

TOYOTA CATALYTIC CONVERTER

All Models

DESCRIPTION & OPERATION

CATALYTIC CONVERTER

Converter is made up of .08-.12" diameter 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 passed 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.

Cressida, Supra, and Tercel models use two converters. The first is a small monolithic type and the larger second converter is filled with pellets.

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.

The warning light will be off during normal operation. When the converter temperature rises above 1445°F (785°C) on Celica, Corona, Pickup, and Corolla models, or 1380°F (750°C) on Land Cruiser models, the warning light will come on. The air injection system will divert air at this time, to prevent the catalytic converter from overheating further. The warning light should go out when the converter cools off.

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 (except Land Cruiser Wagon; insert probes into front of connector). Resistance should measure between 2000-200,000 ohms.

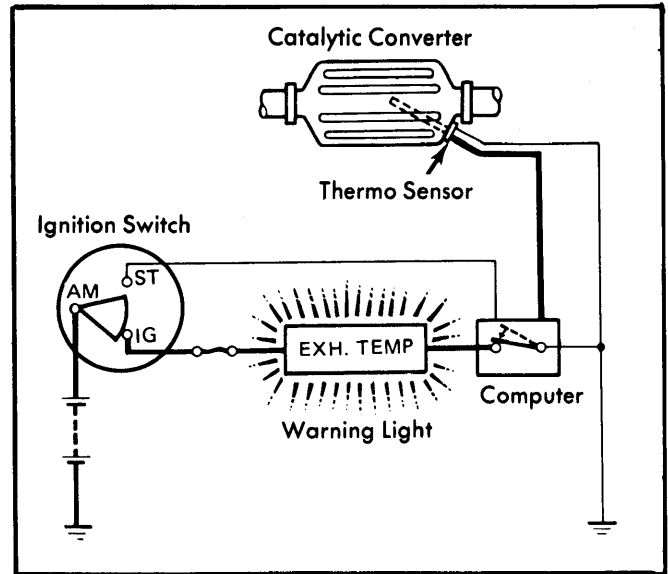


Fig. 1 Catalytic Converter & Warning System (Shown at Excessive Temperature Condition)

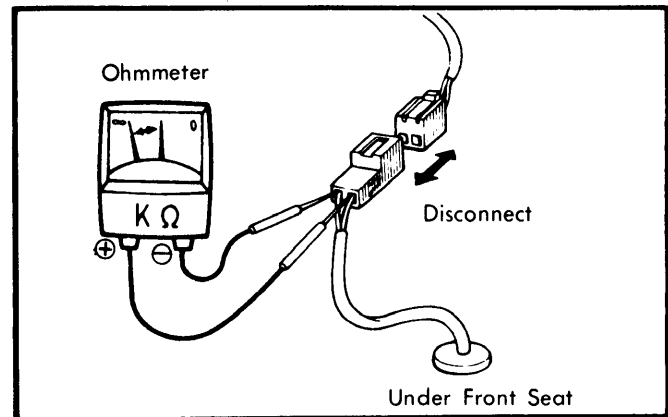


Fig. 2 Measuring Temperature Probe Resistance