B & C Specialty Products Inc

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

Manufacturer of Lightweight Electrical Systems

General Information on Piper PA32 Standby Alternators

B&C Specialty Products is pleased to announce that we have received FAA STC/PMA approval for installation of the BC410 standby alternator and BC203-2D (28v) or BC217-1A (14v) regulator on all Piper PA32, Cherokee Six, Lance and Saratoga models (including those w/ turbocharged engines).

Prices for the components are as follows:

Alternator & Regulator w/ STC (specify 14v or 28v) \$2200.00 Installation Kit 410-506-1 (28v) or 410-506-2 (14v) \$435.00

This system has been installed by New Piper as factory equipment on all new PA32's since late 2005.

System Operation

The standby system provides 20 amps of power to support continued flight in the event of primary alternator failure. It turns on automatically, annunciating its operation to the pilot through a panel mounted annunciator which doubles as a standby alternator load monitor.

If the primary alternator fails in flight, the standby regulator 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 light steadily. The pilot may choose which equipment he needs 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 5 minutes without damaging the standby alternator.

Installation Notes

The B&C Standby Alternator is mounted on the hydraulic accessory drive pad on the Lycoming "dual mag" (2-in-1 magneto) drive engines. On engines with two separate magnetos, the standby alternator is mounted on the vacuum pump drive and the vacuum pump is re-located to the hydraulic accessory drive pad. Lycoming parts needed to complete the hydraulic accessory drive are not included in the installation kit and must be purchased separately.

Panel mounted equipment includes a STBY ALT ON annunciator light, a STBY ALT rocker switch (purchased separately to match the existing switches) and three standard pull-type circuit breakers (1 amp, 5 amp and 40 amp). Appropriate placards are provided for each panel mounted device. The regulator is mounted in the area between the instrument panel and the firewall.

Because of the poor service record of the primary alternator and increased dependency on electrical power over the last 5 to 10 years, installing the B&C Standby Alternator System will greatly increase your flying safety.

United States of America

Bepartment of Transportation -- Federal Abiation Administration Supplement

Number SA01066WI

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:

A3SO

Make:

Model: PA-32-260, PA-32-300, PA-32S-300, PA-32R-300, PA-32RT-300, PA-32R-301, PA-32-301, PA-32R-301T, PA-32-301T, PA-32RT-

300T, PA-32-301XTC, PA-32-301FT

Description of Type Design Change: Installation of B&C Specialty Products BC410-1 Standby Alternator System. Data Required: (1) B&C Specialty Products, Inc. Drawing List No. 410LST3.DOC, Revision (-). dated June 4, 2001; (2) B&C Specialty Products Document No. FMS410-3, FAA Approved Airplane Flight Manual Supplement, dated April 3, 2002; or later FAA

Limitations and Con 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, reveked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application . June 7, 2001

Date reissued :

Date of issuance : April 3, 2002

Date amended: November 6, 2006

ection of the Administrator am Manager ircraft 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.

APPL ICABILITY

ILMBERS	CHERDKEE SIX - 260 32-03, 32-04, 32-1 THRU 32-1297, 32-7100001 THRU 32-7800008	CHERDKEE SIX - 300 32-15, 32-21, 32-40000 THRU 32-40974, 32-7140001 THRU 32-7940290	CHERDKEE SIX – 300 32S-15, 32S-40000 THRU 32S-40974, 32S-7140001 THRU 32S-7240137 SEA PLANE	R7880058	R-7985105	32K-8013001 THRU 32R-8613006, 3213001 THRU 3213028, 3213030 THRU 3213041	3213029, 3213042 THRU 3213103 (14V), 3246001 THRU 3246017 (14V), 3246018 & UP (28V)	32-8006002 THRU 32-8606023, 3206001 THRU 3206019, 3206042 THRU 3206044, 3206047, 3206050 THRU 3206055, 3206060	32R-8029001 THRU 32R-8629008 & 3229001 THRU 3229003		8424002	32R-7787001 & 32R-7887002 THRU 32R-7987126		
SERIAL NUMBERS	32-03, 32-04, 32-1	32-15, 32-21, 32-400	72S-15, 32S-40000 TF	32R-7680001 THRU 32R7880068	32R-7885002 THRU 32R-7985106	32R-8013001 THRU 32R 3213030 THRU 3213041	3213029, 3213042 THE 3246018 & UP (28V)	32-8006002 THRU 32-6 3206044, 3206047, 3	32R-8029001 THRU 32K	3257001 & UP	32-8024001 THRU 32-8424002	32R-7787001 & 32R-7E	3255001 & LIP	3232001 & UP
MIDEL NAME	CHEROKEE SIX - 260	CHEROKEE SIX - 300	CHERDKEE SIX - 300 SEA PLANE	LANCE	LANCE II	SARATDGA SP	SARATOGA II HP	SARATUGA	TURBO SARATOGA SP	SARATOGA II TC	TURBO SARATOGA	TURBO LANCE II	PIPER 6XT	PIPER 6X
MODEL NO.	PA-32-260 (PA-32-300	PA-32S-300	PA-32R-300	PA-32RT-300	PA-32R-301	PA-32R-301	PA-32-301	PA-32R-301T	PA-32R-301T	PA-32-3017	PA-32RT-300T	PA-32-301XTC	PA-32-301FT

NDTE: -1 KIT FOR 28 VOLT AIRCRAFT, -2 KIT FOR 14 VOLT AIRCRAFT

BC410 WT.= 5.75 LBS. BC203-20 WT.= 0.6 LBS BC217-1A WT.= 0.6 LBS. W&B NOTE:

INSTALLATION INSTRUCTIONS

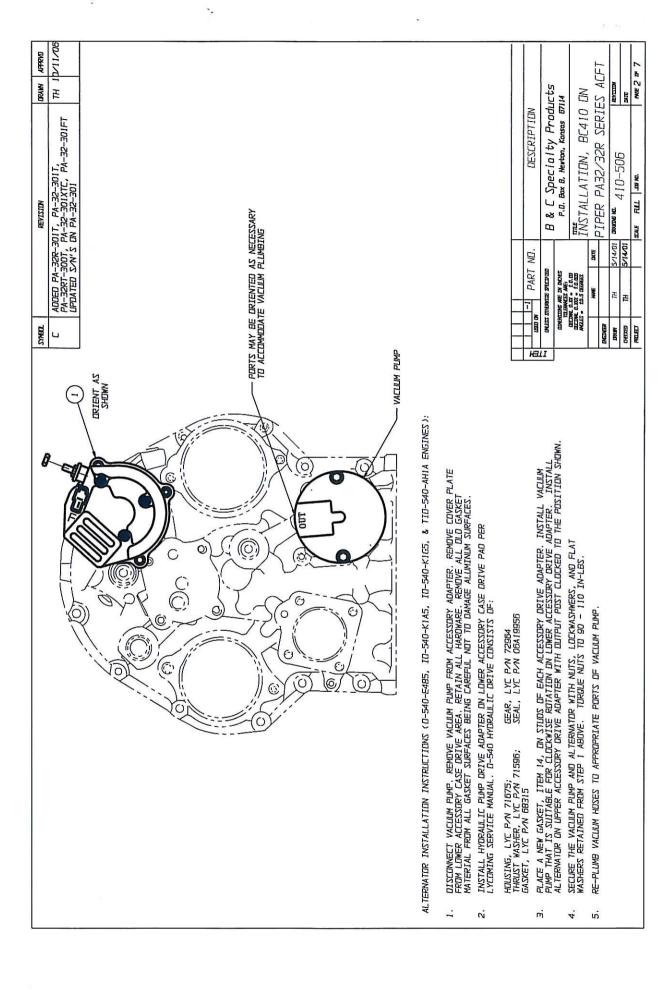
- O 1. REMOVE TOP AND BOTTOM ENGINE CONLINGS.
- 3. DN AIRCRAFT EQUIPPED WITH D-540-E485, ID-540-K165, ID-540-K165, AND TID-540-AHIA ENGINES, REFERENCE PAGE 2 DF 7. INSTALL LYCOMING HYDRALLIC PLMP ADAPTER DN ENGINE LOWER ACCESSORY DRIVE PAD (IF NOT INSTALLED), MOVE VACILIM PLMP AND INSTALL ALTERNATOR. ☐ 2. DISCONNECT THE AIRCRAFT BATTERY.☐ 3. ON AIRCRAFT EQUIPPED WITH 0-540-
 - DN AIRCRAFT EQUIPPED WITH ID-540-K165D, ID-540-K1A5D, DR TID-540-S1AD ENGINES, REFERENCE PAGE 7 DF 7, INSTALL LOWER ACCESSORY CASE ACCESSORY DRIVE GEAR (IF NOT INSTALLED) AND INSTALL ALTERNATOR DN LOWER ACCESSORY DRIVE. 4
 - REFERENCE PAGE 3 OF 7 FOR CONTROLLER INSTALLATION INSTRUCTIONS. ភេ
 - REFERENCE PAGE 4 OF 7 FOR ANNINCIATOR, FIELD SWITCH AND BREAKER INSTALLATION INSTRUCTIONS. 9

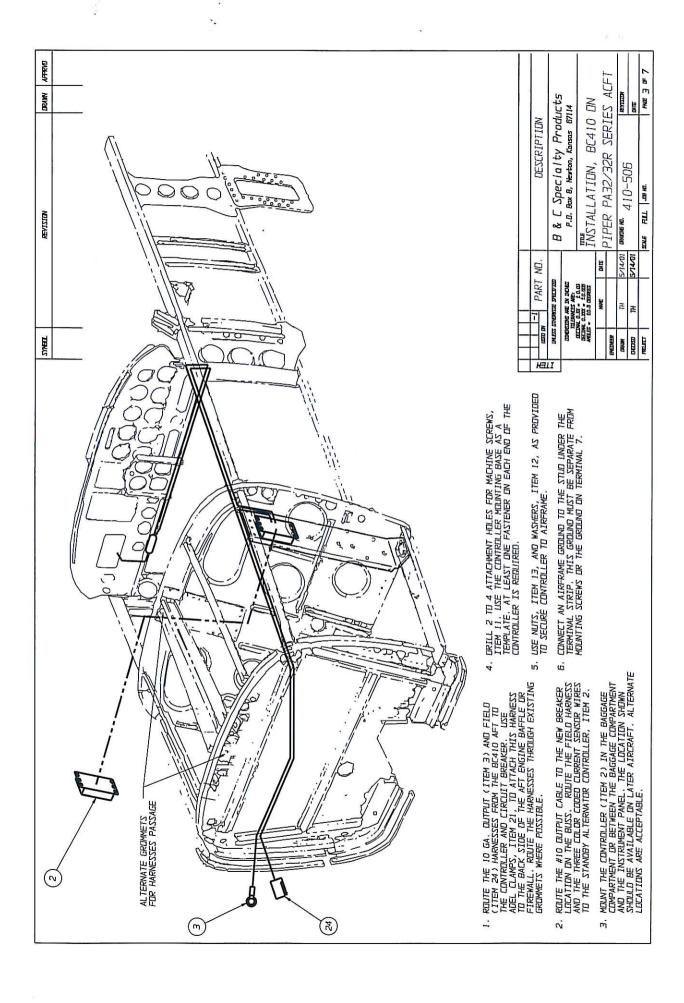
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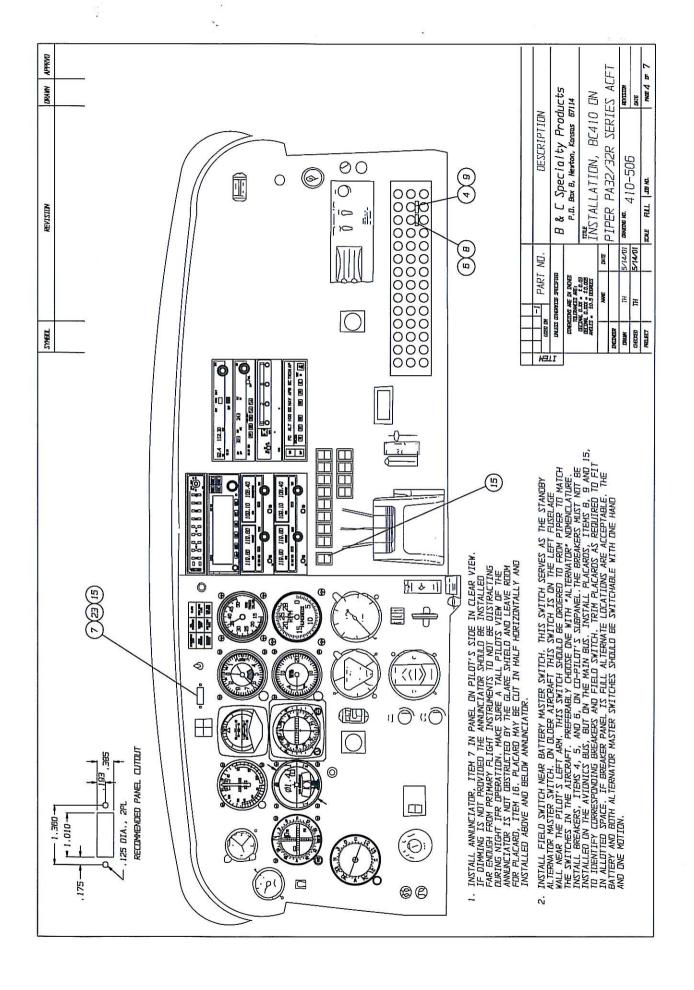
- 7. REFERENCE PAGE 3 OF 7 FOR PLACEMENT OF WIRING HARVESS FORWARD OF AND PASSING THROUGH THE FIREWALL.
- 8. REFERENCE PAGE 5 OF 7 FOR FINAL WIRING SCHEMATICS.
- DRESS ALL WIRES AWAY FROM CHAFE POINTS AND FLIGHT CONTROLS USING NYLON WIRE TIES, CHECK THE WIRE CLEARANCES FROM FLIGHT CONTROLS AT ALL EXTREMES OF CONTROL MOVEMENT. 9. 0 0
- 10. RE-CONNECT AIRCRAFT BATTERY, REFERENCE PAGE 6 OF 7; PERFORM FINAL TEST PROCEDURE.
- 11. RE-INSTALL ENGINE COMLING AND INTERIOR PANELS. 0 0 0
- 12. UPDATE AIRCRAFT WEIGHT AND BALANCE, LOG BOOKS AND AIRCRAFT FLIGHT MANUAL.

FOR INSTRUCTIONS FOR CONTINIED AIRWORTHINESS SEE B&C DOCLIMENT NUMBERS ICA-BC410, ICA_BC217-1A OR ICA_BC203-2D

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4 MS35333-40 MS3/HER, LIDCKING, INTERNAL TIDDI 4 A MAGGO-416L MS3/HER, LIDCKING, INTERNAL TIDDI 4 A MAGGO-416L MS3/HER, LIDCKING, INTERNAL TIDDI 5 A MS367-41-9 FIELD CINNECTINE ASSEMBLY 5 MS367-1-9 CABLE TIE, NYLIN 6 MS367-1-9 CABLE TIE, NYLIN 7 A 10-225-9 FIELD CINNECTINE ASSEMBLY 8 MS21919-WIGS CLAMP, CLISHTINED 9 MS281919-WIGS CLAMP, CLISHTINED 1 A 10-404 MIT, HEX, LIDCK 1 A 10-404 MIT, HEX, LIDCK 1 A 10-404 MIT, HEX, LIDCK 1 A 25-402 PLACARD, BREAKER, STBY ALT 2 A NSB0-10L MASHER, PLAT 3 A 25-205-1 ANNINCIATUR (14V) 4 A 25-205-1 ANNINCIATUR (2B) 1 B C217-1 BREAKER, 5 AMP 1 B C217-1 BREAKER, 5 AMP 1 B C217-1 BREAKER, 5 AMP 1 B C217-1 BREAKER, 5 BAST 1 B C217-1 ALTERNATUR 1 B C217-1 ALTERNATUR 1 B C217-1 ALTERNATUR 1 B C218-2 AUST 1 B C218-2 AUST 1 B C218-2 AUST 1 B C218-3 AUST 1 B C218-3 AUST 2 A A 1 B C 1 AUST 3 B C217-1 ALTERNATUR 4 B C218-3 AUST 5 B C217-1 ALTERNATUR 6 A 6 A 6 A 6 7 A 7 A 7 A 7 8 A 7 A 7 A 7 8 A 7 A 7 A 7 9 A 7 A 7 A 7 1 B C 1 A 7 A 7 1 B C 1 A 7 A 7 1 B C 1 A 7 A 7 1 B C 1 A 7 A 7 1 B C 1 A 7 A 7 1 B C 1 A 7 A 7 1 B C 1 A 7 A 7 1 B C 1 A 7 A 7 1 B C 1 A 7 A 7 A 7 1 B C 1 A 7 A 7 A 7 1 B C 1 A 7 A 7 A 7 1 B C 1 A 7 A 7 A 7 1 B C 1 A 7 A 7 A 7 1 B C 1 A 7 A 7 A 7 1 B C 1 A 7 A 7 A 7 1 B C 1 A 7 A 7 A 7 1 B C 1 A 7 A 7 A 7 1 B C 1 A 7 A 7 A 7 1 B C 1 A 7 A 7 A 7 1 B C 1 A 7 A 7 A 7 1 B C 1 A 7 A 7 A 7 1 B C 1 A 7 A 7 A 7 1 B C 1 A 7 A 7 A 7 1 B C 1 A 7 A 7 A		נ	Ü	UNTINUEL	ON P	2 OF		
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4 4 MS35333-40 MSSHER, LDCKING, INTERNAL TDDI 4 4 ANBGG-416L MSSHER, FLAT 1.44 4 4 ANBGG-416L MSSHER, FLAT 1.44 1 410-225-9 FIELD CINNECTOR ASSEMBLY 2 2 MS35714-14 SCREW, PAN HEAD, 6-32 x .38), 6 12 2 MS35714-19 CABLE TIE, NYLDN 12 2 MS21918-MDG CLAMP, CINSHIDNED 13 12 CS 1482 CLAMP, CINSHIDNED 14 10-404 RING TERMINAL, #6 15 2 MS2104-21 MIRE, 22 AMG 1 1 MS25171-22 WIRE, 22 AMG 1 1 MS2718-104-2 WIRE, 22 AMG 1 1 MS2718-104-2 WIRE, 24 AMG 2 ANSTHORAD, BREAKER, STBY ALT FIE 3 MS21042-3 MULT, HEX, LDCK 4 A25-401 PLACARD, BREAKER, STBY ALT SEP 5 ANSTHORAD, BREAKER, STBY ALT SEP 6 MS2104-1 REGILATOR (28) 1 A25-205-2 ANMINICIATOR (28) 1 A25-205-1 ANMINICIATOR (28) 1 SB71-5 BREAKER, 5 AMP 1 SB71-5 BREAKER, 5 AMP 1 SB71-5 BREAKER, 5 AMP 1 BC210-1 ALTERNATOR 2 MSS 1	2015		-					
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2 2 MX35214-14 SCREW, PAN HEAD, 6-32 x .38, 6 120 20 MX3357-1-9 CABLE TIE, NYLIN 2 2 MX21919-WDG2 CLAMP, CLSHITINED 12 12 SB1486 RIN5 TERMINAL, #6 12 12 SB1486 RIN5 TERMINAL, #6 10 MX2759716-22-9 WIRE, 22 AWG 10 MX25177-25 INSLIATOR, SILICON 1 1 410-404 ANNINCLATOR, SILICON 2 2 AX334-01 GASKET CASKET 2 AX334-01 GASKET CASKET CAS	7		_	+	25-9	FIELD CONNECTOR ASSEMBLY		
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10 10 10 10 10 10 10 10	19		35	5 M22759		MIRE,		
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1 1 S971-1 BREAKER, 1 AMP 1 1 S971-5 BREAKER, 5 AMP 1 1 S971-6 BREAKER, 40 AMP 1 1 BC210-2 CLIRRENT SENSIRR 1 BC210-2 REGILATUR (14V) 1 BC203-2D REGILATUR (2BV) 2 REGILATUR (2BV) 3 REGILATUR (2BV) 4 REGILATUR (2BV) 5 REGILATUR (2BV) 6 REGILATUR (2BV) 7 REGILATUR (2BV) 8 REGILATUR (2BV) 8 REGILATUR (2BV) 1 RC303-2D 1 RC	^		_	-	<u>35-1</u>	ANNUNCIATOR (28)		. 84
1 1 S871-5 BREAKER, 5 AMP 1 1 S871-5 BREAKER, 40 AMP 1 1 BC218-2 CLIRRENT SENSTR 1 1 BC217-1 REGILATIR (2BV) 1 1 BC410-1 ALTERNATUR (2BV) 1 1 BC410-1 ALTERNATUR (2BV) 2 -2 -1 PART ND. ALTERNATUR (2BV) 1 1 BC410-1 ALTERNATUR (2BV) 1 1 BC410-1 ALTERNATUR (2BV) 2 -2 -1 PART ND. B& C Specialty Products 1 1 BC410-1 ALTERNATUR (2BV)	9		-	-		-		
1 1 SA7B-40 BREAKER, 40 AMP 1 BL218-2 CILRRENT SENSTR 1 BL2217-1 REGILATIR (14V) 1 BL222-2D REGILATIR (28V) 1 BL23-2D REGILATIR (28V) 1 BL240-1 ALTERNATIR CBV 1 BL2410-1 ALTERNATIR CBV 1 BL2410-1 ALTERNATIR CBV 1 BL2410-1 ALTERNATIR DESCRIPTION	2		-	-				
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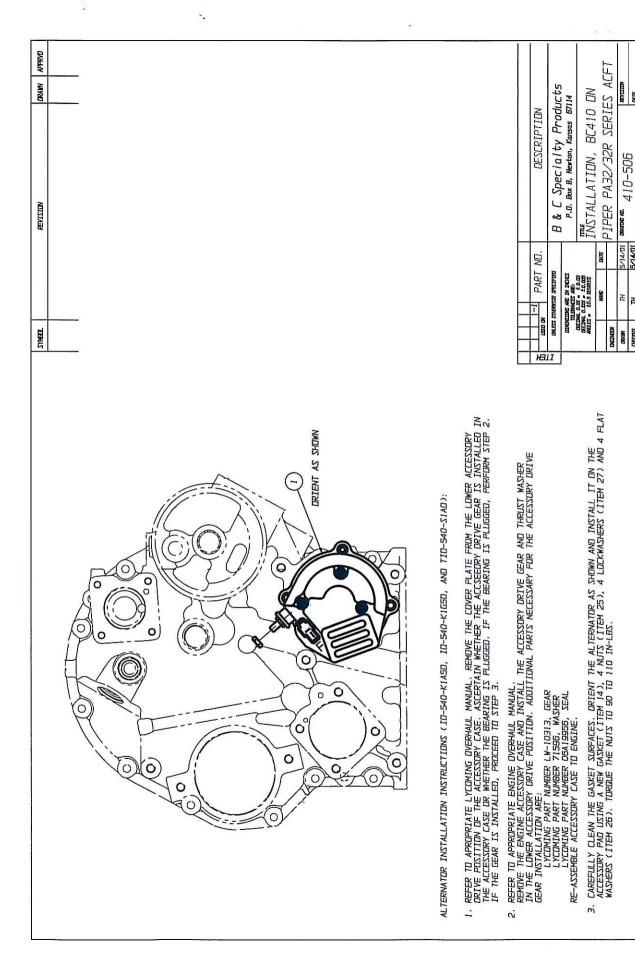
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PRELIMINARY FUNCTIONAL TEST

- REFER TO ALCRAFT DINNERS OR MAINTENANCE MANUAL AND RE-CONNECT THE BATTERY.
 THE MAG SWITCH SHOULD REMAIN DIFF.
 - ri
- TURN ON THE BATTERY MASTER SWITCH, CHECK THAT NEITHER STANDBY ALTERNATOR BREAKER TRIPS, CHECK THAT THE "STBY ALT ON" ANNUNCIATOR ILLIMINATES. CLOSE THE "STBY ALT", "FIELD" AND "SENSE" CIRCUIT BREAKERS AND THE "STBY ALT" MASTER (OR FIELD) SWITCH. m
- LISING A HIGH IMPEDANCE VOLTMETER (PREFERABLY DIGITAL) CHECK THE VOLTAGE BETWEEN PIN 7 OF THE REGULATOR AND BOTH THE AIRFRAME AND THE BATTERY NEGATIVE POST. THE VOLTAGE SHOULD BE NEAR O VOC. 4
- LISE PIN 7 OF THE REGILATOR OR AIRFRAME AS NEGATIVE REFERENCE, MEASURE THE VOLTAGE ON PIN 1 OF THE BC203-2A OR PIN 3 OF THE BC217-1 AS APPROPRIATE, THE VOLTAGE SHOULD BE EQUAL TO THE BUS VOLTAGE. i,
 - USE PIN 7 OF THE REGULATOR OR AIRFRAME AS NEGATIVE REFERENCE. CHECK THE VOLTAGE ON PIN 6 OF THE REGULATOR. THE VOLTAGE SHOULD BE MITHIN 1.0 VOLT OF THE BUS VOLTAGE. Ö.
- USE PIN 7 OF THE REGILATOR OR AIRFRAME AS NEGATIVE REFERENCE. IF THE REGILATOR IS A BECOD-2A, CHECK THE VOLTAGE ON PIN 5. THE VOLTAGE SHOULD BE 13 TO 15 VOLTS. IF THE REGILATOR IS A BC217-1 CHECK THE VOLTAGE ON PIN 4. IT SHOULD BE 1.2 VOLTS LESS THAN THE VOLTAGE ON PIN 4. 7
- 8 CHECK THAT PULLING THE STANDBY ALTERNATOR "FIELD" CIRCUIT BREAKER CAUSES THE VOLTAGE ON PIN 6 TO GO TO ZERO AND THE "STBY ALT ON" ANNUNCIATOR TO (OFF. CLOSE THE CIRCUIT BREAKER. ø,
- 旦 CHECK THAT DPENING THE "STBY ALT" MASTER CAUSES THE VOLTAGE ON PIN 6 GD TO ZERO AND THE "STANDBY ALT ON" ANNINCIATOR TO GO OFF. CLOSE THE "STANDBY ALT" MASTER SWITCH, oi
- CHECK THAT PULLING THE STANDBY ALTERNATDR "SENSE" CIRCLIT BREAKER CAUSES THE VOLTAGE ON PIN 1 OF THE BC203-24 OR PIN 3 OF THE BC217-1 TO GO TO ZERO AND THE "STBY ALT ON" ANNUNCIATOR TO GO OFF. CLOSE THE BREAKER. 0 10.
- MOVE TO THE ENGINE COMPARTMENT. USING A CLEAN ENGINE GROUND FOR NEGATIVE REFERENCE, CHECK THE VOLTAGE ON THE ALTERNATOR FIELD TERMINAL. THE CONNECTOR MUST NOT BE DISCONNECTED FOR THIS MEASUREMENT. USE A THIN PROBE OR SMALL WIRE TO ACCESS THE TERMINAL THRU THE CONNECTOR. THE VOLTAGE SHOULD MEASURE WITHIN 1.0 VOLT OF THE VALUE ON PIN 5 OF THE BC203—2A OR PIN 4 OF THE BC217—1 AS APPROPRIATE. 011.
- USING ENGINE GROUND AS NEGATIVE REFERENCE CHECK THE VOLTAGE ON THE "9" LEAD (OLITPUT TERMINAL) OF THE ALTERNATOR, THE VOLTAGE SHOULD BE EGIAL TO THE BUS 0 12.
- C 13. TURN OFF THE BATTERY MASTER

- O 1. PERFORM A NORMAL PREFLIGHT INSPECTION
- C 2, MOVE THE AIRCRAFT TO AN AREA SAFE FOR ENGINE START.
- O 3. PERFORM A NORMAL ENGINE START AND ALLOW THE ENGINE TO REACH PROPER TEMPERATURE FOR RUNUP RPM.
- A SSURE THAT THE "STBY ALT" AND "STBY ALT SENSE" CIRCUIT BREAKERS AND "STBY ALT" MASTER SWITCH ARE IN THE ON POSITION.
 - O 5. REDUCE SYSTEM ELECTRICAL LOADS TO APPROX 10-15 AMPS
- SET ENGINE TO 2000 RPM MINIMUM.
- 0.6.
- O 7. SWITCH PRIMARY ALTERNATOR FIELD SWITCH TO DFF.
- O B. CHECK THAT THE "STBY ALT ON" ANNUNCIATOR LIGHTS.
- INCREASE THE ELECTRICAL LOAD TO OVER 20 AMPS. THE "STBY ALT DIN" AMNUNCIATUR SHOILD BE BLINKING. REDICE THE ELECTRIAL LOAD TO LESS THAN 20 AMPS. THE "STBY ALT DIN" ANNUNCIATOR SHOILD BE DIN STEADILY. ö
- à SWITCH THE PRIMARY ALTERNATOR FIELD SWITCH TO ON. THE "STBY ALT ANNUNCIATOR SHOULD GO DIFF." 10.
- CII. RETURN THE ENGINE TO IDLE RPM.

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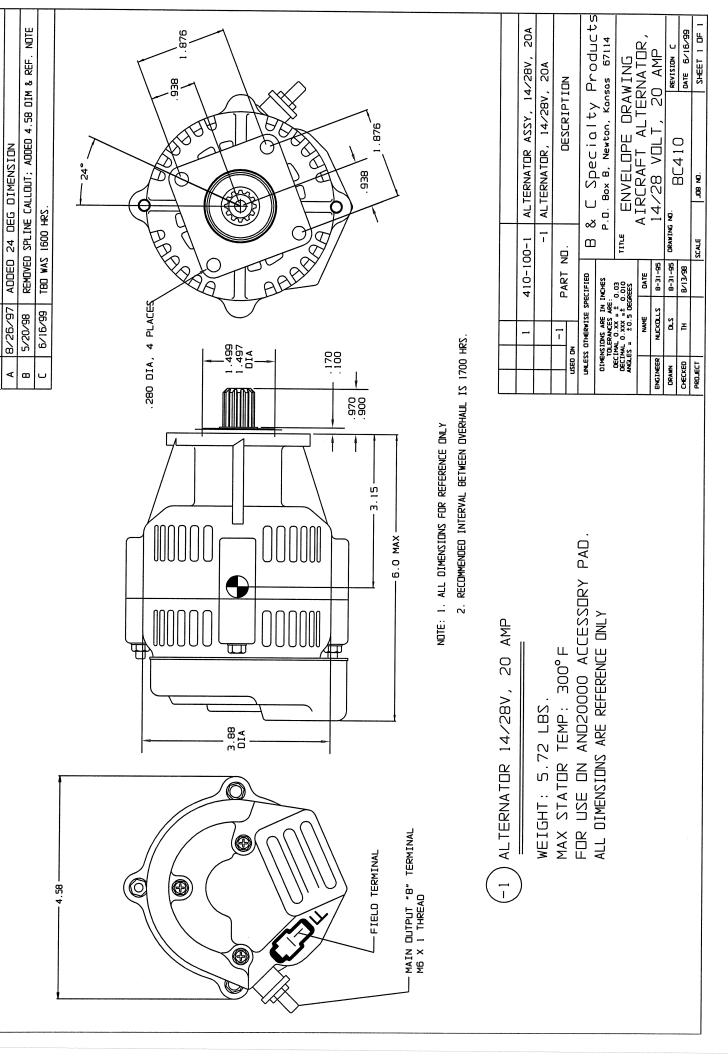
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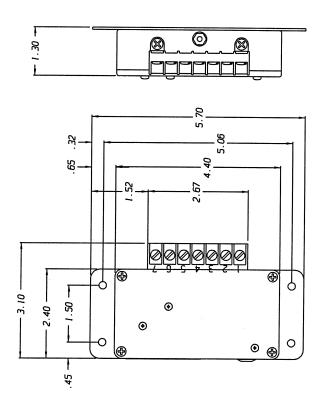
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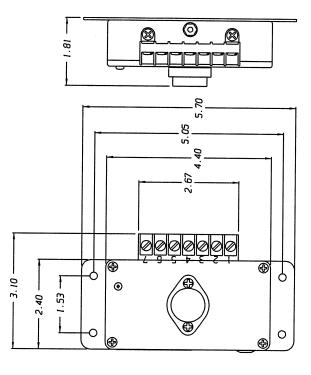


DESCRIPTION

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TERMINAL FUNCTIONS (-2A):
 (STANDBY CONTROLLER)
 1. BLIS SENSE
 2. STBY ALT ON ANNUNCIATOR
 3. CLORRENT SENSOR ANALOG (OPTIONAL)
 4. CLORRENT SENSOR +10 VOLTS (OPTIONAL)
 5. FIELO
 6. BLIS SUPPLY
 7. GROUND



TERMINAL FUNCTIONS:

1. SENSOR +10 VOLTS
2. SENSOR ANALOG
3. BUS VOLTAGE SENSE
4. FIELD
5. LOW VOLTAGE WARNING LIGHT
6. BUS SUPPLY (ALSO TEMPERATURE PROBE WHITE
7. GROUND

BC217-1A (14 V)

BC203-2D (28 V)

B & C Specialty Products Inc

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

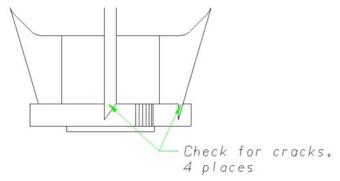
Manufacturer of Lightweight Electrical Systems

Instructions for Continued Airworthiness for B&C Specialty Products Model BC410 & BC425 Alternators

The B&C Model BC410 or BC425 alternator requires no recurrent maintenance during its service life of 1700 hours. It is recommended that at 1700 hours or less time in service or during engine overhaul the alternator be returned to B&C Specialty Products for factory overhaul.

At each Annual or 100 hour inspection required by the FAA, make the following inspections:

- 1. Note during a normal run-up whether the alternator vibrates or is mechanically noisy. If so, suspect a bearing failure. Bearing failure may also be indicated by gray dust residue around the rear housing cooling slots. If bearing failure is suspected, return the alternator to the factory for repair or replacement.
- 2. Check the alternator externally for security of mounting. If oil is leaking around the alternator base, check the torque of the mounting bolts to be 70 In-Lbs. If there is still a leak, try replacing the gasket. Do not increase torque above 70 In-Lbs.
- 3. Clean the area around the mounting flanges and the casting webs between the mounting flanges and the alternator housing. Check for cracks in the webs as shown in the figure below.



Normal tooling parting lines should not be mistaken for cracks. Any alternator identified as having cracks in any of the four webs must be returned to the factory for repair or replacement.

4. Check for security of alternator wiring. Look for dark discoloration of the copper plated output stud and nut. If it is discolored or corroded, be suspicious of a poor terminal crimp on the output wire.

Disconnect the terminal and clean the output post and nut with a brass wire brush. Replace the crimp terminal by removing enough conductor length to obtain a clean, bright stripped conductor before crimping on a new ring terminal. Re-install the terminal on the output post using a lock washer and nut and torque the nut to 50 In-Lbs.

5. Perform the before takeoff test described under the "Normal Procedures" section of the Airplane Flight Manual Supplement. Alternately, the "Final Test" described in the installation drawing may be used for this test.

Failure due to broken wires or damaged connectors may be corrected in the field using repair procedures complying with the latest revision of AC43.13-xx. All other repairs are by replacement only.

IF THESE UNITS ARE NOT BEING INSTALLED UNDER AN STC, THEY MUST BE ACCOMPANIED BY A ONE TIME FIELD APPROVAL FOR USE ON A TYPE CERTIFICATED AIRCRAFT