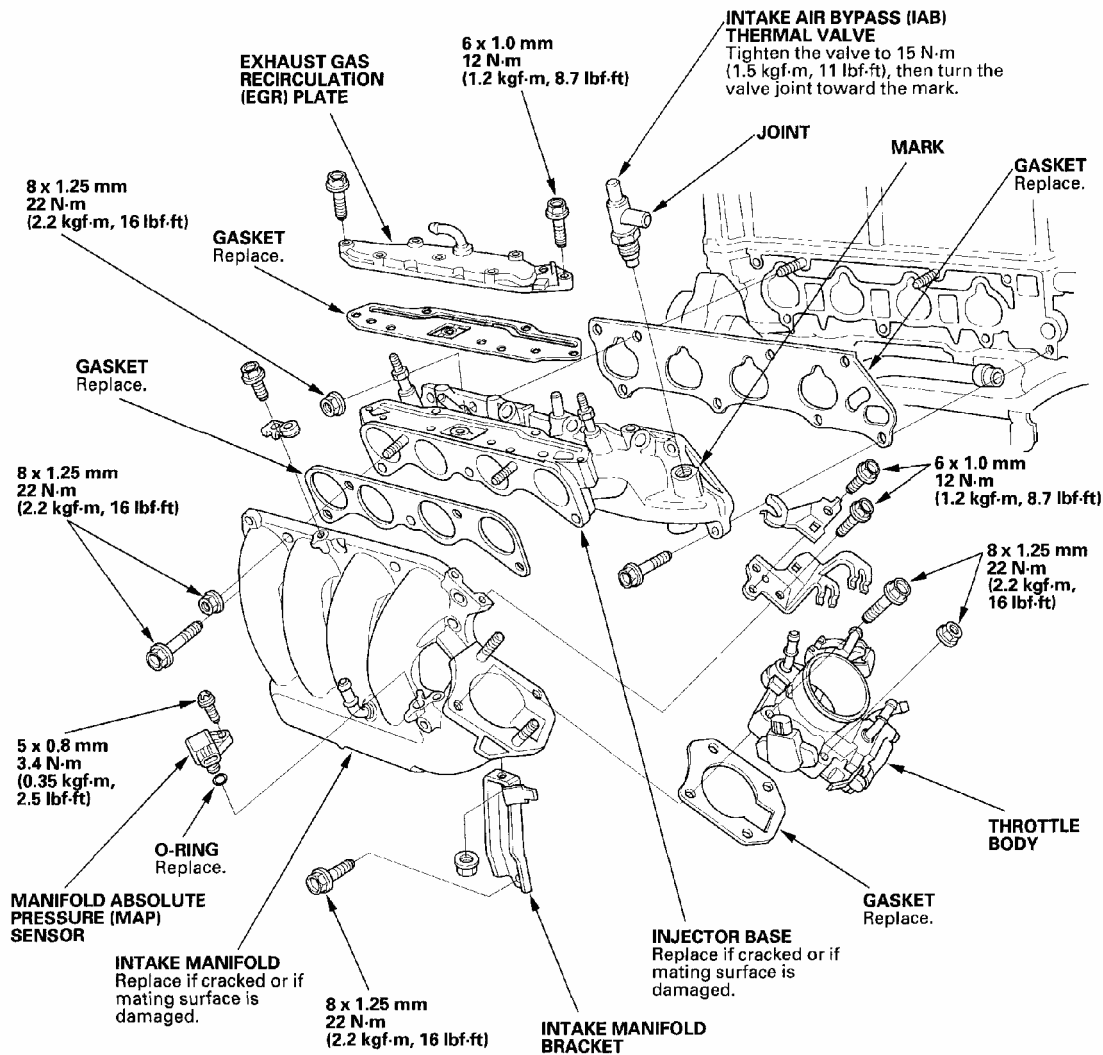


2003-06 ENGINE

Intake Manifold And Exhaust System - Element

INTAKE MANIFOLD REMOVAL AND INSTALLATION

EXPLODED VIEW



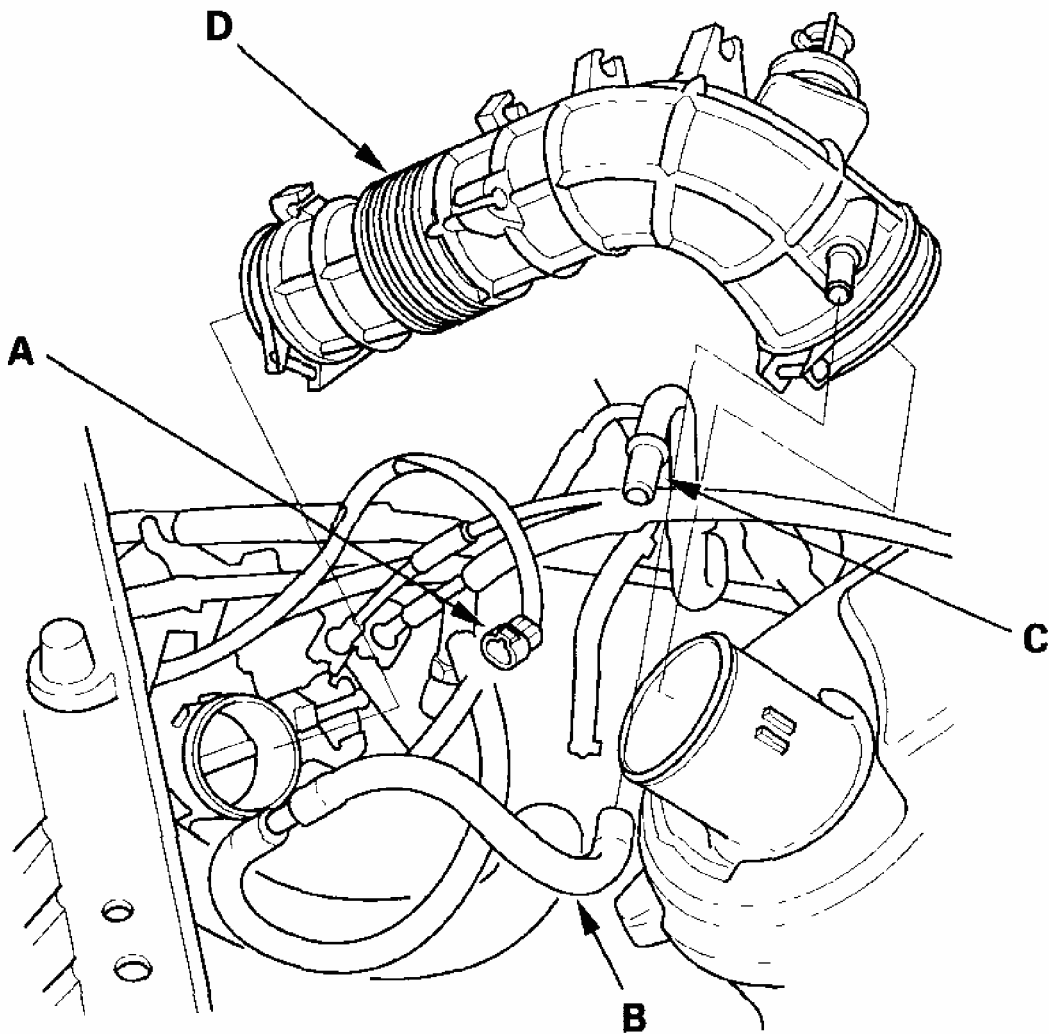
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**Fig. 1: Exploded View Of Intake Manifold And Exhaust System Components And Torque Specifications**

Courtesy of AMERICAN HONDA MOTOR CO., INC.

REMOVAL

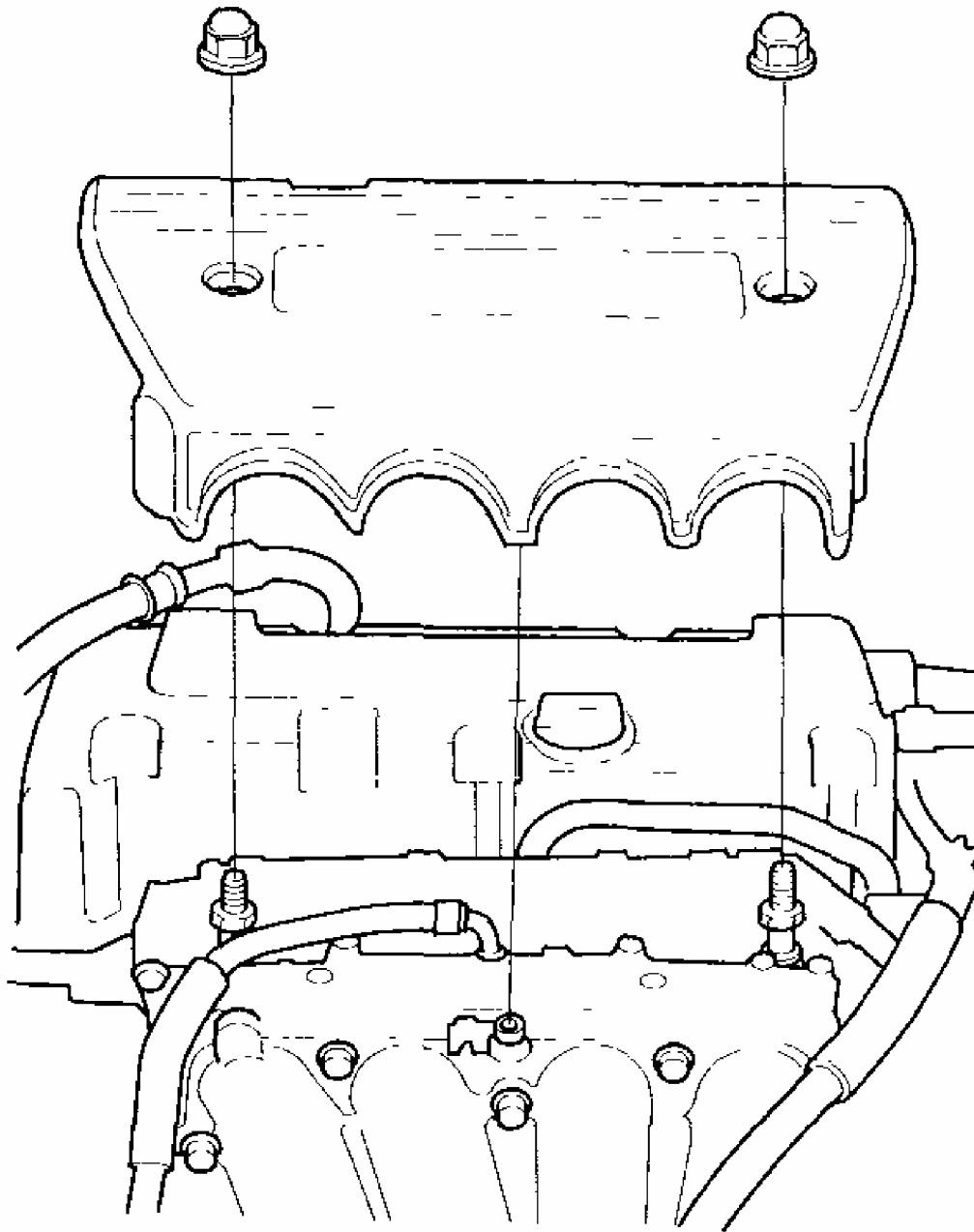
1. Disconnect the intake air temperature (IAT) sensor connector (A).



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**Fig. 2: Disconnecting Intake Air Temperature Sensor Connector**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Remove the vacuum hose (B) and breather pipe (C), then remove the intake air duct (D).
3. Remove the intake manifold cover.



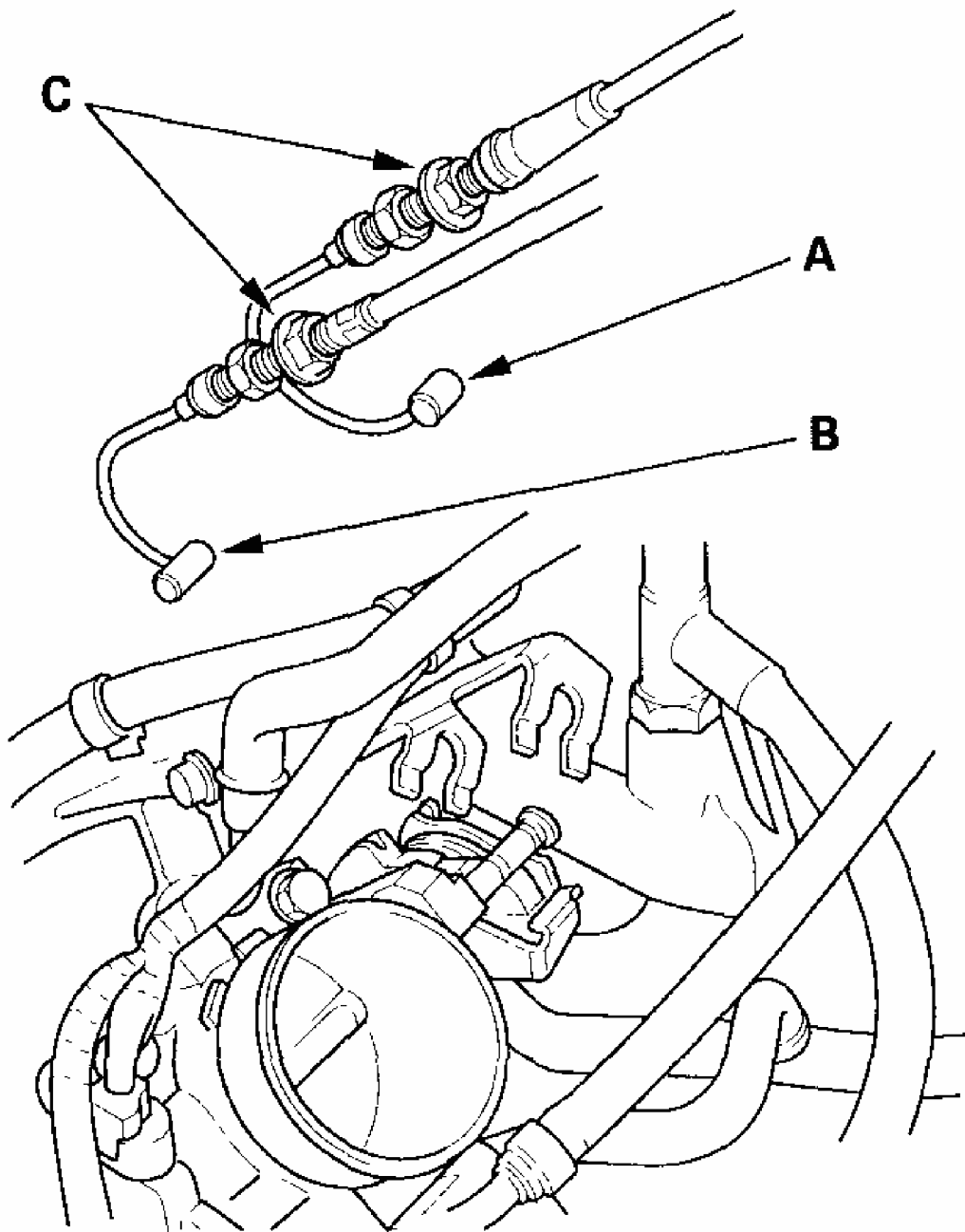
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**Fig. 3: Removing Intake Manifold Cover**

Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the throttle cable (A) and cruise control actuator cable (B) by loosening the locknuts (C), then slipping the cable ends out of the accelerator linkage. Take care not to bend the cables when removing them. Always replace any kinked cable with a new

one.

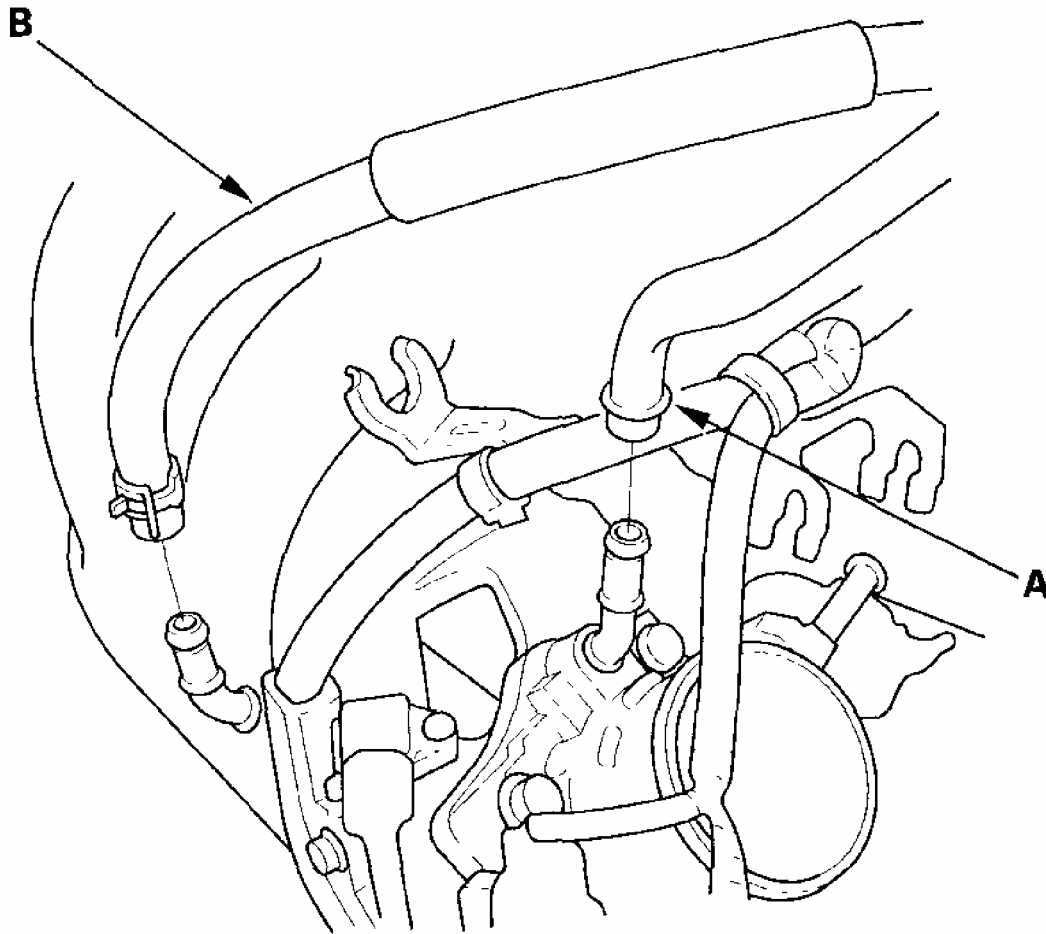


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**Fig. 4: Removing Throttle Cable And Cruise Control Actuator Cable**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.

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

hose (B).

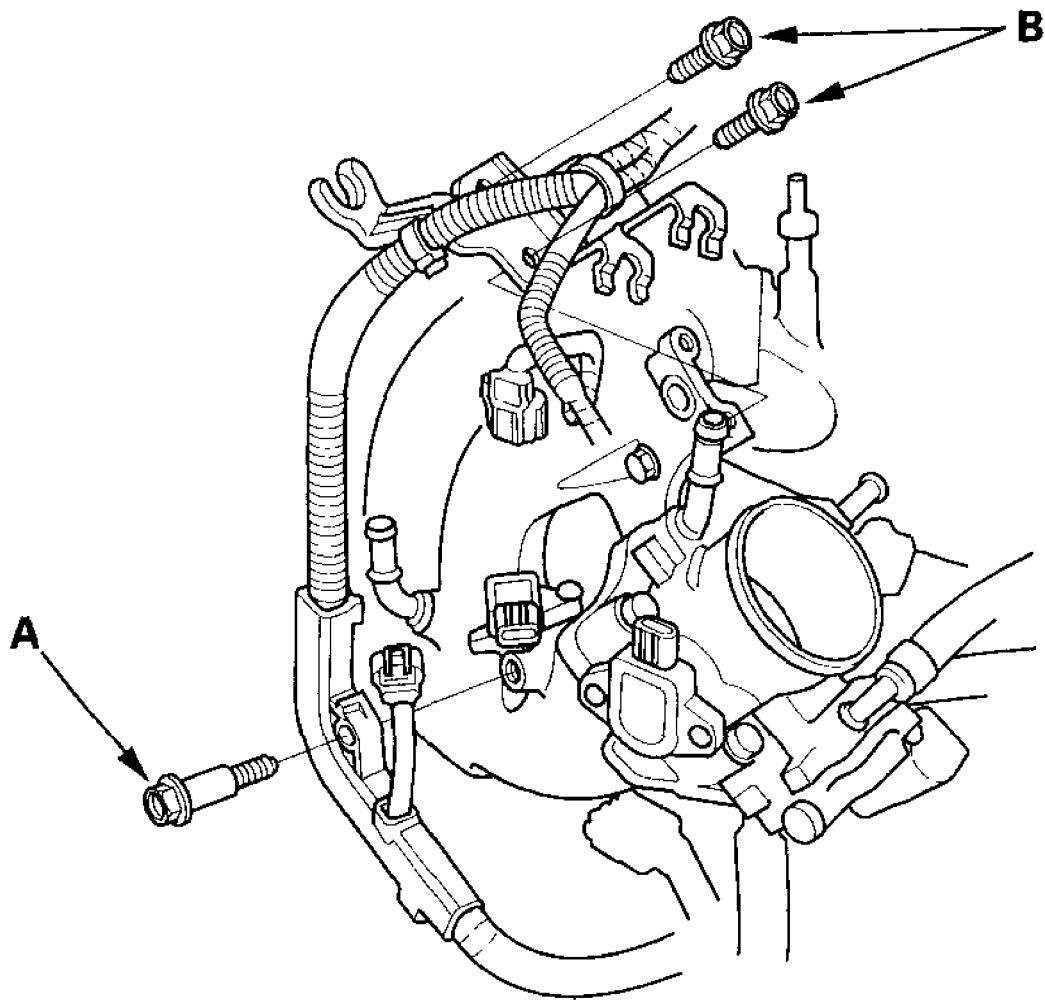


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**Fig. 5: Removing Evaporative Emission Canister Hose And Brake Booster Vacuum Hose**

**Courtesy of AMERICAN HONDA MOTOR CO., INC.**

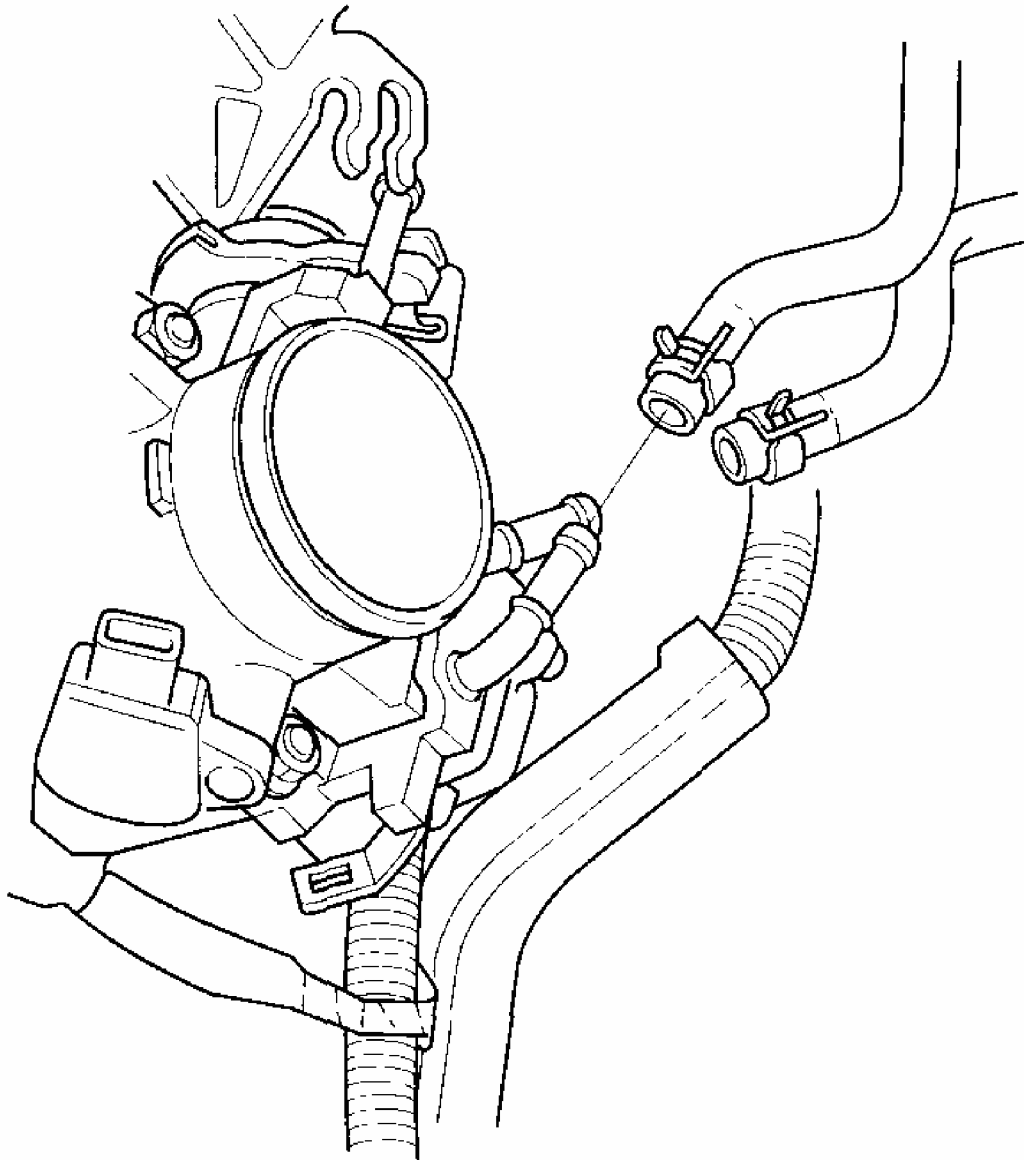
6. Remove the engine wire harness connectors and wire harness clamps from the intake manifold.
  - Idle air control (IAC) valve connector
  - Throttle position (TP) sensor connector
  - Manifold absolute pressure (MAP) sensor connector
7. Remove the bolt (A) securing the harness holder, and remove the two bolts (B) securing the throttle cable bracket.



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**Fig. 6: Removing Bolt Securing Harness Holder**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.

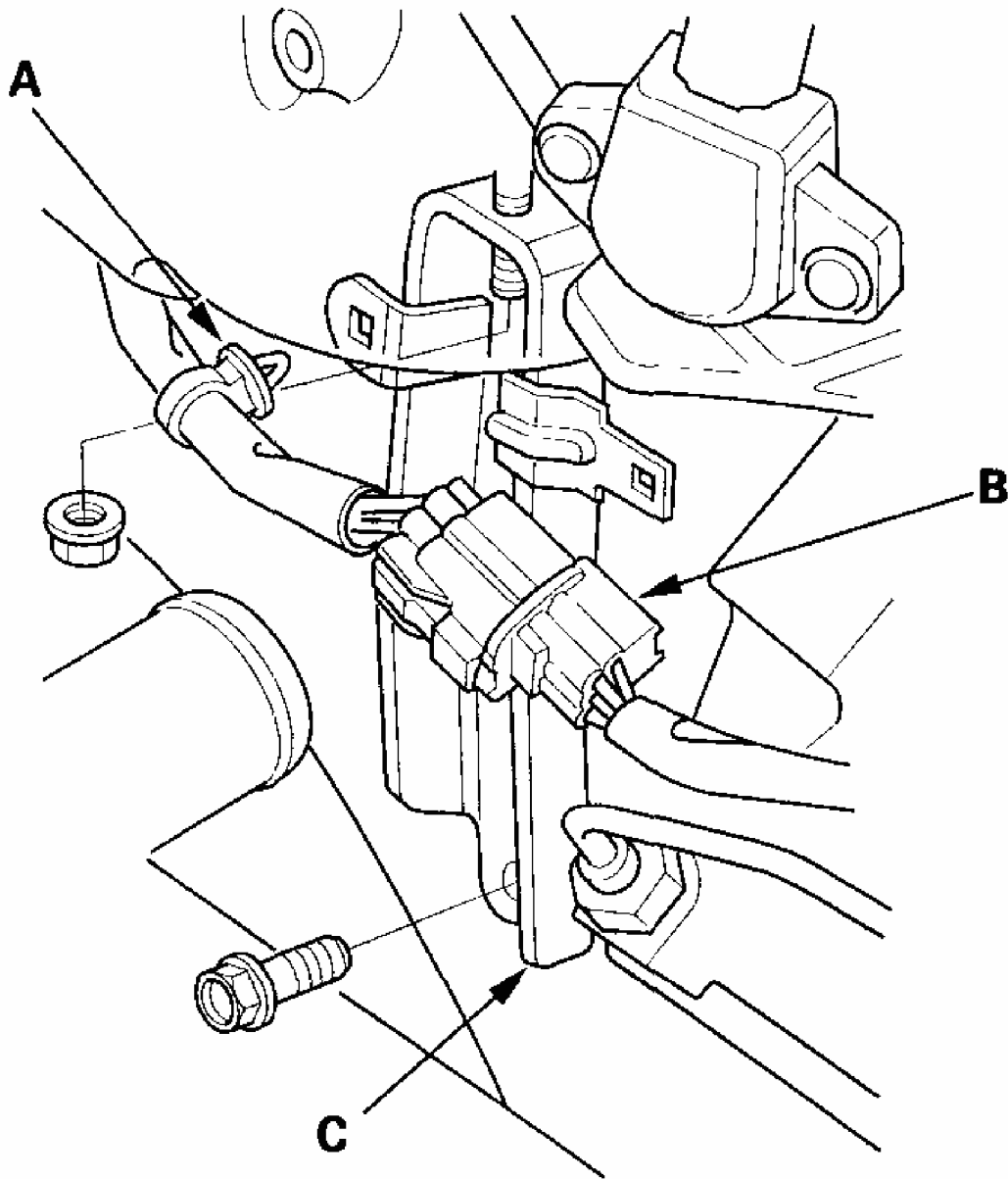
8. Remove and plug the water bypass hoses.



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**Fig. 7: Removing And Plug Water Bypass Hoses**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Remove the harness clamp (A), and the harness connector (B) from the intake manifold bracket, then remove the intake manifold bracket (C).



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**Fig. 8: Removing Harness Clamp And Harness Connector From Intake Manifold Bracket**

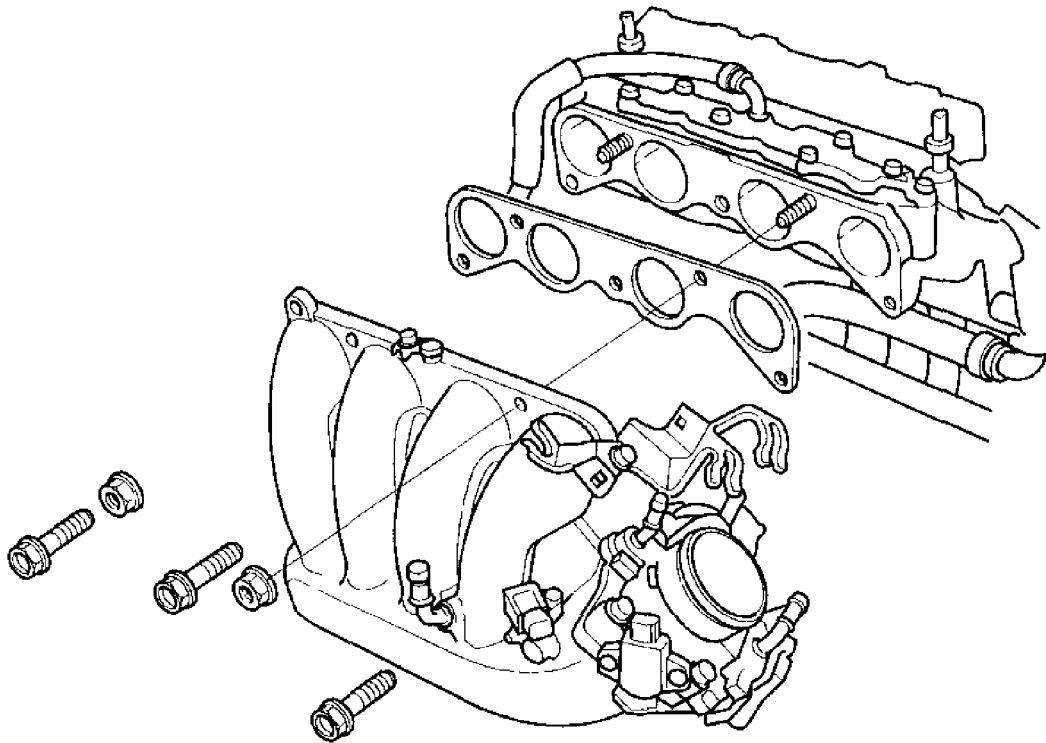
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Remove the intake manifold.



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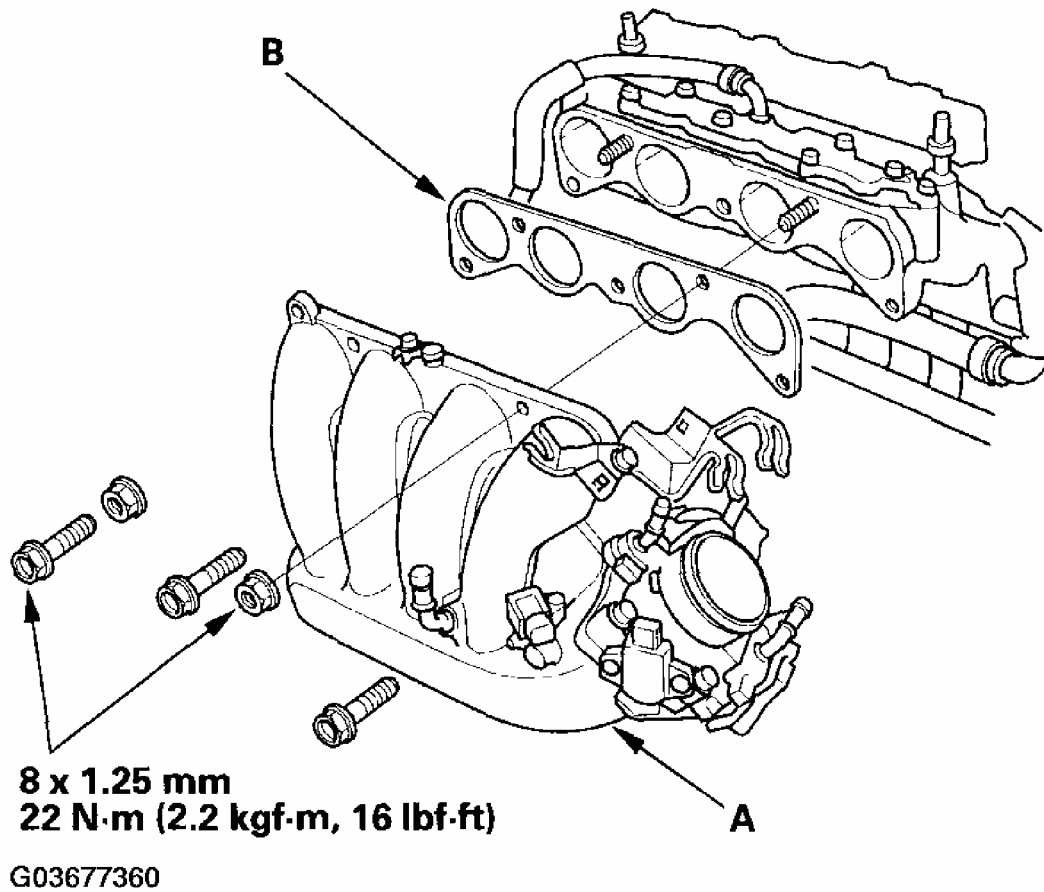


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**Fig. 9: Removing Intake Manifold**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.

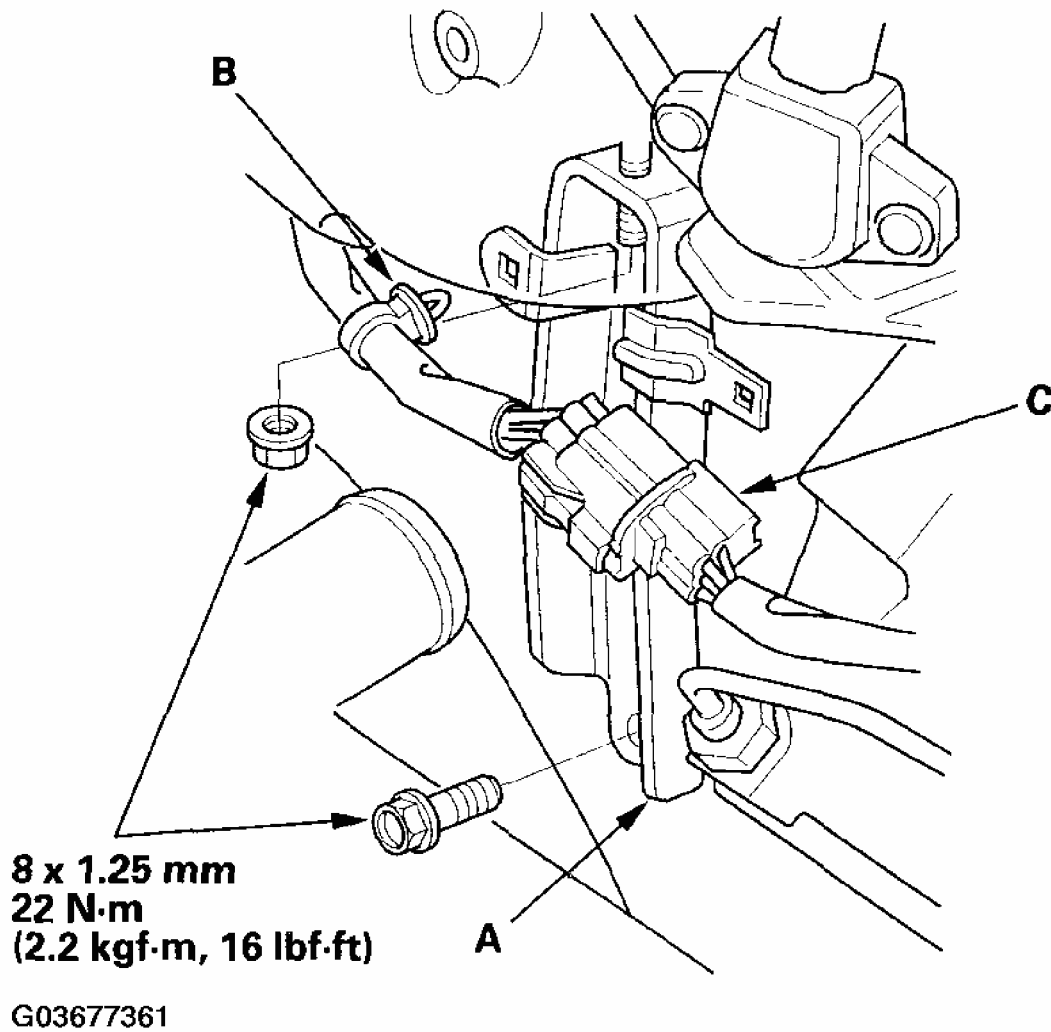
### INSTALLATION

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



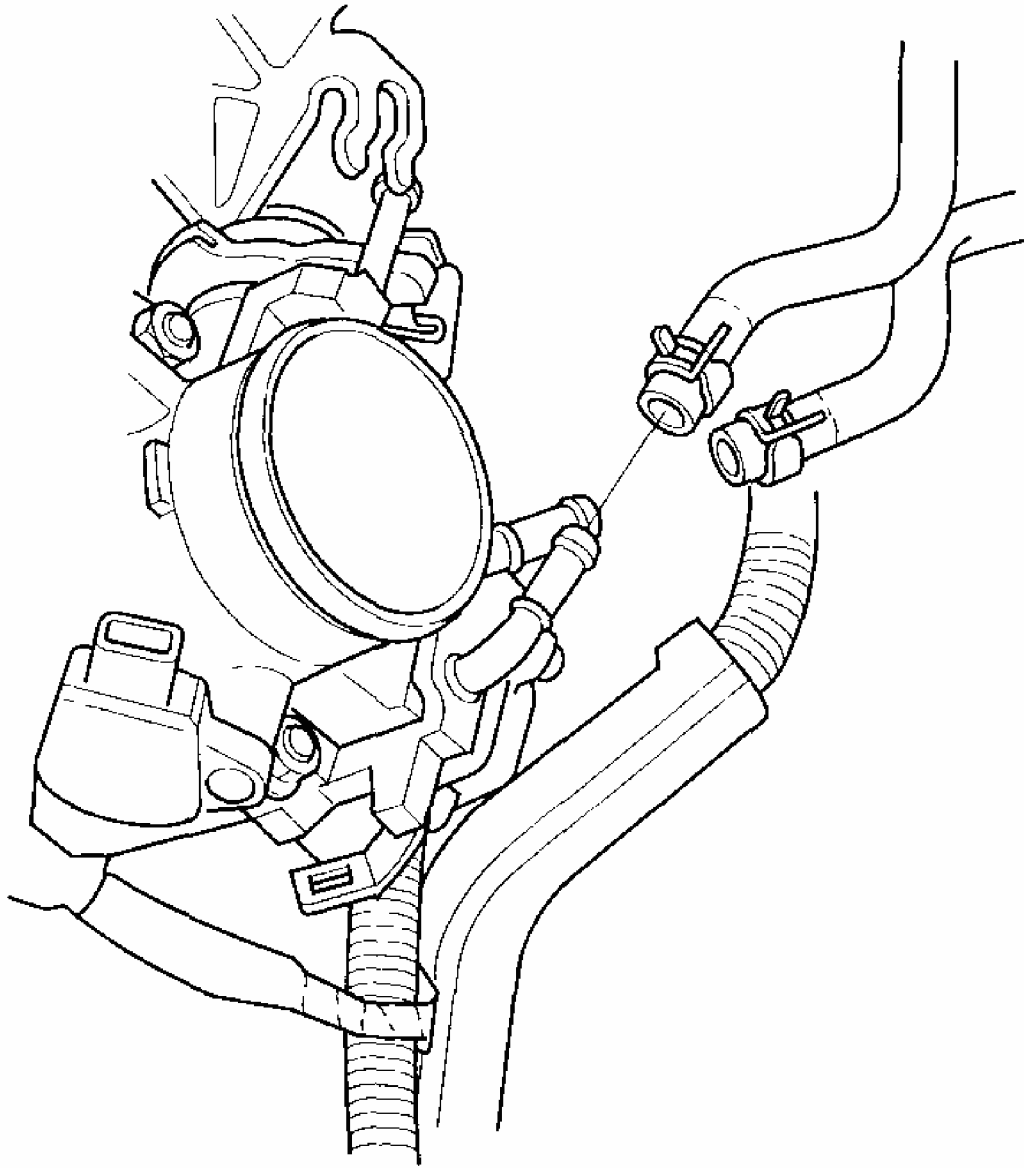
**Fig. 10: Installing Intake Manifold And Tightening Bolts/Nuts In Crisscross Pattern And Torque Specifications**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.

2. Install the intake manifold bracket (A), then install the harness clamp (B), and harness connector (C) to the intake manifold bracket.



**Fig. 11: Installing Intake Manifold Bracket, Harness Clamp And Harness Connector To Intake Manifold Bracket And Torque Specifications**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the water bypass hoses.



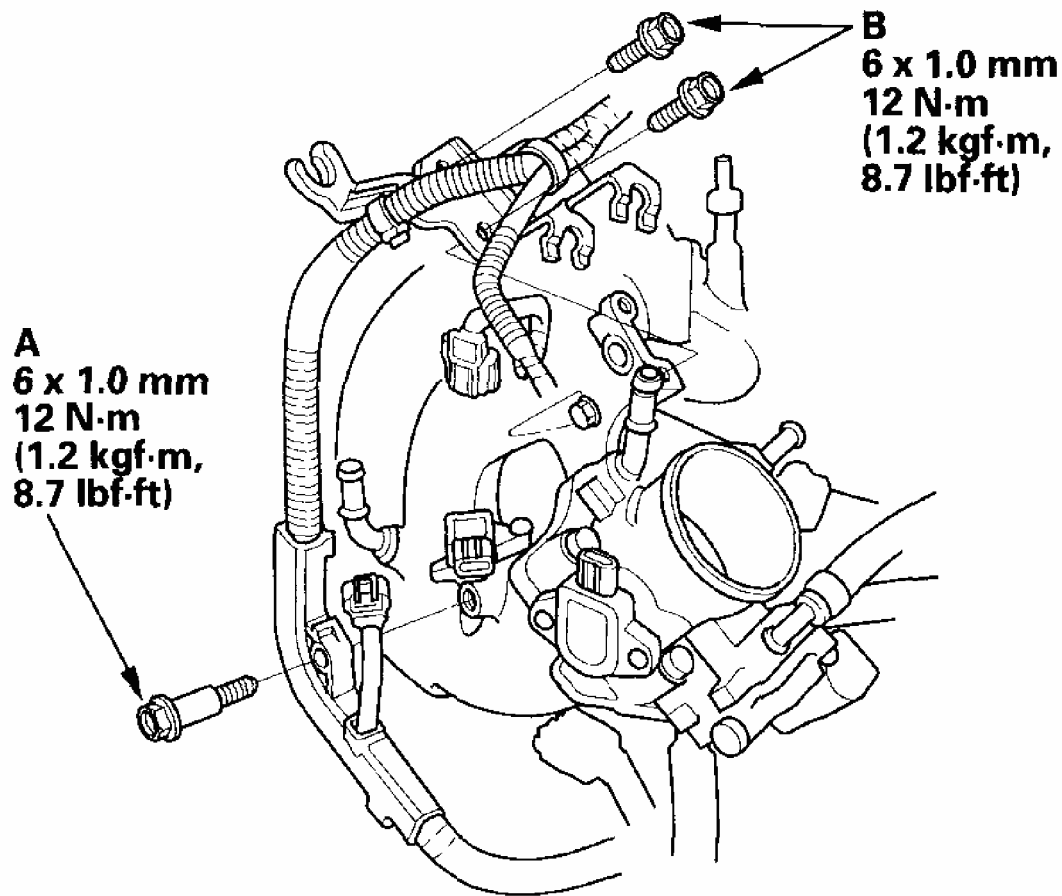
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**Fig. 12: Installing Water Bypass Hoses**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Tighten the bolt (A) securing the harness holder, and tighten the two bolts (B) securing the throttle cable bracket.

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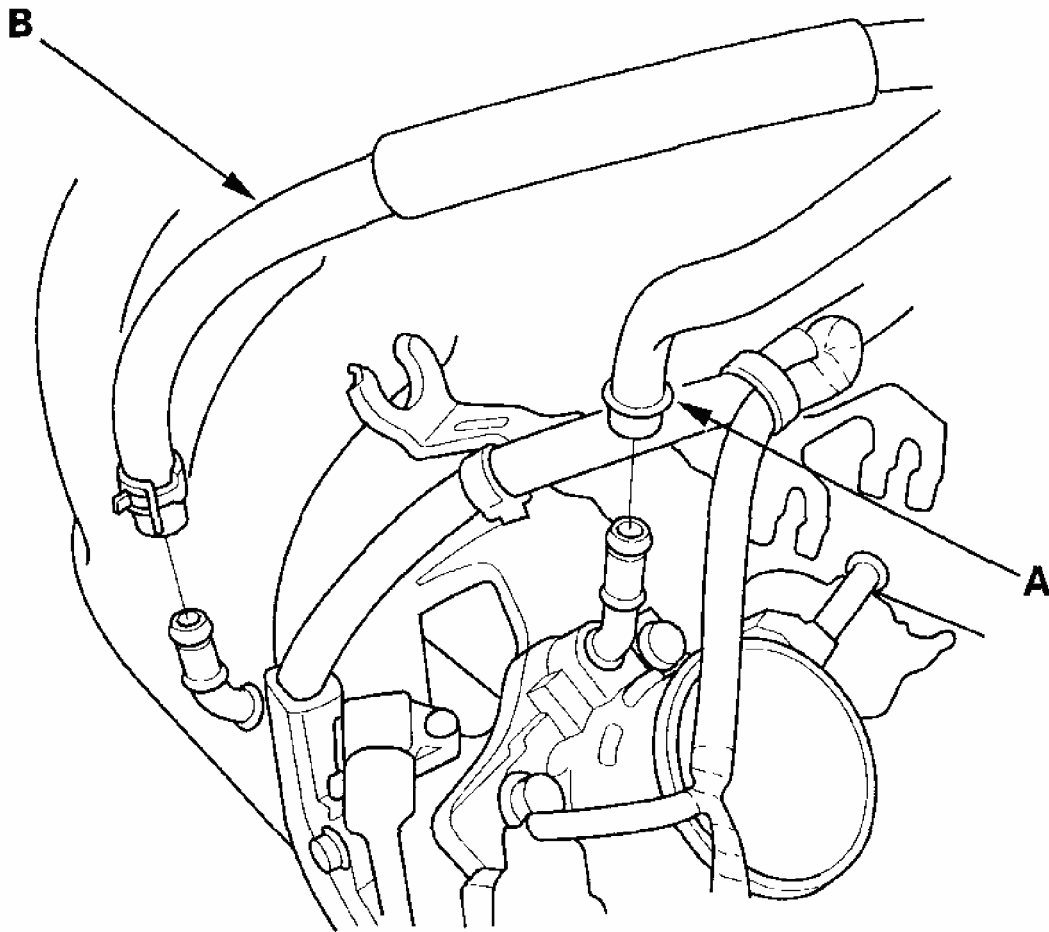
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**Fig. 13: Tightening Bolt Securing Harness Holder And Torque Specifications**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Install the evaporative emission (EVAP) canister hose (A) and brake booster vacuum hose (B).



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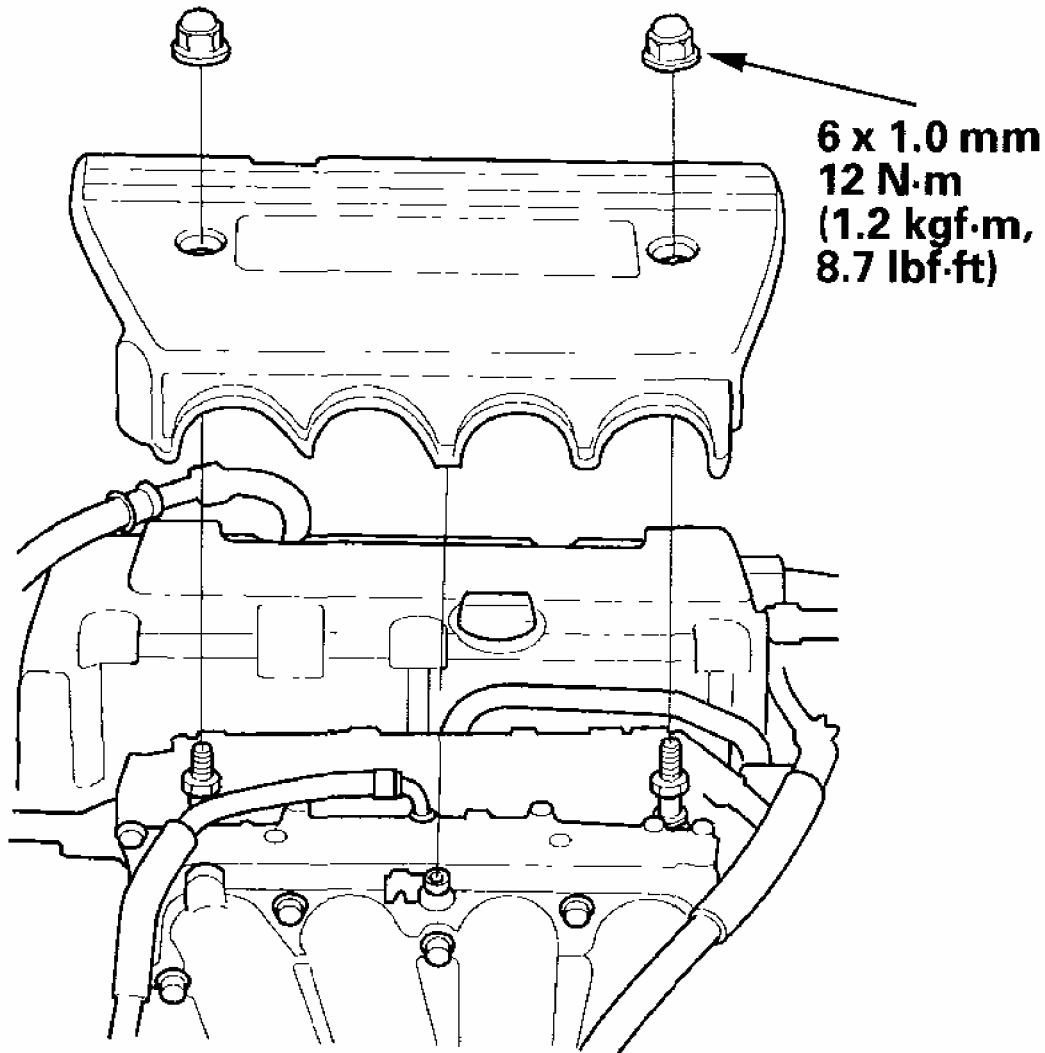
**Fig. 14: Installing Evaporative Emission Canister Hose And Brake Booster Vacuum Hose**

**Courtesy of AMERICAN HONDA MOTOR CO., INC.**

6. Install the throttle cable (see **THROTTLE CABLE REMOVAL/INSTALLATION** ), then adjust the cable (see **THROTTLE CABLE ADJUSTMENT** ).
7. Install the cruise control actuator cable (see **CRUISE CONTROL ACTUATOR/CABLE REPLACEMENT** ), then adjust the cable (see **CRUISE CONTROL ACTUATOR CABLE ADJUSTMENT** ).
8. Install the intake manifold cover.

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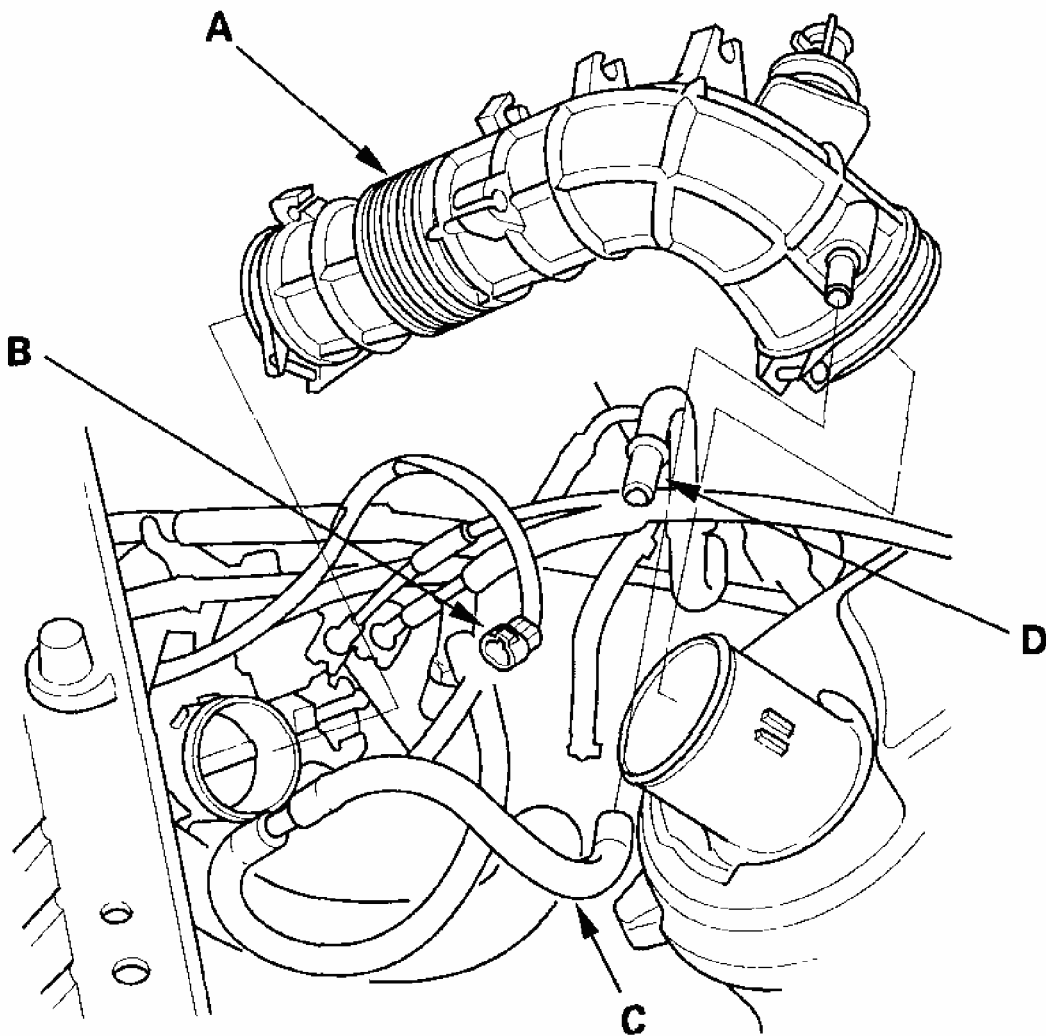
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**Fig. 15: Installing Intake Manifold Cover And Torque Specifications**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Install the intake air duct (A), then connect the intake air temperature (IAT) sensor connector (B), and install the vacuum hose (C) and breather pipe (D).



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**Fig. 16: Installing Intake Air Duct, Vacuum Hose And Breather Pipe**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Clean up any spilled engine coolant.
11. After installation, check that all tubes, hoses, and connectors are installed correctly.
12. Refill the radiator with engine coolant, and bleed air from the cooling system with the heater valve open (see step 7 on **COOLANT REPLACEMENT** ).

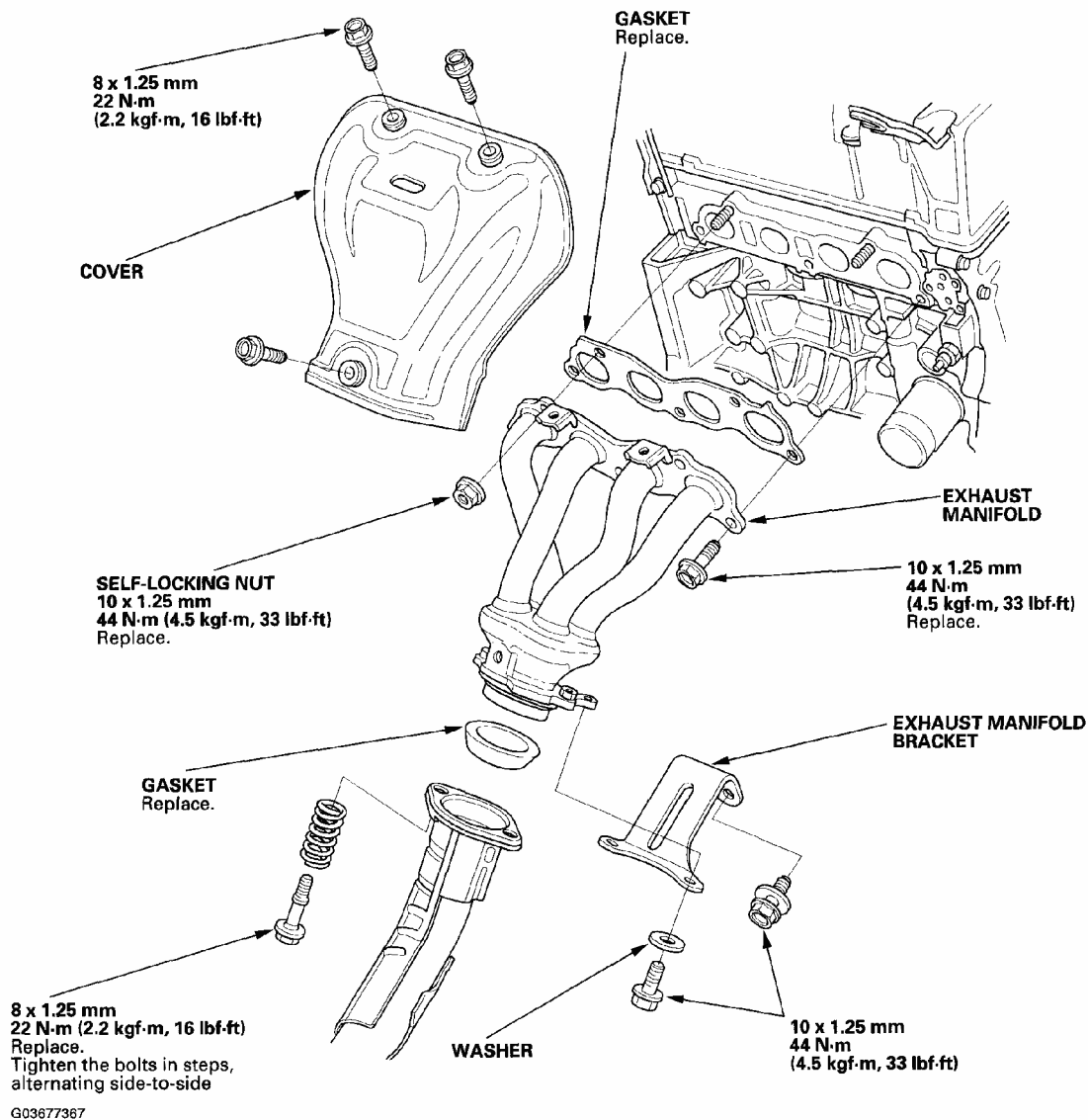
## **EXHAUST MANIFOLD REMOVAL AND INSTALLATION**

1. Remove the rocker arm oil control solenoid (VTEC solenoid valve) (see **ROCKER ARM OIL CONTROL SOLENOID (VTEC SOLENOID)** ).
2. Remove the intermediate shaft heat cover (see step 3 on **INTERMEDIATE SHAFT** ).



**REMOVAL** ).

3. Remove the cover and exhaust manifold bracket, then remove the exhaust manifold.



**Fig. 17: Removing Cover And Exhaust Manifold Bracket And Exhaust Manifold And Torque Specifications**  
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

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 in the reverse order of removal.

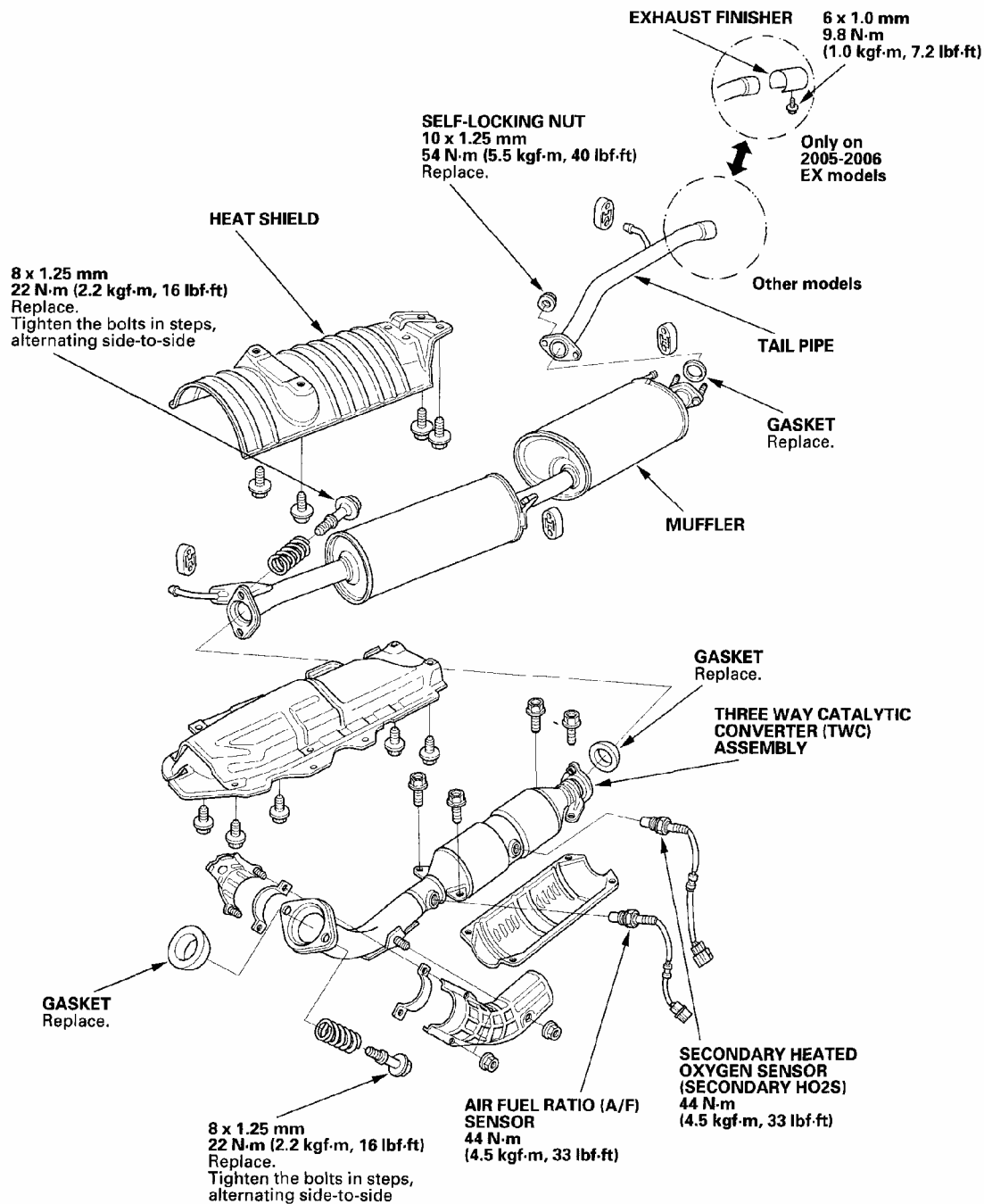
**EXHAUST PIPE AND MUFFLER REPLACEMENT**

**NOTE:** Use new gaskets and self-locking nuts when

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## reassembling.



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**Fig. 18: Exploded View Of Exhaust Pipe And Muffler Components And Torque Specifications**

Courtesy of AMERICAN HONDA MOTOR CO., INC.