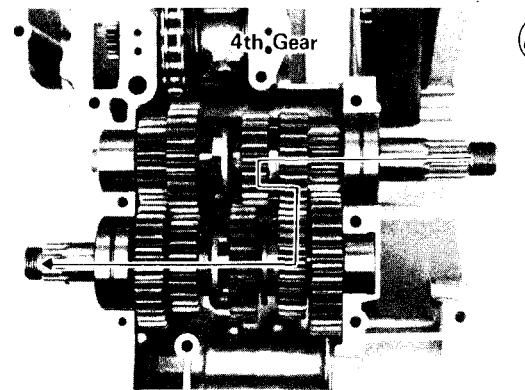
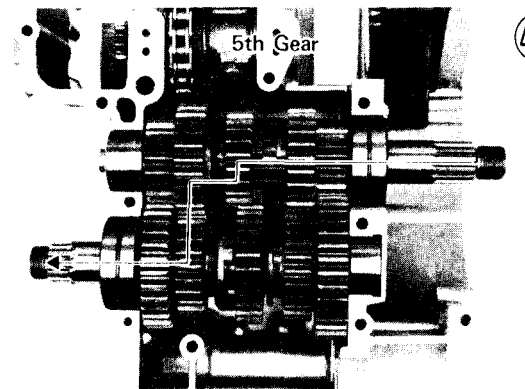


479



480



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When the shift pedal 8 is raised or lowered, the shift shaft (21) turns, a pawl on the external shift mechanism arm 3 catches on one of the shift drum pins 4, and the shift drum 11 turns. At the same time, the overshift limiter 5 on the shift lever 17 catches another pin as shown in Fig. 483. As the shift drum turns, the shift fork guide pins 19 (3), each riding in a groove in the shift drum, change the position of one or another of

the shift forks 13, 23, 24, in accordance with the winding of the grooves. The shift fork ears then determine the position of gears D3,6, 04 26; and/or 05 '25.. Refer to Fig. 476 to 481 for the gear position and drive path for neutral and each of the 5 gears.

A pawl spring 9 is fitted on the external shift mechanism to keep the shift arm and overshift limiter pressed against the shift drum pins to ensure

proper pawl and pin contact. When the shift pedal is released after shifting, the return spring 18 returns the shift lever and shift pedal back to their original positions. So that the transmission will remain where it was shifted, the shift drum positioning pin spring 15; pushes the shift

drum positioning pin 14 into one of six notches on the shift drum operating plate 7. Five of these notches are equally spaced and correspond to the 5 gears. The other notch is halfway between the notches for 1st and 2nd gears, and corresponds to the half-stroke shift pedal movement from 1st or 2nd gear required to shift into neutral.

The return spring pin 10 on the side of the crankcase passes through a cutout on the shift mechanism lever. This pin engages between the two ends of the shift mechanism return spring. Normally, the return spring pin should not make contact with the cutout on the lever, because the overshift limiter is the primary control for shift lever movement.

Overshift Limiter:

Each time that the shift pedal is operated, the overshift limiter interlocks with the shift drum pins to prevent overshifting. On a full upshift or downshift stroke, the limiter "hooks" catch the shift drum pins to keep the inertia of the heavy shift drum from allowing it to rotate