

Fig. 12 ① Oil level gauge

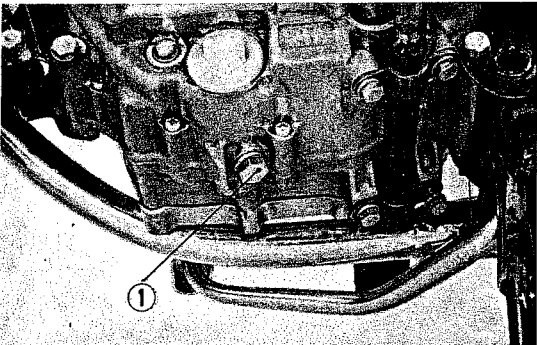


Fig. 13 ① Drain plug

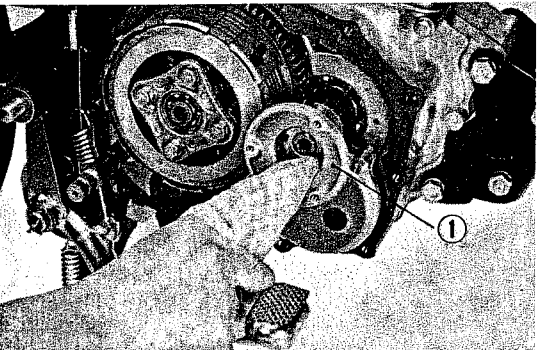


Fig. 14 ① Oil filter

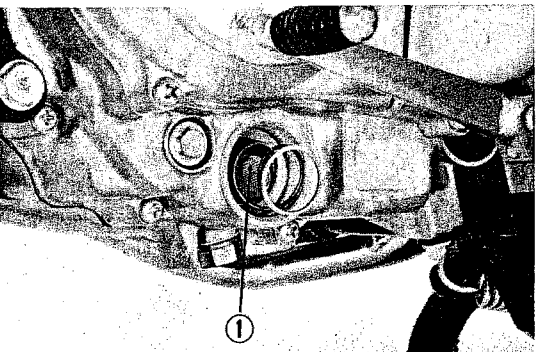


Fig. 15 ① Oil pump screen

## 6. ENGINE OIL CHANGE

The oil change is better performed while the engine is warm as this will expedite thorough draining of oil.

- 1) Remove the oil cap and remove the drain plug to drain oil. (Fig. 13)
- 2) When the oil is thoroughly drained, replace the drain plug.

Fill with a brand name oil SAE 10W-30, in the quantity of 1 lit. (1.05 qt.). Check the level by placing the dip stick in its hole, but not screwing it in. In this position, the level should be within the upper and lower marks. (Fig. 12)

## 7. OIL FILTER CLEANING

- 1) Remove the muffler.
- 2) Remove the step bar.
- 3) Remove the right crankcase cover.
- 4) Remove the centrifugal oil filter cap and clean inside. (Fig. 14)

### Oil Pump Screen Cleaning

Whenever the right crankcase cover is removed, check the oil pump screen to see if dirt is trapped. If it is dirty, remove the screen by taking off the cap. Clean the screen by blowing compressed air through it. (Fig. 15)

### 8. CAM CHAIN ADJUSTMENT

Perform the adjustment with the adjuster screw. Loosen the lock nut and turn the adjuster screw counter clockwise to decrease the slack in the cam chain. The procedure for adjustment is, first loosen the screw and then tighten until it becomes heavy. Tighten the lock nut after completing the adjustment. (Fig. 16)

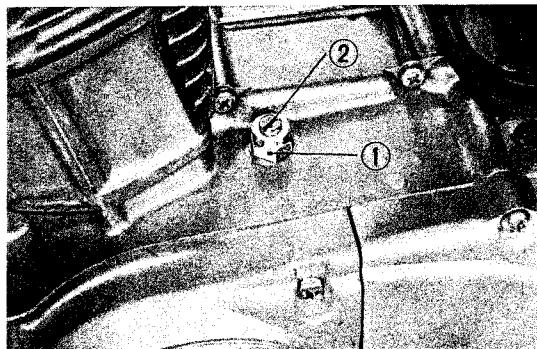


Fig. 16 ① Lock nut ② Adjuster screw

### 9. FUEL SYSTEM INSPECTION

Inspect the fuel tank, fuel cock, carburetor and fuel piping system for any fuel leaks. If fuel is spilled at any time during the replacement of fuel system component, it should be cleaned up immediately as it is a fire hazard.

### 10. AIR CLEANER ELEMENT SERVICING

- 1) Remove the right side cover.
- 2) Loosen air cleaner connecting clamp and the two mounting nuts to remove the air cleaner element. (Fig. 17)

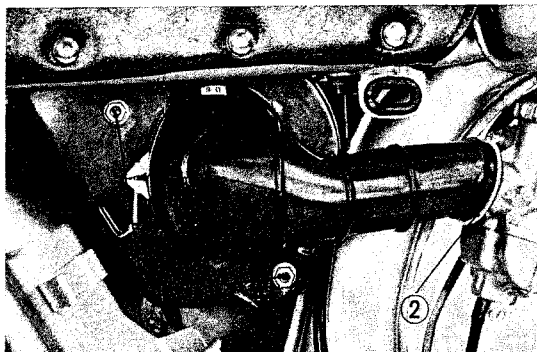


Fig. 17 ① Mounting nut ② Air cleaner connecting clamp

- 3) Wash the element in solvent and then allow to dry. Apply a small quantity of oil on the element before installation. (Fig. 18)

**Note:**

**Do not use gasoline to wash the filter element.**

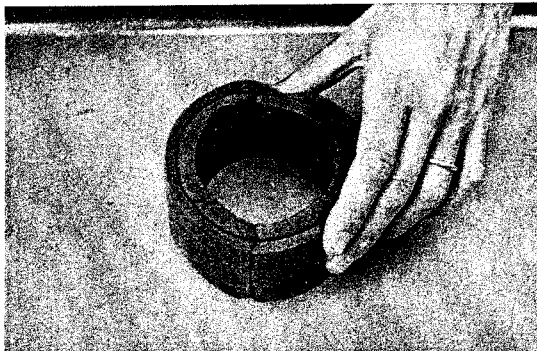


Fig. 18 ① Air cleaner element

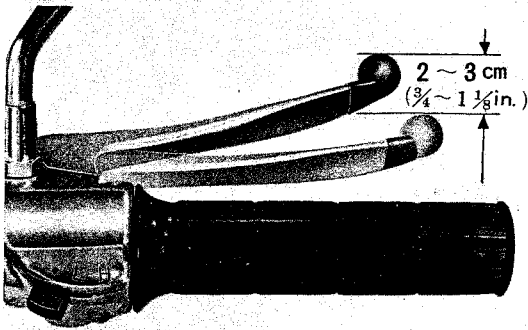


Fig. 19 Brake lever play

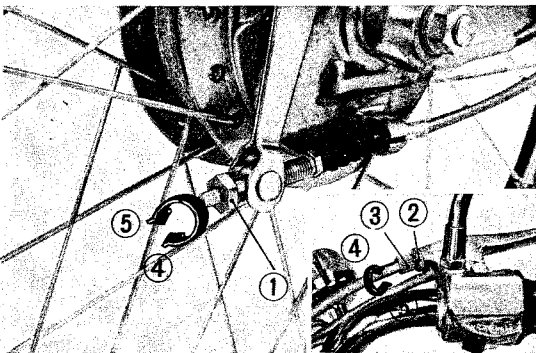


Fig. 20 ① Adjuster nut ② Lock nut ③ Adjuster nut ④ Decrease ⑤ Increase  
Fig. 20-A

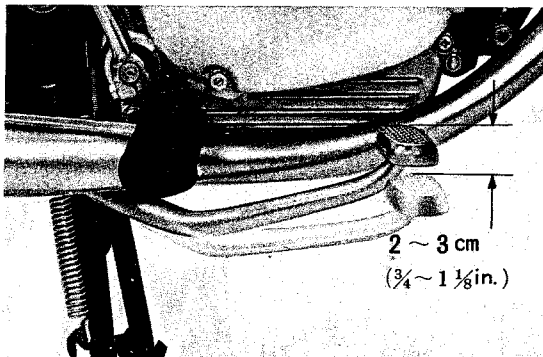


Fig. 21 Brake pedal play

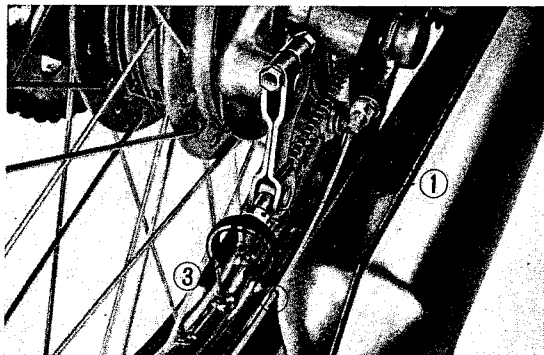


Fig. 22 ① Adjuster nut ② Decrease ③ Increase

## 11. BRAKE ADJUSTMENT

(Front wheel)

Check the brake free play at the end of the brake lever. The play should be 2-3 cm (3/4-1.1/8 in.). (Fig. 19) If it is not within this range, adjust it in accordance with the following procedure.

1) Turn the adjuster nut clockwise to reduce play in the brake lever. (Fig. 20)

2) Minor or fine adjustment can be made with adjuster nut on the clutch lever. (Fig. 20-A)

(Rear wheel)

Check the brake free play at the end of the brake pedal. The play should be 2-3 cm (3/4-1.1/8 in.). (Fig. 21) If it is not within this range, adjust it in accordance with the following procedure.

1) Turn the adjuster nut clockwise to reduce the amount of play in the brake pedal. (Fig. 21)

2) Minor or fine adjustment can be made with adjuster nut on the brake lever.

## 12. DRIVE CHAIN ADJUSTMENT

Adjust the chain slack to 1-2 cm (2/5-3/4 in.) with adjuster nuts after the axle nut is loosened. (Fig. 23)

**Note:**

Both right and left adjuster nuts should be turned equal amounts. This can be verified by the position of the adjuster indicator plate on both sides.

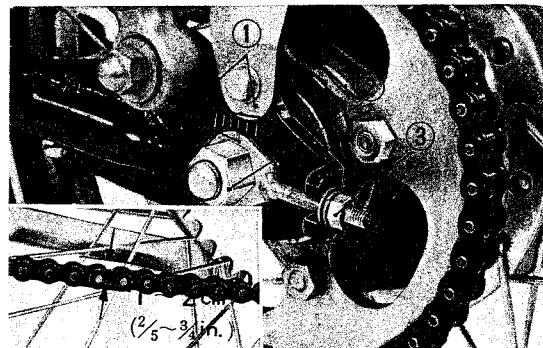


Fig. 23 ① Index mark and side scale ② Rear axle nut  
③ Adjuster nut

## 13. BATTERY ELECTROLYTE INSPECTION

Remove the left side cover and check the level of battery electrolyte to level indicator marks on battery case. (Fig. 24)

- 1) If the electrolyte level is low, remove the battery to refill it.
- 2) Add distilled water to bring electrolyte level to upper level marked on the case.

**Note:**

Over filling will cause electrolyte to overflow and result in corrosion around the battery compartment.

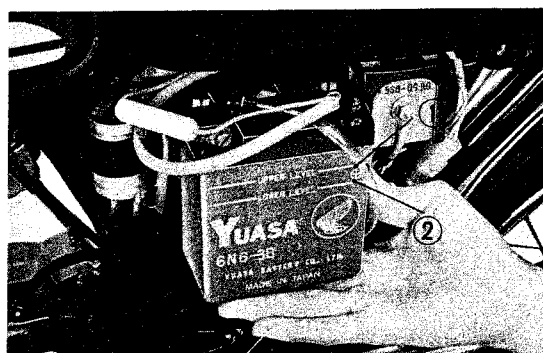


Fig. 24 ① Upper level ② Lower level

## 14. FRONT FORK OIL REPLACEMENT

- 1) Remove the fork bolts and remove the drain plug to drain oil. Actuate the fork for complete draining. (Fig. 25-26)

- 2) Flush out the interior using solvent.

**Note:**

Do not use gasoline for cleaning.

- 3) Reinstall the drain plug and tighten before refilling with new oil. (Fig. 26)

**Recommended oil: SAE 10W-40**

**Capacity:**

**CB100, CB125S 130-140cc (4.4-4.7 ozs)**

**CL100, CD125S 130-140cc (4.4-4.7 ozs)**

**SL100, SL125 180-190cc (6.1-7.2 ozs)**

- 4) Replace the fork bolt.

Torque to 4.0-5.0 kg-m (29.0-36.0 ft lbs).

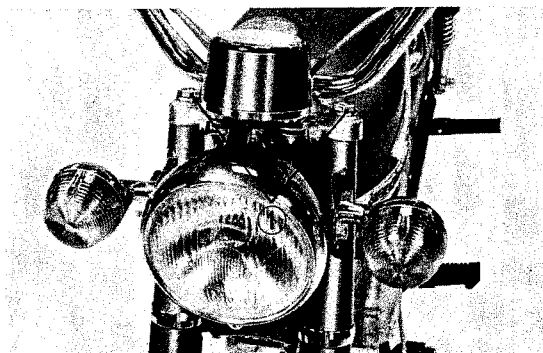


Fig. 25 ① Fork bolt

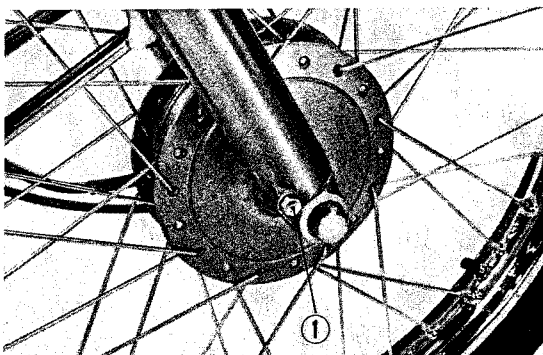


Fig. 26 ① Drain plug

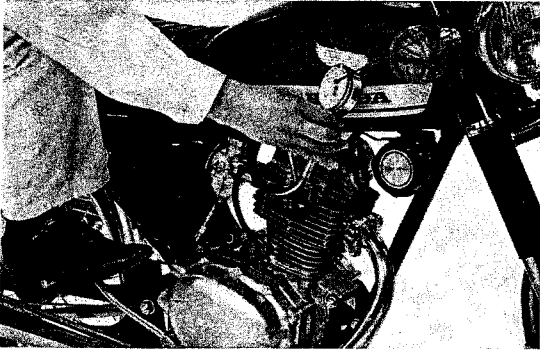


Fig. 27 ① Compression gauge

### 15. CYLINDER COMPRESSION CHECK

Low compression and pressure leak will cause unstable engine rpm and loss of power. Compression is checked with a cylinder compression gauge by the following procedure. (Fig. 27)

- 1) Remove the spark plug.
- 2) Insert the rubber tip of compression gauge into the spark plug hole and operate the kick starter while holding the throttle grip fully open.

#### Note:

Perform the check after warming up the engine.

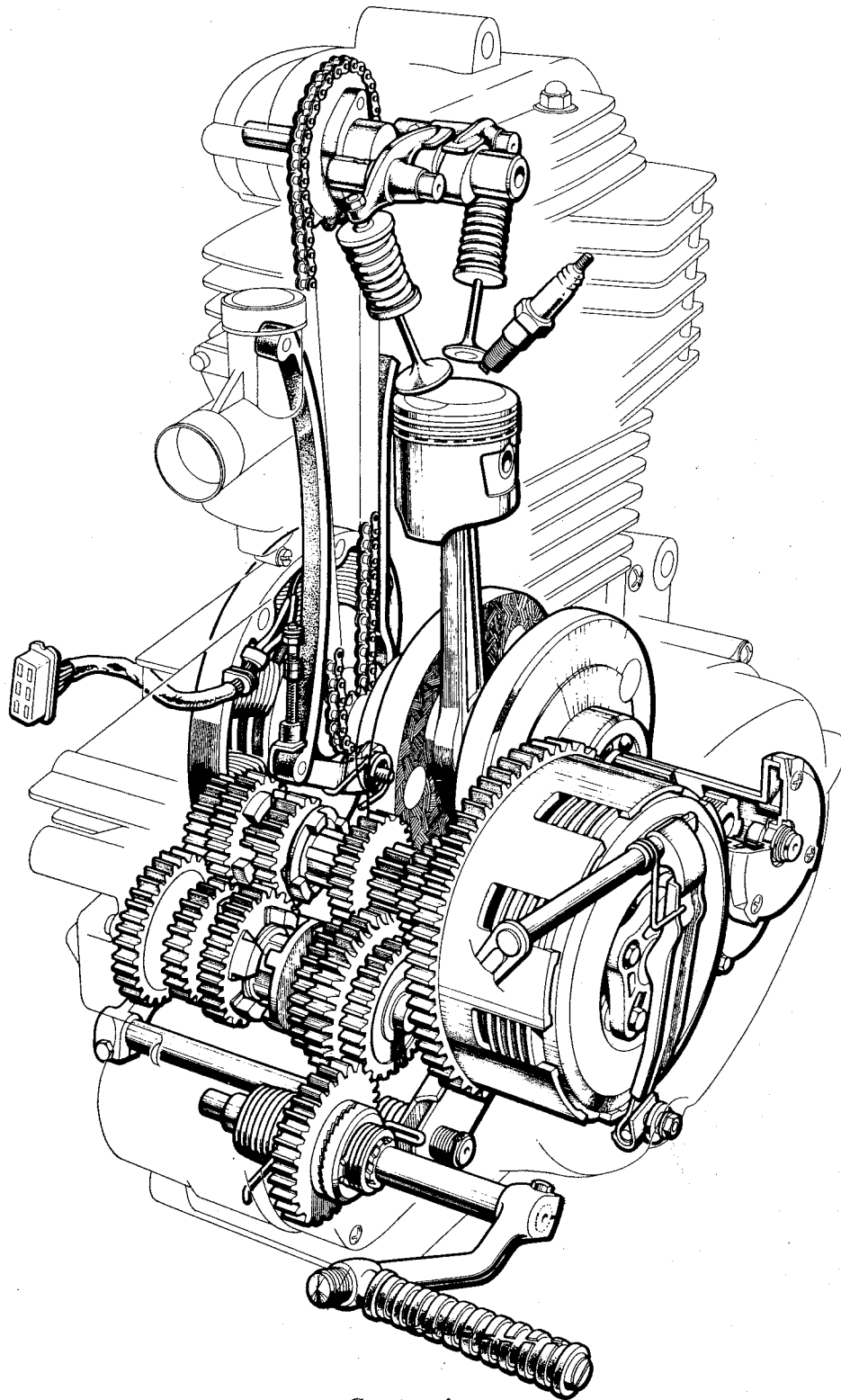
- 3) The normal compression pressure is **12 kg/cm<sup>2</sup> (170 psi)**.

① Low compression is due to one of the following causes:

- Leaking valve.
- Defective or sticking piston rings.
- Blown cylinder head gasket.
- Improper tappet adjustment.

② Unusually high compression pressure is due to excessive carbon deposits on the combustion chamber or on the piston head.

Engine must be disassembled for complete inspection or repair in these cases.



Construction

## 1. WORK WHICH CAN BE PERFORMED WITHOUT REMOVING THE ENGINE.

Work Item	Page
1) Oil pump, oil filter	22
2) Clutch	25
3) Gear shift mechanism	27

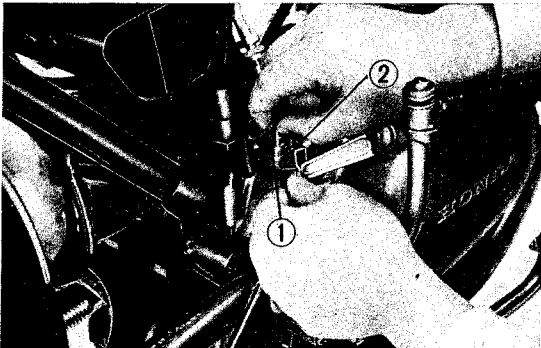


Fig. 28 ① Clutch cable ② Clutch lever

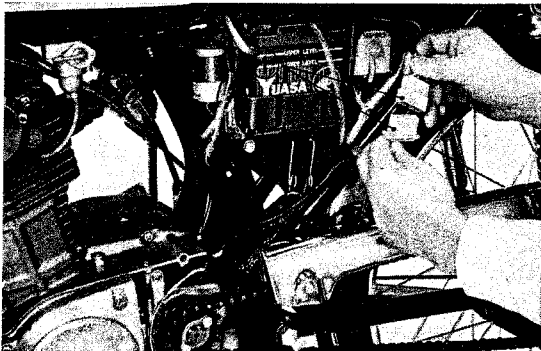


Fig. 29 ① Electrical coupler

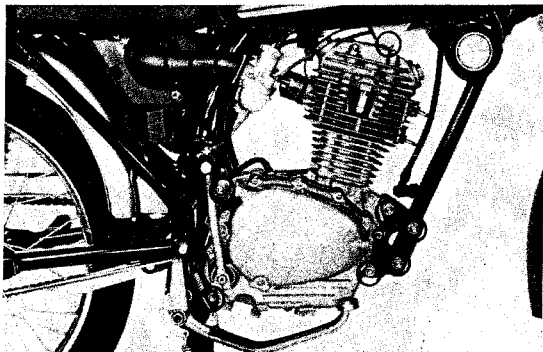


Fig. 30 ① Engine hanger bolts

## 2. ENGINE REMOVAL AND REINSTALLATION

### A. Engine Removal

- 1) Remove the exhaust pipe and muffler.
- 2) Remove four 8 mm step bar mounting bolts and remove the step bar.
- 3) Loosen the clutch cable lock nut, provide additional cable slack and then disconnect from the clutch lever. (Fig. 28)
- 4) Unscrew the two carburetor mounting bolts and separate the carburetor from the inlet pipe.
- 5) Remove the gear change pedal.
- 6) Remove the left rear crankcase cover.
- 7) Disconnect and remove the drive chain.
- 8) Disconnect the coupler from wire harness. (Fig. 29)
- 9) Remove nuts from the engine hanger bolts, raise engine toward the rear, and remove engine bolt while supporting the engine. (Fig. 30)

## B. Engine Reinstallation

- 1) Reinstall engine in the reverse order of removal.
- 2) To simplify installation, use the "T" handle screwdriver to hang the engine temporarily followed by installing the support bolt.
- 3) Temporarily install the exhaust pipe joint and muffler and then perform the final torquing.
- 4) When connecting drive chain, make sure that the chain joint clip is properly installed. (Fig. 31)

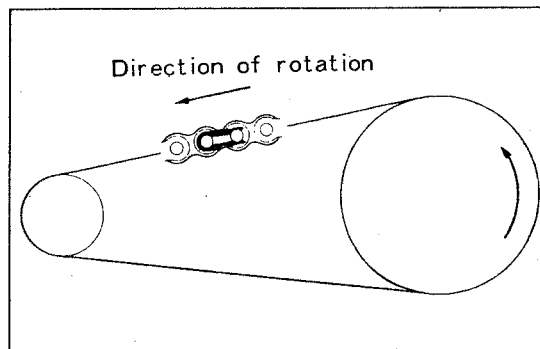


Fig. 31 Direction of rotation

## 3. CYLINDER, CYLINDER HEAD AND PISTON

### A. Disassembly

- 1) Remove two 5mm screws and disassemble the point cover.
- 2) Loosen two 5mm mounting screws and remove the contact breaker. (Fig. 32)
- 3) Loosen the 6mm mounting bolt and remove the governor. (Fig. 32)
- 4) Loosen two 6mm screws and remove the point base. (Fig. 32)
- 5) Position the piston at top-dead-center, loosen the cam sprocket mounting bolts and remove the cam sprocket from the cam chain. (Fig. 33)

Drop cam chain toward the side of the cylinder.

#### Note:

**Do not loosen the cylinder head bolts.**

- 6) Remove four 8mm cap nuts.
- 7) Align both the inlet and exhaust cams to the cutout on the cylinder head and then remove the camshaft from the cylinder. (Fig. 34)

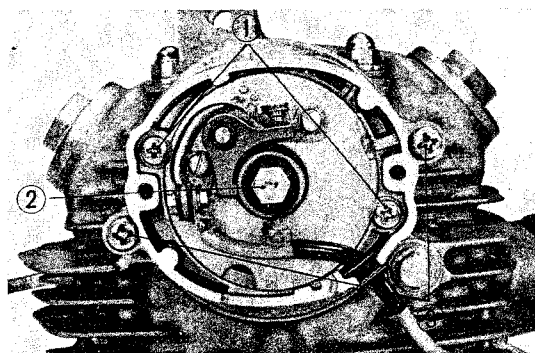


Fig. 32 ① 5mm screws ② 6mm bolt ③ 6mm screws

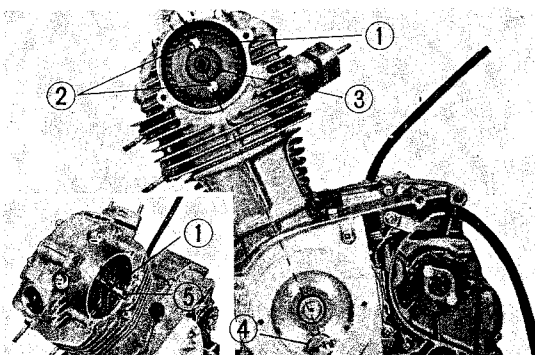


Fig. 33 ① Cam chain ② 6mm bolts ③ Cam sprocket  
④ "T" aligning mark ⑤ Cam shaft

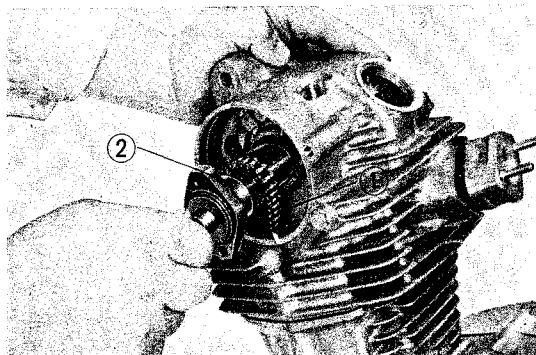


Fig. 34 Camshaft removal  
① Cam chain ② Camshaft