

Sensor Verification Test

Proceed as follows:

With LAT sensor connected to PC Board:

1. Insert test thermometer into duct as near to LAT sensor as possible.
2. Measure DC voltage across two LAT terminals.
3. Voltage reading should indicate the same temperature as test thermometer reading shown on chart (**Fig. 11a**), plus or minus 3° F.
4. If voltage reading is different than chart voltage, proceed to the following sensor check.

With LAT sensor disconnected from PC Board:

1. Measure resistance across sensor at 100k to 200k Ohm scale. Ohm reading should indicate the same temperature as test thermometer chart below. (**Fig. 11a**)
2. If Ohm reading does not match chart (+ or - 10 %), replace the sensor.
3. If Ohm reading matches the chart, check for 5 volts DC at LAT terminals.
4. If voltage is not 5 Volt DC, replace PC Board.

LAT - TEMPERATURE / OHMS / DC VOLTAGE RELATIONSHIP CHART

<u>Temp</u>	<u>Ohms (k)</u>	<u>DC Volts</u>	<u>Temp</u>	<u>Ohms (k)</u>	<u>DC Volts</u>
40	26.1	3.82	76	10.2	2.85
42	24.7	3.77	80	9.3	2.72
44	23.4	3.72	90	7.3	2.42
46	22.1	3.69	100	5.8	2.14
48	20.9	3.63	110	4.7	1.88
50	19.9	3.57	120	3.8	1.63
52	18.8	3.52	130	3.0	1.41
54	17.9	3.46	140	2.5	1.22
56	16.9	3.40	150	2.0	1.05
58	16.1	3.35	160	1.7	0.90
61	14.5	3.28	170	1.4	0.77
70	11.8	2.98	180	1.2	0.66

(Fig. 11a)

SMART SLAVE ZONE (SSZ™) Thermostat

Any number of Smart Slave Zones may be added to all Arzel panels. The Smart Slave Zone thermostat does not control the HVAC equipment. It will only open its zone dampers if the air temperature in the duct is compatible with the thermostat call. Smart Slave Zone operation is indicated by the LED on its PC board. If the LED is lit, the damper is in the open position. Do not use a Heat Pump thermostat for the Smart Slave Zones.

SMART SLAVE ZONE (SSZ™) WIRING AND TUBE CONNECTIONS (Fig.12a)

- Smart Slave Zone thermostats do not need a heating-cooling sub-base to operate but could be used to lock out cooling calls in the heating season or heating calls in the cooling season.
- Connect "R", "W" and "Y" thermostat wires to "R", "W" and "Y" terminals on the Smart Slave Zone PC board.
- Connect Smart Slave Zone damper tubing to the Smart Slave Zone solenoid bulkhead fitting on top of the panel.
- Do not use a heat pump thermostat for any Smart Slave Zone, in Heat Pump applications.

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