



SERVICE BULLETIN

CK-SB003

Rev A

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Cub Crafters, Inc. Considers Compliance Mandatory

EFFECTIVE DATE: This Service Bulletin is effective December 16, 2014.

SUBJECT: *CYLINDER HEAD TEMPERATURE PROBE*

MODELS AFFECTED: *ALL CCK-1865 AIRCRAFT WITH ELECTRONICS INTERNATIONAL CGR-30P ENGINE MONITOR INSTALLED Purchased before November 30, 2014*

COMPLIANCE TIME: *AT NEXT MAINTENANCE ACTION*

PURPOSE: *P-100 Ungrounded screw-in CHT Probes are to be replaced because the new P-101 grounded probe is better suited for this application.*

PARTS LIST:

<u>PART</u>	<u>DESCRIPTION</u>	<u>QTY</u>
VP6214-002	GROUNDING CHT PROBE, SCREW IN TYPE	4

INSTRUCTIONS:

1. Read all instructions before beginning any work.
2. Remove engine cowl, retaining all fasteners.
3. Start with one CHT probe, trace wiring harness back to connector and remove any cable ties holding the wiring bundles together. Each probe has a pigtail similar in length to the new ones provided with the SB kit.

NOTE

For slip together (male/female) connectors, refer to Appendix A before proceeding.

4. Disconnect the probe wiring at the connector. Repeat for each of the four CHT probes. Verify each wire is marked according to cylinder number on the harness side.
5. Unscrew and remove each probe from the cylinder head (see Figure 1).



FIGURE 1 – EI P-100 Ungrounded CHT Probe

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6. Screw new probes into each cylinder where old probes were. Utilizing an anti-seize agent is recommended. Make sure the probe is properly aligned in the hole to eliminate cross threading (see Figure 2).
7. Connect probe to corresponding, marked, lead wiring.
8. Secure all wires into bundles with cable ties.
9. Power up the unit and verify the temperature indication. If the engine is cold, the cowl temperature should be indicated. The CHTs should be indicating similar temperatures as the EGTs, OAT and oil temperature (see Figure 3). If the engine is warm, the indication should read above cowl temperature.
10. Check the engine ground strap and the battery ground strap for loose or contaminated connections, broken conductors or bad crimp joints.
11. Reinstall the engine cowling.
12. Perform an engine run-up and verify the CHT probes indicate similar numbers. Cross reference the CHT Monitor (if installed) to the CHT temperature indicated on the CGR-30P. Note that the CHT Monitor will not indicate temperatures under 200°F.
13. Make logbook entry stating that probes were changed to P/N VP6214-002, and CK-SB003 Rev A was complied with. There are no changes to weight and balance.
14. Please use the enclosed shipping label to return the used P-100 probes to Electronics International.



FIGURE 2 – New EI P-101 Grounded CHT Probe, Screw In Type



FIGURE 3 - CGR-30P Engine Monitor

If you are no longer in possession of this aircraft, please forward this information to the present owner/operator and notify Cub Crafters, Inc. Contact the customer service department at:

Cub Crafters, Inc.
 1918 S. 16th Avenue
 Yakima, WA 98903.
 1-877-484-7865 or 1-509-248-9491
support@cubcrafters.com

Please include the aircraft registration number, serial number, current name, and address of the owner and/or operator.

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APPENDIX A: Electronics International Over-Lap Connector Instructions

The OLC-1 Over-Lap Connector bonds two mating wires together in a gas tight cold weld style connection using a set screw. Since the two wires are overlapped and no dissimilar metals are introduced in the junction, the OLC-1 can be used as a precision connector for thermocouple wire. The elasticity of the mating wires locks the set screw. Thread lock is not required.

INSTRUCTIONS:

1. Cut off each connector at the harness.
2. Strip back the wire's red and yellow insulation on the two mating wires 3/8". The strip back length must be correct to insure proper wire overlap.
3. Place the hex driver (0.050", provided) in the set screw and back the set screw out to the last thread. Leave the hex driver in the set screw.
4. Hold the connector between your thumb, index and middle fingers (Figure 4).
5. Insert the two wires into the ends of the connector so the wire insulation is just inside the nylon housing and the ends of the wires are not exposed on the opposite side. Use your index and middle fingers to hold the wires at opposite ends of the connector.
6. Tighten the set screw until the set screw stops turning and the hex driver starts to flex (4-5 inch lbs.).
7. Tug on the wires (1-2 lbs) to insure proper connection.

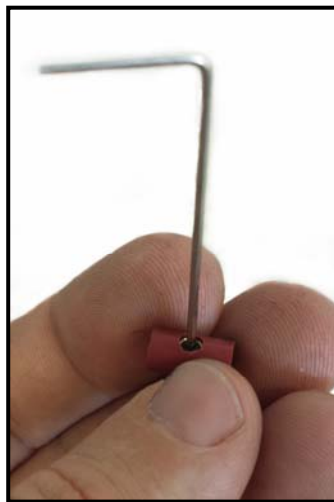


FIGURE 4 – Connector Coupling

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