## 4. Intake and Exhaust System

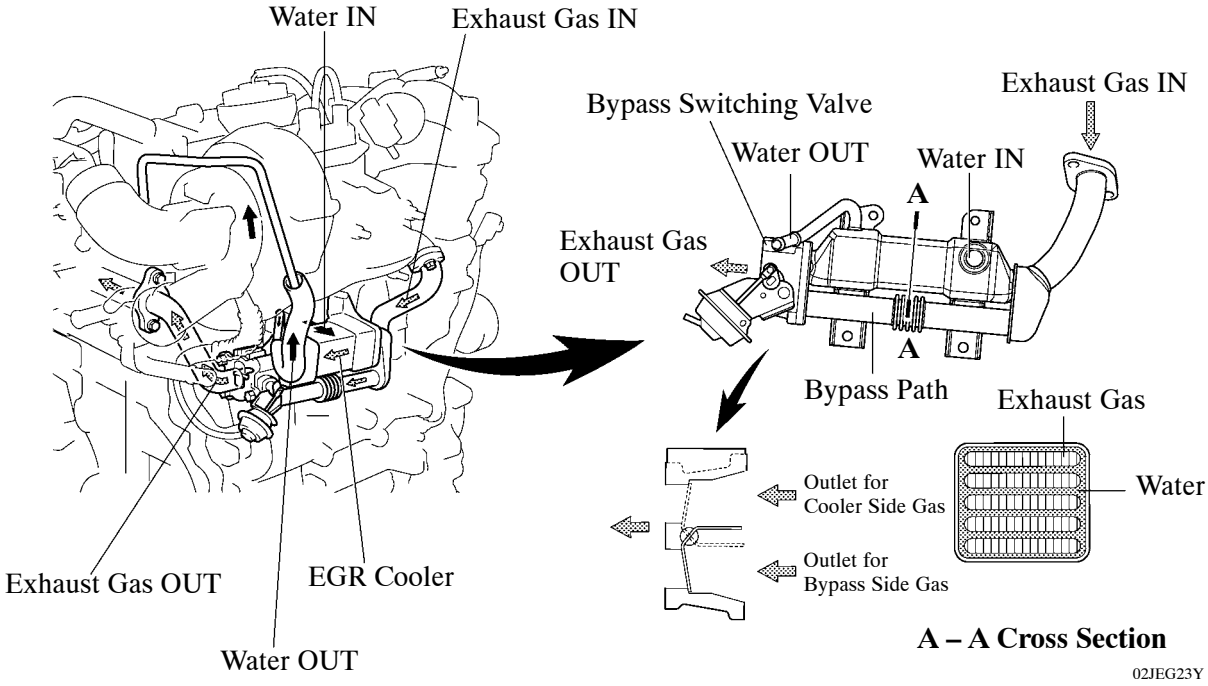
### General

- A bypass path with a switching valve is added to the EGR cooler.
- An oxidation catalyst and DPF catalyst are used in the exhaust manifold converter.

### EGR Cooler

A bypass with an EGR cooler bypass switching valve is added to the EGR cooler.

- If EGR gas is cooled down in the EGR cooler with light engine load, compression air temperature decreases. To prevent this, the EGR gas passage is switched by the EGR cooler bypass switching valve.




### Exhaust Manifold Converter

- The exhaust manifold converter consists of the oxidation catalyst and DPF catalyst.
- The DPF catalyst purifies the PM (Particulate Matter), HC, CO.

