CARBURETOR TEMPERATURE INDICATOR
N12 x18U 120 Fxxx

Installation Instructions:

Additional wire and fuses may be necessary for installation of unit.

1. Mount indicator in desired location in aircraft's instrument panel.

2. Install temperature sensor on carburetor. Check with carburetor manufacturer where to install the probe. Route a wire from each of the sensor wires to pin 5 and pin 8 of the DB9 connector. (Polarity of sensor wires does not affect the operation.) Connect pin 9 on the DB9 connector to a suitable aircraft ground. Connect pin 1 on the DB9 connector to the aircraft 14 or 28 volts DC electrical system (master switch). Use a 1amp inline fuse. Use #18 to 22 AWG size Teflon wire for extension wires.

IMPORTANT: Make sure to route all wires away from sources of heat and moving parts. Use wire ties as needed.

Temperature indicator Information

Supply Voltage: 14-28 Volts DC (Nominal)
10-30 Volts DC (Max)

Current Draw: 100 mA (Maximum)

Accuracy: ± 5 °F @ Room Temperature

Range: -60° to 120°F (or -50° to 50°C)

Temperature probe

UMA#  Thread Size  Sensor Type:
1B8    1/4-20    Thermistor probe

Installation Hints:

1) If indicator reading stays on zero with power on and engine warm. Check resistance of probe. (May be open.)
2) If indicator gives a full scale reading when power to indicator is turned on. Check resistance of probe. (May be shorted.)
3) Correct resistance of probe between 70-80 °F, should be 4500 – 6000 ohms.
UMA DB-9 Connector pin out

<table>
<thead>
<tr>
<th>Pin</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Voltage Input</strong> (14 or 28 volt systems)</td>
</tr>
<tr>
<td>2</td>
<td>(Internally connected to pin 1)</td>
</tr>
<tr>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>4</td>
<td>N/A</td>
</tr>
<tr>
<td>5</td>
<td><strong>Signal Input</strong> (Probe Black wire)</td>
</tr>
<tr>
<td>6</td>
<td>EL Lighting Input (Internal lighting only)</td>
</tr>
<tr>
<td>7</td>
<td>EL Lighting Input (Internal lighting only) (Optional)</td>
</tr>
<tr>
<td>8</td>
<td><strong>Signal GND</strong> (Probe Black wire) (Internally connected to pin 9)</td>
</tr>
<tr>
<td>9</td>
<td><strong>GND</strong> (Connect to aircraft ground)</td>
</tr>
</tbody>
</table>

**Warranty**

UMA, Inc. warrants all products to be free from defects in material and workmanship under normal use and operation. UMA does not warrant any product which has been damaged as the result of accident, abuse, negligence, improper operational voltage, lightning, fire, flood, or other acts of nature. Any indication that the unit has been opened can void warranty. Under no circumstances shall UMA be liable for any loss or damage, direct, consequential or incidental, arising from the use of or inability to use this product.

This warranty is limited to the repair or replacement, at the manufacturer's option, of any product or part thereof, which has been returned to UMA within the specified warranty period, and which after examination shall disclose to the customer service department's satisfaction that the product is defective. Transportation to the factory or authorized service center must be prepaid; the product after repair or replacement will be returned at the expense of the dealer or end customer. This warranty does not apply to any product or integral part thereof, which has been altered or serviced by other than the manufacturer or authorized service center.

The warranty period is twelve (12) months to the user.

This warranty supersedes all other warranties either expressed or implied and shall be governed and executed under the laws of the Commonwealth of Virginia, USA.