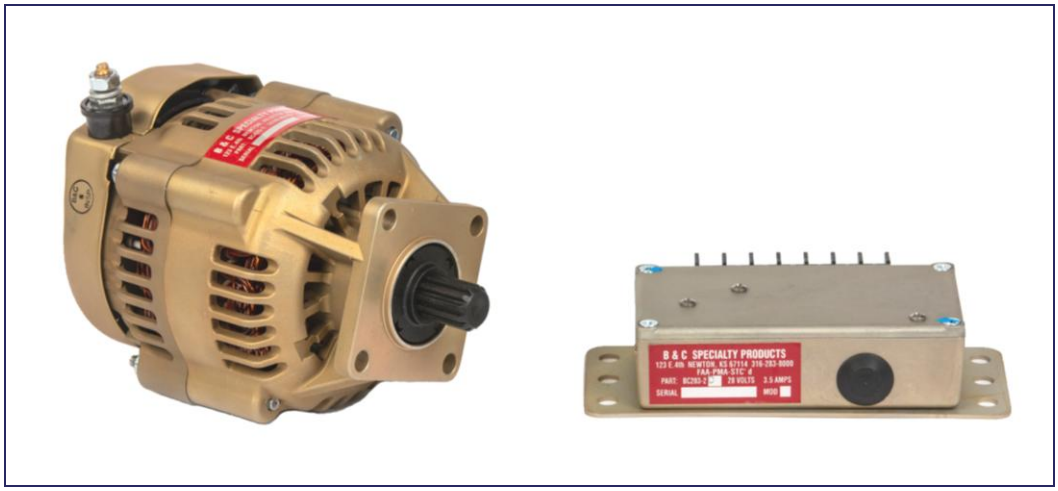
123 East 4th St, P.O. Box "B" · Newton KS 67114-0894
Telephone (316) 283-8000 · Fax (316) 283-7400

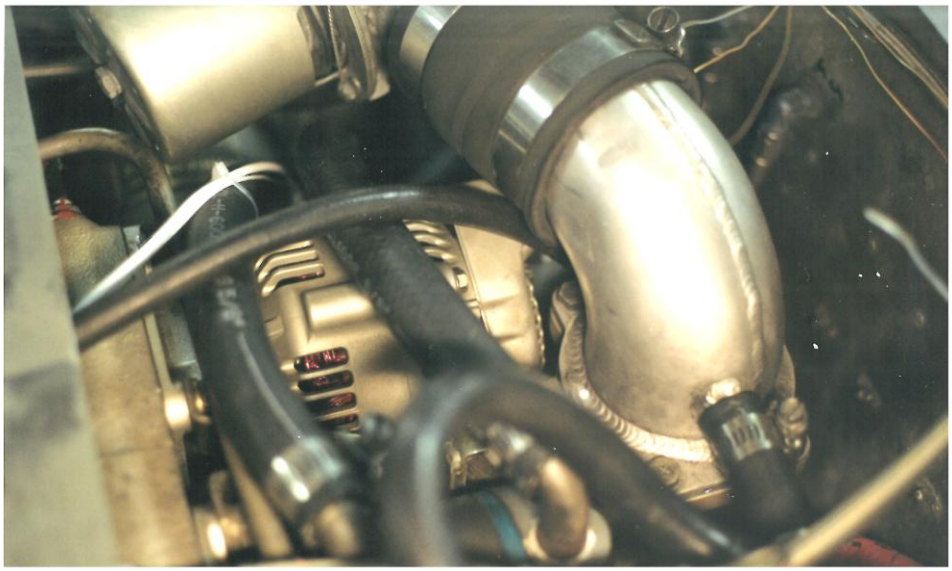
The B&C Standby Alternator System for the Cessna 210

The B&C Standby Alternator system provides improved safety of flight for owners of Cessna 210 aircraft, with ease of operation and exceptional dependability. STC/PMA approved for installation on Cessna 210L, 210M, 210N, T210L, T210M, T210N, and P210N aircraft. Eligible serial numbers are detailed on page 3.



In operation, the B&C Standby Alternator system monitors the aircraft bus voltage 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 should fail in flight, the Standby Alternator system will sense the resulting drop in bus voltage and automatically activate. Rated to provide 20 amps of power to support continued flight, if load requirements exceed 20 amps the panel-mounted annunciator will flash, alerting the pilot to the condition. Reducing load 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.



Installation Notes

The standby alternator is mounted on the right-hand accessory drive pad on the Continental engine to allow throttle linkage clearance. As a result, the vacuum pump usually mounted in this location must be moved to the left-hand accessory drive pad. Panel mounted equipment includes a STBY ALT ON annunciator, a STBY ALT toggle type breaker and two standard pull type circuit breakers (1 amp and 40 amp). Appropriate placards are provided for each panel mounted device. The standby alternator controller (regulator) is mounted behind the interior panel near the pilot's left leg.

B & C Specialty Products Inc.
STC No. SA00846WI
Cessna 210 Standby Alternator Approved Models List

Model	Serial Numbers
210L	21059503 thru 21059719 (1972 model) 21059720 thru 21060089 (1973 model) 21060090 thru 21060539 (1974 model) 21060540 thru 21061039 (1975 model) 21061040 thru 21061041 (1976 model) 21061043 thru 21061573 (1976 model)
210M	21061574 thru 21062273 (1977 model) 21061042, 21062274 thru 21062954 (1978 model)
210N	21062955 thru 21063640 (1979 model) 21063641 thru 21064135 (1980 model) 21064136 thru 21064535 (1981 model) 21064536 thru 21064772 (1982 model) 21064773 thru 21064822 (1983 model) 21064823 thru 21064897 (1984 model)
P210N	P21000001 thru P21000150 (1978 model) P21000151 thru P21000385 (1979 model) P21000386 thru P21000590 (1980 model) P21000591 thru P21000760 (1981 model) P21000761 thru P21000811 (1982 model) P21000812 thru P21000834 (1983 model)
T210L	21059503 thru 21059719 (1972 model) 21059720 thru 21060089 (1973 model) 21060090 thru 21060539 (1974 model) 21060540 thru 21061039 (1975 model) 21061040 thru 21061041 (1976 model) 21061043 thru 21061573 (1976 model)
T210M	21061574 thru 21062273 (1977 model) 21061042, 21062274 thru 21062954 (1978 model)
T210N	21062955 thru 21063640 (1979 model) 21063641 thru 21064135 (1980 model) 21064136 thru 21064535 (1981 model) 21064536 thru 21064772 (1982 model) 21064773 thru 21064822 (1983 model) 21064823 thru 21064897 (1984 model)

United States of America
Department of Transportation -- Federal Aviation Administration

Supplemental Type Certificate SAMPLE

Number SA00846WI

This certificate issued to B & C Specialty Products, Inc.
123 E. 4th Street
Newton, KS 67114-0894

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 3 *of the* Civil Air *Regulations.*

Original Product - Type Certificate Number : 3A21

Make : Cessna

Model : 210L, 210M, 210N, P210N, T210L, T210M, T210N

Description of Type Design Change: Installation of B&C Specialty Products BC425-1 Standby Alternator. Data Required: (1) B&C Specialty Products, Inc. Master Drawing list No. 425LST1.DOC, Revision B, dated December 17, 1999; (2) B&C Specialty Products Document No. FMS425-1, FAA Approved Airplane Flight Manual Supplement, dated December 23, 1999; or later FAA Approved Revisions to (1) or (2).

Limitations and Conditions: Compatibility of this design change with previously approved modifications must be determined by the installer.

If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application : December 10, 1998

Date of issuance : December 23, 1999

Date reissued :

Date amended :

By direction of the Administrator

FEDERAL AVIATION ADMINISTRATION SAMPLE

(Signature)

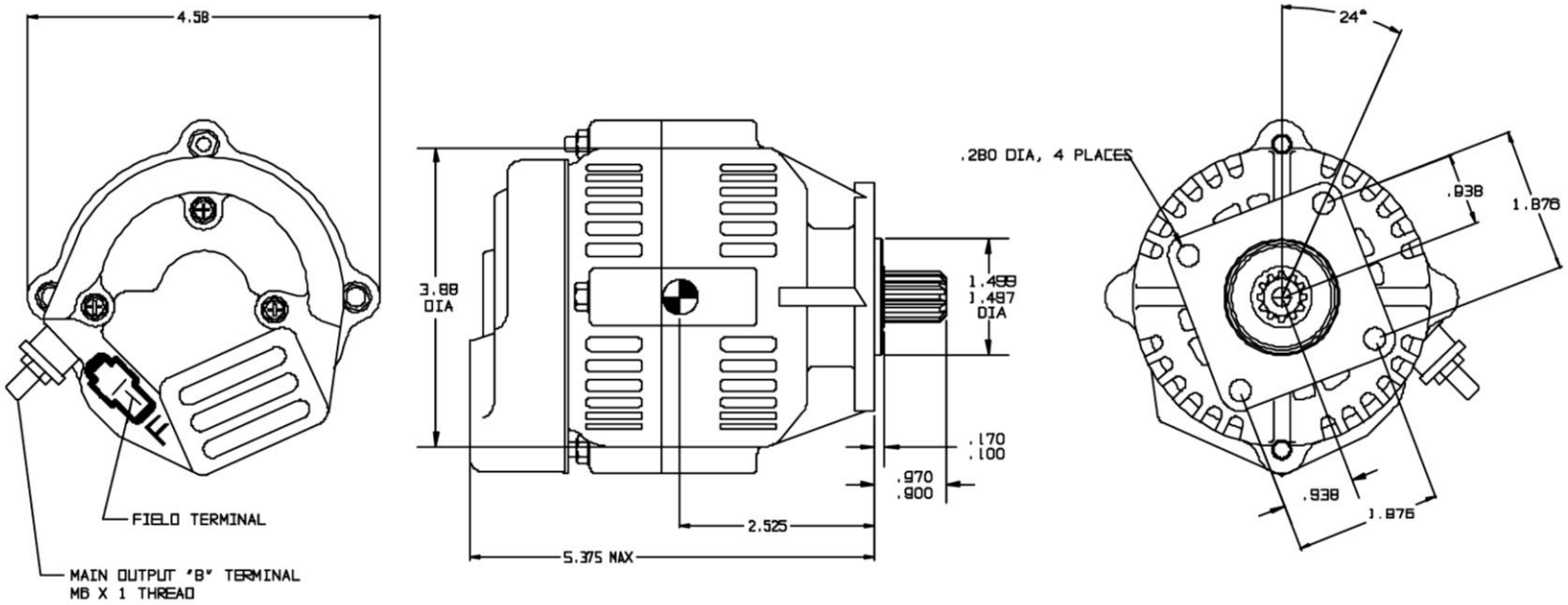
Joel M. Ligon
Program Manager
Wichita Aircraft Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

FAA Form 8110-2(10-68) PAGE 1 of 2 PAGES *This certificate may be transferred in accordance with FAR 21.47.*

REV	DATE	DESCRIPTION



NOTE: 1. ALL DIMENSIONS FOR REFERENCE ONLY

2. RECOMMENDED INTERVAL BETWEEN OVERHAUL IS 1700 HRS.

(-1) ALTERNATOR 14/28V, 20 AMP

WEIGHT: 5.72 LBS.
MAX STATOR TEMP: 300°F
FOR USE ON AND20000 ACCESSORY PAD.
ALL DIMENSIONS ARE REFERENCE ONLY

		1	425-100-1	ALTERNATOR ASSY, 14/28V, 20A
			-1	ALTERNATOR, 14/28V, 20A
		-1	PART NO.	DESCRIPTION
USED ON				

UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
DECIMAL 0.XX = ± 0.03
DECIMAL 0.XXX = ± 0.010
ANGLES = ±0.5 DEGREES

	NAME	DATE
ENGINEER	TH	10/13/18
DRAWN	TH	10/13/18
CHECKED	TH	10/13/18
PROJECT		

B & C Specialty Products
P.O. Box 8, Newton, Kansas 67114

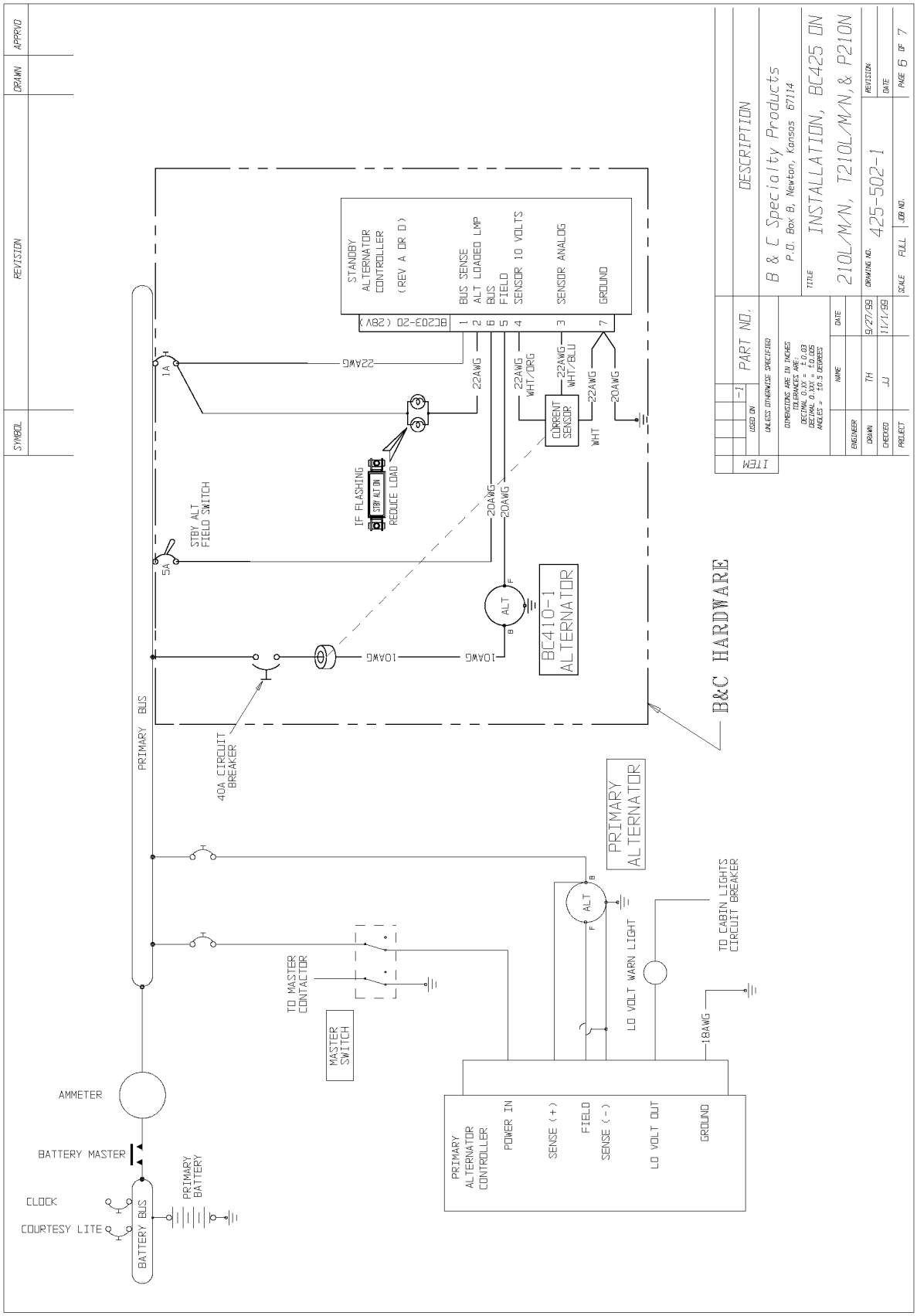
TITLE: ENVELOPE DRAWING
AIRCRAFT ALTERNATOR,
14/28 VOLT, 20 AMP

DRAWING NO. BC425

REVISION

DATE

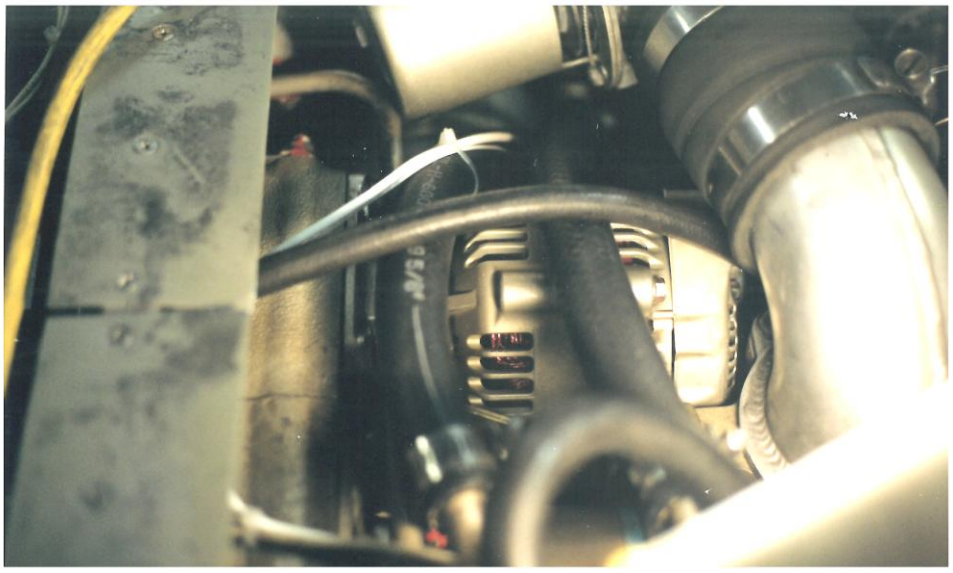
SCALE | JOB NO. | SHEET 1 OF 1


B&C HARDWARE
BC410-1 ALTERNATOR
STANDBY ALTERNATOR CONTROLLER (REV A OR D)
BC203-20 (28V)
BUS SENSE
ALT LOADED LMP
BUS FIELD
SENSOR 10 VOLTS
SENSOR ANALOG
GROUND
CURRENT SENSOR
STBY ALT FIELD SWITCH
IF FLASHING STBY ALT ON REDUCE LOAD
40A CIRCUIT BREAKER
PRIMARY BUS
PRIMARY ALTERNATOR
TO MASTER CONTACTOR
MASTER SWITCH
LO VOLT WARN LIGHT
TO CABIN LIGHTS CIRCUIT BREAKER
AMMETER
BATTERY MASTER
PRIMARY BATTERY
CLOCK
COURTESY LITE
BATTERY BUS
PRIMARY ALTERNATOR CONTROLLER
POWER IN
SENSE (+)
FIELD
SENSE (-)
LO VOLT OUT
GROUND
B & C Specialty Products
P.O. Box 8, Newton, Kansas 67114
INSTALLATION, BC425 ON 210L/M/N, T210L/M/N, & P210N
425-502-1
PAGE 6 OF 7

Range of Applications

The B&C Specialty Products Standby Alternator System has been installed in thousands of certified aircraft over the past 20 years. It has been factory-installed on the Mooney Ovation and Acclaim since June 1996; on the Beech Bonanza since mid-2000; and on the Quest Kodiak since 2008. B&C also holds an STC for installation of the Standby Alternator system in Piper PA32 aircraft and has cooperated on an STC/PMA installation for Cessna 182 and 206 aircraft with Lycoming powerplants (contact us for details).

For individuals interested in obtaining one-time field approvals on aircraft not yet covered by the STC, a general system wiring diagram has been provided in this brochure to assist in these efforts. We will continue to work on STC's for other models. Please let us know if you are interested in the Standby Alternator system for your aircraft – and feel free to call if you have any questions.



Pricing

BC410-1 Alternator and Regulator w/ STC (28v only) $3850.00

Includes: Alternator, Controller, and Installation Kit