



Engine Removal/Installation

Removal

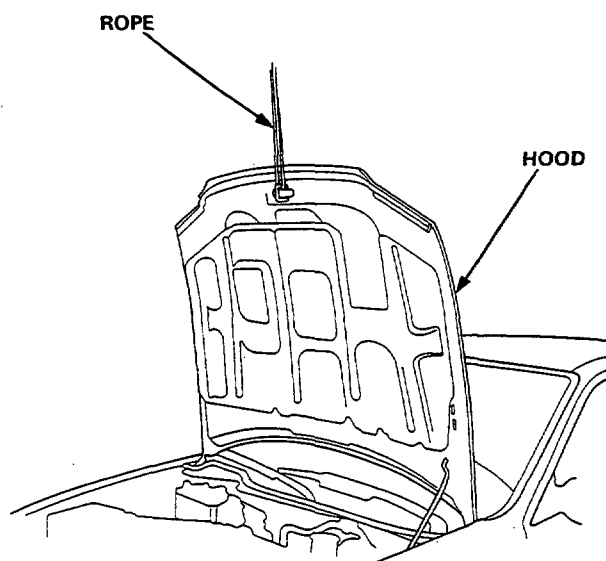
⚠ WARNING

- Make sure jacks and safety stands are placed properly and hoist brackets are attached to the correct positions on the engine.
- Make sure the car will not roll off stands and fall while you are working under it.

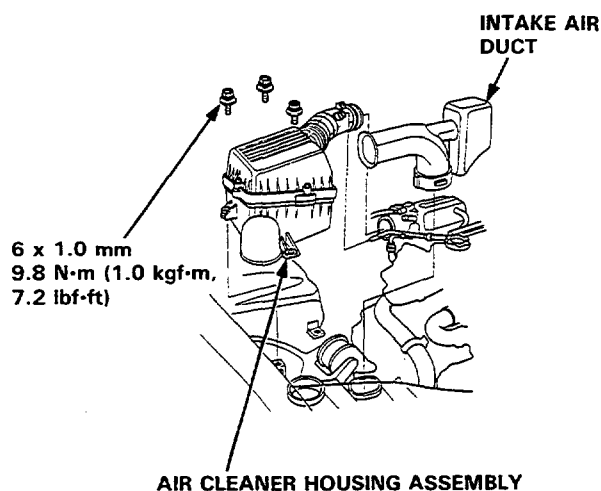
CAUTION:

- Use fender covers to avoid damaging painted surfaces.
- Unspecified items are common.
- Unplug the wiring connectors carefully while holding the connector portion to avoid damage.
- Mark all wiring and hoses to avoid misconnection. Also, be sure that they do not contact other wiring or hoses, or interfere with other parts.

1. Fix the hood in a vertical position as shown in the illustration.



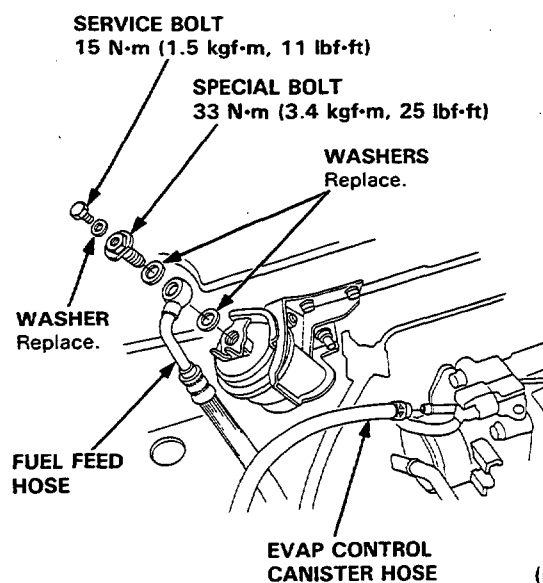
2. Disconnect the battery negative terminal first, then the positive terminal.
3. Remove the battery.
4. Remove the intake air duct and the air cleaner housing assembly.



5. Relieve fuel pressure by loosening the service bolt on the fuel filter about one turn (see section 11).

⚠ WARNING Do not smoke while working on fuel system. Keep open flame or spark away from work area. Drain fuel only into an approved container.

6. Remove the fuel feed hose and evaporative emission (EVAP) control canister hose.



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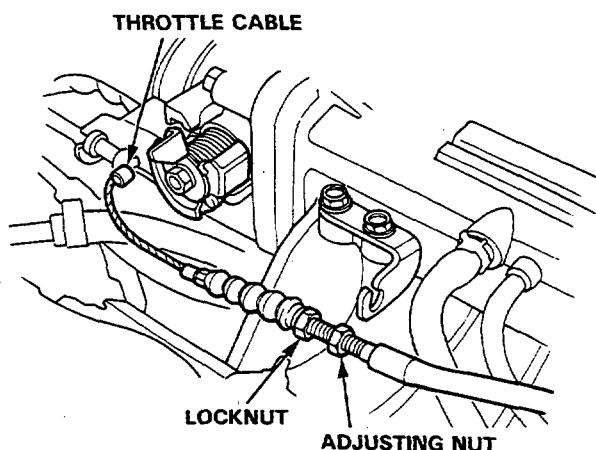
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Removal (cont'd)

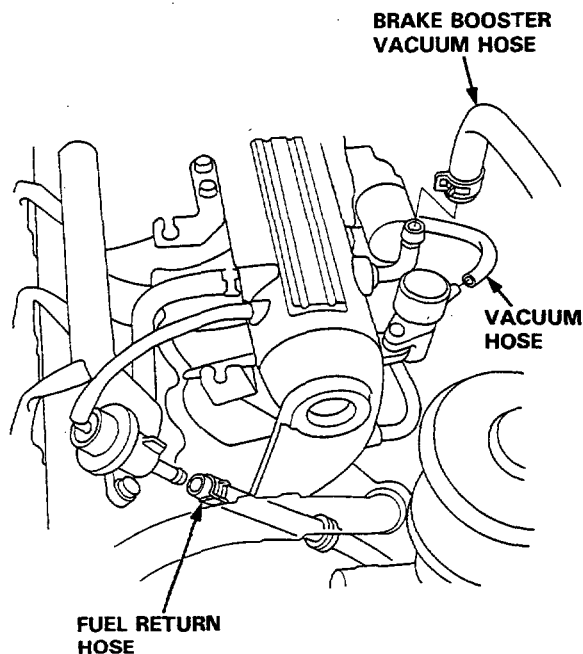
7. Remove the throttle cable by loosening the locknut, then slip the cable end out of the throttle linkage.

NOTE:

- Do not loosen the adjusting nut.
- Take care not to bend the cable when removing it. Always replace any kinked cable with a new one.
- Adjust the throttle cable when installing (see section 11).

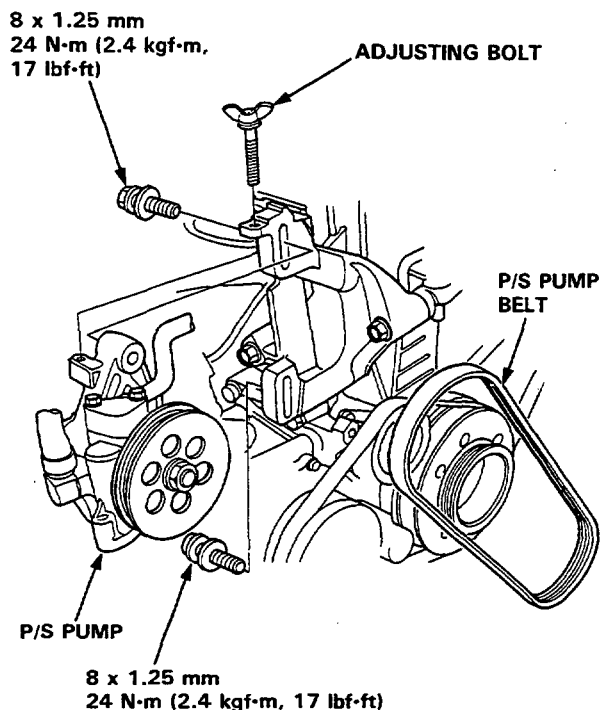


8. Remove the brake booster vacuum hose, vacuum hose and fuel return hose.

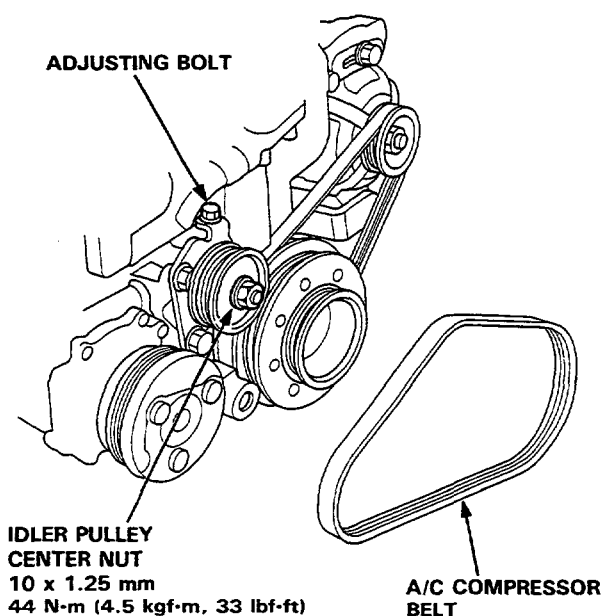


9. Remove the mounting bolt and adjusting bolt, then remove the power steering (P/S) pump belt and pump.

- Do not disconnect the P/S hoses.

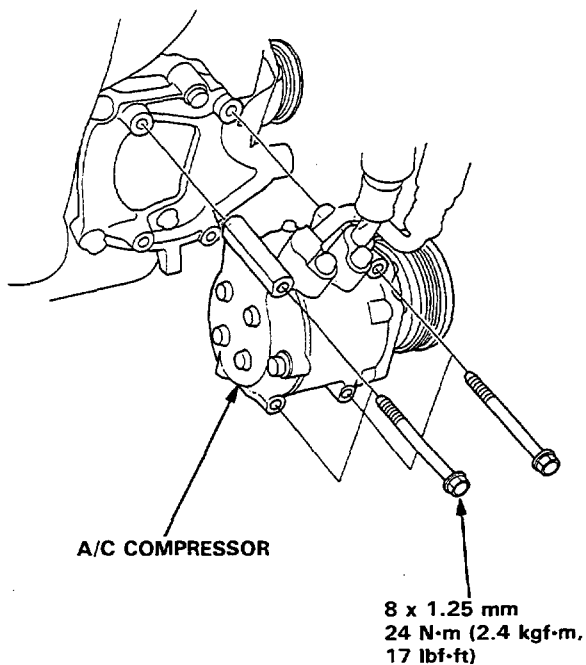


10. Loosen the idler pulley center nut and adjusting bolt, then remove the air conditioning (A/C) compressor belt.

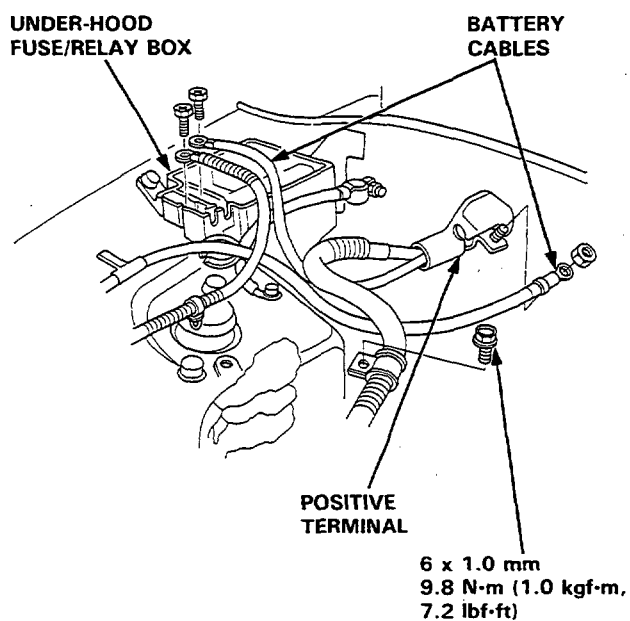




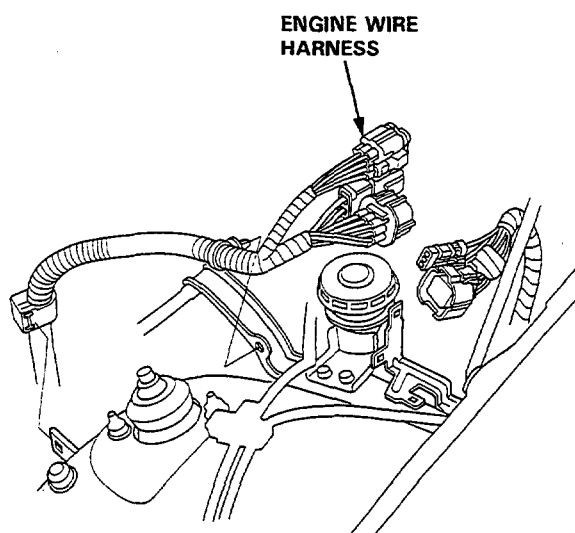
11. Remove the A/C compressor.
● Do not remove the A/C hoses.



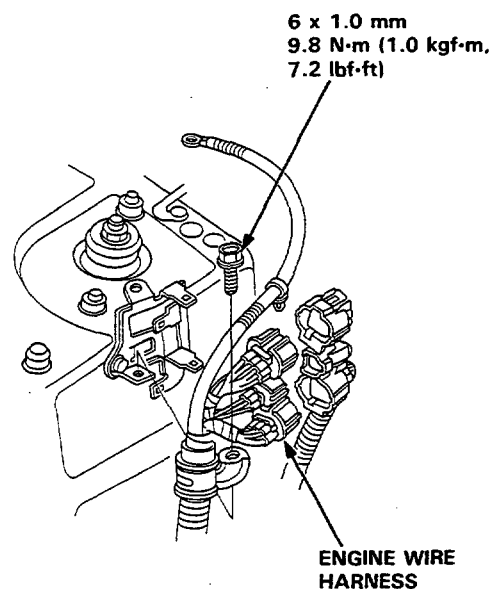
12. Remove the battery cables from the under-hood fuse/relay box and the positive terminal.



13. Remove the engine wire harness connectors on the left side of engine compartment.



14. Remove the engine wire harness connectors on the right side of engine compartment.



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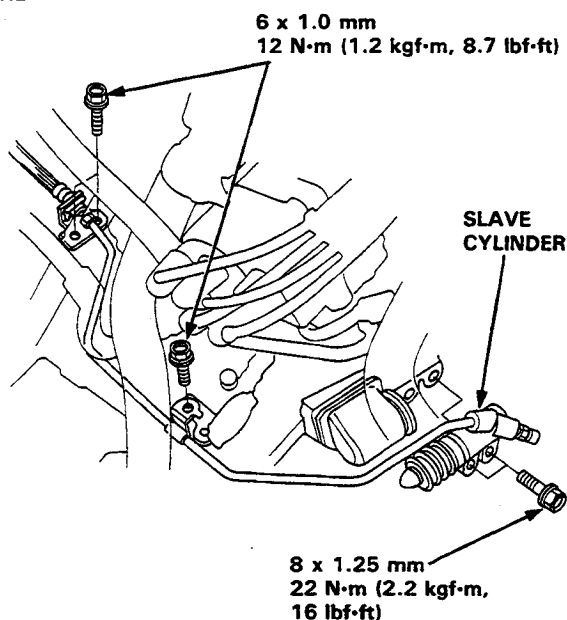
Removal (cont'd)

15. Remove the clutch slave cylinder and pipe/hose assembly for manual transmission (M/T).

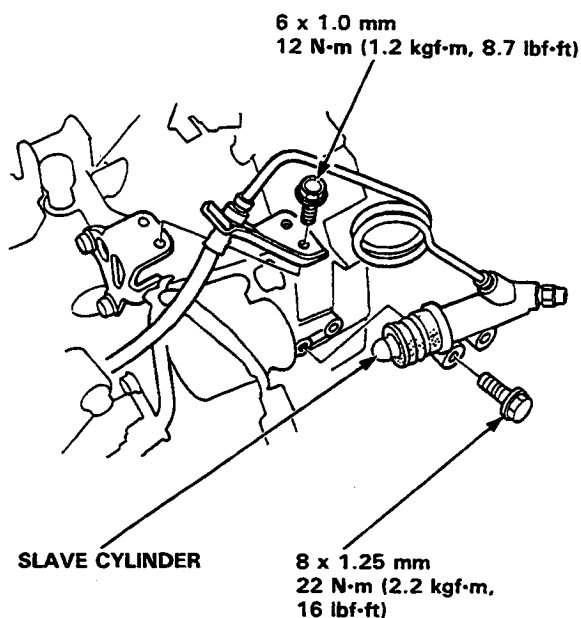
NOTE:

- Do not disconnect the pipe/hose assembly.
- Do not operate the clutch pedal once the slave cylinder has been removed.
- Take care not to bend the pipe.

LHD:



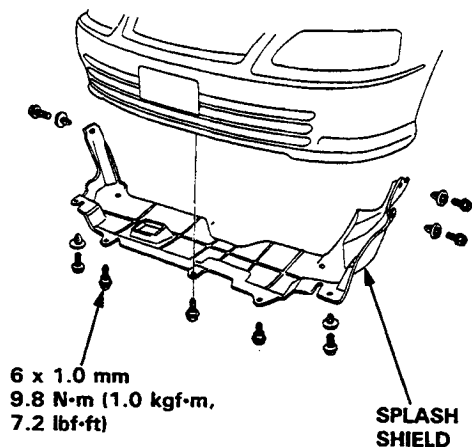
RHD:



16. Remove the radiator cap.

⚠ WARNING Use care when removing the radiator cap to avoid scalding by hot coolant or steam.

17. Raise the hoist to full height.
18. Remove the front tires/wheels and the splash shield.

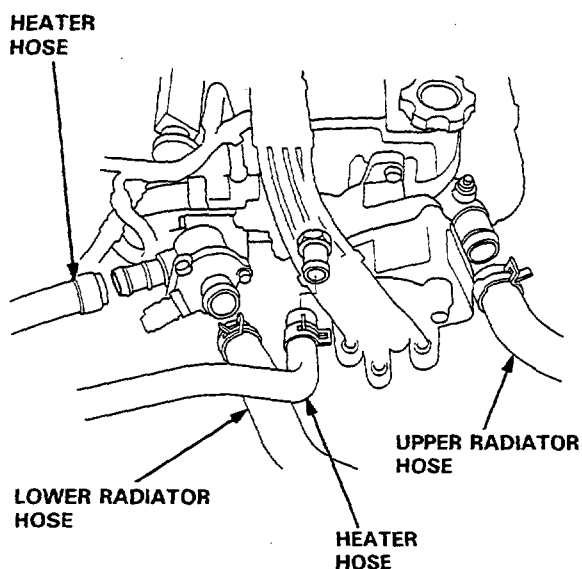


19. Drain the engine coolant (see page 10-4).
● Loosen the drain plug in the radiator.
20. Drain the transmission oil or fluid.
Reinstall the drain plug using a new washer.
21. Drain the engine oil. Reinstall the drain plug using a new washer.

CAUTION: Do not overtighten the drain plug.

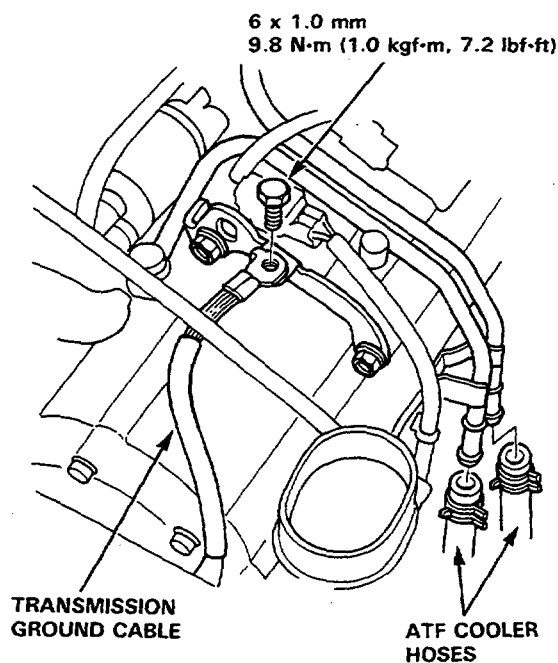


22. Lower the hoist, then remove the upper and lower radiator hoses and the heater hoses.



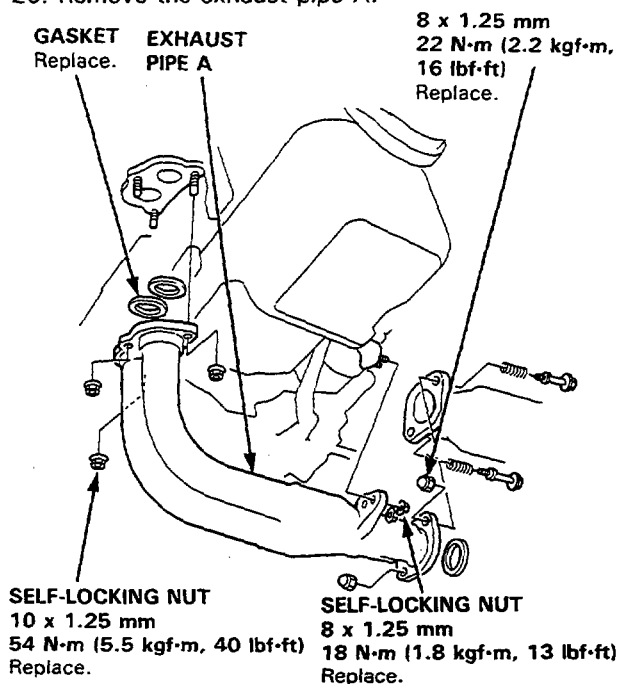
23. Remove the transmission ground cable.

24. (Automatic transmission) Remove the ATF cooler hoses.



25. Raise the hoist to full height.

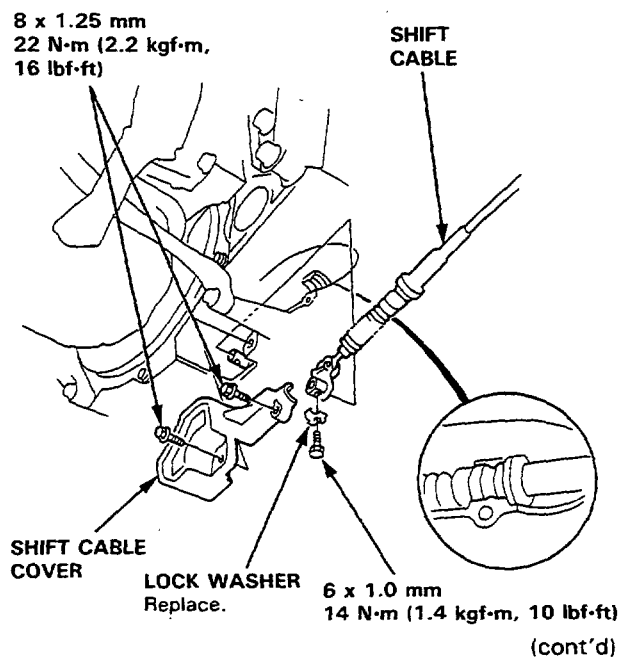
26. Remove the exhaust pipe A.



27. (Automatic transmission) Remove the shift cable.

NOTE:

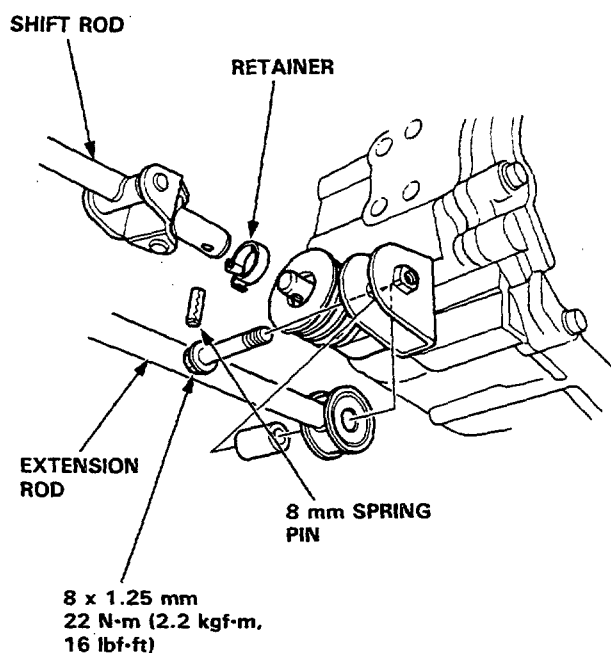
- Take care not to bend the cable when removing it. Always replace any kinked cable with a new one.
- Adjust the shift cable when installing (see section 14).



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Removal (cont'd)

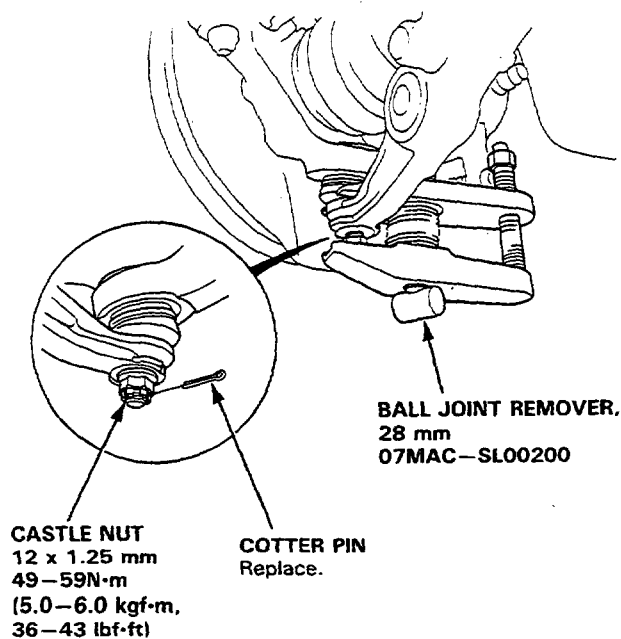
28. (Manual transmission) Remove the shift rod and extension rod.



29. Remove the damper fork (see section 18).

30. Disconnect the suspension lower arm ball joints with the special tool. Refer to section 18 for the proper procedure.

NOTE: Adjust the tool so the jaws are parallel to each other.

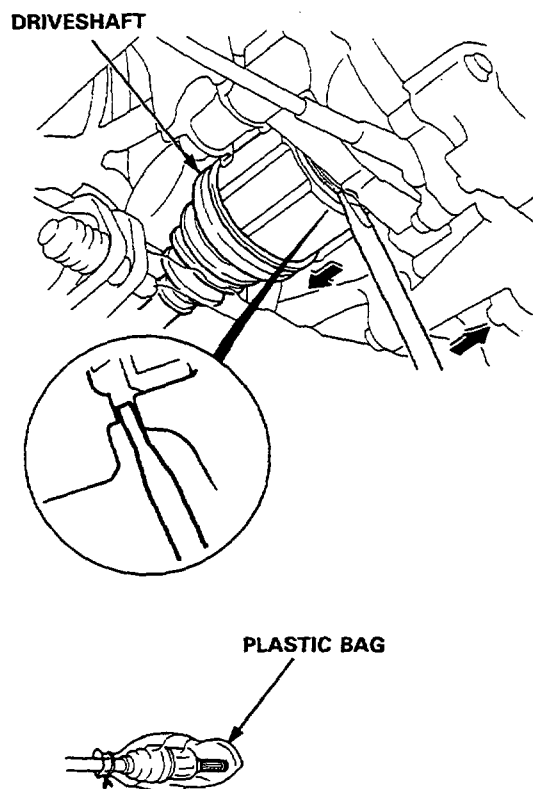


31. Remove the driveshafts.

CAUTION:

- Do not pull on the driveshaft, the CV joint may come apart.
- Use care when prying out the assembly. Pull it straight to avoid damaging the differential oil seal or intermediate shaft dust seal.

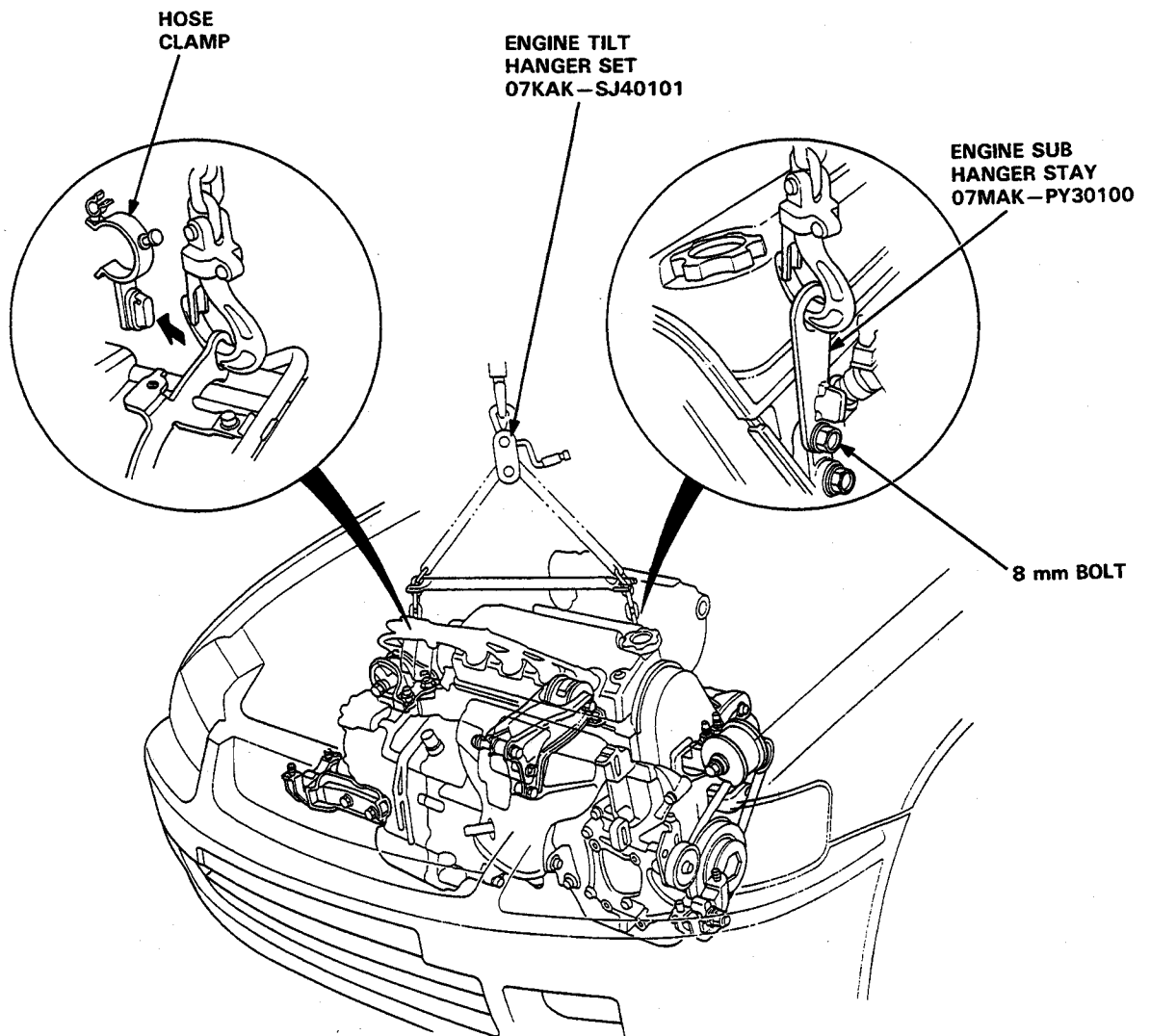
NOTE: Coat all precision-finished surfaces with clean engine oil. Tie plastic bags over the driveshaft ends.





32. Lower the hoist.

33. Attach the chain hoist to the engine.

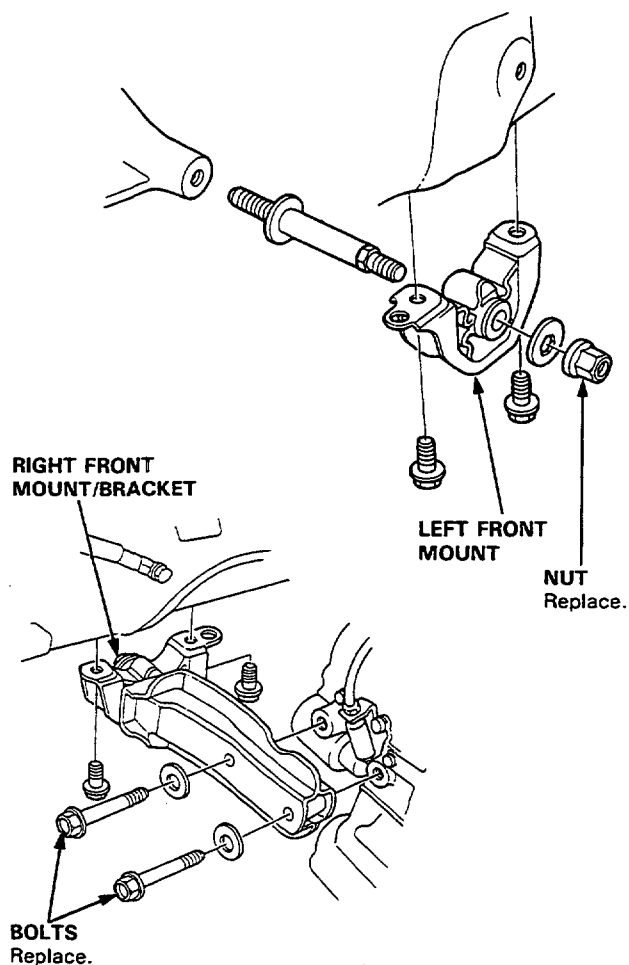


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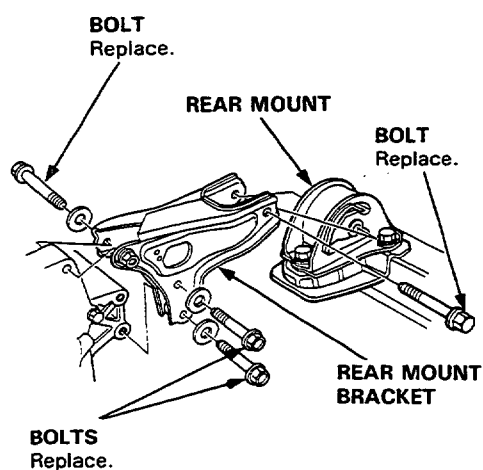
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Removal (cont'd)

34. Remove the left and right front mounts and brackets.

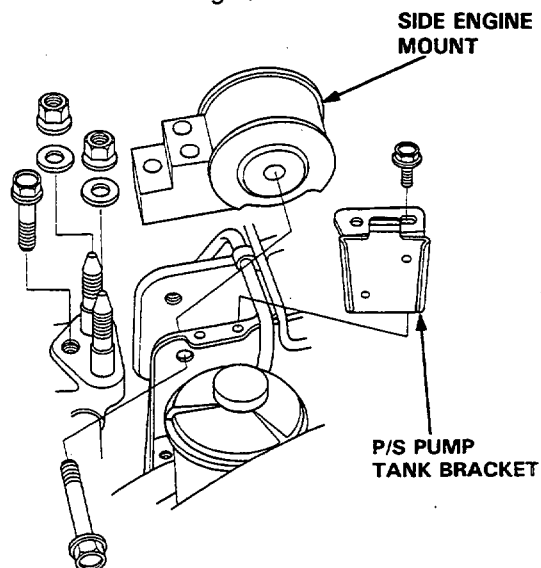


35. Remove the rear mount bracket.

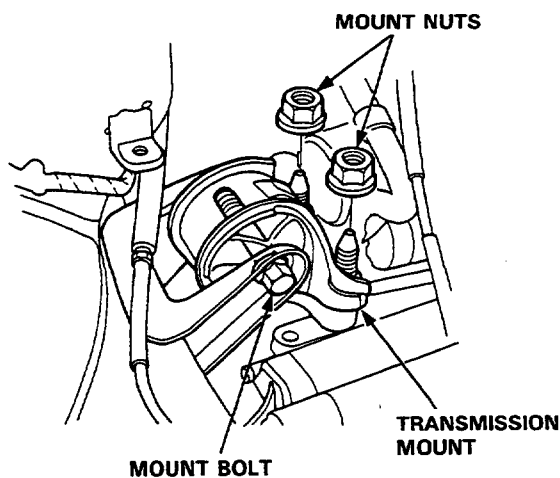


36. Remove the P/S pump tank bracket.

37. Remove the side engine mount.



38. Remove the transmission mount.



39. Check that the engine is completely free of vacuum hoses, fuel and engine coolant hoses and electrical wiring.

40. Slowly raise the engine approximately 150 mm (6 in). Check once again that all hoses and wires are disconnected from the engine.

41. Raise the engine all the way and remove it from the car.