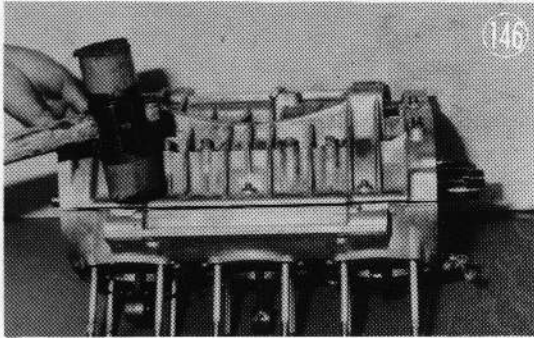
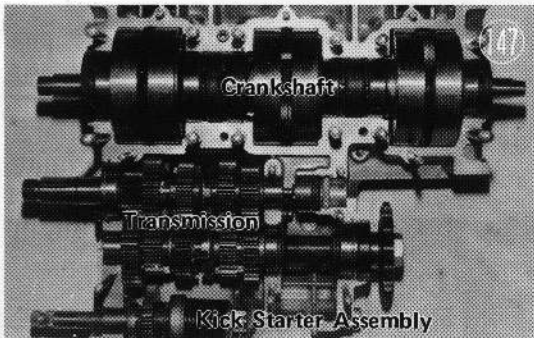


Tap the lower crankcase and shift shaft mounting lightly with a mallet, so that all the shafts, etc. remain in the upper crankcase when it is disassembled.



**NOTE:** The crankcase cannot be disassembled unless the clutch release is first removed.

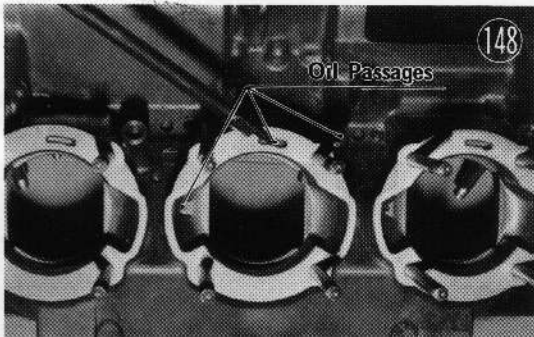
Taking off the lower crankcase permits removal of the crankshaft assembly, transmission assembly, kick shaft, drum, etc.



## 2) Overhaul

### a. Oil Passages

Inspect the oil passages for clogging, and blow them out with compressed air.



### b. Breather Hole

Inspect and clean this in the same manner as for the oil passages. If this hole becomes clogged, oil pressure will build up and cause oil to leak from between the crankcase and the left cover.

## 3) Assembly

Assembly is the reverse of disassembly.

### NOTE:

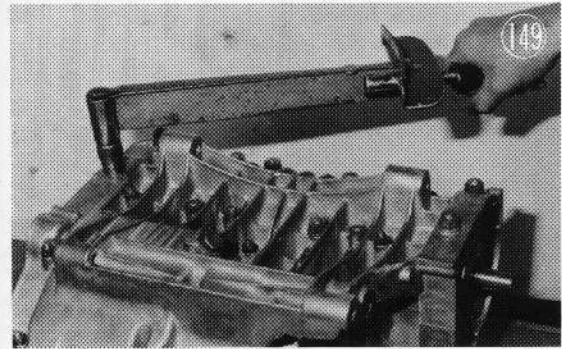
1. To avert any possible oil leakage, clean the crankcase gasket surfaces thoroughly with gasoline, wipe them dry, and apply an even layer of Kawasaki Bond sealer on the lower crankcase gasket surface.

2. When replacing the mounting nuts, starting from the center of the crankcase and working to the outside ends, tighten the nuts with a torque wrench to this tightness:

3. Be careful that the oil seals are installed at right angles to the crankcase, and see that they do not protrude beyond the outer crankcase surface.

Table 15

Nut Size	Torque
8 mm	16.0 – 19.5 ft.lbs. (2.2 – 2.7 kg.M)
6 mm	11.0 – 11.5 ft.lbs. (1.5 – 1.6 kg.M)



## 11. CRANKSHAFT

The intermittent force of exploding gasoline hammers on the pistons, and the resultant up and down motion of the pistons is received by the crankshaft and changed into shaft rotation. Due to the powerful force involved, crankshaft play or runout will cause damage to the crankcase, bearings, etc., and will produce noise, vibration, and result in a loss of power. It is therefore of critical importance to overall engine life to make necessary repairs as early as possible.

However, crankshaft assembly demands precise measurement of rotational balance, big end clearance, the exact mounting angle of each connecting rod, and the force by which the press-fitted crank pins are being compressed. It follows that for crankshaft repair and assembly, a hydraulic press and other specialized equipment plus a high degree of technical skill is necessary.

This manual deals only with common crankshaft troubles, and the manner in which the various checks are performed. If any parts are out of tolerance, or if inspection indicates that repair is necessary, it is recommended that the crankshaft be replaced as an assembly.