

# ELECTRO HYDRAULIC POWER ASSIST STEERING CONTROL MODULE CONSTRUCTION/OPERATION

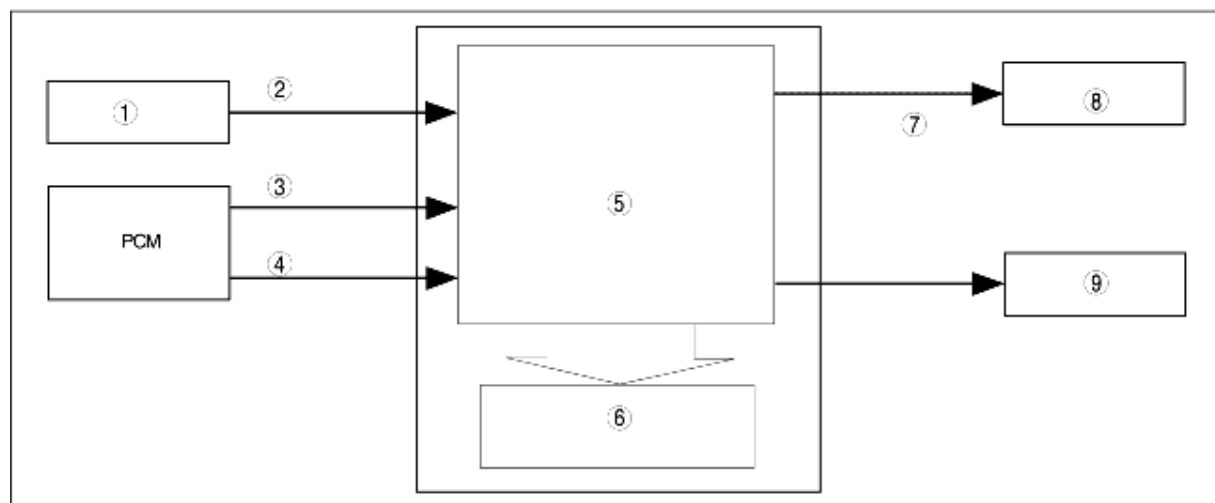
B3E061467880T04

## Construction

- The EHPAS control module is built into the electric power steering oil pump.
- The module calculates the proper assist current based on the steering speed signal from the P/S angle sensor installed on the steering gear and linkage, and the vehicle and engine speed signals from the PCM via CAN communication, and then outputs the control current to the motor.

## Function Table

Control item	Function
Motor current control	• Calculates the proper assist current based on the steering speed, and vehicle and engine speeds, and outputs a control current to the motor.
On-board diagnostic function	<ul style="list-style-type: none"> <li>• A function that allows important parts of the control system to perform self-diagnosis. In case a malfunction occurs, the EHPAS warning light illuminates to advise the driver, and at the same time a DTC is stored in the EHPAS control module.</li> <li>• When a malfunction is determined as a result of the on-board diagnosis, system control is suspended or limited to prevent any dangerous occurrence while driving.</li> </ul>



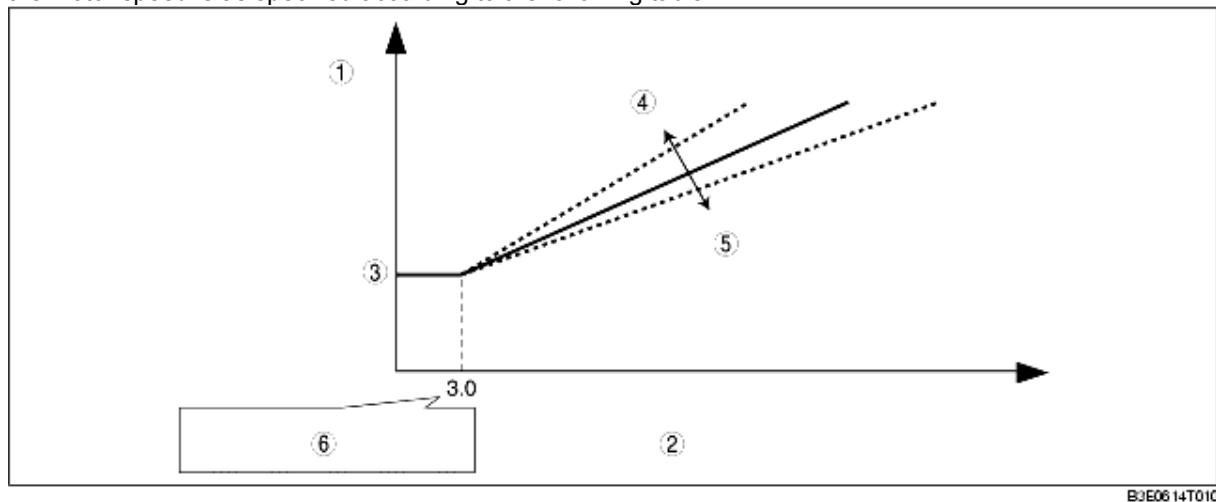
B3E06 12T005

1	P/S angle sensor
2	Steering speed signal
3	Vehicle speed signal (CAN)
4	Engine speed signal (CAN)
5	EHPAS control module
6	On-board diagnostic function
7	Control current
8	Motor
9	EHPAS warning light

## Operation

## Motor current control

- The proper assist current is calculated based on the steering speed from the P/S angle sensor, and the vehicle and engine speed signals from the PCM, and then the current output to the motor is controlled so that the motor speed is as specified according to the following table.



B3E06 14T010

1	Motor speed (rpm)
2	Steering wheel rotation speed (deg/s)
3	Stand-by
4	Vehicle speed (low)
5	Vehicle speed (high)
6	Smallest detected angle of P/S angle sensor