



Dear Fellow Aviation Enthusiast,

Thanks for picking up B&C's 2019 Catalog. We could not do the work we love without you. In fact, we are continually inspired by our customers. From backyard experimental builds to cutting edge company projects, we exist to support your dream of flight.

Because of that inspiration and love of our work, we are always seeking to get better at what we do. The biggest improvement this year is the release of our new website: **BandC.com**. You'll immediately notice an entirely new look and feel, with features like the Experimental Product Finder and Oil Filter Adapter Fit Guide.

While we hope these new features serve you well, we always know there is room for improvement. Please let us know if you have any suggestions. The new site will serve as a foundation for continued improvement in how we interact with you and get you the products and information you need. We already have a number of major upgrades in mind.



Speaking of upgrades, B&C will be announcing the release of an all-new permanent magnet regulator this summer for Rotax and Jabiru engines. It will work with any single phase permanent magnet alternator (up to 20 amps) and features cool-running mosfet technology, with integral over-voltage protection, lithium ion battery compatibility, field-adjustable charging voltage, and LED/incandescent/EFIS warning output. This new product will be a major upgrade over current options and set a new level of safety and ease of installation.



We also have a new certified alternator project in the works. Stay tuned for further details late this summer.

As we continue to try to meet our high standard of excellence, we are reminded that our team could do nothing without your support. As always, thank you for your patronage. Call or email us anytime. We are always here to help.

Regards,

Nathan Bainbridge President, B&C Specialty Products

B&C

cultivating people

OUR VALUES:

Humility | Respect

we think of others before ourselves, we treat others how we want to be treated

Honesty | Trust the truth builds trust; we trust our team, customers and partners

> **Courage** we confront and slay our dragons

Tenacious Pursuit of Excellence we do our best, every day; we expect challenges and are determined to overcome them

Team Growth

we ourselves grow best when we grow together; we grow together, succeed together, and share with others

Lean Value Creation

delivering value to our customers, team and partners through elimination of the 8 wastes

Improvement on Purpose continuous improvement because we can always be better

Ordering Information

Orders and Inquiries: We are available to take your call Monday through Friday from 9:00am to 4:30pm Central time. Phone orders placed by 1:00pm for in-stock, off-theshelf items typically ship the same day. If you prefer, you may also order securely on-line at <u>BandC.com</u>. There is no "minimum order."

Shipping: We can ship via UPS, FedEx, and United States Postal Service "Priority" or "Express" mail.

Returns: Provided the item is in new, uninstalled and/or unopened condition, a refund will be given on merchandise returned within 90 days. No refund will be given on custom-made items (such as: SBL, BBS, cables, and any other made-to-order items), special order items, or items returned beyond 90 days from the invoice date.

All returns are subject to a 20% restocking fee, to help recover the cost of processing the return.

Refunds generally appear on your credit card statement in 1-2 billing periods, and take the form of a credit back to the same card used to make the original purchase. A receipt will be mailed to you to confirm your refund.

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ANOTHER

ORIGINAI

\$2300

\$525

\$525

STANDBY ALTERNATOR SYSTEMS

BC410 STANDBY ALTERNATOR SYSTEM (BONANZA & PA-32)

Reliable Standby Electrical Power for the Bonanza

The B&C Standby Alternator system continues to earn the acclaim of Bonanza owners around the world 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) INSTALLATION KIT 410-500-3-1 (28v) INSTALLATION KIT 410-500-3-2 (14v)
 EL PANEL—NEW, EXCHANGE ('84 & ON A36/B36TC)
 \$495

 EL PANEL—NEW, EXCHANGE ('72-83 A36; '70-'94 F33A)
 \$495

 A/C CASTING MODIFICATION (STC/PMA)
 \$175

Enhance Your PA-32 with Standby Electrical Power

Owners of Piper PA32, Cherokee Six, Lance and Saratoga aircraft (14 or 28 volt) can also enjoy the peace-of-mind of an STC/PMA standby electrical system — all with superior reliability and ease-of-use. The B&C Standby Alternator system for Piper aircraft follows our proven systems used on thousands of Beech Bonanzas, Mooney Ovation, and Cessna 210's. 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.

\$2300

\$495

\$495

BC410 & CONTROLLER (STC/PMA) INSTALLATION KIT 410-506-1 (28v) INSTALLATION KIT 410-506-2 (14v)

BC425 STANDBY ALTERNATOR SYSTEM (CESSNA 210)

Improve your safety of flight with a reliable BC425 Standby Alternator system from B&C Specialty Products. Proven performance on Beech Bonanzas, Piper PA-32's, and Mooney Ovations since 1995 — the perfect replacement for the

OEM standby generator on your 210. Featuring an intuitive, pilot-friendly annunciation system, the BC425 senses primary alternator failure in flight, and automatically energizes the standby alternator to provide 20 amps of power to maintain the aircraft bus and essential systems. STC/PMA approved for Cessna 210L,



210M, 210N, T210L, T210M, T210N, and P210N.

BC425 & CONTROLLER (STC/PMA)	\$2300
INSTALLATION KIT 425-502-1 (28v)	\$550

PRIMARY ALTERNATOR SYSTEMS

BC400 ALTERNATOR SYSTEM (PIPER J5C THRU PA-22)

Now you can replace your heavy, worn out generator or unreliable alternator with a dependable lightweight Alternator system — with NO expensive requirement to relocate your oil cooler! Approved for Lycoming-powered JC5 thru PA22 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 since 1980 — 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) features solid-state construction, with "quiet" linear voltage regulation; integral over-voltage protection; low-voltage sensing and warning; and field-adjustable charging voltage.

The BC400 installation kits include a Boss (Wide Deck) or Case (Narrow Deck) alternator mounting bracket, attachment hardware, belt tension arm, high-performance belt, field connector assembly, and panel-mount warning light. An optional "electrical package" adds necessary wire and ring terminals, circuit breakers, and

a Mil-Spec "OFF-ON" toggle switch (useful for early aircraft requiring an "upgrade" of existing electrical components). Note: this approved installation is applicable to aircraft with previously-existing electrical systems only.



BC400-2 ALTERNATOR & BC201-1 REGULATOR (STC/PMA), FOR AIRCRAFT WITH NO/REAR OIL COOLER \$735 Includes Installation Kit 400-500-1 (Boss), 400-500-2 (Case, B&C Starter), or 400-500-3 (Case, Other Starter)

BC400-2 ALTERNATOR & BC201-1 REGULATOR (STC/PMA), FOR AIRCRAFT WITH FRONT OIL COOLER \$925 Includes Installation Kit 400-500-4 (Boss), 400-500-5 (Case, B&C Starter), or 400-500-6 (Case, Other Starter)

BC400 ELECTRICAL PACKAGE (STC/PMA), INCLUDES INSTALLATION KIT 400-500-EP (OPTIONAL)

APPROVED MODELS						
Airplane Make	Airplane Model	Spec. No.		Airplane Make	Airplane Model	Spec. No.
Piper	J5C, AE-1, HE-1	A-725		Piper	PA-18A (Restricted), PA-18A "135" (Restricted), PA-18A	AR-7
Piper	PA-11, PA-11S	A-691			"150" (Restricted)	
Piper	PA-12, PA-12S	A-780		Piper	PA-20, PA-20S, PA-20 "115", PA-20S "115", PA-20 "135", PA-20S "135"	1A4
Piper	PA-14	A-797			FA-20 133, FA-203 133	
Piper	PA-16, PA-16S	1A1		Piper	PA-22, PA-22-108, PA-22-135, PA-22S-135, PA-22-150, PA-22S-150, PA-22-160,	1A6
Piper	PA-18, PA-18S, PA-18 "105" (Special), PA-18S "105" (Special), PA-18A, PA- 18 "125" (Army L-21A), PA-18S "125", PA-18AS "125", PA-18A "135" (Army L-21B), PA-18A "135", PA-18S "135", PA-18AS "135", PA-18 "150", PA-18A "150", PA-18S "150", PA-18AS "150", PA-19 (Army L-18C), PA-19S	1A2			PA-225-160	

APPROVED MODELS

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\$275

ALTERNATORS

BC460-H ALTERNATOR

Introducing the "Next Generation" 60 amp Alternator you've been waiting for! Our BC460-H saves both weight AND money – without sacrificing performance or reliability. Rather than following along with the "Bigger is Better" line of thinking, we've designed the BC460-H for superior efficiency (maximum output-per-pound). With modern avionics and LED lighting, aircraft electrical systems are becoming more frugal than ever. What is needed is not a bigger alternator, but rather a better alternator - one with genuine guality, durability, and efficiency. The BC460-H is built with that in mind, featuring heavy-duty sealed ball bearings, two internal cooling fans, and a precision dynamicallybalanced rotor (rare in the industry, but standard on every B&C!). More than that, it has three attachment points for stable mounting, and provision for external, aircraft-style alternator control 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.

BC460-H ALTERNATOR, 60 AMPS, W/ BOSS MOUNT OR CASE MOUNT BRACKET KIT (HOMEBUILT)

\$540

BC462-H ALTERNATOR

NOTHER

Here's a game-changer – the new high-performance spline-driven alternator from the company that pioneered the spline-driven alternator over 20 years ago! The BC462-H continues our tradition of innovation, offering robust performance and superb efficiency. Rated at a nominal 35 to 45 amps @ cruise RPM, it mounts on a standard AND20000-spec accessory pad, and is built to the same quality standards you've come to expect from B&C. Every BC462-H features a CNC machined billet aluminum mounting flange for superior durability. Inside you'll find 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 aircraftstyle external control, and may be used as either a Primary or a Standby Alternator, depending on your electrical system configuration (see page 9 for our line of Alternator Controllers/Regulators). Includes mounting gasket and a pre-wired field connector assembly. Weight: 6.75 lbs.

ALTERNATORS

L-40 ALTERNATOR

Our 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 and modest weight, this belt-driven alternator for Lycoming engines has sealed heavy-duty ball-bearings and built-in cooling fans to insure trouble-free service — and the best value for the long term. 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 that you just won't find on the Brand X competitor. Not only that, 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 we add a third attachment point to insure solid, stable support (look closely - many of the Brand X alternators only have two attachment points). Suitable for 14 volt and 28 volt applications, the L-40 Alternator includes your choice of Boss (Wide Deck) or Case (Narrow Deck) mounting brackets, field connector assembly, belt tension arm, high-performance belt, and mounting hardware. Weight: 6.1 lbs.

L-40 ALTERNATOR, 40 AMPS, W/ BOSS MOUNT OR CASE MOUNT BRACKET KIT (HOMEBUILT)

\$379

See our entire line of Primary and Standby Alternator Controllers (Regulators) on page 9.

BC410-H ALTERNATOR

The BC410-H is the original high-performance spline-driven alternator (with nearly 10,000 units in the field).

It mounts on a standard vacuum pump accessory pad, and may be used either as a Primary or a Stand-by alternator for a nominal output of 20 to 30 amps, depending on engine cruise RPM. Designed for many hours of durable service, this alternator features heavy-duty sealed ball-bearings, two cooling fans, a dynamically balanced rotor, and a special "shear section" drive coupling. Available for both 14 volt and 28 volt applications, the BC410-H is externally-regulated, and may be appropriately matched with our LR3C, LS-1A, or SB1B Controllers (depending on your application and electrical system configuration). Measures 4.6" wide and 6" deep, with clearance for a stock tach cable and oil filter on Lycoming engines. Weight: 5.75 lbs.

The closely related BC425-H may be installed on Continental and some Rotax engines, and measures 4.6" wide, 5.375" deep. Weight: 5.72 lbs.

BC410-H Spline-Driven Alternator, 20 to 30 amps (Homebuilt) *Also Available* BC425-H Spline-Driven Alternator, 20 to 30 amps (Homebuilt) \$575

\$575

ALTERNATORS

BC433-H 30 AMP ALTERNATOR FOR THE CONTINENTAL ENGINES (C-75 THROUGH O-300)

The BC433-H sets a new standard for lightweight, high-performance geardrive alternators for Continental engines. Weighing only 4.4 lbs., and measuring 4" in diameter and 3.7" in installed length, the BC433-H alternator features a precision CNC machined billet aluminum mounting flange, integral cooling, heavy-duty sealed ball bearings, and an innovative (and efficient) three-phase design. Provides 30 amps at cruise RPM. Includes PMR3A three-phase regulator (14v) and 505-1 PM/OV Kit, designed to provide over-voltage protection for aircraft electrical systems (see page 13 for kit details). Note: the BC433-H is sold less the Continental drive gear, which is customer supplied, and requires the latest revision of the Hub (P/N 653983) and Retainer (P/N 653982). Gear installation performed by B&C Specialty Products.

BC433-H ALTERNATOR, 30 AMPS (HOMEBUILT, LESS GEAR) \$720

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. Includes PMR1C-14 regulator (14v) and 504-1 PM/OV Kit (see page 13 for kit details). Note: this alternator is sold without the Continental alternator gear assembly, which is customer supplied and installed by B&C Specialty Products.

200G ALTERNATOR, 12 AMPS (HOMEBUILT, LESS GEAR)

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 amps @ 3500 alternator RPM, the SD-8 may be mounted on either the vacuum pump accessory pad, or on a hydraulic pump pad. Features a billet aluminum

mounting flange, sealed ball-bearings, and a "shear section" drive coupling. Includes PMR1C-14 regulator (14v) and 504-1 PM/OV Kit (see page 13 for kit details).

SD-8 ALTERNATOR, 8 AMPS (HOMEBUILT)

\$545

\$575

ALTERNATORS FOR SUKHOI AND LOM

B&C also offers alternators designed for both the Sukhoi (M14P) and LOM engines, with available outputs ranging from 10 to 35 amps.



BC412-H (SK35) FOR M14P, 35 AMPS \$780 BC414-H (LOM10) FOR LOM, 10 AMPS \$695 BC413-H (LOM30) FOR LOM, 30 AMPS \$795

ALTERNATOR CONTROLLERS/REGULATORS

LR3C LINEAR CONTROLLER

More than just another regulator, the LR3C is a field-adjustable Alternator Controller that combines three essential devices in one, making it a cost-effective alternative for any aircraft electrical system while also

improving safety of flight. First, the LR3C functions as a linear ("quiet") voltage regulator, generating no audio or radio noise. Second, it safeguards your electrical system with solid-state "crowbar" over-voltage protection circuitry. And third, it functions as a low-voltage monitoring and warning system. The LR3C also features field-adjustable charging voltage, for flexible use with "flooded," SLA/VRSLA, or LiFePO batteries.



On-Board Two History-Making Flights

LR3C-14 ALTERNATOR CONTROLLER, 14v (HOMEBUILT) \$180 LR-INSTALL INSTALLATION KIT, 14v/28v (HOMEBUILT) \$45 LR3C-28 ALTERNATOR CONTROLLER, 28v (HOMEBUILT) \$180

LS-1A LINEAR CONTROLLER

The LS-1A Controller offers linear voltage regulation, integral overvoltage protection, low-voltage monitoring and warning, and fieldadjustable charging voltage (like the LR3C). It has been specifically designed for use with B&C wound-field alternators such as the BC460-H, L-40, BC462-H, BC410-H, or BC412-H in a 28v electrical system. The LS-1A may be mounted on the cabin side of the firewall.

LS-1A ALTERNATOR CONTROLLER, 28V (HOMEBUILT)

\$180

STANDBY ALTERNATOR CONTROLLERS

The SB1B provides Standby Alternator control for our BC410-H, BC425-H, or BC462-H Alternators in a single bus, single battery electrical system. Electrically "quiet" and may be mounted on the cabin side of the firewall. Features



solid-state OV protection and field-adjustable charging voltage.

SB1B-14 STANDBY ALTERNATOR CONTROLLER, 14v (HOMEBUILT) \$180 SB1B-28 STANDBY ALTERNATOR CONTROLLER, 28V (HOMEBUILT) \$180

B&C supplied Alternators and Regulators for both the Voyager round-the-world flight in 1986 — and again on the White Knight high-altitude aircraft, which carried SpaceShip One aloft for its flights into outer space, in 2004. These history-making projects required mission-critical reliability, and rock-solid performance. We are proud

STANDBY ALTERNATOR INSTALLATION KITS

PMR1C REGULATOR

Homebuilt aircraft with our SB1B and BC410-H, BC425-H, or BC462-H Alternators can have the unique functionality of our Standby Alternator system for certified aircraft by using the SBK kit. Includes a

current sensor, current limiter and base, panel indicator light (not shown), and special placarding.

SBK-14 INSTALLATION KIT, 14v (HOMEBUILT) \$298 SBK-28 INSTALLATION KIT, 28v (HOMEBUILT) \$298

reatures a	recenter of	iage,	Barn	
adjustable	solid-state		STE AN ALENT PRODUCTS	
regulator	circuitry,	and	NARAL THE OTHER STORE	
built-in heat sink. NOTE: not for				
use with th	e BC433-H,	or wou	und-field alternators.	

PMR1C-14 REGULATOR, 14v (HOMEBUILT)	\$75
PMR1C-28 REGULATOR, 28v (HOMEBUILT)	\$75

This simple, reliable rectifier-type regulator is

designed for use with B&C permanent magnet

to have been associated with them — and

we salute the pilots, engineers, and visionaries that made each of these

remarkable achievements possible!

alternators, such as the SD-8, 200G, SK-10, and LOM-10. It features a rectifier bridge, adjustable solidregulator circuitry, built-in heat sink. NO

THE B&C STARTER FOR LYCOMING ENGINES

BC315/BCS206 STARTER

The original lightweight Starter — imitated, but never equaled. First introduced in 1986, the B&C Starter for Lycoming engines has provided dependable service for thousands of satisfied customers; and it remains the benchmark of reliability and genuine value.

Compared with the Prestolite-type starter for 4- and 6-cylinder engines, the B&C Starter will save 7 lbs. (or 24 lbs. for the OEM starter for 8-cylinder engines!) - not to mention that it has torque greater and eliminates the troublesome Bendix drive. Compared with the current OEM starter for the same engines, it provides greater durability in challenging conditions and superior quality. Of course, there are cheaper starters on the market . . . but that cuts both ways. Proven reliability offers a better value in the long term. 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. Weight: 10.2 lbs.

FEATURES:

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

BC315-100-1 (STC/PMA)	\$655	BCS206-122-12 (HOMEBUILT)	\$625
BC315-100-2 (STC/PMA)	\$655	BCS206-149-12 (HOMEBUILT)	\$625
BC315-100-3 (STC/PMA)	\$685	BCS206-122-24 (HOMEBUILT)	\$655
BC315-100-4 (STC/PMA)	\$685	BCS206-149-24 (HOMEBUILT)	\$655
BC315-100-6 (STC/PMA)	\$685	BCS206-149-12/CR (HOMEBUILT)	\$655
BC315-100-8 (STC/PMA)	\$685	BCS206-149-24/CR (HOMEBUILT)	\$655

APPLICATION GUIDE

We are proud to offer the B&C Starter for Lycoming engines in numerous different configurations. All feature the same "No Compromises" construction that has made the B&C Starter the benchmark of long-term reliability and genuine value since 1980.

VOLTAGE	RING GEAR TEETH	MODEL NUMBER (STC/PMA)	MODEL NUMBER (HOMEBUILT)	ENGINE ROTATION
12	122	BC315-100-1	BCS206-122-12	Standard
12	149	BC315-100-2	BCS206-149-12	Standard
24	122	BC315-100-3	BCS206-122-24	Standard
24	149	BC315-100-4	BCS206-149-24	Standard
12	149	BC315-100-6	BCS206-149-12/CR	Counter
24	149	BC315-100-8	BCS206-149-24/CR	Counter

THE **B&C STARTER FOR CONTINENTAL ENGINES**

BC320 STARTER

FEATURES:

Sealed Heavy-Duty

Ball Bearings

• All-Metal Gears

With an innovative, patented design, the B&C Starter for Continental engines (C-75, C-85, C-90, C-145-2, O-200, IO-240-A/-B, O-300-A/-B/-C, and GO-300-A/-B/-C) solves all the problems that other starter designs have had — worn-out clutches, broken pinions, nagging oil leaks, and catastrophic failure modes. Built for reliable service, the BC320 features a precision CNC machined billet aluminum end bell, heavy-

duty sealed ball-bearings, all-steel gears, electro-mechanical pinion engagement, and an efficient series-wound motor. Provides greater starting torque for Continental engines, all while saving 4.3 to 5.2 lbs. over the OEM key-type and pullcable 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. Many engine shops and flight schools use this Starter exclusively, in fact, due to its proven reliability and long service life. STC/PMA for certificated aircraft, this Starter makes a superb choice for Homebuilt aircraft, also. Weight: 10.3 lbs.

Two installation kits are available — one to replace an existing key-type starter, the other for an existing pull-type starter. For an existing key-type starter, select kit 501-1 and remove the needle bearing from the engine case (Figure 1

below). To aid in removing this bearing, you may purchase our Needle Bearing Removal Tool Kit 501-2 for \$135, and return the kit when finished for a \$100 refund. If you are replacing an existing pull-type starter, select kit 501-3 and cut off the 9/16" steel shaft installed in the engine case (Figure 2 below).

• Electro-Mechanical		
Pinion Actuation	BC320-1 (STC/PMA)	\$655
• Efficient Series-	For Counter-Rotating (-2) or 24v (-3) versions of the	ABOVE - ADD \$82
Wound Motor	501-1 INSTALLATION KIT, EXISTING KEY-TYPE	\$25
Self-Contained Gear	501-2 TOOL KIT, NEEDLE BEARING REMOVAL	\$135
• Sell-Contained Gear	501-3 INSTALLATION KIT, EXISTING PULL-TYPE	\$75





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OIL SYSTEM PARTS (LYCOMING ENGINES)

THE ORIGINAL 90-DEGREE OIL FILTER ADAPTER

Why settle for an imitation when you can depend on the original? Since its introduction in 1996, the B&C Oil Filter Adapter for Lycoming engines has been precision CNC machined from a solid billet of aluminum — superior in strength to cheaper castings, and without the natural voids inherent in the casting process. Widely used in the demanding world of aerobatic aircraft, the B&C Oil Filter Adapter mounts directly on the accessory case, replacing the OEM oil screen, the horizontal-mount oil-filter adapter, or other "remote" oil filtration systems. 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 complicated hoses and leak-prone fittings to purchase (or replace), nor is there a need to reinforce the firewall. Fits most Lycoming O-235 through IO-720 engines. Includes mounting hardware, gasket, and Champion 48108-1 filter. Weighs 2.25 lbs. (with the filter).

BC700-1 SPIN-ON OIL FILTER ADAPTER (STC/PMA) BC700-H SPIN-ON OIL FILTER ADAPTER (HOMEBUILT) \$450 \$395

BC702 & BC708 Spin-On Oil Filter Adapters **OIL FILTER ADAPTER SPACERS & ACCESSORIES** Our billet aluminum spacers may be used to facilitate BC700 installation on a wide range of aircraft. Each spacer kit includes mounting hardware and an additional BC702-1 BC708-1 mounting gasket. For engines Robinson R22 Maule STL without a Vern-a-Therm, an AN909B16 plug will be needed to fill the corresponding opening. B&C Specialty Products also offers Oil Filter Adapters For engines with a tube-style Oil designed for Robinson R22 and Maule STL aircraft. Each Temperature Sender, the 700-304 has a unique geometry that accommodates the adapter may be used to reposition this device. Robinson and Maule airframes, and features the same quality construction of the BC700. FK502-.75 SPACER KIT, .75" \$50 BC702-1 OIL FILTER ADAPTER (STC/PMA) \$450 FK502-1.4 SPACER KIT, 1.4" \$55 FK502-2.5 SPACER KIT, 2.5" **BC702-H OIL FILTER ADAPTER (HOMEBUILT)** \$65 \$395 BC708-1 OIL FILTER ADAPTER (STC/PMA) \$450 700-304 M/F TEMPERATURE SENDER ADAPTER \$15 **BC708-H OIL FILTER ADAPTER (HOMEBUILT)** AN909B16 Plug, Vern-A-Therm Opening \$395 \$39

THE ORIGINAL VAC-2 INVERTED OIL PICKUP

The innovative VAC-2 provides a direct replacement for the Lycoming vacuum pump adaptor. Precision CNC machined from solid billet aluminum, 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 BC410-H. The VAC-2 permits better engine lubrication and reduced prop surges compared to oil systems using a firewall-mounted "T"-fitting. Ships complete with integral oil seal, gasket, and MS20822-10D 90° fitting. Just install a standard Lycoming vacuum pump gear and thrust washer (not included), and the VAC-2 is ready to mount.

BC704-H VAC-2 INVERTED OIL PICKUP, 4-CYLINDER LYCOMING (HOMEBUILT) \$198 BC706-H VAC-2 INVERTED OIL PICKUP, 6-CYLINDER LYCOMING (HOMEBUILT) \$198



Over/Under-Voltage Sensors	PM/OV FILTER AND OV PROTECTION KITS
This solid-state device provides a visual indication of abnormal bus voltage via panel-mounter warning light (included). When flashing, this light indicates bus voltage greater the 15.5 volts D.C.; when stead it indicates bus voltage below 12.5 volts D.C. BC207-1 OV/LV SENSOR (14v) BC207-2 OV/LV SENSOR (28v) \$85.00/E4	e over-voltage protection to B&C permanent magnet alternators, such as the SD-8, 200G, SK-10, LOM-10, and BC433-H. Includes an over-voltage protection module, warning light, filter capacitor, adel clamp, and wire terminals. 504-1 PM/OV KIT (14v) \$70.00/EA 504-2 PM/OV KIT (28v) \$70.00/EA
ELECTROLYTIC FILTER CAPACITORS	PANEL-MOUNT WARNING LAMPS
CORNELL DUBLIER Helpful in reducing the electric "ripple" introduced into an aircraft bu by permanent magnet — and som wound-field — alternators. Robu design, with extended cathoo construction for enhanced coolin and long life. Supplied with 10-3 terminal hardware. Rated 10,000uF 50VDC (S8007-1) or 22,000uF @ 40VD (S8007-3).	 lights use a replaceable "midget flange" lamp with tinted lens. Panel mounting requires a .465" hole; electrical connections via solder terminals. Useful as part of an annunciation circuit indicating starter- engagement, alternator-failure, canopy ajar, and low oil-pressure. Includes mounting hardware.
S8007-1 FILTER CAPACITOR \$29.00/E	A S888-2-(X) PANEL-MOUNT WARNING LAMP (SPECIFY LENS COLOR), 28V \$15.00/EA
S8007-3 FILTER CAPACITOR \$50.00/E	A Colors: Red (-2), Yellow (-4), Green (-5), and Blue (-6).

Introducing our NEW Experimental Builder Tool!

Sometimes the choices are overwhelming — we understand! That's why we've taken the best available fit information on our products, and created a convenient online tool to help you find what you need.



Try it out on our new website at: bandc.com/experimental-product-finder-tool/

ectrical Supplies

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TED TRANSPONDER ANTENNA	RG400 COAXIAL CABLE 🔀 MIL-SPEC 🗶
If you need 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 TED TRANSPONDER ANTENNA\$25.00/EA	Excellent quality cable for your \$\$\$ radio gear. Performance equals 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] \$3.20/FT RG-400 COAXIAL CABLE [50+ FEET] \$3.00/FT
BNC MALE CONNECTOR MIL-SPEC +	BNC FEMALE 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.	This mil-spec BNC female connector from Amphenol is useful wherever you need a "maintenance friendly" coax run. Features a dual-crimp design, with silver-plated brass coupling, gold-plated phosphorus bronze center contact, and Teflon dielectric.
S605CM-A BNC MALE CONNECTOR \$5.95/EA	S605CF-A BNC FEMALE CONNECTOR \$5.95/EA
BNC BULKHEAD FEMALE CONNECTOR * MIL-SPEC *	BNC RIGHT ANGLE ADAPTER
BNC BULKHEAD FEMALE CONNECTOR MIL-SPEC AMP mil-spec BNC bulkhead- mounted female connector for RG-400 coax. Dual-crimp connection design, with a nickel-plated brass coupling, gold-plated copper center contact, and a Teflon dielectric. Qualified to MIL-C-39012/19.	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.
AMP mil-spec BNC bulkhead- mounted female connector for RG-400 coax. Dual-crimp connection design, with a nickel-plated brass coupling, gold-plated copper center contact, and a Teflon	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
AMP mil-spec BNC bulkhead- mounted female connector for RG-400 coax. Dual-crimp connection design, with a nickel-plated brass coupling, gold-plated copper center contact, and a Teflon dielectric. Qualified to MIL-C-39012/19.	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.
AMP mil-spec BNC bulkhead- mounted female connector for RG-400 coax. Dual-crimp connection design, with a nickel-plated brass coupling, gold-plated copper center contact, and a Teflon dielectric. Qualified to MIL-C-39012/19. S605BF-A BNC BULKHD FEMALE CONNECTOR \$5.95/EA	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 \$5.95/EA

CIRCUIT BREAKERS, 1A THROUGH 25A	CIRCUIT BREAKERS, 30A			
These 7277-series Klixon [®] circuit breakers are compact and reliable. Body measures .750"h x .562"w x 1.400"d. Connects via screw terminals (supplied). Ships with appropriate mounting hardware. CB-(xx) CIRCUIT BREAKER (SPECIFY SIZE) \$20.00/EA Sizes available (in Amps): 1, 2, 3, 4, 5, 7.5, 10, 15, 20, and 25.	Chicker Differs a big bordThis mid-range circuit breaker from Klixon® offers a good value, combining modest footprint and quality construction. Features a conventional pull-type barrel, and measures 1.094"h x .750"w x 1.809"d. Connects via screw terminals (supplied). Includes mounting hardware.Image: CB30 CIRCUIT BREAKER (30 AMP)\$65.00/EA			
CIRCUIT BREAKERS, 40A AND 50A	FUSIBLE LINK KITS			
If you need larger amperage circuit breakers, these well-made devices 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). Includes mounting hardware.	Everything you'll need to build your own fusible links to protect low-power (less than 10A) aircraft systems. Each kit includes 2 feet of fiberglass sleeving, 4 insulated butt splices, and enough Tefzel [®] wire to make four 6" fusible links.			
CB40 Circuit Breaker (40 Amp) \$130.00/ea CB50 Circuit Breaker (50 Amp) \$135.00/ea	FLK-1 FUSIBLE LINK KIT, 24-20 AWG \$8.00/EA FLK-2 FUSIBLE LINK KIT, 20-16 AWG \$8.00/EA			
ANL CURRENT LIMITERS, 40A THROUGH 130A				

These muscular relatives of slow-acting fuses offer an effective, economical alternative to large-amperage circuit breakers for alternator B-lead wiring, providing excellent protection against hard electrical faults, and less susceptibility to "nuisance" tripping. Capable of withstanding loads approximately 80% BEYOND their rated capacity for an indefinite period of time. Features a silver-plated copper element, and a special mica viewing window. Installs using an ANL mounting base (below). Note: these devices are sized 1:1 against the alternator's rated output — 40 Amp alternator = 40 Amp limiter.

MEXICO

C905-(XX) CURRENT LIMITER (SPECIFY SIZE) Sizes available (in Amps): 35, 40, 60, 80, 100, 130. \$16.00/EA

COVERED ANL CURRENT LIMITER BASE STANDARD ANL CURRENT LIMITER BASE This thermoplastic base secures our ANL Current This COVERED base for ANL Current Limiters (above) Limiters (above) in place, with electrical connections has breakouts for multi-directional wire access. using .31" studs. Features countersunk #10 mounting with .31" electrical connections, and countersunk #10 holes 1" apart. Ships with lock nuts and flat washers. mounting holes. Includes nuts and flat washers. Rated at 120v maximum. Max. torgue: 120 inch-lbs. Rated at 48v maximum. Max. torque: 110 inch-lbs. **C903-1 CURRENT LIMITER BASE, STANDARD** \$15.00/EA \$20.00/EA

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C903-2 CURRENT LIMITER BASE, COVERED

FUSE HOLDERS, 6-POSITION THROUGH 20-POSITION

These fuse blocks offer a low-cost, space-saving solution for power distribution circuit protection, without the expense, fabrication-time, and higher parts-count of a panel with miniature circuit breakers and a rigid bus bar. Designed for ATC-style fuses, these fuse blocks may be installed below the instrument

panel, with main power connection via a

#10 ring terminal, and branch-circuits by .25" Fast-On terminals (customer supplied).

Note: we recommend









power distribution of no more than 15A continuous per slot, AND no more than 60A TOTAL continuous per fuse block.

FH-6 ATC FUSEBLOCK, 6-SLOT FH-8 ATC FUSEBLOCK, 8-SLOT FH-10 ATC FUSEBLOCK, 10-SLOT

\$13.00/EA	
\$16.00/EA	
\$18.00/EA	

FH-12 ATC FUSEBLOCK, 12-SLOT FH-16 ATC FUSEBLOCK, 16-SLOT FH-20 ATC FUSEBLOCK, 20-SLOT

\$21.00/EA
\$27.00/EA
\$32.00/EA

FUSES (ATC-STYLE)

	These fuses fit our Fuse Block Holder, and are color-coded for
	S889-1, 1-AMP PLUG-IN FUSE S889-2, 2-AMP PLUG-IN FUSE S889-3, 3-AMP PLUG-IN FUSE
· 7.5 ·	S889-4, 4-AMP PLUG-IN FUSE S889-5, 5-AMP PLUG-IN FUSE S889-7.5, 7.5-AMP PLUG-IN FUSE
10	S889-10, 10-Amp Plug-in Fuse S889-15, 15-Amp Plug-in Fuse
	S889-20, 20-AMP PLUG-IN FUSE S889-25, 25-AMP PLUG-IN FUSE S889-30, 30-AMP PLUG-IN FUSE

ese fuses fit our Fuse Blocks and In-Line Fuse older, and are color-coded for easy identification. 89-1, 1-AMP PLUG-IN FUSE \$1.50/PKG 5 89-2, 2-AMP PLUG-IN FUSE \$1.50/PKG 5 89-3, 3-AMP PLUG-IN FUSE \$1.50/PKG 5 89-4, 4-AMP PLUG-IN FUSE \$1.50/PKG 5 89-5, 5-AMP PLUG-IN FUSE \$1.50/PKG 5 89-7.5, 7.5-AMP PLUG-IN FUSE \$1.50/PKG 5 89-10, 10-AMP PLUG-IN FUSE \$1.50/PKG 5 89-15, 15-AMP PLUG-IN FUSE \$1.50/PKG 5 89-20, 20-AMP PLUG-IN FUSE \$1.50/PKG 5



S889-KIT ATC FUSE KIT (WITH STORAGE CASE & TOOL)

Contains 110 ATC-style fuses (10 each of our standard 1 amp through 30 amp fuses) and ATC fuse extraction tool, all in a handy storage case. A \$37.00 value! \$26.00

FUSES, ILLUMINATED (ATC-STYLE)	FUSE HOLDER, IN-LINE (ATC-STYLE)
Identify blown fuses in a snap with our illuminated fuses. Designed to fit ATC- style Fuse Blocks or In-Line Fuse Holders, these light up with a bright LED when blown. Color-coded. Sold in packages of 5. S889-3L, 3-AMP ATC Fuse, ILLUMINATED \$4.50/PKG 5 S889-5L, 5-AMP ATC FUSE, ILLUMINATED \$4.50/PKG 5 S889-7.5L, 7.5-AMP ATC FUSE, ILLUMINATED \$4.50/PKG 5 S889-10L, 10-AMP ATC FUSE, ILLUMINATED \$4.50/PKG 5	These 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). To install, just cut the lead wire molded into the housing, crimp on a ring terminal at one end and a butt splice on the
S889-15L, 15-AMP ATC FUSE, ILLUMINATED \$4.50/PKG 5	other. Not for continuous loads
S889-20L, 20-AMP ATC FUSE, ILLUMINATED \$4.50/PKG 5 S889-25L, 25-AMP ATC FUSE, ILLUMINATED \$4.50/PKG 5	exceeding 20A.
S889-30L, 30-AMP ATC FUSE, ILLUMINATED \$4.50/PKG 5	IFH-2 IN-LINE FUSE HOLDER, ATC-STYLE \$3.75/EA

\$1.50/PKG 5

\$1.50/Pkg 5

ESSENTIAL/E-BUS DIODES

This is the diode bridge rectifier recommended for use as an Essential Bus (or E-Bus) normal feed diode in several AeroElectric Connection powerdistribution 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
221-200 Essential Bus Diode w/ Heatsink, 8 Watt
221-201 ESSENTIAL BUS DIODE W/ HEATSINK, 15 WATT

STEREO HEAD	SET/MIC JACKS AND WASHER	D-SUB PINS AND SOCKETS MIL-SP	EC ★
	Standard .250" I.D. head and .206" I.D. microphone jac used in aircraft radio and interco systems. Nickel-plated copp alloy bushing. Mounts in a .379 hole. Supplied with hex nut a flat washer. If your airplane metal, be sure to isolate the	ks the size of the part. That's why our m D-sub Pins and Sockets are er genuine AMP mil-spec 0" components, with gold over nickel nd plating — they simply don't come is any better. Conforms to MIL-C-	
	jacks from airframe ground means of our extruded insulati washers (1 pair per jack).	S604P D-SUB PIN S604P50 D-SUB PIN, 50 PKG. (.32/EA)	\$0.40/EA \$19.00/PKG \$35.00/PKG
S606H HEADSET S606M Mic Jac S892 Insulating		A S604S50 D-SUB SOCKET, 50 PKG. (.34/EA)	\$0.40/EA \$19.00/PKG \$35.00/PKG

\$5.00/EA \$18.00/EA \$20.00/EA

D-SUB CONNECTORS (PLUGS & RECEPTACLES, WITH BACKSHELLS)

If your project requires D-sub pins or sockets, you'll also need these connector "bodies" to complete the job. Supplied with an appropriate backshell and hardware — almost everything you'll need except pins or sockets.

S8013-9-F D-SUB, 9 POSITION, RECEPTACLE S8013-9-M D-SUB, 9 POSITION, PLUG S8013-15-F D-SUB, 15 POSITION, RECEPTACLE S8013-15-M D-SUB, 15 POSITION, PLUG S8013-25-F D-SUB, 25 POSITION, RECEPTACLE S8013-25-M D-SUB, 25 POSITION, PLUG S8013-37-F D-SUB, 37 POSITION, RECEPTACLE S8013-37-M D-SUB, 37 POSITION, PLUG S8013-HEX D-SUB, STAND-OFF, FEMALE, HEX



See our RCT-3 D-sub crimp tool on page 23, and DSE-1 D-sub Insertion/Extraction tool on page 24.

TOGGLE SWITCHES

Our S700-series toggle switches feature full-sized, brass (nickel plate) bat-handle actuators and bushings. Available in single-pole or double-pole configurations, these switches mount in .4688" holes, with electrical connections using .25" Fast-On terminals. Rated 15A VAC maximum. Single pole switch bodies (behind the panel) measure 1.134"H x .634"W x 1.018"D; double-pole bodies measure 1.308"H x .750"W x .887"D (except S700-2-11, which measures 1.308"H x 1.090"W x .887"D). Note: every S700-series switch we sell comes with two hex nuts, internal-tooth lockwasher, and a keyway (tabbed) anti-rotation washer.

Single Pole	
S700-1-1 SINGLE POLE ON-OFF-ON SWITCH	\$5.00/EA
S700-1-2 SINGLE POLE OFF-ON SWITCH	\$5.00/EA
S700-1-3 SINGLE POLE ON-ON SWITCH	\$5.00/EA
S700-1-4 SINGLE POLE (ON)-OFF-(ON) SWITCH	\$8.00/EA
S700-1-5 SINGLE POLE ON-OFF-(ON) SWITCH	\$8.00/EA
S700-1-8 SINGLE POLE (ON)-ON	\$8.00/EA
Double Pole	
S700-2-1 DOUBLE POLE ON-OFF-ON SWITCH	\$8.00/EA
S700-2-2 DOUBLE POLE OFF-ON SWITCH	\$8.00/EA
S700-2-3 DOUBLE POLE ON-ON SWITCH	\$8.00/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	\$20.00/EA
S700-2-11 DOUBLE POLE ON-ON-OFF SWITCH	\$20.00/EA
S700-2-50 DOUBLE POLE (ON)-ON-ON SWITCH	\$20.00/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.

Also Available 🛧 MIL-SPEC 🛧

The **MS35058-22** switch is a heavy-duty, Single Pole OFF-ON toggle switch suited for loads of up to 20A. Robust construction, featuring a silicon bat-handle seal and silver-plated copper contacts. Switch body measures 1.130"h x .624"w x 1.040"d. Mounts in a .4650" hole, with electrical connections via 6-32 screw terminals. Conforms to MIL-S-83731. "Lusterless finish" (per the Mil-spec). **\$20.00/EA**

S700-SERI	es Toggle Switch Face	NUTS	S700-SERIES TOGGLE SWITCH WASH	HERS
	If you want to "fancy up" try our special toggle swit Face nuts available in nick deluxe flat black. Replac nuts for switches (nickel p available—just in case you develop "legs" during you	ch face nuts. (el plate and cement hex late) are also u've had one	These special washers keep your toggle switch secure once installed. We add these to every toggle switch we sell. The thin internal tooth lock- washer 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-	\bigcirc
S700DFN FA	CE NUT, DELUXE (BLACK)	\$1.00/EA	rotation tab.	
	E NUT, STANDARD (NICKEL)	\$0.35/EA	S700LW LOCKWASHER, INTERNAL TOOTH	\$0.35/EA
S700HN HEX	(NUT (NICKEL)	\$0.35/EA	S700KW Keyway Tab Washer	\$0.35/EA

Need Fast-On or ring terminals? See page 22. Need a crimping tool or wire stripper? See pages 23-24.

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 goldplated silver internal contacts; mounts



omentary control. The S708-1 has goldplated silver internal contacts; mounts in a .1719" hole. The S708-2 features gold-over-nickel brass internal

contacts; mounts in a .2656" hole. Both switches include appropriate mounting hardware. Connection via solder terminals.

S708-1 SUB-MINIATURE PUSH BUTTON (SPST)\$7.00/EAS708-2 MINIATURE PUSH BUTTON (SPST)\$7.00/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 possibility of inadvertent operation.

Features a positive-feel action, with zinc mounting bushing, silver-plated brass internal contacts, and silver-plated copper terminals. Mounts in a .462" hole. Solder connection.

S895-1 STARTER PUSH-BUTTON, W/ GUARD \$19.00/EA

PRESSURE SWITCH (SPDT)	Relays
At last — a reliable pressure switch at a reasonable price. This switch has a dual-circuit configuration (NO/NC), and features gold- plated silver-alloy internal contacts, 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	These 12v and 24v compact relays are suited for use with OV protection circuits in permanent-magnet alternator systems (i.e. B&C, Rotax, Jabiru). Also useful for motor control in flap and trim systems. All three feature silver-alloy internal contacts, with an expected life of up to 100,000 cycles. Supplied with wire terminals.
Hobbs meter, oil pressure warning light, or other similar device.	S704-1 20A SPDT SEALED RELAY (12v) \$10.00/EA S704-2 20A SPDT SEALED RELAY (24v) \$10.00/EA
S8012 PRESSURE SWITCH (SPDT) \$32.00/EA	S8009-1 40A SPDT SEALED RELAY (12V) \$10.00/EA

CONTACTORS

These devices are suitable for a range of applications in experimental aircraft. The S701-1 and S701-2 contactors may be used 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). 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\$35.00/EAS701-2, 4-TERMINAL, PREWIRED CROSS-FEED CONTACTOR, 12V\$35.00/EAS702-1, INTERMITTENT DUTY STARTER CONTACTOR, 12V\$35.00/EAS811-1, B&C STARTER CONTACTOR, 12V\$45.00/EA



Electrical Supplies

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GROUNDING BLOCKS

A centralized grounding system using one of our Ground Blocks is a smart way to discourage pesky electrical gremlins and ground-loops. These are handmade from .04" flat brass stock, with 24 or 48 Fast-On tabs soldered into place. Ships with installation hardware (shown) 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 need the 48-point Block. A "firewall ground kit" providing ground points on both sides of the firewall is also available in two sizes for composite aircraft.

GB24, 24-TAB GROUND BLOCK	\$30.00/EA
GB48, 48-TAB GROUND BLOCK	\$40.00/EA

GB24/24, FIREWALL GROUND BLOCK KIT \$60.00/EA GB24/48, FIREWALL GROUND BLOCK KIT \$70.00/EA

BRAIDED BONDING STRAP (BBS) SUPER-FLEX BATTERY LEAD (SBL) These are a close "cousin" to our Braided Bonding The best way to establish an appropriate electrical Straps. Electrically equivalent to 4AWG wire, but pathway for starter/alternator currents to the with the copper wire wrapped in an unusually airframe. Constructed of two layers of woven, tinned flexible and durable neoprene jacket. "Super-Flex" copper wire, and high guality ring terminals, our Braided Bonding Straps are electrically equivalent to Leads are far more "installer-friendly" than 2AWG wire, though more flexible. Fabricated to your conventional battery leads — ideal for tight spaces in your airplane. Available with BLACK or RED jacket specifications — minimum length is 4", maximum length for \$19.00 is 15" ... add \$1/inch over 15". to denote NEGATIVE or POSITIVE connections. BRAIDING BONDING STRAP (BUILT TO ORDER, SPECIFY: SUPER-FLEX BATTERY LEAD, (Built to Order, Specify: TERMINAL-LENGTH-TERMINAL) \$19.00/EA TERMINAL-LENGTH-TERMINAL; BLACK OR RED) \$19.00/EA

Indicate center-to-center length, and specify 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" = 12" Bonding Strap, with 1/4" and 5/16" ring terminals.

BUS AND GROUNDING SUPPLIES

MS25171-1S TERMINAL INSULATION BOOT (FITS 0.16" DIA. WIRE) \$2.00/EA MS25171-2S TERMINAL INSULATION BOOT (FITS 0.31" DIA. WIRE) \$2.50/EA BUS BAR STOCK .025" X .50" X 12" BRASS **C909 ULTRA TEF-GEL® ANTI-SEIZE & CORROSION INHIBITOR** S8024-2.25-10 WASHER, INTERNAL TOOTH, #6 S8024-2.50-10 WASHER, INTERNAL TOOTH, #8



BBS and SBL Ordering Info

\$2.00/EA \$15.00/EA \$0.75/Pkg 10 \$0.75/PKG 10

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

M22759/16-6 27478

Tefzel[®] insulated wire (M22759/16) constructed with a stranded, tinned copper conductor and extruded ETFE insulation (part of the Teflon[®] family of fluoropolymer resins). Voltage rated to 600V and temperature rated @ -55° C to 150° C, with excellent resistance to abrasion and chemicals, and low fume toxicity.

M22759/16-2-9 2AWG WHITE	\$5.95/FT	M22759/16-18-0 18AWG BLACK	\$0.30/FT
M22759/16-4-9 4AWG WHITE	\$3.35/FT	M22759/16-18-2 18AWG RED	\$0.30/FT
M22759/16-6-9 6AWG WHITE	\$2.25/FT	M22759/16-18-9 18AWG WHITE	\$0.30/FT
M22759/16-8-9 8AWG WHITE	\$1.85/FT	M22759/16-20-0 20AWG BLACK	\$0.22/FT
M22759/16-10-9 10AWG WHITE	\$1.10/FT	M22759/16-20-2 20AWG RED	\$0.22/FT
M22759/16-12-0 12AWG BLACK	\$0.85/FT	M22759/16-20-9 20AWG WHITE	\$0.22/FT
M22759/16-12-2 12AWG RED	\$0.85/FT	M22759/16-22-0 22AWG BLACK	\$0.22/FT
M22759/16-12-9 12AWG WHITE	\$0.85/FT	M22759/16-22-2 22AWG RED	\$0.22/FT
M22759/16-14-0 14AWG BLACK	\$0.40/FT	M22759/16-22-9 22AWG WHITE	\$0.22/FT
M22759/16-14-2 14AWG RED	\$0.40/FT	M22759/16-24-0 24AWG BLACK	\$0.22/FT
M22759/16-14-9 14 AWG WHITE	\$0.40/FT	M22759/16-24-2 24AWG RED	\$0.22/FT
M22759/16-16-0 16AWG BLACK	\$0.30/FT	M22759/16-24-9 24AWG WHITE	\$0.22/FT
M22759/16-16-2 16AWG Red	\$0.30/FT	By-the-foot wire (6 to 24 AWG) is available on a	
M22759/16-16-9 16AWG WHITE	\$0.30/FT	spool, at your request. Cost is \$2.00/per spool.	

WIRE, SHIELDED TEFZEL® (CONFORMS TO MIL-DTL-27500) 🗙 MIL-SPEC ★

Tefzel[®] insulated wire, with stranded tinned copper conductor(s) per MIL-W-22759/18, wrapped in a braided tinned copper shield and an extruded ETFE jacket. Voltage rated to 600V. Temperature rated –55° C to 150° C.

S906-1-18 18AWG SINGLE [10 TO 49 FEET] \$0.65/FT	\$906-2-22 22AWG Duo	[10 TO 49 FEET] \$0.70/ft
[50 + FEET] \$0.60/FT		[50 + FEET] \$0.65/FT
S906-1-20 20AWG SINGLE [10 TO 49 FEET] \$0.55/FT	\$906-3-22 22AWG Trio	[10 TO 49 FEET] \$1.00/ft
[50 + FEET] \$0.50/FT		[50 + FEET] \$0.95/FT
S906-1-22 22AWG SINGLE [10 TO 49 FEET] \$0.65/FT	\$906-4-22 22AWG QUAD	[10 TO 49 FEET] \$1.45/ft
[50 + FEET] \$0.60/FT		[50 + FEET] \$1.40/FT

Wiring Supplies, Heatshrink (Conforms to MIL-DTL-23053/5, Class 2)



Contains 32 ft. of clear heatshrink: 16 *continuous* ft. of 3/32" and 5 *continuous* ft. each of 1/8", 3/16", 1/4", and 3/8." **\$22.00/EA**

Made from irradiated polyolefin. Useful for sealing and insulating wire connections, strain relief, and wire identification. Highly flexible and thermally stable, with superior resistance to chemicals, solvents, and abrasion. Features a 2:1 shrink ratio for a preferable "recovered wall thickness" vs. 4:1 ratio thin-wall heatshrink. Rated at 600V @ 125°C. Operating temperature range of -55°C to +135°C.

S816C112 3/32" CLEAR HEATSHRINK	\$0.30/FT
S816C212 1/8" CLEAR HEATSHRINK	\$0.30/FT
S816C312 3/16" CLEAR HEATSHRINK	\$0.40/FT
S816C412 1/4" CLEAR HEATSHRINK	\$0.40/FT
S816C612 3/8" CLEAR HEATSHRINK	\$0.55/FT

Tefzel and Teflon* are registered trademarks of the DuPont Corporation.

Terminals and Splices

FASTON TERMINALS, KNIFE AND BUTT SPLICES — Nylon Preinsulated (Genuine AMP)

RFO11-10 , 18-22 AWG, .11" FASTON	\$3.00/pkg 10
RFO18-10 , 18-22 AWG, .1875" FASTON	\$3.00/ркд 10
RFO25-50 , 18-22 AWG, .25" FASTON	\$15.00/рк д 50
BFO18-10 , 14-16 AWG, .1875" FASTON	\$3.00/PKG 10
BFO25-50 , 14-16 AWG, .25" FASTON	\$15.00/рк д 50
YFO25-10 , 10-12 AWG, .25" FASTON	\$7.00/рк д 10
S890RK-10, 22-18 AWG, KNIFE SPLICES	\$6.00/рк д 10
S890BK-10, 14-16 AWG, KNIFE SPLICES	\$6.00/рк д 10
S891RB-10, 22-18 AWG, BUTT SPLICES	\$7.00/рк д 10
S891BB-10 , 14-16 AWG, BUTT SPLICES	\$7.00 /ркд 10
S891YB-10, 10-12 AWG, BUTT SPLICES	\$8.00/PKG 10



ITK-1 INSULATED TERMINAL KIT (WITH STORAGE CASE)

Our most commonly-requested sizes of **Genuine AMP** pre-insulated wire terminals in one kit — *a* \$164.00 value! Includes 24 AWG to 10 AWG FastOn and Ring terminals, Butt splices, and convenient storage case. \$90.00/EA

INSULATED RING TERMINALS — NYLON PREINSULATED (GENUINE AMP)

S814R6-10, 18-22AWG, #6 \$3.00/PKG 10 **S814R8-10**, 18-22AWG, #8 \$3.00/PKG 10 **S814R10-10**, 18-22AWG, #10 \$3.00/PKG 10 S814R25-10, 18-22AWG, .25" \$3.00/PKG 10 \$3.00/PKG 10 S814R31-10, 18-22AWG, .31" S814R38-10, 18-22AWG, .38" \$3.00/PKG 10 **S814B6-10**, 14-16AWG, #6 \$3.00/PKG 10 \$3.00/PKG 10 **S814B8-10**, 14-16AWG, #8 **S814B10-10**, 14-16AWG, #10 \$3.00/PKG 10



S814B25-10, 14-16AWG, .25" \$3.00/PKG 10 S814B31-10, 14-16AWG, .31" \$3.00/PKG 10 S814B38-10, 14-16AWG, .38" \$3.00/PKG 10 **S814Y10**, 10-12AWG, #10 \$0.50/EA S814Y416, 10-12AWG, .25" \$0.50/EA S814Y516, 10-12AWG, .31" \$0.50/EA S814Y6, 10-12AWG, #6 \$0.50/EA S814Y616, 10-12AWG, .38" \$0.50/EA S814Y8, 10-12AWG, #8 \$0.50/EA

UNINSULATED RING TERMINALS — BRAZED SEAM, WITH DOUBLE-WALL HEATSHRINK (GENUINE AMP)

S812-2-3 2AWG RING, .1875" \$2.00/EA **S812-4-7** 4AWG RING, .4375" \$1.50/EA **\$812-2-4** 2AWG RING, .25" \$2.00/EA **S812-6-3** 6AWG RING, .1875" \$1.25/EA **S812-2-5** 2AWG RING, .32" \$2.00/EA **S812-6-4** 6AWG RING, .25" \$1.25/EA **S812-2-6** 2AWG RING, .38" \$2.00/EA **S812-6-5** 6AWG RING, .31" \$1.25/EA **S812-4-3** 4AWG RING, .1875" \$1.50/EA **S812-6-6** 6AWG RING, .38" \$1.25/EA **S812-4-4** 4AWG RING, .25" \$1.50/EA **S812-8-3** 8AWG RING, .1875" \$1.00/EA **S812-4-5** 4AWG RING, .31" \$1.50/EA \$812-8-4 8AWG RING, .25" \$1.00/EA **S812-4-6** 4AWG RING, .38" \$1.50/EA \$812-8-5 8AWG RING, .31" \$1.00/EA

Which Size Terminals Do I Need?

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

- B&C Controllers/Voltage Regulators (LR3C-14, LR3C-28, LS-1A, SB1B-14, & SB1B-28): #6 Ring
- B&C Starters (BC206/BC315 and BC320): .31 Ring
- B&C Alternators, B-lead (L-40, BC460-H, BC462-H, BC410-H): .25 Ring
- Batteries (BC100, BC116): .25 Ring
- Circuit Breakers: #6 (CB1 CB30) or #8 Ring (CB40-CB50)
- Contactors: .31 Ring, #10 Ring
- Current Limiter Bases: .31 Ring
- Fuse Holders: .25 Fast-On, #10 Ring
- Grounding Blocks: .25 Fast-On, .31 Ring
- S700-series Switches: .25 Fast-On



TOOLS

Ratcheting & Non-Ratcheting Crimpers

Our crimp tools have been selected for durability and solid results, all while minding the budget. The RCT-series ratcheting crimpers permit efficient one-handed operation. The BCT-series have a non-ratcheting, precise crimping action, and the ICT crimper has the sturdiness needed to crimp non-insulated terminal "lugs".



RCT-1 PIDG-Style

The RCT-1 crimps Fast-On and ring terminals, as well as insulated butt & knife splices. Features 3 crimping "pockets" for 18-22 AWG (red), 14-16 AWG (blue), and 10-12 AWG (yellow) terminals. **\$45.00/EA.**



RCT-2 BNC Connector

The RCT-2 makes possible professional installation of commercial and Mil-Spec BNC coax connectors on RG-400 and RG-58. **\$45.00/EA.**



RCT-3 D-Sub Pin/Socket

The RCT-3 yields excellent results on standard D-sub pins or sockets, with a superb 4-way crimping mechanism. May also be adjusted for highdensity pins and sockets. **\$49.00/EA.**



RCT-4 Open Barrel

BCT-2 B-Crimp

The RCT-4 for open barrel contacts combines ratcheting action with precise, consistent crimps for 10-20 AWG B-type conductors. **\$49.00/EA.**

The BCT-2 for open-barrel type

terminals has separate pockets

for non-ratcheting crimping of

14-18 AWG & 20-24 AWG

insulation, and 14-16 AWG, 18-

20 AWG, & 22-24 AWG B-type



BCT-1 B-Crimp

The BCT-1 for open-barrel type terminals has separate pockets for non-ratcheting crimping of 16-20 AWG & 22-30 AWG insulation, and 16-18 AWG, 20-22 AWG, & 24-30 AWG B-type conductors. **\$35.00/EA.**

The Right Tool for the Job

Our Tech Support staff is really a pretty intrepid bunch, but one thing that makes them wince is hearing of a wire terminal that was installed by "mashing" it with a pair of plyers. That's painful to hear ... especially since there are affordable tools to be had. Good tools don't need to cost a mint to do a reliable job — they just need to be right for the task.



ICT-1 Uninsulated

conductors. \$35.00/EA.

The ICT-1 Impact Crimp Tool is a fast and efficient way to crimp uninsulated terminals. Just use a 2 lb. hammer and strike the top of the ram — and the job is done. Crimps 8AWG thru 4/0AWG. **\$50.00/EA.**

TOOLS

Wire Stripper, Cable Cutter, and Other Tools



45-097 Stripmaster®

The Ideal Stripmaster[®] 45-097 features a die-cast frame, precision knife-type blades, and a smooth spring-action motion. This is the tool of choice in our shop for work with Tefzel[®] wire. **\$55.00/EA.**



Wire Stop & Blades

Outfit your 45-097 Stripmaster[®] with the L-5270 Adjustable Wire Stop for repetitive stripping operations. **\$14.00/EA.**

L-4994 or L-4421 Replacement Blades. **\$25.00/EA.**



AVPW716 Wrench

This wrench fits into the tight areas between the vacuum pump (or pad-driven alternator) and other nearby accessories, making installation & removal less difficult. Use with any 1/4" drive extension. **\$45.00/EA.**



DMM-2 Multimeter

This digital meter measures DC and AC voltage, DC current, Resistance, Diode, Transistor and Continuity Test. 3-1/2 digit, 7 segment LCD display with back light. Powered by a 9V battery. **\$24.00/EA.**



DSE-1 Insertion/Extraction

The DSE-1 D-Sub Insertion/ Extraction tool (M81969/1-02) is designed to install and extract standard D-Sub pins and sockets from DB-type connector bodies. USA-made. **\$4.00/EA.**



ATC Fuse Extraction

If your fingers are just too big to grasp a seated ATC-type fuse, the S889-TOOL makes a handy addition to your tool box. Suitable for both standard and illuminated ATC fuses. **\$4.00/EA.**

The AeroElectric Connection, 12th 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 by Bob Nuckolls, *The AeroElectric Connection* offers a wealth of information on the theory and practice of aircraft electrical systems. Accessible to novice and experienced builders alike. If you want to wire your aircraft — and want to do it safely — this is THE book you need.

The AeroElectric Connection

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