

3.11 CRANKSHAFT

A. Construction

The crankshaft is constructed of high strength carbon steel and together with the connecting rod, converts the reciprocating motion of the piston to the rotary motion and, in addition, performs the function of the flywheel by absorbing the fluctuating torque.

The right and left crankshaft components are press fitted to the nickel chrome molybdenum crank pin with the connecting rod assembled.

The timing sprocket which drives the cam chain is shrunk fitted to the left crankshaft.

Crankshaft assembly is supported at two points by heavy duty ball bearings.

The right crankcase incorporates a center oil passage through which oil under pressure passes to the crankpin to lubricate the large end of the connecting rod. (Fig. 3.80)

B. Disassembly

1. Remove the clutch assembly in accordance with 8.B and the gear shift spindle in accordance with 10.B.
2. Remove the left crankcase.
3. Remove the cylinder head in accordance with 5.B and the cylinder in accordance with 6.B.
4. Remove the 6 x 16 hex bolt and separate the left crankcase.

The crankshaft and transmission will be completely exposed.

5. The crankshaft assembly ① can be removed from the left crankcase. ② (Fig. 3.81)

C. Inspection

1. Support the crankshaft ① on V blocks ③ at both bearings and measure the amount of runout. (Fig. 3.82)

Item		Standard value	Serviceable limit
Total runout	Left bearing web side at 35mm (1.379 in)	0.015 (0.0006 in)	Replace if over 0.110.004 in.
	Right bearing web side at 35mm (1.379 in)	0.015 (0.0006 in)	Replace if over 0.110.004 in.



Fig. 3.80 Crankshaft

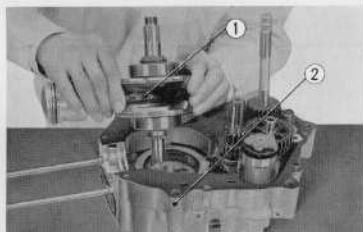


Fig. 3.81 Removing the crankshaft
① Crankshaft
② L. crankcase

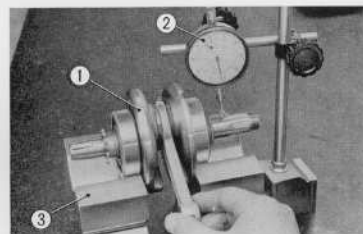


Fig. 3.82 Measuring crankshaft alignment
① Crankshaft
② Dial gauge
③ V block