1974-79 EXHAUST EMISSION SYSTEMS
Mazda Catalytic Converter

All Piston Engines

DESCRIPTION

A catalytic converter is used on GLC and on California B1800 models. The converter reduces exhaust emissions by changing the chemical structure of HC and CO emissions to water vapor and carbon dioxide. The converter is located in exhaust system, in front of muffler.

HEAT HAZARD WARNING SYSTEM

GLC - Due to the high temperature at which the converter operates, a heat hazard warning system is incorporated to tell the driver when an extreme overheat condition in the converter exists. A heat sensor, located beneath floor mat and near parking brake lever, senses overheat conditions and activates the warning lamp on the instrument panel.

OPERATION

When exhaust gases pass through the converter the catalyst promotes a chemical reaction to convert unburned hydrocarbons and carbon monoxide into carbon dioxide and water. Engine maintenance is critical on vehicles equipped with catalytic converter as misfiring or excessive richness of fuel mixture can overheat the converter and destroy its effectiveness. Only unleaded fuel can be used with converters as lead can coat the catalyst and reduce its efficiency.

TESTING

HEAT HAZARD WARNING SYSTEM

Warning Light Test - Turn ignition on. Warning lamp should also come on. Start engine and warning lamp should go off. Disconnect the coupler of the heat hazard sensor (under floor mat). Connect a jumper wire to both terminals in the coupler. The warning lamp should come on.

Sensor Test - Remove sensor from floorboard. Wrap a thermometer and sensor with aluminum foil and place in an oil bath. *See Fig. 1.* Connect test lamp and battery to sensor coupler terminals. Gradually heat oil. Test lamp should come on when temperature in aluminum foil reached 284-320°F (140-160°C). If sensor does not operate within specifications, replace sensor assembly.

NOTE: Do not heat oil to more than 392°F (200°C).

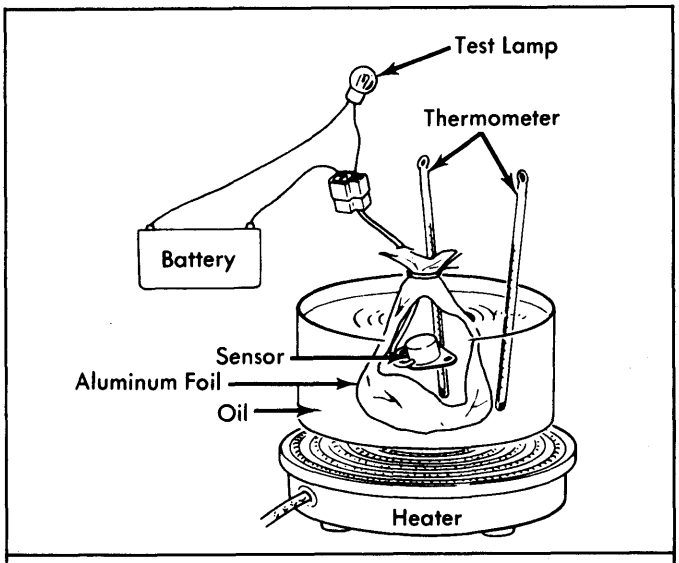

Fig. 1: Checking Heat Hazard Sensor