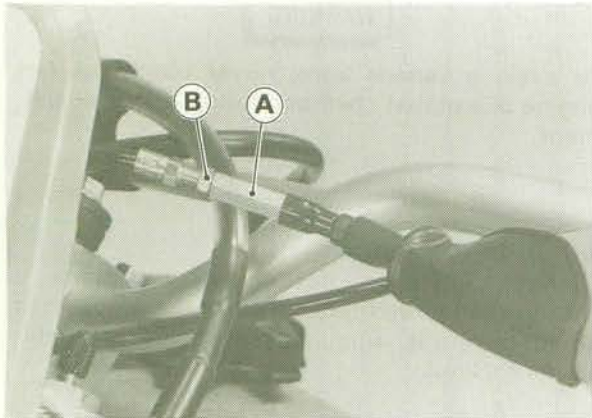


## 5-8 ENGINE RIGHT SIDE

- Slide back the clutch lever dust cover.
- ★ If the adjuster at the clutch lever has reached its limit, adjust the cable with the adjusting nut at the upper end of the clutch cable.
- Loosen the knurled locknut at the clutch lever.
- Turn the adjuster in all the way, then tighten the knurled locknut.
- Loosen the locknut at the upper end of the cable, and turn the adjusting nut so that clutch lever has 10 – 20 mm of play.

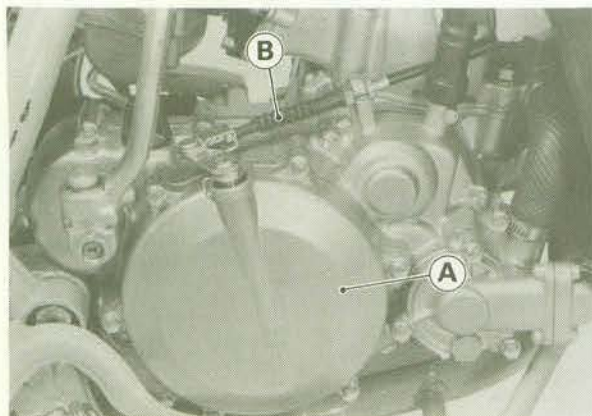


A. Adjusting Nut      B. Locknut

- Tighten the locknut.
- Slide the dust cover back into place.
- After the adjustment is made, start the engine and check that the clutch does not slip and that it releases properly.

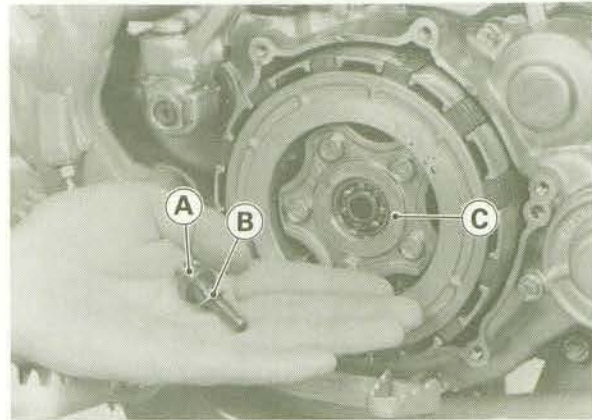
### Clutch Removal/Disassembly

- Remove the clutch cable.
- Remove the clutch cover.



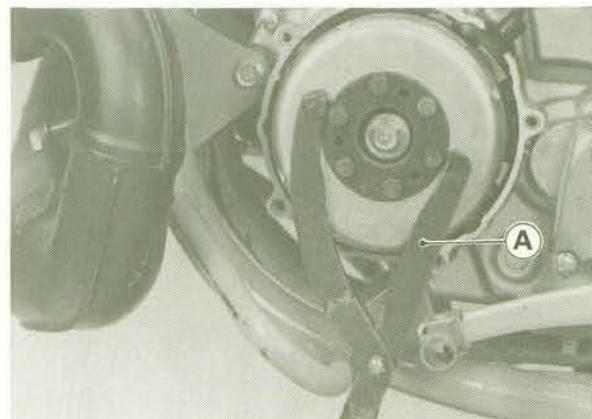
A. Clutch Cover      B. Clutch Cable

- Remove the flat washer (if provided), clutch and spring plate pushers in the clutch hub.

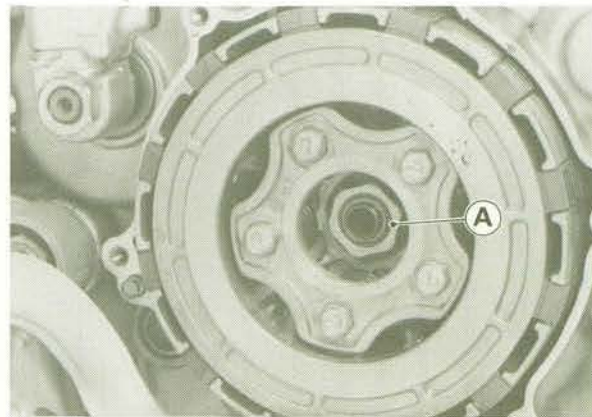


A. Clutch Pusher      C. Spring Plate Pusher  
B. Flat Washer (If provided)

- Remove the magneto cover.
- Use the Flywheel holder (special tool) to prevent the clutch from rotating, remove the clutch hub nut.



A. Flywheel Holder :57001-306



A. Clutch Hub Nut

- Remove the clutch assembly, sleeve and thrust washer.



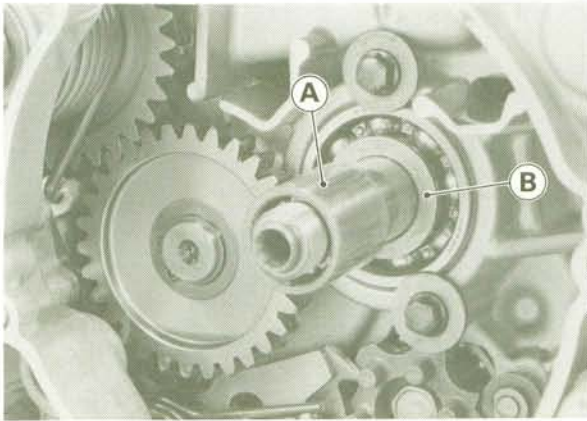
## ENGINE RIGHT SIDE 5-9

### Clutch Installation Notes

- Installation is the reverse of removal.
- Apply molybdenum disulfide grease to the outside of the sleeve.
- Apply transmission oil to the the clutch housing gear and kick starter driven gear.
- Install the friction plates and clutch plates, starting with a friction plate and alternating them. Finishing with a friction plate.

### CAUTION

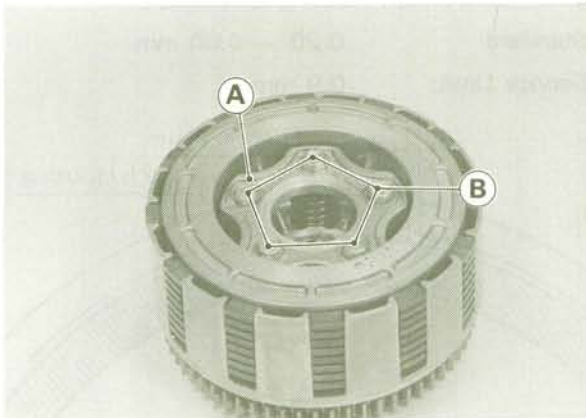
- If dry clutch plates and friction plates are installed, apply transmission oil to the surfaces of each plate to avoid clutch plate seizure.



A. Sleeve

B. Thrust Washer

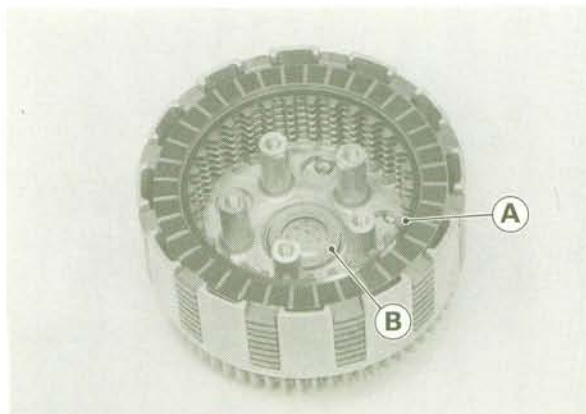
- Unbolt the spring plate, and remove the spring and clutch hub.



A. Spring Plate

B. Bolts

- Take out the jada spring, friction plates, clutch plates, and thrust washer from the clutch housing.



A. Jada Spring

B. Thrust Washer

- Tighten the clutch spring bolts to the specified torque.

### Tightening torque:

**9.3 N-m (0.95kg-m, 82 in-lb)**

- Tighten the clutch hub nut to the specified torque.

### Tightening Torque:

**78 N-m (8.0 kg-m, 58 ft-lb)**

- Apply molybdenum disulfide grease to the clutch spring plate pusher.

### Friction and Clutch Plate Wear, Damage Inspection

- Visually inspect the friction and clutch plates to see if they show any signs of seizure, or uneven wear.
- ★ If any plates show signs of damage, replace the friction plates and clutch plates as a set.
- Measure the thickness of the friction and clutch plates with vernier calipers.
- ★ If they have worn past the service limit, replace them with new ones.

### Friction Plate Thickness

**Standard: 2.92 – 3.08 mm**

**Service Limit: 2.7 mm**

### Clutch Plate Thickness

**Standard: 1.46 – 1.74 mm**

**Service Limit: 1.30 mm**

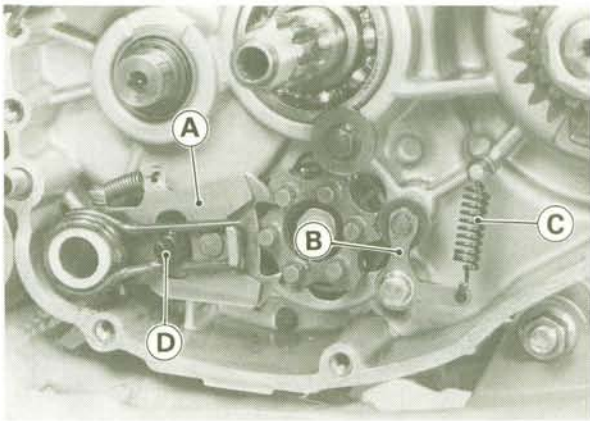




**External Shift Mechanism**

**External Shift Mechanism Removal**

- Remove the following parts.
  - Shift Pedal
  - Magneto Cover
  - Right Engine Cover
  - Clutch Housing
  - Idle gear
- Pull out the shift shaft with the shift mechanism arm and arm spring, and remove the return spring.

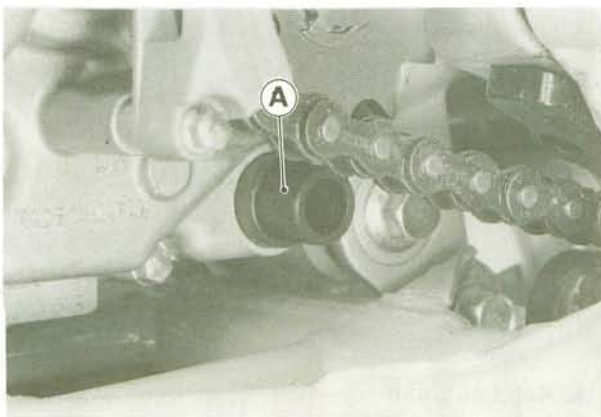


- A. External Shift Mechanism
- B. Neutral Set Lever
- C. Return Spring
- D. Return Spring Pin

- Remove the bolt, and take off the neutral set lever.

**External Shift Mechanism Installation Notes**

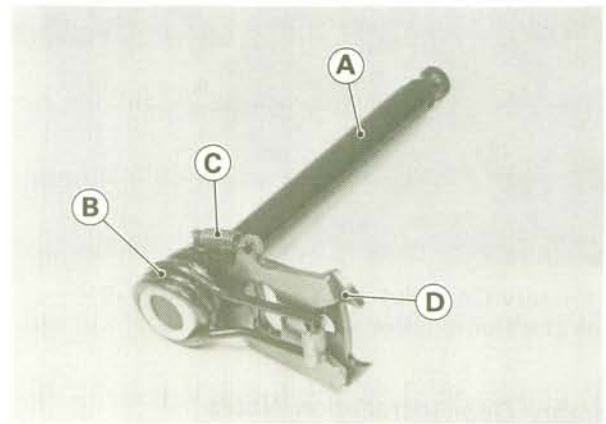
- Installation is the reverse of removal.
- Insert the shift shaft into the crankcase using the shift shaft oil seal guide (special tool) on the oil seal in the left crankcase half to protect the seal.
- Before installing the shift shaft, apply high temperature grease to the oil seal lips.



A. Shift Shaft Oil Seal Guide: 57001-264

**External Shift Mechanism Inspection**

- Examine the shift shaft for any damage.
  - Check the shift shaft for bending or damage to the splines.
  - ☆ If the shaft is bent, straighten or replace it. If the splines are damaged, replace the external shift mechanism.
  - Check the return spring and arm spring for cracks or distortion.
  - ☆ If the springs are damaged in any way, replace them.
  - Check the shift mechanism arm for distortion.
  - ☆ If the shift mechanism arm is damaged in any way, replace the external shift mechanism.



- A. Shift Shaft
- B. Return Spring
- C. Arm Spring
- D. Shift Mechanism Arm

- Check that the return spring pin is not loose.
- ★ If it is loose, unscrew it, apply a non-permanent locking agent to the threads, and tighten it to the specified torque.

**Tightening Torque:**

**20 N-m (2.0 kg-m, 14.5 ft-lb)**

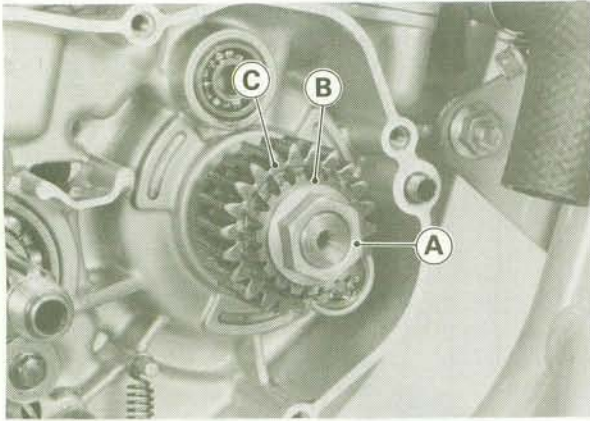
- Check the neutral set lever and its spring for cracks or distortion.
- ★ If the lever or spring is damaged in any way, replace them.

## 5-12 ENGINE RIGHT SIDE

### Primary Gear

#### Primary Gear Removal

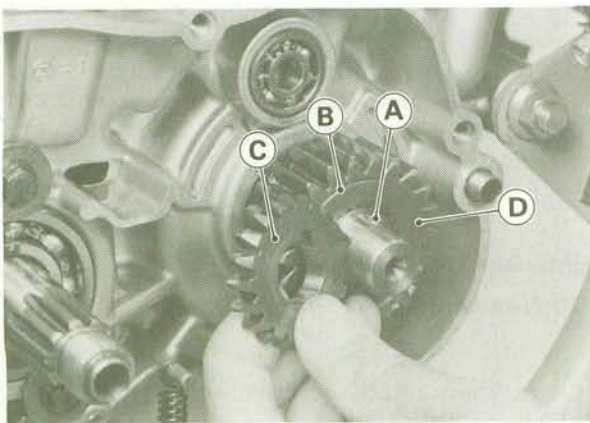
- Remove the right engine cover (see Right Engine Cover Removal).
- Remove the clutch (see Clutch Removal).
- Remove the primary gear nut, water pump drive gear, pin, and primary gear.



A. Primary Gear Nut  
B. Water Pump Drive Gear  
C. Primary Gear

#### Primary Gear Installation Notes

- Installation is the reverse of removal.
- Install the primary gear on the crankshaft with groove side facing out.
- Install the pin into the crankshaft hole.
- Install the water pump drive gear so that chamfered side faces outward.



A. Pin  
B. Groove  
C. Water Pump Drive Gear  
D. Primary Gear

- Tighten the primary gear nut to the specified torque.

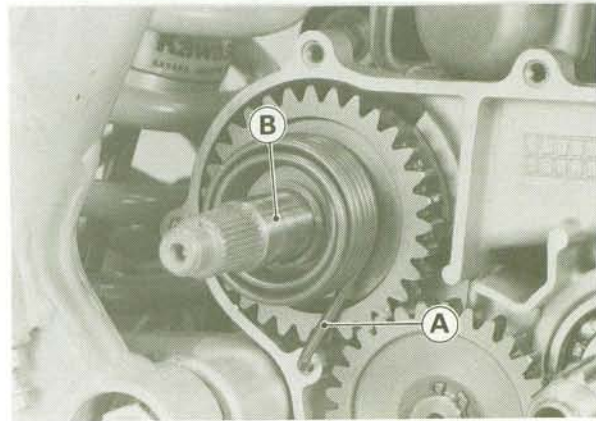
#### Tightening Torque:

**78 N-m (8.0 kg-m, 58 ft-lb)**

### Kickstarter

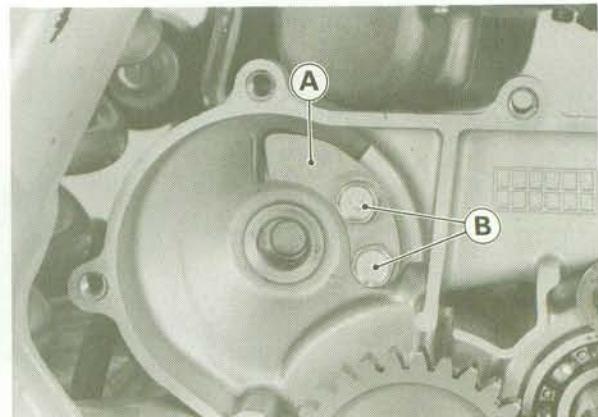
#### Kick Shaft Assembly Removal

- Remove the following parts.
  - Right Engine Cover
  - Clutch Housing
- Pull the end of the kick spring out of the hole in the crankcase.



A. Kick Spring  
B. Kickstarter Assembly

- Remove the kickstarter assembly.
- Remove the ratchet guide, stopper and bolts.



A. Ratchet Guide  
B. Bolts