



250 SE Timber Avenue, Redmond, Oregon 97756 Phone 541 923-2233 Fax 541 923-2255

SERVICE BULLETIN

SB071-0310

Subject: Voltage Regulator Location
Date: March 23, 2010
Ref: None
Pages: 1
Status: Mandatory Compliance

Background:

It has come to our attention that there have been some voltage regulators that have been installed inside the engine compartment of the various Lancair kit aircraft configurations. This service bulletin is to reflect manufacturer's suggested location and position for the voltage regulators that can be used in Lancair kit aircraft. This service bulletin affects, but is not limited to, the following voltage regulators:

LR3	LS1
LR3A	LS1A
LR3B	SB1B-14
LR3C	SB1B-28

These voltage regulators are designed and qualified for aircraft use, it is suggested they are to be in a protected space.

Note:

This service bulletin is mandatory for all voltage regulators installed on Lancair kit aircraft. It is recommended to follow the same practice for all other models of voltage regulators.

Action:

On the models listed above, it is required to follow the precautions set forth in the **B&C Installation Instructions** for each of the specific voltage regulators which can be found at <http://www.bandc.biz/downloads-reference.aspx#S4>. It is required that the builder follow the manufacturer's instruction when mounting the voltage regulators. In absence of instruction, the best practice is to treat the component as you would all avionics. Install the voltage regulators in a location where it can be protected from extreme heat, vibration and water intrusion. The most viable location to mount a voltage regulator is inside the cabin, on the firewall or fuselage where it is free of any contamination from dust, dirt, or moisture. Installation of the regulator near the avionics panel or on the avionics shelf will ensure long life and trouble-free operation. If the regulator is located in an engine compartment or is exposed to the elements, the units should be relocated to a protected area inside the cabin as defined by this Lancair Service Bulletin and the manufacturer's recommendations.

It is also best practice to annually inspect your aircraft wiring following Advisory Circular AC43.13-1B (CHG1), Chapter 11 which can be downloaded from www.faa.gov. This includes all airframe wiring and connections, to include the voltage regulator. Inspection of the voltage regulator should include the security of mounting, tightness of terminal screws, chafing or breaking of wire. It is also necessary to perform an operational check to confirm system function (stable voltage) with various loads and RPM settings.