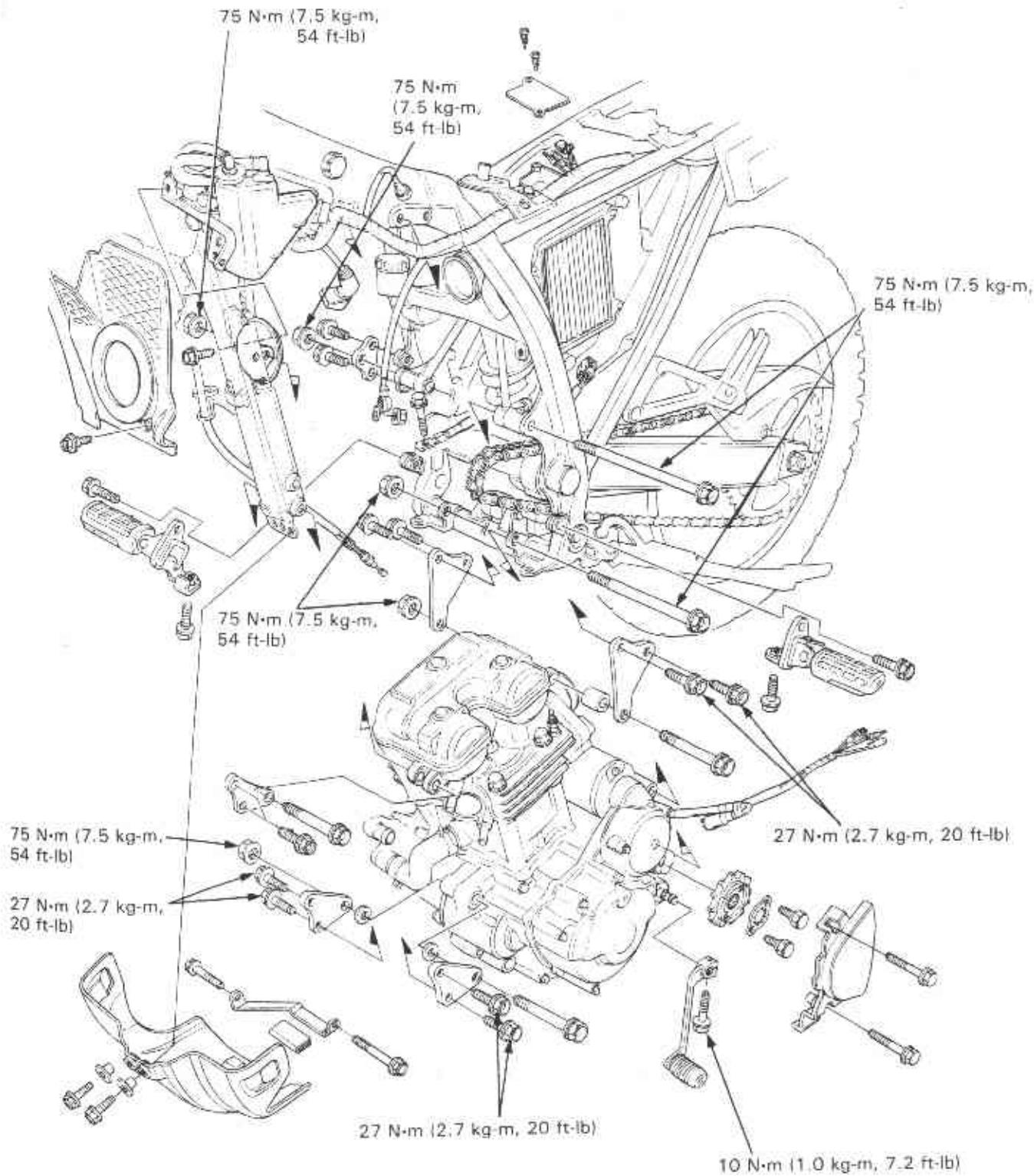


## **ENGINE REMOVAL/ INSTALLATION**

**DEPOSE/REPOSE DU MOTEUR**

**AUSBAU/EINBAU DES MOTORS**



#### **ENGINE REMOVAL/INSTALLATION**

SERVICE INFORMATION	6-1	ENGINE INSTALLATION	6-4
ENGINE REMOVAL	6-2		

## **SERVICE INFORMATION**

## GENERAL

**CAUTION**

- If you sit on the motorcycle after the engine is removed, the frame will be damaged.

- A floor jack or other adjustable support is required to support and maneuver the engine.
  - The following parts or components can be serviced with the engine installed in the frame:
    - Clutch
    - Gearsshift linkage  
(Stopper arm and cam plate)
    - Oil pump
    - Alternator
    - Starter motor
    - Starter clutch
    - Carburetor
    - Cylinder head
    - Cylinder, piston
    - Water pump

## SPECIFICATIONS

**Oil capacity** 1.6 lit (1.69 US qt, 1.41 Imp qt) at disassembly  
**Coolant capacity** 1.0 lit (1.06 US qt, 0.88 Imp qt) total

## TORQUE VALUES

**Engine mounting bolt 10 mm:** 75 N·m (7.5 kg-m, 54 ft-lb)  
**Engine bracket bolt 8 mm:** 27 N·m (2.7 kg-m, 20 ft-lb)

## ENGINE REMOVAL/INSTALLATION

### ENGINE REMOVAL

Support the motorcycle using a hoist or other adjustable support.

Drain the engine oil (page 2-2) and radiator coolant (page 5-4).

Remove the following:

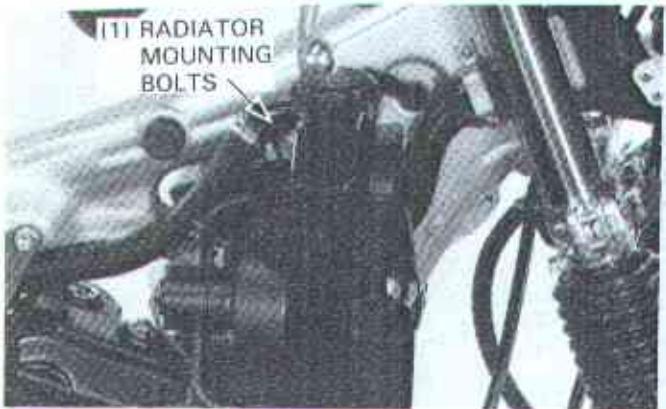
- fuel tank (page 4-3).
- side fairings (page 15-2).
- spark plug cap.

Remove the skid plate mounting bolts and the plate, then remove the skid plate stay from the engine.

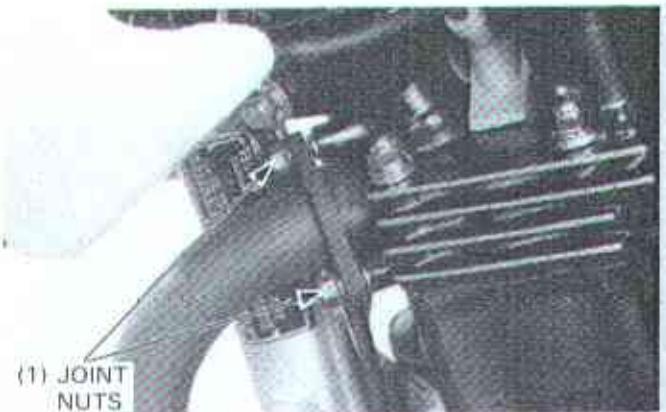


Disconnect the upper and lower radiator hoses (page 5-5).

Remove the radiator mounting bolts then hook the radiator with piece of rope.

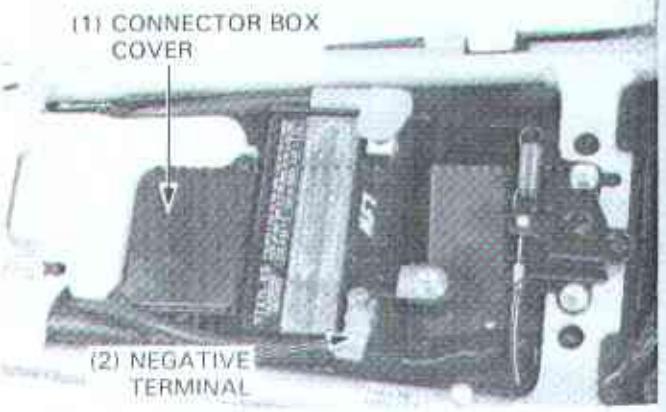


Remove the exhaust pipe by removing the joint nuts and loosening the pipe-to-muffler connecting band bolt.



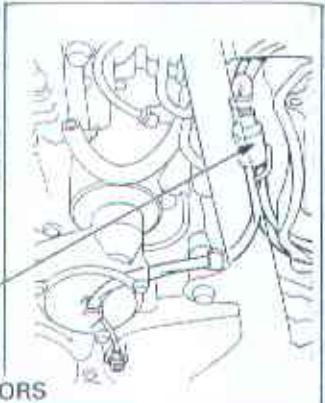
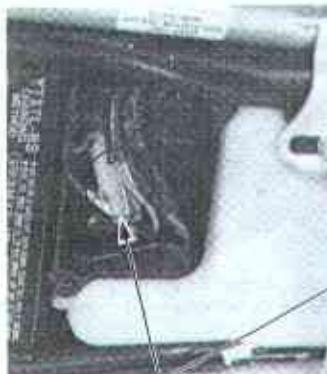
Disconnect the battery negative cable from the battery terminal.

Remove the connector box cover.



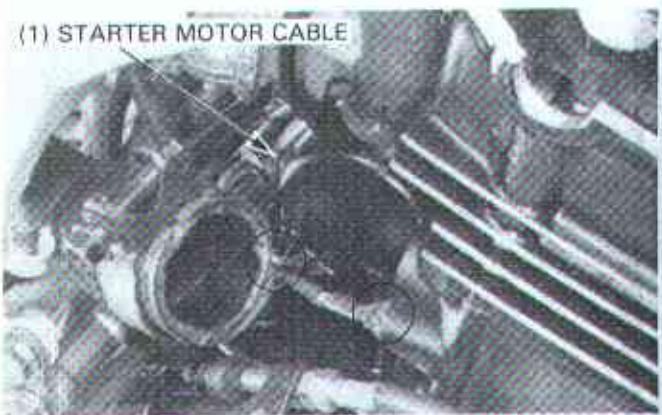
## ENGINE REMOVAL/INSTALLATION

Disconnect the alternator 2P and 4P connectors and free the wire from the frame.



(1) ALTERNATOR CONNECTORS

Remove the starter motor cable from the starter motor.



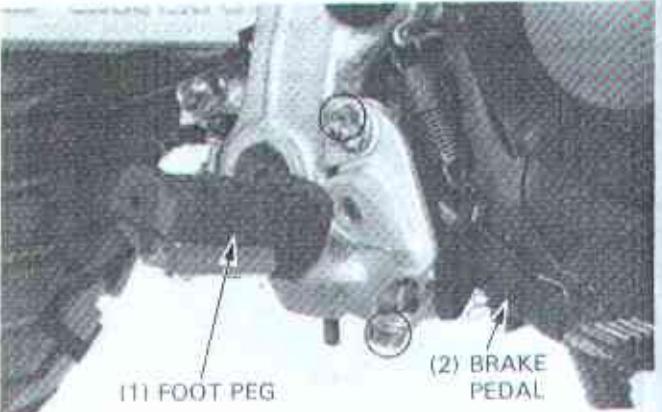
Disconnect the clutch cable from the engine (page 7-3).



(1) DRIVE SPROCKET

Remove the drive sprocket cover (page 8-2) and the gearshift pedal.

Remove the drive sprocket bolts, lock plate and drive sprocket from the drive chain.



Remove the right and left foot pegs and the brake pedal.

## ENGINE REMOVAL/INSTALLATION

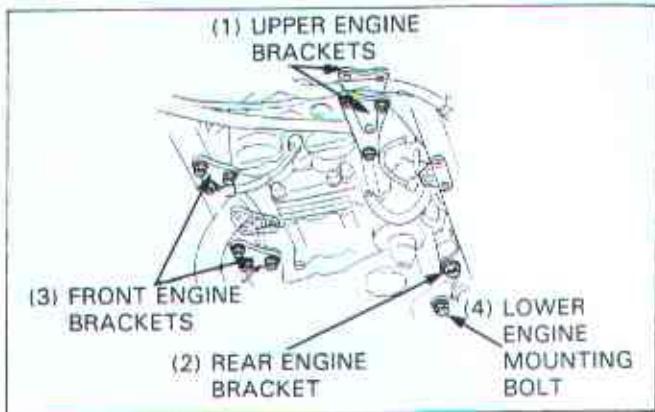
Remove the upper engine brackets and the carburetor (page 4-5).

Remove the rear engine bracket and bolt.

Remove the front engine brackets, collars and bolts.

Remove the lower engine mounting bolts.

Remove the engine from the frame.



## ENGINE INSTALLATION

Engine installation is essentially the reverse order of removal. Use a floor jack or other adjustable support to carefully maneuver the engine into place.

### CAUTION

- Carefully align mounting points with the jack to prevent damage to mounting bolt threads and wire harness and cables.*

### NOTE

- Be sure to install the mounting collars in their correct positions.

Tighten all the fasteners to the specified torque given on pages 6-0, and 6-1.

### NOTE

- Route the wires and cables properly (section 1).
- Fill the crankcase to the proper level with the recommended oil (page 2-11).
- Fill the cooling system (page 5-4).
- Perform the following inspection and adjustments:  
Throttle operation (page 3-4).  
Clutch (page 3-14).

