

PREVOST

ENREGISTRÉ - REGISTERED
ISO 9001 & ISO 14001

**MAINTENANCE
 INFORMATION**

Mi85-11B



DATE : November 1999	SECTION : 22
SUBJECT : TESTING PROCEDURE FOR SOLID STATE HVAC THERMOSTAT AND CONTROL	

REVISION : B

NEW PROCEDURE

APPLICATION

Model	VIN
H series vehicles Model year: 1988 to 1998	From 2P9H33468J1001001, up to 2PCH33494W1012234 AND 2PCH3349XW1012285
XL series Model year: ALL	ALL
96 inch series vehicles Model year: ALL	ALL

DESCRIPTION

As with any electrical component of a vehicle, it could be helpful to periodically verify the operation of solid state HVAC thermostat and control.

These instructions allow verification of the driver's HVAC control on H series vehicles (including the H3-40, H3-40 VIP, H5-60, H3-41, H3-45 and H3-45 VIP). On all other vehicles (XL and 96 inch models) these instructions allow verification of the central and driver's HVAC thermostat and control.

We suggest that you proceed as follows when suspecting a failure in the above-mentioned component.

PROCEDURE

1. Start engine and ensure electrical system operates at 27.5 volts. Adjust, if necessary using voltage regulator set screw (Refer to Maintenance Manual, Section 6: Electrical).
2. Refer to INSTALLATION DIAGRAM for proper identification of components and connectors (Fig. 1).
3. Check voltage as outlined in SPECIFICATION CHART.

Note: Ground must be verified at vehicle frame.

4. Refer to TROUBLESHOOTING.

5. If heating control module replacement is necessary, ensure that wire position on harness connector corresponds to figure 1.

Note: Installation diagram is a guide, use it with the vehicle electrical diagram.

H SERIES VEHICLES

SPECIFICATION CHART

Connector position / wire color	CONNECTOR A		Connector position / wire color	CONNECTOR B	
	Heating	Not heating		Heating	Not heating
1 / RED	27.5 volts	27.5 volts	1 / Brown	19 ± 2 volts	0 volt
2 / Brown	0 volt	25 ± 3 volts	2 / Red	0 volt	0 volt
3 / Orange	0 volt	0 volt	3 / Orange	5 ± 1 volts	
4 / Yellow	5 ± 1 volts		not-applicable		
5 / Green	19 ± 2 volts	0 volt	not-applicable		

TROUBLESHOOTING

SYMPTOM: The system stays in heating mode or temperature is not stable.

STEP	TEST	RESULTS	PROBABLE CAUSE
1	Measure voltage between red wire (pin #1) and orange wire (pin #3) on connector A.	0 volt..... 27.5 volts.....	The control of the supply line is not correct or fuse is blown. See step #2.
2	Measure voltage at yellow (pin #4) wire on connector A and at orange wire (pin #3) on connector B.	If 8.5 ± 0.5 volts..... If 5 ± 1 volts.....	Thermostat or wire is defective. See step #3
3	Measure voltage at green wire (pin #5) on connector A and at brown wire (pin #1) on connector B.	Measurements do not correspond to SPECIFICATION CHART..... Measurements correspond to SPECIFICATION CHART.....	Temperature control is defective. See step #4.
4	Turn heating control counter-clockwise (To the off position). Measure voltage at brown (pin #2) on connector A and at water valve terminal.	If 0 volt..... If 27.5 volts.....	Temperature control is defective. Water valve is defective or particles interfere with the diaphragm.

Note: Before replacing temperature control, ensure that the valve is not short-circuited. Solenoid resistance must be more than 50 Ω. Otherwise, replace solenoid valve or solenoid only.

SYMPTOM: System does not provide any heat.

STEP	TEST	RESULTS	PROBABLE CAUSE
1	Turn heating control clockwise. (To the on position). Measure voltage at water valve terminal.	If 27.5 volts..... If 0 volt.....	Temperature control is defective (see Note 1). Valve is locked in closed position. Change the valve.

XL AND 96 INCHES SERIES VEHICLES

SPECIFICATION CHART

Connector position / wire color	CONNECTOR A		Connector position / wire color	CONNECTOR B	
	Heating	Not heating		Heating	Not heating
6 / RED	27.5 volts	27.5 volts	1 / Brown	19 ± 2 volts	0 volt
3 / Brown	0 volt	25 ± 3 volts	2 / Red	0 volt	0 volt
5 / Orange	0 volt	0 volt	3 / Orange	5 ± 1 volts	
2 / Yellow	5 ± 1 volts		not-applicable		
4 / Green	19 ± 2 volts	0 volt	not-applicable		

TROUBLESHOOTING

SYMPTOM: The system stays in heating mode or temperature is not stable.

STEP	TEST	RESULTS	PROBABLE CAUSE
1	Measure voltage between red wire (pin #6) and orange wire (pin #5) on connector A.	0 volt..... 27.5 volts.....	The control of the supply line is not correct or fuse is blown. See step #2.
2	Measure voltage at yellow (pin #2) wire on connector A and at orange wire (pin #3) on connector B.	If 8.5 ± 0.5 volts..... If 5 ± 1 volts.....	Thermostat or wire is defective. See step #3
3	Measure voltage at green wire (pin #4) on connector A and at brown wire (pin #1) on connector B.	Measurements do not correspond to SPECIFICATION CHART..... Measurements correspond to SPECIFICATION CHART.....	Temperature control is defective. See step #4.
4	Turn heating control counter-clockwise (To the off position). Measure voltage at brown (pin #3) on connector A and at water valve terminal.	If 0 volt..... If 27.5 volts.....	Temperature control is defective. Water valve is defective or particles interfere with the diaphragm.

Note: Before replacing temperature control, ensure that the valve is not short-circuited. Solenoid resistance must be more than 50 Ω. Otherwise, replace solenoid valve or solenoid only.

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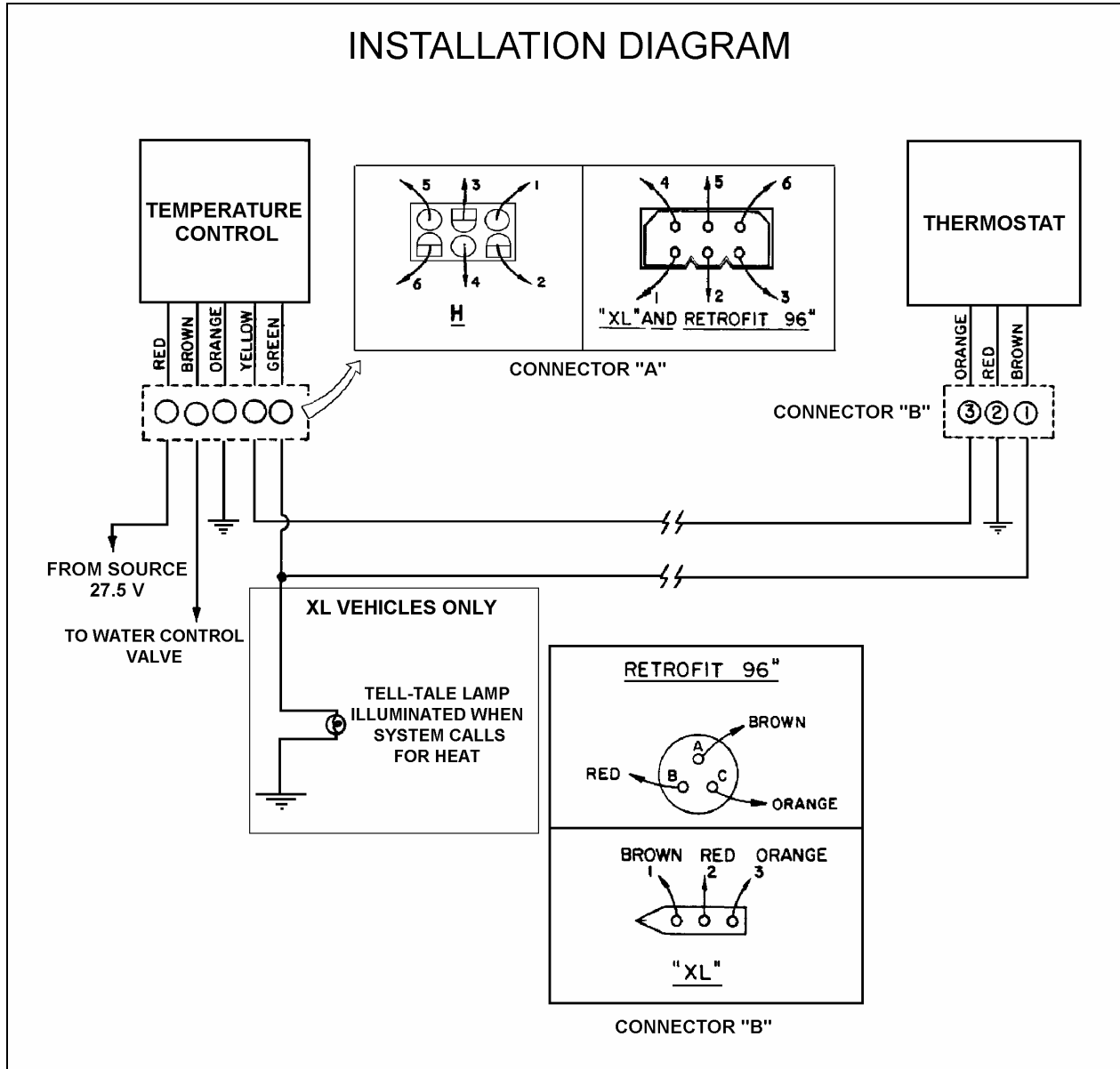


FIGURE 1

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