ECLIPSE AVIATION

ALERT

SERVICE BULLETIN

NUMBER:	**SB 500-71-001, REV A**
MODEL:	**ECLIPSE EA500**
SUBJECT:	**STARTER GENERATOR POWER/GROUND GROMMET REWORK**

1. PLANNING INFORMATION

A. Effectivity

Aircraft Serial Numbers (S/N) 000001 through 000134.

B. Reason

To eliminate the possibility of starter generator cables chafing against the aircraft structure.

C. Description

This Service Bulletin (SB) accomplishes the following:

- Enlarges the existing starter generator cables grommet opening.
- Removes and replaces existing starter generator cable grommets with new parts.

D. Relevant Publications

None

E. Compliance

Eclipse Aviation Corporation considers this to be a mandatory modification that must be accomplished at the next 300 Hour/24 Month Inspection.

F. Approval

This Service Bulletin is based on engineering data that is FAA-approved, and the modification herein complies with the applicable regulations.

G. Labor Requirements

The following information is for planning purposes only.

(1) In-service Time: 2 Days

Suggested number of personnel: 1

The above is an estimate based on properly equipped and experienced personnel complying with this Service Bulletin. Actual labor hours may vary depending on workforce experience, concurrent maintenance, discovery of other discrepancies, etc.

(2) Qualification of personnel:

- A person properly authorized under 14 CFR 43 to perform aircraft maintenance.

H. Weight and Balance Change

None

I. Electrical Load Data Change

None

J. References

Aircraft Maintenance Manual (AMM), P/N 06-117751 latest Rev.

Illustrated Parts Catalog (IPC), P/N 06-117752, latest Rev.

K. Publications Affected

Illustrated Parts Catalog (IPC), P/N 06-117752, latest Rev.

2. MATERIAL INFORMATION

A. Materials

Order Non–Kitted Parts below.

(1) **Non–Kitted Parts**

Part Number	Description	Qty	Unit of Issue
71-117748-2001	Grommet, Fire Barrier	4	EA.

B. Consumables

The following consumables are required for this Service Bulletin.

Material	Specification	Use
Adhesive	DC-732 or equivalent	Adhere components together.
Aerodynamic Sealant	PR-2050 B1/2	To fill in gaps around pylon.
Alodine	1201 or equivalent	Chemical conversion coating for aluminum.
Fireproof Sealant	Fastblock_100	Seal grommets on Apron/Firewall
Isopropyl Alcohol	N/A	Facilitate grommet installation.
Lint Free Cloth	N/A	Clean and wipe down surfaces.
Nitrile Gloves	Ansell Edmont 26-665 or equivalent	Protect hands from absorbing sealant or chemicals.
Paint Brush	2-inch wide	Apply FastBlock 100 Adhesive and smooth
Paint Remover	Eldorado PR-5044	Remove primer and paint.
Plastic Scraper	N/A	Remove excess adhesive.
Plastic Sheet	N/A	Protect pylon components.

Material	Specification	Use
Primer	MIL-PRF-85582 or MIL-PRF-23377	Apply to components that will require a polyurethane top coat.
Sealant	PR-2001	For aerodynamic smoothing, fillet sealing, fastener sealing, prepack sealing, injection sealing, and sealing joints and seams.

C. Interchangeability/Intermixability of Parts

Grommets are interchangeable for both the left and right sides.

D. Part Re-identification

None.

3. ACCOMPLISHMENT INSTRUCTIONS

A. Job Set-Up Procedure

(1) Make aircraft safe for maintenance. Refer to AMM 20-00-01 – MAKE SAFE FOR MAINTENANCE.

(2) Obey all electrical system safety precautions. Refer to AMM-24-00-00 – ELECTRICAL POWER SYSTEM – DESCRIPTION AND OPERATION.

(3) Remove left upper nacelle panel 411 AT and right upper nacelle panel 412 AT. Refer to AMM 54-20-21 – UPPER NACELLE - REMOVAL.

(4) Remove left lower nacelle panel 411 CB and right lower nacelle panel 412 CB. Refer to AMM 54-20-22 – LOWER NACELLE - REMOVAL.

(5) Remove maintenance access door 311 AL. Refer to AMM 06-50-00.

(6) Remove left and right pylon panels as follows (refer to AMM 06-50-00):

WARNING: USE CARE WHEN WORKING AROUND FIRE EXTINGUISHER CONNECTORS, OR WHEN WORKING NEAR FIRE EXTINGUISHER. ACCIDENTAL DISCHARGE CAN CAUSE PERSONAL INJURY AND DAMAGE TO THE AIRCRAFT.

- Leading edge pylon skin – 311 EL (Left) and 312 BR (Right)
- Forward lower pylon skin – 311 JL (Left) and 312 FR (Right)
- BASS module NACA panel – 311 FL (Left) and 312 CR (Right)

CAUTION: MAKE SURE TO USE CARE WHEN REMOVING SEALANT OR ADHESIVE FROM GROMMET. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO STARTER GENERATOR CABLES.

B. Starter Generator Grommet Rework Procedure

CAUTION: MAKE SURE TO USE CARE WHEN REMOVING SEALANT OR ADHESIVE FROM GROMMET. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO STARTER GENERATOR CABLES.

(1) Remove and discard starter generator cable grommet P/N 71-117748-2001 (1, Figure 1) by carefully cleaning and removing the Fast block 100 from the apron.

(2) Remove and discard starter generator cable grommet P/N 71-118251-2001 (1, Figure 2) by carefully cleaning and removing the DC-732 sealant between the grommet and aircraft skin.

(3) Disconnect starter generator ground cable P/N 24-117701 (left) and P/N 24-117702 (right) from starter generator. Remove clamps as necessary in order to pull disconnected ground cable into the aircraft maintenance bay.

(4) Disconnect starter generator feeder cable P/N 24-117699 (left) and P/N 24-117700 (right) from starter generator. Remove clamps as necessary in order to pull disconnected ground cable into the aircraft maintenance bay.

(5) Remove all sealant or adhesive from aircraft skin and apron in area where grommets were removed with a non-metallic scraper.

(6) Enlarge the aircraft skin opening that accepts the starter generator cable-to-aircraft grommet. Refer to Figure. 3.

(7) Remove all metal shavings from reworked areas in both the pylon and inside the maintenance bay.

(8) Break sharp edges to 0.005 to 0.015 inch and maintain 125RHR or better surface finish on the enlarged penetration.

(9) Apply Alodine to reworked area. Refer to manufacturer's instructions.

(10) Touch up reworked area with two coats of MIL-PRF-23377 or MIL-PRF-85582 primer.

(11) Route the starter generator ground cables P/N 24-117701 (left) and P/N 24-117702 (right) through both starter generator cable grommets P/N 71-117748-2001.

(12) Route the starter generator feeder cables P/N 24-117699 (left) and P/N 24-117700 (right) through both starter generator cable grommets P/N 71-117748-2001.

(13) Install starter generator cable grommet P/N 71-117748-2001 into enlarged fuselage openings on both left and right sides. If necessary, lubricate the edges of grommet with isopropyl alcohol to facilitate ease of installation.

(14) Install starter generator cable grommet P/N 71-117748-2001 into apron on both left and right sides. If necessary, lubricate the edges of grommet with isopropyl alcohol to facilitate ease of installation.

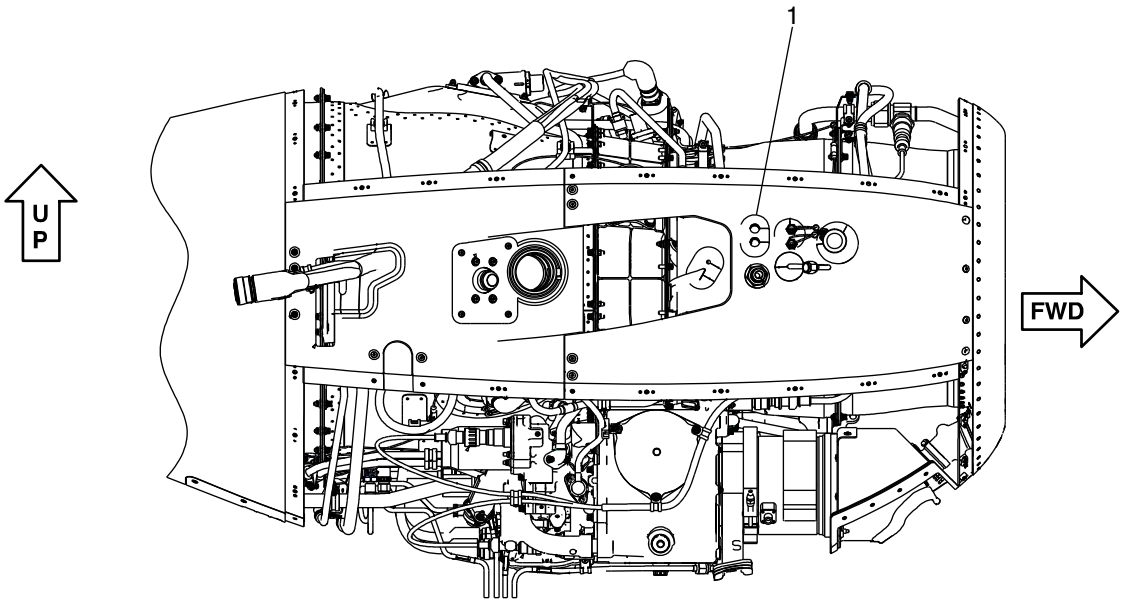
(15) Clean area around both P/N 71-117748-2001 grommets.

(16) Secure starter generator ground and feeder cables with previously removed clamps. Make sure clamps are properly spaced in accordance with the section 5 of the WRM.

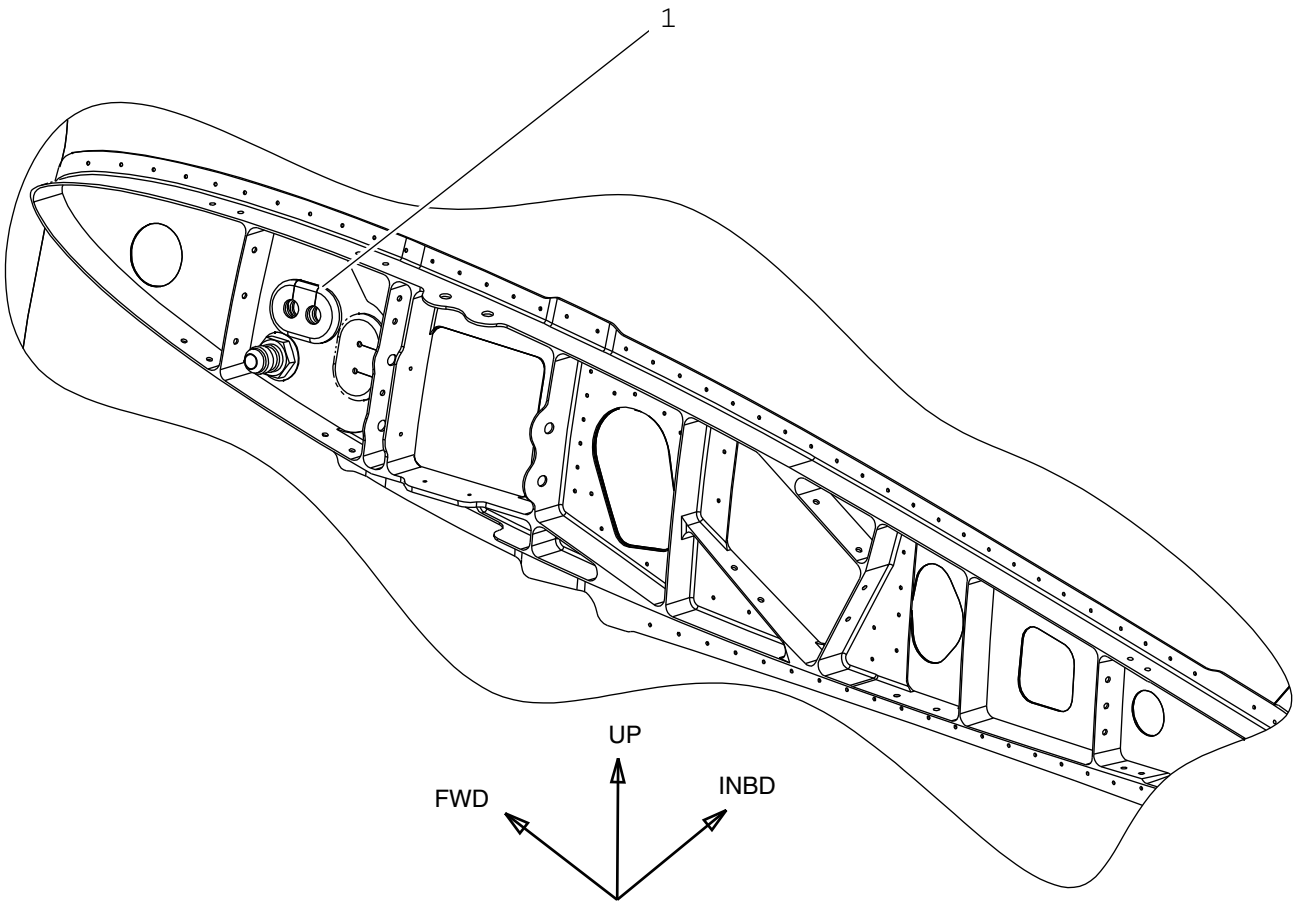
(17) Apply Dow Corning (DC-732) all around the edges of starter generator cable grommet P/N 71-117748-2001 at the fuselage skin, sealing all openings. Make sure to remove all excess adhesive from the fuselage skin.

(18) Apply Fast Block 100 sealant to starter generator cable grommet P/N 71-117748-2001 at the apron with a scraper, sealing all openings. Make sure to apply sealant on both sides (inside and outside) of the apron.

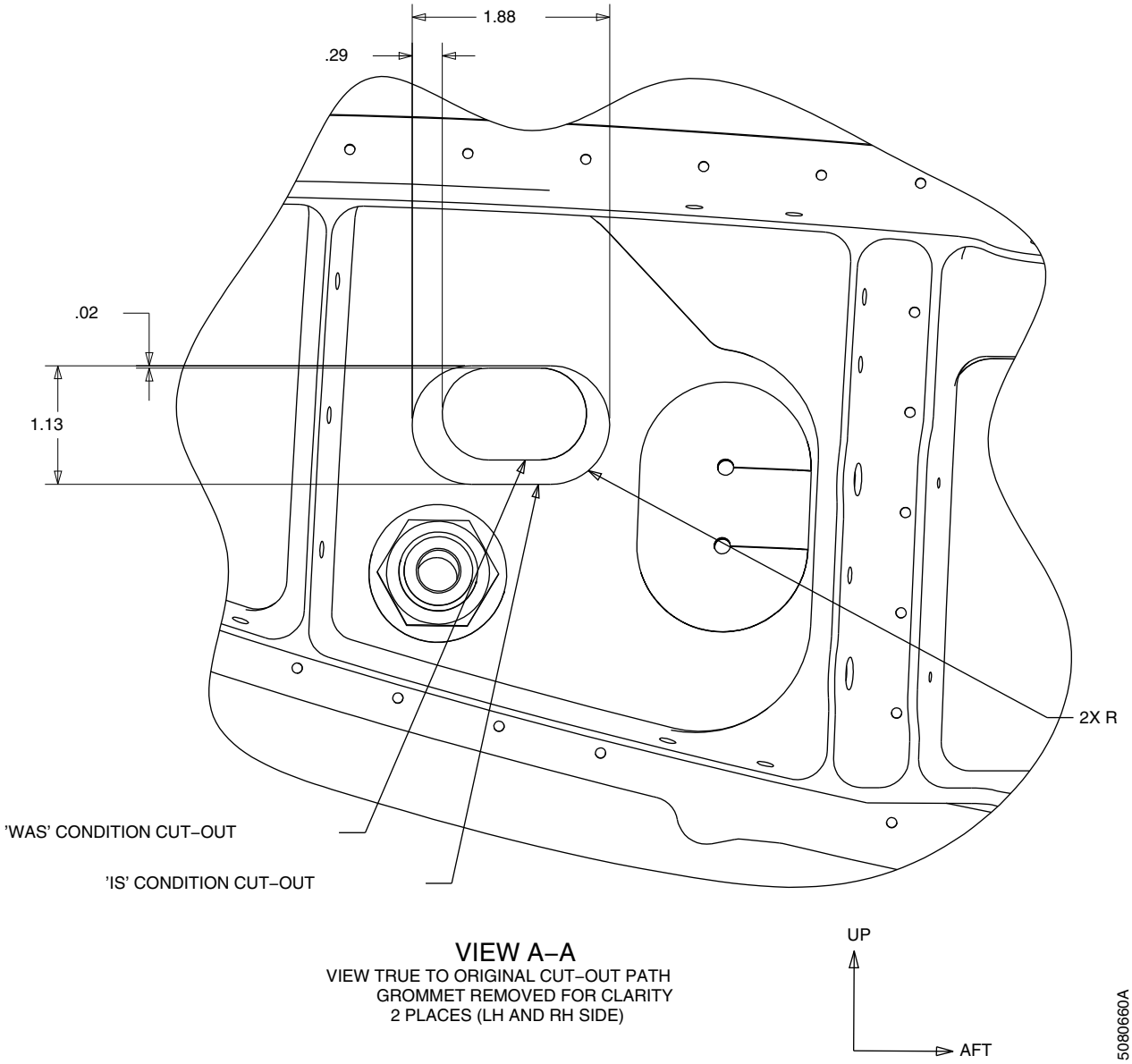
(19) Clean-up and smooth out Fast Block 100 with a paint brush. Make sure to remove all excess sealant from the apron.



Starter Generator Cable Grommet Apron Installation
Figure 1



Cable Grommet Fuselage Installation (Left Pylon Shown, Right Pylon Similar)
Figure 2



Aft Fuselage Skin Modification
Figure 3

C. Job Close-Up Procedure

(1) Install left lower nacelle panel 411 CB and right lower nacelle panel 412 CB. Refer to AMM 54-20-22 – LOWER NACELLE - INSTALLATION.

(2) Install left upper nacelle panel 411 AT and right upper nacelle panel 412 AT. Refer to AMM 54-20-21 – UPPER NACELLE - INSTALLATION.

(3) Install maintenance access door 311 AL. Refer to AMM 06-50-00.

WARNING: USE CARE WHEN WORKING AROUND FIRE EXTINGUISHER CONNECTORS, OR WHEN WORKING NEAR FIRE EXTINGUISHER. ACCIDENTAL DISCHARGE CAN CAUSE PERSONAL INJURY AND DAMAGE TO THE AIRCRAFT.

(4) Install left and right pylon panels as follows (refer to AMM 06-50-00):

- Leading edge pylon skin – 311 EL (Left) and 312 BR (Right)
- Forward lower pylon skin – 311 JL (Left) and 312 FR (Right)
- BASS module NACA panel – 311 FL (Left) and 312 CR (Right)

(5) Do Adjustment/Check of the left and right Starter/Generators. Refer to AMM 80-00-00-STARTER GENERATOR – ADJUSTMENT/CHECK.

(6) Remove all tools, equipment, and unwanted material from work area.

(7) If all other maintenance is complete, return aircraft to service. Refer to AMM 20-00-02 – RETURN TO SERVICE (AFTER MAINTENANCE).

D. Limitations and Procedures

None

E. Parts Disposition

Scrap

F. Cost

Parts and Labor will be supplied by Eclipse Aviation Corporation at no charge to the aircraft owner. This Service Bulletin must be accomplished at an Eclipse Aviation Service Center.

4. RECORD OF COMPLIANCE

Upon completion of this Service Bulletin, make an appropriate maintenance-record entry specifying the Service Bulletin number.

5. NOTIFYING ECLIPSE AVIATION

On completing this service bulletin, the operator/maintainer shall complete the attached Compliance Record and send it to Eclipse Aviation via regular mail, fax, or e-mail.

MAILING ADDRESS	Eclipse Aviation Corporation ATTN: Customer Care 2503 Clark Carr Loop SE Albuquerque, NM 87106
Fax	1-505-241-8802
E-mail	customercare@EclipseAviation.com

SERVICE BULLETIN COMPLIANCE RECORD

SB 500-71-001, Rev A: Starter Generator Power/Ground Grommet Rework

MODEL _____ AIRPLANE S/N _____ REG. NO. _____ TOTAL TIME _____ (HOURS)

OWNER NAME:
_____

ADDRESS: _____
_____

TELEPHONE NO. (___) _____ FAX NO. (___) _____

COMPLIANCE WITH SB 500-71-001, Rev A

Description of Work Performed

(Inspection | Modification | Repair | Option Installation | Defect or Damage Found, if applicable)

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_____

DATE _____

WORK PERFORMED

BY _____ (PRINTED)

_____ (SIGNATURE)

COMPANY _____

ADDRESS _____

_____

TELEPHONE _____ FAX_____ _____