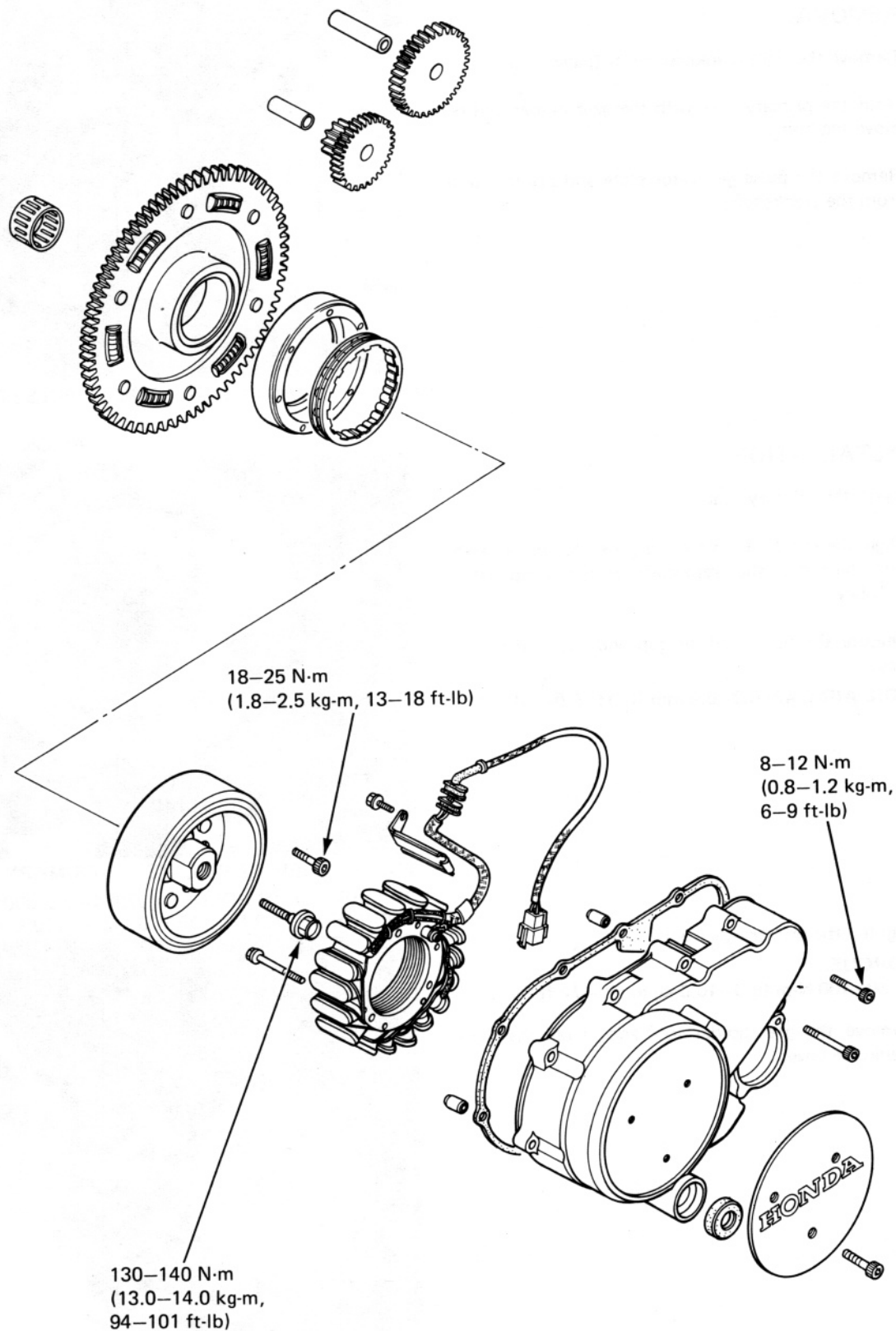


ALTERNATOR/STARTER CLUTCH



8. ALTERNATOR / STARTER CLUTCH

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SERVICE INFORMATION

8

GENERAL

- This section covers removal and installation of the alternator and starter clutch.
- Refer to section 18 for troubleshooting and inspection of the alternator.

SPECIFICATIONS

	STANDARD	SERVICE LIMIT
Starter driven gear O.D.	57.710–57.840 mm (2.2720–2.2772 in)	57.60 mm (2.268 in)
Starter clutch outer I.D.	74.414–74.440 mm (2.9297–2.9307 in)	74.50 mm (2.933 in)

TORQUE VALUE

Alternator rotor/Flywheel bolt	130–140 N·m (13.0–14.0 kg·m, 94–101 ft·lb)
Starter clutch Torx bolts	18–25 N·m (1.8–2.5 kg·m, 13–18 ft·lb)
Alternator cover bolts	8–12 N·m (0.8–1.2 kg·m, 6–9 ft·lb)

TOOLS

Special

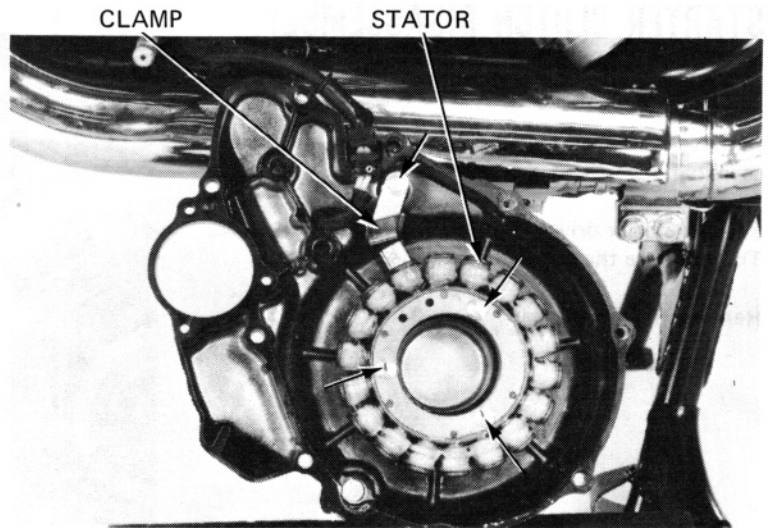
- Torx bit — Commercially available in U.S.A.
Flywheel holder 07925–ME90000 — or band strap wrench (commercially available in U.S.A.)

Common

- Rotor puller 07733–0020001 or 07933–3250000

Remove the bolt attaching the alternator wire clamp and clamp.

Remove the stator mounting bolts and stator from the alternator cover.



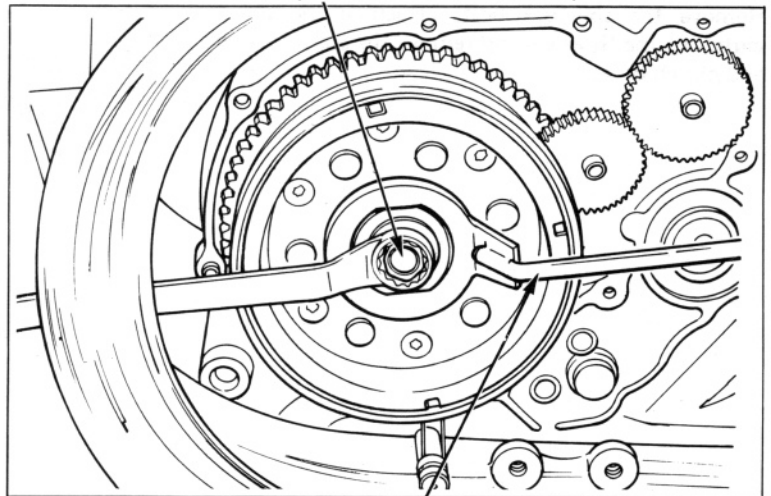
FLYWHEEL REMOVAL

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

NOTE:

The flywheel bolt has left-hand threads.

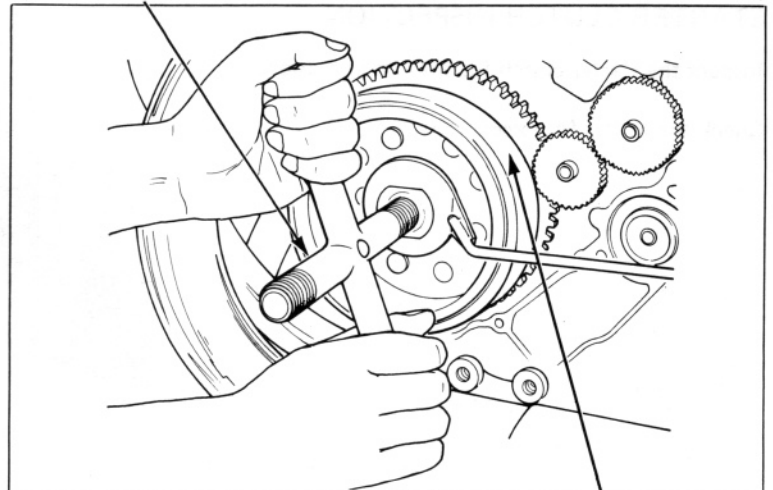
FLYWHEEL BOLT (LEFT-HAND THREADS)



ROTOR PULLER
07733-0020001 OR
07933-3950000

FLYWHEEL HOLDER 07923-ME900000R
BAND STRAP WRENCH
(COMMERCIALLY AVAILABLE IN U.S.A.)

Remove the flywheel with the rotor puller.



FLYWHEEL

ALTERNATOR/STARTER CLUTCH

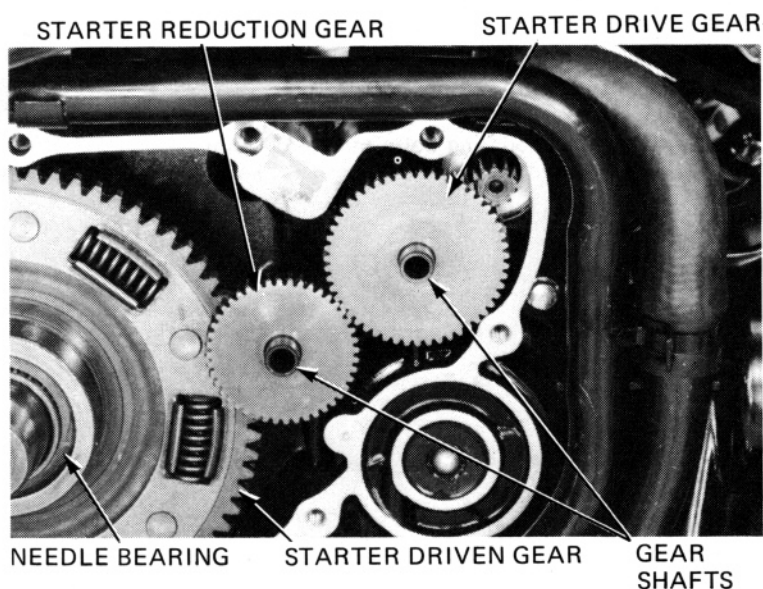
STARTER CLUTCH DISASSEMBLY

Remove the flywheel (page 8-3).

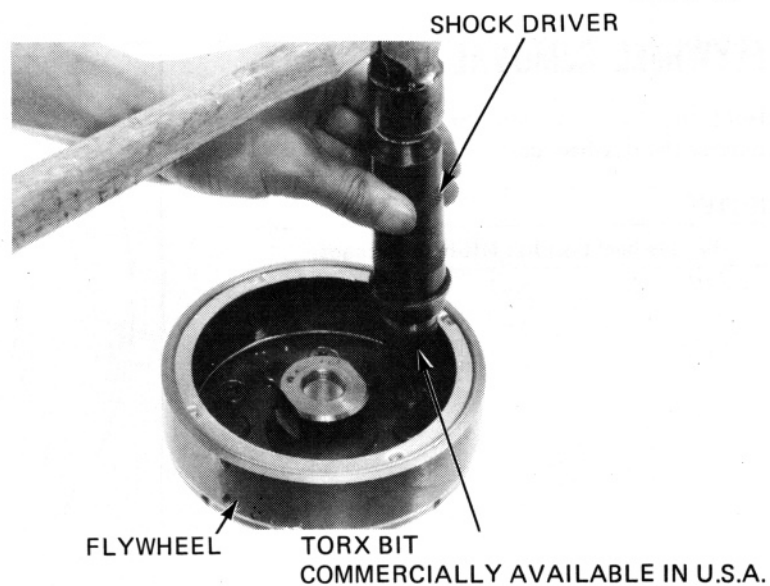
Remove the starter drive and reduction gears, and gear shafts.

Pull the starter driven gear toward you until it stops. Then remove the needle bearing from the gear.

Remove the driven gear.



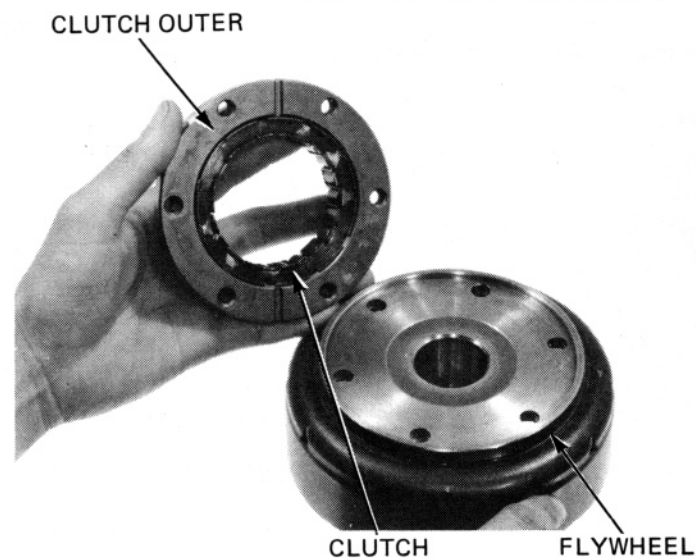
Remove the six torx bolts attaching the starter clutch to the flywheel and remove the starter clutch and clutch outer.



STARTER CLUTCH INSPECTION

Inspect the starter clutch for smooth operation.

Check the rollers for excessive wear.



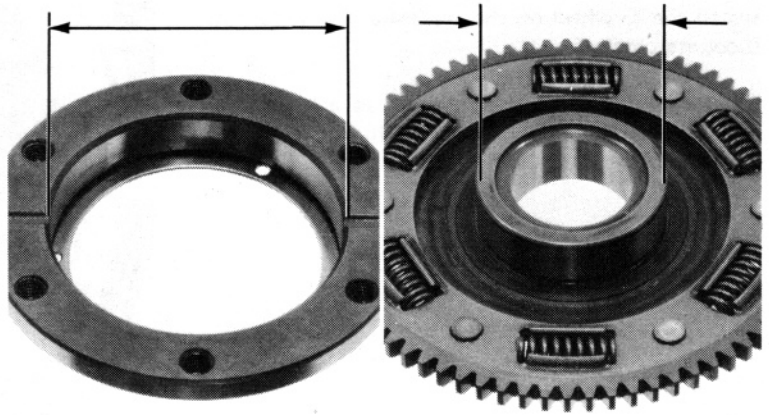
Inspect the driven gear for damage or excessive wear.

Measure the starter clutch outer I.D.

SERVICE LIMIT: 74.50 mm (2.933 in)

Measure the driven gear O.D.

SERVICE LIMIT: 57.60 mm (2.268 in)

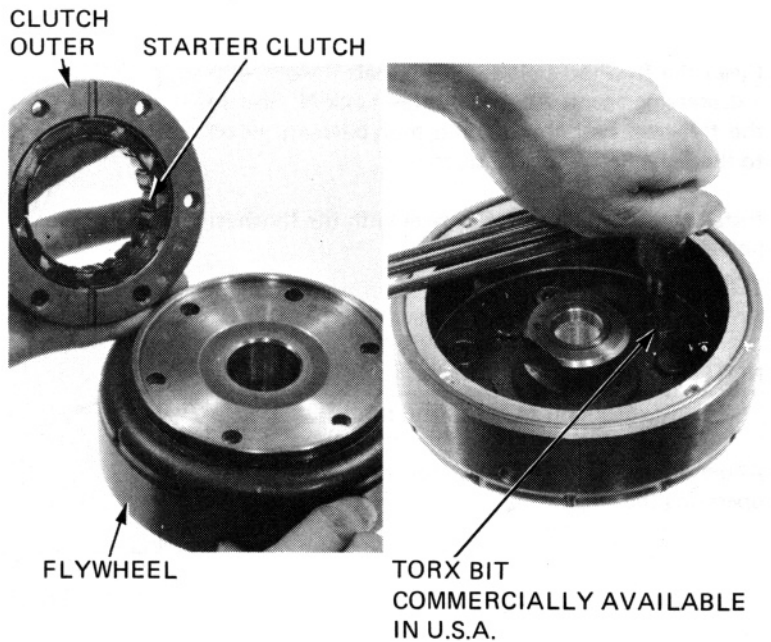


STARTER CLUTCH ASSEMBLY

Install the starter clutch and clutch outer onto the flywheel.

Apply Loctite® Lock N'Seal to the threads of the six torx bolts and tighten the bolts with a torx bit.

TORQUE: 18–25 N·m (1.8–2.5 kg·m, 13–18 ft·lb)

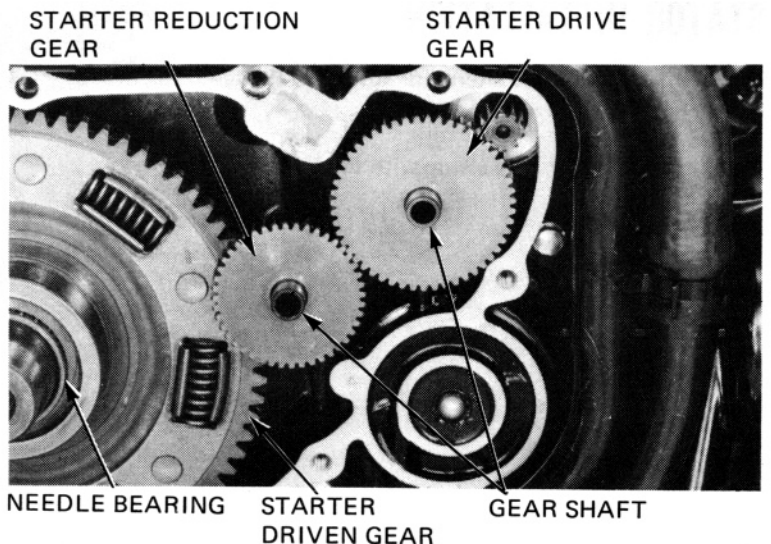


Install the starter driven gear and needle bearing over the crankshaft.

Install the starter reduction gear, drive gear and shafts.

NOTE:

The starter drive gear and reduction gear must be replaced as a set; if either the starter drive gear or reduction gear needs replacement, replace the other gear also.

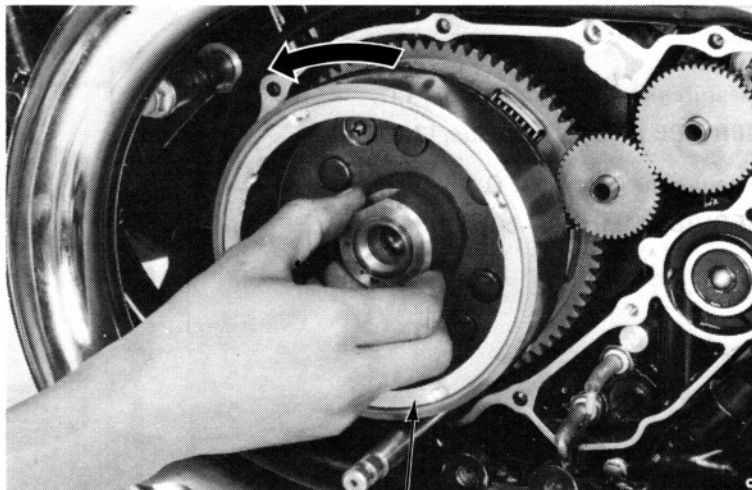


ALTERNATOR/STARTER CLUTCH

FLYWHEEL INSTALLATION

Install the flywheel on the crankshaft while turning it counterclockwise.

Clean the outside of the flywheel so a band strap wrench will not slip when the flywheel bolt is tightened.



FLYWHEEL

Clean the flywheel bolt and crankshaft threads with a degreasing agent. Apply Loctite® Lock N' Seal to the flywheel bolt threads and molybdenum grease to the bolts flange seating surface.

Install the bolt hold the flywheel with the flywheel holder and torque the bolt.

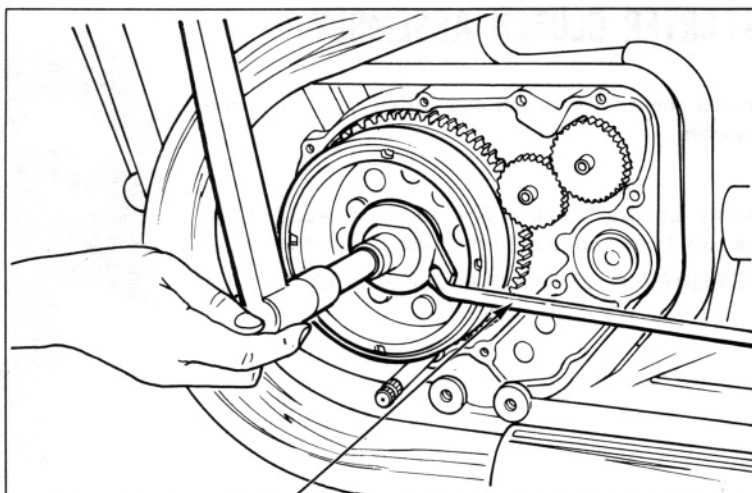
TORQUE:

130–140 N·m (13.0–14.0 kg·m, 94–101 ft·lb)

NOTE:

The flywheel bolt has left-hand threads.

Allow the Loctite® to dry for one hour before operating the engine.



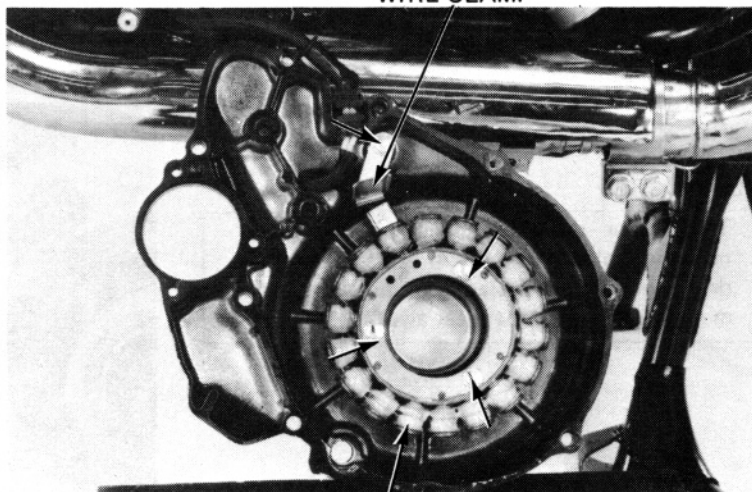
FLYWHEEL HOLDER 07925-ME90000 OR
BAND STRAP WRENCH (COMMERCIALLY AVAILABLE IN U.S.A.)

WIRE CLAMP

STATOR INSTALLATION

Install the stator on the alternator cover and tighten the three bolts.

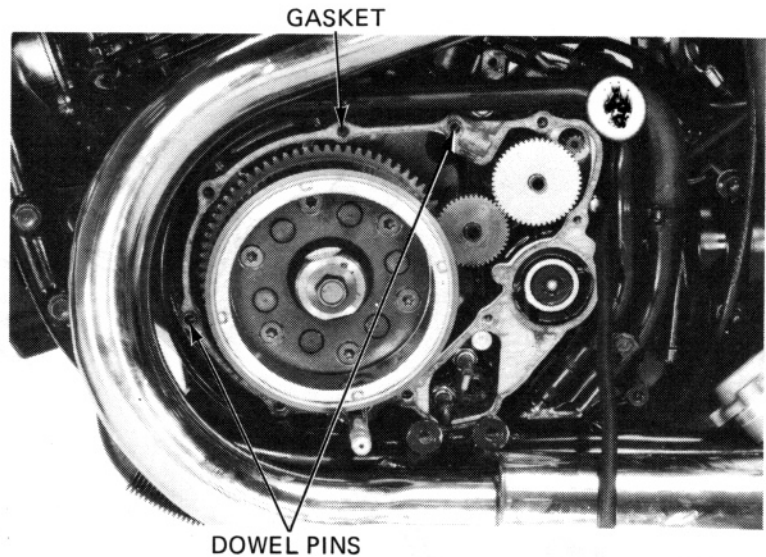
Install the alternator wire clamp with the bolt.



STATOR

ALTERNATOR/STARTER CLUTCH

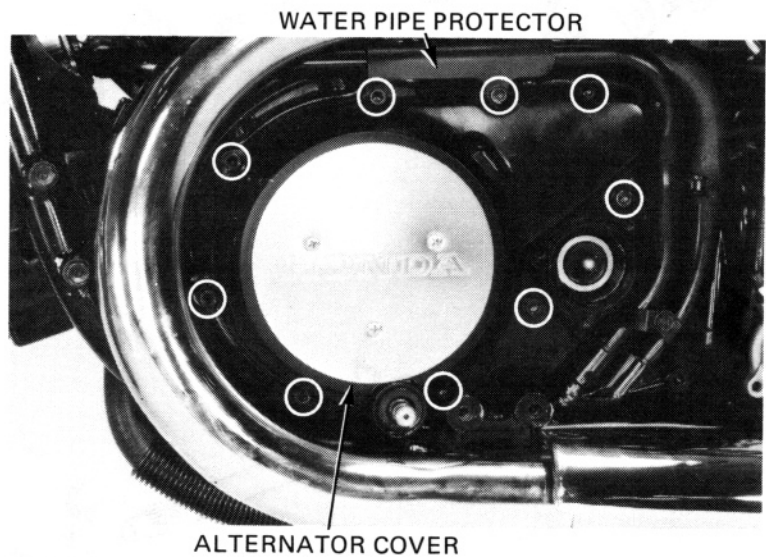
Install the dowel pins and a new gasket.



Install the alternator cover.

Install the water pipe protector and tighten the two bolts.

TORQUE: 8–12 N·m (0.8–1.2 kg·m, 6–9 ft·lb)



Install the left foot peg and gear shift pedal.

Install the clutch slave cylinder (page 7-10).
Connect the alternator coupler.

Install the seat and frame left side cover.

