

# B & C Specialty Products Inc

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## **L-40 Installation Instructions (Boss Mount)**

1. Mount alternator on engine case. Use the two bolts that are already in the bracket and bolt the bracket to the boss with the two 5/16" NC tapped holes. Torque the bolts to 110-150 in-lbs. Safety wire the bolts and bend the tabs up against the flat of the heads.
  2. Mount the belt tension arm in the standard location. The bolt is taped to the belt tension arm. Install the other bolt (already on the alternator) through the slot in the tension arm.
  3. Install the belt (prop must be removed), adjust the tension of the belt, and tighten the two belt tension arm bolts to 110-150 in-lbs. Safety wire these two bolts also.
  4. Tighten the long pivot bolt to 225-300 in-lbs.
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### **Caution**

The L40 receives its ground through the mounting brackets. It is necessary that the mating surfaces are clean and the mounting hardware is tight. On non-standard installations, make sure the alternator is grounded well enough to carry full alternator output in spite of any mechanical/ electrical isolation mounts.

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### **NOTE**

The L-40 alternator does not have an internal regulator and must have an external alternator controller (regulator). The LR3\_-14 is recommended for 14 volt systems and the LS1\_ is required for 28 volt systems. Both are linear, adjustable regulators with built-in over voltage

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5. Install the Field plug on the harness. Refer to the diagram below for the correct terminal locations. Even though only one field connection is required, it is recommended both terminals be installed in the connector body to help stabilize the connector under high vibration conditions. It is further recommended that the two terminals be jumped together for a redundant field connection. This may be accomplished by crimping a short (2 to 3") jumper along with the field wire from the regulator in one of the terminals. Place a short length of heat shrink tubing over the wires before crimping. Install a second short piece of shrink tube over the free end of the jumper. The other end of the jumper is then crimped in the second terminal.

Solder both terminals and then shrink the tubing over the wires and the crimped area of the terminals. Install the terminals in the slots in the connector body. Check to see that the terminals have locked into the connector body. Install the connector on the alternator and be sure the connector locks into the alternator receptacle.



**CONNECTED TOGETHER INTERNALLY  
TO ONE END OF THE FIELD WINDING**

### **Alternator Rear View**

6. Install the large gage wire from the Battery Master Contactor on the copper post labeled "B".

**This part is not STC'd and is sold  
for amateur built aircraft only**