
GROUP 27

REAR AXLE

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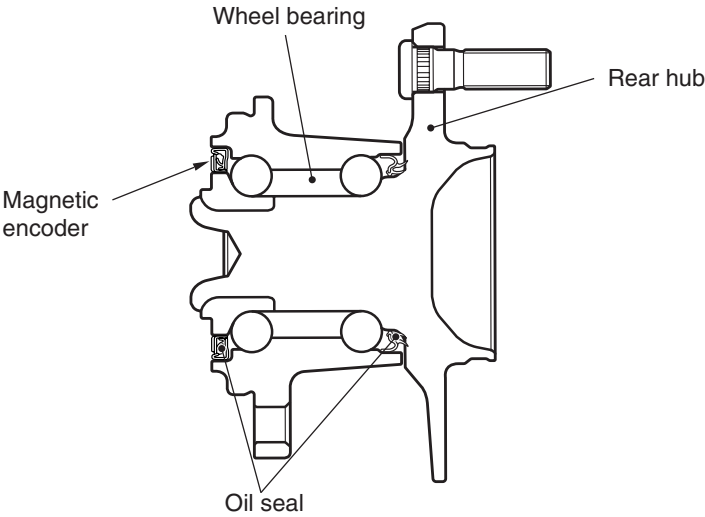
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GENERAL INFORMATION

M1271000100371

- The rear axle has the following features:
- The wheel bearing is a unit ball bearing (double-row angular contact ball bearing) for reduced friction.
 - The wheel bearing incorporates magnetic encoder for wheel speed sensing.
 - The rear wheel hub assembly combines the hub, wheel bearing and oil seal in a single unit for fewer parts, better durability, improved assembly precision, and better structural organization.

CONSTRUCTION DIAGRAM



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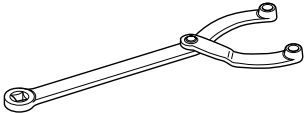
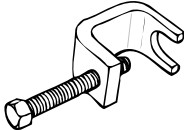
SERVICE SPECIFICATIONS

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

SPECIAL TOOLS

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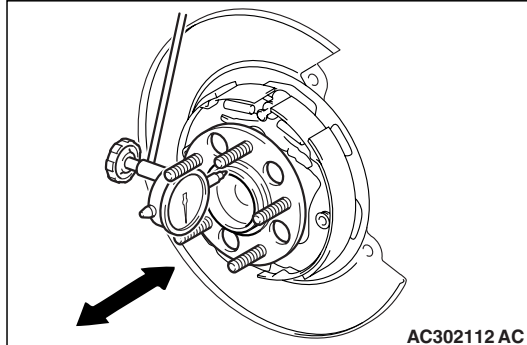
Tool	Number	Name	Use
 B990767	MB990767	Front hub and end yoke holder	Hub fixing
 MB991618	MB991618	Hub bolt remover	Hub bolt removal

ON-VEHICLE SERVICE

WHEEL BEARING AXIAL PLAY CHECK

M1271000900504

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

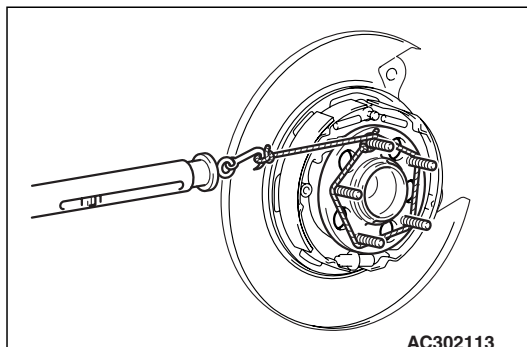
3. If the play exceeds the limit, replace the rear hub assembly.
4. After having checked, install the brake disc, the caliper assembly and tighten the caliper mounting bolt to the specified torque.

Tightening torque: 60 ± 5 N·m

WHEEL BEARING 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 wheel bearing is at the limit value.

Limit: 19 N

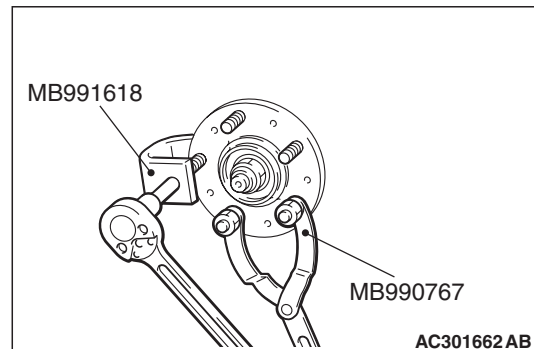
4. If limit value is exceeded, replace the rear hub assembly.
5. After having checked, install the brake disc, the caliper assembly and tighten the caliper mounting bolt to the specified torque.

Tightening torque: 60 ± 5 N·m

HUB BOLT REPLACEMENT

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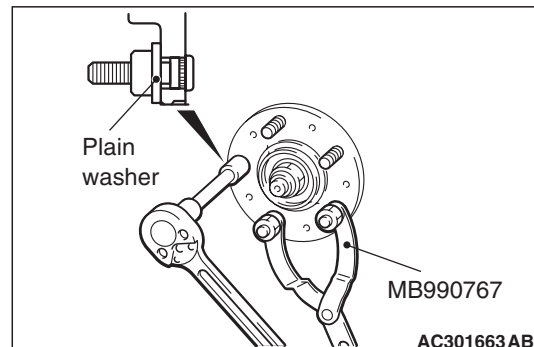
1. Remove the caliper assembly, and suspend the caliper assembly with a wire and remove the brake disc.



2. Use the following special tools to remove the hub bolts.

- Front hub and end yoke holder (MB990767)
- Hub bolt remover (MB991618)

NOTE: To retain a space for removing the hub bolts, remove them near the retainer spring mounting position.



3. Install the plain washer to the new hub bolt, and install the bolt with a nut.

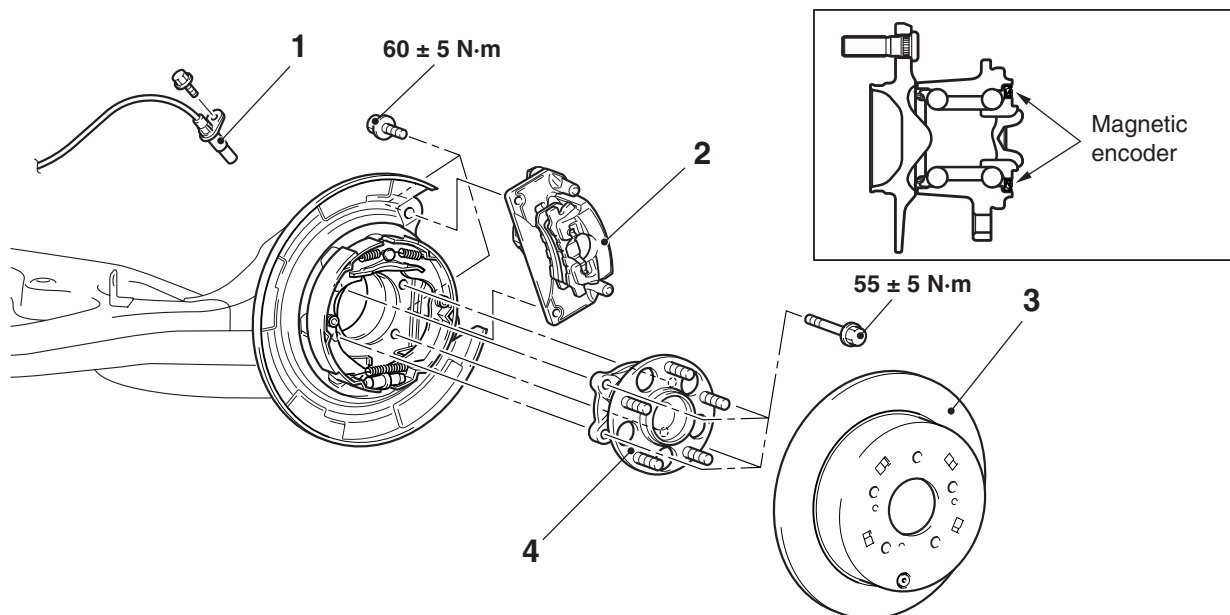
REAR AXLE HUB ASSEMBLY

REMOVAL AND INSTALLATION

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⚠ CAUTION

- Do not disassemble the rear wheel hub assembly.
- The magnetic encoder collects any metallic particle easily, because it is magnetized. Make sure that the magnetic encoder should not collect any metallic particle. Check that there is not any trouble inside of bearing prior to reassembling it.
- When the rear wheel hub assembly is removed and installed, make sure that the magnetic encoder does not contact with surrounding parts to avoid damage.



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Removal steps

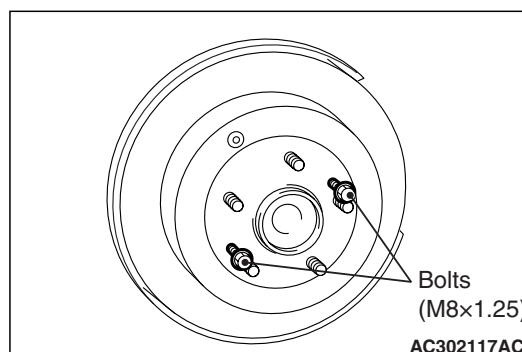
- <<A>> 1. Rear wheel speed sensor
<> 2. Caliper assembly
3. Brake disc
4. Rear wheel hub assembly

REMOVAL SERVICE POINTS

<<A>> CALIPER ASSEMBLY REMOVAL

Secure the removed caliper assembly with wire, etc.

<> BRAKE DISC REMOVAL



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If the brake disc is seized, install M8 × 1.25 bolts as shown, and remove the disc by tightening the bolts evenly and gradually.

INSPECTION

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- Check the rear hub assembly for crack or damage.