

CHASSIS

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EXTERIOR PARTS

REMOVAL

SEAT

- Remove the rear seat by removing the bolts.

⚠ CAUTION

Be careful not to scratch the rear fender.



- Remove the rear seat grip band by removing the bolts.



- Remove the seat.

⚠ CAUTION

Be careful not to scratch the rear fender.

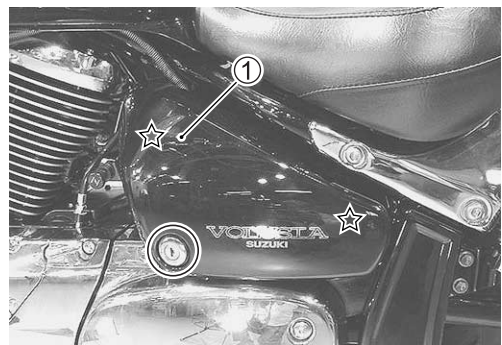


FRAME COVER

- Remove the left frame cover ① with the ignition key.
- Remove the right frame covers ② by removing the bolts.

⚠ CAUTION

- * Wait until the engine and exhaust pipe are cool enough to touch with bare hands before draining oil.
- * Be careful not to scratch the frame covers.



☆ : hooked part



☆ : hooked part

REAR FENDER

- Remove the seat. (☞ 7-2)
- Disconnect the coupler ①.



- Remove the left or right side frame handle grip.
- Remove the rear fender ②.

⚠ CAUTION

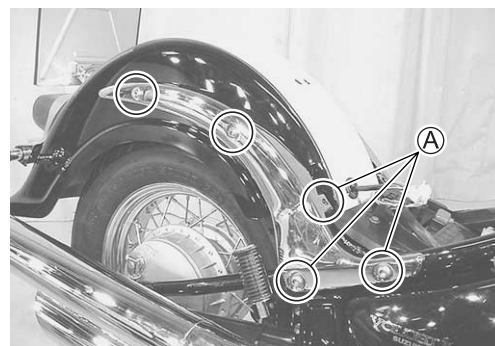
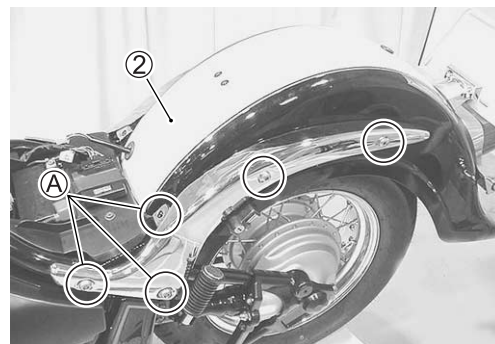
Be careful not to scratch the rear fenders.

NOTE:

When installing the frame handle grip bolts, apply a small quantity of THREAD LOCK “1303” to its mounting bolts and tighten them to the specified torque.

🔧 1303 99000-32030: THREAD LOCK SUPER “1303”

🔩 Frame handle grip mounting bolt ① (M10): 50 N·m
(5.0 kgf·m, 36.0 lb-ft)



REMOUNTING

Remount the seats, covers and rear fender in the reverse order of removal.

FRONT WHEEL
CONSTRUCTION

① Front axle
② Bearing (R)
③ Front wheel
④ Spacer
⑤ Bearing (L)
⑥ Brake disc
⑦ Spacer

Ⓐ Front axle
Ⓑ Brake disc mounting bolt

ITEM	N·m	kgf·m	lb·ft
Ⓐ	65	6.5	47.0
Ⓑ	23	2.3	16.5

Left ← → Right

Ⓐ Front axle
Ⓑ Axle pinch bolt
Ⓒ Brake disc bolt

ITEM	N·m	kgf·m	lb·ft
Ⓐ	65	6.5	47.0
Ⓑ	33	3.3	24.0
Ⓒ	23	2.3	16.5

REMOVAL AND DISASSEMBLY

- Loosen the front axle pinch bolt ①.
- Loosen the front axle ② by using the special tool.

 **09900-18710: Hexagon socket (12 mm)**

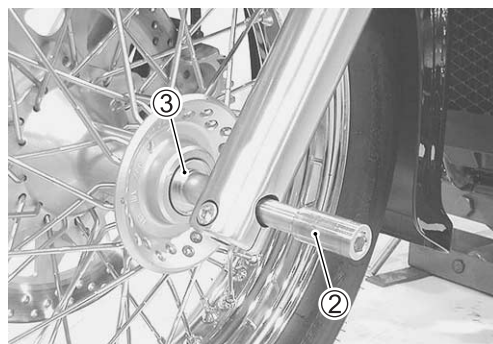
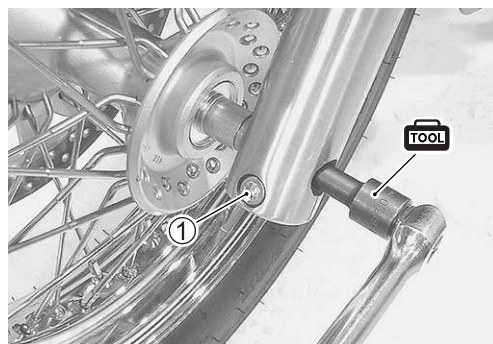
- Raise the front wheel off the ground with a jack or a wooden block.

- Remove the front axle ②, spacers ③ and front wheel.

CAUTION

Do not operate the brake lever during or after front wheel removal.

- Remove the brake disc by removing its bolts.

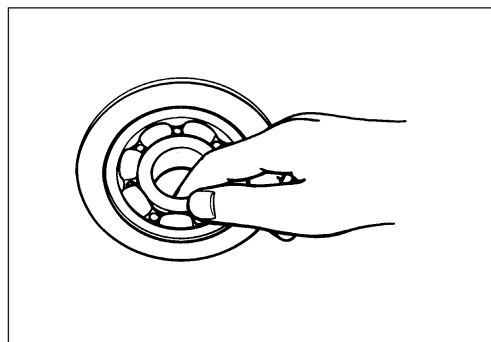


INSPECTION

WHEEL BEARINGS

Inspect the play of the wheel bearings by finger while they are in the wheel. Rotate the inner race by finger to inspect for abnormal noise and smooth rotation.

Replace the bearing in the following procedure if there is anything unusual.



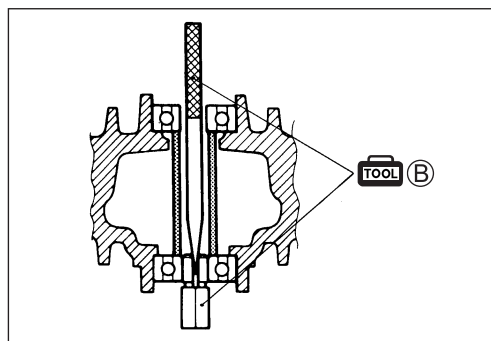
WHEEL BEARINGS REMOVAL

- Remove the wheel bearings by using the special tool (A) or (B).

TOOL 09921-20220: (A) Bearing remover set (17 mm)
or 09941-50111: (B) Wheel bearing remover

CAUTION

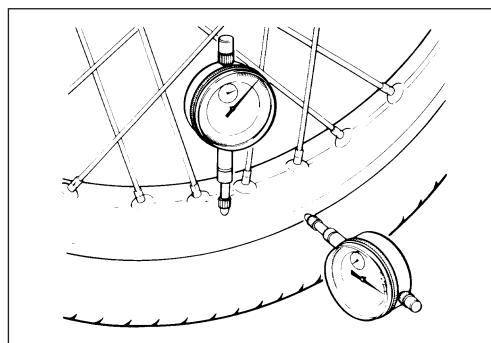
The removed bearings should be replaced with new ones.



FRONT WHEEL

Make sure that the wheel runout (axial and radial) does not exceed the service limit when checked as shown. An excessive amount of runout is usually due to worn or loose wheel bearings and can be corrected by replacing the bearings. If bearing replacement fails to reduce the runout, replace the wheel with a new one.

DATA Wheel rim runout (axial and radial)
Service Limit: 2.0 mm (0.08 in)

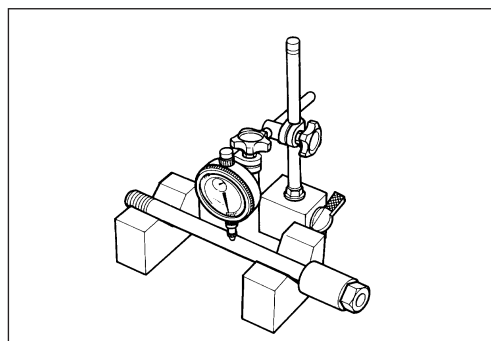


FRONT AXLE

Measure the front axle runout using the dial gauge. If the runout exceeds the service limit, replace the front axle with a new one.

TOOL 09900-20606: Dial gauge (1/100 mm)
09900-20701: Magnetic stand
09900-21304: V-block set (100 mm)

DATA Wheel axle runout
Service Limit: 0.25 mm (0.010 in)



REASSEMBLY AND REMOUNTING

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

WHEEL BEARING

- Apply SUZUKI SUPER GREASE “A” to the bearings before installing.

For USA

 99000-25030: SUZUKI SUPER GREASE “A”

For the other countries

 99000-25010: SUZUKI SUPER GREASE “A”

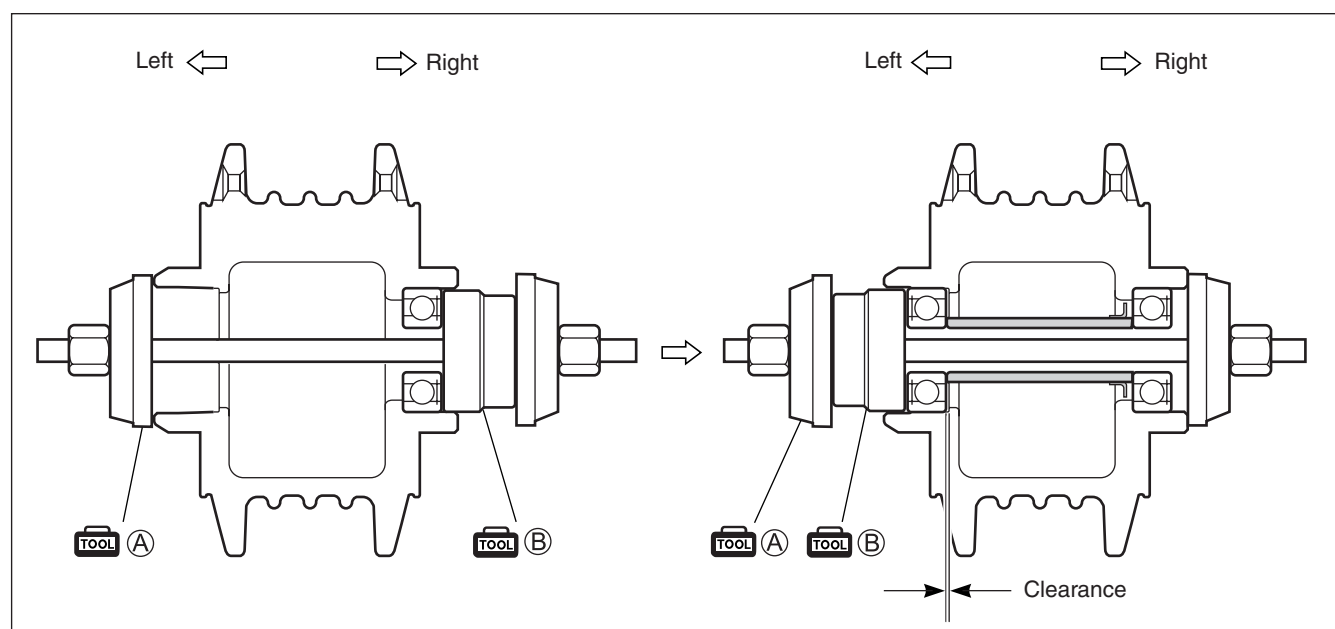
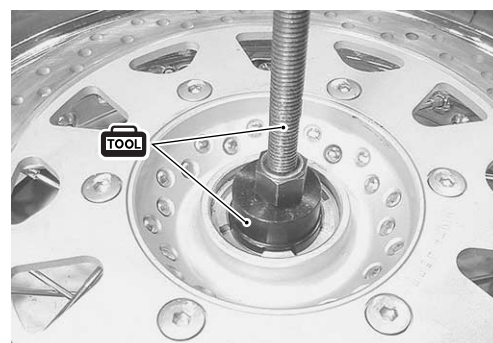
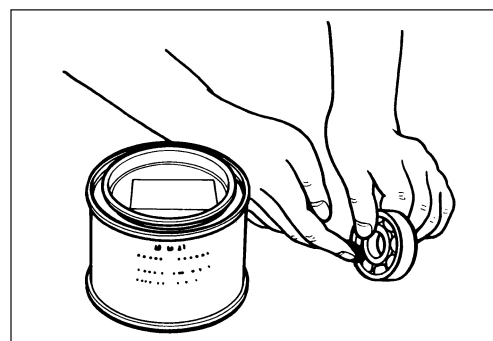
- Install the wheel bearings using the used bearings and special tool as described below.

 (A) 09941-34513: Bearing installer set

(B) 09913-70210: Bearing installer set (40 mm)

⚠ CAUTION

- * First install the right wheel bearing, then install the left wheel bearing.
- * The sealed covers on the bearings must face to the outside.

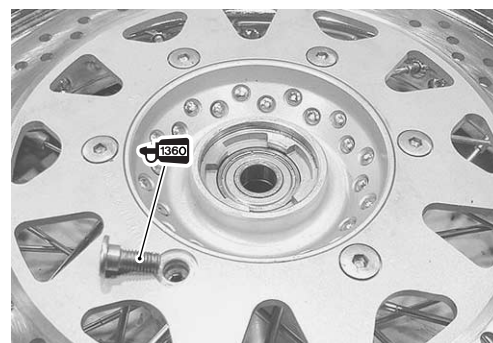


BRAKE DISC

- Make sure that the brake disc is clean and free of any grease. Apply THREAD LOCK SUPER “1360” to the brake disc bolts and tighten them to the specified torque.

 99000-32130: THREAD LOCK SUPER “1360”

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



SPEED SENSOR

- Apply SUZUKI SUPER GREASE “A” to the speed sensor dust seal.

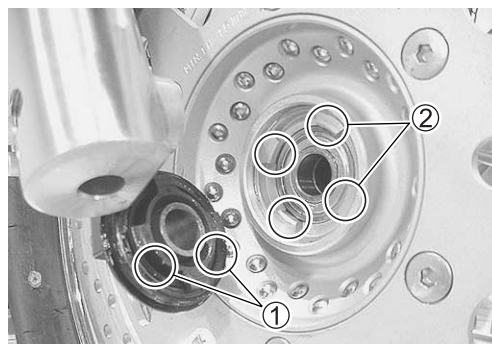
For USA

 99000-25030: SUZUKI SUPER GREASE “A”

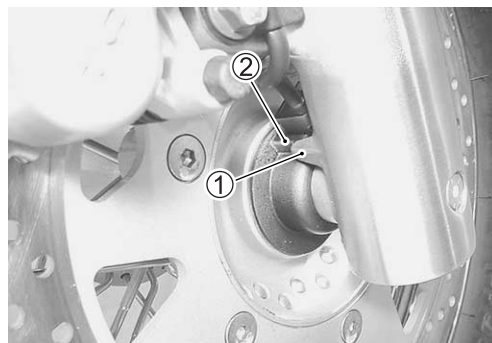
For the other countries

 99000-25010: SUZUKI SUPER GREASE “A”

- Align the grooves ① on the speed sensor with the lugs ② on the wheel hub.

**FRONT WHEEL**

- Make sure that the front fork stopper ① and the speed sensor stopper ② are installed as shown.

**⚠ CAUTION**

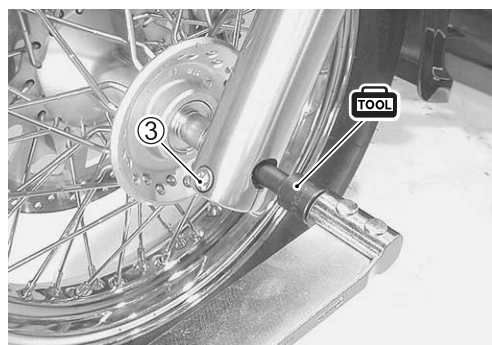
When installing the front wheel, position the brake disc between the brake pads. Be careful not to damage the brake pads.

- Tighten the front axle to the specified torque.
- Tighten the front axle pinch bolt ③ on the specified torque.

 **Front axle: 65 N·m (6.5 kgf·m, 47.0 lb-ft)**

Front axle pinch bolt: 33 N·m (3.3 kgf·m, 24 lb-ft)

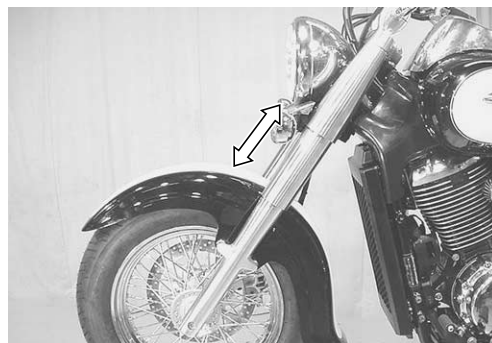
 **09900-18710: Hexagon socket (12 mm)**

**NOTE:**

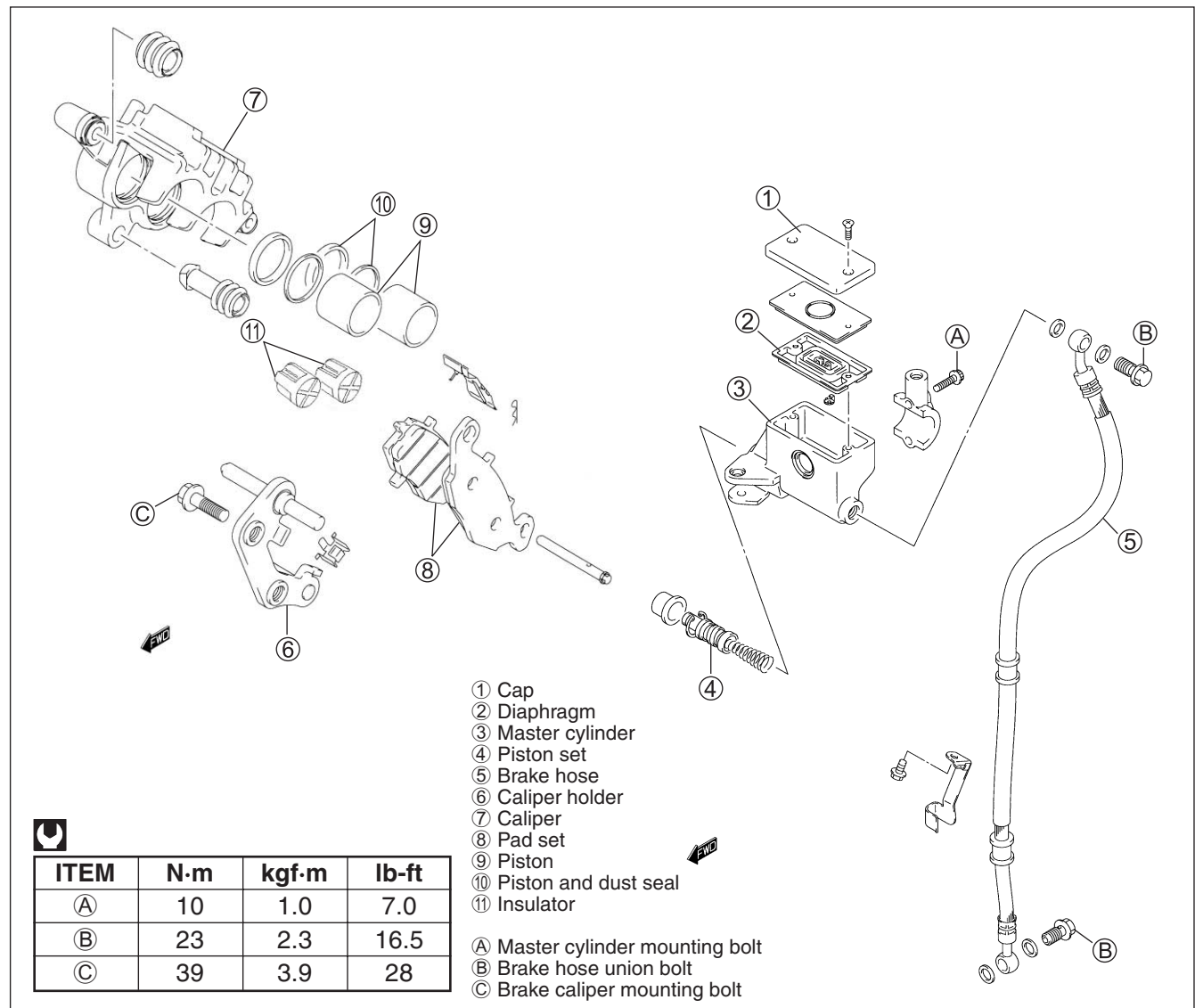
Before tightening the front axle pinch bolts ③, move the front fork up and down four or five times.

NOTE:

After remounting the front wheel, pump the brake lever a few times to check for proper brake operation.



FRONT BRAKE CONSTRUCTION



⚠ WARNING

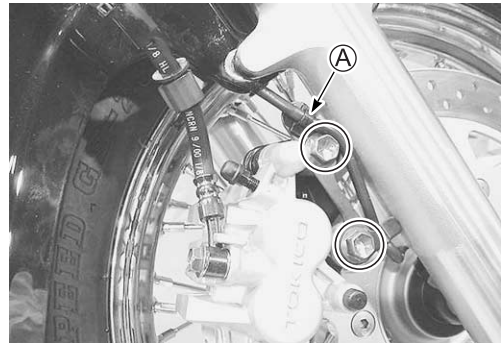
- * The brake system is filled with an glycol-based brake fluid, which is classified DOT 4. Do not use or mix other types of brake fluid, such as silicone-based and petroleum-based brake fluids when refilling the brake system, otherwise serious damage to the brake system will result.
- * Do not use any brake fluid taken from old, used, or unsealed containers.
- * Do not reuse brake fluid left over from the last servicing or which has been stored for a long period of time.
- * When storing brake fluid, be sure to seal the container completely and keep it out of the reach of children.
- * When replenishing brake fluid, be sure not to get any dust or other foreign materials in the fluid.
- * When washing brake components, always use new brake fluid. Do not use cleaning solvent.
- * A contaminated brake disc or brake pad reduces braking performance. Discard contaminated pads and clean the brake disc with high-quality brake cleaner or a neutral detergent.

⚠ CAUTION

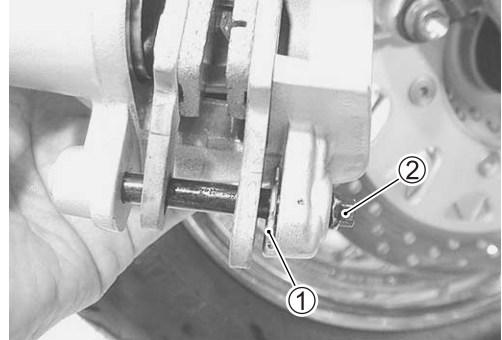
Handle brake fluid with care: the fluid reacts chemically with paint, plastics, rubber material, etc.

BRAKE PAD REPLACEMENT

- Remove the guide hook (A).
- Remove the brake caliper by removing the brake caliper mounting bolts.



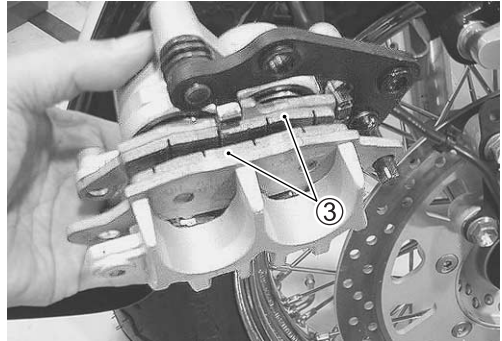
- Remove the pin (1).
- Remove the pad pin (2).



- Remove the brake pads (3).

⚠ CAUTION

- * Do not operate the brake lever during or after brake pad removal.
- * Replace the brake pads as a set, otherwise braking performance will be adversely affected.



- Install the new brake pads.



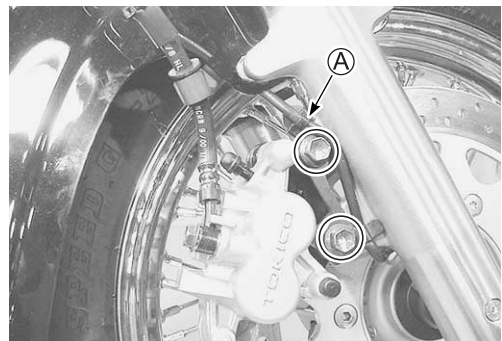
- Tighten the brake caliper mounting bolts to the specified torque.

🔧 Brake caliper mounting bolts: 39 N·m (3.9 kgf·m, 28 lb·ft)

- Install the guide hook (A).

NOTE:

After replacing the brake pads, pump the brake lever a few 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 handlebar straight.
- Remove the master cylinder reservoir cap and diaphragm.
- Remove as much old brake fluid as possible.
- Fill the reservoir with new brake fluid.



Specification and classification: DOT 4

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

⚠ CAUTION

Bleed air from the brake system.

(👉 2-17)

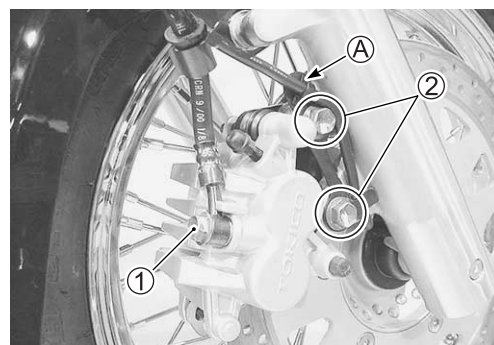


BRAKE CALIPER REMOVAL AND DISASSEMBLY

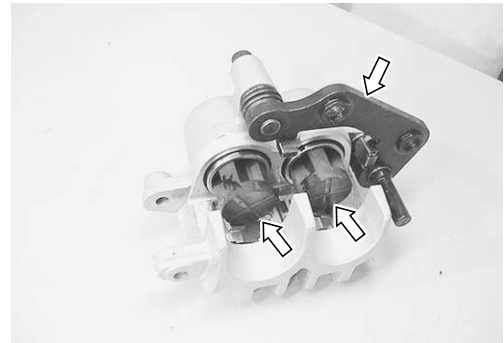
- Remove the guide hook (A).
- Disconnect the brake hose from the brake caliper by removing the brake hose union bolt (1) and allow the brake fluid to drain into a suitable receptacle.
- Remove the brake caliper by removing the brake caliper mounting bolts (2).

⚠ WARNING

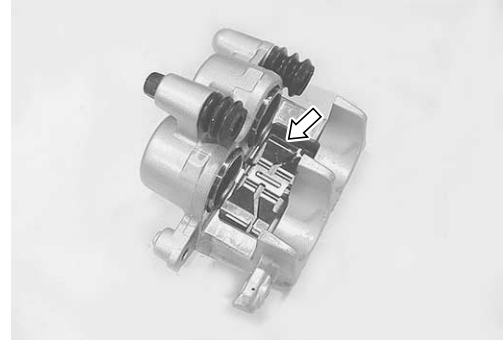
- * Do not reuse the brake fluid left over from the last servicing or which has been stored for a long period of time, otherwise serious damage to the brake system will result.
- * Brake fluid, if it leaks, will interfere with safe running and discolor painted surfaces. Check the brake hose and hose joints for cracks and oil leakage.



- Remove the brake pads. (7-10)
- Remove the insulator.
- Remove the brake caliper holder.



- Remove the spring.



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

⚠ CAUTION

Do not use extremely high pressure to remove the brake caliper pistons, otherwise damage to the pistons will result.



- Remove the dust seals and piston seals.

⚠ CAUTION

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



BRAKE CALIPER INSPECTION

BRAKE CALIPER

Inspect each brake caliper cylinder wall for nicks, scratches or other damage. If any damages are found, replace the brake caliper with a new one.

BRAKE CALIPER PISTONS

Inspect the brake caliper pistons for any scratches or other damage. If any damages are found, replace the piston with a new one.



RUBBER PARTS

Replace the removed rubber parts with new ones.



BRAKE CALIPER REASSEMBLY AND REMOUNTING

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

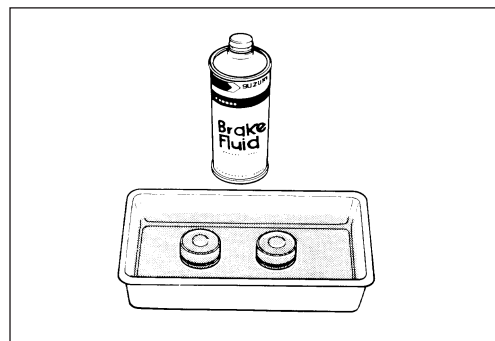
- Wash the caliper bores and pistons with the specified brake fluid. Thoroughly wash the dust seal grooves and piston seal grooves.



Specification and classification: DOT 4

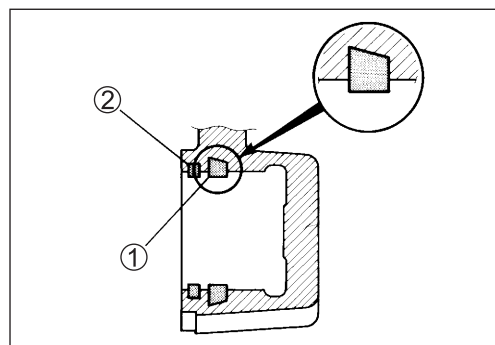
⚠ CAUTION

- * Wash the brake caliper components with new brake fluid before reassembly.
- * Do not wipe the brake fluid off after washing the components.
- * When washing the components, use the specified brake fluid. Never use different types of fluid or cleaning solvents such as gasoline, kerosine, etc.
- * Replace the removed piston seals and dust seals with new ones.
- * Apply brake fluid to all of the seals, brake caliper bores and pistons before reassembly.



PISTON SEALS

- Install the piston seals ① and dust seals ② as shown.

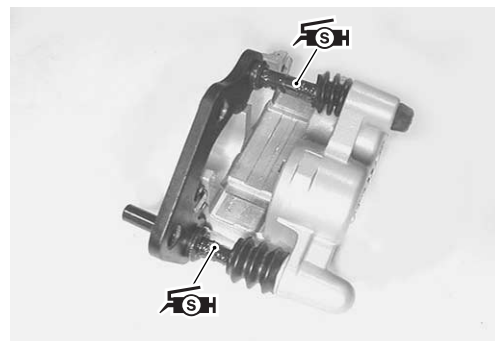


BRAKE CALIPER HOLDER

- Apply SUZUKI SILICON GREASE to the brake caliper holder.



99000-25100: SUZUKI SILICONE GREASE



- Tighten the brake caliper mounting bolts ①, and brake hose union bolt ② to the specified torque.

🔧 Brake caliper mounting bolt: 39 N·m (3.9 kgf·m, 28 lb·ft)
Brake hose union bolt: 23 N·m (2.3 kgf·m, 16.5 lb·ft)

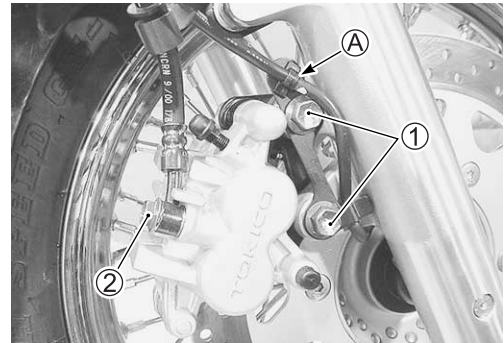
- For assembly procedure of brake hose: 📖 9-18
- Install the guide hook ①.

NOTE:

Before remounting the brake caliper, push the brake caliper pistons all the way into the caliper.

⚠ CAUTION

Bleed air from the system after reassembling the brake caliper. (📖 2-17)



BRAKE DISC INSPECTION

Check the brake disc for cracks or damage and measure the thickness using the micrometer. If any damages are found or if the thickness is less than the service limit, replace the brake disc with a new one.

🔧 09900-20205: Micrometer (0 – 25 mm)

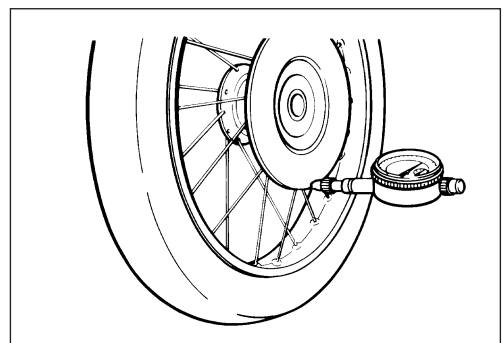
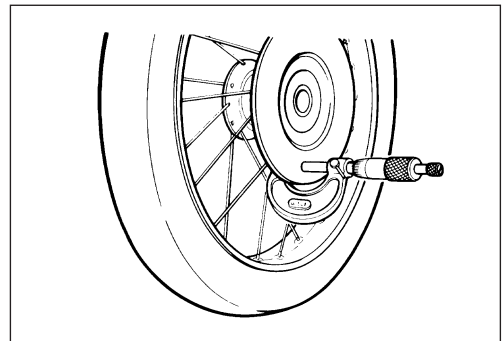
📊 DATA Brake disc thickness
Service Limit: 4.5 mm (0.098 in)

Measure the runout using the dial gauge. If the runout exceeds the service limit, replace the brake disc with a new one.

🔧 09900-20606: Dial gauge (1/100 mm)
09900-20701: Magnetic stand

📊 DATA Brake disc runout
Service Limit: 0.3 mm (0.012 in)

- If either measurement exceeds the service limit, replace the brake disc with a new one. (📖 7-5)



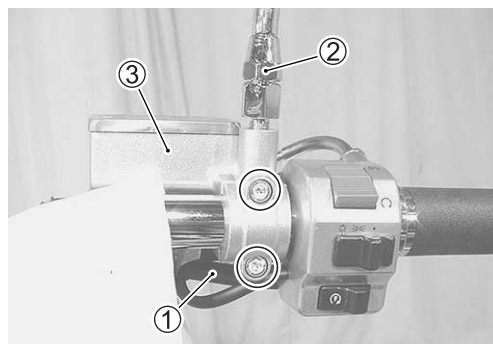
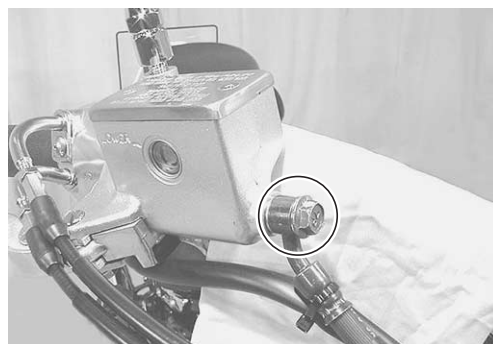
MASTER CYLINDER REMOVAL AND DISASSEMBLY

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

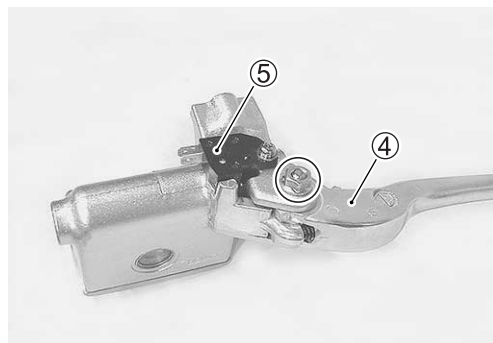
⚠ CAUTION

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

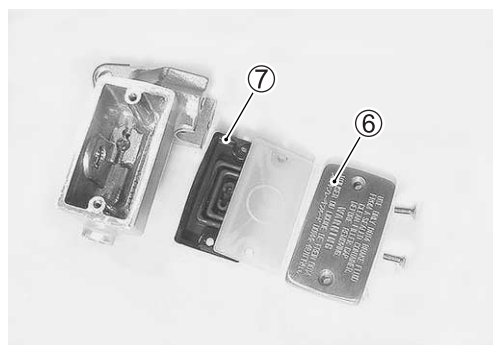
- Disconnect the front brake light switch lead wire ①.
- Remove the right rear view mirror ② and master cylinder assembly ③.



- Remove the brake lever ④ and front brake light switch ⑤.



- Remove the reservoir cap ⑥ and diaphragm ⑦.
- Drain the brake fluid.



- Pull the dust boot ⑧ out and remove the circlip ⑨.

