1974-79 EXHAUST EMISSION SYSTEMS
Datsun Catalytic Converters

All Models

DESCRIPTION

CATALYTIC CONVERTER

The catalytic converter is installed in front of muffler, so that all exhaust gases pass through it. The converter contains a substance coated with a catalyst material. When exhaust gases, mixed with the excess air from the air/fuel mixture or secondary air from the air injection system, pass through the converter, the catalyst material promotes a chemical reaction to convert unburned hydrocarbons and carbon monoxide into carbon dioxide and water.

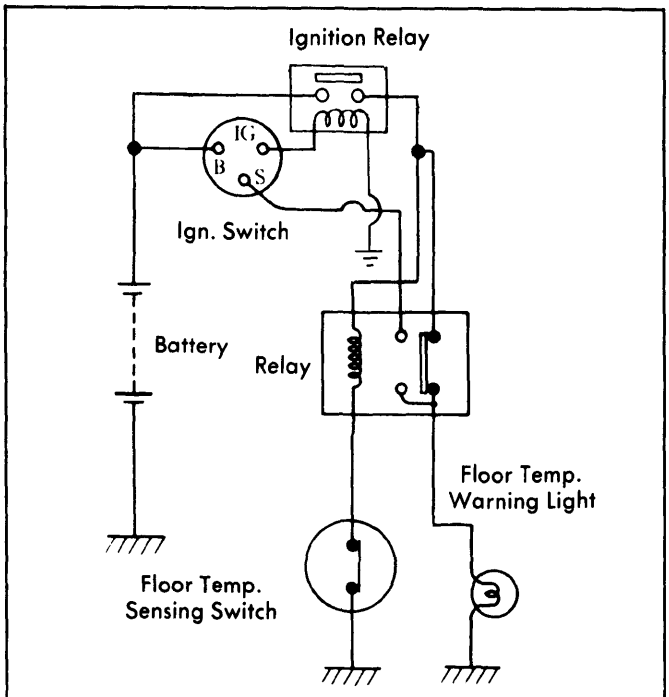

Fig. 1: F10, B210 & 200SX Floor Temperature Warning System

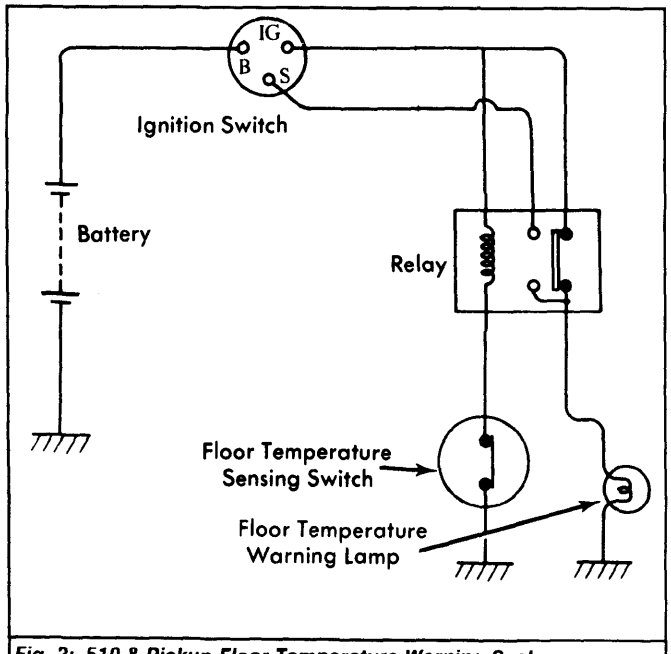

Fig. 2: 510 & Pickup Floor Temperature Warning System

FLOOR TEMPERATURE WARNING SYSTEM

A sensor turns on warning light when exhaust system temperature rises above a preset level. As a check, warning light should come on when ignition switch is turned to the "START" position, and should go out when switch is returned to ignition "RUN" position.

The temperature sensor is located on floor behind seat in Pickups, under rear seat in 510 station wagons, and behind trunk finish panel in 510 sedans. On B210 sedans, the floor temperature sensor is located behind rear seat. On F10, the floor temperature sensor is located in trunk (near fuel tank). On 280ZX, the temperature sensor is located in luggage compartment (near left tail light cover). On 810 station wagons, sensor is located under rear seat, and in floor panel inside trunk on 810 sedans.

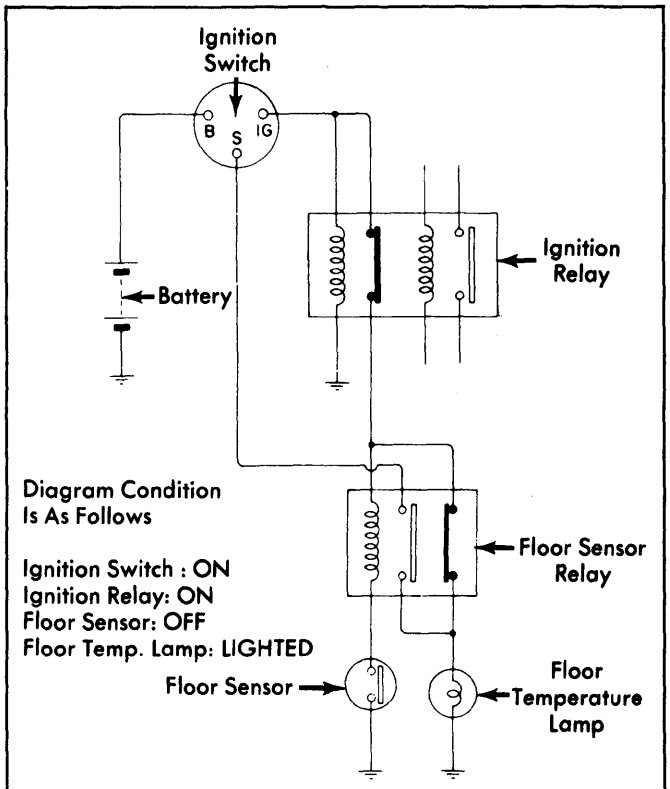

Fig. 3: 280ZX & 810 Floor Temperature Warning System

TESTING

CATALYTIC CONVERTER

280ZX & 810 - 1) Perform test with engine at normal operating temperature and transmission in Neutral. Run engine at 2000 RPM for a few minutes under no load until catalytic converter reaches operating temperature.

2) Turn ignition switch to "OFF" position. Disconnect electrical connector from water temperature sensor, then connect Emission Adjuster (J-25381) to sensor connector. *See Fig. 4.* Insert exhaust gas analyzer probe into exhaust pipe.

3) Start and run engine at 2000 RPM. Using emission adjuster, adjust CO% level to 3 percent. Remove injector connector from cylinder No. 6, keep engine speed at 2000 RPM and recheck CO% level.

4) The CO% level should now be less than 1 percent. If CO% level is greater than 1 percent, catalytic converter must be replaced. Stop engine and reconnect water temperature sensor and injector connector.

1974-79 EXHAUST EMISSION SYSTEMS
Datsun Catalytic Converters (Cont.)

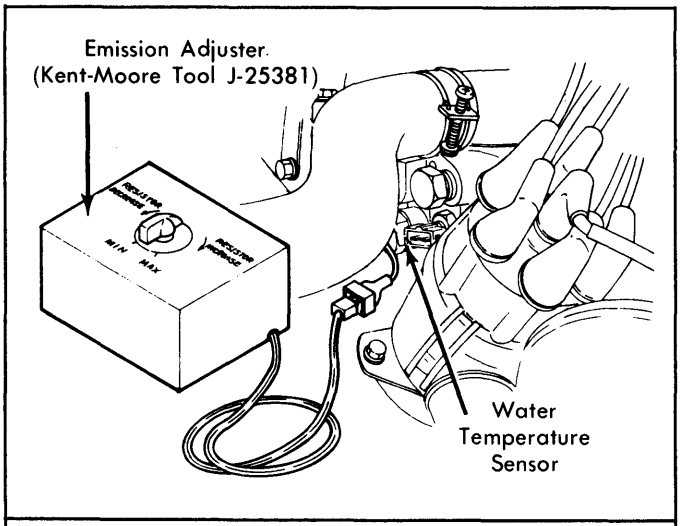

Fig. 4: Connecting Emission Adjuster To 280ZX & 810 Models

All Other Models - 1) Perform test with engine at normal operating temperature and transmission in Neutral. Ensure engine idle speed and CO% level are adjusted to specifications.
2) Visually check catalytic converter for cracks or damage. Remove cap and install air hose to check valve. Ensure carburetor pipes are connected properly.

NOTE: Air injection system must be CONNECTED when checking CO% levels during this test.

3) Run engine at 2000 RPM for approximately 4 minutes, then allow one minute for engine speed to stabilize before checking CO% level. If level is less than 0.3 percent, catalytic converter is okay. If level is greater than 0.3 percent, and air injection system is operating properly, replace catalytic converter.

FLOOR TEMPERATURE WARNING SYSTEM

280ZX & 810 - 1) Place transmission in Neutral and turn ignition switch to "START" position. Warning light should come on. If not, check bulb or wiring, and repair as necessary.
2) Make sure floor temperature is below 176°F (80°C). Expose area around sensor. Turn ignition switch to ignition "RUN" position, warning light should go out. Heat floor area around temperature sensor. Warning light should glow when temperature is above specifications as shown in TEMPERATURE WARNING SYSTEM table.
3) If light does not glow, check floor temperature sensor connector for continuity. If continuity exists after heating floor, replace temperature sensor. If continuity does not exist, check wiring for damage and repair as necessary.
4) Turn ignition switch to ignition "RUN" position and disconnect floor temperature sensor connector. Light should stay on. If not, check the floor temperature relay for continuity.

TEMPERATURE WARNING SYSTEM

Application	Light On Above
280ZX	239°F (115°C)
810	
Sedan	275°F (135°C)
Station Wagon	239°F (115°C)
200SX	257°F (125°C)
F10	
Hatchback	221°F (105°C)
Sport Wagon	239°F (115°C)
Pickup	221°F (105°C)
B210	
Sedan	275°F (135°C)
Hatchback	239°F (115°C)
510	275°F (135°C)

5) Remove floor temperature relay from vehicle and check it for continuity and voltage. On terminals No. 5 and 6, and terminals No. 2 and 4 continuity should exist. Terminals No. 1 and 3 should not have continuity. *See Fig. 5.*
6) With 12 volts applied across terminals No. 5 and 6, continuity should exist between terminals No. 1 and 3. Continuity should not exist between terminals "2" and "4". If relay does not perform as specified, replace it.

All Other Models - 1) Place transmission in Neutral and turn ignition switch to "START" position. Warning light should come on. If not, check bulb or wiring, and repair as necessary.
2) Make sure that floor temperature is below 176°F (80°C). Remove rear seat and turn ignition switch to ignition "RUN" position. Warning light should go out.
3) Heat floor area around temperature sensor. DO NOT heat floor temperature sensor directly. Warning light should glow when temperature is above specifications as shown in TEMPERATURE WARNING SYSTEM table.
4) If warning light comes on and stays on, check wiring harness for a short or open circuit. Check condition of the fuel system and ignition system for proper operation.
5) If light does not come on, check floor temperature sensor connector for continuity. If continuity exists after heating floor, replace temperature sensor. If continuity does not exist, check wiring for damage and repair as necessary.
6) Turn ignition switch to ignition "RUN" position and disconnect floor temperature sensor connector. Light should stay on. If not, check the floor temperature relay for continuity.
7) Check relay for continuity between pins No. 4 and 5. *See Fig. 5.* Check that there is continuity between pins No. 1 and 3. Check that there is NO continuity between pins No. 1 and 2.
8) With 12 volts applied across pins No. 4 and 5, continuity should exists between pins No. 1 and 2. No continuity should exist between pins No. 1 and 3. If relay does not test as indicated, replace floor temperature relay.

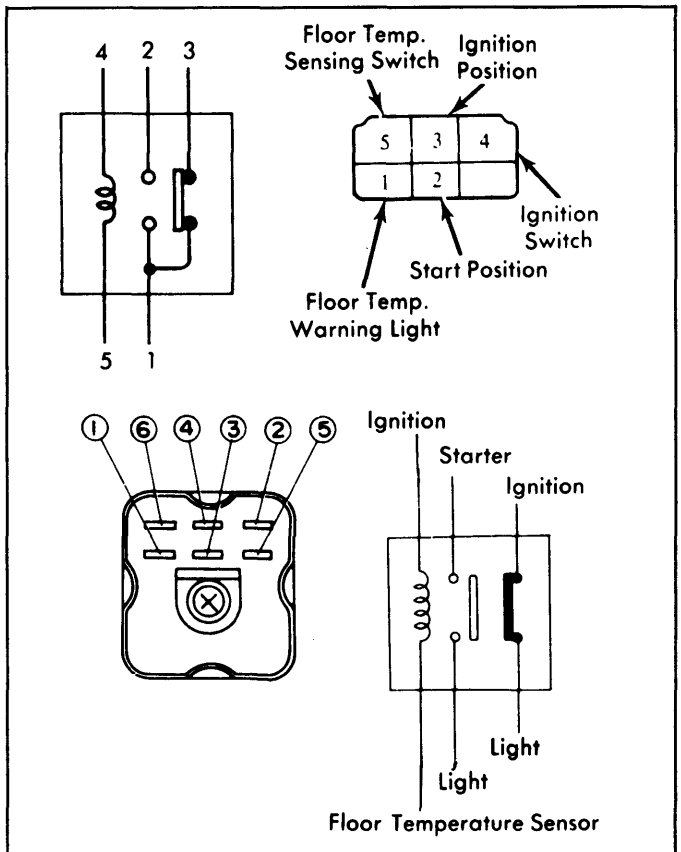

Fig. 5: Floor Temperature Relay Test