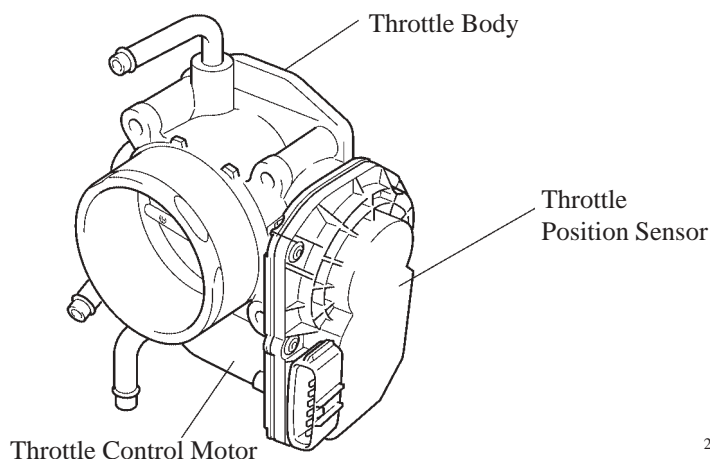


3. Intake and Exhaust System

Throttle Body

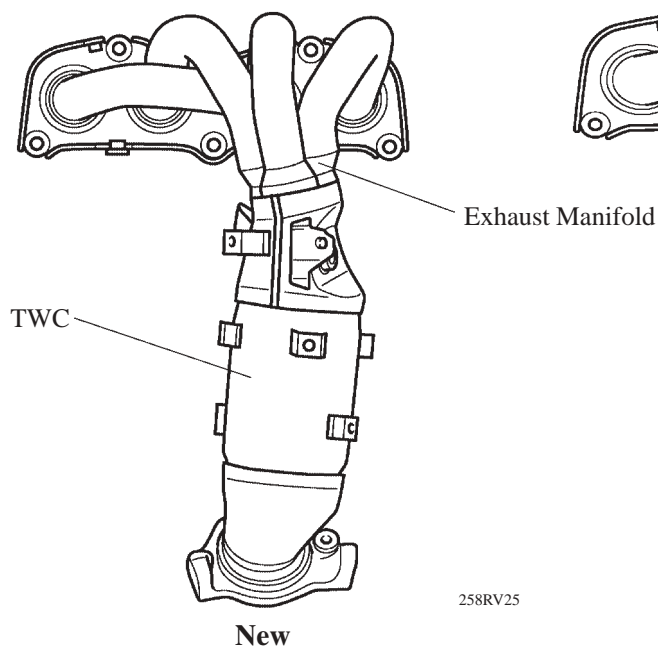
- A DC motor with excellent response and minimal power consumption is used for the throttle control motor. The engine ECU performs the duty ratio control of the direction and the amperage of the current that flows to the throttle control motor in order to regulate the opening angle of the throttle valve.
- The link-less type throttle body has adopted and it realizes excellent throttle control.
For details of ETCS-i control, [refer to page 174](#).



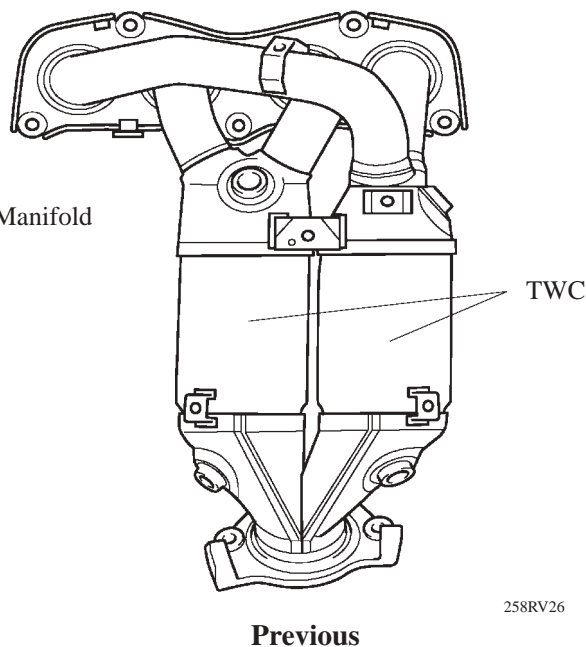
251EG07

Exhaust Manifold

- To comply with the STEP-IV exhaust emission regulations in Europe, the number of startup converters (TWC) has been changed from two to one, and the warm-up performance of the catalyst has been improved, in order to reduce the exhaust emissions during the starting of the engine.
- The exhaust manifold has been changed from the unequal-length to an equal-length type, in order to improve performance in the low- to medium-speed range and fuel economy in the high-speed range.



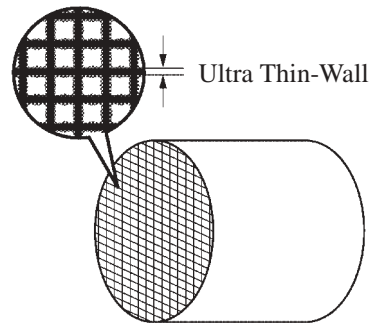
258RV25



258RV26

Three-Way Catalytic Converter

- The ceramic type TWC (Three-Way Catalytic Converter) has been adopted directly below the exhaust manifold and under floor. This TWC enables to improve in reducing the amount of exhaust emissions by optimizing the cell's density and wall thickness.

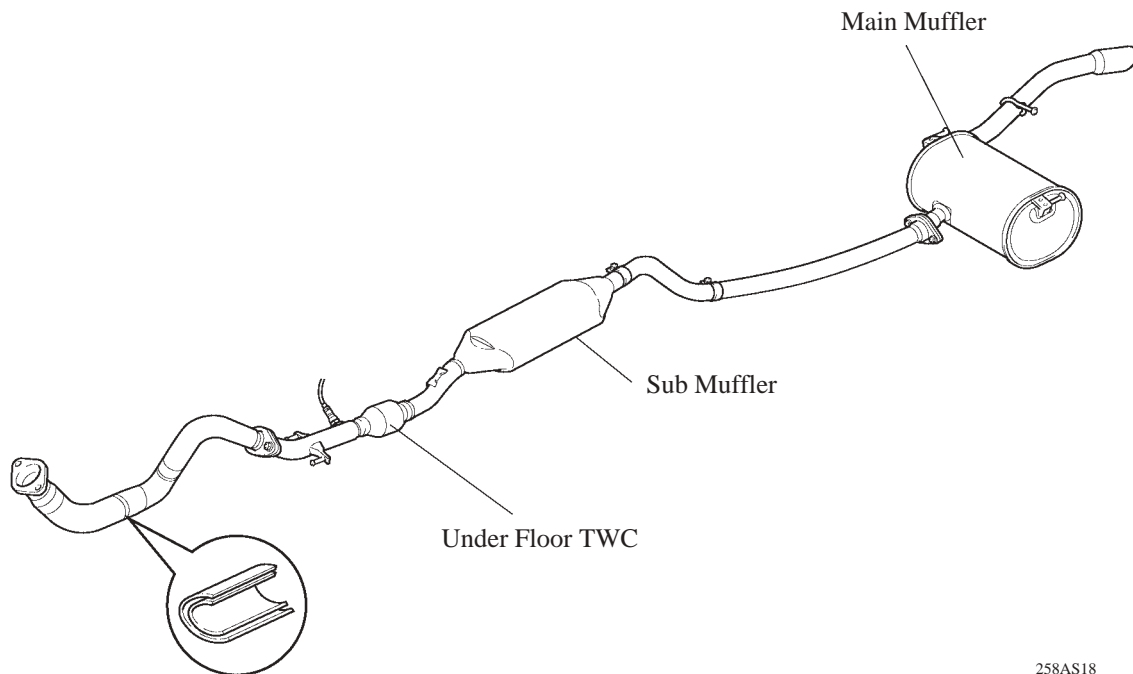


198EG06

4

Exhaust Pipe

- To comply with the Step-IV exhaust emission regulations, the exhaust pipe system on the models for Europe has adopted an under floor catalyst, and a dual pipe construction in the pipe upstream of the catalyst.



258AS18