

Fig. 3.89 Second gear
 ① Transmission mainshaft
 ② Mainshaft second gear
 ③ Mainshaft third gear
 ④ Transmission countershaft
 ⑤ Countershaft second gear

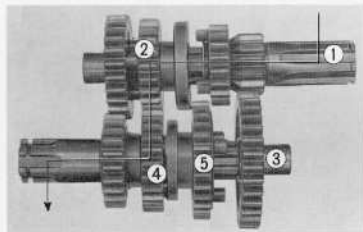


Fig. 3.90 Third gear
 ① Transmission mainshaft
 ② Mainshaft third gear
 ③ Transmission countershaft
 ④ Countershaft third gear
 ⑤ Countershaft second gear

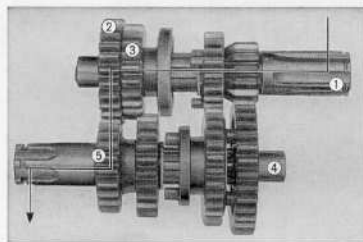


Fig. 3.91 Top gear
 ① Transmission mainshaft
 ② Mainshaft top gear
 ③ Mainshaft third gear
 ④ Transmission countershaft
 ⑤ Top gear

Second: (Fig. 3.89)

The main shaft third gear ③ which is spline slide fitted to the main shaft ① is moved by the shift fork to lock with the second gear ② by means of a dog, thus permitting the transmission of power from the main shaft to the counter shaft ④, by meshing the main shaft second gear ② with the splined counter shaft second gear ⑤ hence to drive the sprocket.

Third: (Fig. 3.90)

The power from the transmission main shaft ① is transmitted to the counter shaft third gear ④ by meshing with the main shaft third gear ②. The counter shaft second gear ⑤ which is spline slide fitted is moved by the shift fork to lock with the free rotating third gear ④ by means of a dog, this causes the counter shaft ③ to rotate and in turn drives the sprocket.

Top: (Fig. 3.91)

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