TOYOTA HOT IDLE COMPENSATOR

Corolla
Land Cruiser
Starlet
Tercel

DESCRIPTION

This unit is located on the air cleaner and works to supply additional air to the intake manifold when high temperature conditions exist. This helps maintain the proper air/fuel mixture under these conditions.

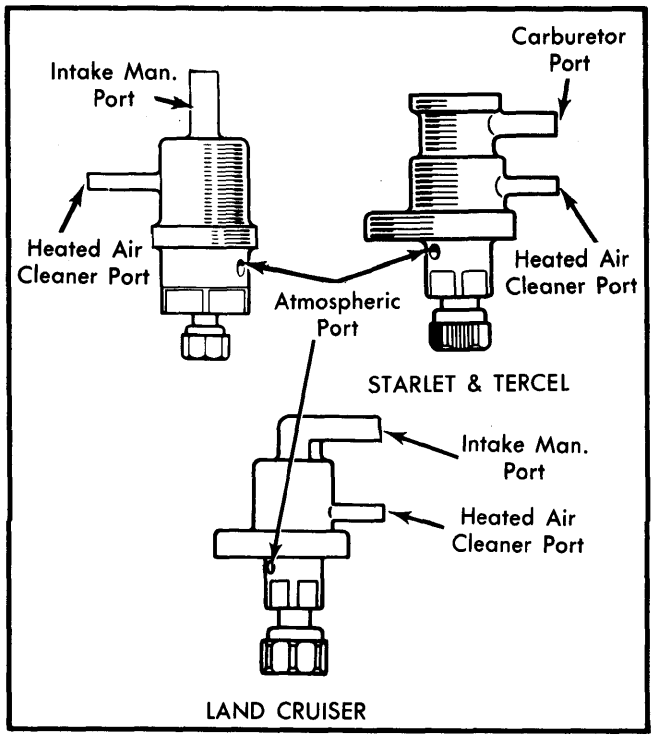

Fig. 1 Hot Idle Compensator Valves

OPERATION

A thermo wax portion of the hot idle compensator valve (HIC) is located inside the air cleaner. This thermo wax responds to temperature conditions. When it senses a high-heat condition, it opens to allow some air to flow directly from the air cleaner to the intake manifold.

TESTING

COROLLA

1) Remove HIC valve from air cleaner. Close atmospheric port with finger and blow through heated air cleaner tube. Air should come out intake manifold port.

2) Heat valve in hot water. DO NOT allow water inside valve. Close intake manifold pipe with finger and blow through heated air cleaner tube. A small amount of air should flow when valve is between 80-149°F (32-65°C). A large amount of air should flow when valve is above 185°F (85°C).

LAND CRUISER

1) Remove HIC valve from air cleaner. Close intake manifold pipe with finger and blow through heated air cleaner tube. No air should come out atmospheric port below 81°F (27°C).

2) Heat valve in hot water. DO NOT allow water inside valve. A small amount of air should flow when valve is between 81-122°F (27-50°C). A large amount of air should flow when valve is above 185°F (85°C).

STARLET & TERCEL

1) Remove HIC valve from air cleaner. Block atmospheric port with finger and blow into heated air cleaner port. Air should come out carburetor port. Air should not pass from carburetor port to heated air cleaner port.

2) Block carburetor port and blow into heated air cleaner port. No air should escape from atmospheric port below 79°F (26°C) on Starlet valve or 72°F (22°C) on Tercel valve. Air should pass through atmospheric port above 93°F (34°C) on Starlet valve or 84°F (29°C) on Tercel valve.