

# B & C Specialty Products Inc

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## **L-40 Installation instructions (Case Mount)**

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NOTE: THIS BRACKET INTENDED FOR USE WITH B&C STARTER.  
MODIFICATIONS ARE NECESSARY TO USE WITH OTHER STARTERS.

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1. Mount the alternator bracket on the engine case using 1/4" engine case thru-bolts closest to the prop flange. The alternator does not need to be removed from the bracket. Torque the engine case thru-bolts to manufacturers specifications.
2. If you are using a B&C starter, bolt the alternator bracket to the starter using the 5/16" bolt that was taped to the alternator bracket. Torque the bolt to 110-150 in-lbs. Several stainless steel washers have been included to use as shims if you need them. If you are not using a B&C starter, you will need to fabricate a bracket to go between the starter and the alternator bracket. It is very important that the alternator bracket is supported in this left-right direction.
3. Mount the belt tension arm in the standard location. The bolt is taped to the belt tension arm.
4. Install the belt (prop must be removed), adjust the tension of the belt, and torque the tension arm bolts to 110-150 in-lbs.
5. 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 protection and low voltage warning light.

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6. 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 that 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**

7. 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**