

BRAKE

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1 BASIC CHECK

WARNING

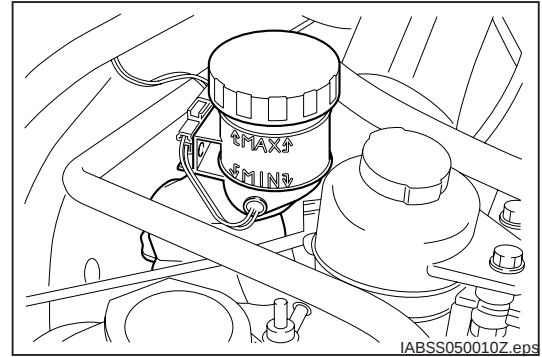
- Keep the position of the jack-up point to avoid causing serious accident due to inclining of the vehicle.

BR-BI-Z-Z-00001

1-1 BRAKE FLUID

1-1-1 FLUID LEVEL CHECK

1. Check to see that the reservoir tank of brake master cylinder is filled with brake fluid to the specified level.

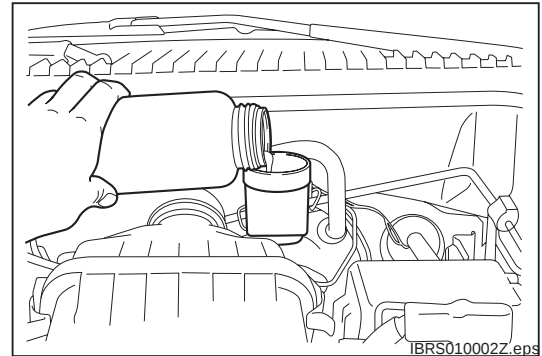


1-1-2 CHANGE

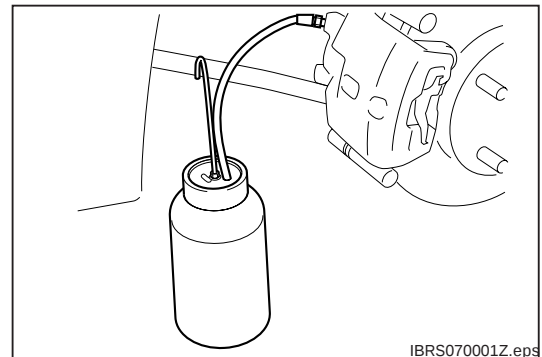
1. Fill up the reservoir tank of the brake master cylinder with brake fluid.

CAUTION

- Pay attention so that brake fluid may not be empty anytime during brake fluid change. Pay attention not to spill the brake fluid because it damages the paint finishing surface.



2. Apply a container to the bleeder plug of the wheel cylinder and open the bleeder plug.



3. Depress the brake pedal several times. Close the bleeder plug when new brake fluid reaches the wheel cylinder. Perform the same operation for other lines.

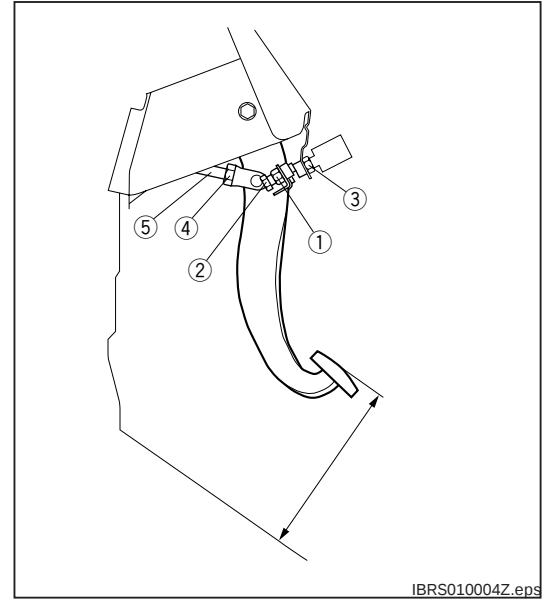
BR-BI-F-X-00001

1-2 BRAKE PEDAL

1-2-1 PEDAL HEIGHT ADJUSTMENT

(1) INSPECTION

1. Measure the height of brake pedal from the dash panel.
SPECIFIED VALUE: $143.6 \pm 5\text{mm}$ (RHD M/T vehicle)
 $148.4 \pm 5\text{mm}$ (RHD A/T vehicle)
 $148.0 \pm 5\text{mm}$ (LHD M/T vehicle)
 $149.8 \pm 5\text{mm}$ (LHD A/T vehicle)



(2) ADJUSTMENT

1. Disconnect the connector of the stop lamp switch, loosen the nut③, turn the switch and make the free travel of the brake pedal S/A.
2. Adjust the pedal height by loosening the nut④ and turning the push rod⑤.
TIGHTENING TORQUE: $14.7 \pm 2.9\text{N}\cdot\text{m}$
3. Turn the switch and lock the nut so that the clearance between the screw edge of the stop lamp switch and the cushion of the brake pedal S/A could maintain 1.0mm.
TIGHTENING TORQUE: $19.6 \pm 7.8\text{N}\cdot\text{m}$

CAUTION

- The stop lamp switch should not be separated from the cushion of the brake pedal S/A.

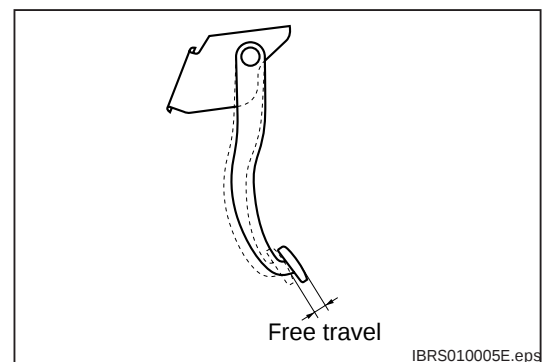
4. After adjusting the pedal height, check the pedal free travel and lighting of the stop lamp.

BR-BI-Y-H-00001

1-2-2 PEDAL FREE PLAY ADJUSTMENT

(1) INSPECTION

1. After stopping the engine, depress the brake pedal several times so that no vacuum could remain in the brake booster Ay.
2. Check the pedal free travel by pushing the brake pedal lightly by hand.
SPECIFIED VALUE: 0.5-3.0mm



(2) ADJUSTMENT

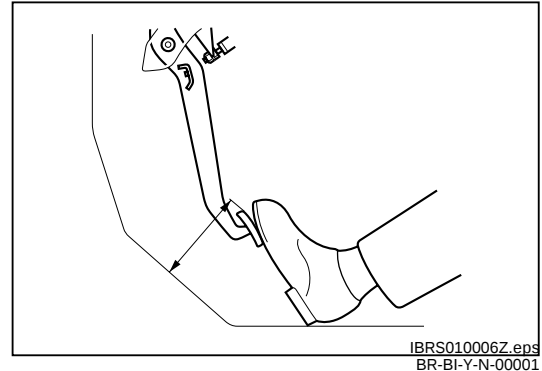
1. Adjust the pedal free travel by loosening the nut ④ and turning the push rod ⑤.
TIGHTENING TORQUE: $14.7 \pm 2.9\text{N}\cdot\text{m}$
2. After adjusting, check the pedal height and lighting of the stop lamp.

BR-BI-Y-L-00001

1-2-3 PEDAL RESERVE TRAVEL CHECK

1. Measure the distance between the brake pedal and the dash panel, keeping the pedal position by applying force of 30kgf with the parking brake lever released during idling the engine.

SPECIFIED VALUE: 74mm or more (RHD M/T vehicle)
78mm or more (RHD A/T vehicle)
78mm or more (LHD M/T vehicle)
80mm or more (LHD A/T vehicle)
(from dash panel)

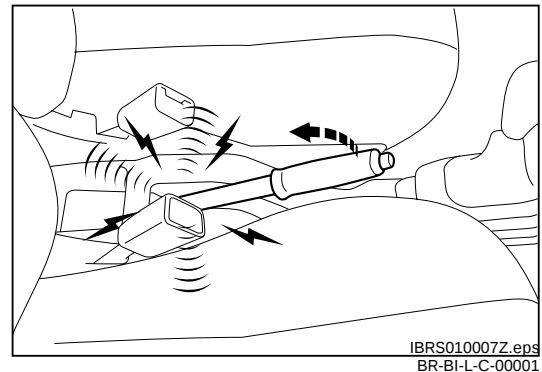


1-3 PARKING BRAKE LEVER

1-3-1 WORKING TRAVEL CHECK

1. Release the parking brake lever completely after depressing the brake pedal several times to maintain the proper shoe clearance.
2. Pull up the parking brake lever slowly to count the clicking sound of the notch.

SPECIFIED VALUE: 4-7 notches (operating force of 196N)

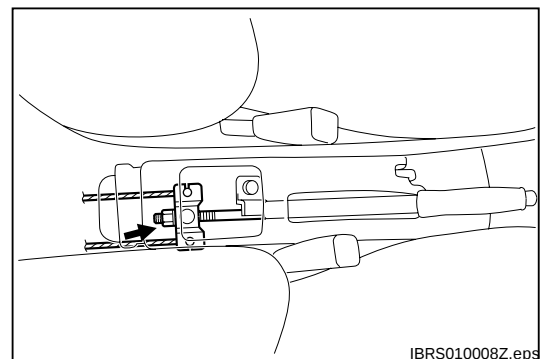


1-3-2 WORKING TRAVEL ADJUSTMENT

CAUTION

- Before adjusting the working travel of the parking brake, depress the brake pedal several times to maintain the proper shoe clearance.

1. Remove the rear console box Ay.
2. Turn the adjusting nut to secure the specified value.
SPECIFIED VALUE: 4-7 notches (operating force of 196N)



3. Check to see that there is no drag on the parking brake.

BR-BI-L-J-00001

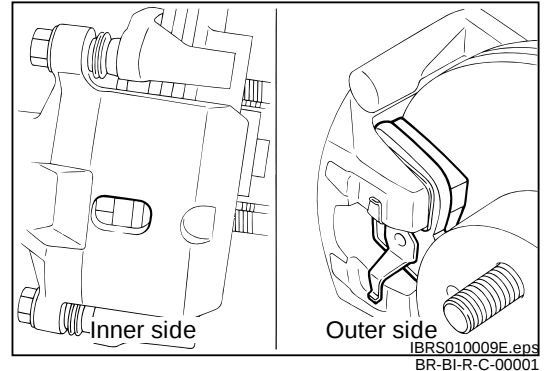
1-4 DISC BRAKE PAD

1-4-1 CHECK OF BRAKE PAD FOR THICKNESS

1. Jack up the vehicle.
2. Remove the front wheel.
3. Check the pad thickness through the inspection hole of the cylinder for the inner side of the pad or from the rear of the caliper for the outer side of the pad.

SPECIFIED VALUE: 10mm

ALLOWABLE LIMIT: 1mm



1-5 DRUM BRAKE LINING

1-5-1 CHECK OF BRAKE LINING FOR THICKNESS

1. Jack up the vehicle.
2. Check the thickness of the rear brake shoe Ay through the inspection hole of the brake backing rear plate S/A.

SPECIFIED VALUE: 4.0mm

ALLOWABLE LIMIT: 1.0mm

CAUTION

- When replacing the rear brake shoe Ay, replace both shoes in right and left wheels as a set in order to prevent the pulling of brake.

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2 BRAKE PEDAL

2-1 REMOVAL AND INSTALLATION

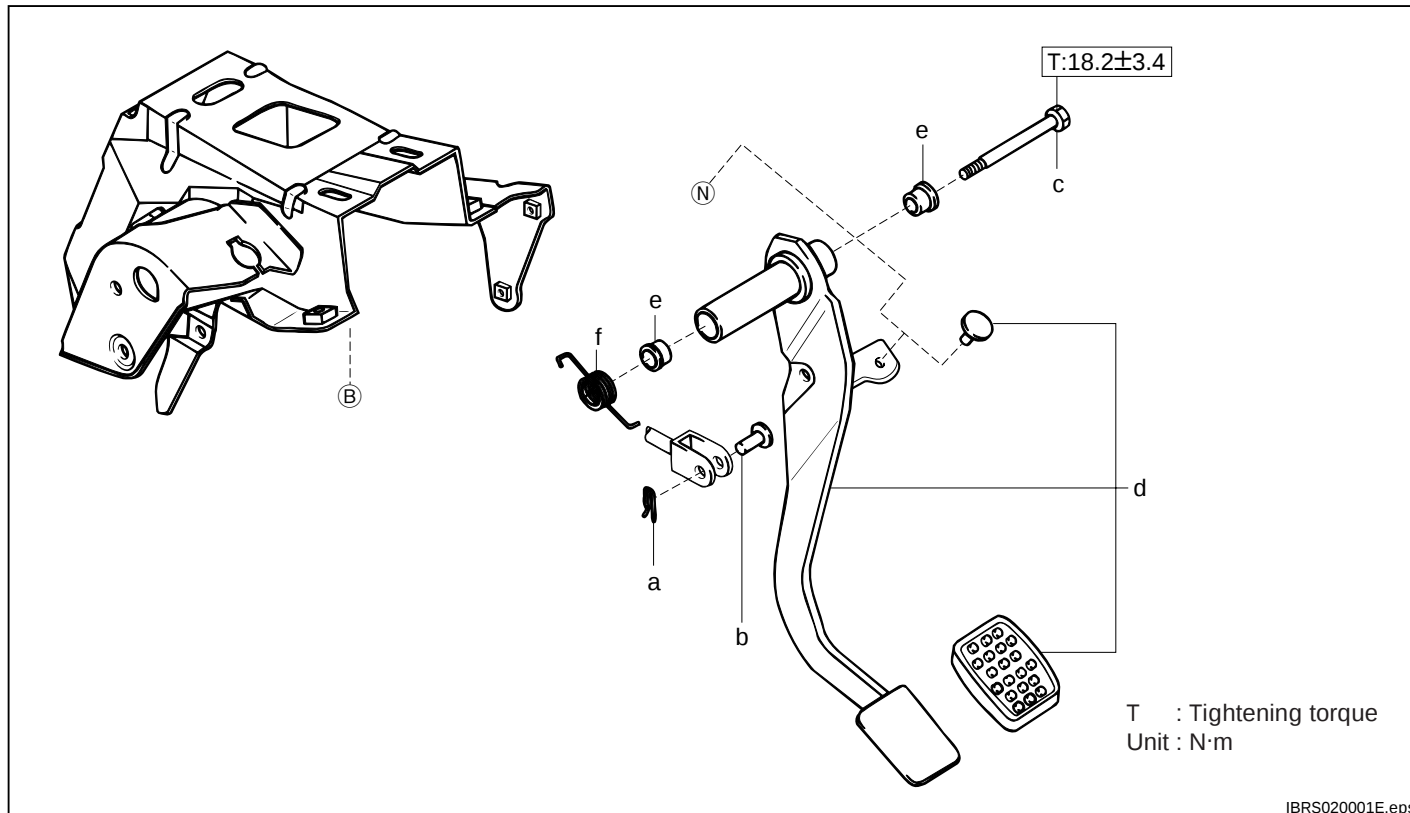
2-1-1 OPERATION BEFORE REMOVAL

1. Remove the instrument panel finish lower panel S/A.

BR-BP-D-B-00001

2-1-2 REMOVAL AND INSTALLATION PROCEDURES

(1) COMPONENTS

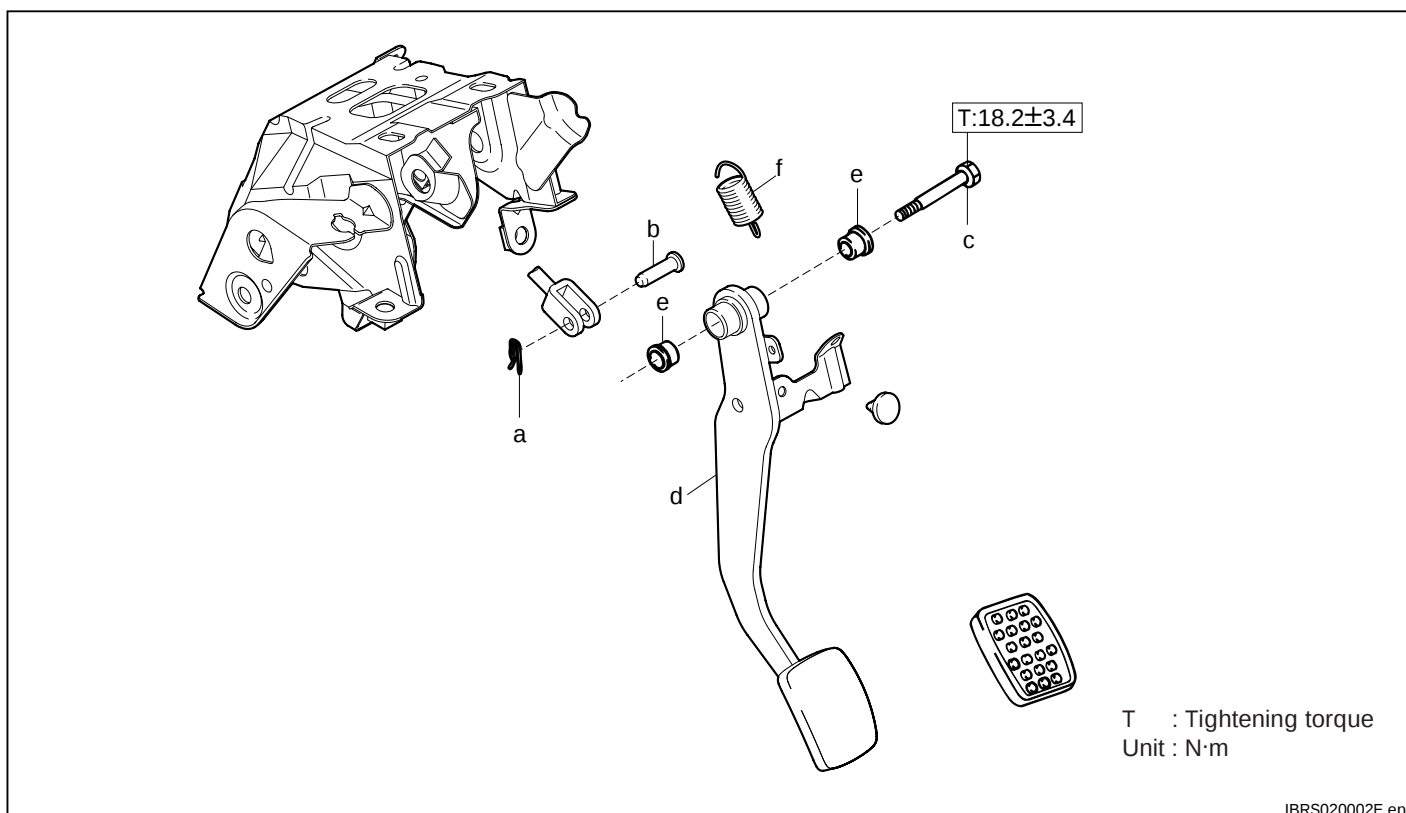


(2) REMOVAL AND INSTALLATION PROCEDURES

- | | | | |
|---|---|---|------------------|
| 1 | 6 | a | Clip |
| 2 | 5 | b | Pin with hole |
| 3 | 4 | c | Bolt |
| 4 | 3 | d | Pedal S/A, brake |
| 5 | 2 | e | Bush |

- 6 1 f Spring

BR-BP-D-T-00001

(1) COMPONENTS (ONLY FOR RHD VEHICLES OF EUROPEAN AND AUSTRALIAN SPECIFICATIONS)**(2) REMOVAL AND INSTALLATION PROCEDURES (ONLY FOR RHD VEHICLES OF EUROPEAN AND AUSTRALIAN SPECIFICATIONS)**

- | | | | | | | | |
|---|---|---|------------------|---|---|---|--------|
| 1 | 6 | a | Clip | 6 | 1 | f | Spring |
| 2 | 5 | b | Pin, with hole | | | | |
| 3 | 4 | c | Bolt | | | | |
| 4 | 3 | d | Pedal S/A, brake | | | | |
| 5 | 2 | e | Bush | | | | |

BR-BP-D-T-00002

2-1-3 OPERATION AFTER INSTALLATION

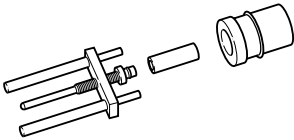
1. Install the instrument panel finish lower panel S/A.
2. Perform the basic check of the brake pedal.
Refer to BR-3.

BR-BP-D-A-00001

3 BRAKE MASTER CYLINDER

3-1 REMOVAL AND INSTALLATION

3-1-1 PREPARATION TOOLS

	Shape	Part Number, Name	Purpose
SST		09730-87401-000 Brake booster gauge set	Adjust the clearance between the brake booster push rod and the brake master cylinder
Luburicant	Brake fluid(DOT3)		

BR-MC-D-P-00001

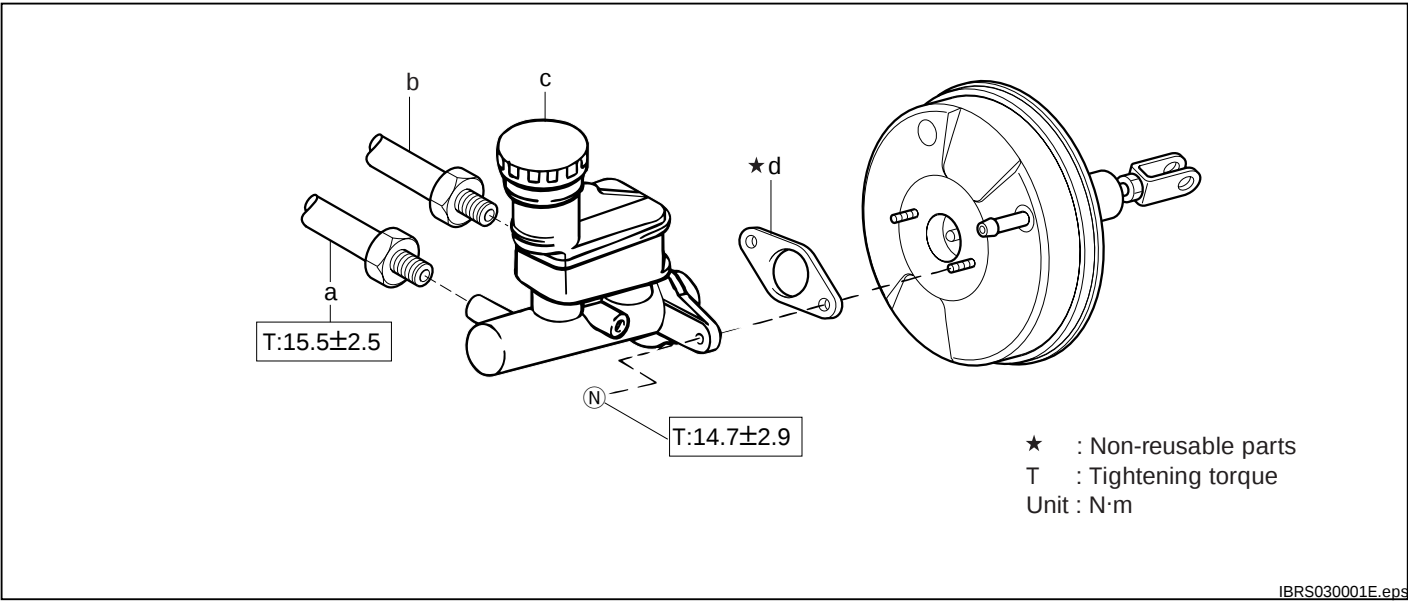
3-1-2 OPERATION BEFORE REMOVAL

1. Drain the brake fluid from the reservoir tank.
CAUTION
 - Be careful not to spill the brake fluid because it damages the paint finishing surface.
2. Remove the suspension upper brace. (for RHD vehicle)
3. Separate the suction hose of air conditioner from the bracket of the power steering reservoir tank. (for RHD vehicle)
4. Remove the bracket of the power steering reservoir tank from car body. (for RHD vehicle)

BR-MC-D-B-00001

3-1-3 REMOVAL AND INSTALLATION PROCEDURES

(1) COMPONENTS



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(2) REMOVAL AND INSTALLATION PROCEDURES

- 1 4 a Tube, front brake, No.2
- 2 3 b Tube, front brake, No.3
- 3 ② c Cylinder, Ay brake master
- 4 1 d Gasket, brake master cylinder

BR-MC-D-T-00001

3-1-4 POINTS OF INSTALLATION

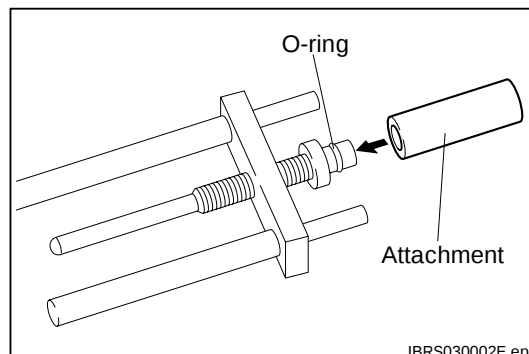
1. Installation of brake master cylinder Ay

(1) Adjust the clearance between the brake booster push rod and the brake master cylinder.

- ① Fit an O-ring into the groove at the rod portion of the gauge (SST) and install an attachment there. Apply rubber grease to the attachment surface.

SST: 09730-87401-000

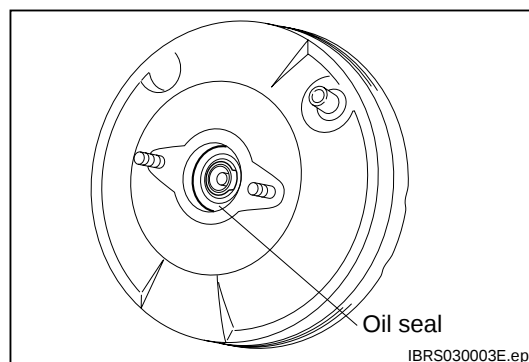
LUBRICANT: RUBBER GREASE



- ② On the other hand, the oil seal which has been installed between the brake master cylinder Ay and the brake booster Ay should be fit to the brake booster Ay. And connect the vacuum hose Ay to the brake booster Ay.

NOTE

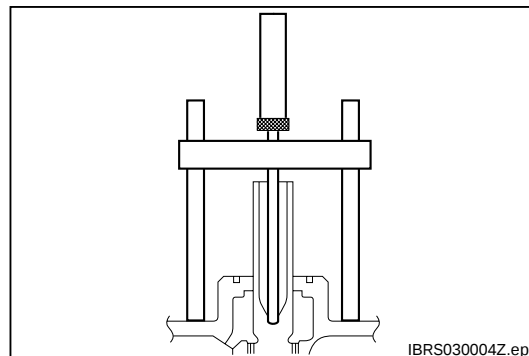
- Apply grease on the lip portion of the oil seal.



2. Set SST in such a way that the rod of SST contacts slightly with the piston of the brake master cylinder Ay.

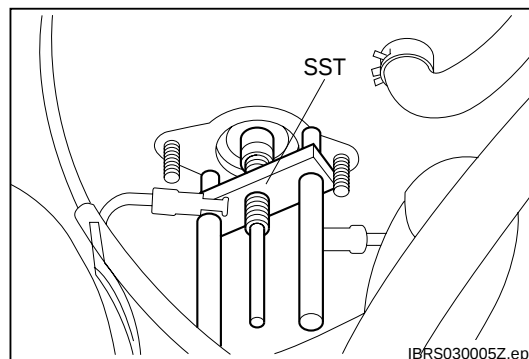
CAUTION

- SST should be set, with the gasket installed in the brake master cylinder Ay.

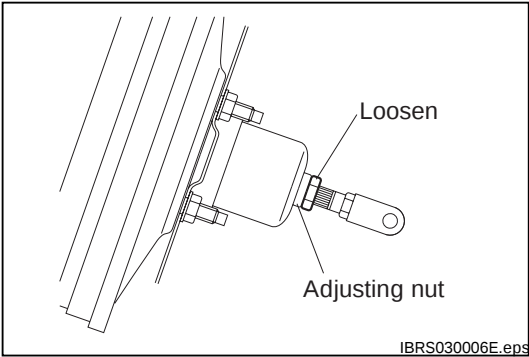


- ① Install the SST to the booster side with SST turned over, start the engine and apply negative pressure about 500mmHg. In this condition, check the clearance between SST rod and the push rod of the booster.

SPECIFIED VALUE: Specified clearance: 0mm



- ② In case it does not meet the specified clearance, adjust it by loosening the double nut of push rod of the brake booster pedal and turning the nut of the brake booster.
- TIGHTENING TORQUE: 14.7 ± 2.9N·m



3. Install the front brake tube to the brake master cylinder Ay.
- CAUTION**
- Tighten the union nut of the front brake tube temporarily by hand till flare portion of the tube contacts securely to the seat, and then tighten it with the specified tightening torque.

BR-MC-D-S-00001

3-1-5 OPERATION AFTER INSTALLATION

1. Install the bracket of power steering reservoir tank to the car body. (for RHD vehicle)
2. Connect the suction hose of air conditioner to the bracket of the power steering reservoir tank. (for RHD vehicle)
3. Install the suspension upper brace. (for RHD vehicle)
4. Fill up the reservoir tank with brake fluid.

CAUTION

- Be careful not to spill brake fluid because it damages the paint finishing surface.
5. Perform air bleeding of brake fluid.
 6. Adjust the front wheel alignment. (for RHD vehicle with EJ engine)
Refer to FS-2.
 7. Confirm that there is no brake dragging.

BR-MC-D-A-00001

3-2 DISASSEMBLY AND ASSEMBLY

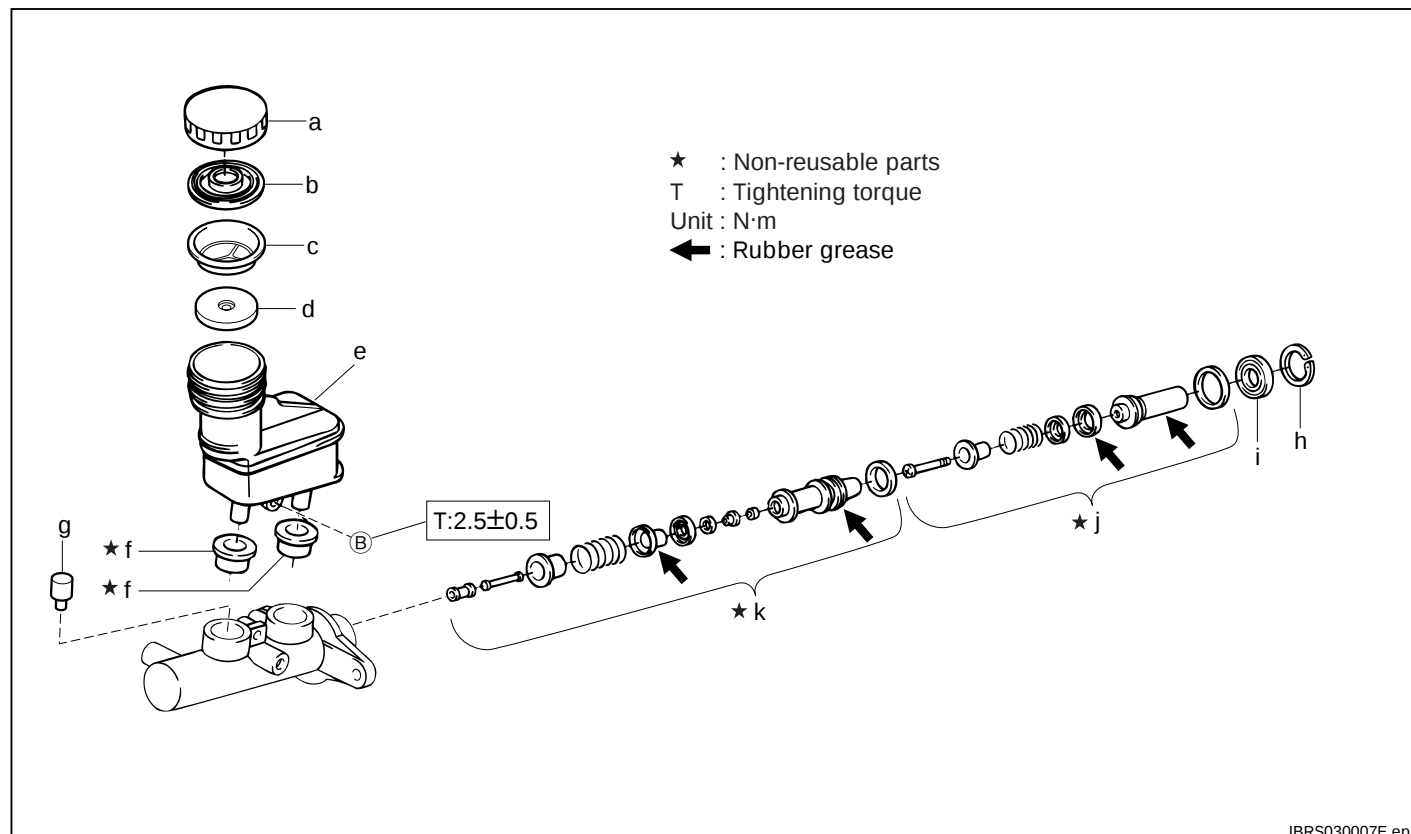
3-2-1 PREPARATION TOOLS

Lubricant	Brake fluid(DOT3), Rubber grease
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BR-MC-B-P-00001

3-2-2 DISASSEMBLY AND ASSEMBLY PROCEDURES

(1) COMPONENTS



(2) DISASSEMBLY AND ASSEMBLY PROCEDURES

- | | | | | | | | |
|---|----|---|--|---|---|---|----------------------------------|
| 1 | 11 | a | Cap, reservoir filler | 7 | 5 | g | Pin |
| 2 | 10 | b | Diaphragm, reservoir | ⑧ | ④ | h | Ring, hole snap |
| 3 | 9 | c | Strainer, master cylinder reservoir, front | 9 | 3 | i | Guide, master cylinder piston |
| 4 | 8 | d | Float, master cylinder reservoir | ⑩ | ② | j | Piston S/A, master cylinder No.1 |
| 5 | 7 | e | Reservoir Ay, master cylinder | ⑪ | ① | k | Piston S/A, master cylinder No.2 |
| 6 | 6 | f | Grommet | | | | |

BR-MC-B-T-00001

3-2-3 POINTS OF DISASSEMBLY

- Removal of master cylinder piston S/A
 (1) Fix the brake master cylinder Ay in a vice through aluminum board or the like.

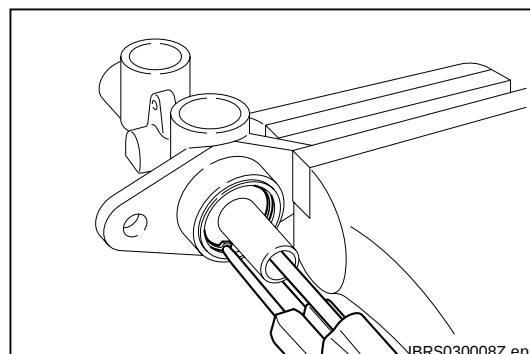
CAUTION

- Never fix the cylinder portion because it could be deformed.

- Remove the hole snap ring with the piston pushed into, by using a snap ring expander and a driver.

CAUTION

- Be careful so that the oil may not scatter when pushing the piston.

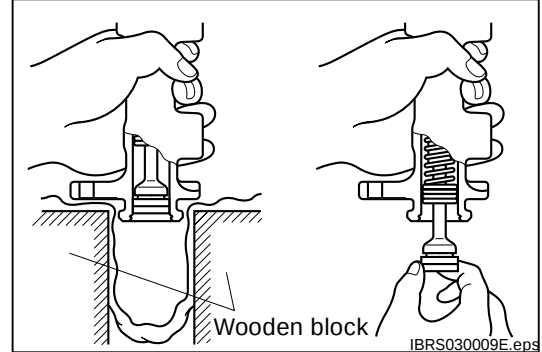


BR-12

- (1) Take out the brake master cylinder No. 1 piston S/A straight.

CAUTION

- Ensure to take out the piston straight so as not to scratch the cylinder bore.
- (2) Tap flange portion lightly against a chip of wood until the end of the brake master cylinder No. 2 piston S/A comes out.



3. When the end of the brake master cylinder No. 2 piston S/A comes out, then pull out the piston straight.

CAUTION

- Ensure to take out the piston straight so as not to scratch the cylinder bore.

BR-MC-B-D-00001

3-2-4 INSPECTION

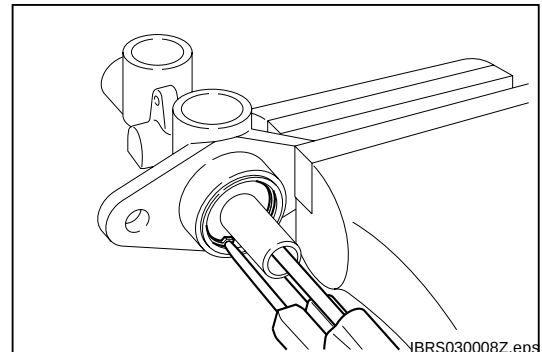
(1) BRAKE MASTER CYLINDER

1. Check to see if the brake master cylinder Ay bore exhibits scratches.
2. Check to see if the brake master cylinder Ay exhibits deformation and scratches.

BR-MC-B-C-00001

3-2-5 POINTS OF ASSEMBLY

1. Assembly of brake master cylinder piston S/A
 - (1) Attach the hale snap ring with the piston pushed into the master cylinder, by using a snap ring expander and a driver.

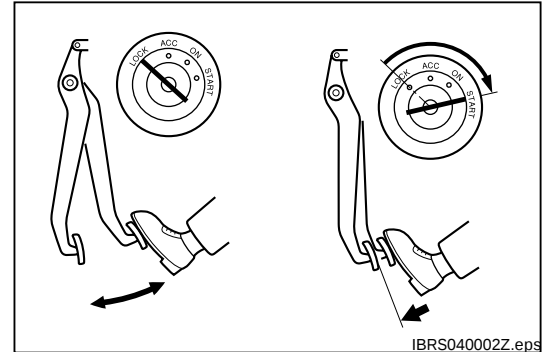


4 BRAKE BOOSTER

4-1 INSPECTION

4-1-1 BOOSTER OPERATION CHECK

1. While engine stopped, depress the brake pedal several times with same level of pedal applying force. Check to see that the pedal height does not vary each time.

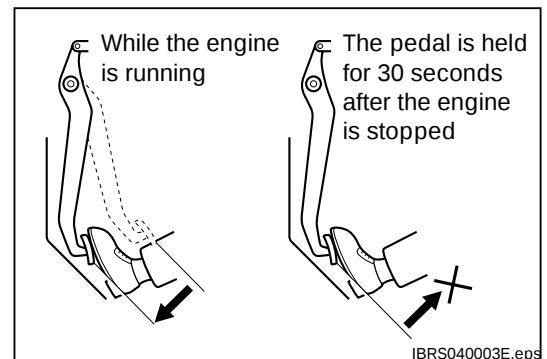


2. Start the engine with the brake pedal depressed and check the change of the pedal height.
SPECIFIED VALUE: The pedal should move slightly toward the floor when starting the engine with the brake pedal depressed condition.

BR-BST-C-2-00001

4-1-2 BOOSTER AIR-TIGHT PERFORMANCE CHECK UNDER LOADED CONDITION

1. With the engine running, depress the brake pedal. With this condition stop the engine and hold the pedal position for 30 seconds. Check the change of the pedal height.



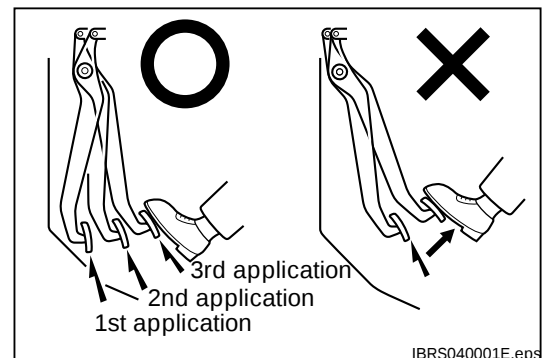
SPECIFIED VALUE: There should be no change in the pedal height.

BR-BST-C-3-00001

4-1-3 BOOSTER AIR-TIGHT PERFORMANCE CHECK

1. Start the engine, then stop it one or two minutes later and check the height of the brake pedal when depressing the pedal with usual pedal applying force.

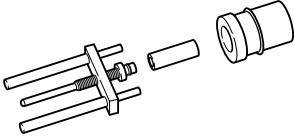
SPECIFIED VALUE: The pedal position of 2nd application should be higher than that of the 1st application, meanwhile that of the 3rd application should be higher than that of the 2nd application. (Each intervals of depressing the pedal should be at least five seconds.)



BR-BST-C-1-00001

4-2 REMOVAL AND INSTALLATION

4-2-1 PREPARATION TOOLS

	Shape	Part Number, Name	Purpose
SST		09730-87401-000 Brake booster gauge set	Adjust the clearance between the brake booster push rod and the brake master cylinder
Luburicant	Brake fluid(DOT3)		

BR-BST-D-P-00001

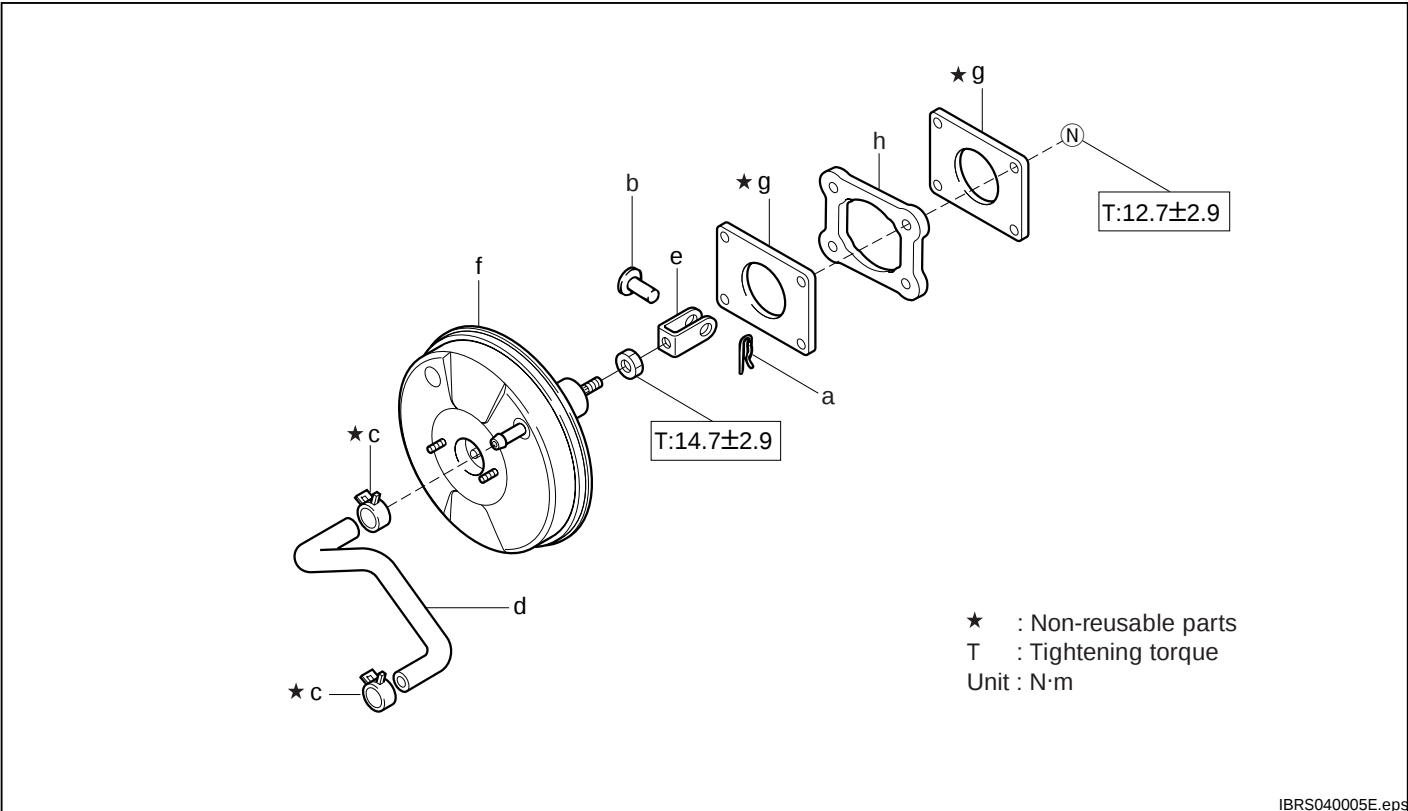
4-2-2 OPERATION BEFORE REMOVAL

1. Drain brake fluid from the reservoir tank.
CAUTION
 - Be sure not to spill the brake fluid because it damages paint finishing surface.
2. Remove the suspension upper brace. (for RHD vehicle)
3. Separate the suction hose of the air conditioner from the bracket of the power steering reservoir tank. (for RHD vehicle)
4. Remove the bracket of power steering reservoir tank from car body. (for RHD vehicle)
5. Remove the brake master cylinder Ay.
Refer to BR-8.
6. Loosen the adjusting nut and the fitting bolt of the vane pump. (for RHD vehicle with EJ engine)
7. Remove the charcoal canister. (for LHD vehicle)
8. Remove the fuse block from the bracket. (for LHD vehicle)
9. Remove the bracket of the charcoal canister. (for LHD vehicle)

BR-BST-D-B-00001

4-2-3 REMOVAL AND INSTALLATION PROCEDURES

(1) COMPONENTS



(2) REMOVAL AND INSTALLATION PROCEDURES

- | | | | | | | | |
|---|---|---|----------------------------------|---|---|---|-------------------------------|
| 1 | 8 | a | Clip | 6 | 3 | f | Booster Ay, brake |
| 2 | 7 | b | Pin with hole | 7 | 1 | g | Gasket, brake booster bracket |
| 3 | 6 | c | Clip | 8 | 2 | h | Spacer, master cylinder |
| 4 | 5 | d | Hose Ay, vacuum | | | | |
| 5 | 4 | e | Clevis, master cylinder push-rod | | | | |

BR-BST-D-T-00001

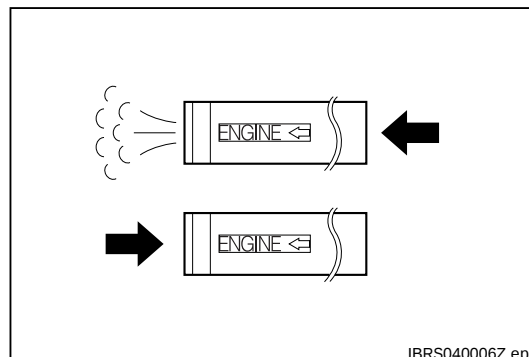
4-2-4 INSPECTION

(1) Check valve (vacuum hose Ay)

1. Check to see that there is air continuity from the brake booster side to the engine side. Conversely, check to see that there is no air continuity from the engine side to the brake booster side.

NOTE

- Replace the vacuum hose Ay in case that the above condition is not satisfied.

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BR-BST-D-C-00001

4-2-5 OPERATION AFTER INSTALLATION

1. Install the brake master cylinder Ay.
Refer to BR-8.
2. Install the bracket of charcoal canister. (for LHD vehicle)
3. Install the fuse block to bracket. (for LHD vehicle)
4. Install the charcoal canister. (for LHD vehicle)
5. Adjust the belt tension of V belt. (for RHD vehicle with EJ engine)
Refer to SR-47.
6. Install the bracket of power steering reservoir tank to car body. (for RHD vehicle)
7. Connect the suction hose of air conditioner to the bracket of power steering reservoir tank. (for RHD vehicle)
8. Install the suspension upper brace. (for RHD vehicle)
9. Replenish the reservoir tank with brake fluid.
CAUTION
 - Pay attention not to spill the brake fluid because it damages the paint finishing surface.
10. Perform air bleeding of brake fluid.
11. Adjust the front wheel alignment. (for RHD vehicle with EJ engine)
Refer to FS-2.
12. Confirm that there is no brake dragging.

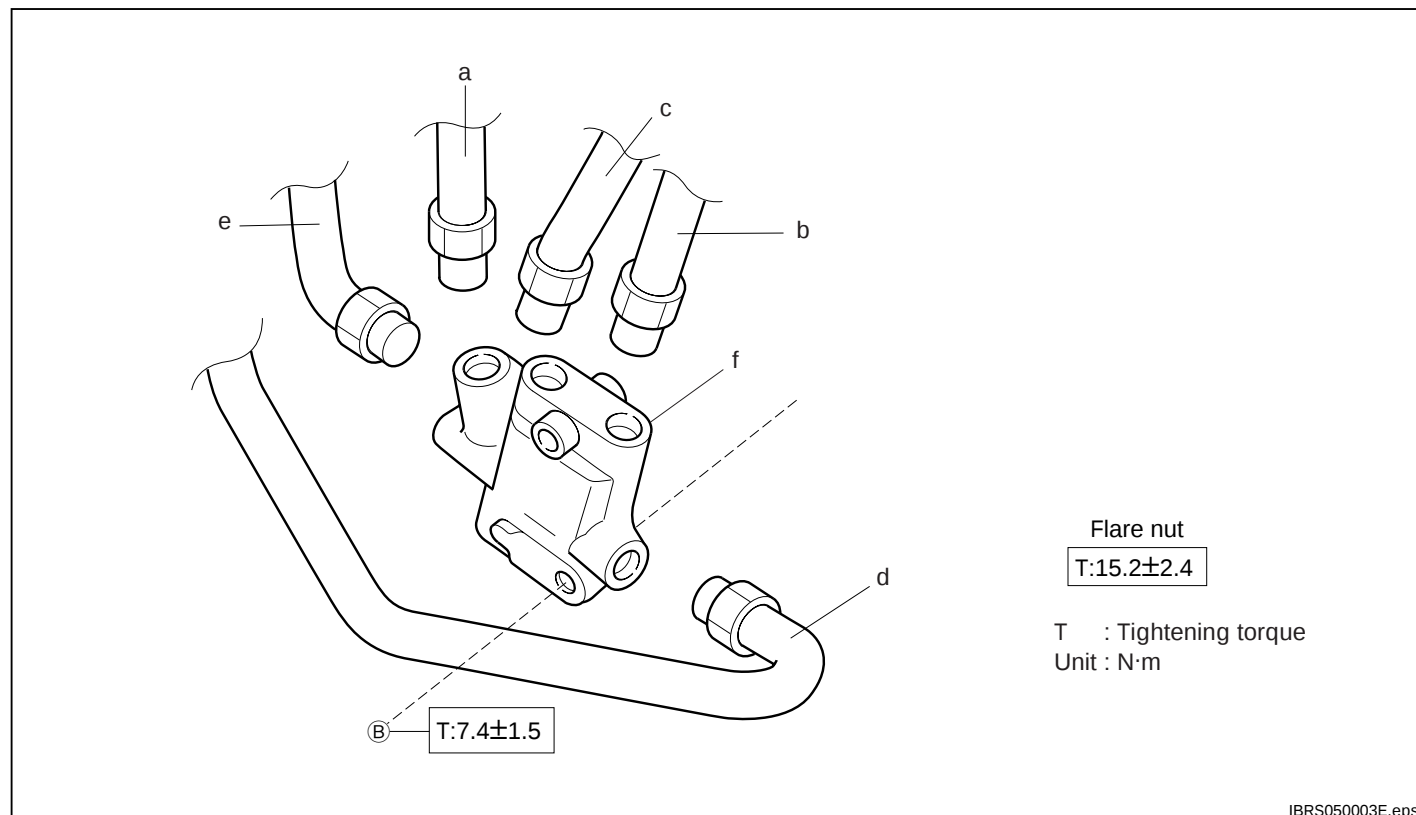
BR-BST-D-A-00001

5 PROPORTIONING VALVE

5-1 REMOVAL AND INSTALLATION

5-1-1 REMOVAL AND INSTALLATION PROCEDURES

(1) COMPONENTS



(2) REMOVAL AND INSTALLATION PROCEDURES

- | | | | | | | | |
|---|---|---|------------------------|---|---|---|-------------------------|
| 1 | 6 | a | Tube, front brake No.4 | 6 | 1 | f | Valve Ay, proportioning |
| 2 | 5 | b | Tube, rear brake No.4 | | | | |
| 3 | 4 | c | Tube, rear brake No.2 | | | | |
| 4 | 3 | d | Tube, rear brake No.3 | | | | |
| 5 | 2 | e | Tube, front brake No.1 | | | | |

CAUTION

- Be sure not to spill the brake fluid because it damages the paint finishing surface.

BR-PV-D-T-00001

5-1-2 OPERATION AFTER INSTALLATION

1. Perform air bleeding of brake fluid.

BR-PV-D-A-00001

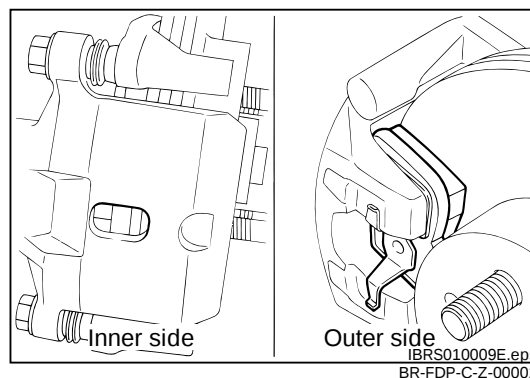
6 FRONT DISC BRAKE PAD

6-1 INSPECTION

1. Check the pad thickness through the inspection hole of the cylinder for the inner side or from the rear of the caliper for the outer side.

SPECIFIED VALUE: 10mm

ALLOWABLE LIMIT: 1mm



6-2 REMOVAL AND INSTALLATION

WARNING

- Keep the position of the jack-up point to avoid causing serious accident due to inclining of the vehicle.
Any kinds of oils and fats applied to the disc brake pad or the brake disc could reduce the brake force.

BR-FDP-D-Z-00001

6-2-1 PREPARATION TOOLS

Gauge	Torque wrench
Lubricant	Brake fluid(DOT3)

BR-FDP-D-P-00001

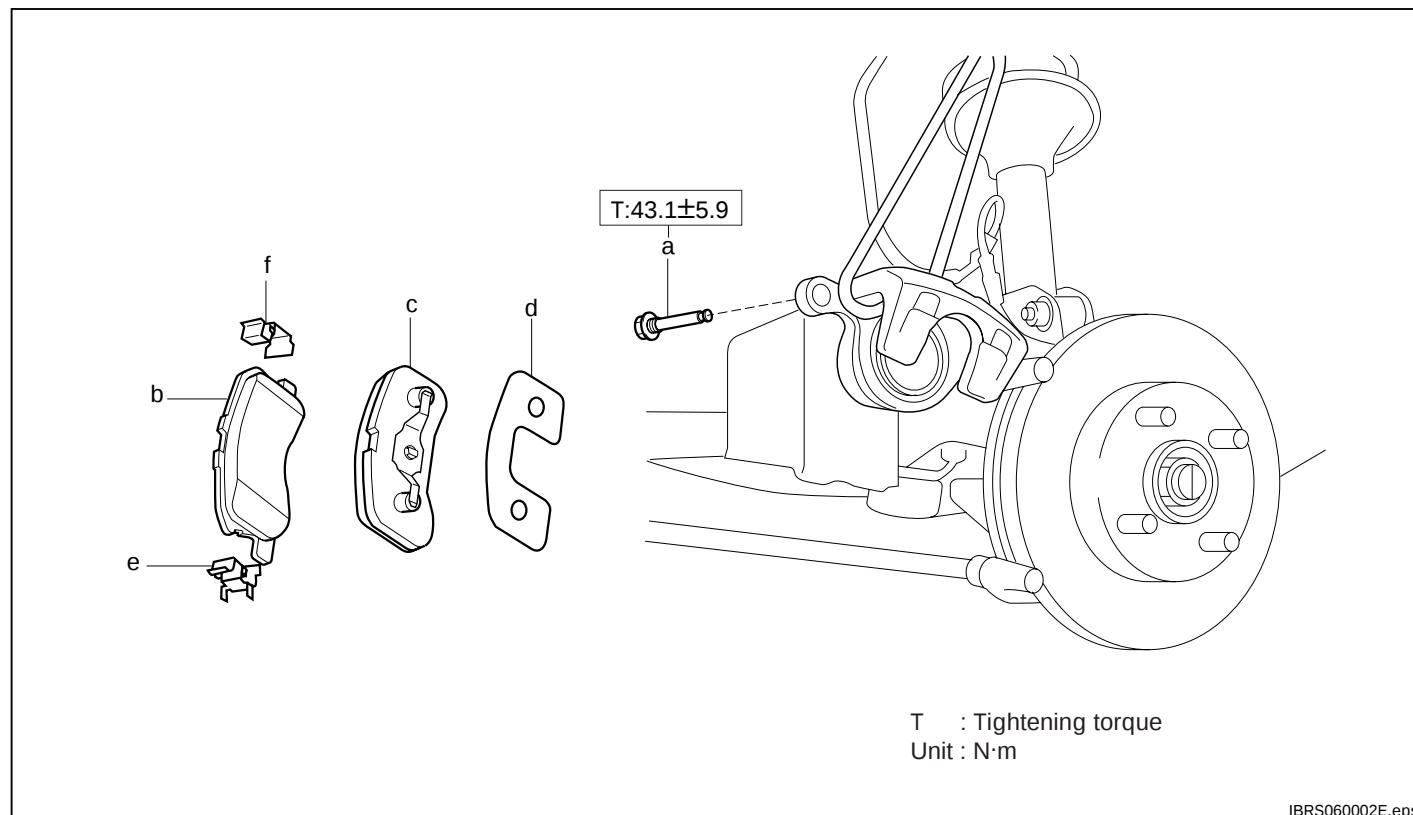
6-2-2 OPERATION BEFORE REMOVAL

1. Jack up the vehicle.
2. Remove the front wheel.

BR-FDP-D-B-00001

6-2-3 REMOVAL AND INSTALLATION PROCEDURES

(1) COMPONENTS



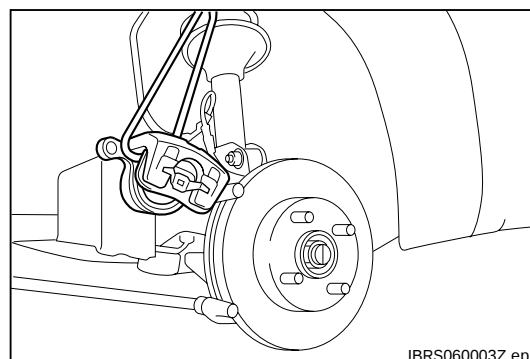
(2) REMOVAL AND INSTALLATION PROCEDURES

- | | | | | | | | |
|---|---|---|-----------------------------|---|---|---|-----------------------------|
| ① | 6 | a | Pin, cylinder slide, No.1 | 6 | ① | f | Plate, disc brake pad guide |
| 2 | ⑤ | b | Pad, disc brake No.1 | | | | |
| 3 | 4 | c | Pad, disc brake No.2 | | | | |
| 4 | 3 | d | Shim anti-squeal | | | | |
| 5 | ② | e | Plate, disc brake pad guide | | | | |

BR-FDP-D-T-00001

6-2-4 POINTS OF REMOVAL

1. Remove the cylinder slide NO.1 pin and hang the wheel cylinder with wires or the like.

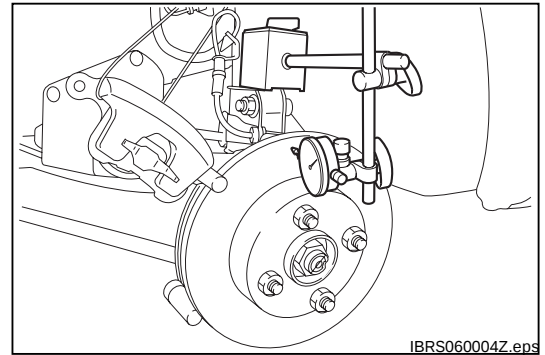


6-2-5 INSPECTION

(1) Check of disc runout

1. Confirm that there is no excessive play in front wheel bearing.
2. Measure the runout of disc end surface, using a dial gauge.

ALLOWABLE LIMIT: 0.10mm (Measure it at a point 10mm from outer periphery edge of the disc)

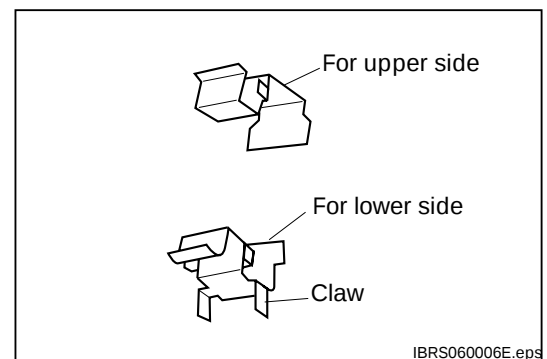


3. In case that the disc runout exceeds the limit, check the axle hub runout. And replace the disc if no abnormality is found on the axle hub.

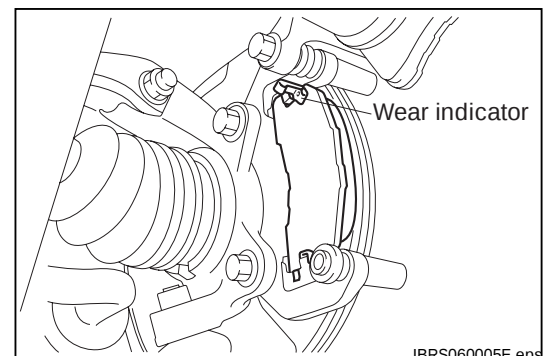
BR-FDP-D-C-00001

6-2-6 POINTS OF INSTALLATION

1. Install the disc brake pad guide plates in such a way that the guide with a claw is fit to the lower side of the caliper and the guide without a claw is fit to the upper side of the caliper.



2. When installing brake pads, install the pad with a wear indicator to the inner side of the vehicle.



6-2-7 OPERATION AFTER INSTALLATION

1. Replenish the reservoir tank with brake fluid up to the MAX line.
2. Perform air bleeding for the brake system.
3. Install the front wheel.

TIGHTENING TORQUE: $103.0 \pm 14.7 \text{ N}\cdot\text{m}$

4. Confirm that there is no brake dragging.

BR-FDP-D-A-00001

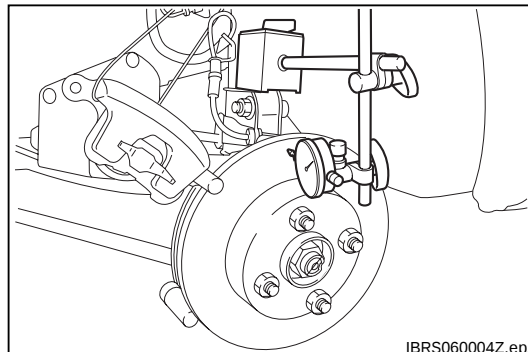
7 FRONT BRAKE DISC

7-1 INSPECTION

1. Remove the disc brake front caliper Ay from steering knuckle and keep it hung from the vehicle with wires and the like.
2. Fix the front disc to the hub with wheel nuts.

(1) DEVIATION

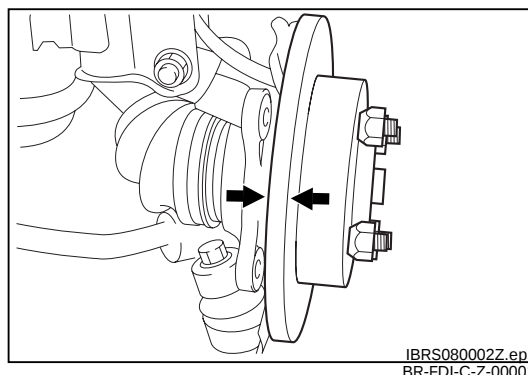
1. Confirm that there is no excessive play in the front wheel bearing.



2. Measure the runout of the disc end face, using a dial gauge.
ALLOWABLE LIMIT: 0.10mm (Measure it at a point 10mm from outer periphery edge of the disc)
3. In case that the front disc runout exceeds the limit, check the axle hub runout. And replace the front disc if no abnormality is found on the axle hub.

(2) THICKNESS

1. Measure the thickness of the front disc, and replace it if the thickness is less than the limit.
SPECIFIED VALUE: 15mm



7-2 REMOVAL AND INSTALLATION

WARNING

- Keep the position of the jack-up point to avoid causing serious accident due to inclining of the vehicle.
Any kinds of oils and fats applied to the disc brake pad or the front disc could reduce the efficiency of the brake.

BR-FDI-D-Z-00001

7-2-1 PREPARATION TOOLS

Gauge	Torque wrench
Lubricant	Brake fluid(DOT3)

BR-FDI-D-P-00001

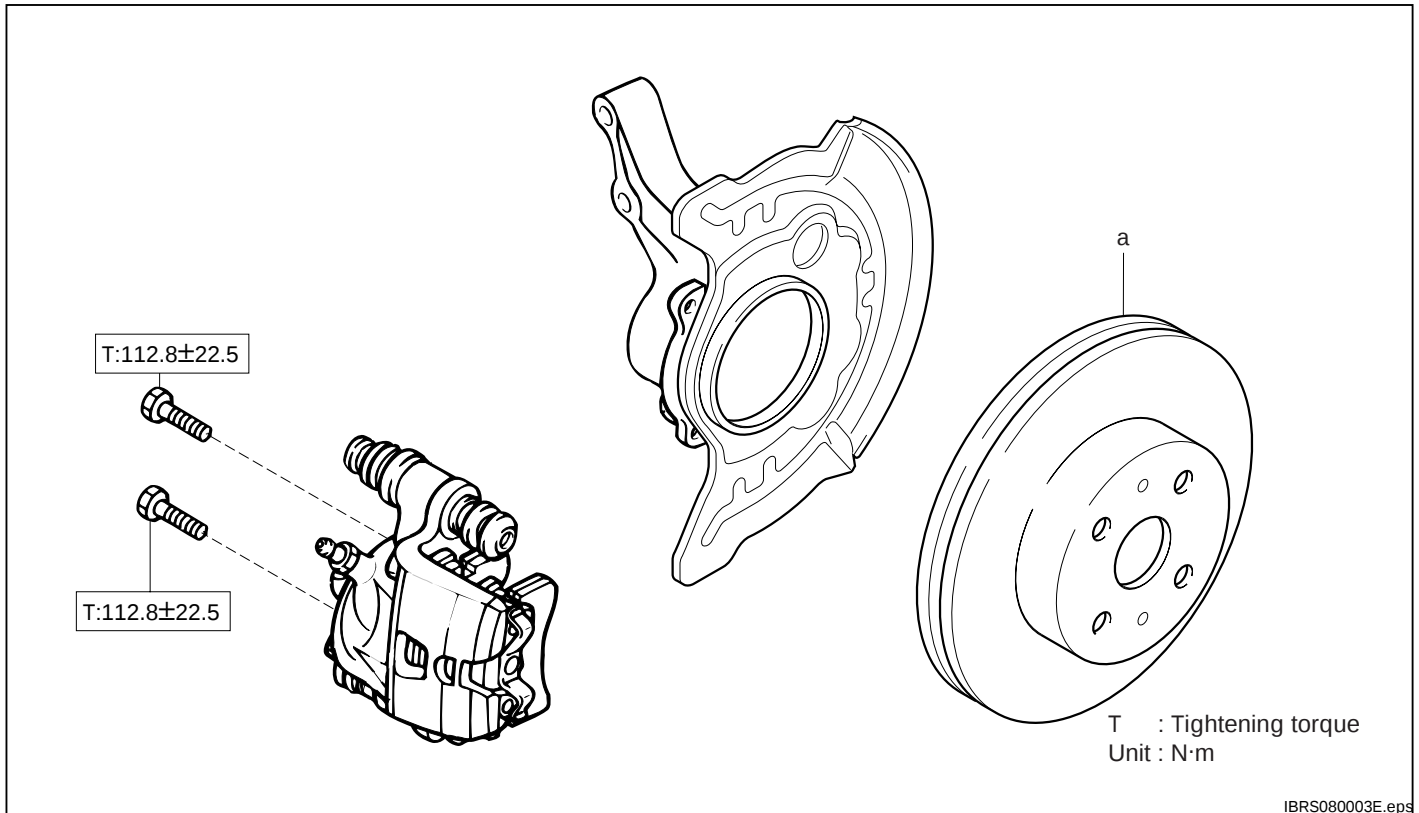
7-2-2 OPERATION BEFORE REMOVAL

1. Jack up the vehicle.
2. Remove the front wheel.
3. Remove the disc brake front caliper Ay from the steering knuckle and keep it hung from the vehicle with wires or the like.

BR-FDI-D-B-00001

7-2-3 REMOVAL AND INSTALLATION PROCEDURES

(1) COMPONENTS



(2) REMOVAL AND INSTALLATION PROCEDURES

1 1 a Disc, front

BR-FDI-D-T-00001

7-2-4 OPERATION AFTER INSTALLATION

1. Install the disc brake front caliper Ay to the steering knuckle.
2. Install the front wheel.
3. Jack down the vehicle.
4. Confirm that there is no brake dragging.

BR-FDI-D-A-00001

8 FRONT DISC CALIPER

8-1 REMOVAL AND INSTALLATION

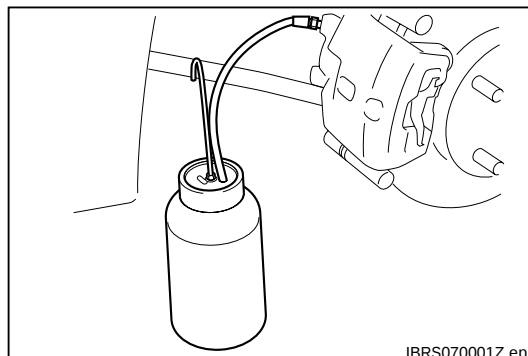
8-1-1 PREPARATION TOOLS

Gauge	Torque wrench
Lubricant	Brake fluid(DOT3)

BR-FDC-D-P-00001

8-1-2 OPERATION BEFORE REMOVAL

1. Jack up the vehicle.
2. Remove the front wheel.
3. Remove the stop lamp fuse.
4. Connect the bottle for air bleeding to the bleeder plug of the disc brake front caliper Ay which is to be removed.



5. Open the bleeder plug.
6. Fix the brake pedal securely at the fully depressed position.

NOTE

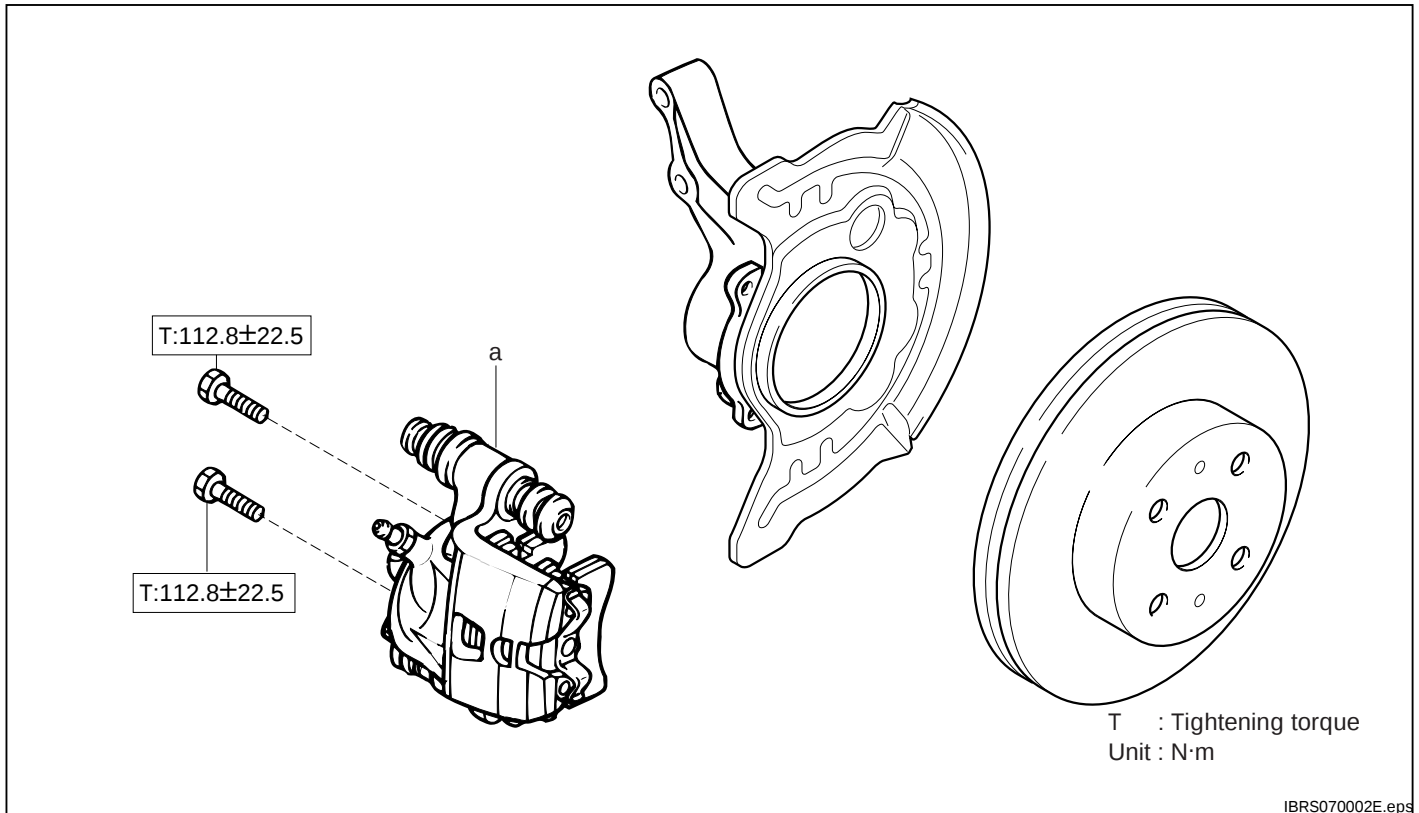
- These measures makes the valve in the master cylinder close to prevent flowing out of the brake fluid.

7. Close the bleeder plug.
8. Separate the brake hose and the brake tube which are connected to the brake caliper that is to be removed.
9. Plug the edge of the separated brake tube with the bleeder plug cap or the like.

BR-FDC-D-B-00001

8-1-3 REMOVAL AND INSTALLATION PROCEDURES

(1) COMPONENTS



(2) REMOVAL AND INSTALLATION PROCEDURES

- 1 1 a Caliper Ay, disc brake front

BR-FDC-D-T-00001

8-1-4 INSPECTION

1. Check to see by visual inspection that there is no leakage of brake fluid from the disc brake front caliper Ay.
2. Check to see by visual inspection that kinds of boot have no split.

BR-FDC-D-C-00001

8-1-5 OPERATION AFTER INSTALLATION

1. Replenish the reservoir tank with brake fluid up to the MAX line.
2. Perform air bleeding of the brake system.
3. Install the stop lamp fuse.
4. Install the front wheel.

TIGHTENING TORQUE: $103.0 \pm 14.7 \text{ N}\cdot\text{m}$

5. Jack down the vehicle.
6. Confirm that there is no brake dragging.

BR-FDC-D-A-00001

8-2 DISASSEMBLY AND ASSEMBLY

WARNING

- While using compressed air, put on safety glasses. When blowing on compressed air, be careful not to pinch fingers and so on by the piston came out intensely. Any kinds of oils and fats applied to the disc brake pad or the front disc could reduce the brake force.

BR-FDC-B-Z-00001

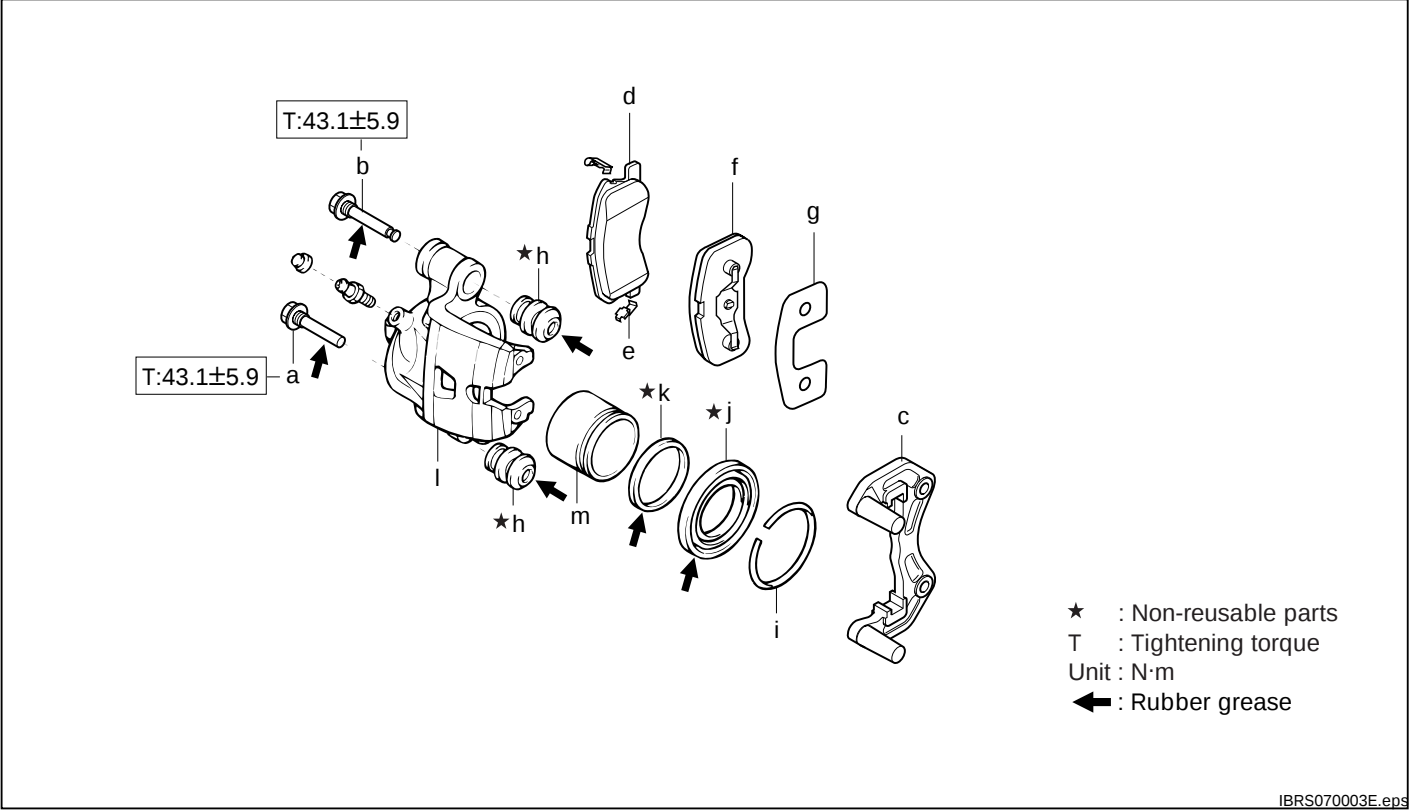
8-2-1 PREPARATION TOOLS

Lubricant	Brake fluid(DOT3), Rubber grease
-----------	----------------------------------

BR-FDC-B-P-00001

8-2-2 DISASSEMBLY AND ASSEMBLY PROCEDURES

(1) COMPONENTS



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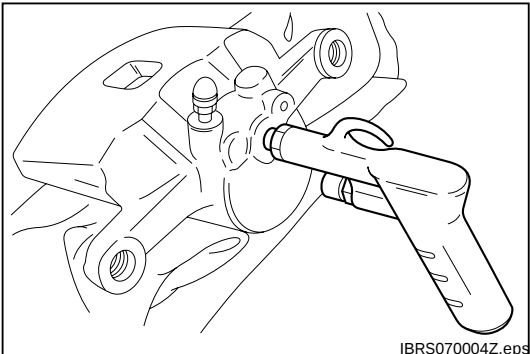
(2) DISASSEMBLY AND ASSEMBLY PROCEDURES

- | | | | | | | | |
|---|----|---|-------------------------------------|----|---|---|--------------------------|
| 1 | ⑬ | a | Pin, cylinder slide, No.1 | 8 | 6 | h | Boot, pin |
| 2 | ⑫ | b | Pin, cylinder slide, No.2 | 9 | 5 | i | Ring, set |
| 3 | 11 | c | Mounting, disc brake cylinder | 10 | 4 | j | Bush, cylinder |
| 4 | 10 | d | Pad, disc brake with indicator No.1 | ⑪ | 3 | k | Piston, front disc brake |
| 5 | ⑨ | e | Plate, disc brake pad guide | ⑫ | 2 | l | Seal, piston |
| 6 | ⑧ | f | Pad, disc brake No.2 | 13 | 1 | m | Cylinder, disc brake |
| 7 | 7 | g | Shim, anti squeal | | | | |

BR-FDC-B-T-00001

8-2-3 POINTS OF REMOVAL

1. Removal of front disc brake piston and piston seal
- (1) With some soft cloth put to prevent scores, pull out the front disc brake piston by blowing compressed air into, and remove the piston seal.



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BR-FDC-B-D-00001

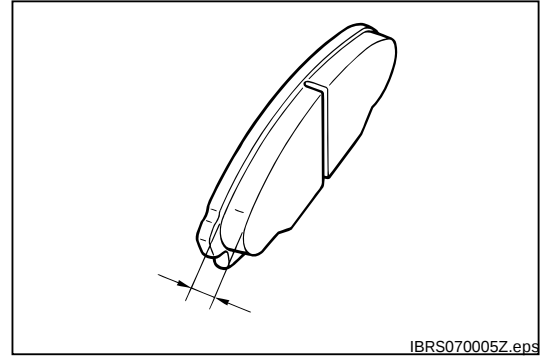
8-2-4 INSPECTION

(1) BRAKE PAD THICKNESS

1. Check the thickness of the disc brake pad, and replace it if the thickness is less than the limit.

SPECIFIED VALUE: 10mm

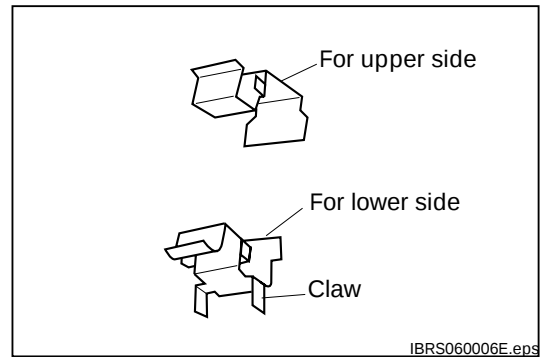
ALLOWABLE LIMIT: 1mm



8-2-5 POINTS OF INSTALLATION

1. Assembly of disc brake pad guide plates

- (1) Install the disc brake pad guide plates in such a way that the plate with a claw is fit to the lower side of the caliper.

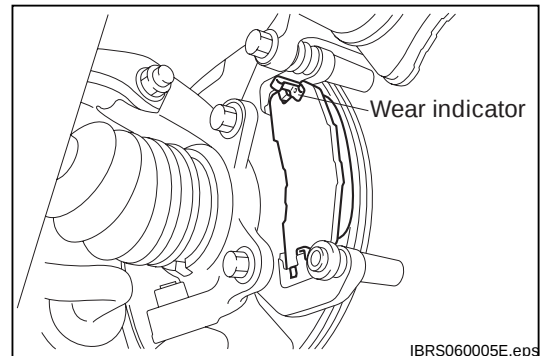


2. Install the brake pads

- (1) Install the brake pads in such a way that the brake pad with a wear indicator is fit to the cylinder side.

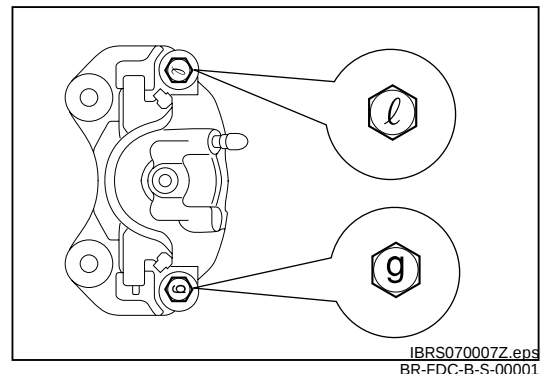
NOTE

- The wear indicator should be located on the upper part of the vehicle if the installing direction of the pad is correct.



3. Installation of cylinder slide pin

- (1) Install the cylinder slide pin stamped "ℓ" to the upper side of the brake caliper.
- (2) Install the cylinder slide pin stamped "g" to the lower side of the brake caliper.



9 REAR BRAKE DRUM

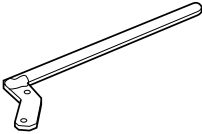
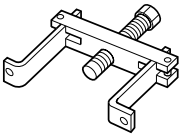
WARNING

- Keep the position of the jack-up point to avoid causing serious accident due to inclining of the vehicle. Improper fitting of the rear brake could reduce the efficiency of the brake during driving or the parking brake. Any kinds of oils and fats applied to the inside brake drum or brake lining surface could also reduce the efficiency of the brake.

BR-RDM-Z-Z-00001

9-1 REMOVAL AND INSTALLATION

9-1-1 PREPARATION TOOLS

	Shape	Part Number, Name	Purpose
SST		09511-87202-000 Brake drum stopper	Removal of castle nut
		09510-87301-000 Front hub & drum puller	Removal of brake drum
Gauge	Torque wrench		

BR-RDM-D-P-00001

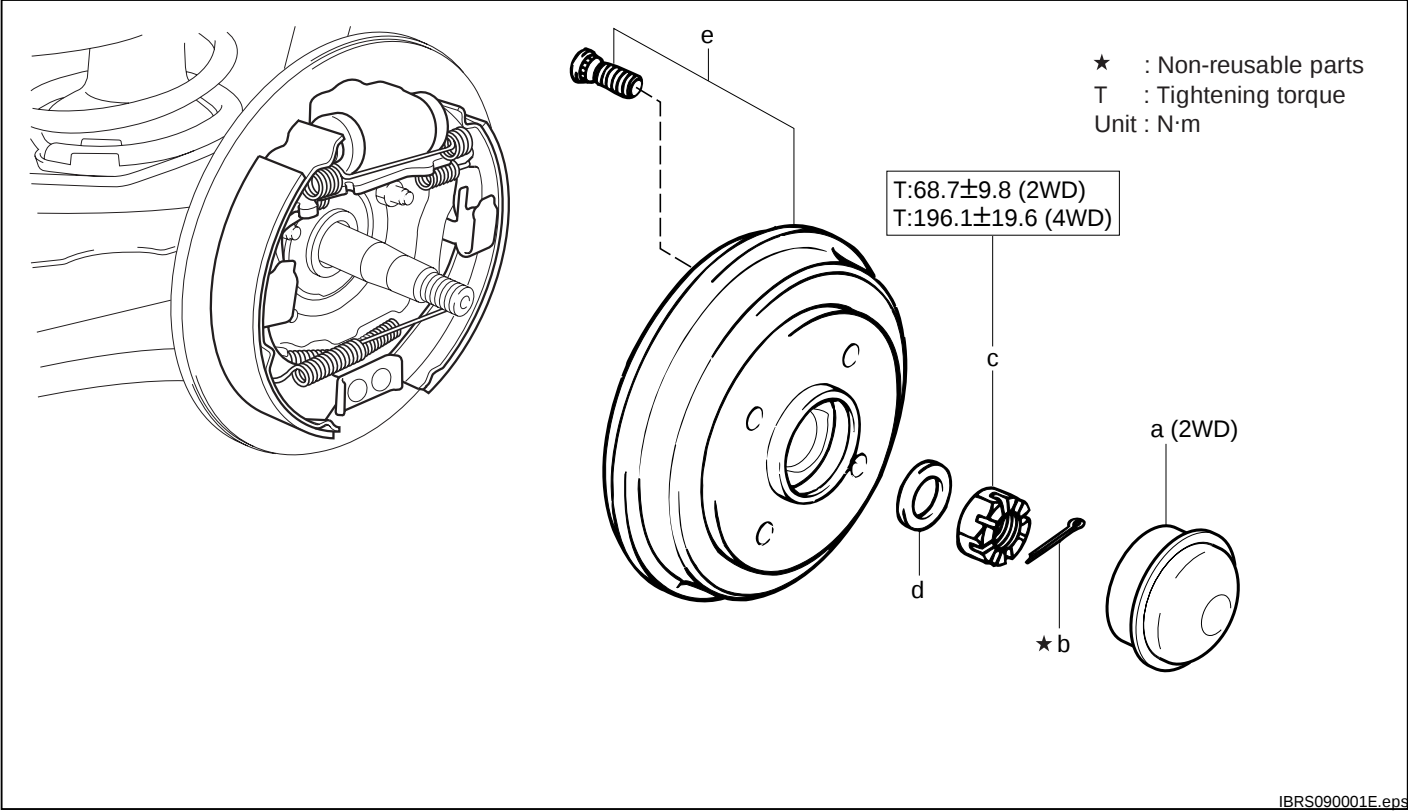
9-1-2 OPERATION BEFORE REMOVAL

1. Jack up the vehicle.
2. Remove the rear wheel.

BR-RDM-D-B-00001

9-1-3 REMOVAL AND INSTALLATION PROCEDURES

(1) COMPONENTS



(2) REMOVAL AND INSTALLATION PROCEDURES

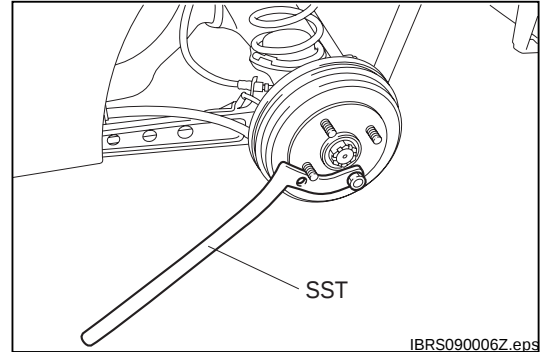
- 1 5 a Cap, rear wheel grease retainer (2WD only)
- 2 4 b Pin, cotter
- ③ 3 c Nut, castle
- 4 2 d Washer
- ⑤ ① e Drum S/A, rear brake

BR-RDM-D-T-00001

9-1-4 POINTS OF REMOVAL

1. Removal of castle nut
 - (1) Remove the castle nut after putting the stopper to prevent turning of the brake drum.

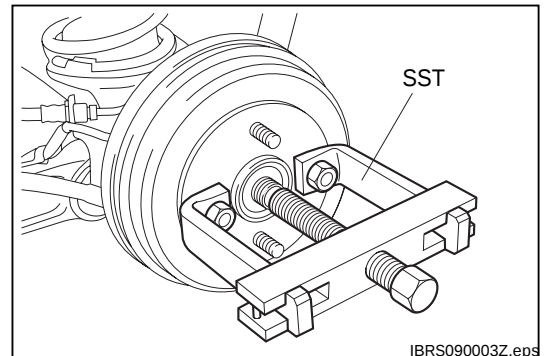
SST: 09511-87202-000



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2. Remove the rear brake drum S/A.

SST: 09511-87301-000

IBRS090003Z.eps
BR-RDM-D-D-00001

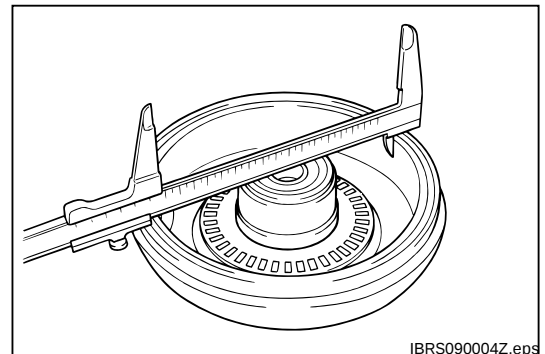
9-1-5 INSPECTION

(1) CHECK OF BRAKE DRUM BORE DIAMETER

1. Polish or replace the rear brake drum S/A in case that it exhibits remarkable uneven wear.

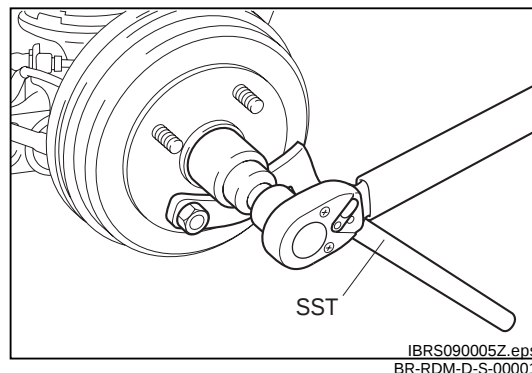
SPECIFIED VALUE: 180mm

ALLOWABLE LIMIT: 181mm

IBRS090004Z.eps
BR-RDM-D-C-00001

9-1-6 POINTS OF INSTALLATION

1. Install the rear brake drum S/A.
SST: 09511-87202-000



9-1-7 OPERATION AFTER INSTALLATION

1. Install the rear wheel.
TIGHTENING TORQUE: $103.0 \pm 14.7\text{N}\cdot\text{m}$
2. Adjust the shoe clearance to the proper condition by depressing the brake pedal several times and activating the adjusting mechanism for shoe clearance.
3. Adjust the working travel of the parking brake lever and install the rear console box Ay.
4. Check the brake dragging.
5. Jack down the vehicle.

BR-RDM-D-A-00001

10 REAR BRAKE LINING

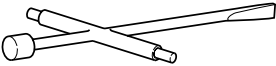
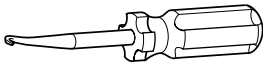
WARNING

- Keep the position of the jack-up point to avoid causing serious accident due to inclining of the vehicle. Improper fitting of the rear brake could reduce the efficiency of the brake during driving or the parking brake. Any kinds of oils and fats applied to the inside brake drum or brake lining surface could also reduce the efficiency of the brake.

BR-RBS-Z-Z-00001

10-1 REMOVAL AND INSTALLATION

10-1-1 PREPARATION TOOLS

	Shape	Part Number, Name	Purpose
SST		09703-30010-000 Brake shoe return spring tool	Removal/installation of spring
		09921-00010-000 Spring tension tool	Removal/installation of spring
Lubricant	Brake grease, Brake fluid(DOT3)		

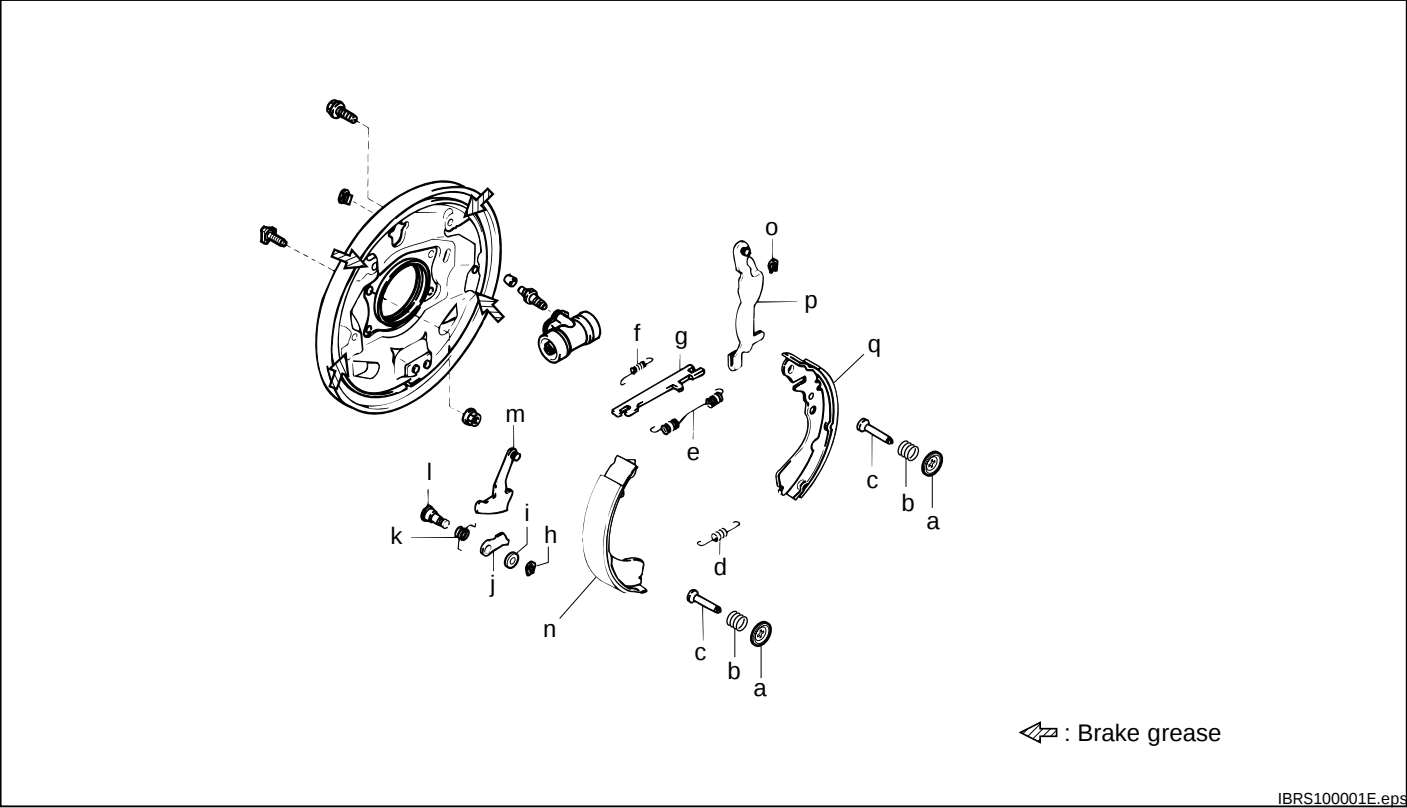
BR-RBS-D-P-00001

10-1-2 OPERATION BEFORE REMOVAL

1. Jack up the vehicle.
2. Remove the rear wheel.
3. Remove the rear brake drum S/A.
Refer to BR-26.

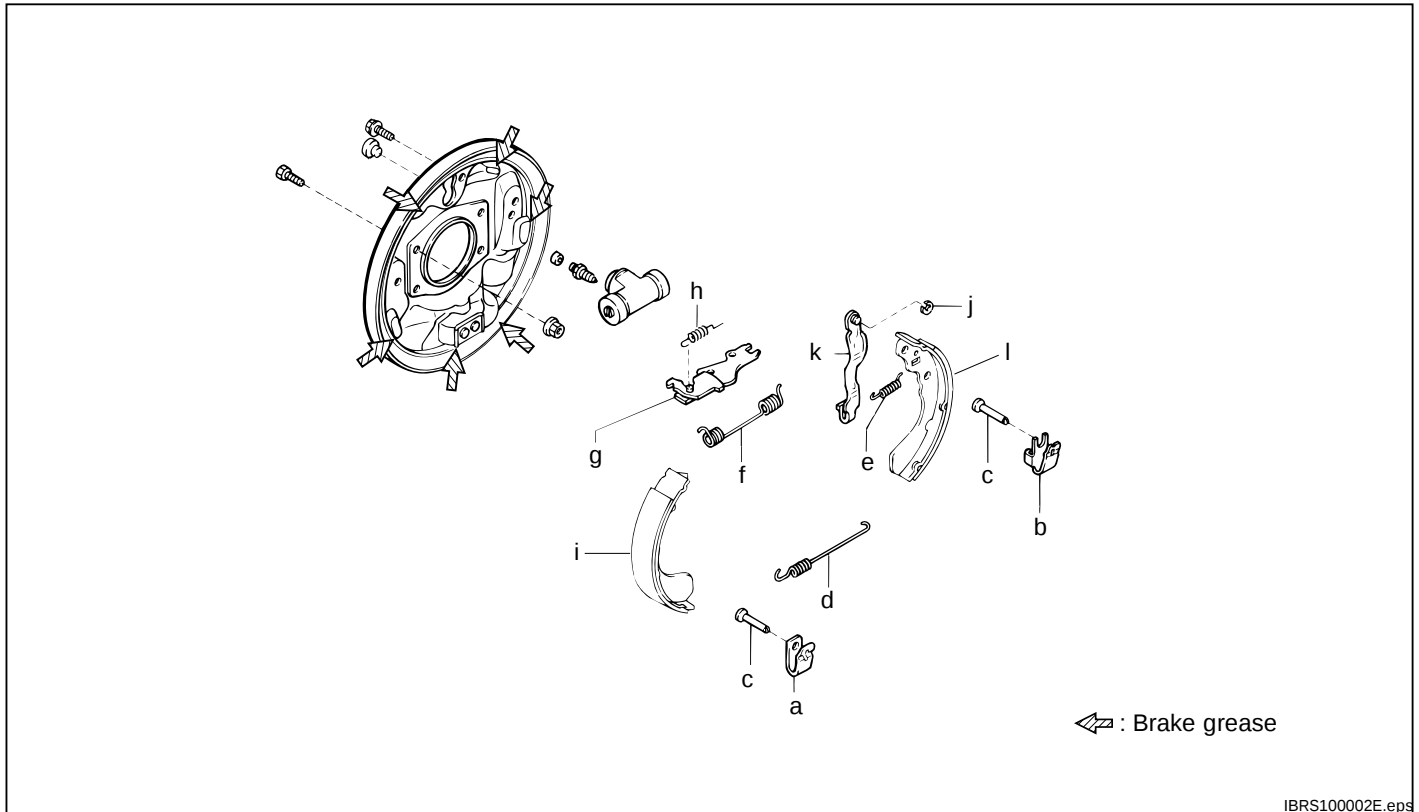
BR-RBS-D-B-00001

10-1-3 REMOVAL AND INSTALLATION PROCEDURES
(1) COMPONENTS (2WD,4WD VEHICLES EQUIPPED WITH ABS)



(2) REMOVAL AND INSTALLATION PROCEDURES (2WD,4WD VEHICLES EQUIPPED WITH ABS)

- | | | | | | | | |
|---|----|---|----------------------------|----|---|---|--------------------------------|
| 1 | 17 | a | Cup, shoe hold-down spring | 10 | 8 | j | Ratch, automatic adjusting |
| 2 | 16 | b | Spring, compression | 11 | 7 | k | Spring, torsion |
| 3 | 15 | c | Pin, shoe hold-down spring | 12 | 6 | l | Pin, automatic adjusting lever |
| 4 | 14 | d | Spring, tension, No.3 | 13 | 5 | m | Lever S/A, automatic adjusting |
| 5 | 13 | e | Spring, tension, No.4 | 14 | 4 | n | Shoe Ay, rear brake No.1 |
| 6 | 12 | f | Spring, tension | 15 | 3 | o | Washer, type C |
| 7 | 11 | g | Strut, parking brake shoe | 16 | 2 | p | Lever S/A, parking brake shoe |
| 8 | 10 | h | Washer, type C | 17 | 1 | q | Shoe Ay, rear brake No.2 |
| 9 | 9 | i | Washer, wave | | | | |

(1) COMPONENTS (4WD VEHICLES NOT EQUIPPED WITH ABS)

IBRS100002E.eps

(2) REMOVAL AND INSTALLATION PROCEDURES (4WD VEHICLES NOT EQUIPPED WITH ABS)

- | | | | | | | | |
|---|----|---|-----------------------------|----|---|---|-------------------------------|
| 1 | 12 | a | Spring, shoe hold-down | 7 | 6 | g | Strut, parking brake shoe |
| 2 | 11 | b | Spring, shoe hold-down No.2 | 8 | 5 | h | Spring, tension, No.2 |
| 3 | 10 | c | Pin, shoe hold-down spring | 9 | 4 | i | Shoe Ay, rear brake No.1 |
| 4 | 9 | d | Spring, tension, No.4 | 10 | 3 | j | Ring, E |
| 5 | 8 | e | Spring, tension, No.3 | 11 | 2 | k | Lever S/A, parking brake shoe |
| 6 | 7 | f | Spring, tension | 12 | 1 | l | Shoe Ay, rear brake No.2 |

BR-RBS-D-T-00002

10-1-4 INSPECTION**(1) INSPECTION OF SHOE LINING THICKNESS**

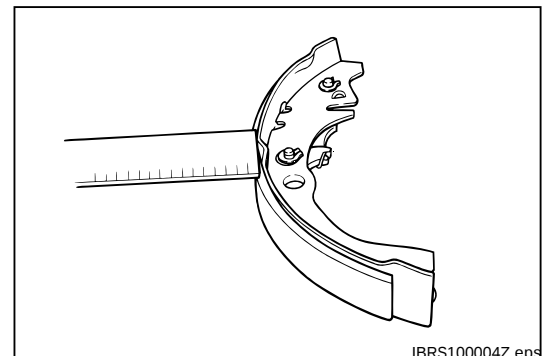
1. Check to see that the thickness of shoe lining is not less than the limit. Check to see that the shoe lining does not have uneven wear. Replace the brake shoe if any abnormality is found.

SPECIFIED VALUE: 4.0mm

ALLOWABLE LIMIT: 1.0mm

CAUTION

- When replacing rear brake shoe Ay, replace both shoes of right and left wheels as a set in order to prevent the pulling of the brake.



IBRS100004Z.eps

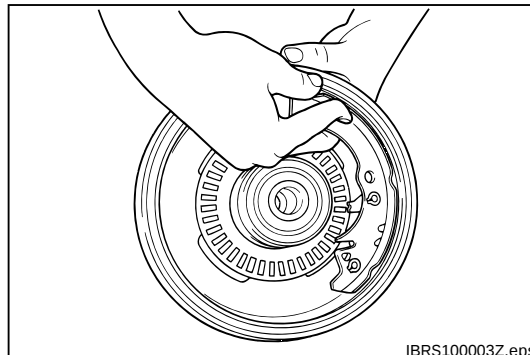
(2) CHECK OF CONTACTING CONDITION OF SHOE LINING WITH BRAKE DRUM

1. Apply the choke to the inside rear brake drum S/A and rub it together with the rear brake shoe Ay. In case of uneven contact, polish the rear brake shoe Ay.

SPECIFIED VALUE: There should be no remarkably uneven contact.

CAUTION

- After the check, wipe off the choke.



IBRS100003Z.eps
BR-RBS-D-C-00001

10-1-5 OPERATION AFTER INSTALLATION

1. Install the rear brake drum S/A.
Refer to BR-26.

2. Install the rear wheel.

TIGHTENING TORQUE: $103.0 \pm 14.7\text{N}\cdot\text{m}$

3. Adjust the shoe clearance to the proper condition by depressing the brake pedal several times and activating the adjusting mechanism for shoe clearance.
4. Adjust the working travel of the parking brake control lever Ay.
5. Install the rear console box Ay.
6. Check the brake dragging.
7. Jack down the vehicle.

BR-RBS-D-A-00001

11 REAR WHEEL CYLINDER

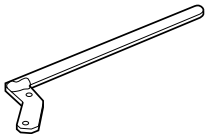
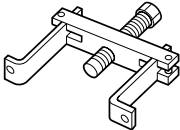
11-1 REMOVAL AND INSTALLATION

WARNING

- Keep the position of the jack-up point to avoid causing serious accident due to inclining of the vehicle. Improper fitting of the rear brake could reduce the efficiency of the brake during driving or the parking brake. Any kinds of oils and fats applied to the inside brake drum or brake lining surface could also reduce the efficiency of the brake. And improper fitting of the brake tube could also reduce the efficiency of the brake.

BR-RWC-D-Z-00001

11-1-1 PREPARATION TOOLS

	Shape	Part Number, Name	Purpose
SST		09511-87202-000 Brake drum stopper	Removal of castle nut
		09510-87301-000 Front hub & drum puller	Removal of brake drum
Gauge	Torque wrench		

BR-RWC-D-P-00001

11-1-2 OPERATION BEFORE REMOVAL

- Jack up the vehicle.
- Remove the rear wheel.
- Remove the stop lamp fuse.
- Connect the bottle for air bleeding to the bleeder plug of the wheel cylinder which is to be removed.
- Open the bleeder plug.
- Fix the brake pedal securely at the fully depressed position.

NOTE

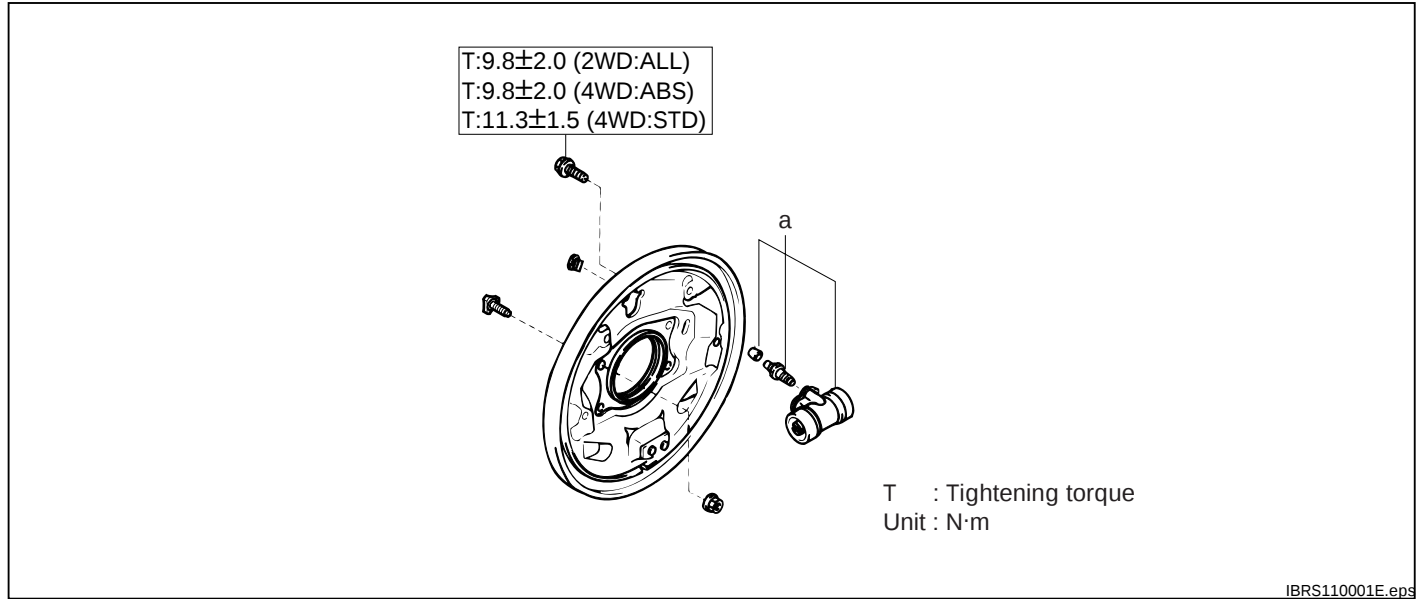
- These measures makes the valve in the master cylinder close to prevent flowing out of the brake fluid.

- Close the bleeder plug.
- Separate the brake hose and the brake tube which are connected with the wheel cylinder which is to be removed.
- Plug the edge of the separated brake tube with the bleeder plug cap or the like.
- Remove the rear brake drum S/A.
Refer to BR-26.

BR-RWC-D-B-00001

11-1-3 REMOVAL AND INSTALLATION PROCEDURES

(1) COMPONENTS



(2) REMOVAL AND INSTALLATION PROCEDURES

- 1 1 a Cylinder, rear wheel

BR-RWC-D-T-00001

11-1-4 INSPECTION

(1) WHEEL CYLINDER CHECK

1. Check the wheel cylinder for corrosion and damage.

BR-RWC-D-C-00001

11-1-5 OPERATION AFTER INSTALLATION

1. Connect the brake tube to the brake wheel cylinder.

CAUTION

- Tighten the union nut temporarily by hand till flare portion of the tube contact securely to the seat, and then tighten it with the specified tightening torque.

TIGHTENING TORQUE: $15.2 \pm 2.5 \text{ N}\cdot\text{m}$

2. Install the brake drum.
Refer to BR-26.
3. Replenish the reservoir tank with brake fluid up to the MAX line.
4. Perform air bleeding of the brake system.
5. Install the stop lamp fuse.
6. Install the rear wheel.

TIGHTENING TORQUE: $103.0 \pm 14.7 \text{ N}\cdot\text{m}$

7. Adjust the shoe clearance to the proper condition by depressing the brake pedal several times and activating the adjusting mechanism for shoe clearance.
8. Adjust the working travel of the parking brake lever.
9. Install the rear console box Ay.
10. Jack down the vehicle.
11. Confirm that there is no brake dragging.

BR-RWC-D-A-00001

11-2 DISASSEMBLY AND ASSEMBLY

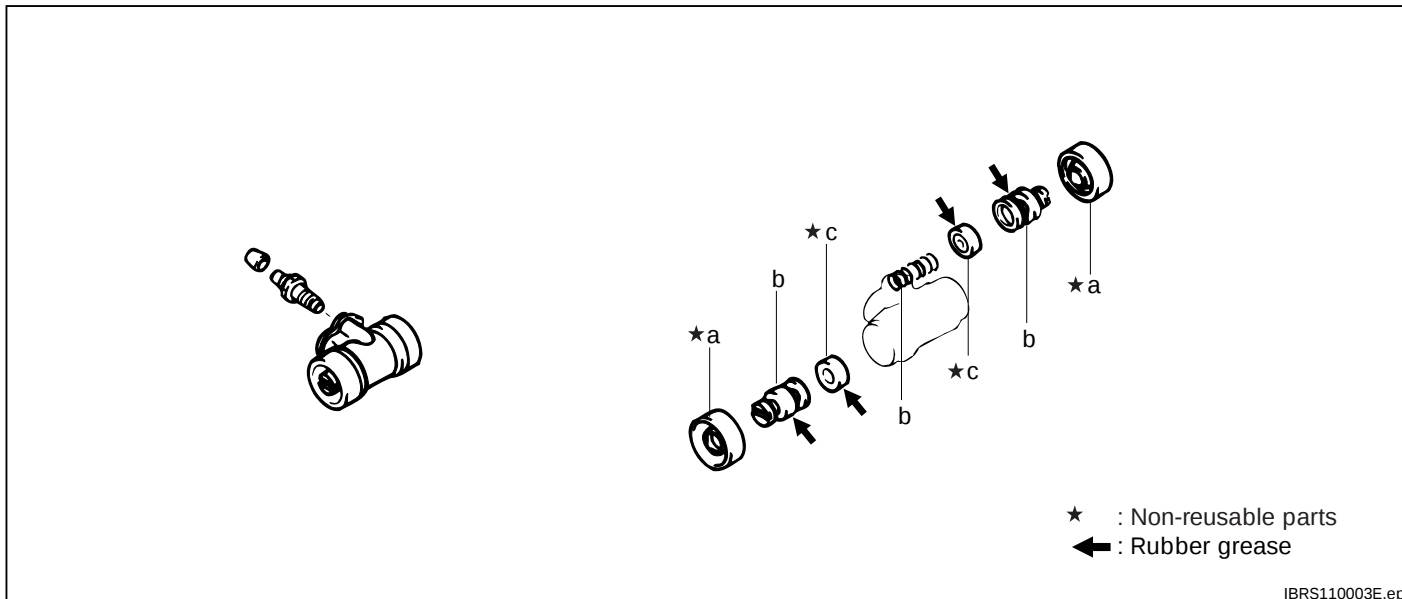
11-2-1 PREPARATION TOOLS

Lubricant	Brake fluid(DOT3), Rubber grease
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BR-RWC-B-P-00001

11-2-2 DISASSEMBLY AND ASSEMBLY PROCEDURE

(1) COMPONENTS



(2) DISASSEMBLY AND ASSEMBLY PROCEDURES

- 1 4 a Boot, wheel cylinder
- 2 3 b Piston, wheel brake cylinder
- 3 2 c Cup, cylinder
- 4 1 d Spring, compression

BR-RWC-B-T-00001

12 REAR BACKING PLATE

WARNING

- Keep the position of the jack-up point to avoid causing serious accident due to inclining of the vehicle.
- Improper fitting of the rear brake could reduce the efficiency of the brake during driving or the parking brake.
- Any kinds of oils and fats applied to the inside brake drum or brake lining surface could also reduce the efficiency of the brake.
- And improper fitting of the brake tube could also reduce the efficiency of the brake.

BR-RBP-Z-Z-00001

12-1 REMOVAL AND INSTALLATION

12-1-1 PREPARATION TOOLS

Gauge	Torque wrench
Lubricant	Brake grease, MP grease, Rubber grease, Liquid gasket, Brake fluid(DOT3)

BR-RBP-D-P-00001

12-1-2 OPERATION BEFORE REMOVAL

1. Jack up the vehicle.
2. Remove the rear wheel.
3. Remove the stop lamp fuse.
4. Connect the bottle for air bleeding to the bleeder plug of rear wheel cylinder which is to be removed.
5. Open the bleeder plug.
6. Fix the brake pedal securely at the fully depressed position.

NOTE

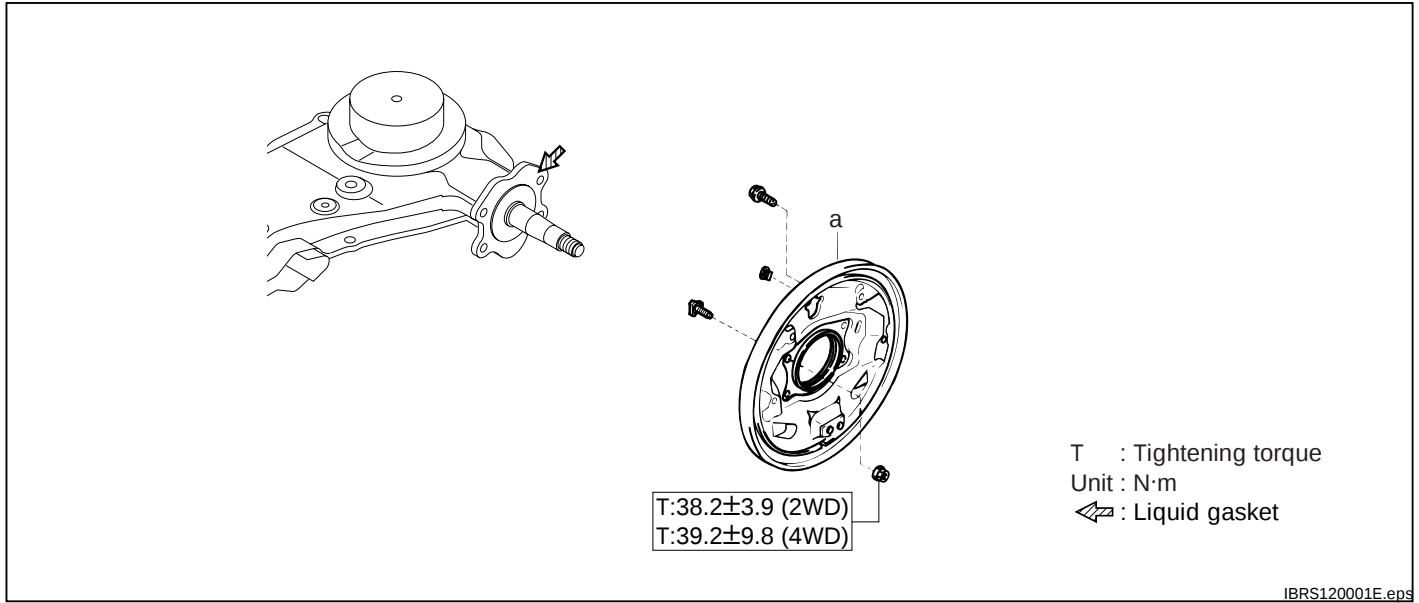
- These measures makes the valve inside of the master cylinder close to prevent flowing out of the brake fluid.

7. Close the bleeder plug.
8. Separate the brake hose and the brake tube which are connected to the rear wheel cylinder which is to be removed.
9. Plug the brake tube edge with bleeder plug cap and so on.
10. Remove the rear brake drum S/A.
Refer to BR-26.
11. Remove the rear brake shoe Ay.
Refer to BR-29.
12. Remove the rear wheel cylinder.
Refer to BR-33.
13. Remove the skid control rear sensor.
Refer to ABS-8.
14. Remove the parking brake cable Ay from rear brake backing plate S/A.
Refer to BR-40.

BR-RBP-D-B-00001

12-1-3 REMOVAL AND INSTALLATION PROCEDURES

(1) COMPONENTS



(2) REMOVAL AND INSTALLATION PROCEDURES

- 1 ① a Plate S/A, brake backing, rear

BR-RBP-D-T-00001

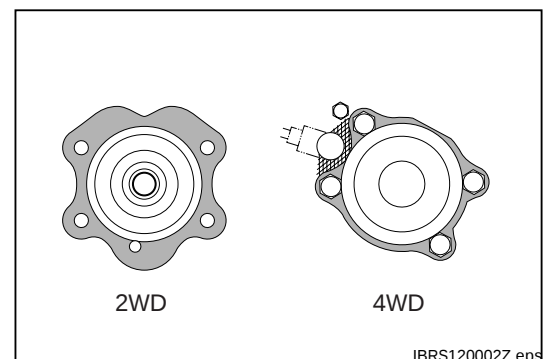
12-1-4 INSPECTION

1. Check to see the condition of wear and damage of rear brake backing plate S/A.

BR-RBP-D-C-00001

12-1-5 POINTS OF INSTALLATION

1. Installation of rear brake backing plate S/A
(1) Apply glue on the place shown in the drawing and install the rear brake backing plate S/A.



12-1-6 OPERATION AFTER INSTALLATION

1. Connect the parking brake cable Ay to the rear brake backing plate S/A.
Refer to BR-40.
2. Install the skid control rear sensor to the rear brake backing plate S/A.
Refer to ABS-8.
3. Install the rear wheel cylinder.
Refer to BR-33.

4. Connect the brake tube to the brake wheel cylinder.

CAUTION

- Tighten the union nut temporarily by hand till flare portion of the tube contacts securely to the seat, and then, tighten it with the specified torque.

TIGHTENING TORQUE: $15.2 \pm 2.5\text{N}\cdot\text{m}$

5. Install the rear brake drum S/A.
Refer to BR-26.
6. Replenish the reservoir tank with brake fluid up to the MAX line.
7. Perform air bleeding of the brake system.
8. Install the stop lamp fuse.
9. Install the rear wheel.

TIGHTENING TORQUE: $103.0 \pm 14.7\text{N}\cdot\text{m}$

10. Adjust the shoe clearance to the proper condition by depressing the brake pedal several times and activating the adjusting mechanism for shoe clearance.
11. Adjust the working travel of the parking brake lever Ay.
12. Install the rear console box Ay.
13. Jack down the vehicle.
14. Confirm that there is no brake dragging.

13 PARKING BRAKE LEVER

13-1 REMOVAL AND INSTALLATION

13-1-1 PREPARATION TOOLS

Gauge	Torque wrench
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BR-PKL-D-P-00001

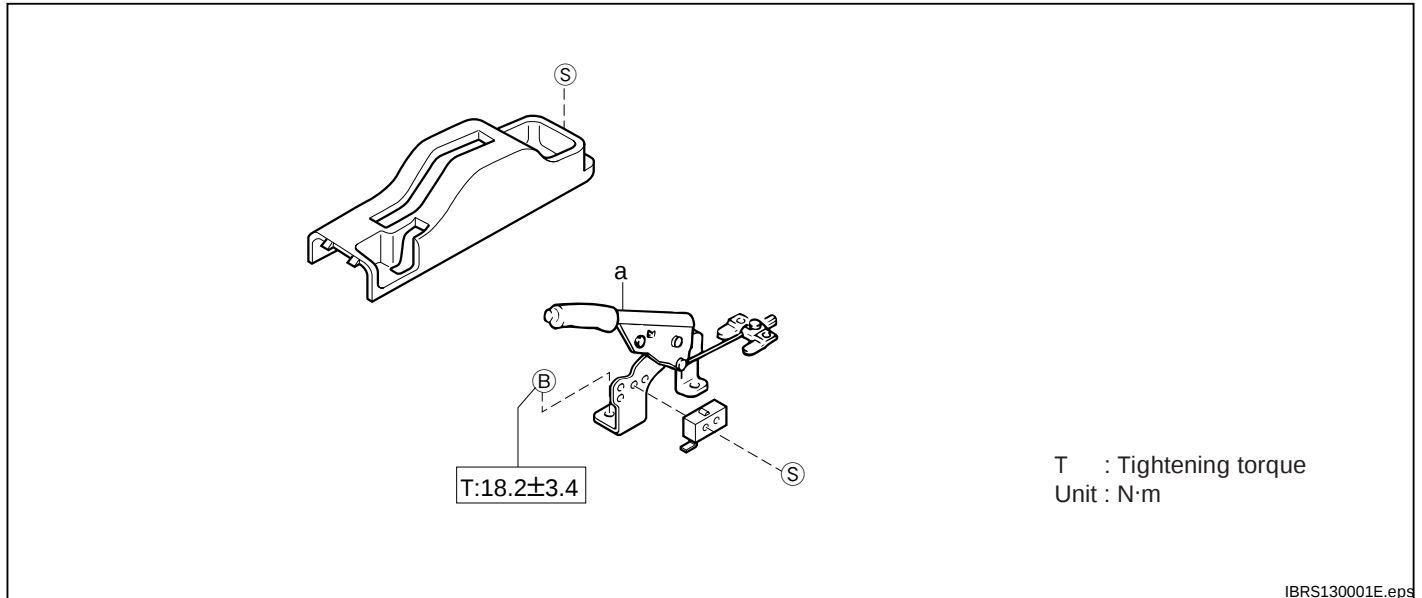
13-1-2 OPERATION BEFORE REMOVAL

1. Remove the rear console box Ay.

BR-PKL-D-B-00001

13-1-3 REMOVAL AND INSTALLATION PROCEDURES

(1) COMPONENTS



(2) REMOVAL AND INSTALLATION PROCEDURES

1. 1 a Handle Ay, parking brake control

BR-PKL-D-T-00001

13-1-4 OPERATION AFTER INSTALLATION

1. Check the working travel of the parking brake lever Ay.
Refer to BR-4.
2. Check that there is no parking brake dragging.
3. Install the rear console box Ay.

BR-PKL-D-A-00001

14 PARKING BRAKE CABLE

14-1 REMOVAL AND INSTALLATION

WARNING

- Keep the position of the jack-up point to avoid causing serious accident due to inclining of the vehicle.
- Improper fitting of the rear brake could reduce the efficiency of the brake during driving or the parking brake.

BR-PKC-D-Z-00001

14-1-1 PREPARATION TOOLS

Gauge	Torque wrench
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BR-PKC-D-P-00001

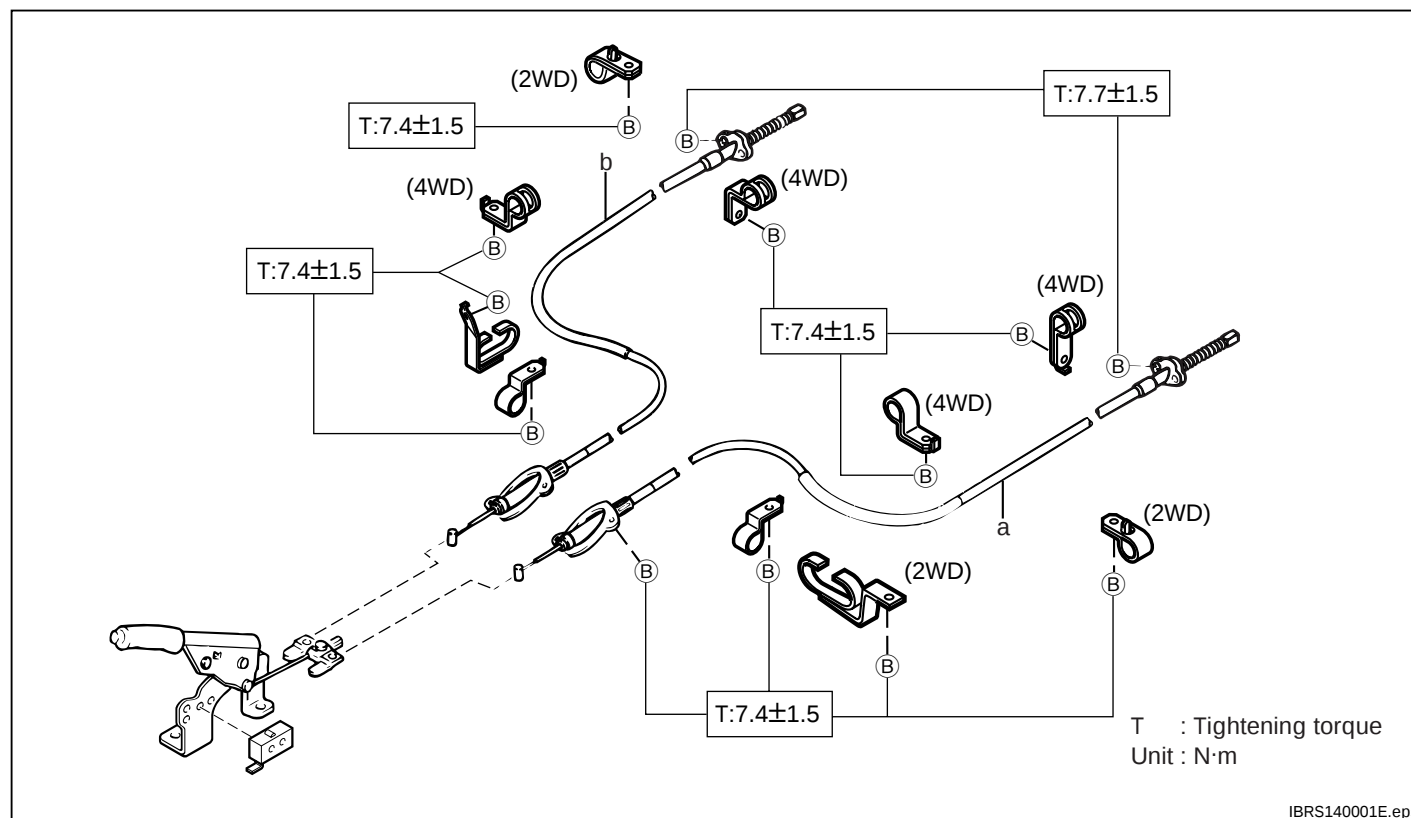
14-1-2 OPERATION BEFORE REMOVAL

1. Remove the rear console box Ay.
2. Jack up the vehicle.
3. Remove the rear brake drum S/A.
Refer to BR-26.

BR-PKC-D-B-00001

14-1-3 REMOVAL AND INSTALLATION PROCEDURES

(1) COMPONENTS



IBRS140001E.eps

(2) REMOVAL AND INSTALLATION PROCEDURES

- 1 2 a Cable Ay, parking brake (Rear left)
- 2 1 b Cable Ay, parking brake (Rear right)

BR-PKC-D-T-00001

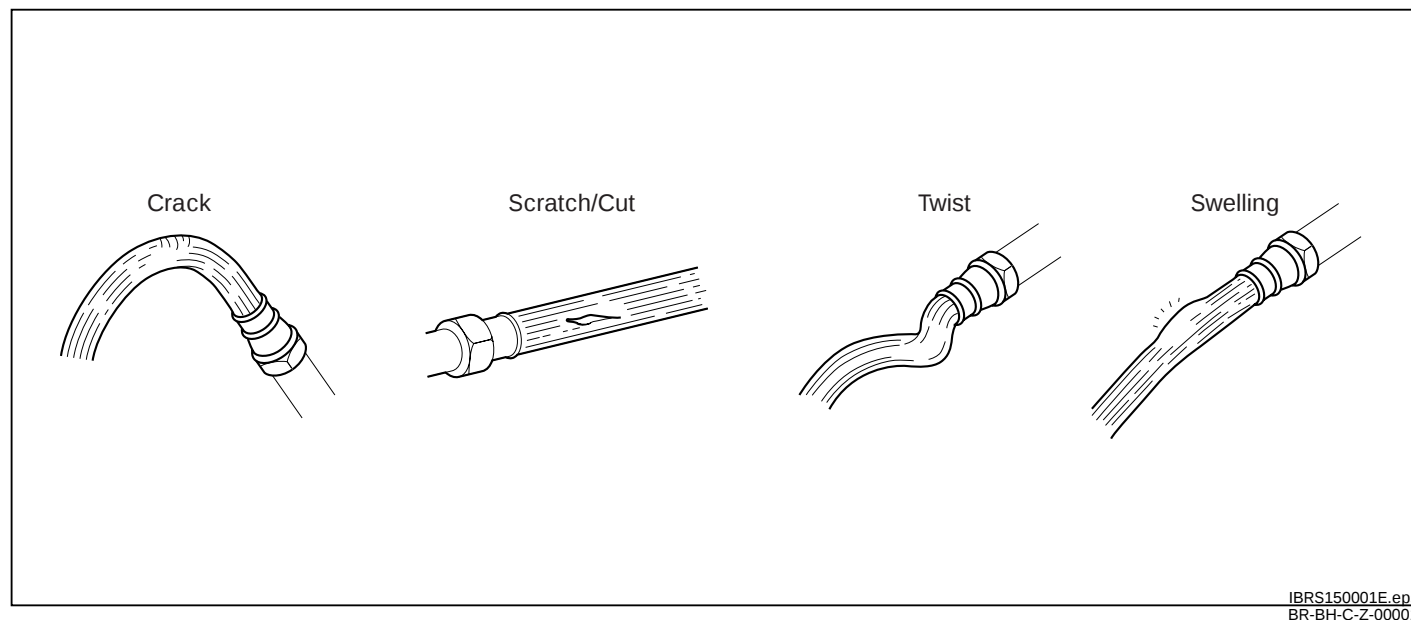
14-1-4 OPERATION AFTER INSTALLATION

1. Install the rear brake drum S/A.
Refer to BR-26.
2. Install the rear wheel.
TIGHTENING TORQUE: $103.0 \pm 14.7\text{N}\cdot\text{m}$
3. Adjust the shoe clearance to the proper condition by depressing the brake pedal several times and activating the adjusting mechanism for shoe clearance.
4. Adjust the working travel of the parking brake lever Ay.
5. Install the rear console box Ay.
6. Check the brake dragging.
7. Jack down the vehicle.

15 BRAKE HOSE

15-1 INSPECTION

1. Check the brake hose for deterioration, damage and twist.
2. In case any abnormality is found, replace it with new one.



15-2 REMOVAL AND INSTALLATION

WARNING

- Keep the position of the jack-up point to avoid causing serious accident due to inclining of the vehicle.

BR-BH-D-Z-00001

15-2-1 PREPARATION TOOLS

Lubricant	Brake fluid(DOT3)
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BR-BH-D-P-00001

15-2-2 OPERATION BEFORE REMOVAL

1. Jack up the vehicle.
2. Remove the wheel.
3. Remove the stop lamp fuse.
4. Connect the bottle for air bleeding to the bleeder plug of the wheel cylinder at the end of the brake hose which is to be removed.
5. Open the bleeder plug.
6. Fix the brake pedal securely at the fully depressed position.

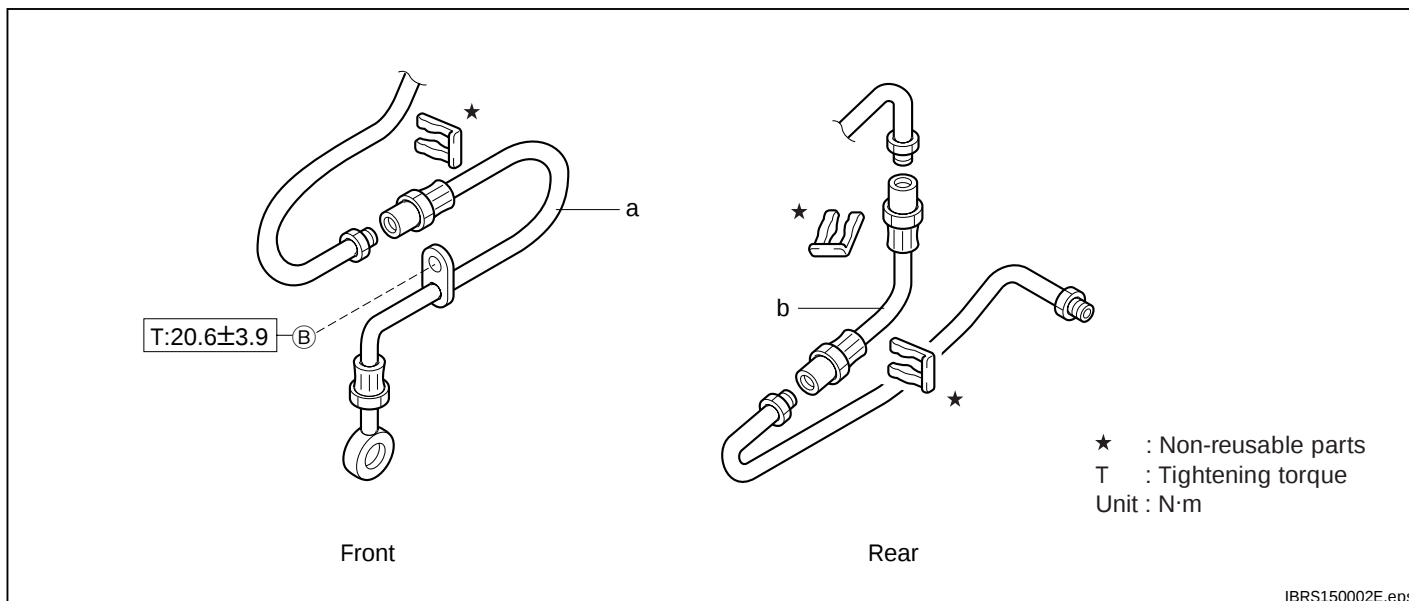
NOTE

- These measures makes the valve inside of master cylinder close to prevent flowing out of the brake fluid.
7. Close the bleeder plug.

BR-BH-D-B-00001

15-2-3 REMOVAL AND INSTALLATION PROCEDURES

(1) COMPONENTS



(2) REMOVAL AND INSTALLATION PROCEDURES

- 1 2 a Hose flexible, front
- 2 1 b Hose flexible, rear

BR-BH-D-T-00001

15-2-4 OPERATION AFTER INSTALLATION

1. Replenish the reservoir tank with brake fluid up to the MAX line.
2. Perform air bleeding of the brake system.
3. Install the stop lamp fuse.
4. Install the wheel.

TIGHTENING TORQUE: $103.0 \pm 14.7 \text{ N}\cdot\text{m}$

5. Jack down the vehicle.
6. Confirm that there is no brake dragging.

BR-BH-D-A-00001

16 TIGHTENING TORQUE

Tightening components			N·m	kgf·cm
Lock nut	×	Brake booster push rod	14.7±2.9	145±30
Stop lamp switch	×	Lock nut	19.6±7.8	190±80
Bleeder plug	×	wheel cylinder	8.4±1.4	85±15
Brake pedal	×	Brake pedal bracket	18.2±3.4	185±35
Brake master cylinder	×	Brake booster	14.7±2.9	145±30
Brake booster	×	Brake pedal bracket	12.7±2.9	130±30
Brake pedal clip	×	Brake booster push rod	14.7±2.9	150±30
Vacuum hose clamp	×	Body	5.4±1.5	55±15
Proportioning valve	×	Body	7.4±1.5	75±15
Front brake caliper	×	Steering knuckle	112.8±22.5	1150±230
Union bolt	×	Brake hose	30.4±3.9	310±40
Cylinder slide pin	×	Disc brake cylinder	43.1±5.9	440±60
Castle nut (2WD)	×	Rear axle	68.7±9.8	700±100
Castle nut (4WD)	×	Rear axle	196.1±19.6	2000±200
Brake backing plate (2WD)	×	Rear axle	38.2±3.9	390±40
Brake backing plate (4WD)	×	Rear axle	39.2±9.8	400±100
Rear wheel cylinder (2WD)	×	Brake backing plate	9.8±2.0	100±20
Rear wheel cylinder (4WD STD)	×	Brake backing plate	11.3±1.5	115±14
Rear wheel cylinder (4WD ABS)	×	Brake backing plate	9.8±2.0	100±20
Parking brake handle	×	Body	18.2±3.4	185±35
Parking brake cable	×	Brake backing plate	7.7±1.4	79±15
Parking brake cable	×	Body	7.4±1.5	75±15
Parking brake cable clump	×	Body	7.4±1.5	75±15
Brake hose	×	Front shock absorber	20.6±3.9	210±40
Brake tube (flare nut)			15.2±2.4	155±25

BR-TQE-Z-Z-00001