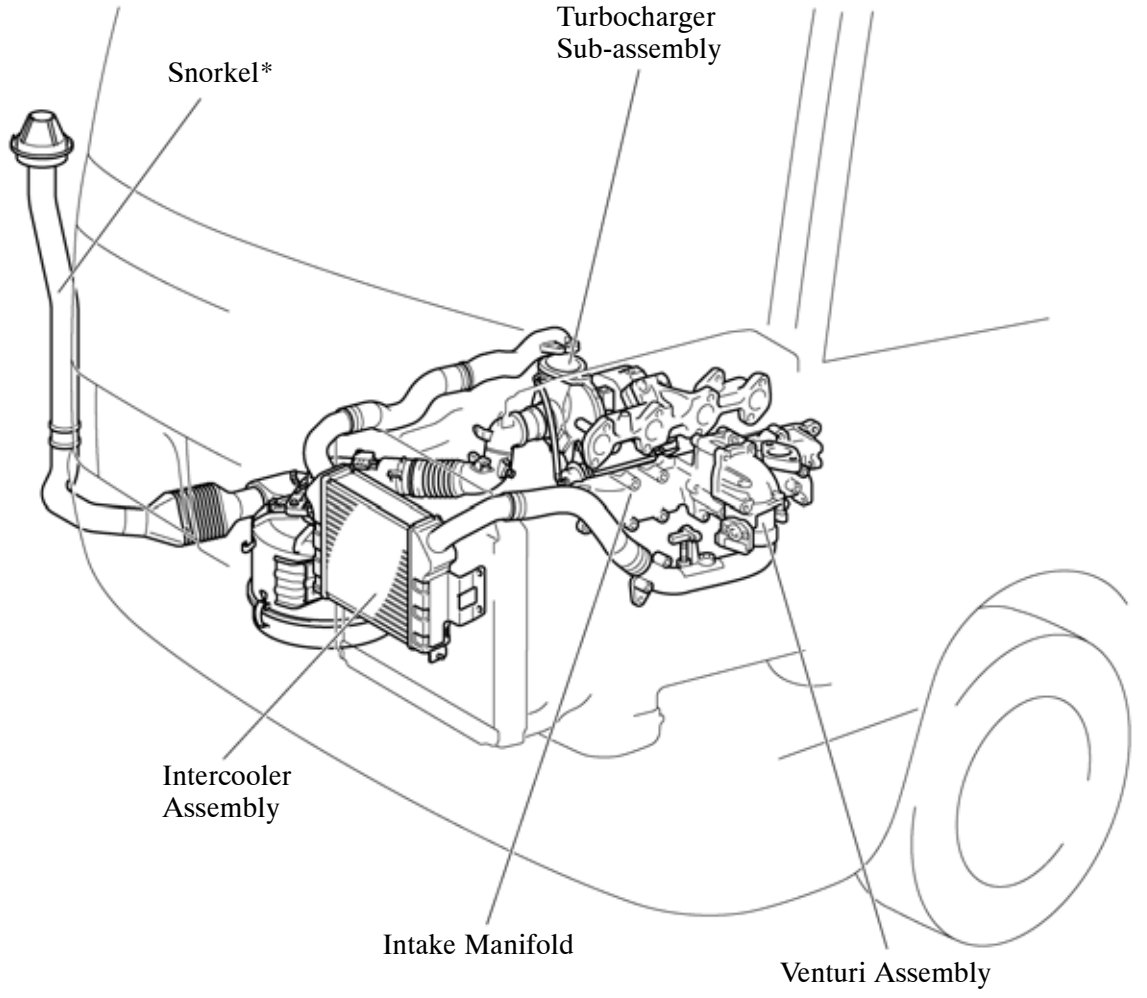
■ INTAKE SYSTEM

1. General

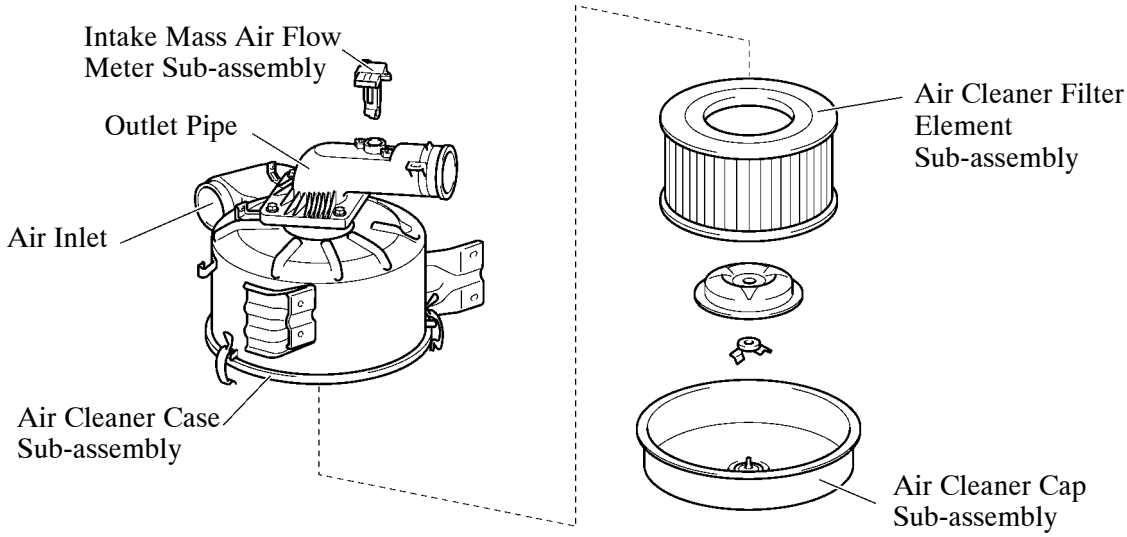
- A turbocharger sub-assembly manufactured by IHI is used.
- A large-size intercooler with a fin type core is used.
- An intake manifold made of lightweight aluminum alloy is used.
- The venturi assembly is located in front of the intake manifold.
- A snorkel is made available depending on a specification.



*: Models with snorkel

2. Air Cleaner

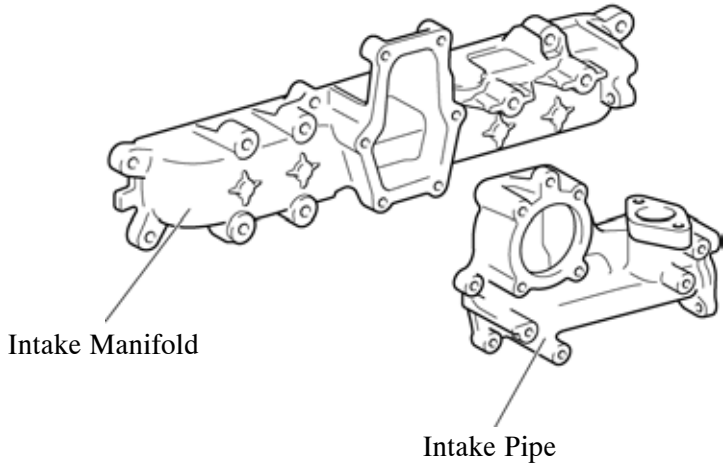
- An air inlet, air cleaner case sub-assembly and air cleaner cap sub-assembly made of steel are used.
- An air flow meter is provided on the outlet pipe.



047EG155Y

3. Intake Manifold and Intake Pipe

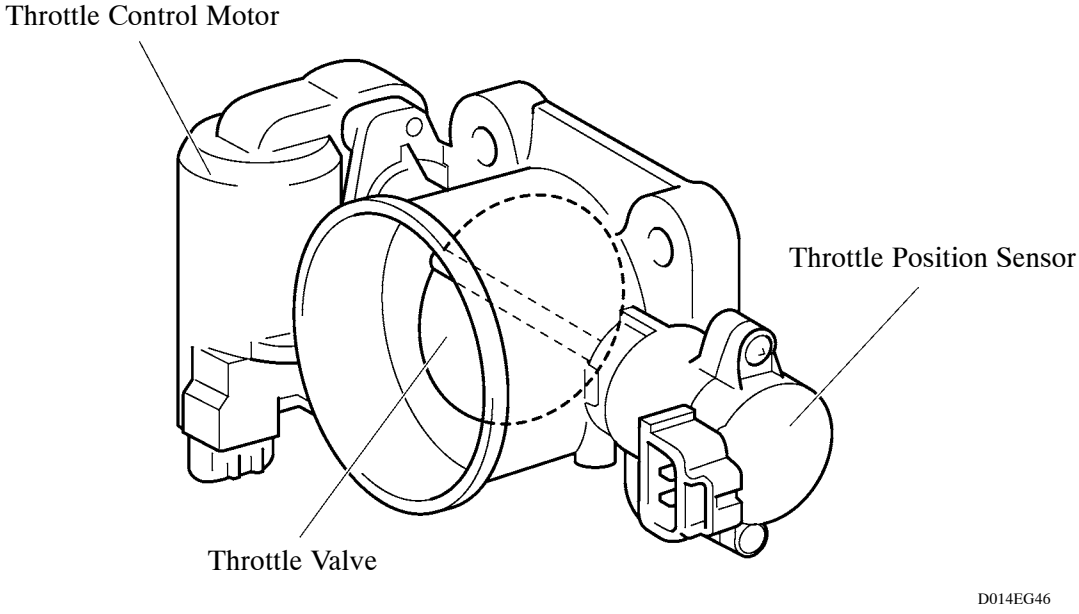
- An intake manifold made of lightweight aluminum alloy is used. The shape of the ports has been optimized in order to ensure the proper intake air volume throughout all operating ranges, ensure better combustion efficiency, and minimize exhaust emissions.
- The intake pipe is located in front of the intake manifold.



0478EG05

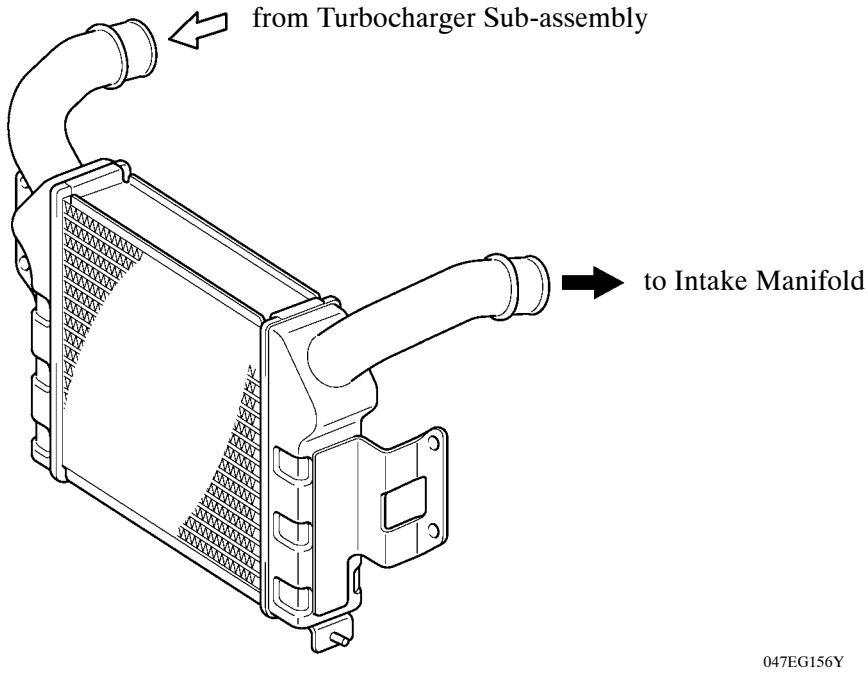
4. Throttle Body

- A venturi assembly equipped with a rotary solenoid type throttle control motor is used.
- The signals provided by the ECM open and close the throttle valve by actuating the throttle control motor, in order to control the intake air mass.
- A non-contact type throttle position sensor is used in the throttle body.
- When the engine stops, the throttle valve is entirely closed, in order to minimize noise.



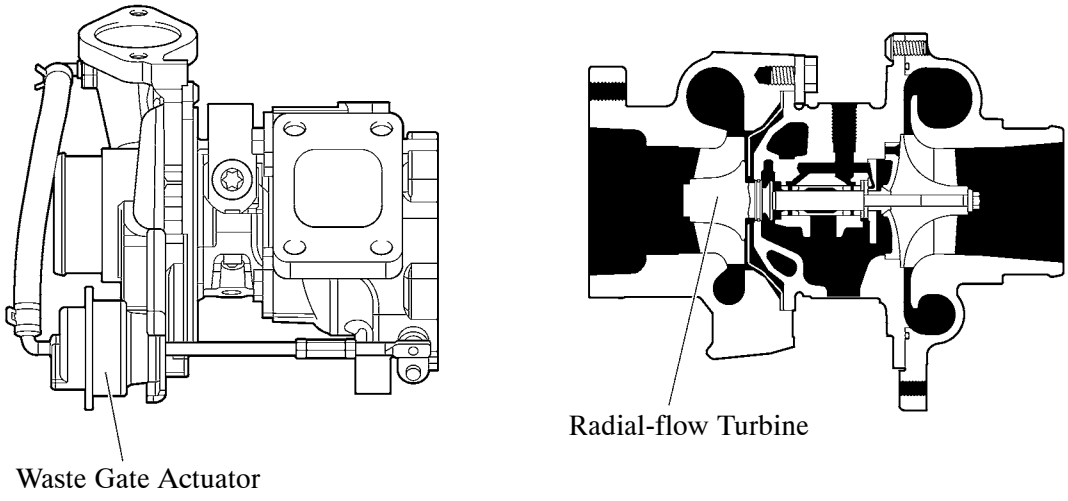
5. Intercooler

- A large-capacity fin type intercooler assembly is used to improve the intake air cooling performance.
- An air-cooled intercooler assembly is used to lower the intake air temperature in order to minimize exhaust emissions and produce high power output. In addition, a stamped tank has been brazed onto the intercooler to ensure reliability.
- A large core is provided in front of the radiator to maximize cooling performance. Ample distance is provided between the intercooler and the engine to minimize the pressure loss from the cooling air.



6. Turbocharger

- A lightweight and compact turbocharger sub-assembly is used for high performance.
- A waste gate valve is built into the turbine housing and is operated by the actuator to control the maximum turbo charging pressure.



0478EG06H