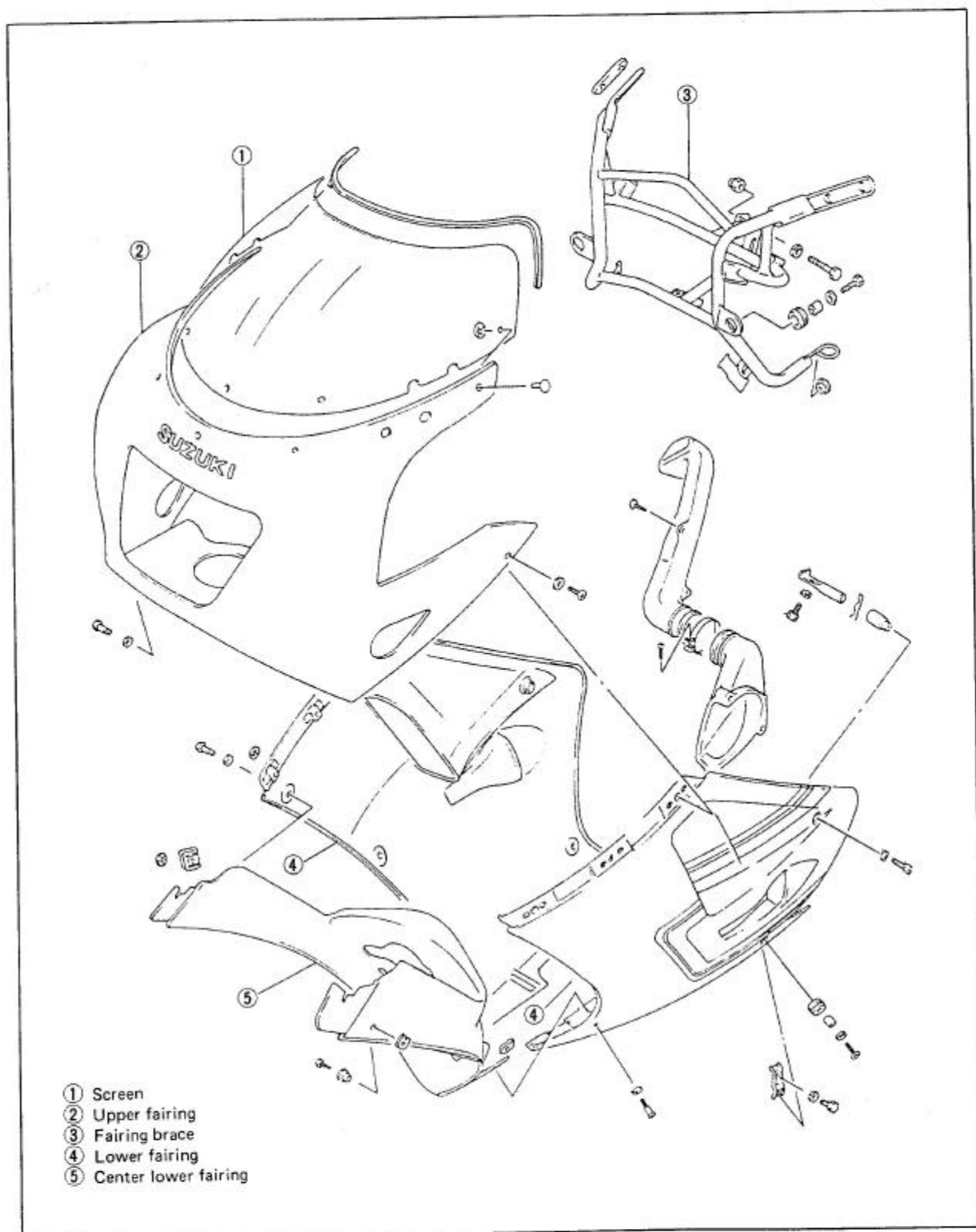


## CHASSIS

### CONTENTS

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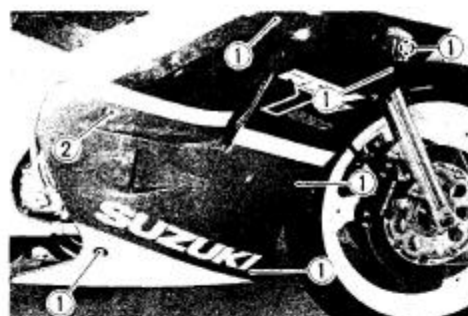
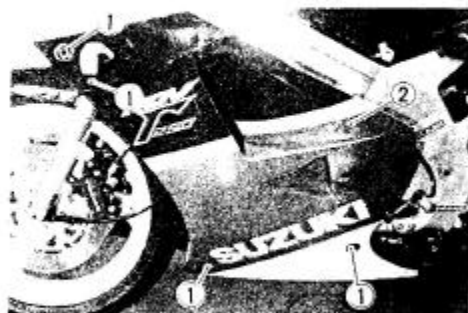
# FAIRING CONSTRUCTION



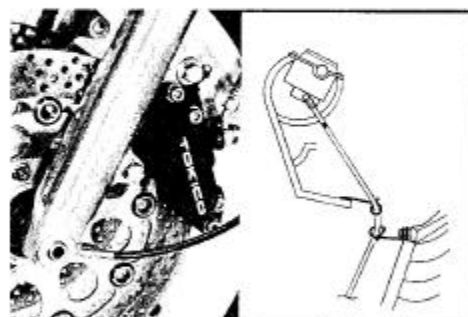
**REMOVAL**

- Loosen screws ① and two clips ② to remove the lower fairing.

09900-00401: L-type hexagon wrench set



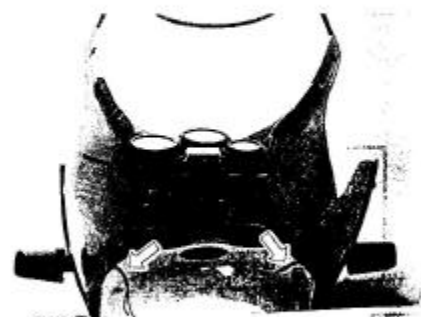
- Remove the speedometer cable.
- For the left side lower fairing, pull out the speedometer cable from the cable guides.



- Remove the right and left rear view mirrors by loosening respective two nuts.



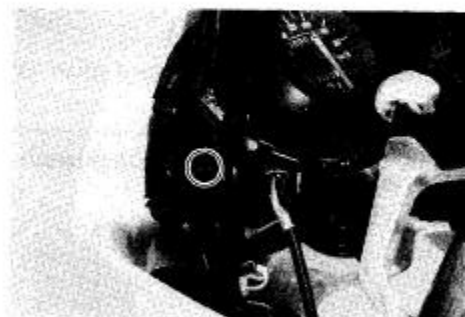
- Disconnect the lead wires for right and left turn signals.



### 7-3 CHASSIS

- Remove the upper fairing by loosening two bolts.

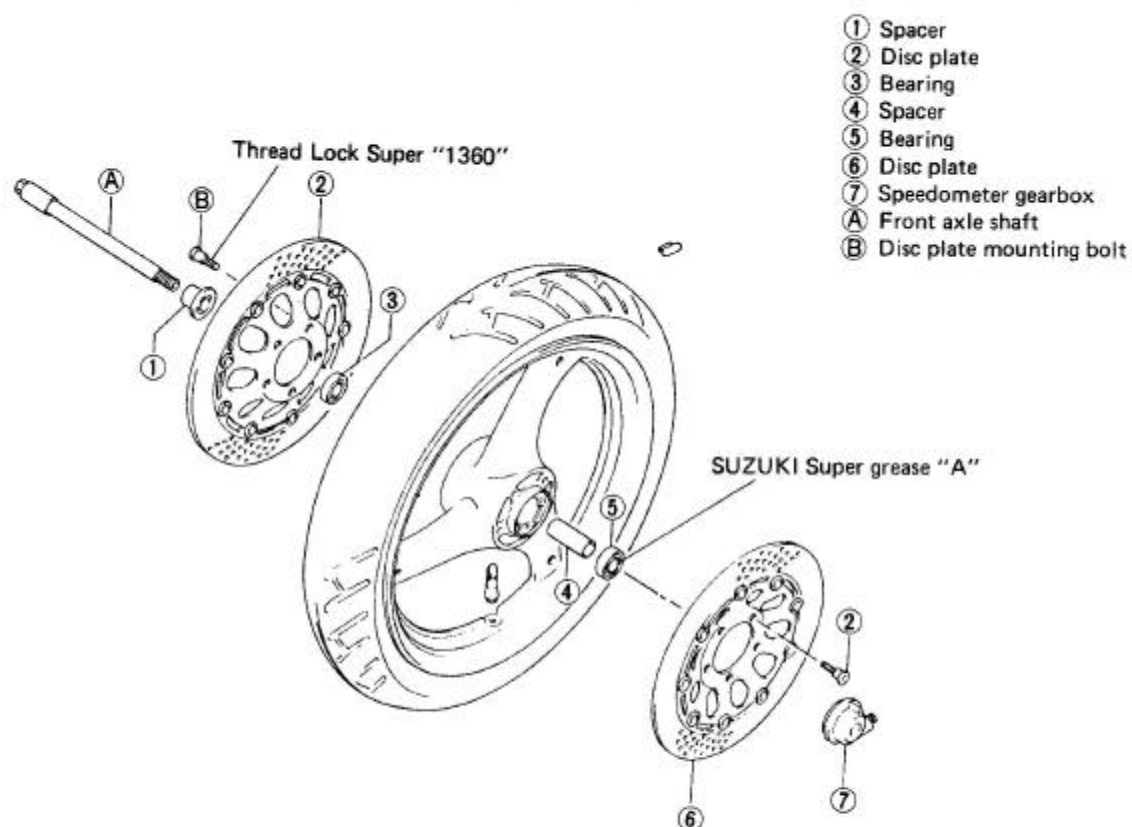
09900-00401: L-type hexagon wrench set



## REMOUNTING

Remount the fairing in the reverse order of removal.

## FRONT WHEEL CONSTRUCTION

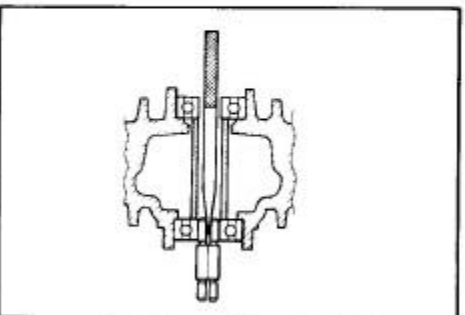
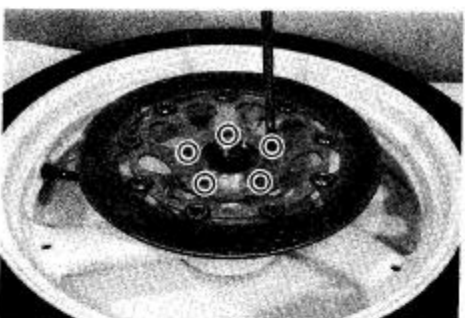
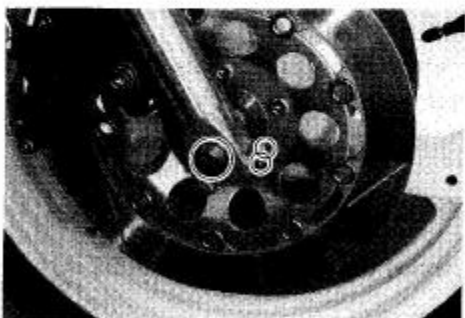
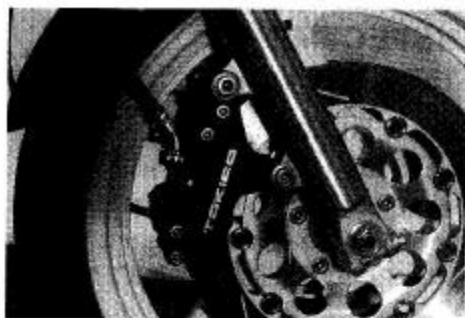


Tightening torque		
Item	N·m	kg·m
Ⓐ	50 – 80	5.0 – 8.0
Ⓑ	15 – 25	1.5 – 2.5

## REMOVAL AND DISASSEMBLY

- Remove the lower fairing. (Refer to page 7-1.)
- Support the motorcycle by jake with wooden block.
- Remove the right and left calipers by loosening caliper mounting bolts.
- Loosen the axle clamp bolts.
- Loosen the axle shaft.
- Draw out the axle shaft and take off the front wheel.
- Remove the securing bolts and separate both the discs from the wheel.
- Drive out both the wheel bearings with the special tool in the following procedures.

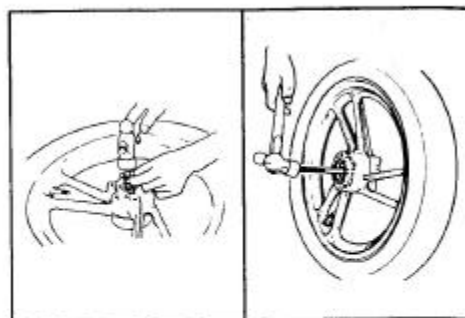
**09941-50110: Bearing remover**



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

**CAUTION:**

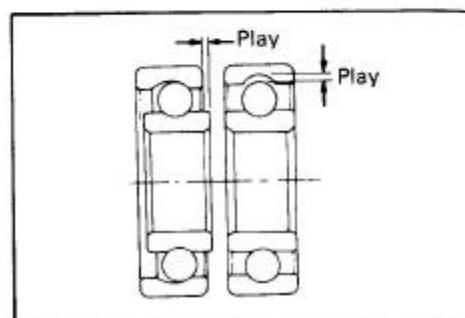
The removed bearing should be replaced.

**INSPECTION**

TIRE ..... Refer to page 7-33

**WHEEL BEARINGS**

Inspect the play of the wheel bearings inner ring by hand while fixing it in the wheel. Rotate the inner ring by hand to inspect for abnormal noise and rotating smoothly. Replace the bearing if there is something unusual.

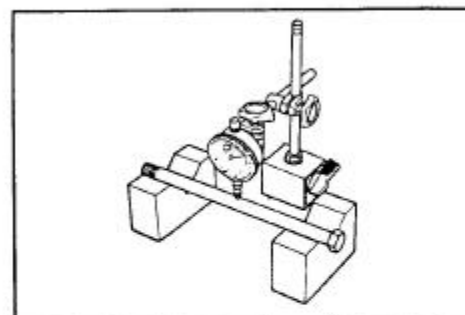
**AXLE SHAFT**

Using a dial gauge, check the axle shaft for runout and replace it if the runout exceeds the limit.

09900-20606: Dial gauge (1/100)

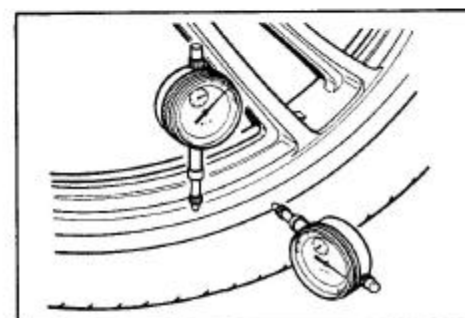
09900-20701: Magnetic stand

Service Limit: 0.25 mm (0.0098 in)

**WHEEL**

Make sure that the wheel runout checked as shown does not exceed the service limit. 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 (Axial and Radial): 2.0 mm (0.0787 in)

**REASSEMBLY AND REMOUNTING**

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

**WHEEL BEARING**

- Apply grease to the bearings before installing.

99000-25010: SUZUKI Super grease "A"



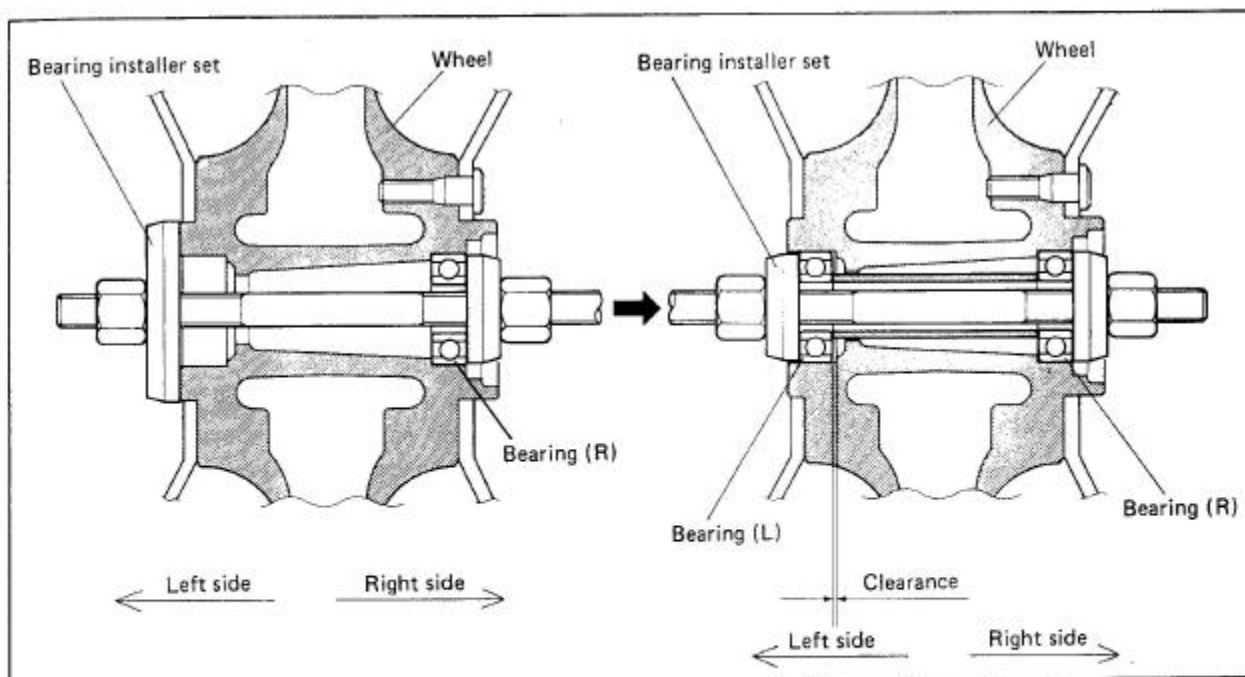
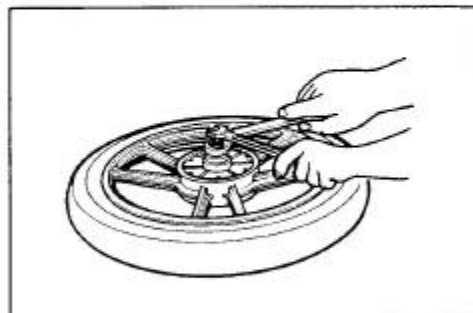
- Install the wheel bearings as follows with the special tool.

**CAUTION:**

First install the wheel bearing for right side.

09941-34511: Bearing installer set

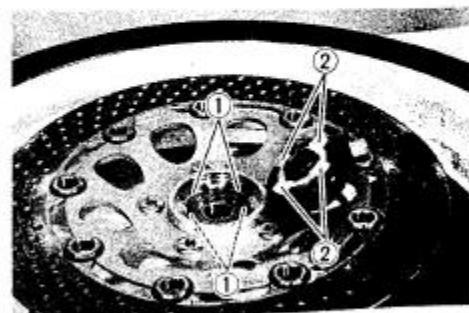
09924-84510: Bearing installer set

**DISC****NOTE:**

Mount the disc plate with a marking "R" on the right side and that with "L" on the left side.

**SPEEDOMETER GEARBOX**

- Before installing the speedometer gearbox, grease it.
- When installing the speedometer gearbox to the wheel hub, be sure to align the four cutaway portions ① on the wheel hub with the four tabs ② of the speedometer gear.
- Before tightening the axle shaft, make sure to locate the speedometer gear box properly with its stopper tab in contact with the fork leg as shown. Tighten the axle shaft to specification.



**NOTE:**

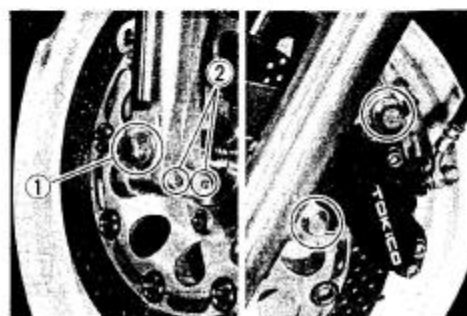
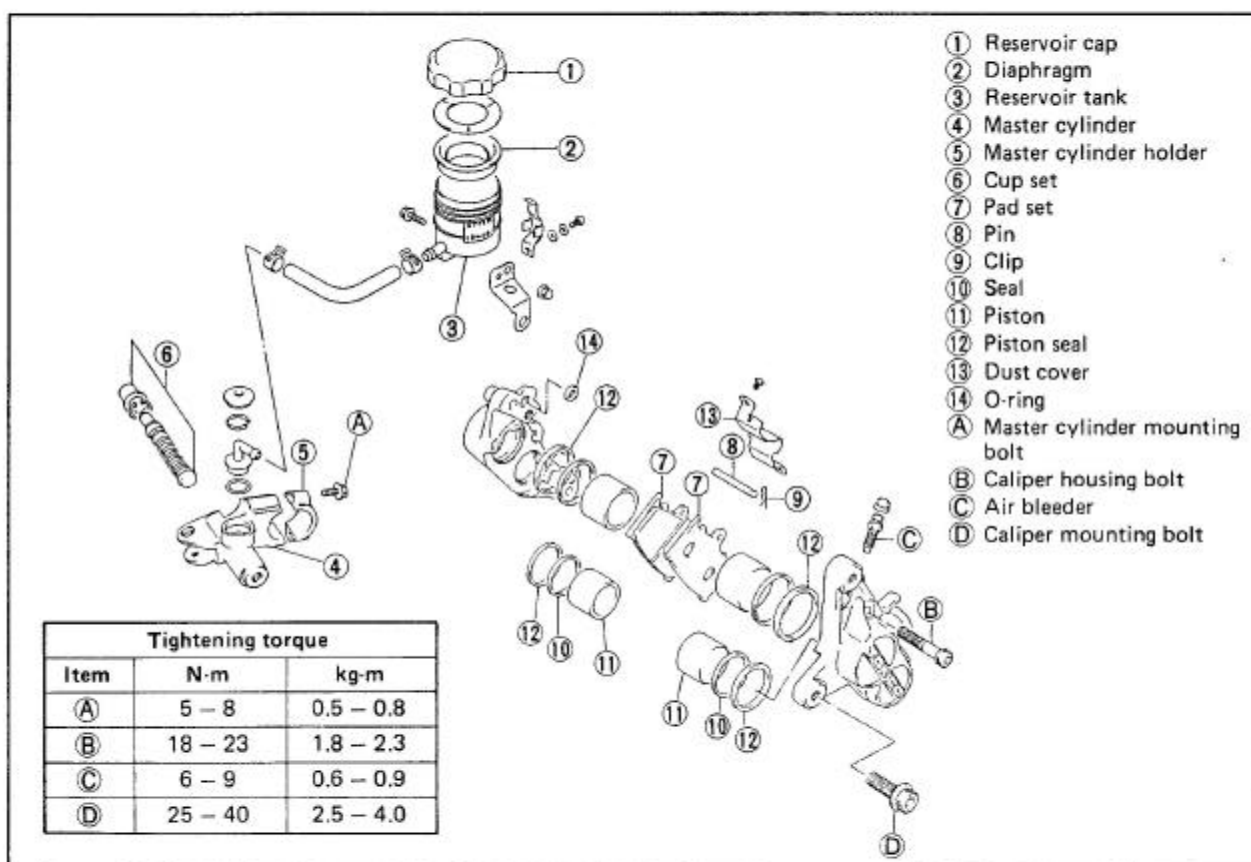
Check to be sure that the speedometer gearbox is in suitable position without cable bending when tightening the axle shaft.

**AXLE SHAFT**

- Tighten the axle shaft ① and axle shaft pinch bolts ②.

**BRAKE CALIPER**

- Tighten the brake caliper mounting bolts.

**FRONT BRAKE****CONSTRUCTION (MASTER CYLINDER AND CALIPER)**



## BRAKE PAD REPLACEMENT

- Remove the dust cover.
- Remove the clips ① draw out the pins ②.
- Take off the pads.

### CAUTION:

- \* Do not operate the brake lever while dismounting the pads.
- \* Replace the brake pad as a set, otherwise braking performance will be adversely affected.



## CALIPER REMOVAL AND DISASSEMBLY

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

### CAUTION:

Never re-use the brake fluid left over from 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 for cracks and hose joint for leakage before riding.

- Remove the two caliper mounting bolts and take off the caliper.

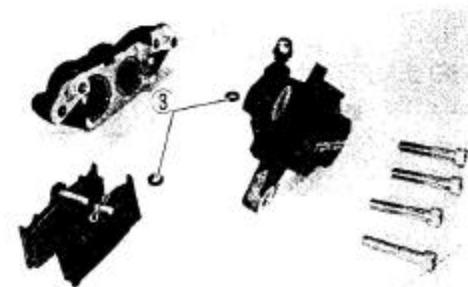
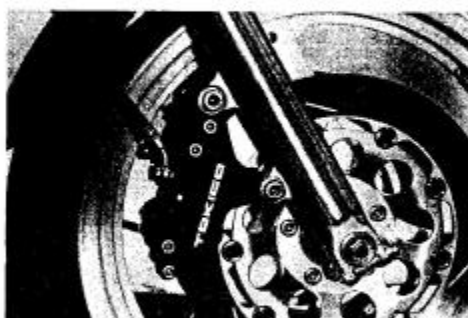
### NOTE:

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

- Remove the pads.
- Separate the caliper by removing the caliper housing bolts.
- Remove the seals ③.

### NOTE:

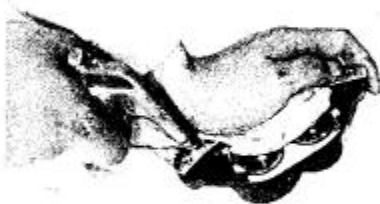
*Once the caliper halves have been separated, replace the O-ring.*



- Push out the piston with an air gun.

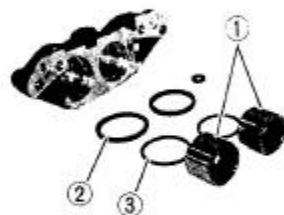
### CAUTION:

Do not use high pressure air to prevent piston damage.



## 7-9 CHASSIS

- Remove the pistons ①, seals ② and piston seals ③ from the caliper.



### CALIPER AND DISC INSPECTION

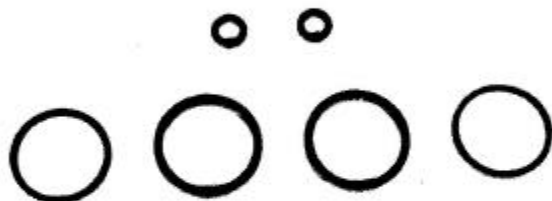
#### CYLINDER AND PISTON

Inspect the caliper bore wall for nicks, scratches or other damage and the piston surface for any scratches or other damage.



#### RUBBER PART

Inspect each rubber part for damage and wear.

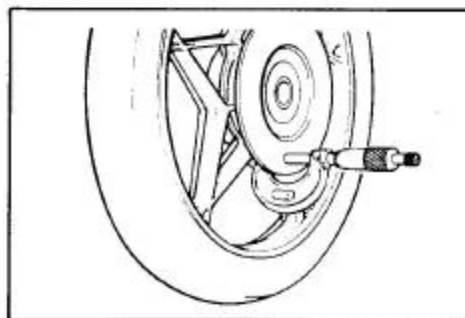


#### DISC

Using a micrometer check the disc for wear. Its thickness can be checked with disc and wheel in place. The service limit for the thickness of the disc is shown below.

09900-20205: Micrometer (0 – 25 mm)

Service Limit (Front disc): 4.0 mm (0.13 in)

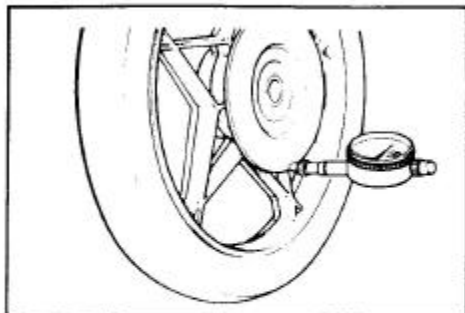


With the disc mounted on the wheel, check the disc for face runout with a dial gauge, as shown.

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

09900-20701: Magnetic stand

Service Limit: 0.30 mm (0.01 in)



## CALIPER REASSEMBLY AND REMOUNTING

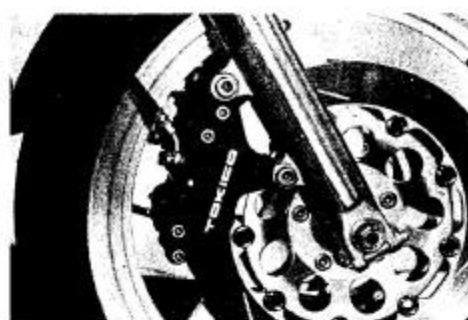
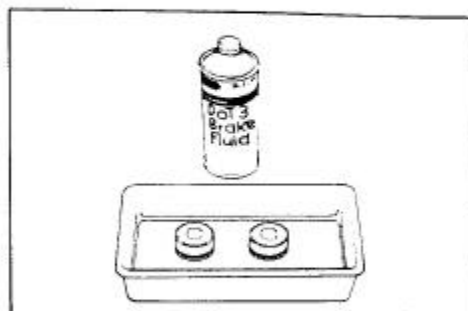
Reassemble and remount the caliper in the reverse orders of removal and disassembly and carry out the following steps.

### 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.

### CAUTION:

Bleed the air after reassembling the caliper. (Refer to page 2-13.)



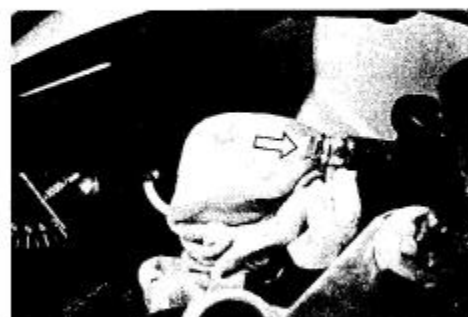
## MASTER CYLINDER REMOVAL AND DISASSEMBLY

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

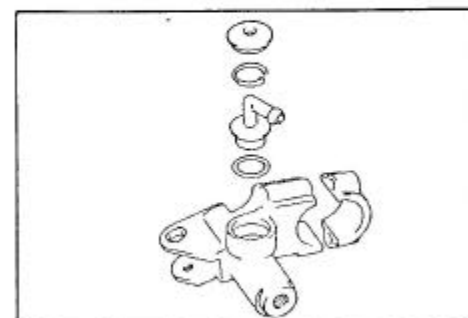
### CAUTION:

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

- Remove the holder bolts and take off the master cylinder assembly.
- Remove the brake lever by loosening a bolt.



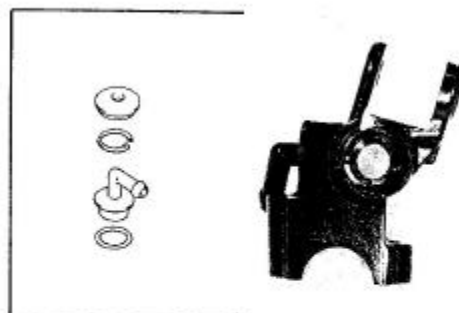
- Remove the reservoir hose, dust seal, circlip and O-ring.



## 7-11 CHASSIS

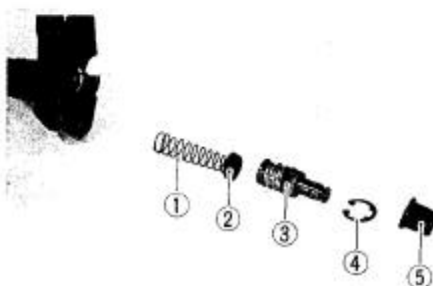
- Pull out the dust boot and then remove the circlip with the special tool.

09900-06108: Snap ring pliers



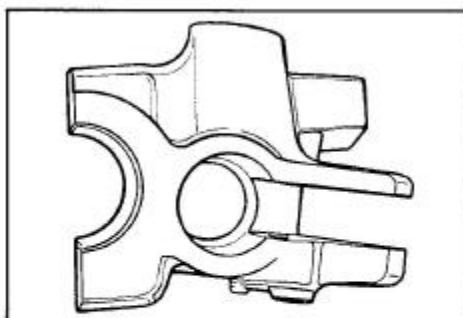
- Remove the piston, primary cup and return spring.

- ① Return spring
- ② Primary cup
- ③ Piston
- ④ Circlip
- ⑤ Dust boot



### 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, dust boot and diaphragm for wear or damage.



## MASTER CYLINDER REASSEMBLY AND REMOUNTING

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

### 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 internal parts to be inserted into the bore.

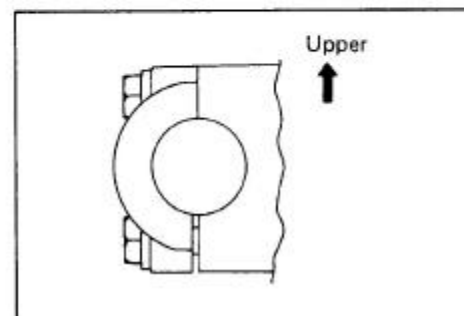
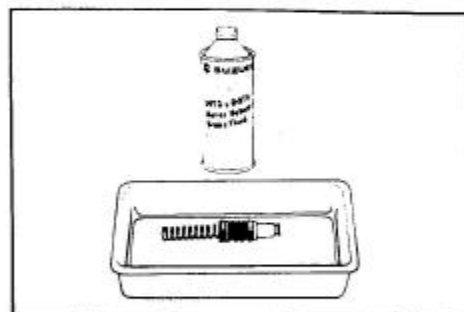
### 99000-23110: SUZUKI BRAKE FLUID DOT3 & 4

- When mounting the master cylinder on the handlebar, align the master cylinder holder mating surface ① with punched mark ② on the handlebar, and tighten the upper clamp bolt first as shown.

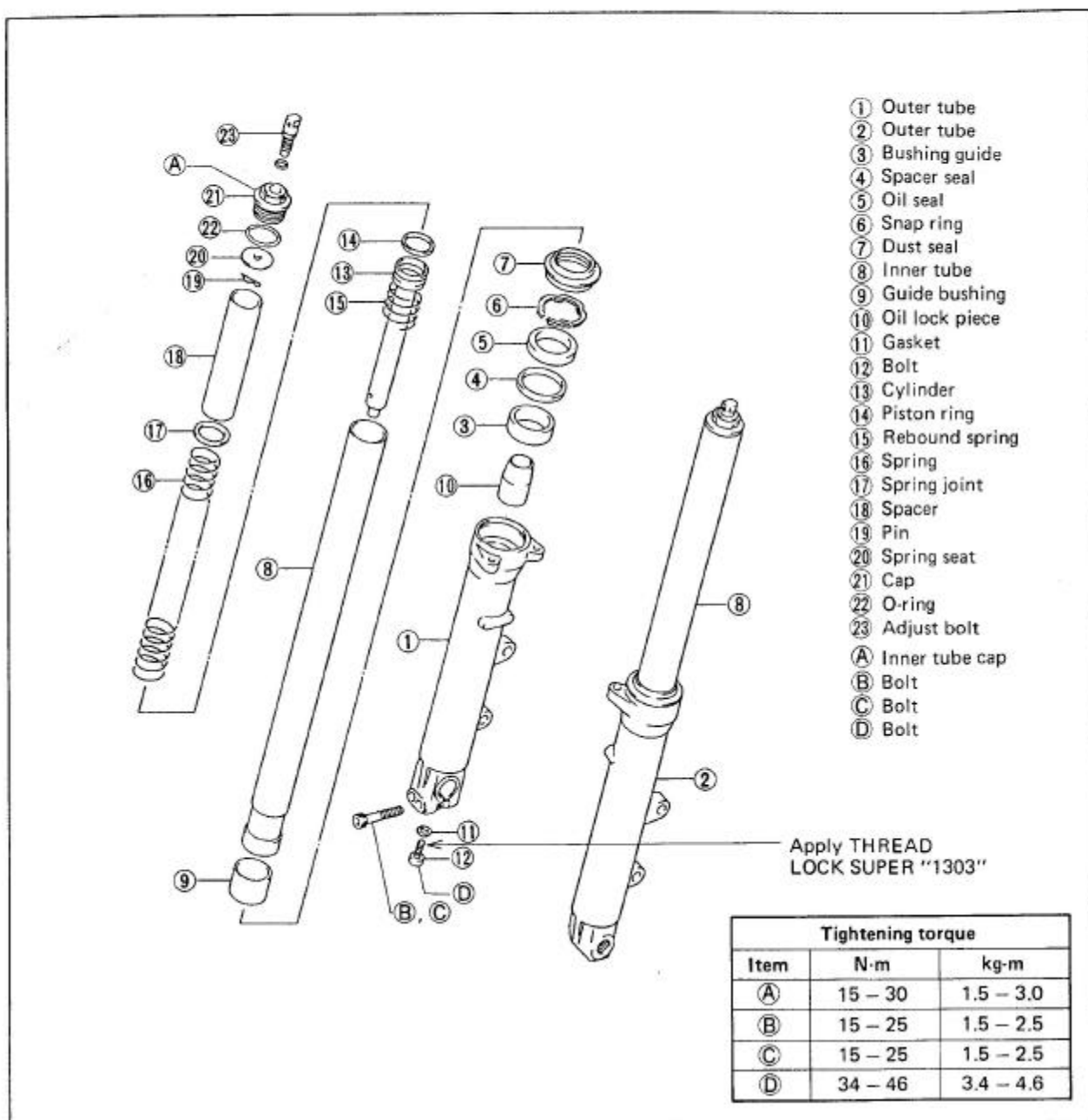
Front brake master : 5 – 8 N·m (0.5 – 0.8 kg-m)  
cylinder bolt

### CAUTION:

Bleed air after reassembling the master cylinder. (Refer to page 2-13.)



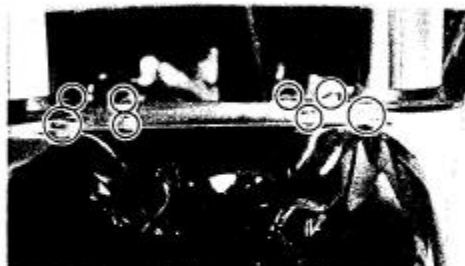
## FRONT FORK



## REMOVAL AND DISASSEMBLY

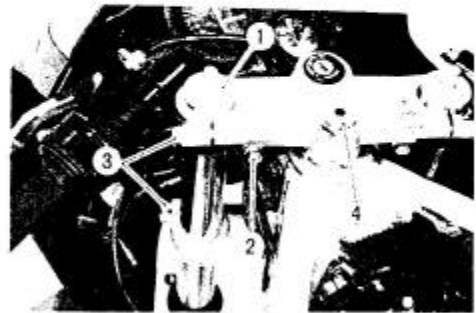
- Remove the fairing. (Refer to page 7-1.)
- Remove the front wheel. (Refer to page 7-3.)
- Remove the front fender brace and front fender by removing eight allen screws.

09900-00401: L-type hexagon wrench set

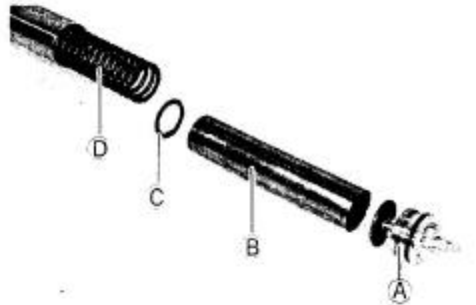


- Loosen the front fork cap bolt ①, handlebar set bolts ②, front fork upper and lower clamp bolts ③ and nut ④, and pull down the front fork assembly.

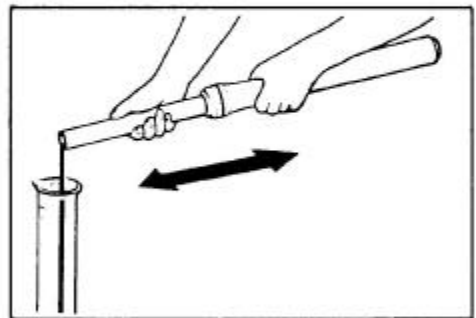
09900-00401: L-type hexagon wrench set



- Remove the front fork cap bolt ①, spacer ②, spring seat ③, and spring ④.



- Invert the fork and stroke it several times to remove the oil.
- Hold the fork inverted for a few minutes to drain the oil.

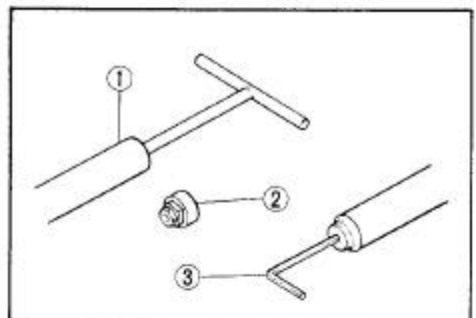


- Remove the damper rod securing bolt with the special tools.

① 09940-34520: "T" handle

② 09940-34581: Attachment "F"

③ 09900-00401: L-type hexagon wrench set



- Remove the dust seal.
- Remove the stopper ring.
- Draw out the damper rod and rebound spring.

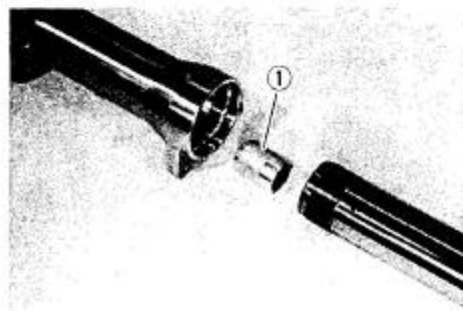
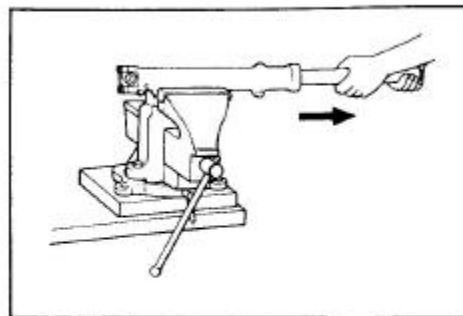


- While holding the caliper mounting portion by vise, separate the inner tube from the outer tube.

**CAUTION:**

The outer tube and inner tube "anti-friction" metals must be replaced along with the oil seal any time the fork is disassembled.

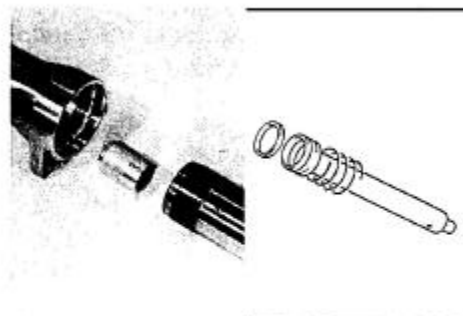
- Remove the oil lock piece ①.



**INSPECTION**

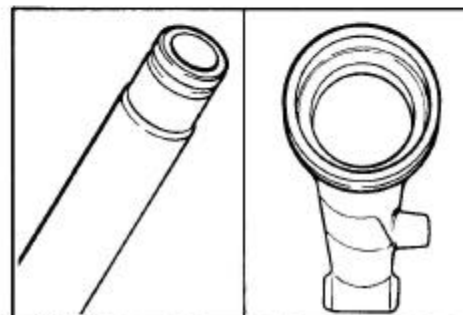
**OIL LOCK PIECE, PISTON RING**

Inspect the oil lock piece, piston ring for wear on damage.



**INNER AND OUTER TUBES**

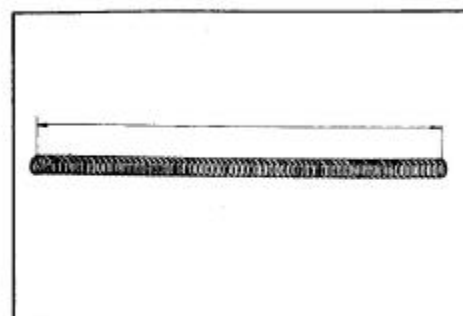
Inspect the inner tube outer surface and outer tube inner surface for any scuffing.



**FORK SPRING**

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

Service Limit: 287 mm (11.30 in)





## REASSEMBLY AND REMOUNTING

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

### INNER TUBE METAL

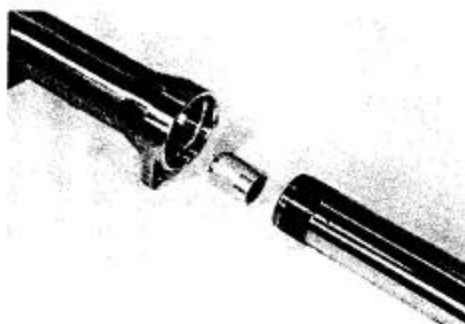
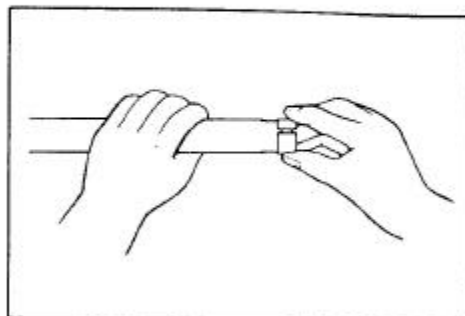
Install the metal by hand as shown.

#### CAUTION:

Use special care to prevent damage to the "Teflon" coated surface of the Anti-friction metal when mounting it.

### OIL LOCK PIECE

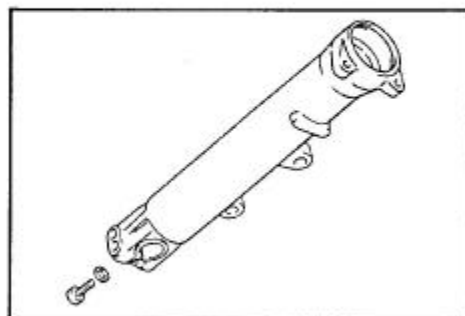
Install the oil lock piece ① as shown in the photograph.



### CYLINDER LOCK BOLT

Refer to page 7-13.

Tighten the cylinder lock bolts.



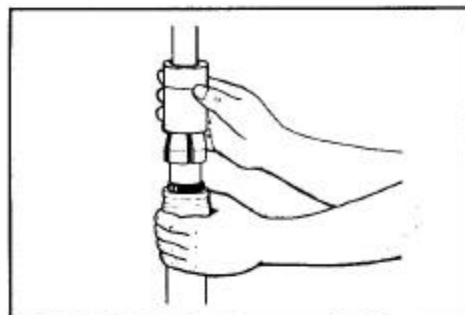
### OUTER TUBE METAL, WASHER AND OIL SEAL

- Install the outer tube metal, washer and oil seal with the special tool.

#### CAUTION:

Use special care to prevent damage to the "Teflon" coated surface of the anti-friction metal when mounting it.

09940-50112: Front fork oil seal installer

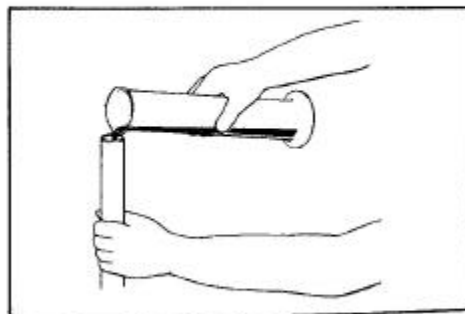


### FORK OIL

- Be sure to use a front fork oil whose viscosity rating meets the specification below.

Fork oil: Fork oil # 10

Capacity: 429 ml (14.5/15.1 US/Imp qt)



## 7-17 CHASSIS

- Hold the front fork vertical and adjust the fork oil level with the special tool.

### NOTE:

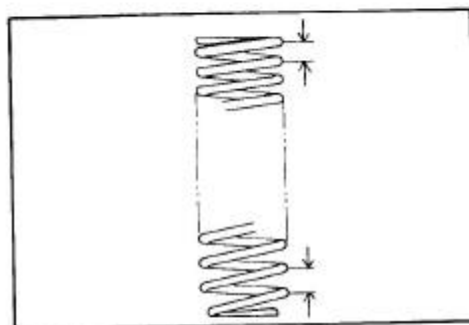
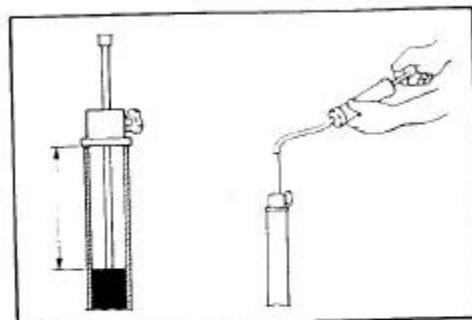
When adjusting oil level, remove the fork springs and compress the inner tube fully.

09943-74111: Fork oil level gauge

Oil level: 110 mm (4.33 in)

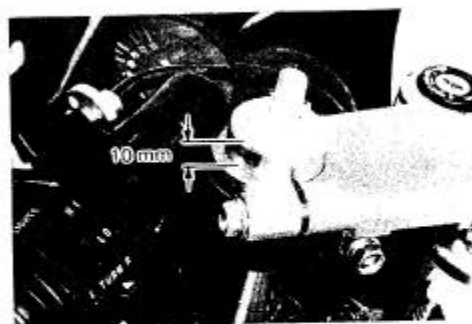
### FORK SPRING

- When installing the fork spring, close pitch end should position in top.



### INNER TUBE

- Position the inner tube with its cap upper surface located higher than the upper bracket by 10 mm (0.393 in) and then tighten the clamp bolt.

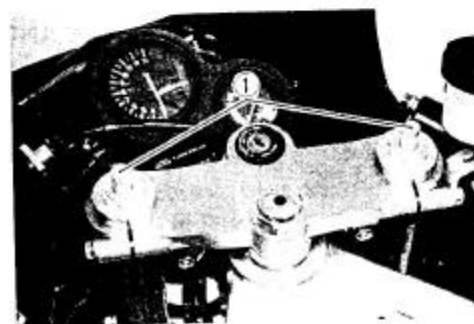


### FRONT FORK SETTING

- Turn the spring adjuster ① for desired stiffness.

### NOTE:

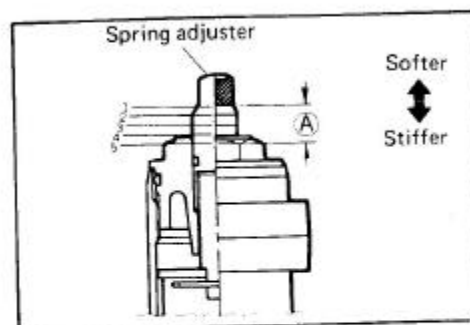
The reference lines on both the right and left adjusters should be in equal position.



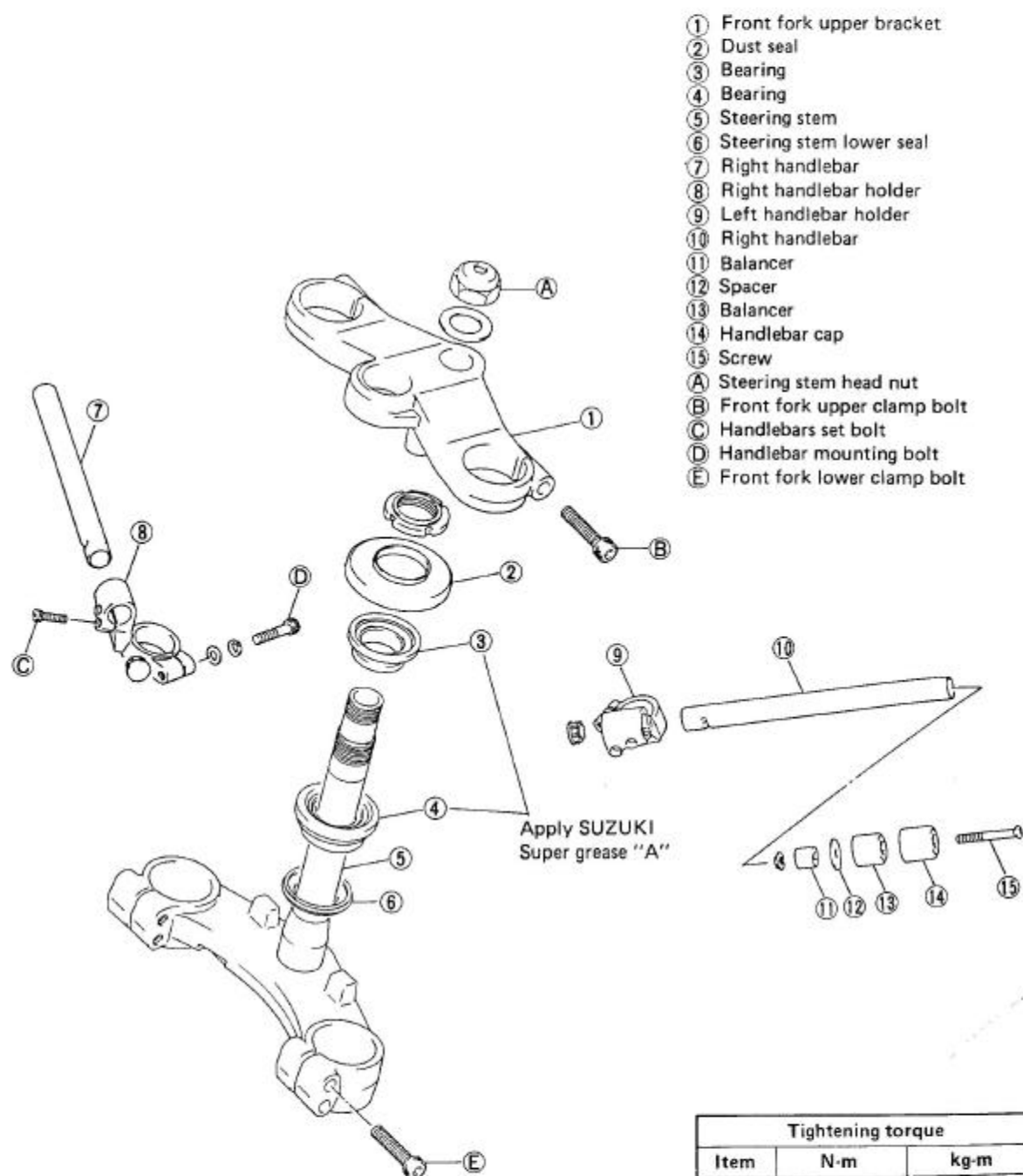
### FRONT FORK SPRING

Spring pre-load is adjustable for ten steps. Shortening the adjuster length ① by turning the adjuster ① clockwise makes the spring pre-load larger, and making the adjuster length ① long make the spring pre-load small.

Standard setting: No. 4 (from top side)



## STEERING STEM

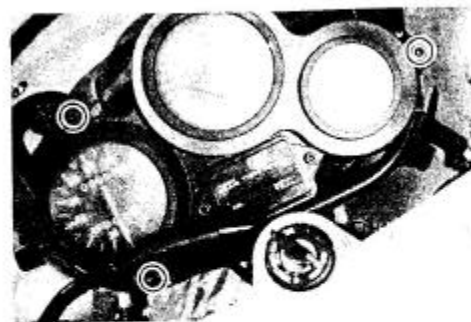


Tightening torque		
Item	N-m	kg-m
A	60 - 100	6.0 - 10.0
B	15 - 25	1.5 - 2.5
C	6 - 10	0.6 - 1.0
D	15 - 25	1.5 - 2.5
E	15 - 25	1.5 - 2.5

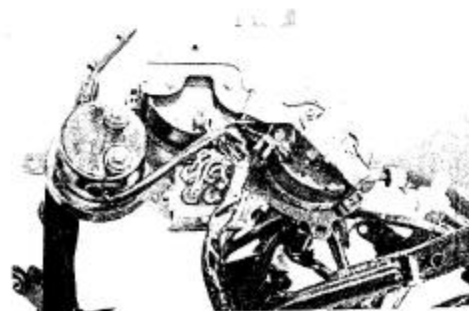
## REMOVAL AND DISASSEMBLY

- Remove the fairing. (Refer to page 7-1.)
- Remove the front wheel. (Refer to page 7-3.)
- Remove the front fork. (Refer to page 7-13.)
- Remove the meter assembly by loosening three bolts.

09900-00401: L-type hexagon wrench set



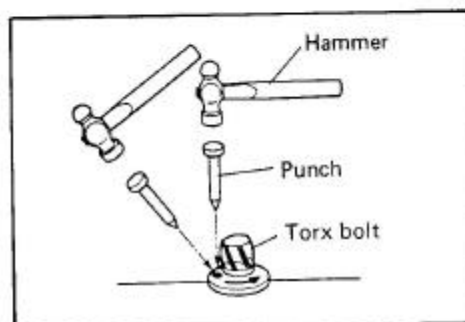
- Disconnect the lead wires of the meter assembly and the headlight assembly.



- Remove the headlight assembly.



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



- Remove the front brake hose connector by loosening two bolt.



- Remove the steering stem head nut ①.



- Remove the steering stem nut with the special tool, then draw out the steering stem.

09940-14911: Steering stem nut wrench

**NOTE:**

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

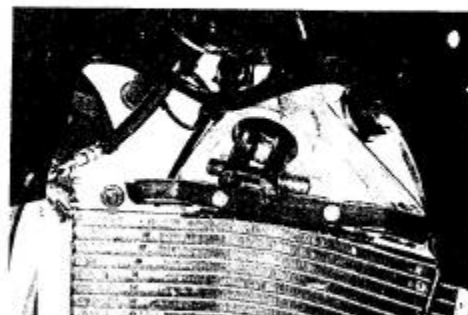
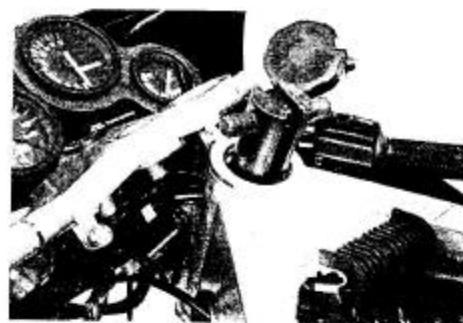


- Remove the lower race.



- Push out the steering stem bearing races, upper and lower, with the special tools.

09941-54911: Steering outer race remover



## REASSEMBLY AND REMOUNTING

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

### OUTER RACES

- Press in the upper and lower outer races using the special tool.

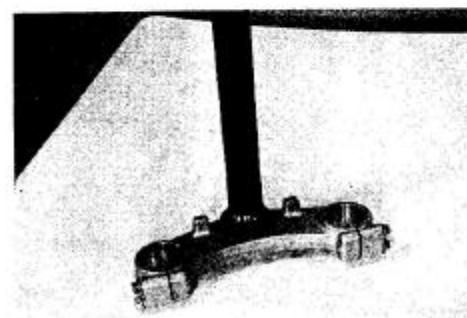
09941-34513: Steering outer race installer



### BEARING

- Place an appropriate washer and press in the lower bearing with the special tool.

09941-74910: Steering bearing installer



### STEM NUT

- Fit the dust seal to the stem nut.
- Tighten the steering stem nut to the specified torque.

Tightening torque: 40 – 50 N.m (4 – 5 kg-m)

09940-14911: Steering stem nut wrench

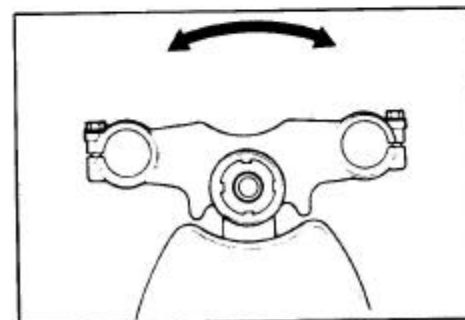
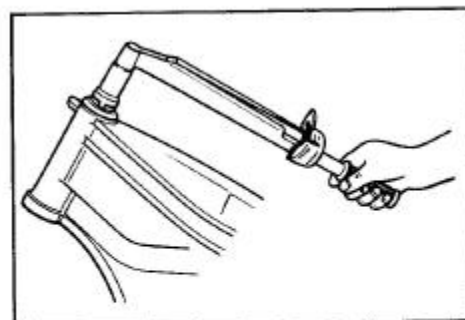
- Turn the steering stem bracket about five or six times all the way to the left and right so that the bearings will be seated properly.
- Turn back the stem nut by 1/4 – 1/2 turn.

#### NOTE:

*This adjustment will vary from motorcycle to motorcycle.*

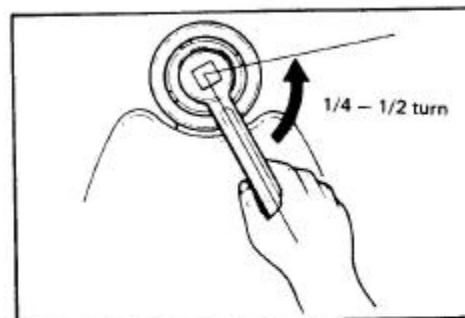
- Steering stem head nut should be tightened to the specified torque.

Tightening torque: 60 – 100 N.m (6.0 – 10.0 kg-m)



### 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

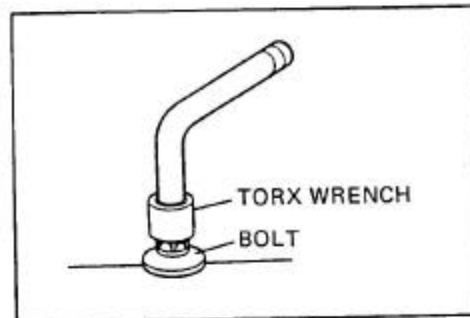
To install the ignition switch, always use the new special bolt and follow the procedures below.

### NOTE:

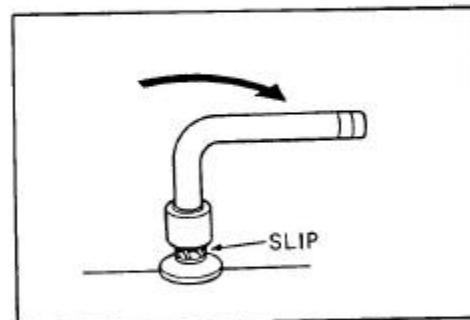
*The spare ignition switch comes equipped with the special bolts, however, the bolt is also individually available as spare parts.*

- 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.

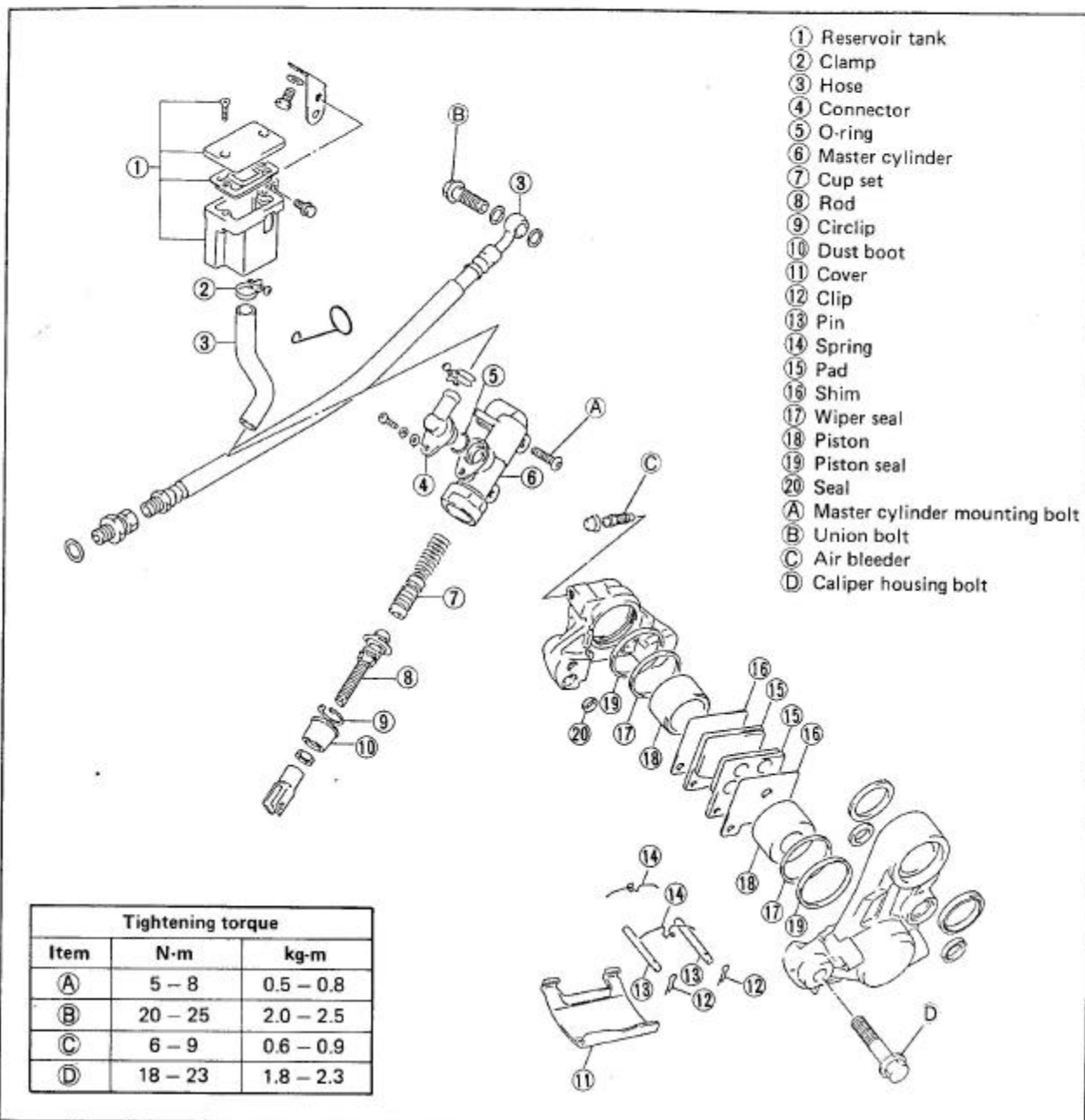
09930-11910: Torx wrench



- 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 BRAKE

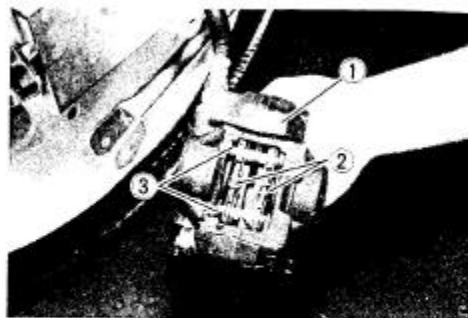


## BRAKE PAD REPLACEMENT

- Remove the dust cover.
- Remove the clips ① and draw out the pins ③. Remove the springs ②.
- Take out the shims and pads.

## CAUTION:

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





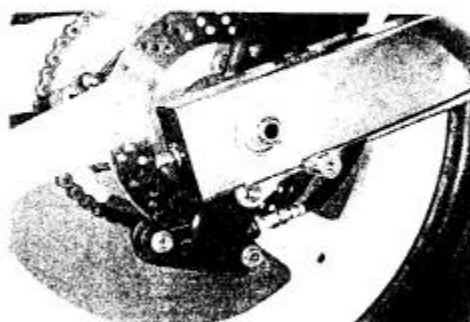
## CALIPER REMOVAL AND DISASSEMBLY

- Remove the union bolt and catch the brake fluid in a suitable receptacle.
- Remove the caliper mounting bolts.

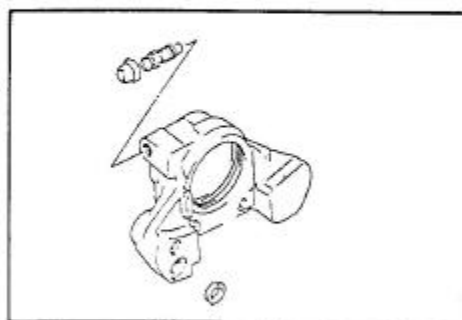
### NOTE:

*Slightly loosen the caliper housing bolts to facilitate later disassembly.*

- Remove the pads. (Refer to page 7-23.)
- Remove the caliper housing bolts and separate the caliper halves.



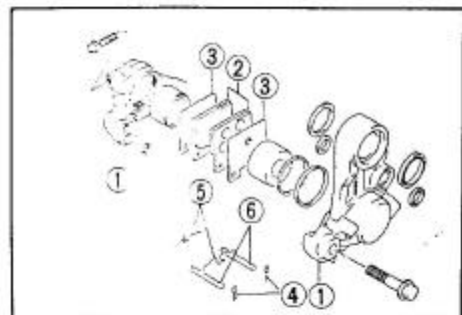
- ① Caliper
- ② Pad
- ③ Shim
- ④ Clip
- ⑤ Spring
- ⑥ Pin



- Remove the O-ring.

### NOTE:

*Once the caliper halves have been separated, replace the O-ring with a new one.*



- Place a rag over the piston to prevent it from popping out and push out the piston by using air gun.

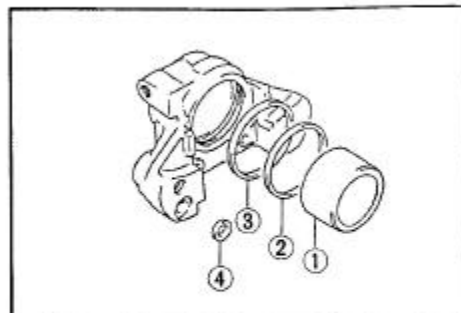
### CAUTION:

To prevent piston damage, do not use high pressure air.



## 7-25 CHASSIS

- Remove the piston ①, dust boot ②, piston seal ③ and O-ring ④.

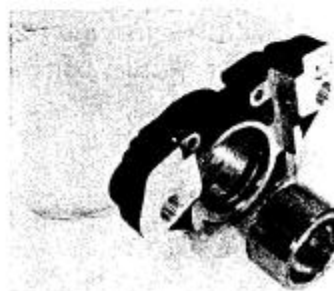


### INSPECTION

#### CYLINDER AND PISTON

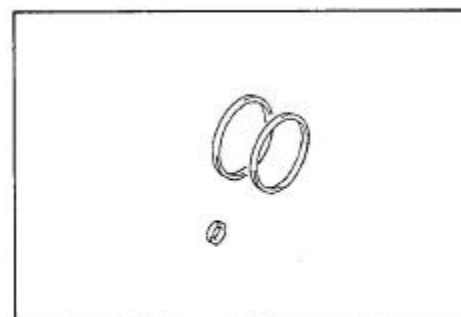
Inspect the cylinder bore wall for nicks, scratches or other damage.

Inspect the piston surface for any flaws or other damage.



#### RUBBER PART

Inspect each rubber part for damage and wear.

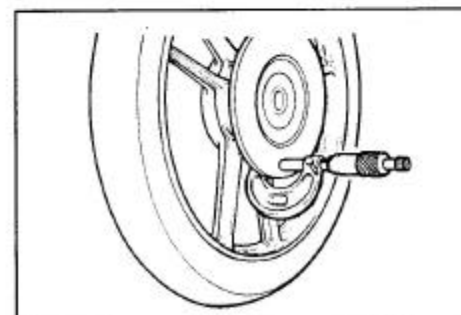


#### DISC

Using a micrometer, check the disc for wear. Its thickness can be checked with disc and wheel in place. The service limit for the thickness of the disc is shown below:

09900-20205: Micrometer (0 – 25 mm)

Service Limit (Rear disc): 4.3 mm (0.169 in)

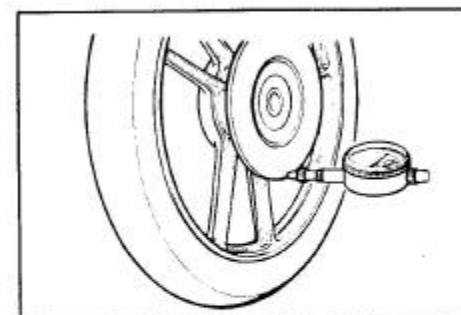


With the disc mounted on the wheel, check the disc for face runout with a dial gauge, as shown.

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

09900-20701: Magnetic stand

Service Limit: 0.30 mm

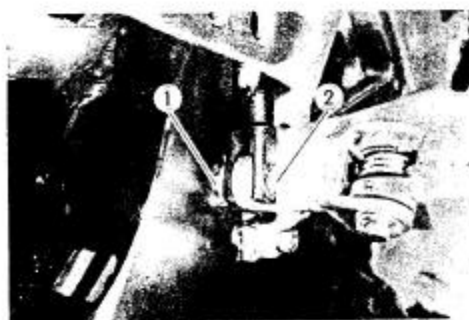
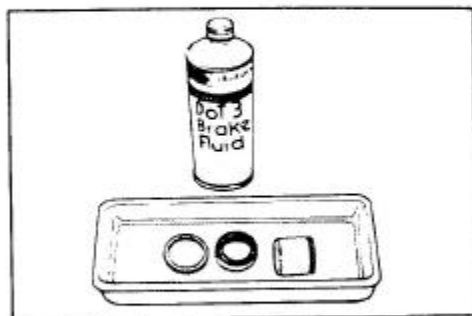


## REASSEMBLY

Reassemble and remount the caliper in the reverse order of removal and disassembly, 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.
  - \* Bleed the air after reassembling the caliper (Refer to page 2-13).
- Pull out the cotter pin ① and take off the pin ②.



- Remove the two master cylinder mounting bolts.



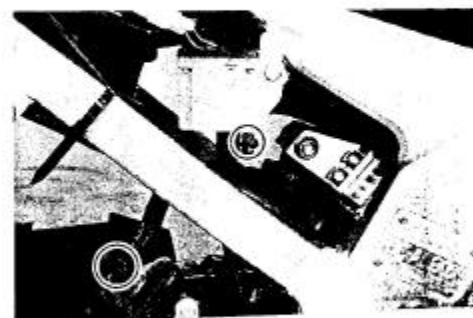
- Place a cloth underneath the union bolt on the master cylinder to catch spilled drops of brake fluid. Unscrew the union bolt and disconnect the brake hose from the master cylinder joint.



### 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.

- Disconnect the reservoir tank hose by loosening a clamp screw.
- Drain the fluid from the reservoir tank.

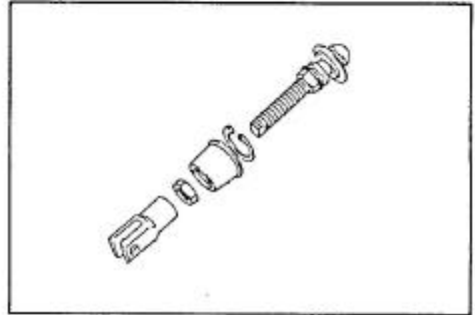


- Remove the connector by loosening a screw and then remove the O-ring.

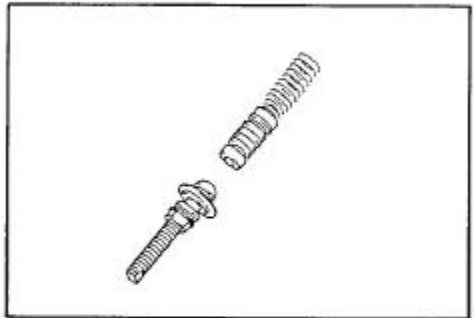


- Remove the dust boot.
- Remove the circlip with the special tool.

09900-06105: Snap ring pliers



- Draw out the push rod, cup piston set.



## INSPECTION

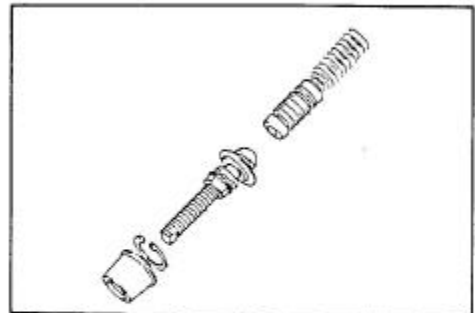
### CYLINDER

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



### PISTON, CUP SET AND RUBBER PARTS

Inspect the piston surface for scratches or other damage.  
Inspect the cup set and each rubber part for damage.



## 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.

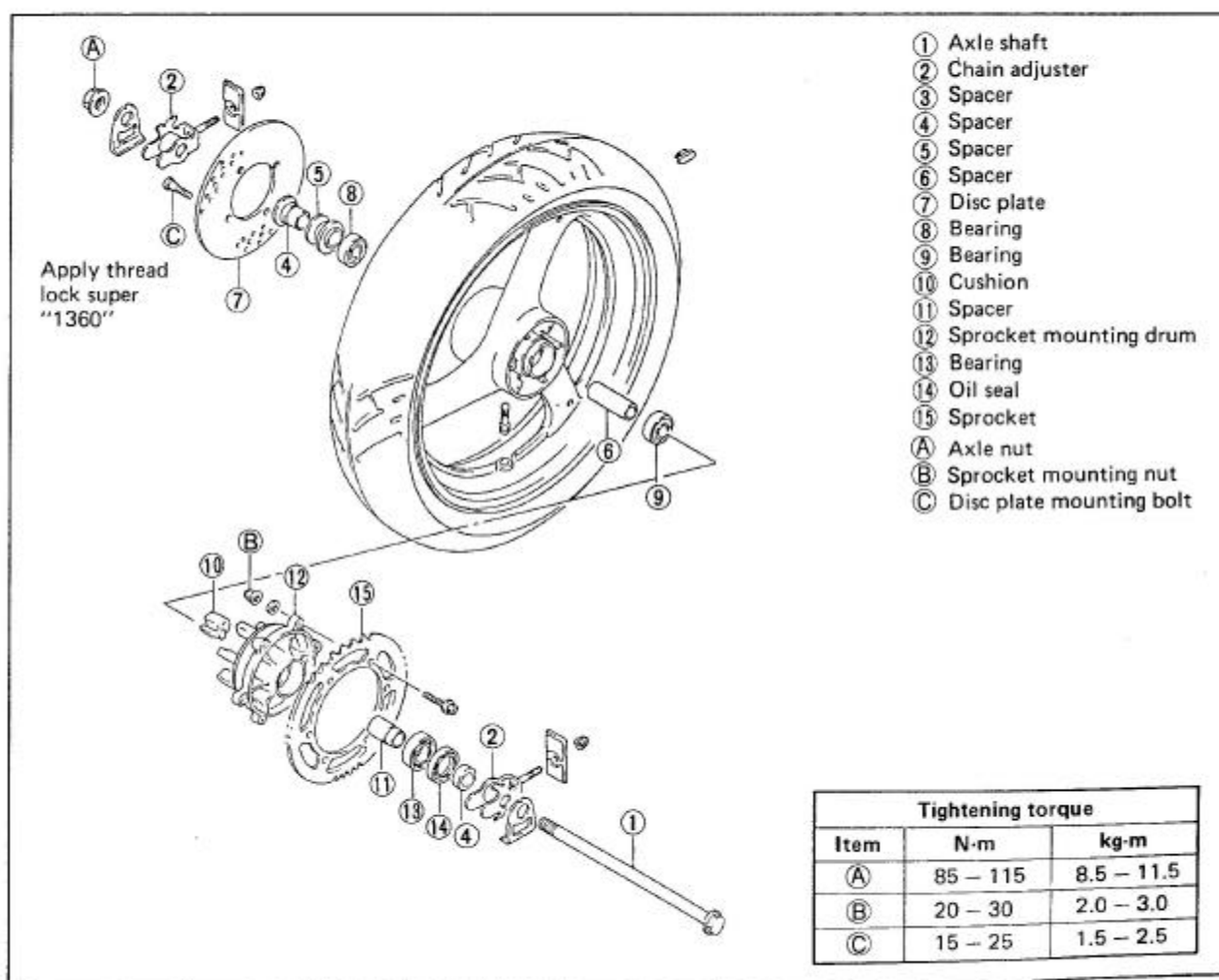
### CAUTION:

Bleed the air after reassembling master cylinder. (Refer to page 2-13.)

Adjust the rear brake light switch and brake pedal height after installation. (Refer to page 2-12.)



## REAR WHEEL CONSTRUCTION



## REMOVAL AND DISASSEMBLY

Remove the rear brake caliper. (Refer to page 7-24.)

- Support the motorcycle with a jack or block.
- Remove the rear torque link bolts.

### CAUTION:

Do not operate the brake pedal while dismounting the brake caliper.

- Loosen the axle nut and the chain adjuster nuts.
- Draw out the axle shaft.
- Disengage the drive chain from the rear sprocket and remove the rear wheel.

- Separate the rear sprocket mounting drum from the wheel.
- Separate the rear sprocket from the sprocket mounting drum by loosening four nuts.

09900-00401: L-type hexagon wrench set

- Remove the oil seal with the special tool.

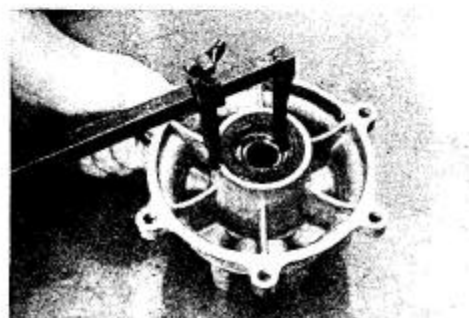
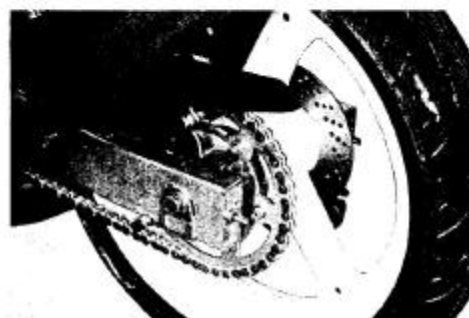
09913-50121: Oil seal remover

- Drive out the sprocket mounting drum bearing as well as front wheel bearing. (Refer to page 7-5.)

09913-80112: Bearing installer

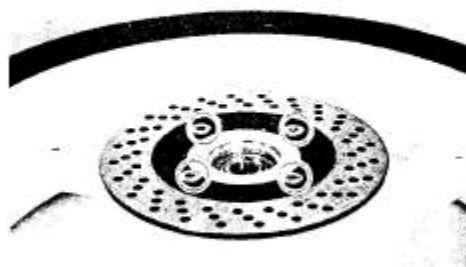
### CAUTION:

The removed bearing should be replaced with a new one.



- Separate the disc from the wheel by loosening four allen bolts.

09900-00401: L-type hexagon wrench set



- Drive out the wheel bearings, right and left.  
(Refer to page 7-5.)

**CAUTION:**

The removed bearing should be replaced with a new one.



- Remove the six cushions.



## INSPECTION

### WHEEL AND SPROCKET MOUNTING

DRUM BEARINGS .....	Refer to page 7- 5
AXLE SHAFT .....	Refer to page 7- 5
WHEEL .....	Refer to page 7- 5
TIRE .....	Refer to page 7-33

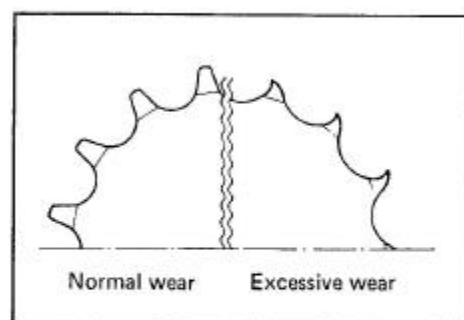
### CUSHION

Inspect the cushions for wear and damage.



**SPROCKET**

Inspect the sprocket teeth for wear. If they are worn as illustrated, replace the sprocket and drive chain.

**REASSEMBLY AND REMOUNTING**

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

**WHEEL AND SPROCKET MOUNTING DRUM BEARINGS**

Apply grease before installing the bearings.

99000-25010: SUZUKI Super grease "A"

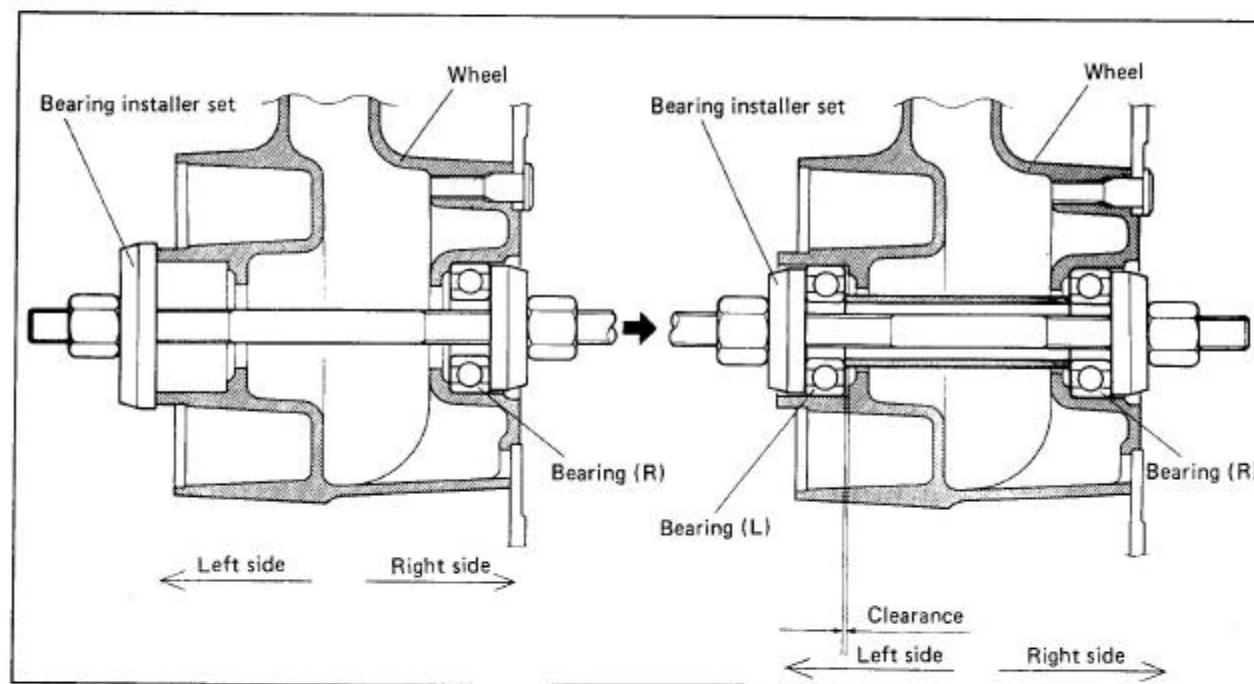
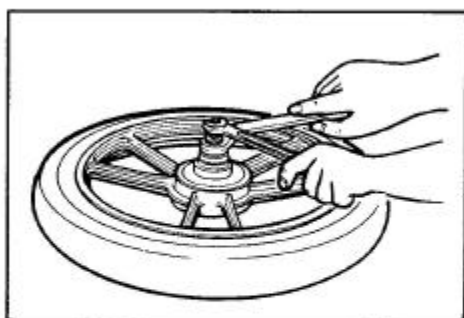
**WHEEL BEARINGS**

- Install the wheel bearing with the special tools.

09924-84510: Bearing installer set

**NOTE:**

First install the wheel bearing for right side.





**SPROCKET MOUNTING DRUM BEARING**

- Install the bearing with the special tool.

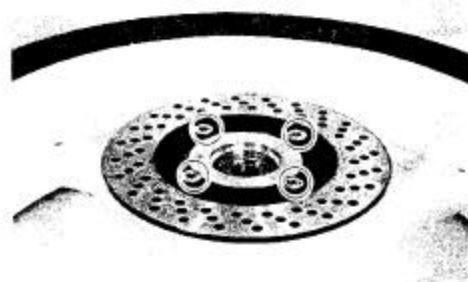
09924-84510: Bearing installer

**NOTE:**

*Apply grease to the bearing and oil seal lip before assembling rear wheel.*

**BRAKE DISC**

- Make sure that the brake disc is clean and free of any greasy matter.
- Refer to page 7-28.

**REAR SPROCKET**

- Tighten the rear sprocket bolts to the specified torque. (Refer to page 7-28.)

**REAR AXLE SHAFT**

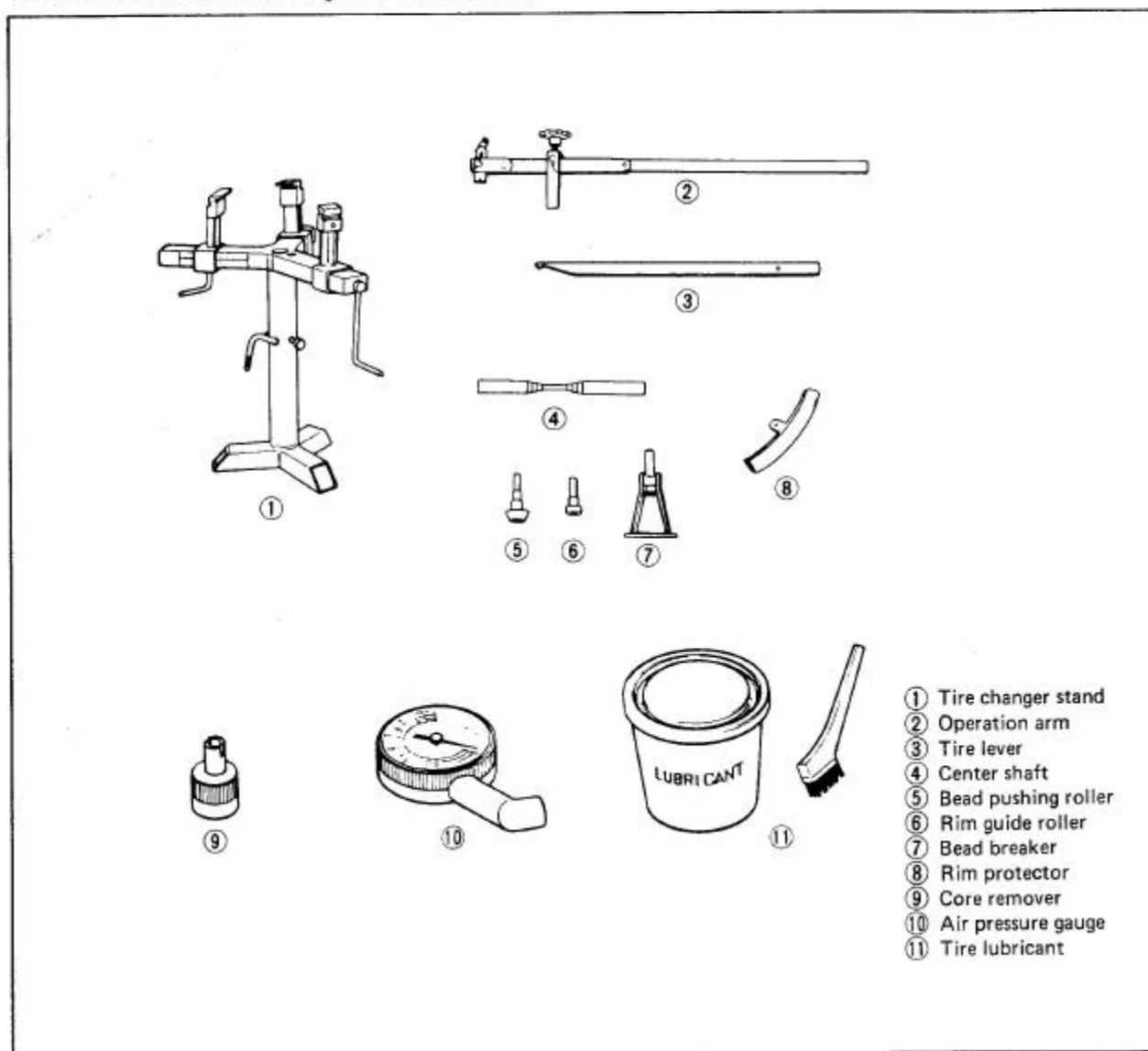
- Adjust the chain slack after rear wheel installation. (Refer to page 2-11.)
- Tighten the rear axle nut to the specified torque. (Refer to page 7-28.)



## TIRE AND WHEEL

## TIRE REMOVAL

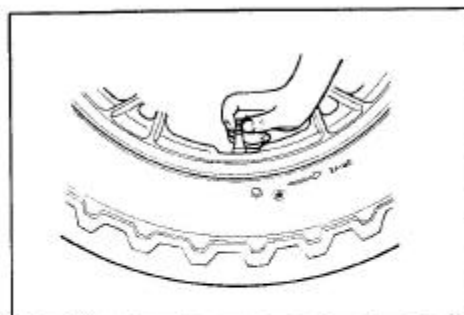
The most critical factor of a tubeless tire is the seal between the wheel rim and the tire bead. Because of this, we recommend using a tire changer which is also more efficient than tire levers. For tire removal the following tools are required.



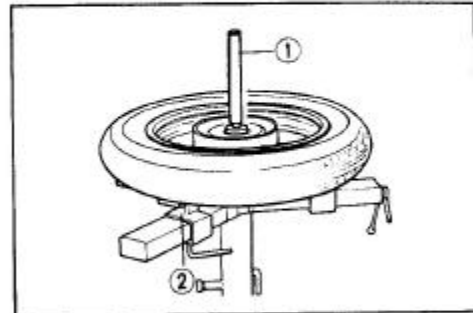
- Remove the valve core from the valve stem, and deflate the tire completely.

**NOTE:**

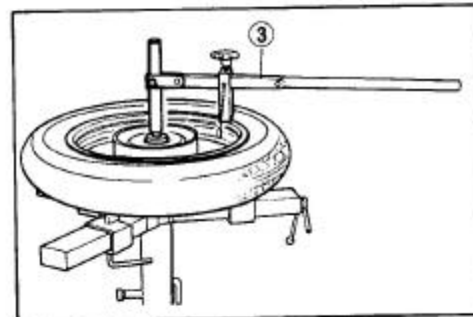
Mark the tire with chalk to note the position ① of the tire on the rim and rotational direction ② of the tire.



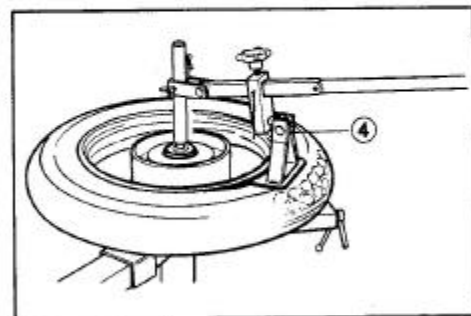
- Place the center shaft ① to the wheel, and fix the wheel with the rim holder ②.



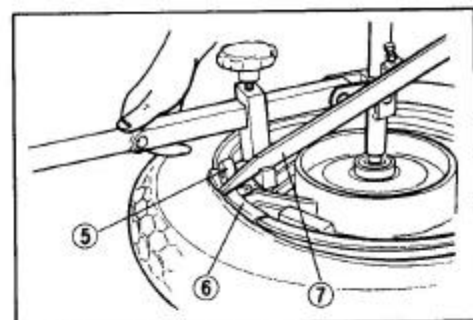
- Attach the operation arm ③ to the center shaft.



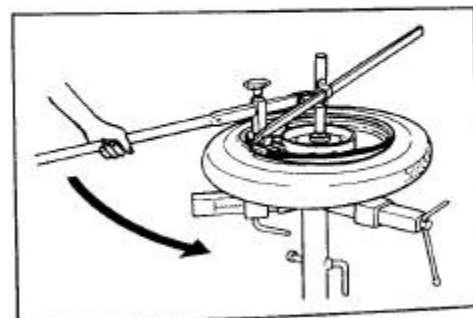
- Attach the bead breaker ④ to the operation arm, and dismount the bead from the rim. Turn the wheel over and dismount the other bead from the rim.



- 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.

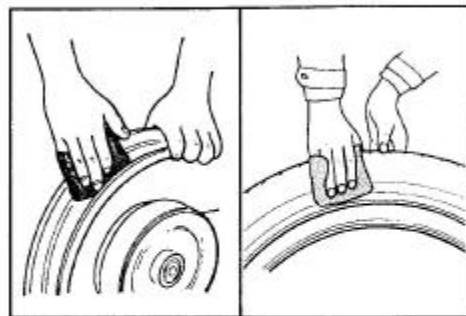


## INSPECTION

### 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.

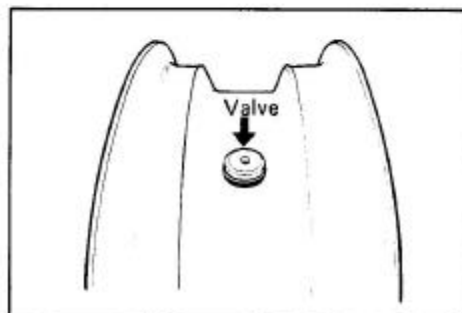
- \* A puncture or a split whose total length or diameter exceeds 6.0 mm (0.24 in).
- \* A scratch or split at the side wall.
- \* Tread depth less than 1.6 mm (0.06 in) in the front tire and less than 2.0 mm (0.08 in) in the rear tire.
- \* Ply separation.
- \* Tread separation.
- \* Tread wear is extraordinarily deformed or distributed around the tire.
- \* Scratches at the bead.
- \* Cord is cut.
- \* Damage from skidding (flat spots).
- \* Abnormality in the inner liner.

### NOTE:

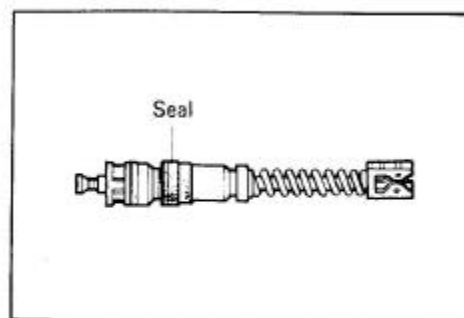
*When repairing a flat tire, follow the repair instructions and use only recommended repairing materials.*

### 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.

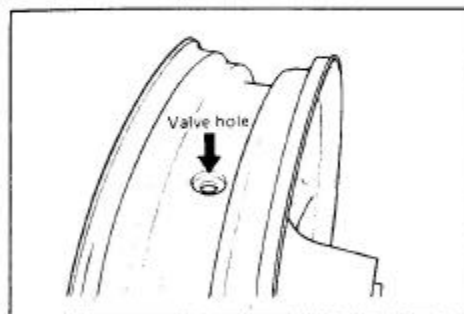


Inspect the removed valve core and replace with the new one if the seal rubber is abnormally deformed or worn.

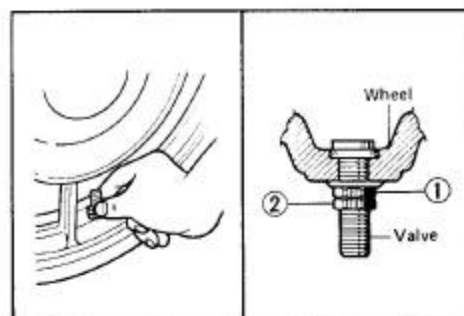


**VALVE INSTALLATION**

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

**CAUTION:**

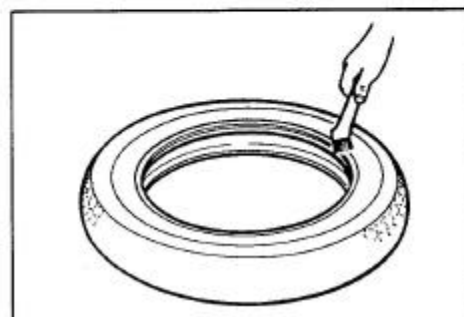
When installing the valve, tighten the nut ① by hand as much as possible. Holding the nut ① under this condition, tighten the lock nut ②. Do not overtighten the nut ① as this may distort the rubber packing and cause an air leak.

**TIRE MOUNTING**

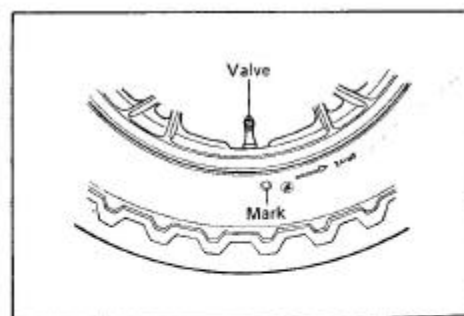
- Apply a special tire lubricant or neutral soapy liquid to the tire bead.

**CAUTION:**

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



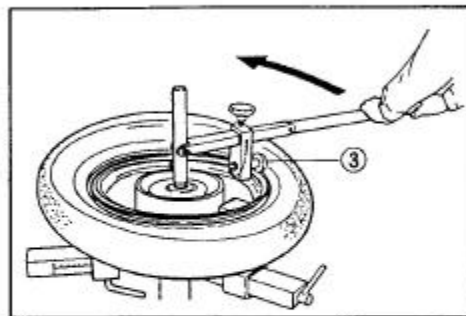
- When installing the tire, make certain that the directional arrow faces the direction of wheel rotation and align the balancing mark of the tire with the valve as shown.



- 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:**

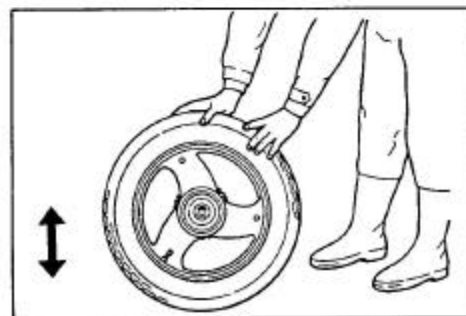
*Before installing the valve core, inspect the core.*



- 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.*



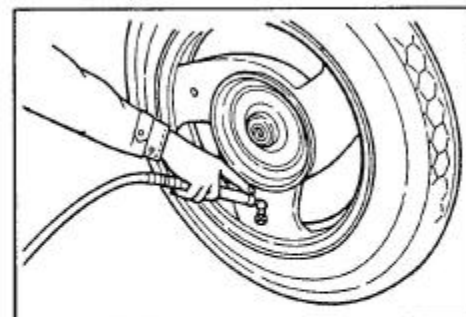
- Pump up the tire with air.

**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:**

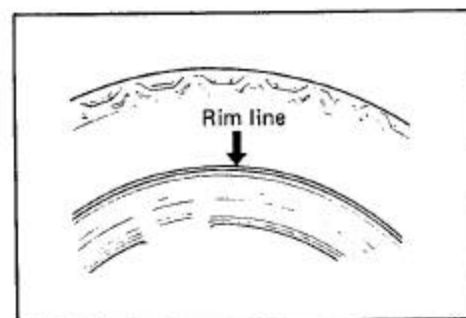
*Check the "rim line" cast on the tire side walls. It must be equidistant from the wheel rim all the way around. If the distance between the rim line and wheel rim varies, this indicates that the bead is not properly seated. If this is so, deflate the tire completely, and unseat the bead for both sides.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



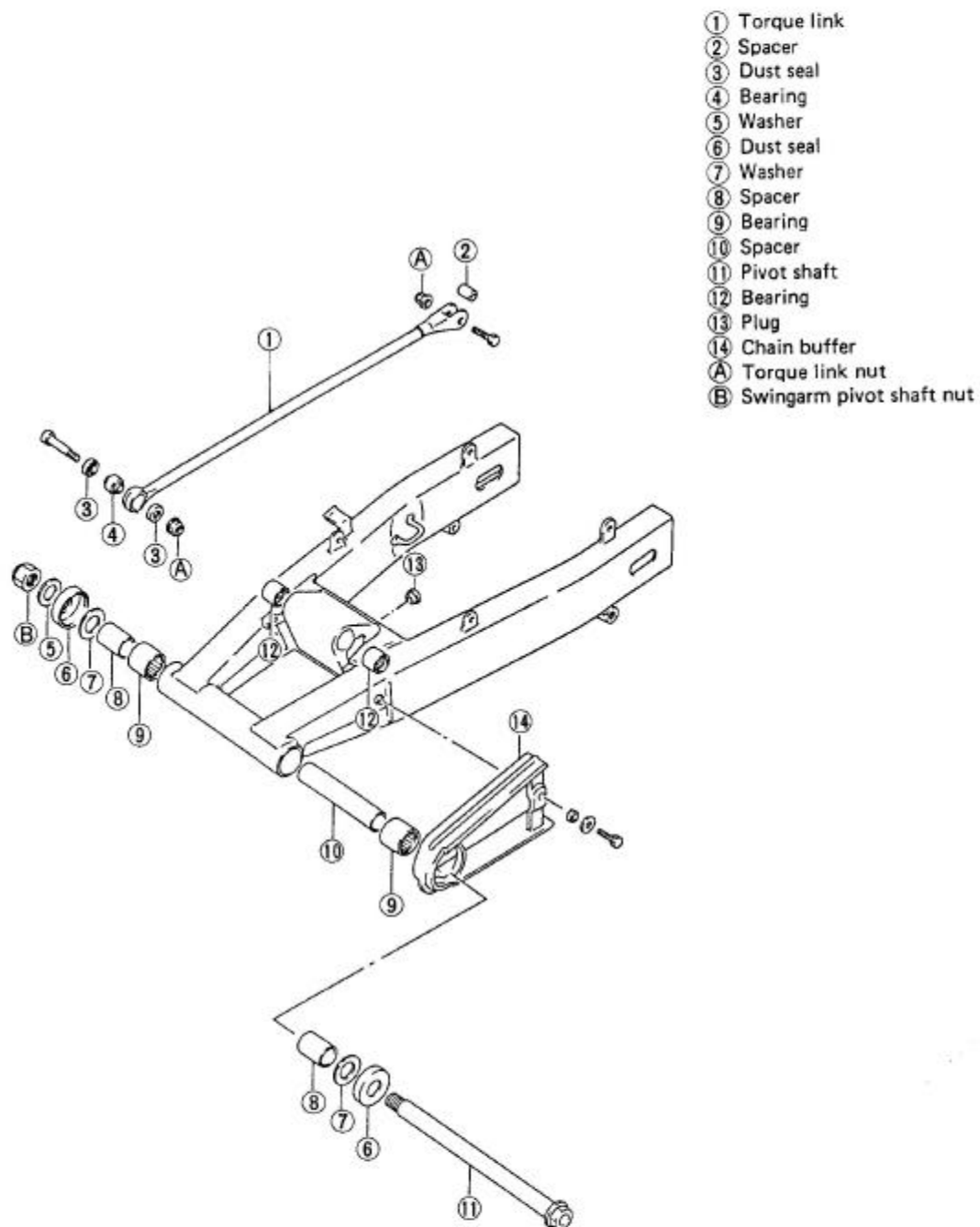
- After tire is properly seated to the wheel rim, adjust the air-pressure to the recommended pressure. Correct the wheel balance if necessary.

**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.

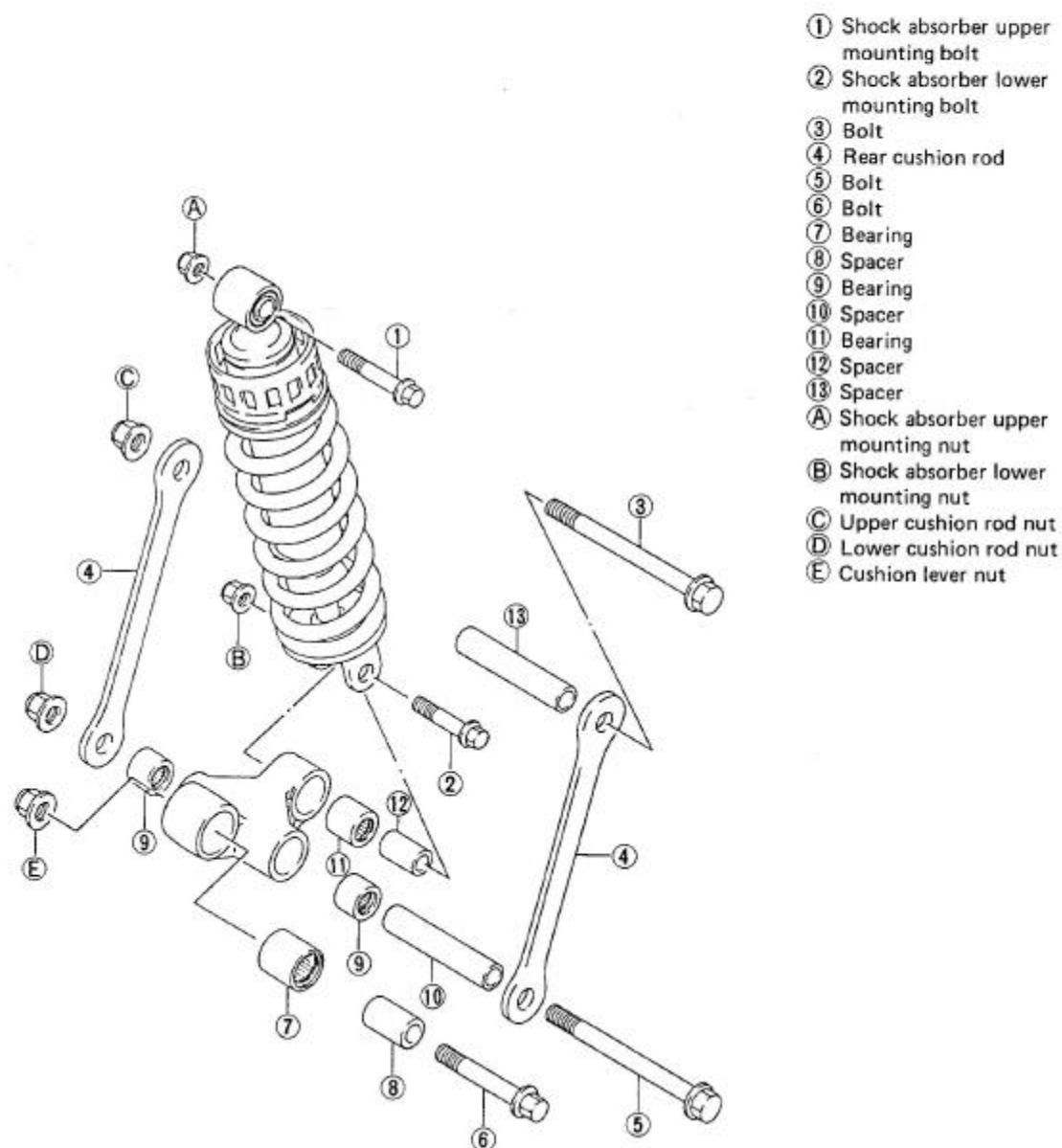


# 



Tightening torque		
Item	N·m	kg·m
A	22 - 34	2.2 - 3.4
B	85 - 110	8.5 - 11.0

# REAR SHOCK ABSORBER AND REAR CUSHION LEVER SET



Tightening torque		
Item	N·m	kg·m
A	40 - 60	4.0 - 6.0
B	40 - 60	4.0 - 6.0
C	70 - 100	7.0 - 10.0
D	70 - 100	7.0 - 10.0
E	70 - 100	7.0 - 10.0



## REMOVAL AND DISASSEMBLY

- Remove the seat.
- Remove the right and left mufflers. (Refer to page 3-5.)



- Remove the rear wheel. (Refer to page 7-29.)
- Remove the lower fender.
- Remove the torque link.



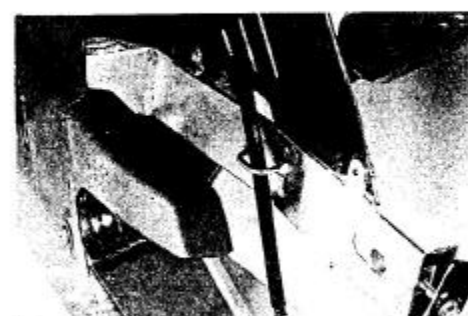
- Remove the rear brake caliper hose union bolt.

### CAUTION:

Completely wipe off any brake fluid adhering to any part of motorcycle.

The fluid reacts chemically with paint, plastics, rubber materials, etc.

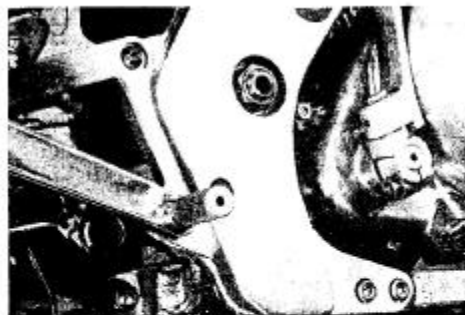
- Remove the rear brake caliper. (Refer to page 7-22.)



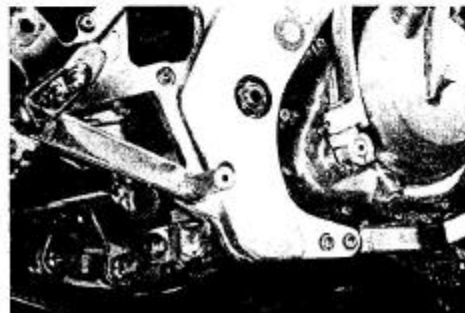
- Remove the shock absorber upper mounting bolt.



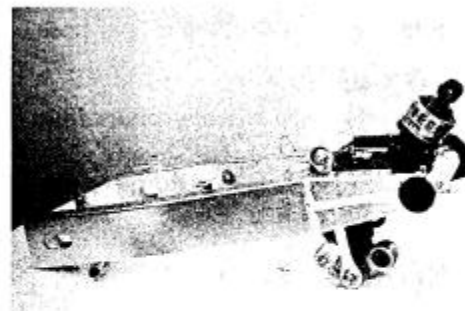
- Loosen the swingarm pivot shaft bolt.



- Remove the cushion lever mounting bolt.



- Remove the rear suspension assembly.
- Remove the shock absorber, cushion lever and cushion rod from swingarm.



#### SWINGARM

- Remove the dust seals, washers and spacers from swingarm.

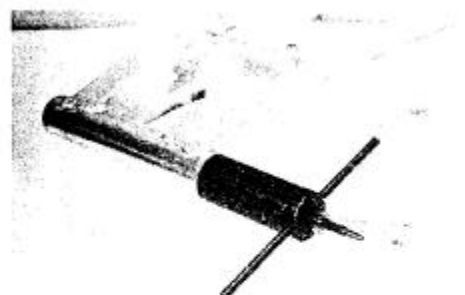


- Draw out the swingarm bearings with a swingarm bearing remover.

09941-44910: Swingarm bearing remover

#### CAUTION:

The bearings removed should be replaced with new ones.



- Remove the lever spacer.
- Draw out the bearings with the special tools.

09923-73210: Bearing puller (17 mm)

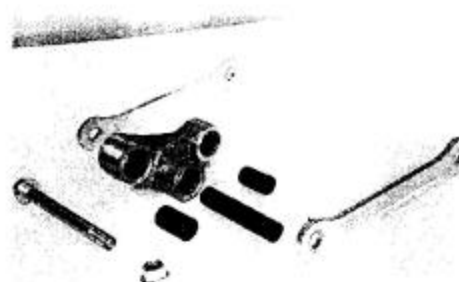
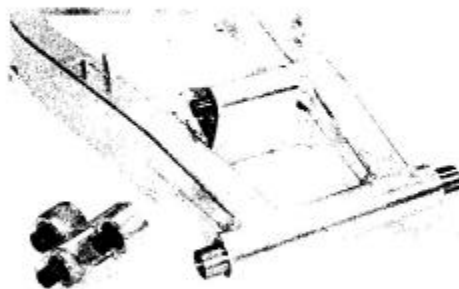
09930-30102: Sliding shaft

#### CAUTION:

The bearings removed should be replaced with new ones.

#### CUSHION LEVER

- Remove the three spacers.



- Draw out the bearings with the special tools.

09943-88210: Bearing installer

09925-98220: Bearing installer

#### CAUTION:

The bearings removed should be replaced with new ones.



## INSPECTION

#### SWINGARM

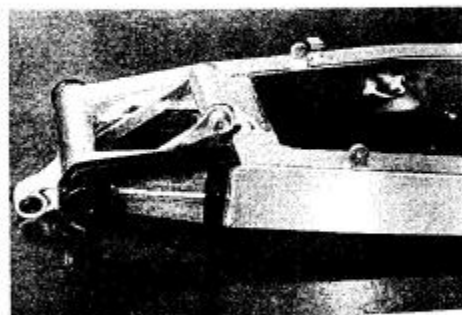
Insert the spacer into bearing and check the play by moving the spacer up and down. If excessive play is noted, replace the bearing with a new one.

Inspect the spacer for any flaws or other damage.

#### CUSHION LEVER

Inspect the spacer for any flaws or other damage.

Insert the spacer into bearing and check the play by moving the spacer up and down. If an excessive play is noted, replace the bearing with a new one.



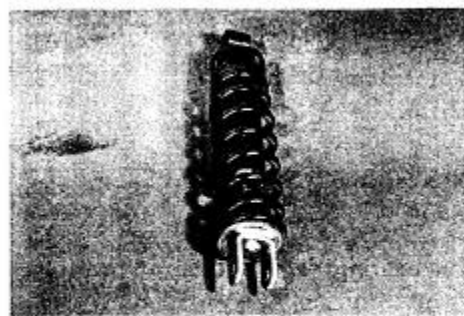
## 7-43 CHASSIS

### SHOCK ABSORBER

Inspect the shock absorber for any oil leakage and smooth operation.

#### CAUTION:

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



### SWINGARM PIVOT SHAFT

Check the pivot shaft runout with a dial gauge. If it exceeds the limit, replace with a new one.

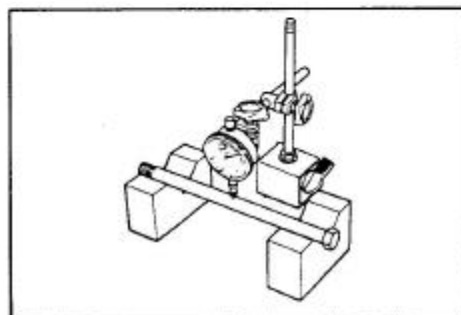
09900-20606: Dial gauge (1/100 mm, 10 mm)

09900-20701: Magnetic stand

09900-21304: V-block (100 mm)

Swingarm pivot shaft runout

Service Limit: 0.3 mm (0.01 in)



## REASSEMBLY AND REMOUNTING

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

### SWINGARM

- Force-fit the bearings into the swingarm pivot with a steering outer race installer.

**09941-34513: Steering outer race installer**

#### NOTE:

*When installing the bearings, punch-marked side of bearing comes outside.*

- Apply grease to the spacers and dust seals when installing them.

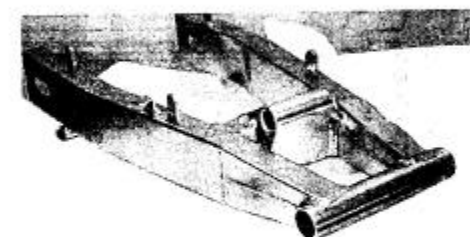
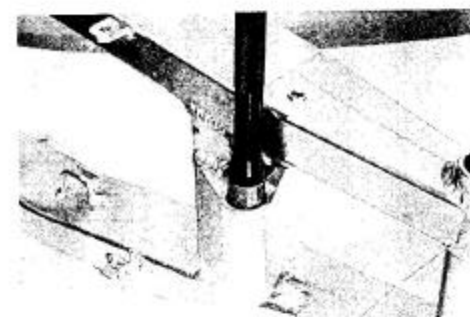
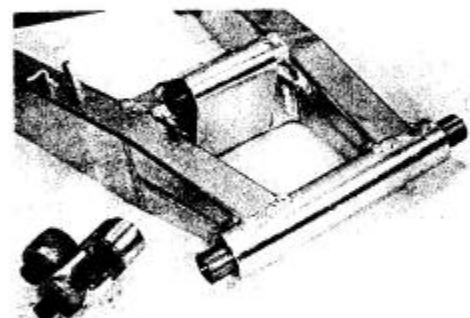
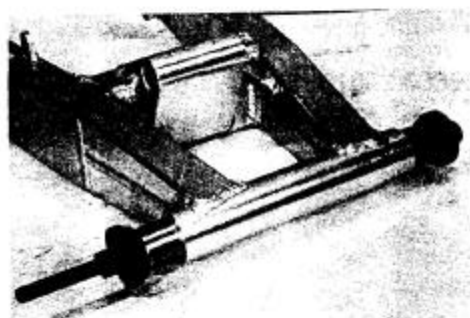
**99000-25010: SUZUKI Super grease "A"**

- Force-fit the bearings into the cushion rod upper mounting portion of swingarm with a steering outer race installer.

**09943-88210: Bearing installer**

- Apply grease to the spacer when installing it.

**99000-25010: SUZUKI Super grease "A"**



## 7-45 CHASSIS

### CUSHION LEVER

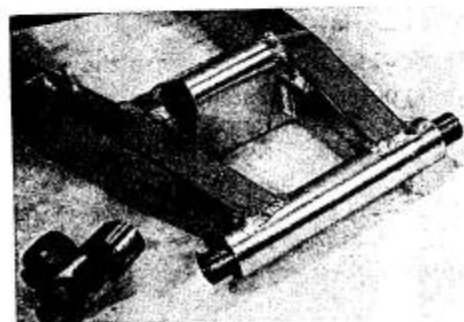
- Force-fit the bearings into the cushion lever with a bearing installer.

09924-84510: Bearing installer



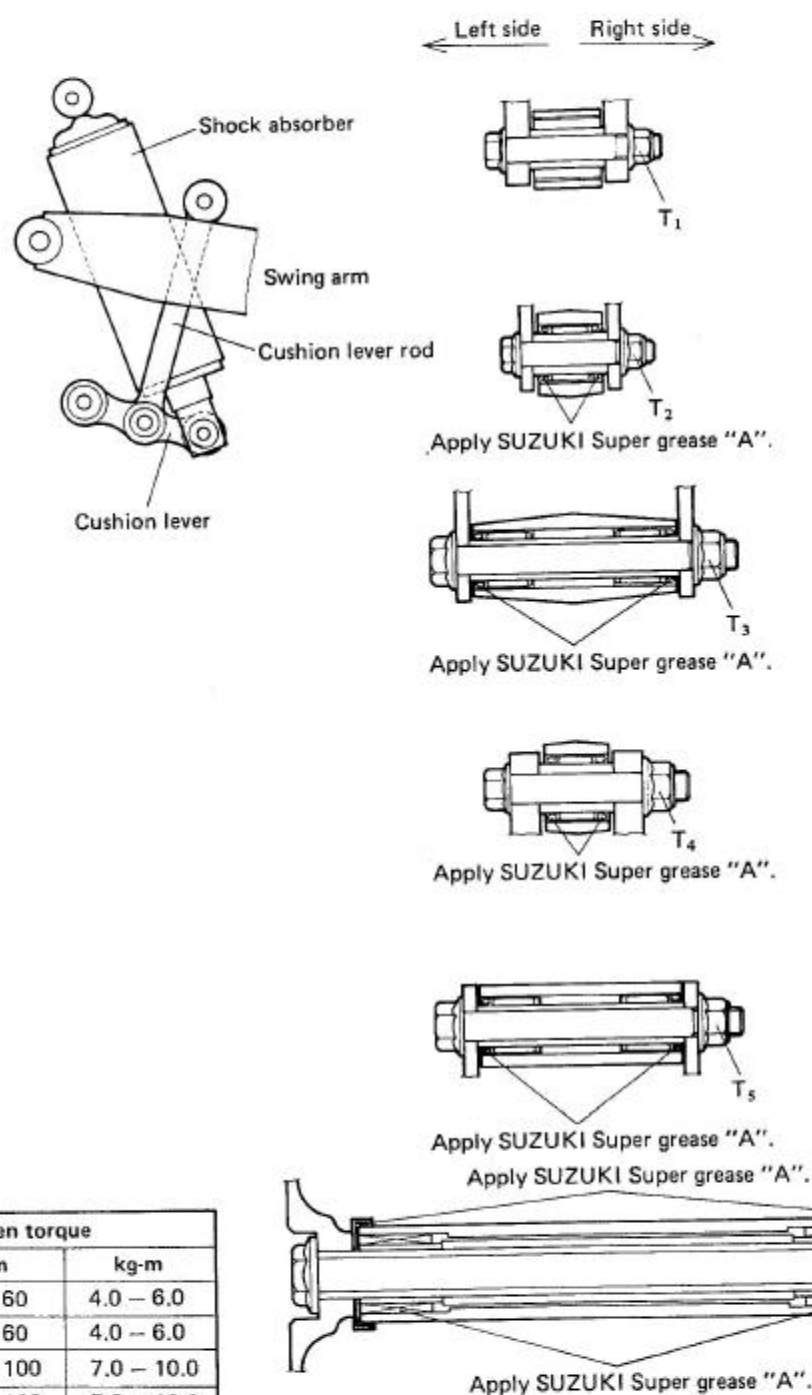
- Apply grease to the spacers when installing them.

99000-25010: SUZUKI Super Grease "A"



# REASSEMBLY INFORMATION

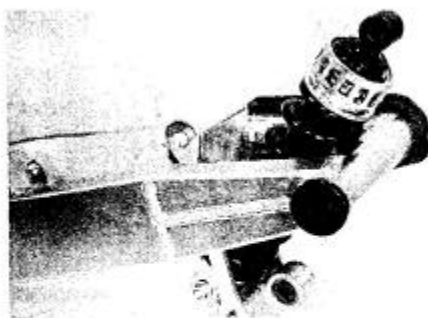
When reassembling the rear shock absorber and cushion linkage in position, tighten bolts and nuts to the specified torque referring to the following illustration:



Item	Tighten torque	
	N·m	kg-m
T <sub>1</sub>	40 - 60	4.0 - 6.0
T <sub>2</sub>	40 - 60	4.0 - 6.0
T <sub>3</sub>	70 - 100	7.0 - 10.0
T <sub>4</sub>	70 - 100	7.0 - 10.0
T <sub>5</sub>	70 - 100	7.0 - 10.0
T <sub>6</sub>	85 - 115	8.5 - 11.5

### REASSEMBLY ONTO FRAME

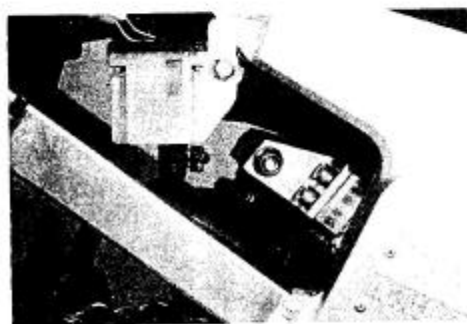
- Assemble the rear shock absorber, cushion lever and cushion rods on the swingarm.



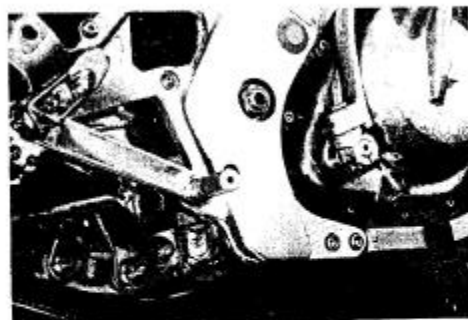
- Install the upper part of rear shock absorber onto frame.

#### NOTE:

*Install the shock absorber with the damping force adjuster located on the left.*



- Install the front of cushion lever onto the frame.



- Install the swingarm onto the frame.





## FINAL INSPECTION AND ADJUSTMENT

After installing the rear suspension and wheel, the following adjustments are required before driving.

- Drive chain (Refer to page 2-10.)
- Rear brake (Refer to page 2-11.)
- Tire pressure (Refer to page 2-14.)
- Chassis bolts and nuts (Refer to page 2-16.)