

## DISASSEMBLY 69

- Fit the timing advancer onto the crankshaft matching its notch with the pin in the end of the crankshaft (Fig. 168), and install the crankshaft rotation nut and the advancer mounting bolt. The notches in the nut fit the projections on the timing advancer. Tighten the bolt with 2.3-2.7 kg-m (16.5 ~ 19.5 ft-lbs) of torque.

- Mount the contact breaker plate, and tighten its screws (3) loosely. Each screw has a lock washer and flat washer.

**NOTE:** These screws will be tightened securely during ignition timing adjustment.

- Turn the kick shaft clockwise until it stops, and insert one end of the spring into the crankcase hole.

- Using needle nose pliers, insert the other end into the kick shaft, and while holding the spring in place, insert the kick spring guide.

- Check to see that knock pins (2) are in place, and using a new kick shaft cover gasket, fit the cover onto the crankcase. Use the kick shaft oil seal guide (special tool) to protect the kick shaft oil seal (Fig. 200). Tighten the cover screws (4).

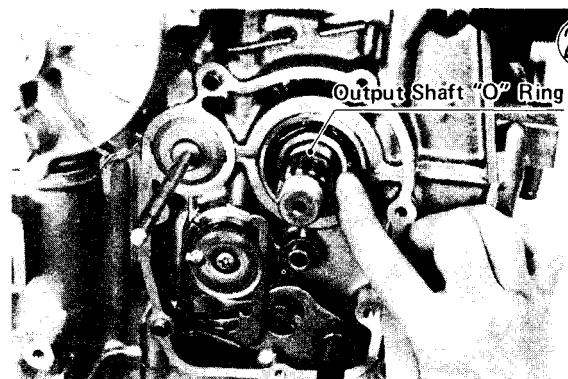
- Install the kick pedal in the position marked during disassembly, and then tighten the bolt.

- Check that the external shift mechanism return spring pin is not loose. If it is loose, remove it, apply non-permanent locking agent to the threads, re-install it, and tighten the locknut.

**NOTE:** The return spring pin must be screwed in until it protrudes approximately 20 mm from the crankcase, so that it can work satisfactorily as an external shift mechanism lever stopper.

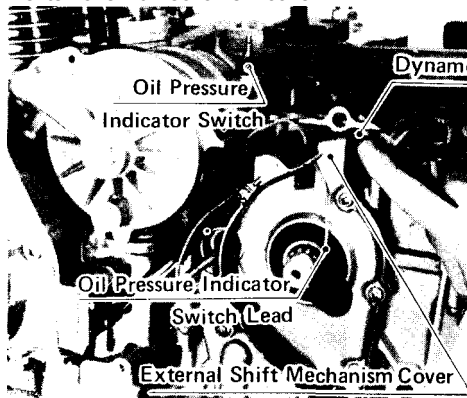
- Check that the external shift mechanism cover knock pins (2) are in place.

- Replace the output shaft O ring with a new one if it is damaged, and install it next to the ball bearing inner race.



- Check that the return spring is properly fitted on the shaft (Fig. 195), mount the external shift mechanism, and place its arms on the shift drum pins.
- Apply a high temperature grease to the lips of the clutch push rod oil seal and the output shaft collar oil seal.
- Insert the shift shaft oil seal guide (special tool) in external shift mechanism cover oil seal (Fig. 196), and install the cover, and then tighten the screws (7).
- Install the output shaft collar.
- Install the engine sprocket chain guard.

- Clean the starter motor lugs and crankcase where the starter motor is grounded.
- Apply a little oil to the O ring and install the starter motor. Apply a non-permanent locking agent to the starter motor retaining bolts (2), and tighten the bolts.
- Install the starter motor sprockets and chain. The protruding side of the starter motor sprocket faces in (Fig. 154).
- Check to see that the thrust washer is at the rear of the dynamo rotor, using a high flash-point solvent clean off any oil or dirt that may be on the crankshaft taper or rotor hub, and install the dynamo rotor and starter motor clutch assembly.
- Tighten the bolt to 7.0 ~ 8.0 kg-m (51 -58 ft-lbs) of torque while holding the dynamo rotor steady with the dynamo rotor holder (special tool).
- Using a new gasket and applying a liquid gasket to the wiring grommets, install the dynamo cover, gasket, and then tighten the screws (8).
- Fit the dynamo wiring between the crankcase and external shift mechanism cover.



- Install the engine (Pg. 28 ).
- NOTE:** Before installing the engine, tighten the remaining upper crankcase bolt if not already tightened. Tightening torque of the bolt is 0.9 ~ 1.1 kg-m (78 ~ 95 in-lbs).
- Fill the engine with oil, check the oil level (Pg. 196), and add more if necessary.
- Carry out the adjustment procedures listed at the end of the engine installation section (Pg. 30 ).

- Connect the oil pressure indicator switch lead (gray) to the switch.
- Connect the neutral indicator light switch lead (red) to the switch.

