

# 10785 Instructions

**THIS UNIT FITS ONLY:**

190D - 1987

190E - 1987

## Prior to installation of the Control Unit:

- 1- Inspect and clean **fuse contacts** in the fuse box.
- 2- Verify that the **Fuse Amperage is rated as suggested by original manufacturer** to avoid overload and burning of control unit circuit board.
- 3- Check **Auxiliary Pump**, and if needed replace it **prior to installation** of new control unit.

Perform steps 1 - 2 prior to installation.

- 1- Turn off ignition and disconnect (L) Left and (R) Right connectors from climate control unit.
- 2-
- 3- Isolate Auxiliary Pump. Current draw = less than 1.3 amps. **IF NOT, REPLACE AUXILIARY PUMP OR WARRANTY IS VOID.**

## **THREE YEAR WARRANTY**

# TROUBLESHOOTING NOTES

## ORIGINAL UNIT PROBLEM

Symptoms	Test/Suspect Problems	Solution
No flaps, heat, fan.	Check fuse.	Replace fuse.
No heat.	Auxiliary pump test. Isolate Pump. Current draw = less than 1.3 amps.	Replace Auxiliary pump, Climate Control Unit.

## NEW UNIT PROBLEMS

Symptom	Test/Suspect Problem	Solution
A.C. compressor only works in defrost.	Interior Temperature sensor. (+) L pin 9 → (-) R pin 12 = 9.5 k ohms @ 77° Fahrenheit.	Replace sensor.
	Coolant temperature switch. Disconnect Compressor Control Unit, check resistance from connector. (+) pin 12 → (-) pin 1 = open (switch closes at 110°c)	Replace switch.
	Ambient temperature sensor. (+) L pin 10 → (-) R pin 12 = 2.4k ohms @ 77° Fahrenheit.	Replace sensor.
	Evaporator temperature sensor. (+) L pin 7 → (-) R pin 12 = 20k ohms @ 77° Fahrenheit.	Replace sensor.
No A.C., no blower, no blend air flaps.	Externally connected circuit has a short circuit. (Auxiliary pump, A.C. Compressor control unit, switch over valves)	Check all external circuits for short circuit .
Cold at center vents, heat at sides vents.	Feedback potentiometer.	See test and adjustment, page 3.
Heat at all times.	Feedback potentiometer.	See test and adjustment, page 3.
	No vacuum to switch over valves.	Repair as necessary.
No A.C. control.	Feedback potentiometer.	See test and adjustment, page 3.
	Defective A.C. Control Unit.	Replace A.C. Control Unit.
When unit is off, fan stays on, or fan cycles on and off.	Short circuit in sensor(s) and/or feedback potentiometer.  (+) R pin 9 → (-) R pin 12 = pulsating voltage.  Interior Temperature sensor = 5 pulses Ambient Temperature sensor = 10 pulses Feedback Potentiometer = 15 pulses Evap Temperature sensor = 20 pulses Coolant Temperature Sensor = 25 pulses	Replace sensor/switch.
No A.C. and Code 25	Make sure instrument cluster is connected and temp gauge is working correctly. Check coolant temperature sensor.	Install instrument cluster. Replace temperature gauge or replace coolant temperature sensor.

### **To Test:**

1. Remove Glove Box Liner.
2. Locate Pig Tail from feedback potentiometer. Without separating the connector, use a voltmeter and insert the black lead into the pin with brown wire; insert the red lead into the pin with the green/red wire or blue wire. The pins with red wire are not used.
3. Run engine at idle speed with Climate Control Unit connected.
4. Depress this button on switch unit, engage temperature wheel at “MIN” and wait for approximately 60 seconds. Voltage should be between 2.4 and 2.7 Volts
5. Engage temperature wheel at “MAX” and wait for approximately 60 seconds, voltage should be between .3 and 1.2 Volts

**NOTE:** If voltage does not change, check electrical connections, as well as vacuum supply to switch over valves.

**The voltage tolerance in steps 3 & 4 must be adhered to since the control functions of the compressor and the closing of the heater valve depend of these values.**

If the voltage is out of tolerance perform adjustment.

Feedback potentiometer adjustment without removing dash.

Allow 1-2 hours for this procedure.

- A. Remove antenna switch next to rear defrost, so adjusting lever can be seen. Shine a light through this hole. Look 45° towards right front wheel.
- B. Remove glove box.
- C. Depress the box button(as shown above).
- D. Set temp wheel at “MIN”, using a 5.5mm socket, and long extension and swivel adapter, turn adjustment screw until 2.5 volts is measured on the voltmeter.(see Fig. 1 )(clockwise lowers voltage, counter clockwise increases voltage)
- E. Engage temperature wheel at “MAX” and wait for approximately 60 seconds, voltage should be between .3 Volts - 1.2 Volts

**NOTE:** Versions with dash insulation, can be difficult to see screw.

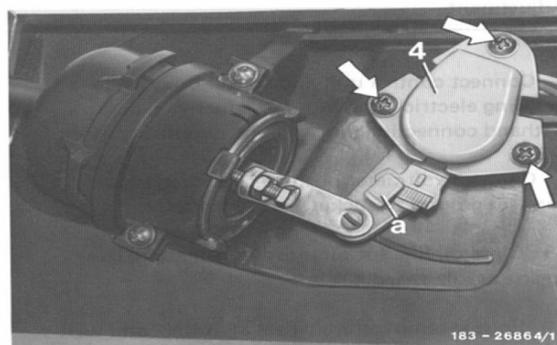


Fig. 1