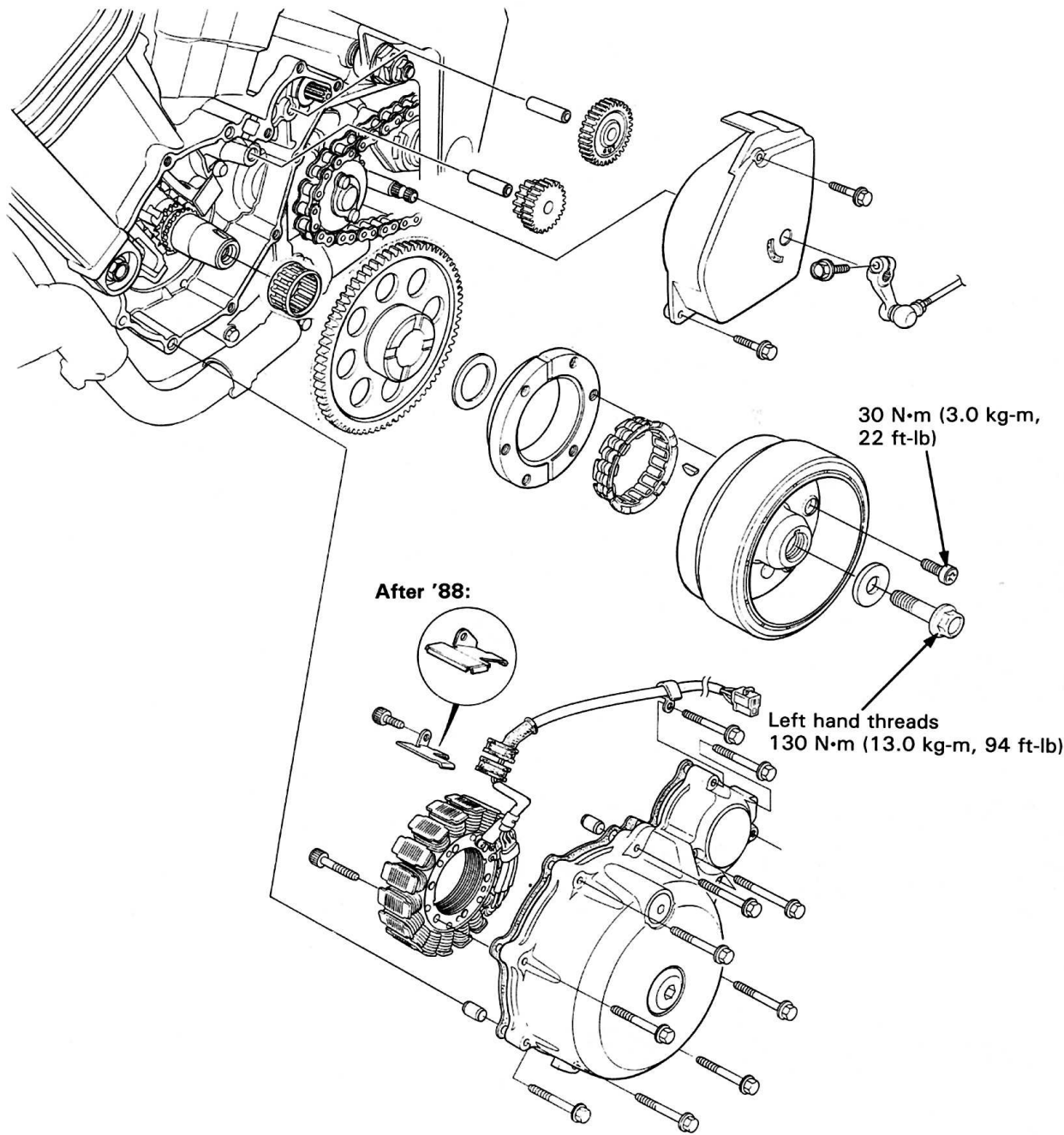


ALTERNATOR/STARTER CLUTCH

'88 Shown:



8. ALTERNATOR/STARTER CLUTCH

SERVICE INFORMATION	8-1	FLYWHEEL INSTALLATION	8-5
LEFT CRANKCASE COVER REMOVAL	8-2	LEFT CRANKCASE COVER INSTALLATION	8-6
FLYWHEEL REMOVAL	8-3		
STARTER CLUTCH	8-4		

SERVICE INFORMATION

GENERAL

- This section covers the removal and installation of the alternator, starter clutch and starter gears.
- Refer to section 15 for troubleshooting and inspection of the alternator.

SPECIFICATIONS

mm (in)		
ITEM	STANDARD	SERVICE LIMIT
Starter driven gear O.D.	57.749—57.768 (2.2736—2.2743)	57.60 (2.268)

8

TORQUE VALUES

Flywheel bolt	130 N•m (13.0 kg-m, 94 ft-lb) Left-hand thread
Starter clutch torx bolts	30 N•m (3.0 kg-m, 22 ft-lb) Apply locking agent to the threads

TOOLS

Common

Rotor puller	07733—0020001 or 07933—3290001
Flywheel holder	07725—0040000
Torx bit	07703—0010100

}Equivalent commercially available in U.S.A.

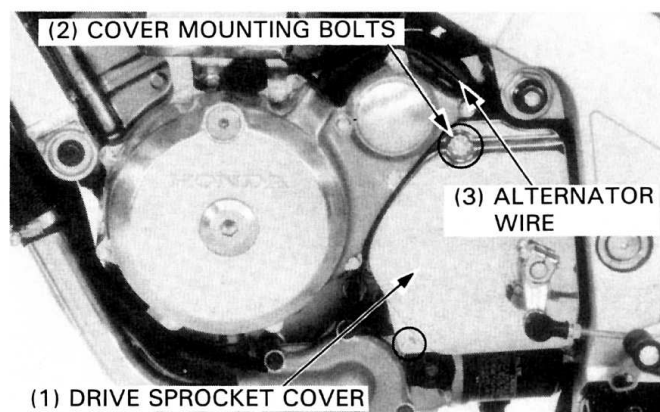
ALTERNATOR/STARTER CLUTCH

LEFT CRANKCASE COVER REMOVAL

Disconnect the alternator wire 3P connector (WHITE).

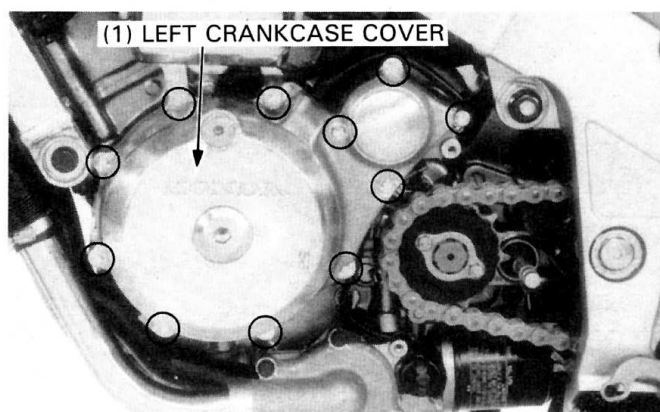
Remove the gearshift arm pinch bolt and shiftarm from the spindle.

Remove the drive sprocket cover.

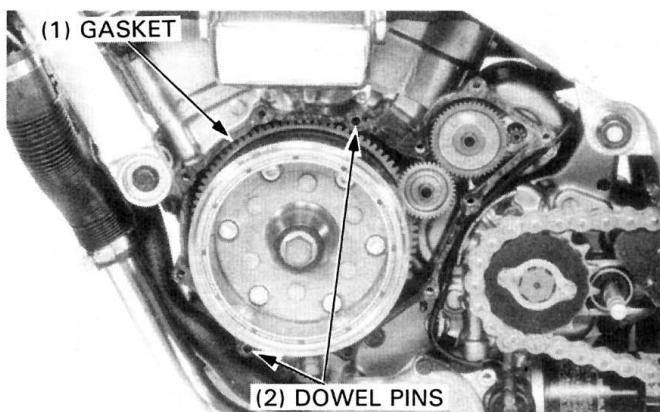


Place a container under the left crankcase cover to catch the engine oil.

Remove the eleven left crankcase cover bolts and the cover.



Remove the dowel pins and gasket.

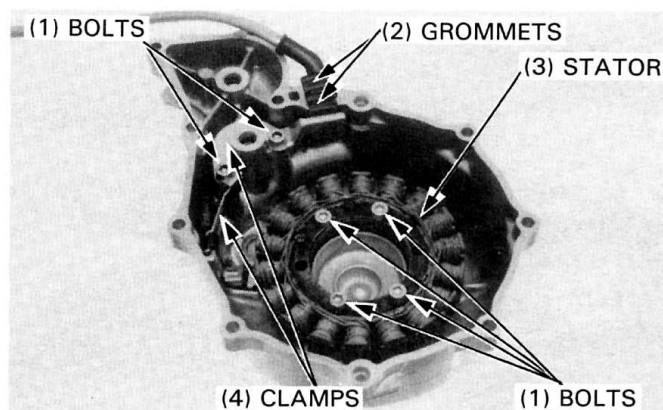


STATOR REPLACEMENT

Remove the wire clamp bolts and the clamps.
Remove the stator mounting bolts and stator.

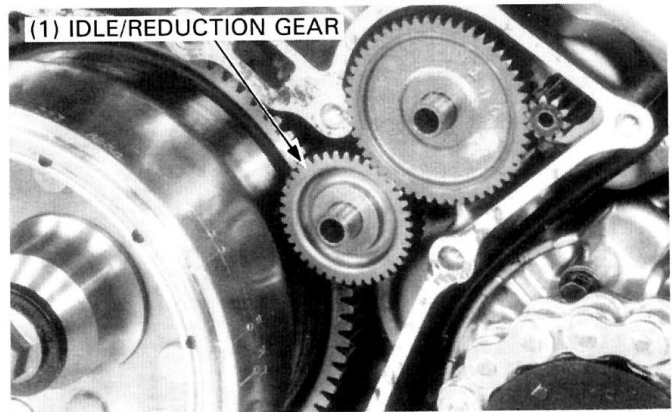
Position the new stator and the grommets in the cover.
Apply a locking agent to the threads of the stator mounting bolts.

Tighten the stator mounting bolts and the clamp bolts.



FLYWHEEL REMOVAL

Remove the starter idle/reduction gear by removing the shaft.

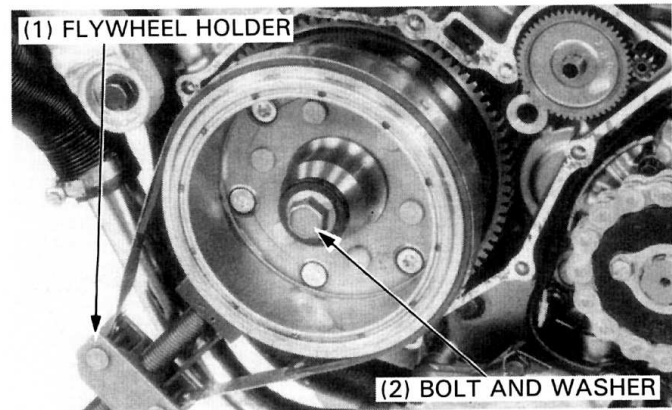


Hold the flywheel with the flywheel holder and remove the flywheel bolt and washer.

TOOL:
 Flywheel holder 07725—0040000 Equivalent
 commercially available in U.S.A.

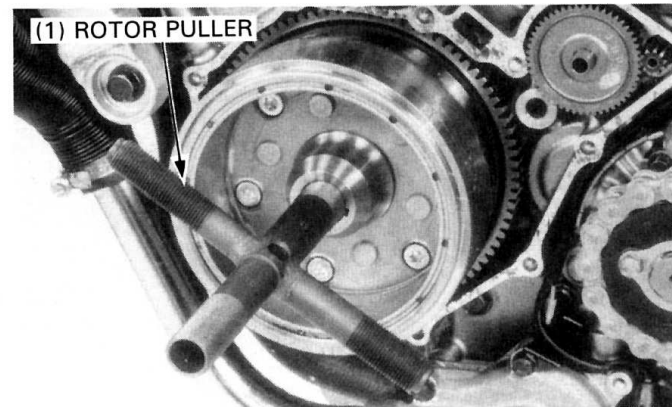
NOTE

- The flywheel bolt has left-hand threads.



Remove the flywheel with the rotor puller.

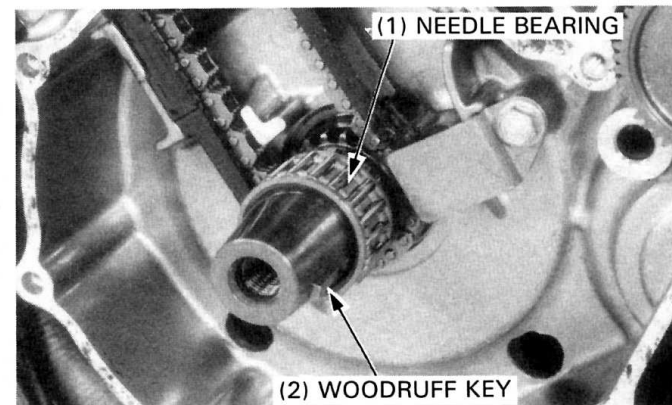
TOOL:
 Rotor puller 07733—0020001 or
 07933—3290001



Remove the needle bearing from the crankshaft, then remove the woodruff key.

NOTE

- Do not lose the woodruff key.



STARTER CLUTCH

DISASSEMBLY

Reinstall the starter driven gear into the flywheel.

Inspect the starter clutch by turning the starter driven gear. The gear should turn counterclockwise freely and should not turn clockwise: if it turns incorrectly, replace the starter clutch.

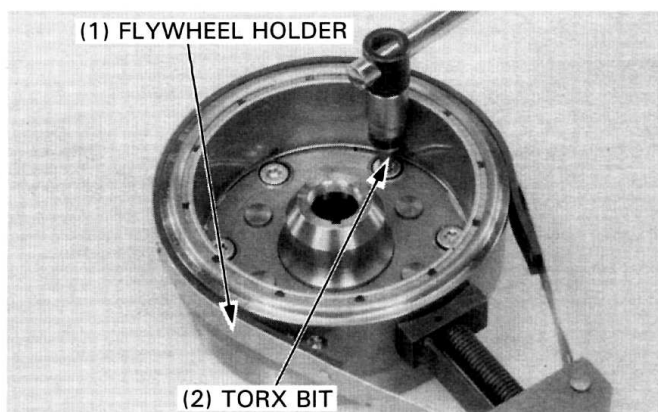
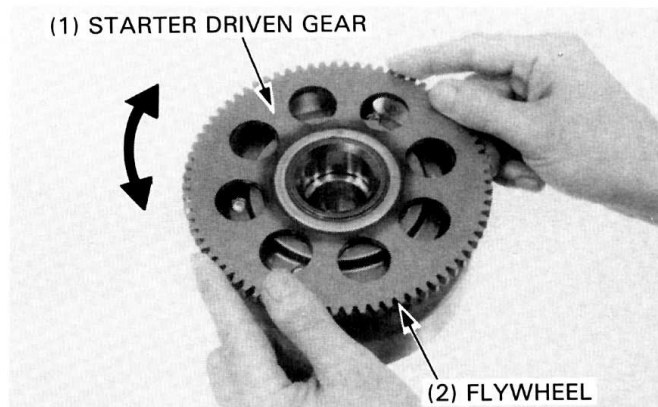
Hold the flywheel with the flywheel holder and remove the torx bolts using a torx bit.

Remove the starter clutch outer and oneway clutch.

TOOLS:

Flywheel holder
Torx bit

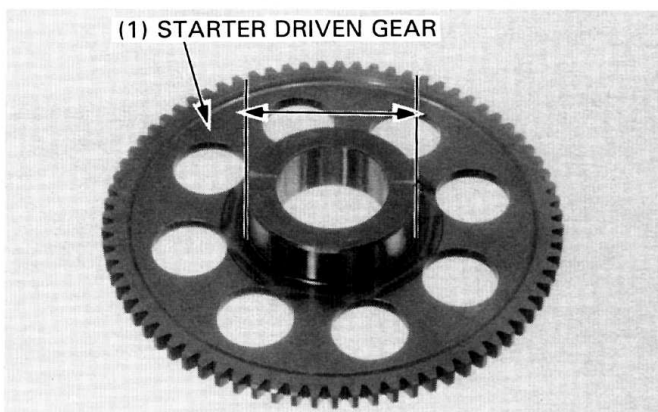
07725-0040000
07703-0010100 } Equivalent
commercially
available in
U.S.A.



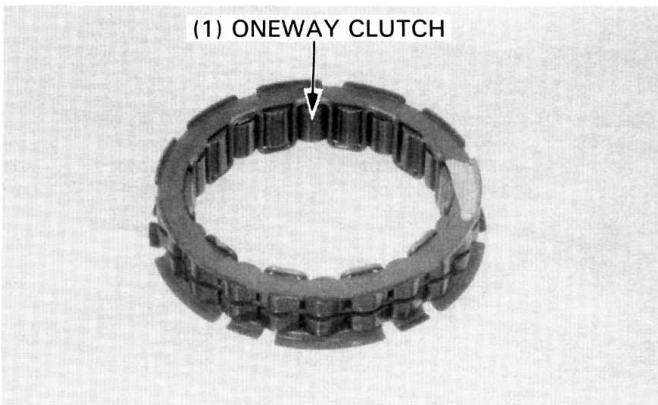
INSPECTION

Measure the O.D. of the starter driven gear.

SERVICE LIMIT: 57.60 mm (2.268 in)

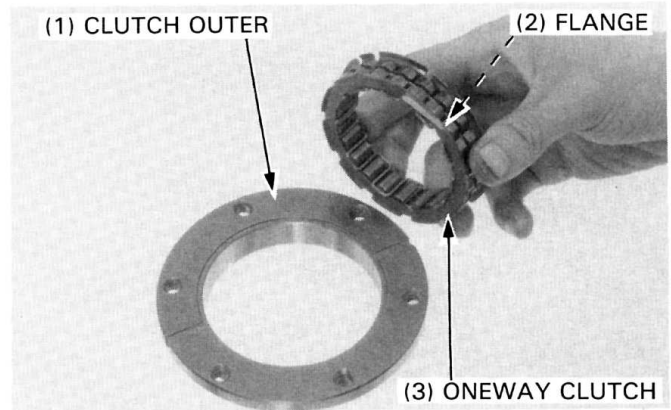


Inspect the oneway clutch for wear or damage and replace if necessary.



ASSEMBLY

Install the oneway clutch into the clutch outer with the flange side facing inside.



Hold the flywheel with the flywheel holder. Apply locking agent to the torx bolt threads and tighten the bolts.

TORQUE: 30 N·m (3.0 kg-m, 22 ft-lb)

TOOLS:

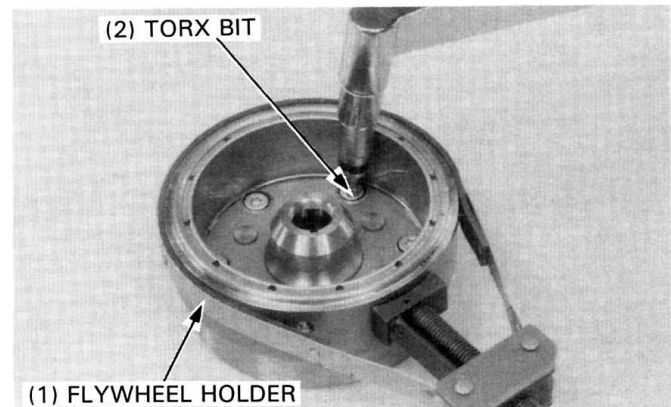
Flywheel holder

07725-0040000

Torx bit

07703-0010100

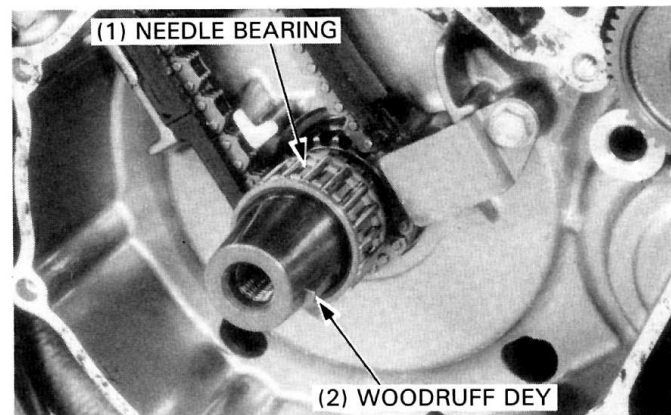
Equivalent
commercially
available
in U.S.A.



FLYWHEEL INSTALLATION

Clean the crankshaft and install the woodruff key.

Install the needle bearing onto the crankshaft.



Install the driven gear and flywheel, aligning the woodruff key on the crankshaft with the flywheel keyway.

Hold the flywheel with the flywheel holder, install the washer and flywheel bolt and tighten the bolt.

TORQUE: 130 N·m (13.0 kg-m, 94 ft-lb)

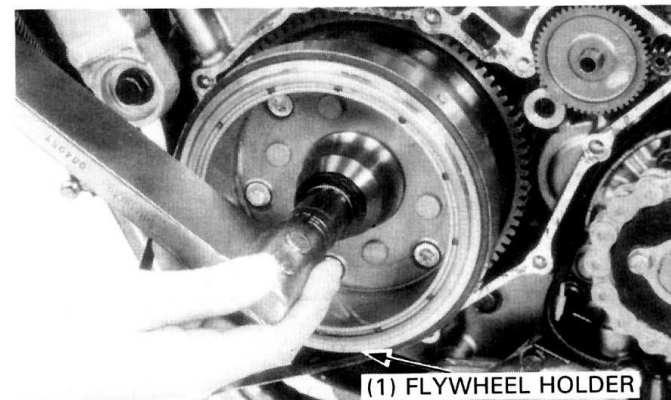
TOOL:

Flywheel holder

07725-0040000 Equivalent
commercially available in U.S.A.

NOTE

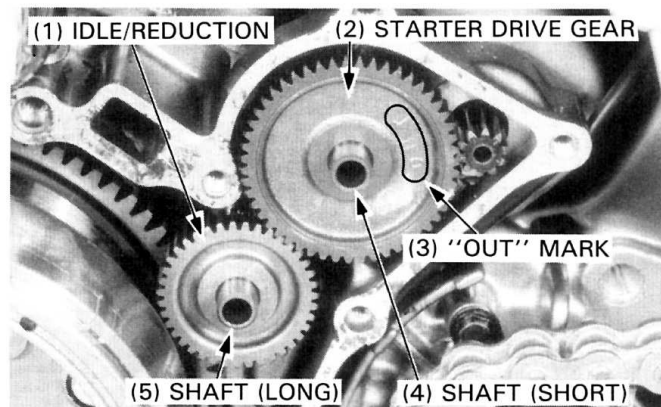
- The flywheel bolt has left hand threads.



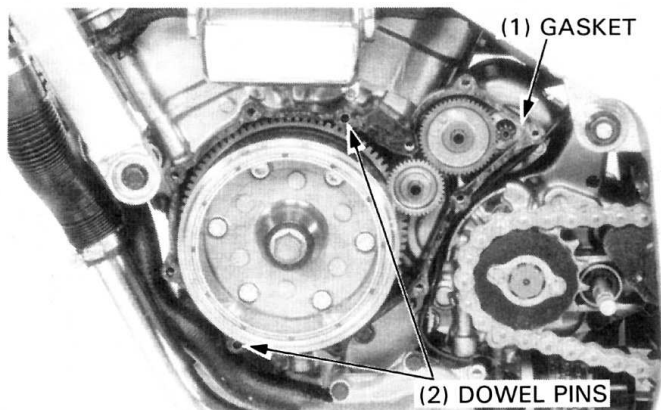
ALTERNATOR/STARTER CLUTCH

Install the starter idle/reduction gear with the longer shaft.

Install the starter drive gear with the "OUT" mark facing out and the shorter shaft, if the gear is removed.



Install the dowel pins and new gasket.

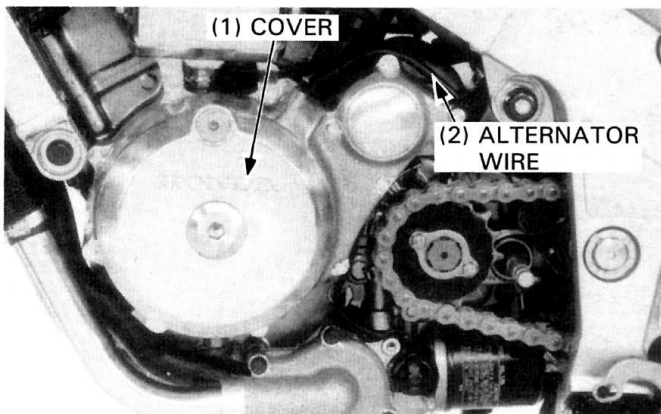


LEFT CRANKCASE COVER INSTALLATION

Install the left crankcase cover and tighten the cover bolts with the neutral and oil pressure switch wire harness clamps as shown.

Route the alternator wire and connect the alternator 3P connector.

Install the drive sprocket cover.



Install the gearshift arm onto the spindle by aligning the punch mark on the arm with the punch mark on the spindle.

Tighten the gearshift arm pinch bolt.

TORQUE: 12 N·m (1.2 kg-m, 9 ft-lb)

Install the drive sprocket cover.

Check the engine oil level and add the oil if necessary.

