

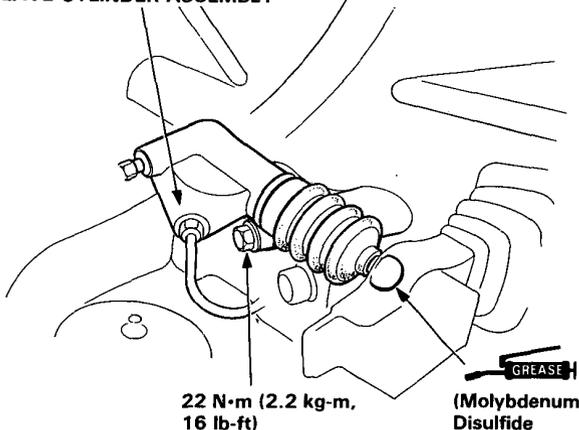
# Transmission

## Removal

1. Disconnect the battery positive (+) and negative (-) cables from the battery.
2. Disconnect the starter and ground cables.
3. Disconnect the backup light switch wires from the engine.
4. Loosen the 6 x 1.0 mm bolt attaching the harness holder at the side of the transmission hanger, and release harness from the transmission.
5. Loosen the 6 x 1.0 mm bolts at the side of the battery base, and intake hose band.
6. Remove the air cleaner case complete with the air intake hose (see section 7).
7. Remove the 8 x 1.25 mm bolts and the clutch slave cylinder with the clutch pipe and push rod.
8. Remove the 8 x 1.25 mm bolts and clutch damper assy from transmission hanger bracket.

**NOTE:** Do not operate the clutch pedal once the slave cylinder has been removed.

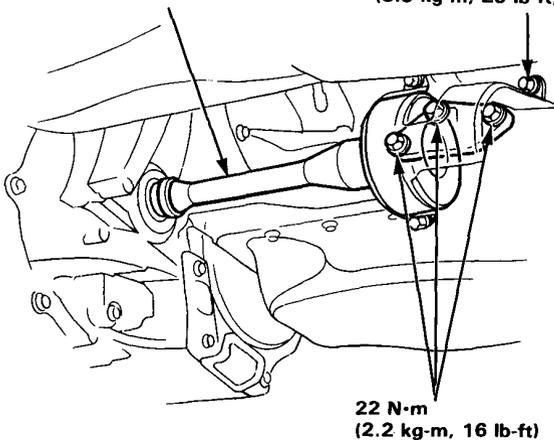
### SLAVE CYLINDER ASSEMBLY



9. Remove the power steering speed sensor with the sensor hose intact.
10. Drain the transmission oil.
11. Remove the axles (see Section 10).
12. Remove the intermediate shaft by removing the 4 bolts.

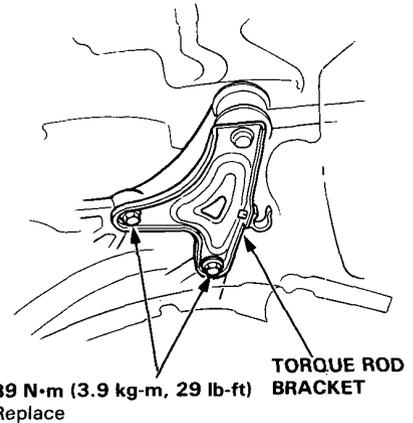
### INTERMEDIATE SHAFT

39 N·m (3.9 kg-m, 29 lb-ft)



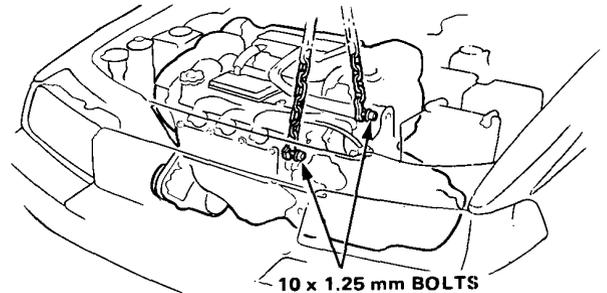
13. Remove the shift rod and shift extension.
14. Remove the 2 bolts attaching the torque rod bracket to the clutch case.

**NOTE:** Replace the bolts with new ones whenever loosened or removed.



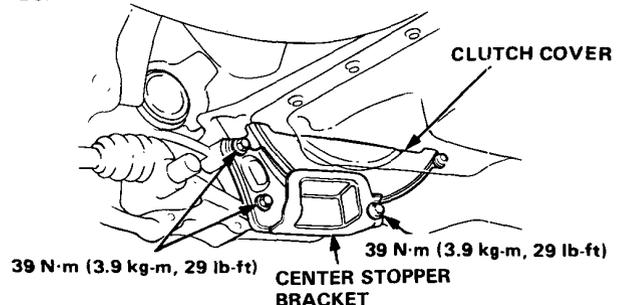
15. Place transmission jack securely beneath transmission.
16. Remove the sub frame center beam.
17. Attach the engine hanger set plates to the engine with two 10 x 1.25 mm bolts, one on each bank.
18. Make sure the hoist chain is tight.

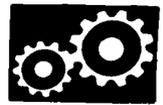
**NOTE:** Use bolts long enough to hold the set plate on the engine, and tighten securely.



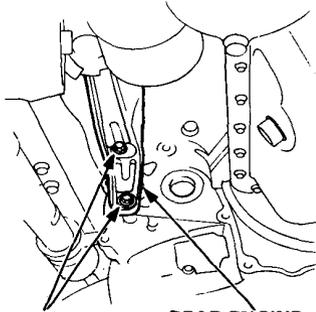
**NOTE:** Be sure the hoist does not interfere with distributor high tension wires.

19. Remove the center stopper bracket from the transmission.
20. Remove the clutch cover.





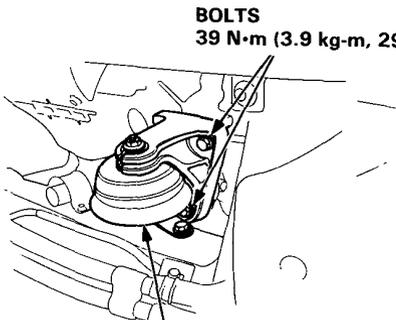
21. Remove the two rear engine mounting bolts from the transmission.



**39 N·m (3.9 kg-m,  
29 lb-ft)**

**REAR ENGINE  
MOUNT**

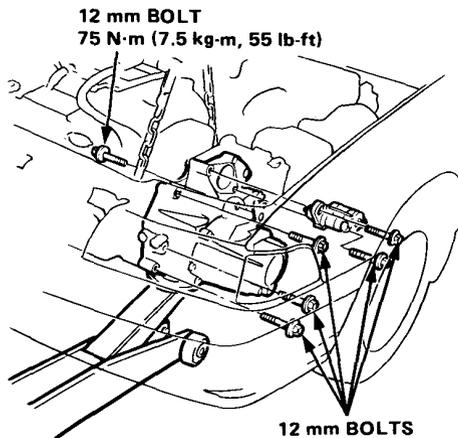
22. Remove the two front engine mounting bolts from the transmission housing.



**BOLTS  
39 N·m (3.9 kg-m, 29 lb-ft)**

**FRONT ENGINE  
MOUNT**

23. Remove the starter mounting bolts and starter.  
24. Remove the rest of the transmission mounting bolts.



**12 mm BOLT  
75 N·m (7.5 kg-m, 55 lb-ft)**

**12 mm BOLTS  
75 N·m (7.5 kg-m, 55 lb-ft)**

25. Pull the transmission away from the engine to clear the two 14 mm dowel pins, and lower on the transmission jack.

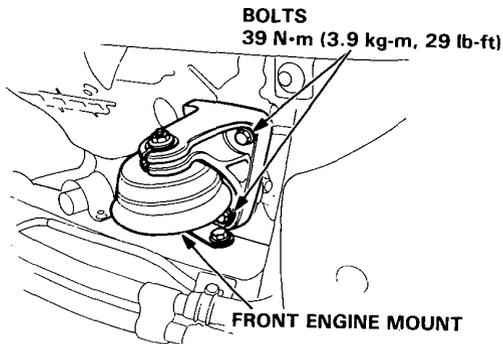
# Transmission

## Installation

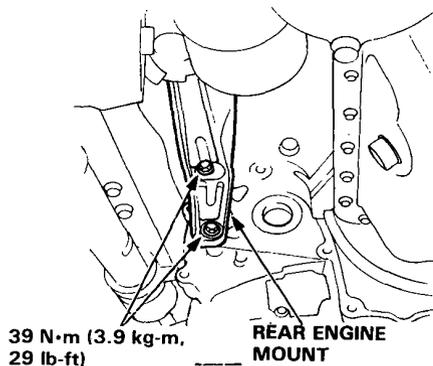
1. Place the transmission on transmission jack.

**NOTE:** Clean and grease release bearing sliding surfaces.

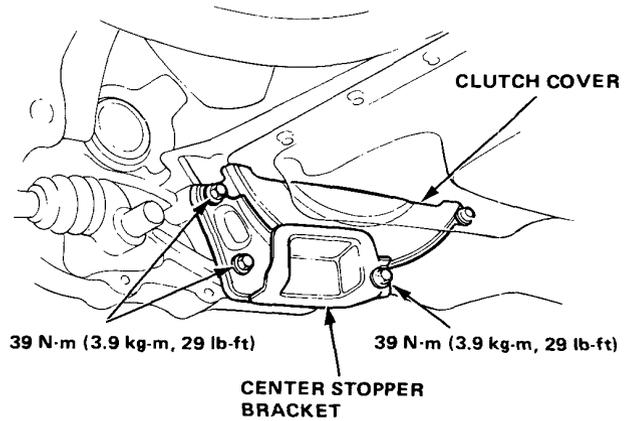
2. Check that the two dowel pins are installed in the clutch housing.
3. Raise the transmission far enough to align dowel pins with matching holes in the block.
4. Roll the transmission toward the engine and fit the mainshaft into the clutch disc splines.
5. Install the transmission mount bolts and torque to 75 N·m (7.5 kg-m, 55 lb-ft).
6. Install the starter mount bolts and tighten to the specified torque.
7. Install the front engine mount bolts and torque to 39 N·m (3.9 kg-m, 29 lb-ft).



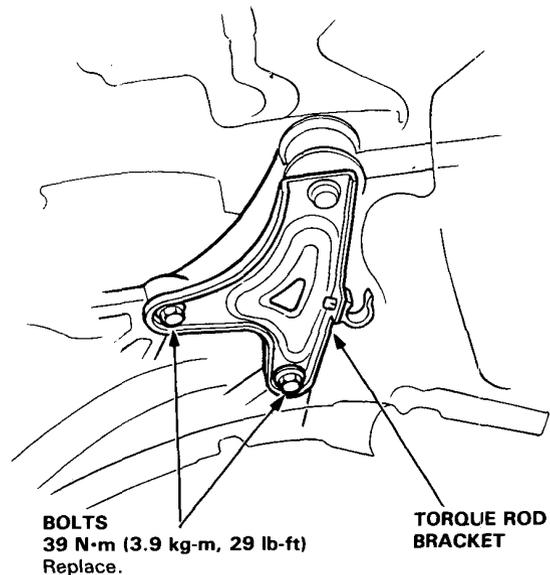
8. Install the rear engine mount bolts and tighten to 39 N·m (3.9 kg-m, 29 lb-ft) torque.



9. Install the center stopper bracket bolts and tighten to 39 N·m (3.9 kg-m, 29 lb-ft).
10. Install the clutch cover.

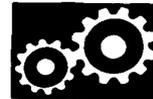


11. Install the center beam.
12. Remove the transmission jack.
13. Install and tighten the new torque rod bracket bolts to 39 N·m (3.9 kg-m, 29 lb-ft).

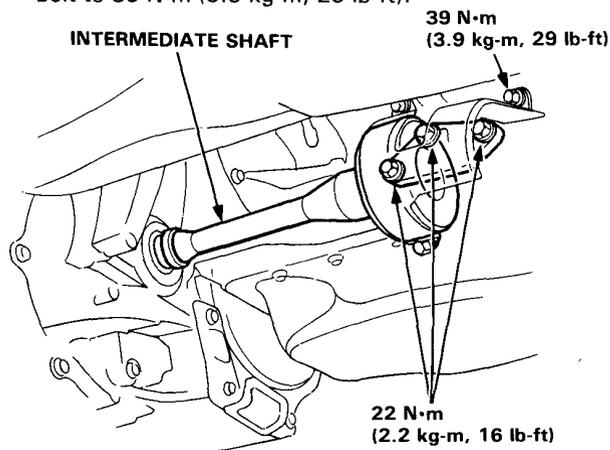


**NOTE:** Replace the bolts with new ones whenever loosened removed.

14. Remove the chain hoist by removing the two 10 mm bolts.

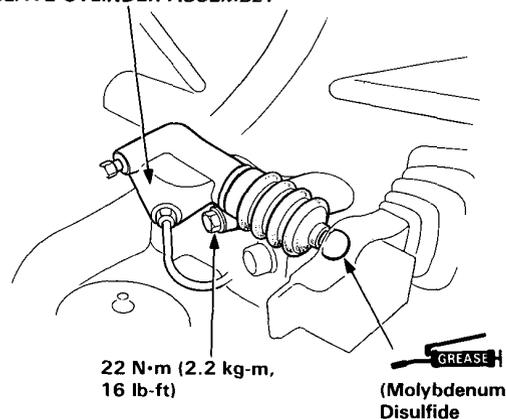


15. Install the shift rod and shift extension.
16. Install the intermediate shaft with the three 8 x 1.25 mm bolts and a 10 x 1.25 mm bolt. Tighten 8 mm bolts to 22 N·m (2.2 kg-m, 16 lb-ft) and 10 mm bolt to 39 N·m (3.9 kg-m, 29 lb-ft).



17. Install the right and left axles.
18. Install the speed sensor.
19. Install the clutch slave cylinder with the two 8 x 1.25 mm bolts complete with the pipe and push rod. Torque the bolts to 22 N·m (2.2 kg-m, 16 lb-ft).
20. Install the clutch damper assembly and 8 x 1.25 mm bolts to transmission hanger bracket. Torque the bolts to 22 N·m (2.2 kg-m, 16 lb-ft).

#### SLAVE CYLINDER ASSEMBLY



21. Install the air cleaner case and intake hose.
22. Install and tighten the two 6 x 1.0 mm bolts at side of the battery case, and tighten the intake hose band.
23. Tighten the 6 x 1.0 mm harness holder bolt at the side of the transmission hanger.
24. Connect the backup light switch wire to the engine.
25. Connect the starter and ground cables.
26. Connect the battery positive (+) and negative (-) cables to the battery.
27. Refill the transmission and adjust clutch free play.
28. Check the transmission for smooth operation.