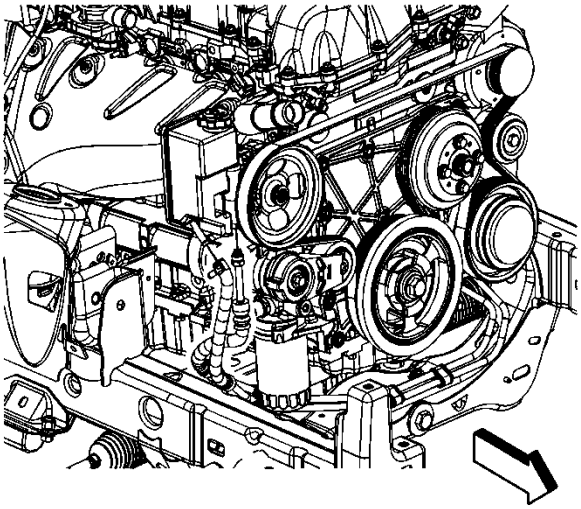
Power Steering Pump Replacement (LLR)

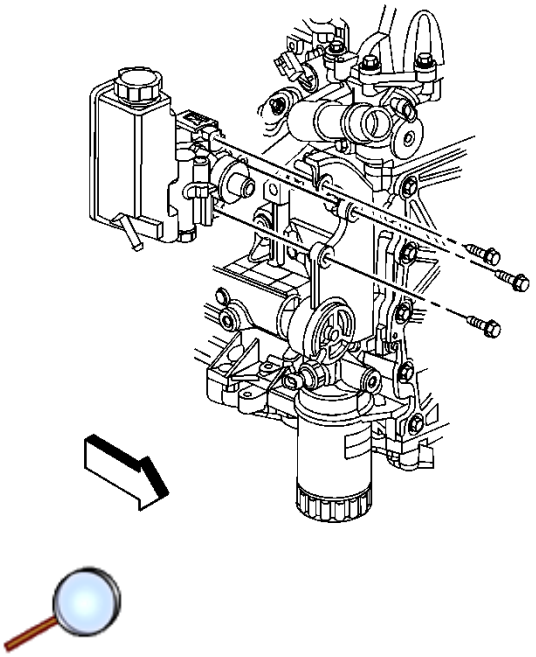
Removal Procedure

1. Remove the air cleaner assembly. Refer to Air Cleaner Assembly Replacement .
2. Remove the power steering pump pulley. Refer to Power Steering Pump Pulley Replacement .
3. Disconnect the wiring harness from the power steering fluid reservoir.
4. Remove as much power steering fluid from the power steering fluid reservoir as possible.
5. Place drain pans under the vehicle as needed.





6. Disconnect the power steering gear inlet and outlet hose from the power steering pump and power steering fluid reservoir assembly.

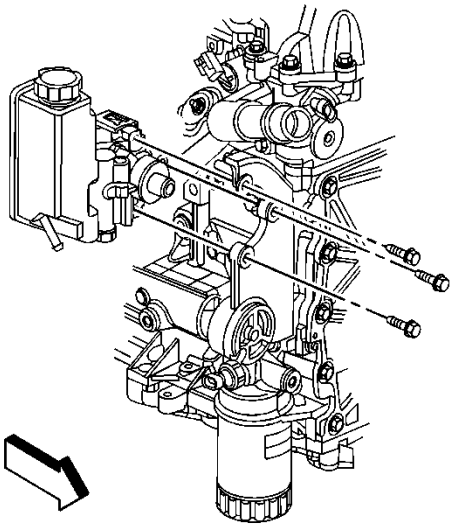


7. Remove the power steering pump bolts.
8. Remove the power steering pump and power steering fluid reservoir assembly from the vehicle.
9. Transfer any parts as needed.

Installation Procedure

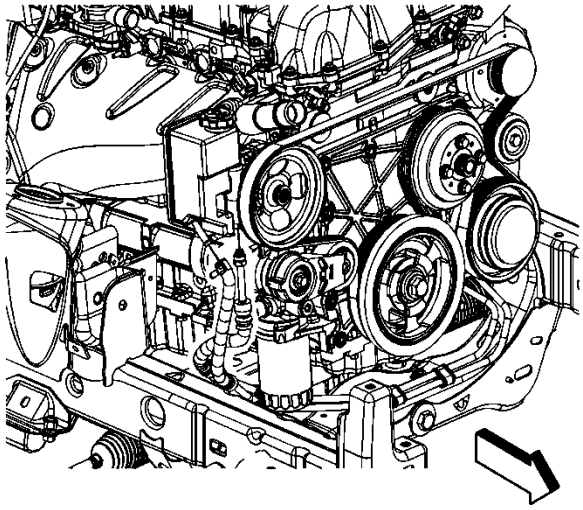
1. Install the power steering pump and power steering fluid reservoir assembly to the vehicle.

   Notice: Refer to Fastener Notice in the Preface section.



2. Install the power steering pump bolts.

   Tighten
   Tighten the bolts to 25 N·m (18 lb ft).



3. Connect the power steering gear inlet and outlet hose to the power steering pump and power steering fluid reservoir assembly.

   Tighten
   Tighten the fitting to 25 N·m (18 lb ft).

4. Clean any excess power steering fluid from the vehicle and remove the drain pans.
5. Connect the oil pressure sensor wiring harness to the power steering fluid reservoir.
6. Install the power steering pump pulley. Refer to Power Steering Pump Pulley Replacement .
7. Install the air cleaner assembly. Refer to Air Cleaner Assembly Replacement .
8. Fill and bleed the power steering system. Refer to Power Steering System Bleeding .

Power Steering Pump Pulley Replacement (LLR)

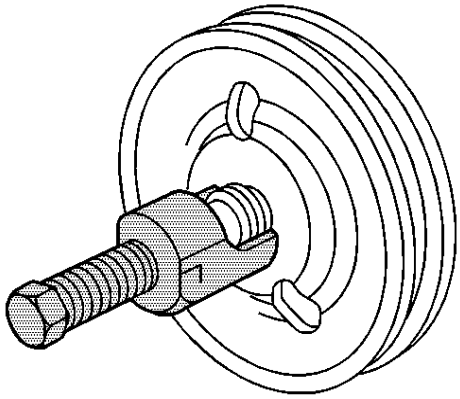
Tools Required

- J 25033-C Pulley Installer
- J 25034-C Pulley Remover

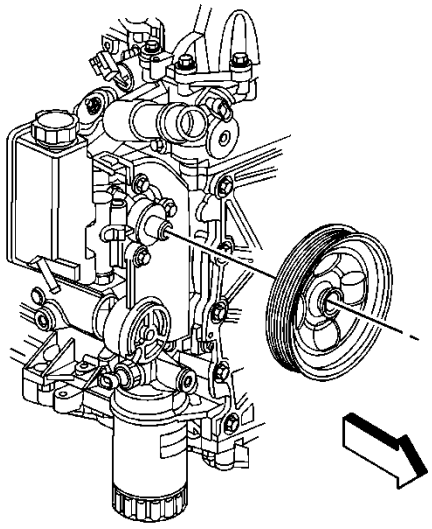
YOU MIGHT BE ABLE TO REMOVE THE PULLEY JUST BY PULLING ON IT AND WIGGLING IT AT THE SAME TIME. IF THAT DOES NOT WORK, LOCAL AUTO PART STORES USUALLY RENT SPECIAL TOOL AND THERE IS PROBABLY A GENERIC TOOL THAT WILL WORK JUST AS GOOD AS THE OVERPRICED GM SPECIAL TOOL.
TO INSTALL, A RUBBER MALLET IS YOUR FRIEND, ALONG WITH A SOCKET THAT IS LONG ENOUGH TO FIT OVER THE SHAFT AND SNUGGLE UP TO THE PULLEY. ALWAYS USE A RUBBER MALLET, NOT A METAL HAMMER. ALSO THE AUTO PARTS STORE MIGHT HAVE A TOOL TO PRESS THE PULLEY BACK ON.

Removal Procedure

1. Remove the drive belt. Refer to Drive Belt Replacement .

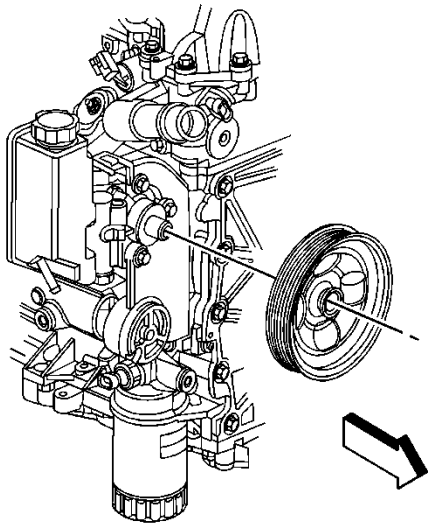


2. Remove the power steering pump pulley using remover J 25034-C .

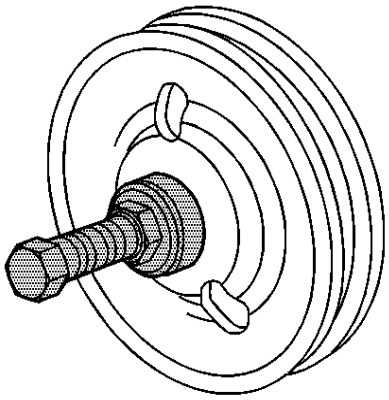


3. Remove the power steering pump pulley from the power steering pump shaft.

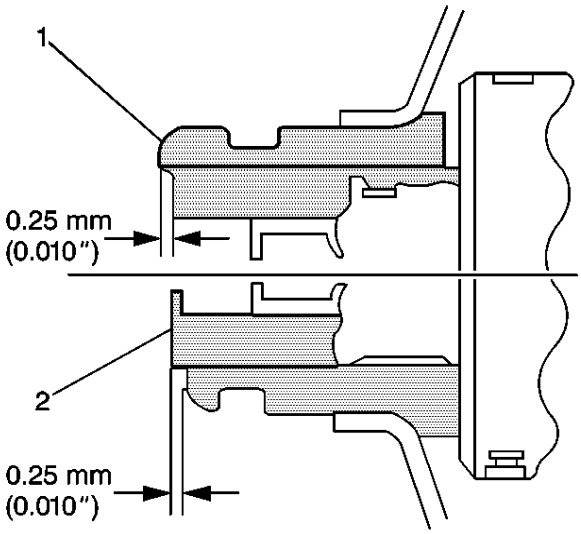
Installation Procedure



1. Install the power steering pump pulley to the end of the power steering pump shaft.



2. Install the power steering pump pulley to the power steering pump using installer J 25033-C .

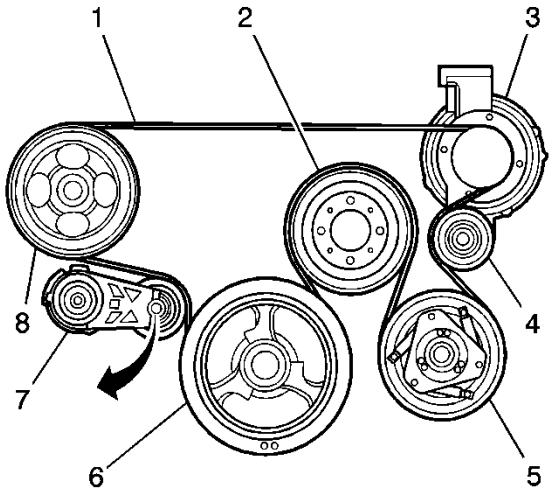




3. Install the power steering pump pulley (1) flush against the end of the power steering pump shaft (2), with an allowable variance of 0.25 mm (0.010 in).
4. Install the drive belt. Refer to Drive Belt Replacement .

Drive Belt Replacement (With A/C)

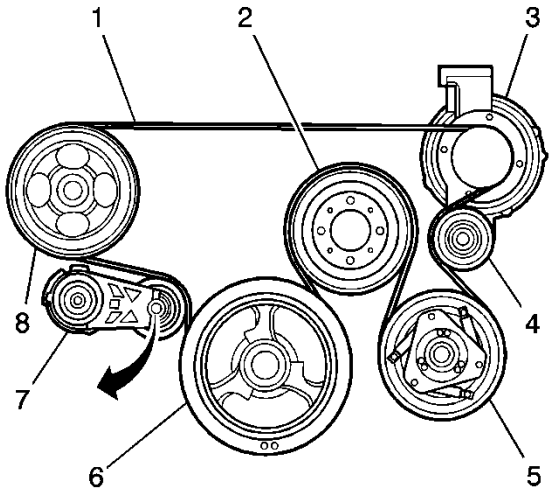
Removal Procedure





1. Install a 3/8 inch breaker bar into the drive belt tensioner (7).
2. Rotate the tensioner (7) clockwise, in order to relieve the tension on the drive belt (1).
3. Slide the drive belt (1) off of the water pump pulley (2).
4. Rotate the drive belt tensioner (7) counterclockwise, allowing the tensioner to return to the relaxed position.
5. Remove the drive belt (1) from the remaining pulleys.

Installation Procedure





1. Install the drive belt (1) over all the pulleys, except for the water pump pulley (2).
2. Install the 3/8 inch breaker bar into the drive belt tensioner (7).
3. Rotate the tensioner (7) clockwise.
4. Install the drive belt (1) over the top of the water pump pulley (2).
5. Slowly release the tension on the drive belt tensioner (7).

   Important: Ensure the drive belt is properly aligned and seated into the grooves of the drive pulleys.

6. Inspect for proper installation of the drive belt (1) on the pulleys.

©

Power Steering System Bleeding

H3s do not have a hydro-boost system, that is for the H2 only.

Important:

- Use clean, new power steering fluid type only. See the Maintenance and Lubrication subsection for fluid specifications. Refer to Fluid and Lubricant Recommendations.
- Hoses touching the frame, body or engine may cause system noise. Verify that the hoses do not touch any other part of the vehicle.
- Loose connections may not leak, but could allow air into the steering system. Verify that all hose connections are tight.

Important: Power steering fluid level must be maintained throughout bleed procedure.

1. Fill pump reservoir with fluid to minimum system level, FULL COLD level, or middle of hash mark on cap stick fluid level indicator.

   ~~**Important:** With hydro-boost only, the oil level will appear falsely high if the hydro-boost accumulator is not fully charged. Do not apply the brake pedal with the engine OFF. This will discharge the hydro-boost accumulator.~~

~~2. If equipped with hydro-boost, fully charge the hydro-boost accumulator using the following procedure:~~

   ~~2.1. Start the engine.~~

   ~~2.2. Firmly apply the brake pedal 10-15 times.~~

   ~~2.3. Turn the engine OFF.~~

3. Raise the vehicle until the front wheels are off the ground. Refer to Lifting and Jacking the Vehicle.
4. Key on engine OFF, turn the steering wheel from stop to stop 12 times.

   ~~Vehicles equipped with hydro-boost systems or longer length power steering hoses may require turns up to 15 to 20 stop to stops.~~

5. Verify power steering fluid level per operating specification. Refer to Checking and Adding Power Steering Fluid.
6. Start the engine. Rotate steering wheel from left to right. Check for sign of cavitation or fluid aeration (pump noise/whining).
7. Verify the fluid level. Repeat the bleed procedure, if necessary.