

3. Rear Axle (FWD Model)

A: REMOVAL

1. DISC BRAKE

- 1) Disconnect ground cable from battery.
- 2) Jack-up vehicle, and remove rear wheel cap and wheels.

CAUTION:

Be sure to loosen and retighten axle nut after removing wheel from vehicle. Failure to follow this rule may damage wheel bearings.

- 3) Pry hub cap off with a screwdriver placed between it and hub.
- 4) Unlock axle nut.
- 5) Remove axle nut using a socket wrench. Remove washer.

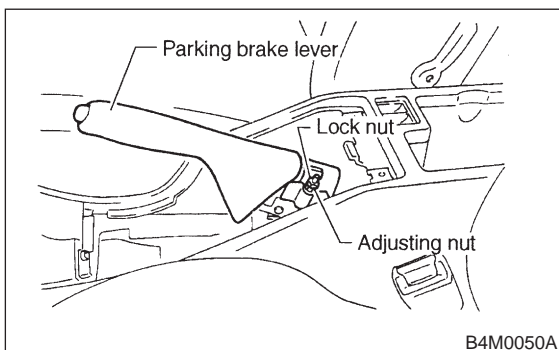
CAUTION:

Do not re-use old axle nut. Replace with a new one.

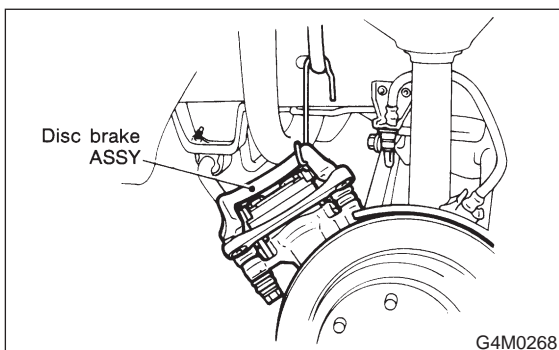
NOTE:

Temporarily tighten axle nut to hold hub in place.

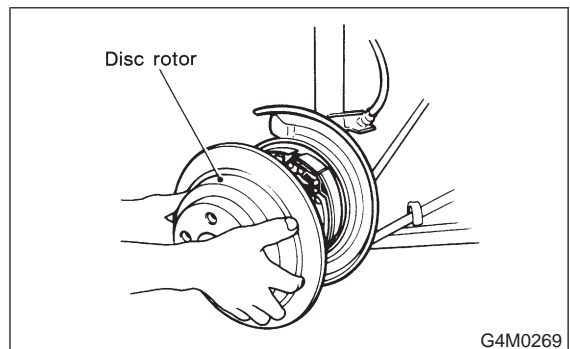
- 6) Return parking brake lever and loosen adjusting nut.



- 7) Remove disc brake assembly from back plate. Suspend disc brake assembly from strut using a wire.



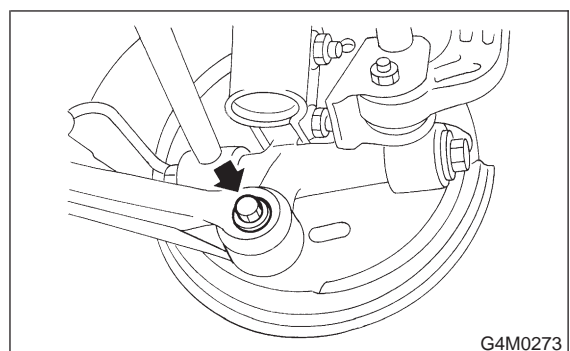
- 8) Remove disc rotor from hub. If disc rotor seizes up within hub, drive it out by installing an 8-mm bolt in bolt hole on disc rotor.



- 9) Disconnect end of parking brake cable.
- 10) Remove bolts which secure trailing link assembly to rear spindle.

CAUTION:

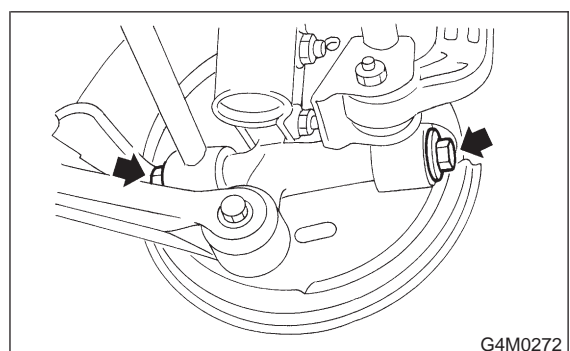
Discard old self-locking nut. Replace with a new one.



- 11) Remove bolts which secure lateral link assembly to rear spindle.

CAUTION:

Discard old self-locking nut. Replace with a new one.



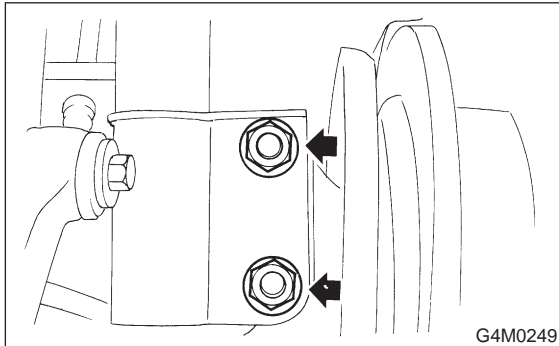
4-2 [W3A2]

3. Rear Axle (FWD Model)

SERVICE PROCEDURE

12) Remove bolts which secure strut assembly to rear spindle.

Remove rear spindle, back plate and hub as a unit.



2. DRUM BRAKE

- 1) Disconnect ground cable from battery.
- 2) Jack-up vehicle, and remove rear wheel cap and wheels.

CAUTION:

Be sure to loosen and retighten axle nut after removing wheel from vehicle. Failure to follow this rule may damage wheel bearings.

- 3) Pry hub cap off with a screwdriver placed between it and hub.
- 4) Unlock axle nut.
- 5) Remove axle nut using a socket wrench. Remove washer.

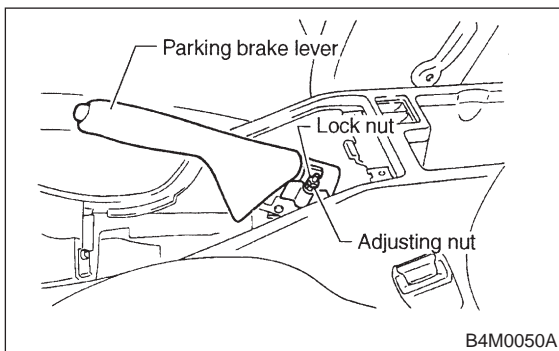
CAUTION:

Do not re-use old axle nut. Replace with a new one.

NOTE:

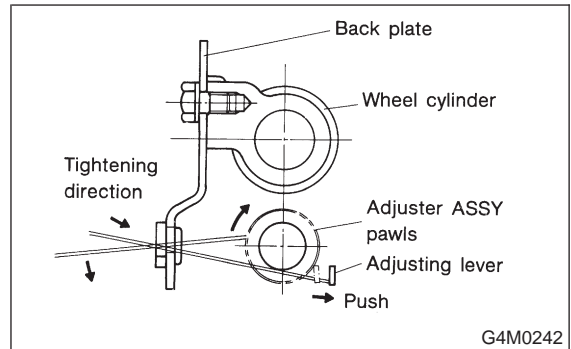
Temporarily tighten axle nut to hold hub in place.

- 6) Return parking brake lever and loosen adjusting nut.



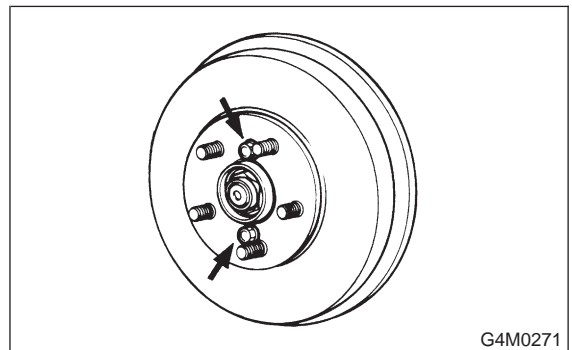
- 7) Remove brake drum from hub.

- 8) If it is difficult to remove brake drum, remove adjusting hole cover from back plate, and then turn adjusting screw using a slot-type screwdriver until brake shoe separates from the drum.



NOTE:

If brake drum seizes up within hub, drive it out by installing an 8-mm bolt in bolt hole on brake drum.



- 9) Disconnect end of parking brake cable.
- 10) Using a flare-nut wrench, disconnect brake pipe from wheel cylinder.

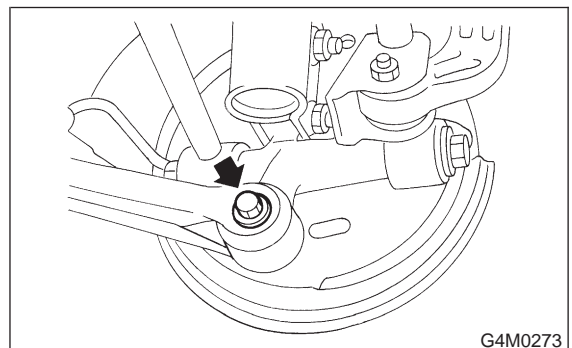
CAUTION:

Cover brake pipe connection to prevent entry of foreign particles.

- 11) Remove bolts which secure trailing link assembly to rear spindle.

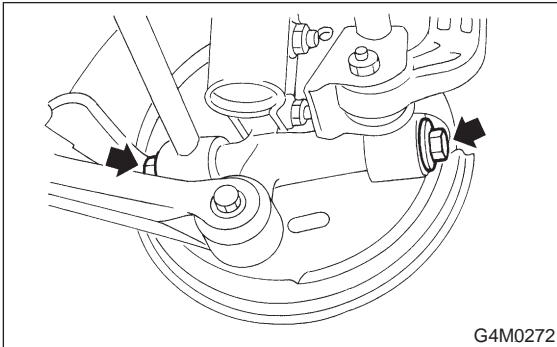
CAUTION:

Discard old self-locking nut. Replace with a new one.

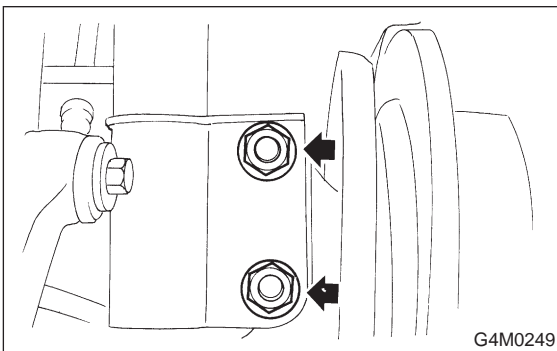


12) Remove bolts which secure lateral link assembly to rear spindle.

CAUTION:
Discard old self-locking nut. Replace with a new one.

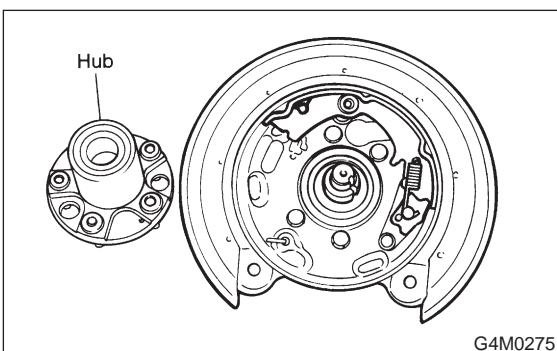


13) Remove bolts which secure strut assembly to rear spindle.
Remove rear spindle, back plate and hub as a unit.

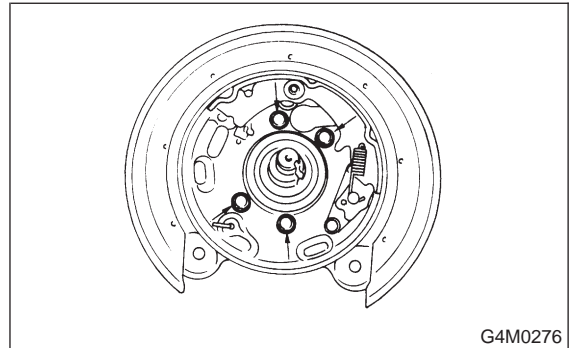


B: DISASSEMBLY

1) Remove hub from rear spindle.



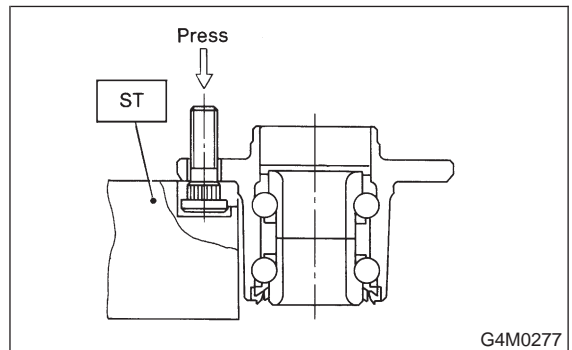
2) Remove back plate from rear spindle.



3) Using ST, press hub bolts out.

CAUTION:
Do not hammer hub bolt since this may deform hub.

ST 927080000 HUB STAND



C: INSPECTION

Clean the removed parts and check them for wear, damage and corrosion. If faulty, replace.

CAUTION:
Hub unit cannot be disassembled. If faulty, replace it as a unit.

4-2 [W3D0]

3. Rear Axle (FWD Model)

SERVICE PROCEDURE

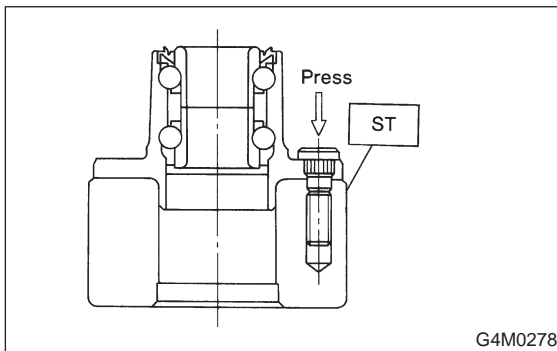
D: ASSEMBLY

1) Using ST, press new hub bolts into place.

NOTE:

- Use a 12 mm (0.47 in) hole in ST to prevent hub bolt from tilting during installation.
- Ensure hub bolt closely contacts hub.

ST 927080000 HUB STAND



- 2) Completely clean dust or dirt from the mating/polished surface of rear spindle back plate.
3) Install back plate to rear spindle.

Tightening torque:

$52 \pm 6 \text{ N}\cdot\text{m}$ ($5.3 \pm 0.6 \text{ kg}\cdot\text{m}$, $38.3 \pm 4.3 \text{ ft}\cdot\text{lb}$)

4) Charge oil seal located on the rear of hub with grease.

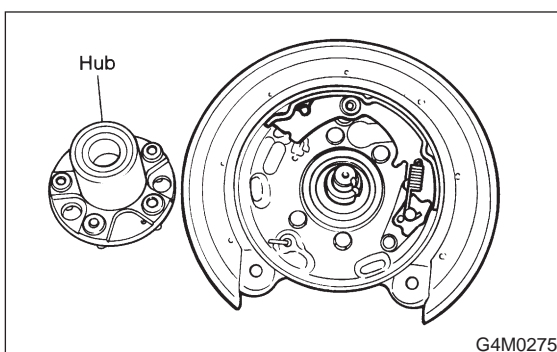
Specified grease:

SHELL 6459N

5) Install hub on rear spindle. Temporarily tighten axle nut and washer to hold hub in place.

CAUTION:

Discard old axle nut. Replace with a new one.



E: INSTALLATION

1. DISC BRAKE

1) Connect rear spindle assembly to strut assembly.

Tightening torque:

$147 \pm 15 \text{ N}\cdot\text{m}$ ($15 \pm 1.5 \text{ kg}\cdot\text{m}$, $108 \pm 11 \text{ ft}\cdot\text{lb}$)

CAUTION:

Use a new self-locking nut.

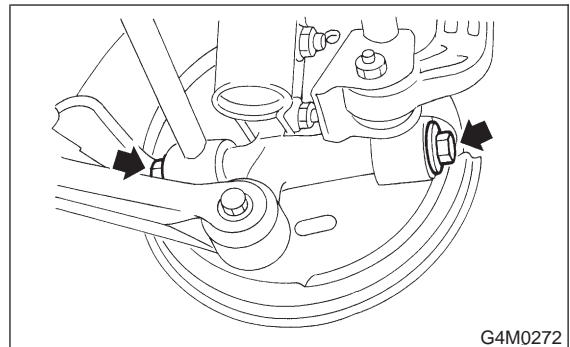
2) Connect rear spindle assembly to lateral link assembly.

Tightening torque:

$137 \pm 20 \text{ N}\cdot\text{m}$ ($14 \pm 2 \text{ kg}\cdot\text{m}$, $101 \pm 14 \text{ ft}\cdot\text{lb}$)

CAUTION:

Use new self-locking nut.



3) Connect rear spindle assembly to trailing link assembly.

Tightening torque:

$113 \pm 15 \text{ N}\cdot\text{m}$ ($11.5 \pm 1.5 \text{ kg}\cdot\text{m}$, $83 \pm 11 \text{ ft}\cdot\text{lb}$)

CAUTION:

Use a new self-locking nut.

4) Connect end of parking brake cable.

5) Install disc rotor to hub unit.

6) Install disc brake assembly to back plate.

Tightening torque:

$52 \pm 6 \text{ N}\cdot\text{m}$ ($5.3 \pm 0.6 \text{ kg}\cdot\text{m}$, $38.3 \pm 4.3 \text{ ft}\cdot\text{lb}$)

7) Tighten axle nut using a socket wrench, and lock securely.

Tightening torque:

$186 \pm 20 \text{ N}\cdot\text{m}$ ($19 \pm 2 \text{ kg}\cdot\text{m}$, $137 \pm 14 \text{ ft}\cdot\text{lb}$)

CAUTION:

● Use a new axle nut.

● Always tighten axle nut before installing wheel on vehicle. If wheel is installed and comes in contact with ground when axle nut is loose, wheel bearings may be damaged.

● Be sure to tighten axle nut to specified torque. Do not overtighten it as this may damage wheel bearing.

8) Install O-ring to hub cap flange, and install hub cap by lightly tapping it with a plastic-faced hammer.

9) Install wheel and tighten wheel nuts to specified torque.

Tightening torque (Wheel nut):

$88 \pm 10 \text{ N}\cdot\text{m}$ ($9 \pm 1 \text{ kg}\cdot\text{m}$, $65 \pm 7 \text{ ft}\cdot\text{lb}$)

2. DRUM BRAKE

1) Connect rear spindle assembly to strut assembly.

Tightening torque:

147±15 N·m (15±1.5 kg·m, 108±11 ft·lb)

CAUTION:

Use a new self-locking nut.

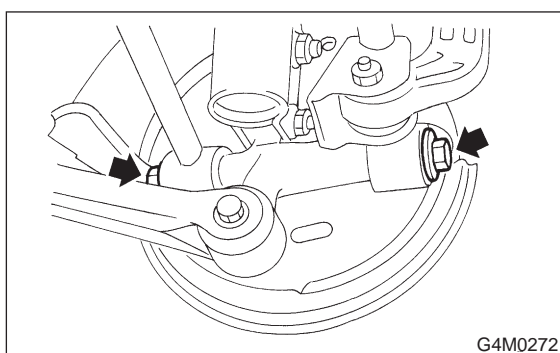
2) Connect rear spindle assembly to lateral link assembly.

Tightening torque:

137±20 N·m (14±2 kg·m, 101±14 ft·lb)

CAUTION:

Use new self-locking nut.



3) Connect rear spindle assembly to trailing link assembly.

Tightening torque:

113±15 N·m (11.5±1.5 kg·m, 83±11 ft·lb)

CAUTION:

Use a new self-locking nut.

4) Completely clean brake pipe connection. Using a flare-nut wrench, connect brake pipe to wheel cylinder.

5) Connect parking brake cable to lever.

6) Install brake drum on hub unit.

7) Bleed air from brake system. <Ref. to 4-4 [W11B0].>

8) Tighten axle nut using a socket wrench, and lock securely.

Tightening torque:

186±20 N·m (19±2 kg·m, 137±14 ft·lb)

CAUTION:

- Use a new axle nut.
- Always tighten axle nut before installing wheel on vehicle. If wheel is installed and comes in contact with ground when axle nut is loose, wheel bearings may be damaged.
- Be sure to tighten axle nut to specified torque. Do not overtighten it as this may damage wheel bearing.

9) Install O-ring to hub cap flange, and install hub cap by lightly tapping it with a plastic-faced hammer.

10) Install wheel and tighten wheel nuts to specified torque.

Tightening torque (Wheel nut):

88±10 N·m (9±1 kg·m, 65±7 ft·lb)