

**GROUP 27****REAR AXLE****CONTENTS**

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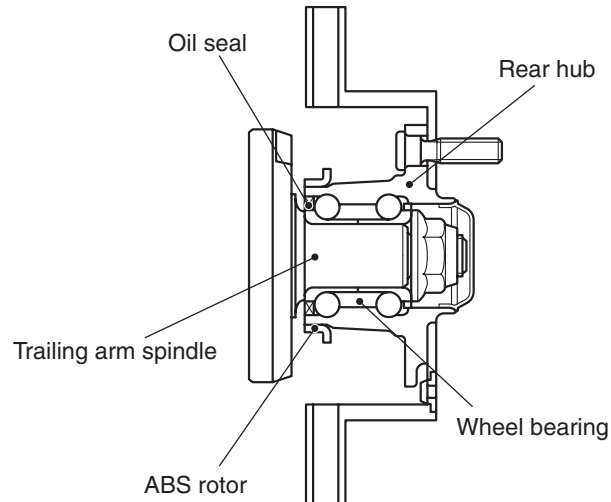
## GENERAL INFORMATION

M1271000100304

The rear axle has the following features:

- The wheel bearing is a unit ball bearing (double-row angular contact ball bearing) which incorporates the oil seals and is highly resistant to a thrust load.
- ABS rotor for detecting the wheel speeds is press-fitted to the rear hub.

## CONSTRUCTION DIAGRAM



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## SERVICE SPECIFICATIONS

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Item	Limit
Wheel bearing axial play mm	0.05
Rear hub rotary-sliding resistance N	19

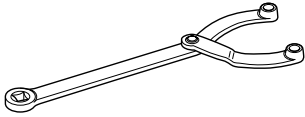
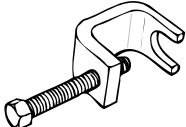
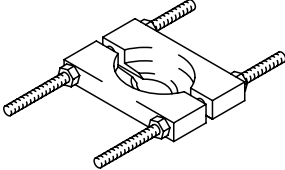
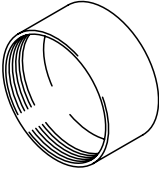
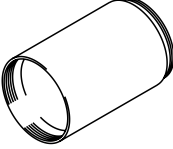
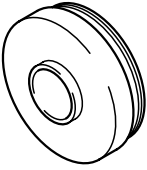
## SEALANT

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Item	Specified sealant	Remark
Hub cap	3M ATD Part No.8663 or equivalent	Semi-drying sealant

**SPECIAL TOOLS**

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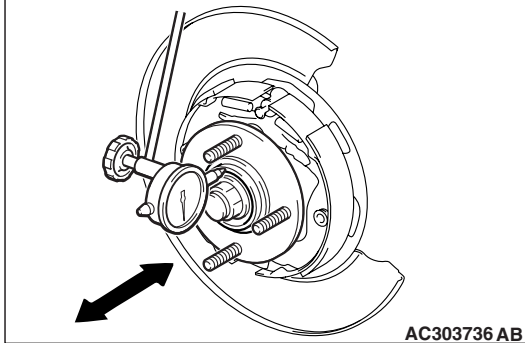
Tool	Number	Name	Use
 <p>B990767</p>	MB990767	Front hub and end yoke holder	Hub fixing
 <p>MB991618</p>	MB991618	Hub bolt remover	Hub bolt removal
	MD998801	Remover	Removal of ABS rotor
	MD998812	Installer cap	
	MD998813	Installer 100	
	MD998815	Installer adapter	

## ON-VEHICLE SERVICE

### WHEEL BEARING AXIAL PLAY CHECK

M1271000900452

1. Remove the caliper assembly, and suspend the caliper assembly with a wire and remove the brake disc.



2. Check the bearing's axial play. Place a dial gauge against the hub surface; then move the hub in the axial direction and check whether or not there is axial play.

**Limit: 0.05 mm**

3. If the play exceeds the limit, the self-locking nut should be tightened to the specified torque and check the axial play again.

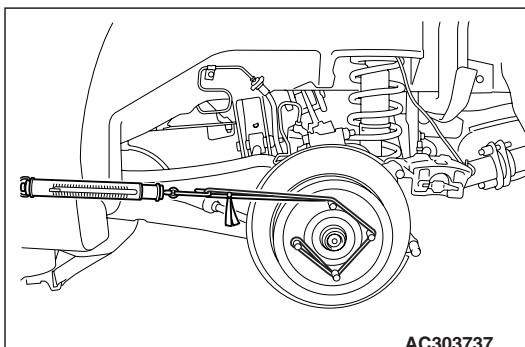
**Tightening torque: 175 ± 25 N·m**

4. Replace the rear hub assembly if an adjustment cannot be made to within the limit.

### REAR HUB ROTARY-SLIDING RESISTANCE CHECK

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1. Remove the caliper assembly, and suspend the caliper assembly with a wire and remove the brake disc.
2. Turn the hub a few times to seat the bearing.



3. Wind a rope around the hub bolt and turn the hub by pulling at a 90° angle with a spring balance. Measure to determine whether or not the rotary-sliding resistance of the rear hub is at the limit value.

**Limit: 19 N**

4. If limit value is exceeded, loosen the self-locking nut and then tighten it to the specified torque and check the rear hub rotary sliding resistance again.

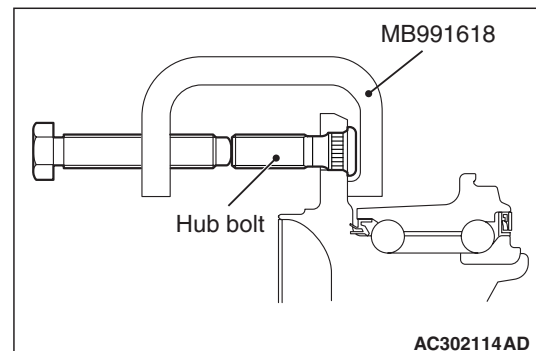
**Tightening torque: 175 ± 25 N·m**

5. Replace the rear hub assembly if an adjustment cannot be made to within the limit.

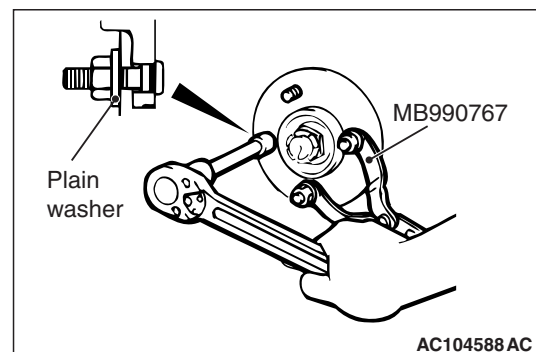
### HUB BOLT REPLACEMENT

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1. Remove the caliper assembly and suspend it with wire so that it does not fall.
2. Remove the brake disc.



3. Use special tool hub bolt remover (MB991618) to remove the hub bolts.



4. Install the plain washer to the new hub bolt, and install the bolt with a nut while holding the hub with special tool front hub and end yoke holder (MB990767).
5. Install the brake disc, caliper assembly and tighten the caliper assembly mounting bolts to the specified torque 60 ± 5 N·m.

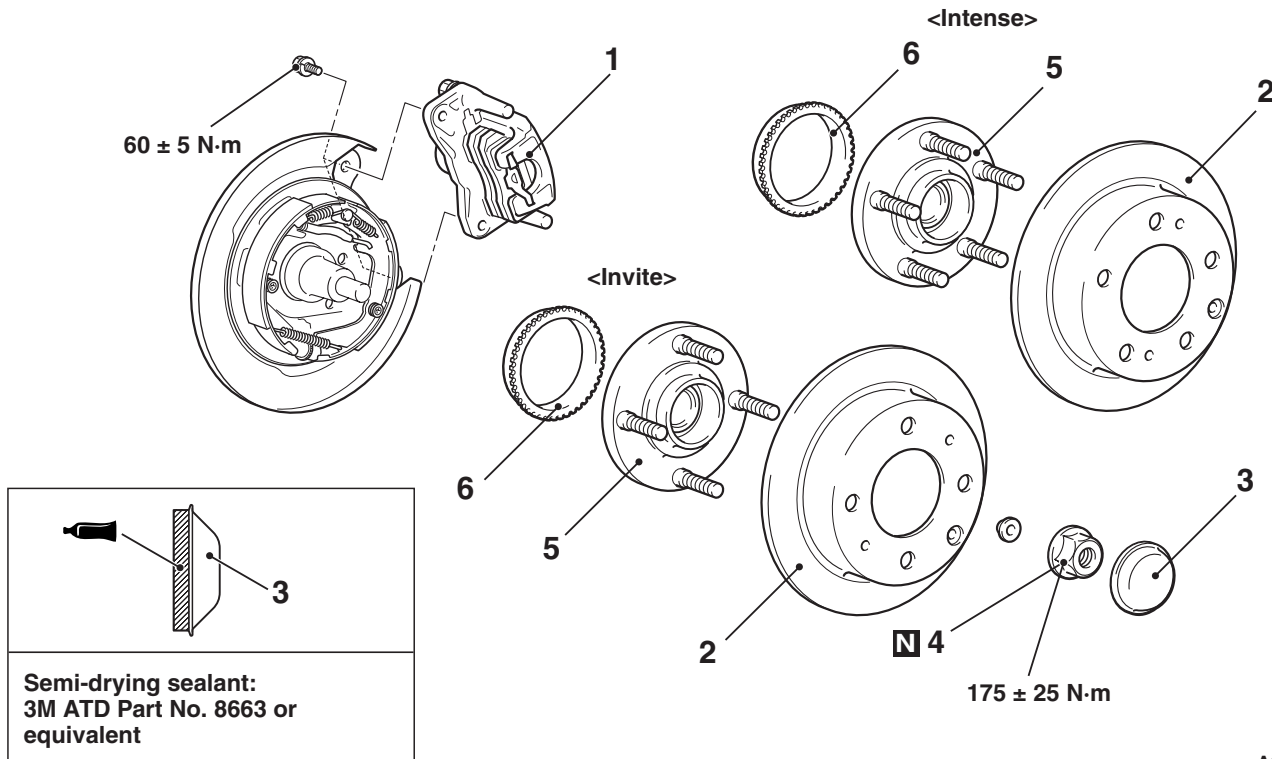
# REAR AXLE HUB ASSEMBLY

## REMOVAL AND INSTALLATION

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### CAUTION

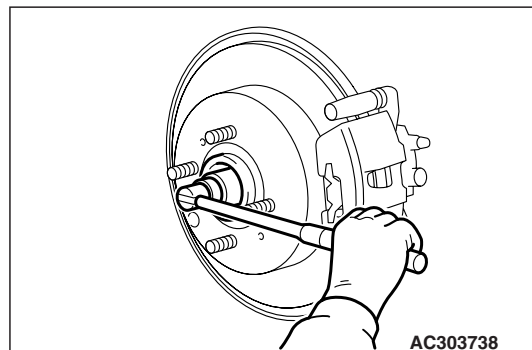
- Care must be taken not to scratch or damage the teeth of the ABS rotor. The ABS rotor must never be dropped. If the teeth of the ABS rotor are chipped, resulting in a deformation of the ABS rotor, it will not be able to accurately detect the wheel rotation speed, and the system will not function normally.
- The rear hub assembly should not be dismantled. When removing the rear hub assembly, the wheel bearing inner race may be left at the spindle side. In this case, always replace the rear hub assembly, otherwise the hub will damage the oil seal, causing oil leaks or excessive play.



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### <<B>> SELF-LOCKING NUT REMOVAL

#### CAUTION



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Do not apply the vehicle weight to the wheel bearing while loosening the self-locking nut, or the wheel bearing will be damaged.

#### Removal steps

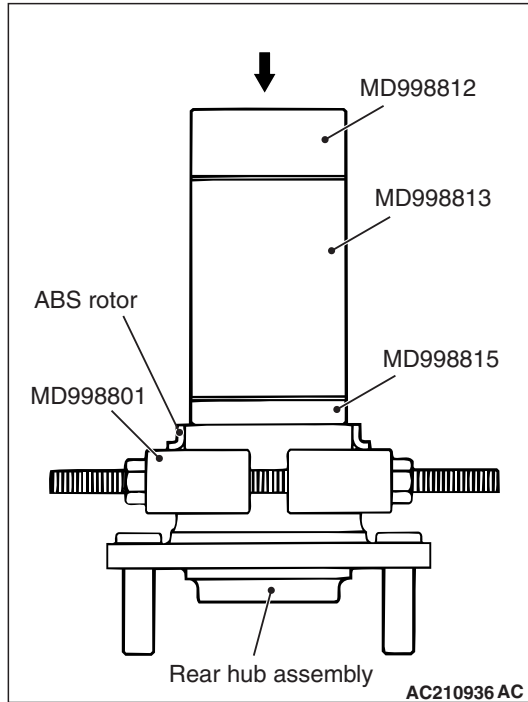
- <<A>> 1. Caliper assembly  
2. Brake disc  
3. Hub cap  
<<B>> >>B<< 4. Self-locking nut  
5. Rear hub assembly  
<<C>> >>A<< 6. ABS rotor

### REMOVAL SERVICE POINTS

#### <<A>> CALIPER ASSEMBLY REMOVAL

Secure the removed caliper assembly with wire, etc.

## &lt;&lt;C&gt;&gt; ABS ROTOR REMOVAL



Use the following special tools to press out ABS rotor from the rear hub assembly.

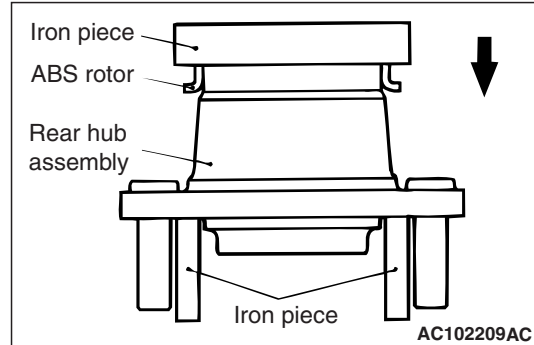
- Remover (MD998801)
- Installer cap (MD998812)
- Installer100 (MD998813)
- Installer adapter (MD998815)

## INSTALLATION SERVICE POINTS

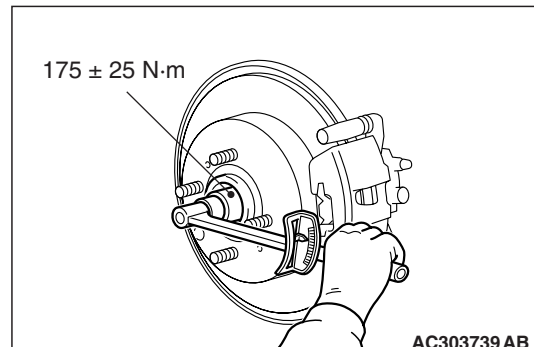
## &gt;&gt;A&lt;&lt; ABS ROTOR INSTALLATION

**⚠ CAUTION**

When installing, take care not to deform the ABS rotor.



Press-fit the ABS rotor to the rear hub assembly.

>>B<< SELF-LOCKING NUT  
INSTALLATION**⚠ CAUTION**

Before securely tightening the self-locking nuts, make sure there is no load on the wheel bearings. Otherwise the wheel bearing will be damaged.

Tighten the self-locking nut to the specified torque.

## INSPECTION

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- Check the rear hub assembly for crack or damage.
- Check the oil seal of the rear hub assembly for crack or damage.
- Check the ABS rotor for chipped teeth.