

System Description

Major Components

The Electrical Power Steering system is composed of the following major components:

- A steering gearbox that converts rotary operation of the steering wheel into transverse operation via a rack and pinion mechanism. Steering sensors and an actuating motor are incorporated.
- A control unit that computes the optimum amount of power assistance, taking into account steering torque, steering speed, and vehicle speed. Selfdiagnosis functions are included.
- A power unit that drives the motor according to the signals from the EPS control unit. A current sensor is built in to give feedback information to the EPS control unit. Two relays shut off the power if a problem in the system occurs.
- A speed sensor, the countershaft speed sensor, send vehicle speed signal to the EPS control unit. Also the speedometer send vehicle speed signal to the EPS control unit. Two signals are used as a double-check.

