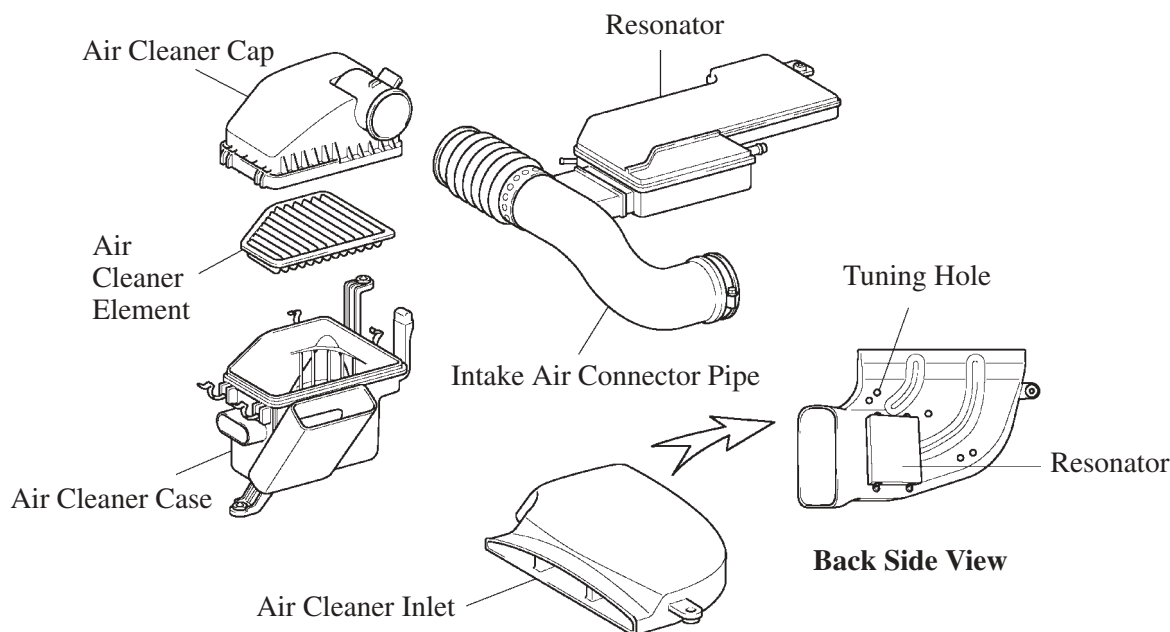


■ INTAKE AND EXHAUST SYSTEM

1. Air Cleaner Inlet Pipe, Box and Air Connector

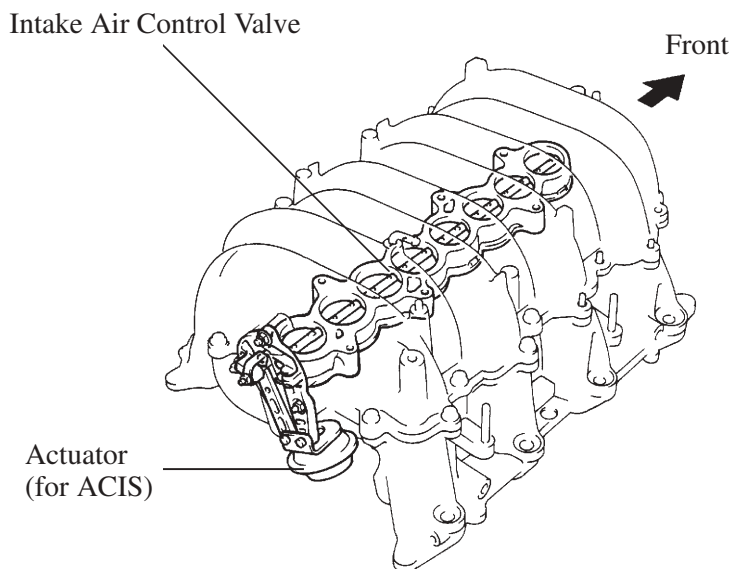
- A resonator and a tuning hole have been provided in the air cleaner inlet to reduce the amount of intake air sound.
- The air cleaner case has been increased in size to reduce the amount of intake air sound, and the construction of the air cleaner element has been optimized to achieve weight reduction.



188EG34

2. Intake Manifold

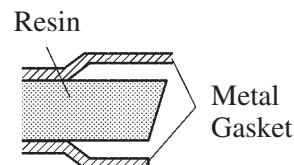
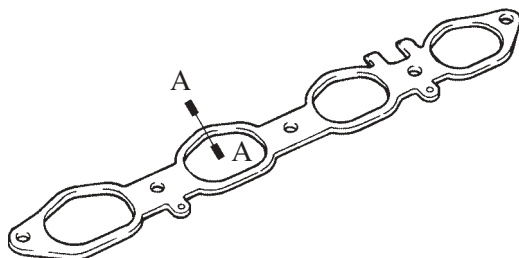
- The low-to mid-speed range torque has been improved by increasing the length of the intake manifold port.
- The air intake chamber consists of upper and lower sections and contains an intake air control valve. This valve is activated by ACIS (Acoustic Control Induction System) and is used to alter the intake pipe length to improve the engine performance in all speed ranges. For details, [see page 58](#).



188EG35

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.



A – A Cross Section

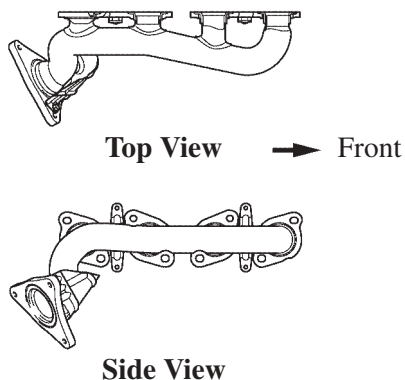
151EG69

144EG04

4. Exhaust Manifold

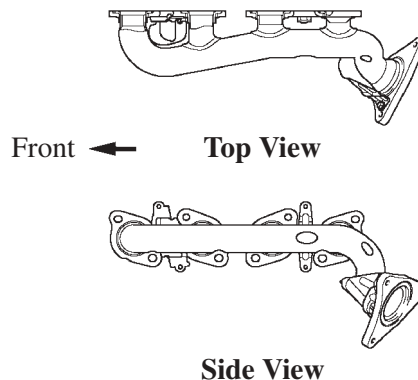
- The front exhaust pipe has been shortened and the warm-up performance of the TWC (Three-Way Catalytic Converter) has been improved.
- Cooling holes have been provided in the heat insulator for cooling the exhaust manifold.

► Right-Hand Exhaust Manifold ◄



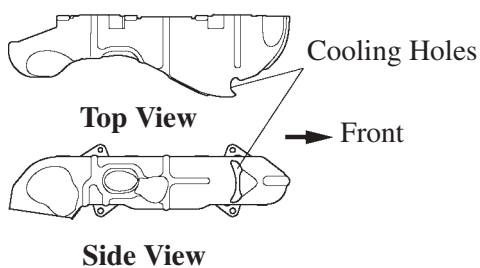
188EG36

► Left-Hand Exhaust Manifold ◄



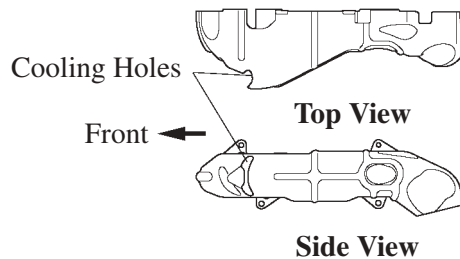
188EG37

► Right-Hand Heat Insulator ◄



188EG38

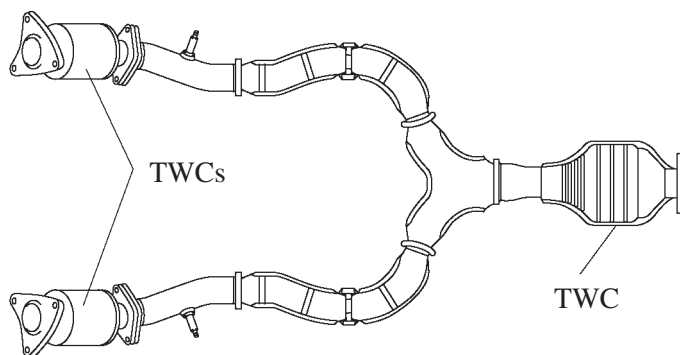
► Left-Hand Heat Insulator ◄



188EG39

5. Exhaust Pipe

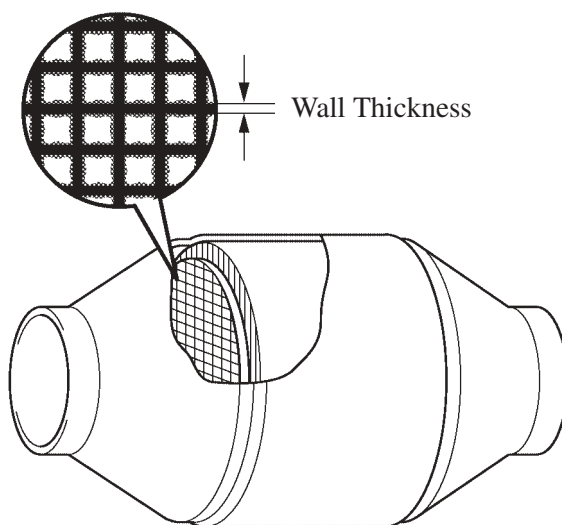
Two TWCs (Three-way Catalytic Converters) have been provided in the front, and one in the center.



188EG40

6. Three Way Catalytic Converter

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. In addition, it enables to achieve cleaner exhaust emission by double-coating the alumina material on the ceramic surface.



189EG21