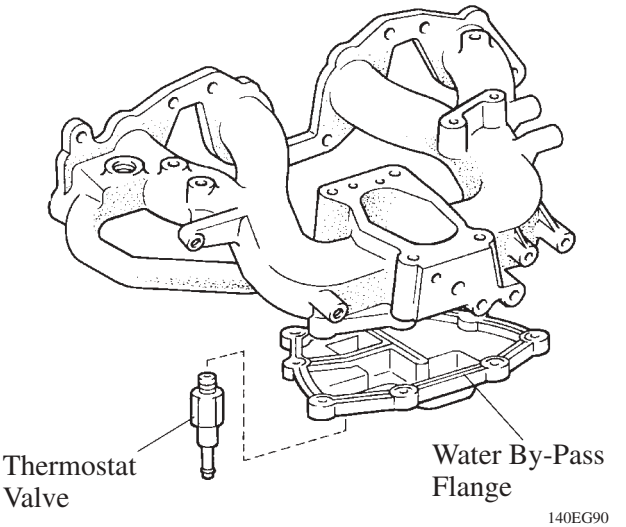
■INTAKE AND EXHAUST SYSTEM

1. Intake Manifold

For 1RZ Engine

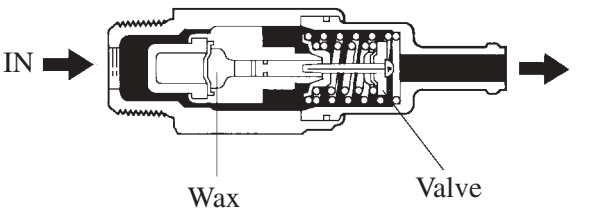
- The system incorporates a tournament port intake manifold to enhance distribution of the air-fuel mixture.
- A hot water heating passage, in which a thermostat valve is installed, has been provided in the intake manifold riser to control the temperature in the riser. As a result, the drivability and engine performance during warm-up have been improved.



140EG90

1) Thermostat Valve

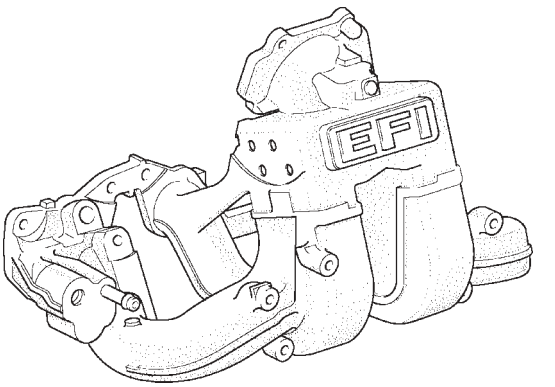
The thermostat valve mounted on the water bypass flange contains wax which expands to close the valve and stops the flow of coolant. As a result, a constant temperature is maintained in the riser.



140EG91

For 1RZ-E Engine

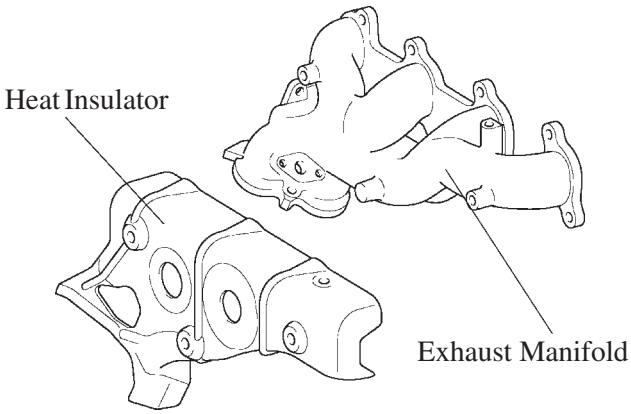
To improve the intake efficiency, the intake manifold lengths have been optimized and equalized while the intake manifolds have been made lighter and more compact.



140EG13

2. Exhaust Manifold

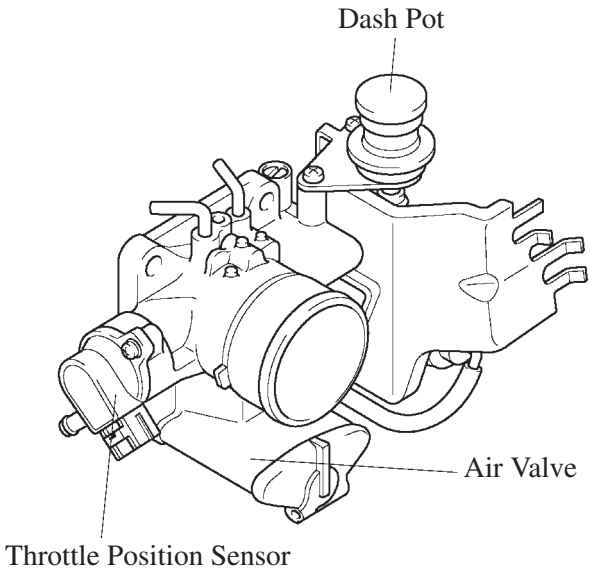
The exhaust manifold is made of heat-resistant cast iron.



140EG42

3. Throttle Body (For 1RZ-E Engine)

- A linear type throttle position sensor has been adopted.
- The dash pot is integrated with the VTV (Vacuum Transmitting Valve) to simplify the system.
- A wax type air valve is integrated with the throttle body.



140EG18