

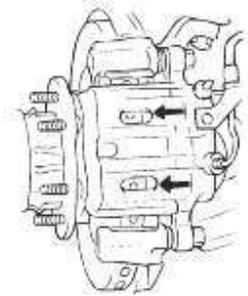
INSPECTION AND REPLACEMENT OF FRONT DISC BRAKE PAD

1. Check the brake pad thickness through the caliper body inspection hole.

Pad lining thickness

Standard value : 10.5 mm (0.413 in.)

Service limit : 2.0 mm (0.0787 in.)



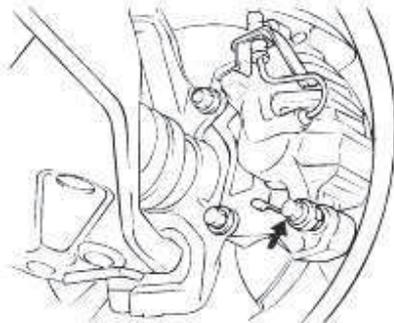
CAUTION

- a. If the pad lining thickness is out of specification, left and right pads must be replaced as a complete set.
- b. When the thickness difference between the left pad and right pad is large, check the sliding condition of the piston, the lock pin and the guide pin.

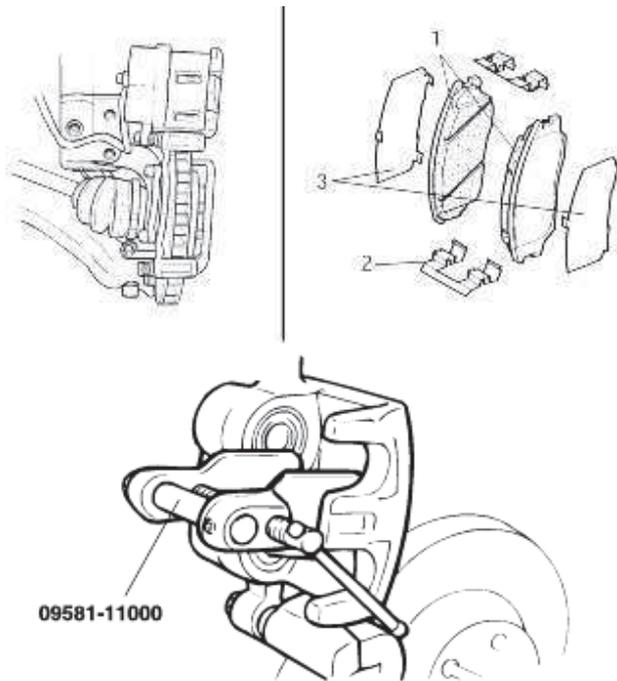
2. Remove the guide pin, lift the caliper assembly up and suspend it with a wire.

CAUTION

Be careful not to contaminate the lock pin and guide pin with grease.

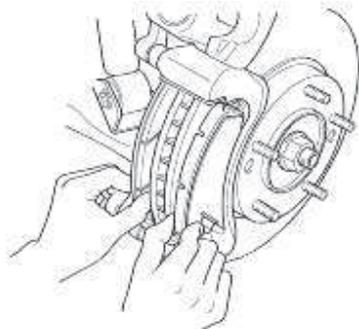


3. Remove the following parts from the caliper support.
 - a. Pad and wear sensor assembly
 - b. Pad spring
 - c. Outer shim



INSTALLATION

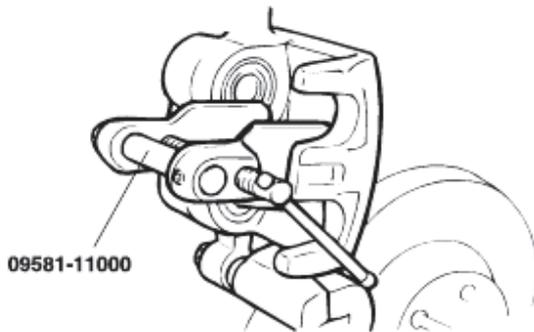
1. Install the pad clips.
2. Install the pads on each pad clip.



CAUTION

- a. All four pads must be replaced as a complete set.
- b. When replacing the brake pads, check for deformation. When replacing the guide spring, use a new one or thoroughly clean the used one.

3. Press-fit the piston with a hammer handle or the special tool (09581-11000).

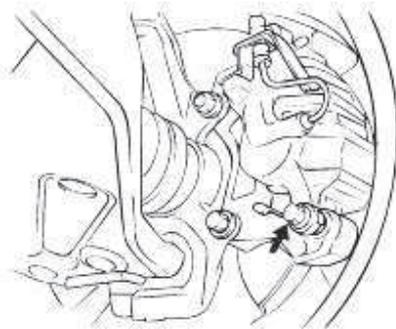


4. Lower and insert the brake cylinder carefully so as not to damage the boot.
5. Tighten the two guide rod bolts to the specified torque.

Tightening torque

Guide rod bolt :

22 - 32 Nm (220 - 320 kg·cm, 16 - 24 lb·ft)



DISASSEMBLY

Front disc brakes should be disassembled separately into the left and right as a set.

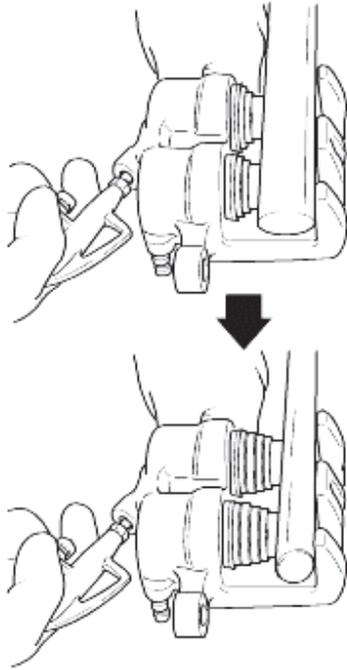
1. Remove the piston boot/piston.

Blow compressed air into the brake hose seating hole so as to remove the piston and the piston boot.

NOTE

When removing the piston, blow air slowly, adjusting the heights of the two pistons to push them out equally.

The secondary piston should not be removed before the primary piston is removed completely. Otherwise the secondary piston can't be removed.



2 Remove the piston seal.

- (1) Remove the piston seal with your finger.

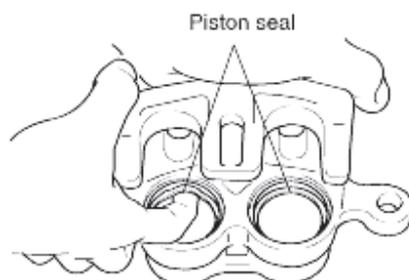
CAUTION

Do not use a screwdriver or another tool because it may damage the cylinder.

- (2) Clean the piston surface and inner cylinder using alcohol or the specified brake fluid.

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Brake fluid : DOT 3 or DOT 4



INSPECTION

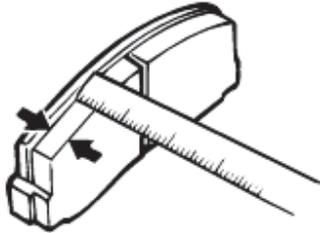
1. Check the cylinder for wear, damage and rust.
2. Check the piston surface for wear, damage and rust.
3. Check the caliper body and sleeve for wear.

4. Check that grease is applied, and the pad and backing metal are not damaged.
5. Check the pad wear. Measure the pad thickness and replace it if it is less than the specified value.

Pad thickness

Specification : 10.5 mm (0.413 in.)

Service limit : 2.5 mm (0.098 in.)



INSPECTION

FRONT BRAKE THICKNESS CHECK

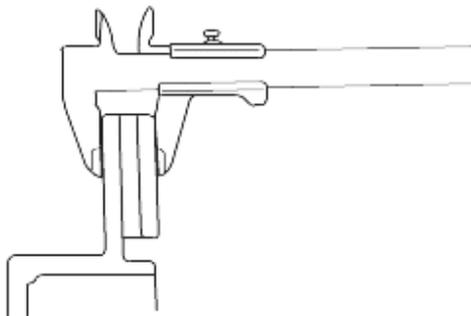
1. Remove all rust and contamination from the disc surface, and then measure the disc thickness at 4 positions at least.

Front brake disc thickness

Standard value : 28mm (1.10 in.)

Limit : 26mm (1.02 in.)

2. Thickness variation should not exceed 0.005mm (circumference) and 0.05mm (radius) at any directions.
3. If wear exceeds the limit, replace the discs and pad assembly for left and right of the vehicle.

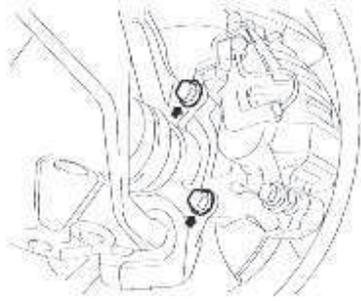


FRONT BRAKE DISC RUNOUT CHECK

1. Remove the caliper support, then raise the caliper assembly upward and suspend with a wire.

Tightening torque :

65-75 N·m (6.5-7.5 kg·m, 47-54 lb·ft)



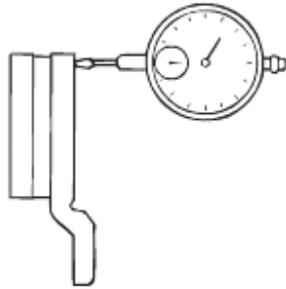
2. Place a dial gauge about 5mm (0.2 in.) from the outer circumference of the brake disc, and measure the runout of the disc.

Brake disc runout

Limit : 0.03mm (0.0012 in.) or less

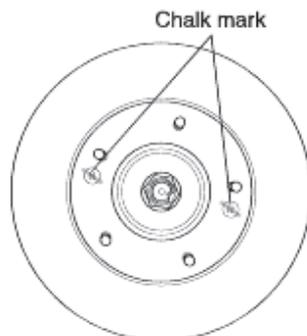
NOTICE

Fix the disc to the hub by tightening the nut.



FRONT BRAKE DISC RUN OUT CORRECTION

1. If the runout of the brake disc is equivalent to or exceeds the limit specification, replace the disc and hub, and then measure the runout again.
 - (1) Before removing the brake disc, chalk both sides of the screw on the side at which the runout is greatest.



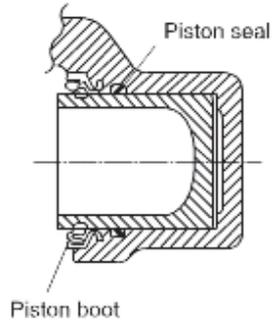
- (1) If it exceeds the limit, disassemble the hub knuckle and check each part.

(2) If the runout does not exceed the limit specification, install the brake disc after turning it 180° from the chalk mark, and then check the runout of the brake disc again.

2. If the runout cannot be corrected by changing the position of the brake disc, replace the brake disc.

REASSEMBLY

1. Clean all components with isopropyl alcohol except for the pad and shim.
2. Install the piston seal.
3. After applying the specified brake fluid to the piston outer surface, install the piston into the cylinder.
4. Install the piston boot.



5. Install the guide pin boots and guide pin.



Adjustment

1. Install the pads and brake cylinder.
2. Install the brake hose to the caliper.

Tightening torque
17-20 Nm (170-200 kg·cm, 12-14 lb-ft)

3. Fill the brake reservoir with brake fluid.
4. Bleed the system.

