# & C ALTERNATORS

### **B & C LIGHTWEIGHT ALTERNATORS**

### L-40 ALTERNATOR

The L-40 is a high-performance belt-driven 40 amp alternator for Lycoming engines. Designed to meet the rigorous demands of weight-sensitive homebuilt designs, without sacrificing reliability, the L-40 alternator features a precision-balanced rotor, sealed heavy-duty ball-bearings and 2 internal cooling fans. Weighs 6.1 lbs. and measures 3.9" (diameter) x 5.6" (length). Also

includes mounting hardware, belt tension arm, and belt. Applicable to Lycoming O-235 through IO-720 engines.

L-40 Boss Mount (Wide Deck engine) .......P/N 07-06815 L-40 Case Mount (Narrow Deck engine), w/ B&C Starter P/N 07-06810

L-40 requires an external voltage regulator - see BELOW

L-40 alternators require external regulators - use: P/N 07-06742 (LR3C) for 14V, P/N 07-06786 (LS1A) for 28V



### **B & C BC462-H ALTERNATOR**

The high-performance spline-driven alternator from the company that pioneered the spline-driven alternator over 20 years ago! The BC462-H mounts on a standard AND20000-spec accessory pad, and offers robust performance with a rated output of 35 to 45 amps @ cruise RPM. Every BC462-H features

a CNC machined billet aluminum mounting flange for superior durability, heavy-duty sealed ball bearings, two internal cooling fans, a precision dynamically-balanced rotor (a B&C quality essential), and a special "shear section" drive coupling. Suitable for 14 volt or 28 volt applications, the BC462-H is designed for aircraft-style external control, and may be used as either a Primary or a Standby Alternator, depending on the electrical system configuration (see note below). Includes mounting gasket and pre-wired field connector assembly. Weight: 6.75 lbs.

P/N 07-17985

Note: L-40, BC460-H, BC410-H, and BC462-H alternators require external regulators - use: P/N 07-06742 (LR3C) for 14V Primary, P/N 07-06786 (LS-1A) for 28V Primary, P/N 07-03461 (SB1B-14) for 14V Standby, and P/N 07-03462 (SB1B-28) for 28V Standby.



BC410-H ALTERNATOR
The BC410-H is the original high-performance spline-driven alternator that mounts on a standard vacuum pump accessory pad. It may be used either as a primary or a stand-by alternator for a nominal output of 20 to 30 amps, depending on engine RPM. Designed for many hours durable service, the BC410-H features a dynamically balanced rotor,

heavy-duty sealed ball-bearings, 2 internal cooling fans, and a special "shear section" designed into the drive coupling. The BC410-H is externally-regulated, and may be used in either 14 and 28 volt homebuilt aircraft using our LR3C-14 (14V), LS-1A (28V), or SB1B (14V or 28V) Controllers. Measures 4.6" (diameter) and 6.0" (length), and weighs 5.75lbs. The BC410-H will clear a stock tachometer cable on Lycoming engines, as well as B&C Oil Filter Adapters ... P/N 07-06771

# LR3C AND LS-1A LINEAR CONTROLLERS (REGULATORS)



P/N 07-06742

The LR3C and LS-1A are more than your typical regulators; more accurately, they are alternator controllers. Each device combines a essential functions in one physical container—linear ("quiet") regulation, solid-state over-voltage protection, and low-voltage monitoring and warning. This makes possible sophisticated and a solid part of the protection of th sible sophisticated, space-saving, and cost-

effective alternator control for homebuilt aircraft, while also improving safety of flight. The LR3C-14 may be used with 14 volt externally regulated alternators, while the LR3C-28 may be used with OEM-type, 28 volt externally regulated alternators. The LS-1A permits the use of B&C alternators in a 28 volt electrical system. The LR3C and the LS-1A weigh approximately 9 ounces each, and are intended for circuit type "B" (one field lead grounded directly) alternator systems.

LR3C-14 Regulator/Controller (14V).......P/N 07-06742 LS-1A Regulator Controller (28V, B&C alternator)

P/N 07-06786

### **BC460-H ALTERNATORS**

Introducing the "Next Generation" 60 amp Alternator that saves both weight AND money – without sac-rificing performance or reliability. The BC460-H fea-tures heavy-duty sealed ball bearings, two internal cooling fans, and a precision dynamically-balanced rotor (rare in the industry, but standard on every

B&C!). Additionally, it has three attachment points for stable mounting, and we uniquely modify the BC460-H for use with a more sophisticated, aircraft style, external voltage regulator with over-voltage protection. The BC460-H may be used in either a 14 volt or 28 volt electrical system, and includes your choice of Boss (Wide Deck) or Case (Narrow Deck) mounting brackets, attachment hardware, belt tension arm, high-performance belt, and pre-wired field connector assembly. Weight: 7.1 lbs.



### **BC433-H GEAR DRIVEN** ALTERNATOR WITH PMR3A

The BC433-H is a 30 amp 14V gear-drive alternator for Continental engines (C-75 through O-300). Featuring a unique brushless design, with a billet

Featuring a unique brushless design, with a billet aluminum mounting flange and heavy-duty ball bearings, the BC433-H is an ideal choice for a variety of homebuilt designs. Weighs 4.4 lbs. and measures 4.1" (diameter) x 3.75" (length). Also includes a matching PMR3A Regulator and 505-1 Over-Voltage Protection kit. Sold without the Continental drive gear assembly (customer supplied), and requires the latest revision of the Hub (P/N 07-01327) and Retainer (P/N 07-01328). B&C has a limited supply of used drive gear assemblies, available at additional cost supply of used drive gear assemblies, available at additional cost. 

Generator Coupling (Cont. P/N: 653983)....P/N 07-01327 Generator Retainer (Cont. P/N: 653982) ... P/N 07-01328



### **SD-8 ALTERNATOR** & REGULATOR

The SD-8 is a lightweight, spline-driven 14V alternator system for aircraft with an available vacuum pump drive pad. Features an ultra-reliable, brushless design, with a billet aluminum mounting flange and sealed heavy-duty ball bearings. With

a nominal output of 8 amps, the SD-8 alternator is adequate for many day-VFR applications, and may be used as a backup power source on a variety of homebuilt aircraft. The SD-8 is a long-time favorite of top aerobatic pilots around the world. Weighs 2.9 lbs. and measures 3.5" (diameter) x 4.6" (length)......P/N 07-06770

# 200G ALTERNATOR & REGULATOR



The 200G is a 12 amp 14V gear-drive alternator for Continental engines (C-75 through O-300). Features a ultra-reliable, brushless design, with a billet aluminum mounting flange and heavy-duty ball-bearings. Used in the prototype Vari-Eze, as well as many Cassuts, Q-200s, and other homebuilt aircraft, the 200G has been in production with many systems still in service. With a nominal

for over 30 years, with many systems still in service. With a nominal output of 12 amps, the 200G will support a modest night-VFR-night system. Measures 4.4" (diameter) and 3.8" (length), and weighs 3.4 lbs. Also includes a matching PMR1C Regulator and 504-1 Over-Voltage Protection kit. Sold without the Continental drive gear assembly (customer supplied; or purchased at additional cost). Gear assembly must be installed by B&C - send to Aircraft Spruce for installation. 200G Alternator .......P/N 07-06575 New Drive Gear.....P/N 07-06500

# **B&C PERMANENT MAGNET ALTERNATOR OVER-VOLTAGE (PM/OV) KITS**



The PM/OV Kit is designed to provide over-voltage protection to homebuilt aircraft electrical systems using a permanent magnet alternator. Féatures a solid-state "crowbar" over-voltage protection

module, relay, filter capacitor, panel-mount warning lamp, and wire terminals. Included with all new B&C Permanent Magnet Alternator systems.

504-1 20A PM/OV Kit (14 Volt)......P/N 08-00658 504-2 20A PM/OV Kit (28 Volt)......P/N 07-00708