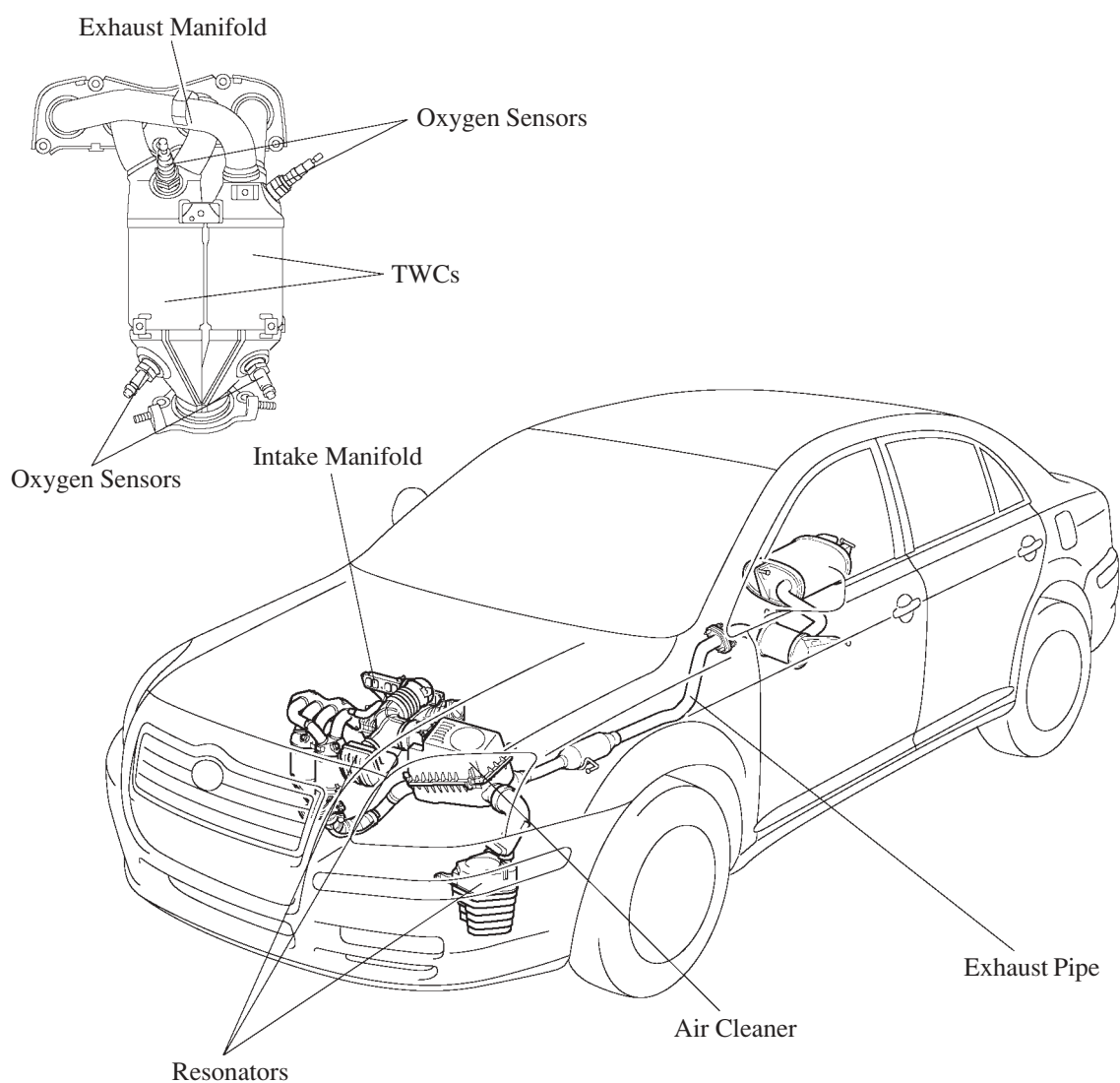


## 8. Intake and Exhaust System

### 1) General

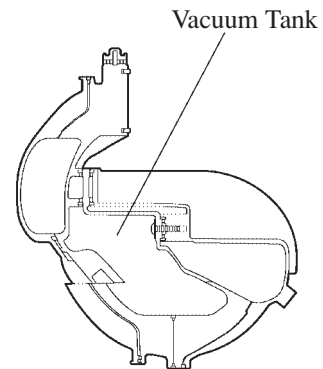
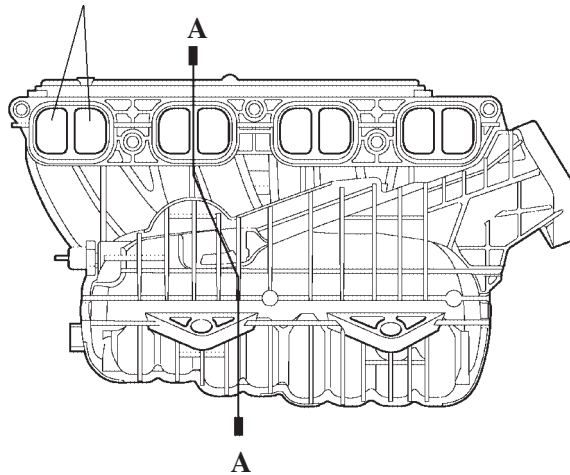
- A plastic intake manifold is used for weight reduction.
- A stainless steel exhaust manifold is used for weight reduction.
- The three resonators has been provided in the intake pipe to reduce air intake noise.
- Plastic air cleaner case clamps are used.
- An ultra thin-wall ceramic TWC (Three-Way Catalytic Converter) is used. By decreasing the thermal capacity in this manner, it becomes easier to heat the catalyst and the catalyst's exhaust purifying performance is improved.



## 2) Intake Manifold

- The intake manifold has been made of plastic to reduce the weight and the amount of heat transferred from the cylinder head. As a result, it has become possible to reduce the intake air temperature and improve the intake volumetric efficiency.
- Eight, independent long ports have been adopted to improve the torque in the low-to mid-range engine speeds.
- A vacuum tank for intake air control has been built in to achieve a compact package with fewer parts.

Independent Long Ports

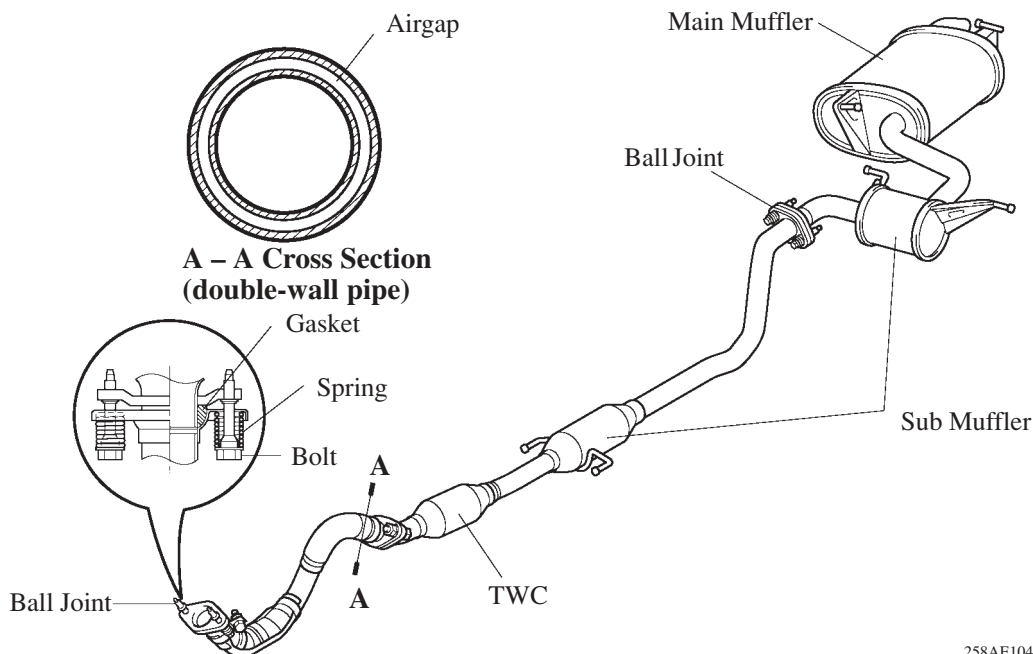


A – A Cross Section

240EG133

## 3) Exhaust Pipe

- An underfloor catalyst has been adopted and the pipe upstream of the catalyst has been made with a double-wall pipe construction.
- To improve noise and vibration performance, ball joints have been adopted at two locations.



258AE104