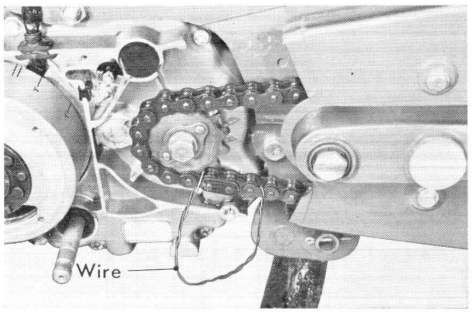

Figure 3-6. Removing the drive chain

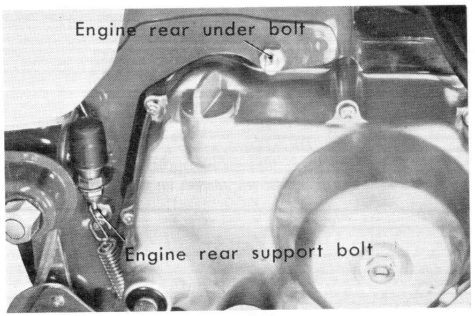

Figure 3-7. Engine mounting bolt

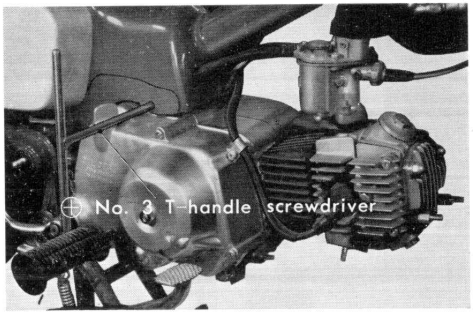

Figure 3-8. Temporary installation

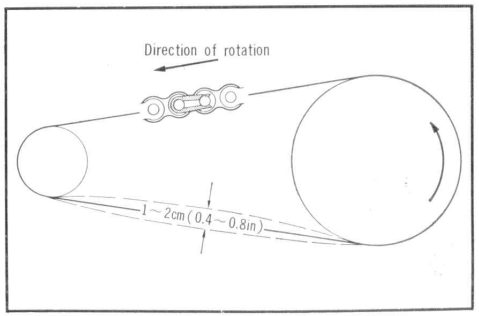

Figure 3-9. Installing direction of joint link

(7) Remove the two 6mm nut installing the carburetor and separate the carburetor from the cylinder head. (C50, C50M, C65, C65M)
For S50 and S65, separate the inlet pipe and cylinder head.

(Note) When it is necessary to remove the carburetor on the C50, C50M, C65 and C65M, pinch the fuel pipe with a hose clip to prevent leaks. This is necessary since the fuel cock is installed on the carburetor.

(8) Disconnect the clutch cable (S50, S65)

(9) Remove kick arm and gear change pedal

(10) Remove the left crankcase cover and the electrical leads.

(11) Rotate the rear wheel to position the chain joint as shown in **Fig. 3-6** and disconnect the drive chain.
When removing the chain joint, the task can be facilitated and the chain prevented from coiling in the chain case by attaching wires to both joining ends of the chain.

(12) Disconnect the high tension terminal from the spark plug.

(13) Remove the high tension cord clip installed on the right crankcase cover.

(14) Remove the brake pedal spring, stop lamp spring, the two 8mm engine mount bolt nuts and pull out the two engine support bolts; the engine can then be detached from the frame. **(Fig. 3-7)**

b. Installation

(1) Perform the engine installation by reversing the engine removal procedure in section 3.14a.

(2) The engine installation can be facilitated by using the ⊕ T-handle screwdriver to temporarily set the engine and then installing the engine support bolts. **(Fig. 3-8)**

(3) The brake pedal spring and the stop spring swich is mounted together with the engine rear under bolt.

(4) When connecting the drive chain, make sure that the joint clip is installed with the opening opposite to the direction of the chain movement. **(Fig. 3-9)**
Adjust the chain tension after installation to 1~2cm (.40~.80 in).

4. LUBRICATION SYSTEM

The oil from the crankcase after being drawn into the oil strainer is diverted for lubrication into the following two routes.

(1) Right crankcase→passageway in the right crankcase cover→centrifugal filter→to lubricate the crankshaft and associated parts.

(2) Right crankcase (upper part of the oil pump)→though the cylinder stud bolt (right lower side)→into the rocker arm side cover→sprayed from the four oil holes in the camshaft→to lubricate the respective sections of the cylinder head→into the oil return hole at the lower end of the exhaust valve and returns to the crankcase. The oil that passes through the camshaft lubricates the cam chain and returns to the crankcase.
In this way, the lubrication of the engine is performed by the two oil routes and the oil spray in the crankcase. **(Fig. 3-10)**

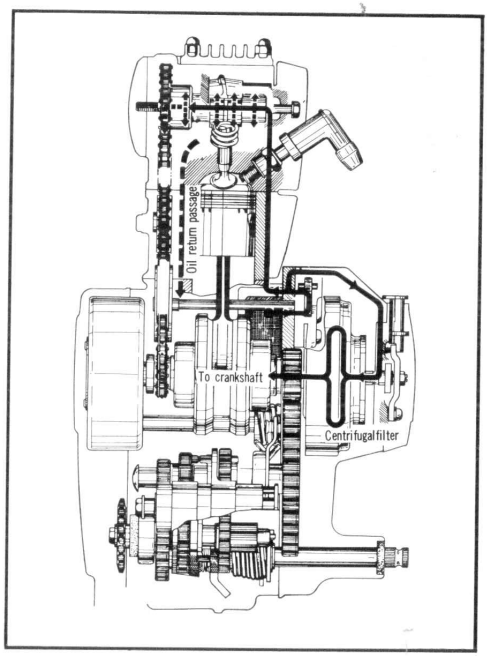

Figure 3-10. Pressure lubrication diagram

5. OIL PUMP PRINCIPLE

In the past, gear type oil pump using two gears were used, however, on these models a more efficient and compact trochoid oil pump is used. This pump consists of an inner and an outer rotor. The pumping action is produced by the differences in the shape and number of the teeth between the inner and the outer rotors. **(Fig. 3-11)**

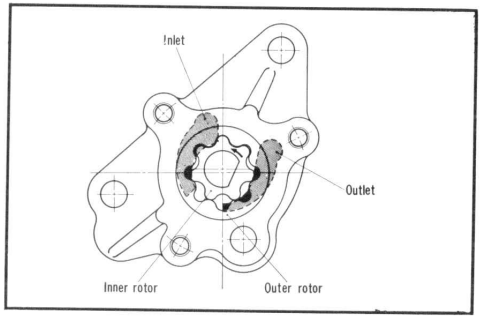

Figure 3-11. Oil pump theory of operation

a. Disassembly

(1) Remove the clutch assembly as described in section 3.14a.

(2) Remove the three 6mm bolts and remove the oil pump as a unit. **(Fig. 3-12)**

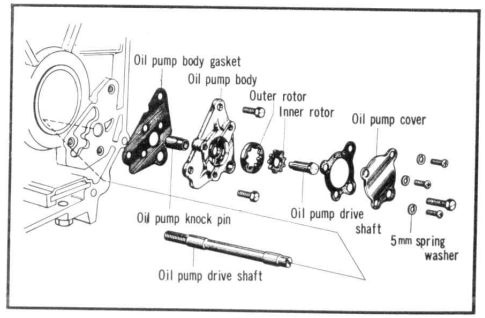

Figure 3-12. Disassemblying the oil pump