

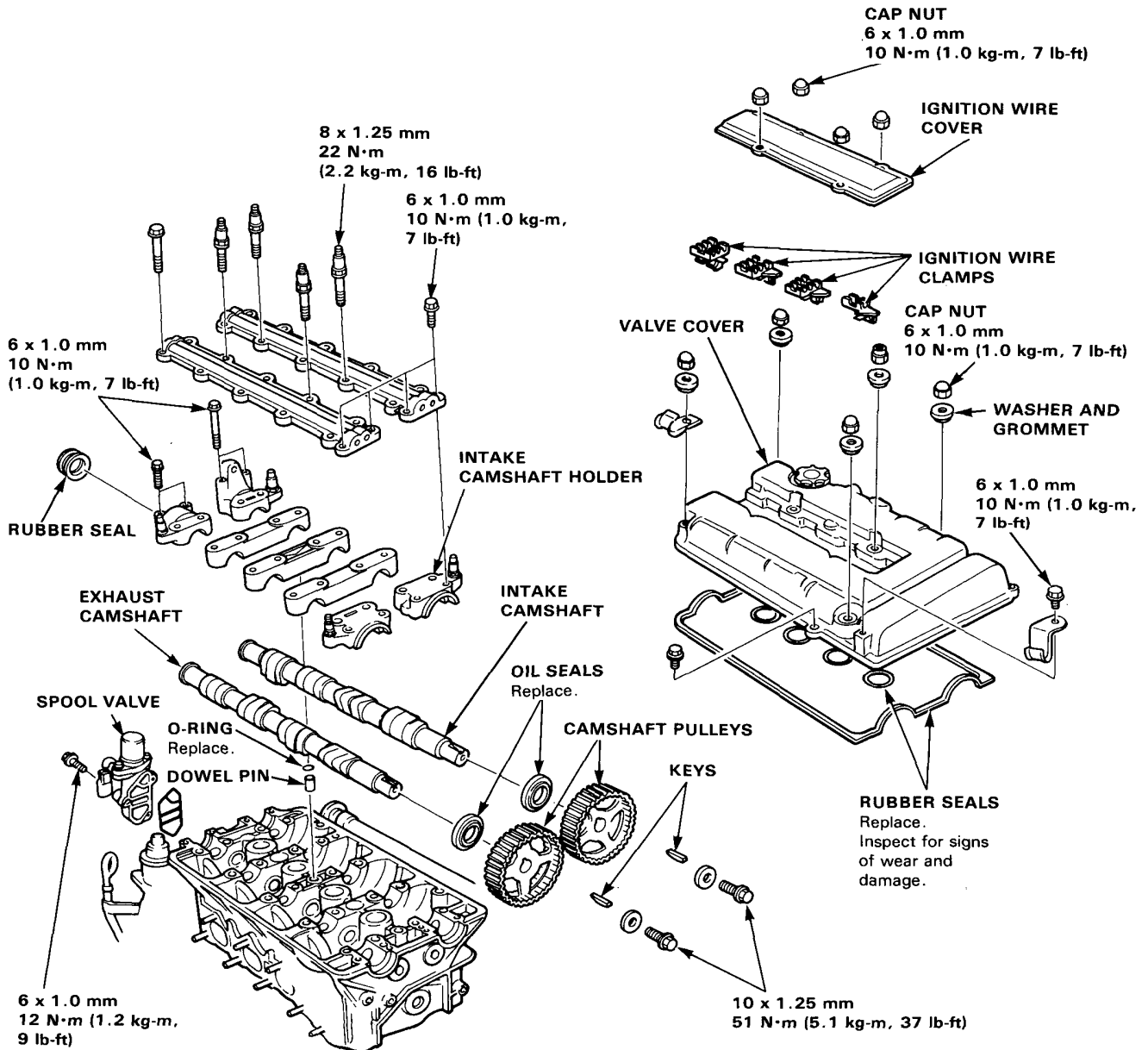
Cylinder Head



Removal (engine removal not required)

CAUTION:

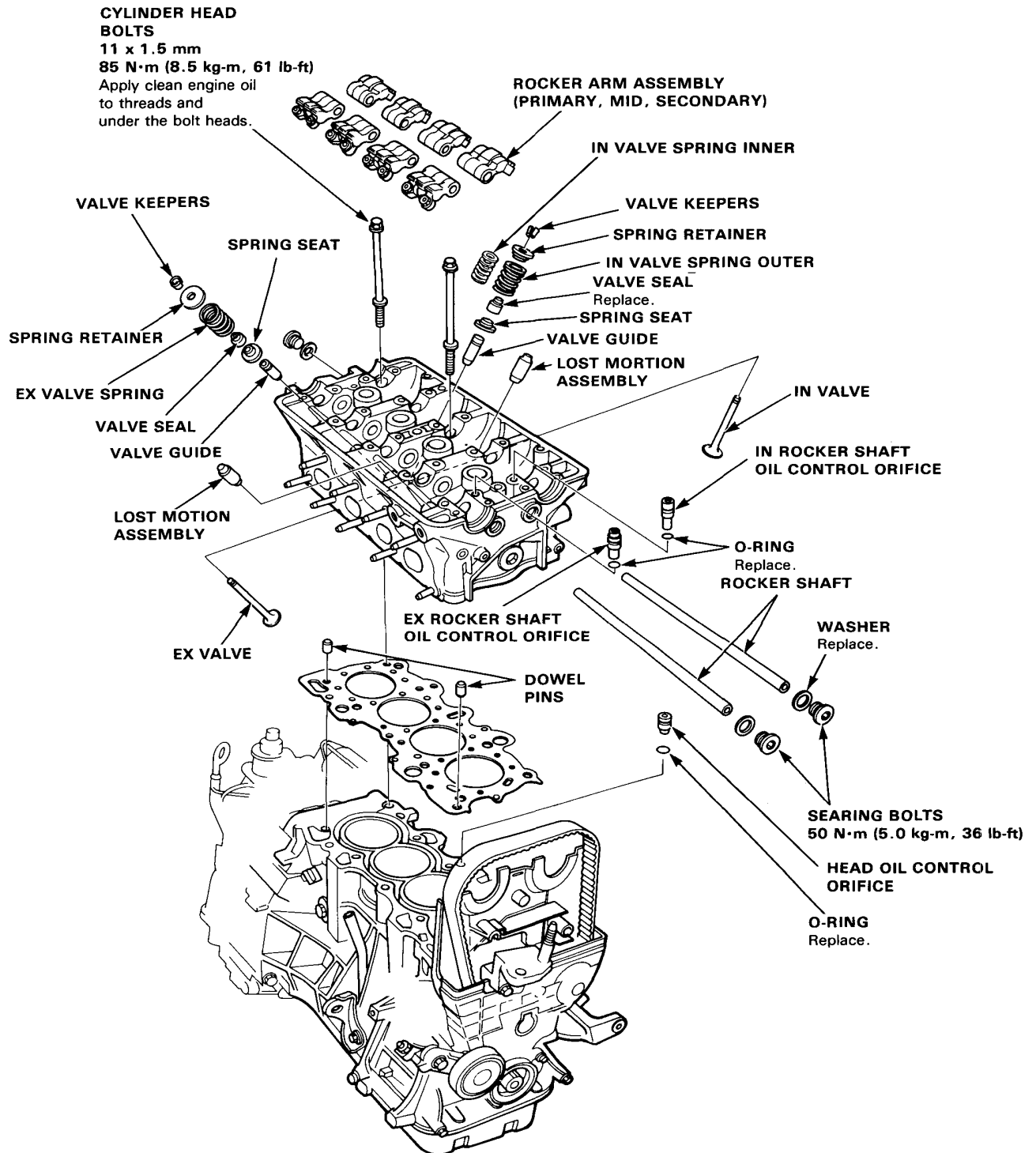
- To avoid damaging the cylinder head, wait until the coolant temperature drops below 38 °C (100 °F) before removing it.
- In handling a metal gasket, care should be taken not to fold it or damage the contact surface of the gasket.



(cont'd)

Cylinder Head

Removal (engine removal not required) (cont'd)





▲ WARNING

- Make sure jacks and safety stands are placed properly (See Section 1).
- Apply parking brake and block rear wheels, so car will not roll off stands and fall on you while working under it.

CAUTION:

- Use fender covers to avoid damaging painted surfaces.
- To avoid damaging the cylinder head, wait until the coolant temperature drops below 38 °C (100 °F) before loosening the retaining bolts.

NOTE:

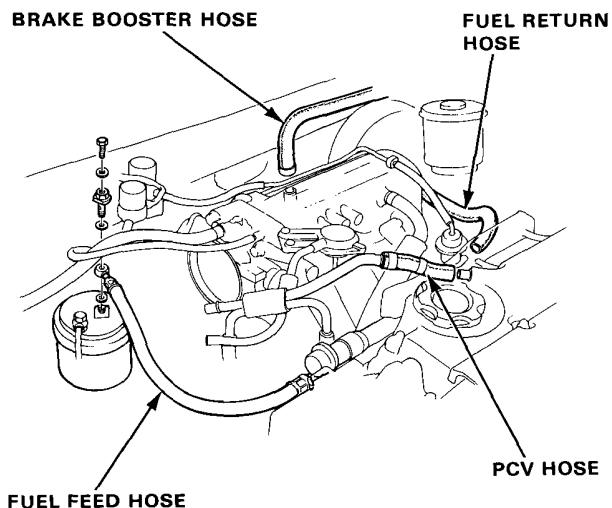
- Inspect the timing belt before removing the cylinder head.
- Turn the crankshaft pulley so that the No. 1 cylinder is at top-dead-center.
- Mark all emissions hoses before disconnecting them.

1. Disconnect the negative terminal from the battery.
2. Drain the coolant system.
3. Relieve fuel pressure (See Section 6).
4. Disconnect the fuel feeder hose and fuel return hose.

▲ WARNING

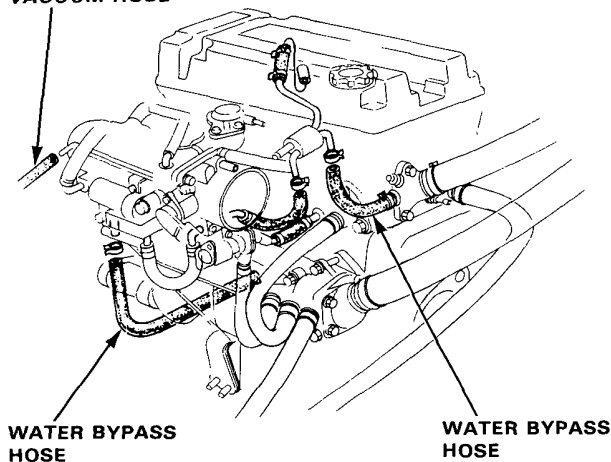
- Do not smoke while working on fuel system, keep open flame or spark away from work area.
- Drain fuel only into an approved container.

5. Remove the brake booster vacuum hose.
6. Disconnect the PCV hose.



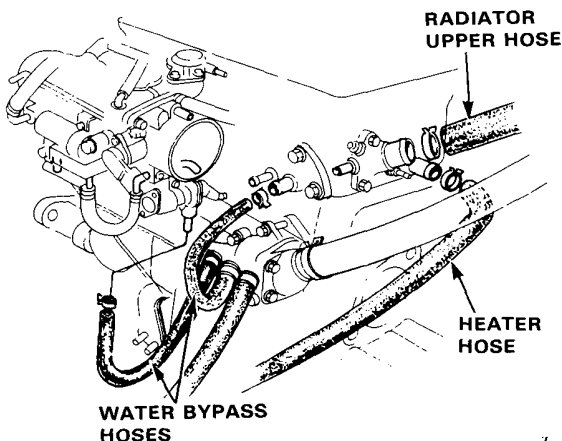
7. Disconnect the breather tube and air intake hose.
8. Disconnect the vacuum hose from the intake manifold.
9. Disconnect the charcoal canister hose.
10. Disconnect the water bypass hose.
11. Disconnect the engine wire connectors and clamps from the cylinder head, throttle body, and IN/EX manifolds.
 - Ignition coil connector (from distributor)
 - EACV connector
 - Engine ground wire
 - Thermounit connector
 - Coolant temperature sensor connector

VACUUM HOSE



- Intake air pressure sensor connector
- Throttle angle sensor connector
- Injection connector
- TDC/CRANK sensor connector

12. Disconnect the radiator upper hose at the engine.
13. Remove the heater hose.



(cont'd)

Cylinder Head

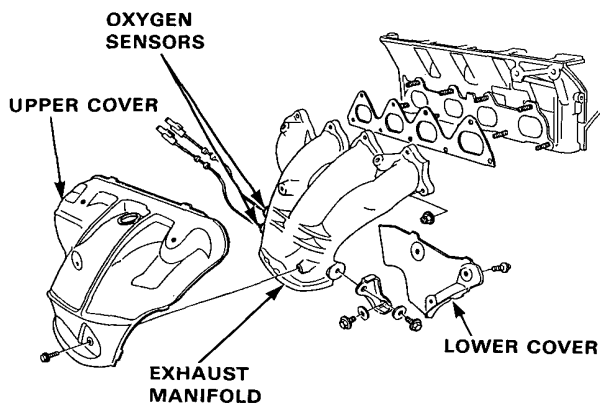
Removal (engine removal not required) (cont'd)

14. Remove the front left wheel and tire.
15. Remove the left splash shield.
16. Remove the mounting bolts of the intake manifold bracket.

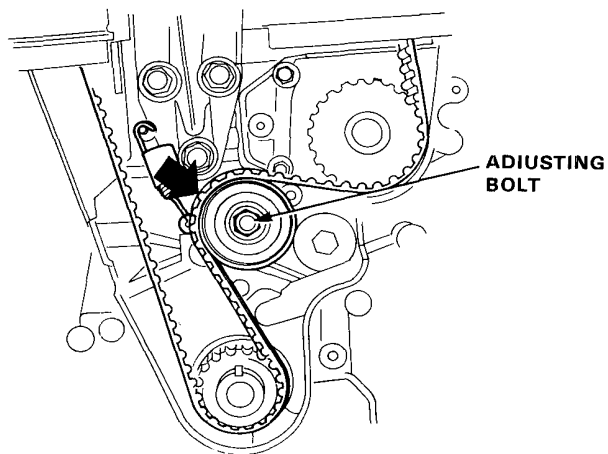
CAUTION:

- Remove the oxygen sensors before disconnecting the exhaust manifold and the exhaust pipe A.
- Do not use air wrench or hammer for disconnecting the exhaust manifold and the exhaust pipe A, if the oxygen sensors are not to be removed.

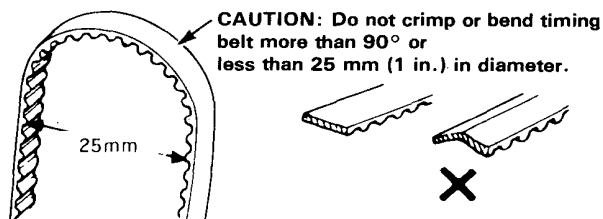
17. Remove the exhaust manifold upper cover.
18. Remove the exhaust manifold bracket.
19. Remove the self-lock nut of the exhaust pipe A.
20. Remove the exhaust manifold.



21. Remove the ignition wire cover and ignition wire.
22. Remove the valve cover.
23. Remove the timing belt middle cover.
24. Loosen the timing belt adjusting bolt, releasing the timing belt, and fix the bolt.

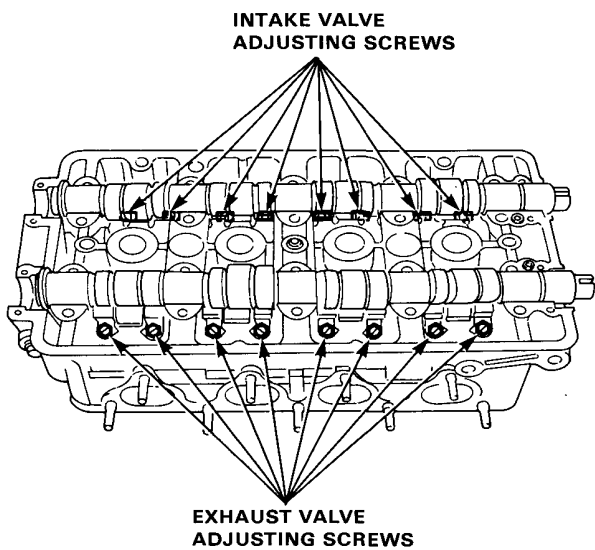


25. Remove the timing belt from the camshaft pulleys.

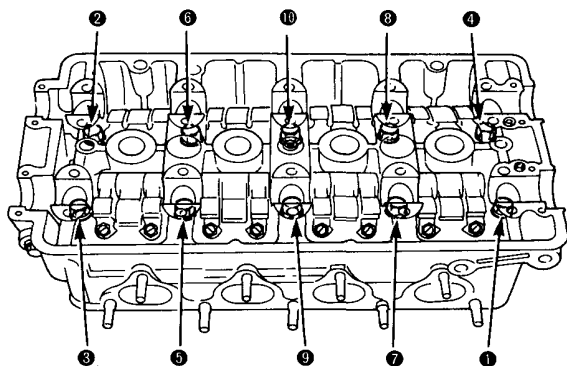




26. Loosen the valve adjusting screws.
27. Remove the camshaft holders, then remove the camshafts.
NOTE: Loosen the camshaft holder bolts a criss-cross pattern in 2 or 3 steps, beginning with the outer bolts.



28. Loosen the cylinder head bolts, then remove the cylinder head.
NOTE: Loosen the bolts a criss-cross pattern in 2 or 3 steps, beginning with the outer nuts.



29. Remove the intake manifold from the cylinder head.

