

SERVICE LETTER

No. SL-300-1-21

FOR INFORMATION

TO: Owners and Operators of EXTRA EA 300/L Airplanes

SUBJECT: Replacement of discontinued Bosch Alternator with Prestolite Alternator.

AFFECTED: EXTRA EA 300/L equipped with either of these Bosch alternators:
Bosch P/N 0120 489 469 (55A),
Bosch P/N 0120 489 917 (55A),
Bosch P/N 0120 489 935 (65A), Extra P/N FT001

The Bosch alternators certified for the EA 300/L aircraft are discontinued by the manufacturer. Therefore, if they need to be replaced, a Prestolite alternator (Extra P/N 33558) is presented as an alternative and approved by minor change AM-300-10-08. This Service Letter describes the installation of this Prestolite alternator.

Approval: The technical content of this document is approved under the authority of the DOA EASA.21J.073.

Contact: For questions or ordering of parts contact Extra Aircraft. Contact information is given on:
<https://www.extraaircraft.com>

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1. PARTS LIST

Table 1 lists all parts that are needed for the installation of the Prestolite alternator (Extra P/N 33558). Items that are marked with a "*" in the QTY column can be retained from the existing Bosch alternator installation.

Table 1: Parts List for the Prestolite Alternator Installation

QTY	P/N	Description	Extra P/N
1		Prestolite 65A Alternator	33558
1*	EA-67106.001	Pulley	EA-67106.001
1*	EA-66106.002	Alternator Strut	EA-66106.002
1*	EA-66106.003	Alternator Bracket	EA-66106.003
1*	EA-66106.004	Bushing	EA-66106.004
1*	EA-66106.005	Connecting Sheet Generator-Starter	EA-66106.005
1*	EA-66106.007	Bolt	EA-66106.007
1	EA-66106.008	Spacer	EA-66106.008
1*	1126610046	Cooling Fan	FT0003
1	6529-43CG	Condensator 2.2 μ F (alt Bosch P/N 0290800052)	in 33558 (31608)
2*	LW-31-0.94	Bolt (5/16-18x15/16 long, hex head)	in 32712
2*	LW-31H0.75	Bolt (5/16-18x3/4 long, hex head, drilled)	in 32712
1*	73383	Locking Plate	in 32712
2*	STD-35	Washer 5/16 plain (alt. AN960-516)	in 32712
1	LN9038- K08020	Bolt	02231
1	DIN937 M8	Castle Nut	01385
2	LN9348 M5	Locking Nut	00076
1	DIN439 04	Nut, flat, M16x1.5	ND4216
1	DIN137 B 17	Spring Washer	ND4215
1	DIN9021 8.4x24	Washer (3D)	01303
3	DIN125 A8.4	Washer	00418
1	LN94-20018	Split Pin (alt. DIN94 VZ 2x18)	NL4148
1	AVX10x975LA	V-Belt	34784
x	MS20995-C32	Locking Wire	00781
x	109630 6.4/3.2	Heat Shrink Tubing	FE0021

2. REMOVAL AND INSTALLATION

For the EA 300/L use AMM EA-06702, rev. 10 or later as a reference.

- Remove Bosch Alternator according to AMM Ch. 24-30-03. Some of the attachment parts can be reused for the installation of the Prestolite alternator, see the Parts List in Table 1.
- Install Prestolite Alternator according to AMM Ch. 24-30-03. Also refer to Figures 1 through 5 below for further details on the installation.
- Install the drive belt and perform the Tension Check according to AMM Ch. 24-30-04

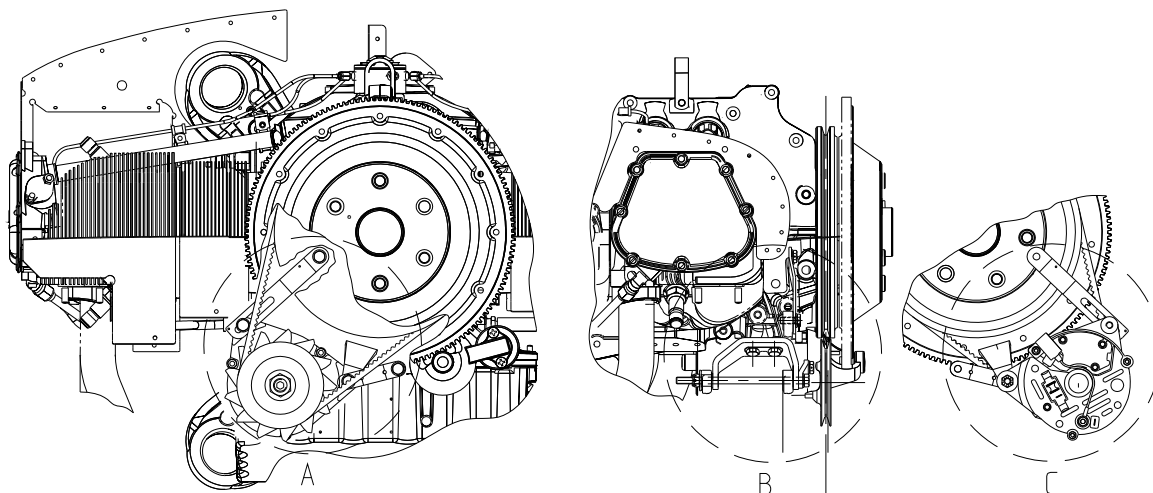


Figure 1: Overview of Prestolite Alternator Installation

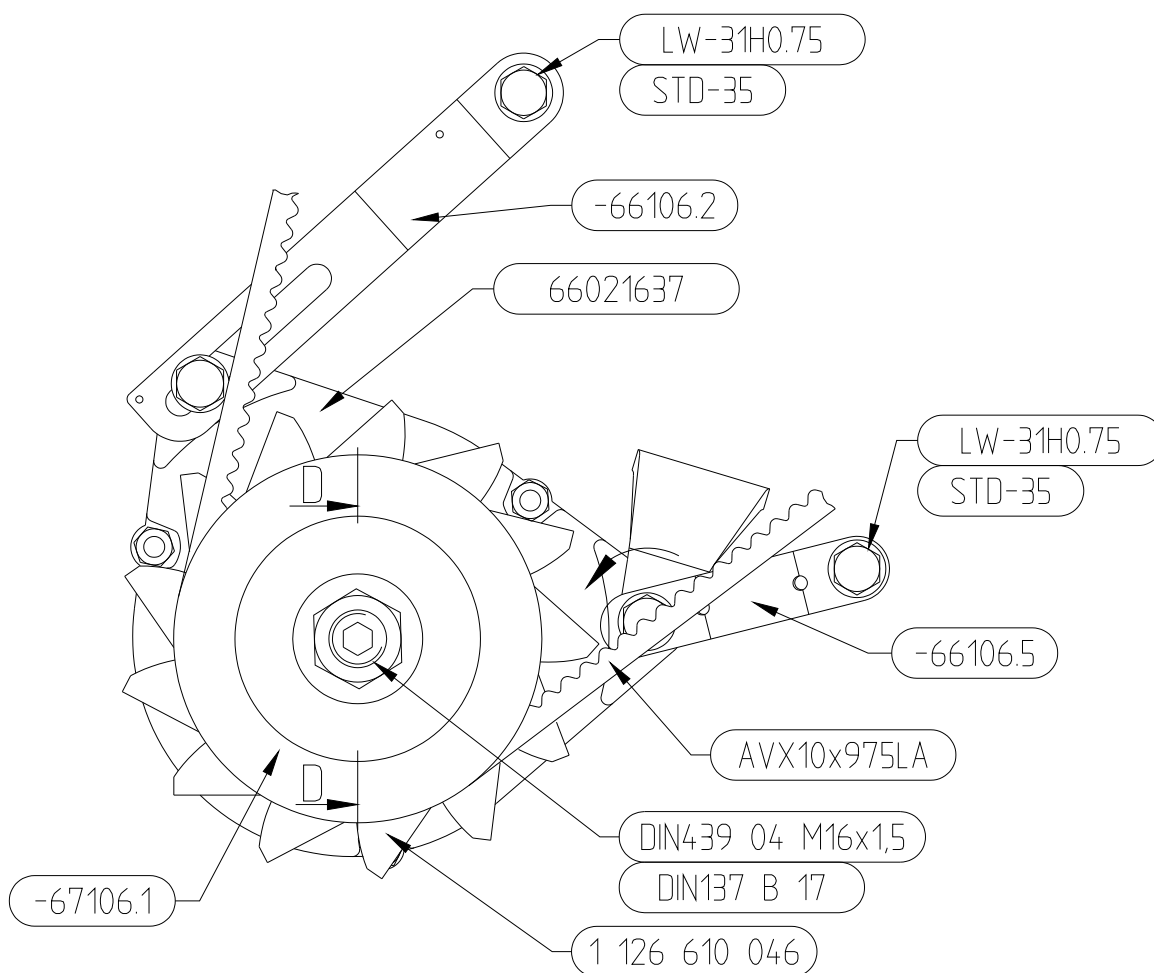


Figure 2: Detail A of Prestolite Alternator Installation

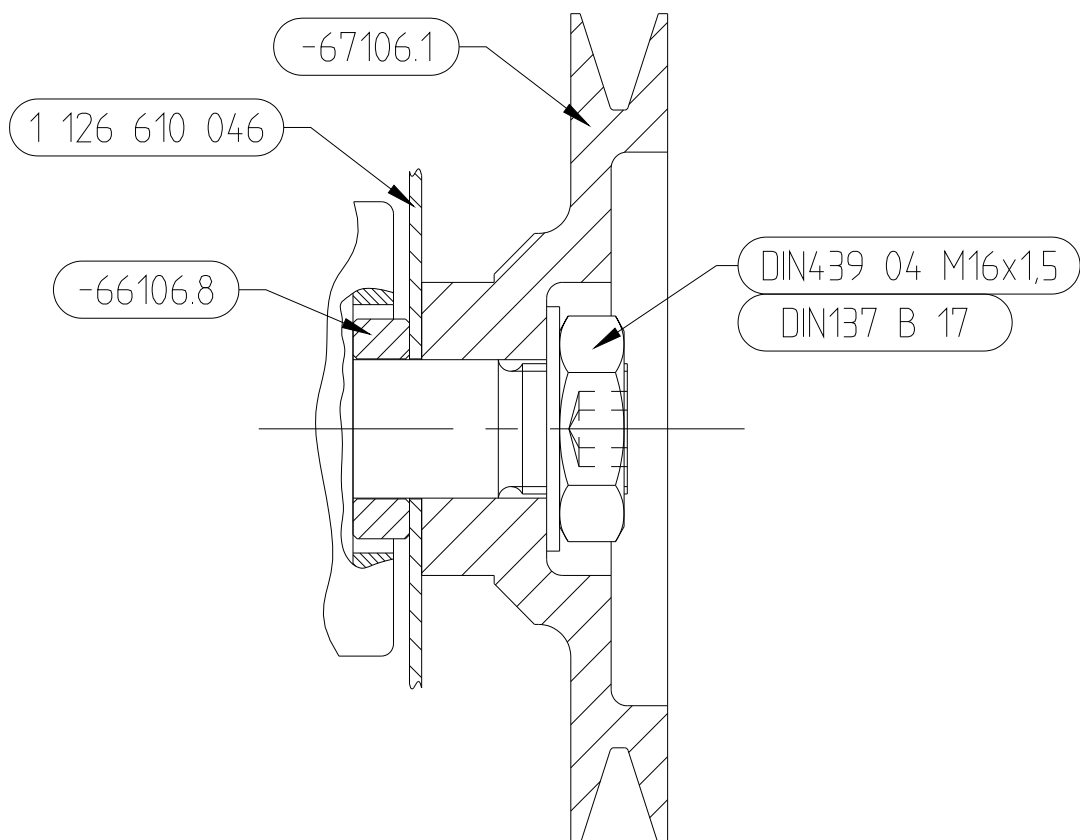


Figure 3: Section D – D from Figure 2, Pulley Installation

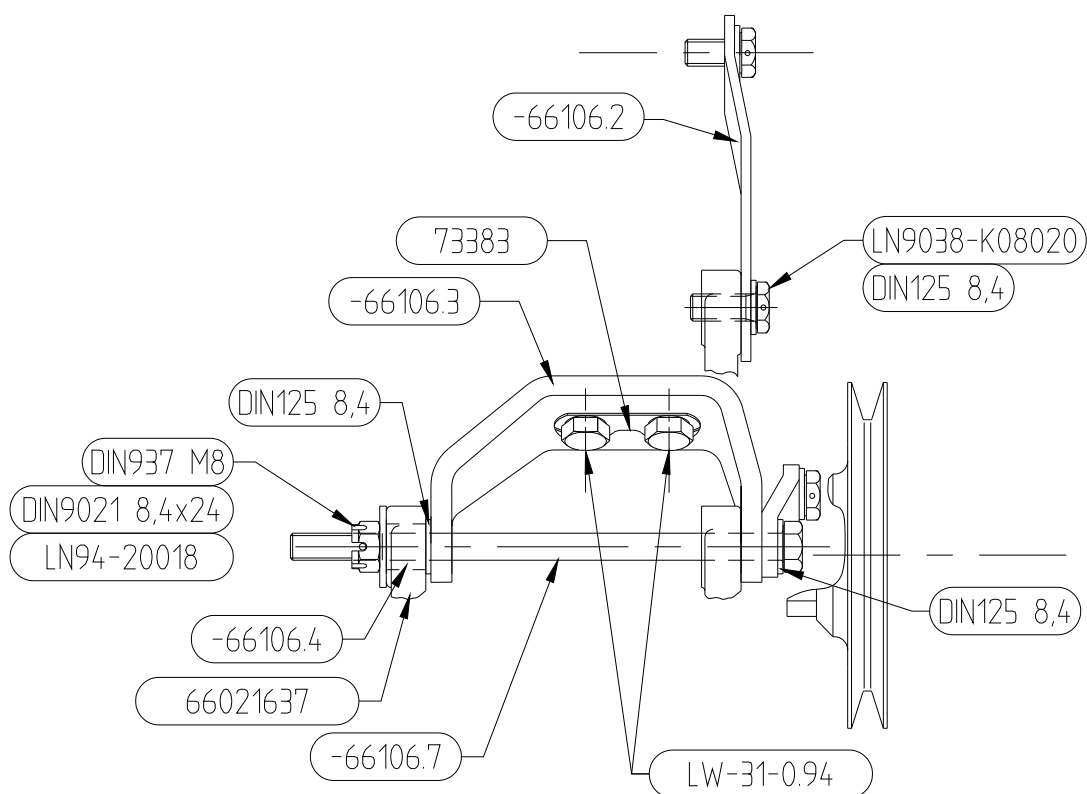


Figure 4: Detail B of Prestolite Alternator Installation

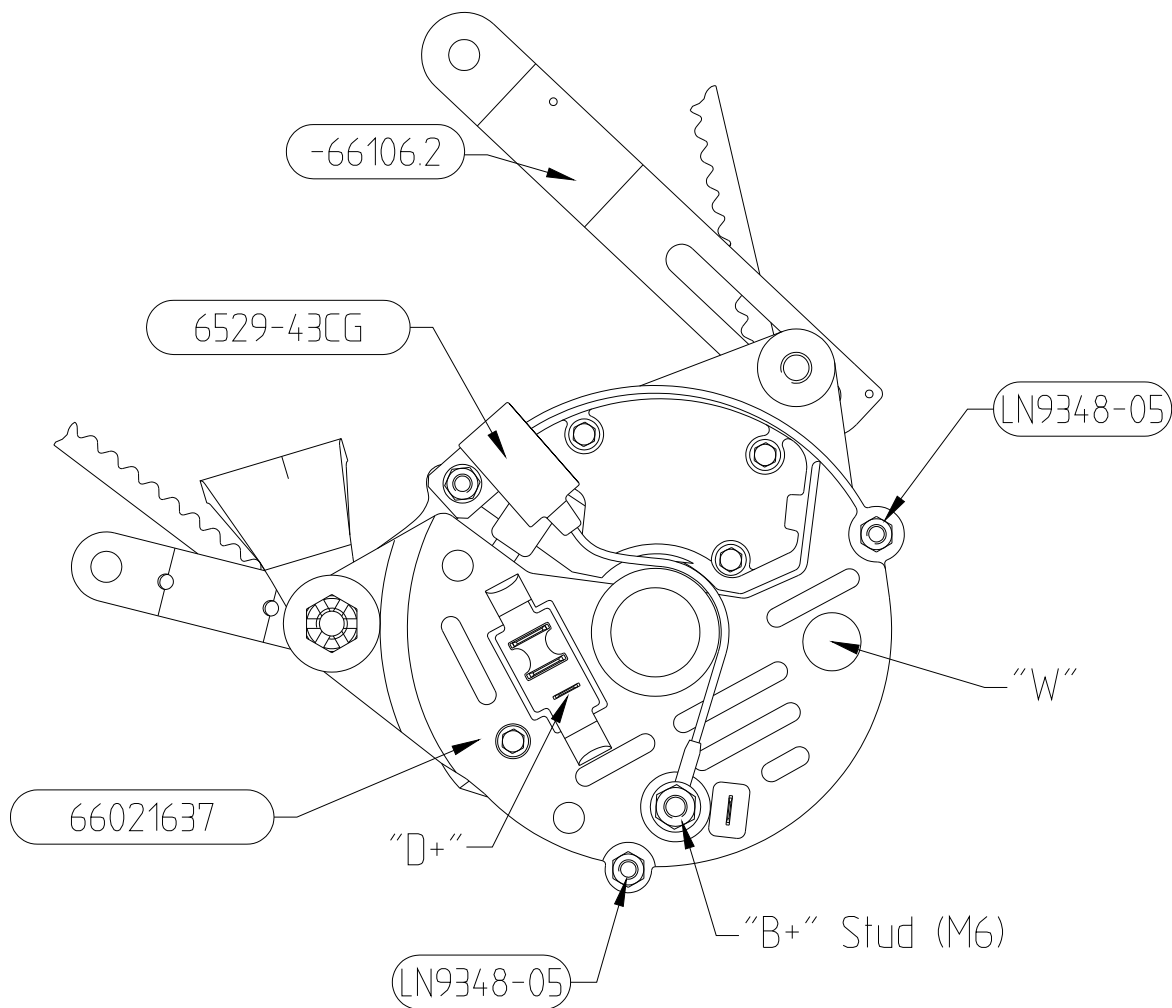


Figure 5: Detail C of Prestolite Alternator Installation

3. ELECTRICAL WIRING

The Prestolite Alternator must be wired according to the wiring diagram in Figure 6.

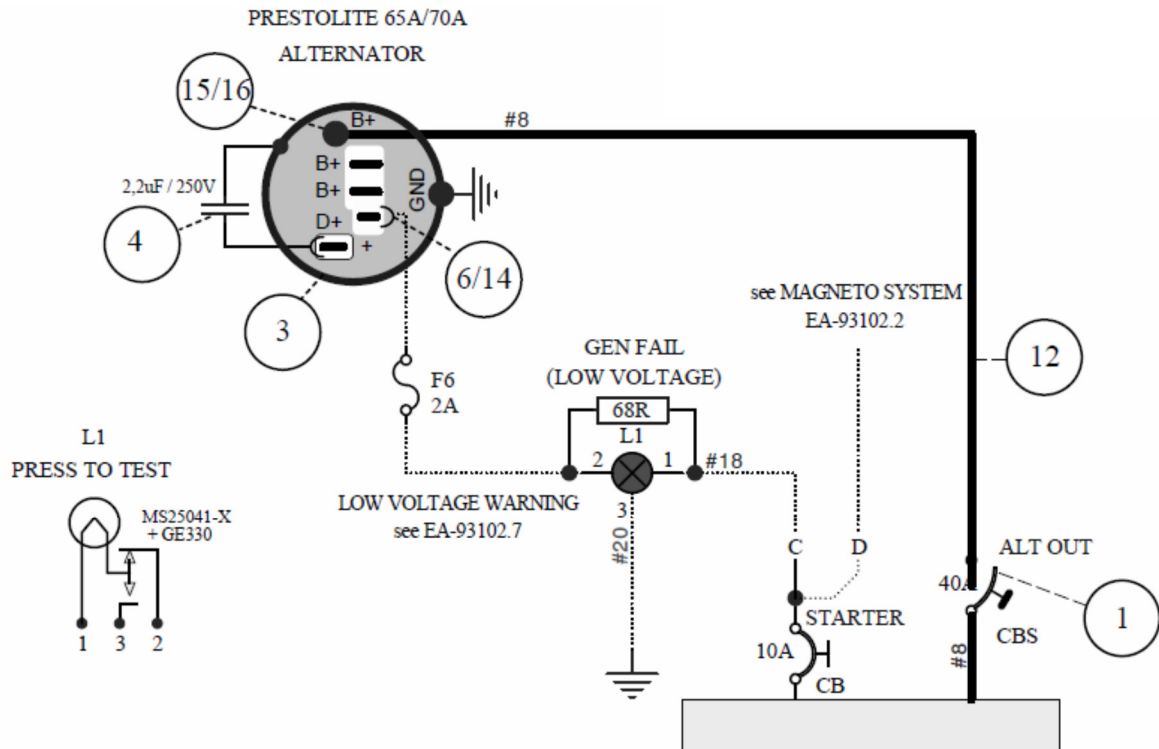


Figure 6: Prestolite Alternator Wiring Diagram (refer to AMM EA-06702, Ch 91, EA-93102.10)

Table 2 lists all electrical parts that are needed for the installation of the Prestolite P/N 66021637 alternator. Items that are marked with a “*” in the QTY column can be retained from the existing Bosch alternator installation.

Table 2: Parts List for the Prestolite Alternator Electrical Installation in Figure 6.

POS	QTY	P/N	Description	Extra P/N
1	1*	W31X2M1G-40	Circuit Breaker Switch 40A	03618
3	1		Prestolite 65A Alternator See Table 1	33558
4	1	6529-43CG	Condensator 2.2µF (alt Bosch P/N 0290800052) See Table 1	in 33558 (31608)
6	1	0042282-2	Flat Connector Socket 6.3mm	00093
12	1*	MIL-W-22759/16-8	Electrical Cable, AWG 8	FE4010
14	1	925324-2	Flat Connector Housing, Single Pole	00098
15	1	0033461-0	Ring Terminal, AWG 8, 6mm	FE4178
16	1	MS25171-1S	Protective Cover	00786

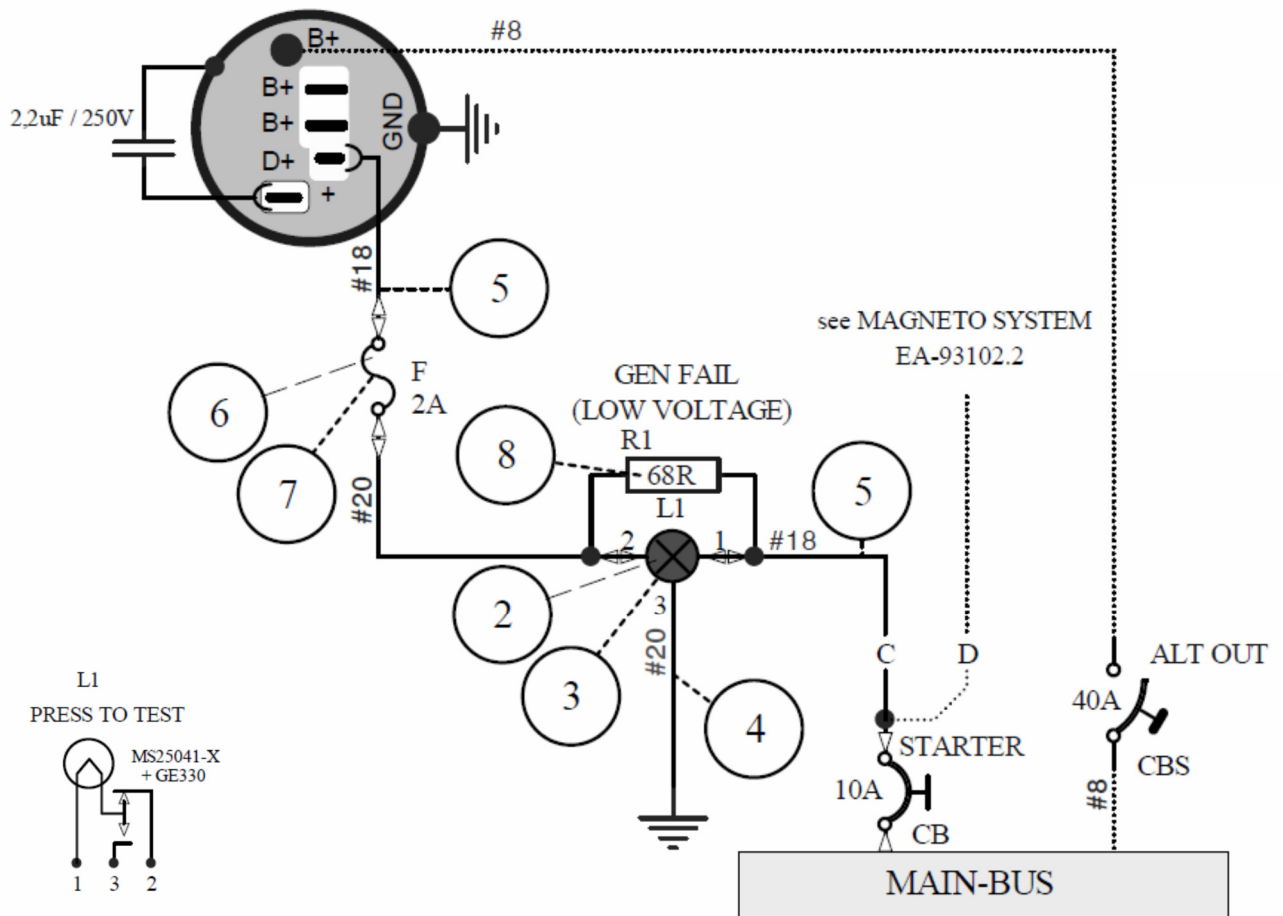


Figure 7: Prestolite Alternator Warning Light Wiring Diagram (refer to AMM EA-06702, Ch 91, EA-93102.7)

Table 3 lists all electrical parts that are needed for the installation of the alternator warning light. Items that are marked with a “*” in the QTY column can be retained from the existing Bosch alternator installation. The resistor (Position 8) and the fuse (Position 7 & 8) were not installed on earlier EA 300/L aircraft.

Table 3: Parts List for the Prestolite Alternator Warning Light Electrical Inst. in Figure 7.

POS	QTY	P/N	Description	Extra P/N
2	1*	MS25041-2	Press To Test Indicator (red)	00140
3	1*	GE330	Bulb (14V 0.08A)	01569
4	1*	MIL-W-22759/16-20	Electrical Cable, AWG 20	00775
5	1*	MIL-W-22759/16-18	Electrical Cable, AWG 18	00776
6	1*	414-601	Fuseholder	30033
7	1*	524122	Fuse 2A Eska	31878
8	1*	ER5868RJT	Resistor 68R / 6W	33341

4. DOCUMENTATION

Make sure the new Prestolite alternator is listed and marked as installed in the equipment list in Chapter 6 of the Pilot's Operating Handbook, EA-06701.

Make sure the Aircraft Maintenance Manual EA-06702 includes revision 10 or later.

Make appropriate logbook entry of the replacement of the alternator system.