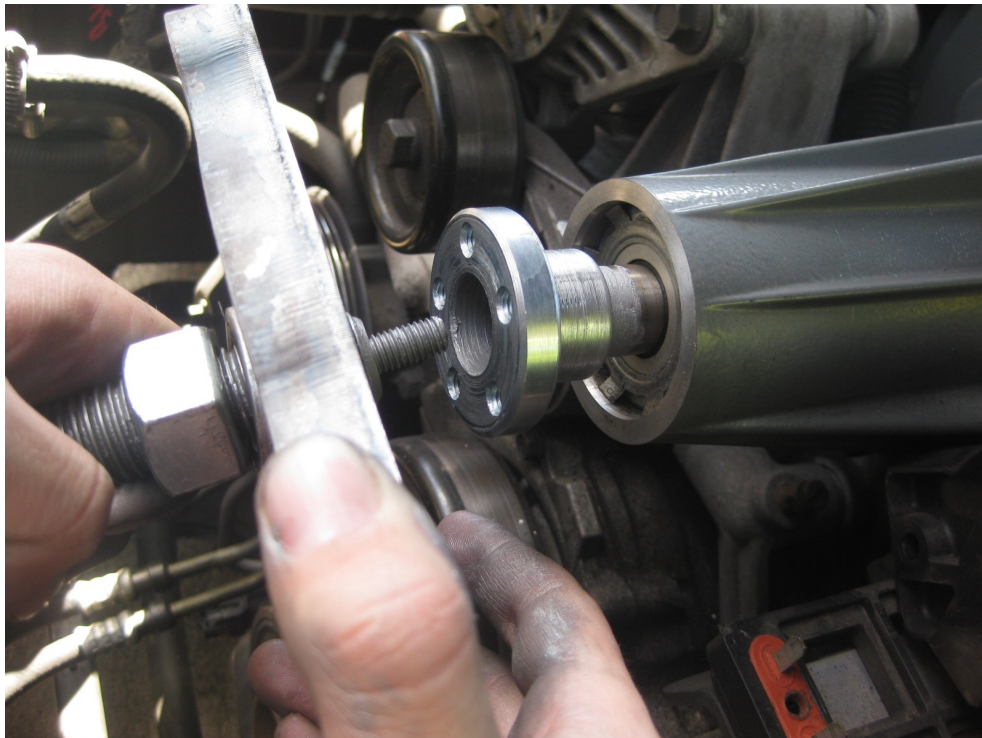


Insert the grub screw half way into the main stud as shown below.

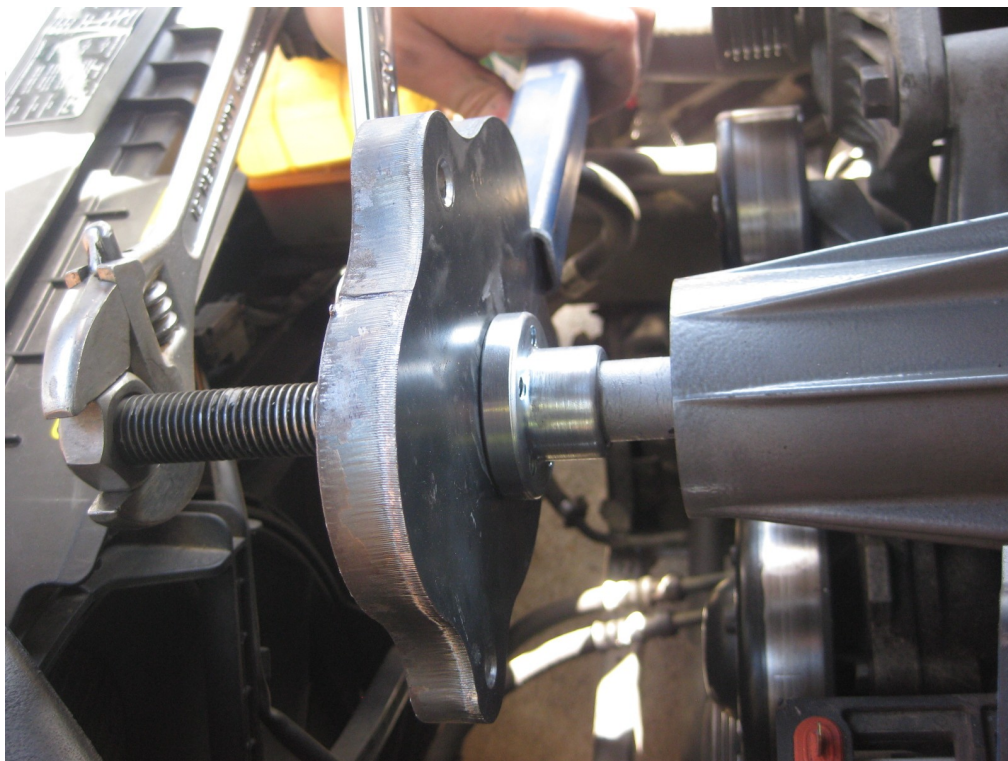
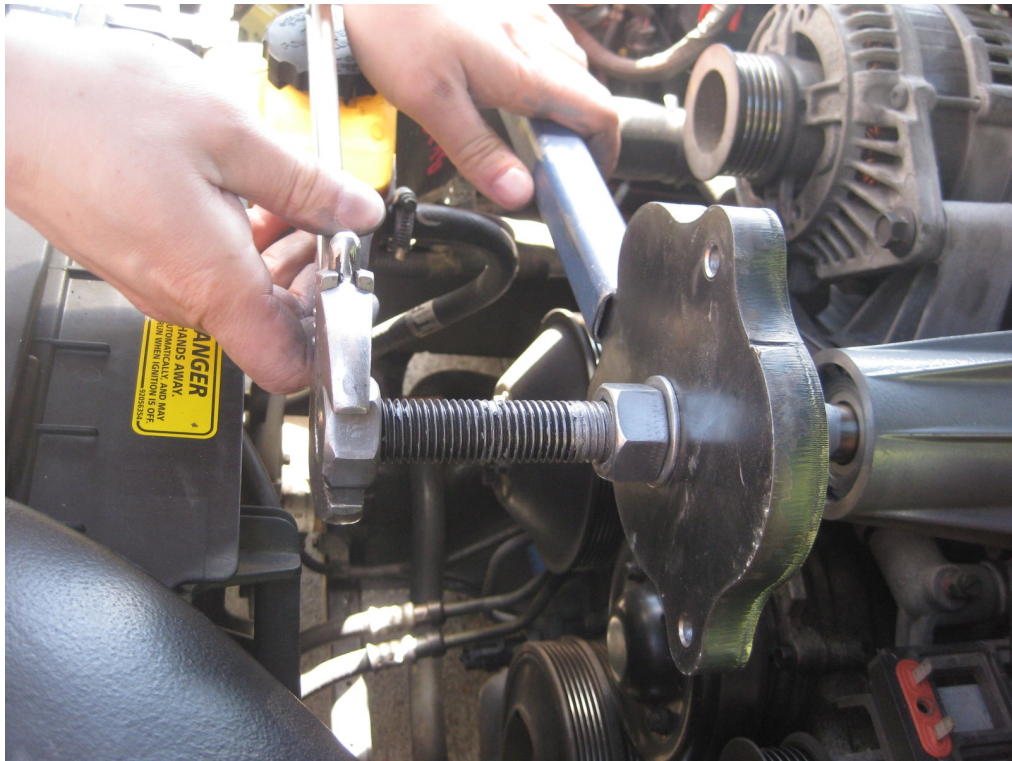


Using only the front plate this time (the front plate simply holds the hub and shaft in place and prevents it from turning), place the hub onto the shaft and fasten the main stud into the snout shaft using the grub screw.

**NOTE: The grub screw should be inserted half way into the stud and half way into the shaft.**

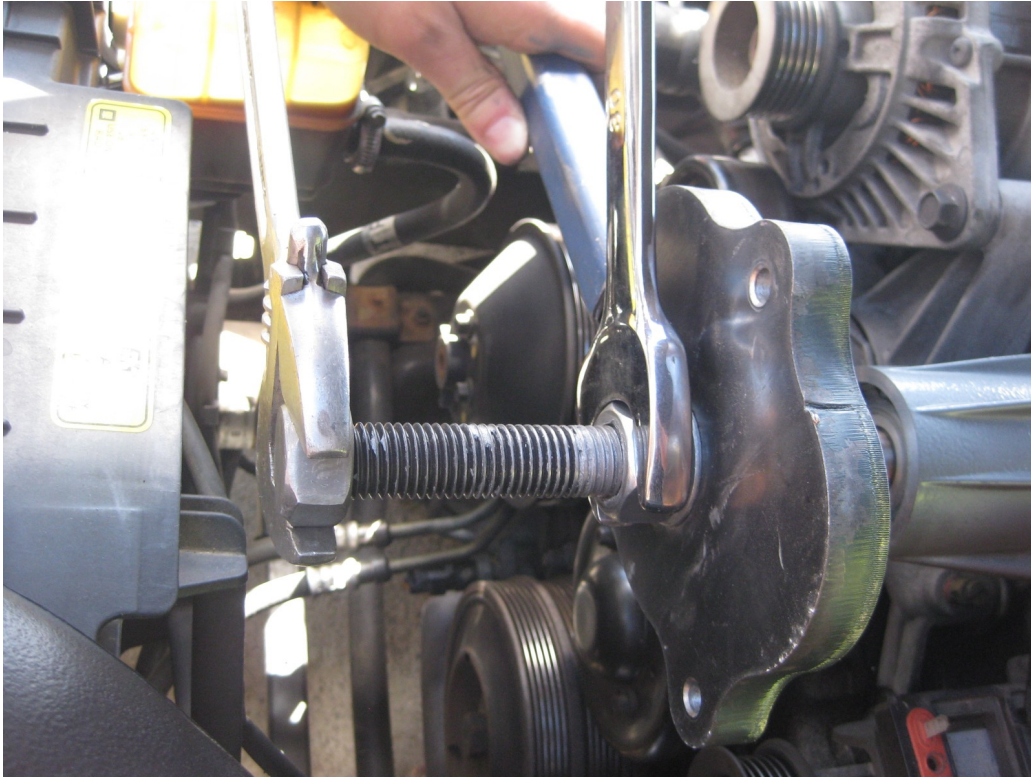


Further photos of the setup are shown below



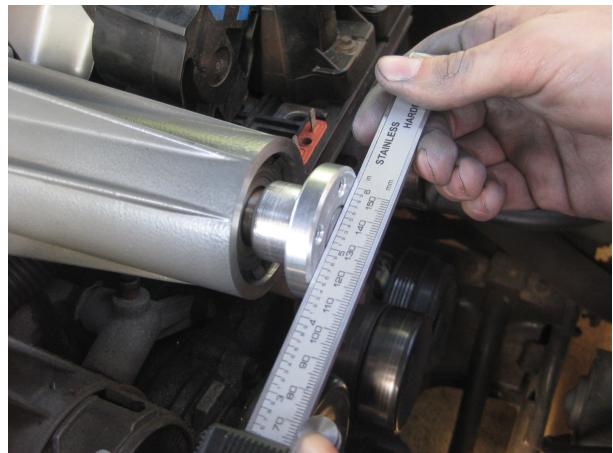
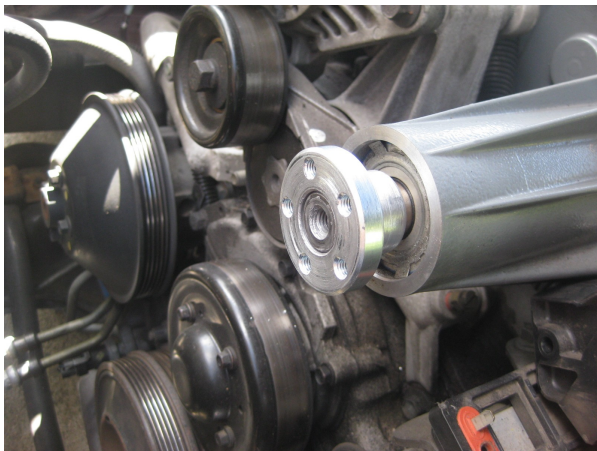
Using a shifter to hold the main stud, turn the nut clock-wise with a spanner in order to push the hub onto the shaft.

**NOTE: The square bar is not essential during installation of the hub, but can be used for extra support.**



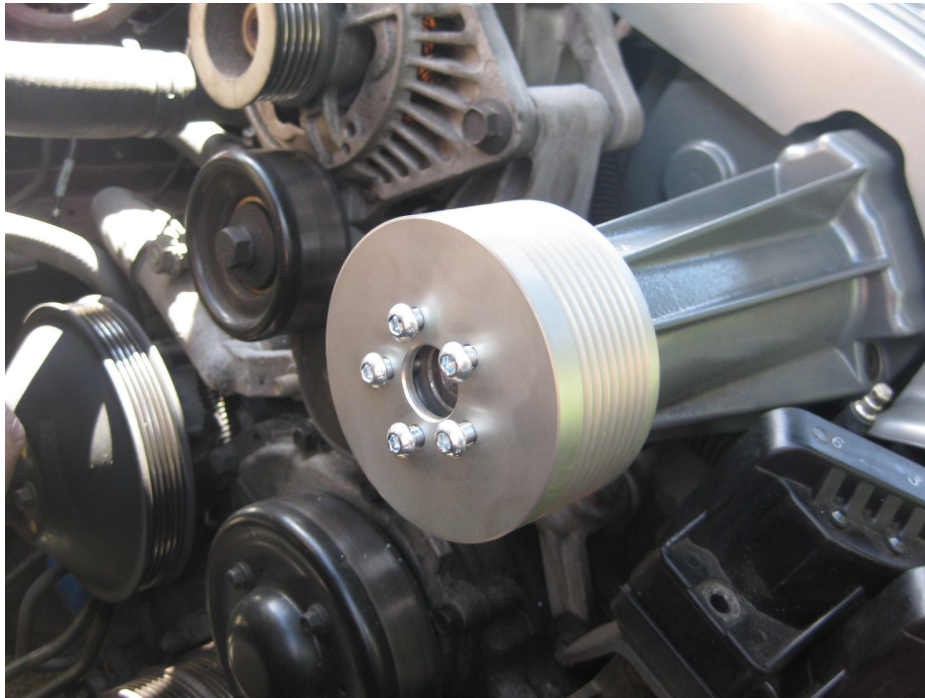
The nut should require much less force in order to install the hub as opposed to pulley removal, and should be turned until the front face of the hub is flush with the shaft face. As shown below.

**NOTE: It may be necessary to stop the process several times to ensure correct alignment. Improper alignment can result in belt noise and/or premature belt wear.**



**Step 8 – Installing the pulley**

Simply place the new pulley onto the hub ensuring all holes are aligned and fasten the 5 screws provided as shown below.



Using a belt to grip onto the pulley, fasten the screws with an allen key.



Install the drive belt onto the car prior to installing the new provided supercharger belt.



Finally, ensure all coils are fastened, battery terminals reconnected and all belts aligned.

