



SERVICE INFORMATION	15-1	BRAKE MASTER CYLINDER	15-4
TROUBLESHOOTING	15-1	BRAKE CALIPER	15-6
BRAKE PADS/DISC PLATE	15-2		

SERVICE INFORMATION

- SPECIAL TOOL

SNAP RING PLIERS 07914-3230001

- SPECIFICATIONS

	STANDARDS	SERVICE LIMIT
Disc thickness	6.8 – 7.2 mm (0.27 – 0.28 in.)	6.0 mm (0.24 in.)
Disc runout	—	0.3 mm (0.012 in.)
Master cylinder I.D.	14.000 – 14.043 mm (0.5512 – 0.5529 in.)	14.055 mm (0.5533 in.)
Master piston O.D.	13.957 – 13.984 mm (0.5495 – 0.5506 in.)	13.940 mm (0.5488 in.)
Caliper piston O.D.	42.772 – 42.822 mm (1.6839 – 1.6859 in.)	42.765 mm (1.6837 in.)
Caliper cylinder I.D.	42.850 – 42.900 mm (1.6870 – 1.6890 in.)	42.915 mm (1.6896 in.)

TROUBLESHOOTING

Poor Brake Performance

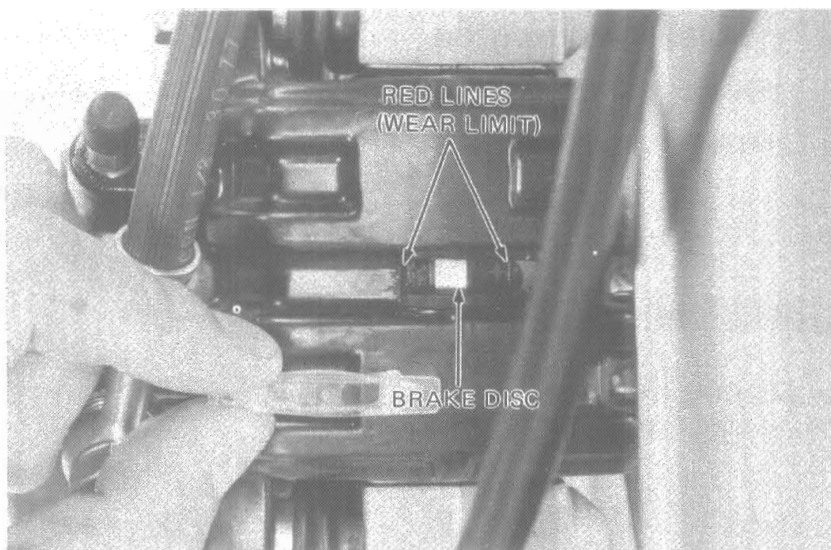
1. Air bubbles in hydraulic system
2. Worn brake pads
3. Pads fouled or glazed
4. Hydraulic system leaking



BRAKE PADS/DISC PLATE

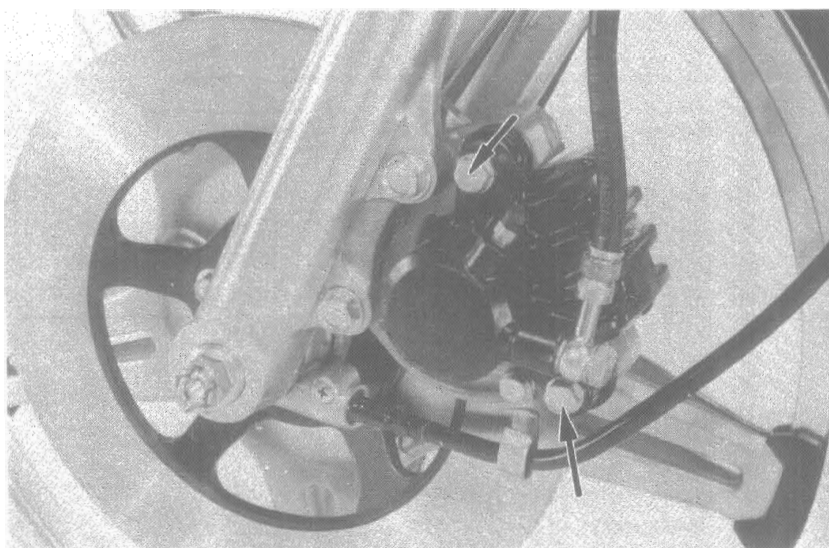
• BRAKE PAD WEAR CHECK

The front brake pads require replacement if the red line on the top of the pads reaches the edges of the brake disc.



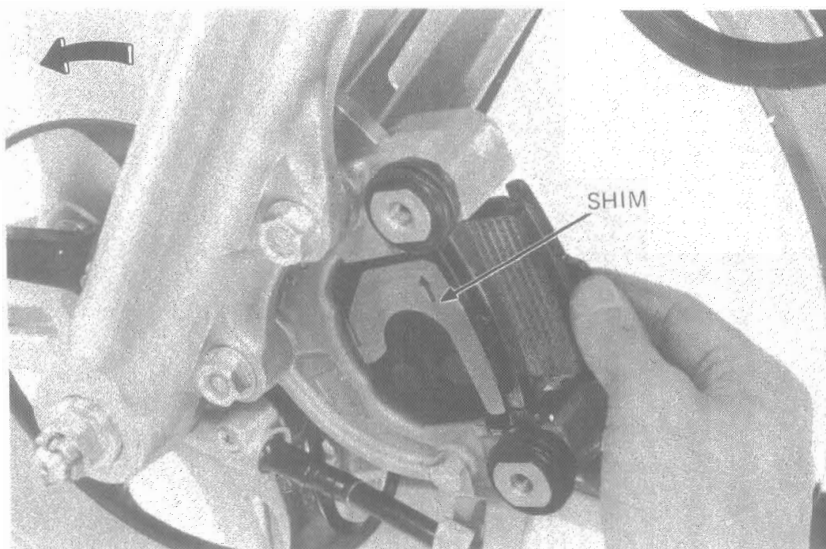
• BRAKE PAD REPLACEMENT

Remove the two brake caliper bolts and remove the caliper.



NOTE

Always replace the brake pads in pairs to assure even disc pressure.
Install the shim on the piston side pad with the arrow "↑" in the normal direction of disc rotation.





Push the piston all the way in to allow installation of new brake pads.

NOTE

Check the brake fluid level in the brake master cylinder reservoir as such operation causes the level to rise.

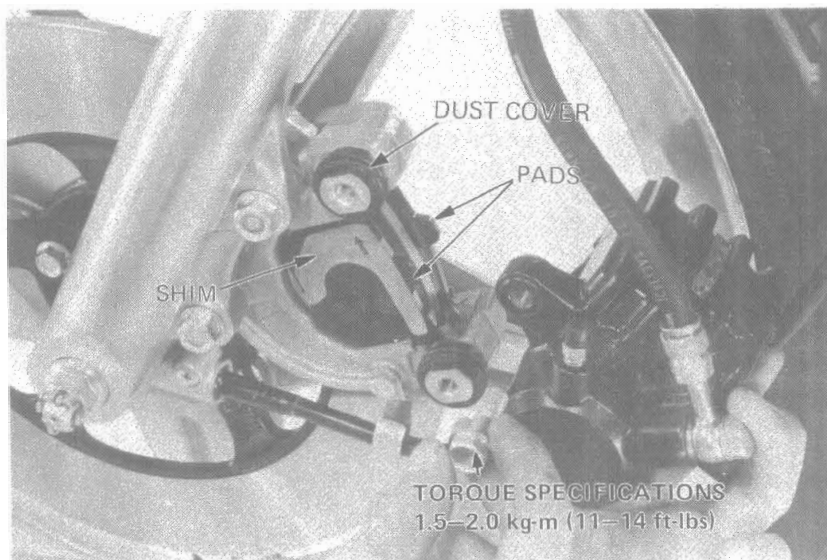
Inspect the piston boot for damage or brittleness.



Insert the pin through the caliper bracket with the chamfered end facing as shown. Inspect the condition of the dust covers. Reinstall the brake caliper.

NOTE

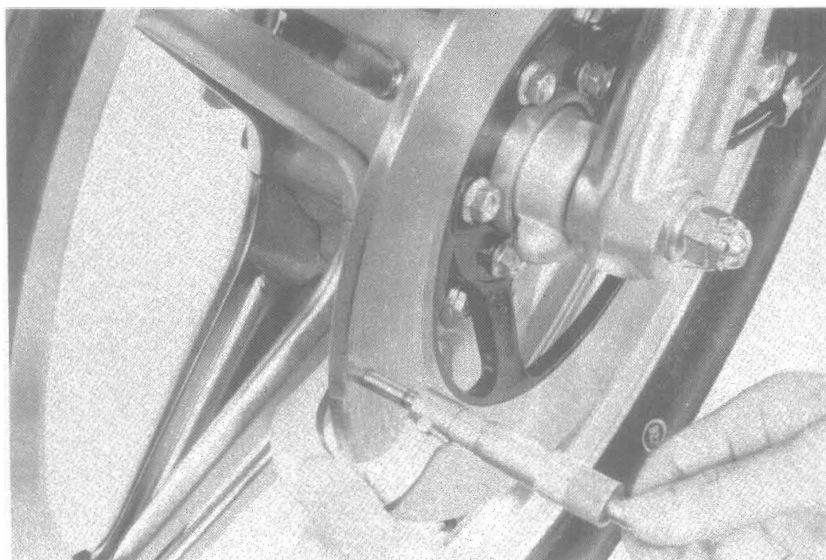
Tighten the bolts, noting the mating faces of the caliper and pin.



• BRAKE DISC THICKNESS

Measure the brake disc thickness.

SERVICE LIMIT: 6.0 mm (0.24 in.)

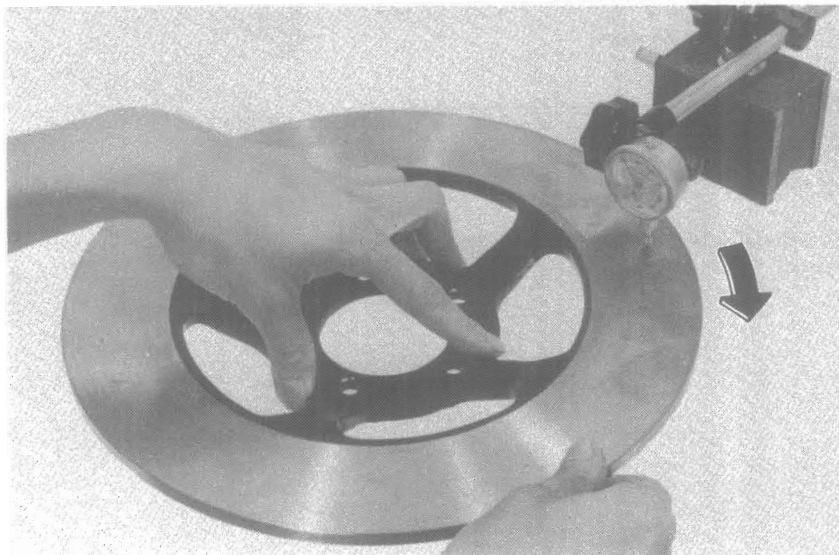




- **BRAKE DISC WARPAGE**

Measure the brake disc warpage.

SERVICE LIMIT: 0.3mm (0.012 in.)



BRAKE MASTER CYLINDER

- **MASTER CYLINDER DISASSEMBLY**

Drain brake fluid from the hydraulic system.

Remove the brake lever from the master cylinder.

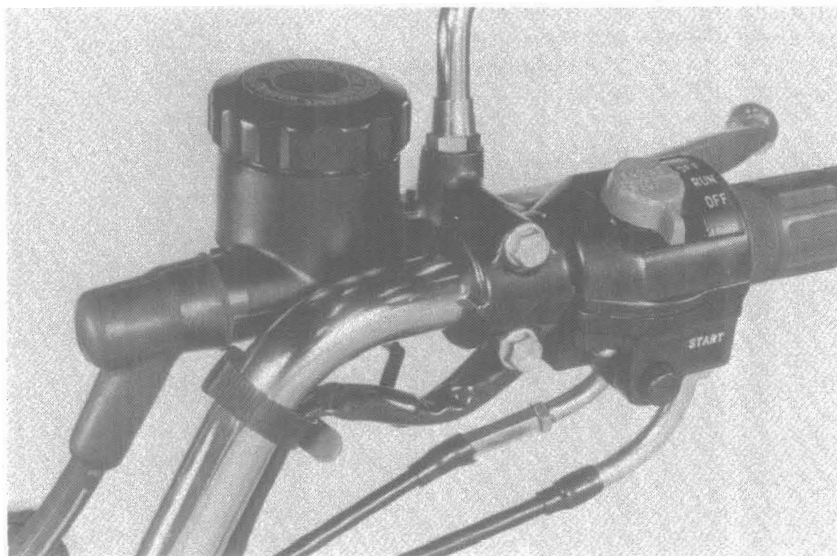
Disconnect the brake hose.

CAUTION

Avoid spilling brake fluid on painted surfaces.

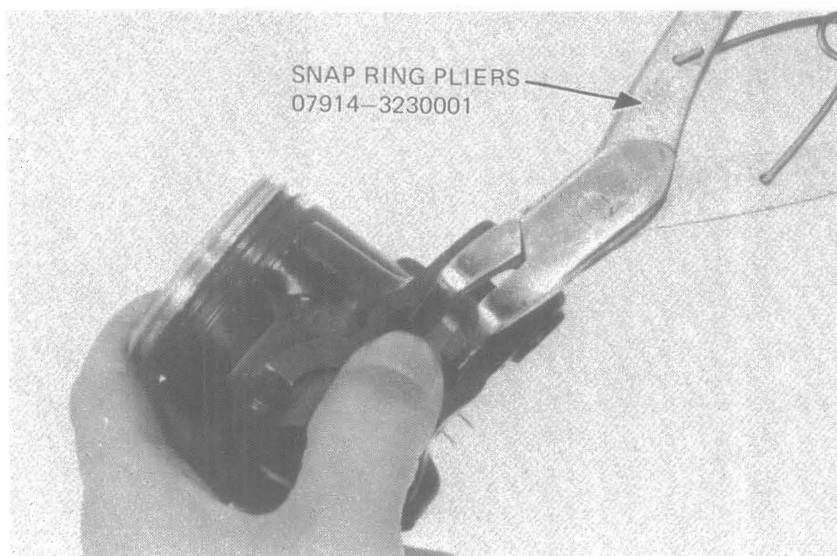
Place a rag over the fuel tank and instrument whenever the brake system is serviced.

Remove the master cylinder.



Remove the snap ring.

Clean the interior of the master cylinder and reservoir with brake fluid.



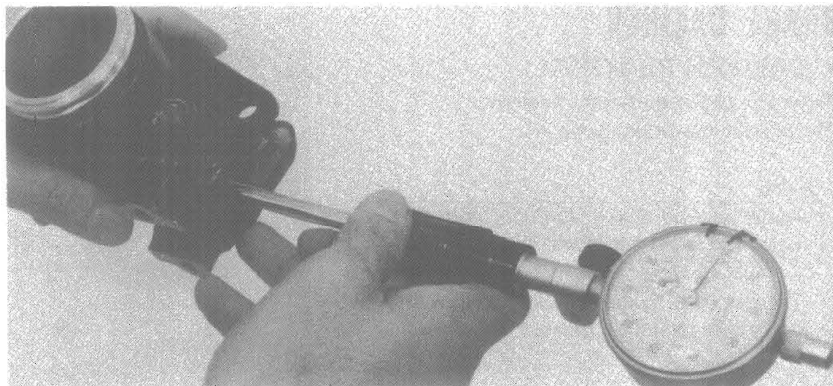


• MASTER CYLINDER I.D. INSPECTION

Measure the master piston bore I.D.

SERVICE LIMIT: 14.055 mm (0.5533 in.)

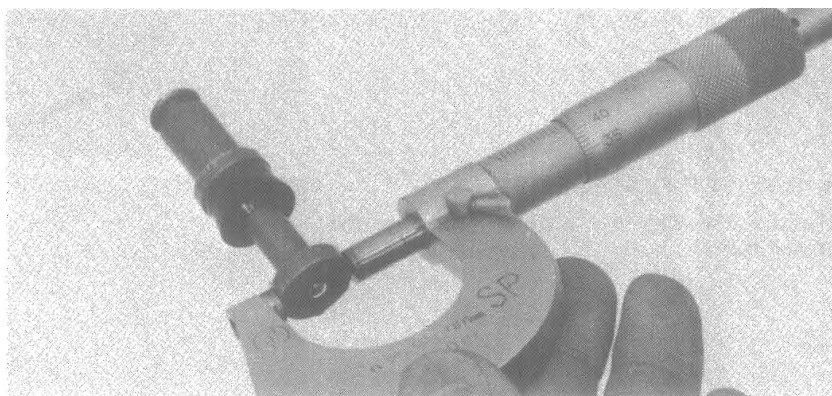
Check for scores, scratches, nicks or other damage.



• MASTER PISTON O.D. INSPECTION

Measure the master piston O.D.

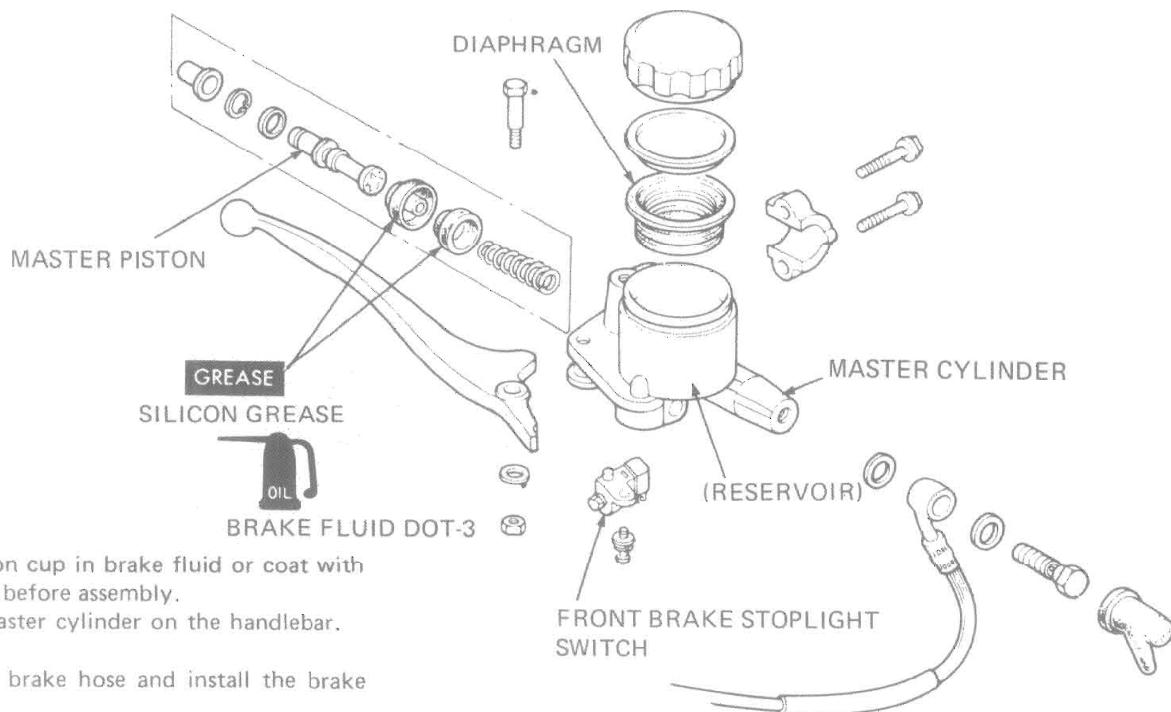
SERVICE LIMIT: 13.940 mm (0.5488 in.)



• MASTER CYLINDER ASSEMBLY

CAUTION

Replace the master cylinder piston, cylinder and spring as a set.



Dip the piston cup in brake fluid or coat with silicon grease before assembly.

Install the master cylinder on the handlebar. (Page 13-4).

Connect the brake hose and install the brake lever.

Bleed the front brake system. (Page 3-10)



BRAKE CALIPER

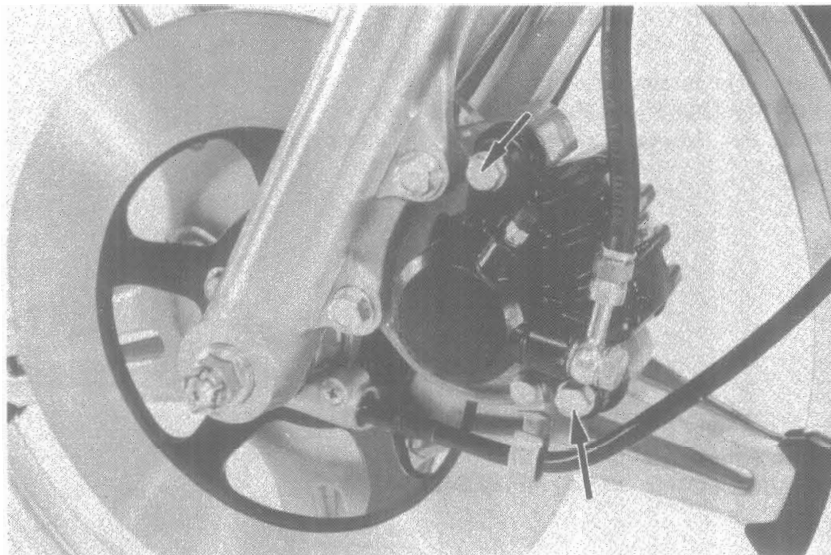
• CALIPER REMOVAL

Drain the brake hydraulic system.
Disconnect the brake hose.

NOTE

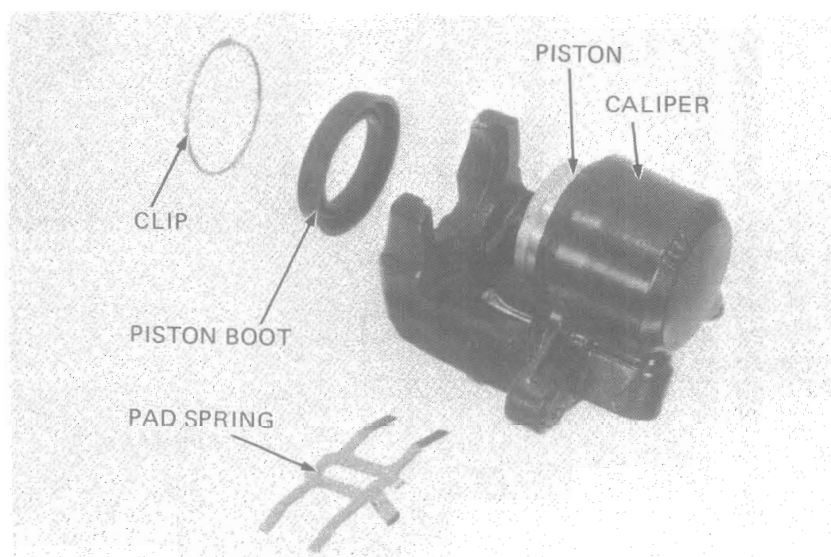
Avoid spilling brake fluid on painted surfaces, the front forks and disc plate.

To remove the brake caliper, loosen the two brake caliper attaching bolts.



• CALIPER DISASSEMBLY

Remove the clip and piston boot from the caliper piston.

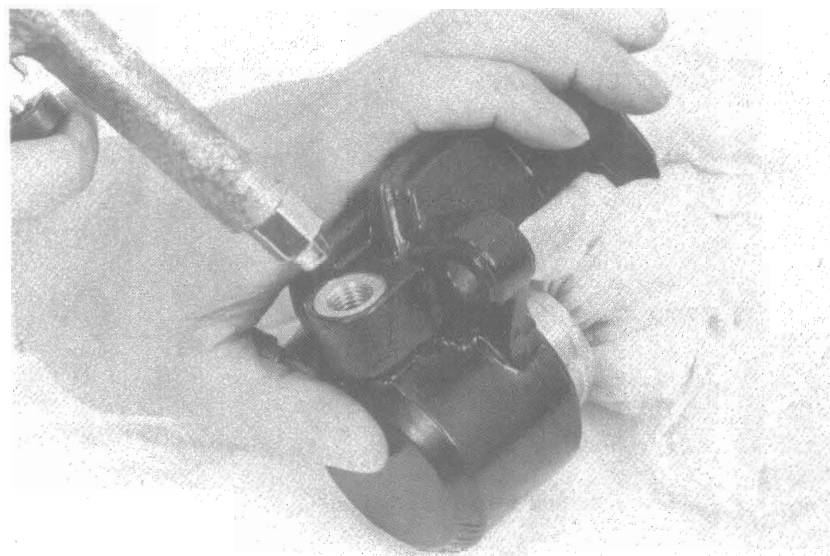


Place a shop towel or rag over the piston to prevent the piston from coming out, and position the caliper with the piston down.

Apply a small amount of air pressure to the fluid inlet.

WARNING

Do not use high pressure air or bring the nozzle too close to the inlet.





Lift out the oil seal by pushing it into the cylinder as shown.

Clean the caliper grooves with brake fluid.

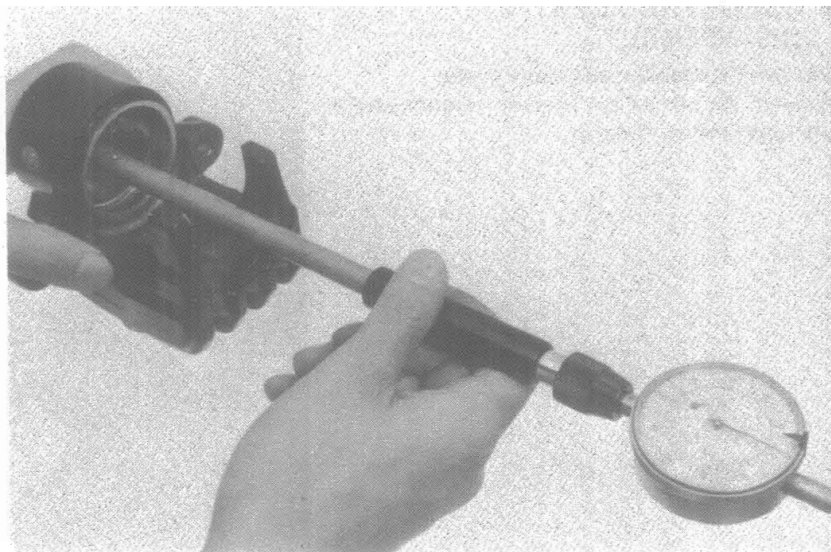
Replace the oil seal whenever the caliper is disassembled.



• CALIPER CYLINDER I.D. INSPECTION

Check the caliper cylinder for scoring, scratches or other damage. Measure the caliper cylinder bore I.D..

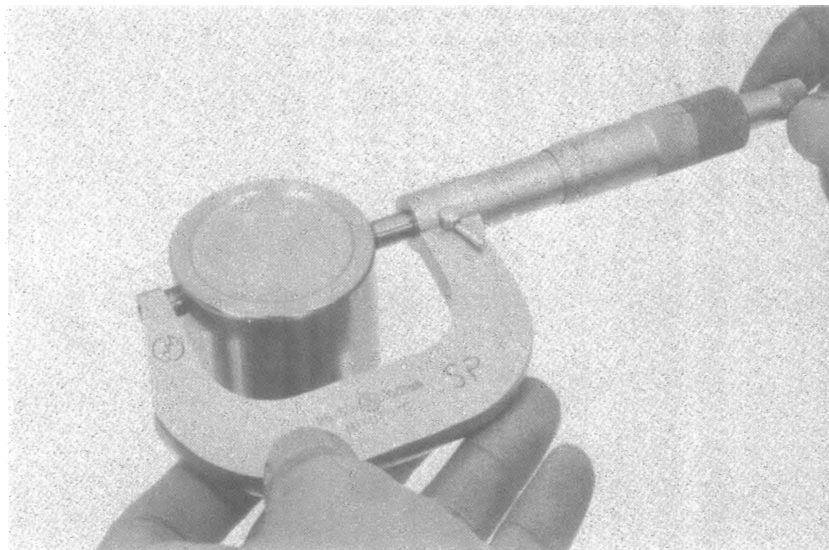
SERVICE LIMIT: 42.915 mm (1.6896 in.)



• CALIPER PISTON O.D. INSPECTION

Check the piston for scoring, scratches or other damage. Measure the caliper piston diameter.

SERVICE LIMIT: 42.765 mm (1.6837 in.)



**• BRAKE CALIPER ASSEMBLY**

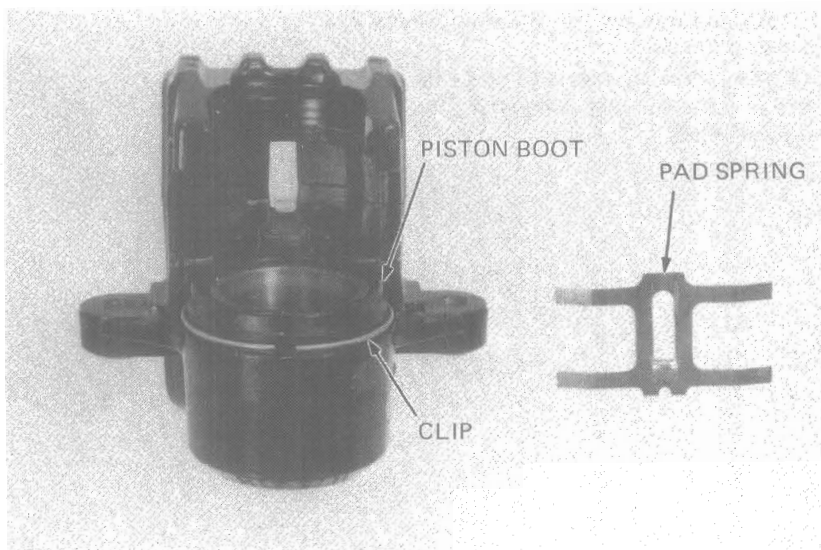
Wash the parts with brake fluid. Coat the O-rings with silicon grease or brake fluid and install the piston with the dished end facing the brake pad.

Install the piston boot and clip on the piston.

NOTE

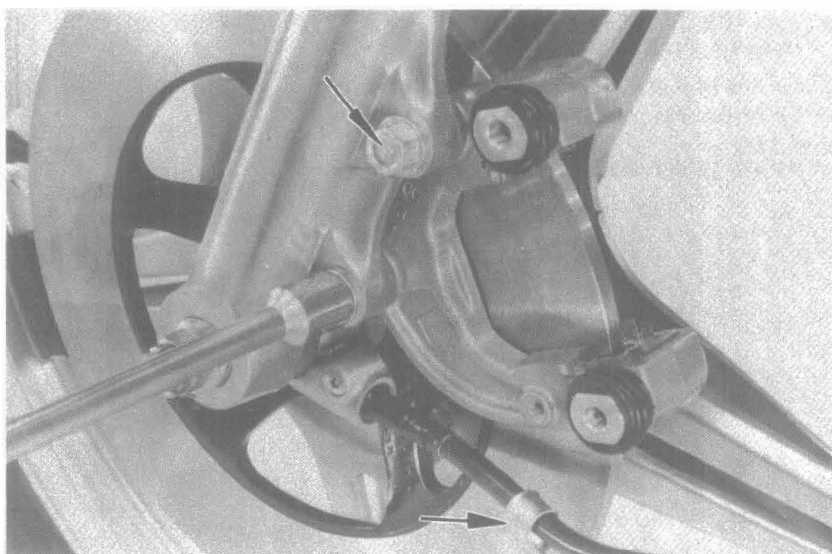
Make sure that the clip is installed securely.

Install the pad spring as indicated.

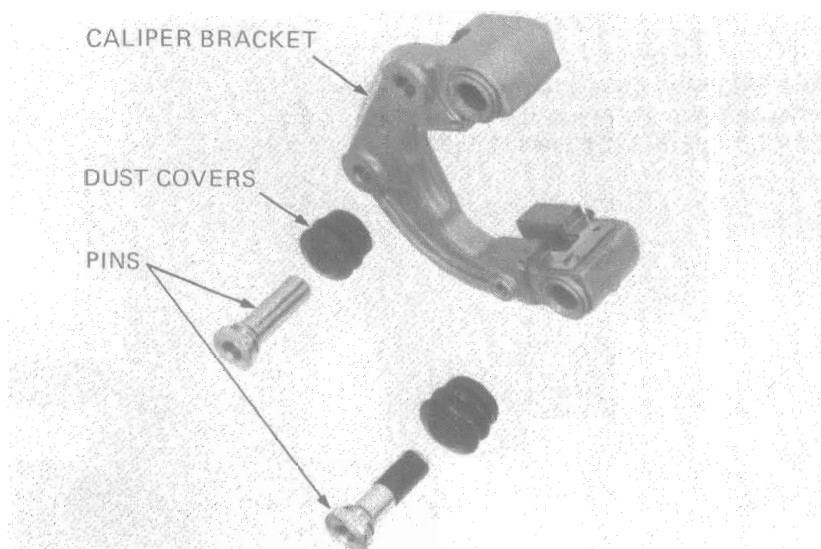
**• CALIPER BRACKET DISASSEMBLY**

Remove the speedometer cable clamp.

Remove the two caliper bracket mounting bolts and brake caliper bracket.



Remove the pins and dust covers from the caliper bracket. Make sure they are in good condition.





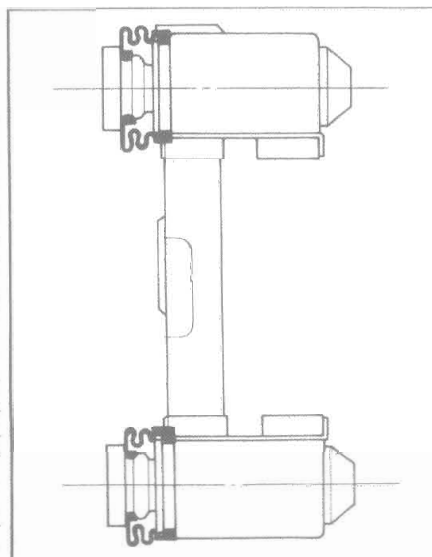
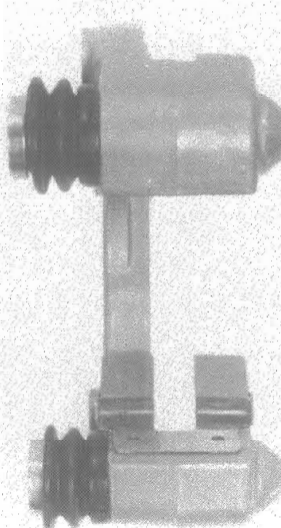
• CALIPER BRACKET ASSEMBLY

Wash all the removed parts. Coat the pins with silicon grease or brake fluid.

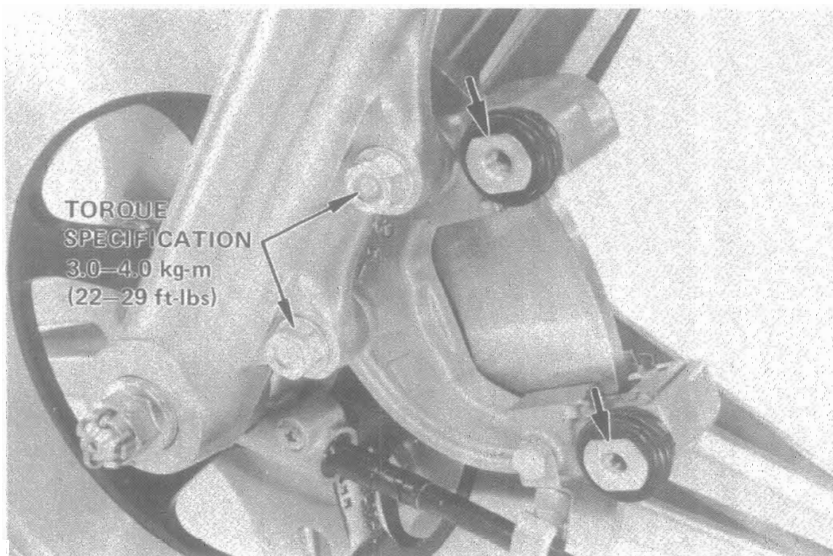
Put the dust covers over the pins and install the pins in the caliper bracket.

NOTE

Make sure the dust covers are seated properly.



Install the caliper bracket on the front fork. Position the pins with the flats positioned as shown.



• BRAKE CALIPER INSTALLATION

Connect the brake hose to the brake caliper and install the bleeder screw.

Install the brake caliper.

NOTE

Tighten the shafts carefully, aligning the mating faces of the calipers.

Bleed the brake system (Page 3-10).

