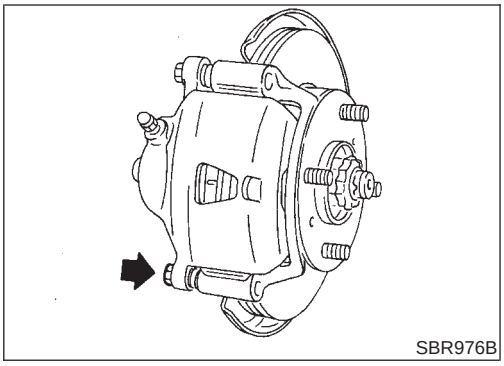
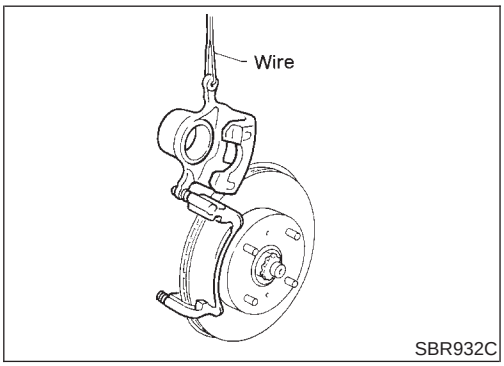

SBR976B

1. Remove master cylinder reservoir cap.
2. Remove pin bolt.
3. Open cylinder body upward. Then remove pad with retainers, inner and outer shims.

Standard pad thickness:
11 mm (0.43 in)
Pad wear limit:
2.0 mm (0.079 in)

Carefully monitor brake fluid level because brake fluid will return to reservoir when pushing back piston.



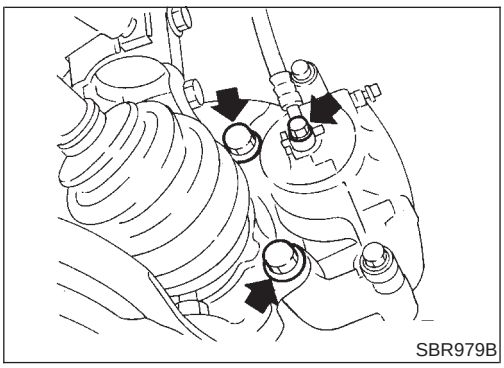
SBR932C

Removal

NJBR0031

WARNING:
Clean brake pads with a vacuum dust collector to minimize the hazard of airborne particles or other materials.

Remove torque member fixing bolts and connecting bolt.
It is not necessary to remove connecting bolt except for disassembly or replacement of caliper assembly. In this case, suspend caliper assembly with wire so as not to stretch brake hose.

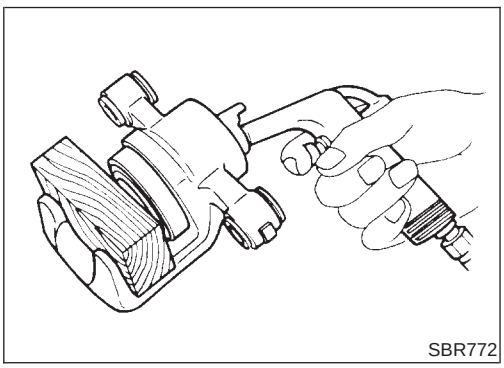

SBR979B

Disassembly

NJBR0032

WARNING:
Do not place your fingers in front of piston.
CAUTION:
Do not scratch or score cylinder wall.

1. Push out piston with piston boot with compressed air.
2. Remove piston seal with a suitable tool.


SBR772

Inspection

NJBR0033

CALIPER

NJBR0033S01

Cylinder Body

NJBR0033S0101

- Check inside surface of cylinder for score, rust, wear, damage or presence of foreign materials. If any of the above conditions are observed, replace cylinder body.
- Minor damage from rust or foreign materials may be eliminated by polishing surface with a fine emery paper. Replace cylinder body if necessary.

CAUTION:
Use brake fluid to clean. Never use mineral oil.

Piston

NJBR0033S0102

CAUTION:
Piston sliding surface is plated. Do not polish with emery paper even if rust or foreign materials are stuck to sliding surface.

Check piston for score, rust, wear, damage or presence of foreign materials. Replace if any of the above conditions are observed.

Slide Pin, Pin Bolt and Pin Boot

NJBR0033S0103

Check for wear, cracks or other damage. Replace if any of the above conditions are observed.

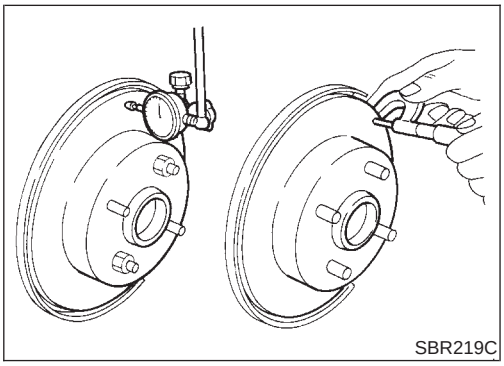
ROTOR

NJBR0033S02

Rubbing Surface

NJBR0033S0201

Check rotor for roughness, cracks or chips.


SBR219C

Runout

NJBR0033S0202

1. Secure rotor to wheel hub with at least two nuts (M12 x 1.25).
2. Check runout using a dial indicator.
   Make sure that wheel bearing axial end play is within the specifications before measuring. Refer to AX section ("Front Wheel Bearing", "ON-VEHICLE SERVICE").
   Maximum runout:
   0.07 mm (0.0028 in)
3. If the runout is out of specification, find minimum runout position as follows:

a. Remove nuts and rotor from wheel hub.
b. Shift the rotor one hole and secure rotor to wheel hub with nuts.
c. Measure runout.
d. Repeat steps a. to c. so that minimum runout position can be found.

4. If the runout is still out of specification, turn rotor with on-car brake lathe ("MAD, DL-8700", "AMMCO 700 and 705" or equivalent).

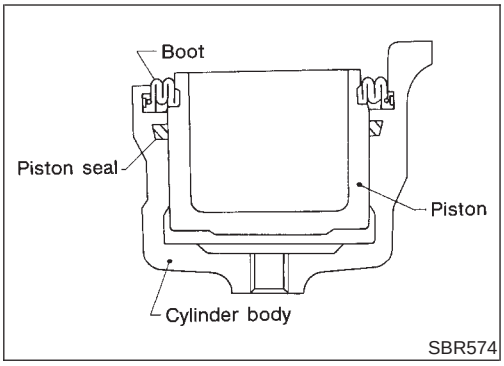
Thickness

NJBR0033S0203

Thickness variation (At least 8 positions):
Maximum 0.01 mm (0.0004 in)

If thickness variation exceeds the specification, turn rotor with on-car brake lathe.

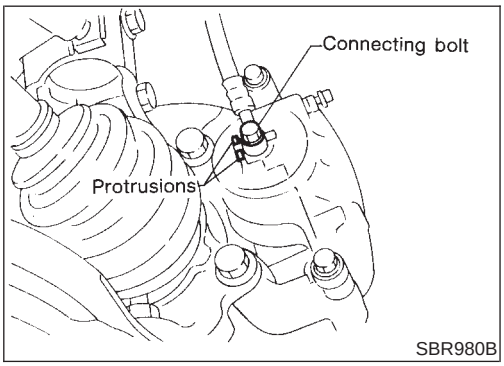
Rotor repair limit:
20.0 mm (0.787 in)



Assembly

NJBR0034

1. Insert piston seal into groove on cylinder body.
2. With piston boot fitted to piston, insert piston boot into groove on cylinder body and install piston.
3. Properly secure piston boot.



Installation

NJBR0035

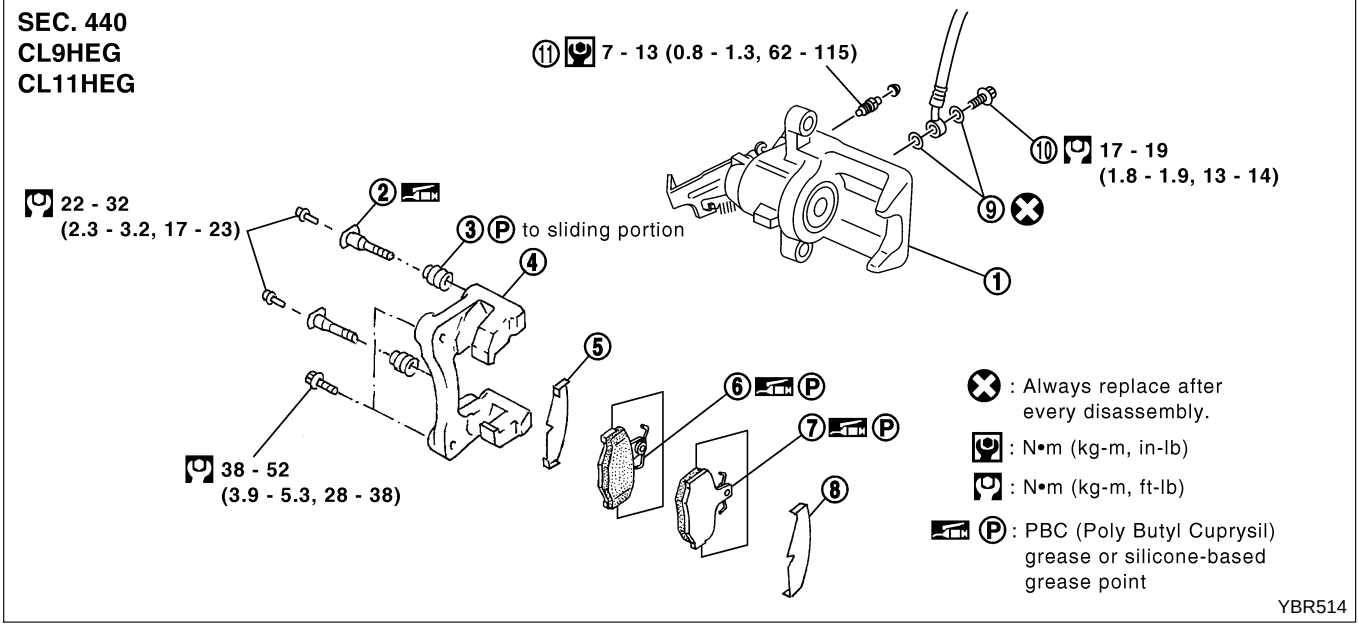
CAUTION:

- **Refill with new brake fluid “DOT 4”.**
- **Never reuse drained brake fluid.**

1. Install brake hose to caliper securely.
2. Install all parts and secure all bolts.
3. Bleed air. Refer to “Bleeding Brake System”, BR-11.

Component

NJBR0141



1. Cylinder body
2. Pin
3. Pin boot
4. Torque member
5. Inner shim
6. Inner pad
7. Outer pad
8. Outer shim
9. Copper washer
10. Connecting bolt
11. Bleed valve

NOTE:
The cylinder body cannot be disassembled.

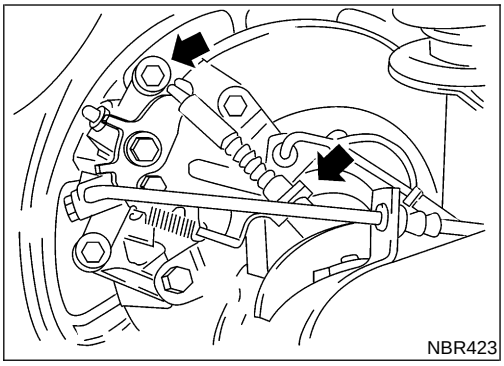
Pad Replacement

NJBR0142

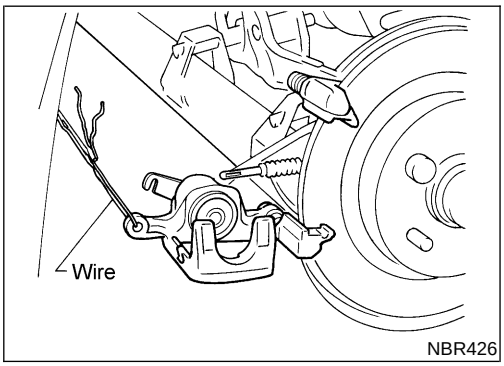
WARNING:
Clean brake pads with a vacuum dust collector to minimize the hazard of airborne particles or other materials.

CAUTION:

- **When cylinder body is open, do not depress brake pedal because piston will pop out.**
- **Be careful not to damage piston boot or get oil on rotor. Always replace shims in replacing pads.**
- **If shims are rusted or show peeling of rubber coat, replace them with new shims.**
- **It is not necessary to remove connecting bolt except for replacement of caliper assembly. In this case, suspend cylinder body with wire so as not to stretch brake hose.**
- **Burnish the brake contact surfaces after refinishing or replacing rotors, after replacing pads, or if a soft pedal occurs at very low mileage.**
  Refer to “Brake Burnishing Procedure”, “ON-VEHICLE SERVICE”, BR-10.


NBR423

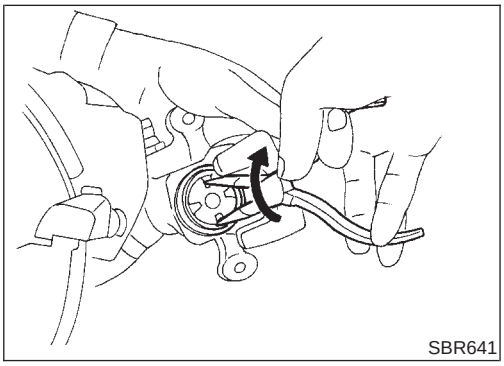
1. Remove master cylinder reservoir cap.
2. Remove brake cable lock spring.
3. Release parking brake control lever, then disconnect cable from the caliper.
4. Remove upper pin bolt.



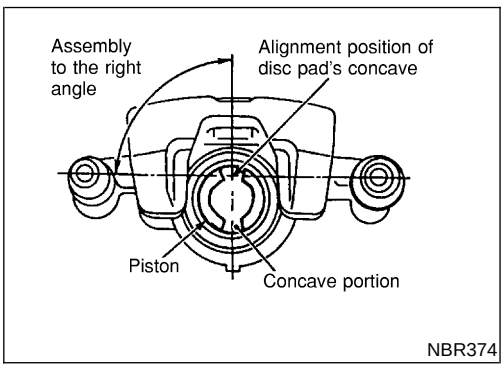
NBR426

5. Open cylinder body downward. Then remove pads inner and outer shims.

Standard pad thickness:
9.3 mm (0.366 in)
Pad wear limit:
2.0 mm (0.079 in)

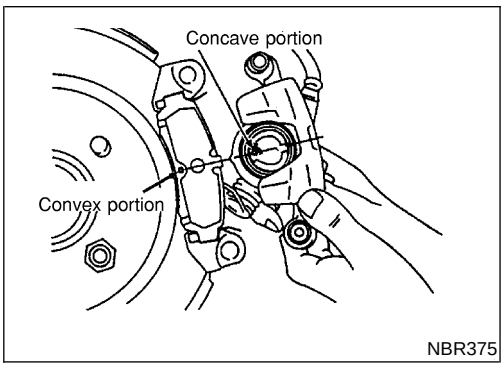

SBR641

6. When installing new pads, push piston into cylinder body by gently turning piston clockwise, as shown.
Carefully monitor brake fluid level because brake fluid will return to reservoir when pushing back piston.



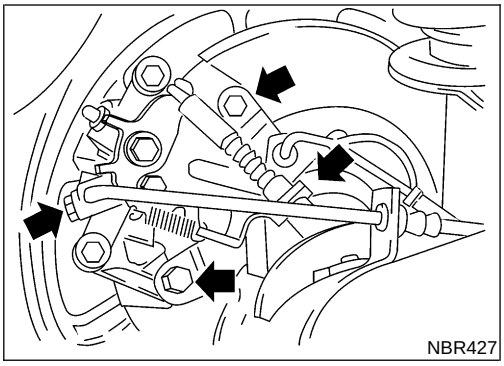
NBR374

7. Adjust the piston to the right angle as shown in the figure.



NBR375

8. As shown in the figure, align the piston's concave to the pad's convex, then install the cylinder body to the torque member.
9. Install brake cable, brake cable mounting bolt, lock spring and master cylinder reservoir cap.


NBR427

Removal

NJBR0143

WARNING:

Clean brake pads with a vacuum dust collector to minimize the hazard of airborne particles or other materials.

1. Remove brake cable lock spring.
2. Release parking brake control lever, then disconnect cable from the caliper.
3. Remove torque member fixing bolts and connecting bolt.
4. Remove brake hose connecting bolt.
5. Plug off the brake hose and cylinder body to prevent air entering the system.

CAUTION:

Care should be taken as not to let:

- **Air enter the cylinder body and brake hose.**
- **Brake fluid spill from the cylinder body and brake hose.**

Disassembly

NJBR0144

Remove pin bolts and pins.

NOTE:

Cylinder body can not be disassembled.

Inspection

NJBR0145

CALIPER

NJBR0145S01

CAUTION:

Do not drain any brake fluid from cylinder body. Cylinder body can not be disassembled.

Cylinder Body

NJBR0145S0101

Check cylinder body for score, rust, wear, damage or presence of foreign materials. If any of the above conditions are observed, replace cylinder body.

Torque Member

NJBR0145S0102

Check for wear, cracks or other damage. Replace if necessary.

Pin and Pin Boot

NJBR0145S0104

Check for wear, cracks or other damage.
Replace if any of the above conditions are observed.