# 1974-79 EXHAUST EMISSION SYSTEMS
# Mazda Heat Hazard Warning System

## 1975-77 Models

## DESCRIPTION

The heat hazard warning system is designed to prevent possible damage to vehicle due to excessively high exhaust system temperatures. A warning lamp, on instrument panel, will light when ignition switch is turned on or when floor temperature is higher than 248°F (120°C). Floor temperature is detected by a floor mounted sensor. Through a system of switches and wiring, fresh secondary air from air pump, is rerouted from exhaust ports to the cooling jacket around the thermal reactor, reducing exhaust system temperatures. System consists of a heat hazard sensor, a warning light, and connecting wiring.

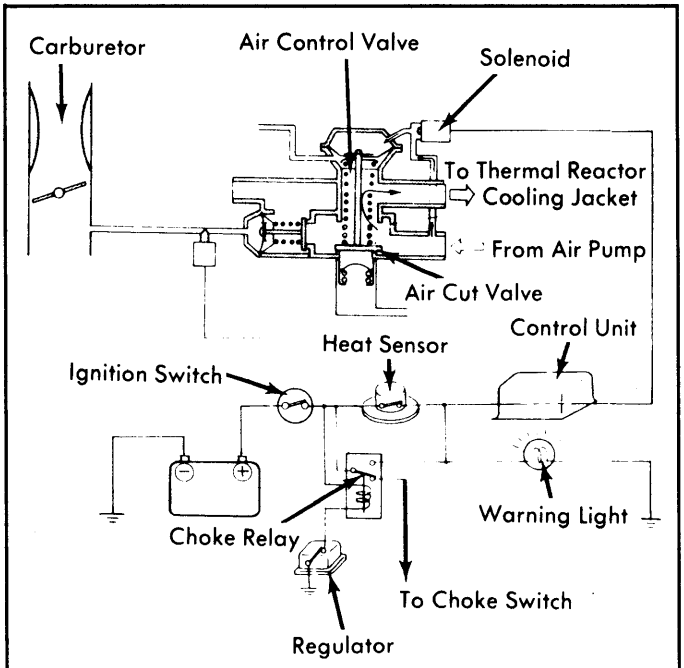


*Fig. 1: Typical Heat Hazard Warning System*

## TESTING

### HEAT HAZARD WARNING SYSTEM

**1976-77 Rotary Engine Equipped Models - 1)** Connect tachometer to engine. Turn ignition on and check that warning light comes on. Start engine. Warning light should go out.

**2)** Disconnect heat sensor. Connect jumper wire between connector terminals (control unit end). Warning light should come on. Disconnect air control valve solenoid. Attach voltmeter to terminal "A". *See Fig. 2.* Voltage should be indicated.

### HEAT HAZARD SENSOR

**1975-76 1600cc Piston Engine Equipped Models - 1)** Locate heat hazard sensor. On Sedan and Coupe, sensor is located beneath mat, in floor of trunk. On Station Wagons, sensor is located under rear seat.

**2)** Remove sensor and wrap sensor and thermometer in aluminum foil. Place sensor in container of oil. *See Fig. 3.* Connect test light and power source to sensor. Slowly heat oil. Test light should come on when temperature in foil reaches 203-221°F (95-105°C). Replace sensor if defective.

***NOTE: Do not allow oil temperature to reach more than 392°F (200°C).***

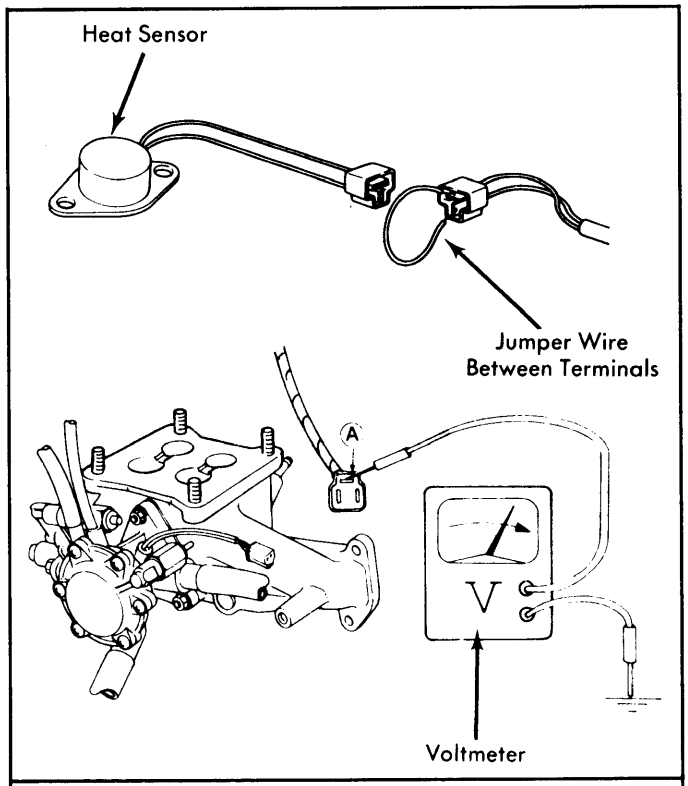


*Fig. 2: Heat Hazard System Test*

**1976-77 Rotary Engine Equipped Models - 1)** Locate heat hazard sensor. On passenger cars, sensor is located beneath mat, in floor of trunk. On Pickup, heat sensor is located in floor of passenger compartment.

**2)** Remove sensor and wrap sensor and thermometer in aluminum foil. Place sensor in container of oil. *See Fig. 3.* Connect test light and power source to sensor. Slowly heat oil. Test light should come on when temperature in foil reaches 230-260°F (100-130°C). Replace sensor if defective.

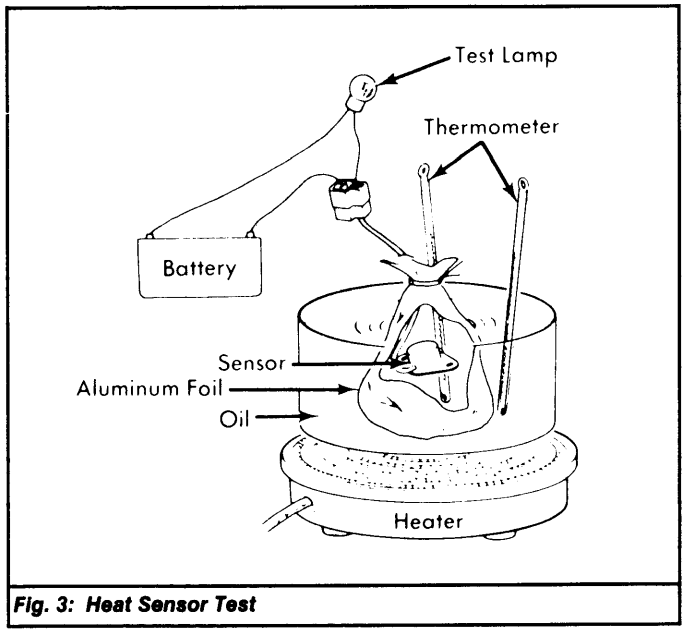


*Fig. 3: Heat Sensor Test*