

# POWER STEERING PUMP INSTALLATION GUIDE

To ensure full core credit, if applicable, the core must be returned in the replacement unit box.



## Top things to do to ensure successful installation

1. Only use the OEM approved FLUID type, never use top-off fluid.
2. FLUSH the old fluid from entire system.
3. Install a FILTER to prolong pump service life.
4. Inspect and replace any hose that is damaged, worn or aged.
5. Remove and install pump pulley using proper tools and procedures.

### PRECAUTIONS AND NOTICES

- Refer to the vehicle service manual for required safety precautions, correct removal, installation, and testing procedures. If you lack the installation experience, proper tools or reference material, you should seek the services of a qualified technician.
- Instructions supplied with this unit are intended as a supplement to the vehicle service manual; it is not the sole information required for successful installation of the replacement unit. It is not intended to cover all possible removal and installation steps and procedures.
- This unit is guaranteed to fit and function in the applications for which it is listed. Carefully verify that the replacement unit part number is correct for your application.
- Most original units fail because of some external cause. Make necessary repairs before installing and operating the replacement unit.

### REMOVE ORIGINAL PUMP

1. Use a suitable puller to remove pressed-on pulleys (if so equipped).
2. Remove pressure and return lines from the pump. If reused, thoroughly clean fittings and flush lines. Cap lines to keep dirt out of the system.
3. Remove drive belt if applicable.
4. Remove and transfer all switches, sensors, brackets, retaining hardware and special parts not supplied with replacement unit; clean and repair or replace as needed.

### TRANSFER THE PUMP RESERVOIR OR RETURN PIPE

If the original pump reservoir or return pipe has to be reused, refer to the vehicle service manual for correct removal precautions and procedures. Thoroughly clean and flush the reservoir or pipe inside and out

using clean power steering fluid. Install using the supplied O-rings or gaskets. Inspect for an internal filter; be sure fluid flows freely through it, clean or replace as needed.

### **INSTALL REPLACEMENT PUMP**

1. Read all enclosed special instructions, labels or tags before proceeding.
2. Refer to the vehicle service manual for instructions specific to your vehicle.
3. Install the pulley (if equipped) using proper tools and procedures – **NEVER** hammer the pulley on; **do not** use a press.
4. Replace defective hoses; be sure all O-rings or fitting seals are replaced.
5. Flush the system following original manufacturer procedures. Only use the fluid type approved by the original equipment manufacturer. Installation of a filter on the return side is recommended.
6. Install pump using proper tools. Torque all bolts to original manufacturer specifications.
7. Align pulley then tighten belts using a tension gauge to manufacturer's spec or inspect belt tensioner for proper operation as applicable. Premature pump failure can result from an over-tightened belt.

### **FLUSH THE SYSTEM**

Old fluid must be flushed from hydraulic hoses, steering unit and hydro-boost (if so equipped). Power flushing is an option, but manual flushing methods are preferred. Regardless of technique used, all old fluid **MUST** be flushed from the system and then replaced with OEM-approved new fluid type. Failure to properly flush the system, and not using the correct fluid will **VOID THE UNIT WARRANTY**.

### **BLEEDING AND TESTING**

1. Before operating the system, check fluid levels, prime the pump, and check that pulleys and belts are clear of obstacles and routed correctly.
2. If possible, crank engine in short bursts to circulate fluid and allow any trapped air to rise toward the reservoir.
3. Start engine and check fluid levels. If fluid level drops, this is an indication that air is still in the system. It may be necessary to vacuum bleed the system using appropriate tools and procedures.
4. If noisy operation persists or fluid stays foamy, a restriction in the system may be the cause. Check for damaged or defective hoses, a blocked reservoir filter, a blocked remote reservoir hose, or a blocked or restricted cooler (if so equipped). Prolonged operation with any of these conditions will affect operation and cause premature pump failure.