

Troubleshooting Chart

SYMPTON	PROBABLE CAUSE	SOLUTION
NO INDICATION OF METER	Shorted or open lead and probe circuit	Repair lead, replace probe, and recheck lead and probe loop resistance. Do system check with Alcal 2000 system tester.
	Possible probe, meter, or lead incompatibility	Check that meter, lead, and thermocouple are the same type, by checking the color codes and part numbers.
	Meter out of calibration	Recalibrate in flight if relative reading or for true temperature use the Alcal 2000 tester.
	Friction in movement	Worn jewels, call Alcor for meter repair or replacement
	Bad or dirty and corroded potentiometer	Attempt to move the pot back and forth to self-clean and recalibrate. *See Note
LOW READING	Meter out of calibration	Recalibrate in flight for relative reading or for true temperature reading use the Alcal 2000 tester
	Thermocouple wire touching together other than probe tip, causing secondary thermocouple junction.	Inspect the insulation and connection of the thermocouple and lead. Perform loop resistance check of thermocouple and lead. If okay, complete a heat check on probe. Correct the connection or replace component.
	EGT Type K probe on Type E system	Install Type K probe
	High resistance in system	Check probe and lead loop resistance. Replace if out of tolerance
	Bad or dirty potentiometer that is corroded.	Attempt to move pot back and forth to self-clean and recalibrate.* See Note
HIGH READING	Meter out of calibration	Recalibrate in flight for relative reading EGT or for true temperature reading use the Alcal 2000 tester.
	EGT Type E Probe on Type K system	Install Type K probe
	An open thermocouple, RTD, or connection on some types of amplified systems.	Test and if defective replace component
	CHT Engine cooling baffling is leaking	Repair and replace baffling
	CHT Gasket Thermocouple is used	Spark plug is higher temperature than cylinder
	Lead receiving bus current through induction. (Test by turning off Master Switch and alternator/generator.	Re-route lead away from current carrying wire.
ERRATIC READING	Bad potentiometer or friction in movement.	Call ALCOR to repair or replace.
	Internally broken probe lead wires, causing intermittent connection.	Check probe resistance by wiggling wire and replace if out of tolerance or fluctuates.

	Lead chafed and grounding intermittently	Insulate from airframe
INDICATOR CHANGES WHEN TAPPED	Friction in movement or old style pot needs exercising or replacing.	Call ALCOR to repair or replace
NO INDICATION AT RUN-UP	EGT Indicator begins at 1200°F. Note: All engines may not reach 1200°F at run-up power while leaned.	Check operation while in flight
	CHT needs adequate time for warm up, meter out of calibration, or meter or probe inoperative.	Test system
INDICATOR WORKS ON BENCH, BUT NOT IN FLIGHT	Check probe and lead resistance. If okay, there may be excessive resistance or friction in meter or pot in poor condition.	Call ALCOR to repair or replace