6. Pull out the cotter pin ot remove the pad B from the caliper B.

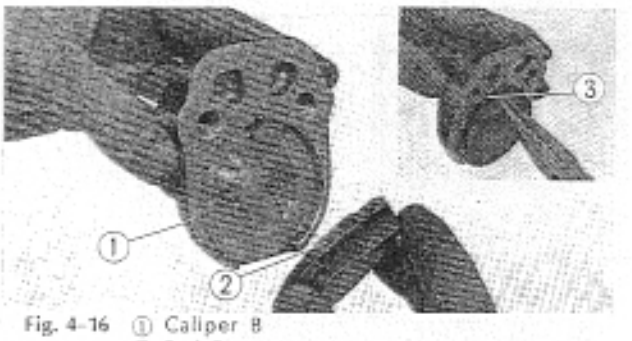

Fig. 4-16 ① Caliper B
② Pad B
③ Cotter pin

7. Remove the pad A from the caliper A by lightly tapping the head of the caliper.

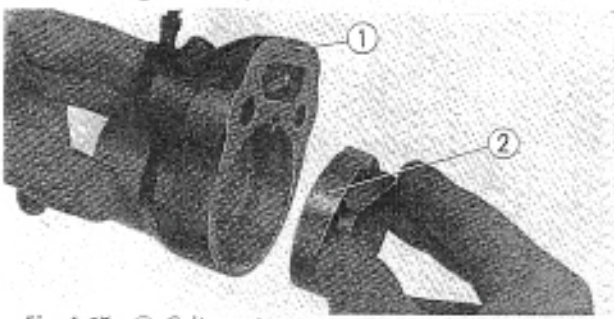

Fig. 4-17 ① Caliper A
② Pad A

Master cylinder

1. Remove the master cylinder.
   1) Remove the master cylinder boots and loosen the oil bolt.
   2) Loosen the hex. bolts to remove the master cylinder holder.
   3) Loosen the brake lever pivot bolt to remove the brake lever.

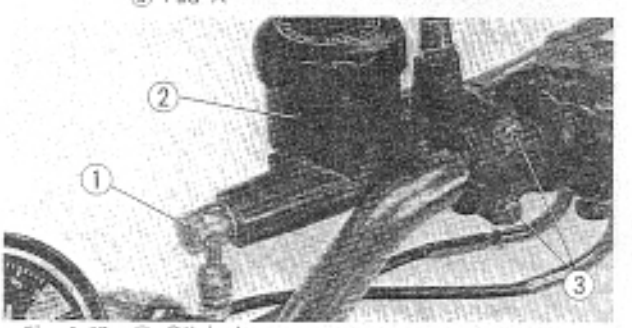

Fig. 4-18 ① Oil bolt
② Master cylinder
③ Hex. bolts

2. Remove the boot from the cylinder, taking care not to damage it. Remove the circlip using snap ring pliers (Tool No. 07073-32301).

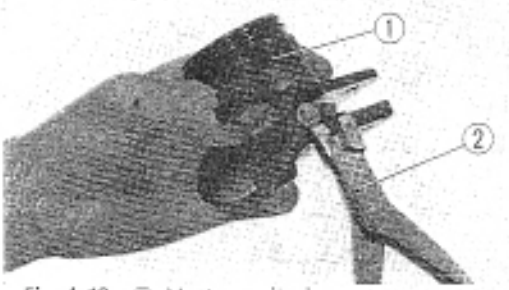

Fig. 4-19 ① Master cylinder
② Snap ring pliers

3. Remove the piston, primary cup, spring and check valve from the master cylinder in this order.

NOTE:

1. Apply air pressure of 2~3 kg/cm² (28~43 psi) to the brake hose joint to remove the primary cup.
2. Take care not to damage the check valve when removing it.

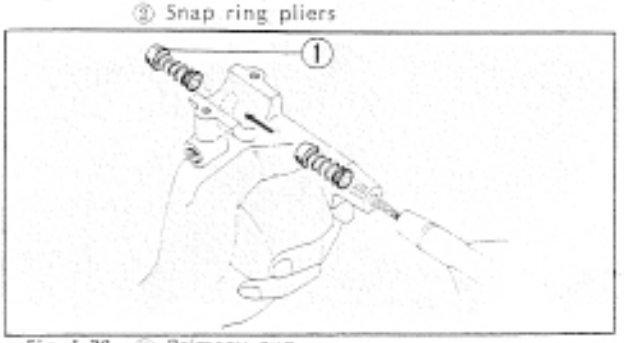

Fig. 4-20 ① Primary cup

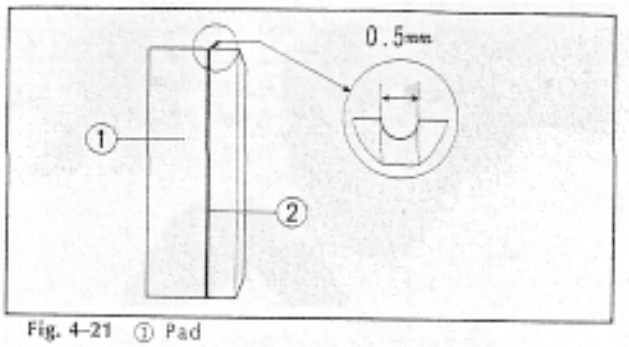

Fig. 4-21 ① Pad
② Red-line groove

Inspection

1. Check the pads A and B for excessive wear. Replace the pad if it is worn down to its red-line groove (wear limit line).
2. Measure the inside diameter of the caliper cylinder and the outside diameter of the piston.
3. Measure the inside diameter of the master cylinder and the outside diameter of the piston.

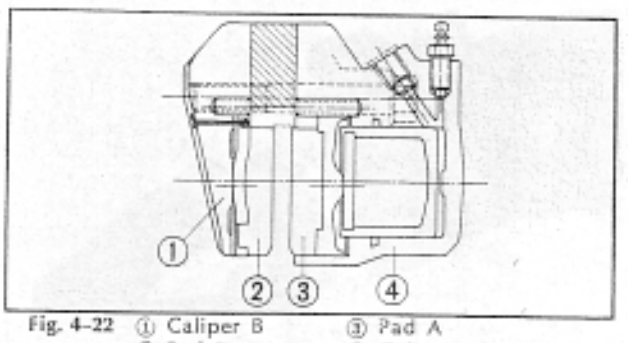

Fig. 4-22 ① Caliper B ③ Pad A
② Pad B ④ Caliper A

Reassembly

Caliper assembly

1. Apply a coat of silicone sealing grease to the sliding surface of the calipers when installing the pads A and B.

NOTE:

1. **Do not grease the friction surfaces of the pads.**
2. **Take care to prevent foreign material from entering the caliper assembly at reassembly.**

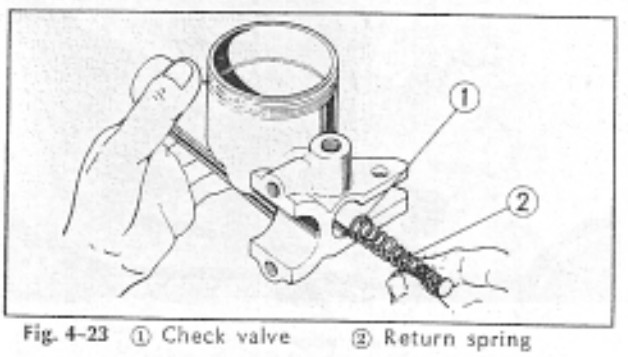

Fig. 4-23 ① Check valve ② Return spring

Master cylinder

1. Apply a coat of brake fluid to the inside surface of the cylinder.
2. Install the check valve together with the return spring to the cylinder.

NOTE:

Check to see the valve is installed properly in the cylinder.

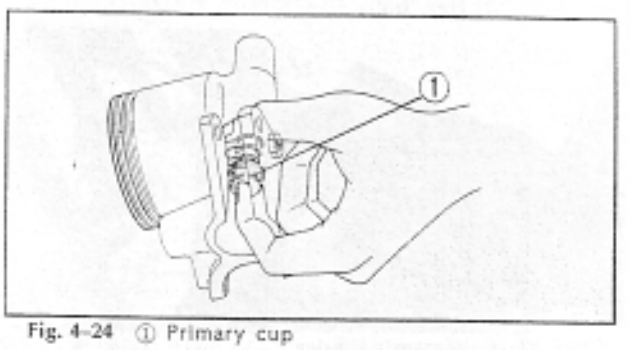

Fig. 4-24 ① Primary cup

3. Apply a thin coat of brake fluid to around the primary cup, and install it to the cylinder in proper orientation.

NOTE:

1. **Take care not to damage the primary cup during installation.**
2. **Be sure to renew primary cup when it is disassembled.**

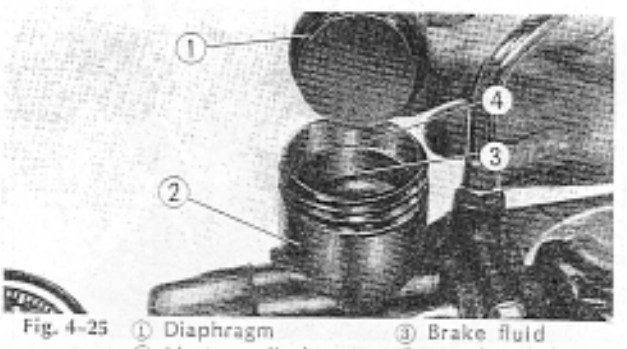

Fig. 4-25 ① Diaphragm ③ Brake fluid
② Master cylinder ④ Level line

4. Install the 18 mm circlip. Check to see the circlip is fitted in place.
5. Bleed the brake line and fill the master cylinder fluid cup with **SAE DOT3 brake fluid.**

3. REAR WHEEL AND REAR BRAKE

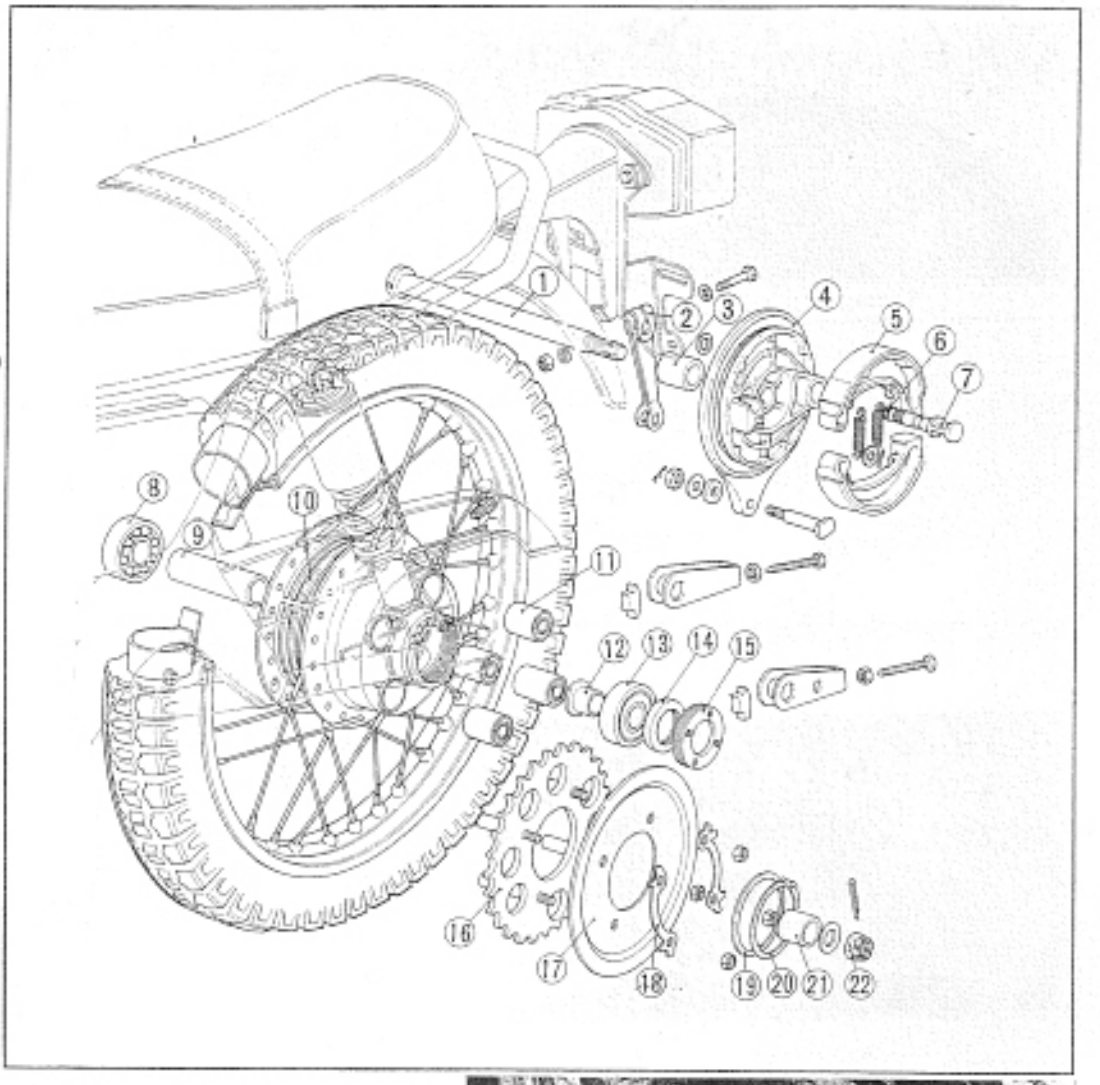

Fig. 4-26
① Rear wheel axle
② Rear brake arm
③ Rear brake panel side collar
④ Rear brake panel
⑤ Rear brake shoe (two)
⑥ Rear brake shoe spring (two)
⑦ Rear brake cam
⑧ 6303 radial ball bearing
⑨ Rear axle distance collar A
⑩ Rear wheel hub
⑪ Rear wheel damper bush (four)
⑫ Rear axle distance collar B
⑬ 6304 radial ball bearing
⑭ Dust-seal 30×45×9.5
⑮ Rear wheel bearing retainer
⑯ Final driven sprocket
⑰ Sprocket side plate
⑱ 10 mm lock washer (two)
⑲ Washer 70 mm
⑳ External circlip 69 mm
㉑ Rear wheel side collar
㉒ Castle nut 16 mm

Disassembly

1. Remove the muffler at each side.
2. Remove the rear brake rod and rear brake stopper arm.
3. Loosen the drive chain adjusting bolt and lock nut on each side. Remove the cotter pin and loosen the axle nut.
4. Remove the drive chain from the final driven sprocket. Then take off the rear wheel together with the chain adjuster stopper and rear wheel axle.
5. Remove the 69 mm external circlip and remove the final driven sprocket. The lock washers need not be removed.

NOTE:

1. When replacing the final driven sprocket, replace it together with its fixing bolts.
2. When the lock washer has been removed, replace it with new one at reassembly.

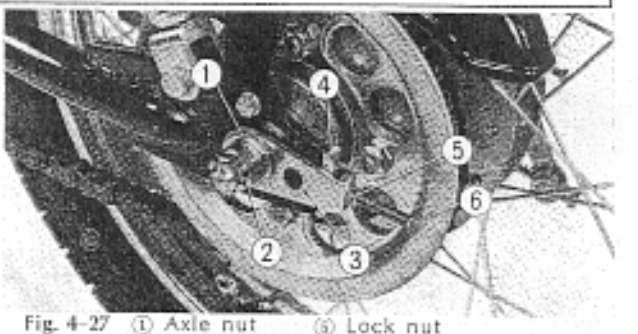

Fig. 4-27 ① Axle nut ⑤ Lock nut
② Cotter pin ⑥ Chain adjusting bolt
③ Drive chain adjuster
④ Chain adjuster stopper

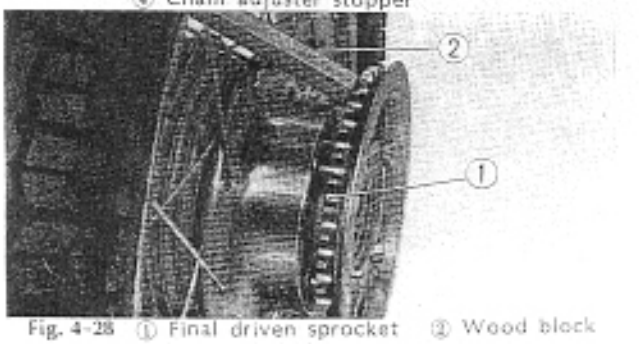

Fig. 4-28 ① Final driven sprocket ② Wood block

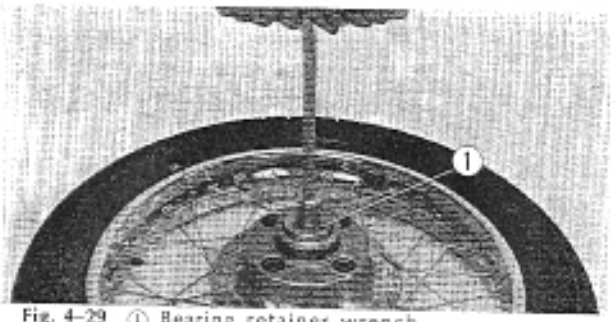

Fig. 4-29 ① Bearing retainer wrench

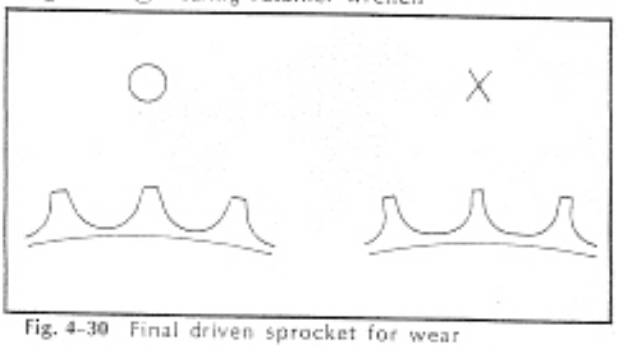
Fig. 4-30 Final driven sprocket for wear

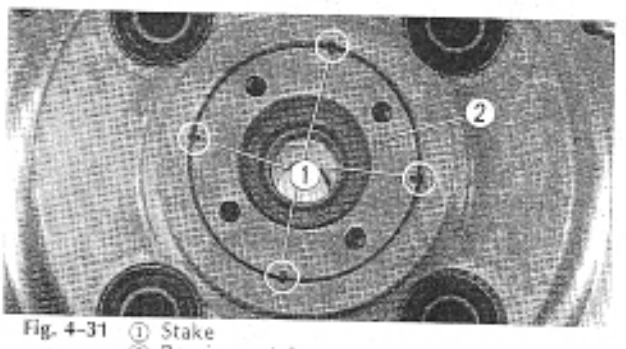

Fig. 4-31 ① Stake
② Bearing retainer

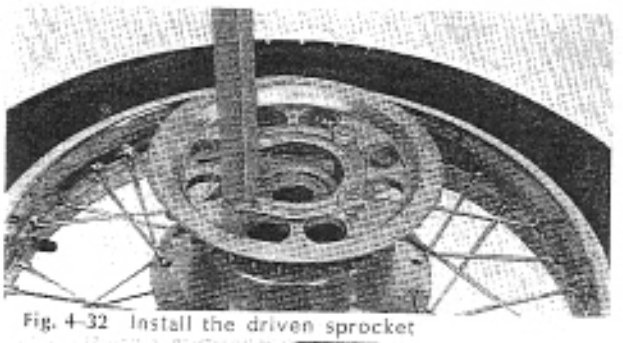
Fig. 4-32 Install the driven sprocket

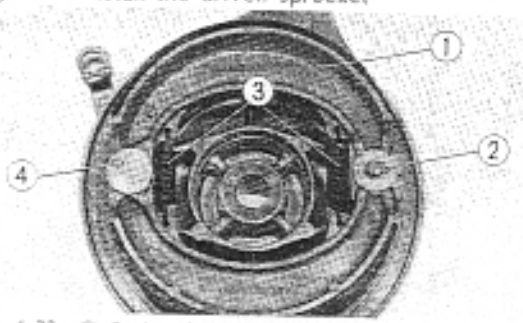

Fig. 4-33 ① Brake shoes
② Anchor pin
③ Brake shoe springs
④ Brake shoe cam

6. Remove the rear wheel bearing retainer with bearing retainer wrench (Tool No. 07088-32901).

Inspection

1. Check the rear wheel axle for bend.
2. Check the ball bearings for excessive play.
3. Check the rim for face runout.
4. Check the spokes for looseness, bend or any other damage.
   Spoke torque specification: **20~30 kg-cm (1.5~1.9 lbs-ft)**.
5. Check the final driven sprocket for wear or any other damage.
6. Check the drive chain for excessive wear, elongation or any other damage.
7. Check the tire for cracks, excessive wear or any other damage.
8. Check the tire pressure.
   Tire pressure specification: **2.0 kg/cm² (28 psi)**.
9. Check the brake lining for excessive wear.
10. Check the brake panel for cracks or any other damage.
11. Check the brake drum for excessive wear.

Reassembly

1. Fill the ball bearings and the wheel hub with grease. Insert the distance collar into the hub and drive in the bearing using bearing driven handle (Tool No. 07048-61101) and driver attachment (Tool No. 07048-33301).
2. Install the bearing retainer using retainer wrench (Tool No. 07088-32901). Stake the bearing retainer at four places as shown in Fig. 4-31.
3. Install the driven sprocket to the pivot bushing of the wheel hub and secure it with the 69 mm circlip.
4. Apply a coat of grease to the anchor pin before installing the brake shoes.

NOTE:
The brake shoe lining must be free from any grease or oil.

5. Upon completion of reassembly, check the drive chain tension and adjust properly.
   Also check the rear brake pedal for depressed-height and free play, and adjust properly if necessary.

4. STEERING HANDLEBAR

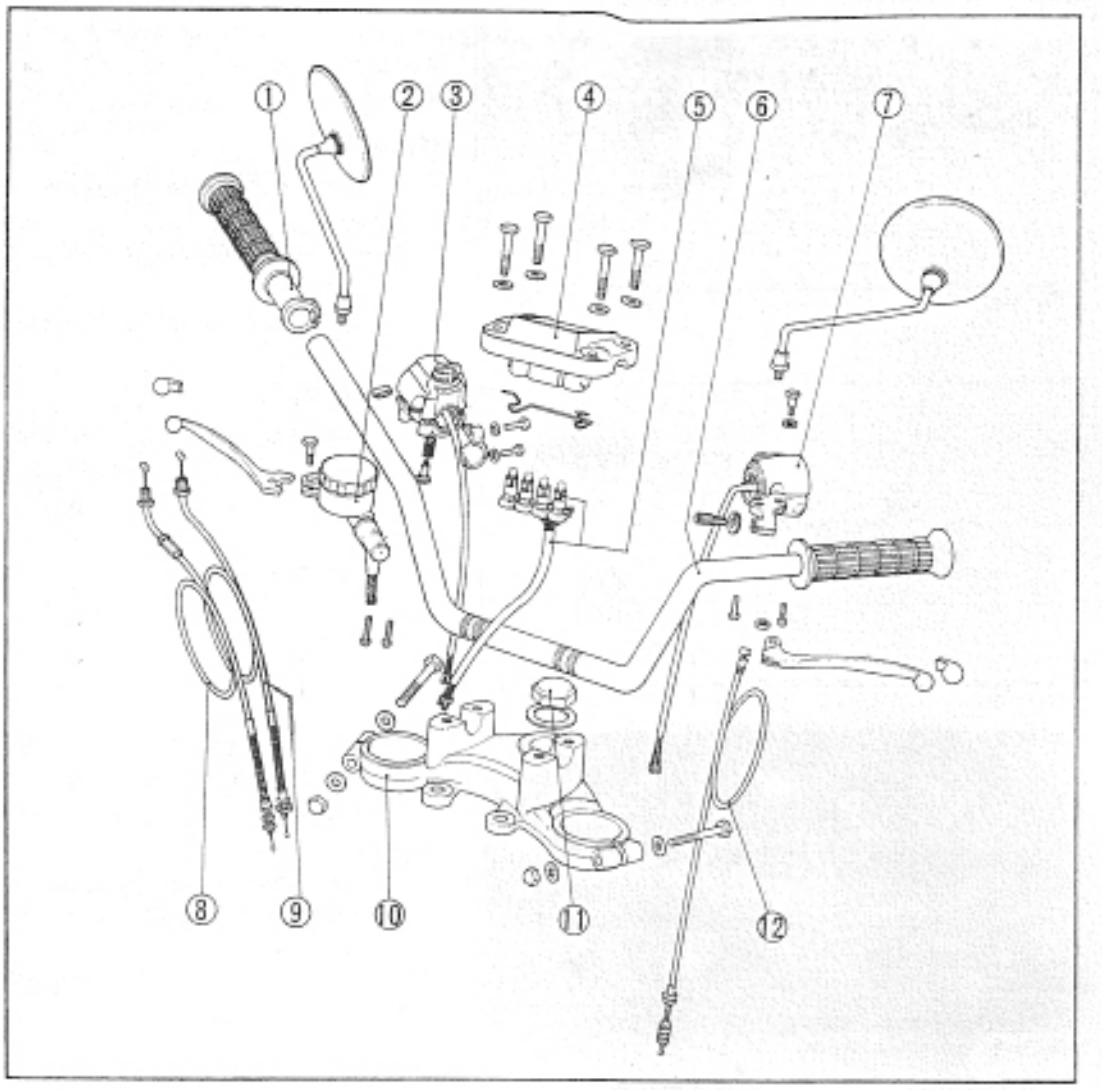

Fig. 4-34
① Throttle grip pipe
② Master cylinder
③ Starter, headlight, emergency switch
④ Upper handle holder
⑤ Pilot lamp
⑥ Steering handlebar
⑦ Turn signal, horn switch
⑧ Throttle cable A
⑨ Throttle cable B
⑩ Fork top bridge
⑪ Steering stem nut
⑫ Clutch cable

Disassembly

1. Remove the master cylinder, taking care not to spill brake fluid.
2. Disconnect the clutch cable at the lever.
3. Disconnect the throttle cables A and B from the carburetor throttle cable stay.

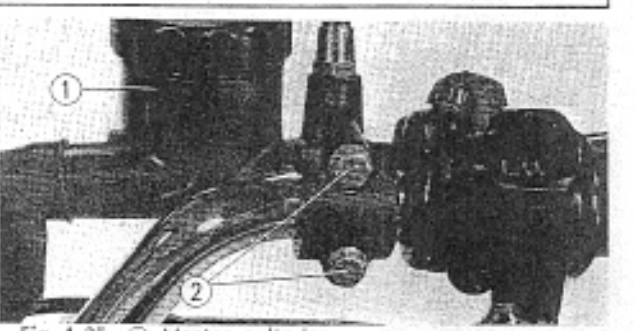

Fig. 4-35 ① Master cylinder
② 6mm hex bolts

4. Remove the head light unit from the case and disconnect the wiring at the harness in the case.
5. Remove the upper handle holder and remove the steering handlebar.

Fig. 4-36 ① Upper handle holder
② Steering handlebar

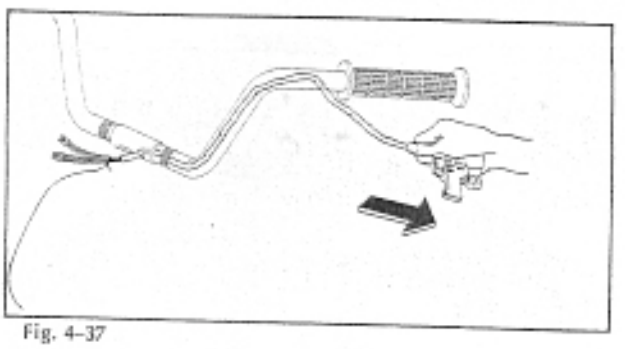
Fig. 4-37

6. Carefully pull out the lighting switch assembly and turn signal switch assembly from the steering handlebar.

Inspection

1. Check the steering handlebar for twist or any other damage.
2. Check each wiring for breakage or any other damage.
3. Check each cable for damage.

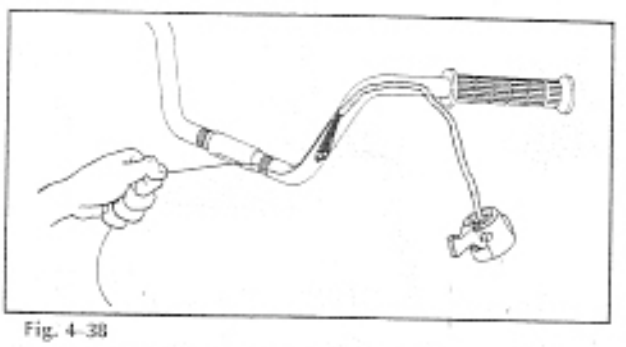
Fig. 4-38

Reassembly

1. Install the lighting switch assembly and turn signal switch assembly to the steering handlebar. In this case use a wire or the like to tie the ends of the wirings to pass through in the pipe without binding or kinking.

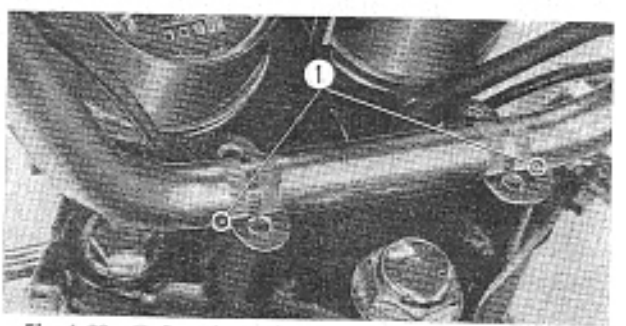

Fig. 4-39 ① Punch marks

2. Install the steering handlebar, aligning the punch marks on the handlebar with the mating edges of the holder and fork top bridge.

NOTE:

1. **When tightening the upper holder to the fork top bridge, tighten the hex. bolts at the front first and then the ones at the rear.**
2. **Take care not to bind or kink the wirings.**

Fig. 4-40 ① Clutch cable ③ Speedometer cable
② Tachometer cable ④ Throttle cables

3. Check to be sure each wiring and cable is free from binding or kinking when turning the steering handlebar fully to either left or right side.

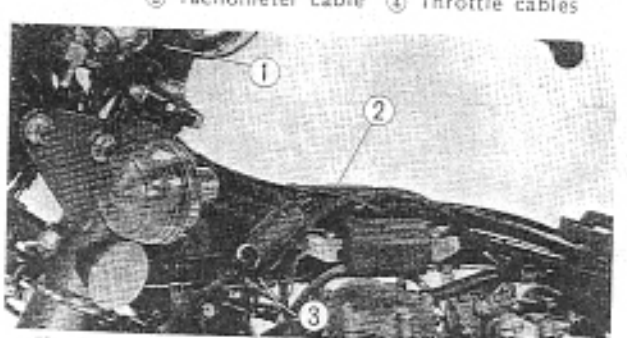

Fig. 4-41 ①② Clutch cable
③ Throttle cables

5. STEERING STEM

Disassembly

1. Remove the front wheel and caliper assembly.
2. Remove the steering handlebar.
3. Remove the head light unit from the head light case and disconnect the wiring at the harness in the case. Then remove the case from the steering stem.
4. Disconnect the brake hose at the 3 way joint at the steering stem.
5. Remove the speedometer and tachometer. Disconnect the meter cables at the engine and front wheel sides.

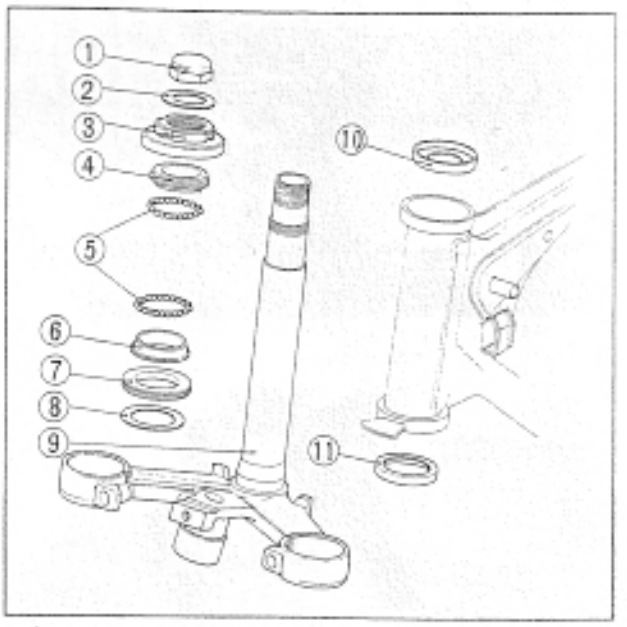

Fig. 4-42 ① Steering stem nut
② Steering stem nut washer
③ Steering top thread
④ Steering top cone race
⑤ ϕ5 steel balls (thirty seven)
⑥ Steering bottom cone race
⑦ Steering head dust seal
⑧ Dust seal washer
⑨ Steering stem
⑩ Steering top ball race
⑪ Steering bottom ball race

6. Loosen the front fork bolt at the steering stem bottom bridge, and also loosen the bolts securing the forks at the fork top bridge. Then pull out the front fork assembly.
7. Loosen the steering stem nut on top of the stem, and remove the fork top bridge.

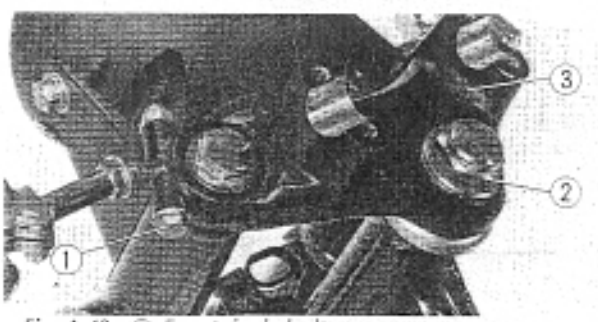

Fig. 4-43 ① Front fork bolts
② Steering stem nut
③ Fork top bridge

8. Loosen the steering head top thread to remove the steering stem.

NOTE:
Take care not to lose the steel balls (upper: 19 pcs. and lower: 18 pcs.)

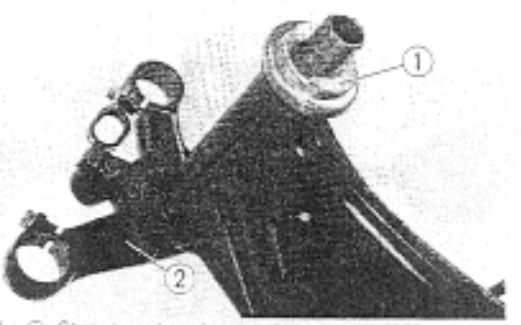

Fig. 4-44 ① Steering head top thread
② Steering stem

Inspection

1. Check the steering stem for bend or any other damage.
2. Check the steering top and bottom cone races for excessive wear or any other damage.
3. Check the steering head dust seal for excessive wear.

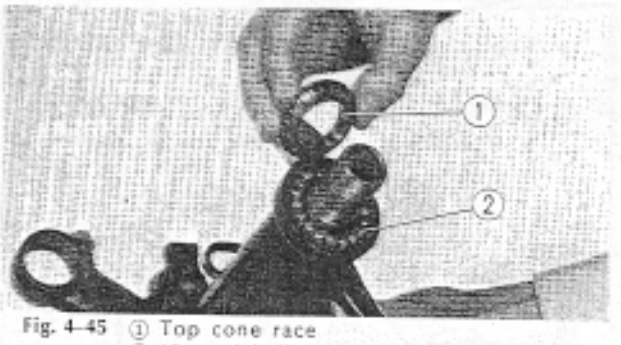

Fig. 4-45 ① Top cone race
② 3/8 steel balls

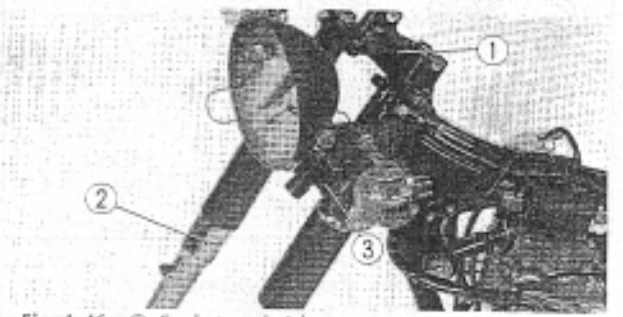

Fig. 4-46 ① Fork top bridge
② Front fork assembly
③ Steering stem

Reassembly

1. Install 3/8 steel balls (upper: **19 pcs.** and lower: **18 pcs.**) to each race properly. Fully tighten the steering head top thread and turn it off so that the stem rotates easily without rattles when turned to either to left or right side.

NOTE:
Be sure to clean the cone races, ball races and steel balls in cleaning solvent, and apply a coat of grease before reassembly.

2. The fork top bridge should be installed after temporarily tightening the steering stem.

6. FRONT SUSPENSION

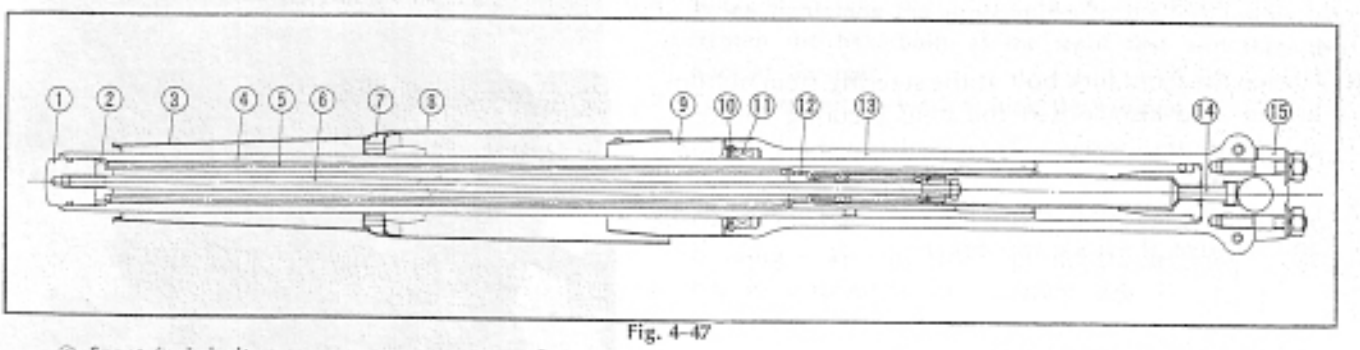

Fig. 4-47

① Front fork bolt
② Lock nut
③ Front fork cover
④ Front fork pipe
⑤ Front cushion spring
⑥ Damper
⑦ Front fork rib
⑧ Front fork under cover
⑨ Bottom case cover
⑩ 47 mm internal circlip
⑪ Oil seal 33×46×10.5
⑫ Cushion spring seat
⑬ Front fork bottom case
⑭ Socket bolt 8 mm
⑮ Axle holder

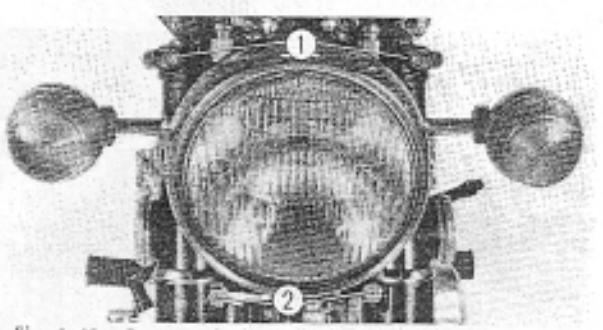

Fig. 4-48 ① 8 mm bolt at fork top bridge
② 8 mm bolt at steering stem bottom bridge

Disassembly

1. Remove the front wheel.
2. Remove the caliper assembly and front fender.
3. Loosen the 8 mm bolts at the steering stem bottom bridge and at the fork top bridge, which secure the front fork assembly. Pull out the assembly from underside.

NOTE:
Before loosening the above bolts, make the front fork bolts loose.

4. Drain the front suspension oil.

5. Remove rust on the front fork pipe, if any, with fine emery cloth.
6. Loosen the 8 mm socket bolt at the bottom of the fork bottom case using hollow wrench (Tool No. 07085-32301).
   The front fork pipe complete with the damper unit can be removed from the bottom case as shown in Fig. 4-50 A.

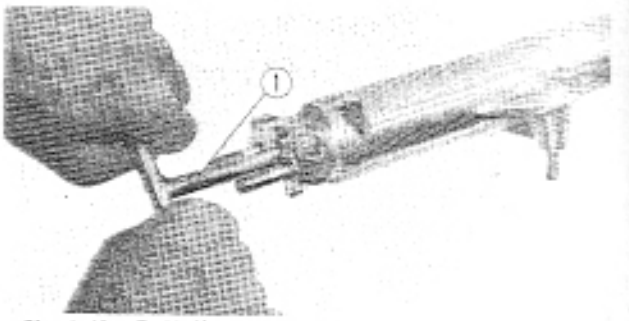

Fig. 4-49 ① Hollow wrench

7. Remove the front fork bolt on top of the fork pipe to remove the front cushion spring and spring seat.
8. To remove the oil seal, take off the bottom case cover and remove the circlip.

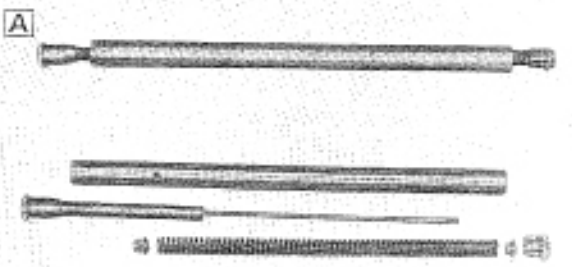

Fig. 4-50

Inspection

1. Measure the free length of the front cushion spring.
2. Check the front fork pipe and bottom case for looseness or any other damage.
3. Check the oil seal for scratches or any other damage.
4. Check the front fork pipe sliding part for damage.

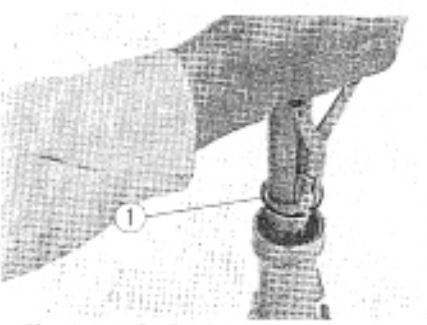

Fig. 4-51 ① Circlip

Reassembly

1. Install the front fork pipe complete with the damper unit into the fork bottom case.

NOTE:
Apply locking sealant to the 8mm socket bolt.

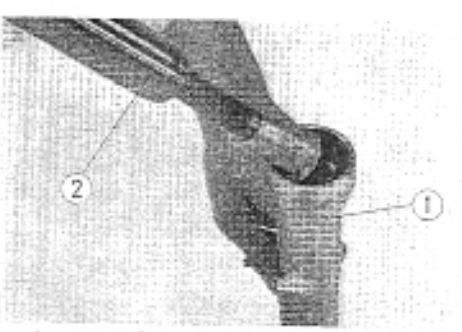

Fig. 4-52 ① Fork bottom case
② Front fork pipe

2. Apply a coat of ATF (automatic transmission fluid) to around and inside the oil seal before installing it to the front fork pipe. Press-fit the seal using front seal driver (Tool No. 07054-33301).

NOTE:
1. **Be sure to install the circlip in place.**
2. **Replace the oil seal with a new one at reassembly.**
3. Fill each front fork bottom case with good quality ATF of **125 cc (4.2 ozs).**

NOTE:
When changing oil, add 105 cc (3.6 ozs).

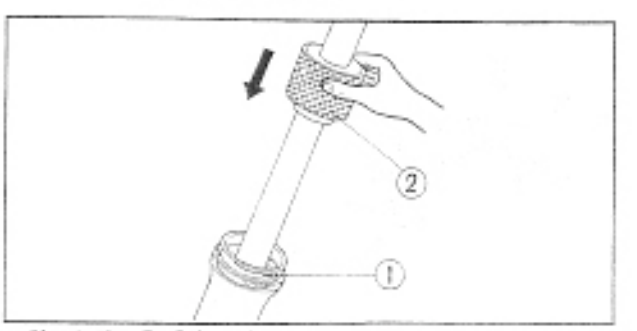

Fig. 4-53 ① Oil seal
② Front seal driver

7. REAR SUSPENSION

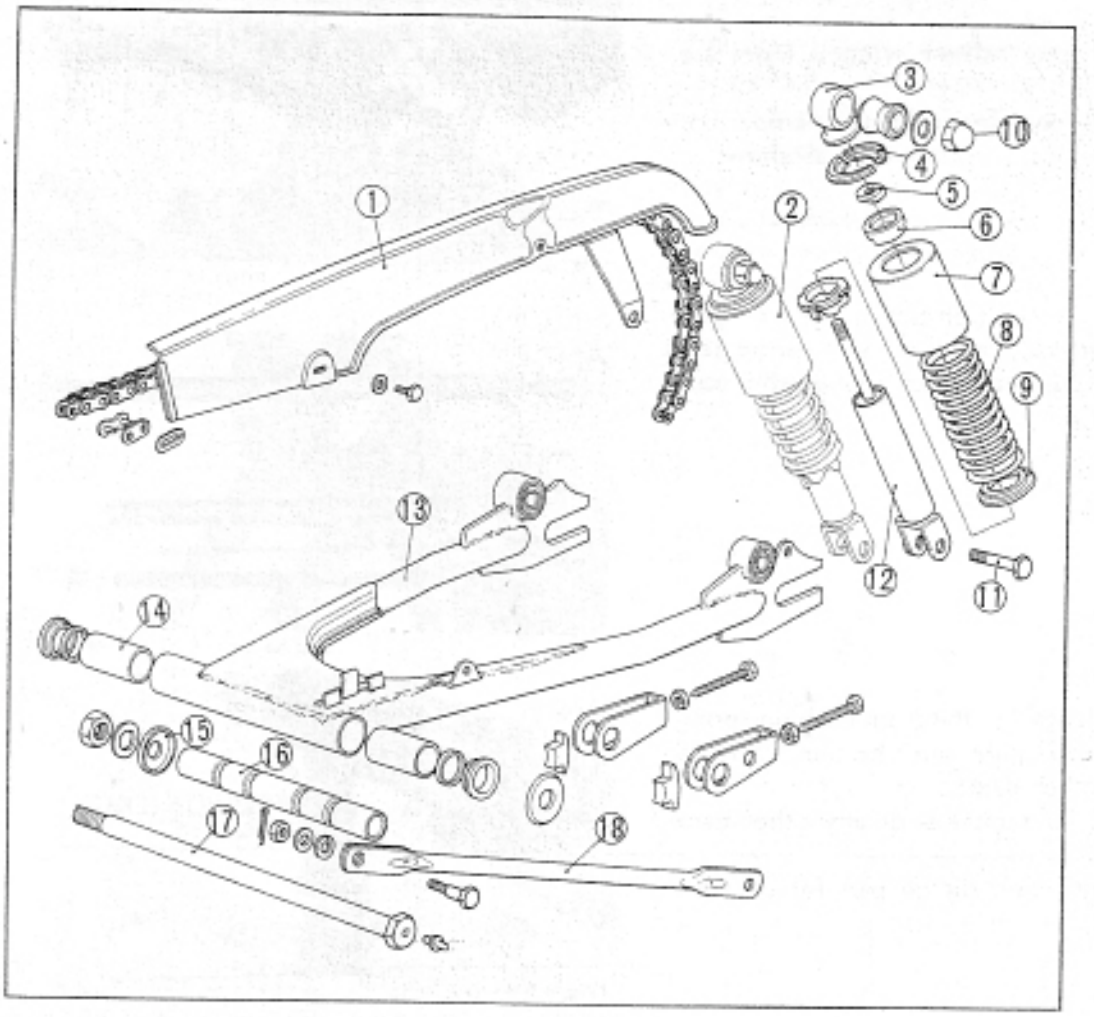

Fig. 4-54
① Drive chain case (two)
② Rear suspension (two)
③ Upper joint (two)
④ Spring seat stopper (four)
⑤ 9 mm lock nut (two)
⑥ Rear cushion stopper rubber (two)
⑦ Rear cushion upper case (two)
⑧ Rear cushion spring (two)
⑨ Spring under seat (two)
⑩ Rear cushion upper nut (two)
⑪ Hex bolt 10×32 (two)
⑫ Rear damper (two)
⑬ Rear fork
⑭ Rear fork pivot bush (two)
⑮ Rear fork dust-seal cap (two)
⑯ Rear fork center collar
⑰ Rear fork pivot bolt
⑱ Rear brake stopper arm

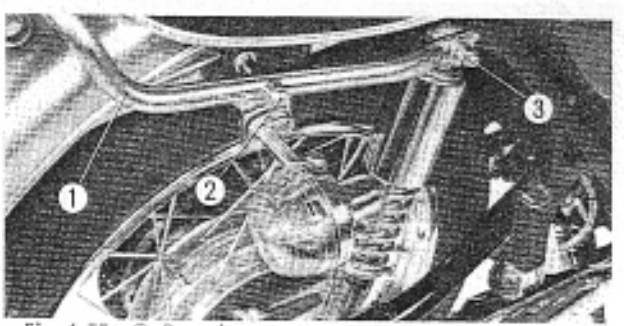

Fig. 4-55 ① Rear bumper
② 8 mm bolt
③ Rear cushion upper nut

Disassembly

Rear suspension

1. Remove the rear bumper by loosening the 8 mm bolts and rear cushion upper nuts.
2. Remove the rear suspension by removing 10 mm bolts.

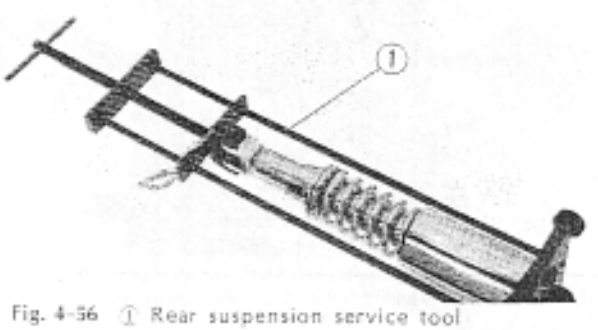

Fig. 4-56 ① Rear suspension service tool

3. Compress the rear suspension using service tool (Tool No. 07035-32901) and remove the spring seat stoppers to remove the rear cushion spring.

Rear fork

4. Remove the rear wheel.
5. Loosen the self lock nut to pull out the rear fork pivot bolt. Then remove the rear fork from the frame.

Inspection

1. Measure the free length of rear cushion spring.
2. Check the rear cushion damper for deformation or oil leakage.
3. Check the rear cushion stopper rubber for damage.
4. Measure the rear fork center collar-to-bushing clearance.
5. Check the rear fork swing arm for bend.

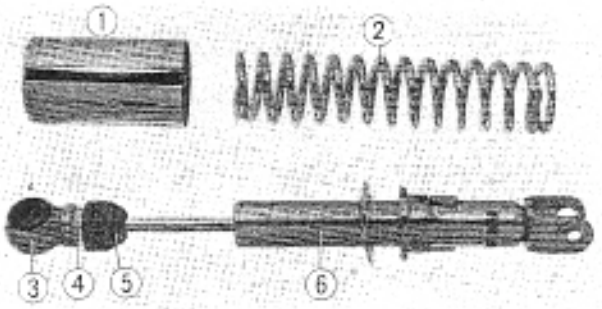

Fig. 4-57 ① Upper case
② Rear cushion spring
③ Upper joint
④ Lock nut
⑤ Stopper rubber
⑥ Rear damper unit

Reassembly

1. Apply a coat of grease to the rear fork center collar befor installing it to the rear fork.
2. Install the rear fork.
   Insert the rear fork pivot bolt from the left side.
3. Assemble the rear suspension.
   1) Compress the rear suspension with the service tool (Tool No. 07035-32901) and pull up the upper joint to install the spring seat stoppers in place.
   2) Apply locking sealant to upper joint before tightening.
4. Install the rear suspension to the frame.

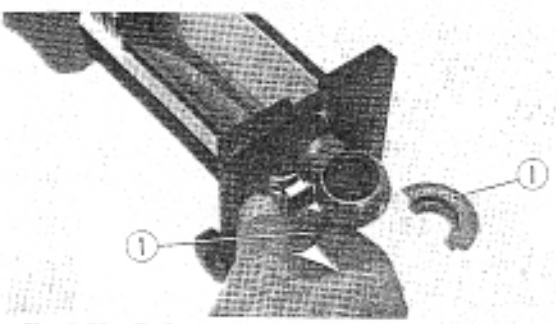

Fig. 4-58 ① Spring seat stoppers

8. FRAME BODY

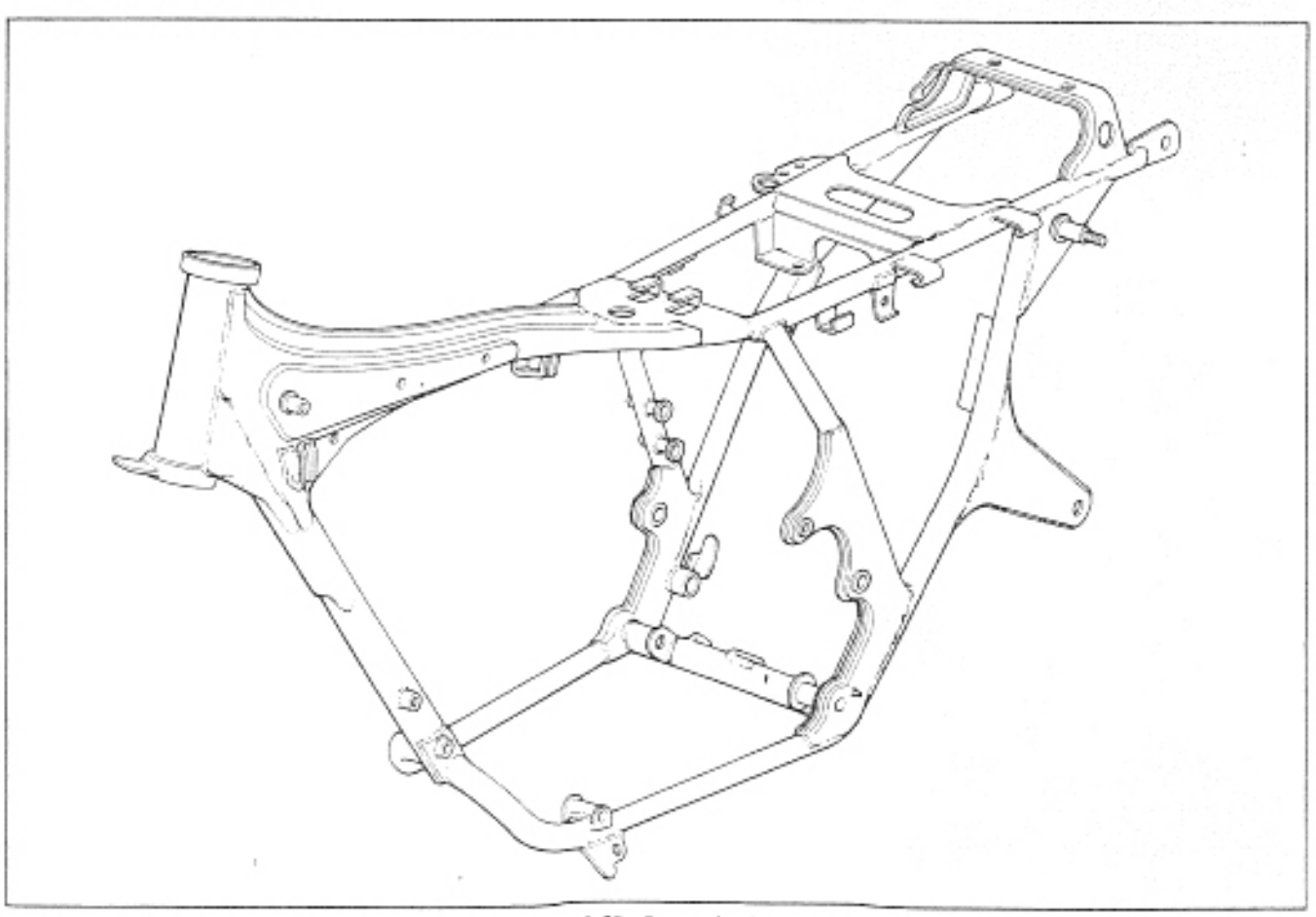

Fig. 4-59 Frame body