



Engine Mechanical

Intake Manifold and Exhaust System

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Intake Manifold and Exhaust System

Component Location Index

J35Z6 engine (without SH-AWD)

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INJECTOR BASE
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EXHAUST PIPE A

**UNDER-FLOOR
THREE WAY CATALYTIC
CONVERTER (TWC)**

EXHAUST PIPE B
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J37A4 engine (with SH-AWD)

INTAKE MANIFOLD
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INJECTOR BASE
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EXHAUST PIPE A

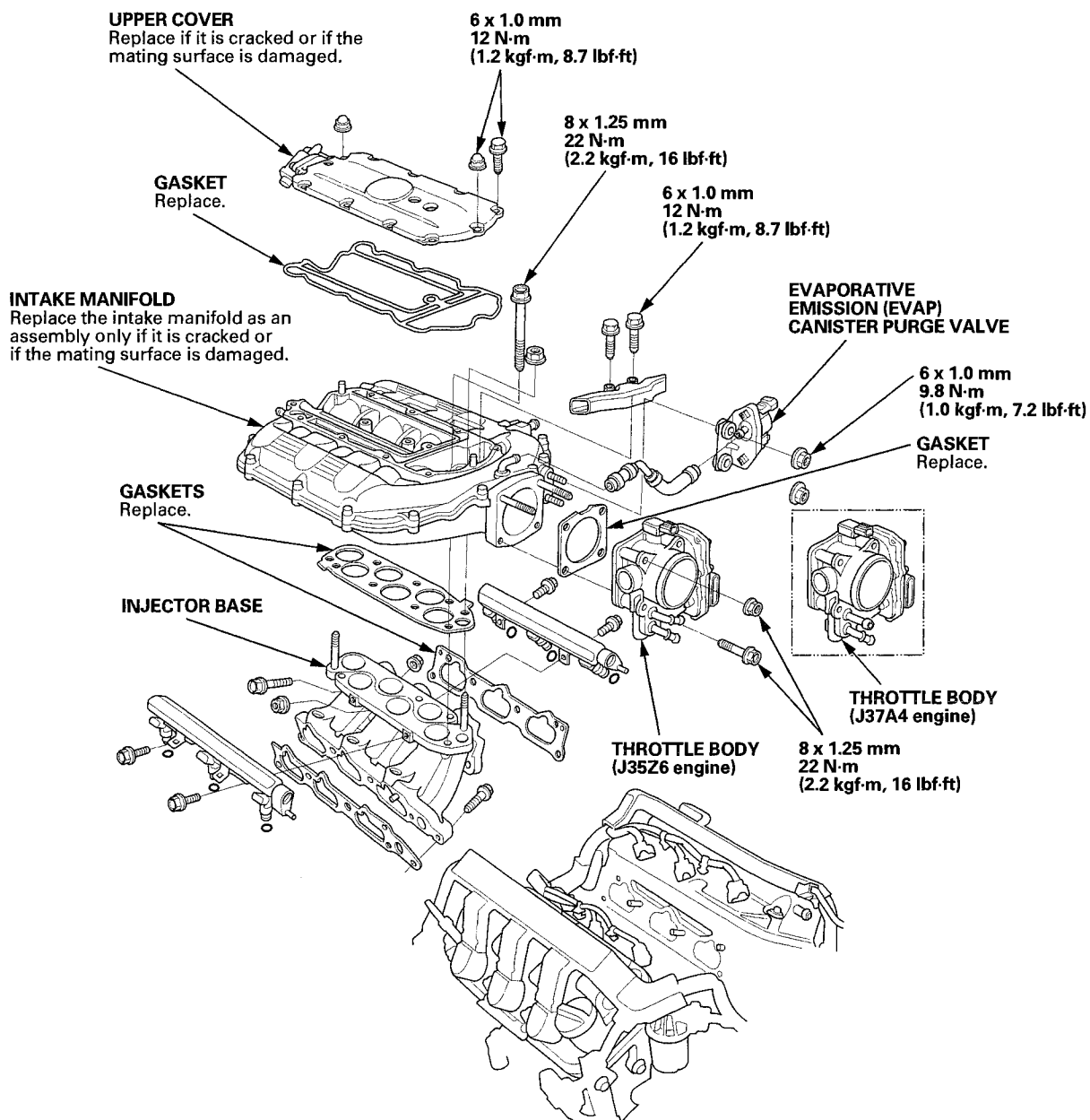
**UNDER-FLOOR
THREE WAY CATALYTIC
CONVERTER (TWC)**

EXHAUST PIPE B
Exhaust Pipe and Muffler Replacement, page 9-10



Intake Manifold Removal and Installation

Exploded View



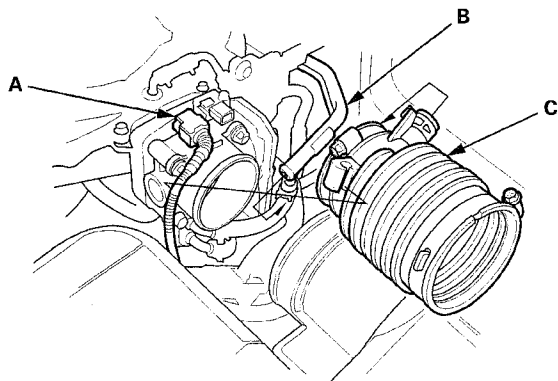
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Intake Manifold and Exhaust System

Intake Manifold Removal and Installation (cont'd)

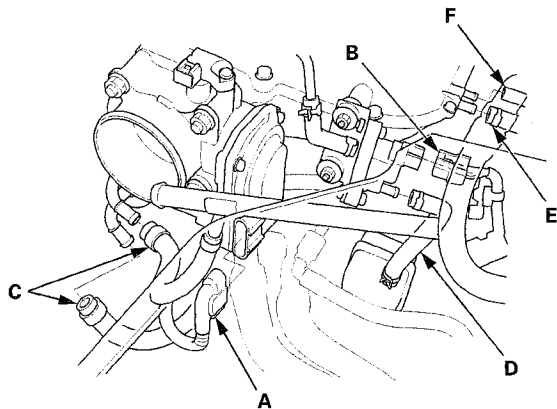
Removal

1. Remove the engine compartment covers (see page 20-186).
2. Disconnect the manifold absolute pressure (MAP) sensor connector (A) and the breather pipe (B), then remove the intake air duct (C).



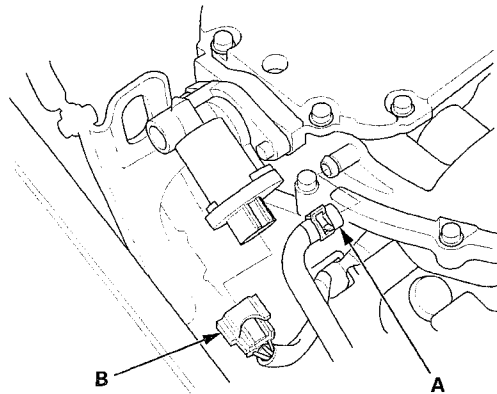
*: This illustration shows J35Z6 engine.

3. Disconnect the throttle actuator connector (A), the evaporative emission (EVAP) canister purge valve connector (B), the water bypass hoses (C), the EVAP canister hose (D), the brake booster vacuum hose (E), and the vacuum hose (F).



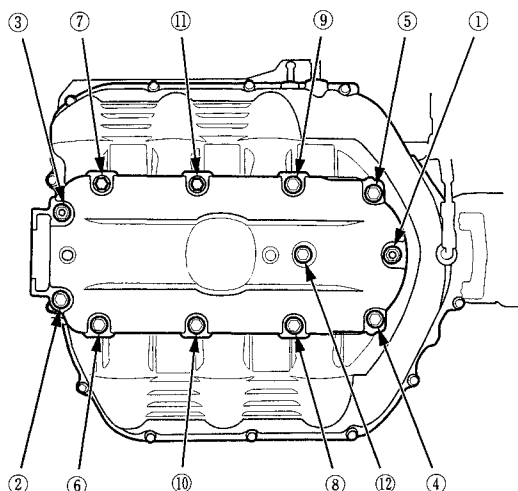
*: This illustration shows J35Z6 engine.

4. Disconnect the positive crankcase ventilation (PCV) hose (A) and the intake manifold tuning (IMT) actuator connector (B).

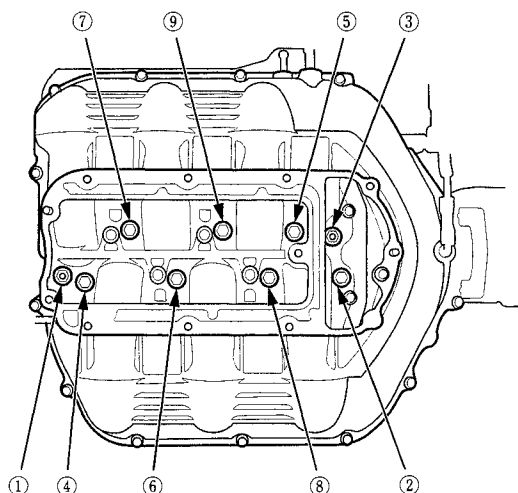




5. Remove the upper cover mounting bolts and nuts sequentially in three steps, then remove the upper cover.



6. Remove the intake manifold mounting bolts and nuts sequentially in three steps, then remove the intake manifold.

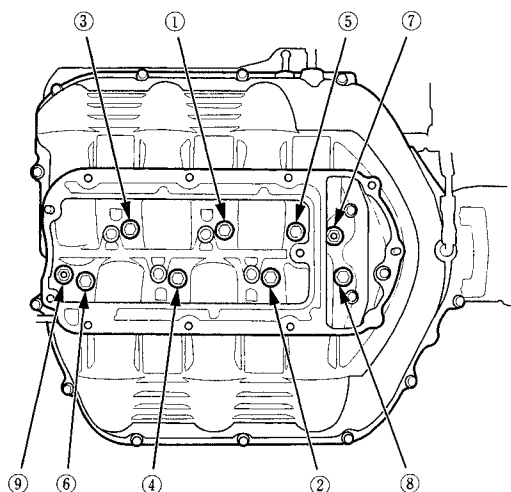


Installation

1. Install the intake manifold. Tighten the mounting bolts and nuts sequentially in three steps. Always use a new intake manifold gasket.

Specified Torque

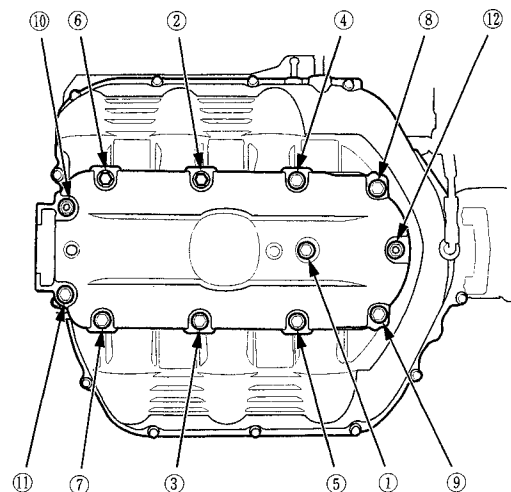
8 x 1.25 mm: 22 N·m (2.2 kgf·m, 16 lbf·ft)



2. Install the upper cover. Tighten the mounting bolts and nuts sequentially in three steps. Always use a new gasket.

Specified Torque

6 x 1.0 mm: 12 N·m (1.2 kgf·m, 8.7 lbf·ft)

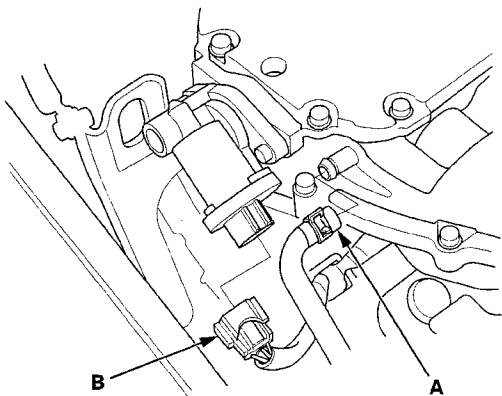


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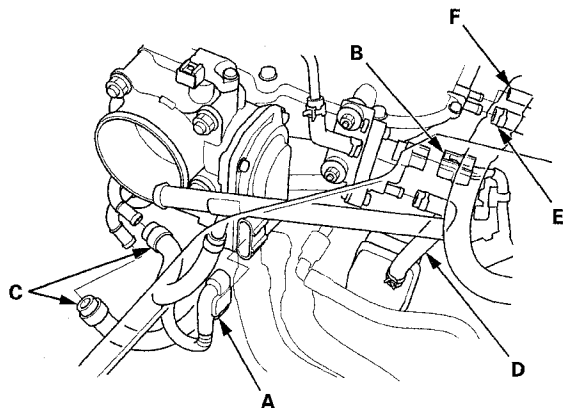
Intake Manifold and Exhaust System

Intake Manifold Removal and Installation (cont'd)

3. Connect the PCV hose (A) and the IMT actuator connector (B).

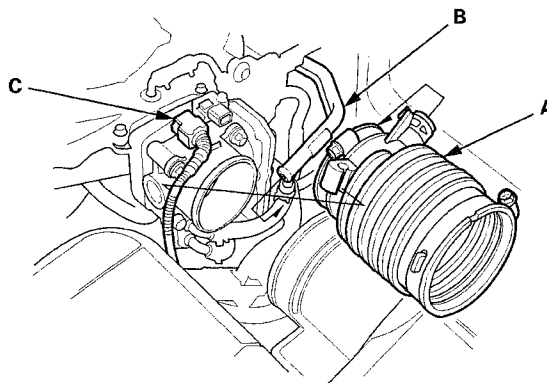


4. Connect the throttle actuator connector (A), the EVAP canister purge valve connector (B), the water bypass hoses (C), the EVAP canister hose (D), the brake booster vacuum hose (E), and the vacuum hose (F).



*: This illustration shows J35Z6 engine.

5. Install the intake air duct (A), then connect the breather pipe (B) and the MAP sensor connector (C).



*: This illustration shows J35Z6 engine.

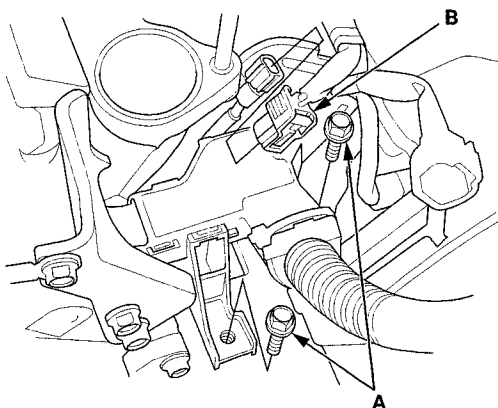
6. Clean up any spilled engine coolant.
7. After installation, check that all tubes, hoses, and connectors are installed correctly.
8. Refill the radiator with engine coolant, and bleed the air from the cooling system. (see step 8 on page 10-7).
9. Install the engine compartment covers (see page 20-186).



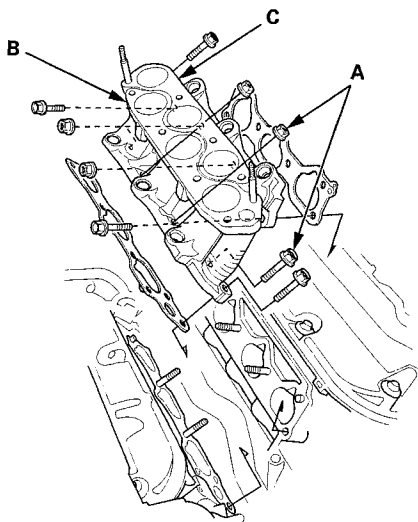
Injector Base Removal and Installation

Removal

1. Relieve the fuel pressure (see page 11-366).
2. Remove the intake manifold (see page 9-4).
3. Remove the injectors (see page 11-271).
4. Remove the harness holder mounting bolts (A) and disconnect the knock sensor connector (B).



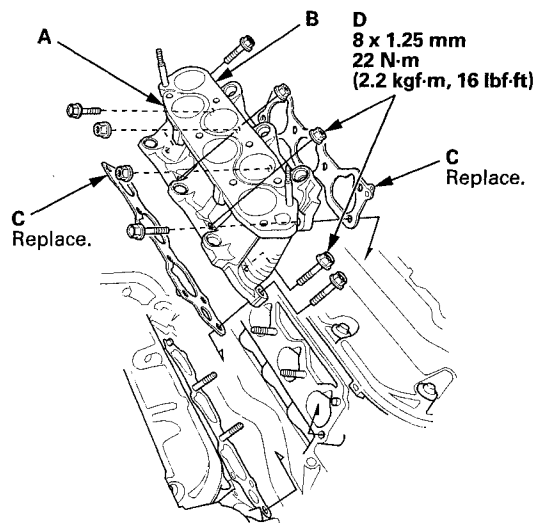
5. Remove the injector base mounting bolts/nuts (A), then remove the front injector base (B) and the rear injector base (C).



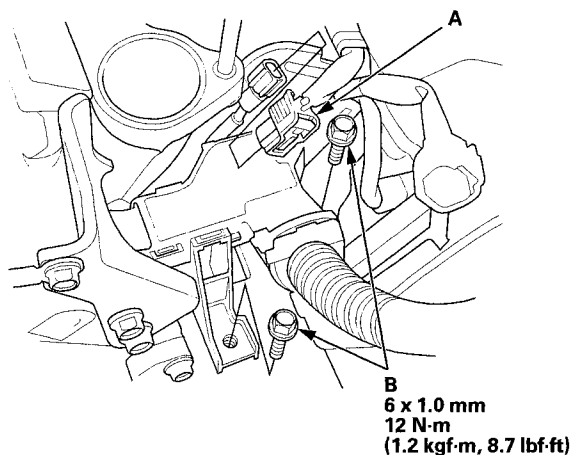
Installation

1. Install the front injector base (A) and the rear injector base (B) with new gaskets (C), and tighten the injector base mounting bolts/nuts (D) in a crisscross pattern in three steps, beginning with the inner nuts.

NOTE: The front injector base gasket is different from the rear one. Do not mix injector base gasket types.



2. Connect the knock sensor connector (A), then install the harness holder mounting bolts (B).



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Intake Manifold and Exhaust System

Injector Base Removal and Installation (cont'd)

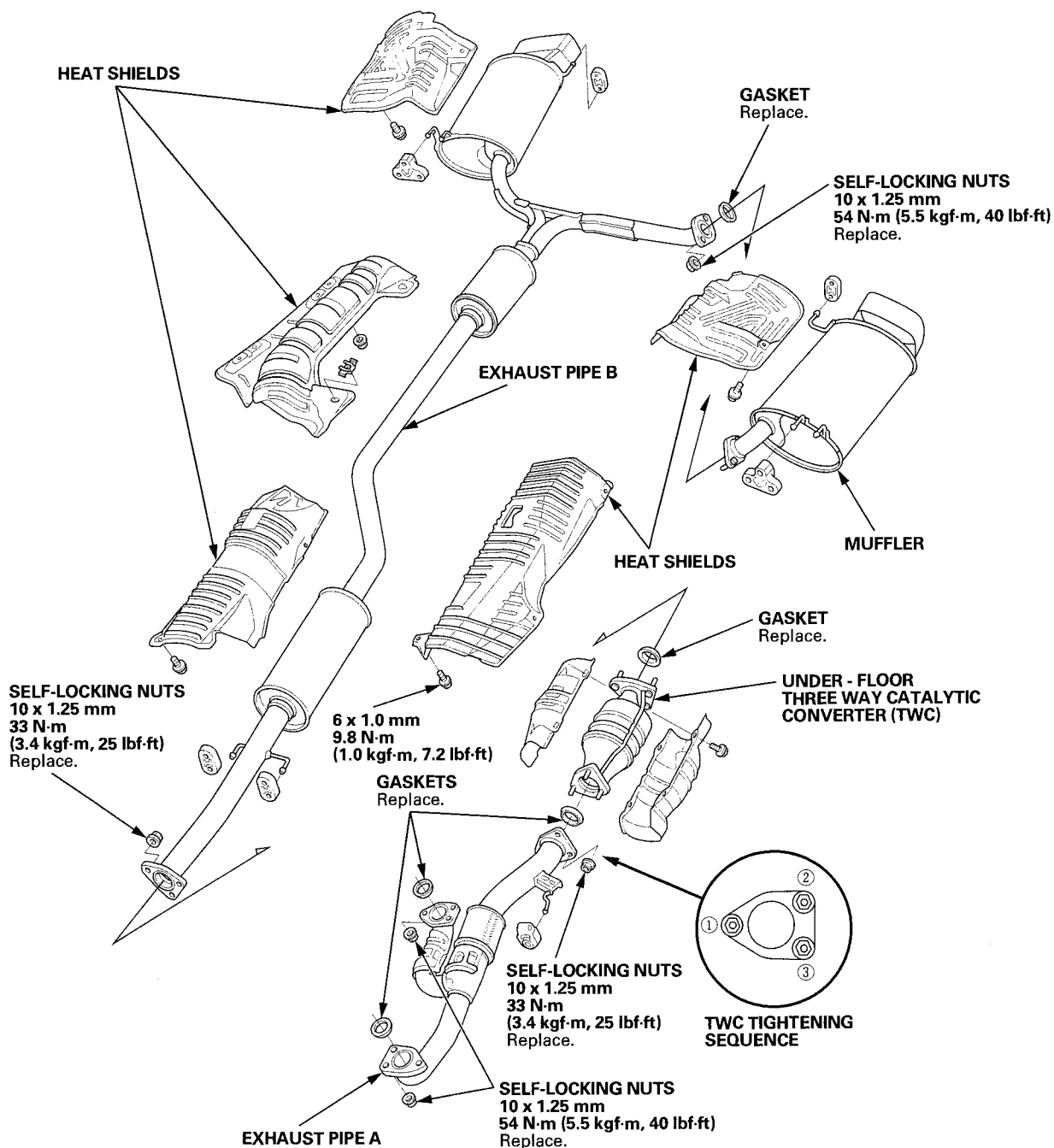
3. Install the injectors (see page 11-271).
4. Install the intake manifold (see page 9-5).
5. Inspect for fuel leaks. Turn the ignition switch to ON (II), or press the engine start/stop button to select the ON mode (do not operate the starter) so the fuel pump runs for about 2 seconds and pressurizes the fuel line. Repeat this operation three times, then check for fuel leakage at any point in the fuel line.



Exhaust Pipe and Muffler Replacement

J35Z6 engine (without SH-AWD)

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



Intake Manifold and Exhaust System

Exhaust Pipe and Muffler Replacement (cont'd)

J37A4 engine (with SH-AWD)

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

