GROUP 35A

BASIC BRAKE

CONTENTS

SERVICE SPECIFICATIONS

M1351000302525

Item		Standard value	Limit
Brake pedal height mm		221.8 – 227.8	–
Dimension from the brake booster stud bolt end to the clevis hole centre mm		75.8 – 80.2	–
Brake pedal free play mm		3 – 8	–
Pedal-to-floor clearance when brake pedal is depressed mm [Pedal depression force: approx. 500 N]		80 or more	–
Brake pedal distortion mm	Distance from the pedal pad surface to the level surface	240 – 246	–
Fluid pressure generated by brake booster non-servo effect test kPa	Pedal depression force: 100 N	0 – 600	–
	Pedal depression force: 300 N	1,030 – 2,220	–
Fluid pressure generated by brake booster servo effect test kPa	Pedal depression force: 100 N	6,570 – 8,330	–
	Pedal depression force: 300 N	10,370 – 11,560	–
Front disc brake	Brake pad thickness mm	10.0	2.0
	Brake disc thickness mm	26.0	24.4
	Brake disc run-out mm	–	0.06
	Brake drag force N	68 or less	–
Rear disc brake	Brake pad thickness mm	9.0	1.5
	Brake disc thickness mm	10.0	8.4
	Brake disc run-out mm	–	0.08
	Brake drag force N	68 or less	–

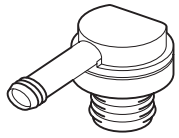
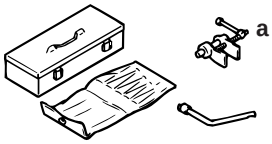
LUBRICANTS

M1351000401682

Item		Specified lubricant	Quantity
Brake fluid		DOT3 or DOT4	As required
Front disc brake	Piston, caliper body , piston seal	DOT3 or DOT4	
	Guide pin, lock pin, pin boot, bushing, boot ring, piston boot	Repair kit grease (Colour: Translucent red), Niglube RX-2 or equivalent	
Rear disc brake	Piston, caliper body , piston seal	DOT3 or DOT4	
	Guide pin, lock pin, pin boot, bushing	Repair kit grease, Niglube RX-2 or equivalent	
	Piston boot	Repair kit grease (Colour: Translucent red), Niglube RX-2 or equivalent	
	Shim, brake pad assembly	Repair kit grease, AS880N or equivalent	

SPECIAL TOOLS

M1352000601872

Tool	Number	Name	Use
 MB992146	MB992146	Booster test adapter	Inspection using a simplified tester
 MB990964	MB990964 a: MB990520	Brake tool set a: Piston expander	Disc brake piston pushing back <Front disc brake>
 MB991621	MB991621	Piston driver	Disc brake piston pushing back <Rear disc brake>

ON-VEHICLE SERVICE

BRAKE PEDAL CHECK

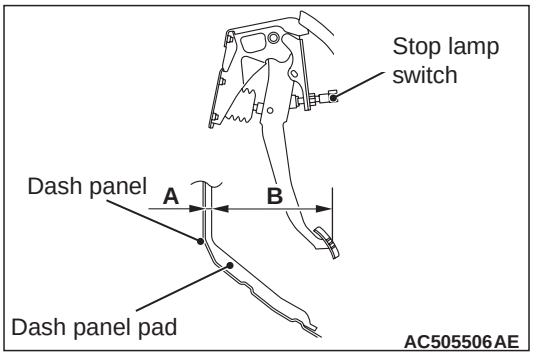
M1351003501042

⚠ CAUTION

Do not apply grease or lubricant to the switch and the switch installation section to avoid malfunction of the switch. In addition, do not use gloves which have grease on them.

BRAKE PEDAL HEIGHT CHECK

1. Turn up the floor carpet under the brake pedal.
2. Remove the stop lamp switch (Refer to P.35A-13).

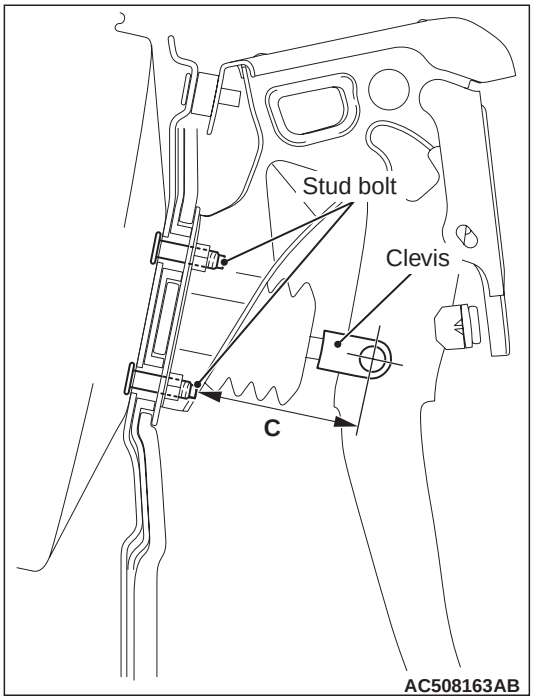


3. Use a needle or similar tool to measure the dimension A in the figure (distance from the dash panel pad surface to the dash panel).
4. Measure the dimension B in the figure (distance from the pedal pad surface to the dash panel pad surface).
5. Make sure that the total of the dimensions A and B measured in Steps 3 and 4 (brake pedal height) is within the standard value.

   Standard value (A+B): 221.8 – 227.8 mm

6. When the brake pedal height is not within the standard value, inspect the brake pedal in the following procedure.
   (1) Remove the brake pedal assembly (Refer to P.35A-13).
   (2) Check the removed brake pedal assembly for distortion, and replace it when deformed (Refer to P.35A-14).
   (3) Install the brake pedal assembly (Refer to P.35A-13).

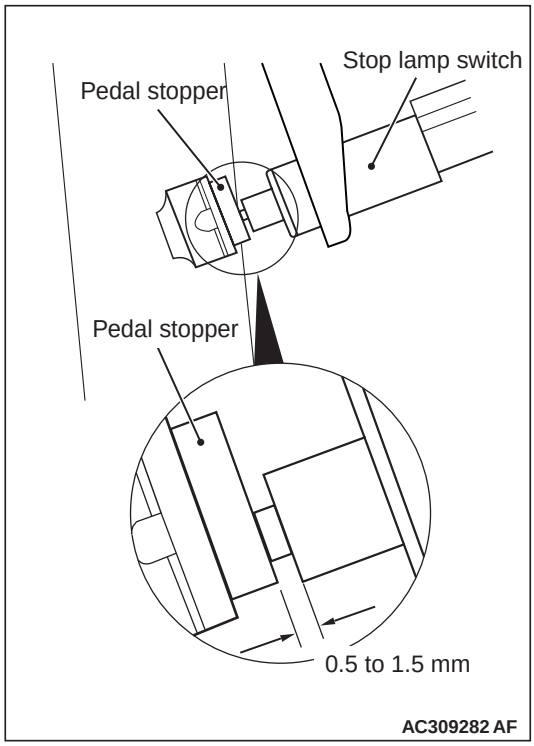
   NOTE: When installing, compress the dash panel pad.



(4) Measure the brake pedal height again, and make sure that it is within the standard value (A+B).
When the measured value is not within the standard value, measure the dimension C in the figure (distance from the stud bolt end to the clevis hole centre), and make sure it is within the standard value (C).

Standard value (C): 75.8 – 80.2 mm

(5) When the measured value is not within the standard value (C), replace the brake booster (Refer to P.35A-15).

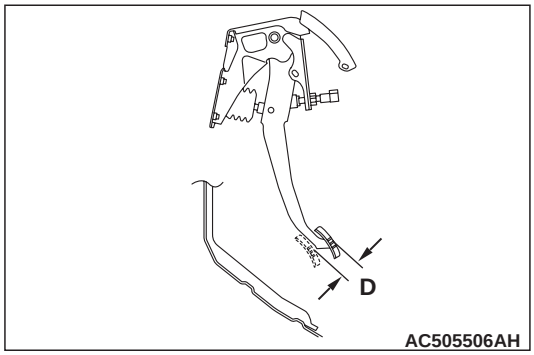


7. After checking the brake pedal height, install the stop lamp switch in the following procedure:
   (1) Screw in the stop lamp switch until its thread contacts the pedal stopper, then turn the switch approximately one eighth of a clockwise turn to fix it. While doing this, pull and hold the brake pedal by hand.
   (2) Check that the clearance between the stop lamp switch and the pedal stopper is as shown in the figure.

⚠ CAUTION
Make sure that the stop lamp is not illuminated when the brake pedal is not depressed.

   (3) Connect the stop lamp switch connector.
8. Recover the floor carpet under the brake pedal.

BRAKE PEDAL FREE PLAY CHECK AND ADJUSTMENT



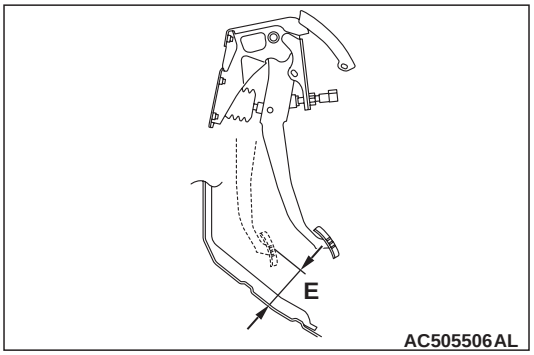
1. With the engine stopped, depress the brake pedal 2 or 3 times to relief the vacuum in the brake booster. Then, press the brake pedal with your finger and check if the pedal stroke until the pedal becomes heavy (play) is within the standard value.

   Standard value (D): 3 – 8 mm

2. When the brake pedal free play is not within the standard value, check the brake pedal-to-clevis pin looseness, clevis pin-to-booster operating rod looseness, brake pedal height, and stop lamp switch position, and adjust or replace as necessary.

BRAKE PEDAL-TO-FLOOR PANEL CLEARANCE CHECK AND ADJUSTMENT

1. Turn up the floor carpet under the brake pedal.



2. Start the engine and depress the brake pedal with approximately 500 N, and measure clearance between the brake pedal and the floor panel.

   Standard value (E): 80 mm or more

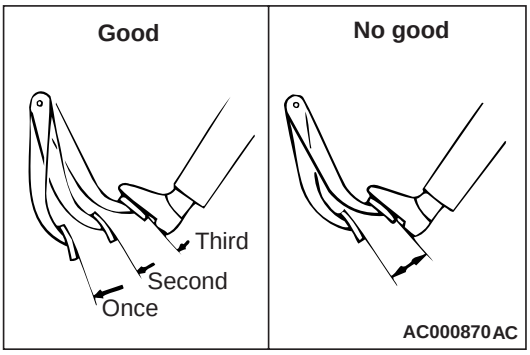
3. When the clearance is not within the standard value, check for the air in the brake line and thickness of the disc brake pad, and correct or replace as necessary.
4. Recover the floor carpet under the brake pedal.

BRAKE BOOSTER OPERATION CHECK

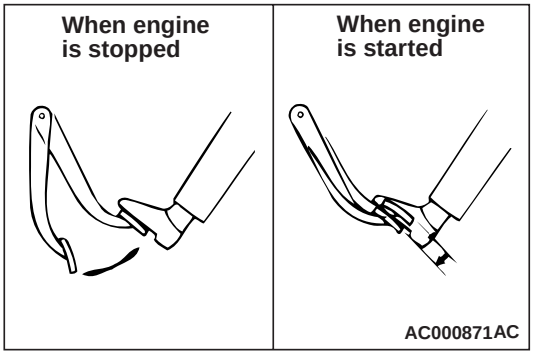
M1351001001331

INSPECTION WITHOUT USING TESTER

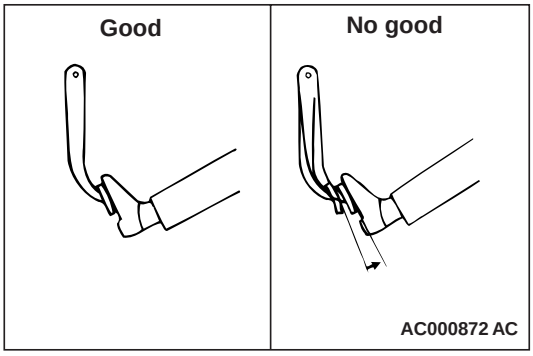
1. Carry out the simplified brake booster operation check in the following procedure:



(1) Run the engine for 1 to 2 minutes, and then stop. Depress the brake pedal with normal depression force. The result is judged as "Good" when the pedal stroke is great at the first depression, and becomes smaller as you repeat depressing the pedal. If the pedal stroke does not change, the result is judged as "No Good."



(2) With the engine stopped, depress the brake pedal several times. Keep the brake pedal depressed and start the engine. At this time, when the pedal moves down slightly, the result is judged as "Good." The result is judged as "No Good" if the pedal does not moves down.



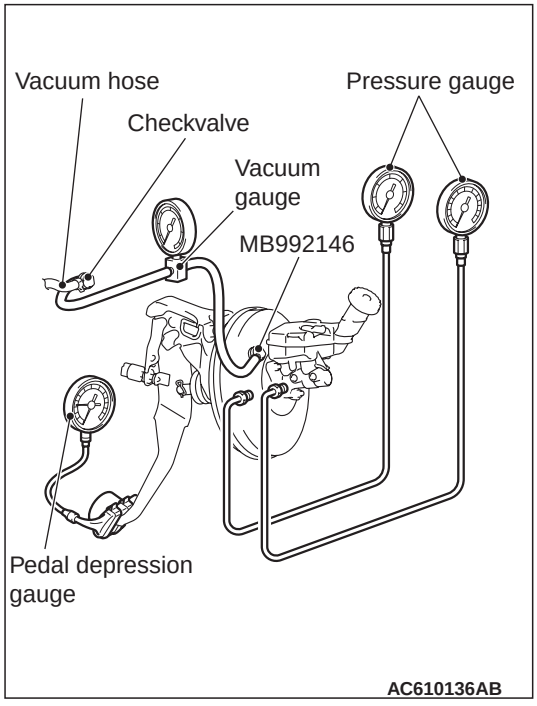
(3) With the engine running, depress the brake pedal. Stop the engine in this condition. The result is judged as "Good" when the pedal height does not change for approximately 30 seconds. The result is judged as "No Good" if the pedal moves up.

2. The brake booster is judged as normal when the results of all the above checks are "Good."

   When one or more of the above check results are "No Good," then the check valve, vacuum hose, or brake booster is suspected faulty.

INSPECTION USING SIMPLIFIED TESTER

1. Before starting this inspection, remove the brake booster check valve from the vehicle and check its operation (Refer to P.35A-15).



2. After checking, install the check valve to the vacuum hose and connect it to the vacuum gauge. Install special tool booster test adapter (MB992146) to the brake booster and connect it to the vacuum gauge. Connect the pressure gauge and pedal depression gauge as shown in the figure. Bleed the pressure gauge and then perform the following tests:

   (1) Airtightness test with no load

   Start the engine, and stop it when the vacuum gauge indicator has reached approximately –67 kPa. The result is judged as "Good" when the drop of the vacuum approximately 15 seconds after the engine was stopped is within –3.3 kPa.

   (2) Airtightness test with load

   Start the engine and depress the brake pedal with 200 N. Stop the engine when the vacuum gauge indicator reached approximately –67 kPa. The result is judged as "Good" when the drop of the vacuum approximately 15 seconds after the engine was stopped is within –3.3 kPa.

   When one or more of the above check results are judged as "No Good," the vacuum hose or brake booster is suspected faulty.

   (3) Brake booster characteristics test

   Perform this test after the above (1) and (2) were performed.

   a. Non-servo effect test

   With the engine stopped, make sure that the vacuum gauge reading is 0 kPa. Depress the brake pedal with 100 N and 300 N, and measure the fluid pressure generated.

Standard value:

Item	Pedal depression force	
	100 N	300 N
Generated fluid pressure kPa	0 – 600	1,030 – 2,220

   b. Servo effect test

   Start the engine. Depress the brake pedal with 100 N and 300 N when the vacuum gauge indicator reached approximately –67 kPa, and measure the fluid pressure generated.

Standard value:

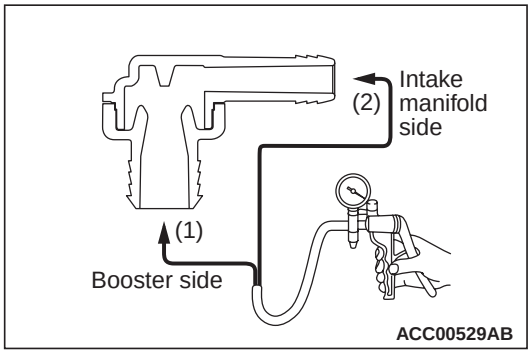
Item	Pedal depression force	
	100 N	300 N
Generated fluid pressure kPa	6,570 – 8,330	10,370 – 11,560

CHECK VALVE OPERATION CHECK

M1351009001197

1. Remove the check valve (Refer to P.35A-15).

⚠ CAUTION
Replace the check valve when it is faulty.



2. Using a vacuum pump, check operation of the check valve.

Vacuum pump connection	Normal condition
When connected to the booster side (1)	Vacuum is generated and maintained.
When connected to the engine side (2)	No vacuum is generated.

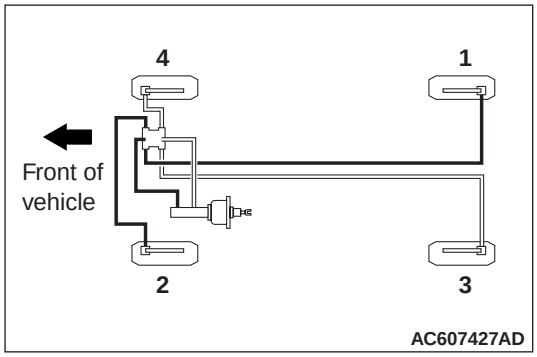
BLEEDING

M1351001401362

⚠ CAUTION
Be sure to use the specified brand and type of brake fluid. Avoid mixing with other type of brake fluid.

Brake fluid: DOT3 or DOT4

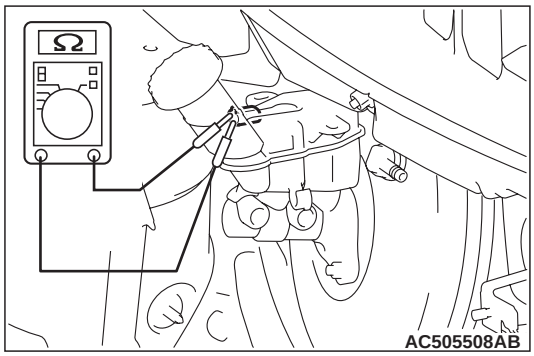
BLEEDING OF BRAKE PIPELINE



1. Perform the bleeding in the order shown in the figure.

BRAKE FLUID LEVEL SWITCH CHECK

M1351009100986

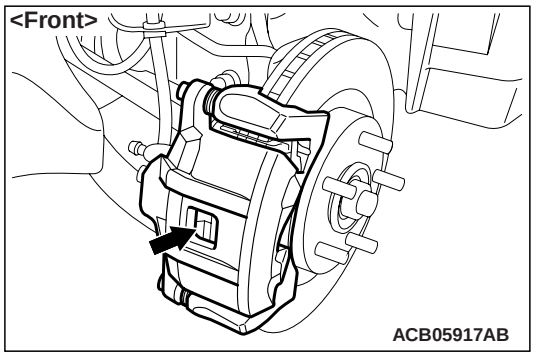


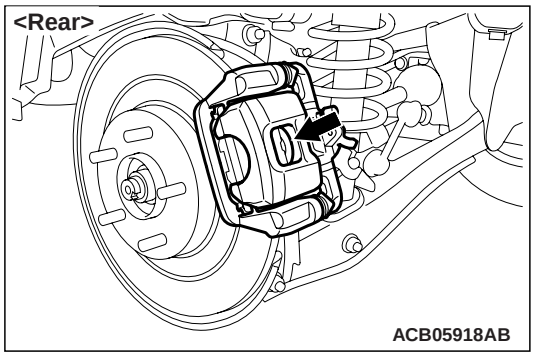
The brake fluid level switch is normal when the following conditions are met: When the brake fluid level is above "MIN," continuity is detected; and when the level is below "MIN," no continuity is detected.

BRAKE PAD CHECK

M1351017300703

⚠ CAUTION
If there is a significant difference in thickness between the brake pads at right and left, check the sliding area and the run-out of the brake disc (Refer to P.35A-9).





1. Visually check the thickness of brake pad from the inspection hole of the caliper body.

   Standard value: 10.0 mm <Front>, 9.0 mm <Rear>
   Limit: 2.0 mm <Front>, 1.5 mm <Rear>

2. If the brake pad thickness is less than the limit value, replace the brake pad (Refer to P.35A-8).

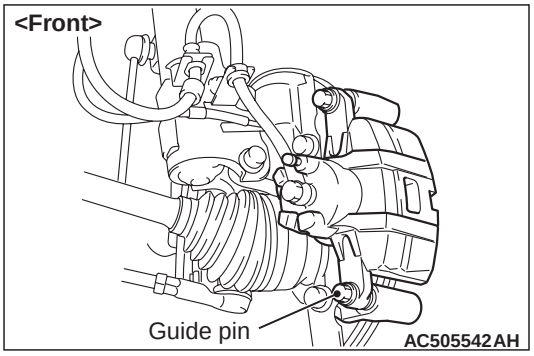
BRAKE PAD REPLACEMENT

M1351017400915

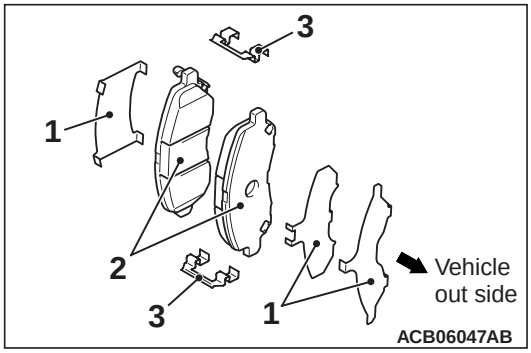
<FRONT>

⚠ CAUTION

When replacing, replace both brake pads (right and left) as a set.



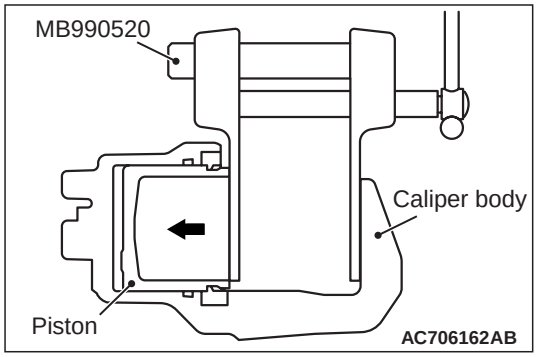
1. Remove the parts indicated in the figure, swivel the caliper body upward and retain it with a wire or similar tool.



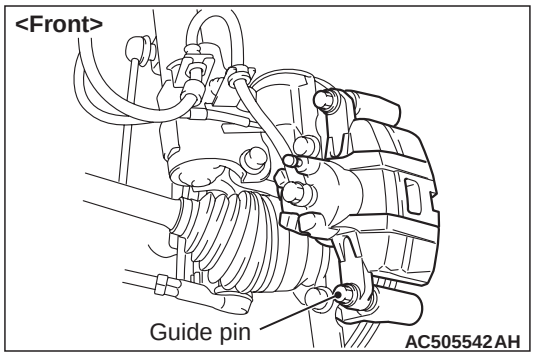
2. Remove the following parts from the caliper support.
   (1) Shim
   (2) Brake pad assembly
   (3) Clip

⚠ CAUTION

Keep grease or other soiling off the pad and brake disc friction surfaces.



3. Clean the piston part, and press the piston into the cylinder using the special tool piston expander (MB990520).

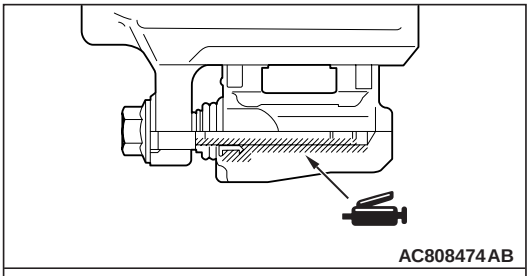


4. Assemble the shim, brake pad assembly and clip to the caliper support, and tighten the lock pin to the specified torque.

   Tightening torque: 44 ± 5 N·m

   NOTE: Install the brake pad assembly (with wear indicator) to the inner side of the brake disc, making sure that the wear indicator is located on the top.

LUBRICATION POINTS



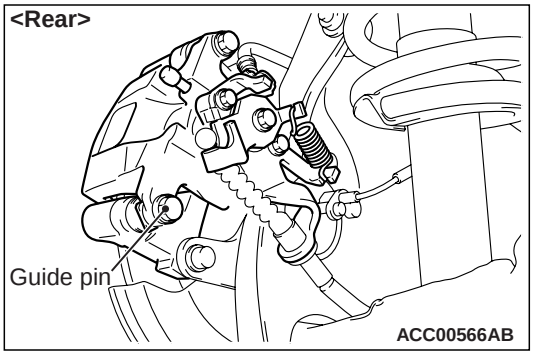
Grease: Repair kit grease (Colour: Translucent red), Niglube RX-2 or equivalent

<REAR>

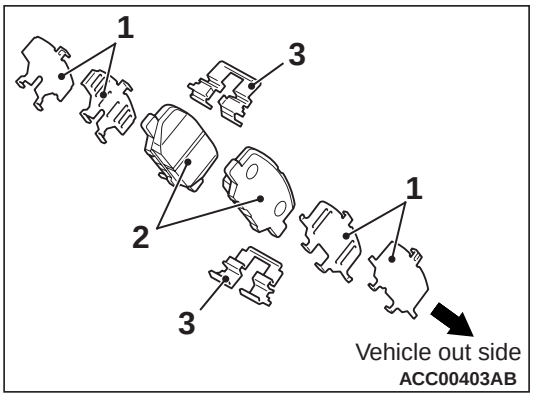
⚠ CAUTION

When replacing, replace both brake pads (right and left) as a set.

1. Remove the parking brake rear cable mounting bolts and nut (at the cable clamp) to loosen the cable. (Refer to GROUP 36 – Parking Brake).

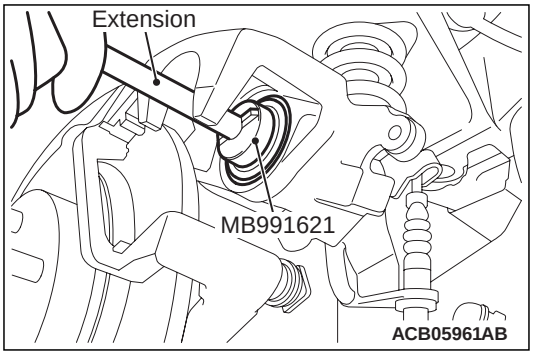


2. Remove the parts indicated in the figure, swivel the caliper body upward and retain it with a wire or similar tool.

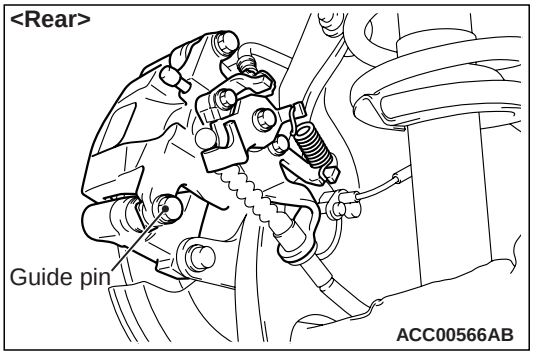


3. Remove the following parts from the caliper support.
   (1) Shim
   (2) Brake pad assembly
   (3) Clip

⚠ CAUTION
Keep grease or other soiling off the pad and brake disc friction surfaces.



4. Clean the piston part, and press the piston into the cylinder using the special tool piston expander (MB991621).



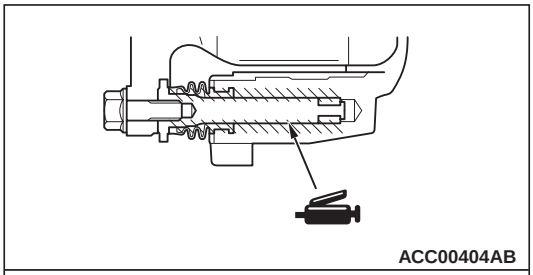
5. Assemble the brake pad assembly to the caliper support, and tighten the guide pin to the specified torque.

   Tightening torque: 44 ± 5 N·m

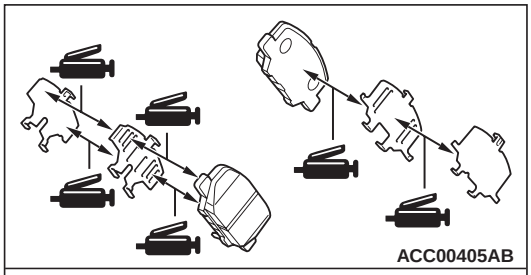
   NOTE: Install the brake pad assembly (with wear indicator) to the inner side of the brake disc, making sure that the wear indicator is located on the bottom.

6. Connect the parking brake rear cable.(Refer to GROUP 36 – Parking Brake).

LUBRICATION POINT



Grease: Repair kit grease, Niglube RX-2 or equivalent



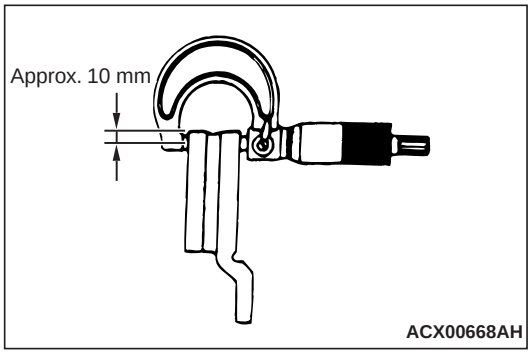
Grease: Repair kit grease, AS880N or equivalent

BRAKE DISC CHECK

M1351018600365

BRAKE DISC THICKNESS CHECK

1. Remove contaminants or corrosion from the brake disc surface.



2. Use a micrometer to measure the brake disc thickness at minimum eight points which are 10 mm inward from its circumference.

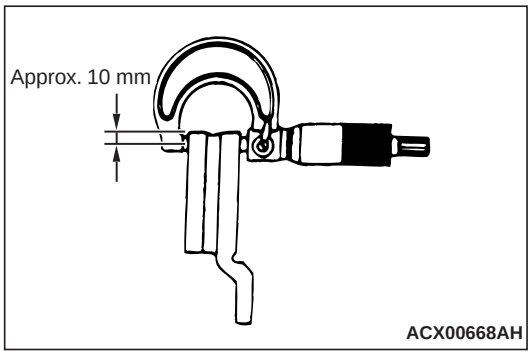
   Standard value:
   26.0 mm <Front>
   10.0 mm <Rear>

   Limit:
   24.4 mm <Front>
   8.4 mm <Rear>

3. If the brake disc thickness is worn beyond the limit value at more than one point, replace the brake disc and check its run-out.

BRAKE DISC THICKNESS UNEVENNESS CHECK AND CORRECTION

1. Remove contaminants or corrosion from the brake disc surface.

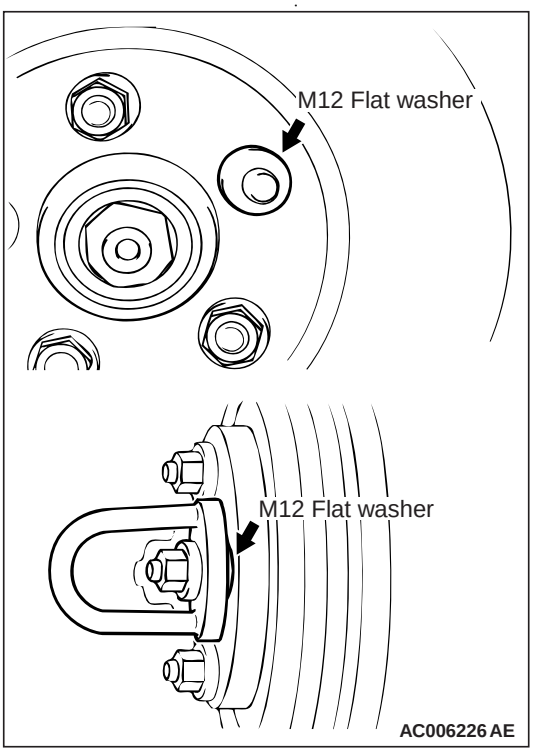


2. Use a micrometer to measure the brake disc thickness at minimum eight points which are 10 mm inward from its circumference. Then record the measurements.
3. If the brake disc thickness unevenness (the difference between the maximum and minimum values measured above) is 0.015 mm or less, it is within the standard value.
4. If the brake disc thickness unevenness exceeds the standard value, grind it according to the procedure below while it is mounted on the vehicle.

NOTE: If it is suspected that the brake disc thickness will become less than the limit value after the grinding, replace the brake disc and check its run-out.

(1) Check for wheel bearing looseness in the axial direction (Refer to GROUP 26 – On-vehicle Service, Wheel bearing axial play check <Front>, GROUP 27A – On-vehicle Service, Wheel bearing axial play check <Rear (2WD)> or GROUP 27B – On-vehicle Service, Wheel bearing axial play check <Rear (4WD)>).

⚠ CAUTION



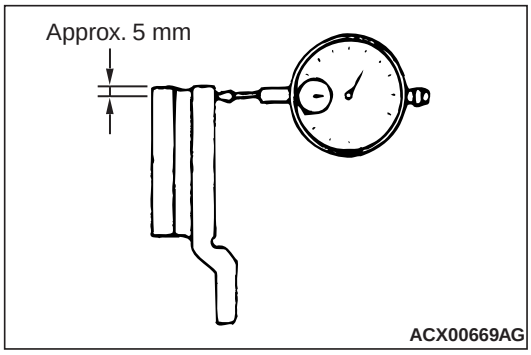
Insert M12 plain washer and then install the adapter as shown before grinding. Failure to use the M12 plain washer will cause the brake disc to be deformed and earth incorrectly.

- **To grind the brake disc, ensure that all the nuts (M12 X 1.5) are tightened evenly and in a diagonal sequence to the specified torque (100 N·m). Failure to use all the nuts (M12×1.5), excessive or uneven tightening torque will cause the brake disc to deform or judder.**

(2) Correct the brake disc uneven thickness by grinding it while in place on the vehicle.

BRAKE DISC RUN-OUT CHECK AND CORRECTION

1. Check for wheel bearing looseness in the axial direction (Refer to GROUP 26 – On-vehicle Service, Wheel bearing axial play check <Front>, GROUP 27A – On-vehicle Service, Wheel bearing axial play check <Rear (2WD)> or GROUP 27B – On-vehicle Service, Wheel bearing axial play check <Rear (4WD)>).
2. If the axial play is within the limit value, secure the brake disc by tightening the nut (M12×1.5) evenly to the specified torque (100 N·m).If the axial play still exceeds the limit value, replace the wheel bearing. Then secure the brake disc by tightening the nut (M12×1.5) evenly to the specified torque (100 N·m).

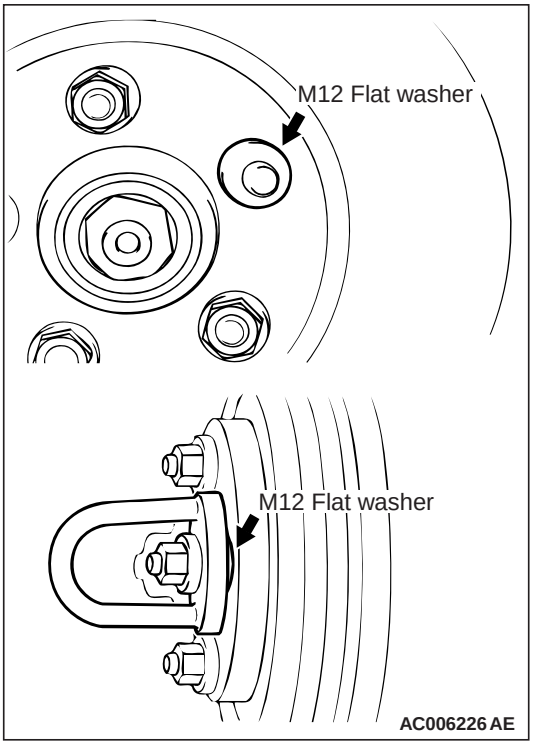


3. Place a dial gauge ca. 5 mm inward from the circumference of the brake disc to measure its run-out.

   Limit:
   0.06 mm <Front>
   0.08 mm <Rear>

4. If the brake disc run-out exceeds the limit value, rephase the brake disc to the hub so that the minimum brake disc run-out is obtained.

⚠ CAUTION



Insert M12 plain washer and then install the adapter as shown before grinding. Failure to use the M12 plain washer will cause the brake disc to be deformed and earth incorrectly.

- **To grind the brake disc, ensure that all the nuts (M12 X 1.5) are tightened evenly and in a diagonal sequence to the specified torque (100 N·m). Failure to use all the nuts (M12×1.5), excessive or uneven tightening torque will cause the brake disc to deform or judder.**

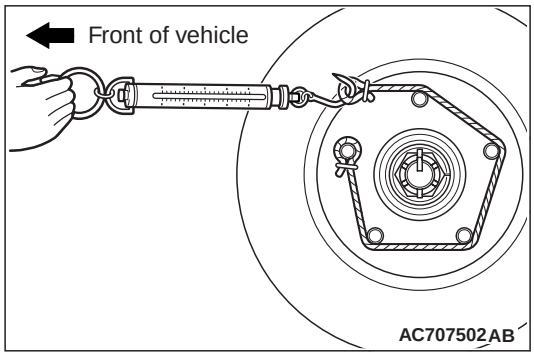
5. If the brake disc run-out exceeds the limit value after rephasing, grind the disc while in place on the vehicle so that the brake disc run-out is within the limit value.

   NOTE: If it is suspected that the brake disc thickness will be below the limit value, replace the brake disc. Then rephase the brake disc so that the minimum brake disc run-out is obtained, or grind the disc while in place on the vehicle so that its run-out is below the limit value.

BRAKE DRAG FORCE CHECK

M1351017200609

1. Remove the brake pad, shim and clip (Refer to P.35A-8).



2. Using a spring scale, measure the hub sliding torque in the forward direction with the brake pad, shim and clip removed.
3. Install the brake pad, shim and clip (Refer to P.35A-8).
4. Start the engine, and depress the brake pedal lightly two or three times. Then stop the engine. (Depressing force: approximately 50 – 100 N)
5. Turn the brake disc 10 times in the forward direction.
6. Using a spring scale, measure the hub sliding torque in the forward direction with the brake pad, shim and clip installed.
7. Obtain the disc brake drag force (difference between measured values of item 2 and item 6).

   Standard value:
   68 N or less <Front>
   68 N or less <Rear>
8. If the brake drag force exceeds the standard value, disassemble the brake caliper assembly to check for fouling/rust on the piston sliding section and piston seal deterioration, and confirm whether the guide pin and lock pin slide properly (Refer to P.35A-18 <Front> or P.35A-22 <Rear>).

BRAKE PEDAL

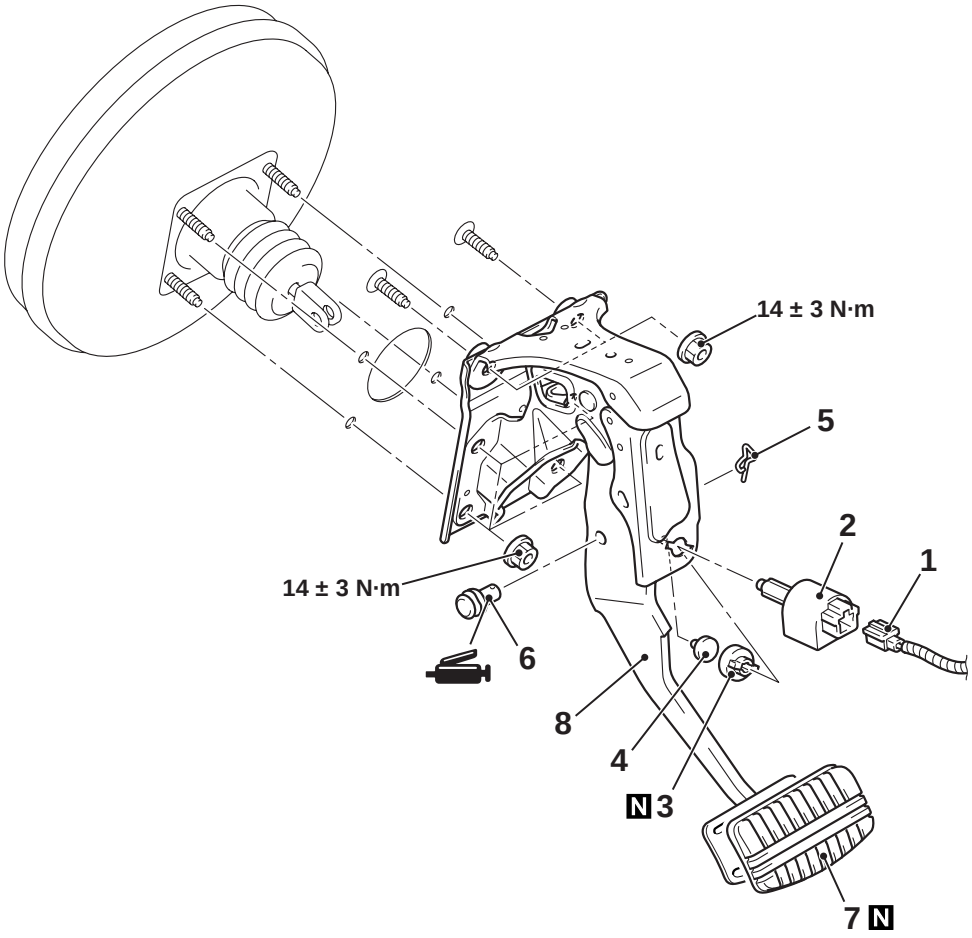
REMOVAL AND INSTALLATION

M1351003401636

⚠ CAUTION

Do not apply lubricant (grease or silicon system sprayer etc.) to the switch and the switch installation section to avoid malfunction of the switch. In addition, do not use gloves which have lubricant (grease or silicon system sprayer etc.) on them.

Pre-removal operation	Post-installation operation
• Front Scuff Plate <LH> and Cowl Side Trim <LH> Removal (Refer to GRUOP 52A, Interior Trim .) • Steering Column Lower Cover and Side Lower Panel Removal (Refer to GRUOP 52A, Instrument Panel Assembly .)	• Steering Column Lower Cover and Side Lower Panel Installation (Refer to GRUOP 52A, Instrument Panel Assembly .) • Front Scuff Plate <LH> and Cowl Side Trim <LH> Installation (Refer to GRUOP 52A, Interior Trim .)



ACC00530AB

Removal steps

1. Stop lamp switch connector connection
2. Stop lamp switch
3. Pedal clip
4. Pedal stopper
5. Snap pin
6. Pin assembly
7. Pedal pad

<<A>> 8. Brake pedal assembly

REMOVAL SERVICE POINT

<<A>> BRAKE PEDAL ASSEMBLY REMOVAL

From the engine compartment side, remove the brake pedal assembly while pulling the brake booster.

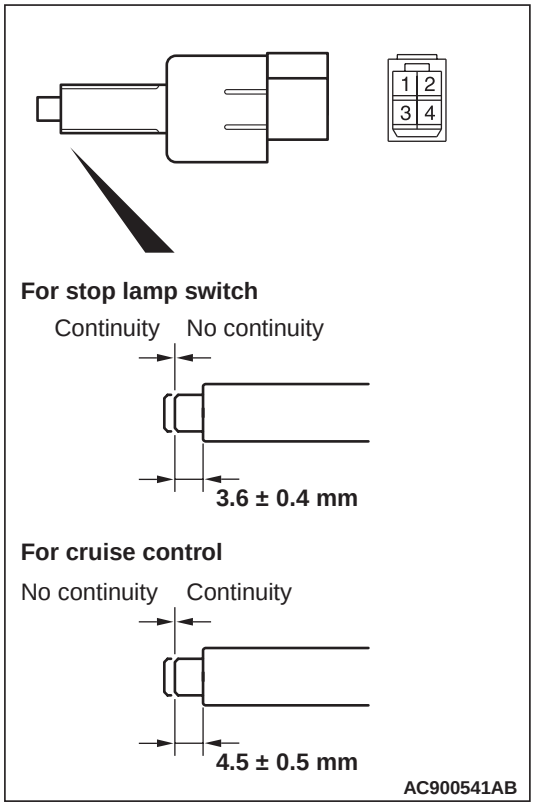
INSPECTION

STOP LAMP SWITCH CHECK

M1351008900729

⚠ CAUTION

Do not apply lubricant (grease or silicon system sprayer etc.) to the switch and the switch installation section to avoid malfunction of the switch. In addition, do not use gloves which have lubricant (grease or silicon system sprayer etc.) on them.

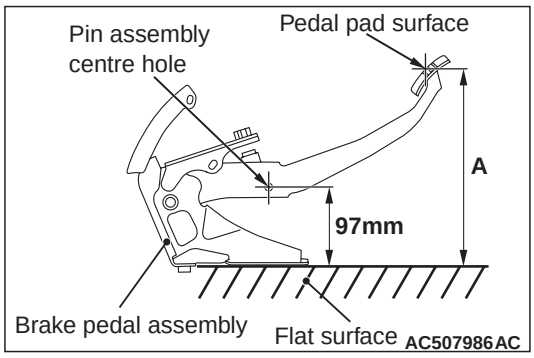


Check for continuity between the terminals of the switch.

Check condition	Terminal connector of tester	Normal condition
At free position	1 – 2 (for stop lamp switch)	Continuity exists (2 Ω or less)
	3 – 4 (for cruise control)	No continuity
Press the plunger from the edge of the outer case by the dimension shown in the figure.	1 – 2 (for stop lamp switch)	No continuity
	3 – 4 (for cruise control)	Continuity exists (2 Ω or less)

BRAKE PEDAL DISTORTION CHECK

M1351016300380



1. Place the brake pedal assembly on a level surface as shown in the figure, and set the distance from the centre of the pin assembly mounting hole to the level surface to 97 mm. Make sure that the dimension A in the figure (distance from the pedal pad surface to the level surface) is within the standard value.

   Standard value (A): 240 – 246 mm

2. When dimension A is not within the standard value, replace the brake pedal assembly.

MASTER CYLINDER ASSEMBLY AND BRAKE BOOSTER ASSEMBLY

REMOVAL AND INSTALLATION

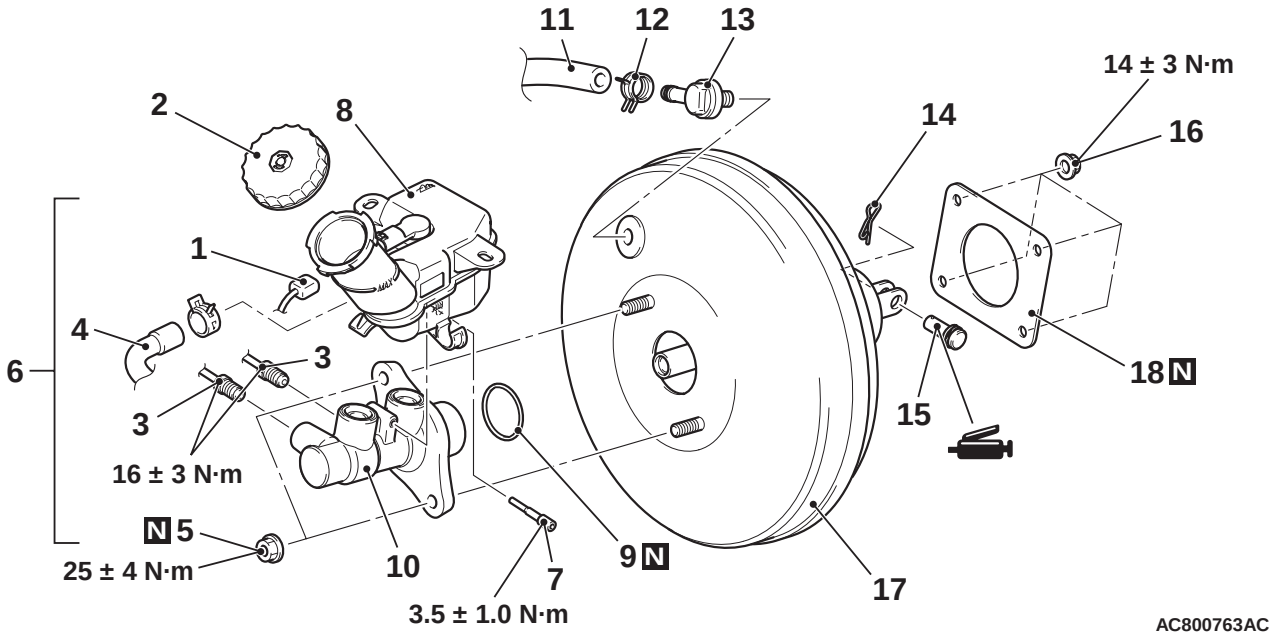
M1351003703213

<MASTER CYLINDER AND BRAKE BOOSTER>

⚠ CAUTION

Do not touch the push rod in the brake booster because it is already adjusted.

Pre-removal operation	Post-installation operation
• Brake Fluid Draining • Air Cleaner Assembly Removal (Refer to GROUP 15 – Air Cleaner <4B11>, <4B12>).	• Air Cleaner Assembly Installation (Refer to GROUP 15 – Air Cleaner <4B11>, <4B12>). • Brake Fluid Refilling and Air Bleeding.



AC800763AC

Master cylinder removal steps

1. Brake fluid level switch connector connection
2. Reservoir cap
3. Brake pipe connection

>>B<< • Bleeding of master cylinder assembly (only at installation)

5. Master cylinder mounting nuts
6. Reservoir assembly and master cylinder assembly
7. Torx bolt
8. Reservoir assembly
9. O-ring
10. Master cylinder assembly

Brake booster removal steps

1. Brake fluid level switch connector connection
3. Brake pipe connection

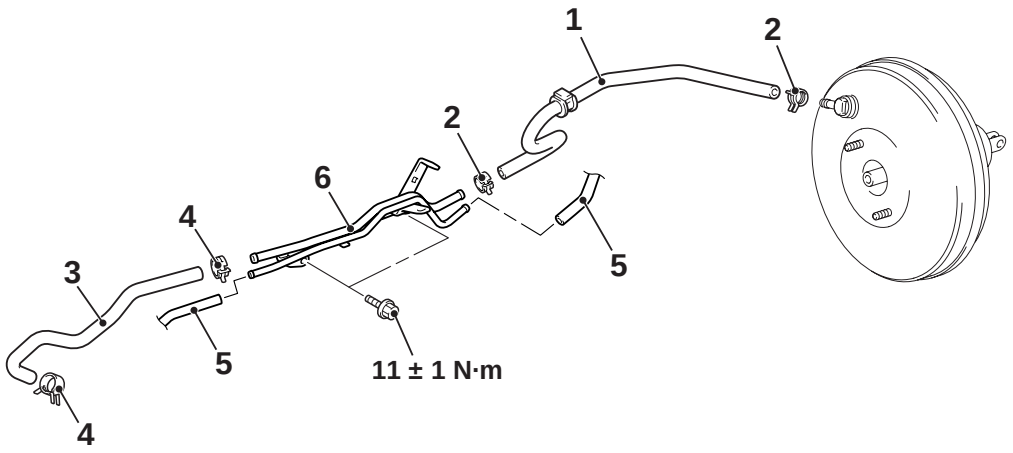
>>B<< • Bleeding of master cylinder assembly (only at installation)

5. Master cylinder mounting nuts
6. Reservoir assembly and master cylinder assembly

>>A<< 11. Vacuum hose connection

12. Hose clip
13. Check valve
14. Snap pin
15. Pin assembly
16. Brake booster mounting nut
17. Brake booster assembly
18. Seal

<VACUUM HOSE AND VACUUM PIPE>



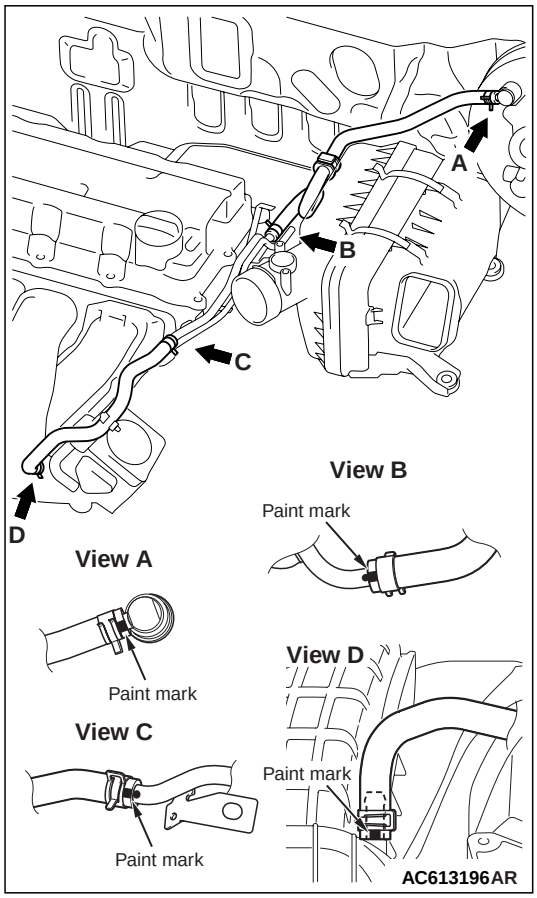
ACB05962AB

Removal steps

>>**A**<< 1. Vacuum hose
2. Hose clip
>>**A**<< 3. Vacuum hose
4. Hose clip
5. Emission vacuum hose connection
6. Vacuum pipe assembly

INSTALLATION SERVICE POINTS

>>A<< VACUUM HOSE INSTALLATION

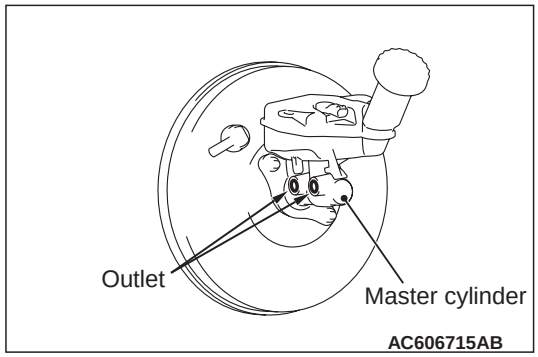


Align the mark as shown in the figure to assemble the vacuum hose.

>>B<< BLEEDING OF MASTER CYLINDER ASSEMBLY

When removed the master cylinder assembly, bleed the master cylinder in the following procedure to make bleeding of the brake pipeline easier (When no brake fluid is in the master cylinder).

1. Fill the brake fluid reservoir with the brake fluid.
2. Depress and hold the brake pedal.



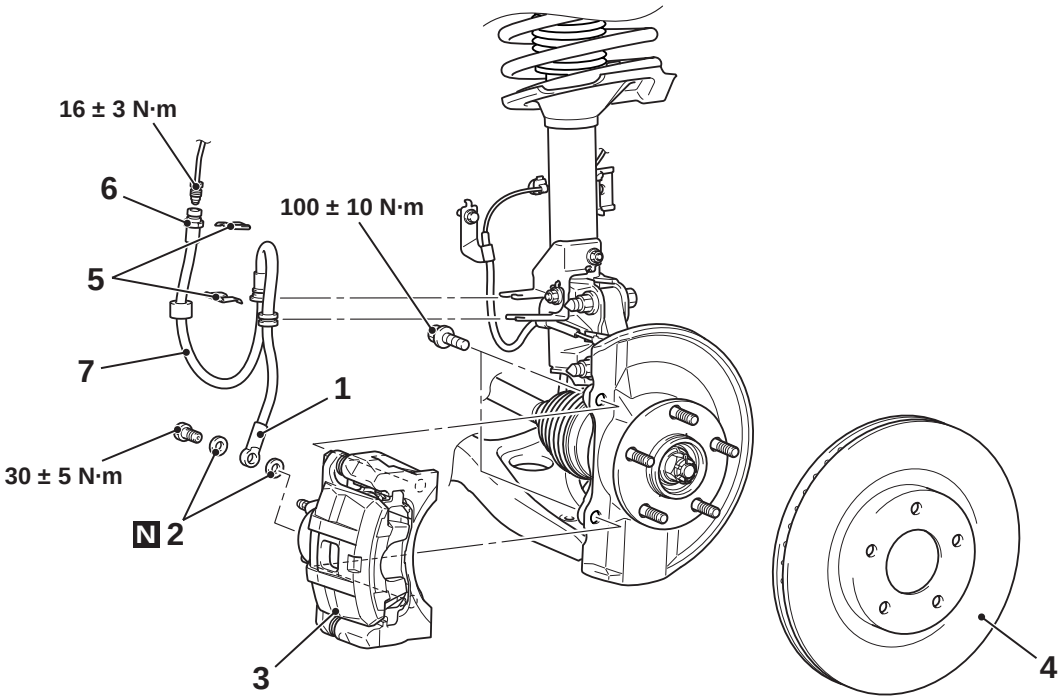
3. Another operator closes the master cylinder outlets with his fingers.
4. In this condition, release the brake pedal.
5. Repeat Steps 2 to 4 for 3 or 4 times to fill the master cylinder with the brake fluid.

FRONT DISC BRAKE ASSEMBLY

REMOVAL AND INSTALLATION

M1351006001897

Pre-removal operation	Post-installation operation
Brake Fluid Draining	Brake Fluid Supplying and Air Bleeding (Refer to P.35A-7).



AC607842AE

Removal steps

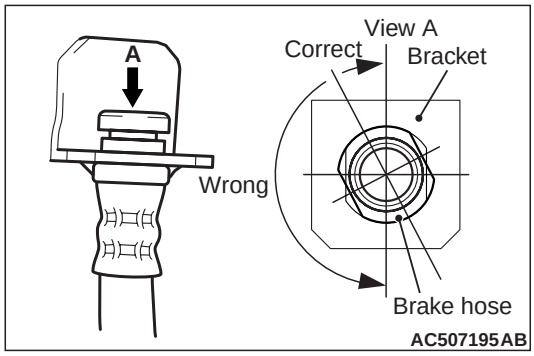
1. Brake hose (brake caliper side) connection
2. Gasket
3. Brake caliper assembly
- Brake disc run-out check and correction (only at installation) (Refer to P.35A-9).
4. Front brake disc
5. Clip
6. Brake pipe connection

>>A<< 7. Brake hose

INSTALLATION SERVICE POINT

>>A<< BRAKE HOSE INSTALLATION

1. Pass the brake hose through the hole in the body-side bracket.
2. Install the brake hose to the brake caliper.
3. Install the brake hose at the two fixing points.

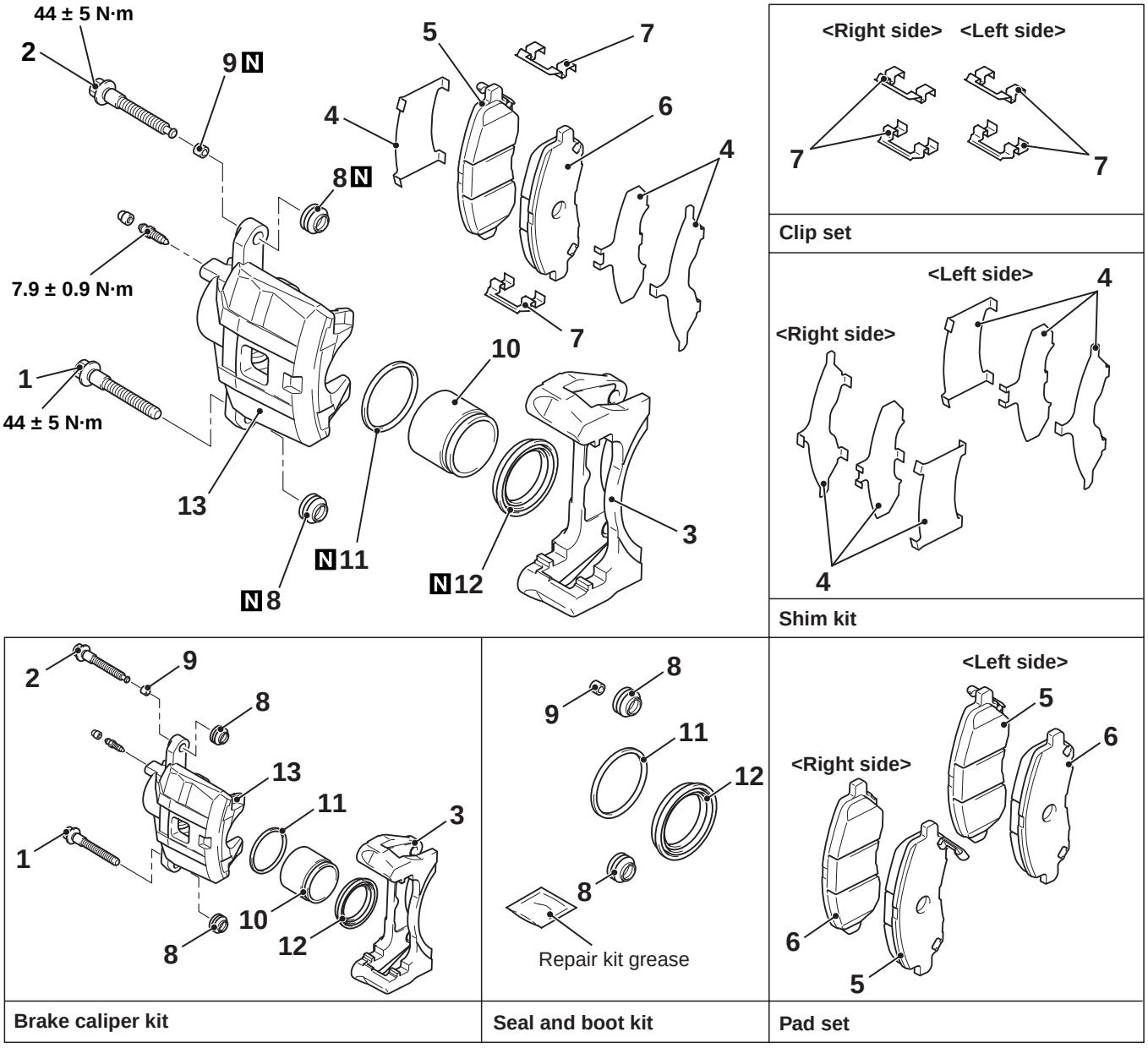


AC507195AB

4. Twist the brake hose toward the lesser torsion between the brake hose and body-side bracket as shown in the figure, and fix it to the body-side bracket with a clip.

DISASSEMBLY AND REASSEMBLY

M1351006202430



AC611009AE

Disassembly steps

1. Guide pin
2. Lock pin
3. Caliper support (including pad, clip, and shim)
4. Shim
5. Pad & wear indicator assembly
6. Pad assembly
7. Clip
8. Pin boot
9. Bushing

<<A>> 10. Piston

<<B>> 11. Piston seal

Disassembly steps (Continued)

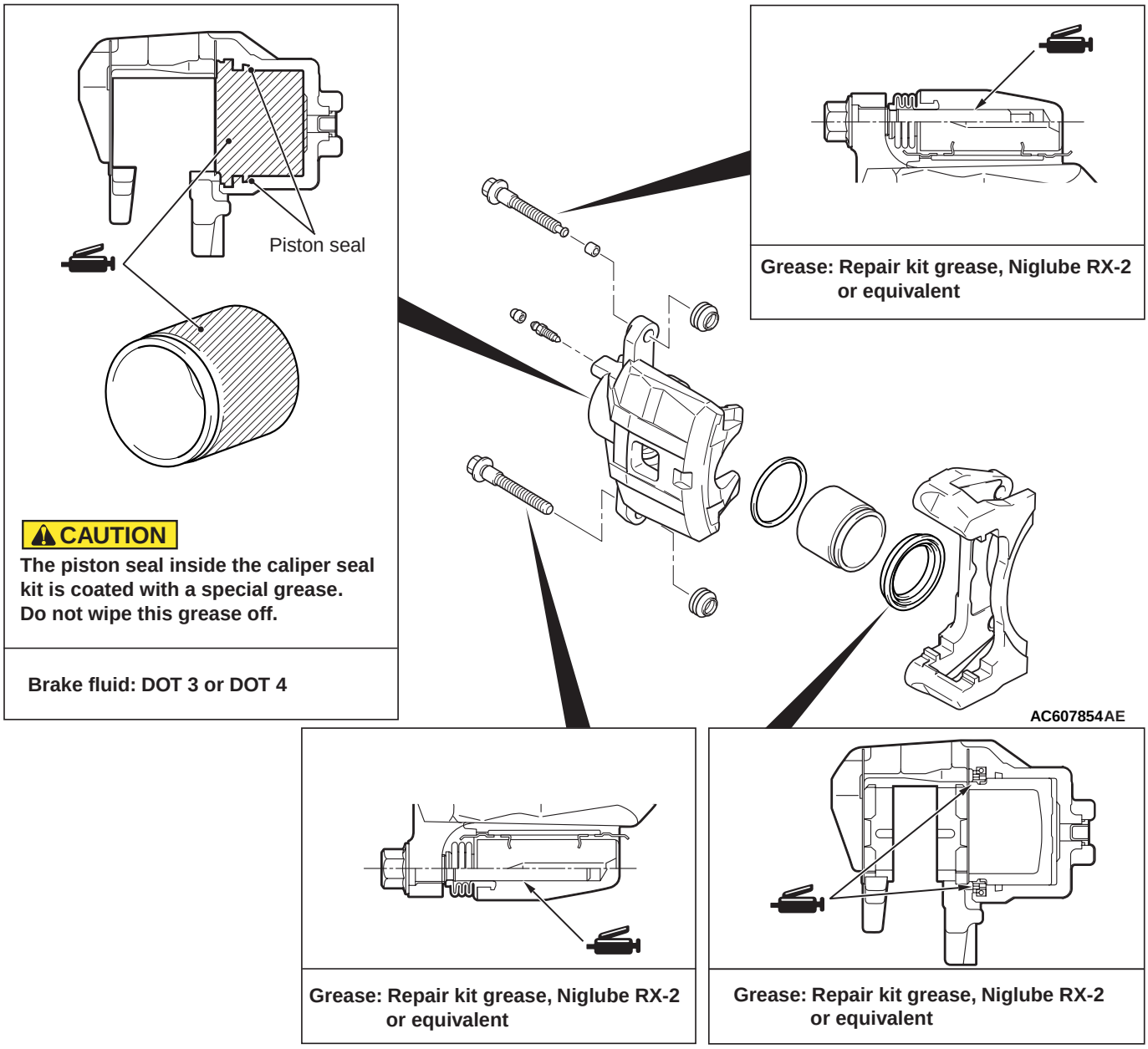
<<A>> 12. Piston boot

13. Caliper body

NOTE:

- *As for the pad set, the brake pads for both the right wheels and the left wheels have the wear indicator.*
- *Install the pad & wear indicator assembly to the inner side of the brake disc, making sure that the wear indicator is located on the top.*

LUBRICATION POINTS



⚠ CAUTION
The piston seal inside the caliper seal kit is coated with a special grease. Do not wipe this grease off.

Brake fluid: DOT 3 or DOT 4

Grease: Repair kit grease, Niglube RX-2 or equivalent

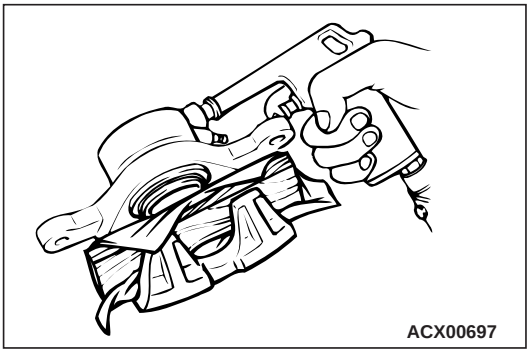
Grease: Repair kit grease, Niglube RX-2 or equivalent

Grease: Repair kit grease, Niglube RX-2 or equivalent

DISASSEMBLY SERVICE POINTS

<<A>> PISTON/PISTON BOOT REMOVAL

⚠ CAUTION
Blow air gradually to remove the pistons. The pistons will rush out if a force of air is applied suddenly.

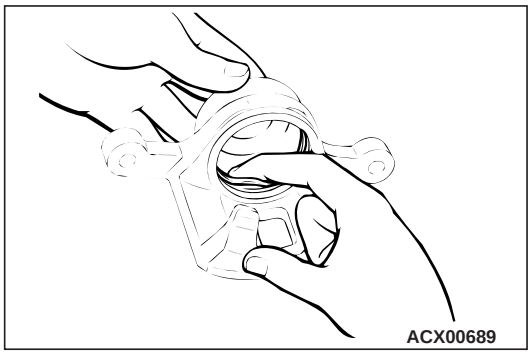


Cover the caliper body outer side with a cloth or similar materials. Blow compressed air through the brake hose installation area to remove the piston and piston boot.

<<B>> PISTON SEAL REMOVAL

⚠ CAUTION

Do not use a flat-tipped screwdriver to remove the piston seal. This may damage the inner side of the cylinder.



1. Remove the piston seal with your finger tip.
2. Clean the piston surface and cylinder inner face with alcohol or specified brake fluid.

   Brake fluid: DOT3 or DOT4

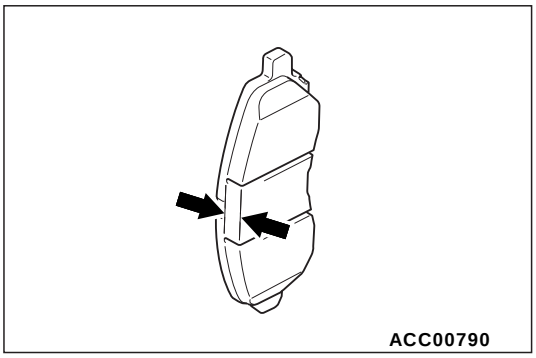
INSPECTION

M1351015001099

BRAKE PAD WEAR INSPECTION

⚠ CAUTION

- **When replacing, replace both brake pad assembly (right and left) as a set.**
- **If there is a significant difference in thickness between the brake pads at right and left, check the sliding area of the brake caliper.**



Measure the brake pad thickness at the most worn area. If the brake pad thickness is less than the limit value, replace the brake pad.

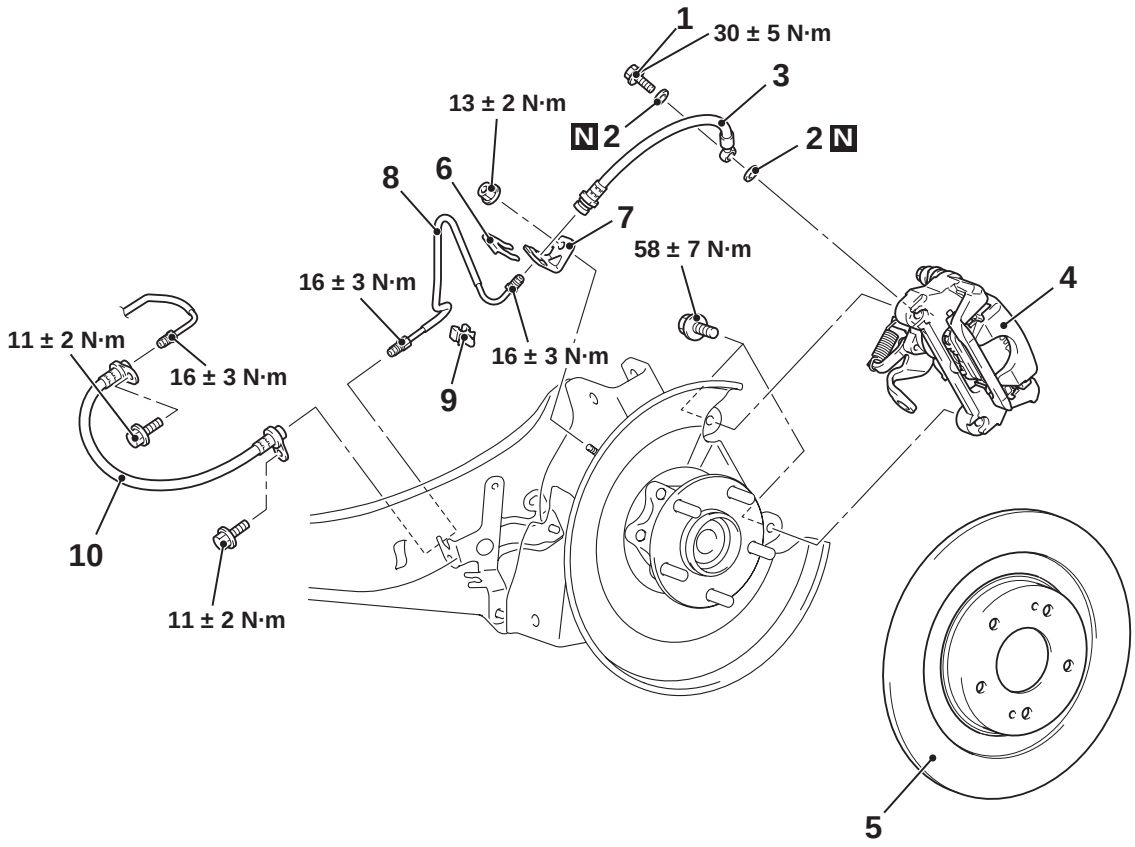
Standard value: 10.0 mm
Limit: 2.0 mm

REAR DISC BRAKE ASSEMBLY

REMOVAL AND INSTALLATION

M1351007001544

Pre-removal operation	Post-installation operation
Brake Fluid Draining	• Brake Fluid Supplying and Air Bleeding (Refer to P.35A-7). • Parking Brake Lining Seating Procedure (Refer to GROUP 36 – On-vehicle Service, Parking Brake Lining Seating Procedure).



ACC00169AB

Removal steps

- Parking brake rear cable connection (rear brake caliper side) (Refer to GROUP 36 – Parking Brake Cable).

1. Brake hose connection bolt
2. Gasket

>>A<< 3. Brake hose (rear brake caliper side)

4. Rear brake caliper assembly

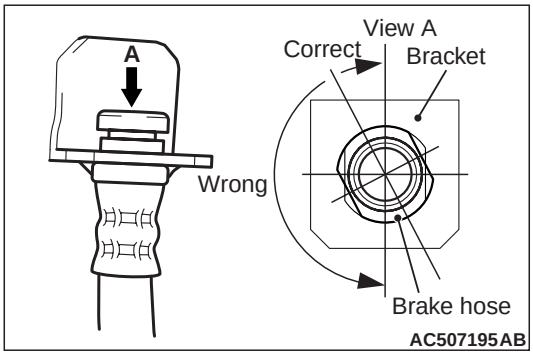
- Brake disc run-out check and correction (only at installation) (Refer to P.35A-9).

5. Rear brake disc
6. Hose clip
7. bracket
8. Brake tube (trailing arm side)
9. Clip
10. Brake tube (body floor side)

INSTALLATION SERVICE POINT

>>A<< BRAKE HOSE INSTALLATION

1. Pass the brake hose through the hole in the bracket.
2. Install the brake hose to the brake caliper.
3. Install the brake hose at the two fixing points.

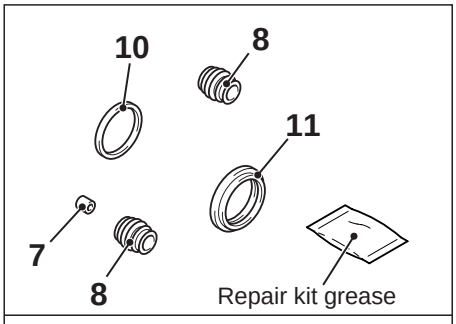


AC507195AB

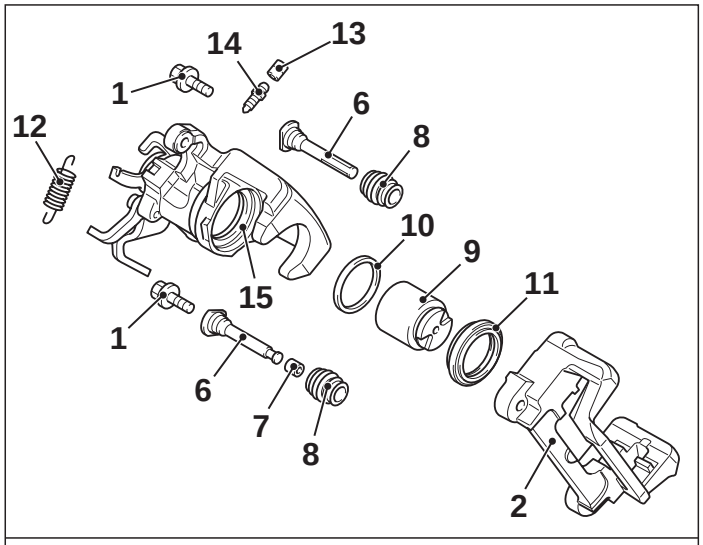
4. Twist the brake hose toward the lesser torsion between the brake hose and bracket as shown in the figure, and fix it to the body-side bracket with a clip.

DISASSEMBLY AND REASSEMBLY

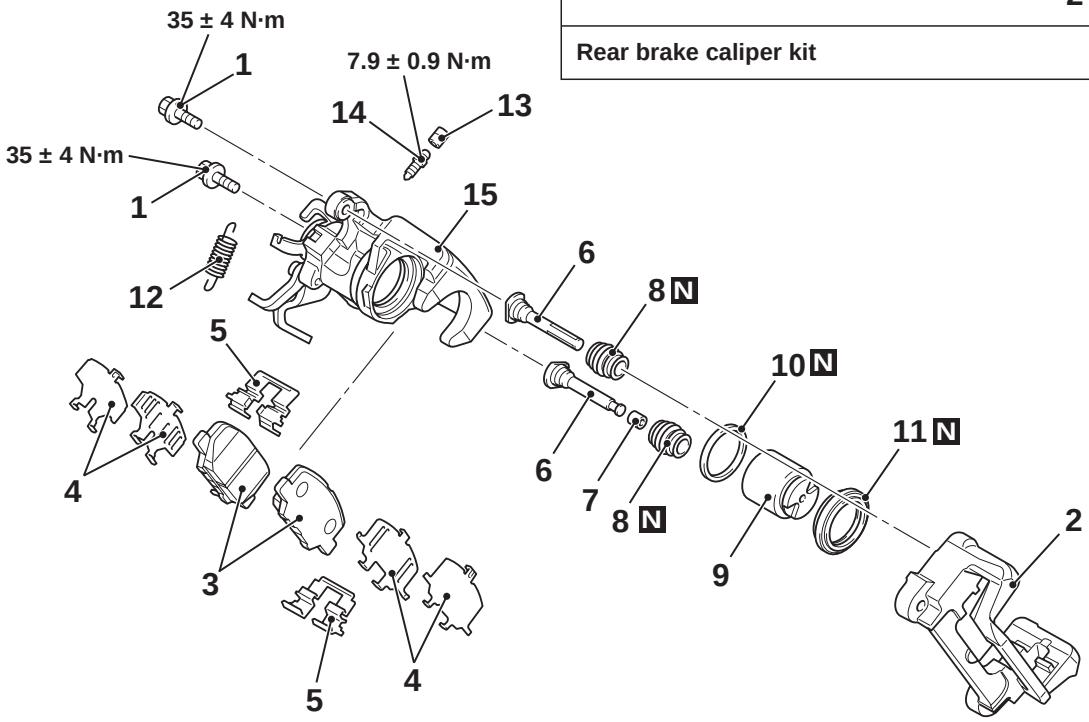
M1351007201678

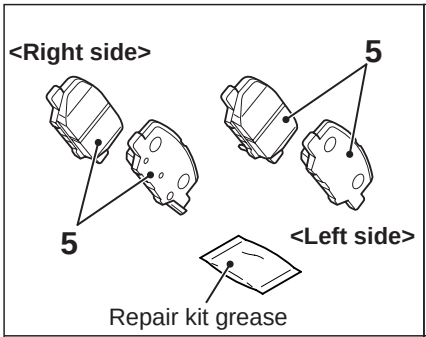


Seal & boot kit

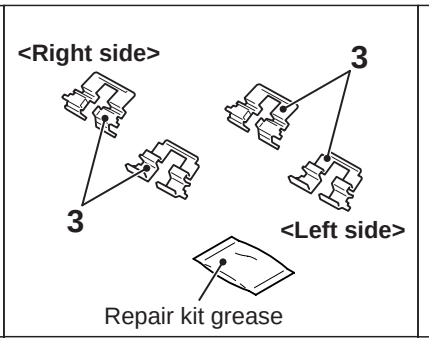


Rear brake caliper kit

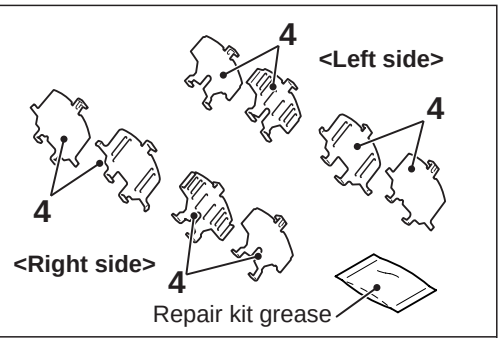




Rear brake pad set



Rear brake clip set



Shim kit

ACB06044AB

Disassembly steps

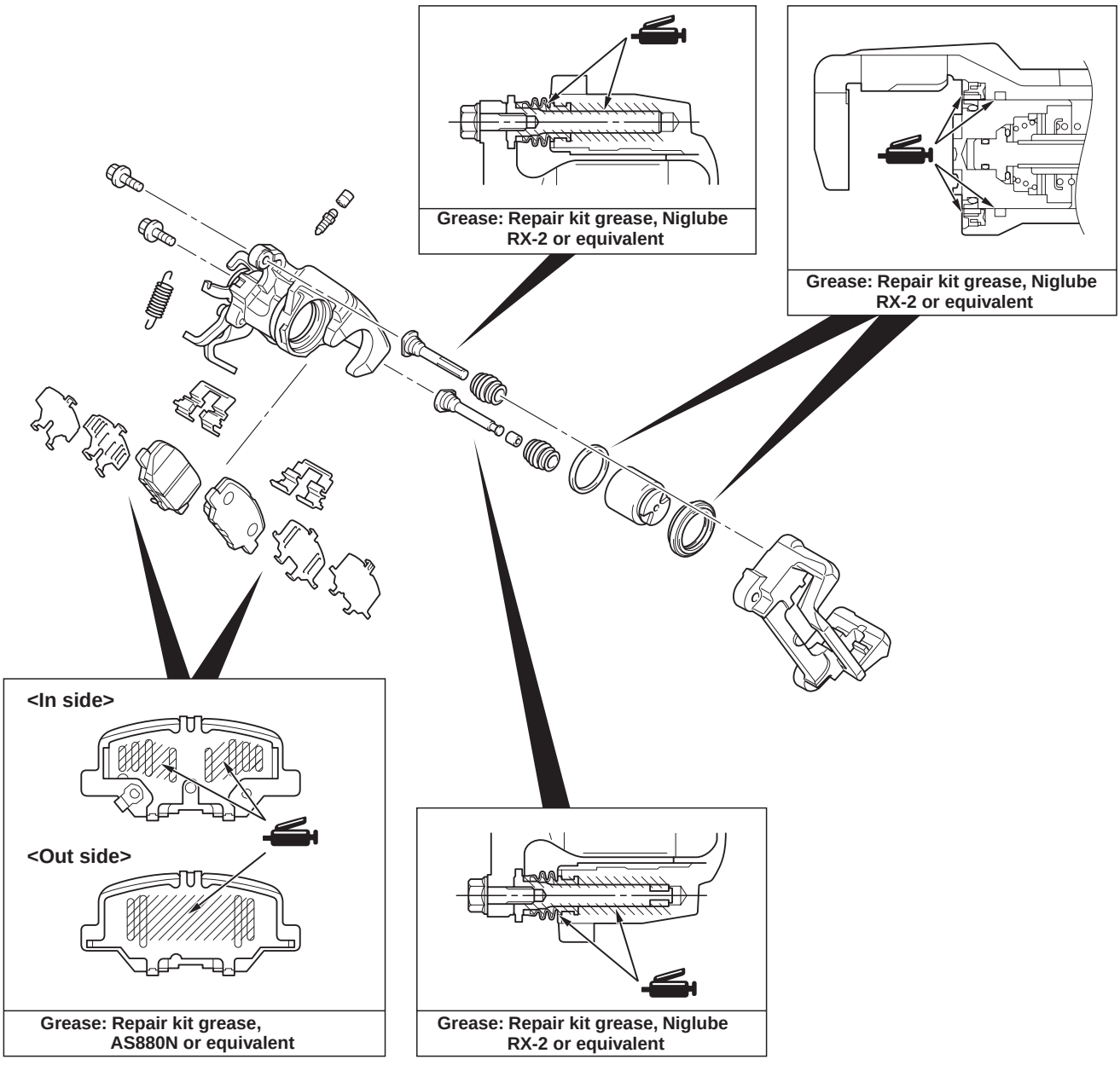
1. Bolts
2. Caliper support
3. Pad assembly
4. Shim
5. Clip
6. Guide pin
7. Bushing
8. Boot

<<A>> >>A<< 9. Piston

Disassembly steps (Continued)

10. Piston seal
11. Piston boot
12. Spring
13. Bleeder cap
14. Bleed screw
15. Caliper body

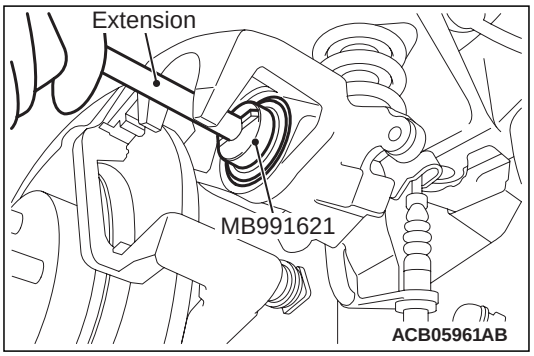
LUBRICATION POINTS



ACB06045AB

DISASSEMBLY SERVICE POINTS

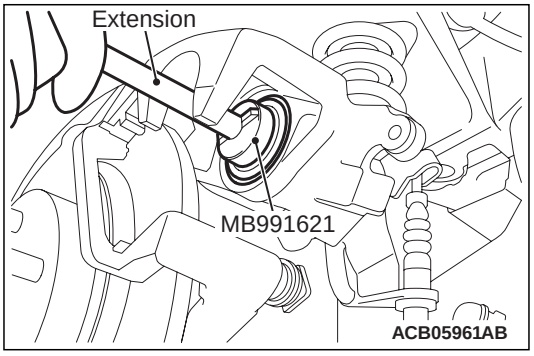
<<A>> PISTON REMOVAL



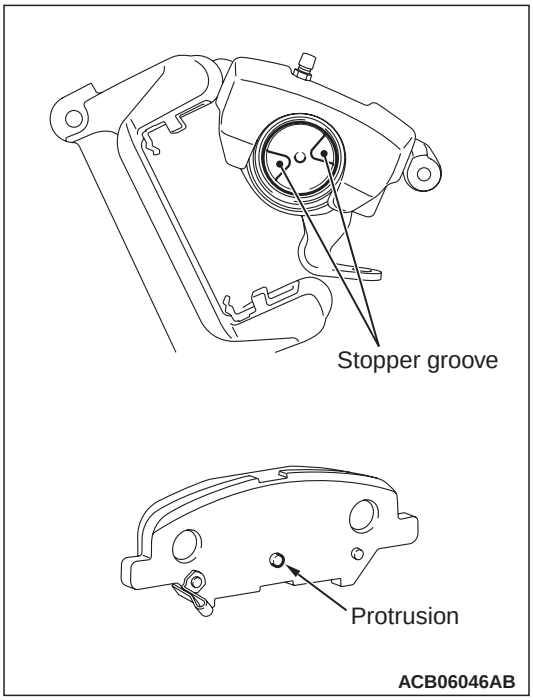
Use the special tool, rear disc brake piston driver (MB991621) to turn the piston as shown, and remove it from the caliper body.

REASSEMBLY SERVICE POINTS

>>A<< PISTON INSTALLATION



1. Use the special tool, rear disc brake piston driver (MB991621) as shown to turn the piston and install to the caliper body.



2. Set as shown so that the protrusion on the pad assembly rear face is engaged in the piston stopper groove.

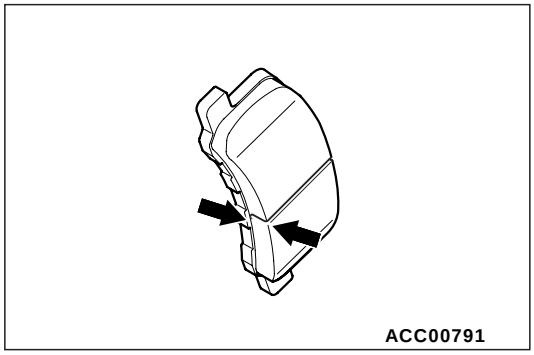
INSPECTION

M1351015001107

BRAKE PAD WEAR INSPECTION

⚠ CAUTION

- **When replacing, replace both brake pad assembly (right and left) as a set.**
- **If there is a significant difference in thickness between the brake pads at right and left, check the sliding area of the brake caliper.**



Measure the brake pad thickness at the most worn area. If the brake pad thickness is less than the limit value, replace the brake pad.

Standard value: 9.0 mm
Limit: 1.5 mm