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SERVICE INFORMATION

GENERAL INSTRUCTIONS

- The following parts or components can be serviced with the engine installed in the frame:
 - Clutch
 - Gear shift linkage
 - Camshaft
 - A.C. generator
 - Starter motor
 - Carburetor

SPECIFICATIONS

Engine dry weight	106 kg (234 lb)
Oil capacity	4.5 lit (4.7 US qt) at engine assembly 3.5 lit (3.7 US qt) at change

TORQUE VALUES

Engine hanger bolt	
8 mm bolt	2.0–2.4 kg-m (14–17 ft-lb)
10 mm bolt	3.5–4.5 kg-m (25–33 ft-lb)
Rear axle nut	8.0–10.0 kg-m (58–72 ft-lb)
Final gear case	3.5–4.5 kg-m (25–33 ft-lb) Apply oil to threads
Exhaust pipe joint nut	3.0–3.5 kg-m (22–25 ft-lb)
Muffler hanger setting bolt	3.5–4.5 kg-m (25–33 ft-lb)
Exhaust pipe mounting under bolt	3.5–4.5 kg-m (25–33 ft-lb)
Exhaust pipe joint band bolt	2.0–2.4 kg-m (14–17 ft-lb)

} Tightening sequence
See page 5-7

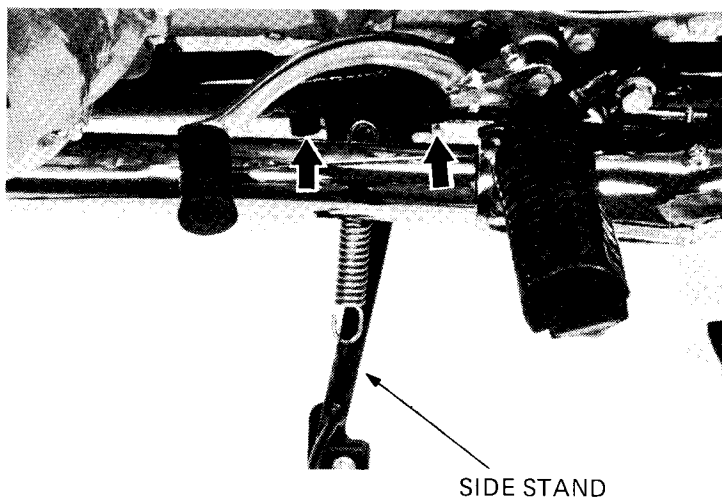


ENGINE REMOVAL

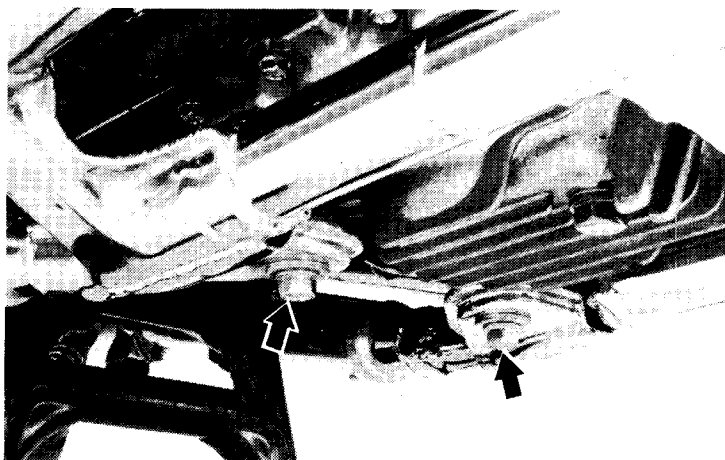
Place the motorcycle on its center stand.
Drain the engine oil.

Remove the seat and fuel tank.
Remove the left and right side covers.

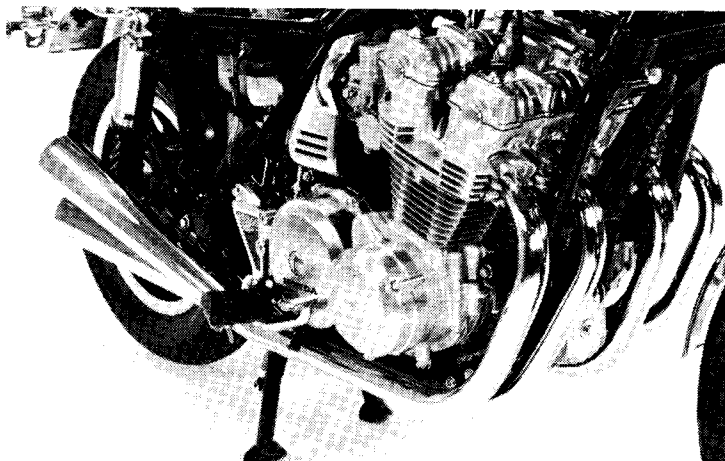
Remove the side stand.



Remove the exhaust pipe center mounting bolts.
Loosen the exhaust pipe joint clamp bolt.

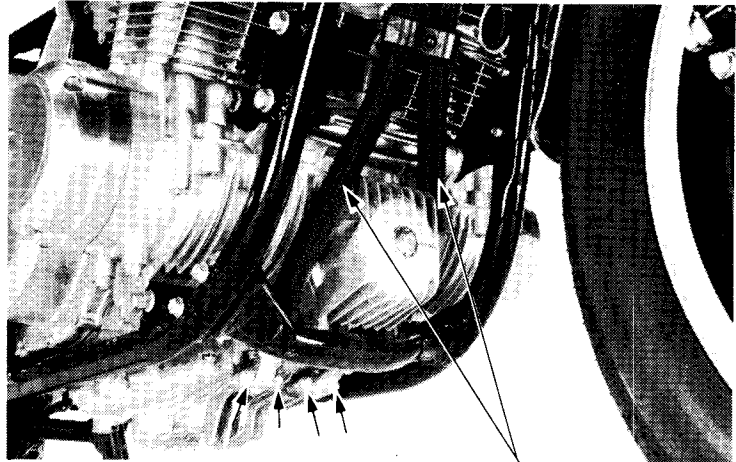


Remove the exhaust pipes.



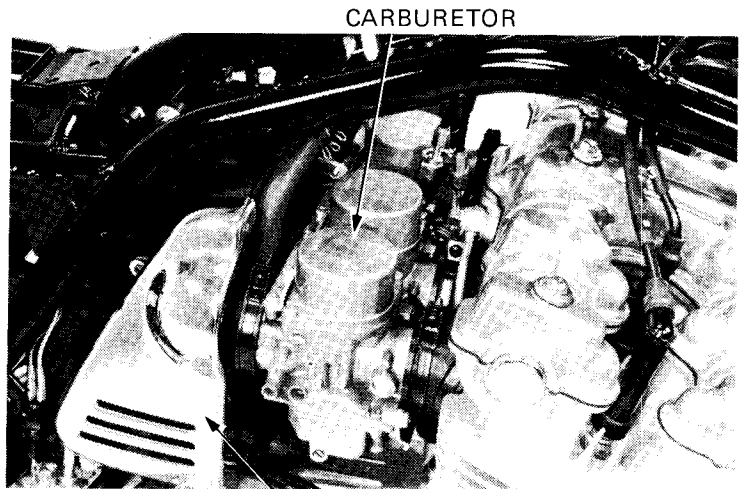


Disconnect the oil cooler hoses from the engine.



OIL COOLER HOSES

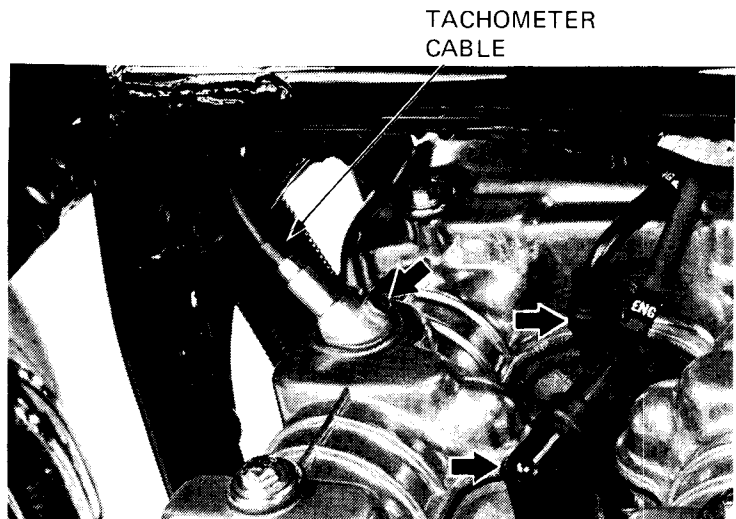
Remove the air cleaner and carburetor.



CARBURETOR

AIR CLEANER

Disconnect the tachometer cable and spark plug caps.



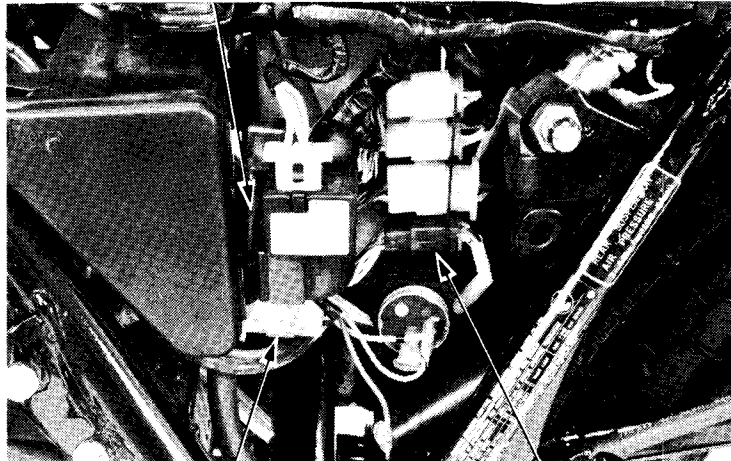
TACHOMETER
CABLE



76 ENGINE REMOVAL/INSTALLATION

Disconnect the starter motor cable.
Disconnect the A.C. generator and pulser generator couplers.

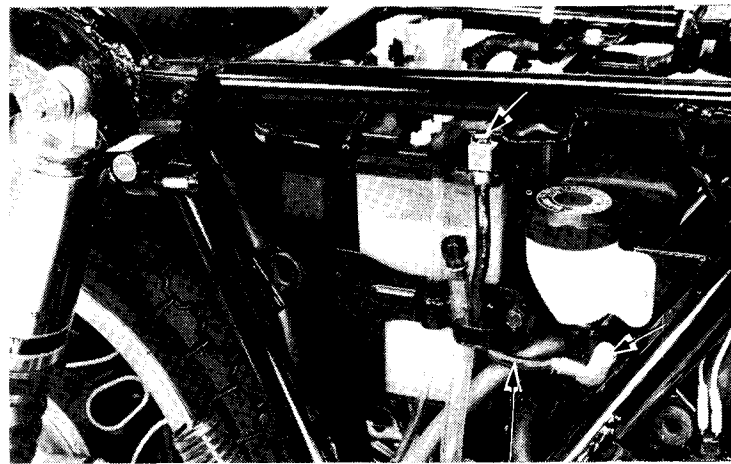
STARTER CABLE



A.C. GENERATOR
COUPLER

PULSER GENERATOR
COUPLER

Disconnect the battery ground cable.

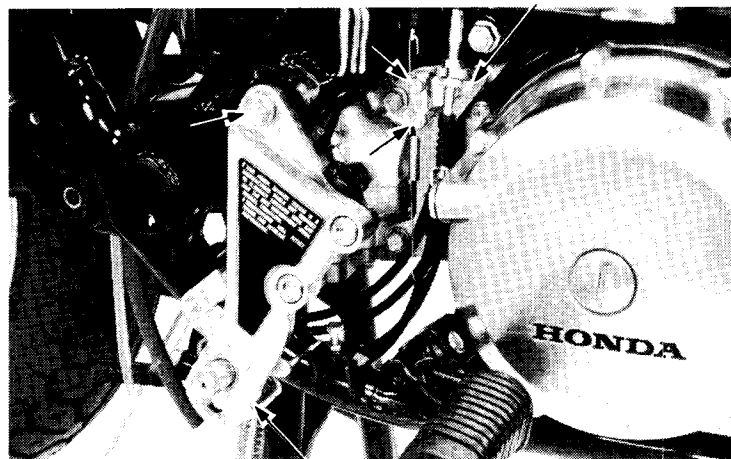


GROUND
CABLE

Remove the brake pedal.
Remove the brake pedal bracket lower mounting bolt and loosen the upper bolt.

Disconnect the clutch cable.
Remove the clutch cable holder.

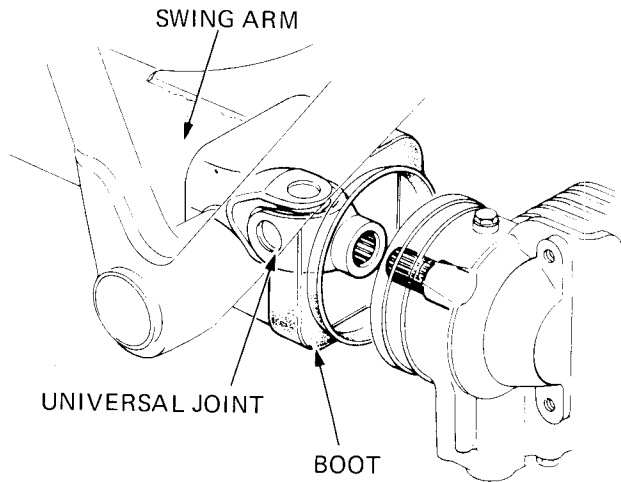
CLUTCH
CABLE HOLDER



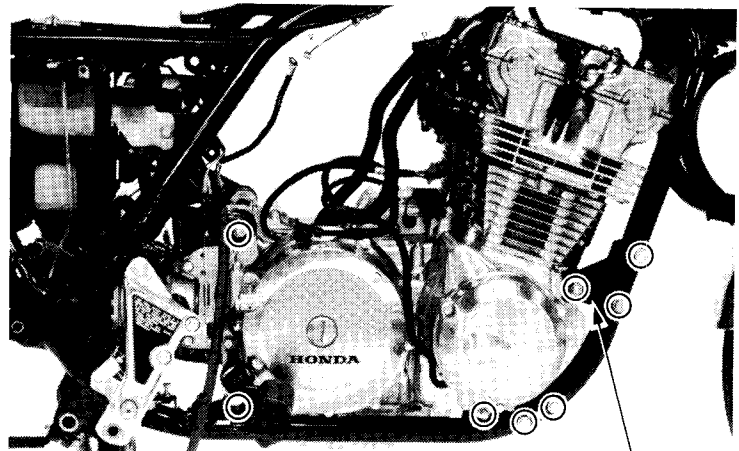
BRAKE PEDAL BRACKET



Remove the rear wheel (page 15-2).
Remove the final drive gear (page 16-3).
Pull the swing arm boot back and disengage the drive shaft from the engine.

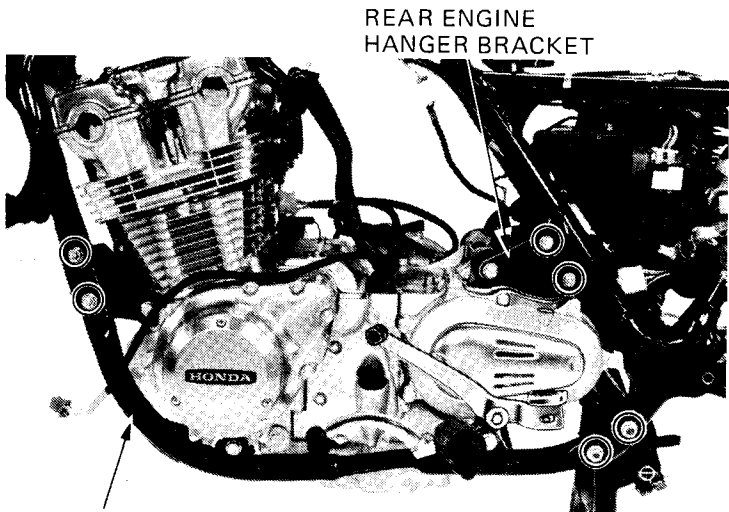


Place a jack under the engine.
Remove the engine mounting bolts and right engine hanger bracket.



RIGHT ENGINE HANGER BRACKET

Remove the rear engine hanger bracket.
Remove the left side under frame.
Remove the engine from the left side.



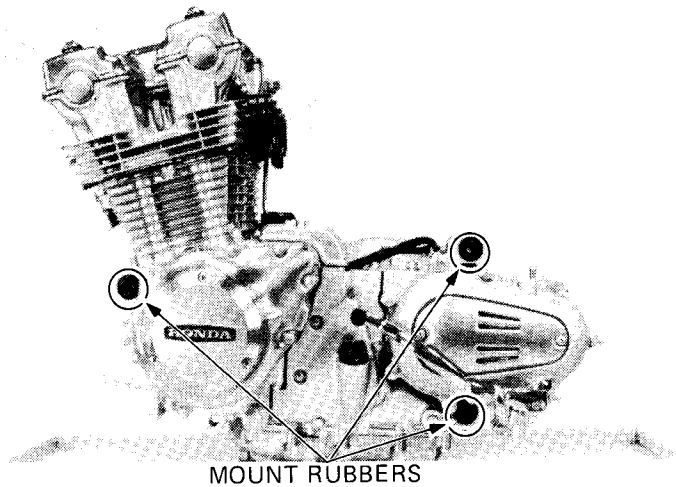
REAR ENGINE HANGER BRACKET

LEFT SIDE UNDER FRAME



ENGINE INSTALLATION

Check the engine mount rubbers for damage.
Replace if necessary.
Install the engine mount rubbers.



MOUNT RUBBERS

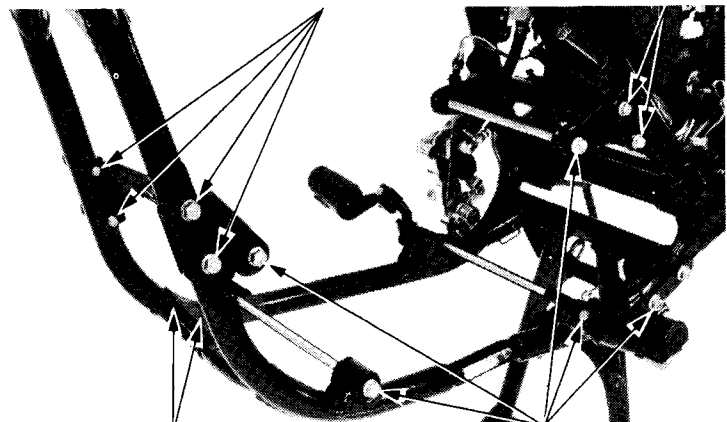
Install the engine in the reverse order of removal.

NOTE

- Route the wires and cables properly (Page 1-9).
- Fill the crankcase to the proper level with the recommended oil (Page 2-1).
- Perform the following inspection and adjustments:
Throttle operation (Page 3-3).
Clutch (Page 3-17).

10 mm BOLTS
3.5–4.5 kg-m
(25–33 ft-lb)

8 mm BOLTS
2.0–2.4 kg-m
(14–17 ft-lb)

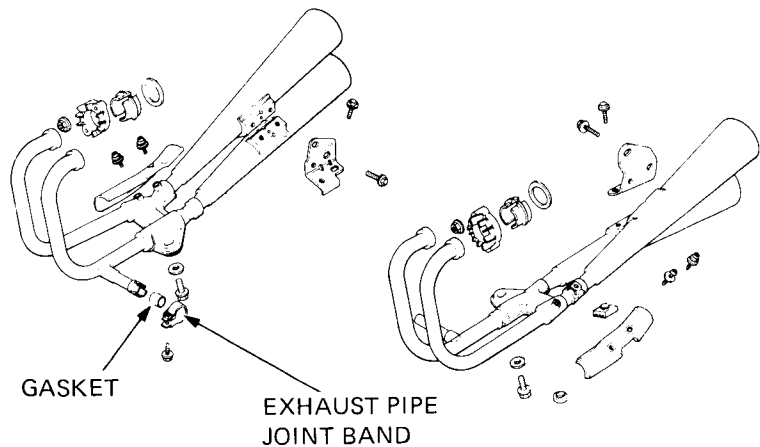


8 mm BOLTS
2.0–2.4 kg-m
(14–17 ft-lb)

10 mm BOLTS
3.5–4.5 kg-m
(25–33 ft-lb)

EXHAUST PIPE INSTALLATION

Install a new exhaust pipe joint gasket.
Assemble the left and right exhaust pipes.
Tighten the exhaust pipe band loosely.



GASKET

EXHAUST PIPE
JOINT BAND



Install the exhaust pipes.

Temporarily install all bolts and nuts, then tighten them as follows:

1. Tighten the exhaust pipe joint nuts.

TORQUE: 3.0–3.5 kg-m (22–25 ft-lb)

2. Tighten the exhaust pipe mounting under bolts.

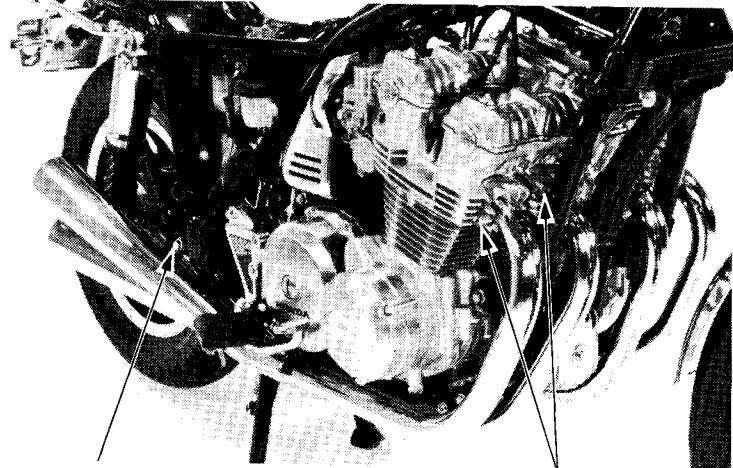
TORQUE: 3.5–4.5 kg-m (25–33 ft-lb)

3. Tighten the rear muffler hanger setting bolts.

TORQUE: 3.5–4.5 kg-m (25–33 ft-lb)

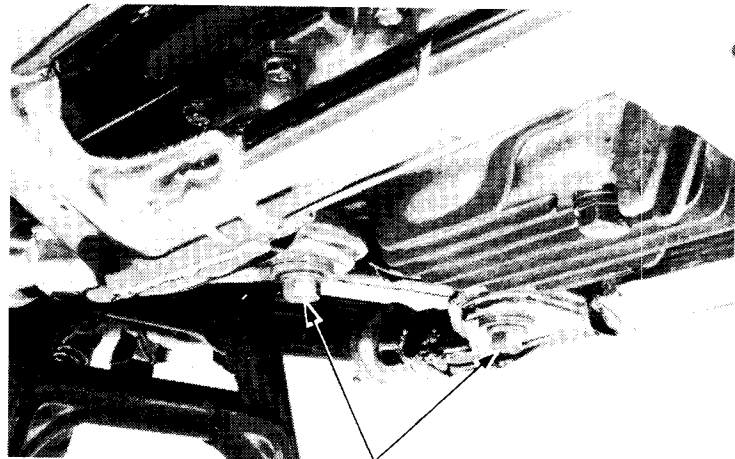
4. Tighten the exhaust pipe joint band bolt.

TORQUE: 2.0–2.4 kg-m (14–17 ft-lb)



HANGER
SETTING BOLT

JOINT
NUTS



UNDER BOLT