8. EGR (Exhaust Gas Recirculation) System

A: DESCRIPTION

1. GENERAL

The EGR system recirculates a part of the exhaust gas into the throttle body from the exhaust manifold to decrease combustion temperature and thereby reduce NOx and improve fuel consumption.

The intake manifold pressure is transmitted to the EGR valve diaphragm when the EGR solenoid valve is opened by the signal from ECU, and the EGR valve is opened. As a result, the exhaust gas is sent into the collector chamber.

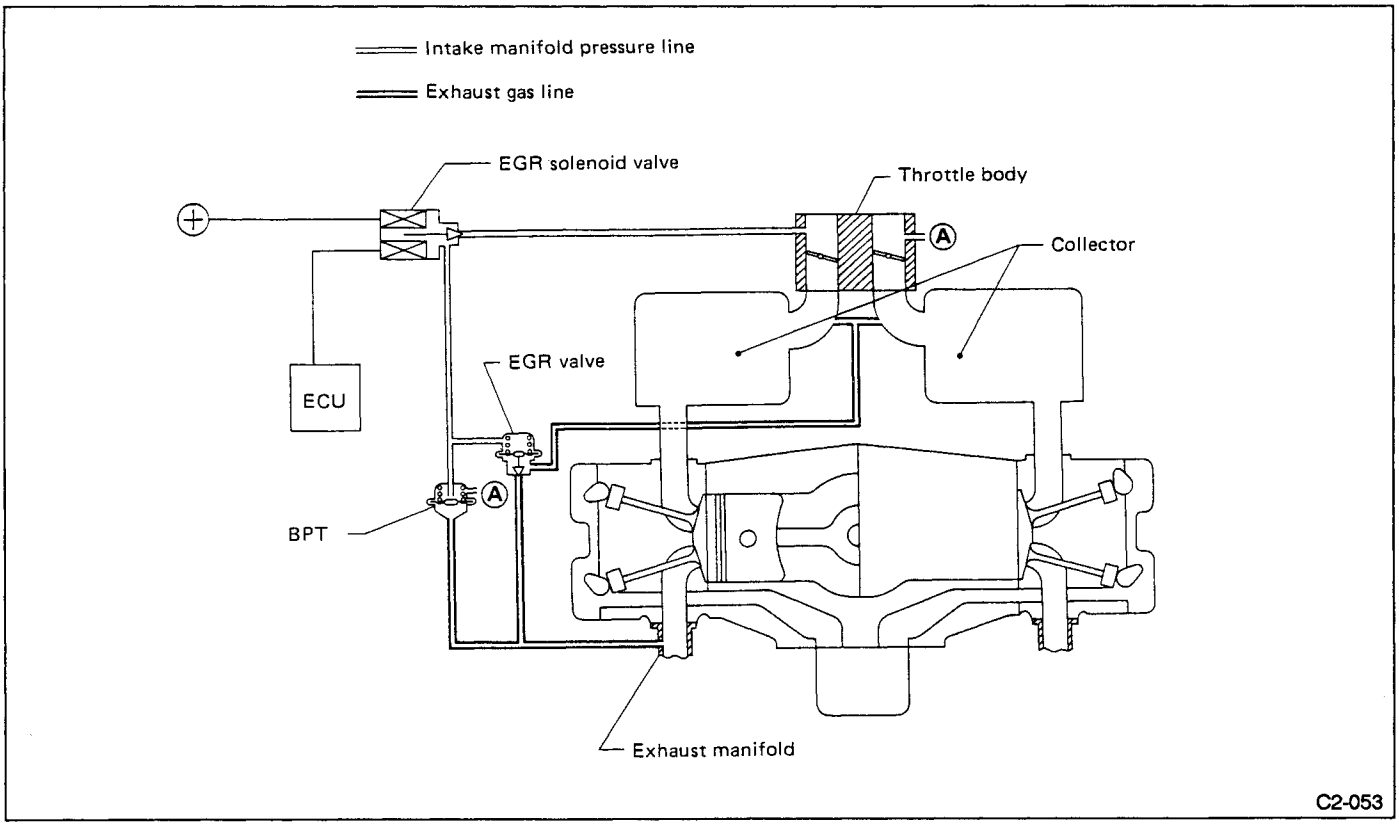

Fig. 5

2. EGR VALVE

The EGR valve is situated between the exhaust manifold and collector. After opening EGR solenoid valve, EGR valve is opened for receiving throttle port pressure on diaphragm. Then, part of the exhaust gas is recirculated into collector chamber.

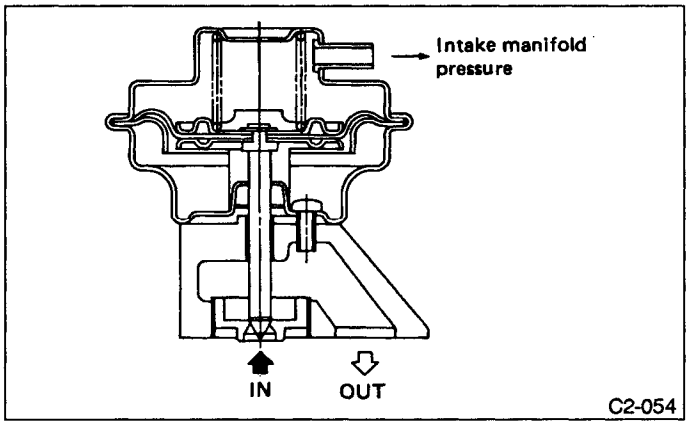

Fig. 6

3. EGR SOLENOID VALVE

The EGR solenoid valve is situated between the throttle body and EGR valve. EGR solenoid valve is opened by a signal emitted from the ECU. Therefore, throttle port pressure is transmitted to diaphragm of EGR valve.

4. BPT

The EGR solenoid valve is either ON or OFF. The EGR vacuum controller performs control corresponding to a change in the engine operating condition after the solenoid valve is opened.

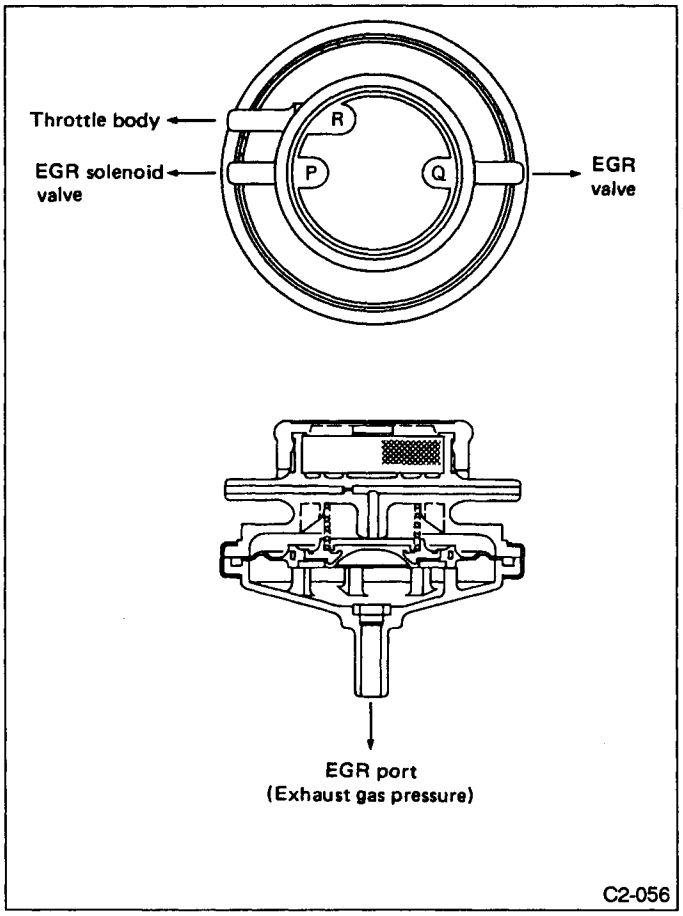

Fig. 7