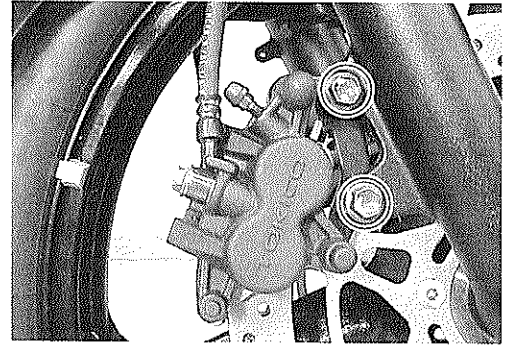


BRAKE PAD REPLACEMENT

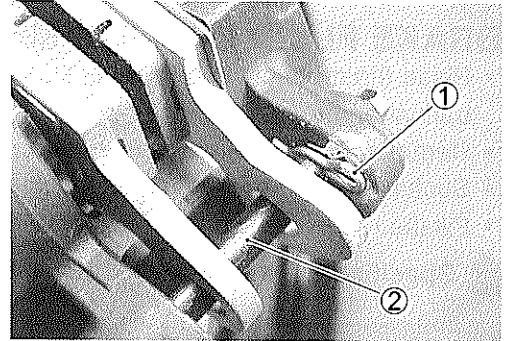
- Remove the caliper.

CAUTION

Do not operate the brake lever while removing the caliper.



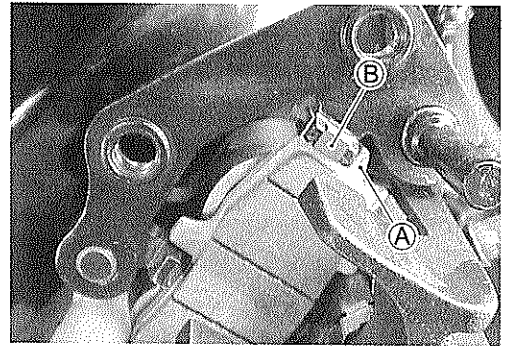
- Remove the pin ①.
- Remove the brake pads by removing the pad mounting pin ②.
- Clean up the caliper especially around the caliper pistons.



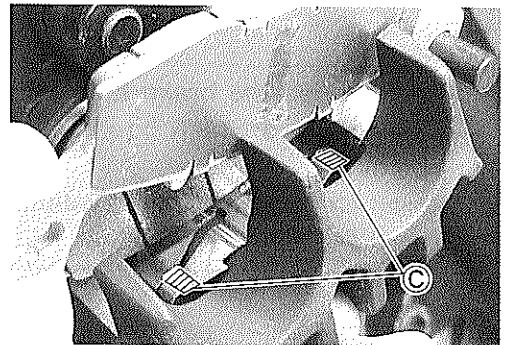
- Install the outer pad with the detent ① of pad fitted to the detent ② on the caliper holder.

CAUTION

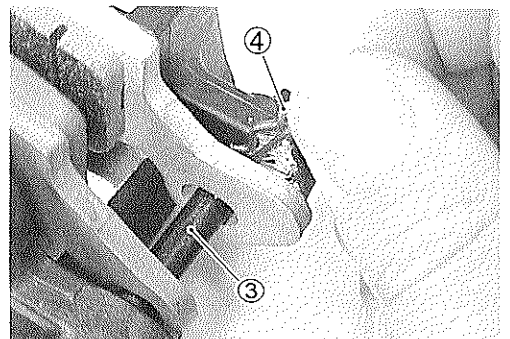
Replace the brake pads as a set, otherwise braking performance will be adversely affected.



- Install the inner pad so that the inner pad will be seated on the hatched part ③.



- Install the pad mounting pin ④.
- Install the pin ④ securely.

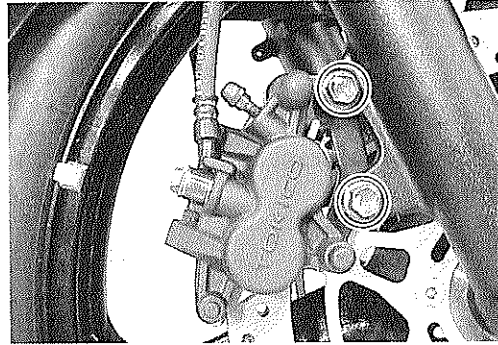


- Remount the caliper.
- Tighten the caliper mounting bolts to the specified torque.

 **Front brake caliper mounting bolt:**
39 N·m (3.9 kgf·m, 28.0 lb·ft)

NOTE:

After replacing the brake pads, pump the brake lever several times to check for proper brake operation and then check the brake fluid level.




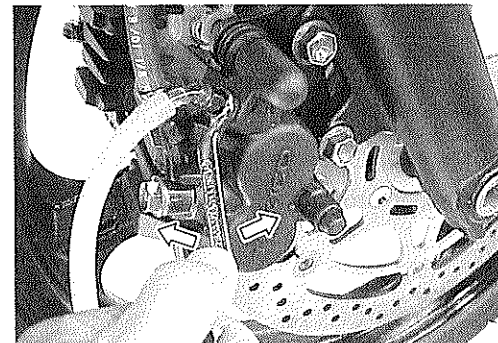
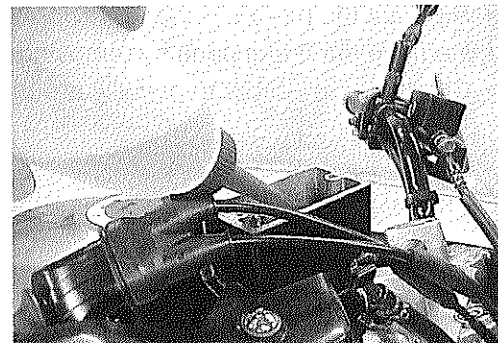
BRAKE FLUID REPLACEMENT

- Place the motorcycle on a level surface and keep the handlebars straight.
- Remove the brake fluid reservoir cap and diaphragm.
- Suck up the old brake fluid as much as possible.
- Fill the reservoir with the new brake fluid.


 **Specification and Classification: DOT 4**

- Connect a clear hose to the caliper air bleeder valve and insert the other end of hose into a receptacle.
- Loosen the air bleeder valve and pump the brake lever until old brake fluid flows out of the bleeder system.
- Close the caliper air bleeder valve and disconnect a clear hose. Fill the reservoir with the new fluid to the upper mark of the reservoir.

 **Brake air bleeder valve: 7.5 N·m (0.75 kgf·m, 5.5 lb·ft)**



CAUTION

- * Never reuse the brake fluid left over from previous servicing and which has been stored for long periods of time.
- * Bleed air from the brake system.
( 2-25)



CALIPER REMOVAL AND DISASSEMBLY

- Drain the brake fluid. (☞ 6-58)
- Remove the brake pads. (☞ 6-57)
- Disconnect the brake hoses by removing the brake hose union bolts.

NOTE:

Place a rag underneath the union bolt on the brake caliper to catch any spilt brake fluid.

- Remove the brake calipers by removing the caliper mounting bolts.

CAUTION

Do not reuse the brake fluid left over from previous servicing and stored for long periods of time.

▲ WARNING

Brake fluid, if it leaks, will interfere with safe running and discolor painted surfaces. Check the brake hose and hose joints for cracks and fluid leakage.

- Remove the caliper holder ①.
- Remove the pad spring ②.

- Place a rag over the pistons to prevent them from popping out and then force out the pistons using compressed air.

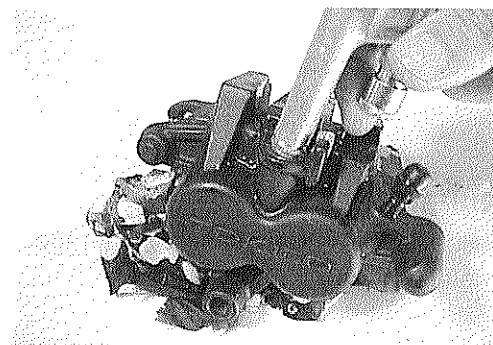
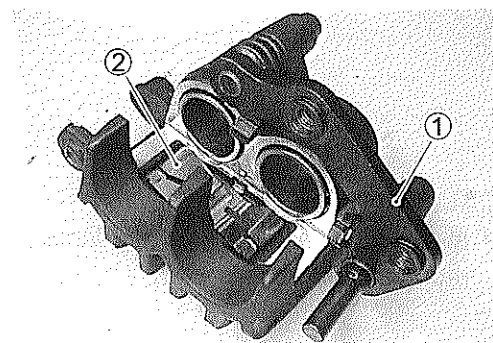
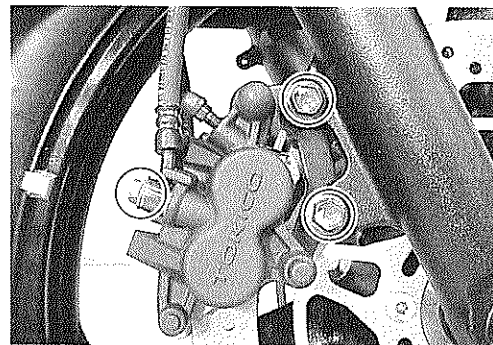
CAUTION

Do not use high pressure air to prevent piston damage.

- Remove the dust seals and piston seals.

CAUTION

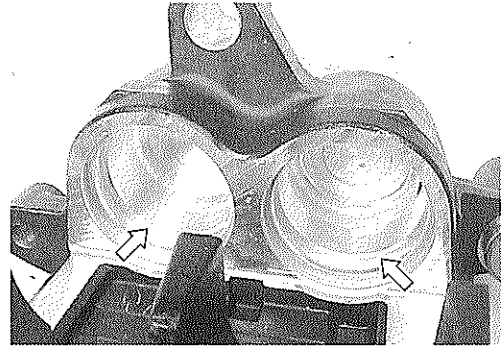
Do not reuse the removed dust seals and piston seals to prevent fluid leakage.



CALIPER INSPECTION

BRAKE CALIPER

Inspect the brake caliper cylinder wall for nicks, scratches and other damage. If any damage is found, replace the caliper with a new one.



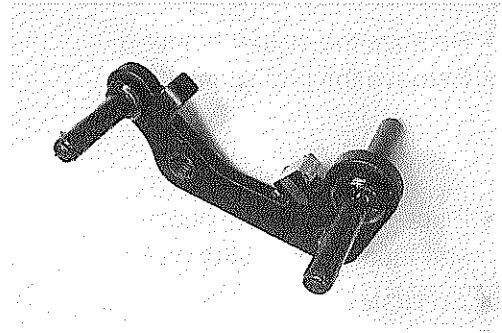
BRAKE CALIPER PISTON

Inspect the brake caliper piston surface for any scratches and other damage. If any damage is found, replace the caliper piston with a new one.



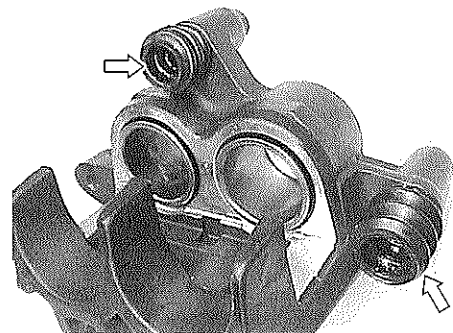
CALIPER HOLDER

- Inspect the caliper holder for damage. If any damage is found, replace it with a new one.



RUBBER PARTS

Inspect the rubber parts for damage. If any damage is found, replace them with the new ones.



CALIPER REASSEMBLY AND REMOUNTING

Reassemble the caliper in the reverse order of removal and disassembly. Pay attention to the following points:

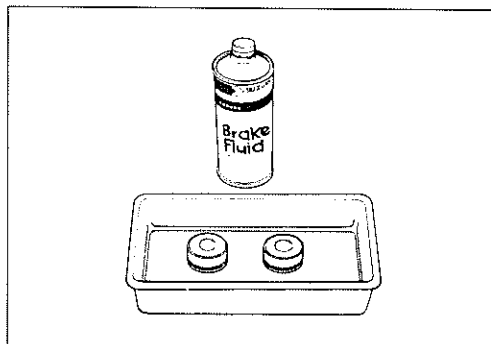
- Wash the caliper bores and pistons with specified brake fluid. Particularly wash the dust seal grooves and piston seal grooves.



Specification and Classification: DOT 4

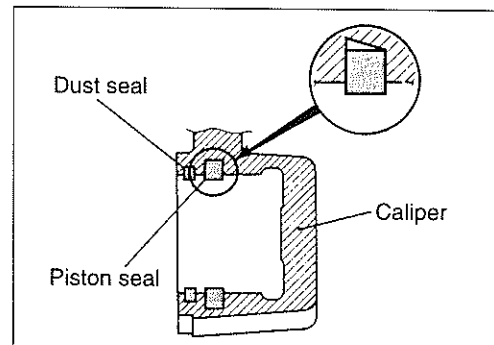
CAUTION

- * Wash the caliper components with fresh brake fluid before reassembly. Never use cleaning solvent or gasoline to wash them.
- * Do not wipe the brake fluid off after washing the components with a rag.
- * When washing the components, use the specified brake fluid. Never use different types of fluid or cleaning solvent such as gasoline, kerosine or the others.
- * Replace the piston seals and dust seals with the new ones when reassembly.
- * Apply the brake fluid to both seals when installing them.



PISTON SEAL

- Install the piston seals as shown in the illustration.
- Install the piston to the caliper.

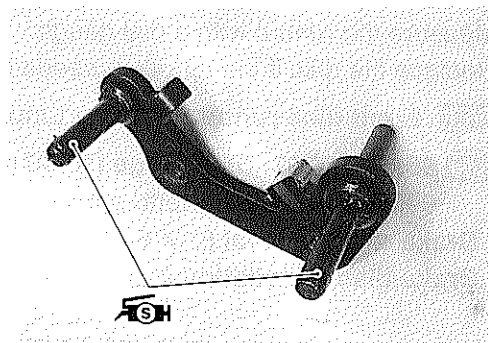


CALIPER HOLDER

- Apply SUZUKI SILICONE GREASE to the caliper holder pin.

 99000-25100: SUZUKI SILICONE GREASE

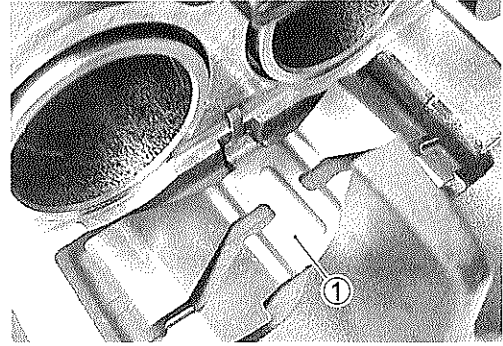
- Install the caliper holder to the caliper.



- Install the pad spring ①.
- Install the brake pads. (☞ 6-57)

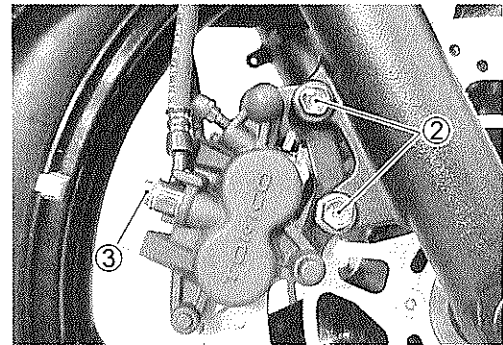
NOTE:

Before remounting the caliper, push the piston all the way into the caliper.



- Remount the brake caliper to the front fork.
- Tighten each bolt to the specified torque.

- 🔧 Front brake caliper mounting bolt ②:**
 39 N·m (3.9 kgf·m, 28.0 lb-ft)
- Front brake hose union bolt ③:**
 23 N·m (2.3 kgf·m, 16.5 lb-ft)

**CAUTION**

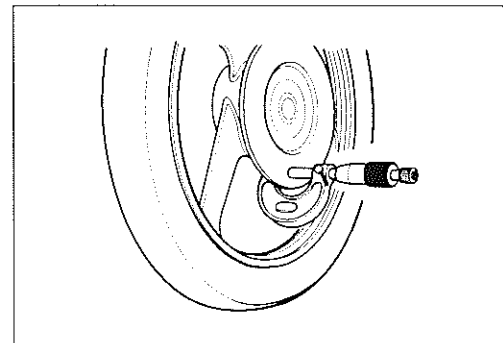
- * The seal washers should be replaced with the new ones to prevent fluid leakage.
- * Bleed air from the system after reassembling the caliper. (☞ 2-25)

BRAKE DISC INSPECTION

Visually check the brake disc for damage or cracks.
 Measure the thickness with a micrometer.
 Replace the disc if the thickness is less than the service limit or if damage is found.

DATA Front disc thickness: Service Limit: 4.5 mm (0.18 in)

🔧 09900-20205: Micrometer (0 – 25 mm)

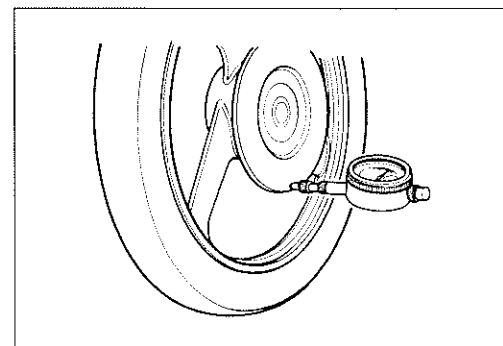


Measure the runout with a dial gauge.
 Replace the disc if the runout exceeds the service limit.

DATA Front disc runout: Service Limit: 0.30 mm (0.012 in)

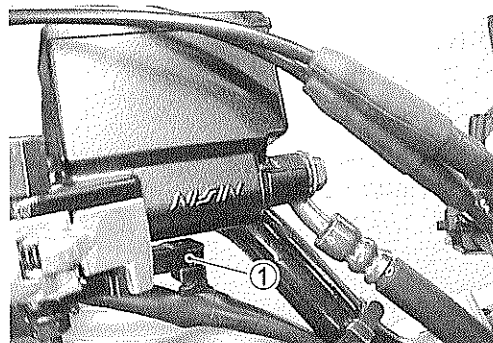
🔧 09900-20607: Dial gauge (1/100 mm)
 09900-20701: Magnetic stand

- * Brake disc removal (☞ 6-9)
- * Brake disc installation (☞ 6-12)



MASTER CYLINDER REMOVAL AND DISASSEMBLY

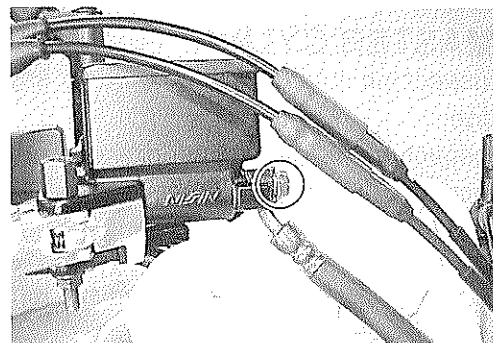
- Remove the rear view mirror and brake lever cover.
- Drain the brake fluid. (☞ 6-58)
- Disconnect the front brake light switch coupler ①.



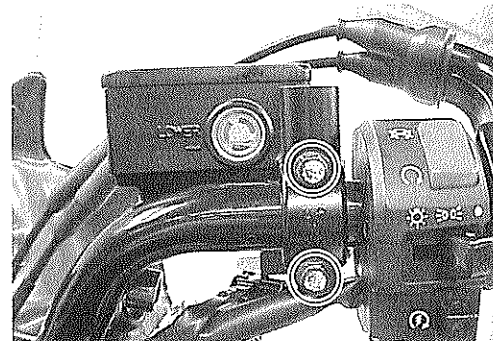
- Place a rag underneath the union bolt on the master cylinder to catch any spilt brake fluid. Remove the brake hose union bolt and disconnect the brake hose.

CAUTION

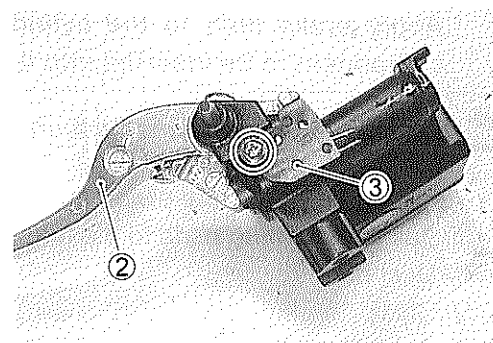
Immediately and completely wipe off any brake fluid contacting any part of the motorcycle. The fluid reacts chemically with paint, plastics and rubber materials, etc. and will damage them severely.



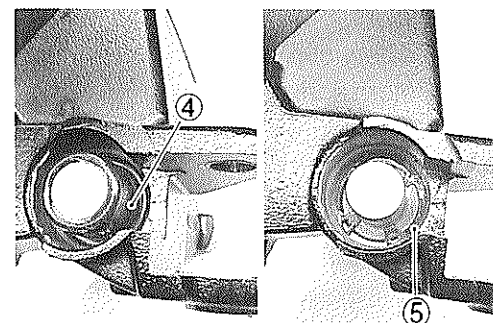
- Remove the master cylinder.



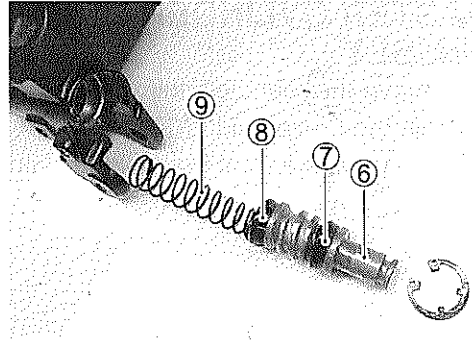
- Remove the brake lever ② and brake switch ③.



- Pull out the dust boot ④ and remove the snap ring ⑤.



- Remove the piston and return spring.
 - ⑥ Piston
 - ⑦ Secondary cup
 - ⑧ Primary cup
 - ⑨ Return spring

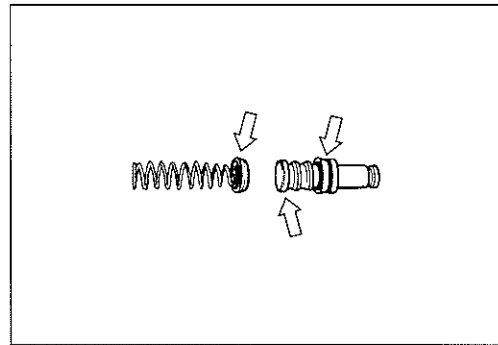


MASTER CYLINDER INSPECTION

Inspect the master cylinder bore for any scratches or other damage.

Inspect the piston surface for any scratches or other damage.

Inspect the primary cup, secondary cup and dust seal for wear or damage.

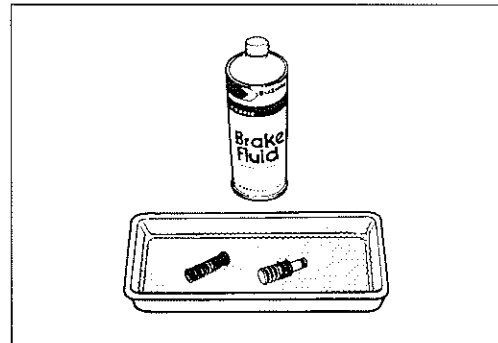


MASTER CYLINDER REASSEMBLY AND REMOUNTING

Reassemble the master cylinder in the reverse order of removal and disassembly. Pay attention to the following points:

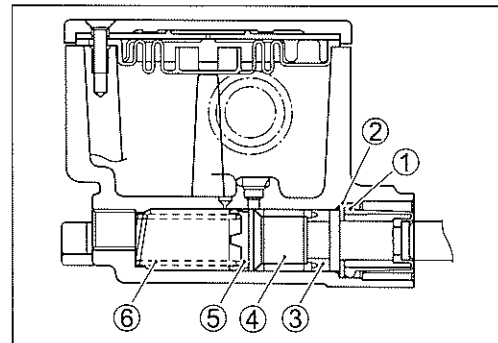
CAUTION

- * Wash the master cylinder components with fresh brake fluid before reassembly. Never use cleaning solvent or gasoline to wash them.
- * Do not wipe the components with a rag.
- * Apply brake fluid to the cylinder bore and all the component to be inserted into the bore.



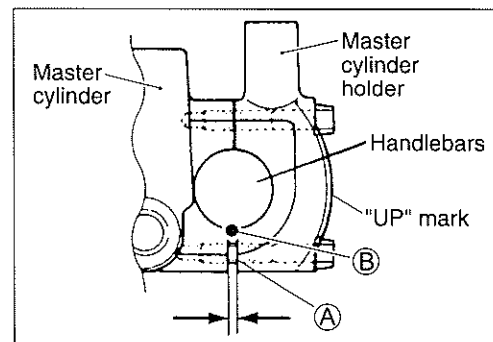
Specification and Classification: DOT 4


- Apply brake fluid to the piston and cups.
- Install the following parts to the master cylinder.
 - ① Dust boot
 - ② Circlip
 - ③ Secondary cup
 - ④ Piston
 - ⑤ Primary cup
 - ⑥ Return spring




- When remounting the brake master cylinder onto the handlebars, align the master cylinder holder's mating surface (A) with punch mark (B) on the handlebars and tighten the upper clamp bolt first as shown.


 **Front brake master cylinder mounting bolt:**
10 N·m (1.0 kgf-m, 7.0 lb-ft)

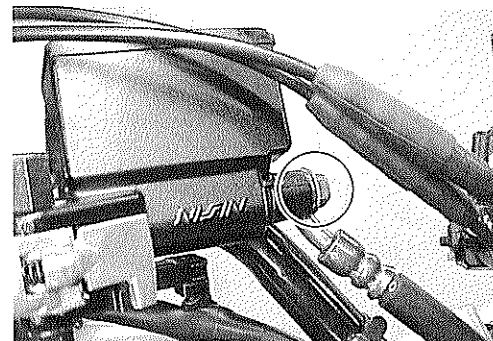


- Tighten the union bolt. (Brake hose routing:  8-24)

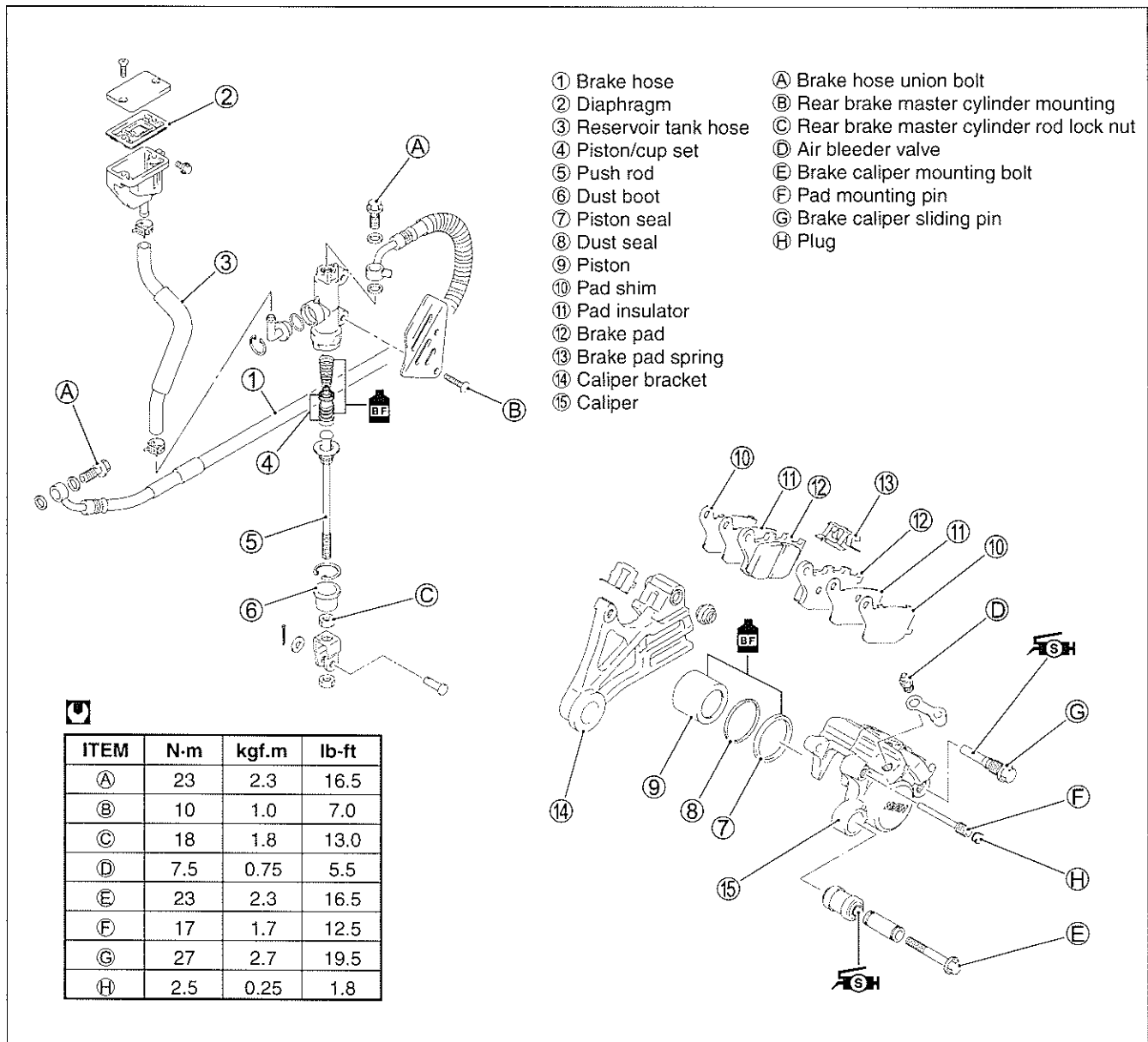
 **Brake hose union bolt: 23 N·m (2.3 kgf-m, 16.5 lb-ft)**

CAUTION

- * The seal washers should be replaced with the new ones to prevent fluid leakage.
- * Bleed air from the system after reassembling the master cylinder. ( 2-25)



REAR BRAKE CONSTRUCTION



⚠ WARNING

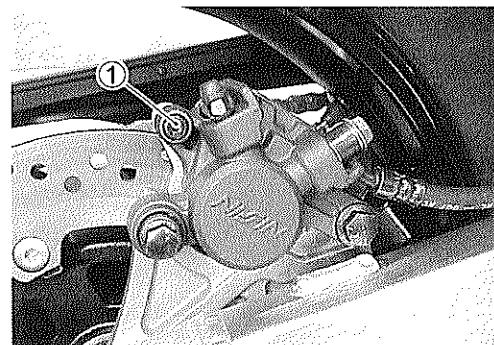
- * This brake system is filled with an ethylene glycol-based DOT 4 brake fluid. Do not use or mix different types of fluid such as silicone-based or petroleum-based.
- * Do not use any brake fluid taken from old, used or unsealed containers. Never reuse brake fluid left over from the last servicing or stored for long periods.
- * When storing the brake fluid, seal the container completely and keep away from children.
- * When replenishing brake fluid, take care not to get dust into fluid.
- * When washing brake components, use fresh brake fluid. Never use cleaning solvent.
- * A contaminated brake disc or brake pad reduces braking performance. Discard contaminated pads and clean the disc with high quality brake cleaner or neutral detergent.

CAUTION

Handle brake fluid with care: the fluid reacts chemically with paint, plastics, rubber materials etc. and will damage them severely.

BRAKE PAD REPLACEMENT

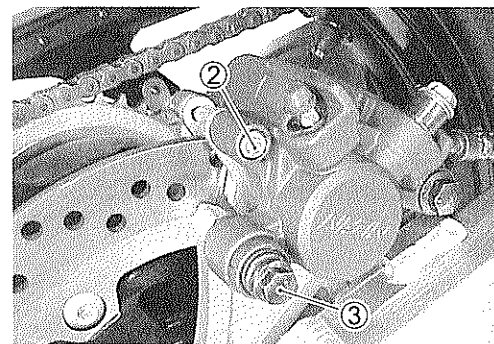
- Remove the plug ①.



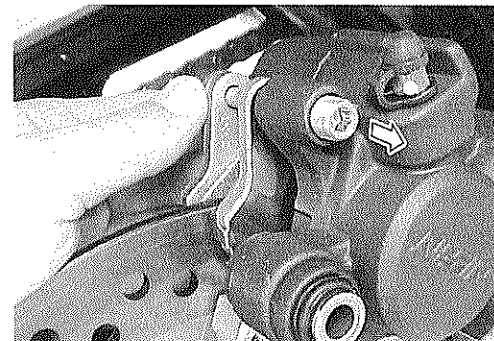
- Loosen the pad mounting pin ②.
- Remove the caliper bracket bolt ③.

CAUTION

- * Do not operate the brake pedal while dismantling the pads.
- * Replace the brake pads as a set, otherwise braking performance will be adversely affected.



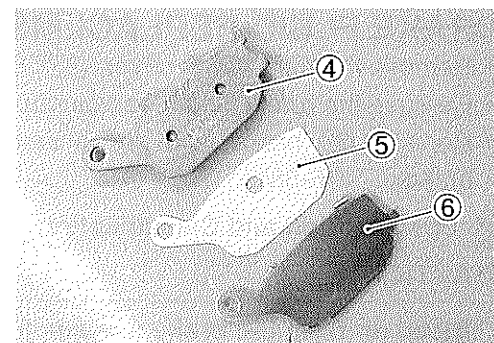
- Remove the pad mounting pin and brake pads with the rear caliper pivoted up.
- Clean up the caliper especially around the caliper pistons.



- Assemble the new brake pad ④, insulator ⑤ and shim ⑥.

CAUTION

- Replace the brake pads as a set, otherwise braking performance will be adversely affected.

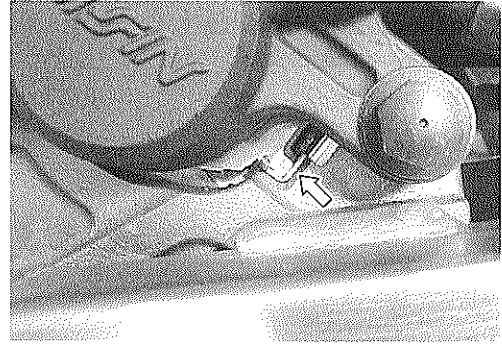


- Install the new brake pads.



NOTE:

Make sure that the detent of the pad is seated onto the retainer on the caliper bracket.



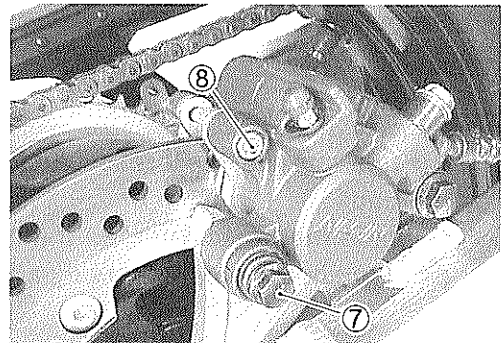
- Tighten the caliper mounting bolt ⑦ and pad mounting pin ⑧ to the specified torque.

🔩 Rear brake caliper mounting bolt:

23 N·m (2.3 kgf-m, 16.5 lb-ft)

Rear brake pad mounting pin:

17 N·m (1.7 kgf-m, 12.5 lb-ft)

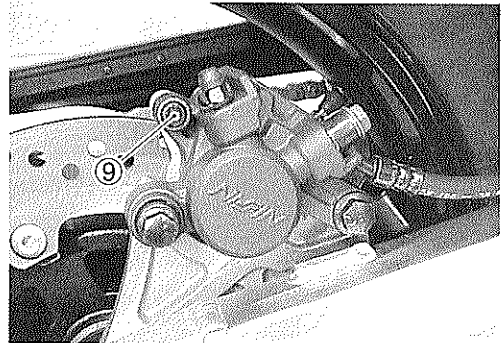


- Install the plug ⑨ to the specified torque.

🔩 Pad pin plug: 2.5 N·m (0.25 kgf-m, 1.8 lb-ft)

NOTE:

After replacing the brake pads, pump the brake pedal several times in order to operate the brake correctly and then check the brake fluid level.



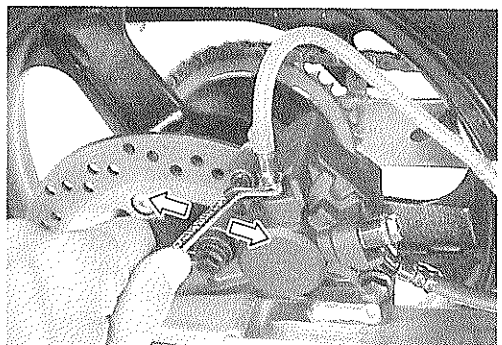
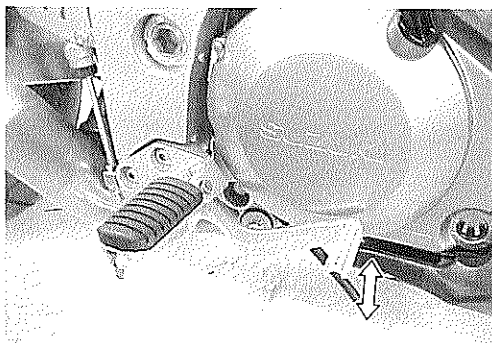
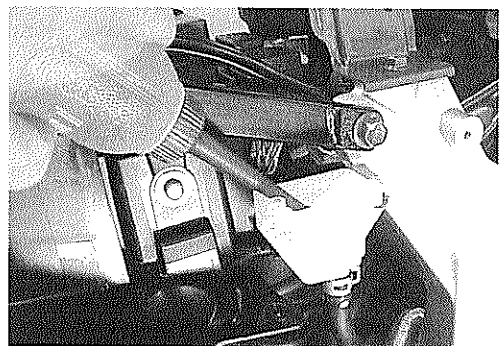
BRAKE FLUID REPLACEMENT

- Remove the right frame cover. (☞ 6-5)
- Remove the brake fluid reservoir cap.
- Replace the brake fluid in the same manner as the front brake. (☞ 6-58)

🛢 Specification and Classification: DOT 4

CAUTION

Bleed air from the brake system. (☞ 2-25)



CALIPER REMOVAL AND DISASSEMBLY

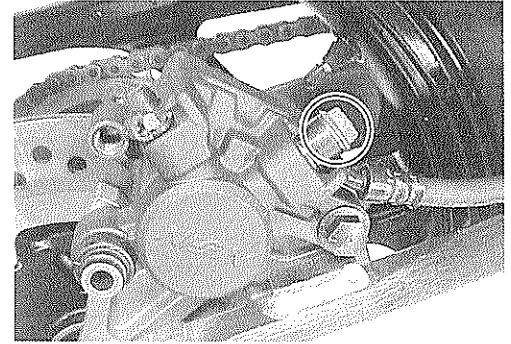
- Drain the brake fluid. (☞ 6-68)
- Remove the brake pads. (☞ 6-67)
- Place a rag underneath the union bolt to catch any spilt brake fluid.
- Disconnect the brake hose by removing the brake hose union bolt.

CAUTION

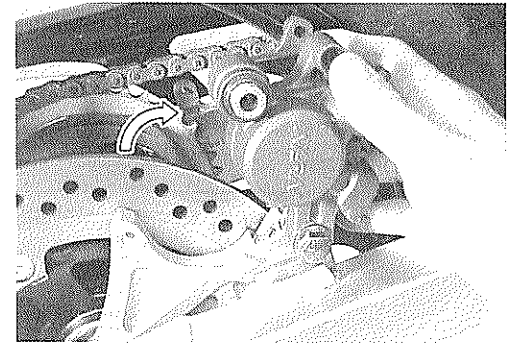
Do not reuse the brake fluid left over from previous servicing and stored for long periods.

▲ WARNING

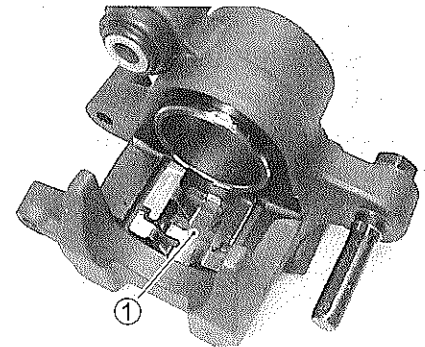
Brake fluid, if it leaks, will interfere with safe running and discolor painted surfaces. Check the brake hose and hose joints for cracks and fluid leakage.



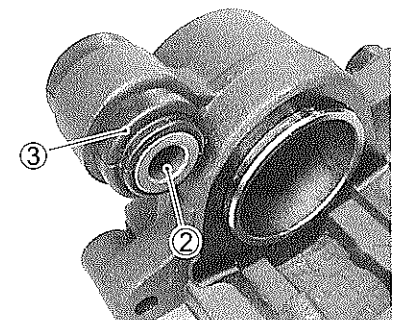
- Pivot the caliper up and remove the caliper from the caliper bracket.



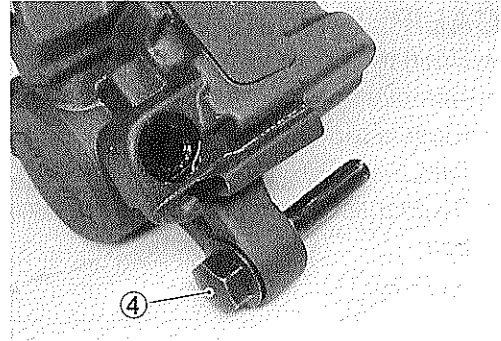
- Remove the pad spring ①.



- Remove the spacer ② and boot ③ from the caliper.



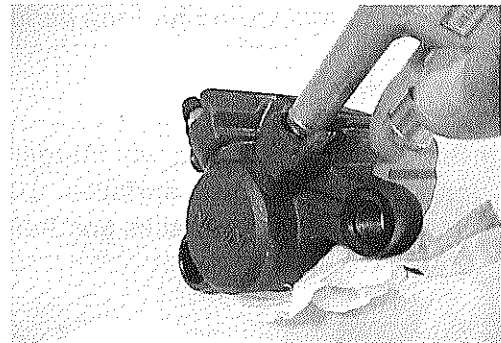
- Remove the slide pin ④.



- Place a rag over the piston to prevent it from popping out and then force out the piston using compressed air.

CAUTION

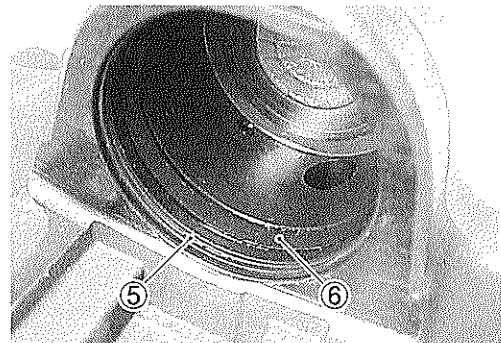
Do not use high pressure air to prevent piston damage.



- Remove the dust seal ⑤ and piston seal ⑥.

CAUTION

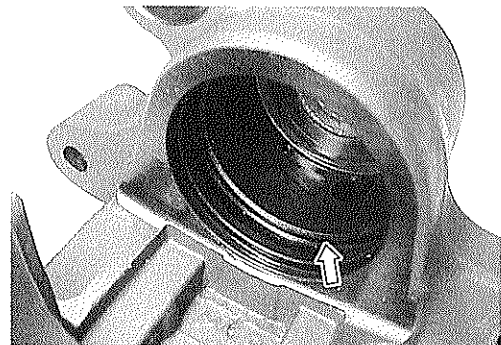
Do not reuse the dust seal and piston seal to prevent fluid leakage.



CALIPER INSPECTION

BRAKE CALIPER

Inspect the brake caliper cylinder wall for nicks, scratches and other damage. If any damage is found, replace the caliper with a new one.



BRAKE CALIPER PISTON

Inspect the brake caliper piston surface for any scratches and other damage. If any damage is found, replace the caliper piston with a new one.



BRAKE CALIPER SLIDING PIN

Inspect the brake caliper sliding pin for wear and other damage. If any damage is found, replace the sliding pin with a new one.



Inspect the boot and spacer for damage and wear. If any damage is found, replace boot and spacer with new ones.



BRAKE DISC INSPECTION

Inspect the rear brake disc in the same manner as the front brake disc. (👉 6-52)

DATA Service Limit

Rear disc thickness: 4.5 mm (0.18 in)

Rear disc runout: 0.30 mm (0.012 in)

* Brake disc removal (👉 6-34)

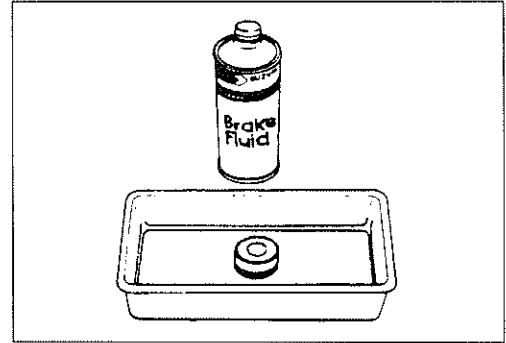
* Brake disc installation (👉 6-40)

CALIPER REASSEMBLY AND REMOUNTING

Reassemble and remount the caliper in the reverse order of removal and disassembly. Pay attention to the following points:

CAUTION

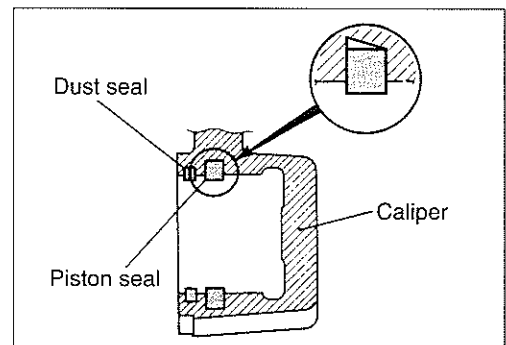
- * Wash the caliper components with fresh brake fluid before reassembly. Never use cleaning solvent or gasoline to wash them.
- * Apply brake fluid to the caliper bore and piston to be inserted into the bore.



 Specification and Classification: DOT 4

PISTON SEAL

- Install the piston seals as shown in the right illustration.
- Install the piston to the caliper.

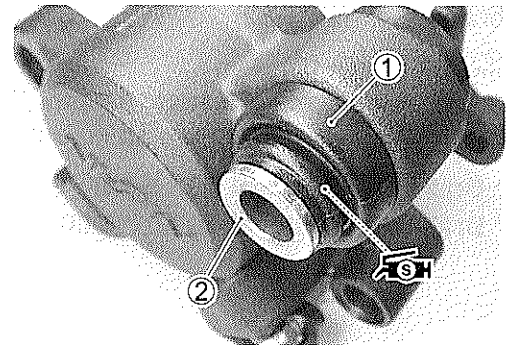


SLIDING PIN


- Install the boot ①.
- Apply SUZUKI SILICONE GREASE to the inside of the boot.

 99000-25100: SUZUKI SILICONE GREASE

- Install the spacer ②.

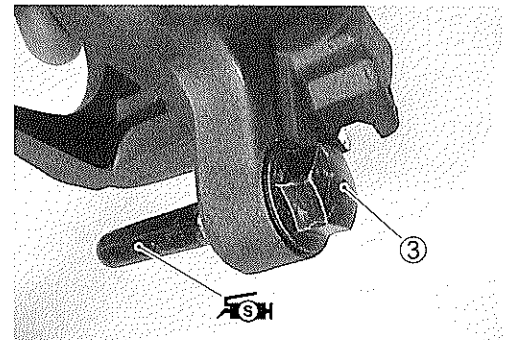


- Tighten the sliding pin ③ to the specified torque.

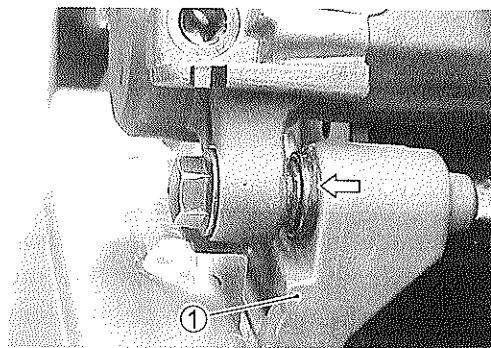
 Brake caliper sliding pin: 27 N·m (2.7 kgf·m, 19.5 lb-ft)

- Apply SUZUKI SILICONE GREASE to the sliding pin.

 99000-25100: SUZUKI SILICONE GREASE



- Install the caliper to the caliper bracket ①.
- Set the boot onto the sliding pin securely.
- Install the brake pad. (☞ 6-67)

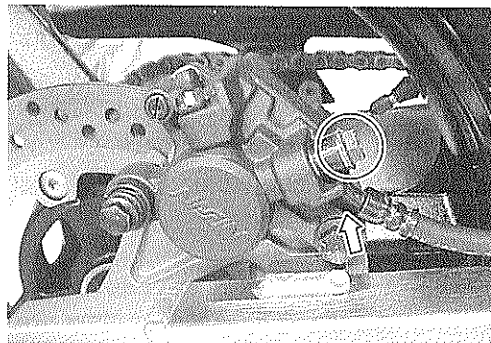


- Tighten the brake hose union bolt with the brake hose union pipe seated in the cutout on the caliper.
(Rear brake hose routing: ☞ 8-25)

🔧 Brake hose union bolt: 23 N-m (2.3 kgf-m, 16.5 lb-ft)

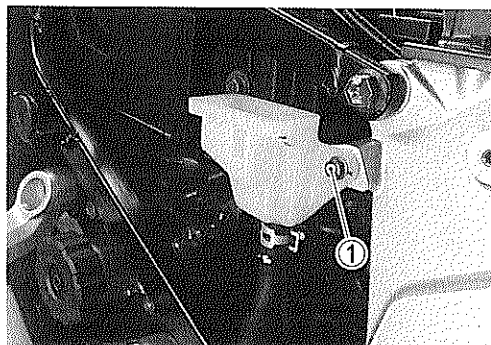
CAUTION

- * The seal washers should be replaced with the new ones to prevent fluid leakage.
- * Bleed air from the system after reassembling the caliper. (☞ 2-25)

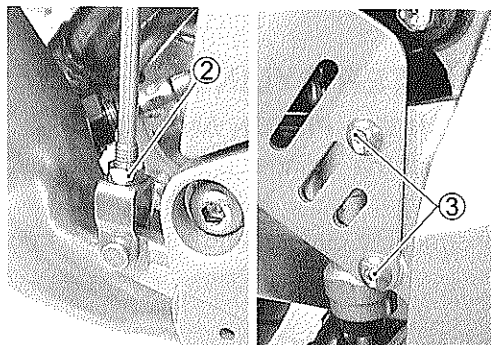


MASTER CYLINDER REMOVAL AND DISASSEMBLY

- Drain the brake fluid. (☞ 6-68)
- Remove the brake fluid reservoir tank mounting bolt ①.



- Loosen the lock nut ②.
- Remove the master cylinder mounting bolts ③.



- Place a rag underneath the union bolt on the master cylinder to catch spilled drops of brake fluid. Remove the union bolt ④ and disconnect the brake hose.
- Disconnect the reservoir tank hose.

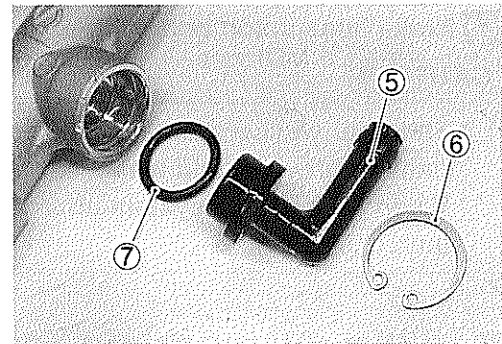
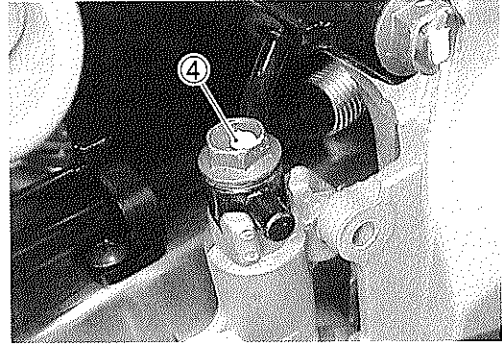
CAUTION

Immediately and completely wipe off any brake fluid contacting any parts of the motorcycle. The fluid reacts chemically with paint, plastic and rubber materials, etc. and will damage them severely.

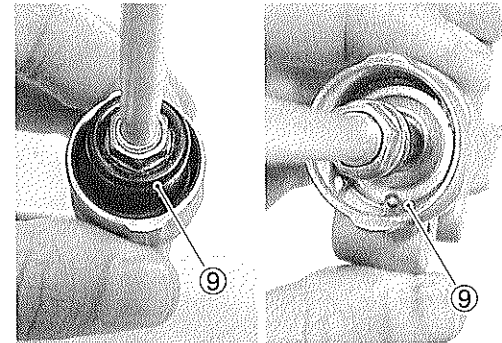
- Remove the master cylinder by turning the master cylinder rod.
- Disconnect the reservoir hose.
- Remove the connector ⑤ by removing the snap ring ⑥.
- Remove the O-ring ⑦.

CAUTION

Replace the O-ring with a new one.



- Pull out the dust boot ⑧, then remove the snap ring ⑨.
- Remove the push rod, piston/primary cup and spring.

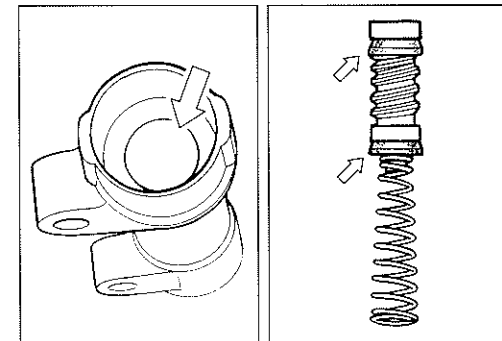


MASTER CYLINDER INSPECTION

CYLINDER, PISTON AND CUP SET

Inspect the cylinder bore wall for any scratches or other damage.

Inspect the cup set and each rubber part for damage.



MASTER CYLINDER REASSEMBLY AND REMOUNTING

Reassemble and remount the master cylinder in the reverse order of removal and disassembly. Pay attention to the following points:

CAUTION

- * Wash the master cylinder components with fresh brake fluid before reassembly. Never use cleaning solvent or gasoline to wash them.
- * Do not wipe the components with a rag.
- * Apply brake fluid to the cylinder bore and all the component to be inserted into the bore.

Specification and Classification: DOT 4

- Apply brake fluid to the piston/cup set.
- Install the following parts.
 - ① Spring
 - ② Piston/primary cup
 - ③ Push rod
 - ④ Snap ring
 - ⑤ Dust boot
- Apply the SUZUKI MOLY PASTE to the push rod.

99000-25140: SUZUKI MOLY PASTE

- Install the O-ring ⑥, connector ⑦ and snap ring ⑧ to the master cylinder.

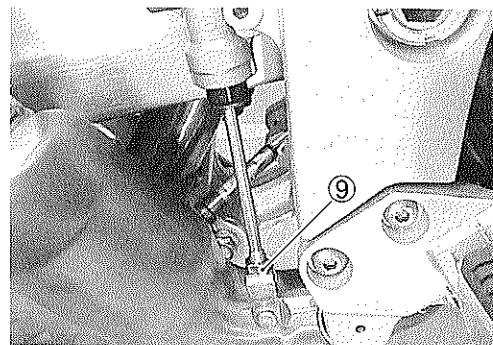
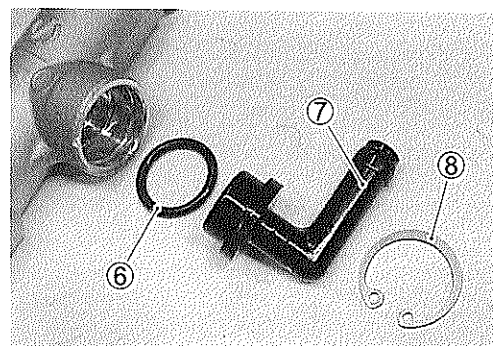
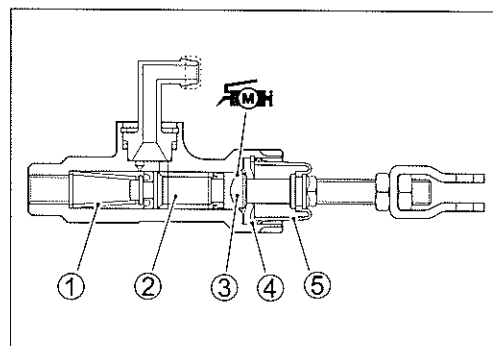
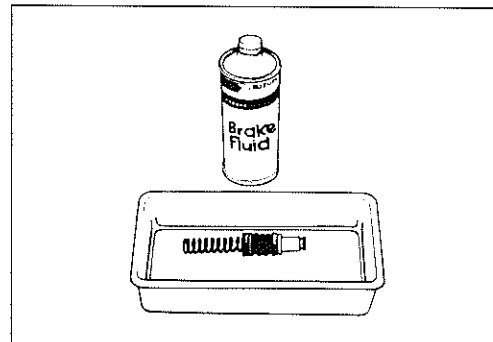
CAUTION



Replace the removed O-ring with a new one.


- Install the master cylinder.
- Tighten the lock nut ⑨.

Rear master cylinder rod lock nut:


18 N·m (1.8 kgf·m, 13.0 lb-ft)




- Install the reservoir tank and reservoir tank hose. (Rear brake hose routing:  8-25)
- Temporarily install the master cylinder to the frame.
- Connect the brake hose to the master cylinder. (Rear brake hose routing:  8-25)
- Tighten the brake hose union bolt to the specified torque.

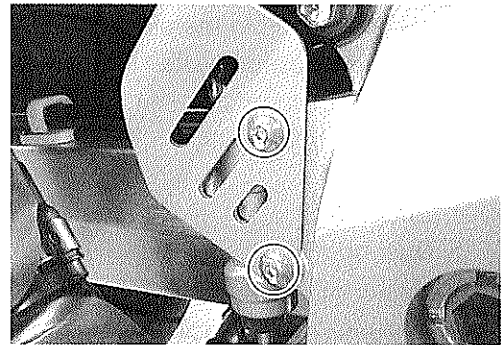
 **Brake hose union bolt: 23 N·m (2.3 kgf-m, 16.5 lb-ft)**

CAUTION

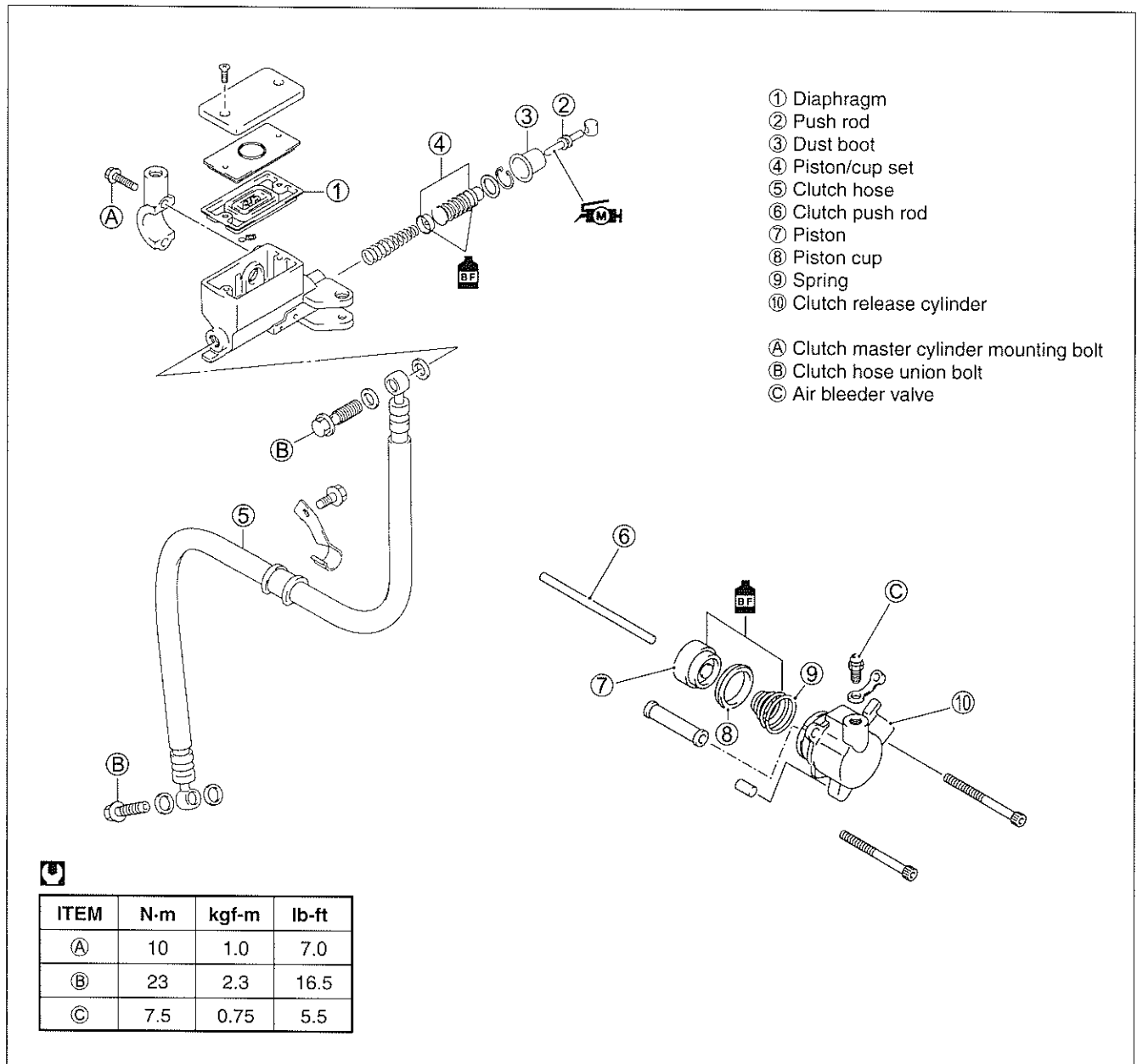
- * The seal washers should be replaced with the new ones to prevent fluid leakage.
- * Bleed air from the system after reassembling the master cylinder. ( 2-25)

- Adjust the brake pedal height. ( 2-24)
- Reinstall the master cylinder.
- Tighten the master cylinder mounting bolts to the specified torque.

 **Rear master cylinder mounting bolt:
10 N·m (1.0 kgf-m, 7.0 lb-ft)**



CLUTCH RELEASE CYLINDER AND MASTER CYLINDER CONSTRUCTION



⚠ WARNING

- * This clutch system is filled with an ethylene glycol-based DOT 4 brake fluid. Do not use or mix different types of fluid such as silicone-based or petroleum-based.
- * Do not use any brake fluid taken from old, used or unsealed containers. Never reuse brake fluid left over from the last servicing or stored for long periods.
- * When storing the brake fluid, seal the container completely and keep away from children.
- * When replenishing brake fluid, take care not to get dust into fluid.
- * When washing brake components, use fresh brake fluid. Never use cleaning solvent.

CAUTION

Handle brake fluid with care: the fluid reacts chemically with paint, plastics, rubber materials etc. and will damage them severely.

CLUTCH FLUID REPLACEMENT

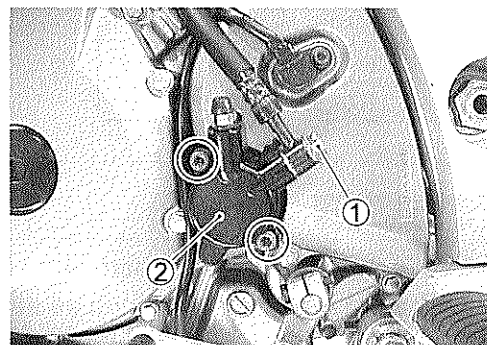
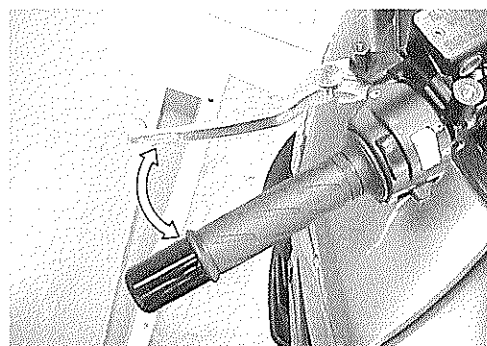
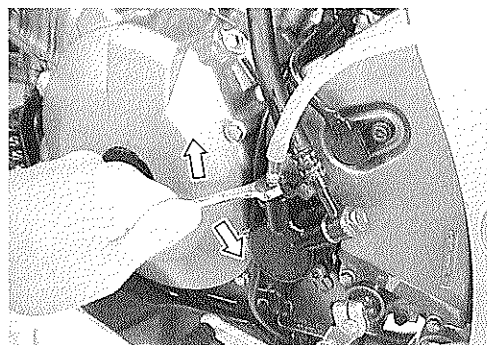
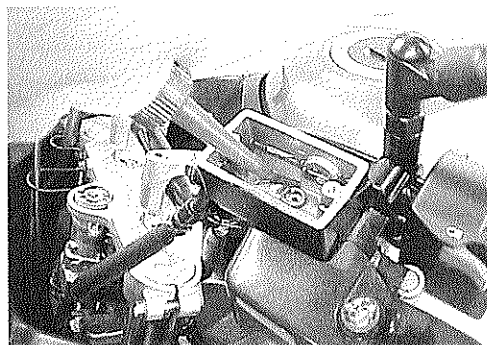
- Place the motorcycle on a level surface and keep the handlebars straight.
- Remove the master cylinder reservoir cap and diaphragm.
- Suck up the old clutch fluid as much as possible from the reservoir tank.
- Fill the reservoir with the new clutch fluid.

BF Specification and Classification: DOT 4

- Connect a clear hose to the clutch release cylinder air bleeder valve and insert the other end of hose into a receptacle.
- Loosen the air bleeder valve and pump the clutch lever until old clutch fluid flows out of the bleeder system.
- Close the clutch release cylinder air bleeder valve, and disconnect a clear hose. Fill the reservoir with fresh brake fluid to the upper level.

CAUTION

Bleed air in the clutch fluid system. (☞ 2-17)



CLUTCH RELEASE CYLINDER REMOVAL AND DISASSEMBLY

- Drain the clutch fluid. (☞ above)
- Disconnect the clutch hose by removing the union bolt ①.

NOTE:

Place a rag underneath the union bolt on the release cylinder to catch any split brake fluid.

- Remove the clutch release cylinder ②.

CAUTION

Do not reuse the brake fluid left over from previous servicing and stored for long periods of time.

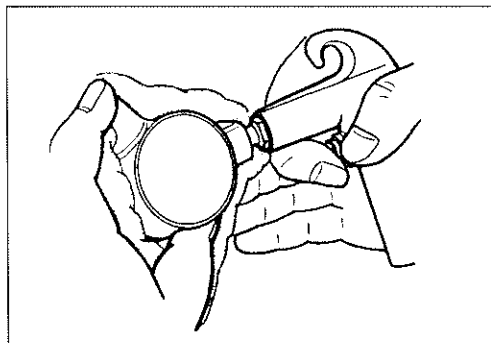
▲ WARNING

Brake fluid, if it leaks, will interfere with safe running and discolor painted surfaces. Check the brake hose and hose joints for cracks and fluid leakage.

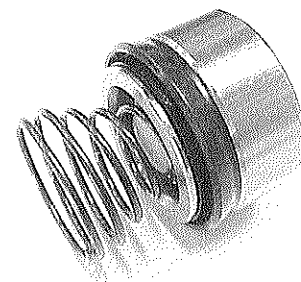
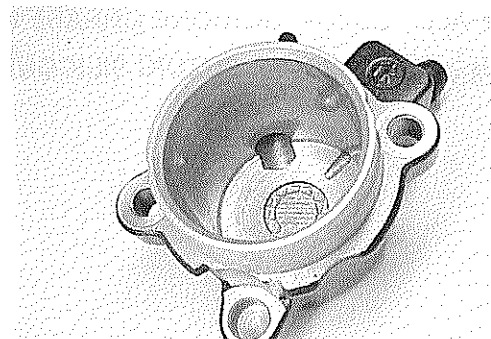
- Place a rag over the piston to prevent it from popping out.
- Force out the piston by using compressed air.

CAUTION

Do not use high pressure air to prevent piston damage.

**CLUTCH RELEASE CYLINDER INSPECTION**

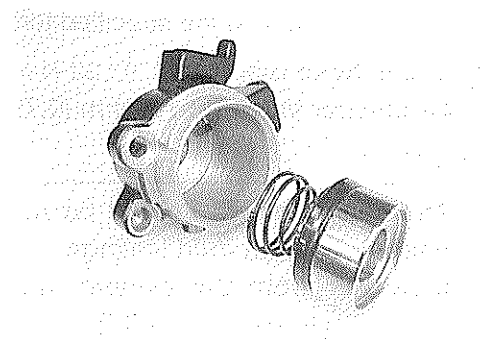
Inspect the clutch release cylinder bore wall for nicks, scratches or other damage. Inspect the oil seal for damage and wear. Inspect the piston surface for any scratches or other damage.

**CLUTCH RELEASE CYLINDER REASSEMBLY AND REMOUNTING**

Reassemble the clutch release cylinder in the reverse order of disassembly and by taking the following steps:

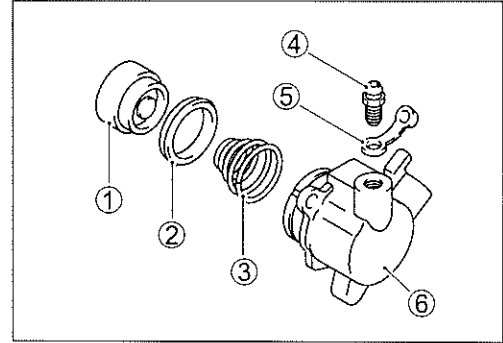
CAUTION

- * Wash the clutch cylinder components with fresh brake fluid before reassembly. Never use cleaning solvent or gasoline to wash them.
- * Do not wipe the components with a rag.
- * Apply brake fluid to the cylinder bore and piston to be inserted into the bore.



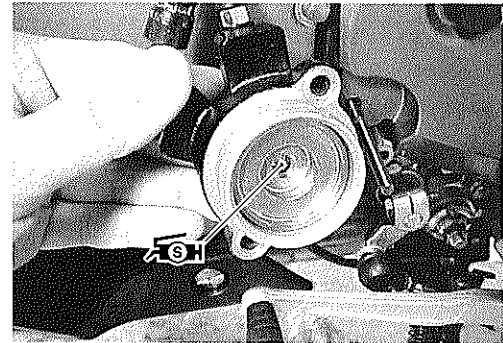
 Specification and Classification: DOT 4

- ① Piston
- ② Piston cup
- ③ Spring
- ④ Air bleeder valve
- ⑤ Bleeder cap
- ⑥ Clutch release cylinder body

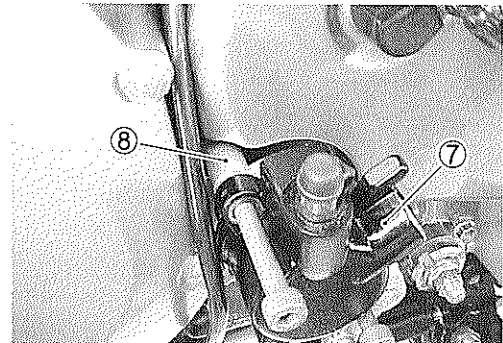


- Apply SUZUKI SILICONE GREASE to the concavity of piston.


 99000-25100: SUZUKI SILICONE GREASE



- Install the clutch release cylinder (7) and spacer (8).

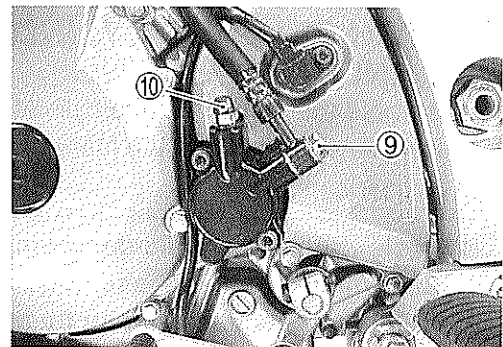


- Tighten each bolt to the specified torque.

 Clutch hose union bolt (9): 23 N·m (2.3 kgf·m, 16.5 lb·ft)
Air bleeder valve (10): 7.5 N·m (0.75 kgf·m, 5.5 lb·ft)

CAUTION

- * The seal washers should be replaced with the new ones to prevent fluid leakage.
- * Bleed air from the system after reassembling the release cylinder. (☞ 2-17)



CLUTCH MASTER CYLINDER REMOVAL AND DISASSEMBLY

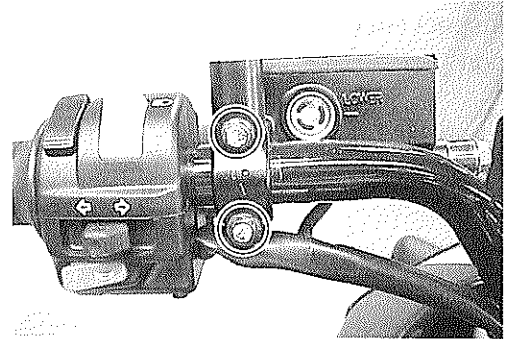
- Remove the rear view mirror and clutch lever cover.
- Drain the clutch fluid. (➔ 6-78)
- Disconnect the clutch lever position switch lead wires.
- Place a rag underneath the union bolt on the master cylinder to catch spilled drops of brake fluid. Remove the union bolt and disconnect the clutch hose from the master cylinder.



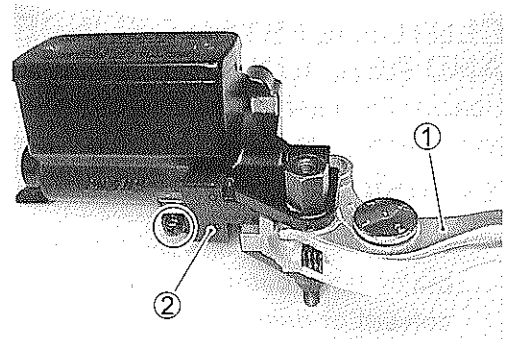
- Remove the clutch master cylinder.

CAUTION

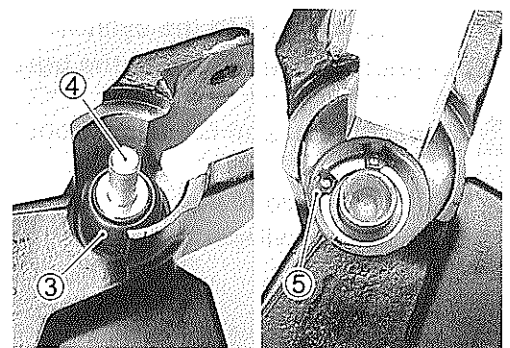
Completely wipe off any brake fluid adhering to any parts of motorcycle. The fluid reacts chemically with paint, plastics, rubber materials, etc. and will damage them severely.



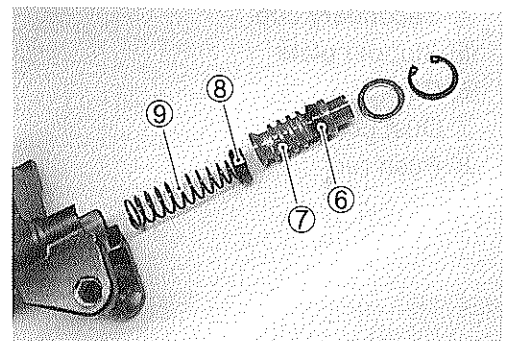
- Remove the clutch lever ① and clutch lever position switch ②.



- Remove the boot ③ and push rod ④.
- Remove the snap ring ⑤.

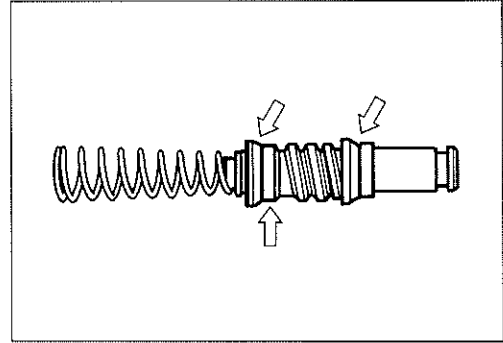


- Remove the piston/cup set
 - ⑥ Secondary cup
 - ⑦ Piston
 - ⑧ Primary cup
 - ⑨ Spring

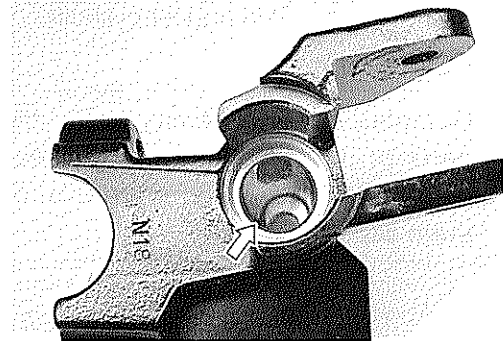


CLUTCH MASTER CYLINDER INSPECTION

Inspect the piston surface for any scratches or other damage. Inspect the primary cup, secondary cup and dust seal for wear or damage.



Inspect the master cylinder bore for any scratches or other damage.

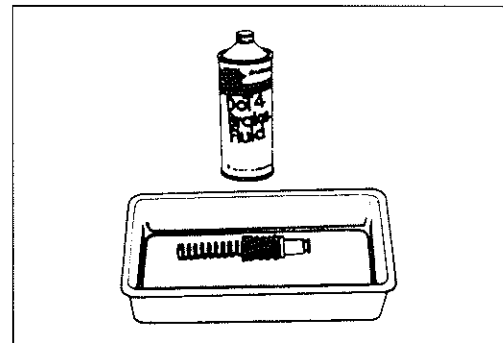


CLUTCH MASTER CYLINDER REASSEMBLY AND REMOUNTING

Reassemble the master cylinder in the reverse order of removal and disassembly. Pay attention to the following points:

CAUTION

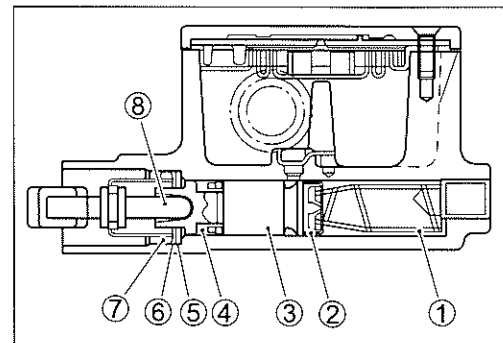
- * Wash the master cylinder components with fresh brake fluid before reassembly. Never use cleaning solvent or gasoline to wash them.
 - * Do not wipe the components with a rag.
- Apply brake fluid to the cylinder bore and all the component to be inserted into the bore.



Specification and Classification: DOT 4

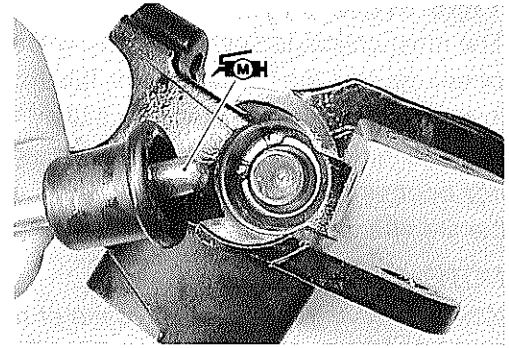
- Apply brake fluid to the piston/cup set and install them to the clutch master cylinder.

- ① Spring
- ② Primary cup
- ③ Piston
- ④ Secondary cup
- ⑤ Stopper plate
- ⑥ Circlip
- ⑦ Dust boot
- ⑧ Push rod



- Apply SUZUKI MOLY PASTE to the push rod.
- Install the push rod and dust boot.

 99000-25140: SUZUKI MOLY PASTE



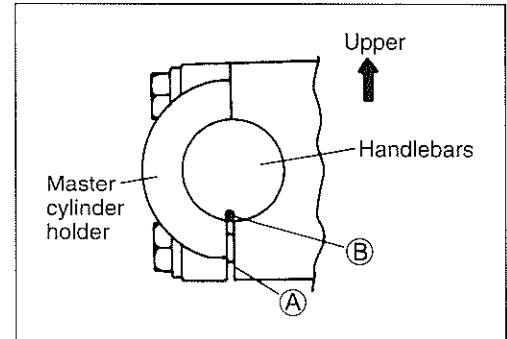
- When remounting the master cylinder on the handlebars, align the master cylinder holder's mating surface (A) with punched mark (B) on the handlebars and tighten the upper clamp bolt first.
- Tighten the clutch master cylinder union bolt to the specified torque.


 **Clutch master cylinder mounting bolt:**

10 N·m (1.0 kgf-m, 7.0 lb-ft)


Clutch master cylinder union bolt:

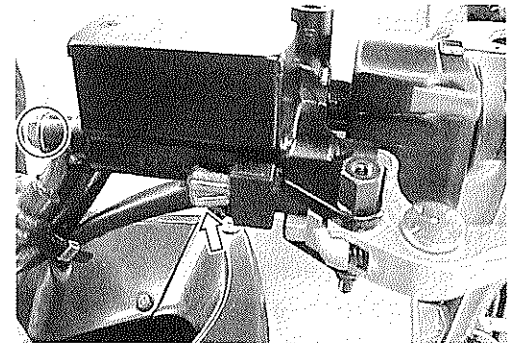
23 N·m (2.3 kgf-m, 16.5 lb-ft)



- Connect the clutch lever position switch lead wire.
(Clutch hose routing:  8-22)

CAUTION

- * The seal washers should be replaced with the new ones to prevent fluid leakage.
- * Bleed air from the system after reassembling the master cylinder. ( 2-17)



TIRE AND WHEEL

TIRE REMOVAL

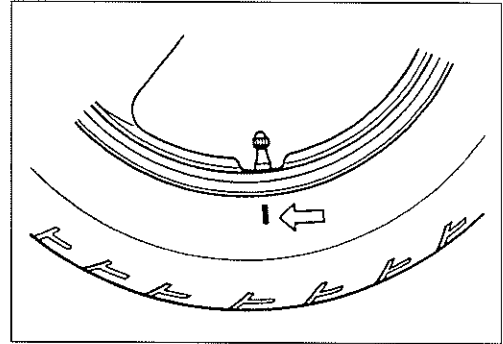
The most critical factor of a tubeless tire is the seal between the wheel rim and the tire bead. For this reason, it is recommended to use a tire changer that can satisfy this sealing requirement and can make the operation efficient as well as functional.

For operating procedures, refer to the instructions supplied by the tire changer manufacturer.

NOTE:

When removing the tire in the case of repair or inspection, mark the tire with a chalk to indicate the tire position relative to the valve position.

Even though the tire is refitted to the original position after repairing puncture, the tire may have to be balanced again since such a repair can cause imbalance.

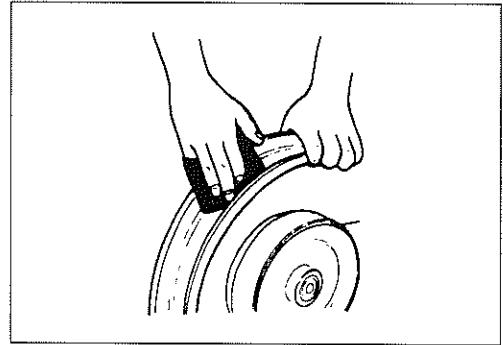


INSPECTION

WHEEL

Wipe the wheel clean and check for the following:

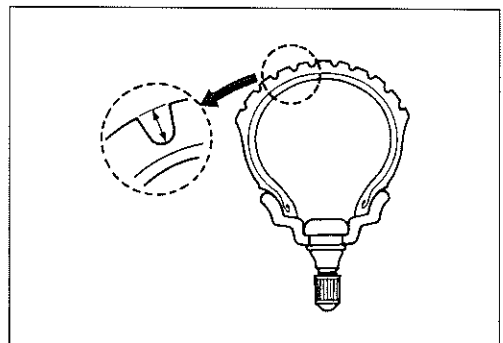
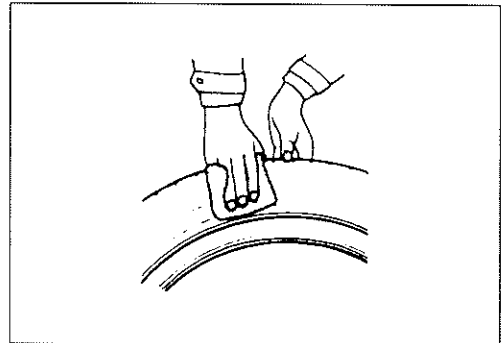
- * Distortion and crack
- * Any flaws and scratches at the bead seating area.
- * Wheel rim runout (☞ 6-10)



TIRE

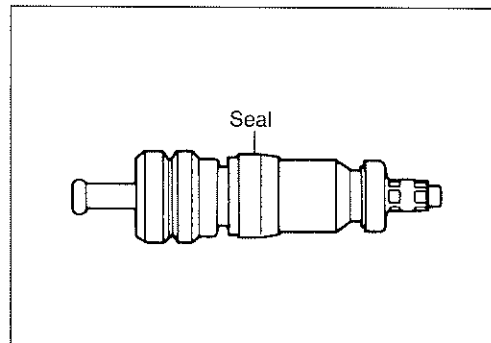
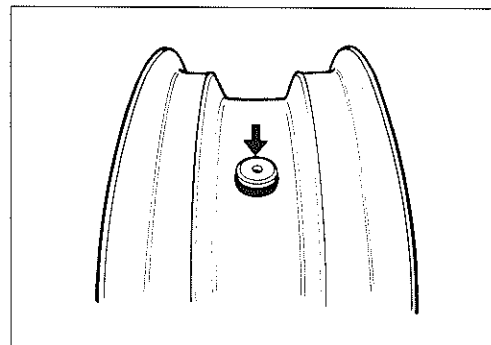
Tire must be checked for the following points:

- * Nick and rupture on side wall
- * Tire tread depth (☞ 2-26)
- * Tread separation
- * Abnormal, uneven wear on tread
- * Surface damage on bead
- * Localized tread wear due to skidding (Flat spot)
- * Abnormal condition of inner liner



VALVE

- Inspect the valve after the tire is removed from the rim. Replace the valve with a new one if the seal rubber is peeling or has damage.
- Inspect the valve core. If the seal has abnormal deformation, replace the valve with a new one.

**VALVE INSTALLATION**

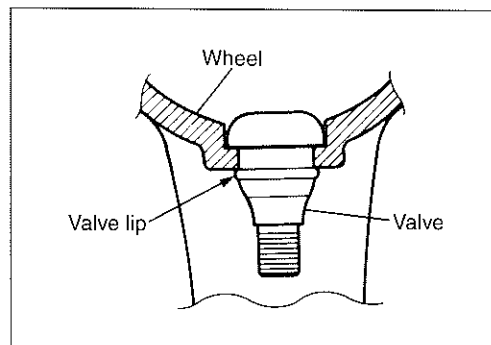
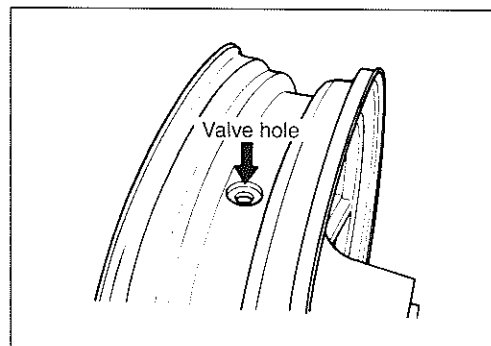
- Any dust or rust around the valve hole must be cleaned off. Then install the valve in the rim.

NOTE:

To properly install the valve into the valve hole, apply a special tire lubricant or neutral soapy liquid to the valve.

CAUTION

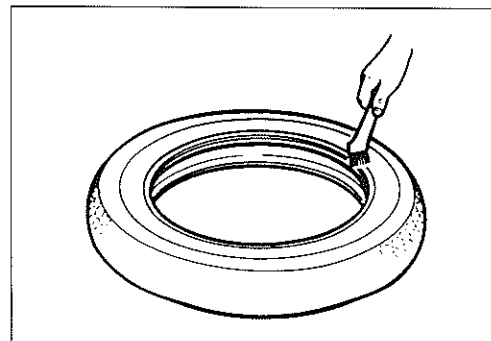
Be careful not to damage the lip of valve.

**TIRE INSTALLATION**

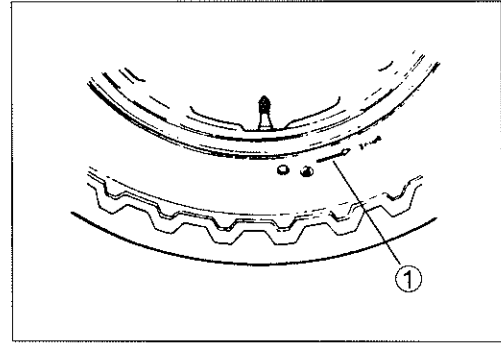
- Apply tire lubricant to the tire bead.
- When installing the tire onto the wheel, observe the following points.

CAUTION

- * Do not reuse the valve which has been once removed.
- * Do not use oil, grease or gasoline on the tire bead in place of tire lubricant.



- When installing the tire, the arrow ① on the side wall should point to the direction of wheel rotation.
- Align the chalk mark put on the tire at the time of removal with the valve position.



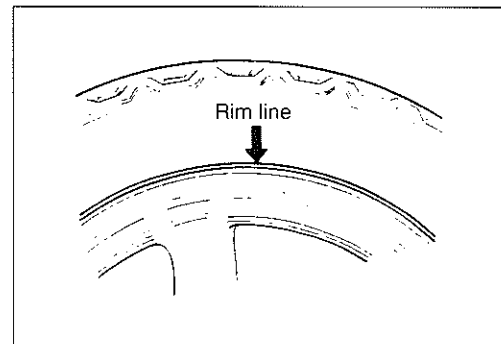
- For installation procedure of tire onto the wheel, follow the instructions given by the tire changer manufacturer.
- Bounce the tire several times while rotating. This makes the tire bead expand outward to contact the wheel, thereby facilitating air inflation.
- Inflate the tire.

⚠ WARNING

* Do not inflate the tire to more than 400 kPa (4.0kgf/cm²). If inflated beyond this limit, the tire can burst and possibly cause injury. Do not stand directly over the tire while inflating.

* In the case of preset pressure air inflator, pay special care for the set pressure adjustment.

- In this condition, check the “rim line” cast on the tire side walls. The line must be equidistant from the wheel rim all around. If the distance between the rim line and wheel rim varies, this indicates that the bead is not properly seated. If this is the case, deflate the tire completely and unseat the bead for both sides. Coat the bead with lubricant and fit the tire again.
- When the bead has been fitted properly, adjust the pressure to specification.
- As necessary, adjust the tire balance.



CAUTION

Do not run with a repaired tire at a high speed.

DATA Tire pressure

- Solo riding: Front: 250 kPa (2.50 kgf/cm², 36 psi)
Rear: 250 kPa (2.50 kgf/cm², 36 psi)
- Dual riding: Front: 250 kPa (2.50 kgf/cm², 36 psi)
Rear: 280 kPa (2.80 kgf/cm², 41 psi)