

# Column Type Electric Power Steering System for FR Sports Cars



For FR sports cars, JTEKT has developed a column type electric power steering system with improved steering feeling. The features of this newly developed steering system are introduced below.

## Features

### 1. Manual Gear

1. A stroke ratio of 60mm/rev. is adopted (increase of 20% compared with conventional) improving the vehicle's response to steering.  
(Total steering gear ratio 13:1)
2. A small diameter rack housing supporting low center-of-gravity positioning of the engine.  
Diameter: Approximately 12% less than the conventional type

### 2. Column

1. Improved mounting rigidity by adopting a large

aluminum block on the driver side vehicle mounting section and increasing bolt size.

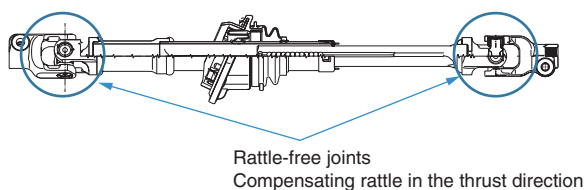
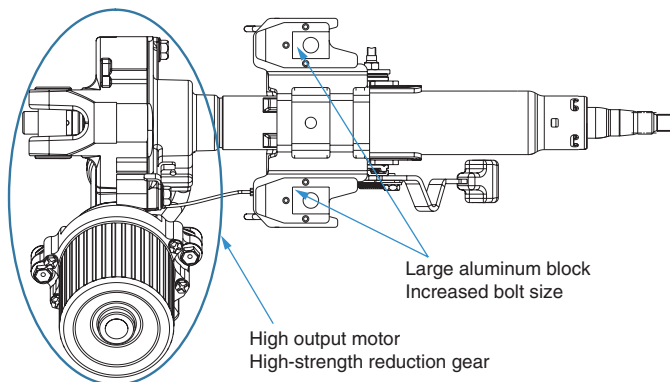
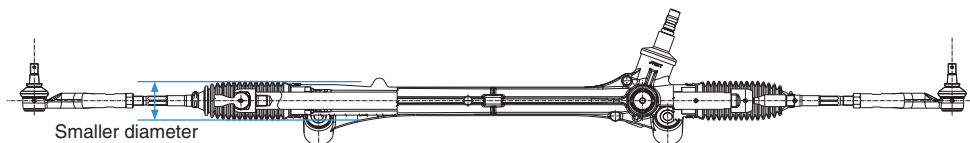
2. Improved handleability of sports cars by achieving an output accommodating high stroke ratio and a small diameter steering wheel ( $\phi 365\text{mm}$ ) through the adoption of a high output motor and high-strength reduction gear.

Motor torque; 4.82 N·m

Reduction ratio; 18.5 : 1

### 3. Intermediate Shaft

Improved steering feeling in the minute steering zone by adopting rattle-free joints (no play in the rotational direction) and compensating rattle in the thrust direction.



(East JAPAN Technical Center,  
Automotive Systems Business Headquarters)

JTEKT CORPORATION