

8. Generator/Starter Clutch

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Service Information

General Safety

This section describes the removal and assembling of the A.C. generator.

For information on A.C generator inspection, refer to the section 15.

The charging system can be maintained without removing the engine.

Specifications

Unit: mm(in)

| Item | Standard value | | service Limit |
|---------------------|----------------|-------------------------------|---------------|
| Starter driven gear | O.D | 39.622-39.635(1.5599 -1.5604) | 39.53(1.556) |
| | I.D | 32.000-32.025(1.2578 -1.2588) | 32.10(1.2618) |

| | | | |
|----------------------|-----|-------------------------------|---------------|
| Reduction gear | I.D | 12.016-12.034(0.4723 -0.4730) | 12.10(0.4756) |
| Reduction gear shaft | O.D | 11.966-11.984(0.4703 -0.4710) | 11.97(0.4705) |

Torque values

| | |
|----------------------------|-------------------------|
| Fly wheel bolt | 5.5kg.m(55N.m, 39ft-lb) |
| Starter clutch socket bolt | 3.2kg.m(32N.m, 23ft-lb) |
| R. crank case cover bolt | 1.1kg.m(11N.m, 8ft-lb) |

Tools

| |
|------------------|
| Fly wheel puller |
| Fly wheel holder |

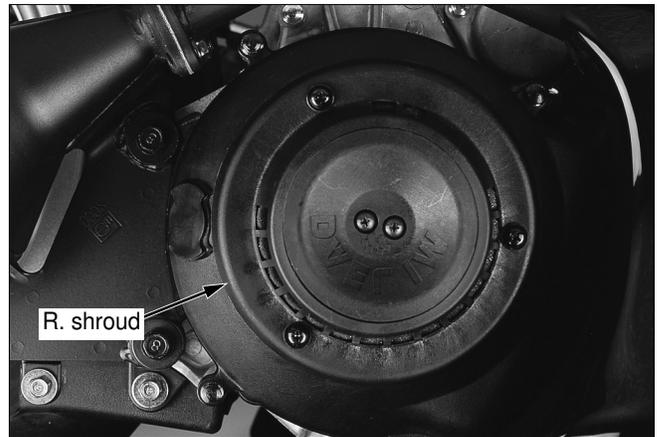
Shroud

Removal

Remove the following parts.

- Luggage box (4-5)
- Body cover (4-6)
- Center cover (4-4)

Loosen the 4 R. shroud setting bolts.

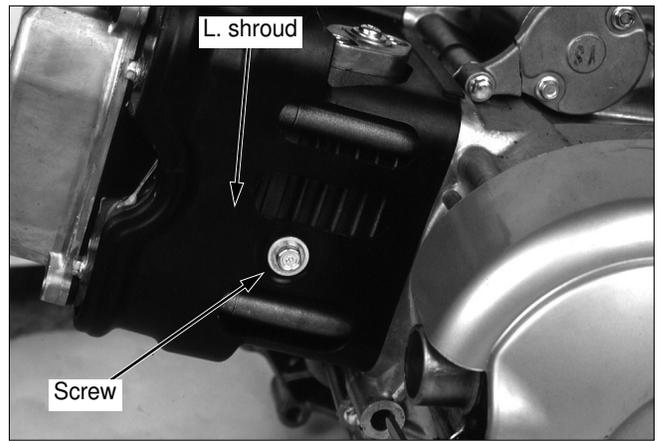


Loosen the 3 shroud R/L setting bolts.

Loosen the shroud L setting screw.

Remove the shroud R/L.

Install in the reverse order of removal.



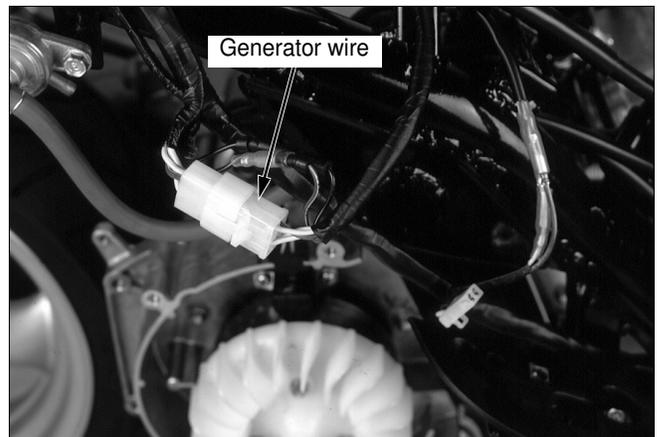
A.C. Generator

Removal

Remove the following parts.

- (4-5)
- (4-6)
- (4-4)
- R. shroud comp (7-2)

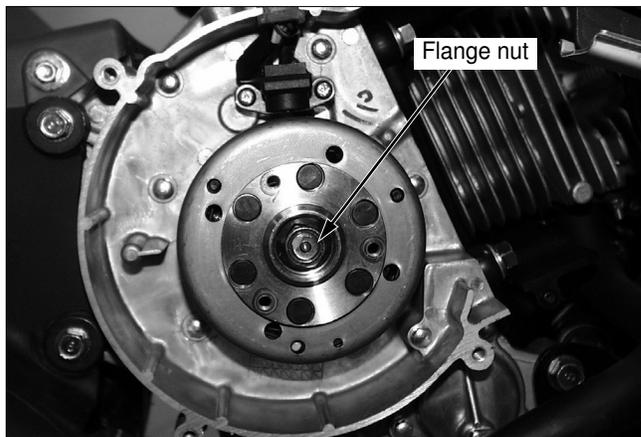
Remove the A.C. generator wiring connection.



Remove the 3 cooling fan bolts.



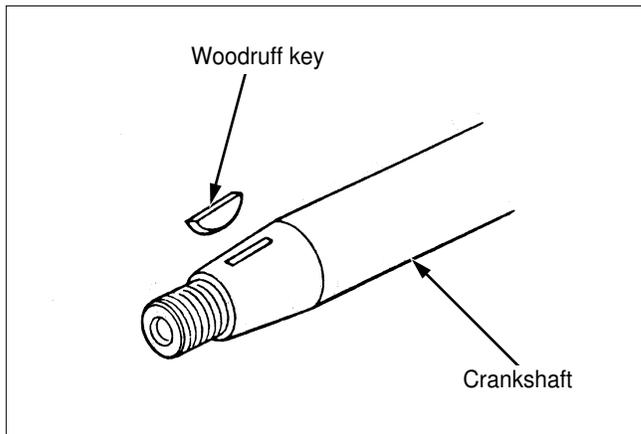
Remove the A.C generator flange nut.



Install the flywheel puller on the rotor, and remove the flywheel

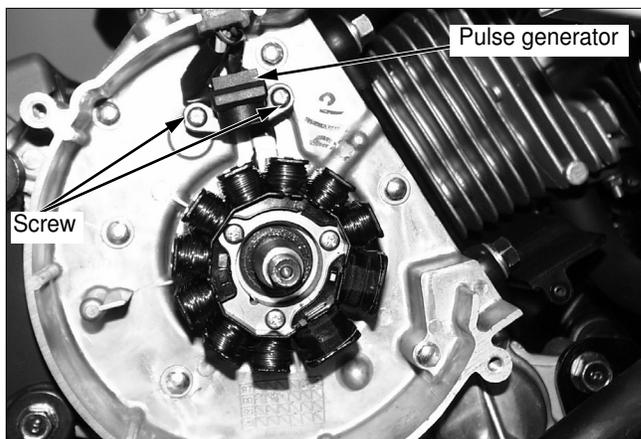
Tool: Fly wheel puller holder

Remove the woodruff key from the crankshaft.



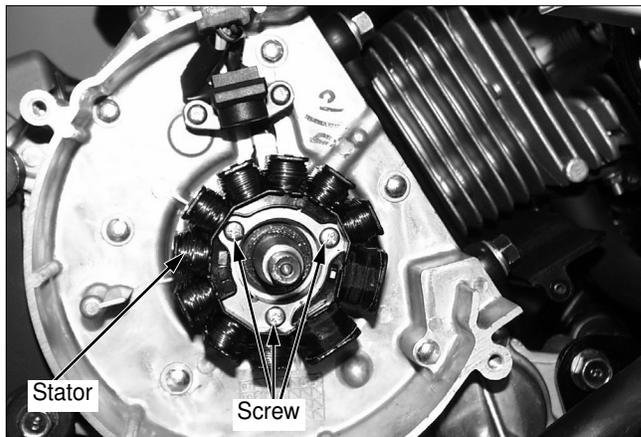
Stator Removal/Installation

Loosen the pulse generator screw, and remove the pulse generator.



Loosen the 3 stator setting screws to remove the stator.

Install in the reverse order of removal.



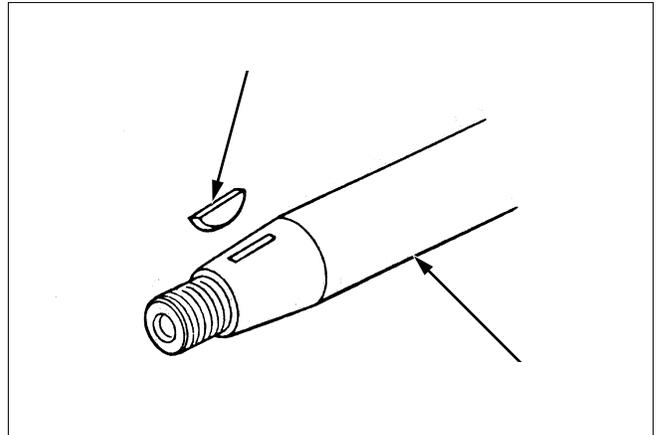
Generator/Starter Clutch

Assembly

Clean, and remove dust from the tapered part of the crankshaft.

If the flywheel is installed with the tapered part contaminated by foreign matters, stress may be applied to the taper contact surface, causing damage to the key.

Assemble the woodruff key to the crankshaft.



NOTE

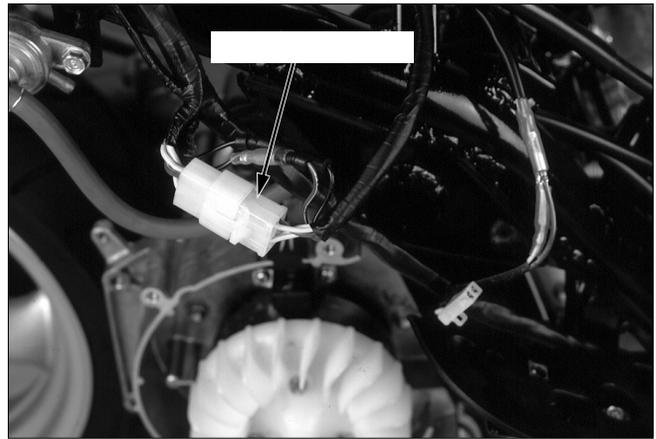
Install the flywheel after verifying bolts and nuts are not attached to the inside of the flywheel.

Temporarily assemble the flywheel nut, and tighten the rotor bolts after fixing the flywheel with the holder.

Tool: Flywheel holder

Torque value: 5.5kg-m(55N.m, 40ft-lb)

Connect the A.C. generator wire.



Assemble the cooling fan with bolts.

Assemble shroud. (8-2)

Assemble the body cover and luggage box.



R. Crank Case Cover

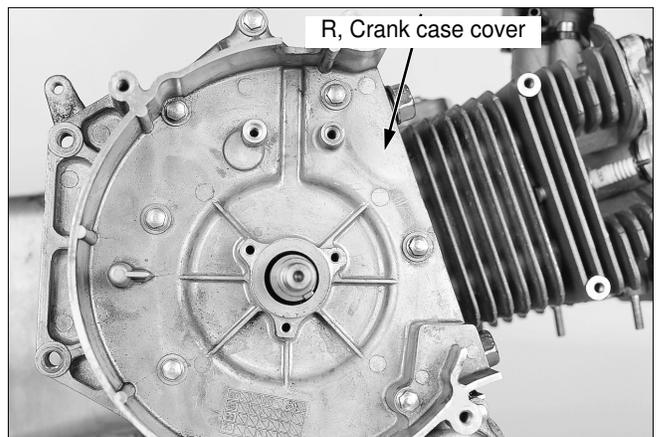
Remove the following parts.

- R/L shroud (8-2)

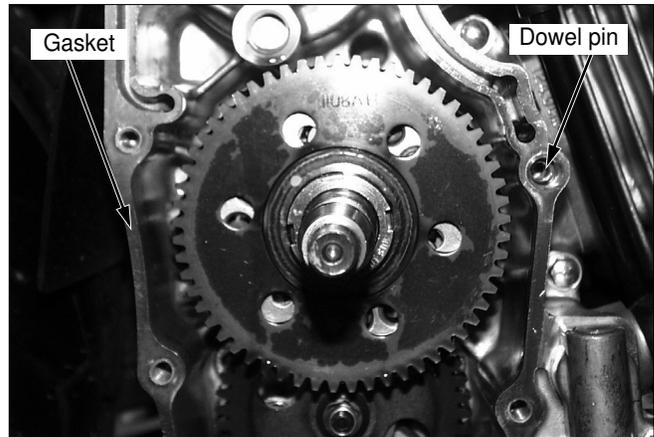
- A.C. generator (8-2)

- Radiator (2-7)

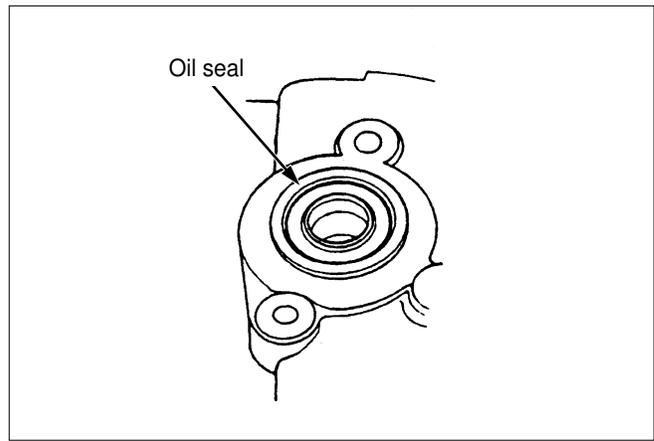
Loosen the R. crank case cover setting bolts.



Remove the gasket and dowel pin.

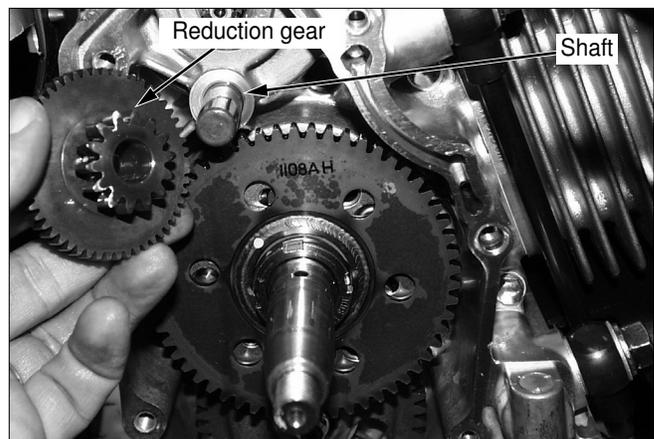


Remove the oil seal
Check the oil seal for wear or damage, and
replace with new oil seals, if necessary.



Starter Reduction Gear

Remove the starter reduction gear and shaft.



Inspection

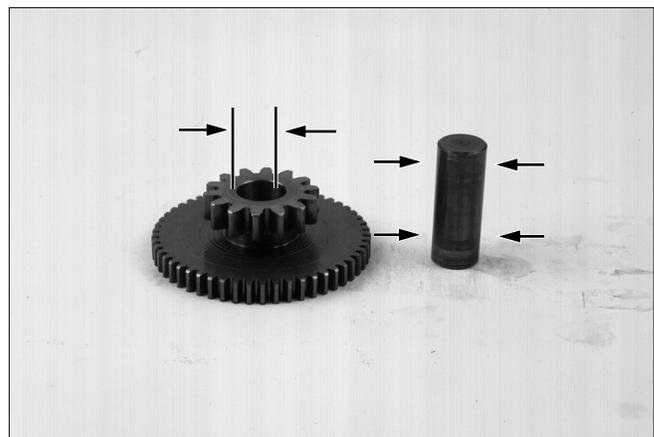
Check the reduction gear for wear or damage.

Measure the inner diameter of the gear.

Service limit: 12.10mm(0.475in)

Measure the outer diameter of the gear shaft.

Service limit: 11.97mm(0.470in)



Generator/Starter Clutch

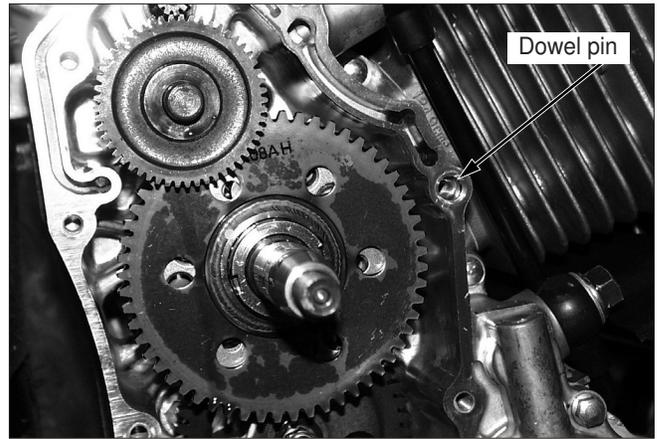
Assembly

Assemble the starter reduction gear and shaft.



Remove the gasket residues from the R. crank case.

Install the new gasket and dowel pin.



Tighten the R. crank case cover with setting bolts.

Assemble the A.C. generator. (8-2)

Assemble the R/L shroud. (8-2)

- Assemble the luggage box (4-5)

- Assemble the body cover (4-6)

Starter Clutch

Removal

- Remove the shroud. (8-2)

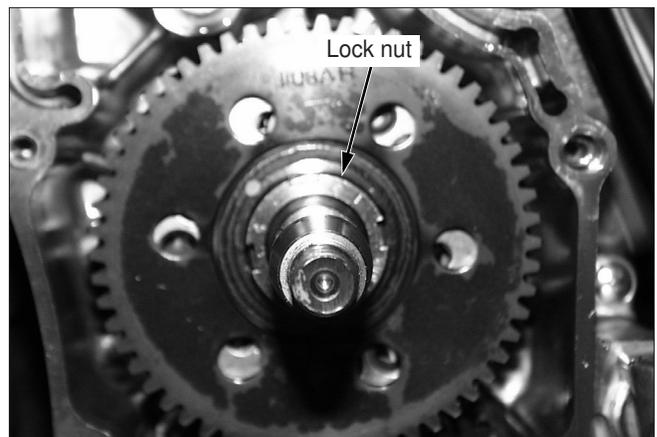
- Remove the A.C. generator. (8-2)

- Remove the R. crank case cover (8-4)

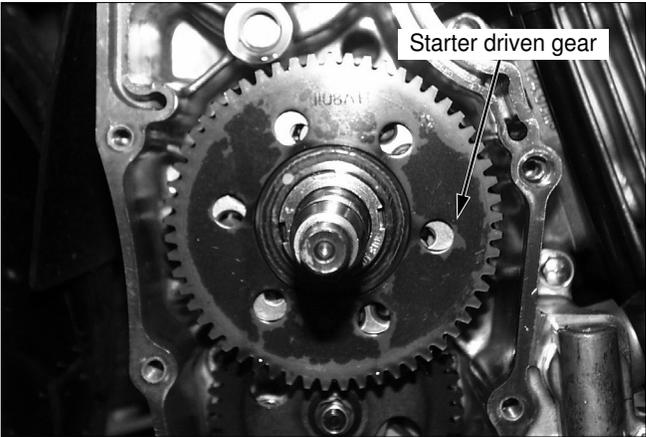
Loosen the starter clutch lock nut with a special tools.

Tool: Special socket (12.7 × 28 × 120)

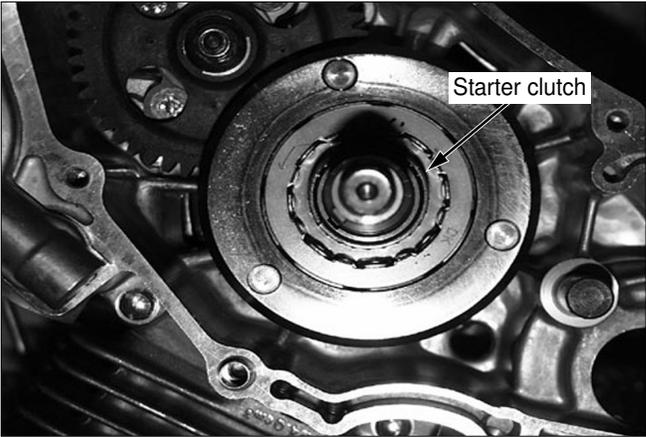
Torque value: 9.5kg-m (95N.m, 67ft-lb)



Remove the washer.
Remove the starter driven gear.



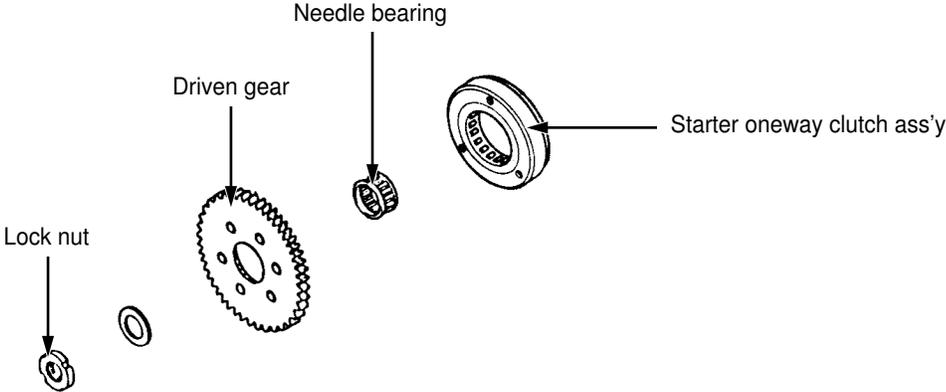
Check the starter driven gear and starter clutch for proper operation.
Remove the starter clutch.



Inspection

Check the starter driven gear for wear or damage.
Measure the inner diameter of the starter driven gear.

Service limit: A 32.10mm(1.262in)
B 39.53mm(1.556in)

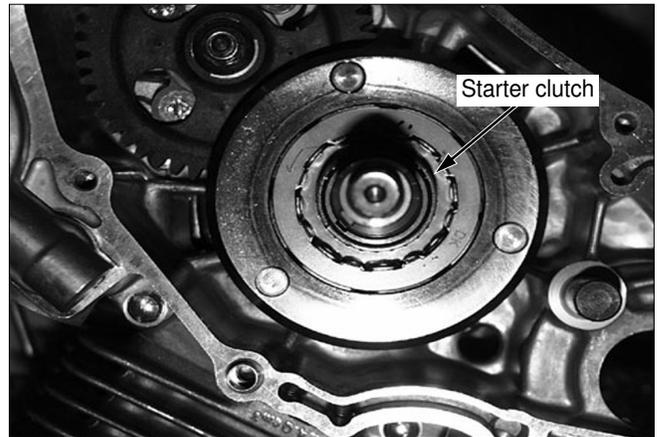


Generator/Starter Clutch

Use a special socket to tighten the starter driven gear with lock nuts.

Torque value: 9.0kg-m(90N.m, 65ft-lb)

Tool: Special socket (12.7 × 28 × 120)



Assemble the washer.

Assemble the R. crank case cover (8-4)

Assemble the A.C. generator. (8-2)

Assemble the shroud. (8-2)

