



# 5. ENGINE REMOVAL / INSTALLATION

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## SERVICE INFORMATION

**5**

### GENERAL

Parts requiring engine removal for servicing:

- Crankshaft
- Oil pump

### SPECIFICATION

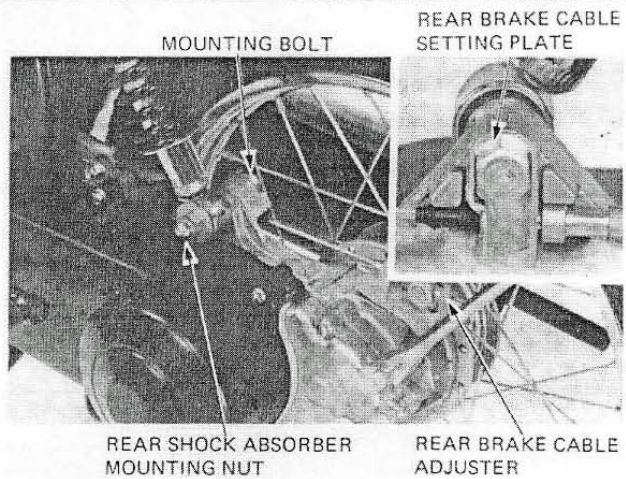
Engine weight	NU50	15.9 kg (35 lb)
	NU50M	16.8 kg (37 lb)

### TORQUE VALUES

Engine hanger bolts	(Upper)	59-65 N.m (5.9-6.5 kg-m, 43-47 ft-lb)
	(Lower)	35-45 N.m (3.5-4.5 kg-m, 25-33 ft-lb)
Rear shock absorber		30-40 N.m (3.0-4.0 kg-m, 22-29 ft-lb)
Rear axle nut		80-100 N.m (8.0-10.0 kg-m, 58-72 ft-lb)

## ENGINE REMOVAL

Remove the rear brake adjusting nut.  
Remove the rear shock absorber mounting nut, and bolt with the rear brake cable setting plate.



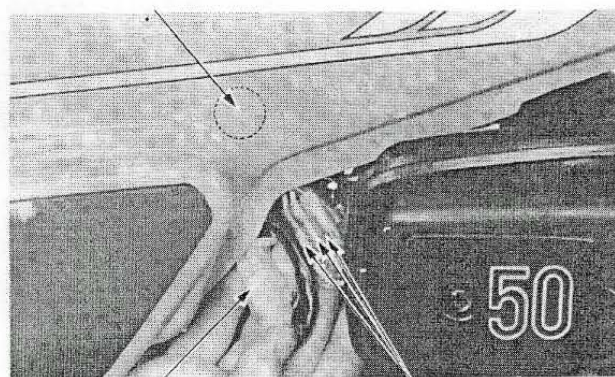
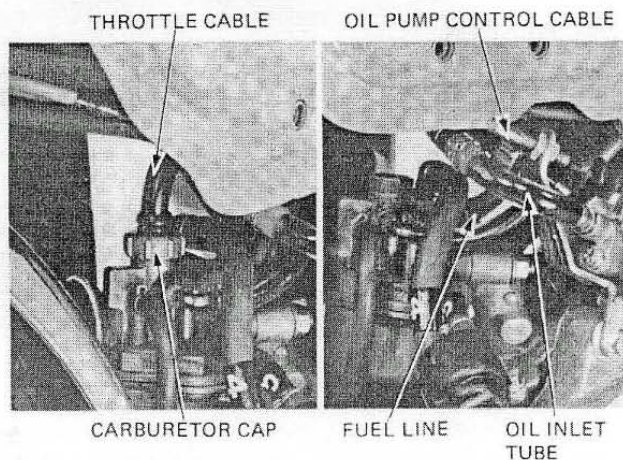
Remove the battery and battery holder.  
Remove the carburetor cap and pull the throttle valve out. Disconnect the throttle cable from the throttle valve and remove the return spring, carburetor cap and rubber seal.  
Disconnect the oil pump control cable.  
Turn the fuel valve OFF and drain the fuel from the carburetor.  
Disconnect the fuel line at the carburetor.

**WARNING**

*Keep gasoline away from flames or sparks.  
Wipe up spilled gasoline at once.*

Disconnect the oil inlet tube at the oil pump.

Disconnect the starter wire coupler and alternator wire connectors.  
Remove the starter and alternator wires from the frame clamp.

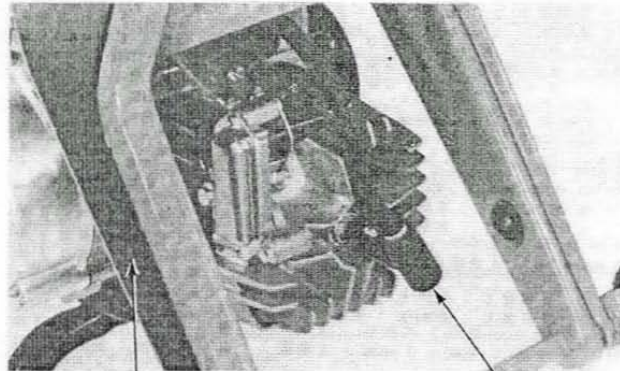


STARTER WIRE COUPLER

ALTERNATOR WIRE CONNECTORS



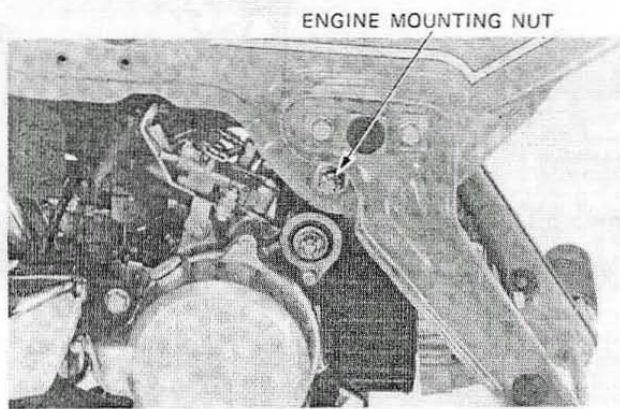
Remove the left and right footpeg covers.  
Remove the spark plug cap.



STEP BAR COVER

SPARK PLUG

Unscrew the nut and remove the engine mounting bolt. Remove the engine.



ENGINE MOUNTING NUT

## ENGINE INSTALLATION

The installation sequence is essentially the reverse of removal.

Torque the engine hanger bolts to the specified torque values.

### TORQUE VALUES:

#### Upper bolt:

59–65 N·m (5.9–6.5 kg-m, 43–47 ft-lb)

#### Lower bolt:

35–45 N·m (3.5–4.5 kg-m, 25–33 ft-lb)

#### Shock absorber nut:

30–40 N·m (3.0–4.0 kg-m, 22–29 ft-lb)

Perform the following inspections and adjustments after installation:

- Wire and cable routing (Page 1-6, 1-8)
- Carburetor adjustment (Page 3-5)
- Rear brake adjustment (Page 3-7)
- Oil pump bleeding/priming (Page 2-7)

