

Neutral : (Fig. 3.92)

The gears are not locked. The main shaft low gear ① is meshed with the counter shaft low gear ② and the main shaft third gear ③ is meshed with counter shaft third gear ④, however, the counter shaft gears rotate freely and therefore no power is delivered to the drive sprocket.

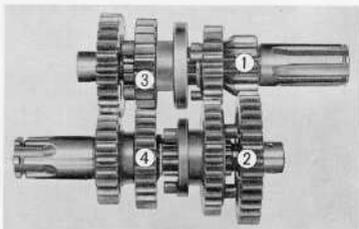


Fig. 3.92 Neutral

2. Operation (C 90)**Low : (Fig. 3.93)**

The power from the crankshaft is transmitted through the clutch to the spline fixed driven gear ① on the transmission main shaft ②. The power from the transmission main shaft is transmitted from the main shaft driven gear to the freely counter shaft low gear ③. However, the counter shaft second gear ④ which is splined to the counter shaft and is moved against the low gear by the shift fork and is locked by means of a dog, forming an integral unit with the counter shaft ⑤ to transmit the driving force to the drive sprocket ⑥ mounted on the left end of the counter shaft.

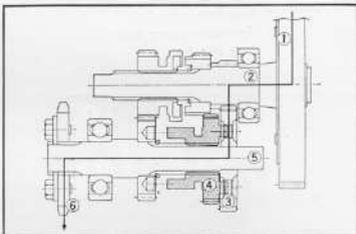


Fig. 3.93 Low gear

Second : (Fig. 3.94)

The main shaft top gear ③ is moved by the shift fork to lock with the free rotating second gear ② by means of a dog, thus permitting the transmission of power from the main shaft ① to the counter shaft ④ by meshing the main shaft second gear ② with the counter shaft second gear ⑤ to drive the sprocket.

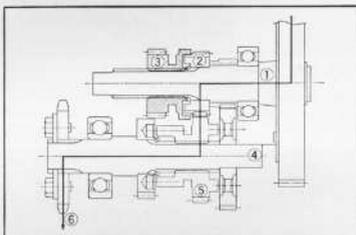


Fig. 3.94 Second gear

Top : (Fig. 3.95)

The counter shaft second gear ④ is moved by the shift fork to engage the top gear ③ by means of a dog. The power is transmitted from the main shaft top gear ② and to the counter shaft top gear ③ and to the drive sprocket.

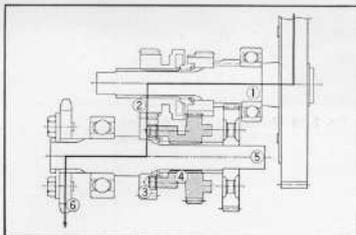


Fig. 3.95 Top gear