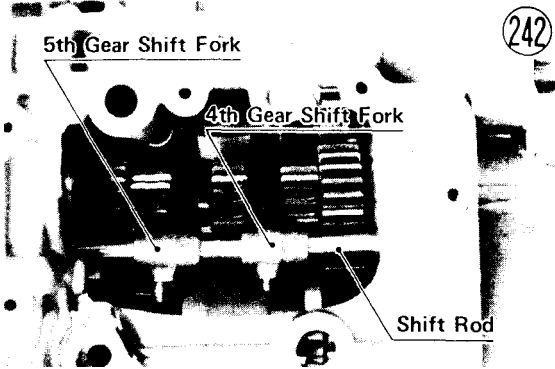
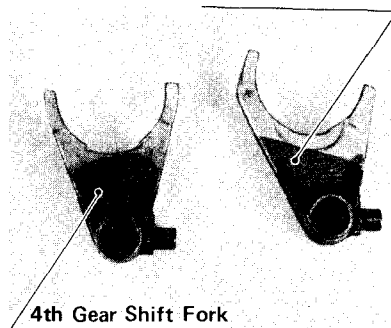


- Apply a little engine oil on the O ring and install the blind cap and washer, and tighten the blind cap stopper bolt.
- Apply a little engine oil to the shift rod and shift fork fingers, insert the shift rod running it through the output shaft 5th gear shift fork, and then through the output shaft 4th gear shift fork, fitting each shift fork guide pin into the shift drum groove.



NOTE: Identification of the shift forks
4th gear shift fork: two fingers have the same length.
5th gear shift fork: one of two fingers is longer than the other and bends about 30° inward.

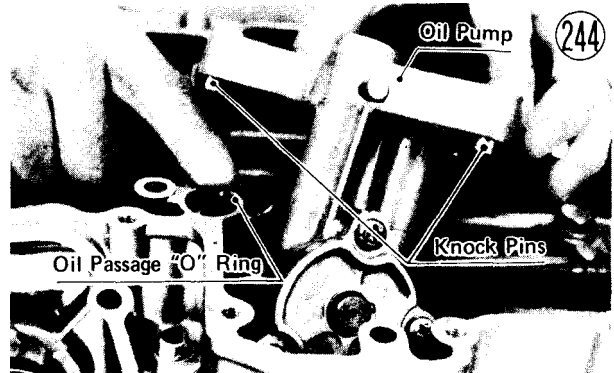
5th Gear Shift Fork



4th Gear Shift Fork

- Check to see that the drive shaft and output shaft turn freely, and, spinning the drive shaft, shift the transmission through all gears to make certain there is no binding and that all gears shift properly.

- Install the shift drum positioning pin, spring, and bolt. Tighten the bolt securely with 3.2 ~ 3.8 kg-m (23~27 ft-lbs) of torque.
- Check to see that the oil pump knock pins (2) and the oil passage O ring are in place. Replace the O ring with a new one, if deteriorated or damaged.



- Install the oil pump, making sure the oil pump gear and pump drive gear at the end of the balancer shaft mesh properly. Apply non-permanent locking agent to the engine oil pump bolts (3), and tighten them with 0.9 ~ 1.1 kg-m (78 ~ 95 in-lbs) of torque.
- Install a new oil pan gasket, and the oil pan with its mounting bolts (17). Tighten the bolts with 0.9 ~ 1.1 kg-m (78~95 in-lbs) of torque.
- Install the upper crankcase bolts (3, or 2 if the engine is set on the Kawasaki engine disassembly apparatus), and tighten them with 0.9 ~ 1.1 kg-m (78~95 in-lbs).
- Remove the timing advancer.
- Put on the thrust washer, clutch hub, and flat washer. Replace the clutch hub nut with a new one, screw on the nut and tighten it with 12~15 kg-m (87 ~ 108 ft-lbs) of torque, while holding the hub stationary with the clutch holder (special tool).
- NOTE:** The washer between the clutch hub and the clutch hub nut must be installed with the marked side, "OUT SIDE", facing out. See "WARNING" in Pg. 53.
- Install the friction plates (8) and steel plates (7), starting with a friction plate and alternating them.
- Insert the clutch push rod, steel ball, and spring plate pusher, applying a thin coat of a high temperature grease to their surfaces (Fig. 176).
- Install the spring plate, springs washers, and spring bolts (5ea). Cross tighten the bolts evenly with 0.9 ~ 1.1 kg-m (78~95 in-lbs) of torque by hand (Fig. 177).
- NOTE:** The spring plate can be installed on the clutch hub in any position, so there is no mark on either the spring plate or the clutch hub.
- Check that the wire band in the engine cover crankshaft oil seal has not slipped out of its proper position and apply a high temperature grease to the oil seal lip (Fig. 178). If the oil seal is damaged, replace it with a new one.
- Check that the two knock pins are in place, and using a new right engine cover gasket, fit the right engine cover onto the crankcase. Tighten the screws (12) firmly. Be sure to include the contact breaker lead clamps with their right engine cover screws.