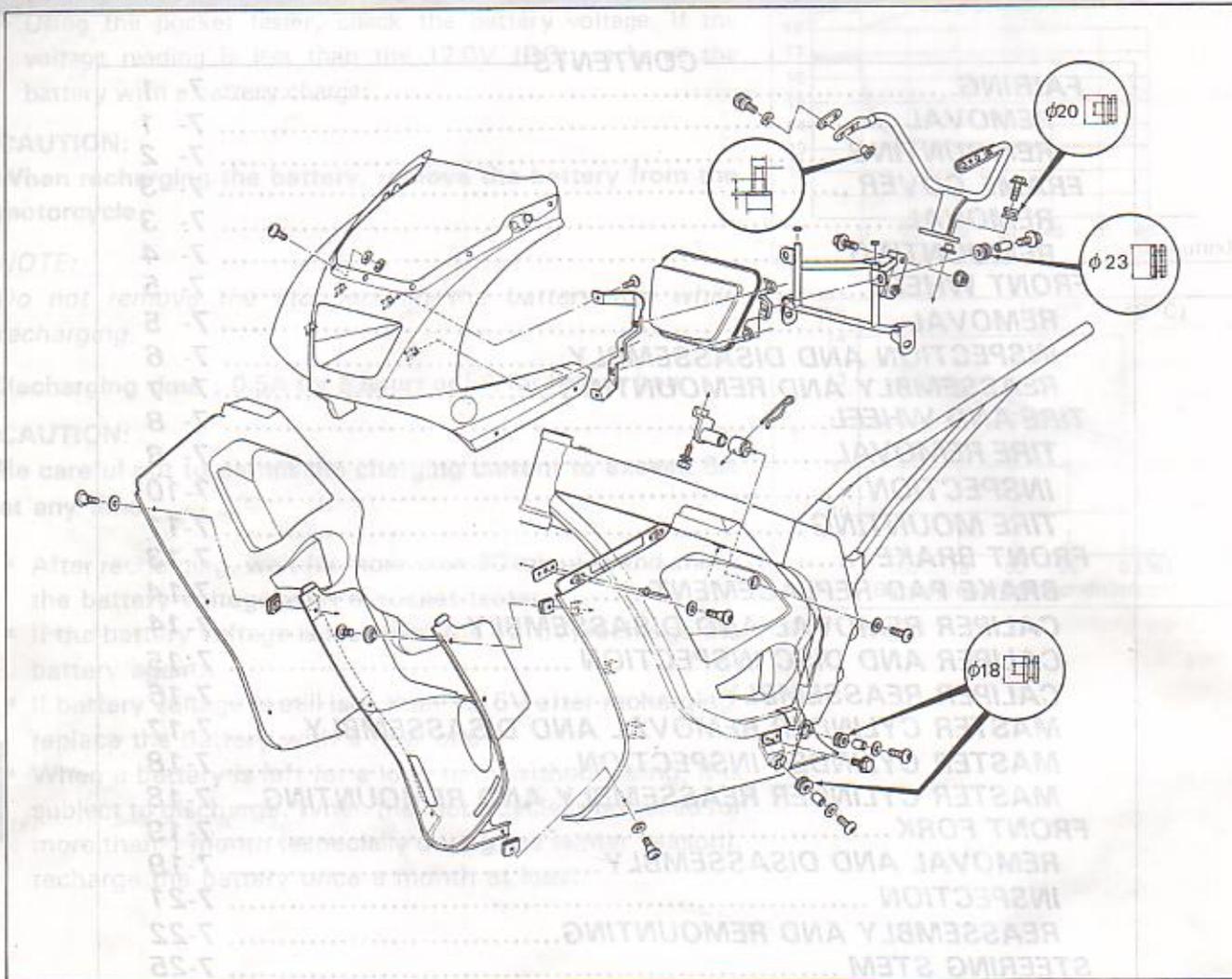


# CHASSIS

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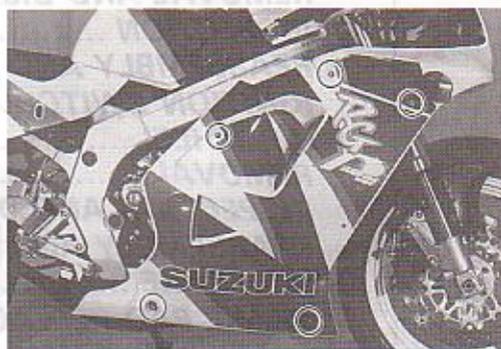
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FAIRING



REMOVAL

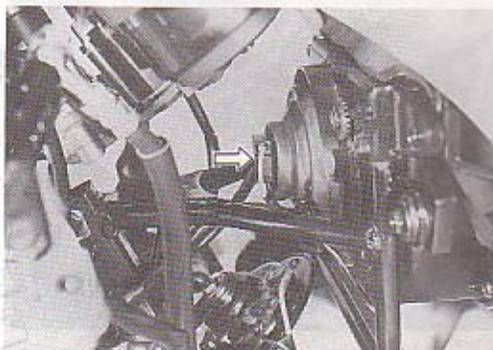
- Remove the right side lower fairing.
- Remove the left side lower fairing with the center lower fairing.



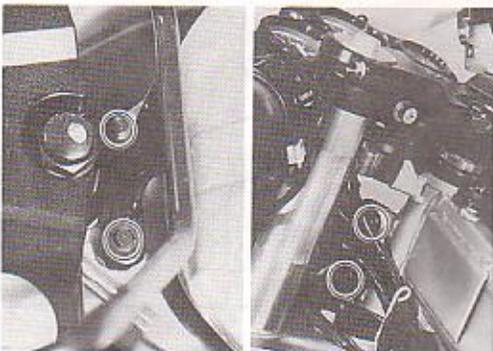
- Disconnect the right and left front turn signal light lead wires.



- Disconnect the headlight lead wires and parking or position light lead wires.



- Remove the fairing with the headlight and rear view mirrors by removing the fairing brace mounting bolts.



### REMOUNTING

Remount the fairing in the reverse order of removal.

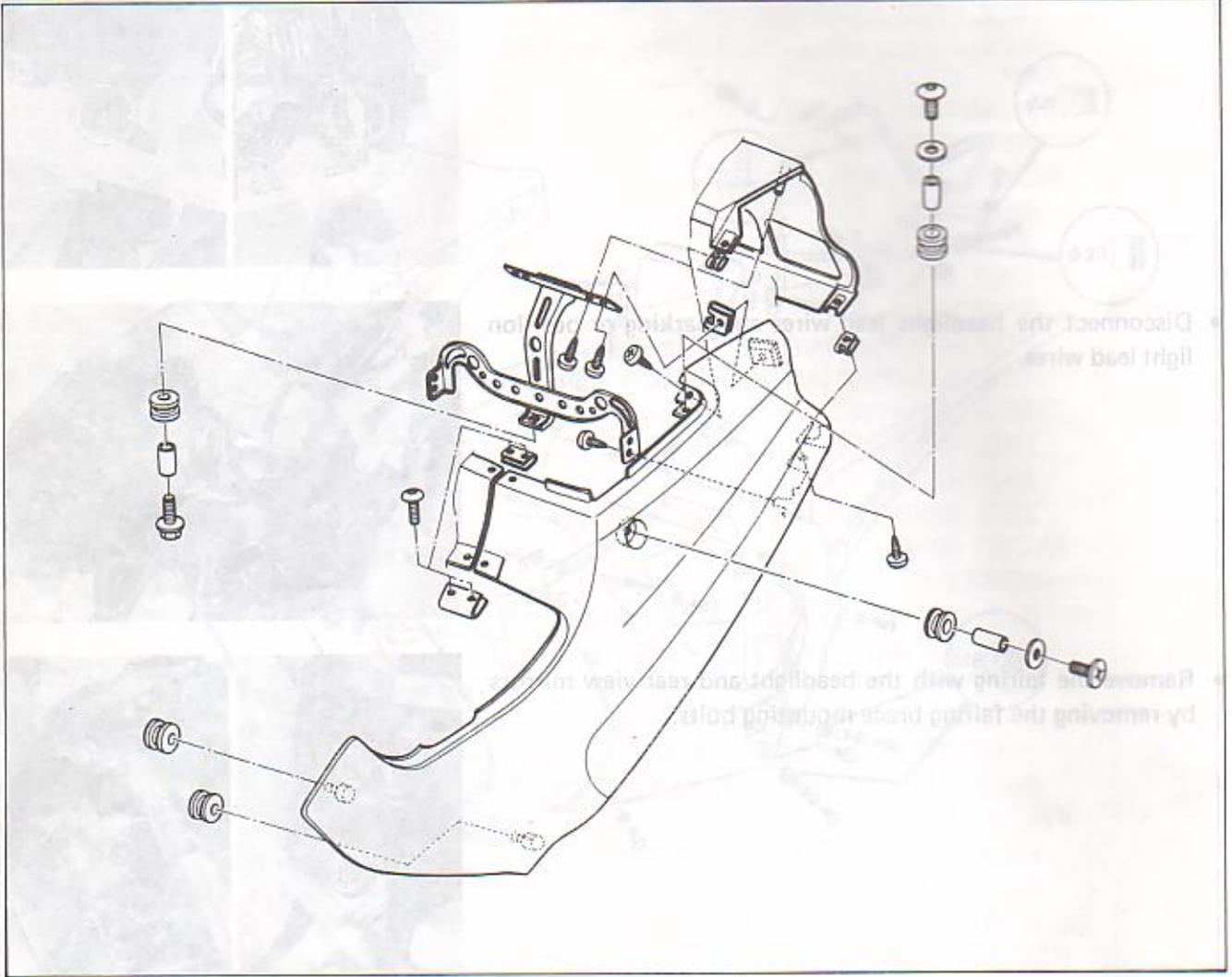


### REMOVAL

- Remove the seat.
- Remove the pillion seat by removing the cable mounting bolts.

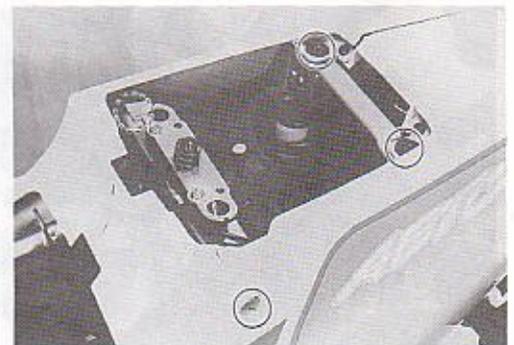
- Remove the frame cover mounting bolts.

## FRAME COVER



## REMOVAL

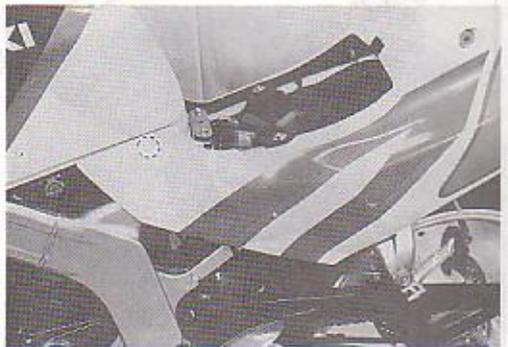
- Remove the seat.
- Remove the pillion seat by removing the cable mounting bolts.
- Remove the frame cover mounting bolts.



- Remove the tail/brake light mounting bolt.



- Disconnect the tail/brake light lead wires.
- Remove the frame covers with the tail/brake light by disconnecting the frame cover bosses from the fuel tank.



**REMounting**

- Remount the frame covers in the reverse order of removal.

ITEM	Weight (kg)	Tightening torque (N·m)
①	19-25	1.9 - 2.8
②	51-81	3.1 - 8.1



**WHEEL RIM**

Make sure that the wheel rim is not bent and the brake linings are not worn. If the wheel rim is bent, it will affect the bearing life and the wheel alignment. The wheel rim should be replaced if it is bent or worn. The wheel rim should be replaced if it is bent or worn.

Service Unit : 2.0 mm (0.08 in)  
(Axial and Radial)



**FRONT WHEEL**

Remove the tail brake light mounting bolt.

Th1360 : Apply THREAD LOCK SUPER "1360" (99000-32020)  
 G : Apply SUZUKI SUPER GREASE "A" (99000-25010)

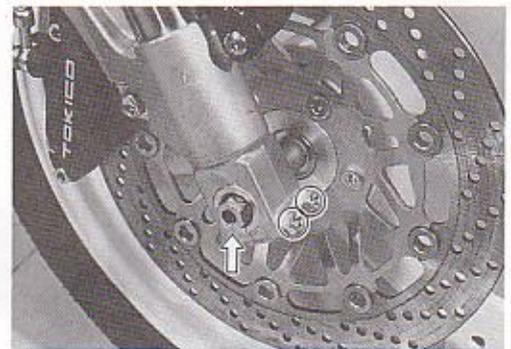
Tightening torque			
ITEM	N·m	kg-m	lb-ft
①	19 - 28	1.9 - 2.8	13.5 - 20.0
②	51 - 81	5.1 - 8.1	37.0 - 58.5

**REMOVAL**

- Remove the lower fairing. (Refer to page 7-1.)
- Support the motorcycle with the jack or wooden block.
- Loosen the front axle holder bolts and axle shaft.
- Draw out the axle shaft and remove the front wheel.

**NOTE:**

Do not operate the brake lever while dismantling the front wheel.



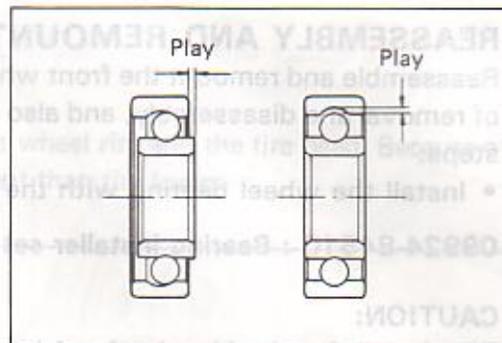
Remove the frame cover (protective grill).

**INSPECTION AND DISASSEMBLY****WHEEL BEARING**

Inspect the play of bearing inner ring by hand while mounted in the wheel.

Rotate the inner ring by hand to inspect if any abnormal noise occurs or rotating smoothly.

Replace the bearing if there is anything unusual.



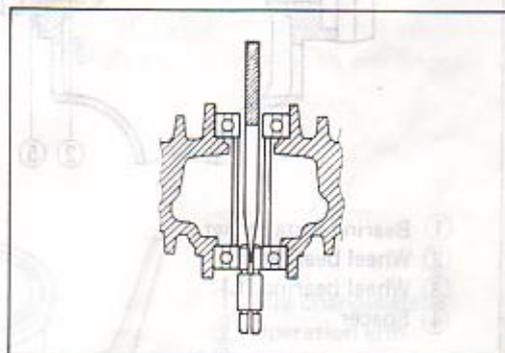
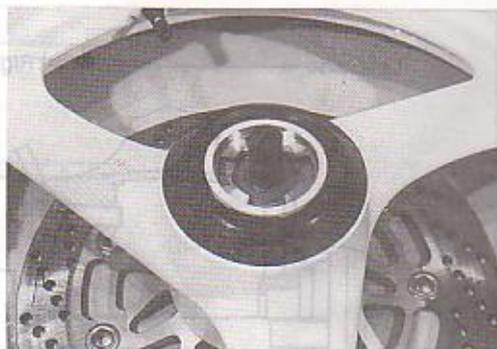
- Remove the dust seal.
- Drive out the both bearing with the special tool in the following procedures.

09941-50110 : Bearing remover

- Insert the adapter into the bearing.
- After inserting the wedge bar from the opposite side, lock the wedge bar in the slit of the adapter.
- Drive out the bearing by knocking the wedge bar.

**CAUTION:**

The removed dust seal and bearing should be replaced with new ones.

**AXLE SHAFT**

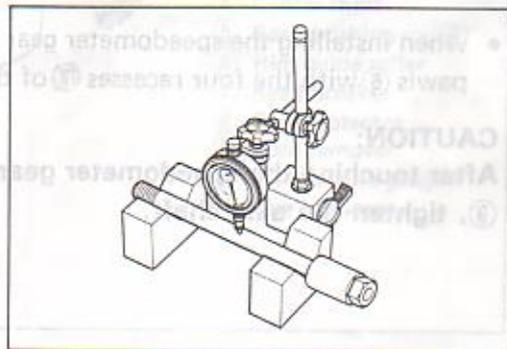
Check the axle shaft runout with a dial gauge and replace it if the runout exceeds the limit.

Service Limit : 0.25 mm (0.010 in)

09900-20606 : Dial gauge (1/100 mm)

09900-20701 : Magnetic stand

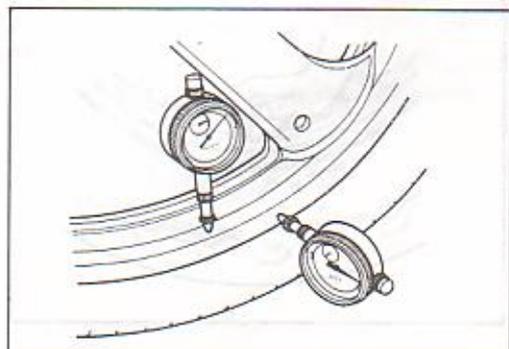
09900-21303 : 'V' block set

**WHEEL RIM**

Make sure that the wheel rim runout does not exceed the service limit when checked as shown.

An excessive runout is usually due to worn or loose wheel bearings and can be reduced by replacing the bearings. If bearing replacement fails to reduce the runout, replace the wheel.

Service Limit : 2.0 mm (0.08 in)  
(Axial and Radial)



### REASSEMBLY AND REMOUNTING

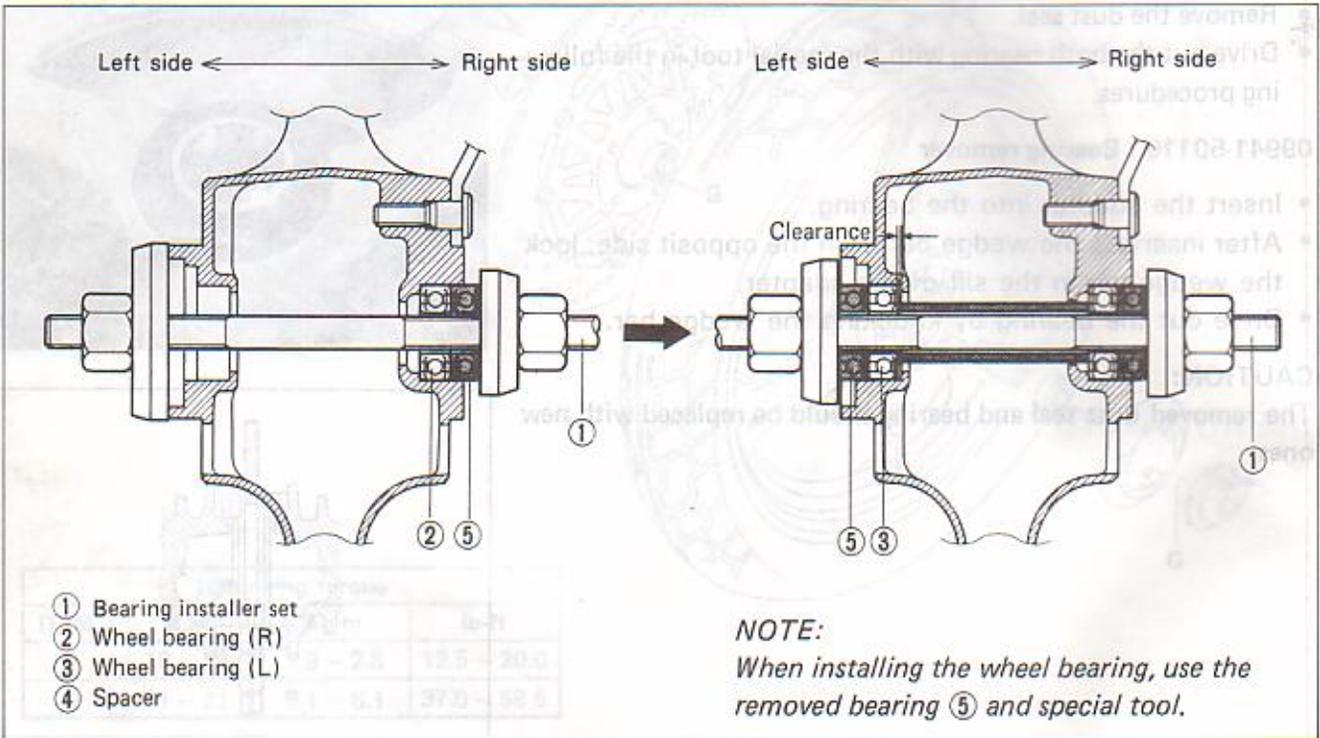
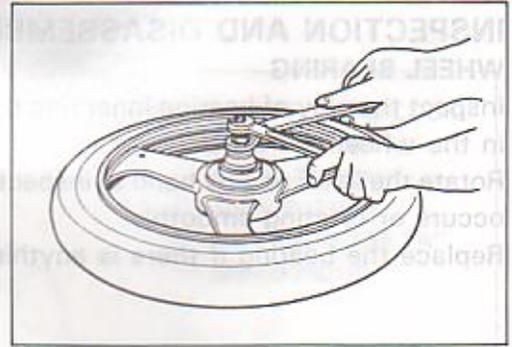
Reassemble and remount the front wheel in the reverse order of removal and disassembly, and also carry out the following steps:

- Install the wheel bearing with the special tools.

**09924-84510 : Bearing installer set**

**CAUTION:**

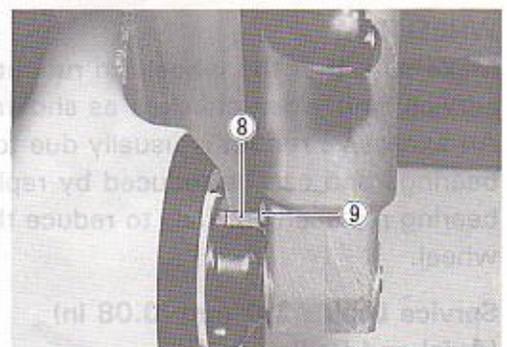
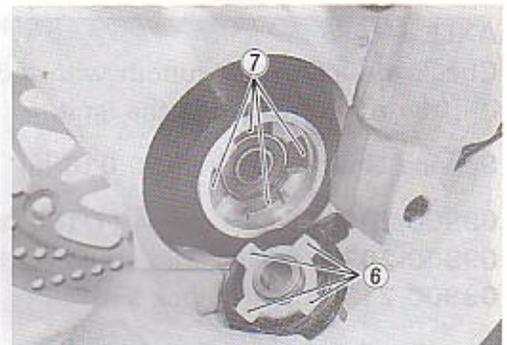
First install the wheel bearing for right side.



- When installing the speedometer gear box, align the four drive pawls ⑥ with the four recesses ⑦ of the wheel hub.

**CAUTION:**

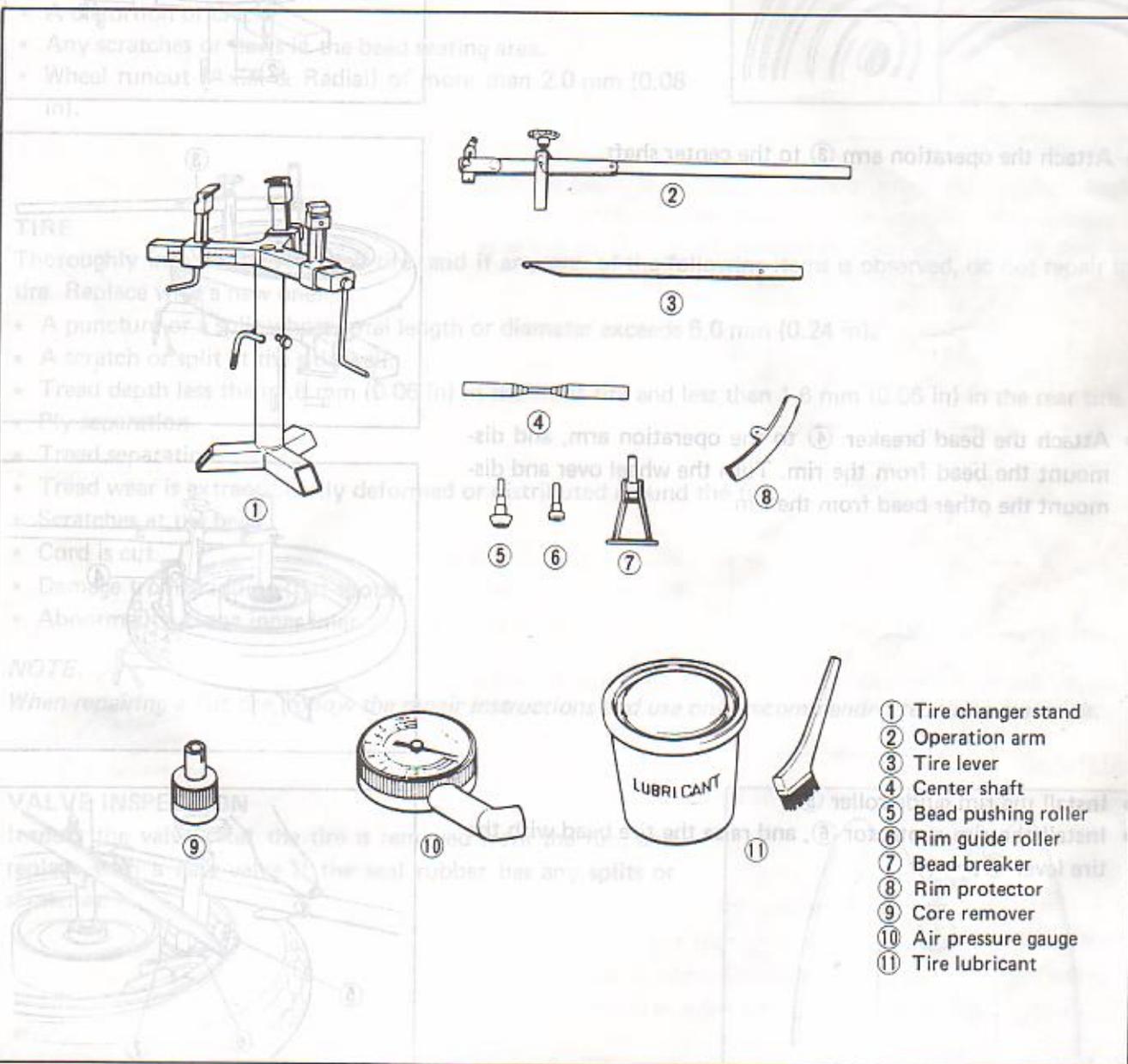
After touching the speedometer gear box ⑧ to the stopper ⑨, tighten the axle shaft.



## TIRE AND WHEEL

### TIRE REMOVAL

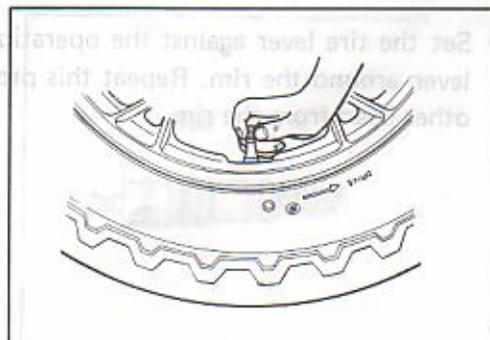
The most critical factor of a tubeless tire is the seal between the wheel rim and the tire bead. Because of this, we recommend using a tire changer which is also more efficient than tire levers. For tire removal the following tools are required.



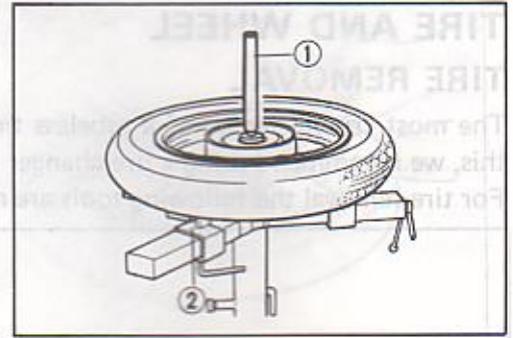
- Remove the valve core from the valve stem, and deflate the tire completely.

**NOTE:**

Mark the tire with chalk to note the position ① of the tire on the rim and rotational direction ② of the tire.



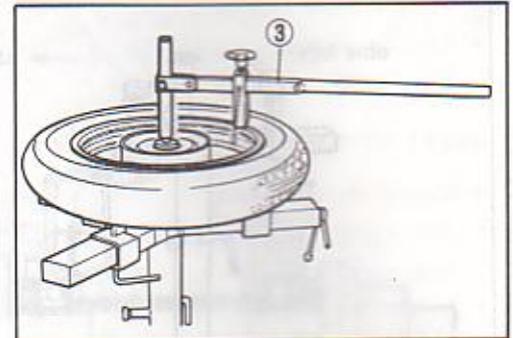
- Place the center shaft ① to the wheel, and fix the wheel with the rim holder ②.



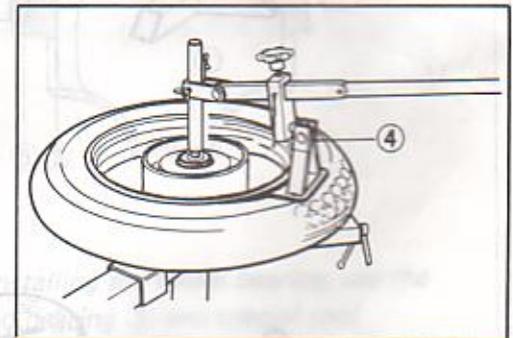
**CAUTION:**

First install the wheel bearing for right side.

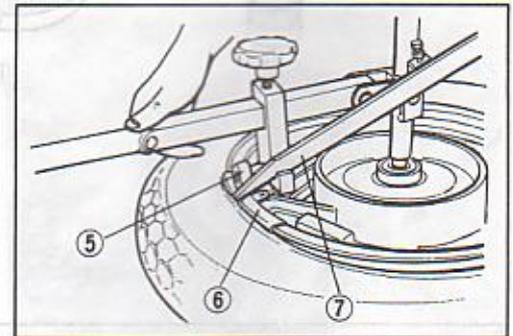
- Attach the operation arm ③ to the center shaft.



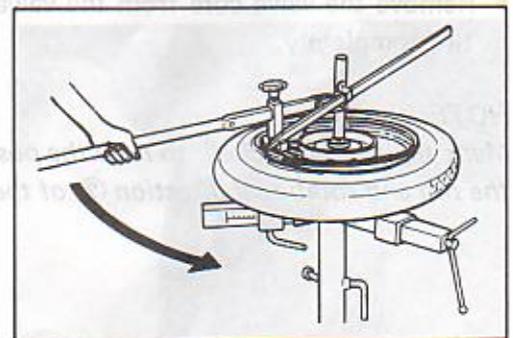
- Attach the bead breaker ④ to the operation arm, and dismount the bead from the rim. Turn the wheel over and dismount the other bead from the rim.



- Install the rim guide roller ⑤.
- Install the rim protector ⑥, and raise the tire bead with the tire lever ⑦.



- Set the tire lever against the operation arm, and rotate the lever around the rim. Repeat this procedure to remove the other bead from the rim.

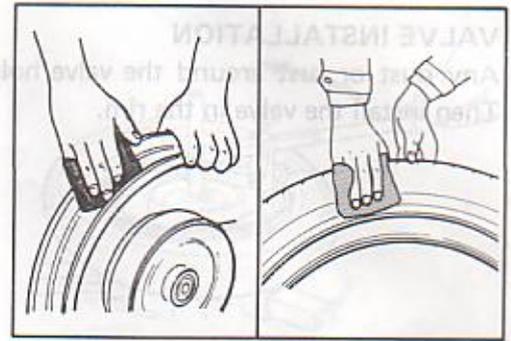


## INSPECTION

### WHEEL

Wipe off any rubber substance or rust from the wheel, and inspect the wheel rim. If any one of the following items is observed, replace it with a new wheel.

- \* A distortion or crack.
- \* Any scratches or flaws in the bead seating area.
- \* Wheel runout (Axial & Radial) of more than 2.0 mm (0.08 in).



### TIRE

Thoroughly inspect the removed tire, and if any one of the following items is observed, do not repair the tire. Replace with a new one.

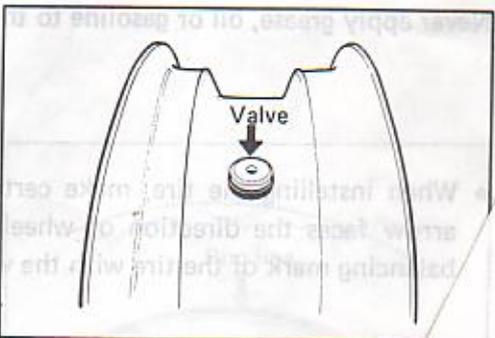
- \* A puncture or a split whose total length or diameter exceeds 6.0 mm (0.24 in).
- \* A scratch or split at the side wall.
- \* Tread depth less than 1.6 mm (0.06 in) in the front tire and less than 1.6 mm (0.06 in) in the rear tire.
- \* Ply separation.
- \* Tread separation.
- \* Tread wear is extraordinarily deformed or distributed around the tire.
- \* Scratches at the bead.
- \* Cord is cut.
- \* Damage from skidding (flat spots).
- \* Abnormality in the inner liner.

### NOTE:

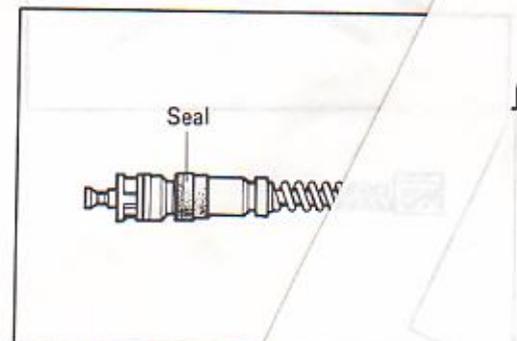
When repairing a flat tire, follow the repair instructions and use only recommended repairing materials.

### VALVE INSPECTION

Inspect the valve after the tire is removed from the rim, and replace with a new valve if the seal rubber has any splits or scratches.

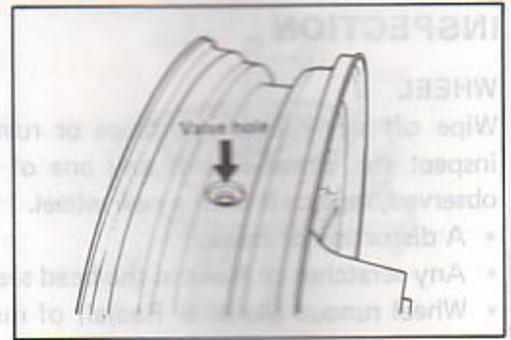


Inspect the removed valve core and replace with the new one if the seal rubber is abnormally deformed or worn.



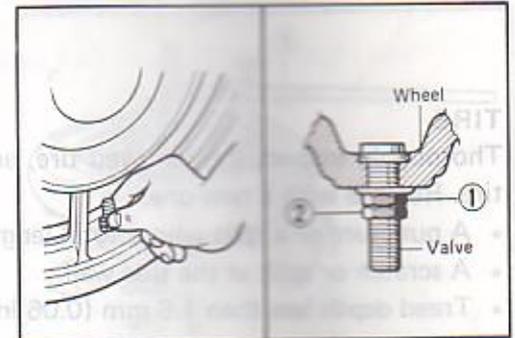
**VALVE INSTALLATION**

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



**CAUTION:**

When installing the valve, tighten the nut ① by hand as much as possible. Holding the nut ① under this condition, tighten the lock nut ②. Do not overtighten the nut ① as this may distort the rubber packing and cause an air leak.

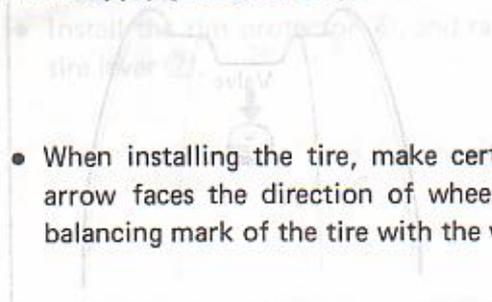


**TIRE MOUNTING**

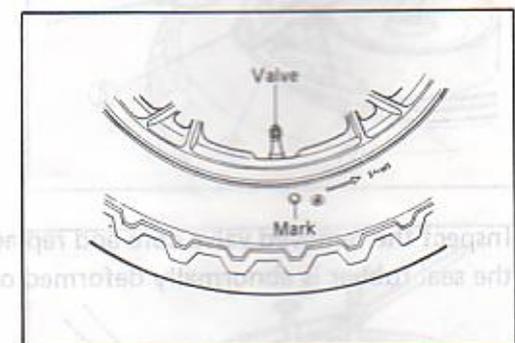
- Apply a special tire lubricant or neutral soapy liquid to the tire bead.

**CAUTION:**

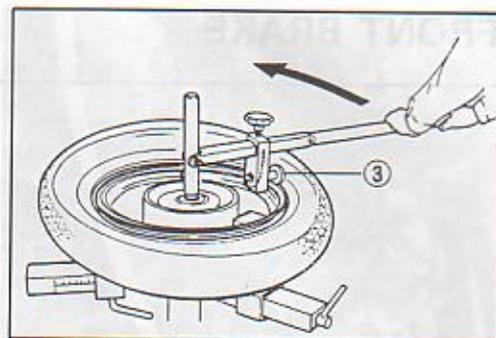
Never apply grease, oil or gasoline to the tire bead.



- When installing the tire, make certain that the directional arrow faces the direction of wheel rotation and align the balancing mark of the tire with the valve as shown.



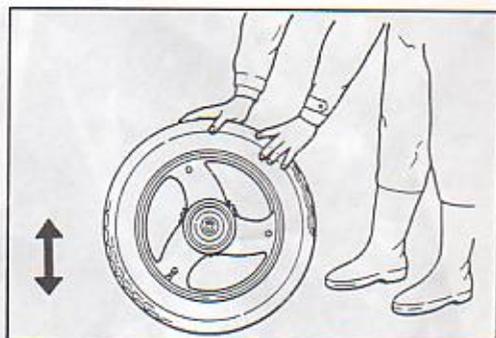
- Set the bead pushing roller ③.
- Rotate the operation arm around the rim to mount the bead completely. Do the bottom bead first, then the upper bead.
- Remove the wheel from the tire changer, and install the valve core in the valve stem.



**NOTE:**

Before installing the valve core, inspect the core.

- Bounce the tire several times while rotating. This makes the tire bead expand outwards, and thus makes inflation easier.



**NOTE:**

Before inflating, confirm that the balance mark lines up with the valve.

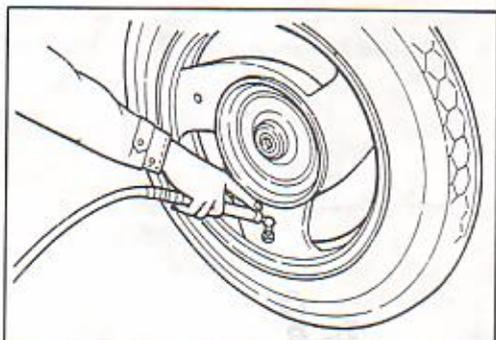
**CAUTION:**

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

- Pump up the tire with air.

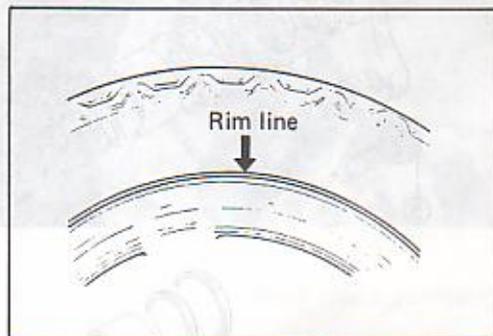
**WARNING:**

Do not inflate the tire to more than 400 kPa (4.0 kg/cm<sup>2</sup>, 56 psi). The tire could burst with sufficient force to cause severe injury. Never stand directly over the tire while inflating it.



**NOTE:**

Check the "rim line" cast on the tire side walls. It must be equidistant from the wheel rim all the way around. If the distance between the rim line and wheel rim varies, this indicates that the bead is not properly seated. If this is so, deflate the tire completely, and unseat the bead for both sides. Coat the bead with lubricant, and try again.



- After tire is properly seated to the wheel rim, adjust the air-pressure to the recommended pressure. Correct the wheel balance if necessary.

**WARNING:**

- \* Do not run a repaired tire more than 50 km/h (30 mph) within 24 hours after tire repairing, since the patch may not be completely cured.
- \* Do not exceed 130 km/h (80 mph) with a repaired tire.

ITEM	N·m	kg·m	ft·lb
①	8-9	0.8-0.9	4.8-6.2
②	8-9	0.8-0.9	4.8-6.2
③	18-20	1.8-2.0	11.5-14.5
④	18-23	1.8-2.3	13.0-16.5
⑤	8-9	0.8-0.9	4.8-6.2
⑥	31-48	3.1-4.8	22.8-34.8



## BRAKE PAD REPLACEMENT

- Remove the pad cover.

- Remove the clip ①.
- Remove the pads by removing the pad mounting shaft ②.

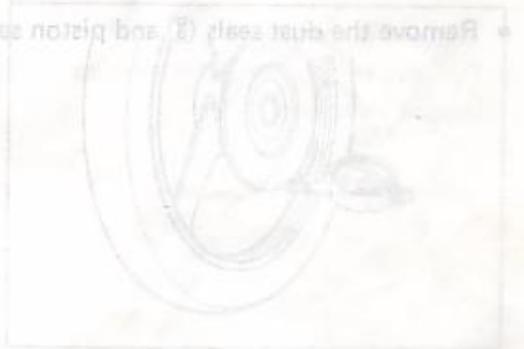
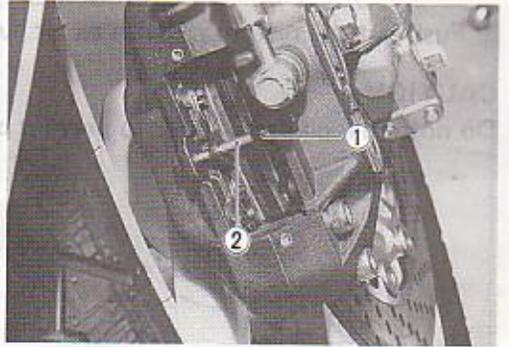
**NOTE:**

Do not operate the brake lever while dismantling the pads.

**CAUTION:**

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

- Remount the pads. (Refer to page 7-4.)



## CALIPER REMOVAL AND DISASSEMBLY

- Remove the brake hose and catch the brake fluid in a suitable receptacle.

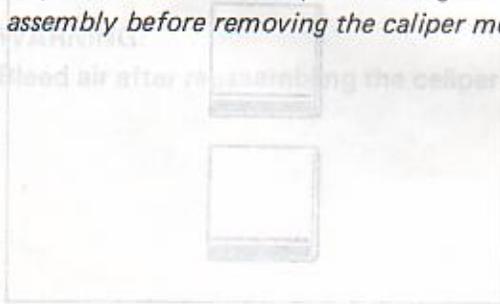
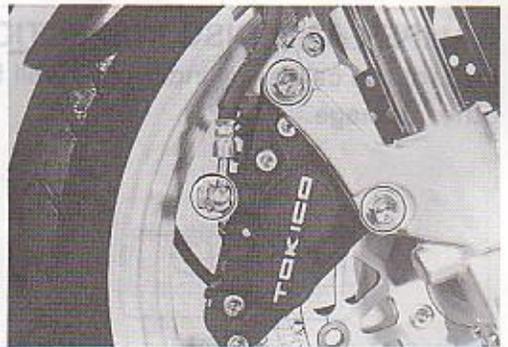
**CAUTION:**

Never re-use the brake fluid left over from the last servicing and stored for long periods.

- Remove the caliper.

**NOTE:**

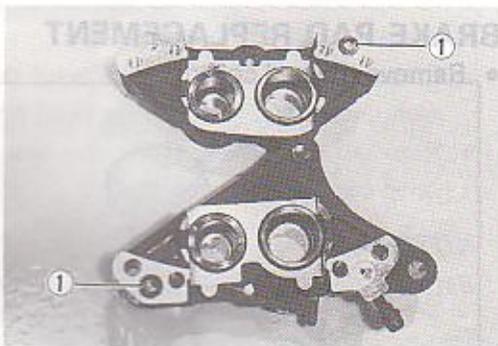
Slightly loosen the caliper housing bolts to facilitate later disassembly before removing the caliper mounting bolts.



- Remove the pads. (Refer to page 7-14.)
- Separate the caliper by removing the caliper housing bolts.
- Remove the seals ①.

**NOTE:**

Once the caliper halves have been separated, replace the seals.



- Push out the pistons ② with an air gun.

**CAUTION:**

Do not use high pressure air to prevent piston damage.

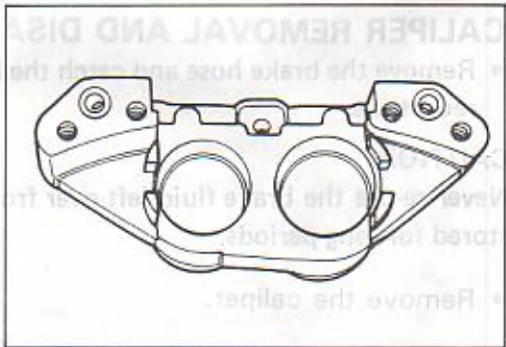


- Remove the dust seals ③ and piston seals ④.

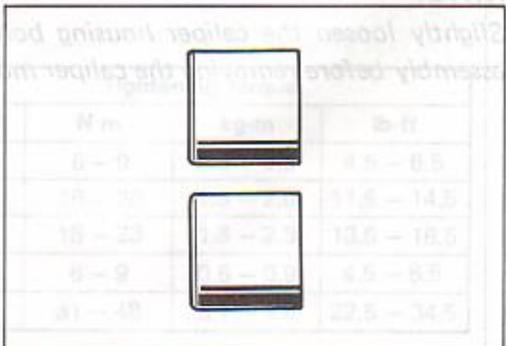


**CALIPER AND DISC INSPECTION**

Inspect the caliper cylinder bore wall for nicks, scratches or other damage.



Inspect each piston for damage and wear.



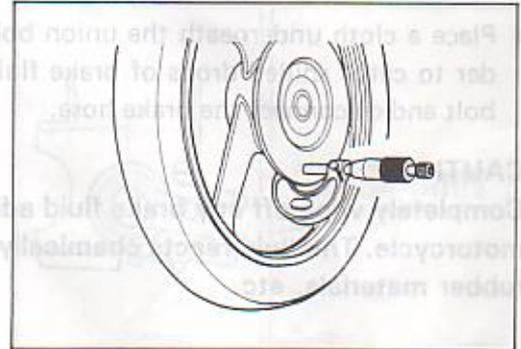
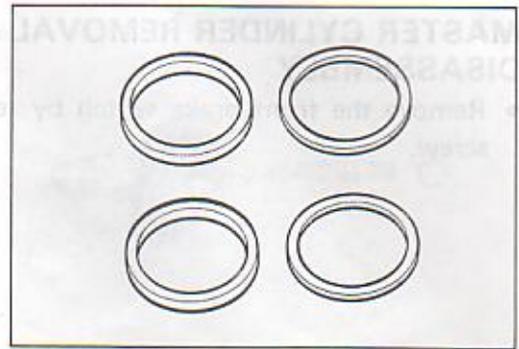
Inspect each rubber part for damage and wear.



Check the disc for wear with a micrometer. Its thickness can be checked with disc and wheel in place. Replace the disc if the thickness exceeds the service limit.

**Service Limit : 4.0 mm (0.16 in)**

**09900-20205 : Micrometer (0–25 mm)**

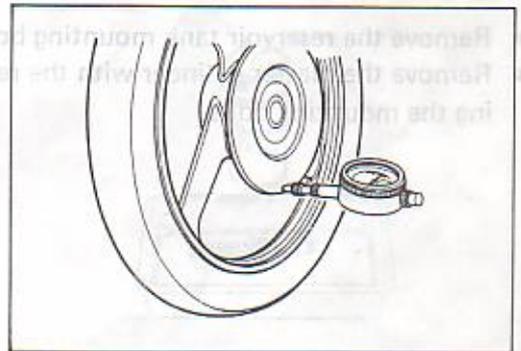


With the disc mounted on the wheel, check the disc for face runout with a dial gauge, as shown. Replace the disc if the runout exceeds the service limit.

**Service Limit : 0.3 mm (0.012 in)**

**09900-20606 : Dial gauge (1/100 mm)**

**09900-20701 : Magnetic stand**



## CALIPER REASSEMBLY

Reassemble and remount the caliper in the reverse order of removal, and also carry out the following steps:

### CAUTION:

**Wash the caliper components with fresh brake fluid before reassembly.**

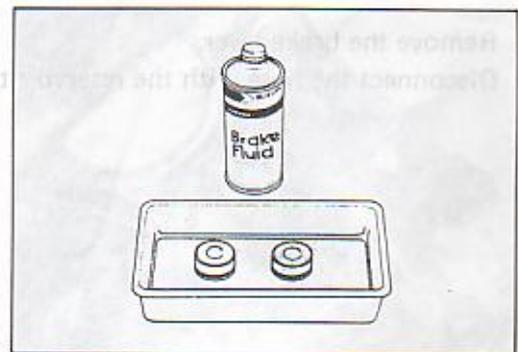
**Never use cleaning solvent or gasoline to wash them.**

**Apply brake fluid to the caliper bore and piston to be inserted into the bore.**

- Reassemble and remount the caliper. (Refer to page 7-13.)

### WARNING:

**Bleed air after reassembling the caliper. (Refer to page 2-12.)**



## MASTER CYLINDER REMOVAL AND DISASSEMBLY

- Remove the front brake switch by removing the mounting screw.

Once the master cylinder has been separated, replace the seals.

- Place a cloth underneath the union bolt on the master cylinder to catch spilled drops of brake fluid. Unscrew the union bolt and disconnect the brake hose.

### CAUTION:

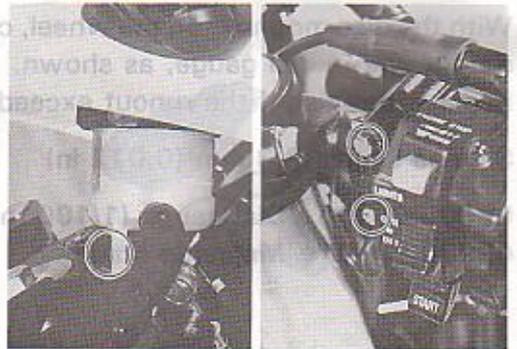
Completely wipe off any brake fluid adhering to any part of motorcycle. The fluid reacts chemically with paint, plastics, rubber materials, etc.

- Remove the reservoir tank mounting bolt.
- Remove the master cylinder with the reservoir tank by removing the mounting bolts.

- Remove the brake lever.
- Disconnect the hose with the reservoir tank.

- Remove the connector and O-ring by removing the circlip with the special tool.

09900-06108: Snap ring pliers



- Remove the dust boot.
- Remove the circlip with the special tool.

#### 09900-06108 : Snap ring pliers

- Remove the piston primary cup and return spring.

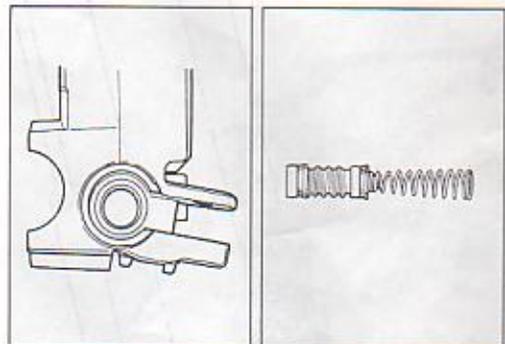


### MASTER CYLINDER INSPECTION

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

Inspect the piston surface for scratches or other damage.

Inspect the primary cup and dust boot for wear or damage.



### MASTER CYLINDER REASSEMBLY AND REMOUNTING

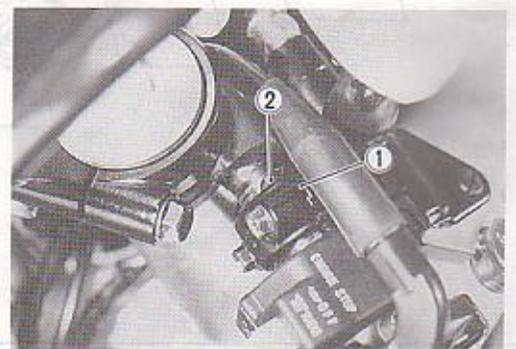
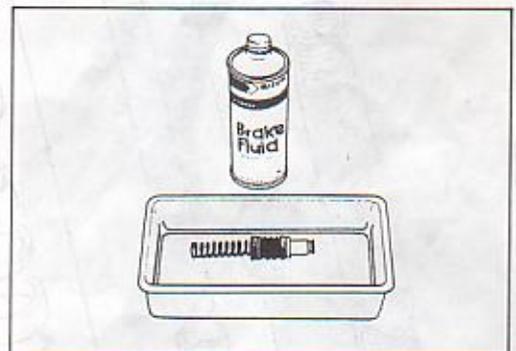
Reassemble and remount the master cylinder in the reverse order of removal and disassembly, and also carry out the following steps.

#### CAUTION:

Wash the master cylinder components with fresh brake fluid before reassembly. Never use cleaning solvent or gasoline to wash them.

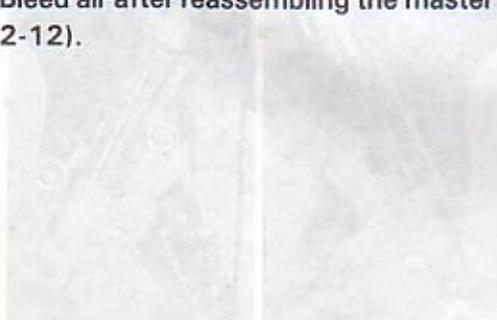
Apply brake fluid to the cylinder bore and all the internals to be inserted into the bore.

- Reassemble and remount the master cylinder. (Refer to page 7-13.)
- When mounting the master cylinder on the handlebars, align the master cylinder holder mating surface ① with punched mark ② on the handlebars, and tighten the upper clamp bolt first as shown in the illustration.

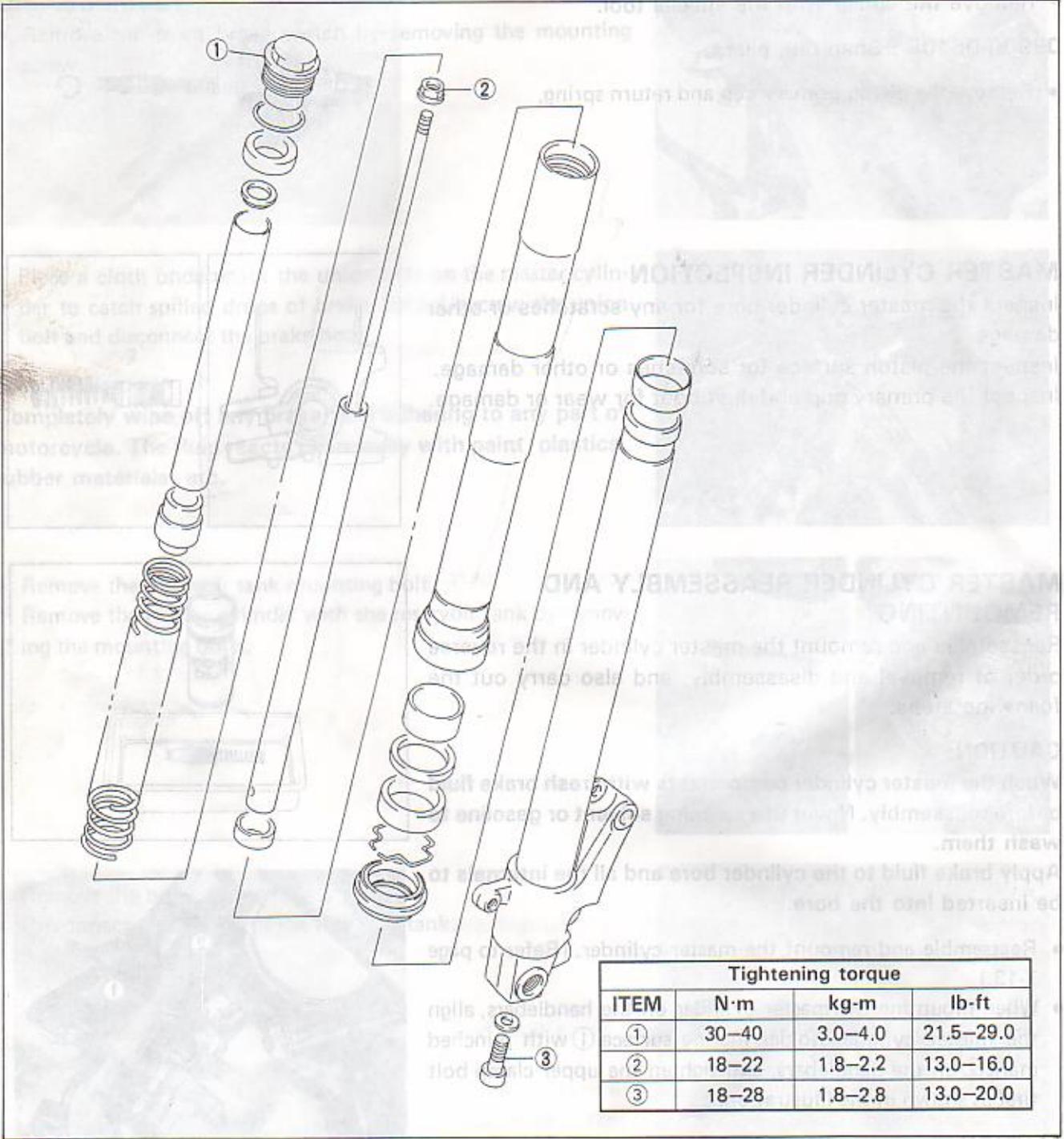


#### CAUTION:

Bleed air after reassembling the master cylinder. (Refer to page 2-12).

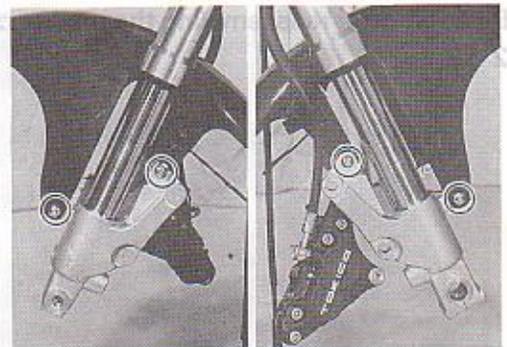


**FRONT FORK**



**REMOVAL AND DISASSEMBLY**

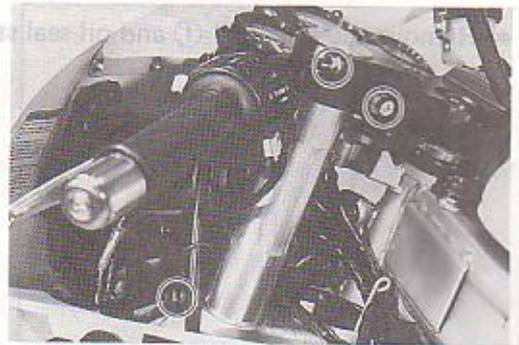
- Remove the front wheel. (Refer to page 7-5.)
- Remove the front fender.



- Remove the front fork by loosening the upper and lower mounting bolts and handlebars holder bolt.

**NOTE:**

*Slightly loosen the front fork cap bolt to facilitate later disassembly.*

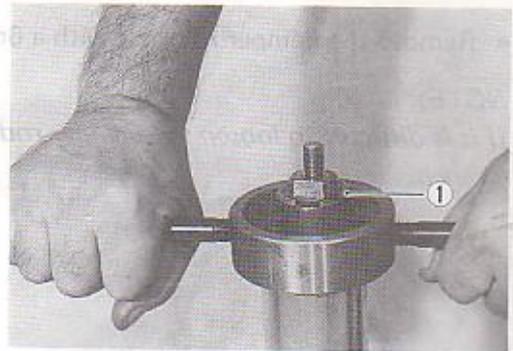


- Remove the front fork cap.



- Remove the spacer guide ① by compressing the spacer with the special tool.

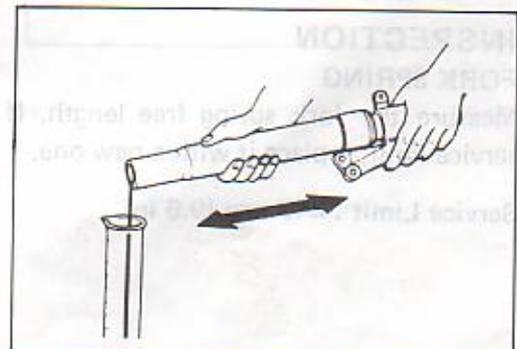
**09940-94930: Front fork spacer holder**



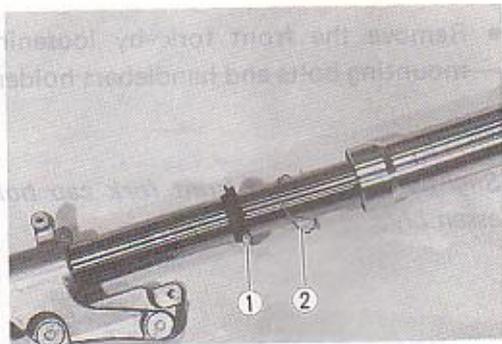
- Remove the spacer and spring.



- Invert the fork and stroke the inner tube and inner rod several times to drain oil.
- Hold the fork inverted for a few minutes to drain oil.



- Remove the dust seal ① and oil seal stopper ring ②.



- Remove the oil seal by slowly pulling out the inner tube.

**NOTE:**

*Be careful not to damage the inside of the tube.*

**CAUTION:**

The outer tube and inner tube metals must be replaced along with oil seal and dust seal, when assembling the front fork.



- Remove the damper rod bolt with a 6mm hexagon wrench.

**NOTE:**

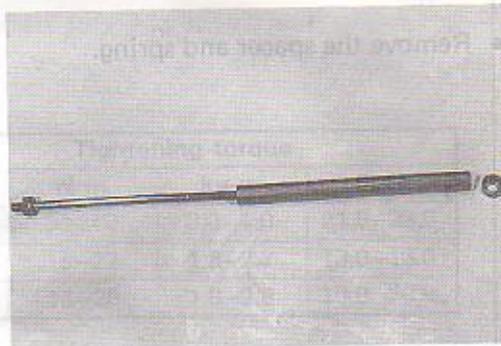
*If it is difficult to loosen the damper rod bolt, use the air impact wrench.*



- Remove the inner rod with the damper.

**CAUTION:**

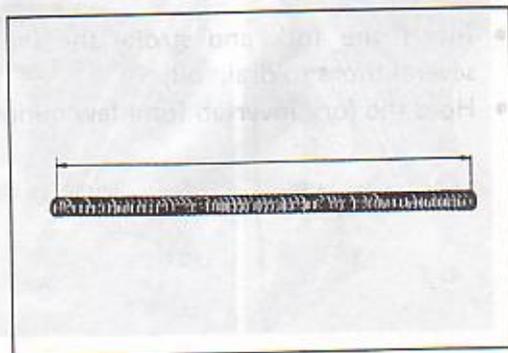
Do not attempt to disassemble the damper rod. It is not serviceable.



**INSPECTION  
FORK SPRING**

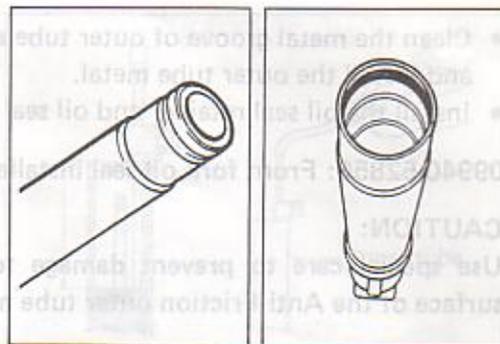
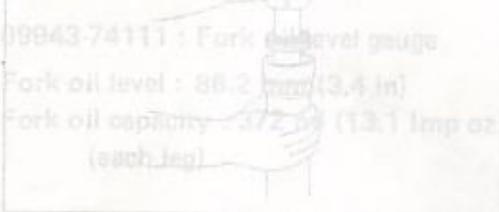
Measure the fork spring free length. If it is shorter than the service limit, replace it with a new one.

**Service Limit : 243 mm (9.6 in)**



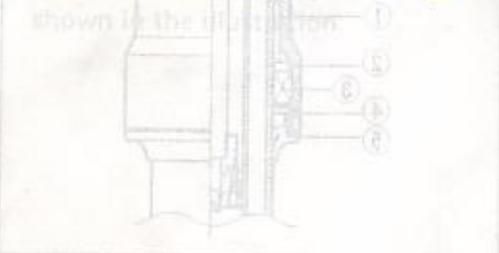
**INNER AND OUTER TUBE**

Inspect the inner tube sliding surface and outer tube sliding surface for any scuffing.



**DAMPER ROD**

Move the inner rod by hand to inspect if operating smoothly.

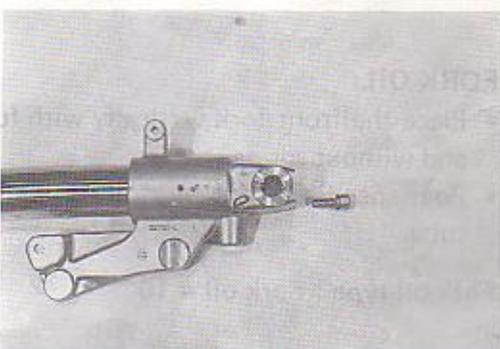


**REASSEMBLY AND REMOUNTING**

Reassemble and remount the front fork in the reverse order of removal and disassembly. Also observe the following instructions:

**DAMPER ROD BOLT**

- Tighten the damper rod bolt to the specified torque. (Refer to page 7-19.)



**CAUTION:**

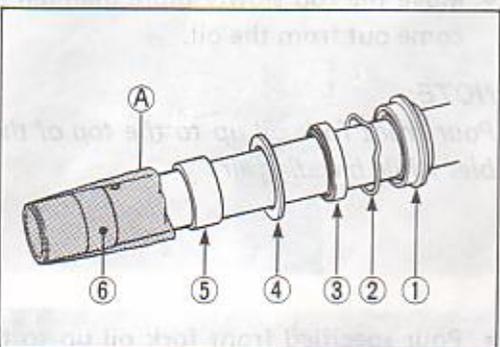
Use the new gasket.

**TUBE METALS AND SEALS**

- Apply grease to the lip of oil seal.

**99000-25010 : SUZUKI SUPER GREASE "A"**

- Install the dust seal ①, oil seal stopper ring ②, oil seal ③, oil seal retainer ④, outer tube metal ⑤ and inner tube metal ⑥ onto the inner tube in that order.



**CAUTION:**

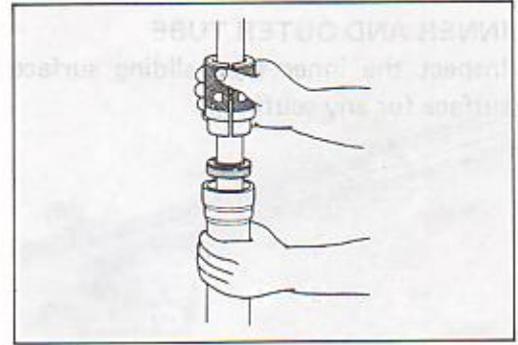
- \* When installing the dust seal ① and oil seal ③ onto the inner tube, protect their seal lips with the vinyl film A to prevent seals damage.
- \* When installing the oil seal onto the inner tube, ID mark on the oil seal comes to outside.
- \* Do not use solvents for washing to prevent oil seal damage.

- Clean the metal groove of outer tube and metal outer surface, and install the outer tube metal.
- Install the oil seal retainer and oil seal with the special tools.

09940-52850: Front fork oil seal installer

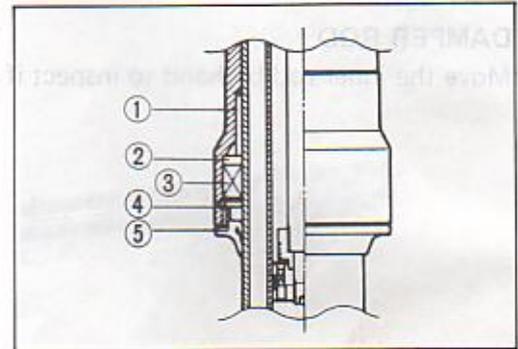
**CAUTION:**

Use special care to prevent damage to the "Teflon" coated surface of the Anti-Friction outer tube metal when installing it.



- After installing the oil seal (3), install the oil seal stopper ring (4) and dust seal (5).

- ① Anti-friction metal
- ② Oil seal retainer
- ③ Oil seal
- ④ Oil seal stopper ring
- ⑤ Dust seal



**CAUTION:**

Make sure that the oil seal stopper ring fitted securely.

**FORK OIL**

- Place the front fork vertically with fully compressed position and without spring.
- Pour specified front fork oil up to the top level of the outer tube.

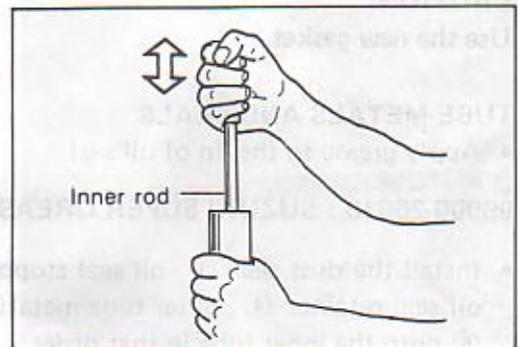
Fork oil type : Fork oil # 10

**Fork oil air bleeding**

- Move the rod slowly more than ten times until bubbles do not come out from the oil.

**NOTE:**

Pour front fork oil up to the top of the inner tube to find bubbles while bleeding air.

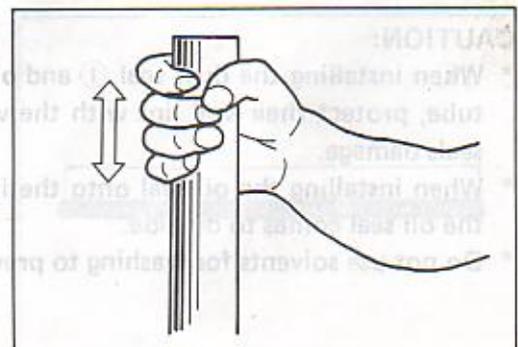


- Pour specified front fork oil up to the top level of the inner tube again. Move the outer tube up and down fully stroke until bubbles do not come out from the oil.

**CAUTION:**

Move the outer tube slowly to prevent the inner tube metal damage.

- Keep the front fork vertically and wait 5 – 6 minutes.



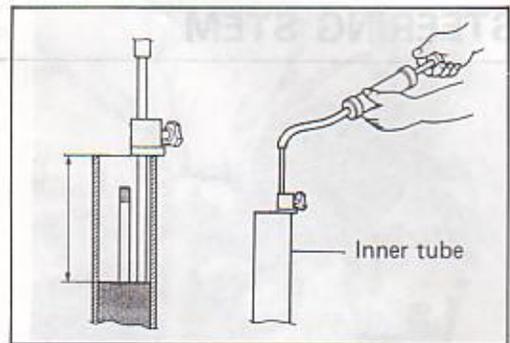
**Fork oil level adjusting**

- Set the oil level gauge to the front fork inner tube and adjust the oil level to the specification.

09943-74111 : Fork oil level gauge

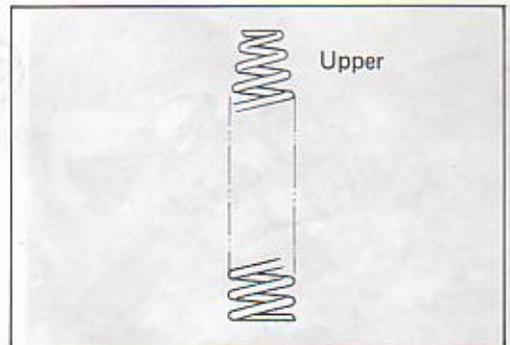
Fork oil level : 86.2 mm (3.4 in)

Fork oil capacity : 372 ml (13.1 Imp oz)  
(each leg)



**FORK SPRING**

- Install the fork spring small diameter end to upper side as shown in the illustration.

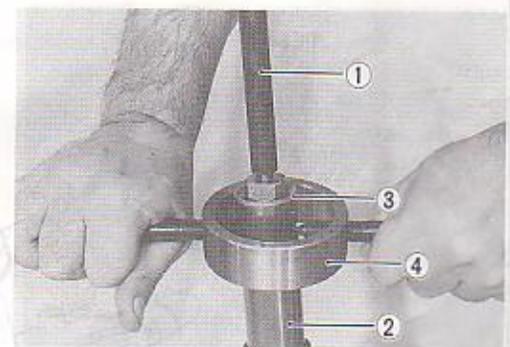


**SPACER AND INNER ROD LOCK NUT**

- Install the special tool ① and then install the spacer ②.
- Install the spacer guide ③ by compressing the spacer with the special tool ④.

09940-52840: Front fork inner rod holder

09940-94930: Front fork spacer holder

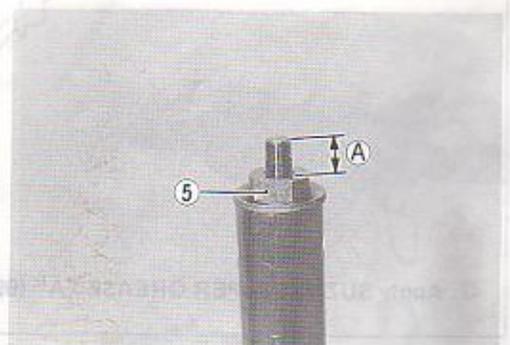


- Adjust the height (A) of the inner rod by adjusting the lock nut ⑤.

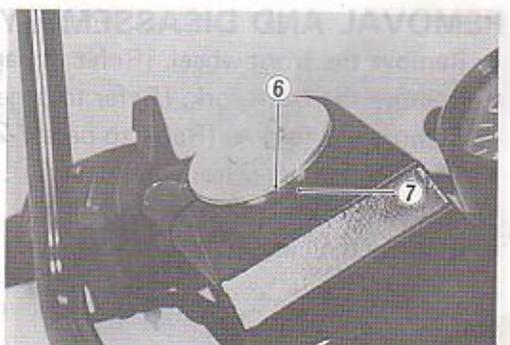
Height (A) : 14 mm (1.57 in)

ITEM	M3T1	Tightening torque	
		N·m	kgf·cm
⑤	19-25	1.8-2.5	19-25

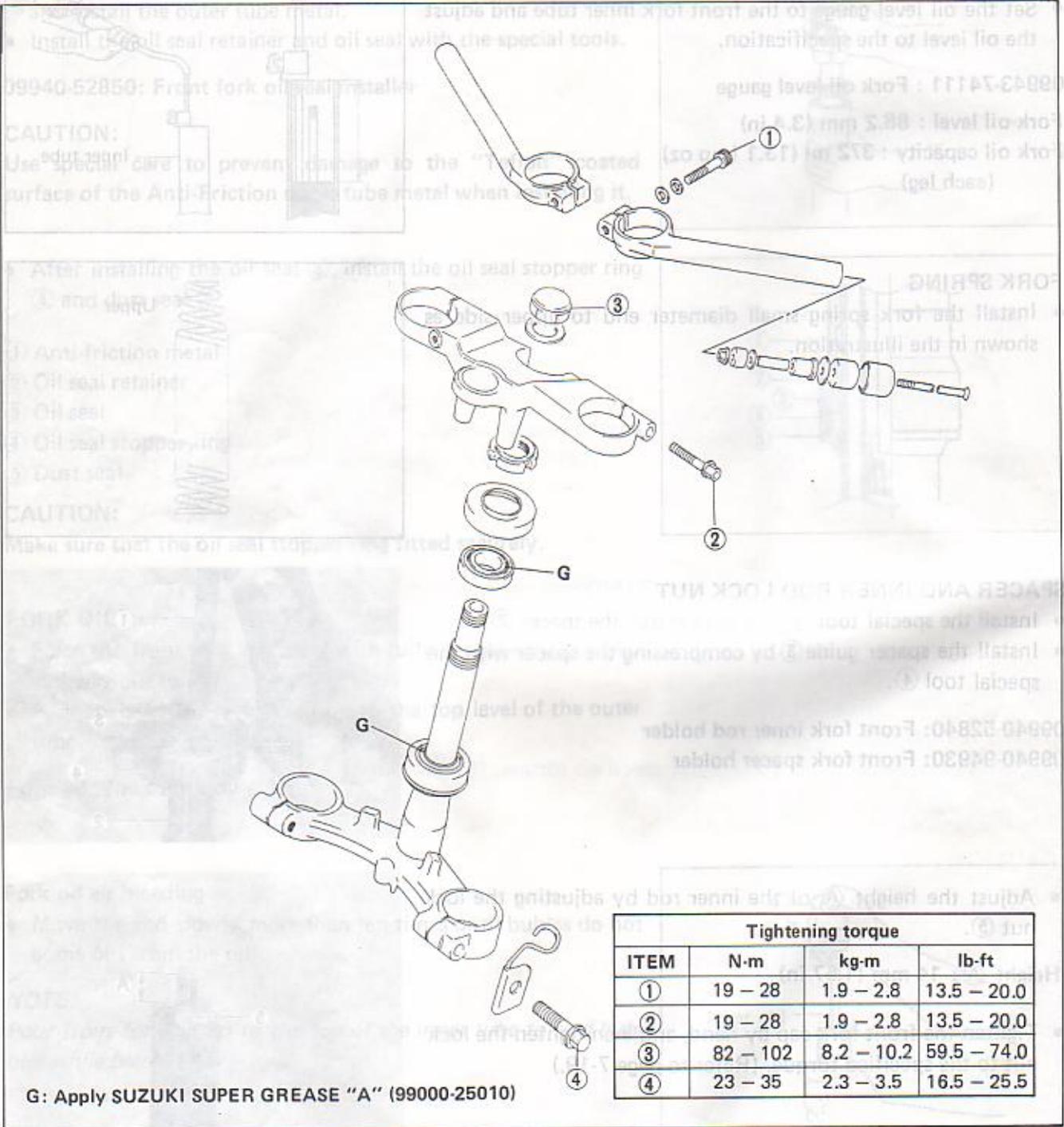
- Tighten the front fork cap by hand, and then tighten the lock nut to the specified torque. (Refer to page 7-19.)



- When installing the front fork assembly, align the upper surface ⑥ of the outer tube with the upper surface ⑦ of the steering stem upper bracket.

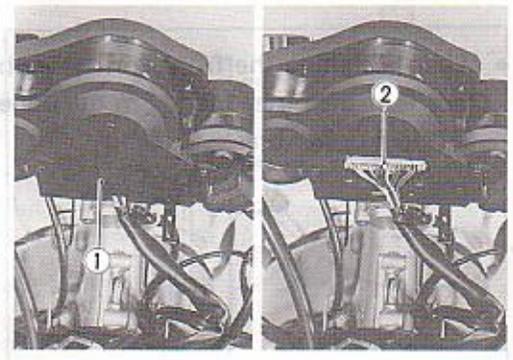


## STEERING STEM

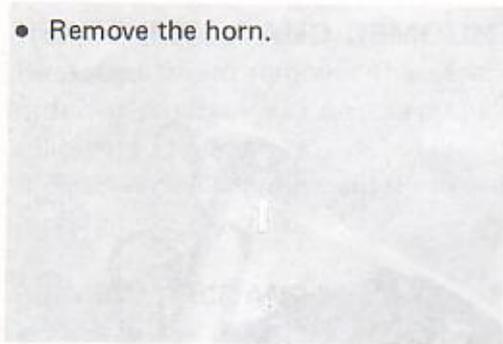


## REMOVAL AND DISASSEMBLY

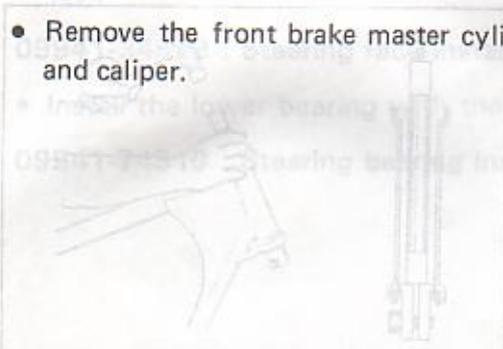
- Remove the front wheel. (Refer to page 7-5.)
- Remove the front fork. (Refer to page 7-19.)
- Remove the fairing. (Refer to page 7-2.)
- Remove the meter lead wire cover ①.
- Disconnect the lead wire coupler ②.
- Remove the combination meter.



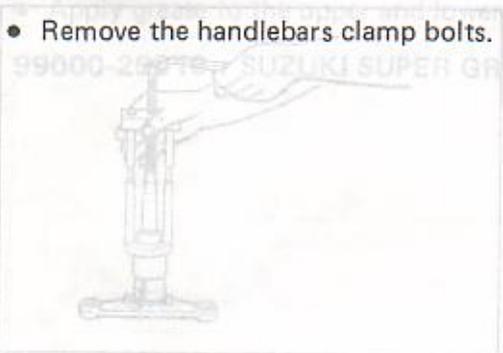
- Remove the horn.



- Remove the front brake master cylinder with reservoir tank and caliper.



- Remove the handlebars clamp bolts.



- Remove the steering stem upper bracket by removing the nut.

• Tighten the steering stem nut to 40 ft-lb (54 Nm) following the following procedure:  
 1. Tighten the steering stem nut to 40 ft-lb (54 Nm) using the special tool.  
 2. Tighten the steering stem nut to 40 ft-lb (54 Nm) using the special tool.  
 09940-14911: Steering stem nut wrench



- Remove the steering stem nut with the special tool.

09940-14911: Steering nut socket wrench

**NOTE:**

Hold the steering stem lower bracket by hand to prevent it from falling.



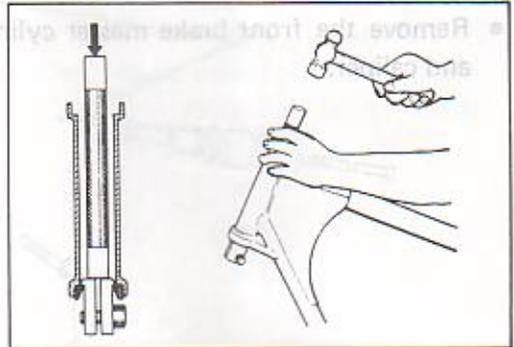
- Remove the upper bearing.



- Remove the steering stem upper and lower bearing race with the special tools.

**09941-54911 : Bearing outer race remover**

**09941-74910 : Steering bearing installer and remover**

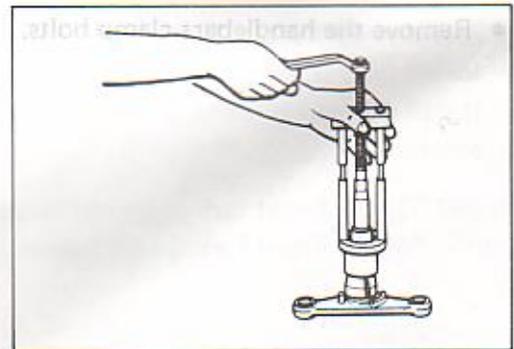


- Remove the steering stem lower bearing with the special tool.

**09941-84510 : Bearing remover**

**CAUTION:**

The removed bearing should be replaced with a new one.



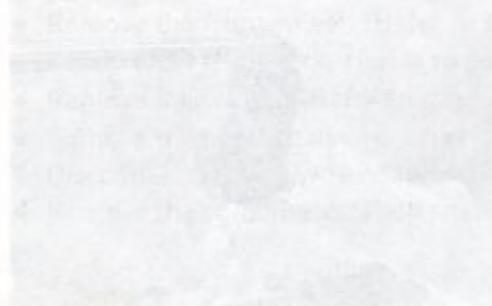
**INSPECTION**

Inspect and check the removed parts for the following abnormalities.

- \* Bearing race wear and brinelling.
- \* Distortion of steering stem upper and lower brackets.

ITEM	N·m	kg·m	ft·lb
1	19 - 28	1.9 - 2.8	13.5 - 20.3
2	19 - 28	1.9 - 2.8	13.5 - 20.3
3	82 - 102	8.2 - 10.2	59.5 - 74.0
4	23 - 30	2.3 - 3.0	16.5 - 21.5

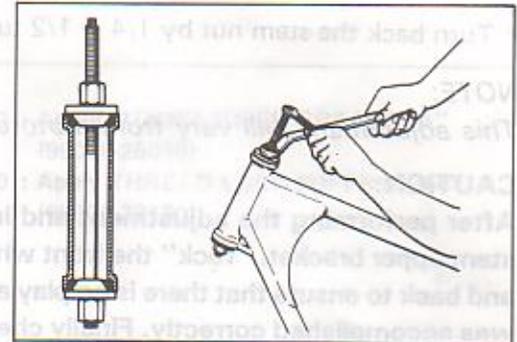
**REMOVAL AND DISASSEMBLY**



### REASSEMBLY AND REMOUNTING

Reassemble and remount the steering stem in the reverse order of removal and disassembly, and also carry out the following steps:

- Reassemble and remount the steering stem. (Refer to page 7-25.)



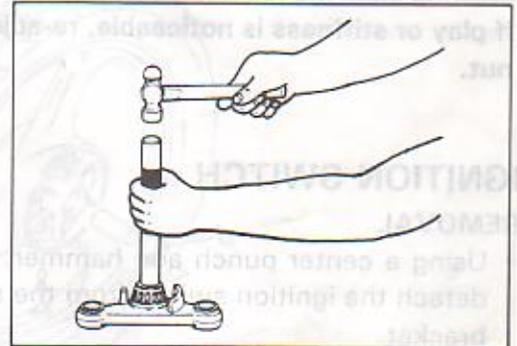
### BEARING RACE AND BEARING

- Press in the upper and lower bearing races with the special tool.

#### 09941-34513 : Steering race installer

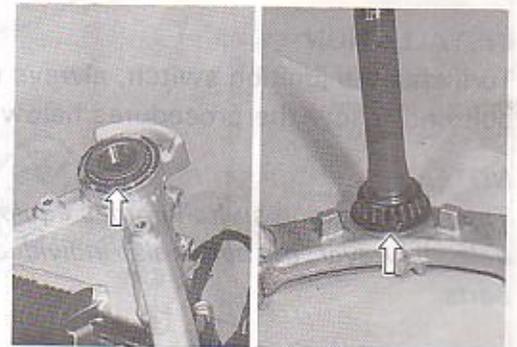
- Install the lower bearing with the special tool.

#### 09941-74910 : Steering bearing installer



- Apply grease to the upper and lower bearings.

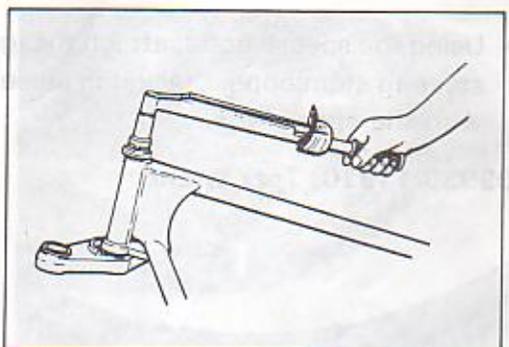
#### 99000-25010 : SUZUKI SUPER GREASE "A"



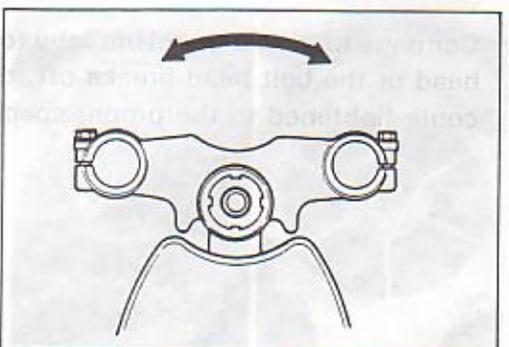
### STEM NUT

- Tighten the steering stem nut to 40 – 50 N·m (4.0 – 5.0 kg-m, 29.0 – 36.0 lb-ft)

#### 09940-14911 : Steering stem nut wrench



- Turn the steering stem bracket about five or six times to the left and right until it locks in position so that the taper roller bearing will be seated properly.



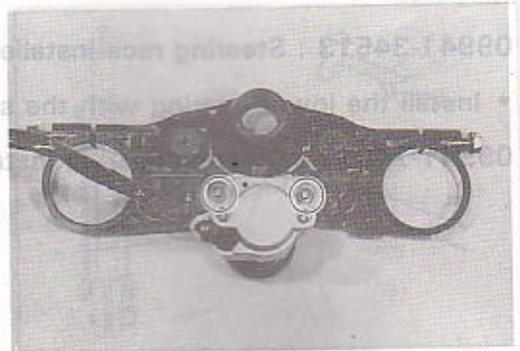
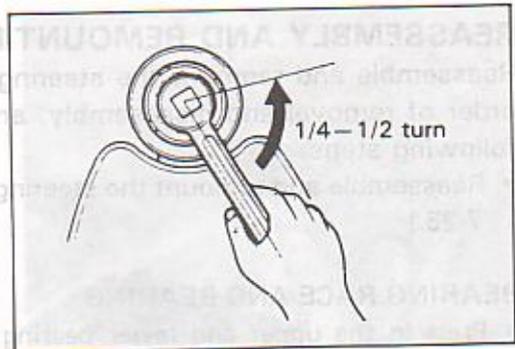
- Turn back the stem nut by 1/4 – 1/2 turn.

**NOTE:**

*This adjustment will vary from motorcycle to motorcycle.*

**CAUTION:**

After performing the adjustment and installing the steering stem upper bracket, "rock" the front wheel assembly forward and back to ensure that there is no play and that the procedure was accomplished correctly. Finally check to be sure that the steering stem moves freely from left to right with own weight. If play or stiffness is noticeable, re-adjust the steering stem nut.



**IGNITION SWITCH**

**REMOVAL**

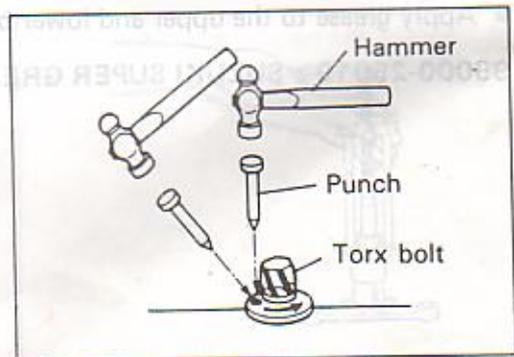
- Using a center punch and hammer, remove the bolt to detach the ignition switch from the steering stem upper bracket.

**INSTALLATION**

To install the ignition switch, always use the new special bolt and follow the procedures below.

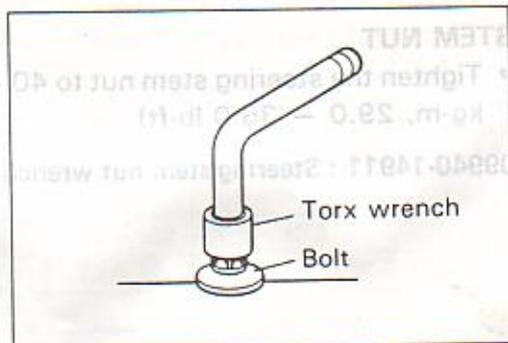
**NOTE:**

*The spare ignition switch comes equipped with the special bolts, however, the bolt is also individually available as spare parts.*

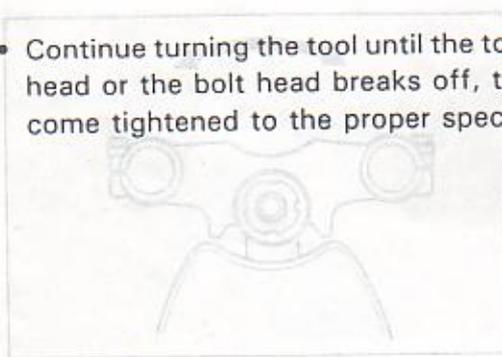
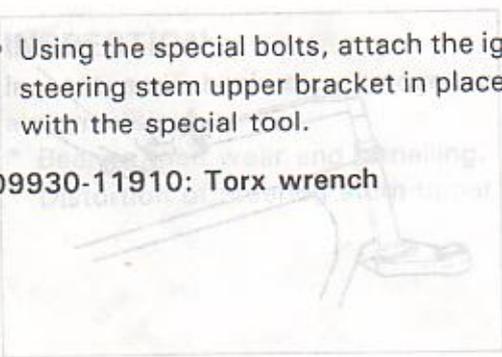
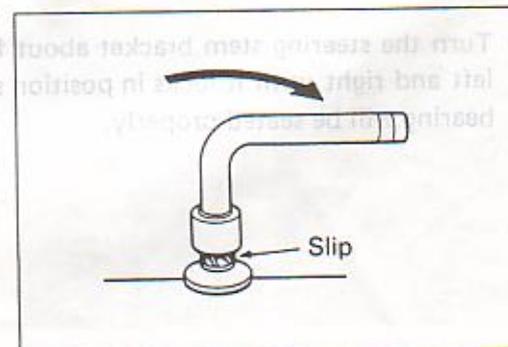


- Using the special bolts, attach the ignition switch on the steering stem upper bracket in place and run in the bolts with the special tool.

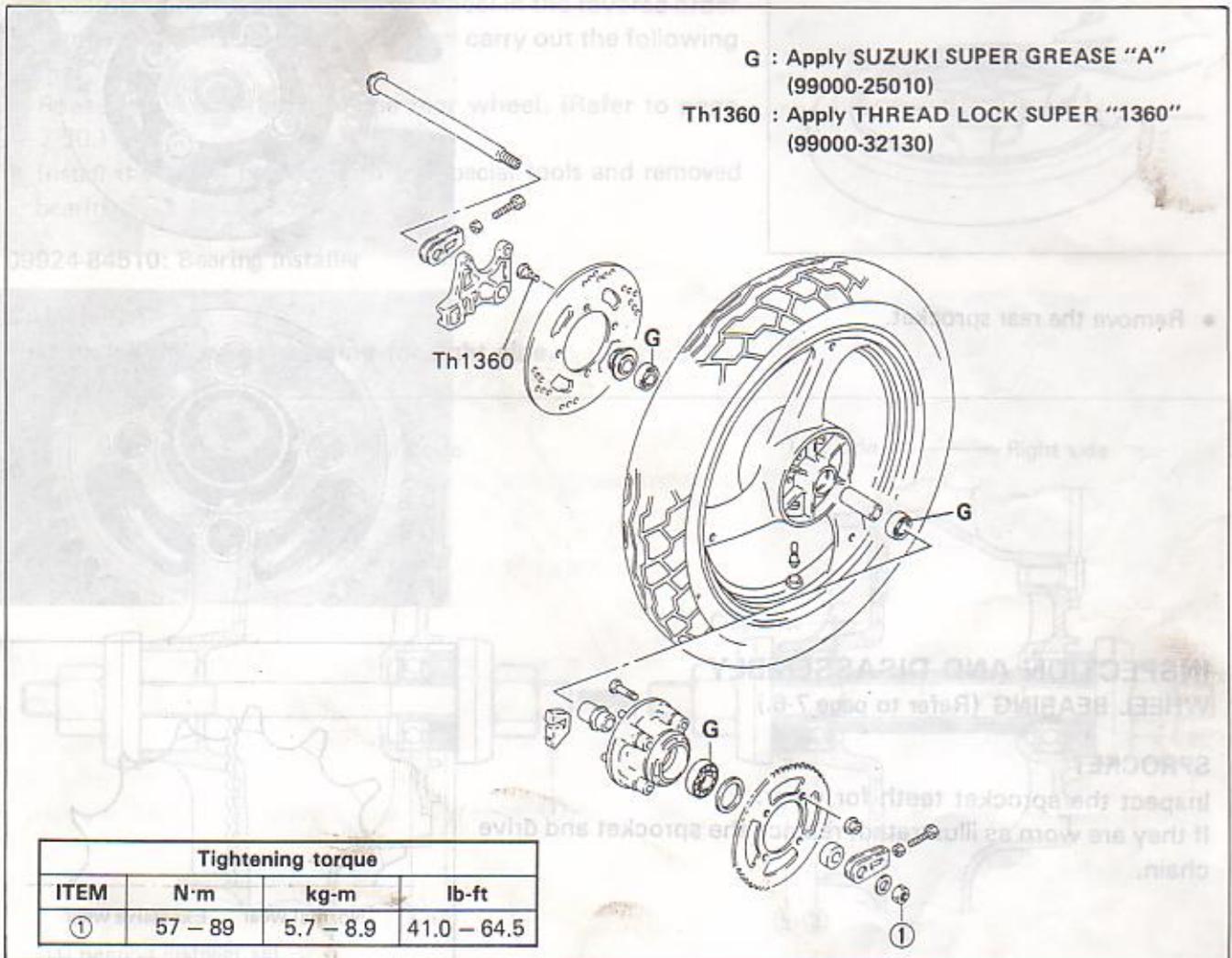
09930-11910: Torx wrench



- Continue turning the tool until the tool slips from the bolt head or the bolt head breaks off, then the bolt has become tightened to the proper specification.

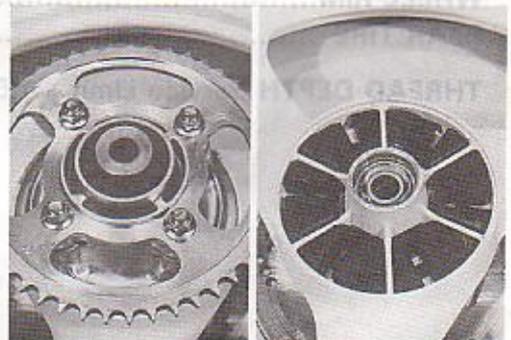
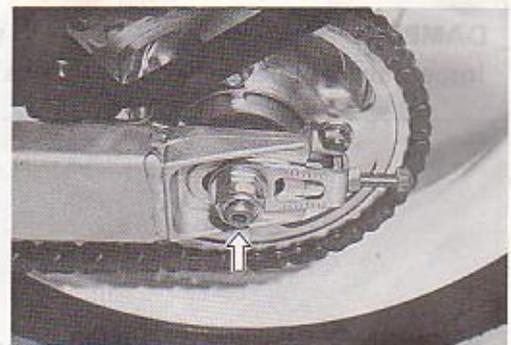


## REAR WHEEL

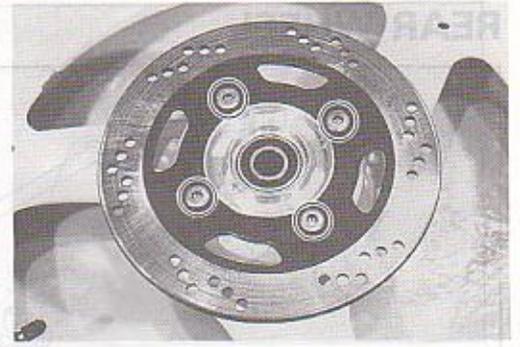


## REMOVAL

- Support the motorcycle with the jack or wooden block.
  - Loosen the rear axle nut, and adjust the drive chain adjusters to loosenest position after loosen the lock nut.
  - Remove the rear axle shaft.
  - Disengage the drive chain from the rear sprocket and remove the rear wheel.
- Remove the rear sprocket with drum.
  - Remove the dampers.



- Remove the rear disc.

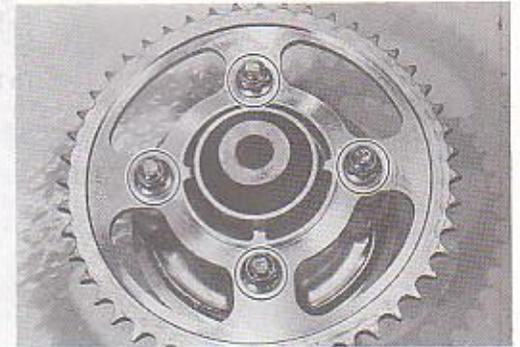


**NOTE:**

Apply SUZUKI SUPER GREASE "A" to the contact surfaces of the disc and hub.

CAUTION: Apply THREAD LOCK SUPER (9900-2507) to the disc and hub.

- Remove the rear sprocket.



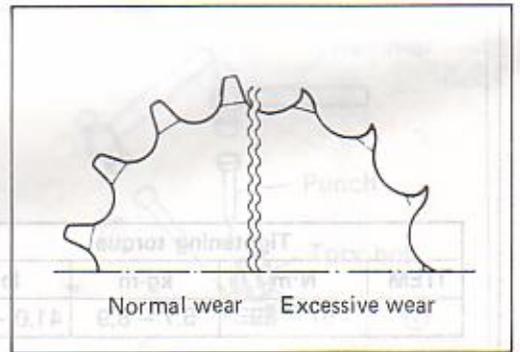
**INSPECTION AND DISASSEMBLY.**

**WHEEL BEARING** (Refer to page 7-6.)

**SPROCKET**

Inspect the sprocket teeth for wear.

If they are worn as illustrated, replace the sprocket and drive chain.



**DAMPER**

Inspect the damper for wear.



**AXLE SHAFT**..... Refer to page 7- 6

**WHEEL RIM**..... Refer to page 7- 6

**REAR TIRE** ..... Refer to page 2-13

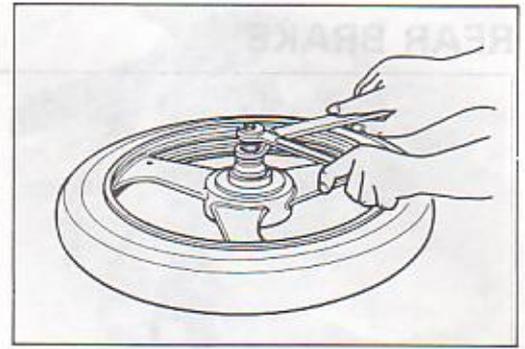
**THREAD DEPTH** Service Limit : 1.6 mm (0.06 in)



### REASSEMBLY AND REMOUNTING

Reassemble and remount the rear wheel in the reverse order of removal and disassembly, and also carry out the following steps:

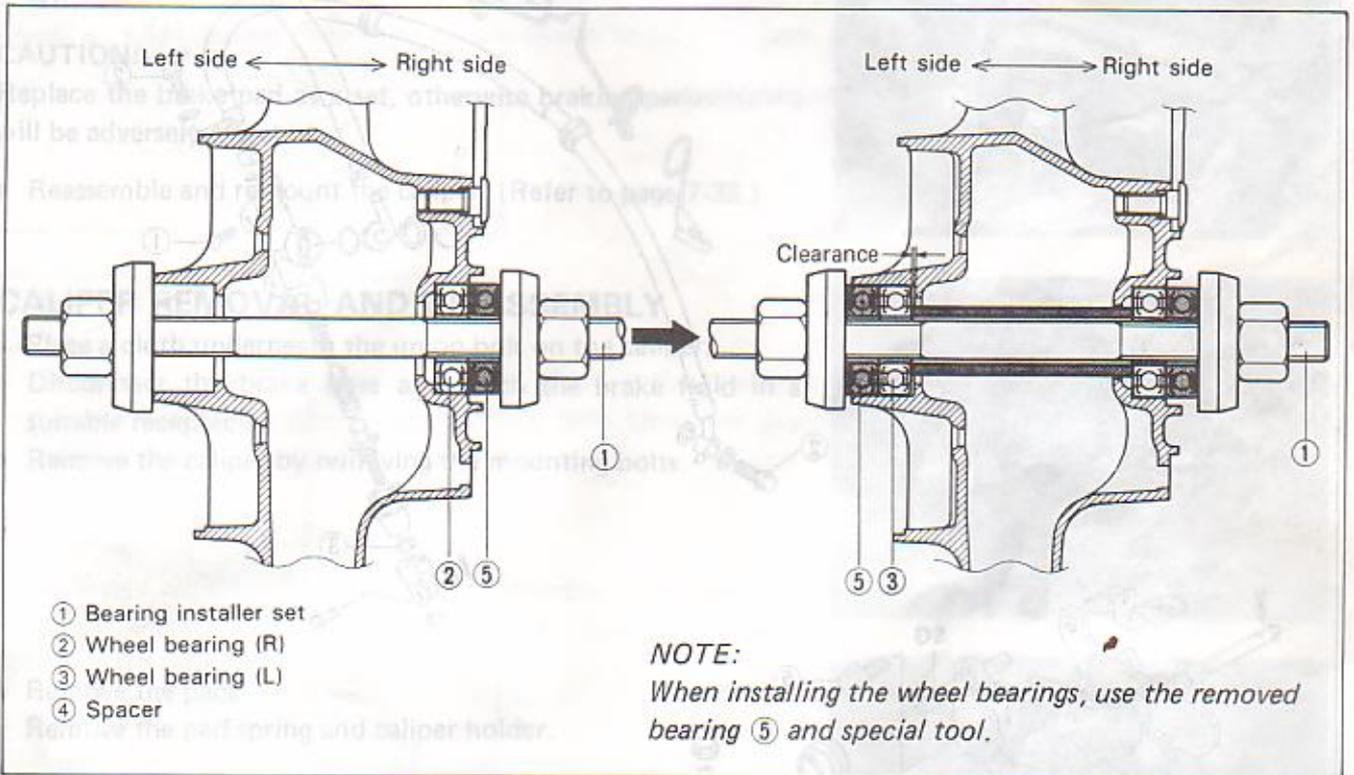
- Reassemble and remount the rear wheel. (Refer to page 7-30.)
- Install the wheel bearing with the special tools and removed bearing.



09924-84510: Bearing installer

**CAUTION:**

First install the wheel bearing for right side.

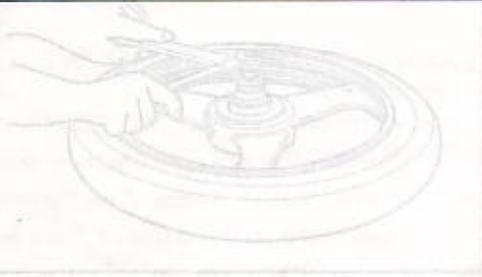


- After remounting the rear wheel, adjust the drive chain slack. (Refer to page 2-9.)

ITEM	kg-m	ft-lb	Tightening torque
①	1.1 - 1.8	8.0 - 13.0	11 - 16
②	1.2 - 2.0	8.5 - 14.5	16 - 20
③	1.8 - 3.0	12.8 - 21.8	18 - 20
④	0.8 - 0.9	5.8 - 6.5	8 - 9
⑤	2.1 - 3.1	15.0 - 22.5	21 - 31

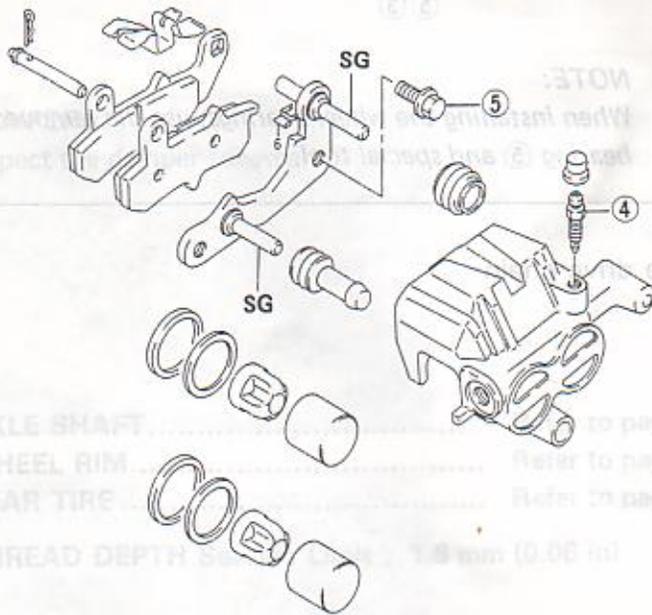
Apply SUPERK1 LITHIUM GREASE (98000-28100)

**REAR BRAKE**



Remove the rear wheel.

Left side → Right side

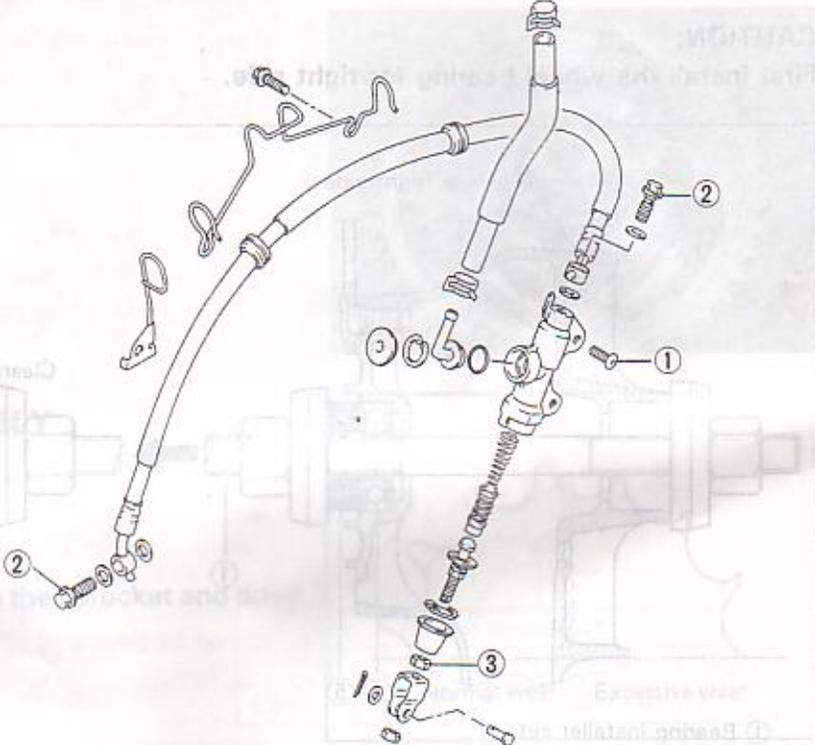


AXLE SHAFT... Refer to page 7-6  
 WHEEL RIM... Refer to page 7-6  
 REAR TIRE... Refer to page 2-2  
 THREAD DEPTH... 1.8 mm (0.06 in)

SG : Apply SUZUKI SILICONE GREASE (99000-25100)

REAR BRAKE ASSEMBLY AND REMOUNTING

Remove the rear wheel. (Refer to page 7-30.)  
 Install the rear wheel. (Refer to page 7-30.)  
 After removing the rear wheel, adjust the rear wheel slack. (Refer to page 2-8.)



Tightening torque			
ITEM	N·m	kg·m	lb·ft
①	11 - 16	1.1 - 1.6	8.0 - 11.5
②	16 - 20	1.6 - 2.0	11.5 - 14.5
③	16 - 20	1.6 - 2.0	11.5 - 14.5
④	6 - 9	0.6 - 0.9	4.5 - 6.5
⑤	21 - 31	2.1 - 3.1	15.0 - 22.5

### BRAKE PAD REPLACEMENT

- Remove the caliper mounting bolts.

Remove the caliper mounting bolts in the reverse order of removal and disassembly, and also carry out the following steps:

- Reassemble and remount the caliper. (Refer to page 7-33.)

**CAUTION:**

Wash the caliper components with fresh brake fluid before reassembly.

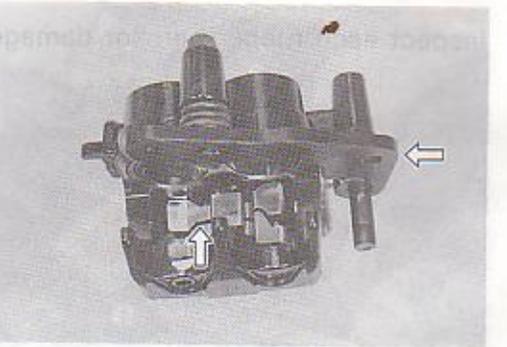
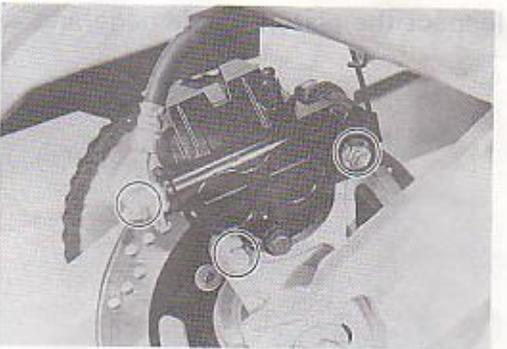
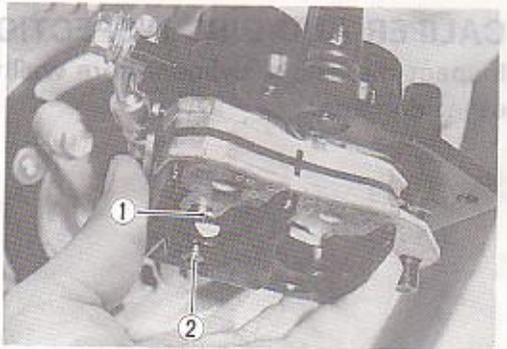
Never use cleaning solvent or gasoline to wash them.

- Remove the clip ①.
- Remove the brake pads by removing the pads mounting shaft ②.

**CAUTION:**

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

- Reassemble and remount the caliper. (Refer to page 7-33.)



### CALIPER REMOVAL AND DISASSEMBLY

- Place a cloth underneath the union bolt on the caliper.
- Disconnect the brake hose and catch the brake fluid in a suitable receptacle.
- Remove the caliper by removing the mounting bolts.

**CAUTION:**

Completely wipe off any brake fluid adhering to any part of motorcycle. The fluid reacts chemically with paint, plastics,

- Remove the pads.
- Remove the pad spring and caliper holder.

- Remove the master cylinder mounting bolts.
- Remove the master cylinder (1).



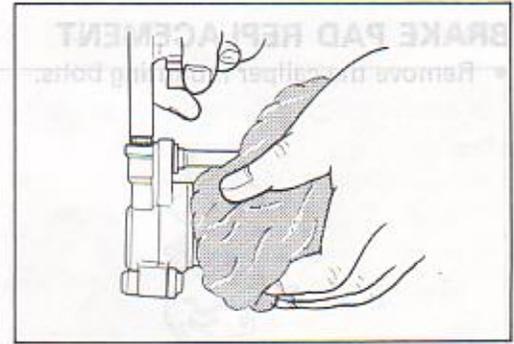
- Remove the piston insulator.

Use special tool.

Part No. : 80160-00690 Snap ring pliers

- Remove the O-ring (1).

- Place a rag over the pistons to prevent popping up. Force out the pistons with an air gun.



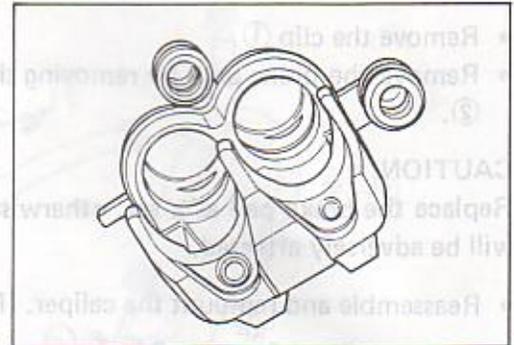
**CAUTION:**

Do not use high pressure air to prevent piston damage.

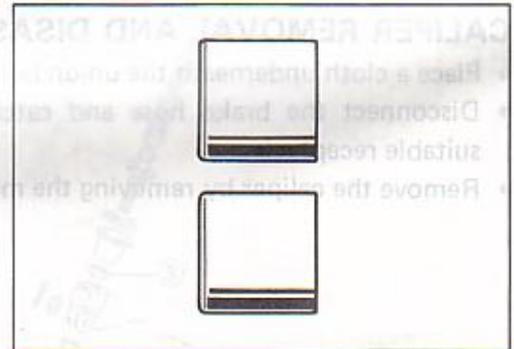
- Remove the dust seal and piston seal.

**CALIPER AND DISC INSPECTION**

Inspect the caliper cylinder bore wall for nicks, scratches or other damage.



Inspect the piston for damage and wear.



Inspect each rubber part for damage and wear.



**DISC THICKNESS (Refer to page 7-16.)**

Service Limit : 3.5 mm (0.14 in)

**DISC RUNOUT (Refer to page 7-16.)**

Service Limit : 0.3 mm (0.012 in)

ITEM	mm	in
1	11 - 16	1.1 - 1.6
2	10 - 20	1.0 - 2.0
3	10 - 20	1.0 - 2.0
4	8 - 9	0.8 - 0.9
5	21 - 31	2.1 - 3.1

## CALIPER REASSEMBLY AND REMOUNTING

Reassemble and remount the caliper in the reverse order of removal and disassembly, and also carry out the following steps:

- Reassemble and remount the caliper. (Refer to page 7-33.)

### CAUTION:

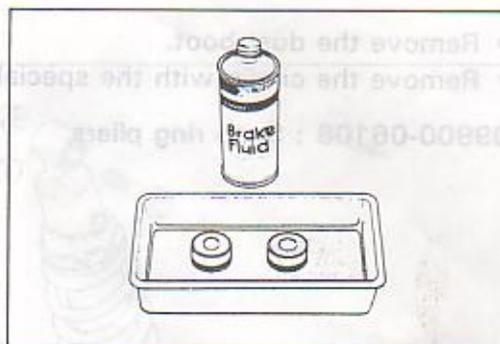
Wash the caliper components with fresh brake fluid before reassembly.

Never use cleaning solvent or gasoline to wash them.

Apply brake fluid to the caliper bore and piston to be inserted into the bore.

### WARNING:

Bleed air after reassembling the caliper (Refer to page 2-12.)



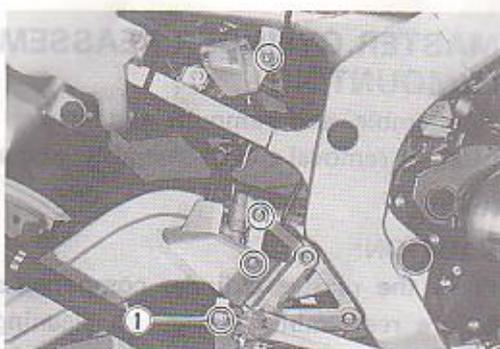
## MASTER CYLINDER REMOVAL AND DISASSEMBLY

- Place a cloth underneath the union bolt on the master cylinder to catch spilled drops of brake fluid. Unscrew the union bolt and disconnect the brake hose/master cylinder joint.

### CAUTION:

Completely wipe off any brake fluid adhering to any part of motorcycle. The fluid reacts chemically with paint, plastics, rubber materials, etc.

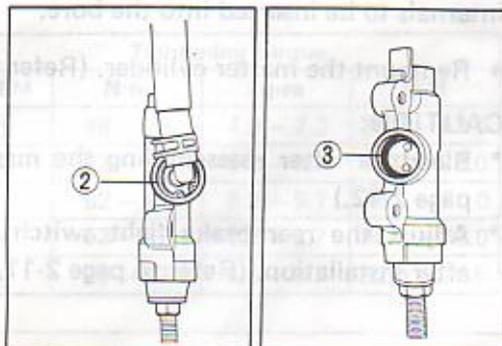
- Remove the reservoir tank mounting bolt.
- Remove the master cylinder mounting bolts.
- Remove the cotter pin and pin ①.



- Remove the connector by removing the circlip ② with the special tool.

09900-06108 : Snap ring pliers

- Remove the O-ring ③.

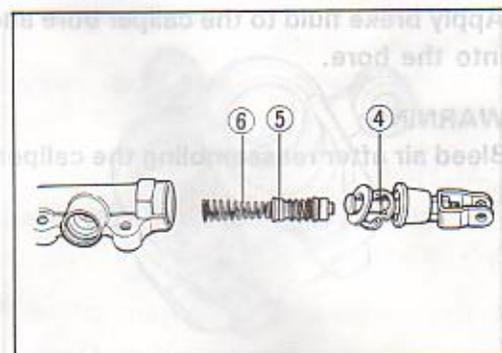
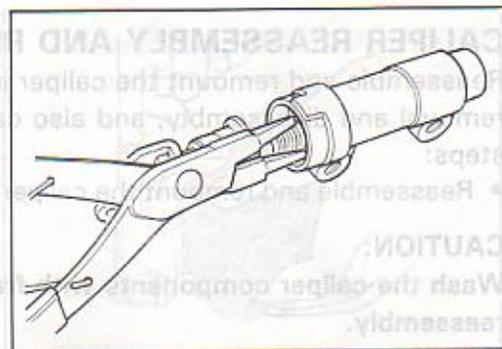


- Remove the dust boot.
- Remove the circlip with the special tool.

09900-06108 : Snap ring pliers



- Remove the rod ④, piston/primary cup ⑤ and spring ⑥.

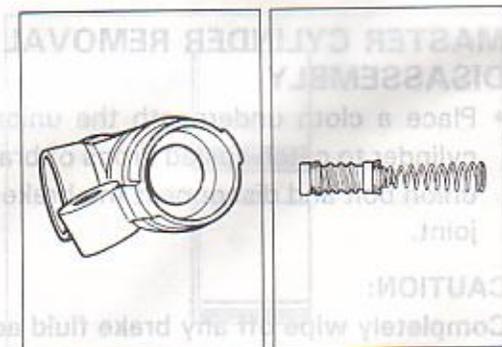


### MASTER CYLINDER INSPECTION

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

Inspect the piston surface for scratches or other damage.

Inspect the primary cup for damage.



### MASTER CYLINDER REASSEMBLY AND REMOUNTING

Reassemble and remount the master cylinder in the reverse order of removal and disassembly, and also carry out the following steps:

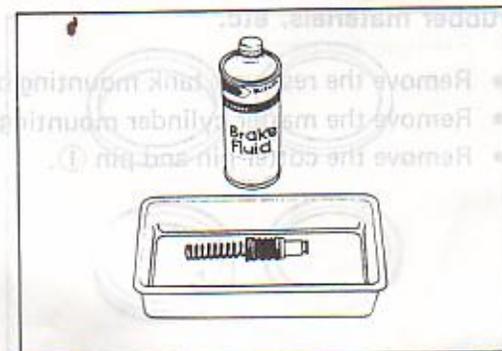
#### CAUTION:

Wash the master cylinder components with fresh brake fluid before reassembly. Never use cleaning solvent or gasoline to wash them. Apply brake fluid to the cylinder bore and all internals to be inserted into the bore.

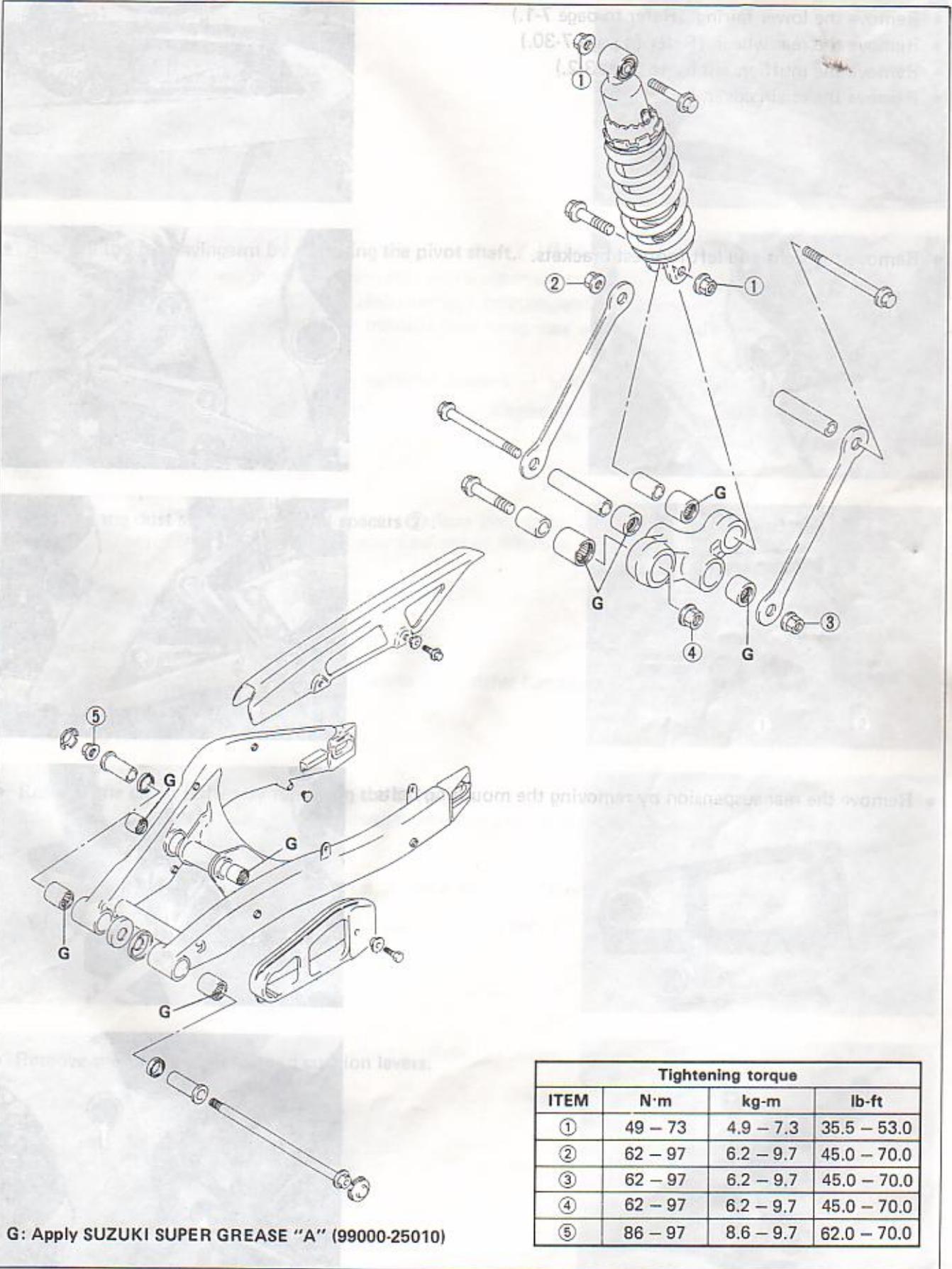
- Remount the master cylinder. (Refer to page 7-33.)

#### CAUTION:

- \* Bleed air after reassembling the master cylinder. (Refer to page 2-12.)
- \* Adjust the rear brake light switch and brake pedal height after installation. (Refer to page 2-11.)



# REAR SUSPENSION AND SWINGARM



G: Apply SUZUKI SUPER GREASE "A" (99000-25010)

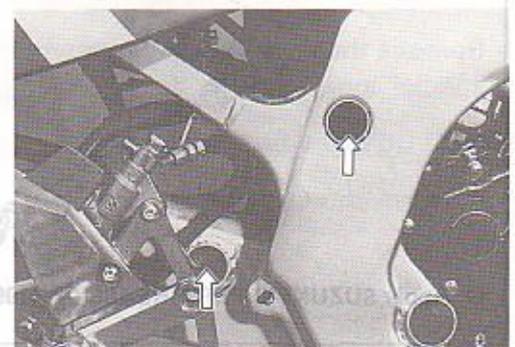
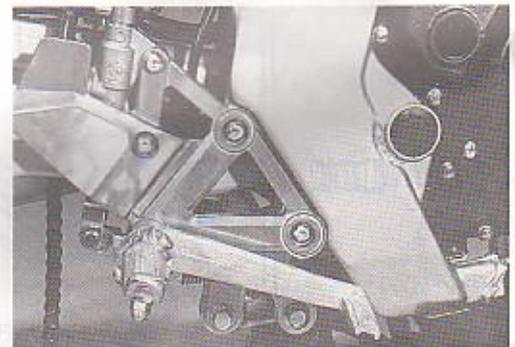
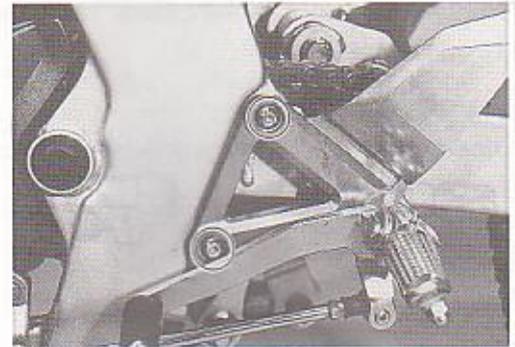
ITEM	Tightening torque		
	N·m	kg-m	lb-ft
①	49 - 73	4.9 - 7.3	35.5 - 53.0
②	62 - 97	6.2 - 9.7	45.0 - 70.0
③	62 - 97	6.2 - 9.7	45.0 - 70.0
④	62 - 97	6.2 - 9.7	45.0 - 70.0
⑤	86 - 97	8.6 - 9.7	62.0 - 70.0

**REMOVAL**

- Remove the lower fairing. (Refer to page 7-1.)
- Remove the rear wheel. (Refer to page 7-30.)
- Remove the muffler. (Refer to page 3-2.)
- Remove the chain cover.

- Remove the right and left footrest brackets.

- Remove the rear suspension by removing the mounting bolts.



**MASTER CYLINDER REPAIR**

Inspect the master cylinder for damage. Impact the cylinder for damage.

**REASSEMBLY**

Reassemble and remount the master cylinder in the reverse order of removal and disassembly, and also carry out the following steps:

**CAUTION:**

Wash the master cylinder components with fresh brake fluid before reassembly. Never use cleaning solvent or gasoline to wash them. Apply brake fluid to the cylinder bore and all internals to be inserted into the bore.

Item	M3T	m-N	kg-m	ft-lb
1	65-67	1.8-2.0	13-14	100-105
2	68-70	2.0-2.2	14-16	105-115
3	71-73	2.2-2.4	16-18	115-125
4	74-76	2.4-2.6	18-20	125-135
5	77-79	2.6-2.8	20-22	135-145

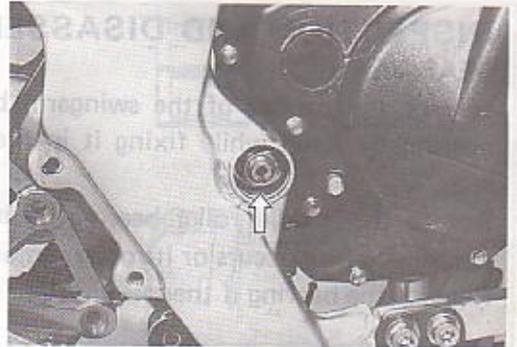
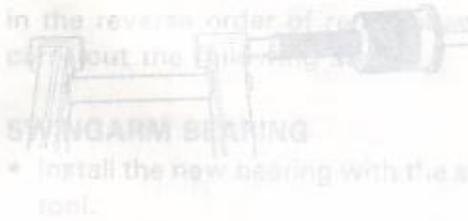
- Remove the rear brake hose guide with hose and brake caliper.

**NOTE:**

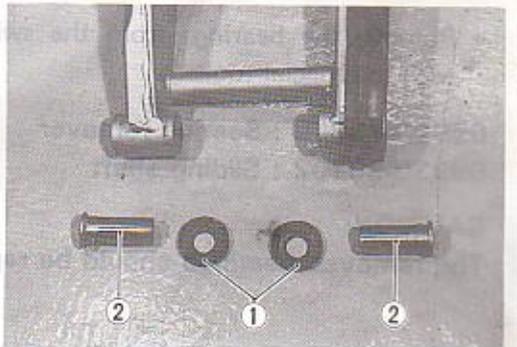
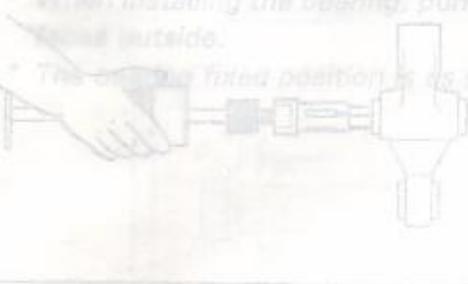
Hang the brake caliper with a string.



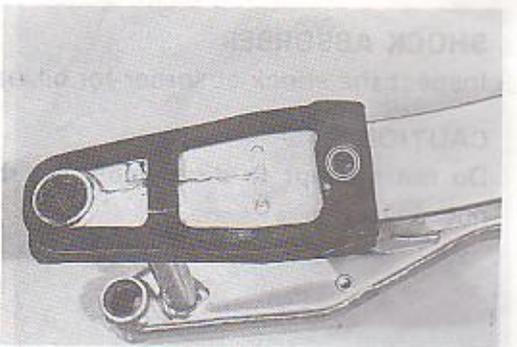
- Remove the rear swingarm by removing the pivot shaft.



- Remove the dust seal covers ① and spacers ②.



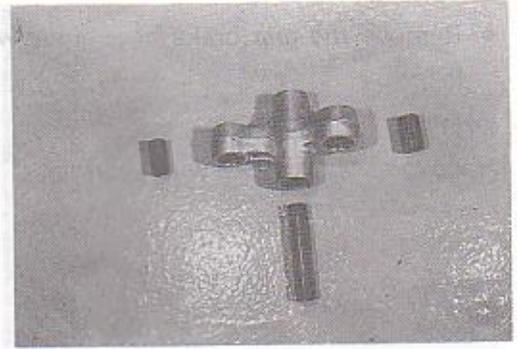
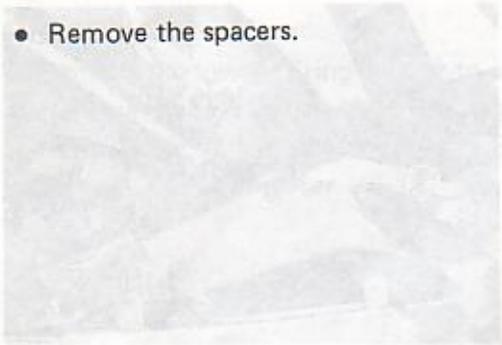
- Remove the chain buffer by removing the bolts.



- Remove the shock absorber and cushion levers.



- Remove the spacers.

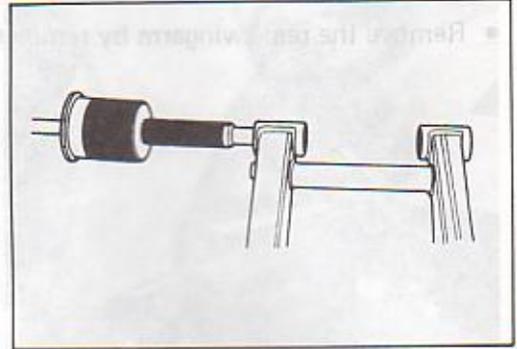


**INSPECTION AND DISASSEMBLY BEARING**

Inspect the rotates of the swingarm bearing and cushion rod bearing by hand while fixing it in the swingarm and cushion rod.

Rotate the needle roller bearing by hand to inspect whether abnormal noise occurs or it rotates smoothly.

Replace the bearing if there is anything unusual.



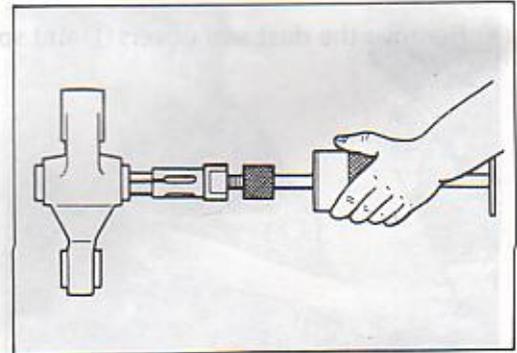
- Remove the bearings from the swingarm and cushion rod with the special tools.

**09923-73210 : Bearing remover**

**09930-30102 : Sliding shaft**

**CAUTION:**

The removed bearings should be replaced with new ones.



**SHOCK ABSORBER**

Inspect the shock absorber for oil leakage or other damage.

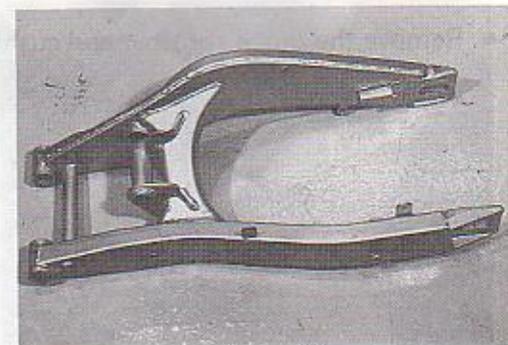
**CAUTION:**

Do not attempt to disassemble the shock absorber unit. It is not serviceable.



**SWINGARM**

Inspect the swingarm for wear or damage.



**SWINGARM PIVOT SHAFT**

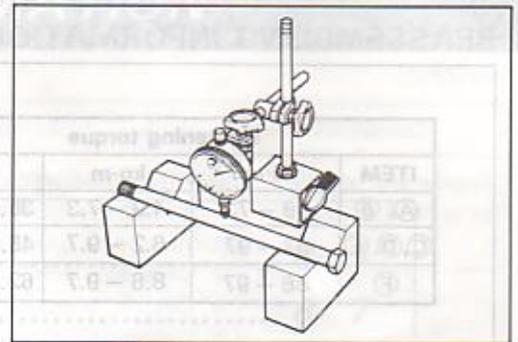
Check the pivot shaft for runout with the special tools.

Service Limit : 0.3 mm (0.01 in)

09900-20606 : Dial gauge

09900-20701 : Magnetic stand

09900-21303 : V-block

**REASSEMBLY AND REMOUNTING**

Reassemble and remount the rear swingarm and suspension in the reverse order of removal and disassembly, and also carry out the following steps:

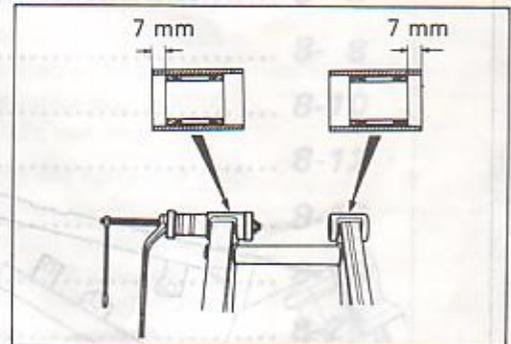
**SWINGARM BEARING**

- Install the new bearing with the suitable socket and special tool.

09924-84510 : Bearing installer

**NOTE:**

- \* When installing the bearing, punch-marked side of bearing faces outside.
- \* The bearing fixed position is as shown in the illustration.

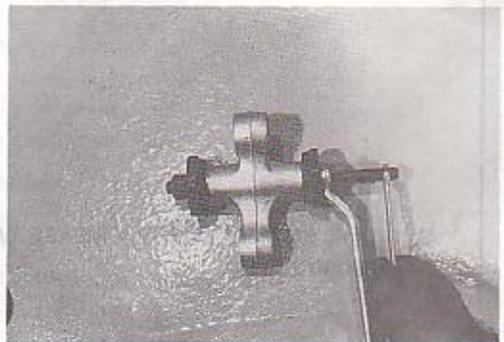
**CUSHION ROD BEARING**

- Install the new bearing with the special tool.

09924-84510 : Bearing installer

**NOTE:**

When installing the bearing, punch-mark side of bearing faces outside.



- Remount the rear swingarm and suspension. (Refer to pages 7-38 and 7-43.)

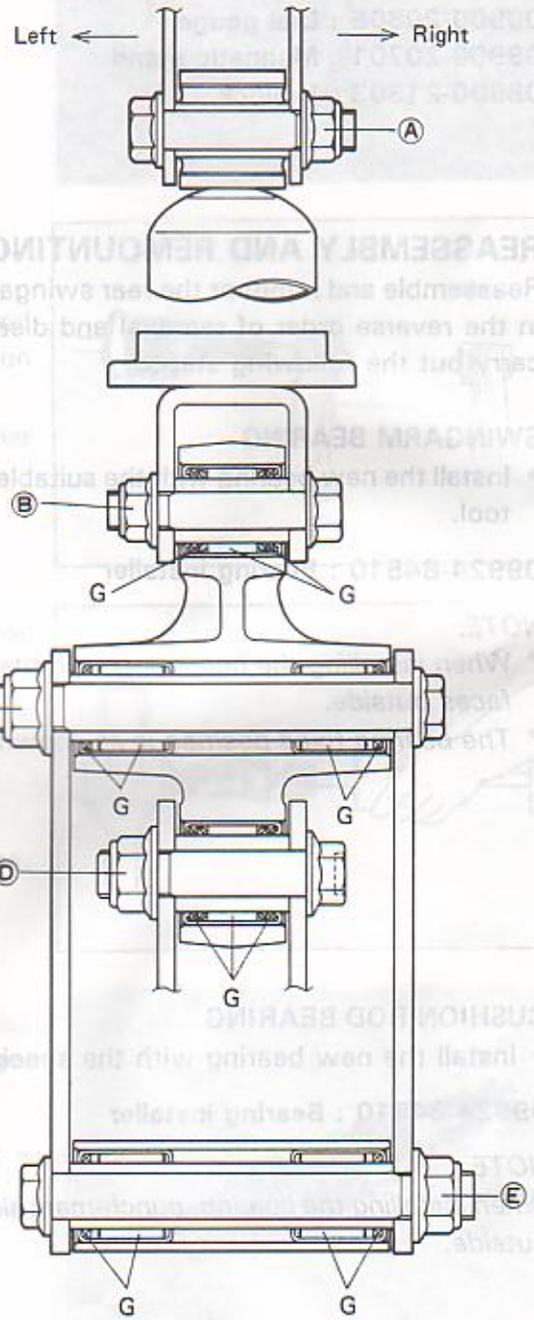
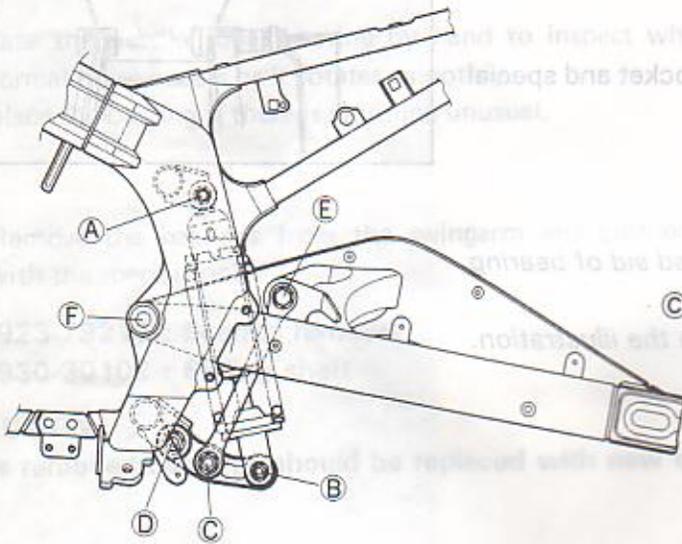
**SHOCK ABSORBER SPRING SETTING**

STD: 4th position



REASSEMBLING INFORMATION

Tightening torque			
ITEM	N·m	kg-m	lb-ft
(A, B)	49 - 73	4.9 - 7.3	35.5 - 53.0
(C, D, E)	62 - 97	6.2 - 9.7	45.0 - 70.0
(F)	86 - 97	8.6 - 9.7	62.0 - 70.0



G : Apply SUZUKI SUPER GREASE "A"  
(99000-25010)

