

# Differential Assembly Transmission Cast Iron Parts Chery Automobile

# **Basic Information**

- Place of Origin:
- Brand Name:
- Certification: IATF 16949:2016
- Minimum Order Quantity: 100 piece
- Packaging Details: Wooden b
- Delivery Time:
- Payment Terms:
- Supply Ability:
- Wooden box packaging Spot goods T/T

China

Dongfeng

Annual production of 50000 pieces



# **Product Specification**

<ul> <li>Warranty:</li> </ul>	1 Year
<ul> <li>Assembly Method:</li> </ul>	Bolted
Weight:	10 Kg
Material:	Steel
Country Of Origin:	China
<ul> <li>Application:</li> </ul>	Automotive
<ul> <li>Speed Ratio:</li> </ul>	3.5:1
Model:	ABC123
<ul> <li>Housing Diameter:</li> </ul>	200 Mm
Components:	Gears, Bearings, Shafts
<ul> <li>Installation Instructions:</li> </ul>	Included
<ul> <li>Torque Capacity:</li> </ul>	1000 Nm
<ul> <li>Compatibility:</li> </ul>	Various Models
Operating Temperature:	-40°C To 120°C
Mounting Style:	Flange

### **Product Description**

Title: Exploring the Differential: A Vital Component of Automotive Powertrains

### What is a Differential?

The differential is a crucial component of the automotive powertrain system, playing a pivotal role in ensuring vehicle stability and control, especially during turns. Its function is to address the issue of differential wheel speeds during turns, thereby ensuring smooth vehicle operation.

#### How Does a Differential Work?

The principle behind the operation of a differential is based on a gear system. It typically consists of a main gear, planetary gears, and side gears. While driving straight, all gears rotate at similar speeds, minimizing speed differentials between the main and side gears. However, during turns, the action of the planetary gears allows the side gears to rotate at different speeds, enabling the inner and outer wheels of the vehicle to rotate at varying speeds, maintaining vehicle stability.

#### Importance of the Differential

Balancing Steering: The differential balances the speed differentials between the inner and outer wheels during steering, ensuring stability during turns.

Protecting the Drivetrain: It helps in reducing damage to the drivetrain by minimizing torque and pressure, thus extending its lifespan.

Enhancing Traction: In challenging terrains such as off-road driving, the differential improves the vehicle's traction by ensuring all wheels maintain good grip, enhancing its off-road capability and maneuverability.

### Application of the Differential in Automotive Operations

Whether on city roads or rugged terrains, the differential is an indispensable part of vehicles. It ensures vehicle stability and safety in various driving conditions, offering drivers a better control experience.

