
GROUP 27A

REAR AXLE <2WD>

CONTENTS

| | | | |
|-----------------------------|--------------|---|--------------|
| GENERAL INFORMATION | 27A-2 | ON-VEHICLE SERVICE | 27A-4 |
| | | WHEEL BEARING AXIAL PLAY CHECK .. | 27A-4 |
| SERVICE SPECIFICATIONS..... | 27A-2 | REAR HUB ROTARY-SLIDING RESISTANCE CHECK | 27A-4 |
| SEALANT..... | 27A-2 | HUB BOLT REPLACEMENT..... | 27A-4 |
| SPECIAL TOOLS..... | 27A-3 | REAR AXLE HUB ASSEMBLY | 27A-5 |
| | | REMOVAL AND INSTALLATION | 27A-5 |
| | | INSPECTION..... | 27A-6 |

GENERAL INFORMATION

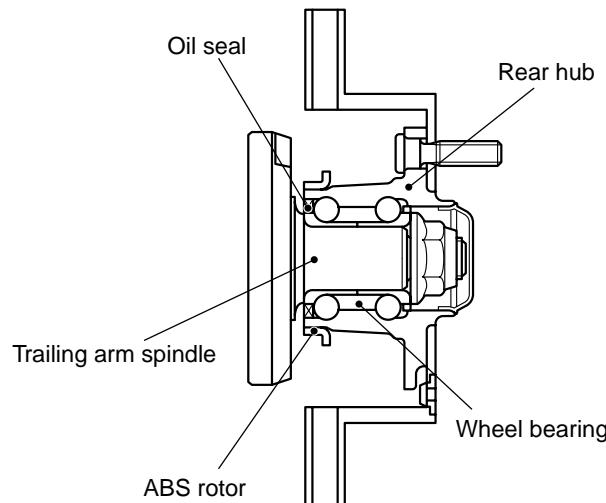
The rear axle has the following features:

- 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 in vehicles with ABS.

M1271000100348

CONSTRUCTION DIAGRAM



AC300617AB

SERVICE SPECIFICATIONS

M1271000300427

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

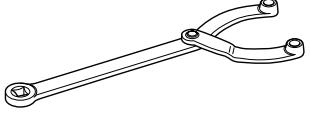
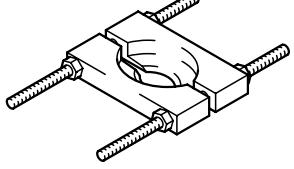
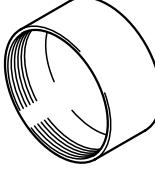
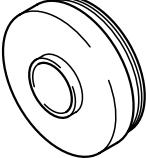
SEALANT

M1271000500249

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

SPECIAL TOOLS

M1271000600439

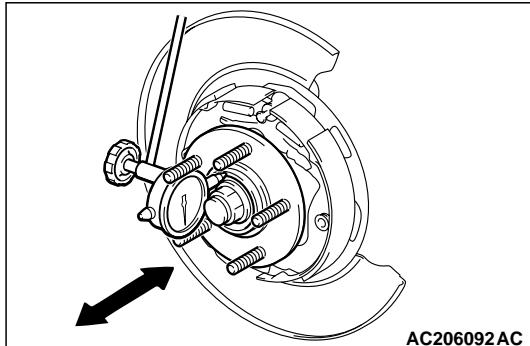
| Tool | Number | Name | Use |
|---|----------|-------------------|----------------------|
|  MB990767 | MB990767 | End yoke holder | Hub fixing |
|  MB991618 | MB991618 | Hub bolt remover | Hub bolt removal |
|  MD998801 | MD998801 | Remover | Removal of ABS rotor |
|  MD998812 | MD998812 | Installer cap | |
|  MD998813 | MD998813 | Installer 100 | |
|  MD998815 | MD998815 | Installer adapter | |

ON-VEHICLE SERVICE

WHEEL BEARING AXIAL PLAY CHECK

M1271000900377

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.

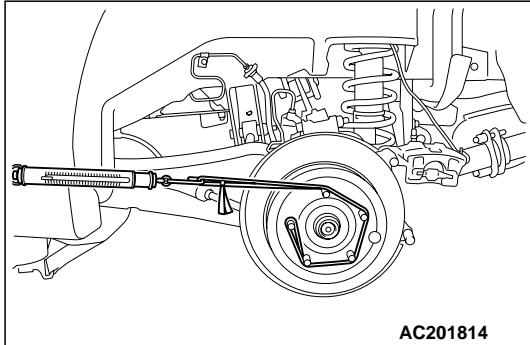
Tightening torque: $175 \pm 25 \text{ N}\cdot\text{m}$

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

REAR HUB ROTARY-SLIDING
RESISTANCE CHECK

M1271001100222

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.

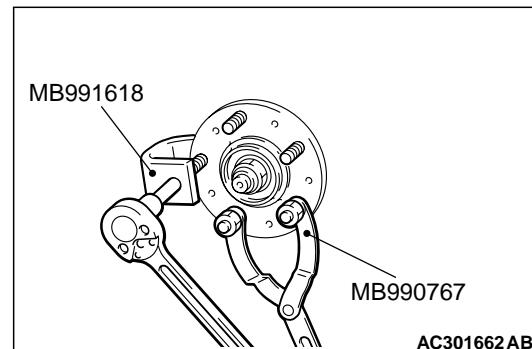
Tightening torque: $175 \pm 25 \text{ N}\cdot\text{m}$

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

HUB BOLT REPLACEMENT

M1271001000214

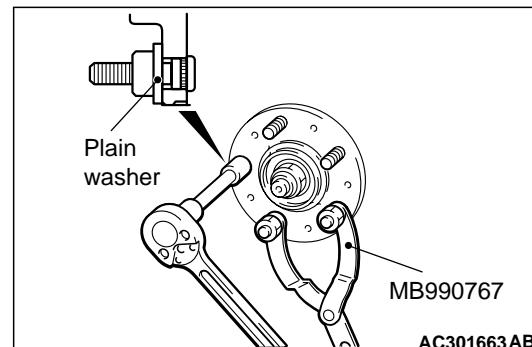
1. Remove the caliper assembly, and suspend the caliper assembly with a wire and remove the brake disc.



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

- 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.

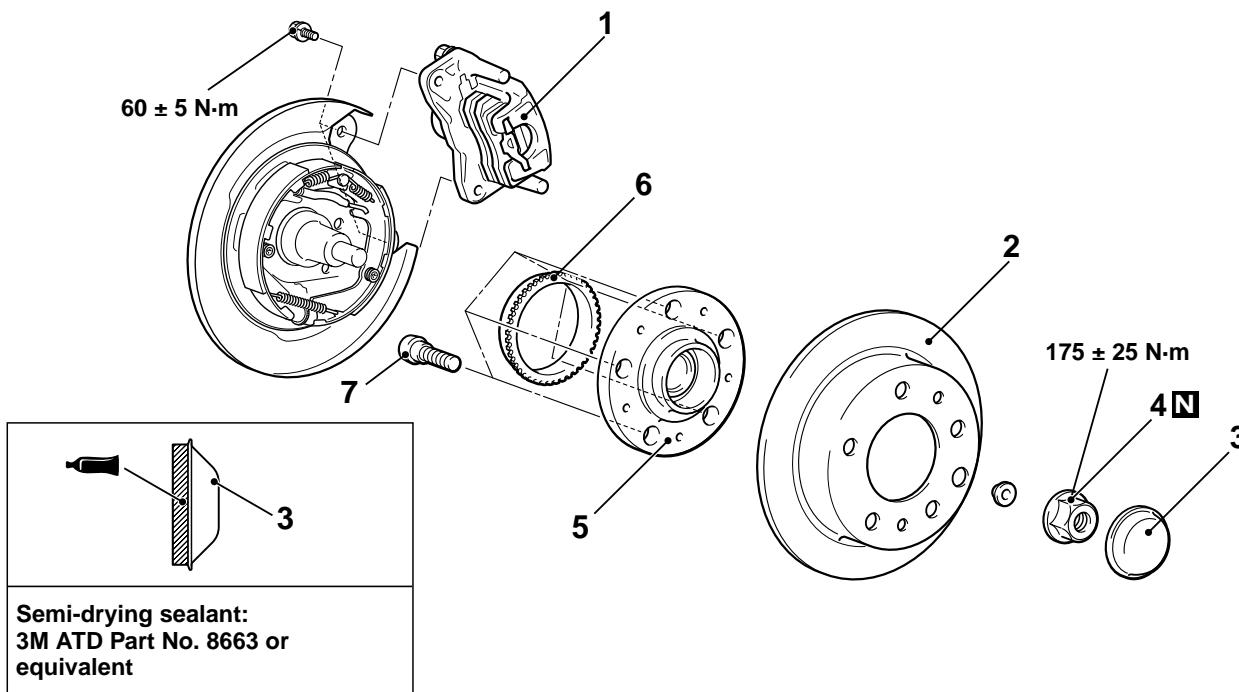
REAR AXLE HUB ASSEMBLY

REMOVAL AND INSTALLATION

M1271002000347

⚠ 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.



| Removal steps | |
|---------------|----------------------|
| <<A>> | 1. Caliper assembly |
| | 2. Brake disc |
| | 3. Hub cap |
| <> >>B<< | 4. Self-locking nut |
| | 5. Rear hub assembly |
| <<C>> >>A<< | 6. ABS rotor |
| | 7. Hub bolt |

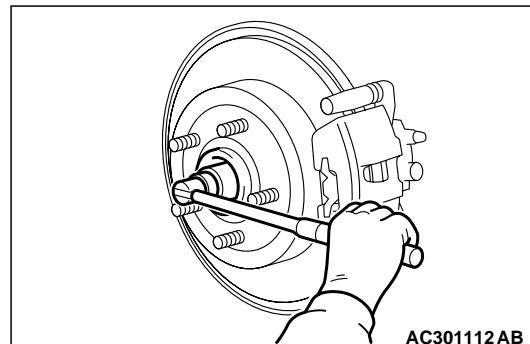
REMOVAL SERVICE POINTS

<<A>> CALIPER ASSEMBLY REMOVAL

Secure the removed caliper assembly with wire, etc.

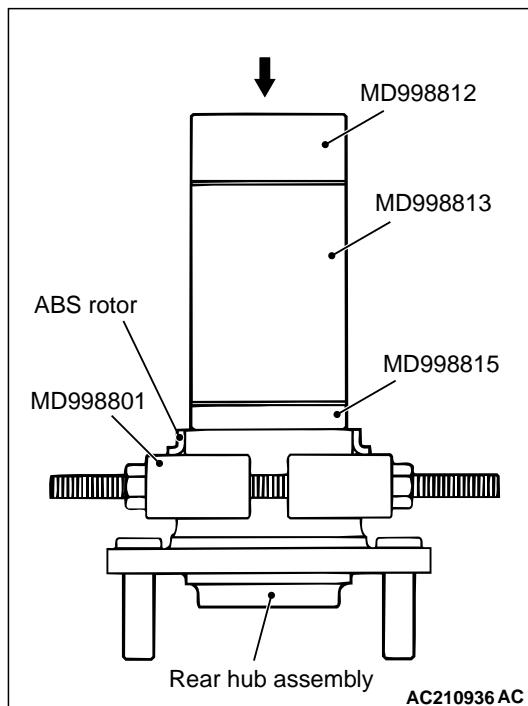
<> SELF-LOCKING NUT REMOVAL

⚠ CAUTION



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

<<C>> ABS ROTOR REMOVAL



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

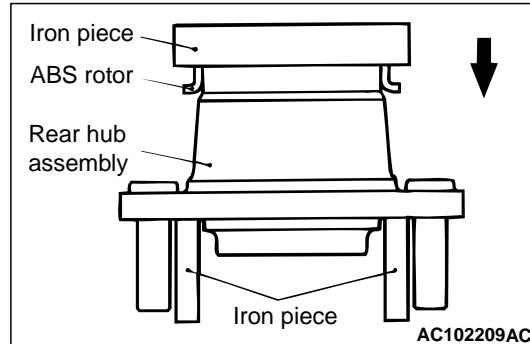
- Remover (MD998801)
- Installer cap (MD998812)
- Installer100 (MD998813)
- Installer adapter (MD998815)

INSTALLATION SERVICE POINTS

>>A<< ABS ROTOR INSTALLATION

⚠ CAUTION

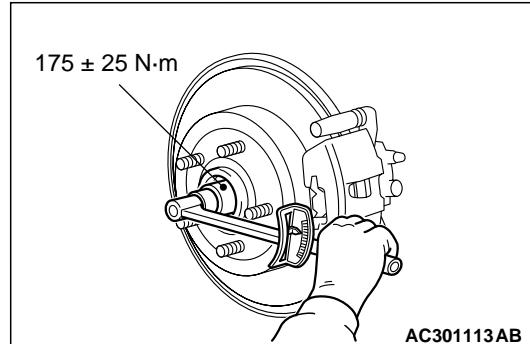
When installing, take care not to deform the ABS rotor.



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

M1271002100225

- 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.