

Electric Power Steering Characteristics

- EPS has the following features.

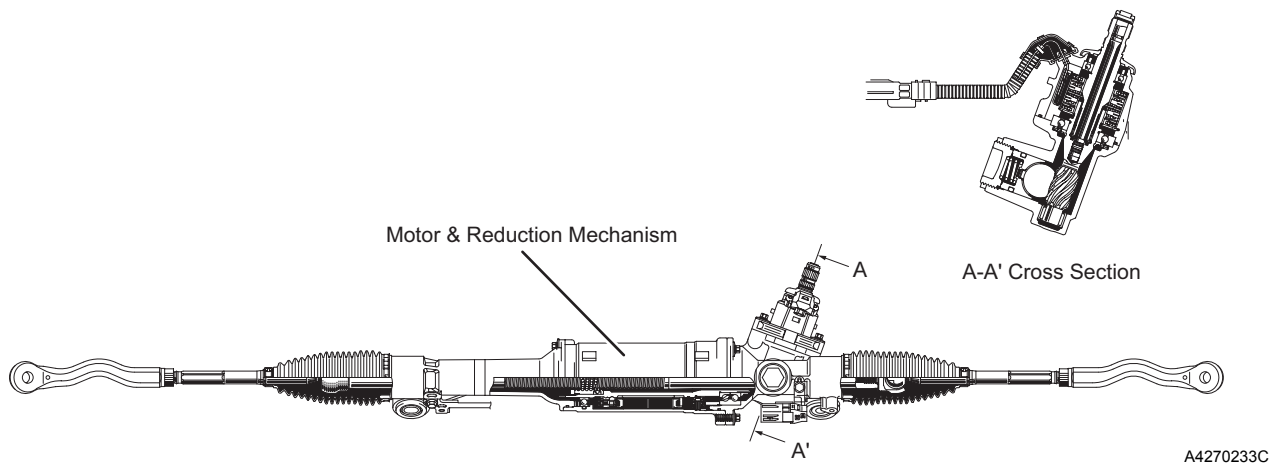
Features

Item	Features
Fuel Economy Characteristics	Hydraulic power steering uses the drive force of the engine to constantly operate a hydraulic pump. In contrast, the EPS drives the motor only during a steering operation that requires assist torque. Accordingly, this power steering does not consume energy during straightline driving at high speeds, and realizes excellent fuel economy characteristics.
Simpler Construction	A simple and compact construction has been achieved by integrating the brushless motor and the reduction gear (the main components of the rack type EPS) in the steering gear unit, and using a compact and lightweight EPS ECU.
Discontinued Hydraulic System	The electric power steering does not need the hydraulic pipes and the oil that are required for driving the hydraulic power steering. Therefore, the steering gear can be easily removed and reinstalled.
Lightweight	It has been made lightweight, along with the discontinuance of the pipe system and the compact configuration of the system.
Steering Feel	This system optimizes the assist characteristics based on the signals provided by the vehicle speed sensor. Thus, it reduces the steering effort at low speeds, and realizes a responsive steering feel at high speeds.

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Steering Gear

- A lightweight and compact rack & pinion type steering gear that excels in ease of use is used.
- The brushless motor and the reduction gear (the main components of the rack type EPS) have been integrated in the steering gear unit.



Steering Gear Specification

	GS300	GS430
Gear Ratio(Overall)	14.6	12.4~17.2
Type	Rack & Pinion	←
No. of Turns Lock to Lock	3.2	2.7
Rack Stroke [mm]	158	←