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Value & Technology
Our goal is sensational driving experiences – JTEKT
A Feeling of Unity between Driver and Car, and Steering Feel That Stimulates the Senses...

"Driving.
""Cornering" and "Steering."

Our three basic vehicle performance functions, our forte is "Cornering."
Committed to producing superior steering equipment.

JTEKT developed the world's first electric power steering (EPS) system in 1988.
Today, our products hold No. 1 market share around the globe.

Proudly No. 1 in the Global Market
One in three vehicles is equipped with JTEKT electric power steering (EPS)

Proposal of optimal electric power steering (EPS) system considering safety, comfort and ecology

As the world’s No. 1 contributor to the environment, JTEKT is a comprehension steering systems manufacturer committed to providing optimal systems that match vehicles and purposes by ensuring products are well-balanced in all areas; from quality, cost and delivery to safety, comfort and ecology.

"Driving," "Cornering" and "Steering."

At the three basic vehicle performance functions, our forte is "Cornering."
Committed to producing superior steering equipment.

JTEKT developed the world’s first electric power steering (EPS) system in 1988.
Today, our products hold No. 1 market share around the globe.
JTEKT responds to market demand in support of a vehicle society of tomorrow as a steering system supplier.

JTEKT products not only realize steering performance matching vehicle requirements (e.g., body, suspension, tires, brakes and drive-train), our steering systems act as a human-machine interface where the driver’s intentions are delivered to the vehicle and supplemental/accurate information is transmitted back to the driver, making it possible for the driver to feel “happier,” “safer” and “more comfortable” when driving the vehicle.

Definition of steering system: Components used to control (steer) the direction a vehicle is moving; in short, the equipment for changing the direction of the tires.

That’s what our steering systems provide

A Confident, Relaxing Driving Experience…
That’s what our steering systems provide

A Confident, Relaxing Driving Experience…
That’s what our steering systems provide
JTEKT Steering Systems

### Standard System Proposal

<table>
<thead>
<tr>
<th>Rack force (kN)</th>
<th>21</th>
<th>20</th>
<th>19</th>
<th>18</th>
<th>17</th>
<th>16</th>
<th>15</th>
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<th>6</th>
<th>5</th>
<th>4</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Vehicle segment</td>
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<td>A</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>K</td>
<td>H</td>
<td>G</td>
<td>F</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
<td>J</td>
<td>I</td>
<td>H</td>
<td>G</td>
<td>F</td>
</tr>
</tbody>
</table>

### System Features by Type

#### Column-assist

- Optimum steering system for compact vehicles with small rack force
- Excellent steering performance as a result of minimal friction between the rack and pinion gear, resulting in smooth, steady steering.

#### Rack-assist

- Optimum steering system for medium-sized to large vehicles that require better steering performance
- High-rigidity steering system with high performance and high precision.

### JTEKT EPS systems are compatible for most automobiles, from small vehicles to large SUVs

#### Application range

- C-EPS
- Rack force: 2 to 21 kN
- Vehicle segment: U to J
- Weight: 6 kg

#### Optimum steering system

- for medium- to large-sized vehicles that require better steering performance
- Excellent steering performance as a result of minimal friction between the rack and pinion gear, resulting in smooth, steady steering.

#### Easier installation realized with adoption of high-output, compact reduction gear.

#### System with excellent safety, comfort and environmental performance realized through the application of proven technologies.

#### Reduction gear

- Highly efficient, compact reduction gear resistant to water.

#### Motor / ECU

- Compact, lightweight, high-efficiency integrated motor / ECU resistant to water.

#### Torque sensor

- Compact, simple, high-performance sensor resistant to water.

### DP-EPS System

- Rack-assist realizes excellent steering feel with high rigidity and superior dynamic performance.
- System structure with flexible mounting realized by separating the assist unit from the steering wheel axle.
- System with excellent safety, comfort and environmental performance realized through the application of proven technologies.

### DP-EPS

- Rack-assist realizes excellent steering feel with high rigidity and superior dynamic performance.
- Easier installation realized with adoption of high-output, compact reduction gear.
- System with excellent safety, comfort and environmental performance realized through the application of proven technologies.

### DP-EPS system

- Excellent steering feel with high rigidity and superior dynamic performance.
- System structure with flexible mounting realized by separating the assist unit from the steering wheel axle.
- System with excellent safety, comfort and environmental performance realized through the application of proven technologies.

### Column

- Compact, simple, high-performance sensor resistant to water.

### Reduction gear

- Compact, lightweight, high-efficiency integrated motor / ECU resistant to water.

### Motor / ECU

- Compact, lightweight, high-efficiency integrated motor / ECU resistant to water.

### Torque sensor

- Compact, simple, high-performance sensor resistant to water.

### Intermediate shaft

- High-strength, high rigidity realized

### Torque sensor

- Compact, simple, high-performance sensor resistant to water.

### Reduction gear

- High-strength, high rigidity realized

### Motor / ECU

- Compact, lightweight, high-efficiency integrated motor / ECU resistant to water.
C-EPS
- Ideal for compact vehicles with small engine compartment: power-assist unit is located in the steering column
- Introduced as the world’s first EPS in 1988
- Superior safety, comfort, and environmental performance based on technologies and experience accumulated since its introduction

Torque sensor

Stable operation and low friction and quiet performance realized

High performance realized

Compact and simple design and

Superior safety, comfort and environmental performance based on technologies and experience accumulated since its introduction

RD-EPS

Flash-assist realizes superior direct-response steering feel,

Superior energy-saving system has low reduction gear loss and high machine efficiency.

System with excellent safety, comfort and environmental performance realized through the application of proven technologies.

E-VGR

Flash-assist realizes excellent direct-response steering feel.

Small/compact system adopted in response the engine room environment.

Rack-assist realizes excellent steering feel with high rigidity and superior dynamic performance.

Variable steering-angle ratio system combining vehicle stability and steering performance.

Variable steering-angle ratio system combining vehicle stability and steering performance.

Excellent steering feel and improved fuel efficiency realized through optimum discharge setting (MAP) and special valve tuning.

Extremely flexible installation and ability to use for EV driving realized by adopting an independent electric pump.

Excellent steering feel and improved fuel efficiency realized through optimum discharge setting (MAP) and special valve tuning.

Variable steering-angle ratio system combining vehicle stability and steering performance.

Excellent steering feel and improved fuel efficiency realized through optimum discharge setting (MAP) and special valve tuning.

Variable steering-angle ratio system combining vehicle stability and steering performance.
Safer, More Reliable Power Steering Systems to Customers Worldwide

JTEKT has been conducting activities to ensure compliance with functional safety standards in accordance with ISO26262 Road Vehicles – Functional Safety since 2005.

Ensuring the Delivery of Safer, More Reliable Power Steering Systems

Advanced Research & Development Facilities for Producing Next-generation EPS Systems

JTEKT R&D centers exchange information around the world, enabling the company to accurately understand market demand and provide the newest/best/optimal systems to meet the diversified needs of our customers.

Iga Proving Ground Enables Testing / Evaluations Simulating Roads Worldwide

Fully utilizing our knowledge as a world-leading systems supplier, JTEKT conducts driving evaluations and analyses of products installed in vehicles. We exhaustively pursue the highest standards in product safety and operation on a test course capable of simulating various road and weather conditions around the world. As a total systems supplier, our highest value is to provide our customers with products that deliver outstanding performance and the best quality that help to make automobiles that are more than just fun to drive.