

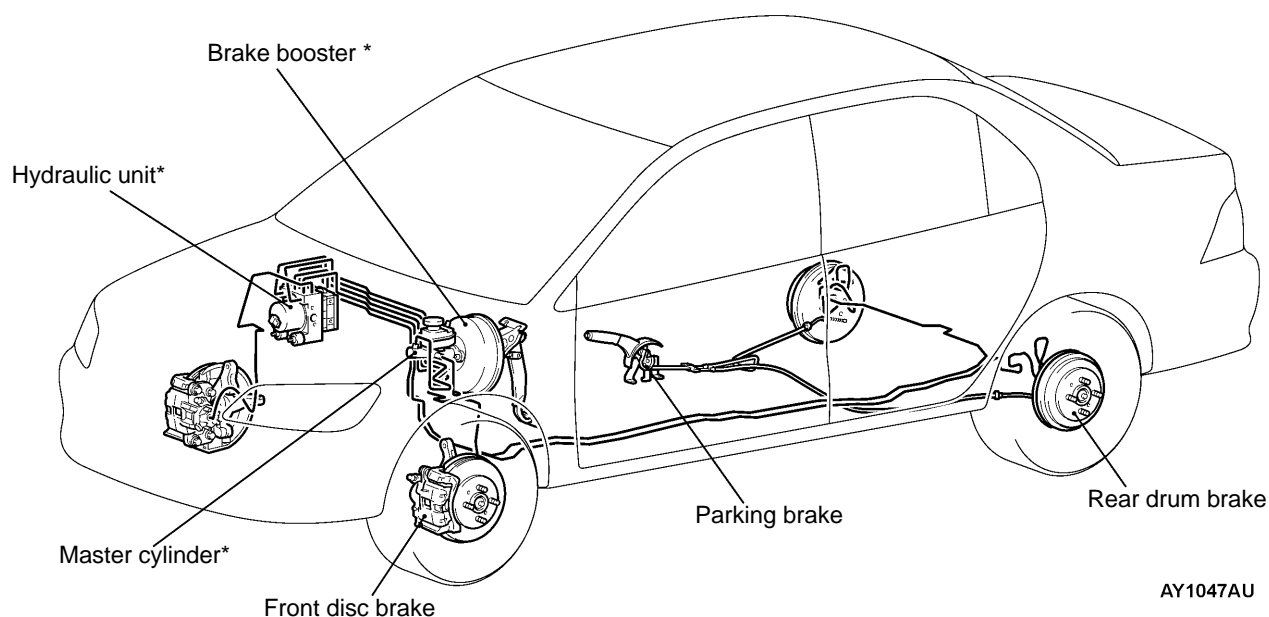
GENERAL INFORMATION

The brake system offers high dependability and durability along with improved braking performance and brake sensitivity.

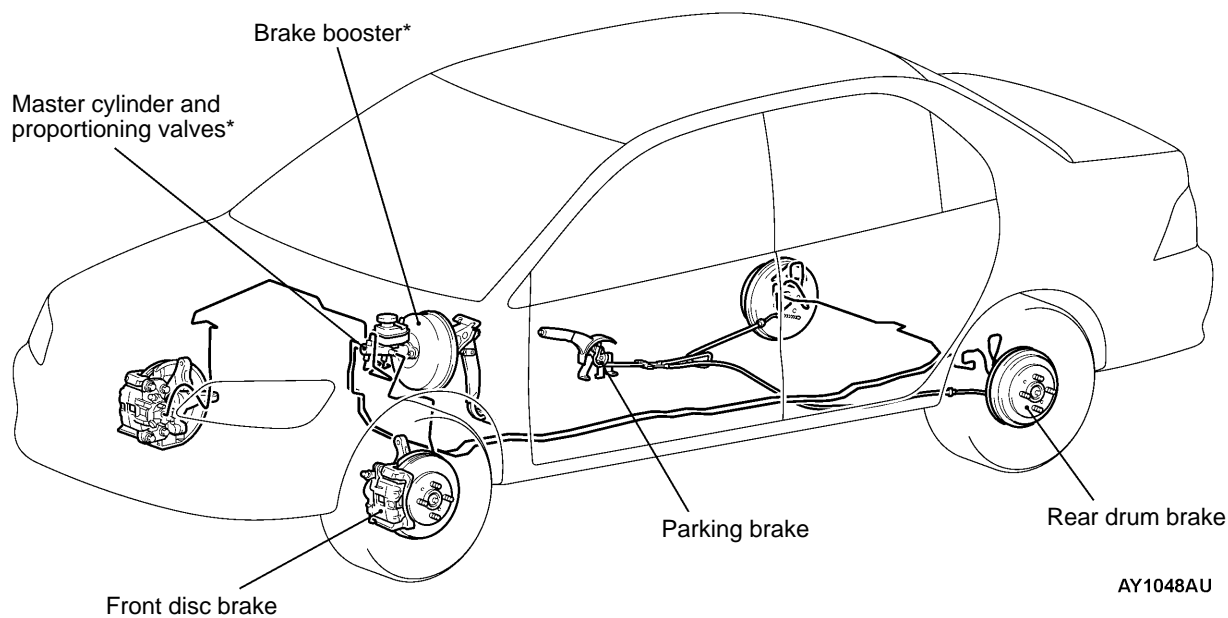
Items		Specifications
Master cylinder	Type	Tandem type
	I.D. mm	22.2
Brake booster	Type	Vacuum type, single
	Effective dia. of power cylinder mm	255
	Boosting ratio	5.0 <Pedal depressing force: 163 N>
Rear wheel hydraulic pressure control method	Vehicles with ABS	Electronic brake-force distribution (EBD)
	Vehicles without ABS	Proportioning valves
Proportioning valves <Vehicles without ABS>	Type	Single type × 2
	Decompression ratio	0.25
Front brakes	Type	Floating caliper, 1 piston, ventilated disc
	Disc effective dia. × thickness mm	207 × 24
	Wheel cylinder I.D. mm	54.0
	Pad thickness mm	10.0
	Clearance adjustment	Automatic
Rear brakes	Type	Leading trailing
	Drum I.D. mm	203
	Wheel cylinder I.D. mm	19.0
	Lining thickness mm	4.3
	Clearance adjustment	Automatic
Brake fluid		DOT3 or DOT4

CONSTRUCTION DIAGRAM

<Vehicles with ABS>



<Vehicles without ABS>



NOTE

For R.H. drive vehicles, only the position indicated by the * is symmetrical.

SERVICE SPECIFICATIONS

Items		Standard value	Limit
Brake pedal height mm		169.1 – 172.1	–
Brake pedal play mm		3 – 8	–
Brake pedal to floorboard clearance when the brake pedal is depressed mm		90 or more	–
Brake booster push rod protrusion amount mm		9.18 – 9.43	–
Proportioning valve <Vehicles without ABS>	Split point MPa	2.94 ± 0.25	–
	Output fluid pressure (Input fluid pressure) MPa	3.92 ± 0.25 (6.86)	–
	Output fluid pressure difference between left and right MPa	–	0.5
Front disc brake	Pad thickness mm	10.0	2.0
	Disc thickness mm	24.0	22.4
	Disc runout mm	–	0.06
	Drag force N	78 or less	–
Rear drum brake	Lining thickness mm	4.3	1.0
	Drum inside diameter mm	203	205
Front hub end play mm		–	0.05

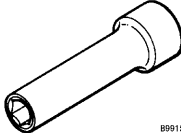
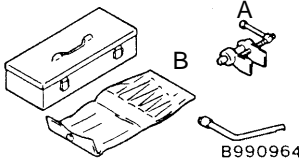
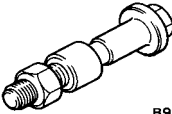
LUBRICANTS

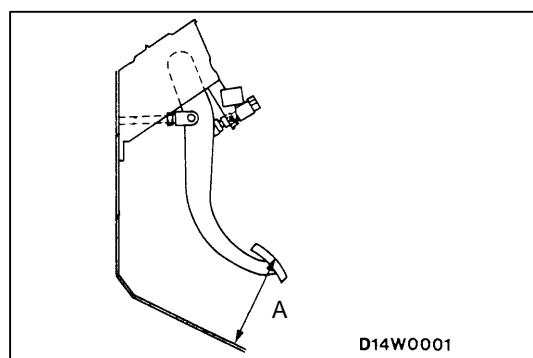
Items	Specified Lubricant	Quantity
Brake fluid	DOT3 or DOT4	As required
Piston boot, piston seal, shim	Repair kit grease	
Guide pin, lock pin		
Pin boot		
Piston, wheel cylinder body	DOT3 or DOT4	
Backing plate	Brake grease SAE J310, NLGI No.1	
Shoe and lining assembly		
Automatic adjuster assembly		

SEALANT

Items	Specified sealant	Remarks
Fitting	3M ATD Part No. 8663 or equivalent	Semi-drying sealant

SPECIAL TOOLS

Tool	Number	Name	Use
	MB991568	Push rod adjusting socket	Adjustment of the brake booster push rod protrusion amount
	MB990964 A: MB990520 B: MB990619	Brake tool set	Pushing-in of the disc brake piston <ul style="list-style-type: none"> Disc brake piston pushing-in Drum brake wheel cylinder piston cup installation
	MB990998	Front hub remover and installer	Provisional holding of the wheel bearing



ON-VEHICLE SERVICE

BRAKE PEDAL CHECK AND ADJUSTMENT

BRAKE PEDAL HEIGHT

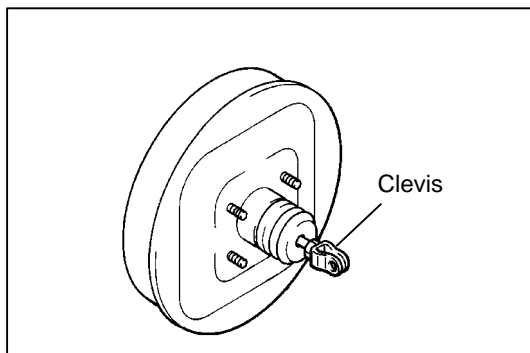
- Turn up the carpet, etc. under the brake pedal.
- Measure the brake pedal height as illustrated.

Standard value (A): 169.1 – 172.1 mm

- If the brake pedal height is not within the standard value, follow the procedure below.
 - Disconnect the stop lamp switch connector.
 - Loosen the stop lamp switch by turning it approx. 1/4 turns anticlockwise.
 - Remove the brake booster.

NOTE

With the master cylinder and brake pipe connected, remove the brake booster only.

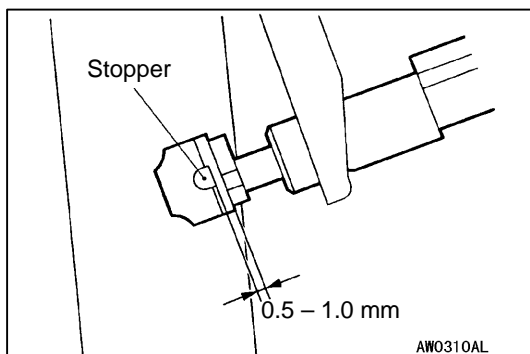


- (4) Adjust the brake pedal height by turning the clevis.

NOTE

When the clevis is turned 180°, the pedal height is changed approximately 2.4 mm.

- (5) **Install the brake booster.**
(6) Measure brake pedal height, and ensure that the measured value is within the specified value. When it is out of the specified value, repeat Step (3) – (6).



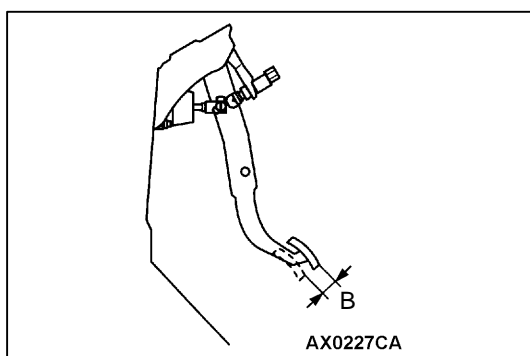
- (7) Lock the stop lamp switch by turning it approx. 1/4 turns clockwise, and confirm that the clearance between the switch plunger and the stopper is as shown.

- (8) Connect the connector at the stop lamp switch.

Caution

Check that the stop lamp does not illuminate when the brake pedal is not depressed.

4. For CVT and A/T models, check the key interlock and shift lock mechanisms. (Refer to GROUP 23A/23B – On-vehicle Service.)
5. Return the carpet, etc.

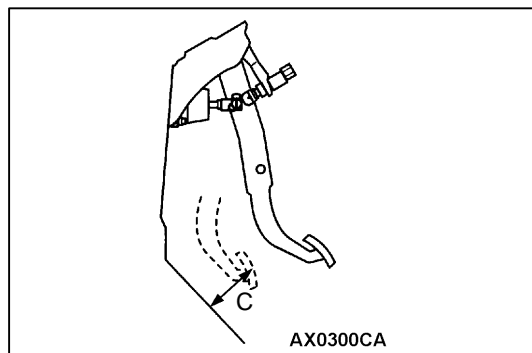


BRAKE PEDAL FREE PLAY

1. With the engine stopped, depress the brake pedal two or three times. After eliminating the vacuum in the power brake booster, press the pedal down by hand, and confirm that the amount of movement before resistance is met (the free play) is within the standard value.

Standard value (B): 3 – 8 mm

2. If the brake pedal play is not within the standard value, check the following, and adjust or replace if necessary:
- Excessive play between the brake pedal and the clevis pin, or between the clevis pin and the brake booster operating rod
 - Brake pedal height
 - Installation position of the stop lamp switch, etc.

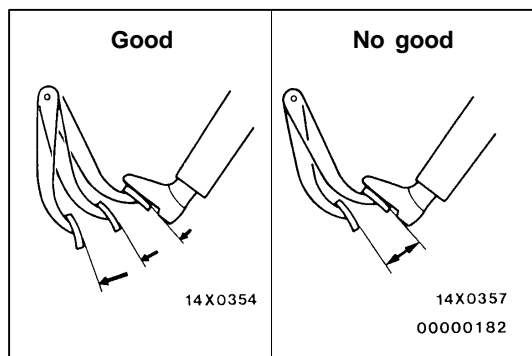


CLEARANCE BETWEEN BRAKE PEDAL AND FLOOR BOARD

1. Turn up the carpet etc. under the brake pedal.
2. Start the engine, depress the brake pedal with approximately 500 N of force, and measure the clearance between the brake pedal and the floorboard.

Standard value (C): 90 mm or more

3. If the clearance is outside the standard value, check for air trapped in the brake line and thickness of the disc brake pad or the drum brake lining and dragging in the parking brake.
Adjust and replace defective parts as required.
4. Return the carpet, etc.

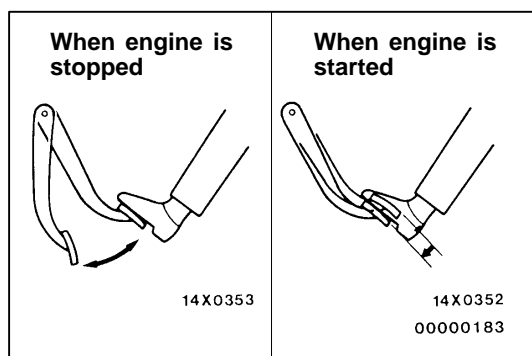


BRAKE BOOSTER OPERATING TEST

For simple checking of the brake booster operation, carry out the following tests:

1. Run the engine for one or two minutes, and then stop it.

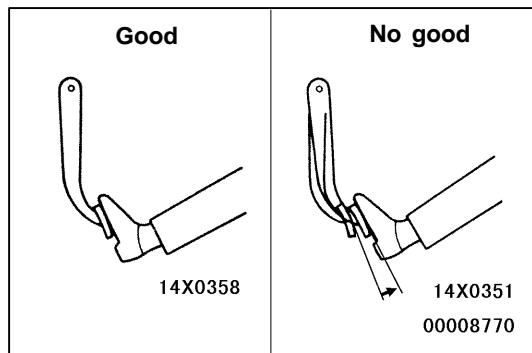
If the pedal depresses fully the first time but gradually becomes higher when depressed succeeding times, the booster is operating properly. If the pedal height remains unchanged, the booster is defective.



2. With the engine stopped, step on the brake pedal several times.

Then start the engine while the brake pedal is stepped on.

If the pedal moves downward slightly, the booster is in good condition. If there is no change, the booster is defective.



3. With the engine running, step on the brake pedal and then stop the engine.

Hold the pedal depressed for 30 seconds. If the pedal height does not change, the booster is in good condition. If the pedal rises, the booster is defective.

If the above three tests are okay, the booster performance can be determined as good.

If one of the above three tests is not okay at least, the check valve, vacuum hose, or booster will be defective.

CHECK VALVE OPERATION CHECK

1. Remove the vacuum hose.

Caution

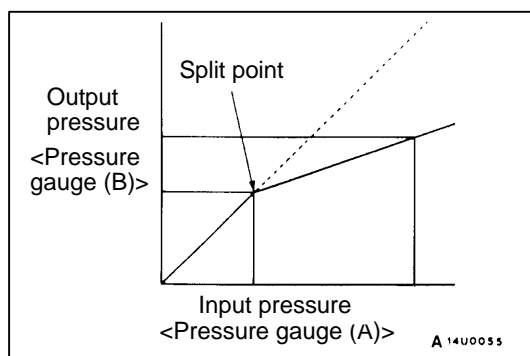
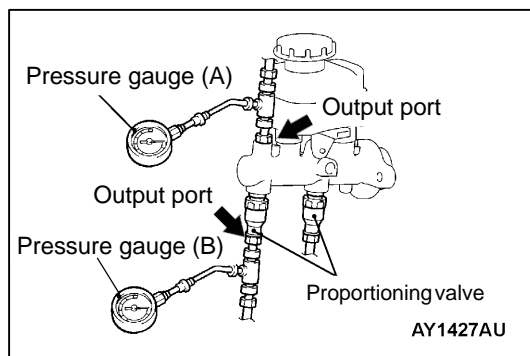
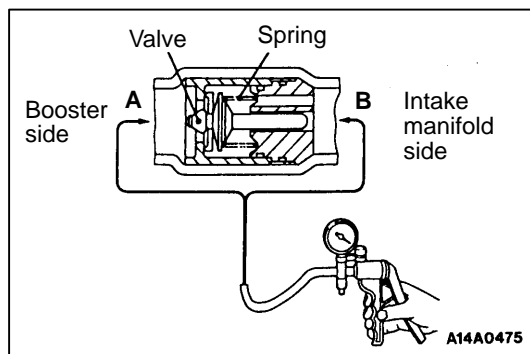
The check valve should not be disassembled from the vacuum hose as they are united as one part.

2. Check the operation of the check valve by using a vacuum pump.

Vacuum pump connection	Accept/reject criteria
Connection at the brake booster side (A)	A negative pressure (vacuum) is created and held.
Connection at the intake manifold side (B)	A negative pressure (vacuum) is not created.

Caution

If the check valve is defective, always replace it as an assembly unit together with the vacuum hose.

**PROPORTIONING VALVE FUNCTION TEST
<Vehicles without ABS>****Caution**

The proportioning valves are installed independently for the right and left brake lines. Always measure each valve.

1. Connect two pressure gauges to the output port of the master cylinder and output port of the proportioning valve.
2. Bleed the brake line and the pressure gauges.

3. Depress the brake pedal gradually. Then check that the split point, where the output fluid pressure begins to drop in proportion to the output fluid pressure, is at the standard value.

Standard value: 2.94 ± 0.25 MPa

4. Depress the brake pedal more strongly than at the above step. Then check that the output fluid pressure is at the standard value when the input fluid pressure is 6.86 MPa.

Standard value: 3.92 ± 0.25 MPa

5. Measure each output fluid pressure at both valves, and check that the difference between the two is at the limit value or less.

Limit: 0.5 MPa

6. If the measured pressure exceeds the limit, replace the proportioning valve.

BLEEDING**Caution**

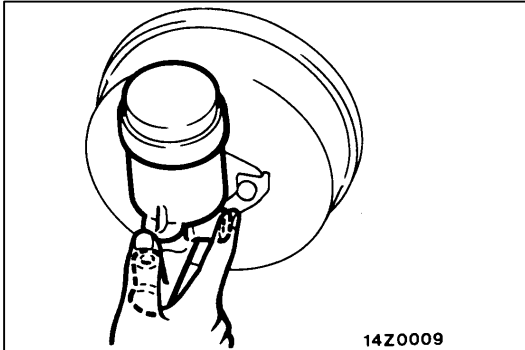
Specified brake fluid: DOT3 or DOT4

Always use the specified brake fluid. Avoid using a mixture of the specified brake fluid and other fluid.

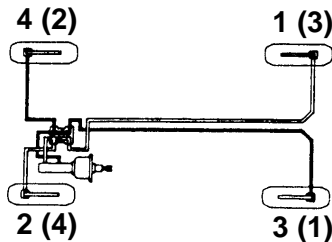
MASTER CYLINDER BLEEDING

The master cylinder used has no check valve, so if bleeding is carried out by the following procedure, bleeding of air from the brake pipeline will become easier. (When brake fluid is not contained in the master cylinder.)

1. Fill the reserve tank with brake fluid.
2. Keep the brake pedal depressed.
3. Have another person cover the master cylinder outlet with a finger.
4. With the outlet still closed, release the brake pedal.
5. Repeat steps 2 – 4 three or four times to fill the inside of the master cylinder with brake fluid.

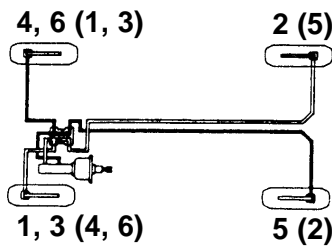
**BRAKE PIPE LINE BLEEDING**

Bleed the air in the sequence shown in the figure.

Vehicles with ABS

(): R.H. drive vehicles

14A0454

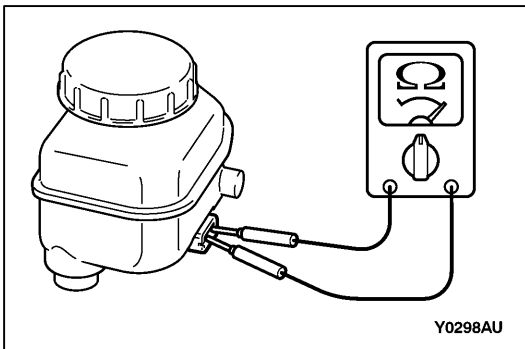
Vehicles without ABS

(): R.H. drive vehicles

14A0454

BRAKE FLUID LEVEL SENSOR CHECK

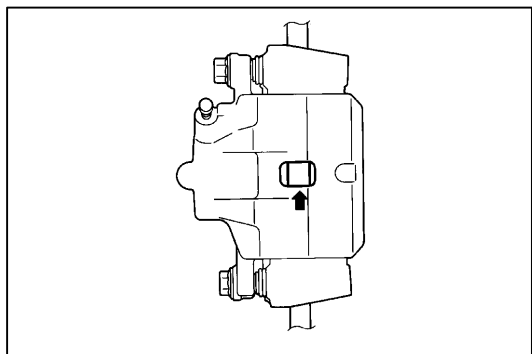
The brake fluid level sensor is in good condition if there is no continuity when the float surface is above "MIN" and if there is continuity when the float surface is below "MIN".



FRONT DISC BRAKE PAD CHECK AND REPLACEMENT

NOTE

The inner side pad of the front disc brake assembly (LH) have a wear indicator that contact the brake disc when the brake pad thickness reaches approximately 2 mm and emit a squealing sound to warn the driver.

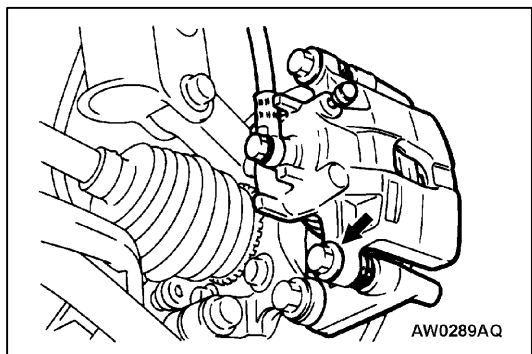


1. Check the brake pad thickness through the caliper body check port.

Standard value: 10.0 mm

Limit: 2.0 mm

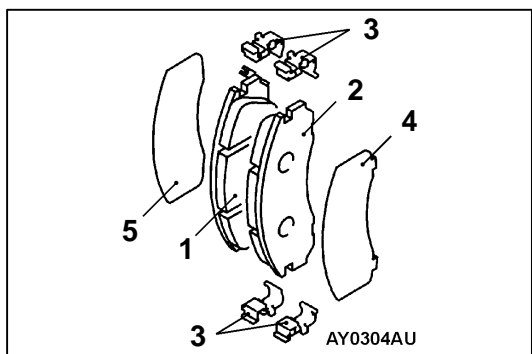
2. When the thickness is less than the limit, always replace the pads at an axle set.



3. Remove the slide pin bolt. Pivot the caliper assembly and hold it with wires.

Caution

Do not wipe off the special grease that is on the slide pin or allow it to contaminate the slide pin.



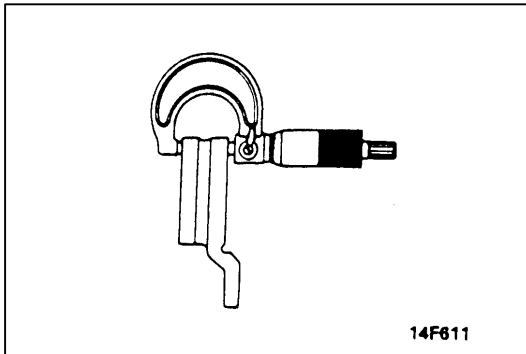
4. Remove the following parts from the caliper support.
 1. Pad assembly or Pad and wear indicator assembly
 2. Pad assembly
 3. Clip
 4. Outer shim
 5. Inner shim
5. In order to measure the brake drag force after pad installation, measure the rotary-sliding resistance of the hub with the pads removed. (Refer to P.35A-21.)**X**
6. **Install** the pads and caliper assembly, and then check the brake drag force.

DISC BRAKE ROTOR CHECK**Caution**

When servicing disc brakes, it is necessary to exercise caution to keep the disc brakes within the allowable service values in order to maintain normal brake operation.

Before re-finishing or re-processing the brake disc surface, the following conditions should be checked.

Inspection items	Remarks
Scratches, rust, saturated lining materials and wear	<ul style="list-style-type: none">• If the vehicle is not driven for a certain period, the sections of the discs that are not in contact with lining will become rusty, causing noise and shuddering.• If grooves resulting from excessive disc wear and scratches are not removed prior to installing a new pad assembly, there will momentarily be inappropriate contact between the disc and the lining (pad).
Run-out or drift	Excessive run-out or drift of the discs will increase the pedal depression resistance due to piston knock-back.
Change in thickness (parallelism)	If the thickness of the disc changes, this will cause pedal pulsation, shuddering and surging.
Inset or warping (flatness)	Overheating and improper handling while servicing will cause inset or warping.



BRAKE DISC THICKNESS CHECK

- Using a micrometer, measure disc thickness at eight positions, approximately 45° apart and 10 mm in from the outer edge of the disc.

Brake disc thickness

Standard value: 24.0 mm

Limit: 22.4 mm

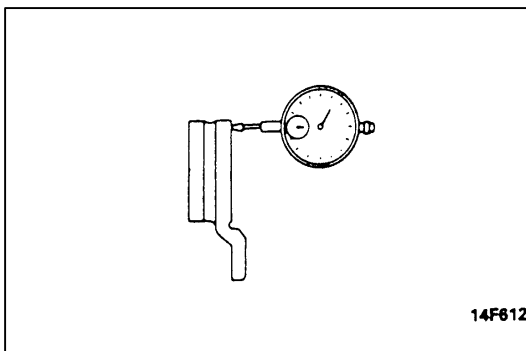
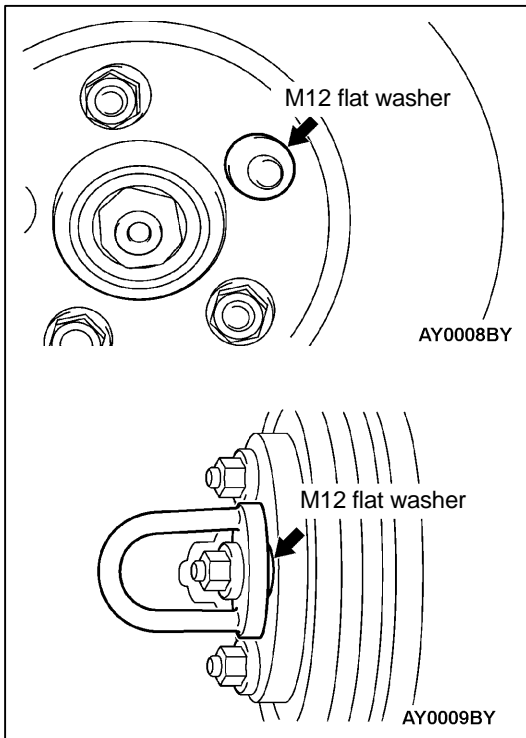
Thickness variation (at least 8 positions)

The difference between any thickness measurements should not be more than 0.015 mm.

- If the disc is beyond the limits for thickness, remove it and install a new one. If thickness variation exceeds the specification, replace the brake disc or grind it with on-the-car type brake lathe ("MAD, DL-8700PF" or equivalent).

Caution

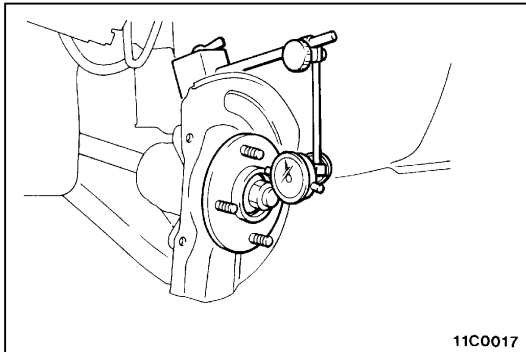
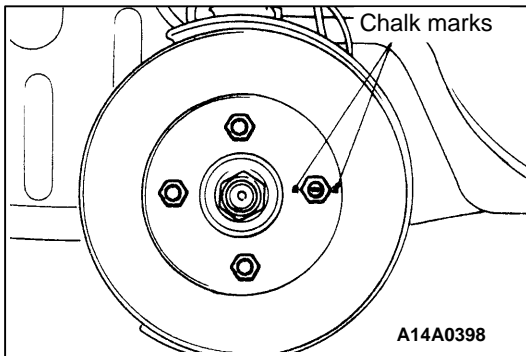
- After a new brake disc is installed, always grind the brake disc with on-the-car type brake lathe. If this step is not carried out, the brake disc run-out exceeds the specified value, resulting in judder.
- When the on-the-car type lathe is used, first install M12 flat washer on the stud bolt in the brake disc side according to the figure, and then install the adapter. If the adapter is installed with M12 flat washer not seated, the brake disc rotor may be deformed, resulting in inaccurate grinding.
- Grind the brake disc with all wheel nuts diagonally and equally tightened to the specified torque 100 N·m. When all numbers of wheel nuts are not used, or the tightening torque is excessive or not equal, the brake disc rotor or drum may be deformed, resulting in judder.



BRAKE DISC RUN-OUT CHECK AND CORRECTION

- Remove the brake assembly, and then hold it with wire.
- Temporarily install the disc with the hub nut.
- Place a dial gauge approximately 5 mm from the outer circumference of the brake disc, and measure the run-out of the disc.

Limit: 0.06 mm or less



4. If the brake disc run-out exceeds the limit, correct it as follows:

(1) Chalk phase marks on the wheel stud and the brake disc, which run-out is excessive as shown.

(2) Remove the brake disc. Then place a dial gauge as shown, and measure the end play by pushing and pulling the wheel hub.

Limit: 0.05 mm

(3) If the end play exceeds the limit, disassemble the hub and knuckle assembly to check each part.
(4) If the end play does not exceed the limit, dephase the brake disc and secure it. Then recheck the brake disc run-out.

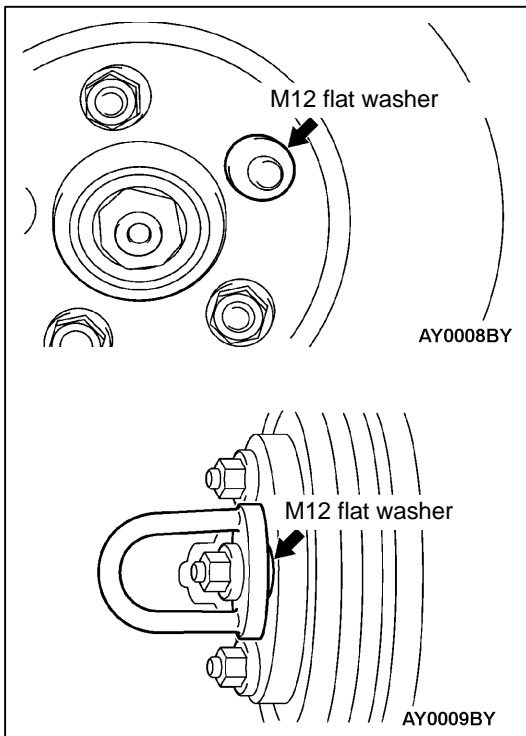
5. If the run-out cannot be corrected by changing the phase of the brake disc, replace the brake disc or grind it with the on-the-car type brake lathe ("MAD, DL-8700PF" or equivalent).

Caution

(1) After a new brake disc is installed, always grind the brake disc with on-the-car type brake lathe. If this step is not carried out, the brake disc run-out exceeds the specified value, resulting in judder.

(2) When the on-the-car type lathe is used, first install M12 flat washer on the stud bolt in the brake disc side according to the figure, and then install the adapter. If the adapter is installed with M12 flat washer not seated, the brake disc rotor may be deformed, resulting in inaccurate grinding.

(3) Grind the brake disc with all wheel nuts diagonally and equally tightened to the specified torque 100 N·m. When all numbers of wheel nuts are not used, or the tightening torque is excessive or not equal, the brake disc rotor or drum may be deformed, resulting in judder.



BRAKE LINING THICKNESS CHECK

1. Remove the brake drum.
2. Measure the thickness of the brake lining at the place worn the most.

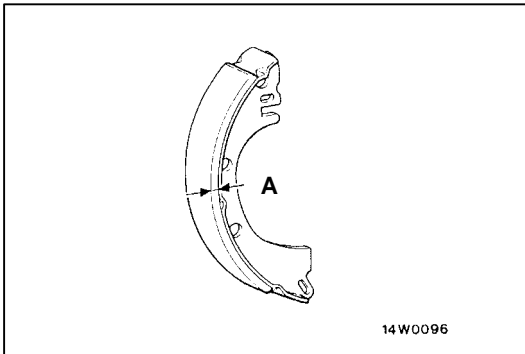
Standard value (A): 4.3 mm

Limit (A): 1.0 mm

3. Replace the shoe and lining assembly as an axle set if brake lining thickness is less than the limit. Refer to information concerning the procedures for [installation of the shoe and lining assembly](#).

Caution

If there is a significant difference in the thickness of the shoe and lining assemblies on the left and right sides, check the sliding condition of the piston.



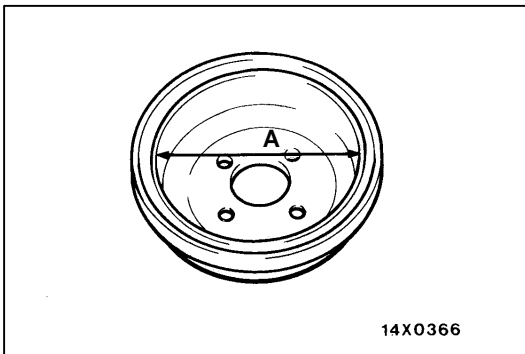
BRAKE DRUM INSIDE DIAMETER CHECK

1. Remove the brake drum.
2. Measure the inside diameter of the brake drum at two or more locations.

Standard value (A) : 203 mm

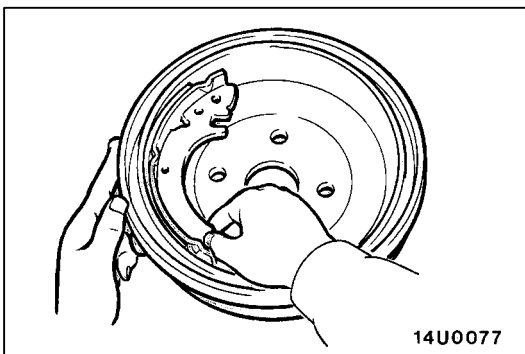
Limit (A) : 205 mm

3. Replace the brake drum when the inside diameter exceeds the limit value or the brake drum is worn unevenly.



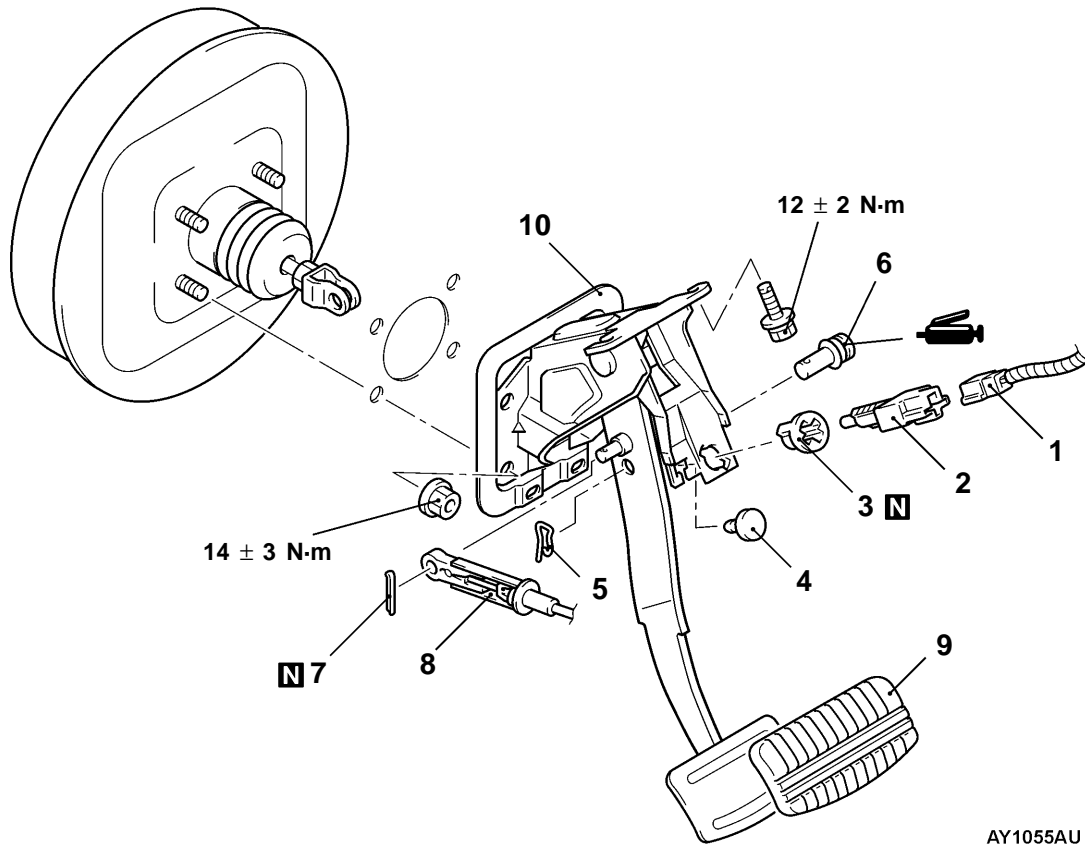
BRAKE LINING AND BRAKE DRUM CONTACT CHECK

1. [Remove the shoe and lining assembly](#).
2. Chalk inner surface of brake drum and rub with shoe and lining assembly.
3. Replace shoe and lining assembly or brake drums if there are any irregular contact area.
4. Clean off chalk after check.



BRAKE PEDAL**REMOVAL AND INSTALLATION**

Post-installation Operation
Brake Pedal Adjustment

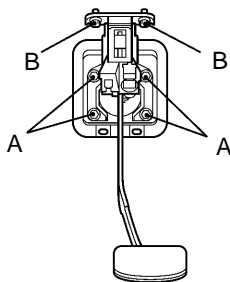


AY1055AU

Removal steps

1. Harness connector
2. Stop lamp switch
3. Adjuster
4. Pedal stopper
5. Snap pin
6. Pin assembly

7. Split pin <where fitted>
8. Shift lock cable connection <where fitted>
9. Pedal pad
- ▶ A ◀ 10. Brake pedal and pedal support member



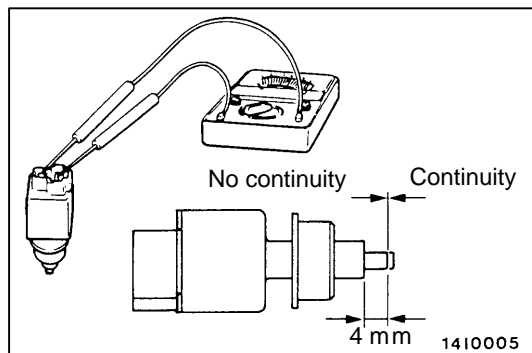
AY1056AU

INSTALLATION SERVICE POINT**▶ A ◀ BRAKE PEDAL AND PEDAL SUPPORT MEMBER INSTALLATION**

Tighten the brake booster mounting nuts (A), and then the brake pedal mounting bolts (B).

NOTE

The pedal support member can not be positioned correctly if the pedal mounting bolts (B) are tightened first as the their holes are oblong holes.



INSPECTION

STOP LAMP SWITCH CHECK

1. Connect an ohmmeter between the stop lamp switch connector terminals.
2. There should be no continuity between the terminals when the plunger is pushed in as shown. There should be continuity when it is released.

PROPORTIONING VALVE, MASTER CYLINDER AND BRAKE BOOSTER

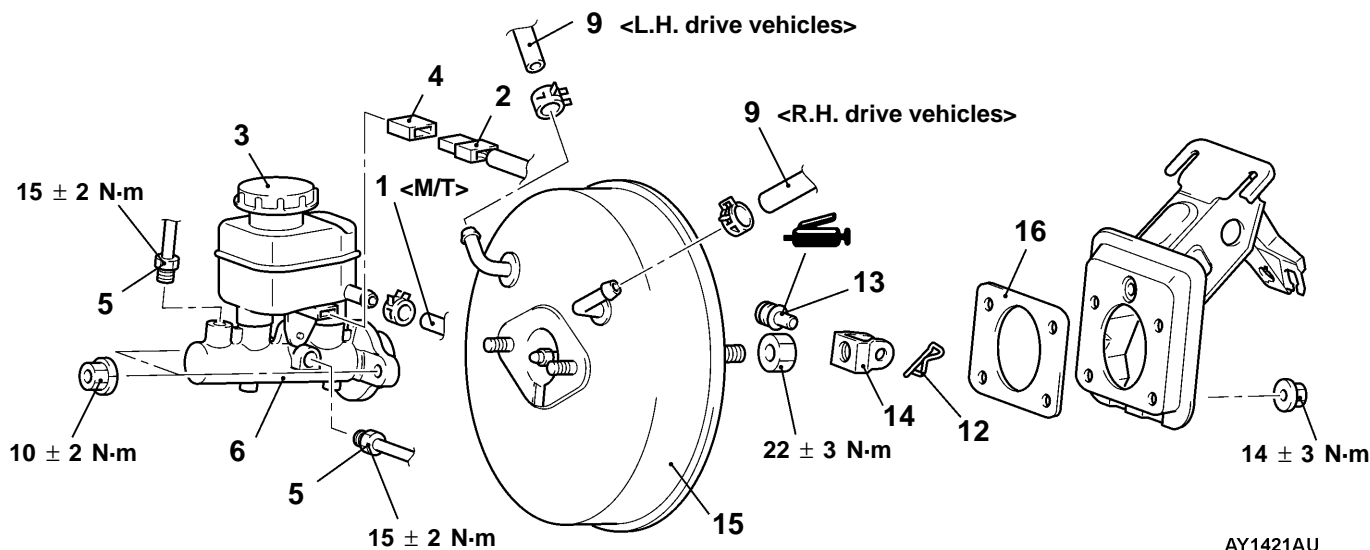
REMOVAL AND INSTALLATION

Pre-removal Operation

- Air Intake Hose and Air Cleaner Removal <L.H. drive vehicles>
- Brake Fluid Draining

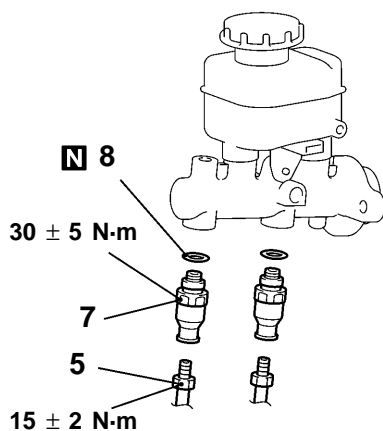
Post-installation Operation

- [Brake Fluid Supplying and Air Bleeding](#)
- [Brake Pedal Adjustment](#)
- Air Intake Hose and Air Cleaner Installation <L.H. drive vehicles>



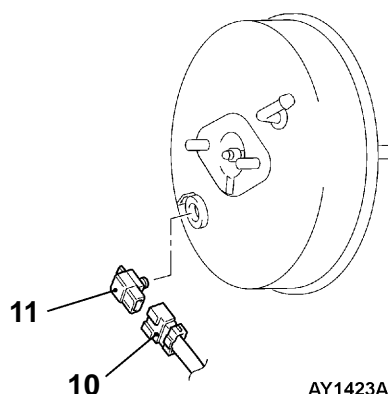
AY1421AU

Proportioning valves <Vehicles without ABS>

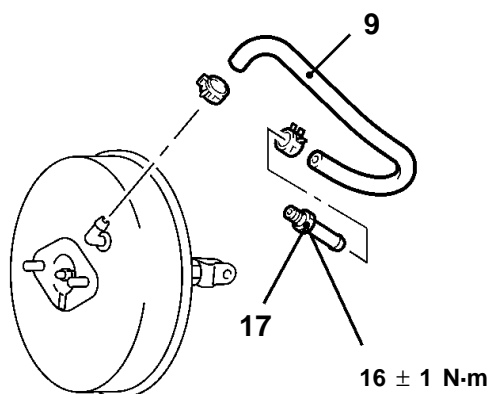


AY1422AU

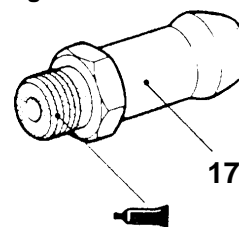
Vacuum sensor



AY1423AU



Fitting



A14Z0003

**Specified Sealant: 3M ATD
Part No.8663 or equivalent**

Master cylinder removal steps

1. Clutch hose connection <M/T>
2. Brake fluid level sensor connector
3. Reservoir cap assembly
4. Brake fluid level sensor
5. Brake pipe connection
6. Master cylinder

Proportioning valve removal steps

5. Brake pipe connection
7. Proportioning valve
8. O ring

Brake booster removal steps

2. Brake fluid level sensor connector
 5. Brake pipe connection
 6. Master cylinder
- Push rod protrusion amount check and adjustment

- ▶A◀ 9. Vacuum hose
(With built-in check valve)
- 10. Vacuum sensor connector <where fitted>
- 11. Vacuum sensor <where fitted>
- 12. Snap pin
- 13. Pin assembly
- 14. Clevis
 - Engine cover <where fitted>
 - Remove A/C liquid pipe B from the retaining clip.
- 15. Brake booster
- 16. Sealer

Fitting removal

17. Fitting

INSTALLATION SERVICE POINTS

▶A◀ VACUUM HOSE CONNECTION

Insert the vacuum hose to the brake booster with its paint mark facing upward, and then secure the hose by using the hose clip.

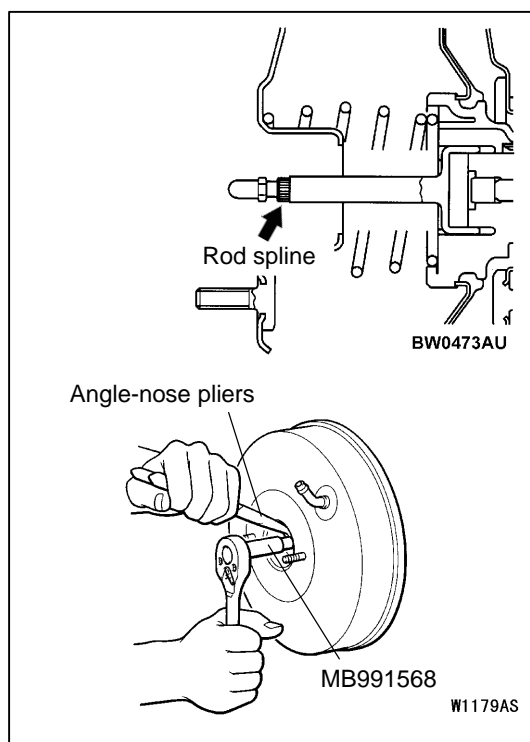
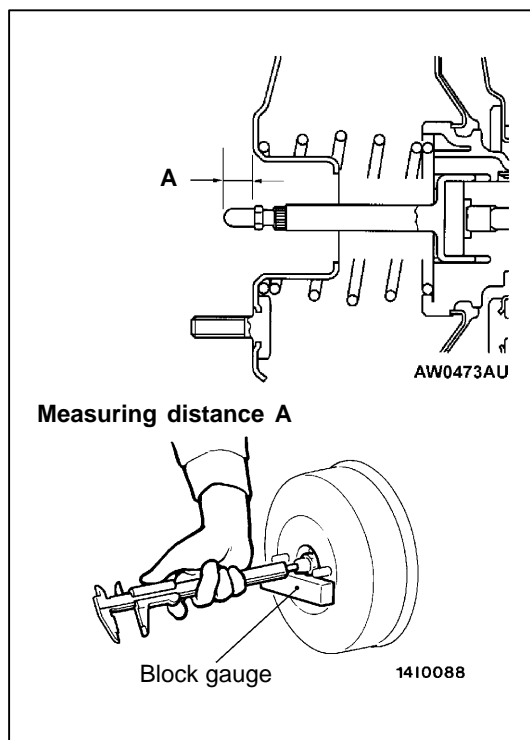
►B◄ PUSH ROD PROTRUSION AMOUNT CHECK AND ADJUSTMENT

1. Measure dimension (A).

Standard value (A) : 9.18 – 9.43 mm

NOTE

When a negative pressure of 66.7 kPa is applied to the brake booster, the push rod should protrude 10.28 – 10.53 mm.



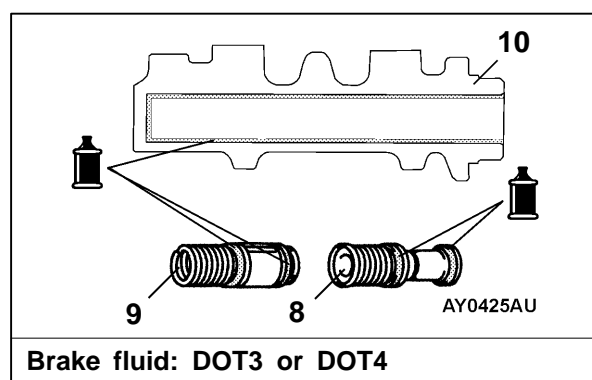
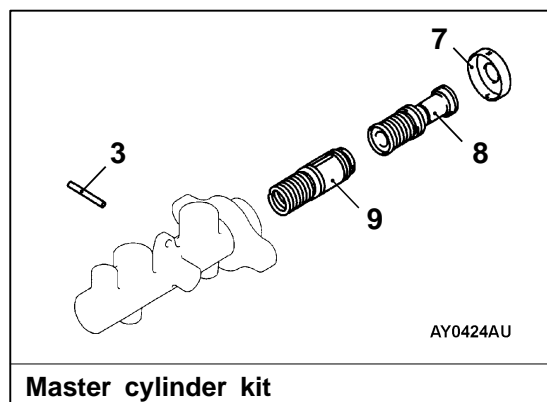
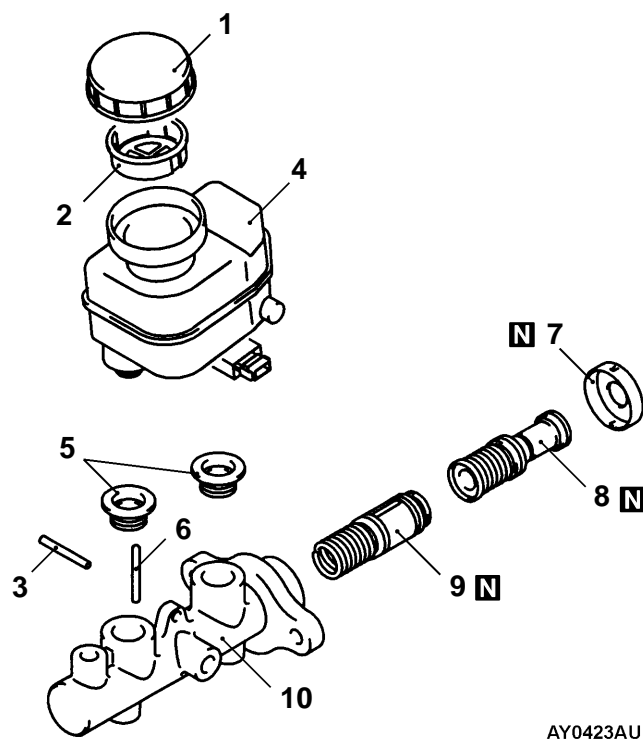
2. If the protrusion amount is not within the standard value range, adjust the push rod length by turning the push rod. Use the special tool to turn the push rod while holding the rod spline with angle-nose pliers.

MASTER CYLINDER DISASSEMBLY AND REASSEMBLY

MAIN

Group
35

35A



Disassembly steps

1. Reservoir cap
2. Filter <Vehicles with ABS>
3. Spring pin
4. Reservoir tank
5. Reservoir seal

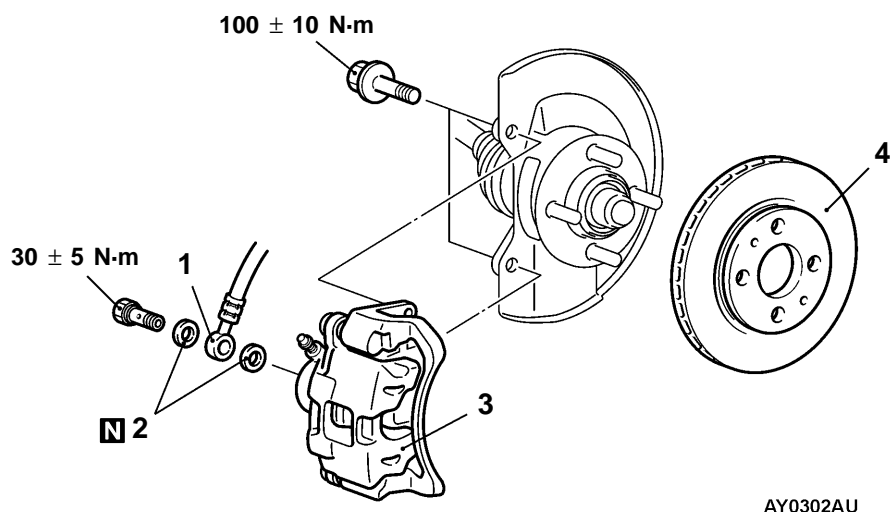
6. Pin <Vehicles with ABS>
7. Piston retainer
8. Primary piston assembly
9. Secondary piston assembly
10. Master cylinder body

FRONT DISC BRAKE

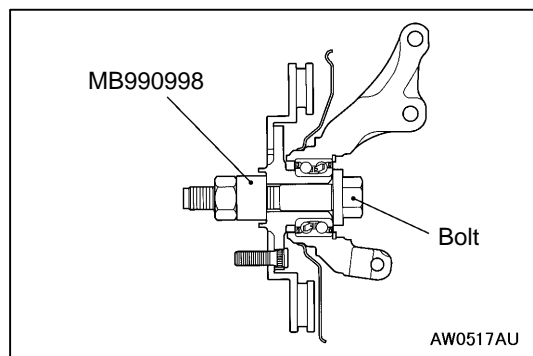
REMOVAL AND INSTALLATION

Pre-removal Operation
Brake Fluid Draining

Post-installation Operation
Brake Fluid Supplying and Air Bleeding

**Removal steps**

1. Brake hose connection
2. Gasket
3. Disc brake assembly
4. Brake disc

**INSTALLATION SERVICE POINT****DISC BRAKE ASSEMBLY INSTALLATION**

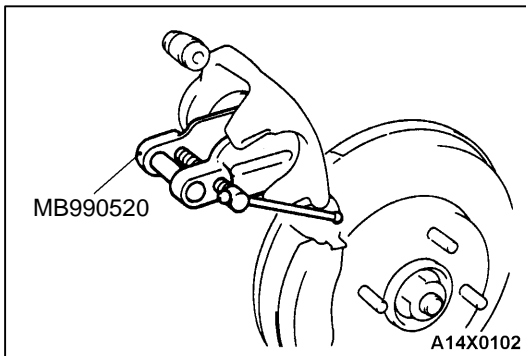
1. In order to measure the brake drag force after pad installation, measure the rotary-sliding resistance of the hub by the following procedure with the pads removed.
 - (1) [Withdraw the drive shaft.](#)
 - (2) Attach the special tool to the front hub assembly as shown in the illustration, and tighten it to the specified torque.

Tightening torque: $245 \pm 29 \text{ N-m}$

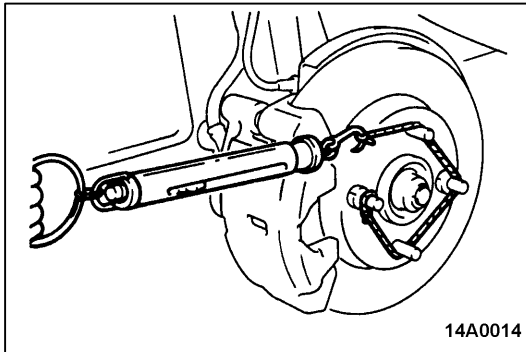
- (3) Use a spring balance to measure the rotary-sliding resistance of the hub in the forward direction.
2. Install the caliper support to the knuckle, and then assemble the pad and the clip to the caliper support.

Caution

Do not contaminate the friction surfaces of the pads and brake discs by any oil or grease.



3. Clean the piston and insert it into the cylinder with the special tool.
4. Be careful that the piston boot does not become caught, when lowering the caliper assembly and install the guide pin to the caliper.
5. Start the engine, and then depress the brake pedal two or three times strongly. Then stop the engine.
6. Turn the brake disc forward 10 times.



7. Use a spring balance to measure the rotary-sliding resistance of the hub in the forward direction.
8. Calculate the drag force of the disc brake [difference between the values measured at steps 1 and 7].

Standard value: 78 N or less

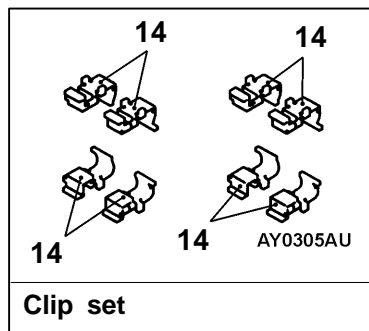
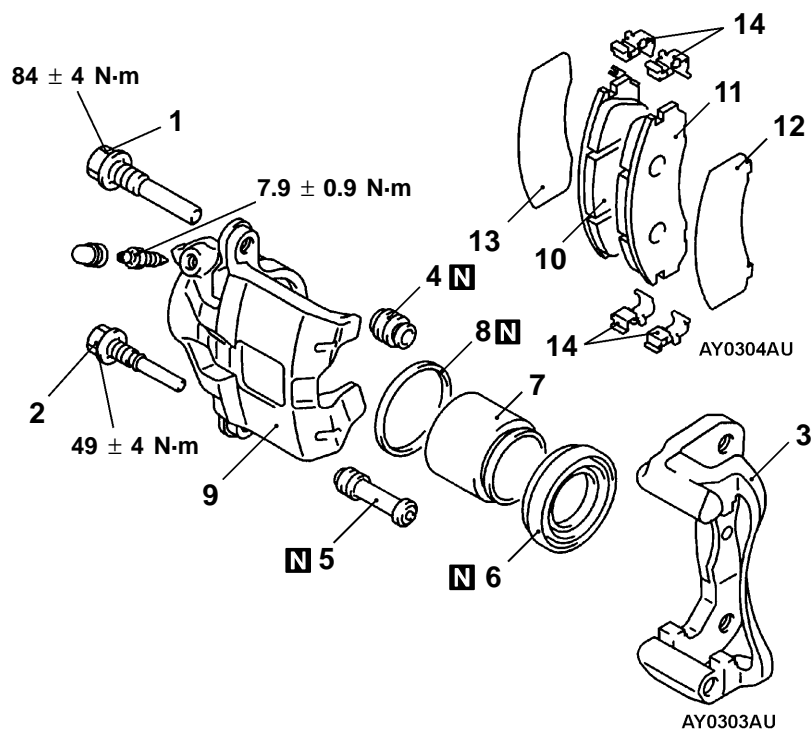
9. If that drag force exceeds the standard value, disassemble the piston assembly. Then check the piston for contamination or rust, and confirm if the piston or the piston seal is deteriorated, and if the slide pins slide smoothly.

DISASSEMBLY AND REASSEMBLY

MAIN

Group
35

35A



<p>BY0303AU</p>	<p>AY0395AU</p>	<p>AY0396AU</p>	<p>AY0397AU</p>
Brake caliper kit	Pad set	Shim set	Seal and boot kit

Disassembly steps

1. Slide pin (main)
2. Slide pin (sub)
3. Caliper support (including pad, clip, and shim)
4. Pin boot
5. Bushing
6. Piston boot
7. Piston



8. Piston seal
9. Caliper body
10. Pad and wear indicator assembly
11. Pad assembly
12. Outer shim (rubber coat)
13. Inner shim (stainless)
14. Clip

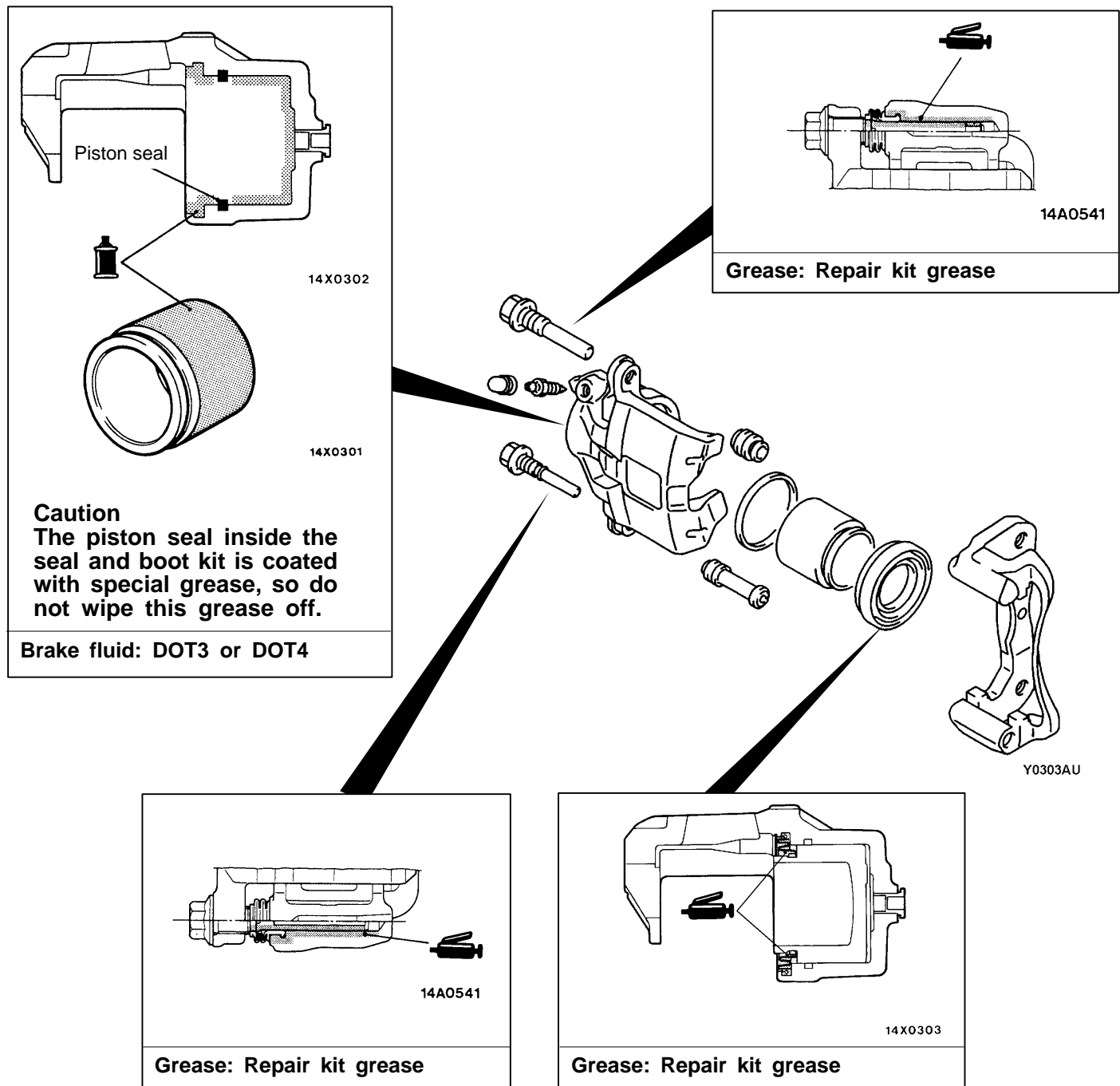


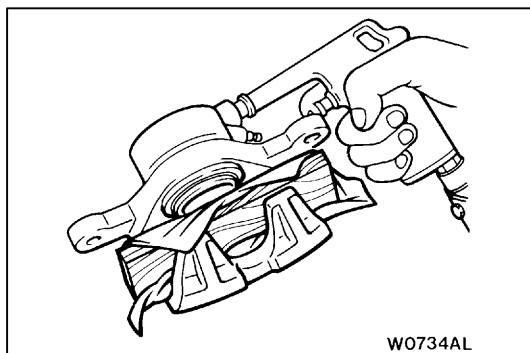
LUBRICATION POINTS

MAIN

Group
35

35A





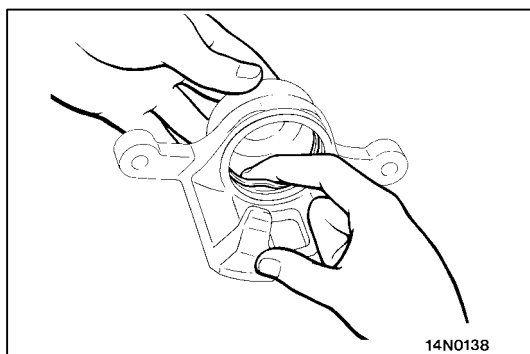
DISASSEMBLY SERVICE POINTS

◀A▶ PISTON BOOT/PISTON REMOVAL

Use a piece of wood to protect the caliper body outer side, and then apply compressed air through the brake hose connection hole to withdraw the piston and piston boot.

Caution

If air is blown into the caliper body suddenly, the piston will pop out, causing damage to the caliper body. Be sure to apply compressed air gradually.



◀B▶ PISTON SEAL REMOVAL

1. Remove the piston seal with finger tip.

Caution

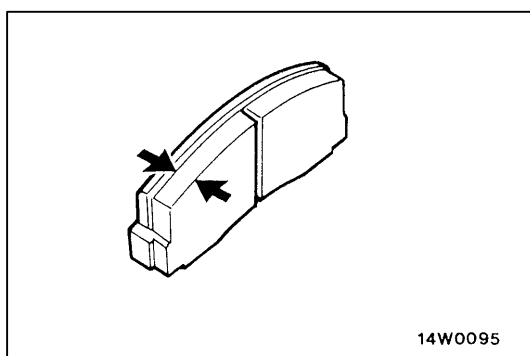
Do not use a flat-tipped screwdriver or other tool to prevent damage to inner cylinder.

2. Clean piston surface and inner bore with trichloroethylene, alcohol or the specified brake fluid.

Specified brake fluid: DOT3 or DOT4

INSPECTION

- Check the cylinder for wear, damage or rust.
- Check the piston surface for wear, damage or rust.
- Check the caliper body or sleeve for wear.
- Check pad for damage or adhesion of grease, check the backing metal for damage.



PAD WEAR CHECK

Measure thickness at the thinnest and worn area of the pad. Replace the pad assembly if the pad thickness is less than the limit value.

Standard value: 10.0 mm

Limit: 2.0 mm

Caution

1. Always replace the brake pads as an axle set.
2. If an excessive difference is found in the thickness between the right and left brake pads, check moving parts.

REAR DRUM BRAKE

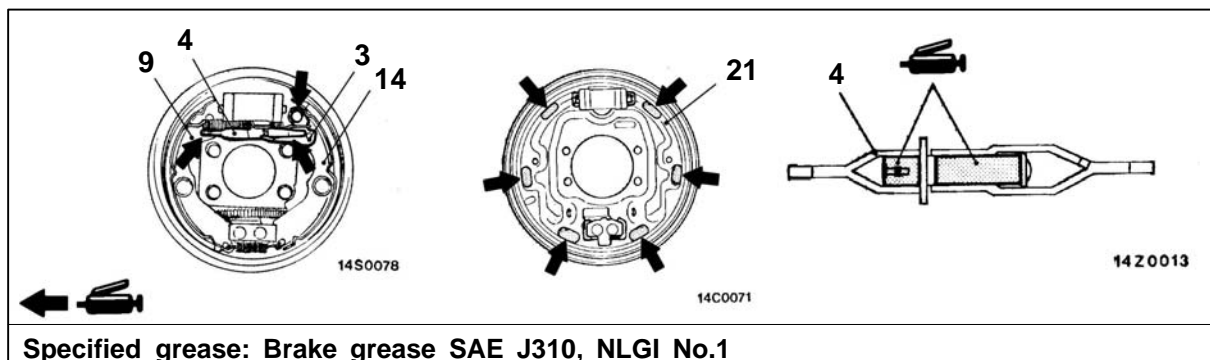
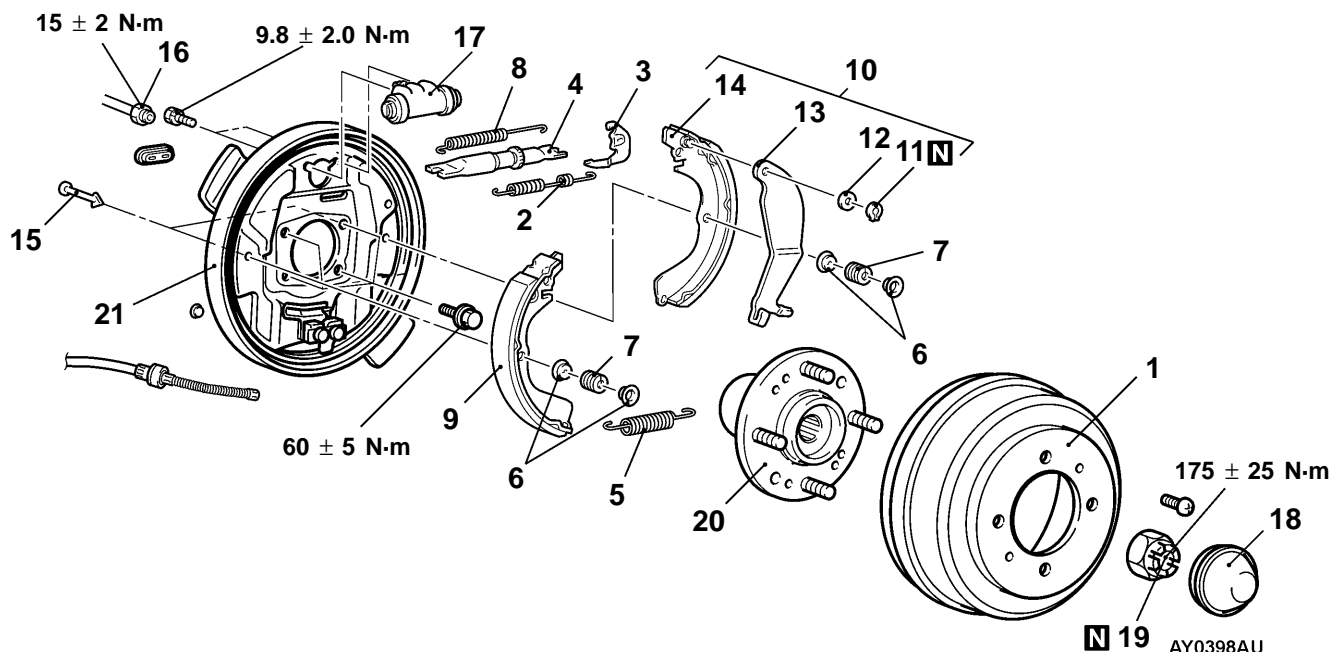
REMOVAL AND INSTALLATION

Pre-removal Operation

- Loosening the Parking Brake Cable Adjusting Nut (Refer to [On-vehicle Service](#))
- Brake Fluid Draining

Post-installation Operation

- Parking Brake Lever Stroke Adjustment (Refer to [On-vehicle Service](#))
- Brake Fluid Supplying and Air Bleeding



Removal steps

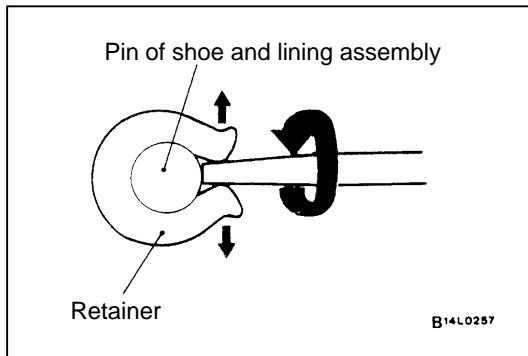
- Brake drum
- Shoe-to-shoe spring
- Adjuster lever
- Auto-adjuster assembly
- Retainer spring
- Shoe hold-down cup
- Shoe hold-down spring
- Shoe-to-lever spring
- Shoe and lining assembly
- Shoe and lever assembly
- Retainer
- Wave washer
- Parking lever

- Shoe and lining assembly
- Shoe hold-down pin
- Brake pipe connection
- Wheel cylinder assembly
- Hub cap
- Lock nut (Refer to [Rear Hub Assembly](#).)
- Rear hub assembly (Refer to [Rear Hub Assembly](#).)
- Backing plate

Wheel cylinder removal steps

- Brake drum
- Brake pipe connection
- Wheel cylinder assembly

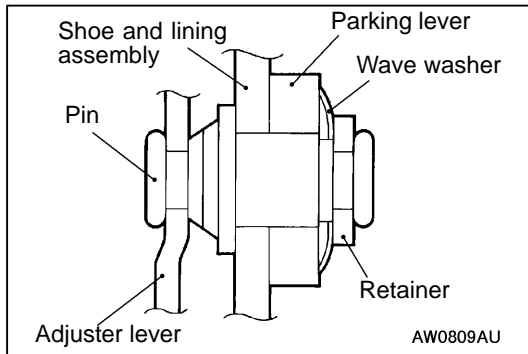




REMOVAL SERVICE POINT

◀A▶ RETAINER REMOVAL

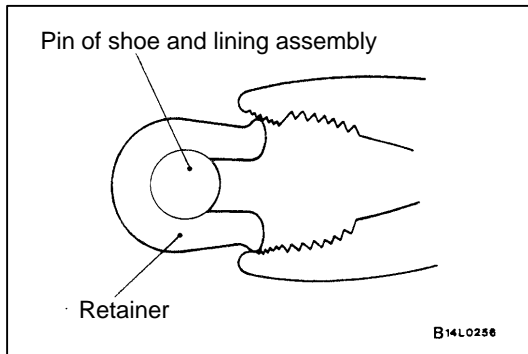
Use a flat-tipped screwdriver or the like to open up the retainer joint, and remove the retainer.



INSTALLATION SERVICE POINTS

▶A◀ WAVE WASHER INSTALLATION

Install the wave washer in the direction shown in the illustration.



▶B◀ RETAINER INSTALLATION

Use pliers or the like to crimp the retainer or the pin positively.

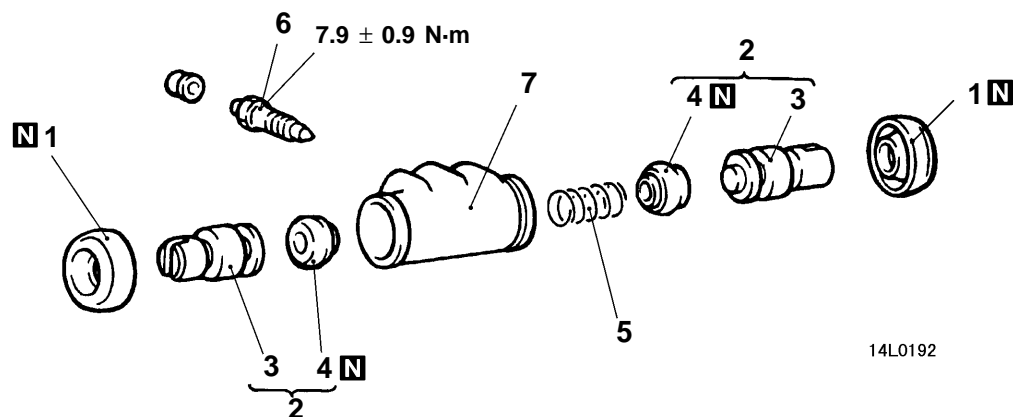
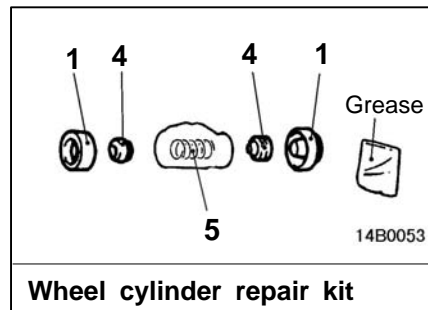
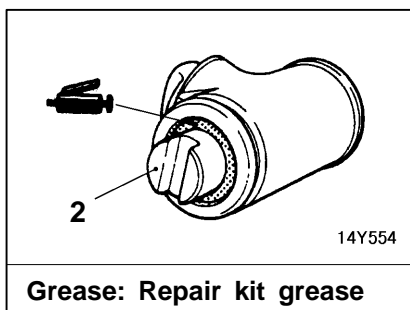
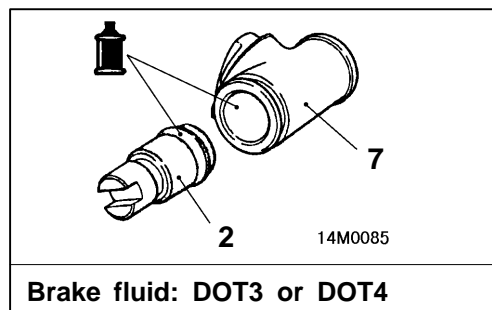
INSPECTION

BRAKE LINING THICKNESS CHECK

BRAKE DRUM INSIDE DIAMETER CHECK

BRAKE LINING AND BRAKE DRUM CONTACT CHECK

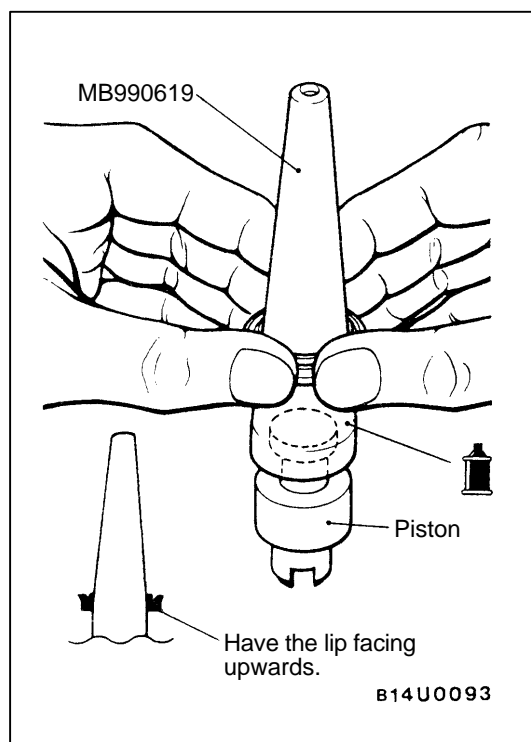
WHEEL CYLINDER DISASSEMBLY AND REASSEMBLY



Disassembly steps

1. Boots
2. Piston assembly
3. Pistons
4. Piston cups

5. Spring
6. Bleeder screw
7. Wheel cylinder body



REASSEMBLY SERVICE POINT

▶◀ PISTON CUPS/PISTONS REASSEMBLY

1. Use trichloroethylene, alcohol or the specified brake fluid to clean the piston.

Specified brake fluid: DOT3 or DOT4

2. Apply the specified brake fluid to the piston cups and the outer circumference of the special tool.
3. Set the special tool on the piston, and then fit the piston cup onto the special tool with the lip of the cup facing upwards.
4. Slide the piston cup down the outside of the tool into the piston groove carefully, making sure that the piston cup is twisted or slanted.

INSPECTION

Check the piston and wheel cylinder walls for rust or damage, and if there is any abnormality, replace the entire wheel cylinder assembly.