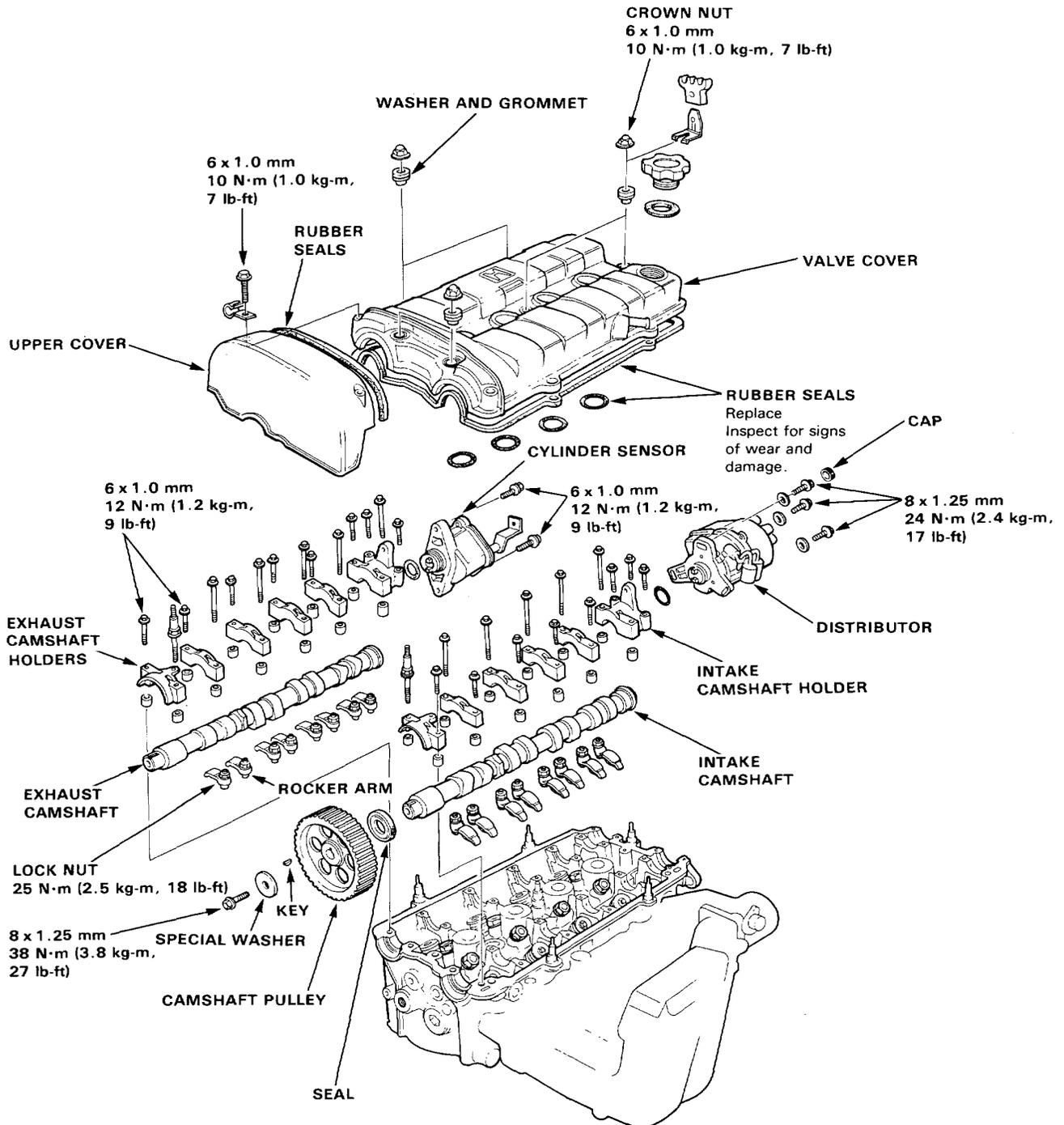


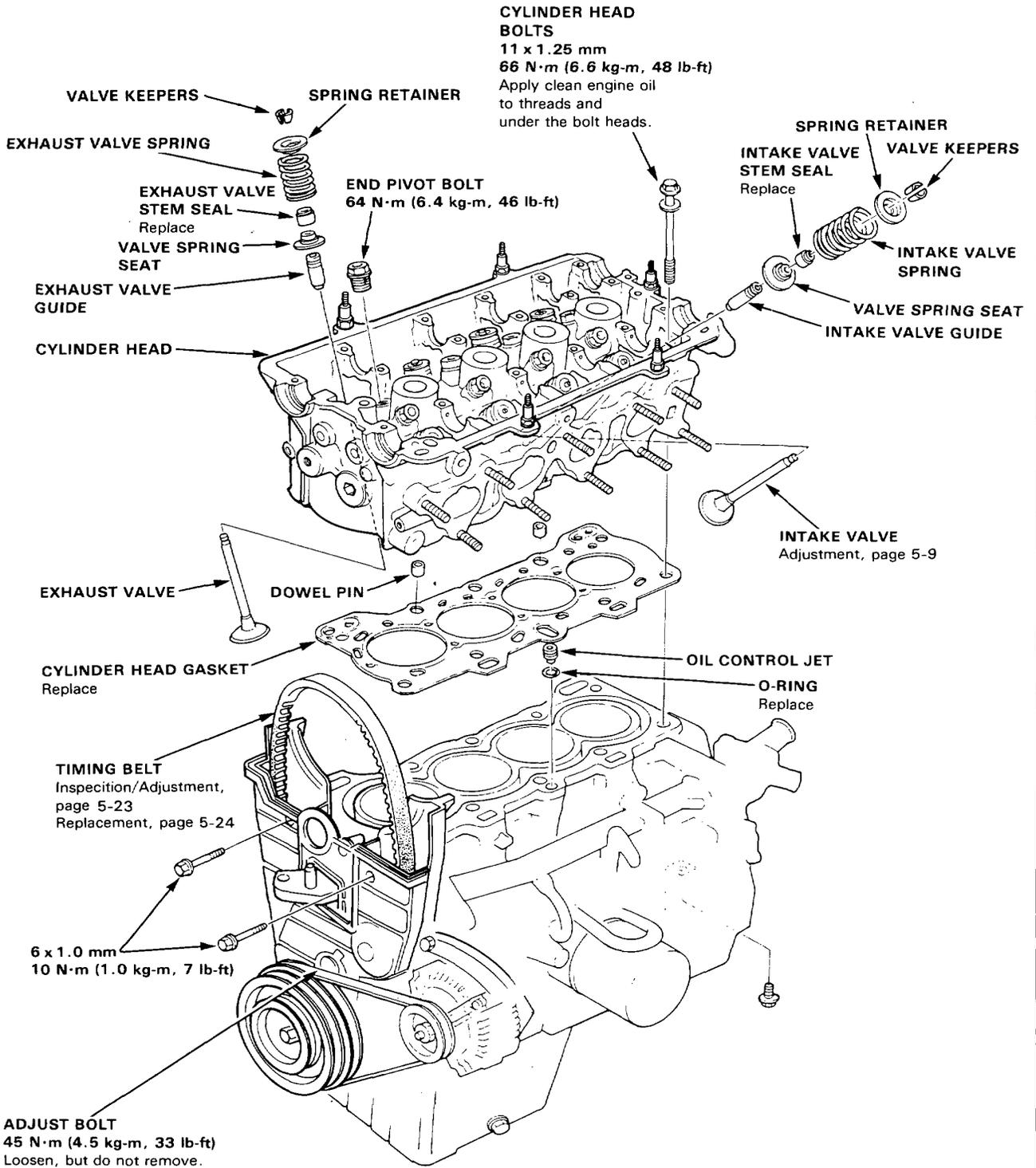
Cylinder Head

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.

NOTE: Use new O-rings and gaskets whenever reassembling.





(cont'd)

Cylinder Head

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

CAUTION: To avoid damaging the cylinder head, wait until the coolant temperature drops below 38°C (100°F) before loosening the retaining bolts.

NOTE:

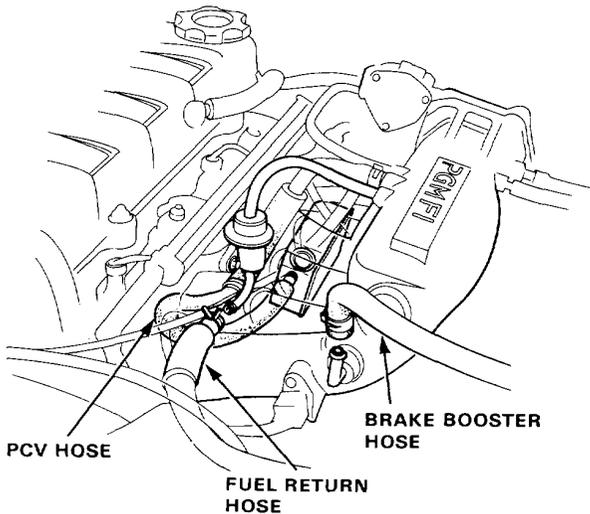
- Inspect the timing belt before removing the cylinder head.
- Turn the crankshaft pulley so that the No. 1 cylinder is at top-dead-center.
- Mark all emissions hoses before disconnecting them.

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.

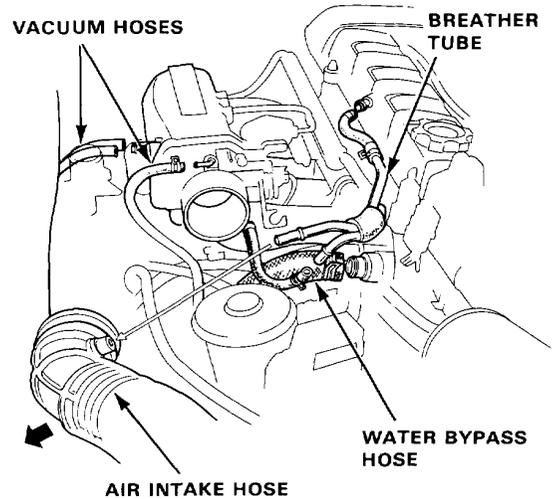
5. Remove the brake booster vacuum hose.
6. Disconnect the PCV hose.



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.

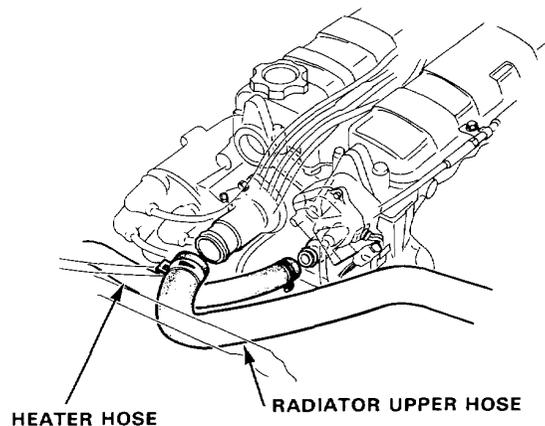
11. Disconnect the engine wire connectors and clamps from the cylinder head, throttle body, and IN/EX manifolds.

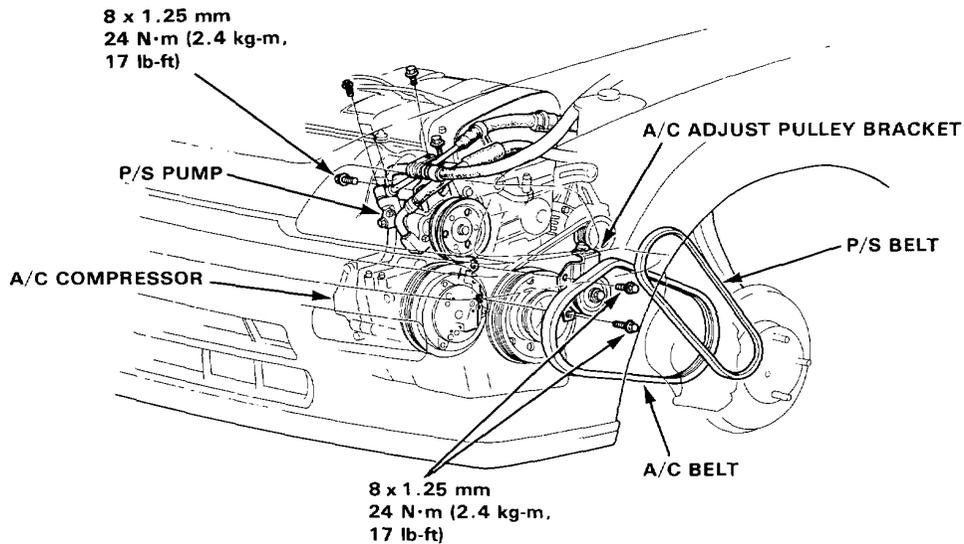
- Ignition coil connector (from distributor)
- EACV connector
- Engine ground wire
- Thermounit connector
- Coolant temperature sensor connector



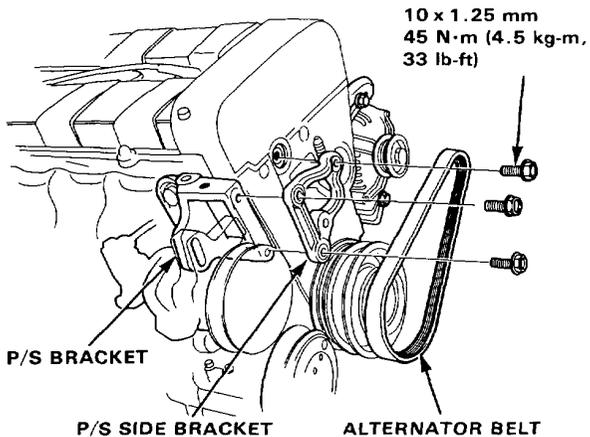
- Intake air pressure sensor connector
- Throttle angle sensor connector
- Injection connector
- TDC/CRANK sensor connector

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



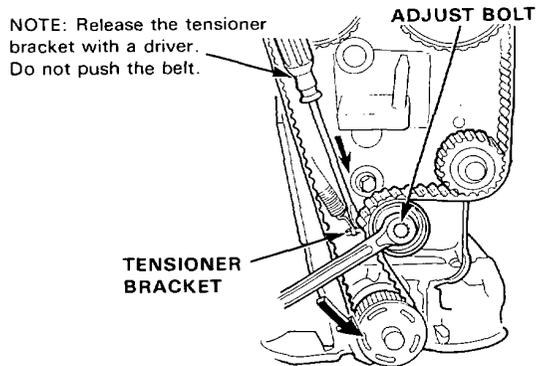


14. Remove the power steering (P/S) pump belt (KQ only) and the alternator belt.
15. Loosen the air conditioning (A/C) idle pulley and remove the A/C belt.
16. Remove the P/S pump bracket (KQ only).

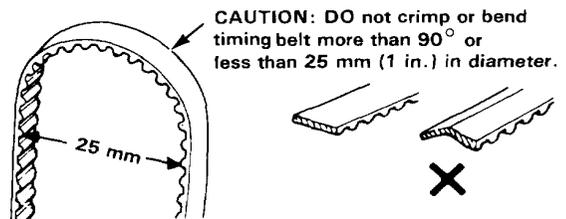


17. Remove the bolts from the intake manifold bracket.
18. Remove the exhaust manifold shroud.
19. Remove the bolts from the exhaust manifold bracket.
20. Remove the self lock nut from the exhaust header pipe.
21. Remove the exhaust manifold assy.
22. Remove the timing belt upper cover.
23. Remove the valve cover.

24. Loosen the timing belt adjust bolt, releasing the timing belt, and fix the bolt.



25. Remove the timing belt from the driven pulleys.



26. Remove the cylinder head.

CAUTION: Loosen the head bolts diagonally from the inside to outside.

27. Remove the intake manifold from the cylinder head.