



# CRUISE CONTROL

## Logical Tree Check Chart Starting Model Year 1976

Refer to Service Information No. 54/9, September, 1976.

1. Verify complaint.
2. Check fuses.
3. Check if both brake lights are working.
4. Visually inspect the electrical and vacuum connections and the linkages.

**A TESTING THE THROTTLE ACTUATOR**

1. Disconnect plug of the T.A.
2. Measure resistance across the terminals of T.A.
3. Resistance should be 10-22 OHMS.

Value incorrect    value correct

Change Throttle Actuator

1. Check Vent Hose connection and
2. Check vacuum hose connection for proper installation.

improper connections    installation correct

install properly

1. Disconnect the vacuum line from the Throttle Actuator and connect vacuum gauge directly to vacuum line.
2. Let engine run at higher idle. (Approx. 1 min.)
3. Turn the engine off.

vacuum drops    vacuum constant

1. Check check-valve, vacuum lines and vacuum system for leaks. See workshop manual. (Vacuum Syst. Heating A/C)

1. Remove air filter. (except OM 617)
2. Connect vacuum pump with gauge directly to Throttle Actuator.
3. Connect one terminal of T.A. to 12 volts.
4. Connect other terminal of T.A. to ground
5. Apply 0.3 (9" in. Hg.) atu vacuum.
6. Linkages, throttle and bowden cable should move freely.

Linkages or Bowden cable sticking    Linkage Bowden cable OK

1. Repair as necessary.
2. Adjust Bowden cable (see S.I.)

1. Check vacuum drop.
2. Allowable 100 (3 in Hg.) mbar/min. less than 100 mbar/min or more than 100 mbar/min    OK

Change Throttle Actuator

1. Disconnect 12 volts from T.A.
2. Linkage has to move to idle position.
3. The vacuum gauge should show no visible vacuum drop for a period of one minute.

Loss of vacuum    OK

Change Throttle Actuator

**B TESTING SWITCH, AMPLIFIER WIRE HARNESS**

1. Install test wire harness. Part No. See page 7.
2. Connect volt meter.
3. Turn ignition on.
4. Actuate cruise control switch, brake and ignition switch as follows:

a. OFF	0 volts
b. accelerate	>11 volts
c. press brake	0 volts
d. resume	>11 volts
e. ignition off/on	0 volts
f. deceleration	>11 volts

values correct    values incorrect

Check electrical connection of brake switch, repair connection or change brake switch.

Temporarily change amplifier for testing. Repeat test once more.

a. off	0 volts
b. accelerate	>11 volts
c. press brake	0 volts
d. resume	>11 volts
e. ignition off/on	0 volts
f. deceleration	>11 volts

value incorrect    value correct

Change Amplifier

**C TESTING SWITCH**

1. Disconnect plug from amplifier.
2. Turn on ignition and check voltage in female plug at terminals noted.
3. Connect negative lead to terminal 12 (-) of female plug and check voltage at terminals noted.

Terminal #	Switch position	Voltage
8	rest position	>11 V
8	off	0 V
9	accelerate	>11 V
6	press brake	>11 V
10	memory	>11 V
4	decelerate	>11 V
5	rest position	>11 V

value correct    value incorrect

Change switch

**D TESTING SENSOR**

1. Disconnect plug of sensor.
2. Measure the resistance of sensor.

Resistance should be 50 to 106 OHMS.  
Sensor integrated in speedometer.  
Resistance should be 650 to 1370 OHMS.

First version up to April, 76: \_\_\_\_\_  
Second version, later than April, 76: \_\_\_\_\_

value incorrect

Change the sensor

NOTE:  
> = more than