# 1974-79 EXHAUST EMISSION SYSTEMS
# Datsun Electric Assist Choke

## 1974-78 Carbureted Models

## DESCRIPTION

The addition of an electric heating feature to the standard automatic choke design reduces exhaust emissions by bringing the engine off fast idle more quickly. This shortens the time the engine runs on a rich cold start mixture. System consists of a bimetallic spring, heater, automatic choke relay, sensors and modulator unit (if equipped), and related wiring.

## OPERATION

As engine starts and current flows through electrical system and choke relay, electric heater in bimetallic housing is activated. This heats bimetallic spring which is attached to choke valve lever. This lever transfers the action of the heated spring to the choke valve. Position of choke valve depends on time elapsed since starting, warm up condition of engine, and ambient air temperature.

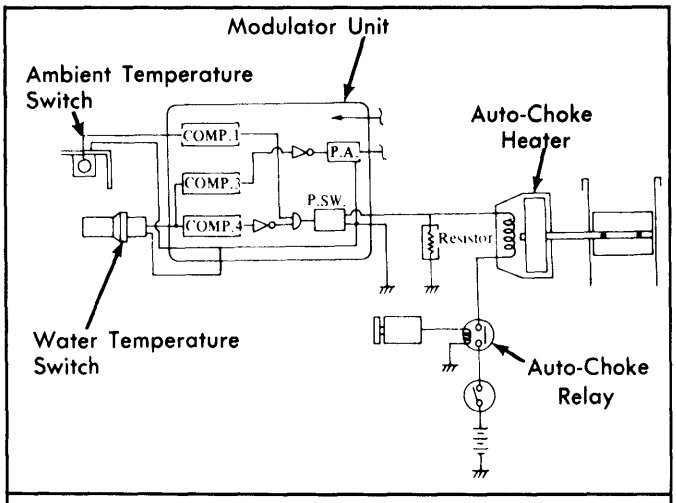


*Fig. 1: 1974 Electric Assist Choke System*

## TESTING

***NOTE: Testing information for 1974-76 models, not available at time of publication.***

### ELECTRIC ASSIST CHOKE

**1977-78 Models** - **1)** Ensure choke mechanism and linkage are in proper working order. Clean or replace as necessary. Choke setting should be at center mark on choke housing. *See Fig. 2.*

**2)** With ignition off, check continuity between terminals "A" and "B" at function test connector. *See Fig. 3.* Choke heater system is working properly if continuity exists. If not, check for poor connections or open heater circuit.

**3)** With engine at idle, check for voltage across terminals "A" and "B". Reading should be 12 volts. *See Fig. 4.* If not, check for poor connections, open circuit, or faulty automatic choke relay. Repair or replace as necessary.

### BIMETALLIC COVER

**1977-78 Models** - Connect one ohmmeter lead to ground and other lead to electric wire connection on cover. Resistance should be 3.7-8.9 ohms. If not, replace bimetallic cover.

### CHOKE RELAY

**1977 Models** - Remove relay from vehicle. Apply 12 volts across terminals No. 1 and 3 (3 and 4 on F10). *See Fig. 4.* With voltage applied, continuity should exist between terminals No. 2 and 4 (1 and 2 on F10). If results are incorrect, replace relay.

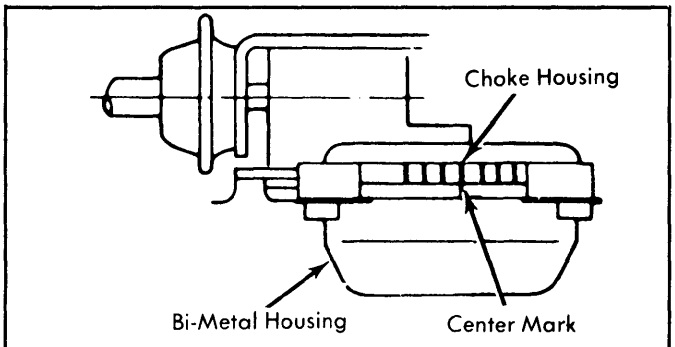


*Fig. 2: Choke Bimetallic Cover Setting*

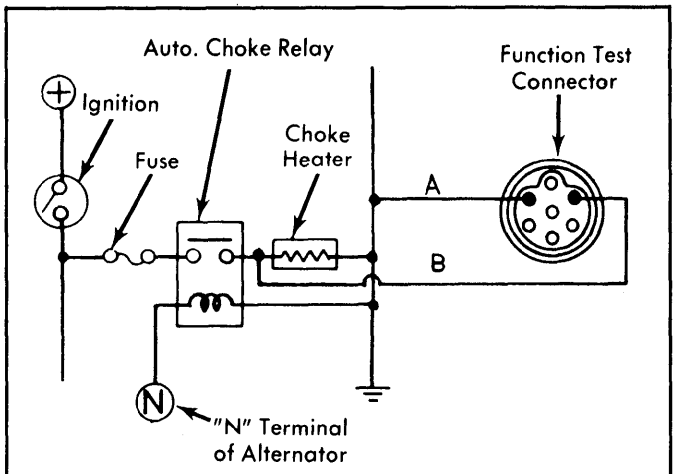


*Fig. 3: 1977-78 Electric Assist Choke System*

**1978 Models** - **1)** Remove relay from vehicle. On Pickups, apply 12 volts across terminals No. 4 and 5. *See Fig. 5.* With voltage applied, no continuity should exist between terminals No. 1 and 3. Continuity should exist between terminals No. 1 and 2. If not, replace relay.

**2)** On all other models, check relay for continuity between terminals No. 2 and 4. *See Fig. 5.* Apply 12 volts across terminals No. 5 and 6. With voltage applied, no continuity should exist between terminals No. 2 and 4. If results are incorrect, replace relay.

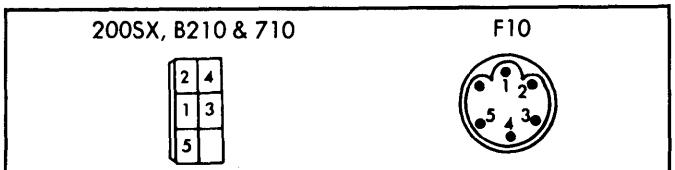


*Fig. 4: 1977 Automatic Choke Relay Terminals*

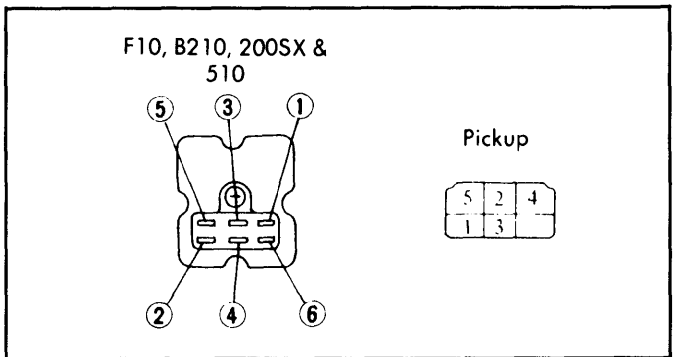


*Fig. 5: 1978 Automatic Choke Relay Terminals*