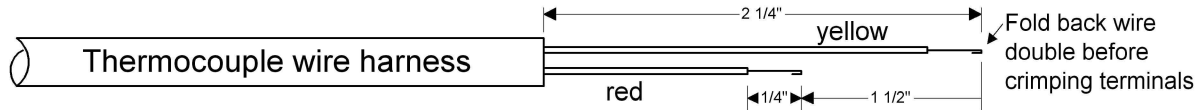


Troubleshooting Probe Problems

If a temperature reading is wrong or missing or intermittent, use this checklist to help solve the problem.

1. Check for open circuit at the wiring harness where the ring terminals connect to the probe. **This is the most common point of failure.** Re-crimp the connections or cut and install new ring terminals, if necessary. Be sure to fold the bare wire double before crimping.



2. Verify the operation of the probe by placing the probe in boiling water. It should read about 212°F or 100°C at sea level.
3. The resistance of a probe should be about 2 ohms. If measuring the resistance from the connector that plugs into the rear of the instrument, you should read about 10-20 ohms.
4. Swap the probe with a known good one and see if the problem moves with the probe or stays on the same cylinder channel on the instrument. If the problem follows the probe, the probe is most likely bad.
5. Check for a short circuit where the probe is connected to the wiring harness. If the two wires (red and yellow) are shorted together, the instrument will measure the temperature at the short rather than at the probe.
6. Moisture could be getting into the connection between the probe and the wiring harness. Be sure the insulated protective sleeve is in place and tie-wrapped well at both ends.
7. Where the probe is connected to the wiring harness, be sure the two yellow wire are connected together and the two red wires are connected together.
8. Check the connector plugged in at the rear of the instrument and verify that a female pin is not recessed in the connector.
9. Be sure the EGT probe is not installed in a slip joint. Slip joints move with engine vibration and will shear off the probe. A solution to this is to drill the hole on the inside sleeve oversize so that when the sleeves move with respect to each other, the larger hole will not slip close enough to shear the probe.
10. If all or many probe readings are changing or missing, check that the instrument is grounded at the engine block, not the avionics ground. If not, move the ground to the engine block.
11. If CHT readings are high and EGT readings are low, check that the EGT leads and CHT leads are not swapped.
12. If one CHT is reading 20° to 50° above or below the others, this may be due to that cylinder having a spark plug gasket probe instead of a bayonet probe. This is necessary because the aircraft's factory original CHT probe is occupying the socket in the cylinder head rather than the EDM-700. This is normal. If the discrepancy is greater, be sure the spark plug gasket probe is mounted on the *top* spark plug. An adapter probe
13. If the aircraft is a twin, swap the right and left engine connectors plugged in at the rear of the instrument and see if the problem moves to the other engine display. If it does, the instrument is okay.

If you cannot solve the problem, call JPI Product Support at 800 345-4574. Before you do, note the serial number of the instrument and what is the numerical reading at the bottom digital display.

