

1982 Exhaust Emission Systems

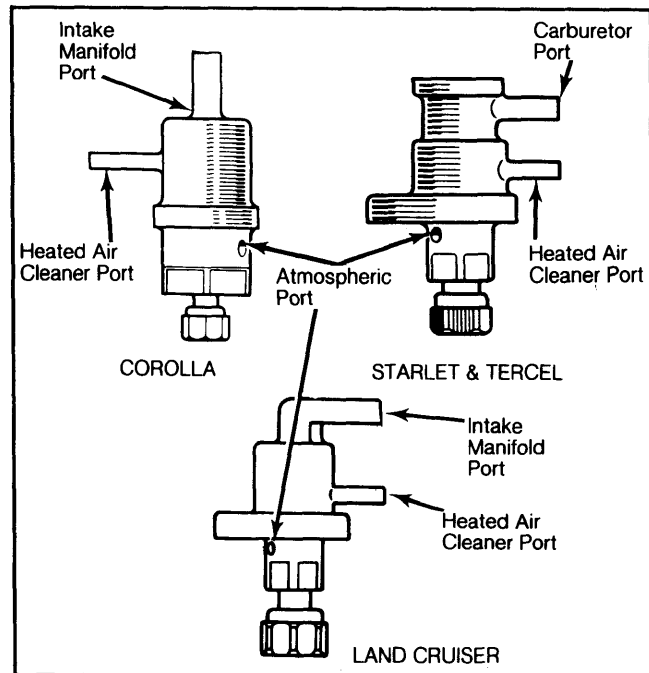
TOYOTA HOT IDLE COMPENSATOR

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



No air should escape from atmospheric port below 81°F (27°C).

2) Heat valve in hot water. DO NOT allow water inside valve. Block heated air cleaner port. Blow through intake manifold port.

3) 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. Blow into heated air cleaner port. Air should pass through carburetor port. Blow through carburetor port. Air should not pass through heated air cleaner port.

2) Block carburetor port. 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.

3) Heat valve in hot water. DO NOT allow water inside valve. Blow into heated air cleaner port. Air should pass through atmospheric port above 93°F (34°C) on Starlet valve or 84°F (29°C) on Tercel valve.

OPERATION

A thermo wax portion of the hot idle compensator (HIC) valve 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. Block atmospheric port. Blow through heated air cleaner port. Air should pass through intake manifold port.

2) Blow through intake manifold port. No air should escape from heated air cleaner port. Block intake manifold port. Blow through heated air cleaner port. No air should escape from atmospheric port when valve is below 89°F (32°C).

3) Heat valve in hot water. DO NOT allow water inside valve. Block intake manifold port. Blow through heated air cleaner port. Air should pass through atmospheric port when valve is above 101°F (39°C).

LAND CRUISER

1) Remove HIC valve from air cleaner. Block intake manifold port. Blow through heated air cleaner port.