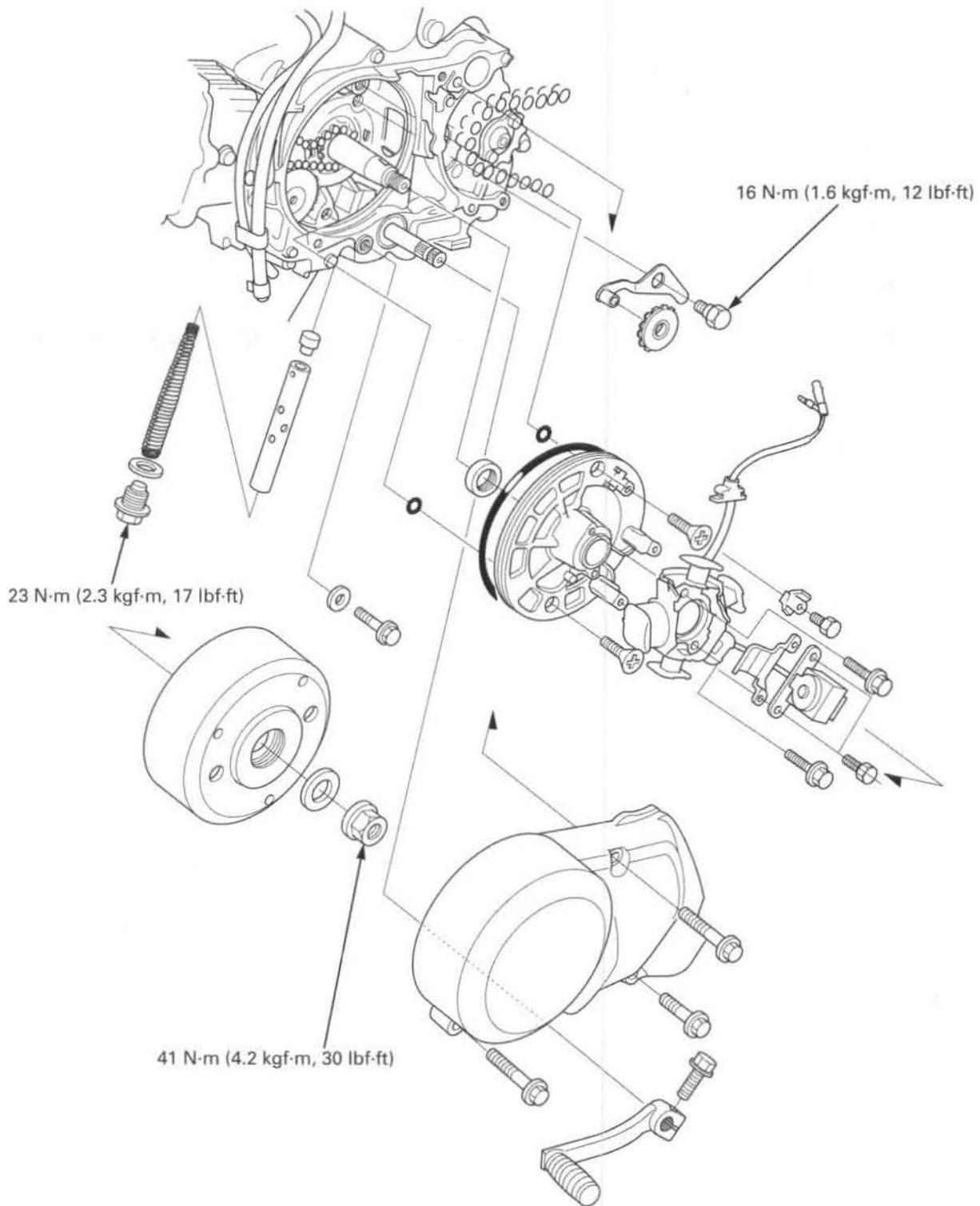


# 10. ALTERNATOR/CAM CHAIN TENSIONER

---

COMPONENT LOCATION .....	10-2	FLYWHEEL/STATOR REMOVAL .....	10-4
SERVICE INFORMATION .....	10-3	CAM CHAIN TENSIONER .....	10-6
TROUBLESHOOTING .....	10-3	STATOR/FLYWHEEL INSTALLATION .....	10-8

**ALTERNATOR/CAM CHAIN TENSIONER**  
**COMPONENT LOCATION**



## SERVICE INFORMATION

### GENERAL

- This section covers service of the flywheel, alternator and cam chain tensioner. All service can be done with the engine installed in the frame.
- Refer to 14-3 for alternator stator inspection.

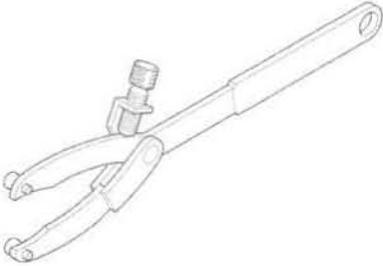
### SPECIFICATIONS

		Unit: mm (in)	
ITEM		STANDARD	SERVICE LIMIT
Cam chain tensioner	Push rod O.D.	11.985 – 12.000 (0.4718 – 0.4724)	11.94 (0.470)
	Spring free length	111.3 (4.38)	100 (3.9)

### TORQUE VALUES

Flywheel nut	41 N·m (4.2 kgf·m, 30 lbf·ft)
Cam chain tensioner sealing bolt	23 N·m (2.3 kgf·m, 17 lbf·ft)
Cam chain tensioner pivot bolt	16 N·m (1.6 kgf·m, 12 lbf·ft)

### TOOLS

<p>Universal holder 07725-0030000</p> 	<p>Flywheel puller 07933-GE00000 (Not available in U.S.A.)</p>  <p>or 07933-0010000 U.S.A. only</p>
--	---

## TROUBLESHOOTING

#### Excessive engine noise

- Worn or damaged cam chain tensioner
- Weak or damaged cam chain tensioner spring

#### Loose cam chain

- Weak or damaged cam chain tensioner spring
- Improper push rod operation

## ALTERNATOR/CAM CHAIN TENSIONER

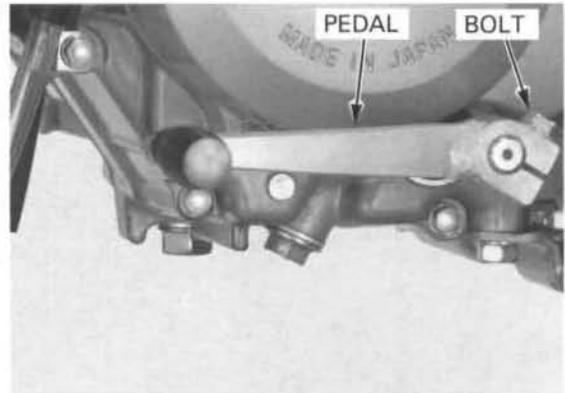
# FLYWHEEL/STATOR REMOVAL

Drain the engine oil (page 3-11).

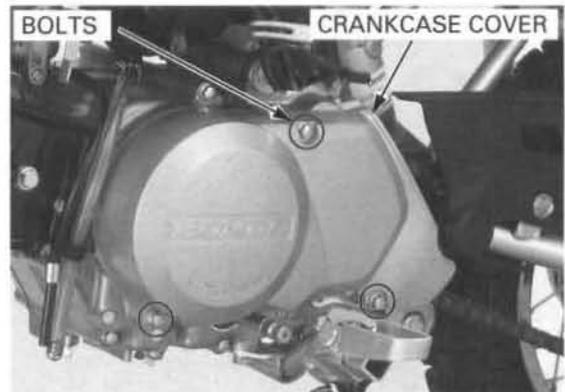
Disconnect the alternator and ignition pulse generator connectors.



Remove the bolt and gearshift pedal.



Remove the three bolts and left crankcase cover.



Hold the flywheel using the universal holder and remove the flywheel nut.

**TOOL:**

Universal holder

07725-0030000

Remove the washer.



## ALTERNATOR/CAM CHAIN TENSIONER

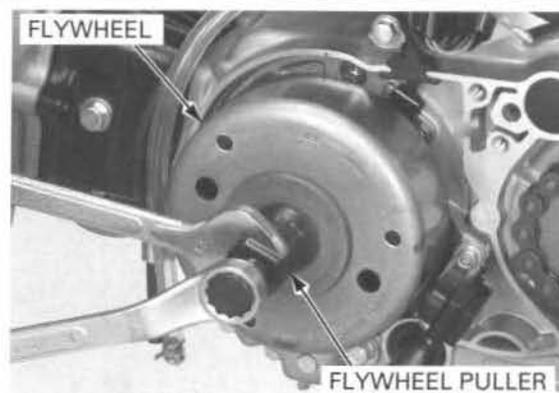
Remove the flywheel using the special tool.

**TOOL:**

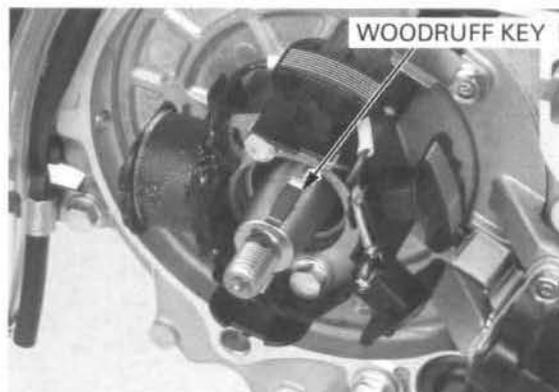
**Flywheel puller**

07933-GE00000  
(Not available in  
U.S.A.) or  
07933-0010000  
(U.S.A. ONLY)

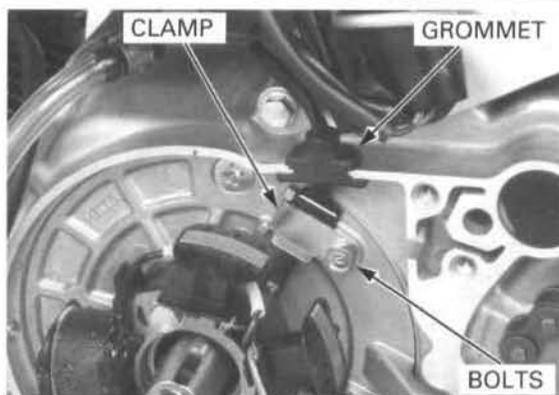
**Flywheel puller**



Remove the woodruff key.

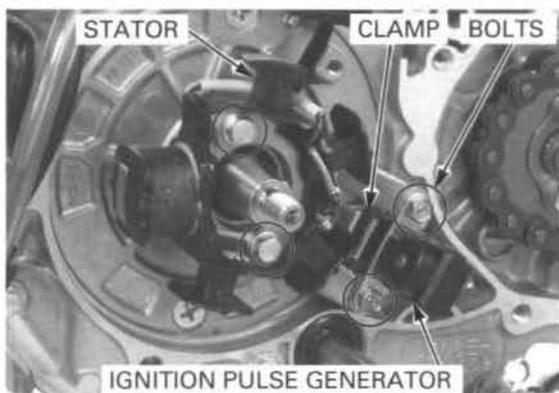


Remove the bolt and wire clamp.  
Release the wire grommet from the crankcase groove.



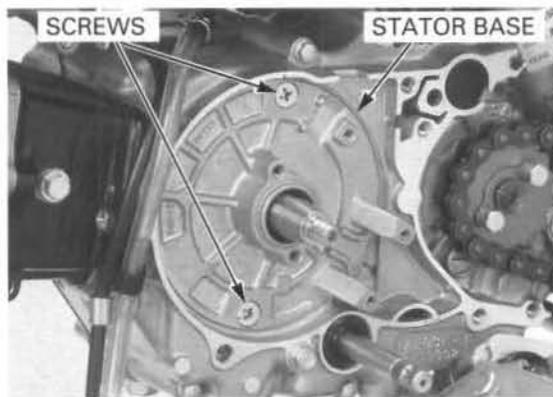
Remove the ignition pulse generator mounting bolts and wire clamp.  
Remove the stator mounting bolts.

Remove the ignition pulse generator and stator as an assembly.

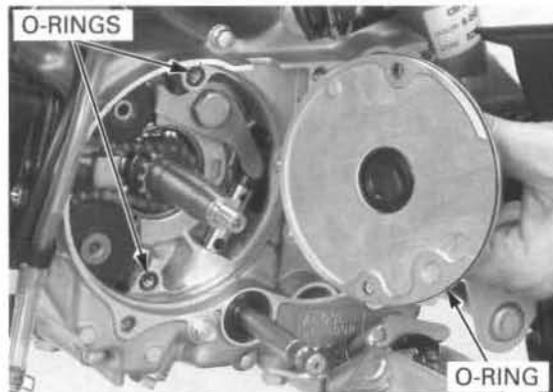


## ALTERNATOR/CAM CHAIN TENSIONER

Remove the screws and stator base.



Remove the O-rings from the crankcase.  
Remove the O-rings from the stator base.

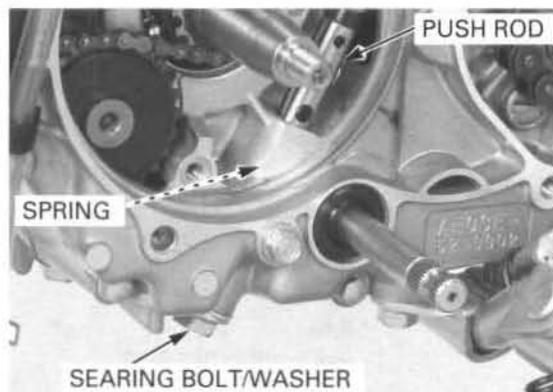


## CAM CHAIN TENSIONER

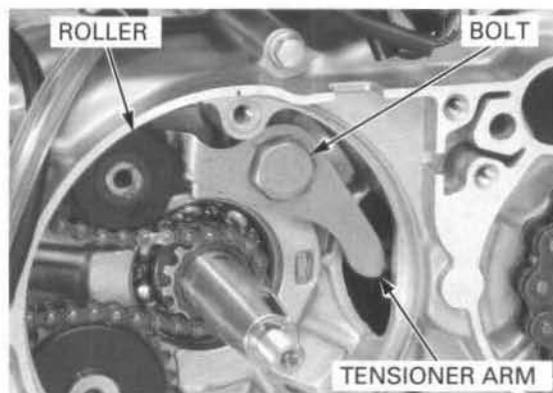
### REMOVAL

Remove the stator base (page 10-4).

Remove the sealing bolt washer, tensioner spring and push rod.



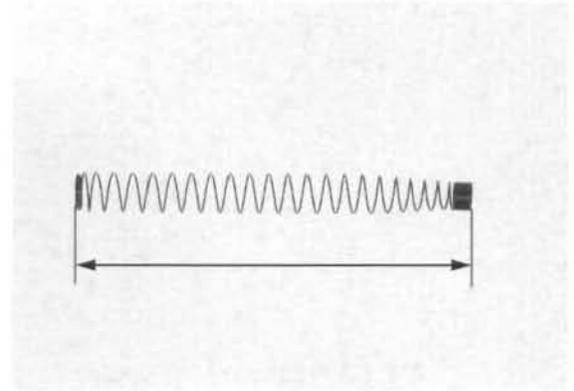
Remove the pivot bolt, tensioner arm and tensioner roller.



**INSPECTION**

Measure the tensioner spring free length.

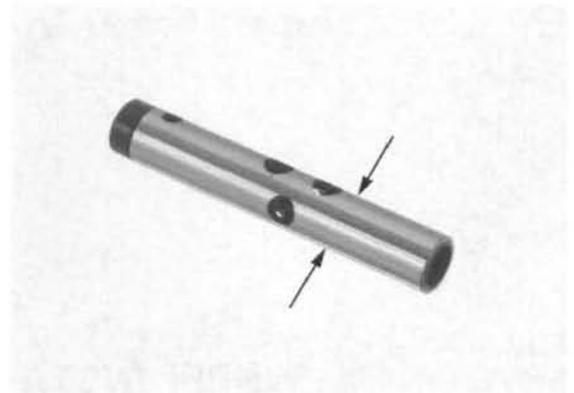
**SERVICE LIMIT: 100 mm (3.9 in)**



Check the push rod for wear or damage.

Measure the push rod O.D.

**SERVICE LIMIT: 11.94 mm (0.470 in)**

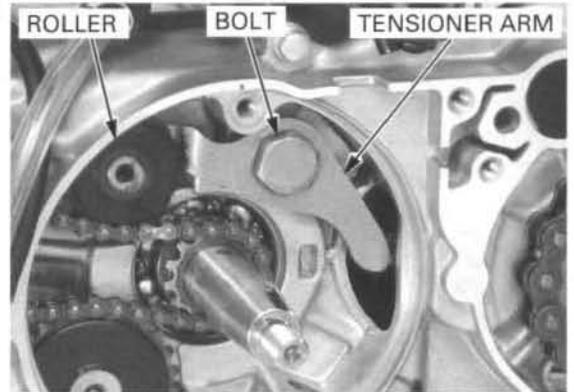


**INSTALLATION**

Install the cam chain tensioner roller, tensioner arm and pivot bolt.

Tighten the pivot bolt to the specified torque.

**TORQUE: 16 N·m (1.6 kgf·m, 12 lbf·ft)**

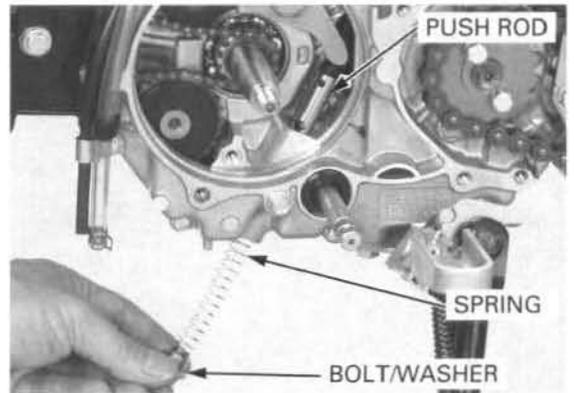


Check the sealing washer is in good condition, replace if necessary.

*Install the spring with the tapered side facing the push rod.*

Install the push rod, spring, washer and sealing bolt. Tighten the sealing bolt to the specified torque.

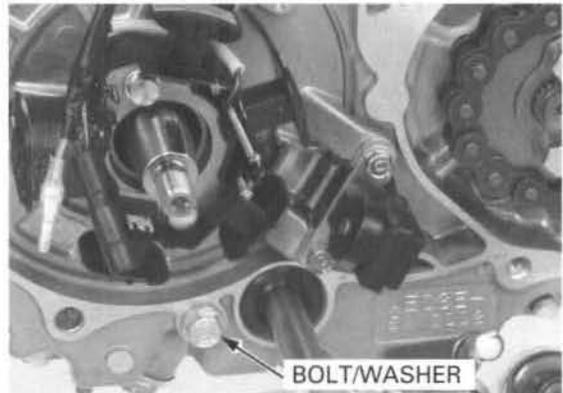
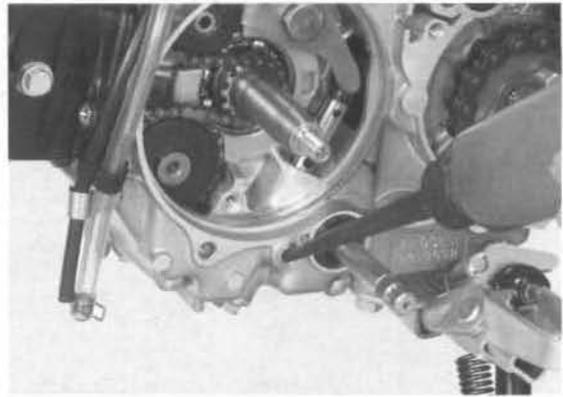
**TORQUE: 23 N·m (2.3 kgf·m, 17 lbf·ft)**



## ALTERNATOR/CAM CHAIN TENSIONER

Remove the crankcase sealing bolt and washer.  
Fill the push rod with 1 – 2 cm<sup>3</sup> of engine oil through the filler hole.

Check the sealing washer is in good condition and install the sealing washer and bolt.  
Tighten the bolt securely.



## STATOR/FLYWHEEL INSTALLATION

Check the stator base oil seal for damage, replace if necessary.

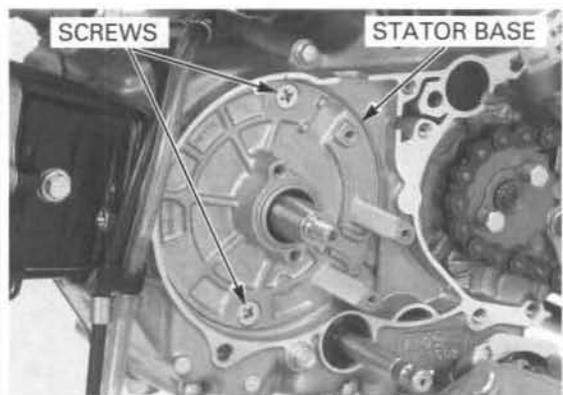
Apply engine oil to the lip of the oil seal.

Apply engine oil to new O-rings, install them into the crankcase grooves.

Apply engine oil to new O-ring, install it into the stator base groove.



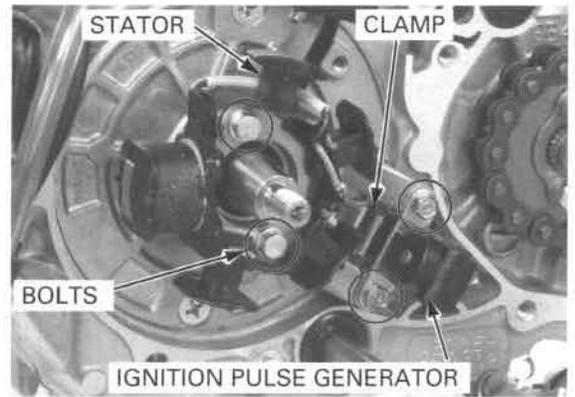
*Be careful not to damage the oil seal lips* Install the stator base and tighten the screws securely.



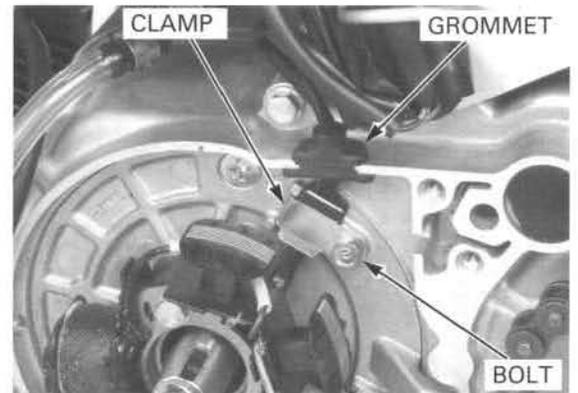
Install the ignition pulse generator and stator as an assembly.

Install the ignition pulse generator mounting bolts and wire clamp.

Install the stator mounting bolts.

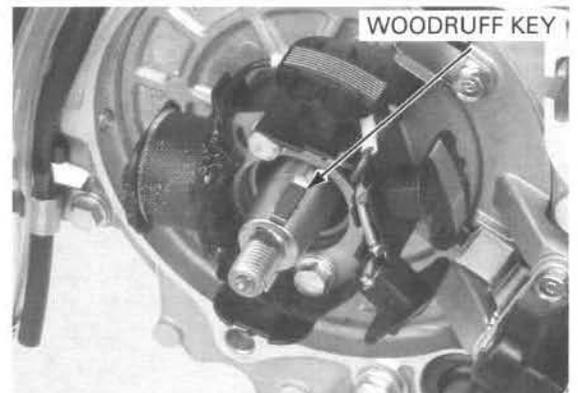


Set the wire grommet into the crankcase groove. Install the wire clamp and tighten the bolt.



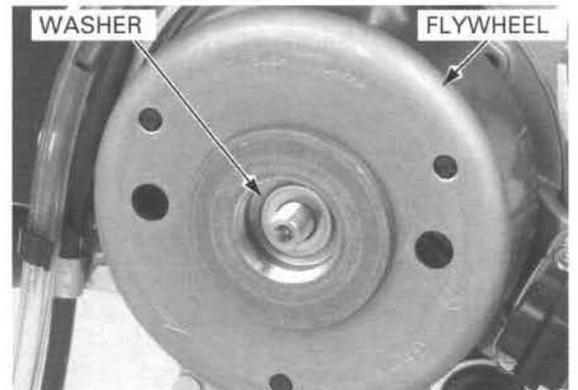
Clean any oil from the tapered portion of the crankshaft and flywheel.

Install the woodruff key into the crankshaft groove.



Install the flywheel by aligning the key way in the flywheel with the woodruff key on the crankshaft.

Install the washer.



## ALTERNATOR/CAM CHAIN TENSIONER

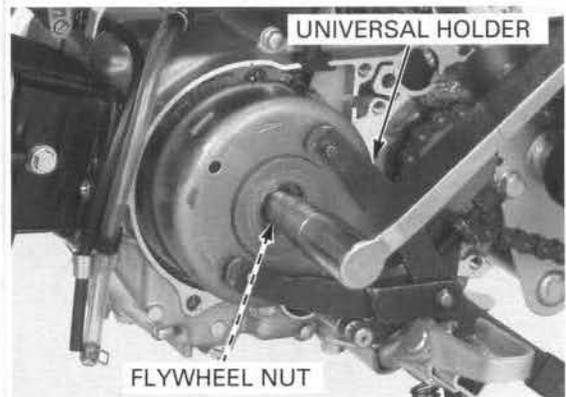
Install the flywheel nut.

Hold the flywheel using the universal holder and tighten the nut to the specified torque.

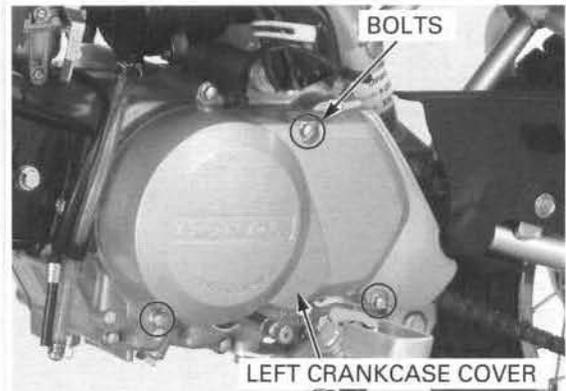
**TOOL:**

Universal holder 07725-0030000

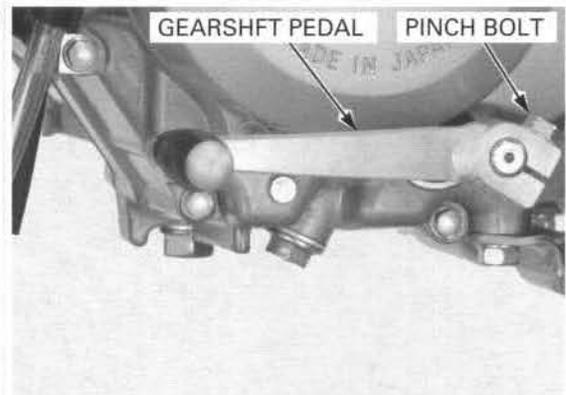
**TORQUE:** 41 N·m (4.2 kgf·m, 30 lbf·ft)



Install the left crankcase cover and tighten the three bolts.



Install the gearshift pedal so that it is same height as the footpeg.  
Install the pinch bolt and tighten it.



Connect the ignition pulse generator and alternator connectors.

