

Engine Mechanical



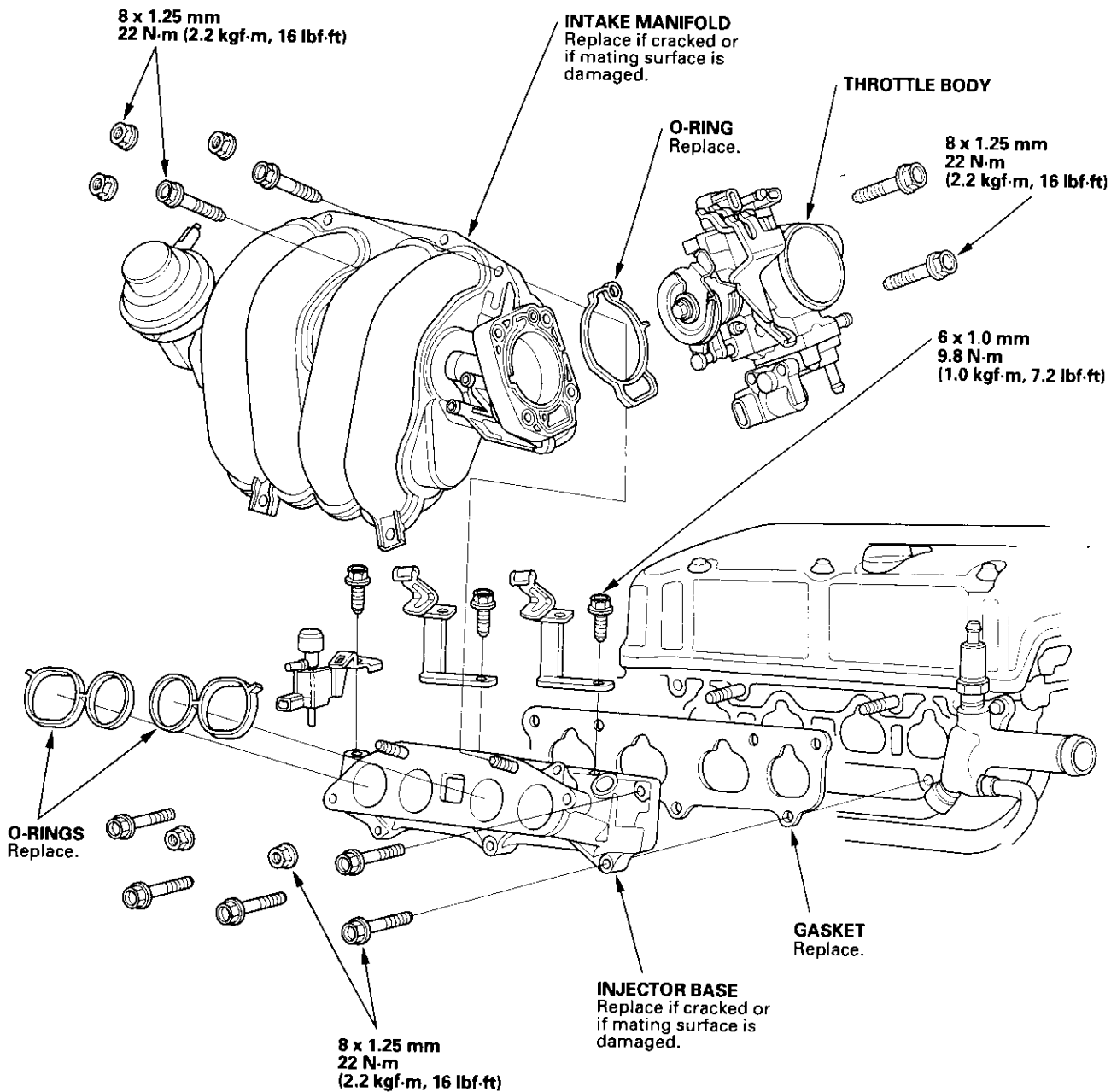
Intake Manifold and Exhaust System

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Intake Manifold and Exhaust System

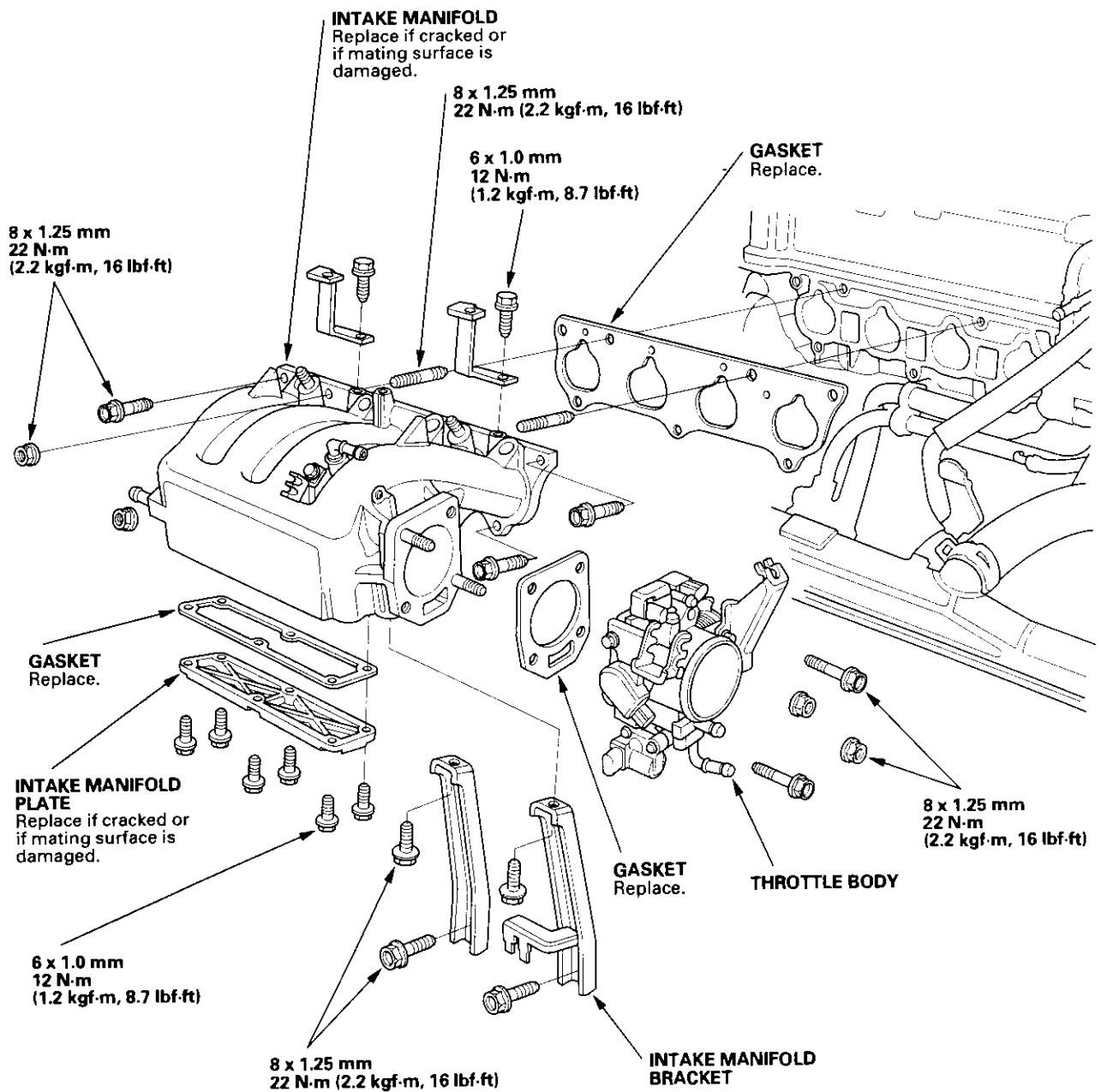
Intake Manifold Removal and Installation

Exploded View-K20A3 engine:





Exploded View-K20A2 engine:



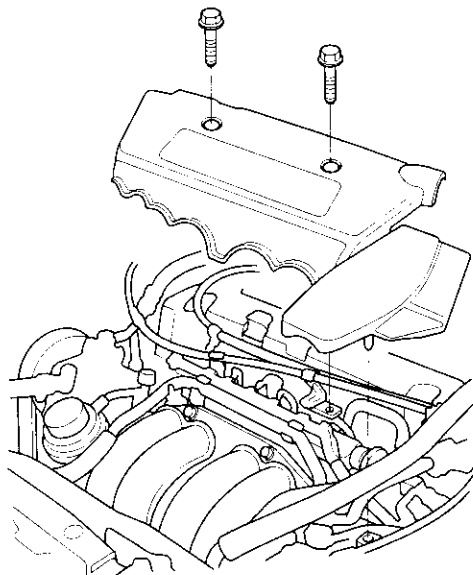
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Intake Manifold and Exhaust System

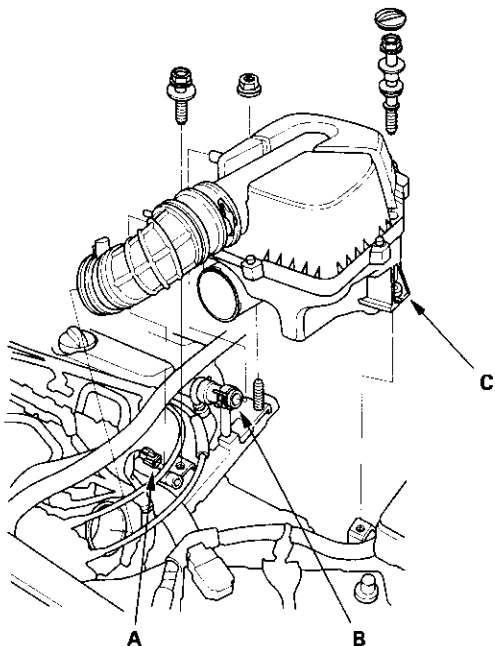
Intake Manifold Removal and Installation (cont'd)

Removal-K20A3 engine

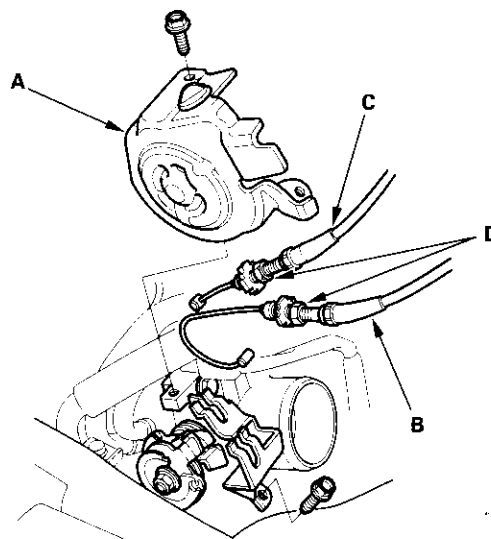
1. Remove the intake manifold cover.



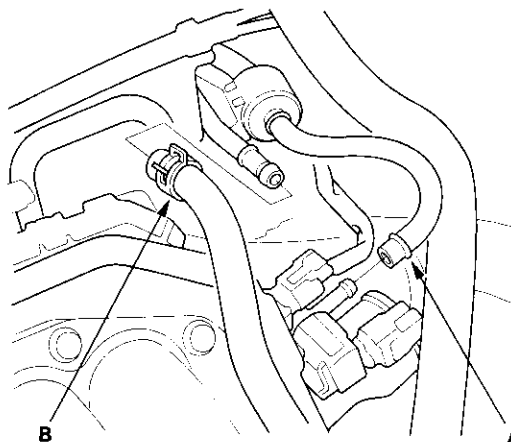
2. Disconnect the intake air temperature (IAT) sensor connector (A), and remove the breather hose (B), then remove the air cleaner housing (C).



3. Remove the throttle cover (A). Fully open the throttle link and cruise control link by hand, then remove the throttle cable (B) and cruise control cable (C) from the links. Loosen the locknuts (D), and remove the cables from the bracket.

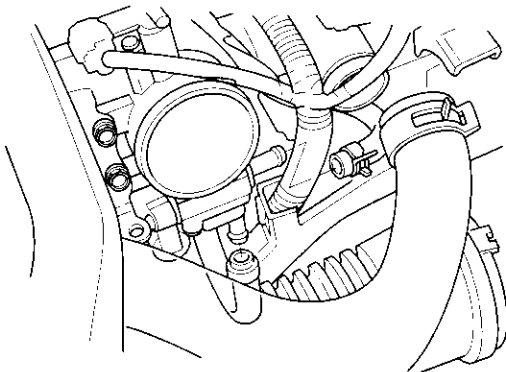


4. Remove the evaporative emission (EVAP) canister hose (A) and brake booster vacuum hose (B).

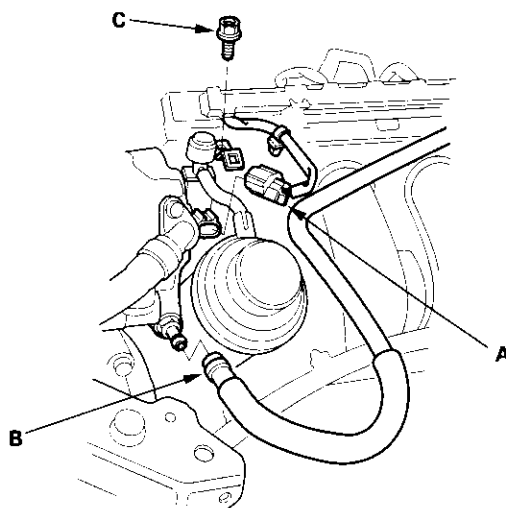




5. Remove the water bypass hoses, then plug the water bypass hoses.

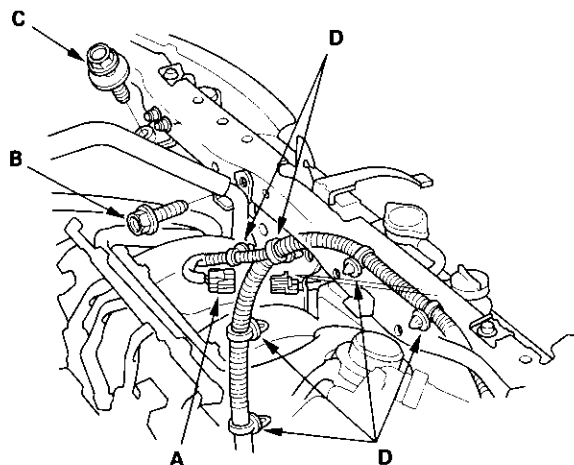


6. Disconnect the Intake manifold runner control (IMRC) valve actuator control solenoid valve connector (A), then remove the positive crankcase ventilation (PCV) hose (B) and IMRC valve control solenoid valve mounting bolt (C).

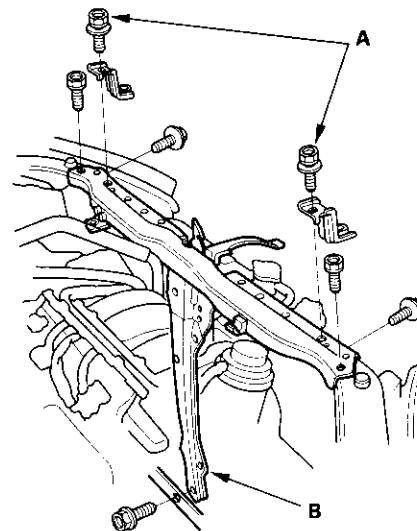


7. Remove the front bumper (see page 20-87).

8. Disconnect the hood switch connector (A), then remove the air conditioning (A/C) line bracket mounting bolt (B), intake airduct mounting bolt (C) and harness clamps (D).



9. Remove the upper bracket and cushion mounting bolts (A), then remove the bulkhead (B).



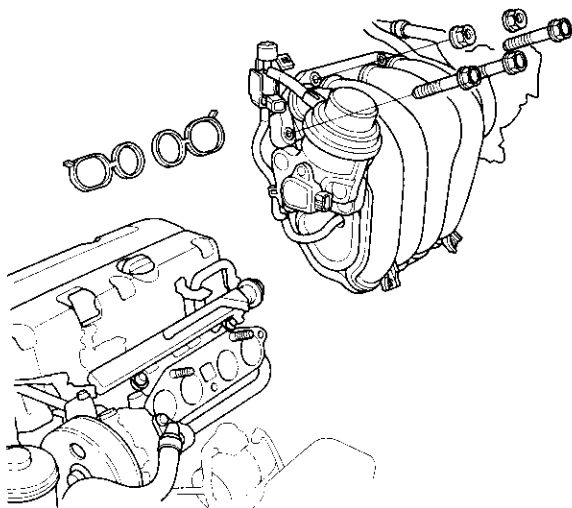
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Intake Manifold and Exhaust System

Intake Manifold Removal and Installation (cont'd)

10. Remove the engine wire harness connectors and wire harness clamps from the intake manifold.
 - Idle air control (IAC) valve connector
 - Throttle position (TP) sensor connector
 - Manifold absolute pressure (MAP) sensor connector
 - Evaporative emission (EVAP) canister purge valve connector
 - Intake manifold runner control (IMRC) valve position sensor connector

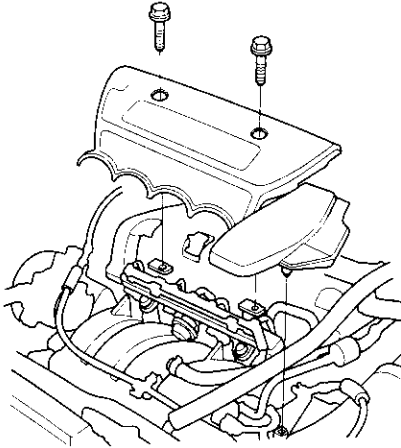
11. Remove the intake manifold.



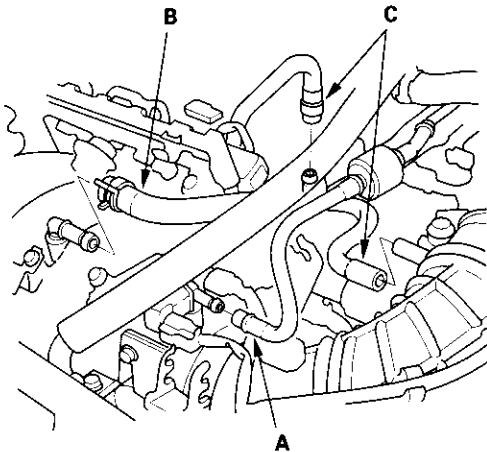


Removal-K20A2 engine:

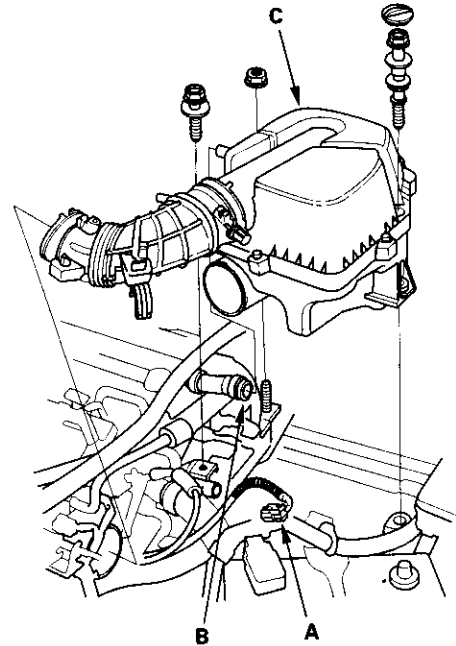
1. Remove the intake manifold cover.



2. Remove the EVAP canister hose (A), brake booster vacuum hose (B) and vacuum hoses (C).



3. Disconnect the IAT sensor connector (A), and remove the breather hose (B), then remove the air cleaner housing (C).

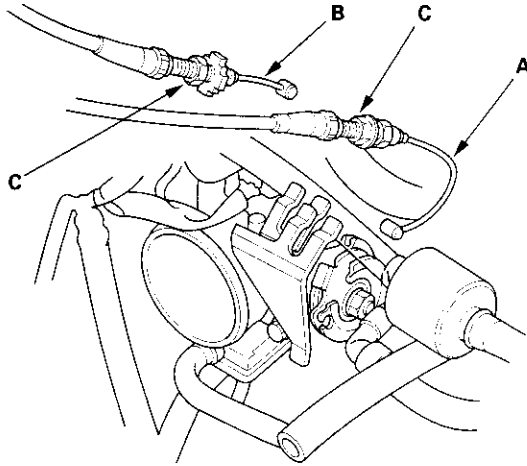


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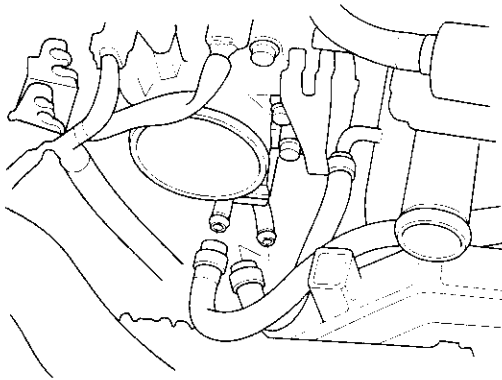
Intake Manifold and Exhaust System

Intake Manifold Removal and Installation (cont'd)

4. Fully open the throttle link and cruise control link by hand, then remove the throttle cable (A) and cruise control cable (B) from the links. Loosen the locknuts (C), and remove the cables from the bracket.

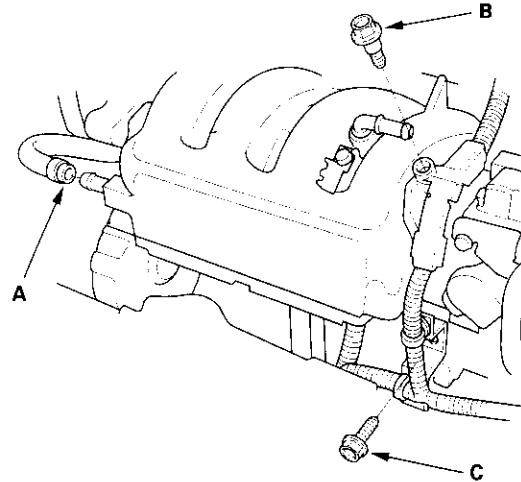


5. Remove the water bypass hoses, then plug the water bypass hoses.



6. Relieve fuel pressure (see page 11-155).
7. Remove the fuel feed hose (see page 11-160).

8. Remove the PCV hose (A), harness holder mounting bolt (B) and harness clamp mounting bolt (C).

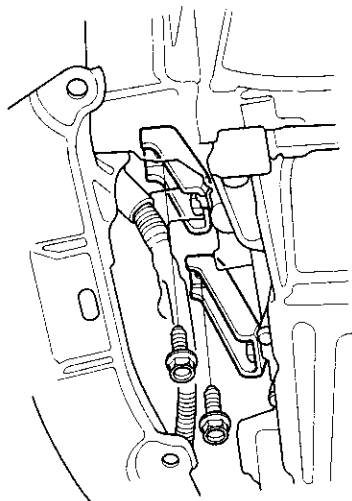


9. Remove the engine wire harness connectors and wire harness clamps from the intake manifold.

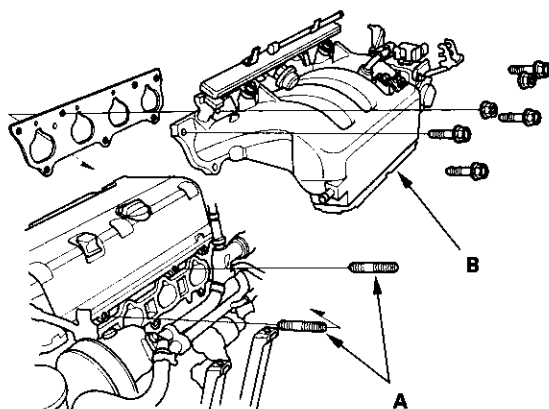
- Four injector connectors
- IAC valve connector
- TP sensor connector
- MAP sensor connector
- EVAP canister purge valve connector



10. Remove the two bolts securing the intake manifold and brackets.



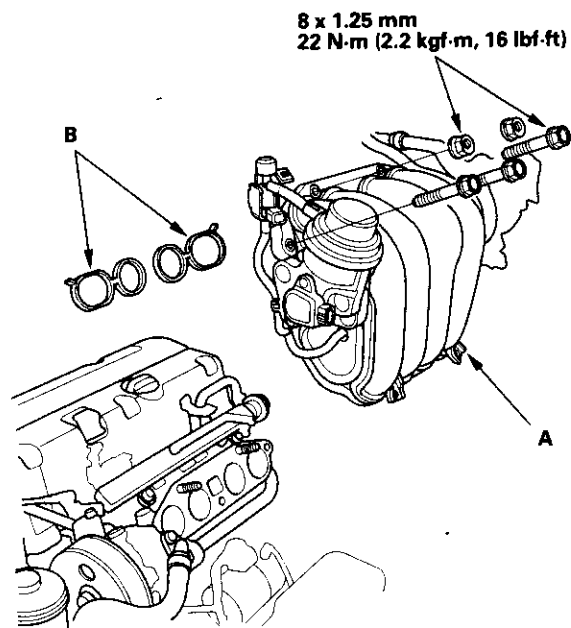
11. Remove all the intake manifold mounting bolts/nuts.



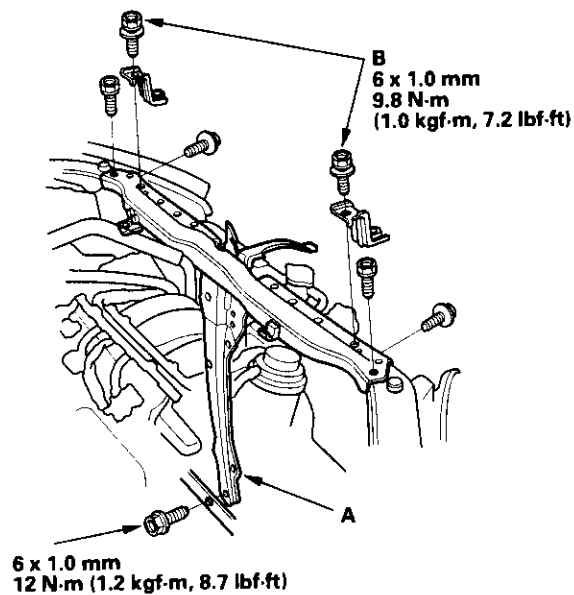
12. Remove the two stud bolts (A), then remove the intake manifold (B).

Installation-K20A3 engine:

1. Install the intake manifold (A) and tighten the bolts/nuts in a crisscross pattern in two or three steps, beginning with the inner bolt. Use new O-rings (B).



2. Install the bulkhead (A), then install the upper bracket and cushion mounting bolts (B).

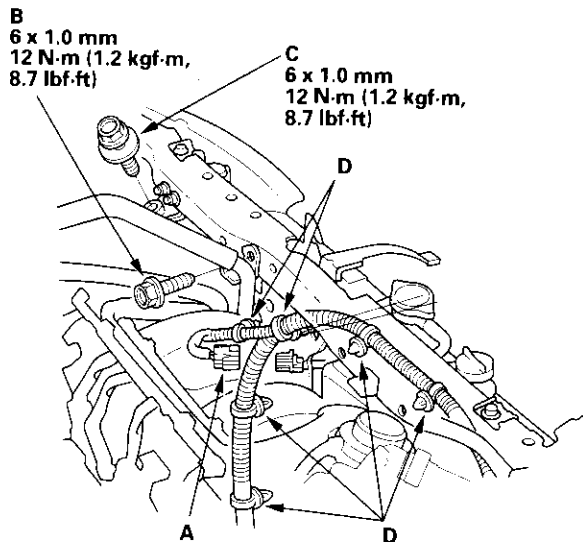


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Intake Manifold and Exhaust System

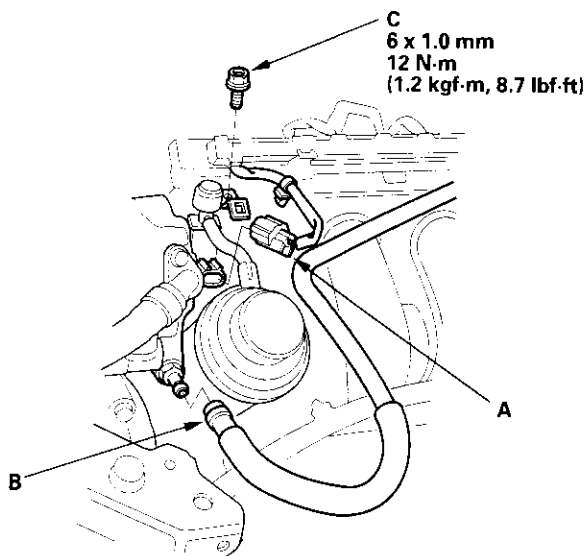
Intake Manifold Removal and Installation (cont'd)

3. Connect the hood switch connector (A), then install the A/C line bracket mounting bolt (B), intake airduct mounting bolt (C) and harness clamps (D).

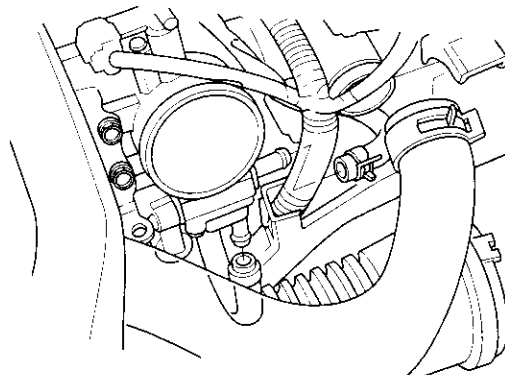


4. Install the front bumper (see page 20-87).

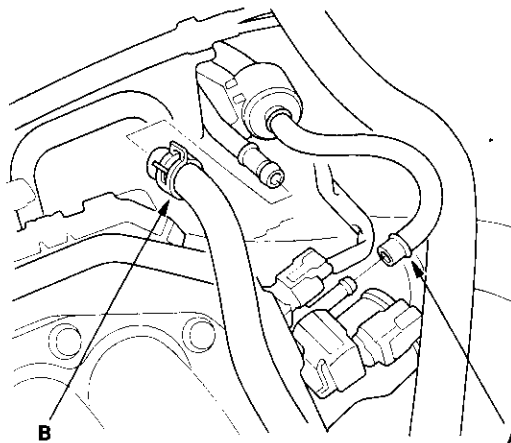
5. Connect the IMRC valve actuator control solenoid valve connector (A), then install the PCV hose (B) and IMRC valve actuator control solenoid valve mounting bolt (C).



6. Install the water bypass hoses.

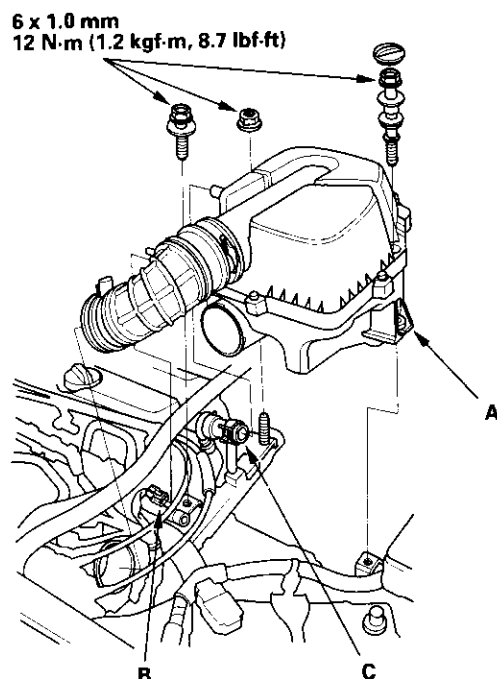


7. Install the EVAP canister hose (A) and brake booster vacuum hose (B).



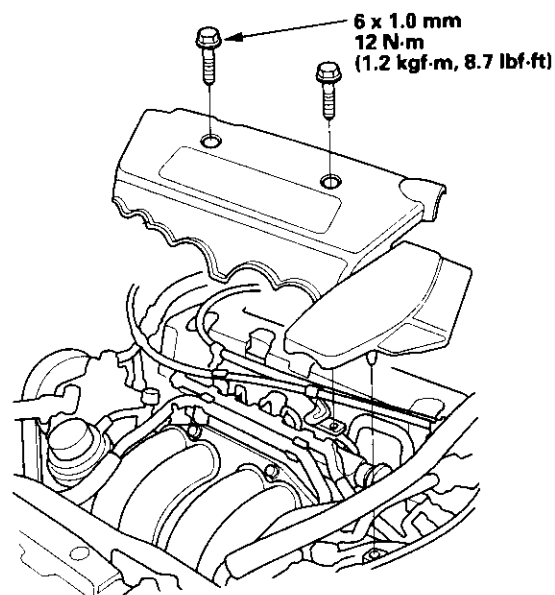


8. Install the throttle cable (see page 11-181), then adjust the cable (see page 11-180).
9. Install the cruise control cable, then adjust the cable (see page 4-57).
10. Install the air cleaner housing (A) and connect the IAT sensor connector (B).



11. Install the breather hose (C).

12. Install the intake manifold cover.



13. Clean up any spilled engine coolant. .
14. After installation, check that all tubes, hoses and connectors are installed correctly.
15. Refill the radiator with engine coolant, and bleed air from the cooling system with the heater valve open (see page 10-6).

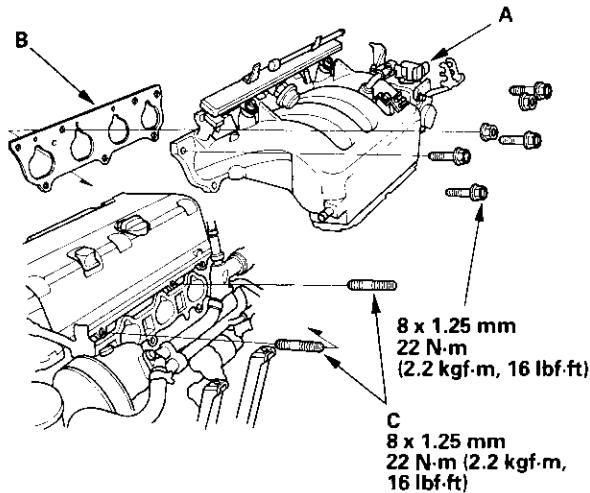
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Intake Manifold and Exhaust System

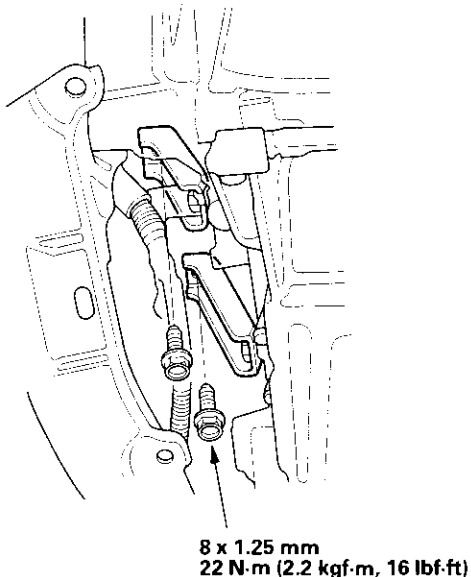
Intake Manifold Removal and Installation (cont'd)

Installation-K20A2 engine:

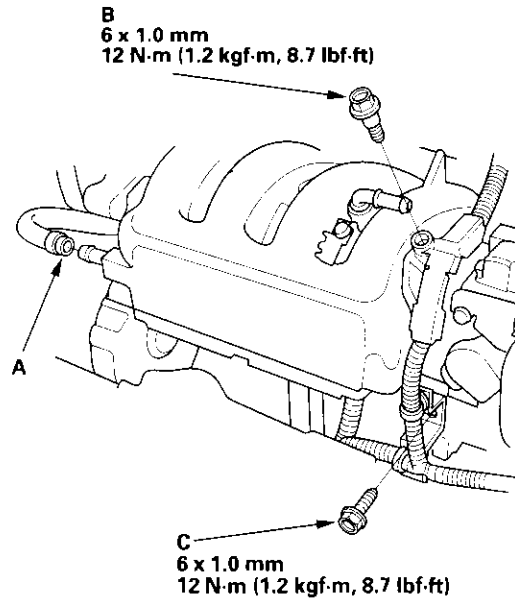
1. Install the intake manifold (A) with a new gasket (B), then tighten the two stud bolts (C).



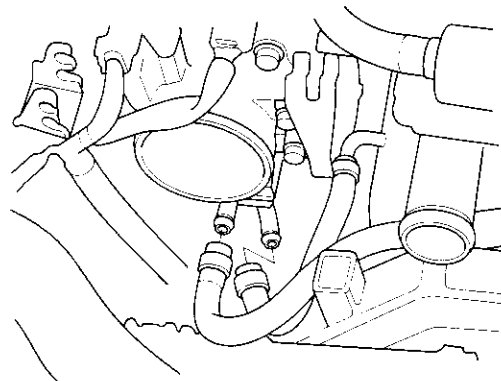
2. Tighten all intake manifold mounting bolts/nuts in a crisscross pattern in two or three steps, beginning with the inner bolt.
3. Tighten the two bolts securing the intake manifold and brackets.



4. Install the PCV hose (A), harness holder mounting bolt (B), and harness clamp mounting bolt (C).



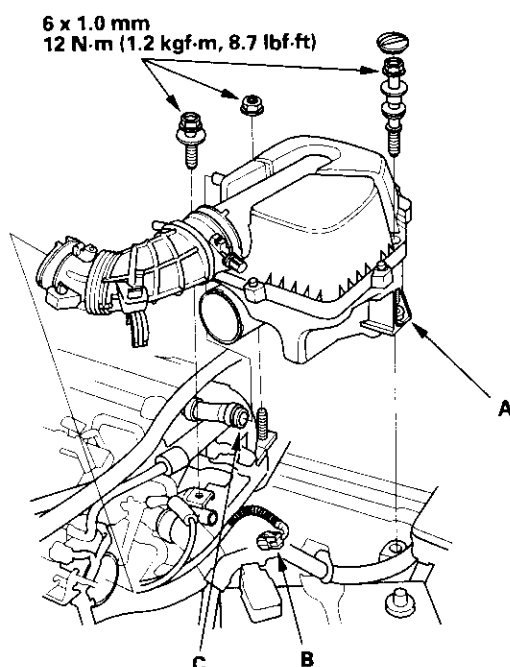
5. Install the fuel feed hose (see page 11-161).
6. Install the water bypass hoses.



7. Install the throttle cable (see page 11-181), then adjust the cable (see page 11-180).
8. Install the cruise control cable, then adjust the cable (see page 4-57).

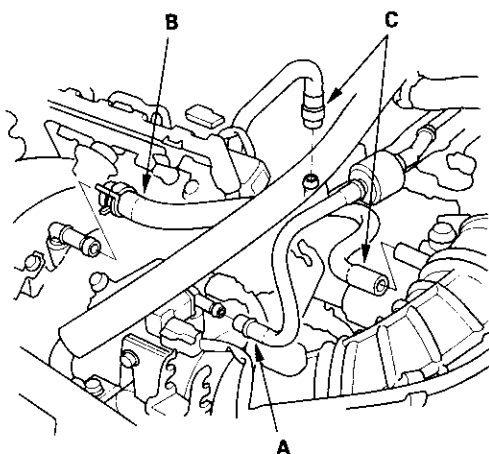


9. Install the air cleaner housing (A) and connect the IAT sensor connector (B).

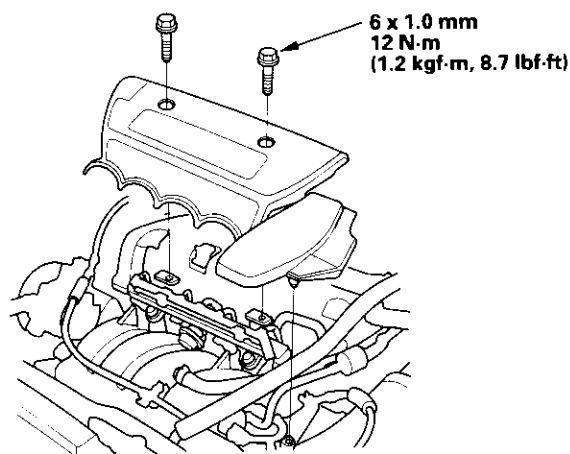


10. Install the breather hose (C).

11. Install the EVAP canister hose (A), brake booster vacuum hose (B), and vacuum hoses (C).



12. Install the intake manifold cover.



13. Clean up any spilled engine coolant.

14. After installation, check that all tubes, hoses, and connectors are installed correctly.

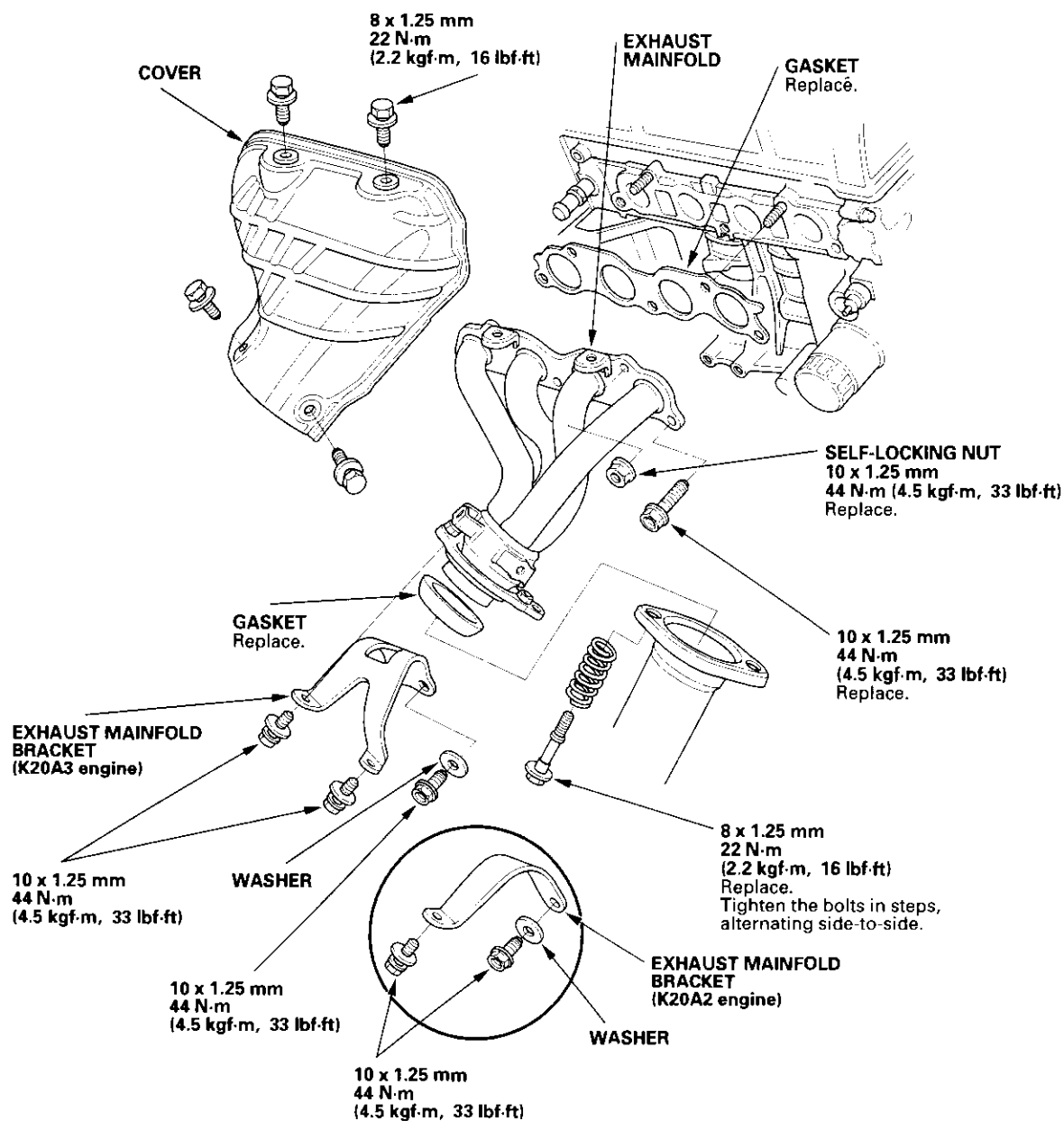
15. Inspect for fuel leaks. Turn the ignition switch ON (II) (do not operate the starter) so that the fuel pump runs for about 2 seconds and pressurizes the fuel line. Repeat this operation two or three times, then check for fuel leakage at any point in the fuel line.

16. Refill the radiator with engine coolant, and bleed air from the cooling system with the heater valve open (see page 10-6).

Intake Manifold and Exhaust System

Exhaust Manifold Removal and Installation

1. Remove the VTEC solenoid valve (see page 11-137).
2. Remove the intermediate shaft cover (see step 36 on page 14-145).
3. Remove the cover and exhaust manifold bracket, then remove the exhaust manifold.



4. Install the exhaust manifold and tighten the bolts/nuts in a crisscross pattern in two or three steps, beginning with the inner bolt.
5. Install the other parts in the reverse order of removal.



Exhaust Pipe and Muffler Replacement

NOTE: Use new gaskets and self-locking nuts when reassembling.

