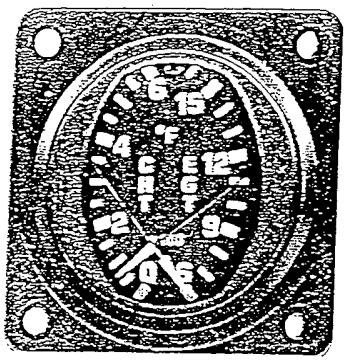


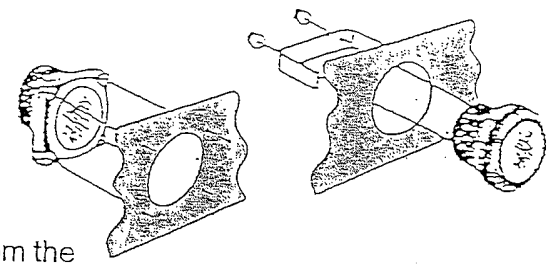
Micro 1000

CHT/EGT Gauge
CE140 & CE141

Aircraft Spruce & Specialty Co.

Requirements

EGT Probe Options (requires one of): EP131, EP130, EP130, EP130R, EP132 or EP133
CHT Probe Options (requires one of): CP130, CP131, or CP132
Leads for the probes listed above are sold separately.
EGT LEAD (requires one of either): EPE130.07 or EPE130.15
CHT LEAD (requires one of either): CPE130.07 or CPE130.15



Gauge Installation

The gauge should be mounted in the panel. Round gauges from the front are secured with a U-clamp in the rear. Square gauges from the rear are secured by four provided brass instrument screws and nylock nuts.

About Your Gauge

This gauge is suitable for use on sport aircraft. It is constructed with a heavy duty, vibration and shock proof precision jeweled mechanism. Unlike other brands, this unit is temperature compensated. That is, changes in ambient air temperature will not affect the gauge display. This gauge, when installed as instructed will perform within 2% of accuracy. Your gauge should be installed with Micro-1000 probes only and 7 or 15 foot thermocouple extension sections.

About Your Probe

The CHT probe is a high grade type "E" chromel/constantan material that has a 1 year warranty. The "E" type probe will provide accurate temperature readings at temperatures below 400°F. The EGT probe is a high grade type K Chromel/Alumel material that has a lifetime warranty. Other brands of "K" type probes will work with this gauge, but are not recommended.

About Exhaust Gas Temperature Monitoring

The exhaust gas temperature gauge is essential for monitoring the engine's current temperature. It is generally useful for setting the carburetor based on current temperature and density altitude conditions. The gauge is powered by the thermocouple and therefore does not require a power source. Optimization of carburetor mixture is not only essential to maximize performance, but also to reduce the formation of carbon deposits on spark excessive engine heat and wear caused by a mixture too lean. In general, two stroke engines should not show a continuous EGT reading in excess of 1200 degrees F over a period of time. However, every engine is different. Readings may vary depending on the location of the thermocouple. Consult your engine manual for proper installation and normal EGT readings. If you are unsure of how to install your gauge and probe, seek the assistance of an engine shop or other professional source.

About Your Cylinder Head Temperature Monitoring

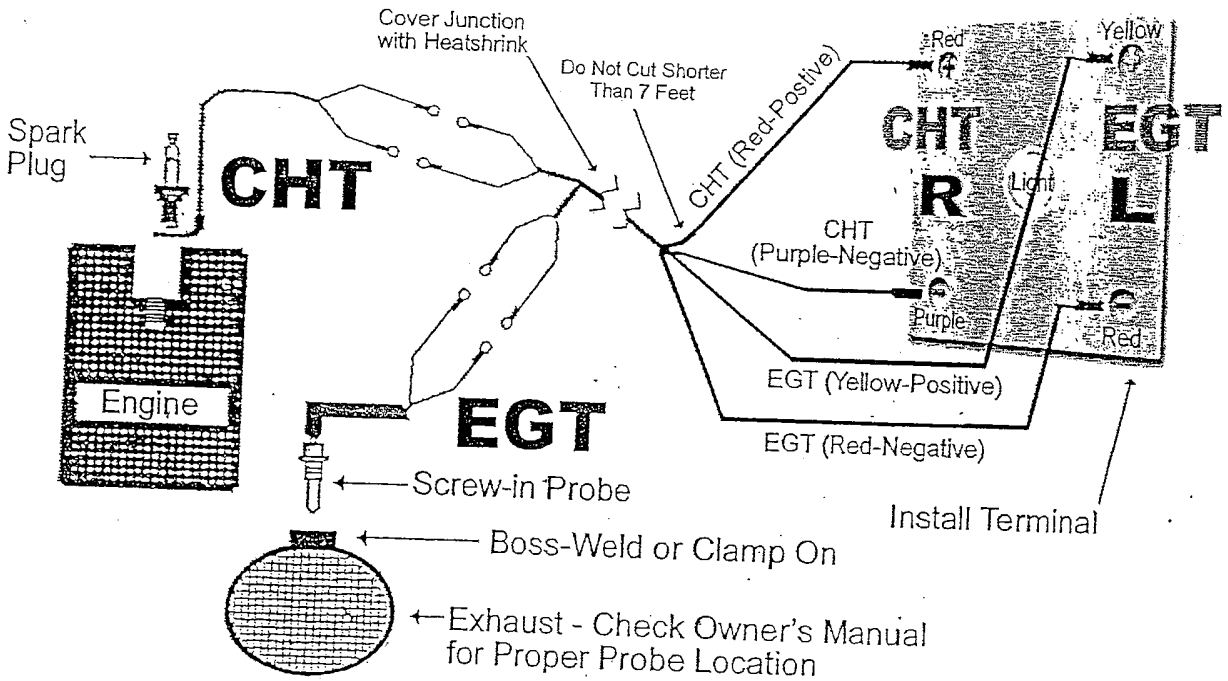
The cylinder head temperature gauge is essential for monitoring the operating temperature of engine components of air cooled engines. If the engine is not being cooled properly the CHT will provide this information. The gauge is powered by the thermocouple and therefore does not require a power source. Most engines will exhibit normal operating temperatures between 225–350°F. CHT indications past 425°F are a sign of potential trouble on most engines. Continuous operations at an excessively high temperature can result in engine seizure or other serious consequences. Consult your engine manual for further information and proper CHT readings.

nermocouple Installation

The ring sender style probe is installed between the sparkplug and engine, usually by replacing the existing gasket. If using a single gauge, choose the leanest cylinder for both CHT and EGT. The clamp-on style EGT probe is connected around the exhaust manifold by locating and drilling a 3/16" hole in the manifold (usually 2-6 inches from the exhaust port). If you are unsure which cylinder to use or where to drill the hole, consult the engine technical manual, engine manufacturer or engine service center.

Connections to Gauge

You must use the Micro-1000 extension lead. This is the thermocouple lead and cannot be substituted with normal electrical wire. Fifteen foot extension can be shortened down to a minimum of 7 feet. Seven foot leads may not be shortened. If you have excess leads then bundle and secure them with cable ties or other safe method. Wire the backlight if desired or leave unconnected. Connect the probe leads to the instrument as shown in the illustration. Connect the extension lead to the probe leads matching to the corresponding colors. Red to red, purple to purple, and yellow to yellow. EGT leads connect the "L" terminals on the gauge. Yellow wire goes to the +positive terminal and the red lead connects to the –negative terminal. CHT leads connect to the "R" terminals on the gauge. The red lead connects to the positive terminal and the purple lead connects to the –negative terminal.



RRANTY: During the first 24 months from the date of original retail purchase, any instrument that fails due to defects in erials or workmanship will be repaired or replaced at Aircraft Spruce's option at no charge.

ubmit a warranty claim, it is required that you contact Aircraft Spruce's customer service department at (800) 861-3192 and request a Return orization. Then return the instrument, postage prepaid, packaged to prevent damage while in transit, with a note stating your name, address, hone number and customer number (if known) to:

raft Spruce & Specialty Co.
: Returned Merchandise
Airport Circle
ona, CA 92880-2527

nstrument will be promptly repaired or replaced.

nent styles which are no longer manufactured will be replaced with a similar instrument of equal or greater value. Removal/ reinstallation ses, any damage to an instrument resulting from natural causes, misuse, neglect, accident, misapplication, improper installation, unauthorized or alteration, and instruments purchased prior to May 1, 1996 are not covered by this warranty. Aircraft Spruce expressly disclaims any liability for ital or consequential damages caused by product defects. Some states do not allow the exclusion of limitation of consequential damages, so the may not apply to you. The warranty herein is in lieu of any other expressed warranty of merchantability or fitness or any other obligation on the Aircraft Spruce or the seller. All implied warranties are limited to the 24 month period. Some states do not allow limitations on how long an implied ty lasts, so the above limitation may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary ate to state.

THIS INSTRUMENT IS NOT CERTIFIED FOR USE ON