

2. CLUTCH

A. Description and Operation

When the right crankcase cover is removed the clutch complete is exposed. To the clutch outer, the clutch spring driving the clutch pressure plate is installed. The clutch plate is installed with the clutch friction disc between the clutch center with four 6×20 hex. bolts.

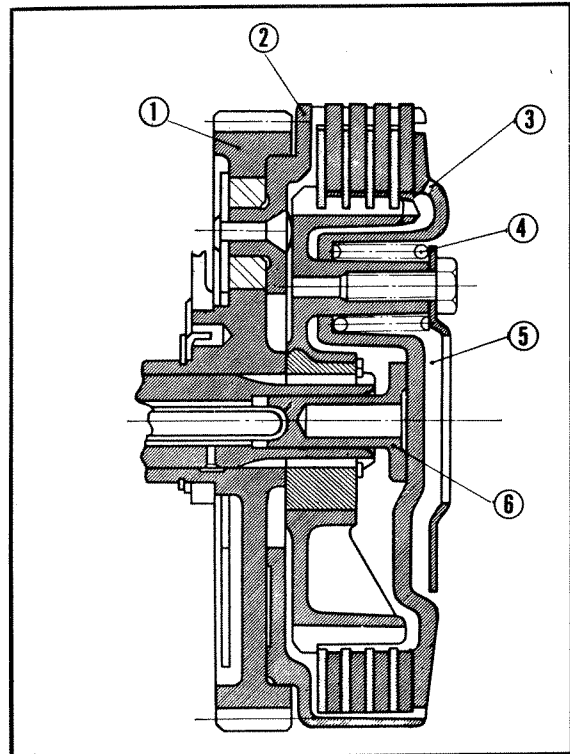
The clutch plate has internal teeth which fits over the machined grooves cut on the outside of the clutch center. Clutch center in turn is mounted on the transmission main shaft by spline. Hence, it and the transmission main shaft are essentially a single unit. The clutch plate, clutch center, and clutch pressure plate rotate.

On the other hand, to the groove cut on the exterior circumference of the clutch outer, the clutch friction disc is coupled by the collar entering the groove; free wheeling rotation with the transmission main shaft is obtained. Hence, while the clutch is connected, the clutch outer center, four clutch plates, four clutch friction discs, and clutch pressure plate are essentially a single unit through friction exerted by the clutch spring; rotation of the crankshaft is transmitted to transmission system.

When the clutch lever is gripped, the clutch adjuster rotates clockwise, the adjustment thread is pushed out by the square-headed thread in the clutch adjuster fitted to the left crankcase cover; this is pushed out by the clutch joint through the clutch rod. The clutch spring is compressed and the four clutch friction discs and four clutch plates become disengaged. Hence, the rotary motion of four outer clutches and four clutch discs is not transmitted to the clutch center. (Fig. 3-170)

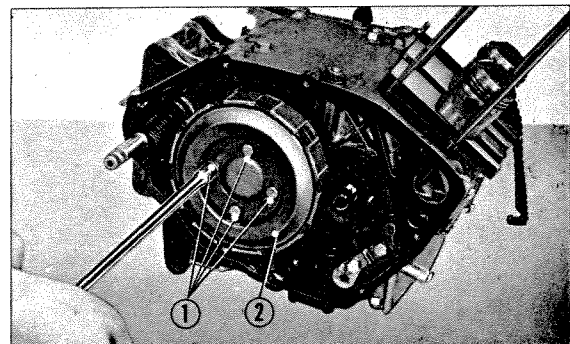
B. Disassembly

1. Remove the right crankcase cover.
2. Remove the four 6×20 bolts ① securing the clutch pressure plate, separate the clutch friction disc and the clutch plate. (Fig. 3-171)
3. By removing the 20 mm set ring ①, clutch center ③ can be removed. (Fig. 3-172)
4. Remove the oil filter cap and extract the oil filter rotor.
Remove the 16mm lock nut securing the primary drive gear.
5. By pulling up the turn stop, remove the 6 mm hex bolts securing the oil pump.

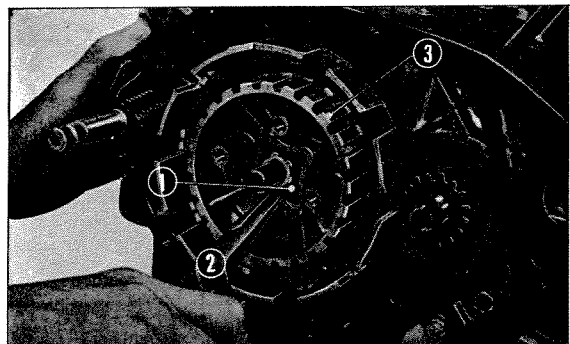


① Primary driven gear ② Clutch outer ③ Oil opening
④ Clutch spring ⑤ Clutch pressure plate
⑥ Clutch lifter joint piece

Fig. 3-170. Sectional view of clutch assembly



① 6×20 hex. bolt ② Clutch assembly
Fig. 3-171. Removing the clutch assembly



① 20 mm set ring ② Plier ③ Clutch center
Fig. 3-172. Removing the clutch center