



# L-40

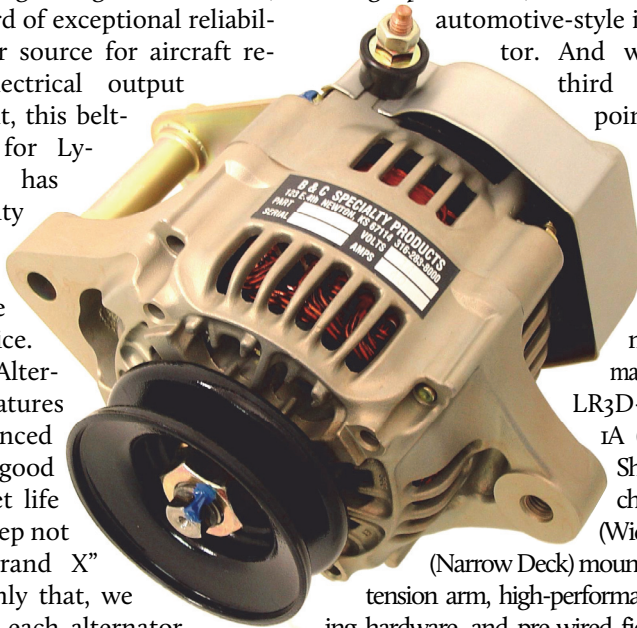
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# QUICK FACTS

## HIGH PERFORMANCE FOR THE LONG HAUL

The L-40 Alternator remains the “gold standard” among lightweight alternators, with a proven record of exceptional reliability. An ideal power source for aircraft requiring ample electrical output with modest weight, this belt-driven alternator for Lycoming engines has sealed heavy-duty ball-bearings, and two built-in cooling fans to insure trouble-free service. As with every B&C Alternator, the L-40 features a dynamically-balanced rotor to promote good bearing and bracket life — a hidden extra step not found on the “Brand X” competitor. Not only that, we uniquely configure each alternator for use with a more sophisticated, aircraft-

style, external voltage regulator with over-voltage protection, instead of utilizing an automotive-style internal regulator. And we integrate a third attachment point in the L-40’s frame to ensure stable support. Suitable for 14 volt or 28 volt applications, the L-40 may be properly matched with our LR3D-14 (14v) or LS-1A (28v) Controllers. Ships with your choice of Boss (Wide Deck) or Case (Narrow Deck) mounting brackets, belt tension arm, high-performance belt, mounting hardware, and pre-wired field connector assembly. Weight: 6.1 lbs.



### FEATURES

- Externally Regulated
- Precision Dynamically Balanced Rotor
- Two Internal Cooling Fans
- Heavy Duty Sealed Ball-Bearings
- Three Attachment Points, with “Thru-Bolt”-type Pivot Arm
- Bracket Systems for Boss-mount or Case-mount engines
- Plated for Corrosion Protection
- Includes Brackets and Belt Tension Arm, Attachment Hardware, High Performance Belt, and Pre-wired Field Connector Assembly
- Weighs only 6.1 lbs.

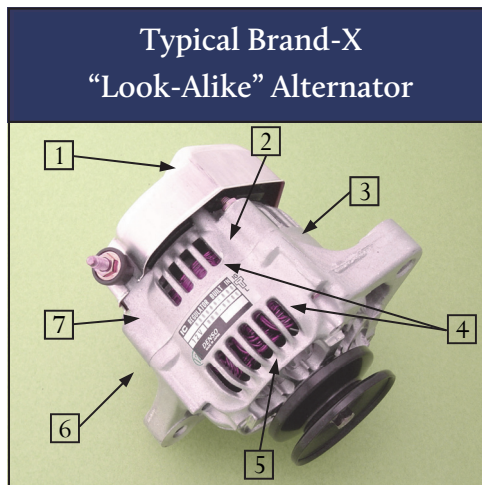
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## BEWARE OF IMITATIONS

There are similar-looking units on the market, but the similarity begins and ends there. If you could carefully examine one of the L-40’s “look-alike” competitors, both inside and out, you might find —

- 1 — An automotive-style internal regulator that does not provide Over-Voltage protection.
- 2 — “Rebuilt” ball-bearings (possibly unsealed).
- 3 — No corrosion-resistant plating.
- 4 — Internal cooling using one fan instead of two.
- 5 — A rotor that has not been balanced to our exacting precision tolerances.
- 6 — No third attachment point.

One close look, and the differences become clear. Nothing else compares to the L-40.



### PRICING

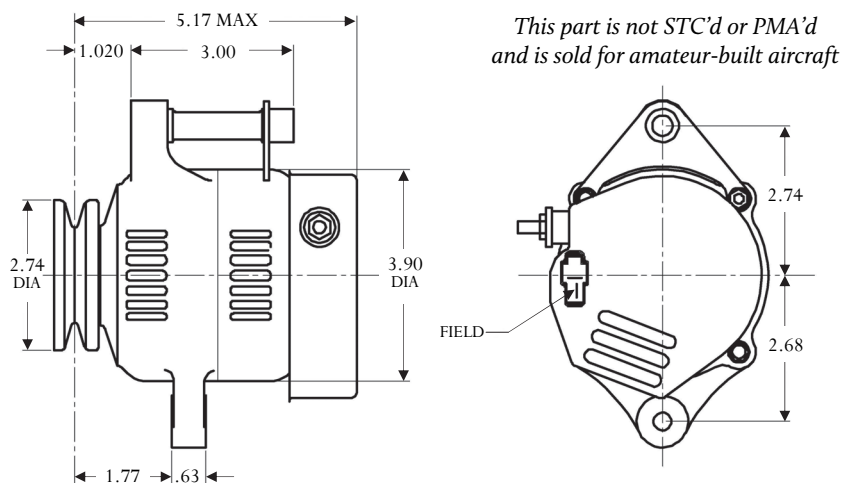
L-40 (Homebuilt), with Boss-Mount or Case-Mount Installation Kit \$425

### ALSO OF INTEREST

LR3D-14 Controller, 14v (Homebuilt) \$215

LS-1A Controller, 28v (Homebuilt) \$215

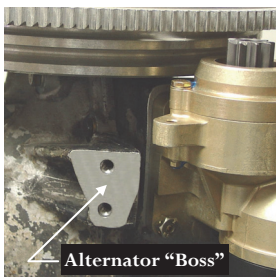
## L-40 DIMENSIONS



## GETTING TO KNOW YOUR ENGINE CASE & RING GEAR SUPPORT

Every L-40 Alternator from B&C Specialty Products comes with one of two types of brackets, belt tension arm, appropriate installation hardware, and a high-performance belt. Here are a few tips to assist you in determining which mounting bracket your engine needs, and the size belt required.

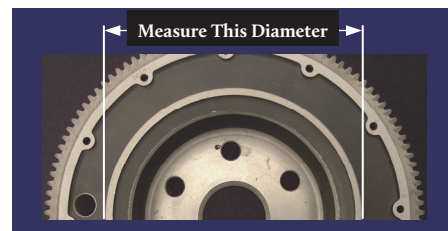
**Brackets:**  
Most Lycoming engine cases since the mid-



1960's have had provision for generator or alternator mounting in the form of a machined pad (or "Boss"). This area is adjacent to the pad for the starter, and contains two threaded holes for bolts securing a U-shaped alternator bracket.

In contrast, many engine cases produced prior to the mid-1960's (and a few specific models of newer engines) lack provision for generator or alternator mounting. For these applications, a special alternator bracket is needed, which attaches to the engine using the front two engine case half bolts — hence the term, "Case Mount."

**Belts:** Determining the size belt you will need can be extrapolated by measuring the outside diameter of the pulley on the ring gear support assembly (aka. "flywheel"). Two pulley sizes are possible — either 7 1/2" or 9 3/4" — depending on when the engine was manufactured.



## EXTRA STEPS FOR EXTRA LONGEVITY AND VALUE

We're admittedly particular about the quality and durability of our products. In fact, we're not averse to taking extra steps — even "hidden" steps that others can quietly neglect — to insure high quality and a long service life.

For example, every B&C alternator rotor is dynamically balanced on our computerized, two-plane balancing machine to very precise tolerances. Others in the industry don't take this step — the machine itself represents a considerable in-



vestment; the operator must be carefully trained; and the time devoted to every rotor represents an additional overhead expense.

Why do we bother?

Simple — balancing significantly extends the life of the alternator. Just as a wheel spins with less wear and less vibration when it has been balanced, so too does an alternator rotor. And that leads to better service over time. Isn't that what "value" is all about?