05IJF–02

SYSTEM DESCRIPTION

1. DESCRIPTION

(a) The EPS system generates torque through the operation of the motor and the reduction gear installed on the column shaft in order to assist steering effort.

Directions and amount of assisting power are determined by signals from the torque sensor built into the steering column assy and by the power steering ECU assy, and controlled in accordance with vehicle speed. As a result, steering effort is controlled to be light during low speed driving and moderately high during high speed driving.

(1) Power steering ECU assy:

The power steering ECU assy calculates assisting power based on a steering torque signal from the torque sensor and a vehicle speed signal from the skid control ECU. It generates specified assisting torque by controlling current to the motor.

(2) Torque sensor:

The torque sensor detects steering effort generated when the steering wheel is turned and converts it to an electrical signal.

(3) EPS motor:

The EPS motor is activated by the current from the power steering ECU assy and generates torque to assist steering effort.