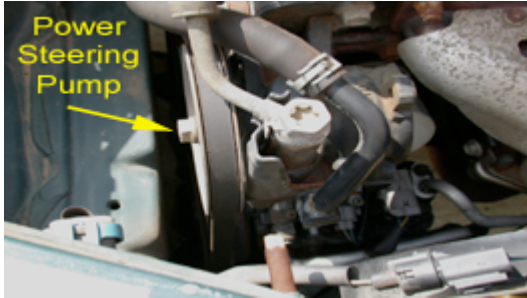




## Steering & Suspension: Power Steering Pump



**Description:** The power steering pump is typically a vane style pump driven by a belt off the engine. A fluid reservoir may be mounted to the pump itself or the reservoir may be mounted remotely. The pump may use specialized power steering fluid or automatic transmission fluid.

**Purpose:** The pump generates high pressures used to reduce steering effort, easing driver fatigue. Some cars use variable-assist power steering systems (check the owner's manual to see if your car has this feature), which provide more assist at low speeds and reduces assist at higher speeds. This provides the most assist when needed, reduces over-steer in emergency situations and provides better on-highway feel.

**Maintenance Tips/Suggestions:** When turning the steering wheel, never hold the steering wheel in the extreme right or left position for more than a few seconds this could damage the pump. Check the power steering fluid level at every oil change. This is also a good time to ensure that the power steering drive belt is tight. Refer to your car's owner's manual for specific recommendations on the type of power steering fluid to use. Fluids need to be compatible with hoses and seals and in some cases the recommended fluid may be automatic transmission fluids such as Type F or Dexron. It's possible to check the power steering fluid level when your car is cold, but it's usually recommended to check the fluid with the car warmed up. Many cars today use a semi-transparent reservoir for power steering fluid, so look for a fluid level mark on the outside. If the reservoir has no markings, open the reservoir's cap. There should be a small dipstick attached that provides the level reading. Use care not to run the system low on fluid; insufficient fluid level can damage the power steering pump. Some common warning signs of power steering problems may be high steering effort, erratic power steering assist, a loud whining sound from the pump, frequent topping off of the fluid reservoir, and a squealing pump drive belt. If your car is equipped with variable-assist power steering and the amount of effort required to steer changes while driving at a constant speed, have the system analyzed by a professional service technician.