

1974-79 EXHAUST EMISSION SYSTEMS

Toyota Catalytic Converters

3-419

All Models

DESCRIPTION

CATALYTIC CONVERTER

Converter is made up of granular alumina carriers, coated with a catalyst metal such as platinum or palladium. This is built into a heat resistant steel case. This converter, as exhaust gases are pressed through it, changes the harmful HC and CO emissions into harmless water and carbon dioxide. This chemical process creates very high temperatures in the converter.

HIGH HEAT WARNING SYSTEM

A thermo sensor is installed on some models to alert the driver if a high heat situation exists in the converter. This condition may be the result of an improperly tuned vehicle or other mechanical malfunction.

NOTE: Some models also have the warning system incorporated into the air injection system. In case of converter overheating, it stops air injection operation to protect the converter.

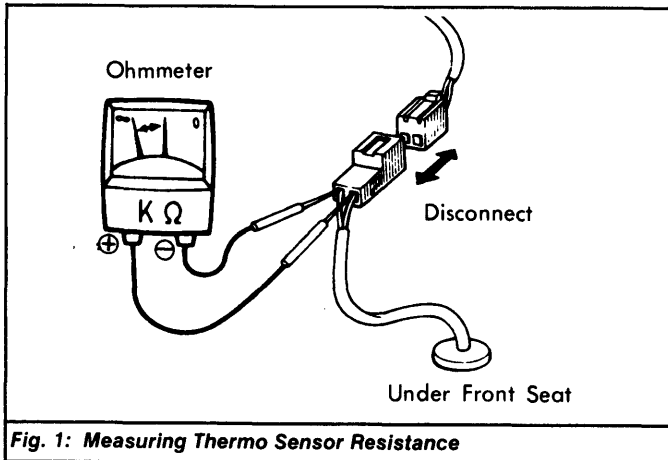
WARNING LIGHT

Warning light will be OFF when converter is operating normally. If temperature rises above 1380°F (749°C), computer will turn on warning light and turn off air injection system. Light should go out when temperature drops. Warning light also comes on when cranking engine to start, but should go out when engine is running.

TESTING

CATALYTIC CONVERTER

Inspect converter for dents and damage. Dents should not exceed .8" (20 mm). Shake converter. If rattling noise is excessive, converter should be replaced.



THERMO SENSOR

Unplug thermo sensor connector under driver or passenger seat. With engine idling at normal operating temperature, insert ohmmeter probes into rear of connector (insert probe in front of connector on Cressida and Land Cruiser). Resistance should measure between 2000-200,000 ohms. See Fig. 1.

TROUBLE SHOOTING

WARNING LIGHT

Light Does Not Come On During Starting - Check fuse, warning light bulb and wiring.

Light Comes On With Cold Engine - Check computer or wiring.

Light Comes On During Long Downhill Run - This indicates system is operating properly since converter can tend to overheat under these conditions. Advise driver to keep engine speed low and to step on accelerator from time to time under these conditions.

Light Comes On During Normal Driving - This indicates a problem exists which creates a misfire condition (ignition or carburetor problem) or that the air injection system is malfunctioning.

