

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 (see [section 1](#)).
- Make sure the car will not roll off stands and fall while you are working under it.

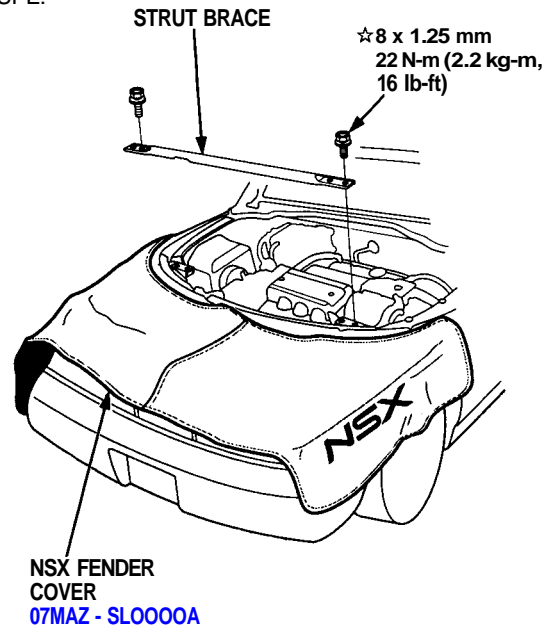
CAUTION:

- Use a fender cover (special tool) 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.
- If the ground clearance needs to be increased, use a scissors jack and install rubber spacers in the coil springs (see [section 1](#)).
- Put rubber pads under the jacking points when using jacks or safety stands to avoid damaging the body (see [section 1](#)).

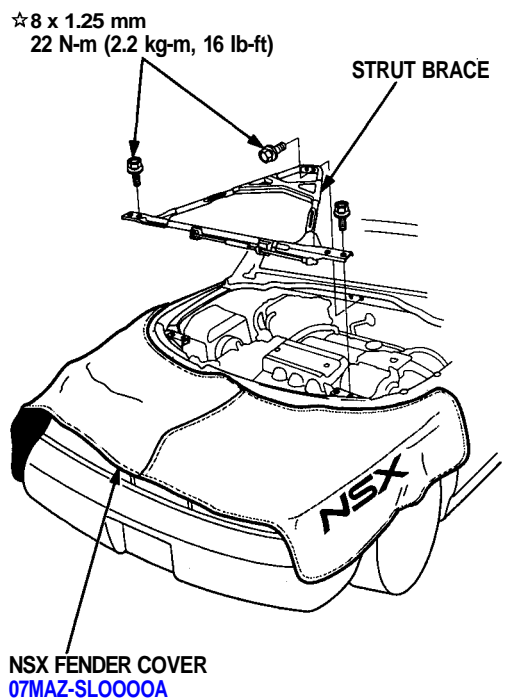
1. Move the seat bottoms and backs as far forward as they will go.
2. Remove the rear hatch assembly and engine cover (see [section 20](#)).
3. Disconnect the battery negative terminal first, then the positive terminal.

4. Remove the strut brace.

COUPE:



NSX-T (open top):



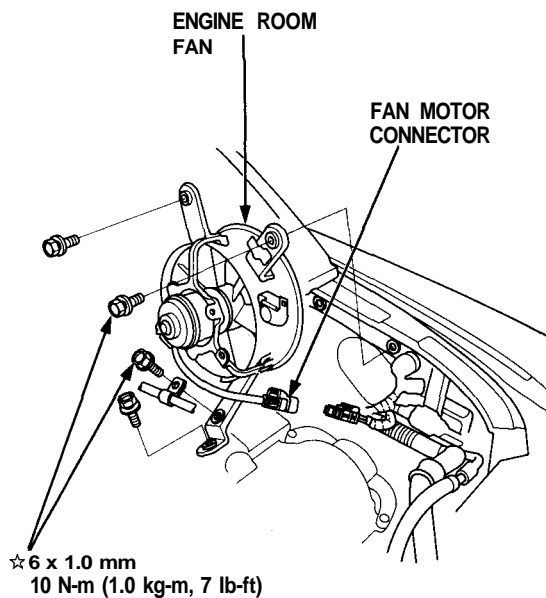
☆: CORROSION RESISTANT BOLT

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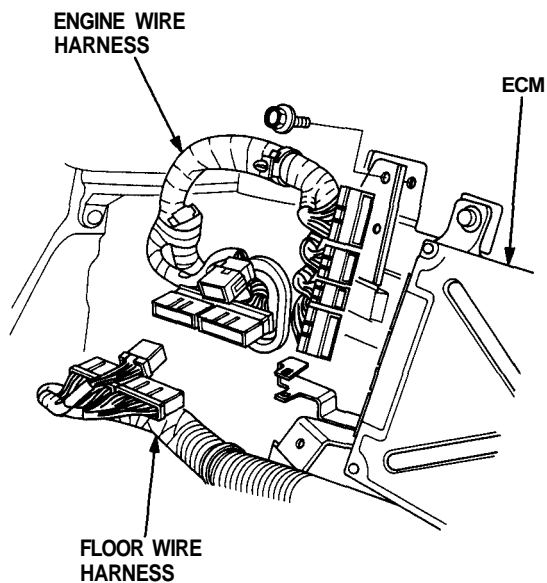
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Removal (cont'd)

5. Disconnect the fan motor connector, then remove the engine room fan assembly.

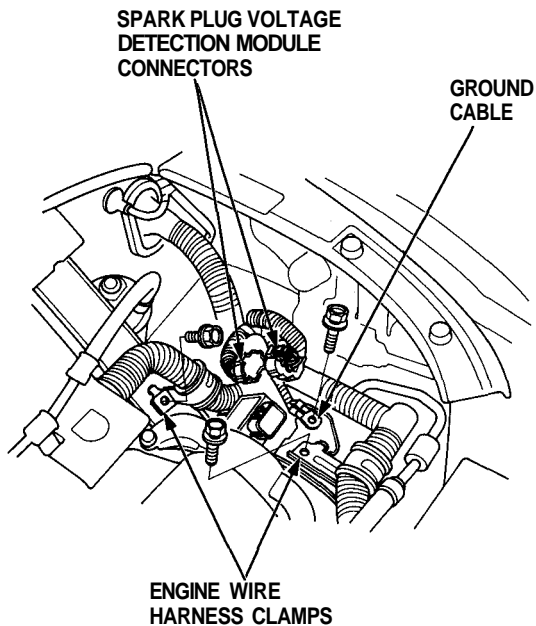


6. Remove the rear trim panels behind the passenger's seat, then disconnect four connectors from the engine control module (ECM) and three connectors from the floor wire harness.

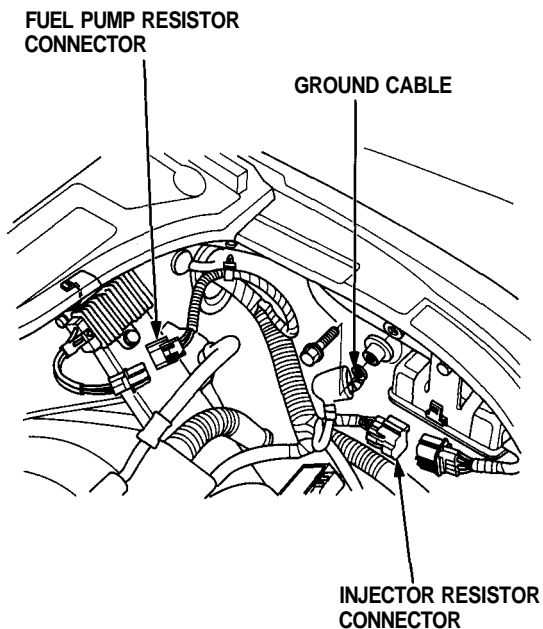


\star : CORROSION RESISTANT BOLT

7. Disconnect the spark plug voltage detection module connectors, ground cable and engine wire harness clamps.



8. Disconnect the fuel pump resistor connector, injector resistor connector and ground cable.

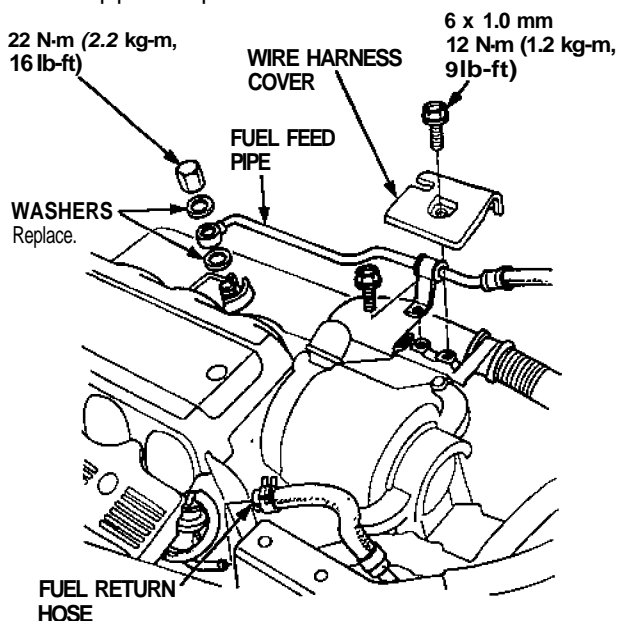




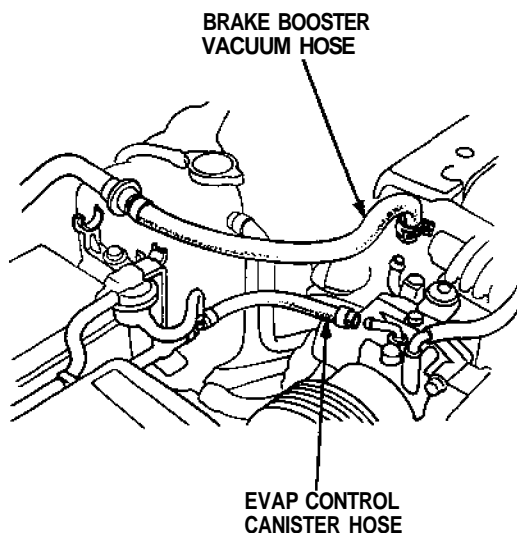
9. Relieve fuel pressure by loosening the service bolt on the fuel filter about one turn (see [section 11](#)).

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

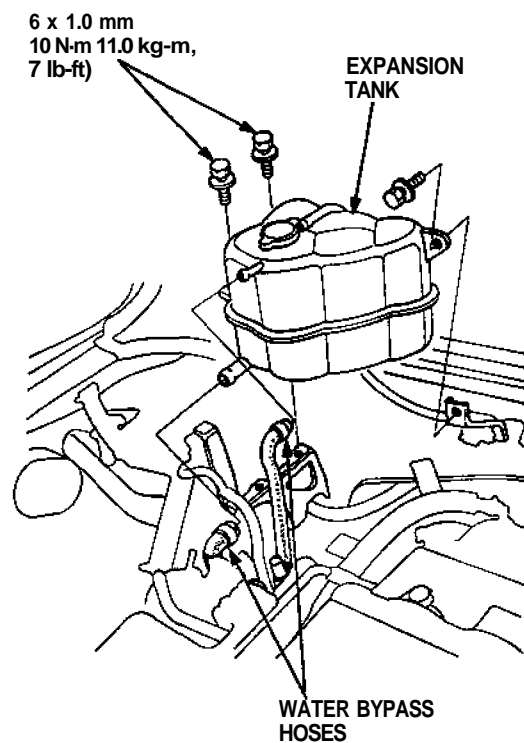
10. Remove the fuel feed pipe and fuel return hose.
11. Remove the wire harness cover, then remove the fuel pipe clamp.



12. Remove the brake booster vacuum hose and evaporative emission (EVAP) control canister hose.



13. Remove the expansion tank cap.
14. Raise the hoist to full height.
15. Drain the engine coolant (see page [10-5](#)).
 - Loosen the drain plug from the radiator lower tank.
 - Remove two drain bolts from the water pipes. Reinstall the drain bolts with new washers.
 - Loosen the front and rear engine drain bolts to drain engine coolant from the cylinder heads. Connect rubber hoses to the drain bolts.
16. Drain the transmission oil/fluid. Reinstall the drain plug with a new washer.
17. Drain the engine oil. Reinstall the drain plug with a new washer.
18. Lower the hoist, then remove the air cleaner housing (see page [6-25](#) ('91-'93 Models), or ('95-'96 Models)).
19. Disconnect two hoses, then remove the expansion tank.

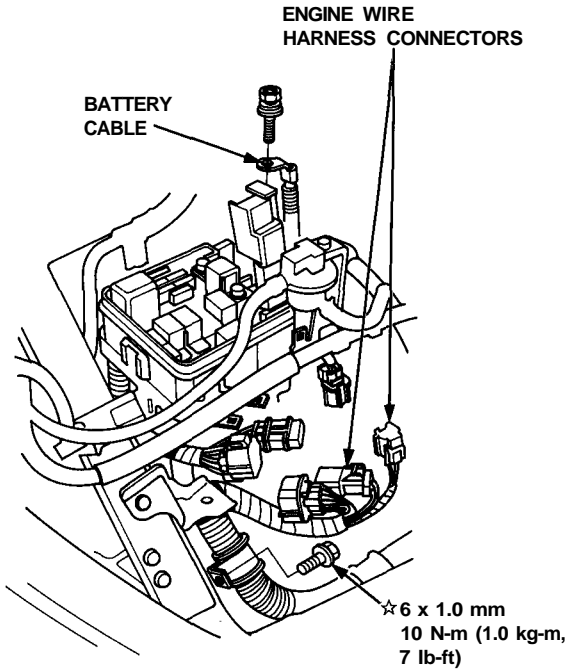


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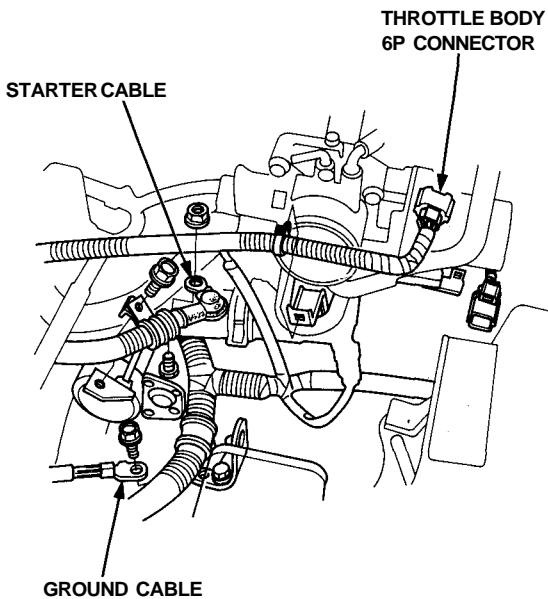
Engine Removal/Installation

Removal (cont'd)

20. Disconnect the engine wire harness connectors.
21. Remove the battery cable from the main fuse box.

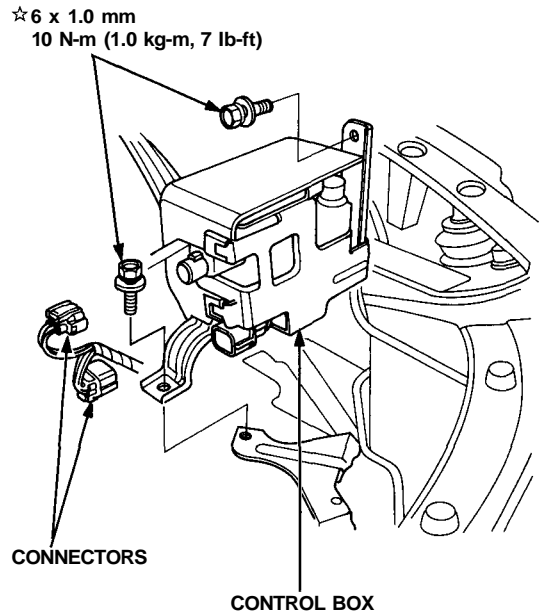


22. Disconnect the throttle body 6P connector, and remove the ground cable and starter cable.

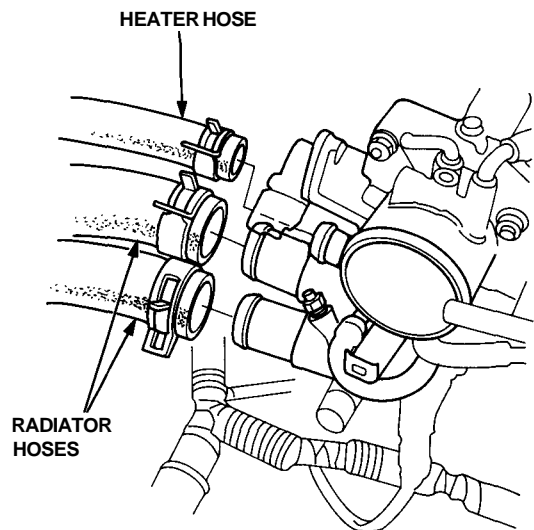


☆: CORROSION RESISTANT BOLT

23. Disconnect the two connectors from the emission control box, then remove the control box.
 - Do not disconnect the vacuum hoses.

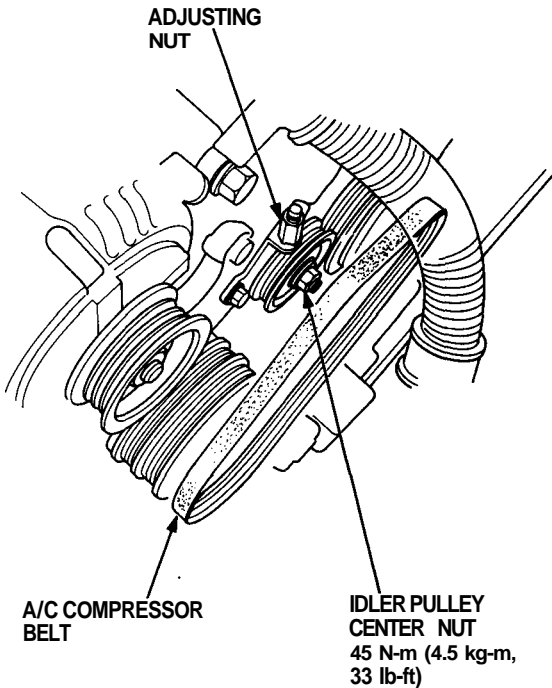


24. Remove the radiator hoses and heater hose.

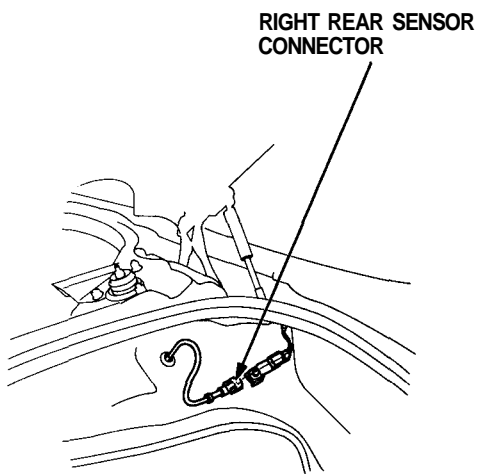




25. Loosen the idler pulley center nut and adjusting nut, then remove the air conditioning (A/C) compressor belt.



26. Move the trunk carpet, and disconnect the right rear wheel sensor connector. Push the wire and connector through the body hole into the engine compartment.



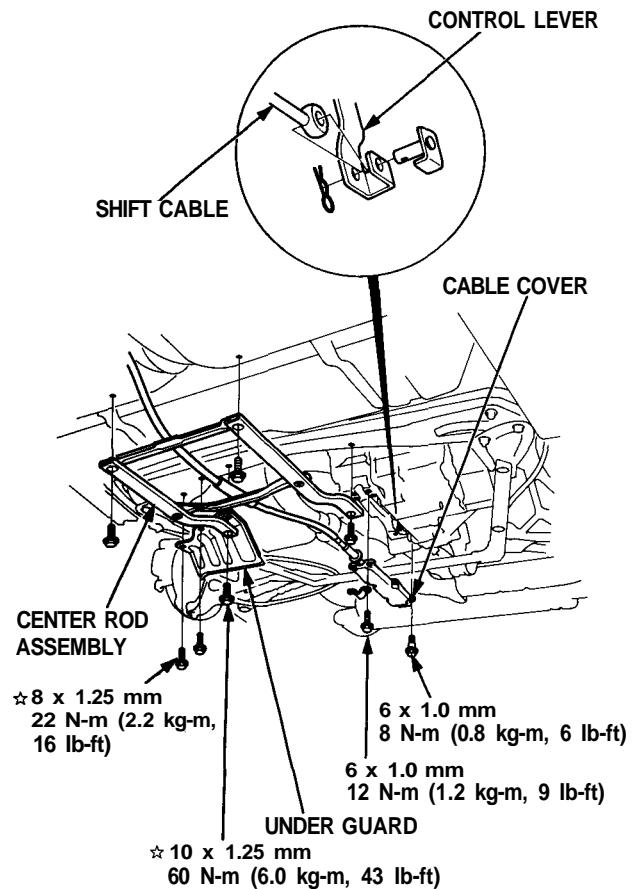
27. Raise the hoist to full height.
28. Remove the slave cylinder (M/T see [section 12](#)).
- Do not disconnect the clutch hose.
29. Remove the lower cover, then remove the shift cable and select cable (M/T see [section 13](#)).
30. Remove the cable cover, then remove the shift cable (A/T).

NOTE:

- Take care not to bend the cable when removing it. Always replace a kinked cable with a new one.
- Adjust the cable when installing.

31. Remove the engine under guard and the center rod assembly.

A/T:

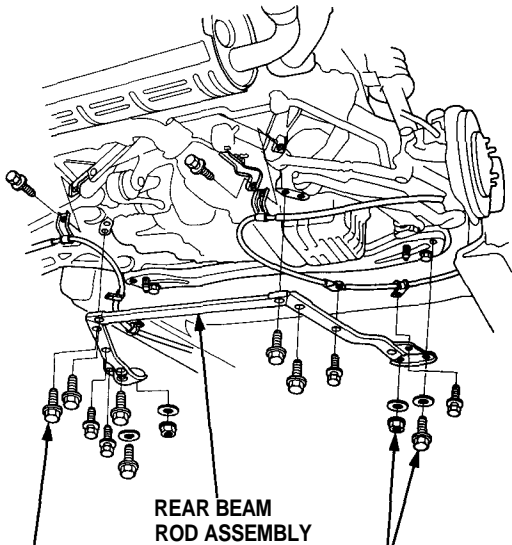


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Engine Removal/Installation

Removal (cont'd)

32. Remove the left and right parking brake cables (see [section 19](#)).
33. Remove the rear beam rod assembly and parking brake cable clamps.

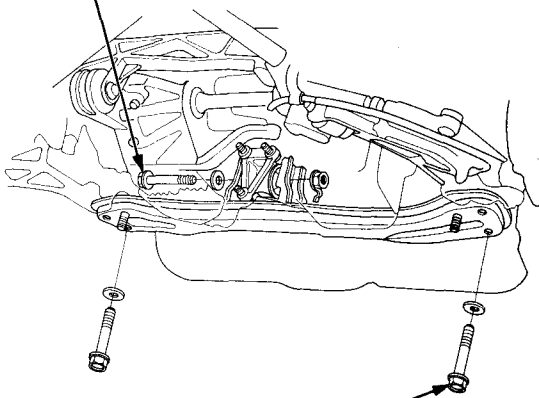


☆ 10 x 1.25 mm
60 N-m (6.0 kg-m,
43 lb-ft)

☆ 12 x 1.25 mm
95 N-m (9.5 kg-m,
69 lb-ft)

34. Remove the front engine mount, then remove the front beam.

☆ 12 x 1.25 mm
77 N-m (7.7 kg-m, 56 lb-ft)
Replace.



☆ 12 x 1.25 mm-
95 N-m (9.5 kg-m,
69 lb-ft)

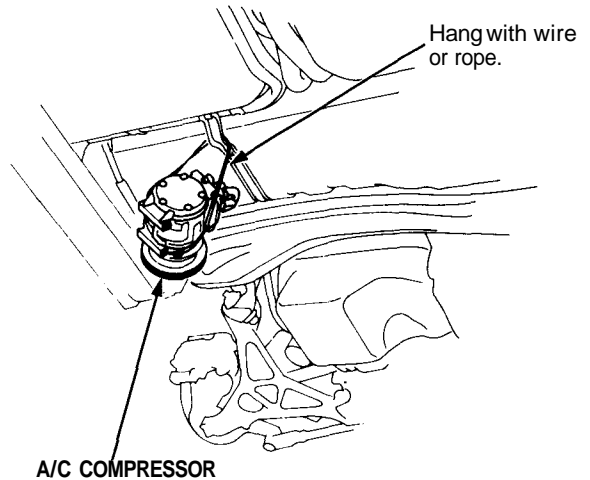
☆: CORROSION RESISTANT BOLT/NUT

35. Remove the A/C compressor (see [section 22](#)), then suspend it from the body.

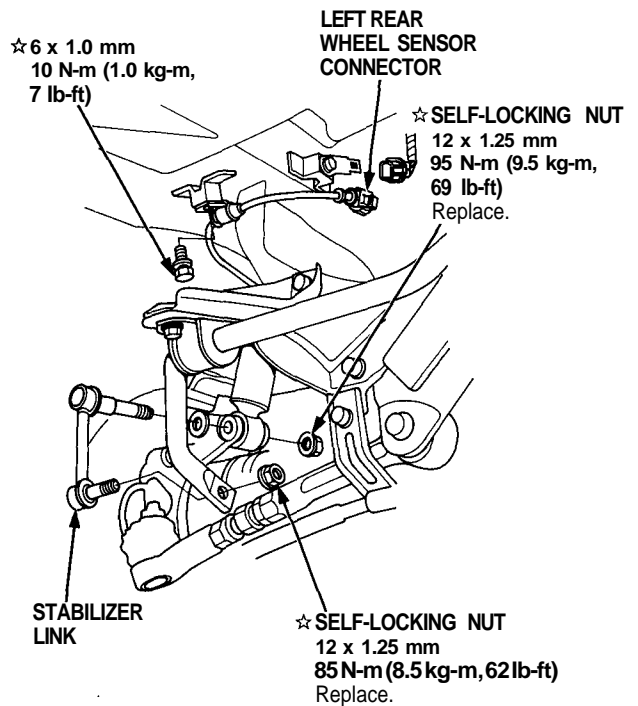
NOTE:

- Do not remove the compressor hoses.
- Do not let the compressor hang by its hoses.

36. Reinstall the front beam and front engine mount.

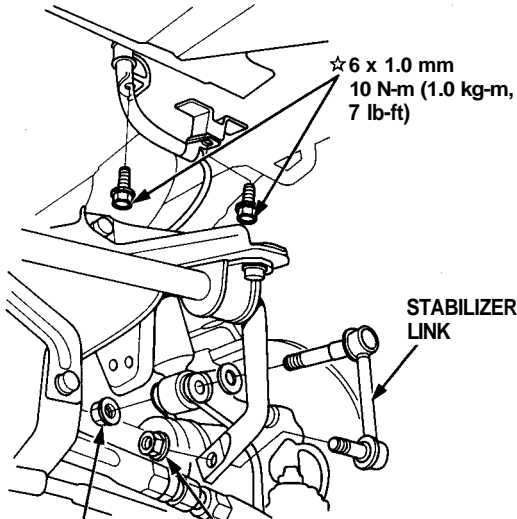


37. Remove the rear brake hoses, then plug the brake pipes with rubber caps (see [section 19](#)).
38. Disconnect the left rear wheel sensor connector, then remove the wheel sensor wire clamps and stabilizer link.





39. Remove the right wheel sensor wire clamps and stabilizer link.

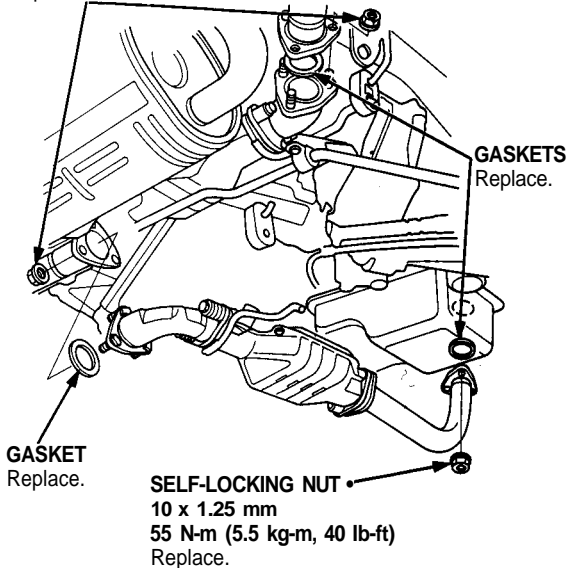


☆ SELF-LOCKING NUT
12 x 1.25 mm
95 N-m (9.5 kg-m,
69 lb-ft)
Replace.

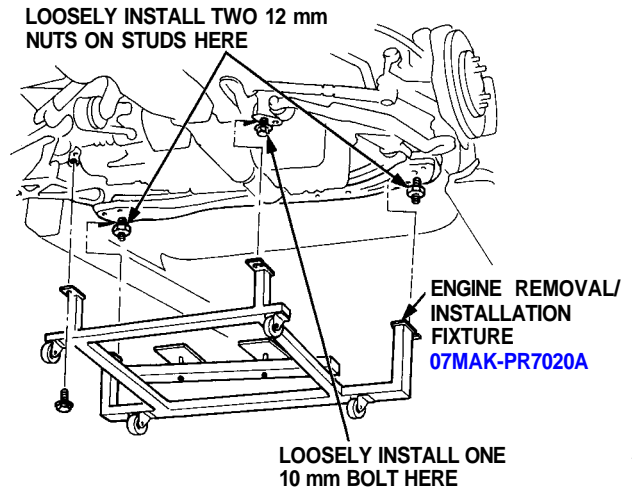
SELF-LOCKING NUT
12 x 1.25 mm
85 N-m (8.5 kg-m, 62 lb-ft)
Replace.

40. Disconnect the front secondary heated oxygen sensor connector, then remove the front exhaust pipe A and front three way catalytic converter (TWC).
41. Separate the rear TWC from the rear joint pipe.

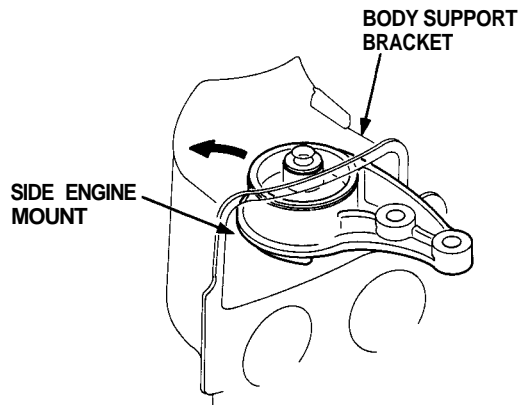
SELF-LOCKING NUTS
10 x 1.25 mm
34 N-m (3.4 kg-m, 25 lb-ft)
Replace.



42. Position the special tool under the car. Lower the car just above the fixture. With the help of an assistant, attach the fixture to the subframe with two 12 mm nuts and two 10 mm bolts.



43. Adjust the pads on the fixture to support the oil pan and transmission housing.
44. Lower the car so the fixture is resting on its casters (or appropriate platform).
45. Remove the two bolts from the side engine mount near the alternator. Pivot the mounting bracket into the housing of the body.

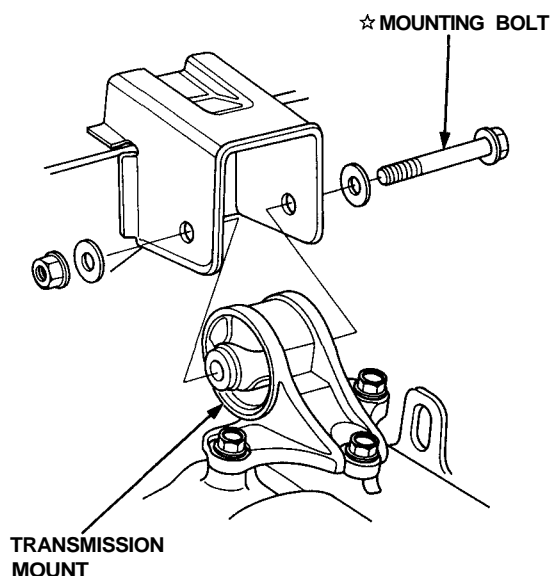


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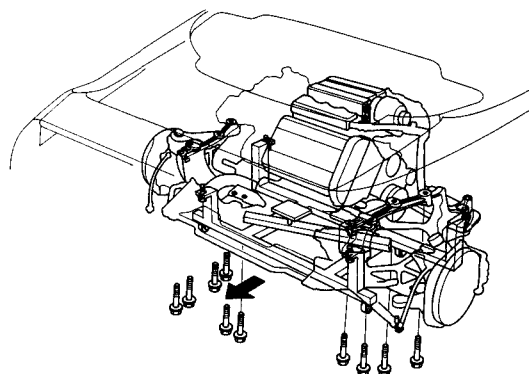
Engine Removal/Installation

Removal (cont'd)

46. Remove the transmission mounting bolt.



47. Remove the twelve subframe-to-body mounting bolts.
48. Raise the car a few inches.
49. Check that all wires and hoses are disconnected from the engine assembly.
50. Raise the car completely off the engine/suspension assembly. Roll the assembly from under the car.



NOTE: Perform steps 51 thru 54 only if the engine assembly is to be removed from the subframe.

51. Remove the adjusting bolt and flange bolt, then separate the lower control arm from the subframe (see [section 18](#)).
52. Remove the flange bolt, then separate the toe control arm from the subframe (see [section 18](#)).

CAUTION: Make sure that the reference marks on the control arm are aligned.

53. Remove the heat shield from the intermediate shaft bearing support, then remove the driveshafts (see [section 16](#)).

NOTE:

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

54. Attach a chain hoist to the engine. Remove the front and rear mount mounting bolts, then separate the engine from the suspension and the beam assembly.

CAUTION: Do not hit the engine oil cooler on the rear right beam bracket.

