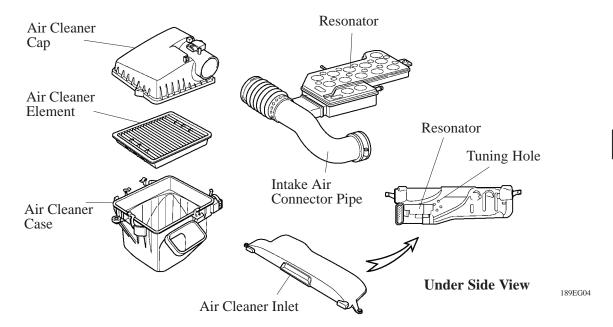
■INTAKE AND EXHAUST SYSTEM

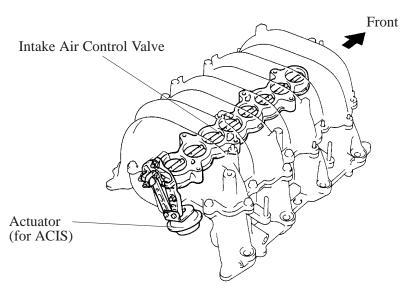
1. Air Cleaner

- A resonator and a tuning hole have been provided in the air cleaner inlet to reduce the amount of intake air sound.
- The air cleaner case has been increased in size to reduce the amount of intake air sound, and the construction of the air cleaner element has been optimized to achieve weight reduction.



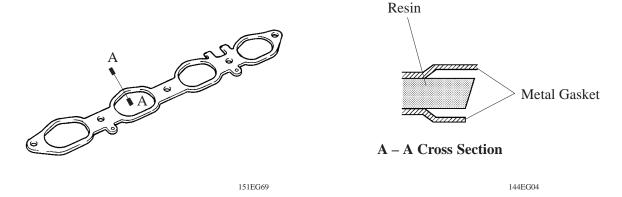
2. Intake Manifold

- The low-to mid-speed range torque has been improved by increasing the length of the intake manifold port.
- The air intake chamber consists of upper and lower sections and contains an intake air control valve. This valve is activated by ACIS (Acoustic Control Induction System) and is used to alter the intake pipe length to improve the engine performance in all speed ranges. For details, see page 80.



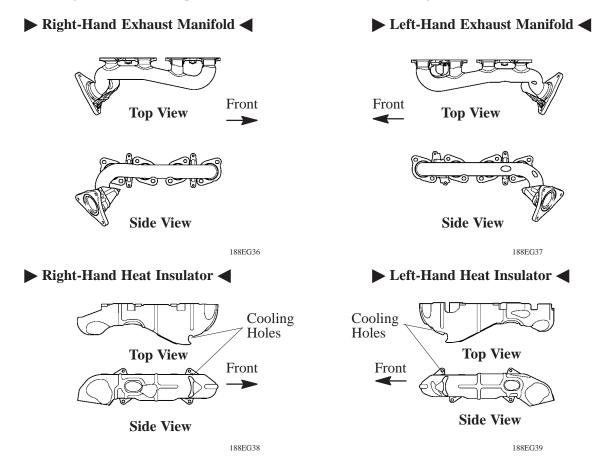
3. Intake Manifold Gasket

- A heat-barrier gasket has been adopted for use between the cylinder head and the intake manifold. This
 gasket, which restrains the heat transfer from the cylinder head to the intake manifold, helps restrain
 the intake air temperature and improve the charging efficiency.
- The construction of the gasket consists of resin that is sandwiched between metal gaskets.



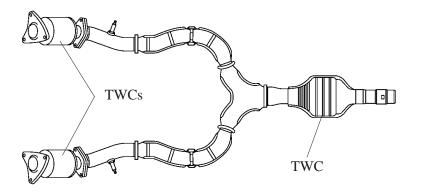
4. Exhaust Manifold

- The front exhaust pipe has been shortened.
- Cooling holes have been provided in the heat insulator for cooling the exhaust manifold.



5. Exhaust Pipe

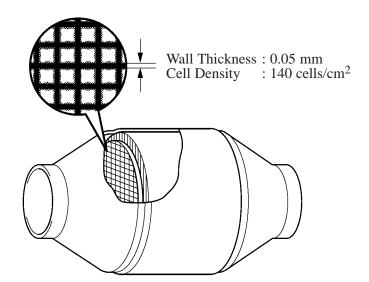
On unleaded gasoline engine model, two TWCs(Three-way Catalytic Converters) have been provided in the front, and one in the center.



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6. Three Way Catalytic Converter (Unleaded Gasoline Model)

An ultra thin-wall, high-cell ceramic type TWC has been adopted. This TWC enables to optimize the cells density and to reduce wall thickness.



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