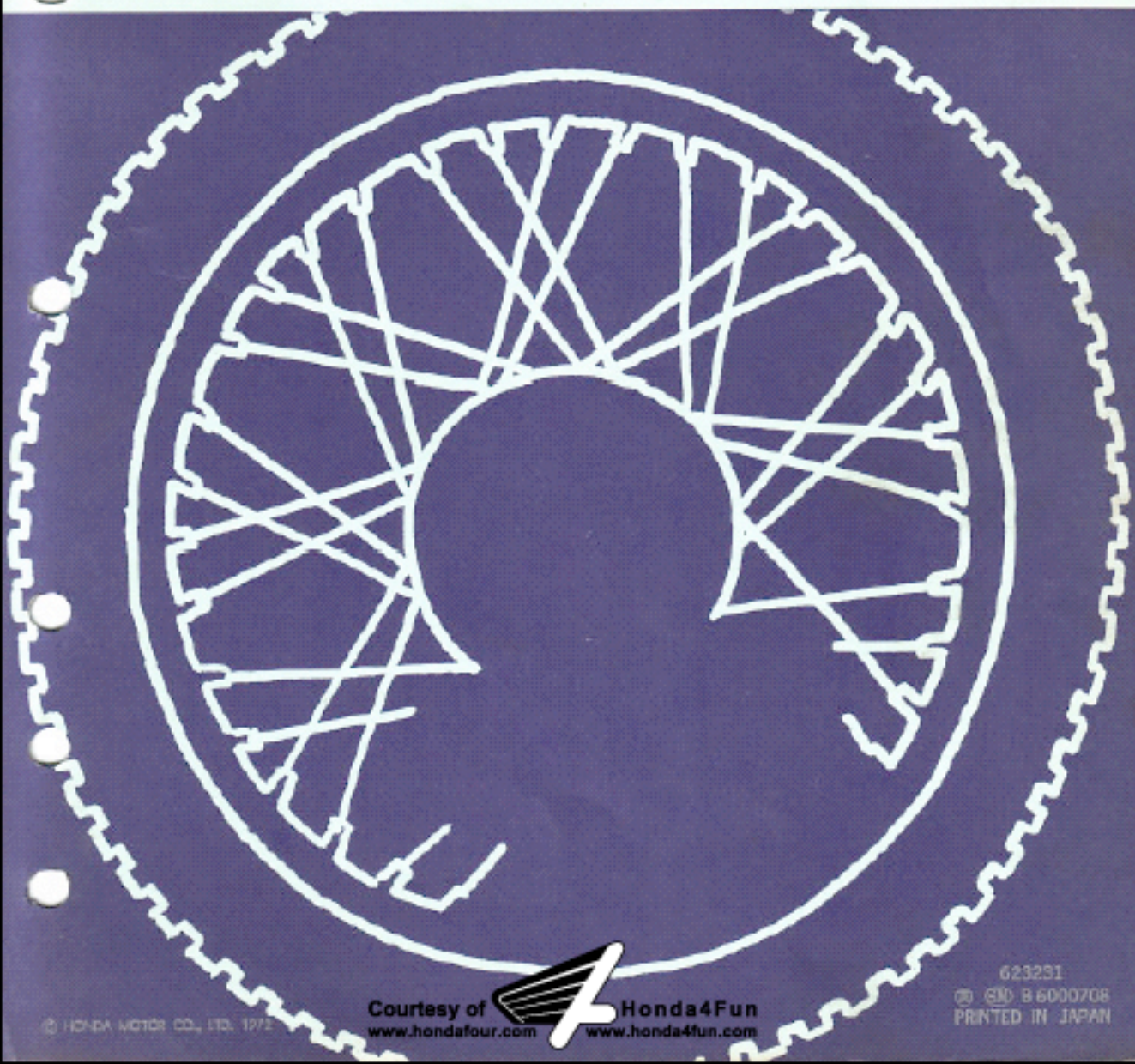
SHOP MANUAL

HONDA

CB350F - CB400F



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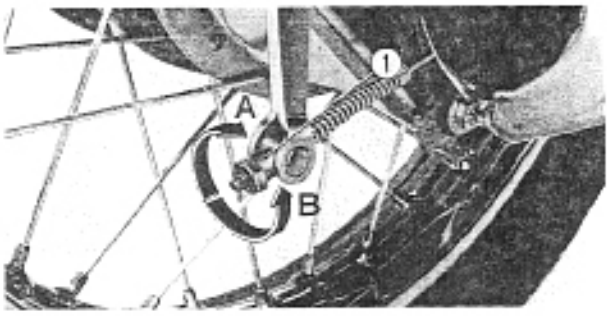

Fig. 2-28 ① Adjusting nut

2. To adjust the free travel at the tip of the pedal, turn the adjusting nut. Turning the nut clockwise (in direction "A") will decrease the free travel, and vice versa (in direction "B").
   Specified free travel: **20~30 mm (0.8~1.2 in.)**

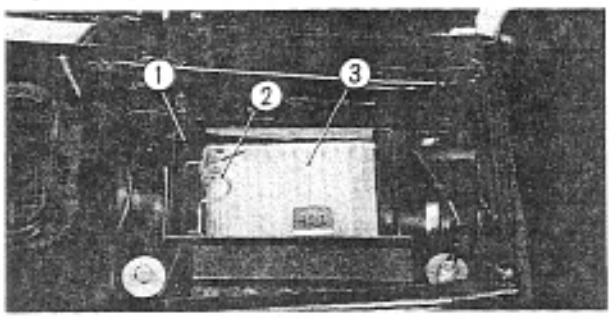

Fig. 2-29 ① Air cleaner case ③ Air cleaner
② Set spring

9. AIR CLEANER

1. Open the seat.
2. Remove the tool tray and air cleaner cover.
3. Remove the set spring to remove the air cleaner element.
4. Lightly tap the element by hand and apply a blast of compressed air from inside.
5. Check the hole at the bottom of the air cleaner case for clogging.

10. DRIVE CHAIN

Checking drive chain tension

1. Check the chain tension by finger-depressing at a point half way between the sprockets and by measuring the sag.
   Specified sag: **20 mm (3/4 in.)**

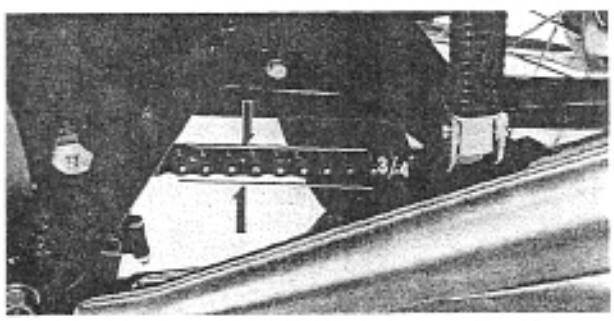

Fig. 2-30 Checking drive chain sag

2. To adjust, remove the cotter pin, loosen the axle nut and lock nut, and turn the adjusting nut in either direction.
   Upon adjustment, align the index marks on the right and left drive chain adjusters with the same notches in the side scales. Tighten the axle nut and install the cotter pin.

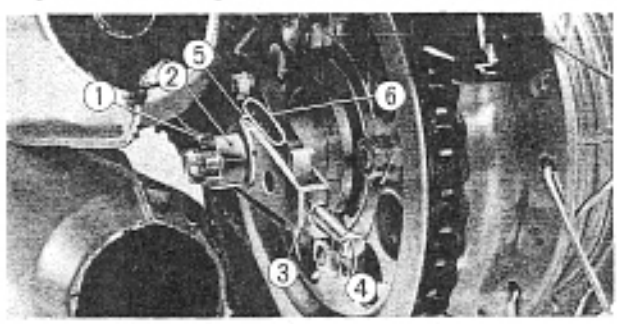

Fig. 2-31 ① Cotter pin ④ Adjusting nut
② Axle nut ⑤ Index mark
③ Lock nut ⑥ Side scale

11. FRONT FORK

Changing fork oil

1. Loosen the front fork bolts and drain bolts. Drain oil out of the fork cylinders.
2. Retighten the drain bolts and fill the front fork cylinders with any brand of automatic transmission fluid for motorvehicle.
   Capacity: **105 cc (3.6 ozs.) per cylinder**

NOTE:

* 125 cc (4.2 ozs.) oil will be required to fill one fork when disassembled.
* Torque the front fork bolt to the specification.

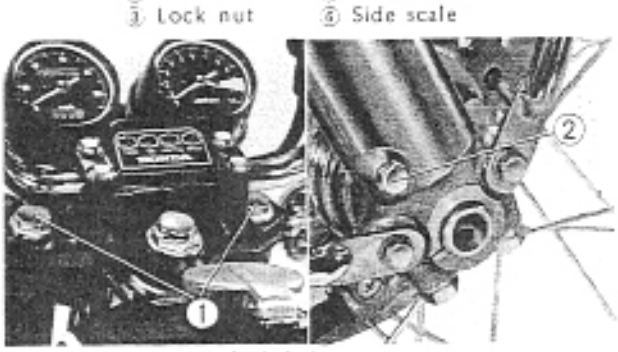

Fig. 2-32 ① Front fork bolts
② Drain bolt

. CLUTCH

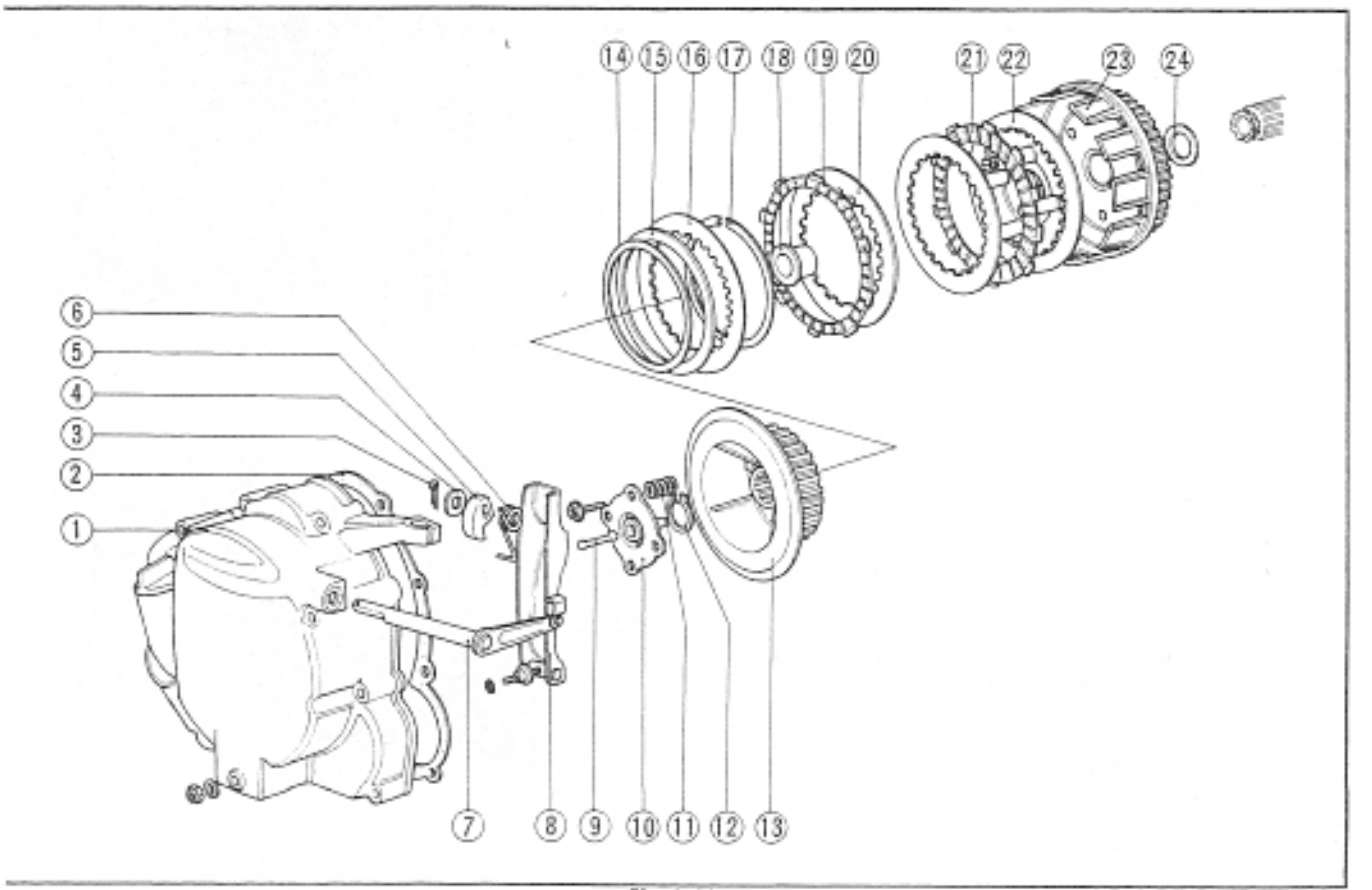

Fig. 3-30

- Crankcase cover, R
- Cover packing
- Cotter pin, 2.0×15
- Washer, 10mm
- Clutch lifter cam
- Clutch lever return spring
- ⑦ Clutch lever
- ⑧ Clutch adjusting lever
- ⑨ Clutch lifter rod
- ⑩ Clutch lifter plate
- ⑪ Clutch springs (four)
- ⑫ Snap ring, 25mm
- ⑬ Clutch center
- ⑭ Disc spring seat
- ⑮ Clutch disc spring
- ⑯ Clutch plate B
- ⑰ Special set ring, 92mm
- ⑱ Collar, 25mm
- ⑲ Clutch friction disc
- ⑳ Clutch plates (six)
- ㉑ Clutch friction discs (six)
- ㉒ Clutch pressure plate
- ㉓ Clutch outer
- ㉔ Thrust washer, 25mm

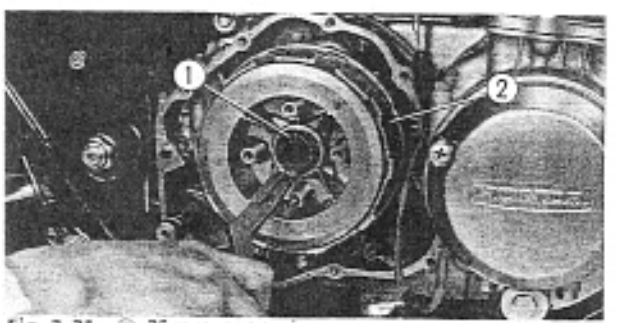

Fig. 3-31 ① 25mm snap ring
② Clutch assembly

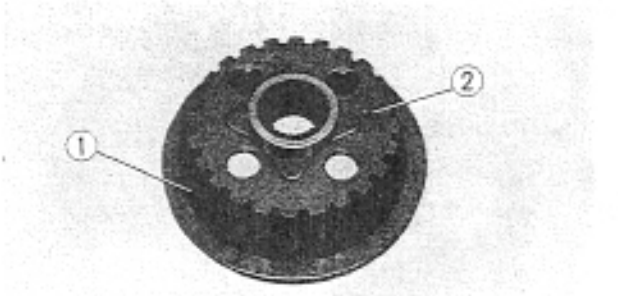

Fig. 3-32 ① 92mm special set ring
② Clutch center

Disassembly

1. Drain oil from the crankcase.
2. Remove the right-hand side foot rest and kick starter pedal.
3. Remove the R. crankcase cover
4. Remove the clutch pressure plate.
5. Remove the 25mm snap ring and remove the clutch assembly.
6. Remove the 92mm special set ring from the clutch center. Disassemble the clutch plate B, clutch disc spring and disc spring seat.
7. Remove the clutch lever and clutch adjuster lever from the R. crankcase cover.

10. CAM CHAIN TENSIONER

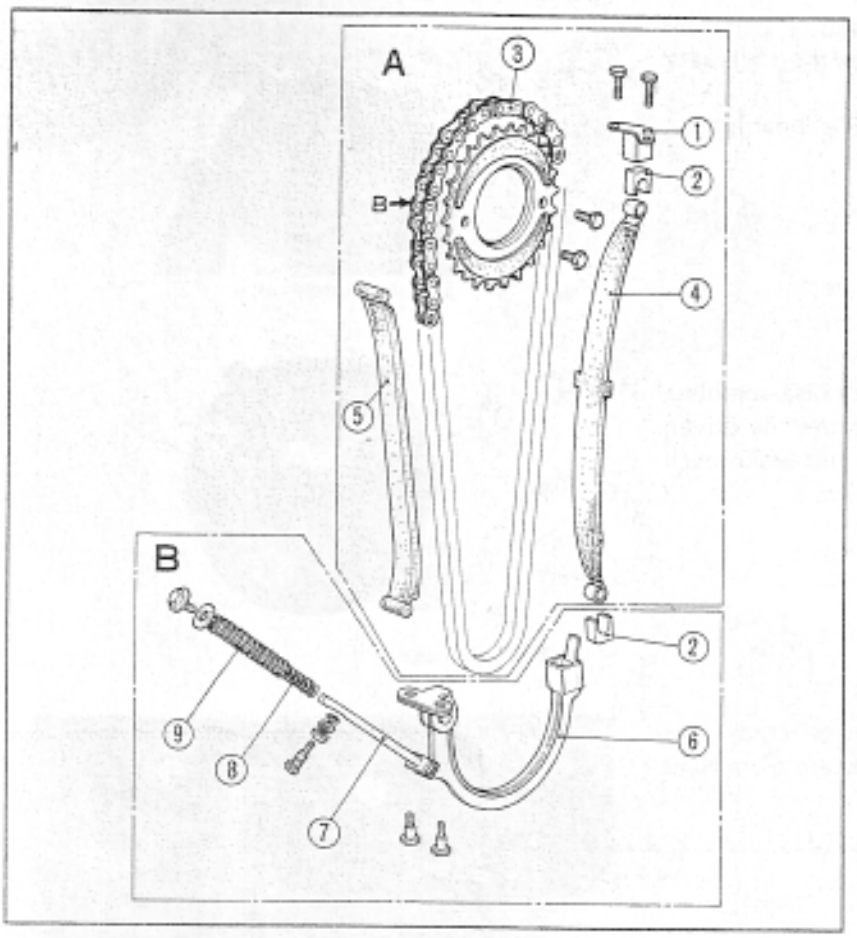

Fig. 3-60

Group A On-vehicle servicing
Group B On-work stand servicing

① Cam chain tensioner holder
② Tensioner dampers (two)
③ Cam chain
④ Tensioner slipper
⑤ Cam chain guide
⑥ Cam chain tensioner arm
⑦ Push bar
⑧ Tensioner inner spring
⑨ Tensioner outer spring

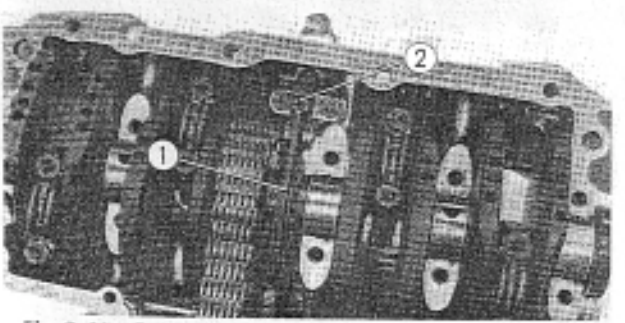

Fig. 3-61 ① Tensioner arm
② Push bar

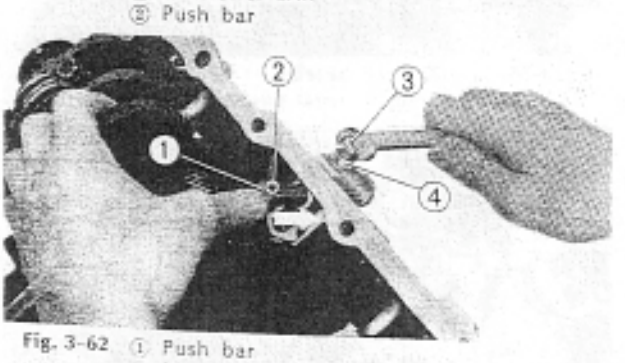

Fig. 3-62 ① Push bar
② Mark
③ Tensioner adjusting bolt
④ Lock nut

Disassembly

Group A

1. Remove the cam chain guide and tensioner slipper. (See pages 12-14)

Group B

1. Remove the lower crankcase. (See pages 23-24)
2. Remove the tensioner arm and tensioner push bar.

Inspection

1. Check the cam chain guide and tensioner slipper for wear.

Reassembly

1. Install the tensioner push bar with the mark facing upward as shown.
   Then finger-depress the push bar and secure it with tensioner adjusting bolt and lock nut.

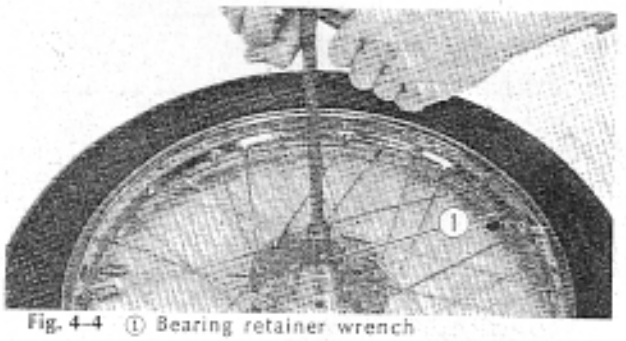

Fig. 4-4 ① Bearing retainer wrench

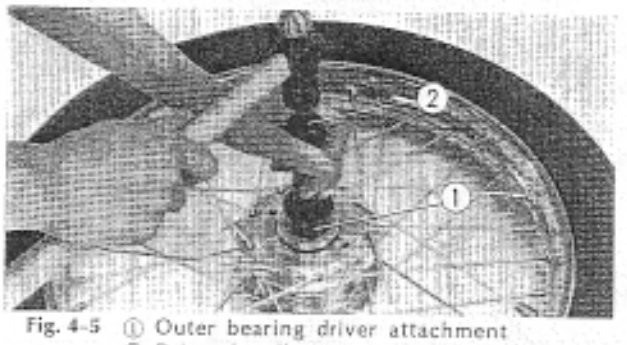

Fig. 4-5 ① Outer bearing driver attachment
② Driver handle

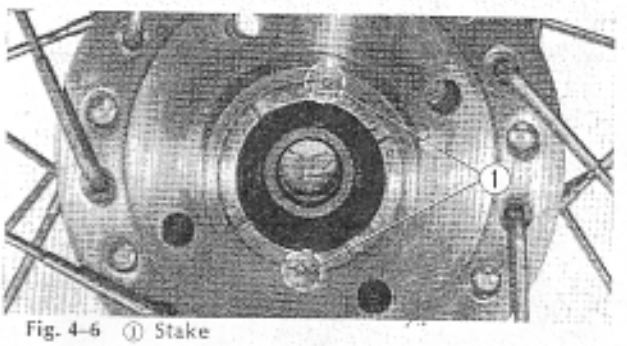

Fig. 4-6 ① Stake

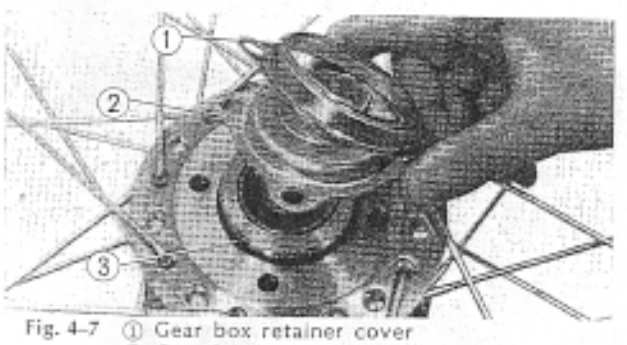

Fig. 4-7 ① Gear box retainer cover
② Gear box retainer
③ Retainer O-ring

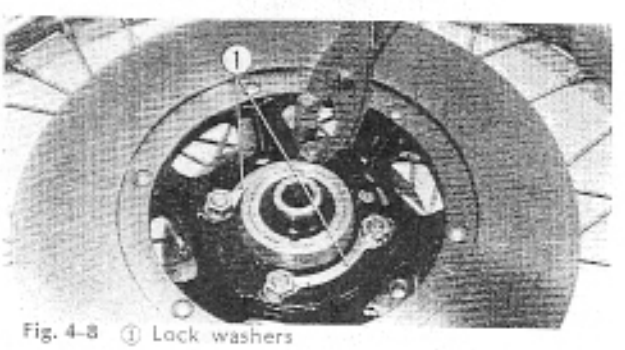

Fig. 4-8 ① Lock washers

6. Remove the dust seal and remove the bearing retainer with bearing retainer wrench (Tool No. 07088-32301).

Inspection

1. Check the front axle for bend.
2. Check the front wheel rim for face runout.
3. Check the spokes for looseness, bend or any other damage.
   Spoke torque specifications: **25~30 kg/cm (1.9~2.2 lbs-ft)**.
4. Check the tire for cracks, excessive wear or any other damage.
5. Check the tube valve for air leaks.
6. Check the tire pressure.
   Tire pressure specification: **1.8 kg/cm² (26 psi)**

Reassembly

1. Fill the ball bearings and the front wheel hub with grease. Drive the bearings in the hub.
   1) Use the outer bearing driver attachment (Tool No. 07048-33301) and ball bearing driver handle (Tool No. 07048-61101) for the bearing installation.
   2) Be sure to install the distance collar.
2. Stake the bearing retainer at two places as shown.
3. Check the retainer O-ring is properly installed. Install the gear box retainer and retainer cover with the 8 mm bolts. Then put the brake disc on the opposite side of the wheel hub.
4. Install the brake disc to the wheel hub with the nuts.

NOTE:
Be sure to renew the lock washers. Bend the lugs of the washers properly after tightening the nuts.

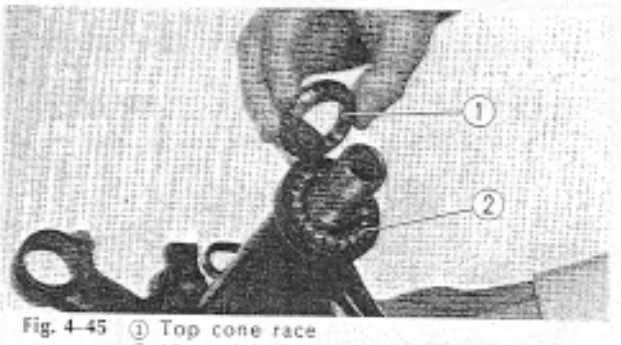

Fig. 4-45 ① Top cone race
② 3/8 steel balls

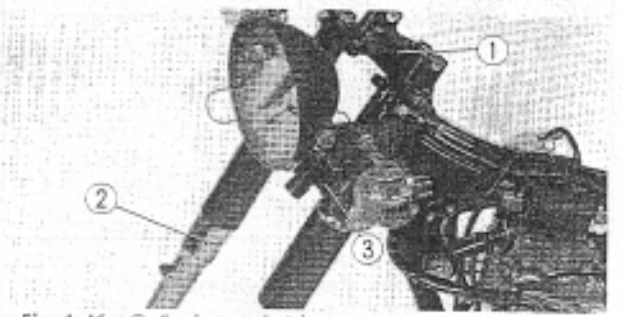

Fig. 4-46 ① Fork top bridge
② Front fork assembly
③ Steering stem

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

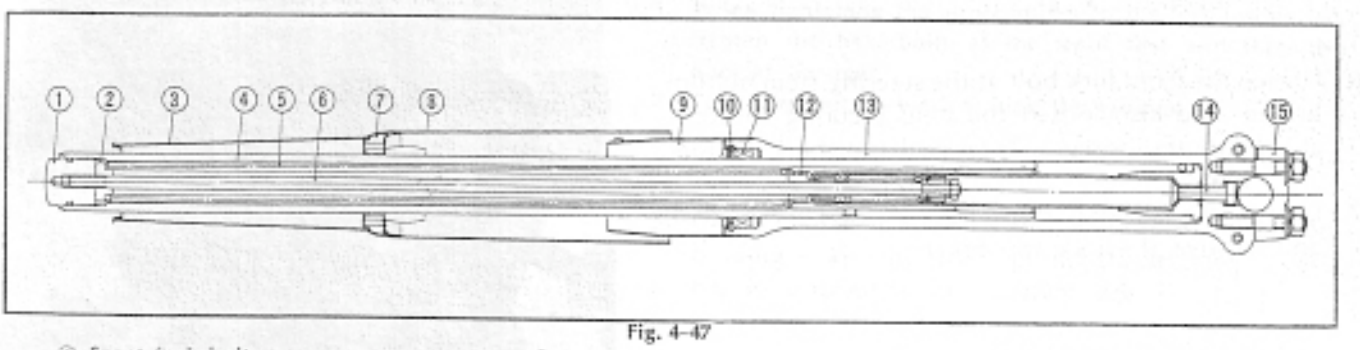

Fig. 4-47

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

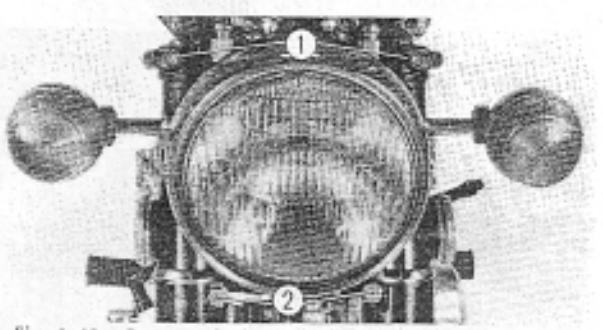

Fig. 4-48 ① 8 mm bolt at fork top bridge
② 8 mm bolt at steering stem bottom bridge

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.

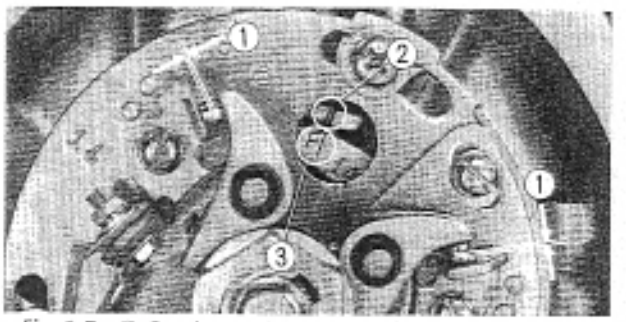

Fig. 5-7 ① Breaker point gap ③ "F" mark
② Matching mark

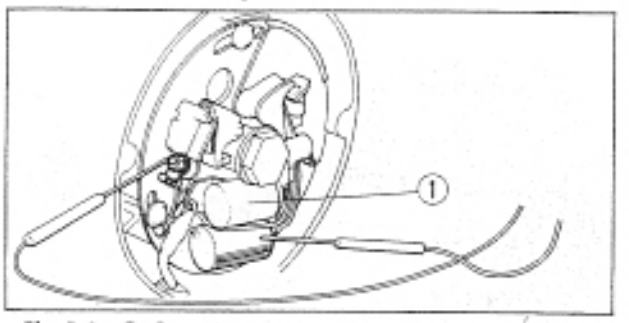

Fig. 5-8 ① Capacitors

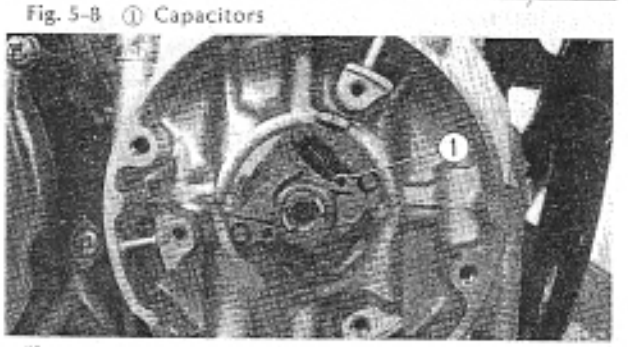

Fig. 5-9 ① Spark advancer

Contact breakers and capacitors

1. Contact breakers
   For the adjustment of the breaker point and ignition timing, refer to the section INSPECTION AND ADJUSTMENT.

2. Capacitors
   Measure the capacitance of the capacitors using the service tester.
   Capacitance specification : **0.22 μF ± 10%**

NOTE :
The point must be kept open when measuring.

Spark advancer

Inspection

1. Wipe off any foreign matter from the friction surfaces and check for smooth operation.
2. Check the advancer pin for excessive wear.
3. Take the readings of the crankshaft rpm at initial and full advance angles using the timing light of the service tester.

MEMO

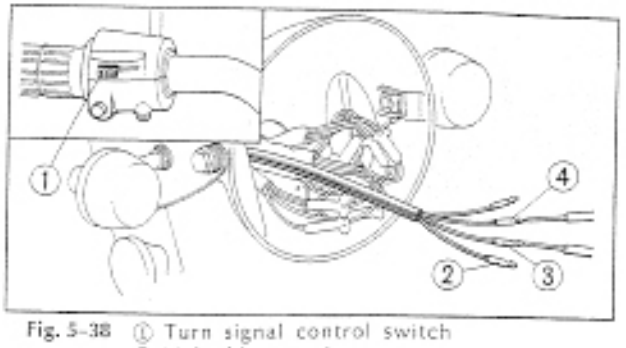

Fig. 5-38 ① Turn signal control switch
② Light blue cord
③ Gray cord
④ Orange cord

Turn signal control switch

Disconnect the cord of the turn signal control switch in the head light case. Check for continuity between the terminals of the gray cord and orange cord (left turn signal) and between those of the gray cord and light blue cord (right turn signal). The switch is in good condition if there is continuity in the circuits (○—○) shown below:

Knob Position \ Cord color	Light blue	Gray	Orange
R	○	○	
OFF			
L		○	○

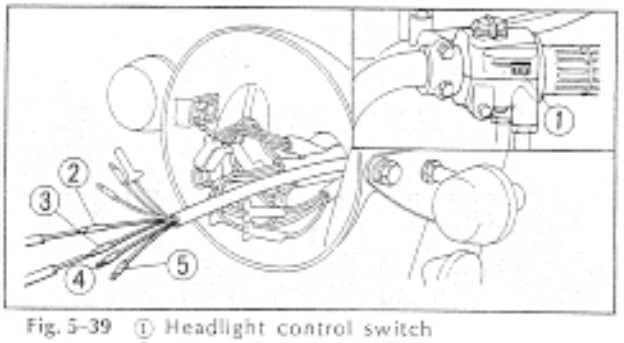

Fig. 5-39 ① Headlight control switch
② Black cord ④ Brown, white cord
③ Blue cord ⑤ White cord

Head light control switch

Check for continuity between the respective terminals of the switch cords in the head light case.
The switch is in good condition if there is continuity in the circuits (○—○) with the switch selector knob set in each position.
Any continuity in other circuits shown below is the symptom of malfunction of the switch.

		IG	HB	TL	LB
Cord color		Black	Blue	Brown/white	White
ON	H	○	○	○	
	N	○	○	○	○
	L	○		○	○

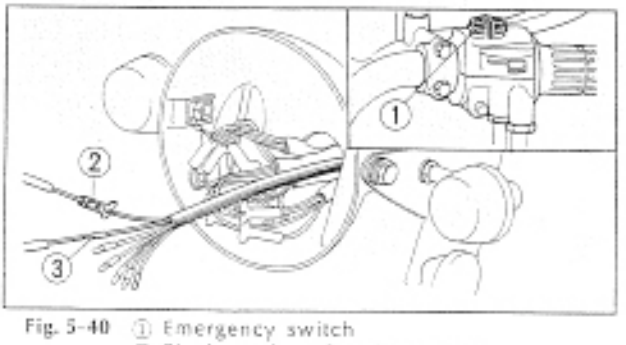

Fig. 5-40 ① Emergency switch
② Black cord ③ White cord

Emergency switch and starter switch

Check for continuity between the respective terminals of the switch cords in the head light case. The switch is normal if there is continuity as specified below (○—○) with the switch selector knob set in each position. Any continuity in other circuits shown below indicates malfunction of the switch.

Emergency switch

Cord color	Black	Black/white
RUN	○	○
OFF		

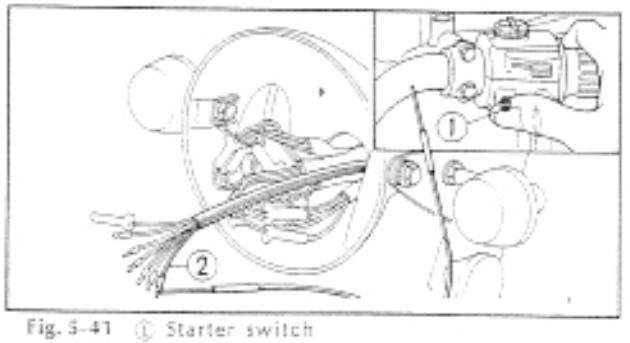

Fig. 5-41 ① Starter switch
② Yellow, red cord

Starter switch

Cord color	Yellow/red	Body grounding
ON	○	○
OFF		

Trouble	Probable Cause	Remedies
Gear slip out	1. Worn fingers on gear shift fork. 2. Worn gear dog hole. 3. Worn spline.	Replace. Replace. Replace.
Clutch slippage	1. No play in the clutch lever. 2. Weak or none uniform clutch spring. 3. Worn or grazed friction disc.	Adjust the clutch. Replace the weak spring. Replace.
Poor clutch engagement	1. Excessive play of clutch lever. 2. Warped friction disc. 3. Warped pressure plate. 4. Bent main shaft.	Adjust clutch lever play. Replace. Replace. Replace.
Pedal does not return	1. Faulty return spring. 2. Unhook return spring.	Replace. Hook return spring.
Kick starter gear does not rotate	1. Excessive wear of kick starter pawl.	Replace.
Engine does not start	Carburetor 1. Choke fully open. 2. Carburetor air screw improperly set. 3. Air leaking into the cylinder head. 4. Clogged carburetor slow jet. 5. Clogged fuel valve or piping. 6. Clogged vent hole in the fuel tank cap. 7. No fuel in the tank.	 Close choke. Adjust air screw. Retighten carburetor connecting tube. Check, clean and retighten. Disassemble and clean. Disassemble and clean. Fill tank with gasoline.
Poor engine idling	Carburetor 1. Clogged or loose carburetor slow jet. 2. Improper float level. 3. Incorrect air screw adjustment. 4. Carburetor linkage mulfunction. 5. Air leaks.	 Check, clean and retighten. Adjust. Adjust. Adjust. Tighten all air passage connection.
Improper running of engine	Carburetor 1. Jet size too small. 2. Improper float level. 3. Clogged carburetor main jet. 4. Carburetor linkage mulfunction. 5. Air leaks.	 Replace with larger size jet. Adjust. Clean and retighten. Adjust. Tighten all air passage connection.

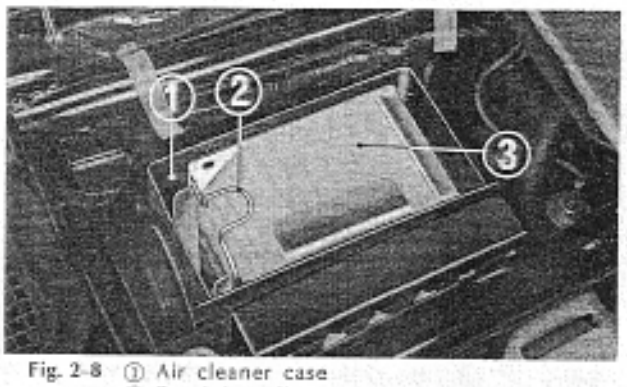

Fig. 2-8 ① Air cleaner case
② Retaining clip
③ Air cleaner element

6. AIR CLEANER

1. Raise the seat and remove the tool compartment together with the air cleaner cover.
2. Lift out the air cleaner element retaining clip. Remove the air cleaner element.
3. Clean the air cleaner element by tapping it lightly to loosen dust. The remaining dust can be brushed from the outer element surface or blown away by applying compressed air from the inside of the element.

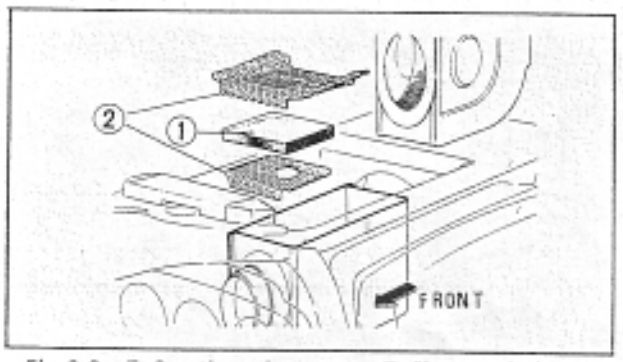

Fig. 2-9 ① Breather element ② Element holder

4. Remove the element holders and breather element
5. Wash the breather element in clean solvent. Squeeze out excess solvent and then dry the element thoroghly.

WARNING:

- **Gasoline or low flash point solvents are highly flammable and must not be used to clean the breather element.**
- **Do not use acid, alkali or organic solvent for washing the breather element.**

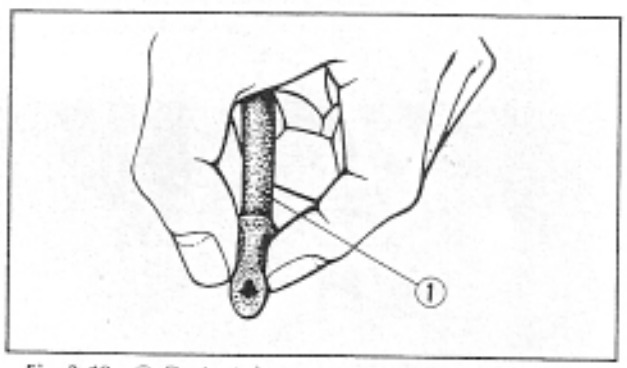

Fig. 2-10 ① Drain tube

6. Squeeze to open lower end of the drain tube, and remove any oil or water which may have accumulated.
7. To reinstall the air cleaner, reverse the removal procedures.

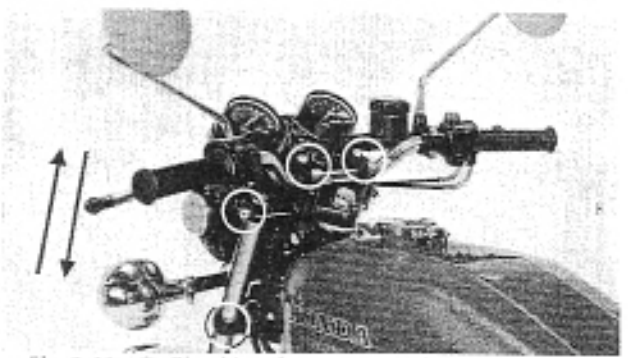

Fig. 2-11 ① Checking front suspension

7. FRONT SUSPENSION

Checking

1. With the front brake applied, check the action of the shock absorbers. This can be done by jouncing the shock absorbers up and down several times by hands. Also check for leaks, twist or bends, and replace, if any, parts worn or damaged beyond repair.
2. Check the front forks and handlebar mounting bolts for looseness.

V. ELECTRICAL SYSTEM

1. CHARGING SYSTEM

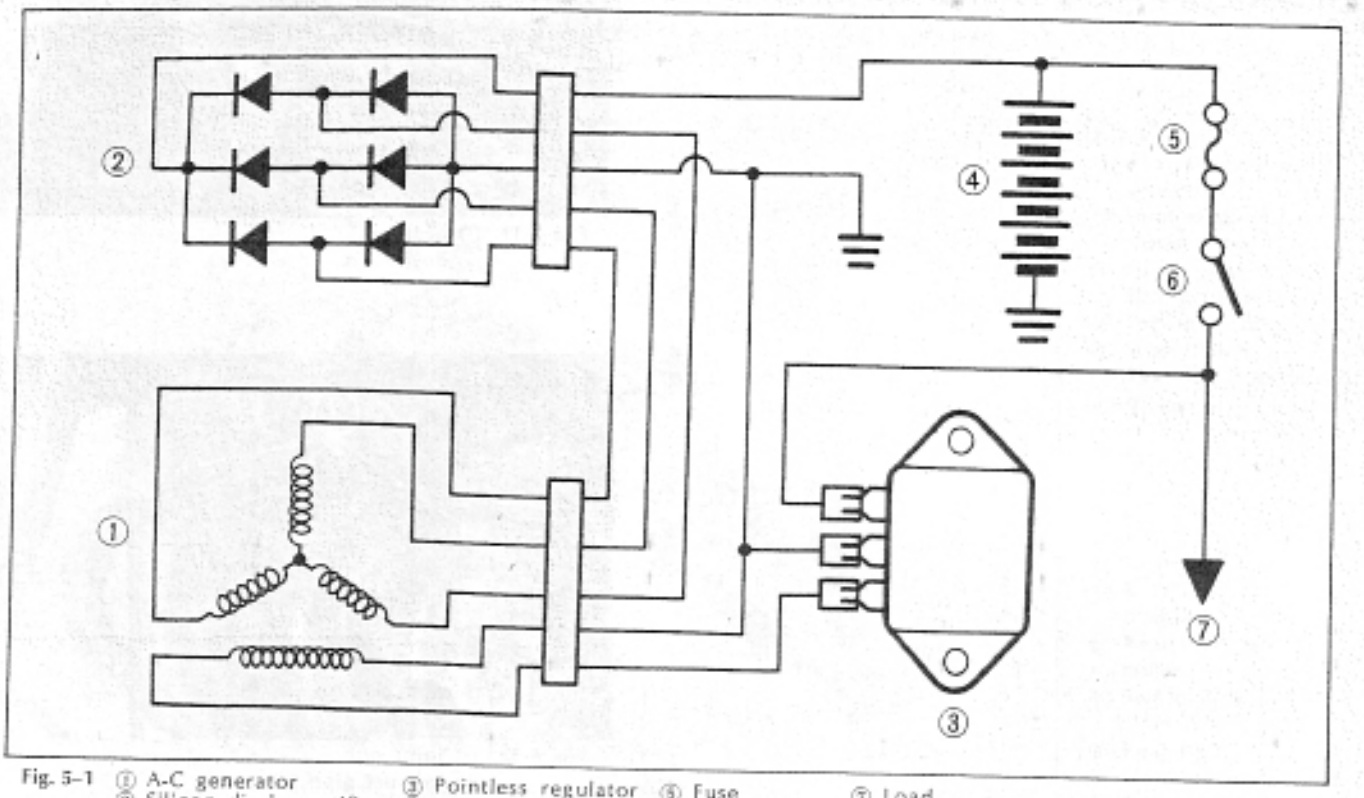

Fig. 5-1 ① A-C generator ② Silicon diode rectifier ③ Pointless regulator ④ Battery ⑤ Fuse ⑥ Main switch ⑦ Load

2. STARTING SYSTEM

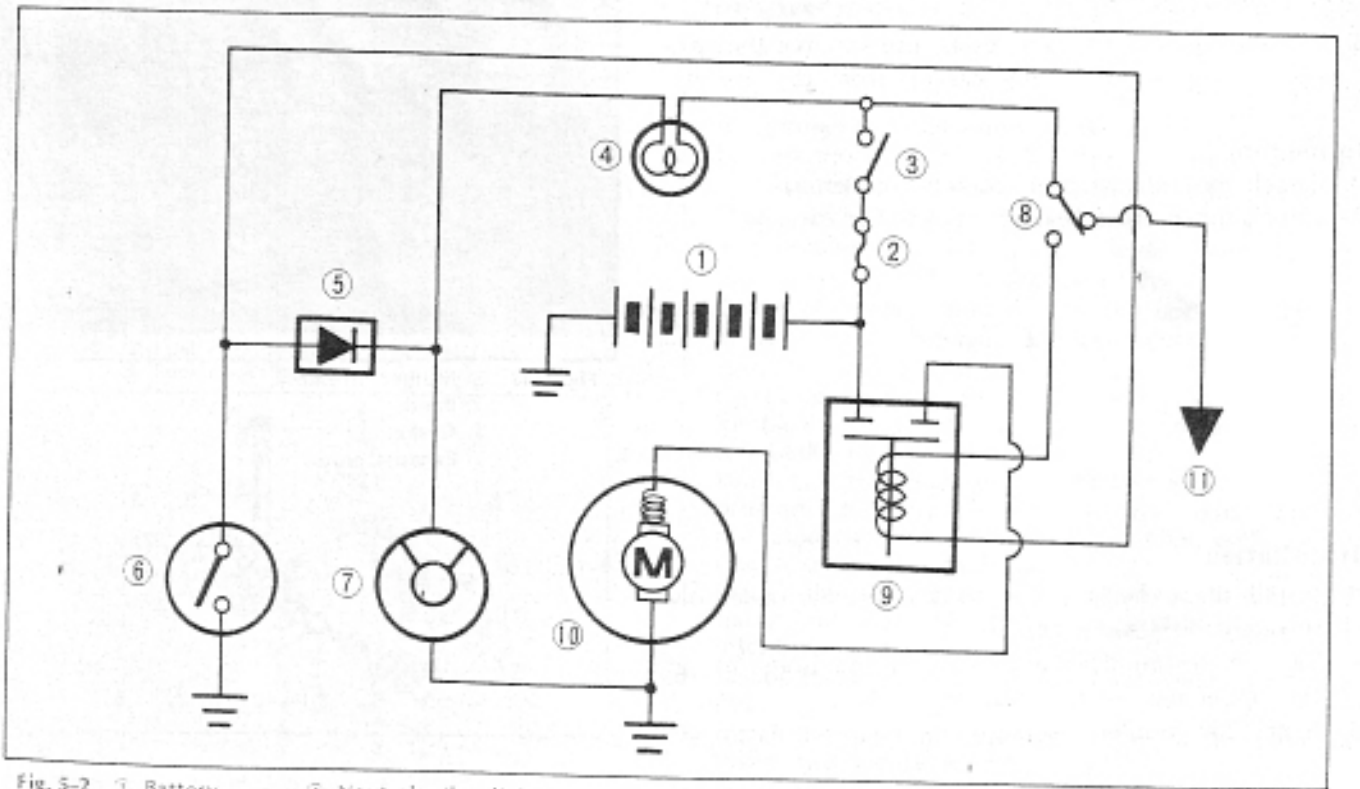

Fig. 5-2 ① Battery ② Fuse ③ Main switch ④ Neutral pilot light ⑤ Silicon diode ⑥ Clutch switch ⑦ Neutral switch ⑧ Starting switch ⑨ Starting magnetic switch ⑩ Starting motor ⑪ To lighting system