

04-11 CONVENTIONAL BRAKE SYSTEM

CONVENTIONAL BRAKE SYSTEM

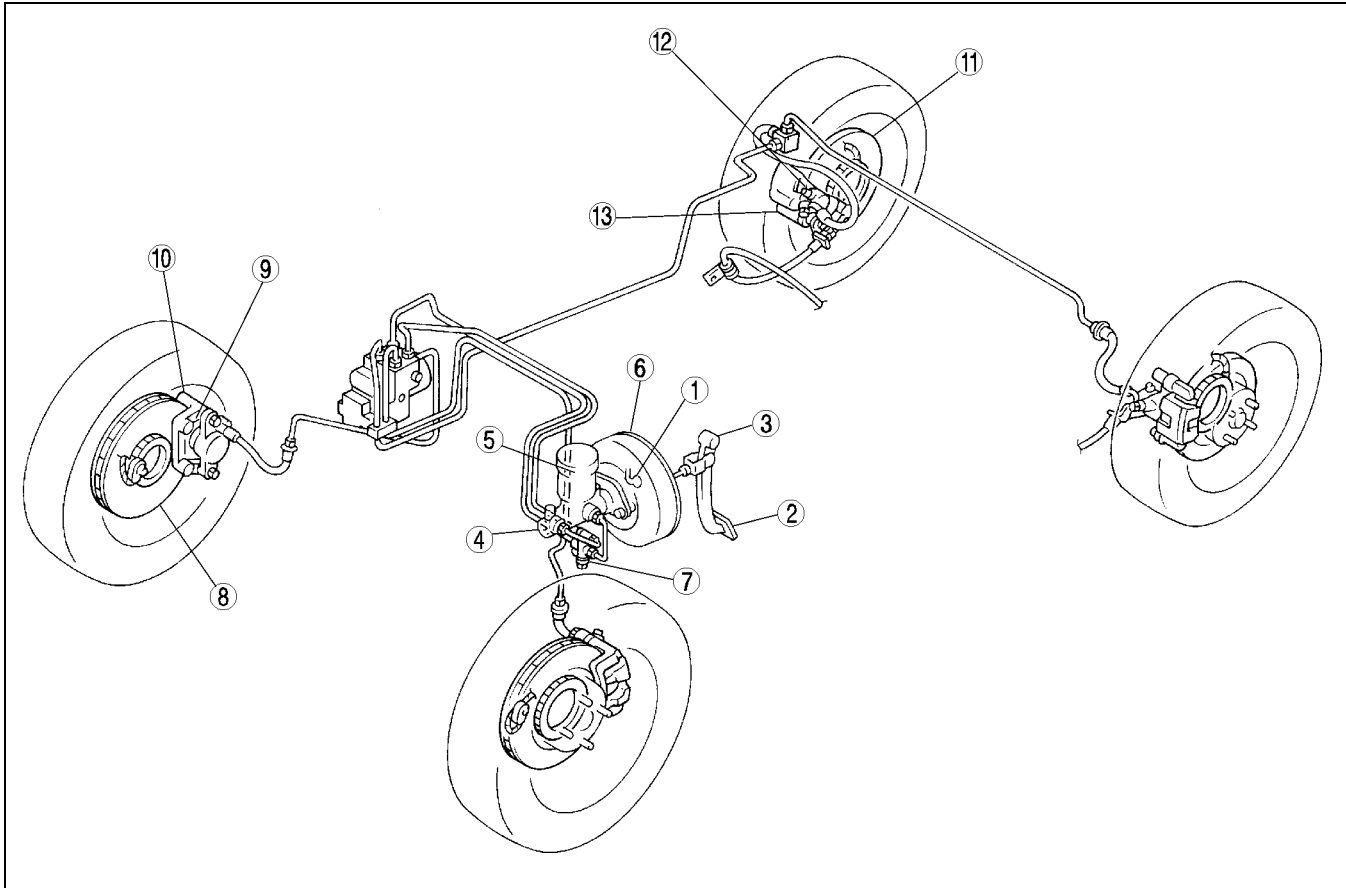
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CONVENTIONAL BRAKE SYSTEM LOCATION INDEX

A5U041101020W01



Z5U0411W129

| | |
|---|---|
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| | |
|----|---|
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CONVENTIONAL BRAKE SYSTEM

AIR BLEEDING

A5U041143001W01

Note

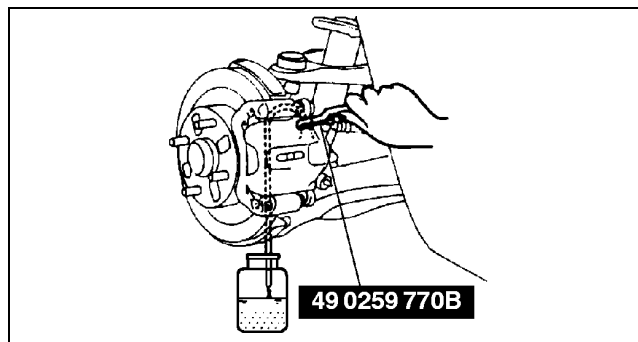
- The brakes should be bled whenever a brake line is disconnected. If a hydraulic line is disconnected at the master cylinder, start at the brake caliper or wheel cylinder farthest from the brake master cylinder, and move to the next farthest brake caliper or wheel cylinder until all cylinders have been bled. If the disconnection point is anywhere except the master cylinder, start at the point closest to the disconnection, and move to the next closest brake caliper or wheel cylinder until all four have been bled.

1. On level ground, jack up the vehicle and support it evenly on safety stands.
2. Remove the bleeder cap and attach a vinyl tube to the bleeder screw.
3. Place the other end of the vinyl tube in a clear, fluid-filled container.
4. The first person depresses the brake pedal a few times, and then holds it in the depressed position.
5. The second person loosens the bleeder screw, drains out the fluid and closes the screw using the **SST**.
6. Repeat step 4 and 5 until no air bubbles are seen. The reservoir should be kept about 3/4 full during bleeding to prevent air from reentering the lines.

Tightening torque

5.9—8.8 N·m {60—90 kgf·cm, 53—78 in·lbf}

7. Inspect for correct brake operation.
8. Verify that there is no fluid leakage. Wipe off any spilled fluid immediately.
9. After bleeding the brakes, add brake fluid to the maximum level.



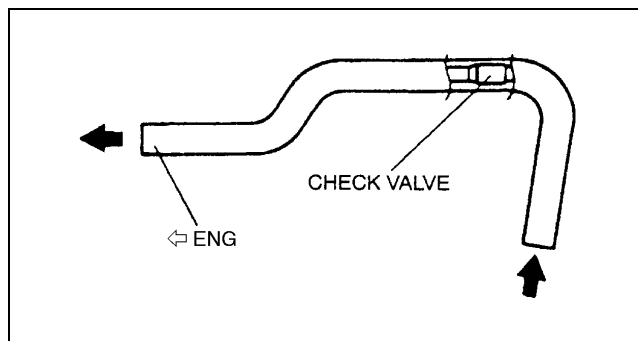
Z5U0411W140

04-11

VACUUM LINE INSPECTION

A5U041143980W01

1. Remove the clamps and vacuum hose.
2. Apply both suction and pressure to the engine-side hose, and verify that air blows only toward that side.
 - If air flows in both directions or not at all, replace the vacuum hose.



W6U411WA1

BRAKE PEDAL INSPECTION

A5U041143300W01

Brake Pedal Height Inspection

1. Verify that the distance from the center of the upper surface of the pedal pad to the carpet is as specified.

Pedal height (reference value)

171—181 mm {6.74—7.12 in} (With carpet)

Brake Pedal Play Inspection

1. Depress the pedal a few times to eliminate the vacuum in the system.
2. Gently depress the pedal by hand until resistance is felt, and inspect for the free play.

Free play

4.0—12.0 mm {0.16—0.47 in}

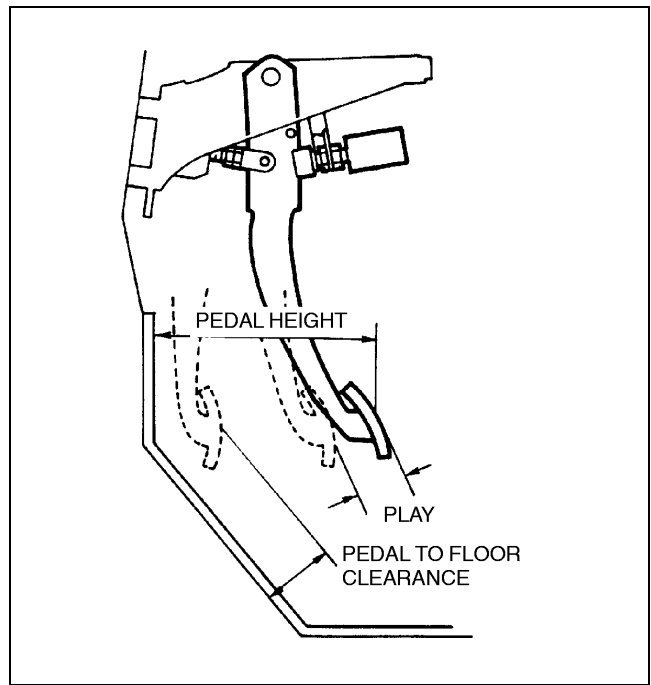
CONVENTIONAL BRAKE SYSTEM

Pedal-to-Floor Clearance Inspection

1. Verify that the distance from the floor panel to the center of the upper surface of the pedal pad is as specified when the pedal is depressed with a force of 588 N {60 kgf, 132 lbf}.
 - If the distance is less than specified, inspect for air in the brake system.

Pedal-to-floor clearance

95 mm {3.74 in} min. (Without carpet)



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BRAKE PEDAL ADJUSTMENT

Brake Pedal Height Adjustment

A5U041143300W02

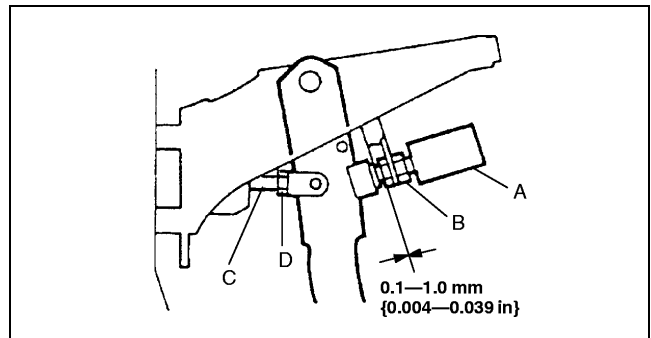
1. Disconnect the brake switch connector.
2. Loosen locknut B and turn switch A until it does not contact the pedal.
3. Loosen locknut D and turn rod C to adjust the height.
4. Tighten the bolt with locknut B so that clearance between the bolt for brake switch A and pedal stopper is within the specification.

Specification

0.1—1.0 mm {0.004—0.039 in}

Tightening torque

13.8—17.6 N·m {140—180 kgf·cm,
122—156 in·lbf}



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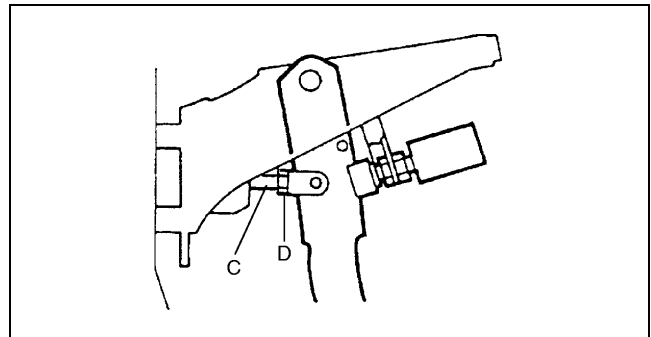
5. Connect the brake switch connector.
6. After adjustment, inspect the pedal play and the brake light operation.

Pedal Play Adjustment

1. Remove the spring pin and the clevis pin. (See 04—11—5 BRAKE PEDAL REMOVAL/INSTALLATION.)
2. Loosen locknut D and turn rod C to align the holes in the fork and in the pedal.
3. Install the clevis pin and the spring pin.
4. Verify the pedal height and the brake light operation.

Tightening torque

24—34 N·m {2.4—3.5 kgf·m, 18—25 ft·lbf}



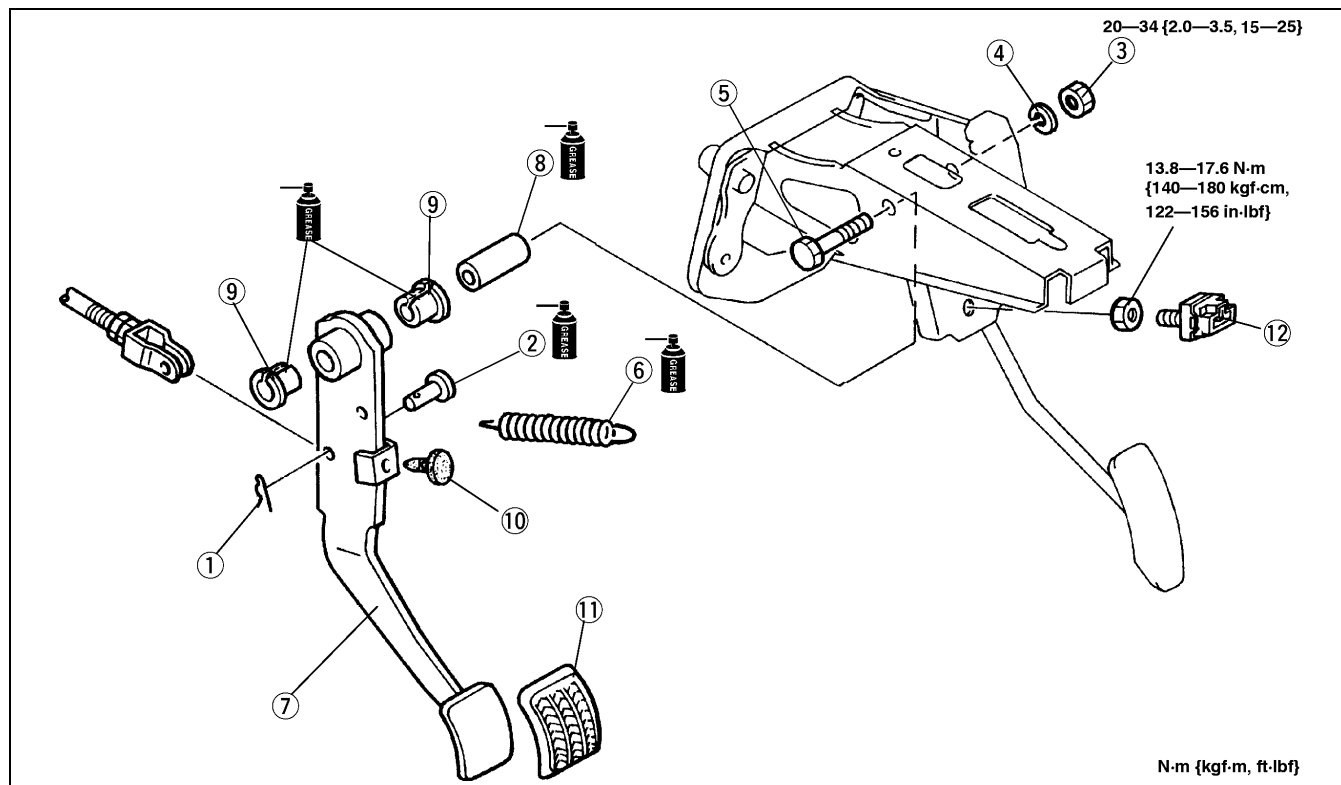
X5U411WA2

CONVENTIONAL BRAKE SYSTEM

BRAKE PEDAL REMOVAL/INSTALLATION

A5U041143300W03

1. Disconnect the brake switch connector.
2. Remove in the order indicated in the table.
3. Install in the reverse order of removal.
4. After installation, verify and adjust the pedal height and free play as necessary.



Z5U0411W300

| | |
|---|---------------|
| 1 | Spring clip |
| 2 | Clevis pin |
| 3 | Nut |
| 4 | Spring washer |
| 5 | Bolt |
| 6 | Return spring |

| | |
|----|--------------|
| 7 | Brake pedal |
| 8 | Guide pipe |
| 9 | Bushing |
| 10 | Stopper |
| 11 | Pedal pad |
| 12 | Brake switch |

BRAKE SWITCH INSPECTION

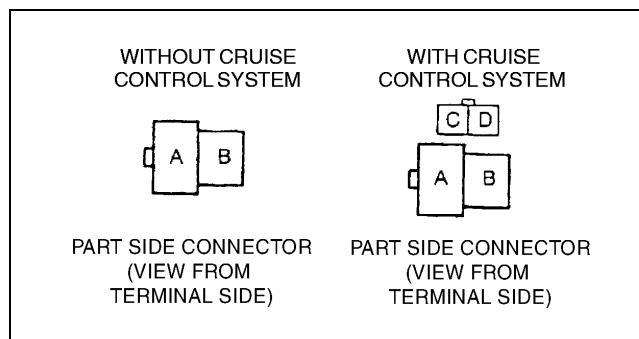
A5U041166490W01

1. Disconnect the brake switch connector.
2. Inspect for continuity between the terminals of the brake switch connector using the circuit tester.

○—○ : Continuity

| Condition | Terminal | | | |
|---------------------------------------|----------|---|-----|---|
| | A | B | C | D |
| When the brake pedal is depressed | ○—○ | | | |
| When the brake pedal is not depressed | | | ○—○ | |

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Y5U411WA9

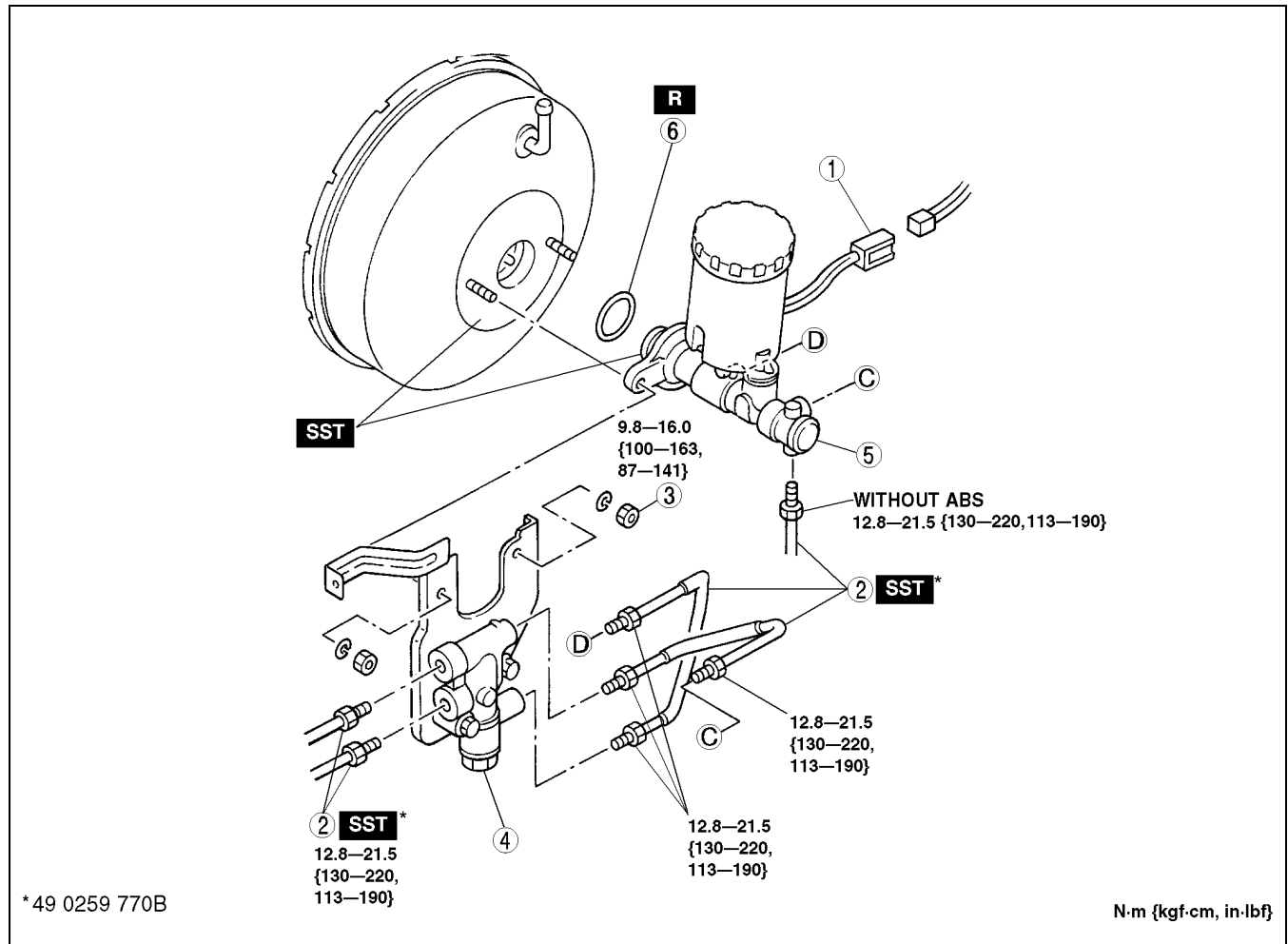
- If not as specified, replace the brake switch.

CONVENTIONAL BRAKE SYSTEM

MASTER CYLINDER REMOVAL/INSTALLATION

A5U041143400W01

1. Remove the cruise actuator. (See 01-20-5 CRUISE ACTUATOR REMOVAL/INSTALLATION.)
2. Remove in the order indicated in the table.
3. Install in the reverse order of removal.



| | |
|---|------------------------------------|
| 1 | Brake fluid level sensor connector |
| 2 | Brake pipe |
| 3 | Nut and washer |

| | |
|---|--|
| 4 | Proportioning bypass valve or brake pipe joint and bracket |
| 5 | Master cylinder (See 04-11-6 Master Cylinder Installation Note) |
| 6 | O-ring |

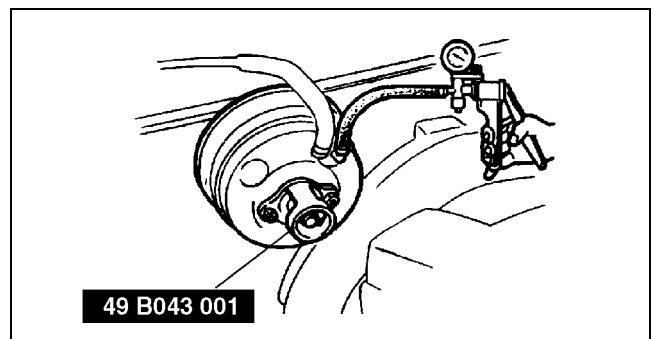
Master Cylinder Installation Note

1. Turn the nut of the **SST** clockwise to fully retract the **SST** gauge rod. Attach the **SST** to the power brake unit.

Tightening torque

9.9—15 N·m {1.0—1.6 kgf·m, 7.3—11 ft·lbf}

2. Apply a **66.7 kPa {500 mmHg, 19.7 inHg}** vacuum by using a vacuum pump.



CONVENTIONAL BRAKE SYSTEM

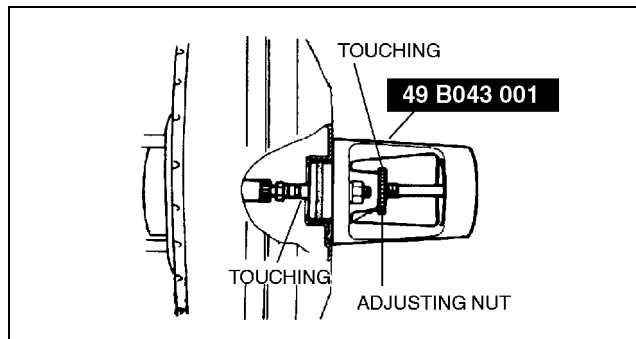
- Turn the adjusting nut of the **SST** counterclockwise until the gauge rod just contacts the push rod end of the power brake unit. Push lightly on the end of the gauge rod to be sure it is seated. Verify that there is no gap between the adjusting nut and **SST** body.
- Remove the **SST** from the power brake unit without disturbing the adjusting nut. Set the **SST** onto the master cylinder as shown in the figure.

Caution

- When pushing the **SST** gauge rod into the master cylinder piston, only use enough pressure to push the rod to the bottom of the piston. If too much pressure is applied, a false reading will occur.

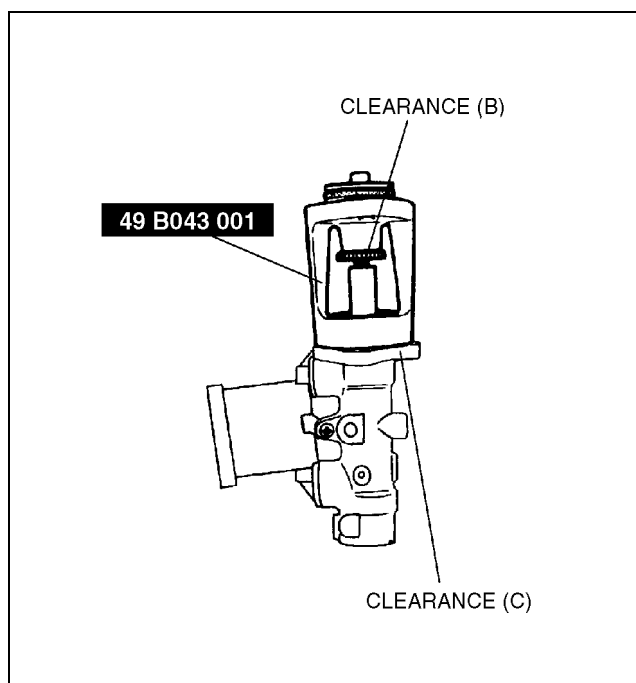
- Push lightly on the end of the **SST** gauge rod to be sure it has contacted the bottom of the master cylinder piston, but do not push so hard that the piston moves. Note any clearance between the **SST** body and the adjusting nut (clearance B) or between the body and the master cylinder (clearance C).

| Measurement | Push rod |
|----------------------------|-----------|
| Clearance at (B) | Too short |
| Clearance at (C) | Too long |
| No clearance at (B) or (C) | |



Z5U0411W131

04-11



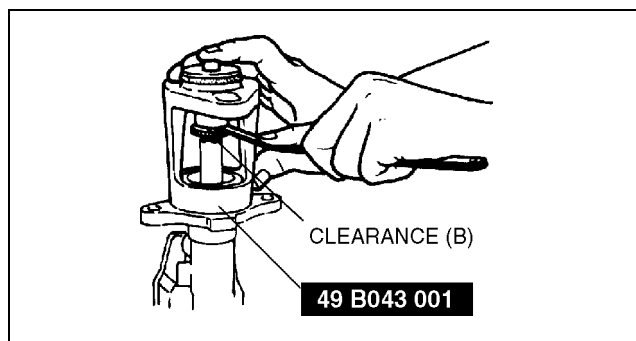
Z5U0411W132

Adjusting the push rod clearance at B

Note

- The threads of the push rod are specially designed so that the bolt becomes harder to turn past a certain point. This is to prevent the bolt from coming loose. Turn the bolt only within this range when adjusting.

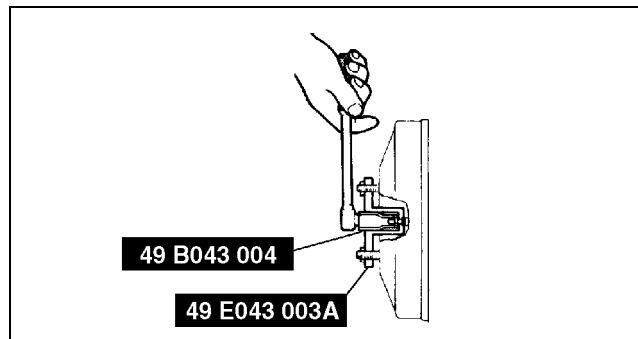
- Push lightly on the end of the **SST** gauge rod, and measure the clearance between the adjusting nut and the **SST** body.



Z5U0411W133

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- Using the **SST**, turn the nut to lengthen the power booster push rod an amount equal to the sum subtracting 0.1—0.4 mm {0.004—0.016 in} from the clearance measured at B.



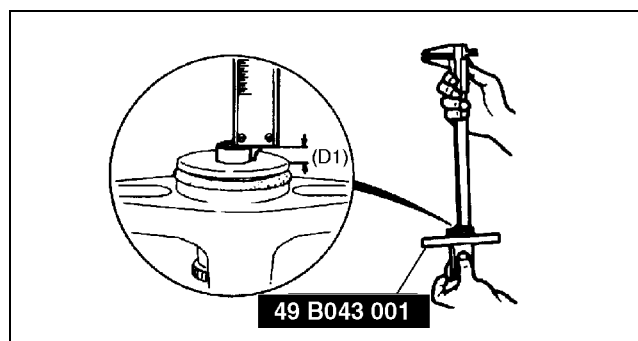
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Adjusting the push rod clearance at C or no clearance at B or C

Note

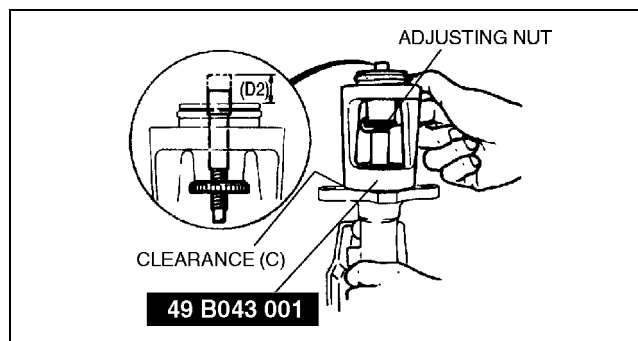
- The threads of the push rod are specially designed so that the bolt becomes harder to turn past a certain point. This is to prevent the bolt from coming loose. Turn the bolt only within this range when adjusting.

- Measure and record height D1 of the gauge rod.
- Turn the adjusting nut until the **SST** body sets squarely on the master cylinder. (Turn only enough for the body to touch.)



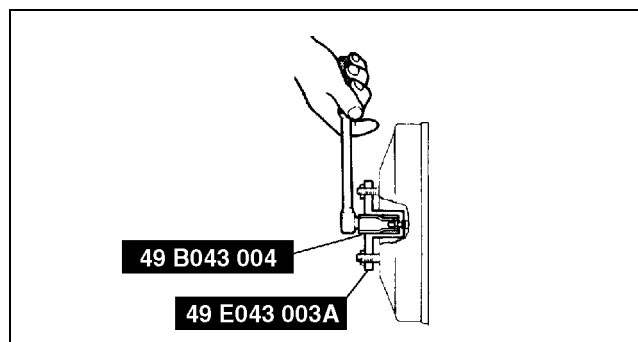
Z5U0411W135

- Measure and record height D2 of the gauge rod.



Z5U0411W136

- Subtract D1 from D2 and add 0.1—0.4 mm {0.004—0.016 in}. Using the **SST**, turn the nut to shorten the power booster push rod an amount equal to the sum.



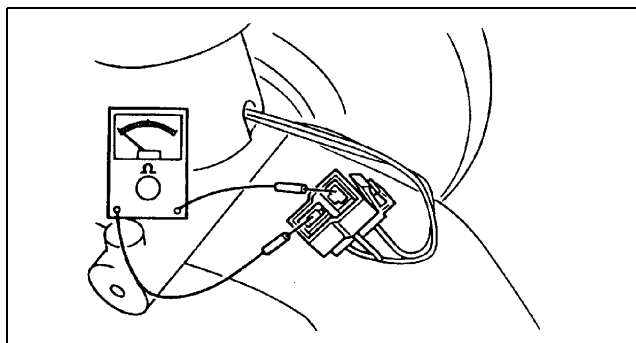
Z5U0411W134

CONVENTIONAL BRAKE SYSTEM

FLUID LEVEL SENSOR INSPECTION

A5U041143540W01

1. Disconnect the sensor connector.
2. Connect an ohmmeter to the connector.
3. Starting with the fluid level above MIN, verify that there is no continuity.
4. Remove the brake fluid and verify that there is continuity when the level is below MIN.
 - If not as specified, replace the sensor.



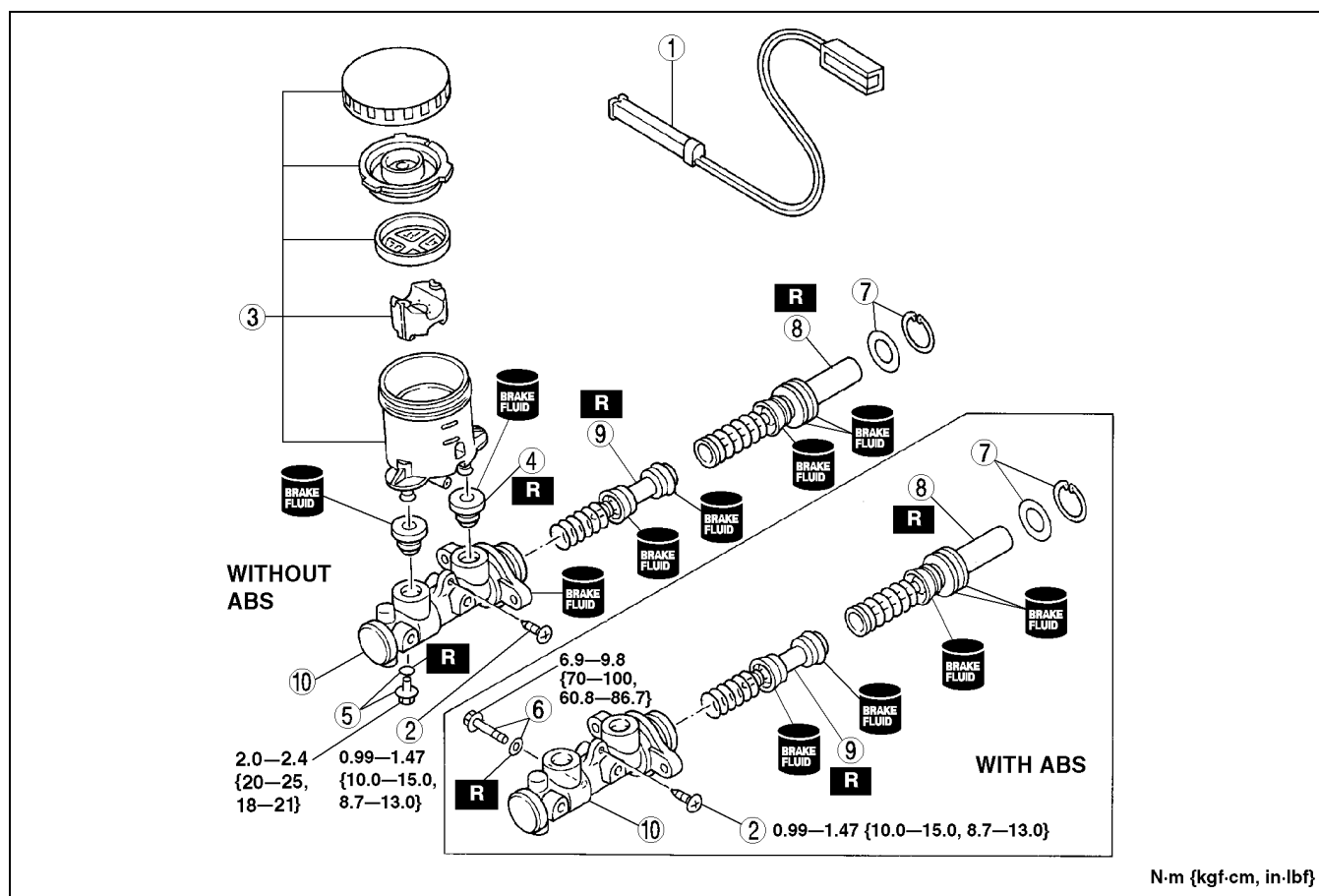
U5U41119

MASTER CYLINDER DISASSEMBLY/ASSEMBLY

A5U041143400W02

04-11

1. After removing the brake fluid, disassemble in the order indicated in the table.
2. Assemble in the reverse order of disassembly.



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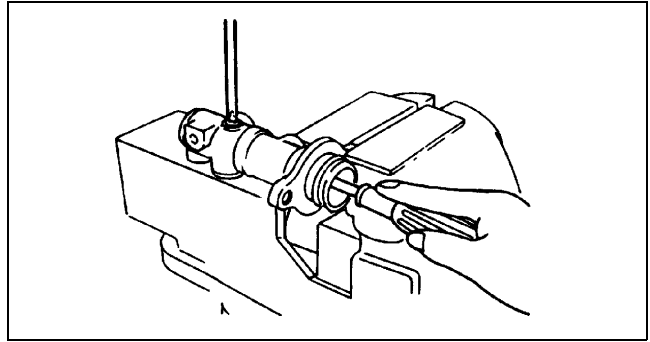
| | |
|---|---|
| 1 | Fluid level sensor |
| 2 | Screw |
| 3 | Reservoir component |
| 4 | Bushings |
| 5 | Stop screw and O-ring (without ABS) (See 04-11-10 Stop Screw and O-Ring (Without ABS) Assembly Note) |

| | |
|----|---|
| 6 | Stop pin and O-ring (with ABS) (See 04-11-10 Stop Pin and O-Ring (With ABS) Assembly Note) |
| 7 | Snap ring and spacer |
| 8 | Primary piston component |
| 9 | Secondary piston component |
| 10 | Master cylinder body |

CONVENTIONAL BRAKE SYSTEM

Stop Screw and O-Ring (Without ABS) Assembly Note

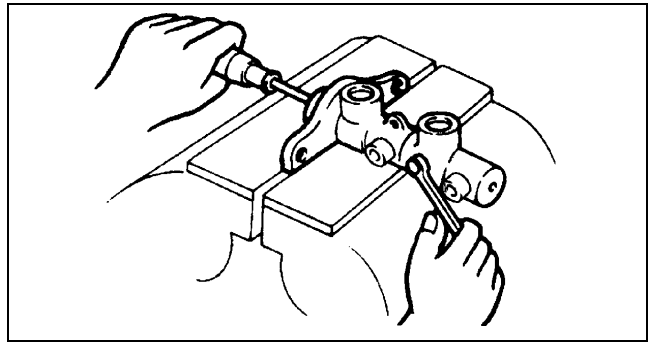
1. Push the primary piston component in fully.
2. Install and tighten a new O-ring and the stop screw.
3. Push and release the piston to verify that it is held by the stop screw.



U5U41121

Stop Pin and O-Ring (With ABS) Assembly Note

1. Install the secondary piston component with the piston hole facing the stop pin.
2. Install and tighten a new O-ring and the stop pin.
3. Push and release the piston to verify that it is held by the stop pin.



X5U411WD1

POWER BRAKE UNIT INSPECTION

Power Brake Unit Function Inspection (Simple Method)

Step 1

1. With the engine stopped, depress the pedal a few times.
2. With the pedal depressed, start the engine.
 - If the pedal moves down slightly immediately after the engine starts, the unit is operating.

Step 2

1. Start the engine.
2. Stop the engine after it has run for **1 or 2 minutes**.
3. Depress the pedal with the usual force.
 - If the first pedal stroke is long and becomes shorter with subsequent strokes, the unit is operating.
 - If a problem is found, inspect for damage or improper connection of the check valve or vacuum hose. Repair if necessary and inspect it once again.

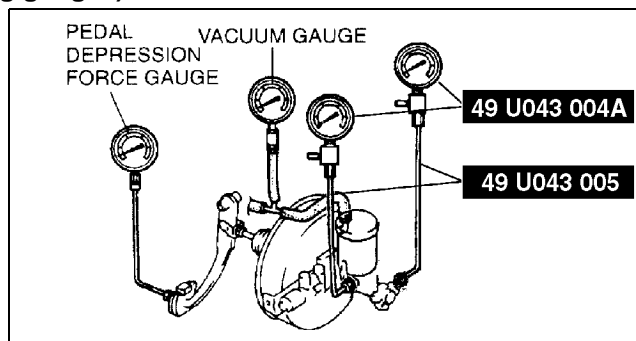
Step 3

1. Start the engine.
2. Depress the pedal with the usual force.
3. Stop the engine with the pedal held depressed.
4. Hold the pedal down for **about 30 seconds**.
 - If the pedal height does not change, the unit is operating.
 - If there is a problem, inspect for damage or improper connection of the check valve or vacuum hose. Repair if necessary and inspect it once again.
 - If the nature of the problem is still not clear after following the 3 steps above, follow the more detailed inspect described in "Inspection using gauges," below.

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Power Brake Unit Function Inspection (Inspection using gauges)

1. Connect the **SST** gauges, a vacuum gauge, and a pedal depression gauge as shown in the figure. Bleed the air from the **SST** gauges before performing the following tests.



Z5U0411W111

Checking for vacuum loss (unloaded condition)

1. Start the engine.
2. Stop the engine when the vacuum gauge indicates **66.7 kPa {500 mmHg, 19.7 inHg}**.
3. Observe the vacuum gauge for **15 seconds**.
 - If the gauge indicates **63.4—66.6 kPa {475—500 mmHg, 18.8—19.6 inHg}**, the unit is operating.

Checking for vacuum loss (loaded condition)

1. Start the engine.
2. Depress the brake pedal with a force of **196 N {20 kgf, 44 lbf}**.
3. With the brake pedal held depressed, stop the engine when the vacuum gauge indicates **66.7 kPa {500 mmHg, 19.7 inHg}**.
4. Observe the vacuum gauge for **15 seconds**.
 - If the gauge indicates **63.4—66.6 kPa {475—500 mmHg, 18.8—19.6 inHg}**, the unit is operating.

Checking for hydraulic pressure

1. With the engine is stopped (vacuum **0 kPa {0 mmHg, 0 inHg}**) and the fluid pressure is within the specification, the unit is operating.

| Pedal force | Fluid pressure |
|------------------------|--|
| 196 N {20 kgf, 44 lbf} | 740 kPa {7.55 kgf/cm ² , 107 psi} |

2. Start the engine. Depress the brake pedal when the vacuum reaches **66.7 kPa {500 mmHg, 19.7 inHg}**.
 - If the fluid pressure is within specification, the unit is operating.

| Pedal force | Fluid pressure |
|------------------------|--|
| 196 N {20 kgf, 44 lbf} | With ABS: 7,200 kPa {73 kgf/cm ² , 1,038 psi} Without ABS (vehicle equipped with 16 inch wheel): 4,700 kPa {48 kgf/cm ² , 683 psi} Without ABS (vehicle equipped with 15 inch wheel): 7,200 kPa {73 kgf/cm ² , 1,038 psi} |

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CONVENTIONAL BRAKE SYSTEM

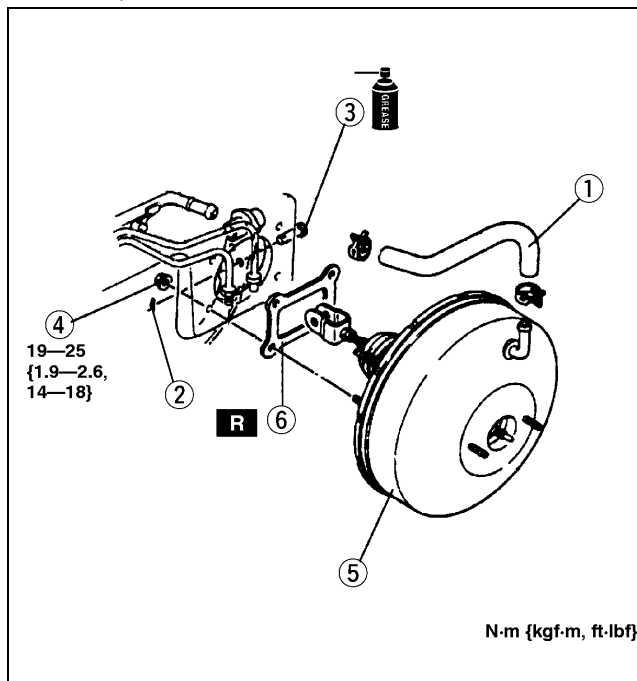
POWER BRAKE UNIT REMOVAL/INSTALLATION

A5U041143800W02

1. Remove the master cylinder and the proportioning bypass valve(without ABS) and brake pipe joint (with ABS).
(See 04-11-6 MASTER CYLINDER REMOVAL/INSTALLATION.)
2. Remove in the order indicated in the table.

| | |
|---|---|
| 1 | Vacuum hose See 04-11-12 Vacuum Hose Installation Note |
| 2 | Snap pin |
| 3 | Clevis pin |
| 4 | Nut |
| 5 | Power brake unit |
| 6 | Gasket |

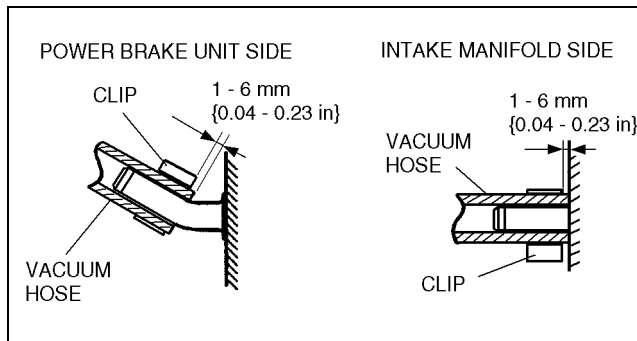
3. Install in the reverse order of removal.



X5U0411WA4

Vacuum Hose Installation Note

1. Install the vacuum hose to the power brake unit and intake manifold as shown.

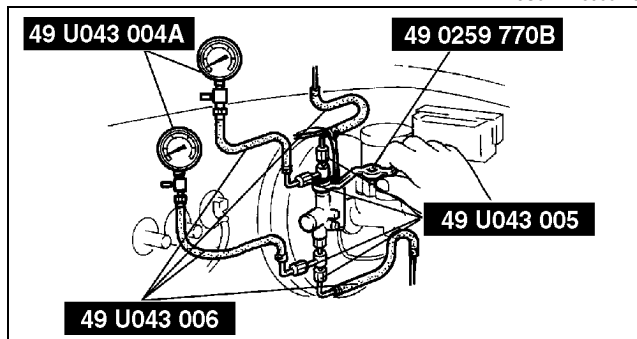


Z5U0411W120

PROPORTIONING BYPASS VALVE INSPECTION [WITHOUT ABS]

A5U041143900W01

1. Connect the SSTs and the adapters to the brake pipes as shown in the figure.
2. Bleed the air from the brake system.



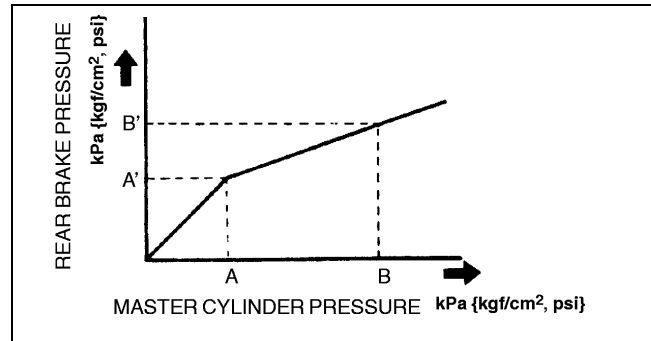
Z5U0411W112

CONVENTIONAL BRAKE SYSTEM

- Measure the fluid pressure from the master cylinder and to the rear brakes.
 - If not as specified, replace the valve component.

Specification

| Fluid pressure kPa {kgf/cm ² , psi} | | | |
|--|------------------------------------|--------------------|--------------------------------------|
| A | A' | B | B' |
| 3,923 {40, 569} | 3,923 {40, 569} ±294 {3, 43} | 5,884 {60, 853} | 4,844 {49.4, 702} ±392 {4, 57} |



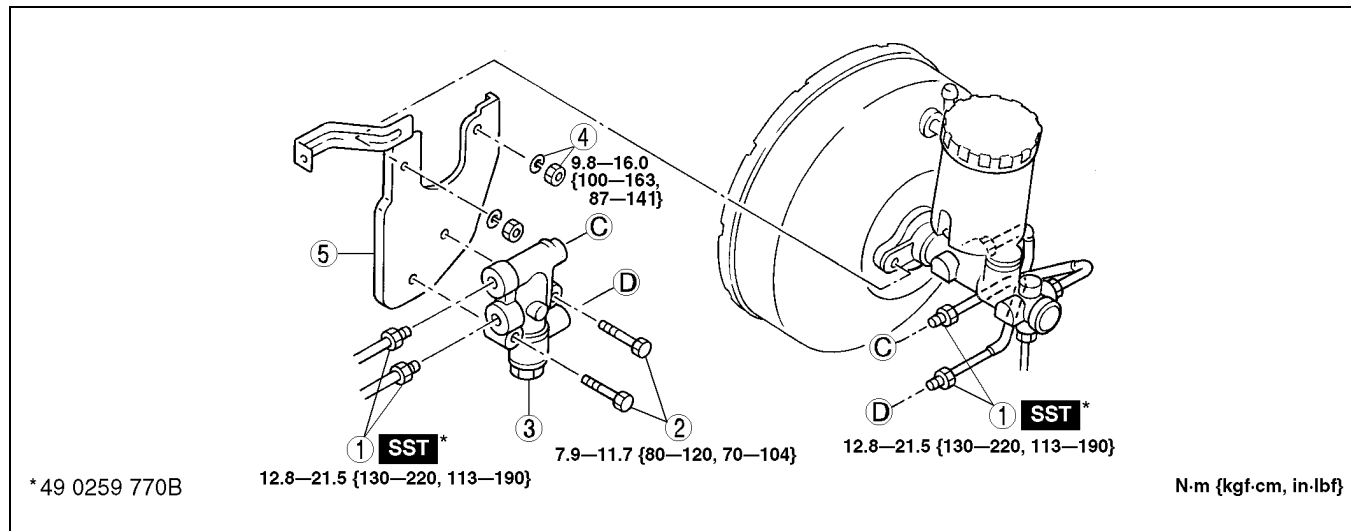
U5U41127

PROPORTIONING BYPASS VALVE (WITHOUT ABS) OR BRAKE PIPE JOINT (WITH ABS) REPLACEMENT

A5U041143900W02

- Remove in the order indicated in the table.
- Install in the reverse order of removal.

04-11



Z5U0411W141

| | |
|---|---|
| 1 | Brake pipe |
| 2 | Bolt |
| 3 | Proportioning bypass valve (without ABS) or brake pipe joint (with ABS) |

| | |
|---|---|
| 4 | Nut and washer |
| 5 | Proportioning bypass valve bracket (without ABS) or brake pipe joint bracket (with ABS) |

FRONT BRAKE (DISC) INSPECTION

A5U041133980W01

Brake Judder Repair Hint

Description

- Brake judder concern has the following 3 characteristics:

Steering wheel vibration

- Steering wheel vibrates in the direction of its rotation. This characteristic is most noticeable when applying brakes at a vehicle speed of **100—140 km/h {62.1—86.8 mph}**.

Floor vibration

- When applying brakes, the vehicle body shakes back and forth. The seriousness of shake is not influenced by vehicle speed.

Brake pedal vibration

- When applying brakes, a pulsating force tries to push the brake pad back occurs. The pulsation is transmitted to the brake pedal.
- The following are the main possible causes of brake judder:

Due to an excessive runout (side-to-side wobble) of disc plate, the thickness of disc plate is uneven.

- If the runout is **more than 0.05 mm {0.002 in}** 10 mm {0.39 in} from the disc plate edge, an uneven wear occurs on the disc plate because the pad contacts the plate unevenly.
- If the runout is **less than 0.05 mm {0.002 in}**, uneven wear does not occur.

CONVENTIONAL BRAKE SYSTEM

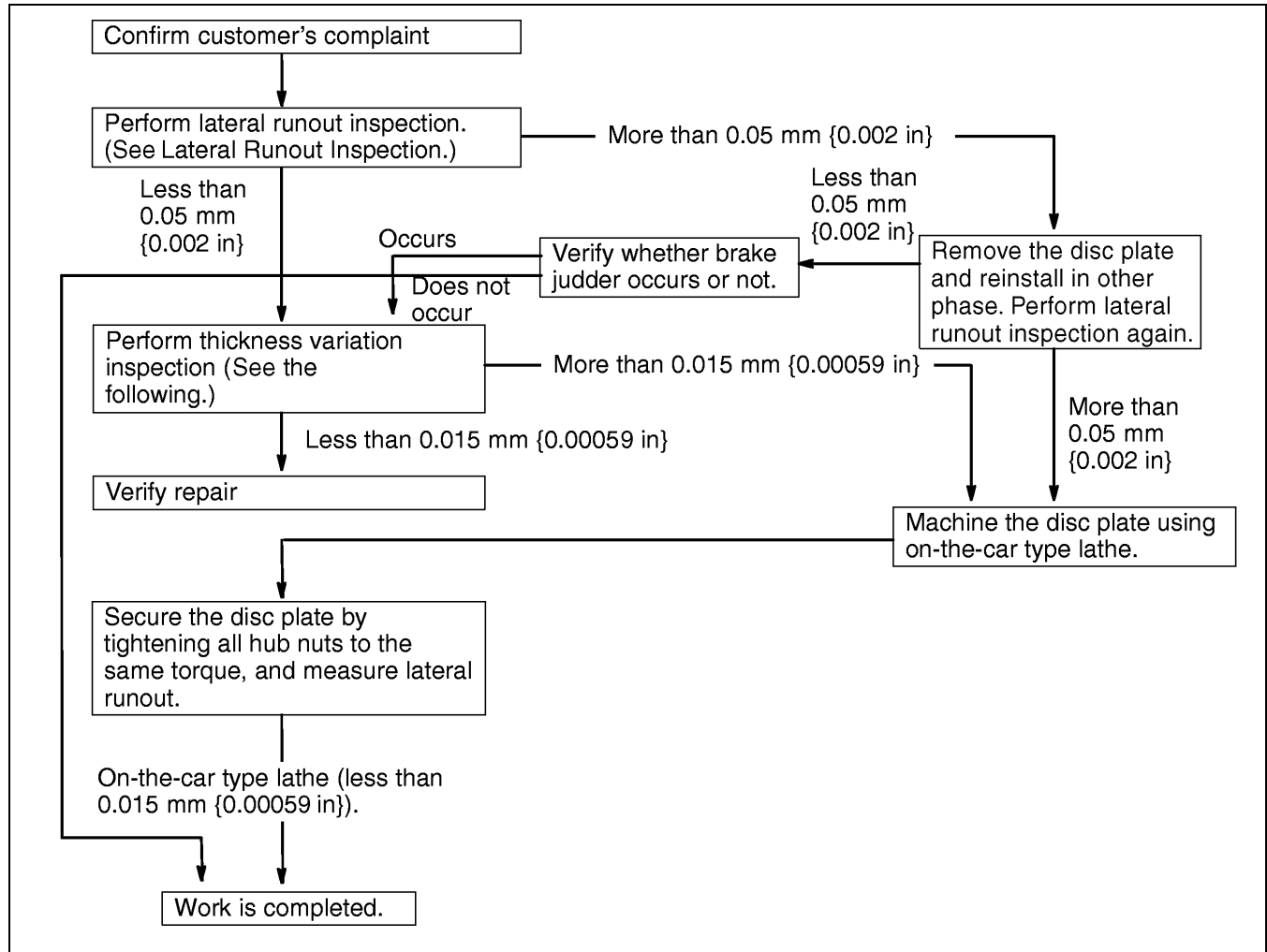
The disc plate is deformed by heat.

1. Repeated panic braking may raise the temperature in some portions of disc plate by **approximately 1,000 °C {1,832 °F}**. This results in deformed disc plate.

Due to corrosion, the thickness and friction coefficient of disc plate change.

1. If a vehicle is parked under damp conditions for a long time, corrosion occurs on the friction surface of disc plate.
2. The thickness of corrosion is uneven and sometimes appears like a wave pattern, which changes the friction coefficient and causes a reaction force.

Inspection and repair procedure



Y3U411WA4

Lateral runout inspection

1. To secure the disc plate and the hub, tighten the hub nuts upside down or insert a washer (thickness **10 mm {0.39 in}**, inner diameter **more than 12 mm {0.47 in}**) between the hub bolt and the hub nut.

Note

- The component parts of the **SST** (49 B017 001 or 49 G019 003) can be used as a suitable washer.
2. After tightening all the hub nuts to the same torque, put the dial gauge on the friction surface of disc plate **10 mm {0.39 in}** from the disc plate edge.
 3. Rotate the disc plate one time and measure the runout.

Runout limit

0.05 mm {0.002 in}

CONVENTIONAL BRAKE SYSTEM

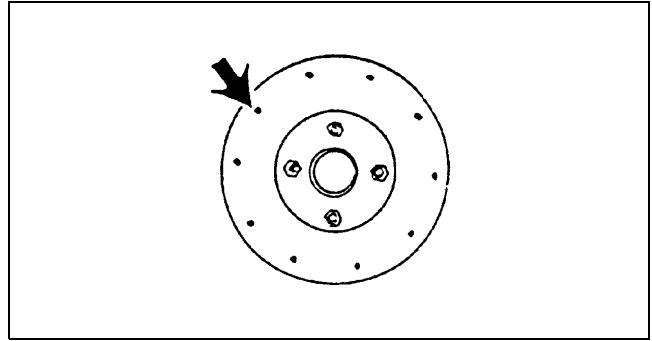
Thickness variation inspection

1. Clean the disc plate-to-pad friction surface using a brake cleaner.
2. Measure the points indicated in the illustration using a caliper (micrometer).
3. Subtract the minimum value from the maximum, and if the result is not within specification, machine the disc plate using a lathe.

Thickness variation limit
0.015 mm {0.00059 in}

Warning

- Do not exceed minimum disc plate thickness.



X3U411WAR

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Disc Plate Thickness Inspection

Caution

- Excessive runout may result if the disc plate is removed from the vehicle then machined. Machine the disc plate while installed on the vehicle.

1. Measure the thickness of the disc plate.
 - If the thickness is not within the specification, replace the disc plate.

Minimum

Disk plate outer diameter 255 mm {10.0 in}: 18 mm {0.71 in}

Disk plate outer diameter 270 mm {10.6 in}: 20 mm {0.79 in}

Minimum thickness after machining using a brake lathe on-vehicle

Disk plate outer diameter 255 mm {10.0 in}: 18.8 mm {0.74 in}

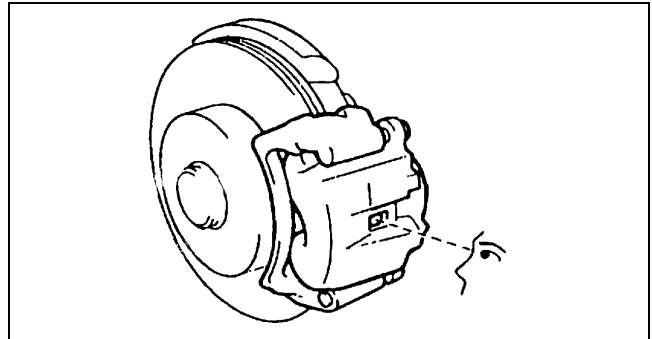
Disk plate outer diameter 270 mm {10.6 in}: 20.8 mm {0.82 in}

Disc Pad Thickness Inspection

1. Jack up the front of the vehicle and support it with safety stands.
2. Remove the wheels.
3. Verify the remaining thickness of the pads.

Thickness
2.0 mm {0.079 in} min.

4. Replace the pads as a set: right and left wheels, if either one is at or less than the minimum thickness.



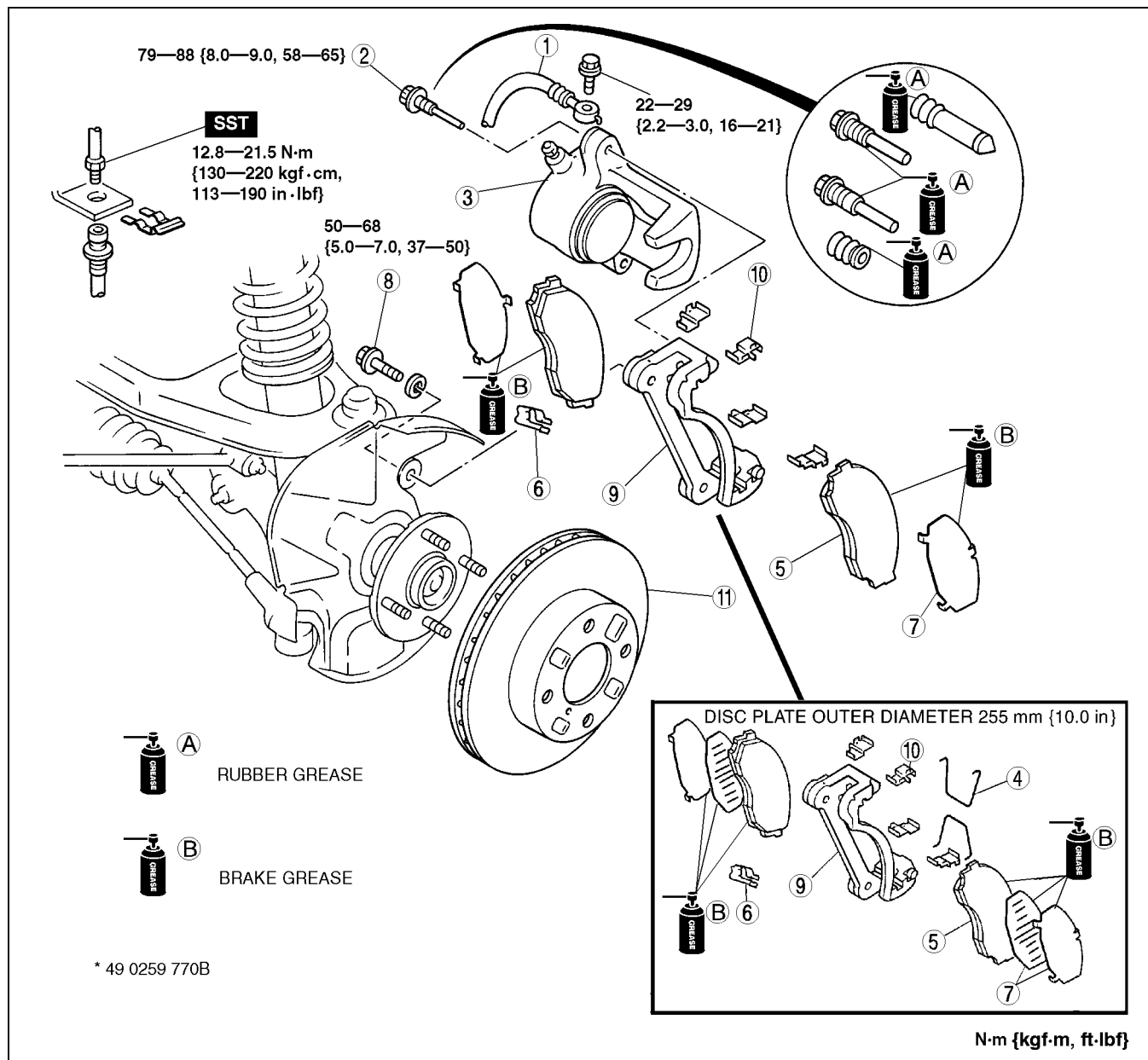
X3U411WAS

CONVENTIONAL BRAKE SYSTEM

FRONT BRAKE (DISC) REMOVAL/INSTALLATION

A5U041133980W02

1. Remove in the order indicated in the table.
2. Install in the reverse order of removal.



A5U0411W001

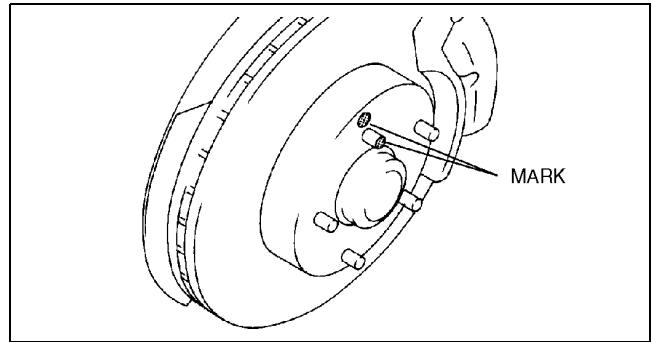
| | |
|---|---|
| 1 | Brake hose |
| 2 | Lock bolt |
| 3 | Caliper |
| 4 | Spring (Disk plate outer diameter 255 mm {10.0 in}) |
| 5 | Disc pad (See 04-11-17 Disc Pad Installation Note) |
| 6 | Pad wear indicator (RH side) |

| | |
|----|---|
| 7 | Shim |
| 8 | Bolt |
| 9 | Mounting support |
| 10 | Guide plate |
| 11 | Disc plate (See 04-11-17 Disc Plate Removal Note) (See 04-11-17 Disc Plate Installation Note) |

CONVENTIONAL BRAKE SYSTEM

Disc Plate Removal Note

1. Mark the wheel hub bolt and disc plate before removal for reference during installation.



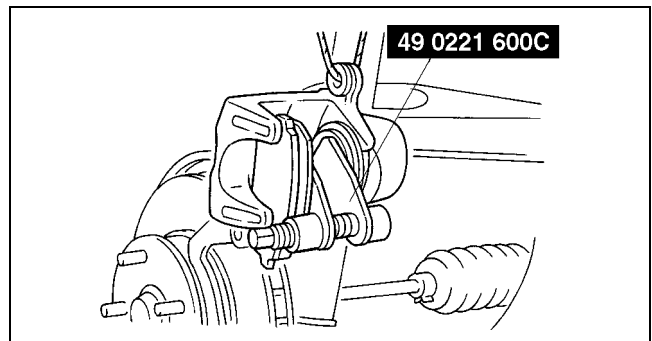
A5U0411W007

Disc Plate Installation Note

1. Remove any rust or grime on the contact face of the disc plate and wheel hub.
2. Install the disc plate and align the marks made before removal.

Disc Pad Installation Note

1. Push the piston inward using the SST.
2. Install the new pads in the mounting support.



Z5U0411W103

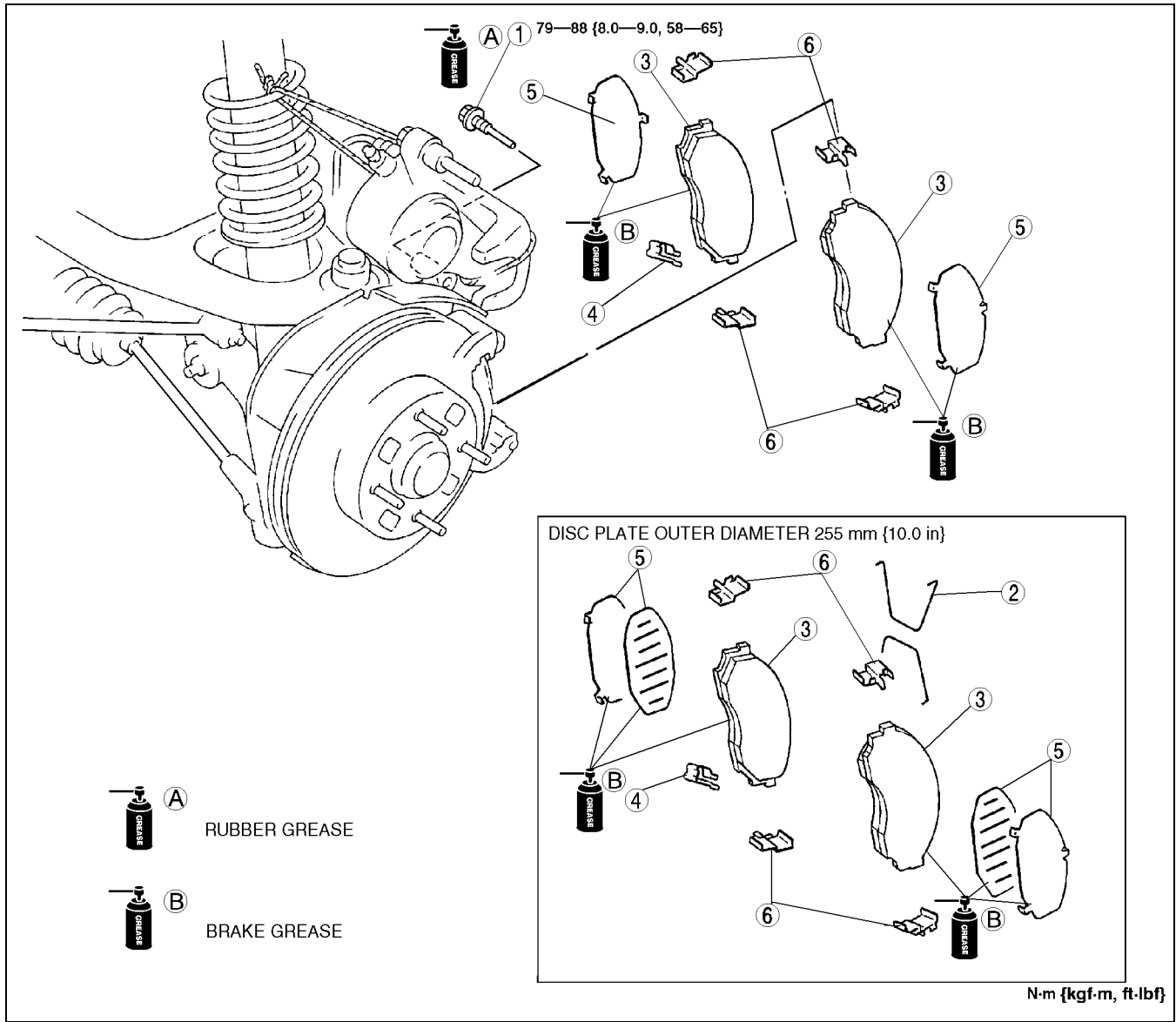
04-11

CONVENTIONAL BRAKE SYSTEM

DISC PAD (FRONT) REPLACEMENT

A5U041133630W01

1. Remove in the order indicated in the table.
2. Install in the reverse order of removal.



A5U0411W002

| | |
|---|---|
| 1 | Lock bolt |
| 2 | Spring (only vehicle equipped with 15 inch wheel) |
| 3 | Disc pad (See 04-11-17 Disc Pad Installation Note) |

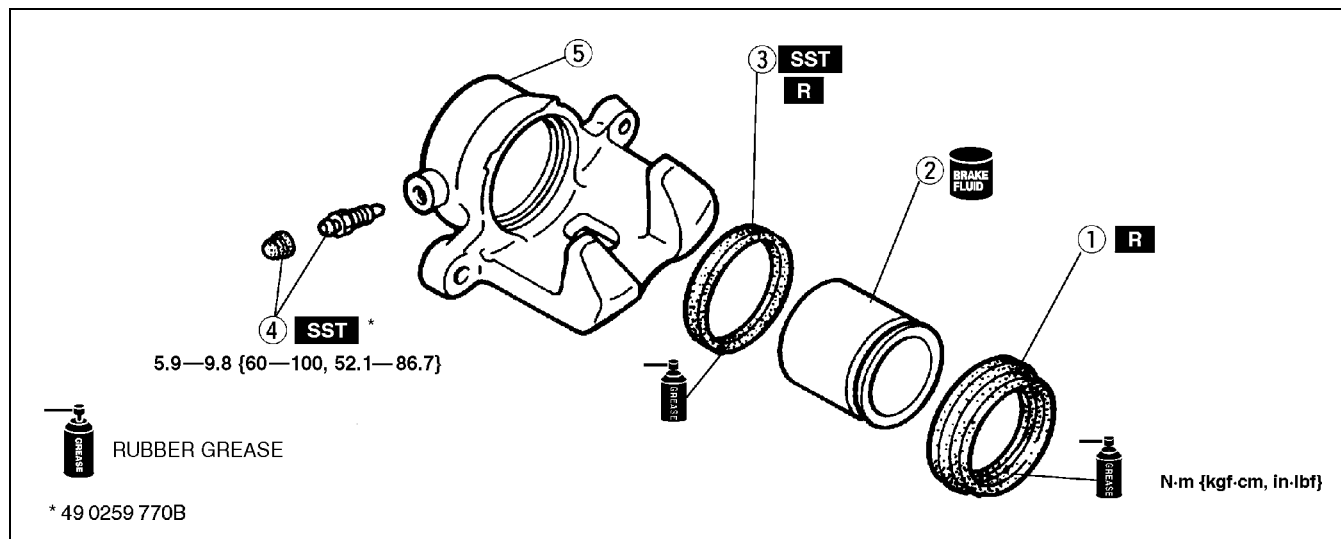
| | |
|---|------------------------------|
| 4 | Pad wear indicator (RH side) |
| 5 | Shim |
| 6 | Guide plate |

CONVENTIONAL BRAKE SYSTEM

CALIPER (FRONT) DISASSEMBLY/ASSEMBLY

A5U041133990W01

1. Disassemble in the order indicated in the table.
2. Assemble in the reverse order of disassembly.



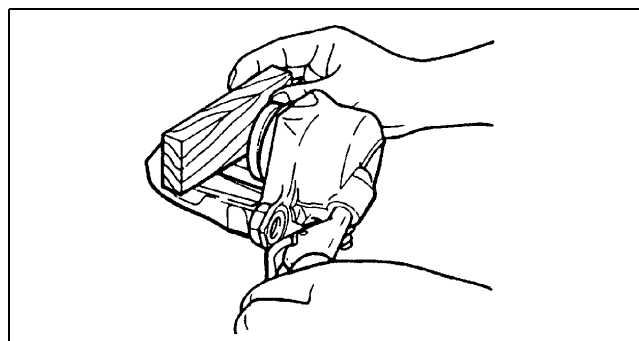
A5U0411W003

| | |
|---|--|
| 1 | Dust seal |
| 2 | Piston (See 04–11–19 Piston Disassembly Note) |

| | |
|---|--|
| 3 | Piston seal (See 04–11–19 Piston Seal Disassembly Note) |
| 4 | Bleeder screw and bleeder cap |
| 5 | Caliper body |

Piston Disassembly Note

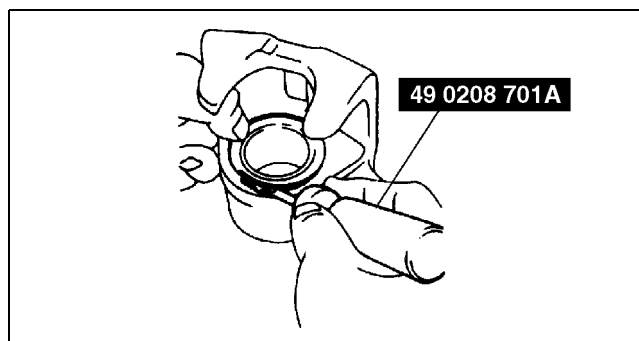
1. Place a piece of wood in the caliper.
2. Gently blow compressed air through the hole to force the piston out of the caliper.



U5U41135

Piston Seal Disassembly Note

1. Remove the piston seal using the SST.



Z5U0411W137

04–11

CONVENTIONAL BRAKE SYSTEM

REAR BRAKE (DISC) INSPECTION

A5U041126980W01

Brake Judder Repair Hint

(See 04-11-13 Brake Judder Repair Hint.)

Disc Pad Thickness Inspection

1. On level ground, jack up the rear of the vehicle and support it with safety stands.
2. Remove the wheels.
3. Look through the caliper inspection hole and verify the remaining thickness of the pad.

Thickness

2.0 mm {0.08 in} min.

Disc Plate Thickness Inspection

1. Measure the thickness of the disc plate.
 - If the thickness is not within the specification, replace the disc plate.

Caution

- When it is necessary to machine the disc plate, if the disc plate is removed from the vehicle then machined, excessive runout may result. Machine the disc plate with it installed on the vehicle.

Minimum thickness:

8.0 mm {0.31 in}

Minimum thickness after machining by using a brake lathe on-vehicle:

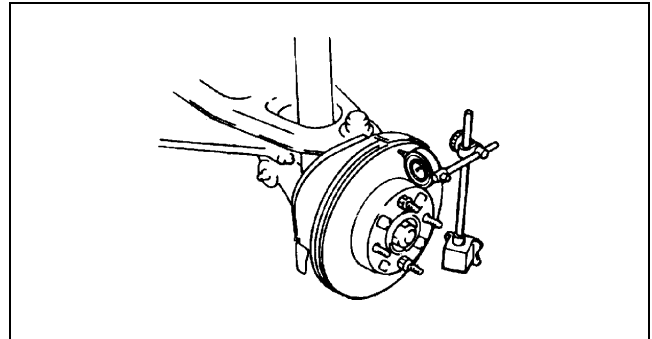
8.4 mm {0.33 in}

Disc Plate Runout Inspection

1. Tighten the disc plate to the wheel hub using two wheel nuts. When measuring runout, measure at the outer edge of the disc plate surface.

Runout limit

0.05 mm {0.002 in} max.



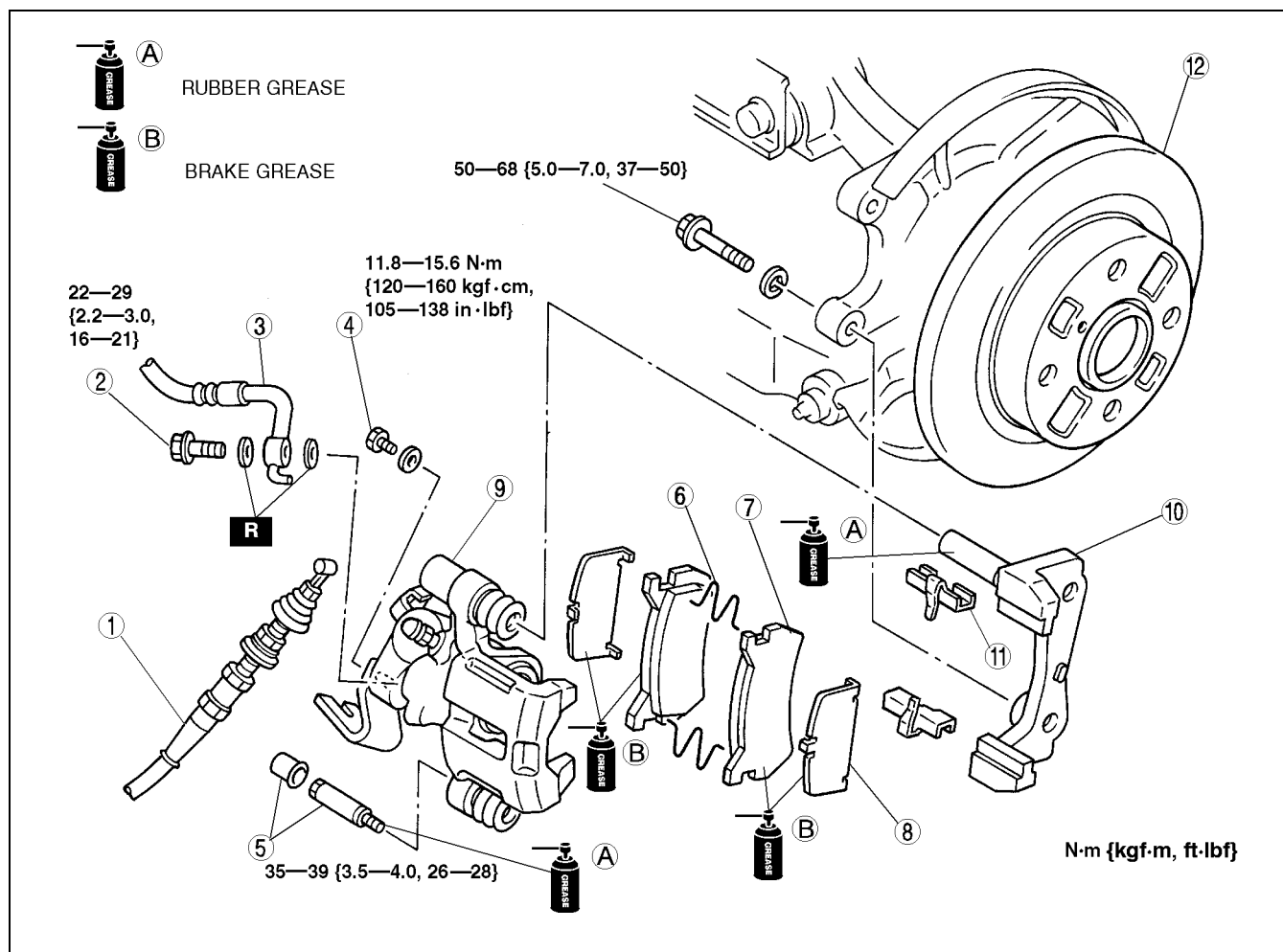
U5U41137

CONVENTIONAL BRAKE SYSTEM

REAR BRAKE (DISC) REMOVAL/INSTALLATION

A5U041126980W02

1. Remove in the order indicated in the table.
2. Install in the reverse order of removal.



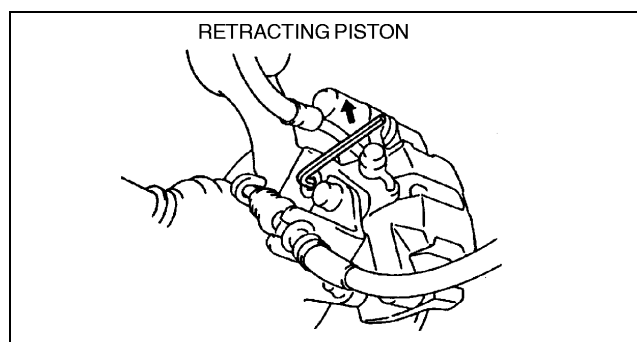
A5U0411W004

| | |
|---|---|
| 1 | Parking brake cable |
| 2 | Connecting bolt |
| 3 | Brake hose |
| 4 | Plug |
| 5 | Cap and lock bolt |
| 6 | Spring (Disk plate outer diameter 251 mm {9.88 in}) |
| 7 | Disc pad (See 04-11-21 Disc Pad Installation Note) |

| | |
|----|---|
| 8 | Shim |
| 9 | Caliper |
| 10 | Mounting support |
| 11 | Guide plate |
| 12 | Disc plate (See 04-11-17 Disc Plate Removal Note) (See 04-11-17 Disc Plate Installation Note) |

Disc Pad Installation Note

1. Turn the manual adjustment gear counterclockwise using an Allen wrench to pull the brake caliper piston back.
2. Install the disc pads.
3. Turn the manual adjustment gear clockwise until the brake pads just touch the disc plate.

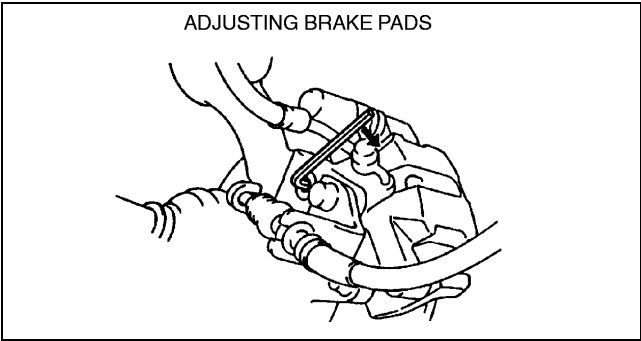


U5U41139

04-11

CONVENTIONAL BRAKE SYSTEM

4. Return the manual adjustment gear counterclockwise 1/3 turn.

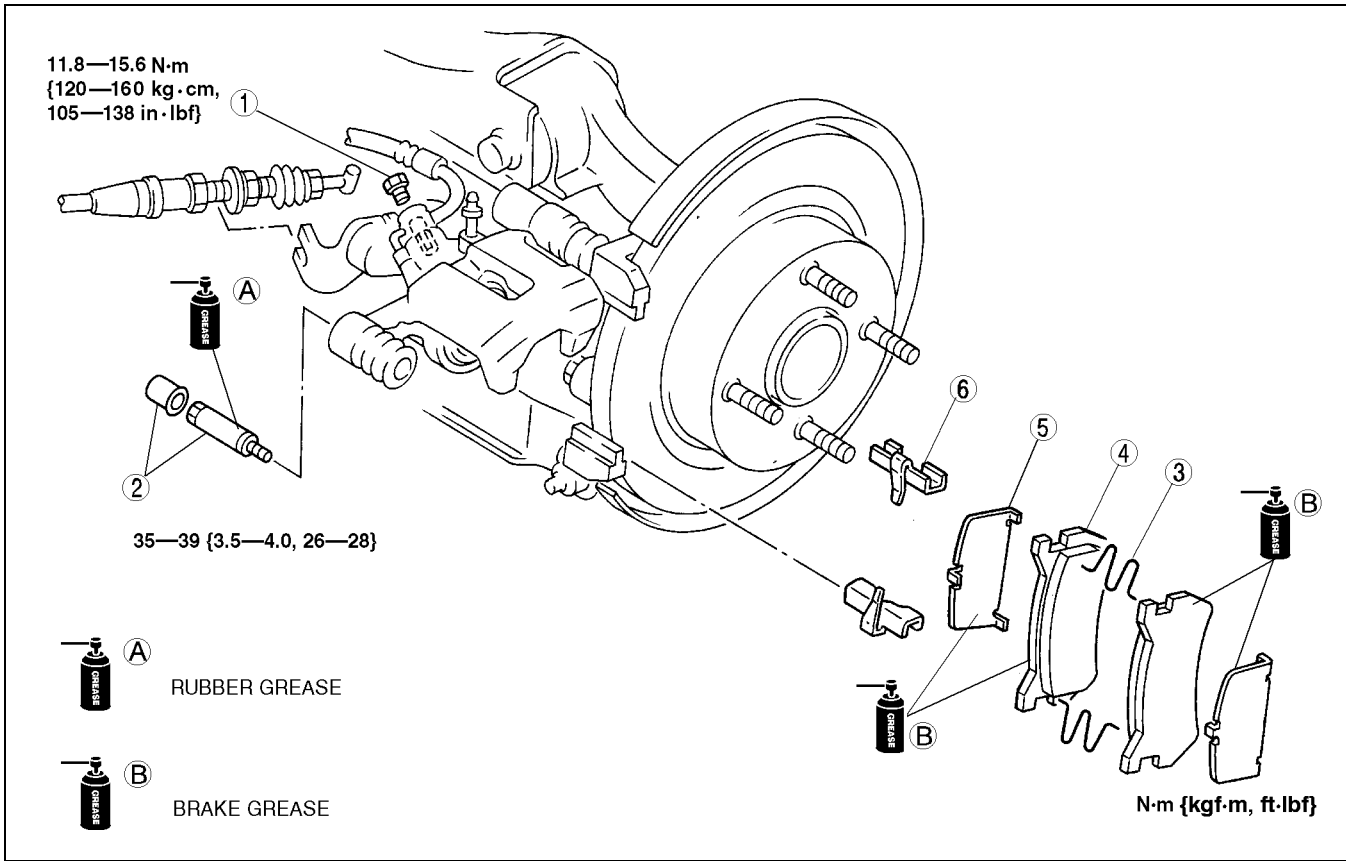


U5U41140

DISC PAD (REAR) REPLACEMENT

A5U041126630W01

1. Remove in the order indicated in the table.
2. Install in the reverse order of removal.



A5U0411W005

| | |
|---|---|
| 1 | Plug |
| 2 | Cap and lock bolt |
| 3 | Spring (Disk plate diameter 251 mm {9.88 in}) |

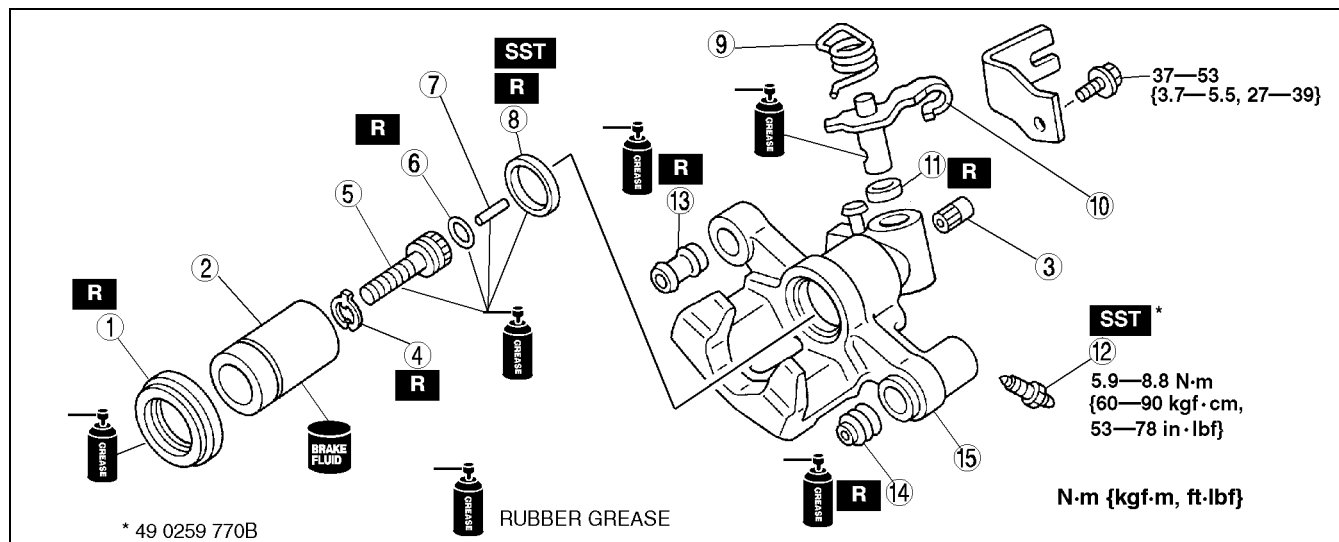
| | |
|---|---|
| 4 | Disc pad (See 04-11-21 Disc Pad Installation Note) |
| 5 | Shim |
| 6 | Guide plate |

CONVENTIONAL BRAKE SYSTEM

CALIPER (REAR) DISASSEMBLY/ASSEMBLY

A5U041126990W01

1. Disassemble in the order indicated in the table.
2. Assemble in the reverse order of disassembly.



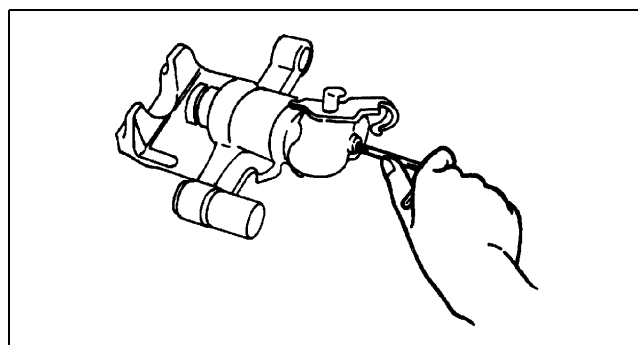
A5U0411W006

| | |
|---|---|
| 1 | Dust seal |
| 2 | Piston (See 04-11-23 Piston Disassembly Note) (See 04-11-23 Piston Assembly Note) |
| 3 | Manual adjustment gear |
| 4 | Snap ring |
| 5 | Adjusting bolt |
| 6 | O-ring |
| 7 | Connecting link |

| | |
|----|--|
| 8 | Piston seal (See 04-11-19 Piston Seal Disassembly Note) |
| 9 | Spring |
| 10 | Operating lever |
| 11 | Boot |
| 12 | Bleeder screw |
| 13 | Boot |
| 14 | Boot |
| 15 | Caliper body |

Piston Disassembly Note

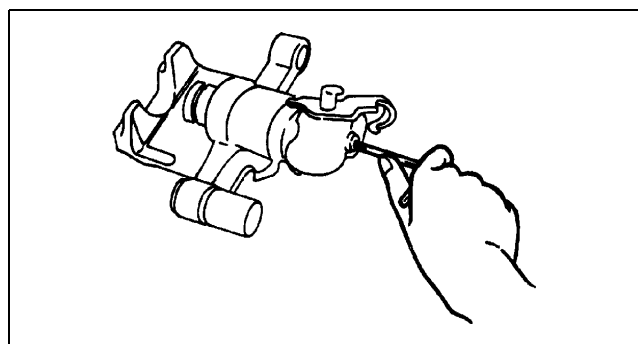
1. Turn the manual adjustment gear clockwise using an Allen wrench. (Turn the manual adjustment gear until it turns easily.)
2. Remove the piston.



U5U41143

Piston Assembly Note

1. Insert the piston into the caliper and turn the adjustment gear counterclockwise using an Allen wrench to pull the piston in fully. (Turn the adjustment gear until it stops.)



U5U41144

04-11