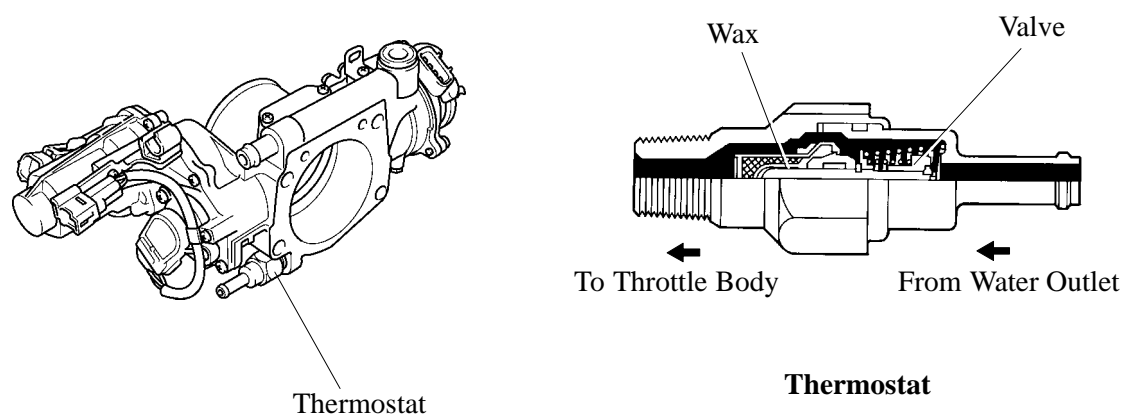


## 6. Intake and Exhaust System

### Throttle Body

- The adoption of the ETCS-i has realized excellent throttle control.
- The ISC system, VSC system, and cruise control system are controlled comprehensively by the ETCS-i. Thus, the IAC valve and the sub-throttle valve have been discontinued.
- A thermostat is installed in the throttle body. The thermostat uses the thermal expansion of the wax to open and close the valve to shut off the flow of warm coolant when the coolant temperature is high in the throttle body's warm coolant passage. This prevents the throttle body temperature from rising more than the needed level, thus restraining the rise in the intake air temperature.

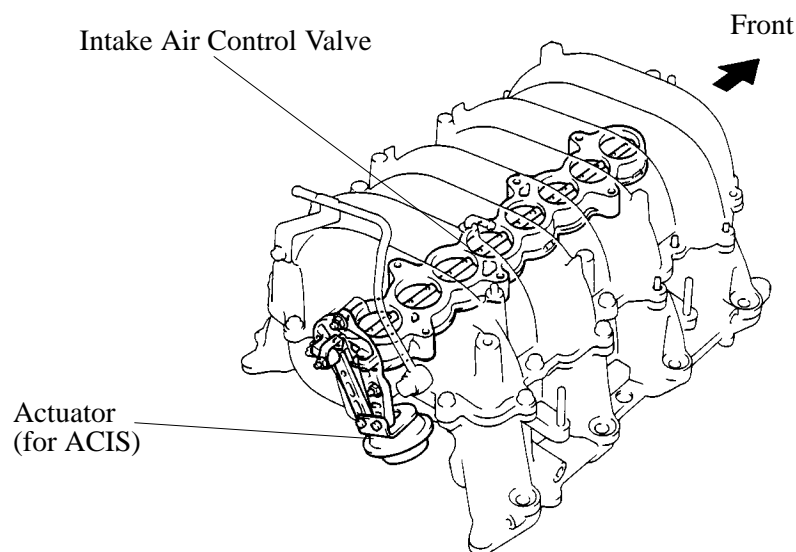


151EG21

150EG21

### Intake Manifold

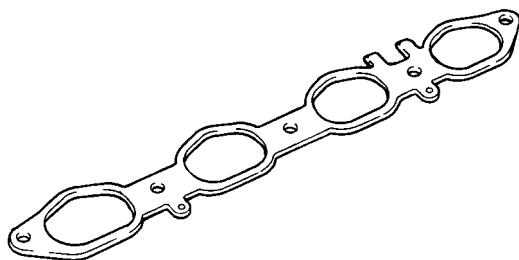
- The low-to mid-speed range torque has been improved by increasing the length of the intake manifold port.
- The intake air chamber consists of upper and lower sections and contains an intake air control valve. This valve is activated by ACIS (Acoustic Control Induction System) and is used to alter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



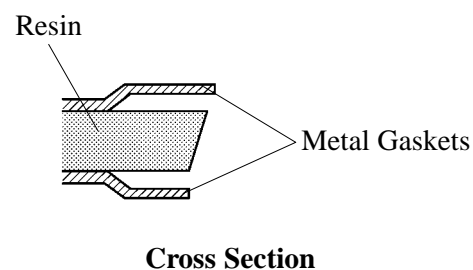
151EG11

### 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.



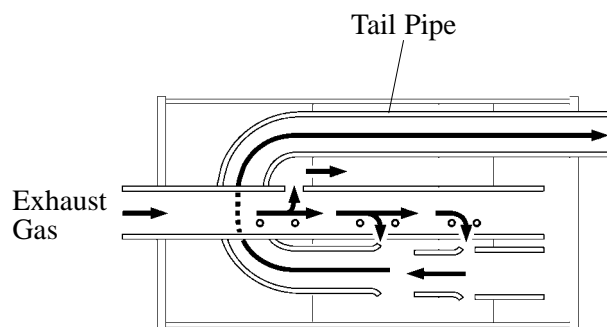
151EG69



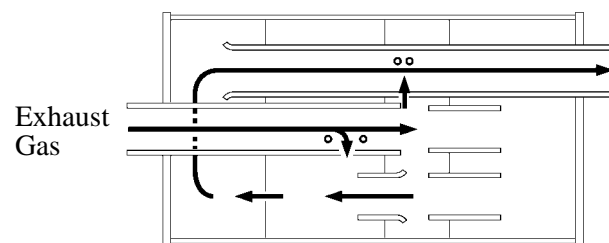
144EG04

### Long Tail Muffler

The internal construction of the main muffler has been changed and the tail pipe length has been extended to realize a quieter operation during idle.



'98 LS400



'97 LS400

151EG10