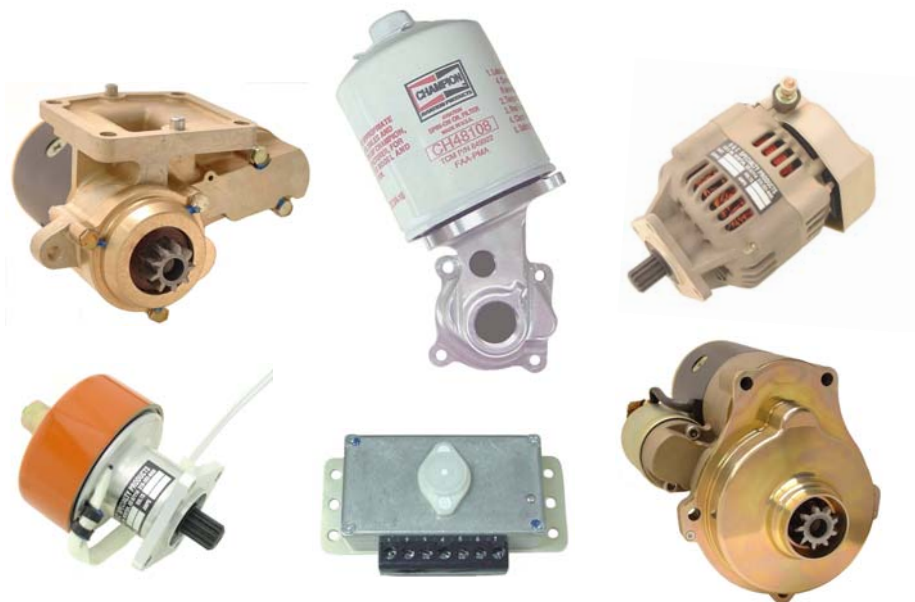




Celebrating 28 Years of Innovation
Established 1980

2008 CATALOG



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THE B&C STARTER FOR LYCOMING ENGINES

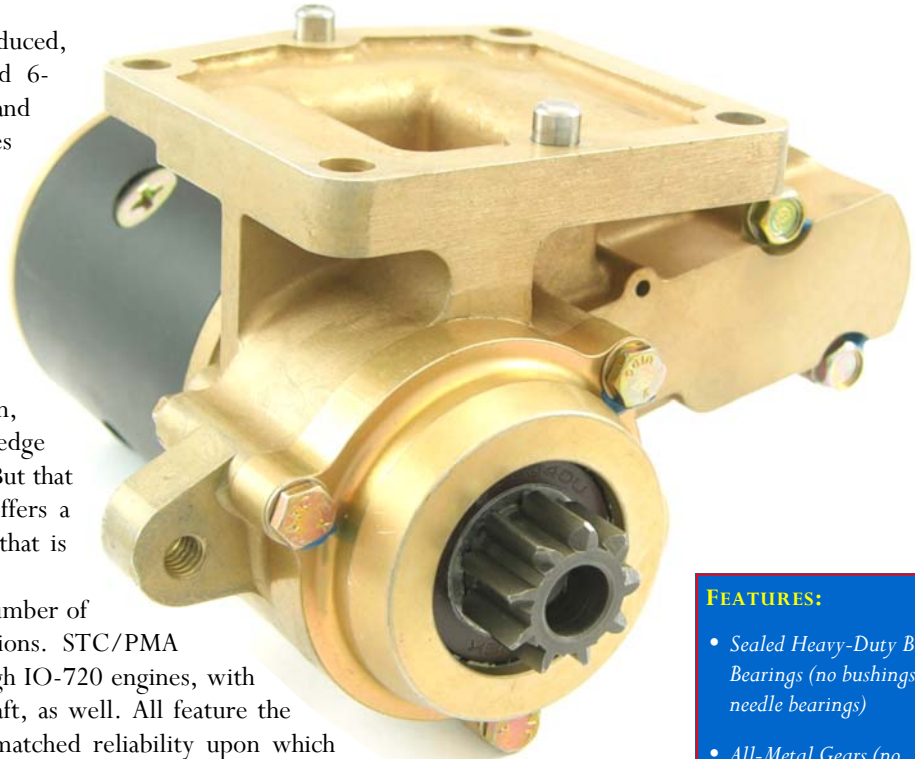
The Original Lightweight Starter

Imitated—but never equaled. The B&C Starter for Lycoming engines is the original lightweight alternative. Introduced over 15 years ago, this same design has provided dependable service for thousands of satisfied customers—and it remains the benchmark of reliability and genuine value.

When the B&C Starter was introduced, the typical OEM starter for 4- and 6-cylinder engines weighed 17.2 lbs. (and the OEM unit for 8-cylinder engines tipped the scales at 34.5 lbs!). In contrast, the B&C Starter weighed only 10.2 lbs. and eliminated the troublesome Bendix drive—all while providing greater torque than either of the OEM units.

Of course, other lightweight starters have joined the market since then, and we'll be the first to acknowledge there are cheaper starters to be had. But that cuts both ways. Proven reliability offers a better value in the long term—and that is our specialty.

The B&C Starter is available in a number of configurations to fit varied applications. STC/PMA approved on Lycoming O-235 through IO-720 engines, with models available for homebuilt aircraft, as well. All feature the same uncompromised value and unmatched reliability upon which B&C has built its reputation. Ask anyone who has one and they'll tell you: nothing else measures up to a B&C.



FEATURES:

- Sealed Heavy-Duty Ball Bearings (no bushings or needle bearings)
- All-Metal Gears (no plastic gears of any kind)
- Electro-Mechanical Pinion Actuation (no Bendix drive)
- Efficient Series-Wound Motor (no permanent magnet motor)

BC315-100-1 (STC/PMA)	\$580	BCS206-122-12 (HOMEBUILT)	\$550
BC315-100-2 (STC/PMA)	\$580	BCS206-149-12 (HOMEBUILT)	\$550
BC315-100-3 (STC/PMA)	\$610	BCS206-122-24 (HOMEBUILT)	\$580
BC315-100-4 (STC/PMA)	\$610	BCS206-149-24 (HOMEBUILT)	\$580

FOR COUNTER-ROTATING VERSIONS OF THE ABOVE - ADD \$82

APPLICATION GUIDE

The B&C Starter for Lycoming engines is available in 16 configurations to suit a variety of applications. Configuration options include—12 or 24 volts; 122 or 149 ring gear teeth; standard- or counter-rotating; STC/PMA or homebuilt. All feature the same “No Compromises” construction that has made the B&C Starter the benchmark of long-term reliability and genuine value.

VOLTAGE	NUMBER OF RING GEAR TEETH	STC/PMA MODEL NUMBER	HOMEBUILT MODEL NUMBER	
12	122	BC315-100-1	BCS206-122-12	STANDARD ROTATION
12	149	BC315-100-2	BCS206-149-12	
24	122	BC315-100-3	BCS206-122-24	
24	149	BC315-100-4	BCS206-149-24	
12	122	BC315-100-5	BCS206-122-12 C/R	COUNTER-ROTATING
12	149	BC315-100-6	BCS206-149-12 C/R	
24	122	BC315-100-7	BCS206-122-24 C/R	
24	149	BC315-100-8	BCS206-149-24 C/R	

THE B&C STARTER FOR CONTINENTAL ENGINES

Better by Design

The B&C Starter for Continental engines (C-75, C-85, O-200, and O-300-A, -B, and -C) solves all the problems that other starter designs have had—worn-out clutches, broken pinions, nagging oil leaks, and catastrophic failure modes. Featuring the durability of all-steel gears and heavy-duty ball-bearings, and the efficiency of a high-torque series-wound motor, the B&C Starter for Continental engines provides greater starting torque, while saving 4.3 to 5.2 lbs. over the old key-type and pull-cable type starters (respectively).

Since its introduction in 1994, the B&C Starter for Continental engines has established an impressive service record as the **ONLY** starter design on the market that has provided reliable, long-term service for these engines. In fact, Teledyne-Continental Motors equips all factory-new IO-240 engines exclusively with the B&C Starter. Many engine shops and flight schools use this Starter exclusively, as well, due to its proven reliability and long service life.

The B&C Starter for Continental engines is STC-PMA approved for use in certificated aircraft, and is available with or without the STC. Two installation kits are also available—one for replacing a key-type starter, the other for replacing a pull-cable type starter.

If you are replacing a key-type starter, you will need Installation Kit 501-1. Before installing the BC320, a needle bearing will need to be removed from your engine (figure 1 below). To aid in removing this needle bearing, you may purchase Needle Bearing Removal Tool Kit 501-2 for \$100. You may return this tool kit when finished and be refunded \$80. If you are replacing a pull-cable starter, you will need Installation Kit 501-3. Before installing the BC320, you will need to cut off the 9/16" steel shaft that is installed in your engine case (figure 2 below).

The B&C Starter for Continental engines: proven performance, unmatched reliability—by design.

FEATURES:

- Sealed Heavy-Duty Ball Bearings
- All-Metal Gears
- Electro-Mechanical Pinion Actuation
- Efficient Series-Wound Motor
- Self-Contained Gear

BC320-1 (STC/PMA)
BC320-2 (STC/PMA) - C/R
BC320-3 (STC/PMA) - 24V
BC320-H (HOMEBUILT)

\$798	501-1 INSTALL KIT—KEY TYPE	\$20
\$880	501-2 BEARING REMOVAL TOOL KIT	\$100
\$880	501-3 INSTALL KIT—PULL-CABLE TYPE	\$60
\$750		

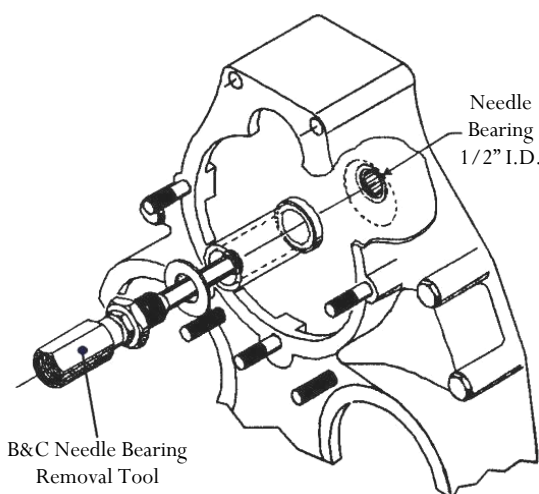


FIGURE 1

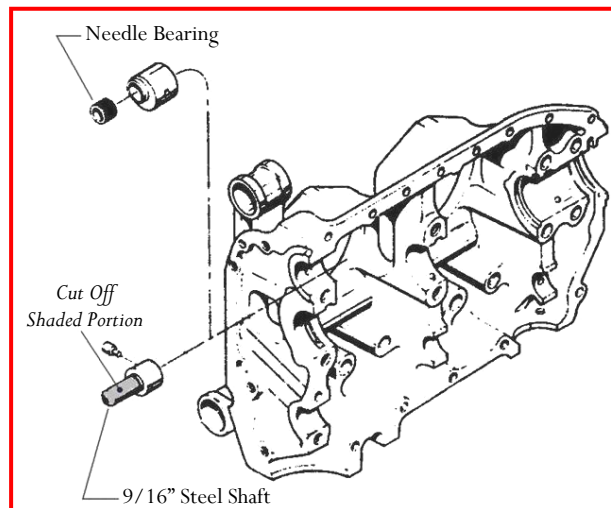


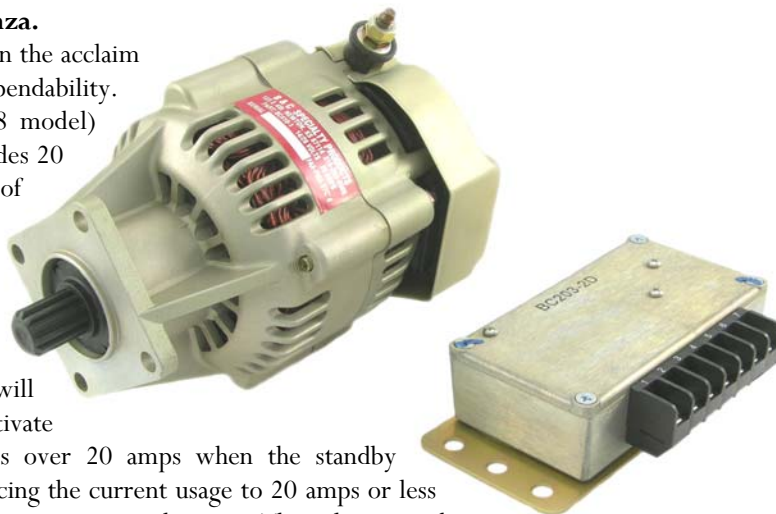
FIGURE 2

B&C STANDBY ALTERNATOR SYSTEMS

Reliable Standby Electrical Power for the Bonanza.

The B&C Standby Alternator system continues to earn the acclaim of Bonanza owners for its ease of operation and dependability. STC-PMA approved for installation on the J35 (1958 model) through the present-production A36, this system provides 20 amps of power to support continued flight in the event of primary alternator failure. Once activated, it operates in the background, automatically signaling its operation to the pilot through a panel-mounted annunciator light (which also doubles as a standby alternator load monitor).

If the primary alternator fails in flight, the controller will sense the drop in system voltage and automatically activate the standby alternator. If the current requirement is over 20 amps when the standby alternator is activated, the annunciator will flash. Reducing the current usage to 20 amps or less will cause the annunciator to cease flashing and illuminate in a steady state. The pilot may choose equipment needed for the given flight conditions by simply keeping the total load below the flashing point of the annunciator. This will reserve battery energy for transient loads, (gear, flaps, landing lights, etc) during approach. Loads may be beyond the flashing point of the annunciator for up to five (5) minutes without damaging the standby alternator.



BC410 & CONTROLLER (STC-PMA)	\$2000	EL PANEL—NEW, EXCHANGE ('84 & LATER A36/B36TC)	\$495
INSTALLATION KIT 410-500-3-1 (28V)	\$435	EL PANEL—NEW, EXCHANGE ('72-'83 A36; '70-'94 F33A)	\$495
INSTALLATION KIT 410-500-3-2 (14V)	\$435	A/C CASTING MODIFICATION (STC-PMA)	\$150

Now Available—the B&C Standby Alternator System for the Cessna 210 Series.

Get the quality and reliability you expect in a standby electrical system from B&C Specialty Products. Replace the OEM standby generator on your 210 with the standby alternator system with proven performance on hundreds of Bonanzas and Mooney Ovations over the past eight years. STC-PMA approved for the Cessna 210L, 210M, 210N, T210L, T210M, T210N, and P210.

BC425 AND CONTROLLER (STC-PMA)	\$2200
INSTALLATION KIT 425-502-1 (28V)	\$435



Your Piper Never Had It So Good.

Owners of Piper PA32, Cherokee Six, Lance and Saratoga aircraft (14 or 28 volt) can now enjoy the peace-of-mind of an STC-PMA standby electrical system, also—all with superior reliability and ease-of-use.

The B&C Specialty Products Standby Alternator system for Piper aircraft follows our proven systems used on the Beech/Raytheon Bonanzas, Mooney Ovation, and Cessna 210s. In operation, the system functions in the "background" until needed, constantly monitoring your aircraft's electrical

system voltage. If the primary alternator fails in flight, the controller will sense the drop in system voltage and automatically energize the Standby Alternator, providing 20 amps of power to support continued flight.

For PA32's equipped with O-540-E4B5, IO-540-K1A5, or IO-540-K1G5 engines, a Lycoming hydraulic pump drive adapter must be purchased separately and installed on the accessory case. The vacuum pump is moved to this new location to allow the Standby Alternator to be installed on the vacuum pump accessory pad. On IO-540-K1A5D and IO-540-K1G5D engines, the accessory case must be removed and an accessory drive gear installed in the existing machined accessory drive pad. The Standby Alternator is installed in this location and the vacuum pump need not be moved.

BC410 & CONTROLLER (STC-PMA)	\$2200
INSTALLATION KIT 410-506-1 (28V)	\$435
INSTALLATION KIT 410-506-2 (14V)	\$435

Don't Compromise Safety of Flight

Unfortunately, many of the primary alternators in use in certified aircraft have poor service records—a reality that is not only frustrating, but also potentially dangerous. Add to this the fact that our aircraft have become increasingly more dependent on electricity in the past 10 years, and you'll see why the B&C Standby Alternator system is the most important item that can be added to your aircraft to improve YOUR SAFETY. Time proven since 1995, the B&C standby system now comes as standard equipment on every new Raytheon Bonanza, Cirrus SR20 & SR22, and Mooney Ovation. Why compromise, when you can improve your safety with the B&C Standby Alternator?

B&C PRIMARY ALTERNATOR SYSTEMS

At Last—A Dependable, Lightweight Alternator for the PA-18/19 SuperCub!

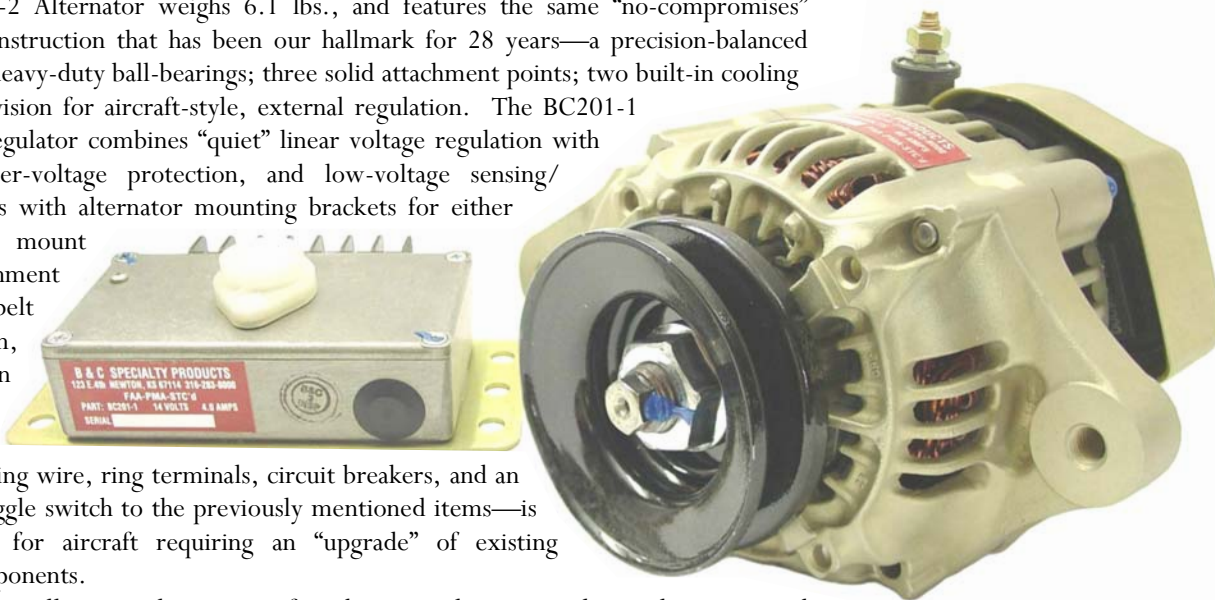
B&C Specialty Products is pleased to announce that we have received FAA STC-PMA approval for installation of the BC400 Alternator System on all PA-18/19 aircraft in both the “Standard” and “Restricted” categories.

The BC400-2 Alternator weighs 6.1 lbs., and features the same “no-compromises” design and construction that has been our hallmark for 28 years—a precision-balanced rotor; sealed heavy-duty ball-bearings; three solid attachment points; two built-in cooling fans; and provision for aircraft-style, external regulation. The BC201-1

Controller/Regulator combines “quiet” linear voltage regulation with solid-state over-voltage protection, and low-voltage sensing/warning. Ships with alternator mounting brackets for either Boss or Case mount engines, attachment hardware, belt tension arm, and belt. An expanded installation

package—adding wire, ring terminals, circuit breakers, and an “ON-OFF” toggle switch to the previously mentioned items—is also available for aircraft requiring an “upgrade” of existing electrical components.

Note: This installation applies to aircraft with previously existing electrical systems, and oil coolers mounted on the aft engine baffle only. Aircraft otherwise equipped will require field alteration and FAA approval; or modification per previously existing STC.



BC400-2 ALTERNATOR (BOSS MOUNT) AND BC201-1 REGULATOR (STC-PMA) \$737.00

INCLUDES INSTALLATION KIT 400-500-3

BC400-2 ALTERNATOR (CASE MOUNT) AND BC201-1 REGULATOR (STC-PMA) \$827.00

INCLUDES INSTALLATION KIT 400-500-4

BC400-2 ALTERNATOR (BOSS MOUNT) AND BC201-1 REGULATOR (STC-PMA), \$1072.00

WITH ELECTRICAL PACKAGE, INCLUDES INSTALLATION KIT 400-500-1

BC400-2 ALTERNATOR (CASE MOUNT) AND BC201-1 REGULATOR (STC-PMA), \$1162.00

WITH ELECTRICAL PACKAGE, INCLUDES INSTALLATION KIT 400-500-2

APPROVED MODELS

AIRPLANE MAKE	AIRPLANE MODEL	SPEC. NUMBER	AIRPLANE MAKE	AIRPLANE MODEL	SPEC. NUMBER
Piper	PA-18	1A2	Piper	PA-18AS “135”	1A2
	PA-18S			PA-18 “150”	
	PA-18 “105” (Special)			PA-18A “150”	
	PA-18S “105” (Special)			PA-18S “150”	
	PA-18A			PA-18AS “150”	
	PA-18 “125” (Army L-21A)			PA-19 (Army L-18C)	
	PA-18S “125”			PA-19S	
	PA-18AS “125”				
	PA-18A “135” (Army L-21B)		Piper	PA-18A (Restricted)	AR-7
	PA-18A “135”			PA-18A “135” (Restricted)	
	PA-18S “135”			PA-18A “150” (Restricted)	

ALTERNATORS

L-60 and L-40 Belt-Drive Alternators



The L-60 and L-40 Alternators from B&C Specialty Products are high-performance, belt-driven alternators for Lycoming engines that make ideal power sources for aircraft requiring ample electrical output, modest weight, and exceptional reliability. Weighing just 8.5 lbs. and 6.1 lbs., respectively, both are produced from all NEW components (absolutely NO remanufactured content), and feature sealed heavy-duty ball-bearings and built-in cooling fans to insure trouble-free service that gives you the best value for the long term.

There are similar-looking units on the market, but the similarity begins and ends there. We dynamically-balance our alternator rotors to promote good bearing and bracket life. We uniquely modify each alternator for use with a more sophisticated, aircraft-style, external voltage regulator with over-voltage protection (such as our LR3C-14 or LS-1A), instead of leaving in place an internal regulator better suited for automobiles. And on the L-40, we add a third attachment point to insure solid, stable support (look closely—many of the “look-alike” competing alternators only have two attachment points).

Available for both 14 volt and 28 volt applications, the L-60 and L-40 Alternators come complete and ready to install, with either Boss or Case mounting brackets, belt tension arm, high-performance belt, and mounting hardware.

L-60 ALTERNATOR, 60 AMPS, W/ BOSS MOUNT BRACKET (HOMEBUILT)	\$595
L-60 ALTERNATOR, 60 AMPS, W/ CASE MOUNT BRACKET (HOMEBUILT)	\$685
L-40 ALTERNATOR, 40 AMPS, W/ BOSS MOUNT BRACKET (HOMEBUILT)	\$409
L-40 ALTERNATOR, 40 AMPS, W/ CASE MOUNT BRACKET (HOMEBUILT)	\$499

SD-20 Alternator

The SD-20 is a 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 rated output of 20 amps @ 3500 alternator RPM.

Constructed of all NEW materials (with absolutely NO “remanufactured” content), the SD-20 is designed for durable service, with heavy-duty sealed ball-bearings, two cooling fans, a dynamically balanced rotor, and a special “shear section” designed into the drive coupling. The SD-20 is available for both 14 volt and 28 volt applications, and is externally-regulated. It may be appropriately matched with our LR3C, LS-1A, or SB1B Controllers (depending on your application and electrical system configuration).

Measuring 4.6" wide and 6" deep, and weighing only 5.75 lbs., the SD-20 will clear the tachometer cable and oil filter on stock Lycoming engines.



SD20 ALTERNATOR, 20 AMPS (HOMEBUILT)	\$695
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ALTERNATORS

BC433-H 30 Amp Gear-Drive Alternator for the Continental Engines (C-75 through O-300).

After many customer requests for a gear-drive alternator for Continental engines with higher output, B&C Specialty Products is pleased to present the BC433-H. Weighing only 4.4 lbs., and measuring 4" in diameter and 3.7" in installed length, the BC433-H alternator features a billet aluminum mounting flange, built-in cooling fins, and an innovative three-phase design that creates 30 amps at cruise RPM. Ships with a matching 14v three-phase regulator.

The BC433-H is sold less the Continental drive gear assembly (which is usually customer supplied), and requires the latest revision of the Hub (P/N 653983) and Retainer (P/N 653982). B&C occasionally has a limited supply of used drive gear assemblies, available at additional cost—please call for price and availability.

NOTE: the BC433-H must be purchased with PM/OV Kit 505-1 (see pg. 8), which is designed to provide vital over-voltage protection for aircraft electrical systems.



BC433-H ALTERNATOR, 30 AMPS (HOMEBUILT, LESS GEAR) \$530

200G 12 Amp Alternator for the Continental Engines (C-75 through O-300).

First introduced by B&C Specialty Products in 1980, the 200G has provided reliable service for thousands of customers. This gear-driven alternator for the Continental engines provides 12.8 amps @ 4500 alternator RPM, while weighing only 3.4 lbs.—a savings of 8 lbs over the OEM generator. Featuring a unique permanent magnet design, the 200G uses heavy-duty sealed ball bearings for long life, and a mating flange machined from solid billet aluminum for superior strength. Ships with a matching regulator.

This alternator is sold without the Continental alternator gear assembly, which is customer supplied and installed by B&C Specialty Products as part of the cost of the new unit.

NOTE: The 200G must be purchased with PM/OV Kit 504-1 (described on page 8).



200G ALTERNATOR, 12 AMPS (HOMEBUILT, LESS GEAR) \$410

SD-8 Alternator

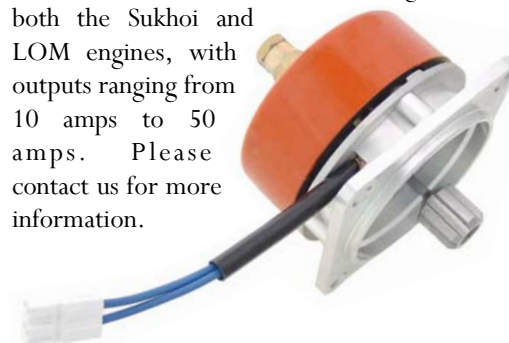
The spline-driven SD-8 alternator offers the benefits of an exceptionally lightweight alternator, and a design with proven durability in the rugged world of aerobatic aircraft. Weighing just 2.9 lbs., with a rated output of 8.4 amps @ 3500 alternator RPM, the SD-8 may be mounted on either the vacuum pump accessory pad, or on the hydraulic pump pad. It features a strong billet aluminum mounting flange, sealed ball-bearings, and a special "shear section" in the drive coupling. Comes with a matching regulator. NOTE: Must be purchased with PM/OV Kit 504-1 (see page 8).



SD-8 ALTERNATOR, 8 AMPS (HOMEBUILT) \$430

Alternators for Sukhoi and LOM

B&C also offers alternators designed for both the Sukhoi and LOM engines, with outputs ranging from 10 amps to 50 amps. Please contact us for more information.



SK10 FOR M14P, 10 AMPS	\$510
SK35 FOR M14P, 35 AMPS	\$780
SK50 FOR M14P, 50 AMPS	\$820
LOM10 FOR LOM, 10 AMPS	\$520
LOM30 FOR LOM, 30AMPS	\$785

ALTERNATOR CONTROLLERS/REGULATORS

More Than Just Another Regulator

The LR3C Controller combines three essential devices in one physical container, making it a lightweight, space-saving, and cost-effective alternative for any aircraft electrical system, while also improving safety of flight.

First, the LR3C operates as a “quiet,” linear regulator, generating no audio or radio noise (in contrast to switching-type regulators). Second, it provides a vital safeguard for your aircraft electrical system with a solid-state, “crowbar” over-voltage protection circuit. And third, the LR3C Controller functions as an important low-voltage monitoring and warning system.

Available in 14 volt and 28 volt models, the LR3C weighs approximately 9 ounces, and may be mounted on the cockpit side of the firewall. It is also available with an optional battery temperature sensor—ideal for aircraft in colder climates.

LR3C-14 CONTROLLER, 14V (HOMEBUILT) \$228

LR3C-28 CONTROLLER, 28V (HOMEBUILT) \$230



Linear Alternator Control for 28 volt Systems

The LS-1A Controller offers the same features as the LR3C—linear voltage regulation, integral over-voltage protection, and low-voltage monitoring and warning. It has been specially designed, however, to permit the use of our wound-field alternators (i.e. L-60, L-40, SD-20) in a 28v electrical system.

Like the LR3C, the LS-1A weighs approximately 9 ounces, may be mounted on the cockpit side of the firewall, and is available with an optional battery temperature sensor for colder climates.

LS-1A CONTROLLER, 28V (HOMEBUILT) \$268

Standby Alternator Controllers for Experimental Aircraft

The SB1B-14 and SB1B-28 are designed to provide standby alternator control for our SD-20 Alternator in a single bus, single battery electrical system. Both provide linear (“quiet”) voltage regulation, and solid-state over-voltage protection.

The SBK Installation Kit (optional) contains a current sensor, pre-wired “STBY ALT” annunciator light, current limiter, current limiter base, and mounting hardware.



SB1B-14 STANDBY ALTERNATOR CONTROLLER, 14V (HOMEBUILT) \$268

SB1B-28 STANDBY ALTERNATOR CONTROLLER, 28V (HOMEBUILT) \$268

SBK-14 INSTALLATION KIT, 14V (HOMEBUILT) \$278

SBK-28 INSTALLATION KIT, 28V (HOMEBUILT) \$278

On-Board Two History-Making Flights

DID YOU KNOW?



B&C provided Alternators and Regulators for both the Voyager round-the-world flight in 1986—and again on the White Knight high-altitude aircraft, which carried SpaceShipOne aloft for its flights into outer space, in 2004. These history-making projects required mission-critical reliability, and rock-solid performance. We are proud to have been associated with them—and we salute the pilots, engineers, and visionaries that made each of these remarkable achievements possible!

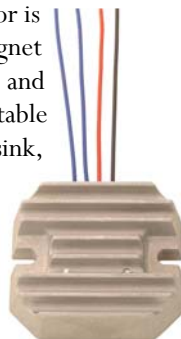
PMR1C Regulator

This simple, reliable rectifier-type regulator is designed for use with B&C permanent magnet alternators, such as the SD-8, 200G, SK-10, and LOM-10. It features a rectifier bridge, adjustable solid-state regulator circuitry, built-in heat sink, and is available in both 14v and 28v models.

NOTE: The PMR-1C is not for use with the BC433-H, or with our wound-field alternators (L-40, L-60, or SD-20).

PMR1C-14 REGULATOR, 14V \$65

PMR1C-28 REGULATOR, 28V \$65



PM/OV Filter and OV Protection Kits

These kits provide crucial over-voltage protection to permanent magnet alternators, such as the SD-8, 200G, SK-10, LOM-10, and BC433-H. Each comes with a clear-yellow warning light that will illuminate if the crowbar over-voltage protection module is tripped (or when the alternator switch is left off), and a filter capacitor to reduce radio noise and enhance regulation.

504-1 PM/OV KIT, 14V \$65

504-2 PM/OV KIT, 28V \$65

505-1 PM/OV KIT, 14V \$65



OIL SYSTEM PARTS (FOR LYCOMING ENGINES)

Clean Oil, No Mess!

The BC700 Oil Filter Adapter for the Lycoming engines makes it possible to enjoy the benefits and convenience of a spin-on oil filter, without complicated hoses and leak-prone fittings. This unit will permit the replacement of the OEM oil screen, the horizontal-mount AC-brand oil-filter adapter, or other "remote" oil filtration systems.

Machined from a solid billet of aluminum for strength and reliability, B&C Oil Filter Adapters have been used extensively in the rigorous world of aerobatic aircraft for many years. Its uniquely-angled geometry clears the tach cable and oil cooler return line, while also negotiating the limited space between the engine and firewall found on many airframes. And unlike a firewall-mounted "remote" oil filtration system, there are no hoses to purchase (or replace) with the B&C Oil Filter Adapter—nor is there a need to reinforce the firewall to support the oil filter mounting bracket. Weighs only 2.25 lbs. (with a CH48108 filter).

Best of all, it is now available in both STC/PMA (O-235 through IO-720 series) and Homebuilt versions. Both feature the same quality workmanship that go into every B&C product.

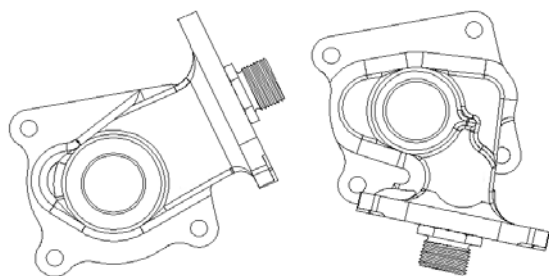
The BC700 Oil Filter Adapter comes ready to install, with new mounting hardware, gasket, and a Champion 48108 filter.

BC700-1 SPIN-ON OIL FILTER ADAPTER (STC/PMA)

\$450

OFA SPIN-ON OIL FILTER ADAPTER (HOMEBUILT)

\$395



BC702-1 Robinson R22 OFA

BC708-2 Maule OFA

BC702 and BC708 Spin-On Oil Filter Adapters

B&C Specialty Products also offers Oil Filter Adapters designed specifically for the Robinson R22 and Maule STL aircraft. Each has a unique geometry that accommodates the Robinson and Maule airframes, while featuring the same construction found on the BC700 (*some purchasing restrictions apply*).

BC702-1 OIL FILTER ADAPTER (STC/PMA) \$789

BC708-1 OIL FILTER ADAPTER (STC/PMA) \$450

BC708-1 OIL FILTER ADAPTER (HOMEBUILT) \$395

BC708-2 OIL FILTER ADAPTER (STC/PMA) \$450

Oil Filter Adapter Spacers and Other Accessories

The BC700-series Oil Filter Adapters may be used with three sizes of spacers—all machined from a solid billet of aluminum—to facilitate installation on a wide range of aircraft. Every spacer kit comes complete with appropriate hardware and an additional mounting gasket.

For engines without a Vern-a-Therm, a plug (P/N: AN909B16) will be required to fill the corresponding opening on the Oil Filter Adapter.

For engines equipped with the Freon-filled tube style Oil Temperature Sender, an adapter (P/N: 700-304) will be required to correctly reposition this device.

FK502-.75 SPACER KIT, .75" \$45

FK502-1.4 SPACER KIT, 1.4" \$50

FK502-2.5 SPACER KIT, 2.5" \$53

700-304 M/F TEMPERATURE SENDER ADAPTER \$10

AN909B16 PLUG, VERN-A-THERM OPENING \$30



VAC-2 Inverted Oil Pickup.

The VAC-2 provides a direct replacement for the Lycoming vacuum pump pad adaptor. Its unique design offers both a standard vacuum pump pad adaptor AND provision for inverted oil pickup. The vacuum pump pad is often used for one of our spline-driven alternators, such as the SD8 or SD20.

Aircraft with oil systems using the standard "T" fitting on the firewall will typically experience a 3 to 5 second drop into the "yellow" oil pressure range after rolling inverted. However with the VAC-2 installed, the oil pressure will have a momentary blip or "wobble" on the oil pressure gauge as the ball valve switches ends. As a result, the engine receives better lubrication and prop surges are lessened.

The VAC-2 comes complete with oil seal installed, gaskets, and an MS20822-10D 90° fitting. Just slip the vacuum pump gear and washer in the VAC-2, and it is ready for installation on the engine. The standard Lycoming vacuum pump gear and washer will fit into the VAC-2 (gear and washer not included).

VAC-2/4 (HOMEBUILT, FITS 4-CYLINDER LYCOMING): \$185

VAC-2/6 (HOMEBUILT, FITS 6-CYLINDER LYCOMING): \$185



ELECTRICAL SYSTEM SUPPLIES

Over/Under-Voltage Sensors

This solid-state device provides a visual indication of abnormal bus voltage via a panel-mounted warning light (included).



When flashing, this light indicates bus voltage greater than 15.5 volts D.C.; when steady, it indicates bus voltage below 12.5 volts D.C.

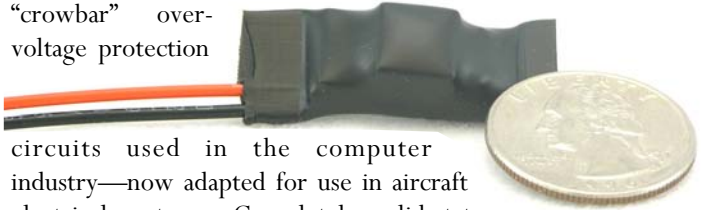


Also includes our S708-2 Miniature Push-Button switch (push-to-test). Available in both 14v and 28v configurations.

BC207-1 OV/LV SENSOR (14v)	\$75.00/EA
BC207-2 OV/LV SENSOR (28v)	\$75.00/EA

Over-Voltage Protection Modules

As introduced by Bob Nuckolls in the AeroElectric Connection, this humble little device is a near-relative of the “crowbar” over-voltage protection



circuits used in the computer industry—now adapted for use in aircraft electrical systems. Completely solid-state, this quarter-sized, sealed module is capable of taking a runaway alternator “off-line” in milliseconds. This same device is used in every 504-1, 504-2, and 505-1 PM/OV Protection Kit sold by B&C. Available for both 14 and 28-volt electrical systems.

OVM-14 OV PROTECTION MODULE, (14v),	\$35.00/EA
OVM-28 OV PROTECTION MODULE, (28v),	\$35.00/EA

Over-Voltage Protection Kits for Permanent-Magnet Alternators are available on page 8.

Electrolytic Filter Capacitors



These computer-grade aluminum electrolytic capacitors can help reduce the distinctive electrical “ripple” introduced into the aircraft bus by permanent magnet alternators. Each are supplied with 10-32 terminal installation hardware. The S8007-1 is rated 10,000uF @ 50VDC; and the S8007-2 is rated 47,000uF @ 16VDC.

S8007-1 FILTER CAPACITOR	\$16.00/EA
S8007-2 FILTER CAPACITOR	\$12.00/EA

Panel-Mount Warning Lamps



Our space-efficient warning lights utilize a replaceable, incandescent “midget flange” lamp with tinted plastic lens. Panel mounting requires a .465 O.D. hole; electrical connections via solder terminals. Available for 14v and 28v systems. Typical applications include: starter-engaged warning; alternator-failure annunciation; canopy ajar indication; and low oil-pressure warning.

S888-1-(X) PANEL-MOUNT WARNING LAMP (SPECIFY LENS COLOR), 14v	\$12.00/EA
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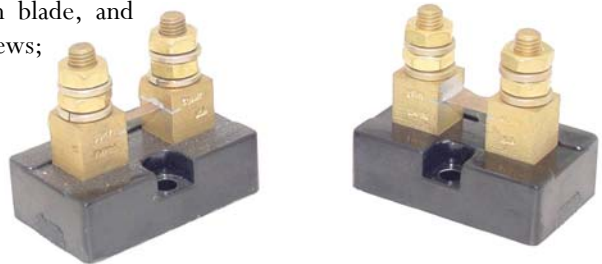
S888-2-(X) PANEL-MOUNT WARNING LAMP (SPECIFY LENS COLOR), 28v	\$12.00/EA
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Colors: *Red* (-2), *Yellow* (-4), *Green* (-5), and *Blue* (-6).

Ammeter/Loadmeter Shunts

These shunts may be used with any conventional Ammeter/Loadmeter marked “for use with 50 m.v. shunt.” Select a shunt to match the output capacity of your alternator (for example: a 40A alternator would generally require a 40A shunt). Robust construction, with solid brass wiring posts (1/4”), brass manganin blade, and Bakelite mounting base. Loadmeter leads attach with 8-32 screws; mounting base measures 1.3” x 2.0”.

Special note: aircraft equipped with an EFIS system will likely utilize a special “current transducer” in lieu of this device. Further details should be available in your EFIS installation documentation, or from the manufacturer of your particular system.



S870-10 10 AMP, 50MV AMMETER SHUNT	\$25.00/EA	S870-60 60 AMP, 50MV AMMETER SHUNT	\$25.00/EA
S870-15 15 AMP, 50MV AMMETER SHUNT	\$25.00/EA	S870-75 75 AMP, 50MV AMMETER SHUNT	\$25.00/EA
S870-20 20 AMP, 50MV AMMETER SHUNT	\$25.00/EA	S870-80 80 AMP, 50MV AMMETER SHUNT	\$25.00/EA
S870-30 30 AMP, 50MV AMMETER SHUNT	\$25.00/EA	S870-85 85 AMP, 50MV AMMETER SHUNT	\$25.00/EA
S870-40 40 AMP, 50MV AMMETER SHUNT	\$25.00/EA	S870-100 100 AMP, 50MV AMMETER SHUNT	\$25.00/EA
S870-50 50 AMP, 50MV AMMETER SHUNT	\$25.00/EA	S870-150 150 AMP, 50MV AMMETER SHUNT	\$25.00/EA

ELECTRICAL SYSTEM SUPPLIES



ANT-1 Transponder Antenna

If you are in need of a well-crafted transponder antenna at a reasonable cost, look no further. This antenna measures 3.0938" long, and installs in a .505" mounting hole. BNC female coaxial connection. Features Teflon dielectric and antenna support, with hex nut, internal-tooth lockwasher, and gasket.

ANT-1 TRANSPONDER ANTENNA \$32.50/EA

RG400 Coaxial Cable ★MIL-SPEC★

Excellent quality cable for your \$\$\$ radio gear. Performance equals that of the solid center-conductor RG-142, but with a stranded center-conductor—AND a Teflon dielectric layer with two outer layers of silver-plated copper braid. Connectors sold separately. Qualified to MIL-C-17/128-RG400.



RG-400 COXAIAL CABLE [1 TO 49 FEET] \$1.85/FT
RG-400 COAXIAL CABLE [50+ FEET] \$1.65/FT

BNC Male Connector ★MIL-SPEC★

Genuine AMP mil-spec BNC male connector for RG-400 coax. Dual-crimp connection, featuring a silver-plated brass coupling, gold-plated brass center contact, and Teflon dielectric material. Qualified to MIL-C-39012/16. Superior quality.



S605CM-A BNC MALE CONNECTOR \$4.95/EA

BNC Female Connector ★MIL-SPEC★

This mil-spec BNC female connector from Amphenol will be useful wherever you need a "maintenance friendly" coax run. Features a dual-crimp design, with silver-plated brass bayonet coupling, gold-plated phosphorus bronze center contact, and Teflon dielectric. Qualified to MIL-C-39012/17.



S605CF-A BNC FEMALE CONNECTOR \$5.95/EA

Need a crimping tool for BNC-type connectors? See our RCT-2 BNC crimping tool on page 20.

BNC Bulkhead Female Connector ★MIL-SPEC★

AMP mil-spec BNC bulkhead-mounted female connector for RG-400 coax. Dual-crimp connection design, featuring a nickel-plated brass coupling, gold-plated copper center contact, and Teflon dielectric. Qualified to MIL-C-39012/19.



S605BF-A BNC BULKHD FEMALE CONNECTOR \$6.25/EA

BNC Right Angle Adapter

A unique and useful item, suitable for use with RG-400. This right-angle "adapter" features BNC male and BNC female ends, permitting sharp 90-degree cable turns from radio gear and other devices where space is limited. Note: this item is not a crimp-on connector.



S605RA BNC RIGHT ANGLE ADAPTER \$5.50/EA

Our Commitment to You

- Offer the Best Products
- Deliver the Best Quality
- Provide the Best Support

*For 28 Years (and counting) our goal has remained the same—
We are here to serve you!*

ELECTRICAL SYSTEM SUPPLIES

Circuit Breakers, 1A through 20A

These circuit breakers from Klixon® combine compact size with manageable cost. Body measures .750"H x .562"W x 1.400"D. Ships complete with mounting hardware.



CB1 (1 AMP)	\$18.00/EA
CB2 (2 AMP)	\$18.00/EA
CB3 (3 AMP)	\$18.00/EA
CB4 (4 AMP)	\$18.00/EA
CB5 (5 AMP)	\$18.00/EA
CB7.5 (7.5 AMP)	\$18.00/EA
CB10 (10 AMP)	\$18.00/EA
CB15 (15 AMP)	\$18.00/EA
CB20 (20 AMP)	\$18.00/EA

Circuit Breakers, 25A and 30A

Mid-range pull-type circuit breakers with a compact footprint can be tough to find; these two are particularly good values.

The CB25 from Mechanical-Products measures a compact .780"H x .593"W x 1.509"D, while the CB30 from Klixon® is 1.094"H x .750"W x 1.809"D. Both feature screw terminals (supplied). Includes mounting hardware.



CB25 CIRCUIT BREAKER (25 AMP)	\$50.00/EA
CB30 CIRCUIT BREAKER (30 AMP)	\$55.00/EA

Circuit Breakers, 40A and 50A

If you have a need for larger amperage circuit breakers, and a Current Limiter doesn't suit your application, then these circuit breakers from Mechanical-Products are good candidates. Both circuit breakers measure 1.094"H x .750"W x 1.860"D, and connect via screw terminals (supplied). Ships complete with mounting hardware.

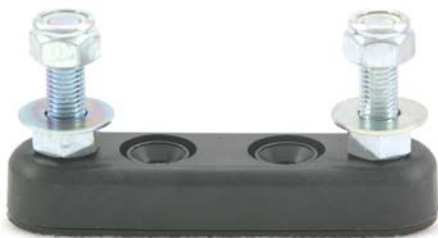


CB40 CIRCUIT BREAKER (40 AMP)	\$85.00/EA
CB50 CIRCUIT BREAKER (50 AMP)	\$85.00/EA

ANL Current Limiter Base

This molded thermoplastic base secures our ANL Current Limiters (at right) in place, with electrical connections made using .31" studs. Features countersunk #10 mounting holes 1" apart. Ships complete with lock nuts and flat washers. Rated at 120v maximum. Max. torque: 120 inch-lbs.

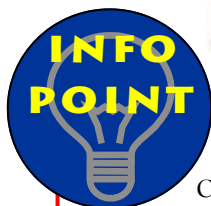
C903-1 CURRENT LIMITER BASE	\$15.00/EA
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ANL Current Limiters, 40A through 130A

Think of these devices as a muscular relative of older, slow-acting fuses. They do require a mounting base (at left), but offer excellent protection against hard electrical faults. Features a silver-plated copper element, visible through a special mica window. Note: these devices cannot be "reset"—replace "blown" units after appropriate diagnostic *post mortem*.

C905-40 CURRENT LIMITER, 40A	\$17.00/EA
C905-60 CURRENT LIMITER, 60A	\$17.00/EA
C905-80 CURRENT LIMITER, 80A	\$17.00/EA
C905-100 CURRENT LIMITER, 100A	\$17.00/EA
C905-130 CURRENT LIMITER, 130A	\$17.00/EA



Why Current Limiters?

Current limiters are effective, economical alternatives to large-amperage circuit breakers used to protect alternator B-lead wiring. More robust than similarly-sized circuit breakers, and less susceptible to "nuisance" tripping, current limiters are capable of withstanding loads approximately 80% BEYOND their rated capacity for an indefinite period of time. They are typically sized 1:1 against the alternator's rated output (i.e. a 40 Amp alternator would require a 40 Amp current limiter). Best of all, the cost of a current limiter and its required mounting base is approximately HALF that of a comparably-sized circuit breaker.



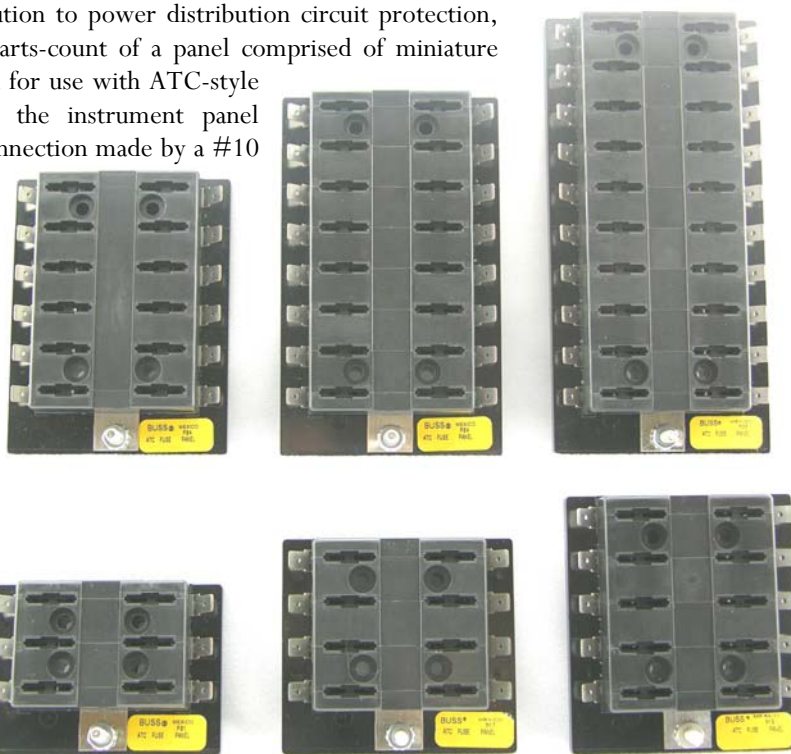
ELECTRICAL SYSTEM SUPPLIES

Fuse Holders, 6-position through 20-position

These fuse blocks offer a low-cost, space-saving solution to power distribution circuit protection, without the expense, fabrication-time, and higher parts-count of a panel comprised of miniature circuit breakers attached to a rigid bus bar. Designed for use with ATC-style fuses, these fuse blocks may be installed below the instrument panel (consuming no panel space), with the main power connection made by a #10 ring terminal, and branch-circuits using .25" Fast-On terminals. Each fuse holder ships with #10-32 hardware (you supply the Fast-On terminals). Available in 6-, 8-, 10-, 12-, 16-, and 20-slot models to suit your particular installation.

Note: while the manufacturer of these devices rates each fuse slot up to 30A, and the main power input up to 100A, we would recommend a more conservative power distribution of no more than 15A continuous per slot, AND no more than 60A TOTAL continuous per fuse block.

FH-6 FUSEBLOCK, 6-SLOT	\$12.00/EA
FH-8 FUSEBLOCK, 8-SLOT	\$15.00/EA
FH-10 FUSEBLOCK, 10-SLOT	\$17.00/EA
FH-12 FUSEBLOCK, 12-SLOT	\$19.00/EA
FH-16 FUSEBLOCK, 16-SLOT	\$25.00/EA
FH-20 FUSEBLOCK, 20-SLOT	\$34.00/EA



Need Fast-On or ring terminals? See page 19. Need a crimping tool? See page 20.

Fuses (ATC-style)

These small fuses fit our Fuse Blocks (above) and ATC-style In-Line Fuse Holder (below).



They are color-coded for easy identification of the amperage rating, and feature tin-plated terminals and an enclosed element (for resistance against vibration and accidental contact). Sold in packages of 5.

S889-1, 1-AMP PLUG-IN FUSE	\$1.50/PKG 5	S889-7.5, 7.5-AMP PLUG-IN FUSE	\$1.50/PKG 5
S889-2, 2-AMP PLUG-IN FUSE	\$1.50/PKG 5	S889-10, 10-AMP PLUG-IN FUSE	\$1.50/PKG 5
S889-3, 3-AMP PLUG-IN FUSE	\$1.50/PKG 5	S889-15, 15-AMP PLUG-IN FUSE	\$1.50/PKG 5
S889-4, 4-AMP PLUG-IN FUSE	\$1.50/PKG 5	S889-20, 20-AMP PLUG-IN FUSE	\$1.50/PKG 5
S889-5, 5-AMP PLUG-IN FUSE	\$1.50/PKG 5	S889-30, 30-AMP PLUG-IN FUSE	\$1.50/PKG 5

Fuse Holders

These small fuse holders allow "in-line" installation of a single fuse. Suited for fast-acting, low-current protection of a single-line circuit (i.e. clock, or dome light). For the ATC-style fuse holder, simply cut the lead wire molded into the housing, install a ring terminal at one end and a butt splice on the other. Not for continuous loads exceeding 20A.

A fuse holder for glass fuses is also available.



IFH-2 IN-LINE FUSE HOLDER, ATC-STYLE	\$3.00/EA
ALSO AVAILABLE—	
HFB-1 IN-LINE FUSE HOLDER, GLASS FUSES	\$7.00/EA

Fusible Link Kits

These kits bring together everything you'll need to build your own fusible links to protect low-power (less than 10A) aircraft systems. Each kit contains 2 feet of silicone-rubber covered fiberglass sleeving, 4 insulated butt splices, and sufficient Tefzel® wire to fabricate four 6" fusible links.



FLK-1 FUSIBLE LINK KIT, 24-20 AWG	\$6.00/EA
FLK-2 FUSIBLE LINK KIT, 20-16 AWG	\$8.00/EA

ELECTRICAL SYSTEM SUPPLIES



Essential/E-Bus Diodes

This is the diode bridge rectifier recommended for use as an Essential/E-Bus normal feed diode in several AeroElectric power-distribution diagrams. The basic D-25 features convenient single hole mounting, .25" Fast-On tab wiring, and requires no electrical insulation of its mounting surface. The larger 221-200 and 221-201 add a heatsink for electrical systems requiring greater heat-dissipation capacity: the 8 watt unit is capable of handling up to 15A maximum; and the 15 watt device up to 25A maximum.

D-25 ESSENTIAL BUS DIODE	\$7.00/EA
221-200 ESSENTIAL BUS DIODE W/ HEATSINK, 8 WATT	\$16.00/EA
221-201 ESSENTIAL BUS DIODE W/ HEATSINK, 15 WATT	\$18.00/EA



Stereo Headset/Mic Jacks and Washers

Standard .205" I.D. headset and microphone jacks used in aircraft radio and intercom systems. Nickel-plated copper alloy bushing. Mounts in a .3750" hole. Supplied with hex nut and flat washer. If your airplane is metal, don't forget to isolate these jacks from airframe ground by means of our extruded insulating washers (1 pair per jack).

S606H HEADSET JACK, STEREO	\$2.50/EA
S606M MIC JACK, STEREO	\$3.75/EA
S892 INSULATING WASHER SET (1 PAIR)	\$0.50/EA

D-sub Pins and Sockets ★MIL-SPEC★

Quality matters...regardless of the size of the part. Our D-sub Pins and Sockets are genuine AMP mil-spec components, with gold over nickel plating—they don't come any better. Conforms to MIL-C-24308/MIL-C-39029.



S604P D-SUB PIN	\$0.30/EA
S604P50 D-SUB PIN, 50 PKG. (.28/EA)	\$14.00/PKG
S604P100 D-SUB PIN, 100 PKG. (.25/EA)	\$25.00/PKG
S604S D-SUB SOCKET	\$0.30/EA
S604S50 D-SUB SOCKET, 50 PKG. (.28/EA)	\$14.00/PKG
S604S100 D-SUB SOCKET, 100 PKG. (.25/EA)	\$25.00/PKG

See our RCT-3 D-sub crimp tool and DSE-1 insertion-extraction tool on page 20.

D-sub Connectors (Plugs & Receptacles, with Backshells)

If your wiring project requires D-sub pins or sockets, you'll also need these connector "bodies" to complete the job. *Note: every plug and receptacle we supply comes with an appropriate backshell and jack screws—everything you'll need except the pins or sockets.*

S8013-9-F D-SUB, 9 POSITION, RECEPTACLE	\$1.25/EA
S8013-9-M D-SUB, 9 POSITION, PLUG	\$1.40/EA
S8013-15-F D-SUB, 15 POSITION, RECEPTACLE	\$2.25/EA
S8013-15-M D-SUB, 15 POSITION, PLUG	\$2.00/EA
S8013-25-F D-SUB, 25 POSITION, RECEPTACLE	\$2.50/EA
S8013-25-M D-SUB, 25 POSITION, PLUG	\$1.60/EA



Dimmers

First described by Bob Nuckolls in *Sport Aviation*—these dimmers represent a significant advance in sophistication and performance when compared to "rheostat" dimmers. Thanks to the use of an adjustable, linear voltage regulator, minor variations in bus voltage no longer appear as flickering panel lights. Dimmer circuit board and heatsink (when applicable) may be mounted where convenient, with the panel control potentiometer installing in a .25" hole. Comes with a complete installation kit—just add wire to suit your installation. Available in a range of sizes, and in both 14v and 28v configurations.



DIM50-14, 5.0A/14V DIMMER INSTALLATION	\$56.00/EA
DIM35-28, 3.5A/28V DIMMER INSTALLATION	\$56.00/EA
DIM30-14, 3.0A/14V DIMMER INSTALLATION	\$47.00/EA
DIM22-28, 2.2A/28V DIMMER INSTALLATION	\$47.00/EA
DIM15-14, 1.5A/14V DIMMER INSTALLATION	\$42.00/EA
DIM10-28, 1.0A/28V DIMMER INSTALLATION	\$42.00/EA
DIM5-14, 0.5A/14V DIMMER INSTALLATION	\$32.00/EA
DIM3-28, 0.3A/28V DIMMER INSTALLATION	\$32.00/EA

ELECTRICAL SYSTEM SUPPLIES

Lighting Equipment

Our Gooseneck Chart Light could be a handy addition to your “Essential-bus” system—there when you need it, but easily kept out of the way when not needed. This light source draws a frugal 0.08 amps at full intensity, and flexes (and stays) as desired to provide illumination for charts and/or the instrument panel during battery-only flight. The gooseneck measures 15.5” in length, and can be detached from its mounting base. The 14v GCL-1 comes with our DIM5-14 Dimmer Assembly; the 24v GCL-2 ships with the DIM3-28 (both described on the preceding page).



GCL-1, GOOSENECK CHART LIGHT KIT (14V)	\$85.00/EA
GCL-2, GOOSENECK CHART LIGHT KIT (28V)	\$85.00/EA

Toggle Switches

Our toggle switches feature full-sized, brass (nickel plate) bat-handle actuators, and brass (nickel plate) bushings. Available in either single-pole or double-pole configurations, both mount in .4688” holes, with electrical connections using .25” Fast-On terminals. Rated at 15A VAC maximum. Single pole switch bodies (behind the panel) measure 1.134”H x .634”W x 1.018”D (including tabs); double-pole switch bodies measure 1.308”H x .750”W x .887”D (including tabs). *Note: every S700-series toggle switch sold by B&C comes furnished with two hex nuts, internal-tooth lockwasher, and a keyway (tabbed) anti-rotation washer.* Special switch face nuts and replacement hardware are available below.

SINGLE POLE



S700-1-1, SINGLE POLE ON-OFF-ON SWITCH	\$5.00/EA
S700-1-2, SINGLE POLE ON-OFF SWITCH	\$5.00/EA
S700-1-3, SINGLE POLE ON-ON SWITCH	\$5.00/EA
S700-1-4, SINGLE POLE (ON)-OFF-(ON) SWITCH	\$5.00/EA
S700-1-5, SINGLE POLE ON-OFF-(ON) SWITCH	\$10.00/EA
S700-1-8, SINGLE POLE (ON)-NONE-ON	\$7.50/EA

DOUBLE POLE



S700-2-1, DOUBLE POLE ON-OFF-ON SWITCH	\$7.50/EA
S700-2-2, DOUBLE POLE OFF-NONE-ON SWITCH	\$7.50/EA
S700-2-3, DOUBLE POLE ON-ON SWITCH	\$7.50/EA
S700-2-5, DOUBLE POLE (ON)-OFF-ON SWITCH	\$15.00/EA
S700-2-7, DOUBLE POLE (ON)-OFF-(ON) SWITCH	\$15.00/EA
S700-2-10, DOUBLE POLE ON-ON-ON SWITCH	\$19.50/EA
S700-2-11, DOUBLE POLE ON-ON-OFF SWITCH	\$19.50/EA
S700-2-50, DOUBLE POLE ON-ON-(ON) SWITCH	\$19.50/EA
S700-2-51, DOUBLE POLE (ON)-ON-OFF SWITCH	\$20.00/EA

*The () above indicates a spring-loaded, momentary action in the position(s) noted.

Need a crimping tool for Fast-On terminals? See our RCT-1 PIDG-style crimping tool on page 20.

S700-series Toggle Switch Face Nuts

If you want to “fancy up” your panel, try our special toggle switch face nuts. Face nuts available in both nickel plate and deluxe flat black. Replacement hex nuts for switches (nickel plate) are also available—just in case you’ve had one develop “legs” during your project!



S700DFN FACE NUT, DELUXE (BLACK)	\$1.00/EA
S700FN FACE NUT, STANDARD (NICKEL)	\$0.30/EA
S700HN HEX NUT (NICKEL)	\$0.25/EA

S700-series Toggle Switch Washers

These special washers keep your toggle switch secure once you’ve installed it. We send these with every toggle switch we sell. The thin internal tooth lockwasher is suited for the forward-face of the instrument panel; the keyway tab washer can be on either side, but needs a small .125” hole for the anti-rotation tab.



S700LW LOCKWASHER, INTERNAL TOOTH	\$0.30/EA
S700KW KEYWAY TAB WASHER	\$0.30/EA

ELECTRICAL SYSTEM SUPPLIES

Miniature Push-Button Switches

Need an "itty-bitty" push-button switch? They don't get much smaller than these two. Useful for a stick- or yolk-mounted press-to-talk switch, or other applications needing space-saving momentary control. The S708-1 has a cad-plated brass bushing, and gold-plated silver internal contacts; mounts in a .1719" hole. The S708-2 features a cad-plated brass bushing, with gold-over-nickel brass internal contacts; mounts in a .2656" hole. Both switches ship with appropriate mounting nuts. Connection via solder terminals.

S708-1 SUB-MINIATURE PUSH BUTTON (SPST) \$6.80/EA
S708-2 MINIATURE PUSH BUTTON (SPST) \$6.80/EA

Starter Push-Button Switch

This push-button switch is perfect for systems where toggle switches replace the OFF-L-R-BOTH-START rotary key-switch. Supplied by B&C with a matching deep-guard bezel to reduce the chances of inadvertent operation. Features a positive-feel action, with zinc mounting bushing, silver-plated brass internal contacts, and silver-plated copper terminals. Solder connection.

S895-1 STARTER PUSH-BUTTON, w/ GUARD \$17.00/EA

Contactors

These devices are suitable for a range of applications in experimental aircraft. The S701-1 and S701-2 contactors may be employed where continuous-duty operation is required (i.e. as a battery master contactor; ground power contactor; alternator disconnect contactor; or hydraulic landing gear system contactor). The S701-2 is appropriate as the cross-feed contactor in a dual alternator system. Each is supplied with spike suppression diode(s). The S702-1 and S811-1 are intermittent-duty devices, for use as starter contactors. Both feature built-in spike suppression diodes, and are capable of powering a "Starter Engaged" warning light in the instrument panel. The S811-1 has been especially selected for use with either of the B&C Starters, and carries a PMA.

S701-1, 4-TERMINAL, CONTINUOUS DUTY CONTACTOR, 12V \$26.00/EA
S701-2, 4-TERMINAL, PREWIRED CROSS-FEED CONTACTOR, 12V \$30.00/EA
S702-1, INTERMITTENT DUTY STARTER CONTACTOR, 12V \$25.00/EA
S811-1, B&C STARTER CONTACTOR, 12V \$40.00/EA

Relays

These compact relays are well-suited for use with OV protection circuits in permanent-magnet alternator systems, such as those from Rotax and Jabiru. Also useful for motor control in flap and trim systems. Both relays are constructed with silver-alloy contact materials, with an expected electrical life of up to 100,000 cycles.

S704-1 20A SPDT SEALED RELAY (12V) \$10.00/EA
S8009 40A SPDT SEALED RELAY (12V) \$10.00/EA

The "Complete" Story

Look closely, and one of the differences you'll notice between B&C and "the other guys" has to do with completeness.

From time to time we'll hear from a builder who bought switches or contactors or similar parts from "the other guys," only to find that they didn't get everything they really needed. Turns out those bargain switches didn't include lock-washers...or anti-rotation tab washers...or button guards; and that cheap contactor didn't include spike-suppression diodes. Those little "extras" cost . . . well, extra.

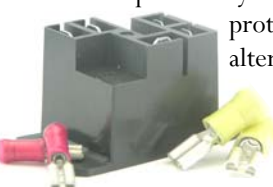
We don't think it should be that way. If it's a part you're going to need in a typical installation, we try to include it.

And that's the "complete" story.

Pressure Switch (SPDT)

At last—a reliable pressure switch at a reasonable price. This switch has a dual-circuit configuration (NO/NC), with a 1/8-27 NPT connection and 8-32 x 1/4 screw terminals (hardware included). Factory set-point is at 4 PSI—suitable for use with a Hobbs meter, an oil pressure warning light, or another similar device.

S8012 PRESSURE SWITCH (SPDT) \$32.00/EA



Solid State Lighting Flasher (Wig-Wag)

Being visible is always good in busy airspace. This heavy-duty 12v flasher is well-suited for use in an economical Wig-Wag recognition lighting system. Features solid-state electronics, with a precise square-wave I.C. controller, contained within a high-temperature plastic enclosure. Rated for a maximum of 150 Watts per side. Connects with .25" Fast-On terminals.

SSF-1 SOLID STATE WIG-WAG FLASHER \$21.00/EA



ELECTRICAL SYSTEM SUPPLIES

Grounding Blocks

Discourage those pesky (and “noisy”) electrical gremlins and ground-loops by using our Ground Blocks as a centralized grounding system. These are hand-made from .04” flat brass stock, sheared to size, with 24 or 48 Fast-On tabs securely soldered into place. Ships complete with installation hardware—brass bolt, nuts, internal-tooth lock washers, and spacer washers to accommodate any thickness of firewall. Most projects will require a single 24-point Ground Block on the cockpit side of the firewall; “loaded” electrical systems may require the 48-point block. A full “firewall ground kit” is also available in two sizes for composite aircraft needing ground points on both sides of the firewall.

GB24, 24-TAB GROUND BLOCK	\$28.00/EA
GB48, 48-TAB GROUND BLOCK	\$37.00/EA
GB24/24, FIREWALL GROUND BLOCK KIT	\$56.00/EA
GB24/48, FIREWALL GROUND BLOCK KIT	\$65.00/EA



Braided Bonding Strap (BBS)

The best way to establish an appropriate electrical pathway for starter/alternator currents to the airframe. Constructed of two layers of woven, tinned copper wire, and high quality ring terminals, our Braided Bonding Straps are electrically equivalent to 2AWG wire, though more flexible. Fabricated to your specifications—minimum length is 4”, maximum length for \$15.00 is 15” . . . add \$1/inch over 15 inches.

BRAIDING BONDING STRAP (BUILT TO ORDER, SPECIFY: TERMINAL-LENGTH-TERMINAL), \$15.00/EA



BBS and SBL Ordering Info

Indicate length from center-to-center of the ring terminals, then specify the size of ring terminals needed in 1/16” increments. Terminal sizes available are -3 (3/16”), -4 (1/4”), -5 (5/16”) and -6 (3/8”). Example: “BBS 4-12-5” would be used to order a 12” Bonding Strap, with 1/4” and 5/16” ring terminals (respectively).

Super-Flex Battery Lead (SBL)

These are a close “cousin” to our Braided Bonding Straps. Electrically equivalent to 4AWG wire, but with the copper wire wrapped in an unusually flexible and durable neoprene jacket. “Super-Flex” Leads are far more “installer-friendly” than conventional battery leads—ideal for tight spaces in your airplane. Available with either BLACK or RED heatshrink to denote NEGATIVE or POSITIVE connections, respectively.

SUPER-FLEX BATTERY LEAD, (BUILT TO ORDER, SPECIFY: TERMINAL-LENGTH-TERMINAL), \$15.00/EA

Sealed RG (Recombinant Gas) Batteries and Battery Chargers

BC102-1 (12V, 7.2AH)	\$38.00
BC102-2 (24V, 7.2AH)	\$78.00
BC103-1 (12V, 12AH)	\$126.00
BC116-1 (12V, 16AH)	\$120.00
BC100-1 (12V, 25AH)	\$150.00
BC100-MJ (12V, 25AH, W/ METAL JACKET)	\$165.00
BC110-1 (12V, 28AH)	\$108.00
BC106-1 (12V, 32AH)	\$120.00
.8ABC CHARGER, .8 AMP (W/ AUTOMATIC CHARGE-FLOAT MODES)	\$80.00
1.2ABC CHARGER, 1.2 AMP (W/ AUTOMATIC CHARGE-FLOAT MODES)	\$85.00



Visit Us on the Web!

www.BandC.info

On-Line Catalog • Secure Ordering



For more detailed information on our Starters, Alternators, Regulators/Controllers, Oil Filter Adapters, and Inverted Oil Pickup, visit our website and click on the “QuickFacts” links.

ELECTRICAL SYSTEM SUPPLIES

Wire, Tefzel® (Conforms to MIL-W-22759/16) ★MIL-SPEC★



M22759/16-2-9 2AWG WHITE	\$4.00/FT	M22759/16-14-2 14AWG RED	\$0.30/FT
M22759/16-4-9 4AWG WHITE	\$3.00/FT	M22759/16-14-5 14AWG GREEN	\$0.30/FT
M22759/16-6-9 6AWG WHITE	\$1.75/FT	M22759/16-14-9 14 AWG WHITE	\$0.30/FT
M22759/16-8-9 8AWG WHITE	\$1.75/FT	M22759/16-16-0 16AWG BLACK	\$0.22/FT
M22759/16-10-9 10AWG WHITE	\$0.50/FT	M22759/16-16-2 16AWG RED	\$0.22/FT
M22759/16-12-5 12AWG GREEN	\$0.50/FT	M22759/16-16-6 16AWG BLUE	\$0.22/FT
M22759/16-12-9 12AWG WHITE	\$0.35/FT	M22759/16-16-9 16AWG WHITE	\$0.22/FT
M22759/16-14-0 14AWG BLACK	\$0.30/FT	M22759/16-18-0 18AWG BLACK	\$0.20/FT
		M22759/16-18-2 18AWG RED	\$0.20/FT
		M22759/16-18-4 18AWG YELLOW	\$0.20/FT
		M22759/16-18-9 18AWG WHITE	\$0.20/FT
		M22759/16-20-0 20AWG BLACK	\$0.20/FT
		M22759/16-20-2 20AWG RED	\$0.20/FT
		M22759/16-20-3 20AWG ORANGE	\$0.20/FT
		M22759/16-20-4 20AWG YELLOW	\$0.20/FT
		M22759/16-20-9 20AWG WHITE	\$0.20/FT
		M22759/16-22-0 22AWG BLACK	\$0.20/FT
		M22759/16-22-2 22AWG RED	\$0.20/FT
		M22759/16-22-9 22AWG WHITE	\$0.20/FT
		M22759/16-24-0 24AWG BLACK	\$0.20/FT

WIRE (6 AWG TO 24 AWG) BY-THE-FOOT IS NOW
AVAILABLE ON A SPOOL FOR YOUR CONVENIENCE.
SPOOLS COST \$2.00/EACH.



Why Tefzel® Wire?

M22759/16-6 27478

Tefzel® insulated wire (M22759/16) is the aviation industry standard for some very good reasons—

- Voltage Rating: 600v • Temperature: -55° C to 150° C • Conductor: Stranded Tinned Copper • Insulation: Extruded ETFE
- These characteristics, along with excellent resistance to abrasion and chemicals, make Tefzel® ideal for demanding applications.

Wire, Shielded Tefzel® (Conforms to MIL-C-27500) ★MIL-SPEC★

S906-1-18 18AWG SHIELDED WIRE [10 TO 49 FEET]	\$.50/FT
S906-1-18 18AWG SHIELDED WIRE [50 + FEET]	\$.40/FT
S906-1-20 20AWG SHIELDED WIRE [10 TO 49 FEET]	\$.45/FT
S906-1-20 20AWG SHIELDED WIRE [50 + FEET]	\$.35/FT
S906-1-22 22AWG SHIELDED WIRE [10 TO 49 FEET]	\$.40/FT
S906-1-22 22AWG SHIELDED WIRE [50 + FEET]	\$.30/FT
S906-3-22 22AWG SHIELDED TRIO [10 TO 49 FEET]	\$.65/FT
S906-3-22 22AWG SHIELDED TRIO [50 + FEET]	\$.55/FT
S906-4-22 22AWG SHIELDED QUAD [10 TO 49 FEET]	\$1.50/FT
S906-4-22 22AWG SHIELDED QUAD [50 + FEET]	\$1.40/FT



Wiring Supplies (Heatshrink, Insulation Boots, Bus Bar Stock)



S816C148 3/32" X 48" CLEAR HEATSHRINK	\$2.25/PC
S816C248 1/8" X 48" CLEAR HEATSHRINK	\$2.60/PC
S816C348 3/16" X 48" CLEAR HEATSHRINK	\$2.60/PC
S816C448 1/4" X 48" CLEAR HEATSHRINK	\$3.00/PC
S816C648 3/8" X 48" CLEAR HEATSHRINK	\$3.50/PC
S816CKIT CLEAR HEATSHRINK KIT	
(CONTAINS 4 PCS. OF 3/32" AND 1 PC. OF 1/8", 3/16", 1/4", AND 3/8")	\$18.00/EA
MS25171-2S TERMINAL INSULATION BOOT	\$2.00/EA
BUS BAR STOCK .025" X .50" X 12" BRASS	\$2.00/EA

ELECTRICAL SYSTEM SUPPLIES

Wiring Supplies (Terminals and Splices)

FAS^{ON} TERMINALS (*GENUINE AMP*)

RFO25-50, 18-22 AWG, .25" FASTON TERMINAL	\$9.50/PKG 50
RFO11-10, 18-22 AWG, .11" FASTON TERMINAL	\$2.00/PKG 10
BFO25-50, 14-16 AWG, .25" FASTON TERMINAL	\$9.50/PKG 50
YFO25-10, 10-12 AWG, .25" FASTON TERMINAL	\$4.00/PKG 10

KNIFE AND BUTT SPLICES (*GENUINE AMP*)

S890RK-10, 22-18 AWG, KNIFE SPLICES	\$6.00/PKG 10
S890BK-10, 14-16 AWG, KNIFE SPLICES	\$6.00/PKG 10
S891RB-10, 22-18 AWG, BUTT SPLICES	\$6.00/PKG 10
S891BB-10, 14-16 AWG, BUTT SPLICES	\$6.00/PKG 10
S891YB-10, 10-12 AWG, BUTT SPLICES	\$6.00/PKG 10

RING TERMINALS (*GENUINE AMP*)

S814R6-10, 18-22AWG RING TERM., #6 STUD	\$2.00/PKG 10
S814R8-10, 18-22AWG RING TERM., #8 STUD	\$2.00/PKG 10
S814R10-10, 18-22AWG RING TERM., #10 STUD	\$2.00/PKG 10
S814R25-10, 18-22AWG RING TERM., .25" STUD	\$2.60/PKG 10
S814R31-10, 18-22AWG RING TERM., .31" STUD	\$2.60/PKG 10
S814R38-10, 18-22AWG RING TERM., .38" STUD	\$3.20/PKG 10
S814B6-10, 14-16AWG RING TERM., #6 STUD	\$2.00/PKG 10
S814B8-10, 14-16AWG RING TERM., #8 STUD	\$2.00/PKG 10
S814B10-10, 14-16AWG RING TERM., #10 STUD	\$2.00/PKG 10
S814B25-10, 14-16AWG RING TERM., .25" STUD	\$2.00/PKG 10
S814B31-10, 14-16AWG RING TERM., .31" STUD	\$2.60/PKG 10
S814B38-10, 14-16AWG RING TERM., .38" STUD	\$3.00/PKG 10
S814Y10, 10-12AWG RING TERM., #10 STUD	\$0.25/EA
S814Y416, 10-12AWG RING TERM., .25 STUD	\$0.25/EA
S814Y516, 10-12AWG RING TERM., .31 STUD	\$0.25/EA
S814Y6, 10-12AWG RING TERM., #6 STUD	\$0.30/EA
S814Y616, 10-12AWG RING TERM., .38 STUD	\$0.30/EA
S814Y8, 10-12AWG RING TERM., #8 STUD	\$0.30/EA
S814Y816, 10-12AWG RING TERM., .50 STUD	\$0.45/EA

UNINSULATED RING TERMINALS (*SUPPLIED W/ HEATSHRINK*)

S812-2-3 2AWG RING TERMINAL, .1875" STUD	\$1.25/EA
S812-2-4 2AWG RING TERMINAL, .25" STUD	\$1.25/EA
S812-2-5 2AWG RING TERMINAL, .32" STUD	\$1.25/EA
S812-2-6 2AWG RING TERMINAL, .38" STUD	\$1.25/EA
S812-4-3 4AWG RING TERMINAL, .1875" STUD	\$1.00/EA
S812-4-4 4AWG RING TERMINAL, .25" STUD	\$1.00/EA
S812-4-5 4AWG RING TERMINAL, .31" STUD	\$1.00/EA
S812-4-6 4AWG RING TERMINAL, .38" STUD	\$1.00/EA
S812-4-7 4AWG RING TERMINAL, .4375" STUD	\$1.00/EA
S812-6-3 6AWG RING TERMINAL, .1875" STUD	\$0.90/EA
S812-6-4 6AWG RING TERMINAL, .25" STUD	\$0.90/EA
S812-6-5 6AWG RING TERMINAL, .31" STUD	\$0.90/EA
S812-6-6 6AWG RING TERMINAL, .38" STUD	\$0.90/EA
S812-8-3 8AWG RING TERMINAL, .1875" STUD	\$0.75/EA
S812-8-4 8AWG RING TERMINAL, .25" STUD	\$0.75/EA
S812-8-5 8AWG RING TERMINAL, .31" STUD	\$0.75/EA

The Fine Print

While every effort has been made to insure the accuracy of prices and descriptions contained in this catalog, we would be the first to admit that it has been produced by human beings with proven fallibility. B&C Specialty Products regrets any errors or omissions that may occur, and reserves the right to correct or amend them, as necessary.



Which Size Connector Do I Need?



Here is a short list of the type(s) and size(s) of connectors used on many of the devices found in this catalog—

- B&C Controllers/Voltage Regulators (LR3C-14, LR3C-28, LS-1A, SB1B-14, and SB1B-28): #6 Ring
- B&C Starter (for both Lycoming and Continental engines): .31 Ring
- B&C Alternators, B-lead (L-40, L-60, and SD-20): .25 Ring
- Circuit Breakers: #6 Ring (CB1 - CB30)
#8 Ring (CB40 & CB50)
- Contactors: .31 Ring, #10 Ring
- Current Limiter Base: .31 Ring
- Fuse Holders: .25 Fast-On, #10 Ring
- Grounding Blocks: .25 Fast-On, .31 Ring
- S700-series Switches: .25 Fast-On
- Shunts: .25 Ring



ELECTRICAL SYSTEM SUPPLIES AND TOOLS

Tools and Materials

RATCHING CRIMP TOOLS

These tools ratchet for efficient one-handed operation, and professional results. The RCT-1 crimps Fast-On and ring terminals, as well as insulated butt and knife splices. It features 3 crimping "pockets" for insulated terminals: 18-22 AWG (red), 14-16 AWG (blue), and 10-12 AWG (yellow). The RCT-2 makes possible professional installation of coax connectors on both RG-400 and RG-58. For D-sub pins or sockets, the RCT-3 yields excellent results with a superb 4-way crimping mechanism. And for open barrel contacts, the RCT-4 provides precise, consistent crimps on 10-20AWG conductors.

RCT-1 PIDG STYLE CRIMP TOOL	\$40.00/EA
RCT-2 BNC COAX CONNECTOR CRIMP TOOL	\$40.00/EA
RCT-3 D-SUB MACHINED PIN CRIMP TOOL	\$40.00/EA
RCT-4 OPEN BARREL TERMINAL CRIMP TOOL	\$40.00/EA

OPEN BARREL CRIMP TOOLS

The BCT-1 and BCT-2 are non-ratcheting tools with separate "pockets" for crimping the conductor and insulation portion of open barrel connectors. The BCT-1 features "pockets" for 16-20 AWG and 22-30 AWG insulation; and 16-18 AWG, 20-22 AWG, and 24-30 AWG B-type conductors. The BCT-2 has "pockets" for 14-18 AWG and 20-24 AWG insulation; and 14-16 AWG, 18-20 AWG, 22-24 AWG conductors.

BCT-1 B-CRIMP OPEN BARREL TERMINAL TOOL	\$32.00/EA
BCT-2 B-CRIMP OPEN BARREL TERMINAL TOOL (MEDIUM)	\$32.00/EA

WIRE STRIPPER AND ACCESSORIES

The Ideal Stripmaster® 45-097 features a die-cast frame, precision-sharpened knife-type blades, and a smooth spring-action motion. This is the tool of choice in our shop for clean, accurate work with Tefzel® wire. The L-5290 Adjustable Wire Stop is a useful addition to this tool (especially for repetitive operations), while the L-4994 Replacement Blades will keep this tool in action for a long time to come. USA-made.

45-097 IDEAL STRIPMASTER®, FOR 16-26 AWG WIRE	\$35.00/EA
L-5270 TRANSPARENT ADJUSTABLE WIRE STOP (FOR ABOVE)	\$7.00/EA
L-4994 REPLACEMENT BLADES FOR STRIPMASTER®	\$15.00/EA

OTHER TOOLS AND MATERIALS

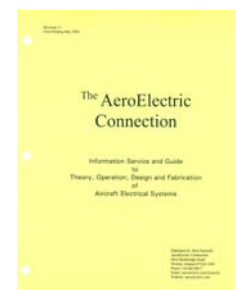
ICT-1 IMPACT CRIMP TOOL (UNINSULATED RING TERMINALS)	\$45.00/EA
DSE-1 INSERTION/EXTRACTION TOOL (D-SUB PINS)	\$5.00/EA
HDC-1 HEAVY DUTY CABLE CUTTER	\$12.00/EA
DMM-2 DIGITAL MULTIMETER	\$45.00/EA
SIOI-1 SOLDERING IRON	\$18.00/EA
S894 SILICONE RUBBER TAPE, 1 INCH X 36 INCH	\$2.00/EA



The AeroElectric Connection, 11th Edition

The essential reference for home-builders. More than once we've had someone tell us, "If only I had read this book *before* I started trying to wire my airplane!" Written and published by Bob Nuckolls, *The AeroElectric Connection* comes in a convenient loose-leaf format, and offers a wealth of information on the wiring of homebuilt/experimental aircraft. It is written in a readable, conversational style accessible to both novice and experienced builders alike. If you want to wire your own aircraft—and want to do it safely—this is THE book you need.

THE AEROELECTRIC CONNECTION, 11TH EDITION (BOOK) \$33.00



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