ECLIPSE Service Bulletin

NUMBER: SB 500-30-002, Rev C

MODEL: ECLIPSE EA500

SUBJECT: Inspection and Treatment of Wing and Tail De-Ice Boots Installation for Surface Corrosion

Recommended

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1. PLANNING INFORMATION

A. Effectivity

Aircraft Serial Numbers: 000001 through 000262, 000266, and 000267

Aircraft Serial Numbers: 550-0263 to 550-0265, 550-0268 to 550-0280, and 550-0282 to 550-0284

B. Reason

Surface corrosion has been discovered within the conductive varnish areas adjacent to the de-ice boots on the wings and horizontal stabilizers of in-service aircraft.

Revision C of this Service Bulletin corrects the effectivity, adds a clear coat and updates company information.

Revision B of this Service Bulletin changes the effectivity to extend to 000300.

C. Description

This Service Bulletin inspects for and repairs corrosion damage, and treats all varnish areas adjacent to the de-ice boots with corrosion prevention treatment.

D. Relevant Publications

06-117751 – EA500 AMM, current revision

E. Compliance

Eclipse Aerospace Inc. considers this to be a recommended modification that should be accomplished at the next 300 Hour Inspection.

Compliance with revision A of this Service Bulletin constitutes compliance with revision B.

Compliance with revision B of this Service Bulletin does not constitute compliance with revision C.

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) Estimated labor hours to perform:

Suggested number of personnel: 1

Wings: 16.0 Hours

Tail: 10.0 Hours

Total labor hours: 26.0 Hours

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

N/A

I. Electrical Load Data Change

N/A

J. Software Accomplishment Summary

N/A

K. References

06-117751 – EA500 AMM, current revision

06-117755 – EA500 SRM, current revision.

L. Publications Affected

None

M. Export Control

These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. These commodities, technology or software are intended for use only in the End User's country. An export license from the U.S. Department of Commerce may be required before these products can be re-exported, transferred, transshipped on a non-continuous voyage, or otherwise disposed of in any other country, either in their original form or after being incorporated into an end item. Diversion of this end-item or its use contrary to any applicable U.S. government license or to U.S. law is prohibited.

2. MATERIAL INFORMATION

A. Materials

N/A

B. Consumables

The following consumables are required for this Service Bulletin.

Material	Specification	Use
Alodine	Touch-n-Prep (1132) (conductive) or Alodine 600	Chemical Conversion Coating
Conductive Varnish	Aerazur P/N 70602B or PRC-DeSoto 5421/2921	Conductive Varnish Coating
Protective Paper	PTFE Coated Fabric	Topcoat protection
Sealant	PRC-Desoto PR2050-B1/2	Gap Sealant
Polyurethane Clear Coat	PPG Aerospace: CA 8800 / B900, CA 9000 / B900, or CA 9005	Conductive Varnish Topcoat

C. Tooling

The following special tooling/support equipment is required to accomplish this Service Bulletin.

Nomenclature	Specification	Use
Scraper	Non-metalic	Remove varnish and sealant

D. Interchangeability / Intermixability of Parts

N/A

E. Part Re-identification

N/A

3. ACCOMPLISHMENT INSTRUCTIONS

A. Procedure

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

(2) Remove the forward wing-to-body fairings. Refer to AMM - 53-11-12 - FORWARD WING TO BODY FAIRING ASSEMBLY - REMOVAL.

(3) Remove varnish and inspect the Left Wing De-ice Boot as follows:

CAUTION: USE ONLY NON-METALLIC TOOLS TO REMOVE THE VARNISH.

(a) Remove the varnish from all wing/horizontal stabilizer skins along their complete length, upper and lower surfaces.

(b) Starting from the wing tip, do a Detailed Visual Inspection (DVI) of the exposed area of the wing skin between the de-ice boot and top coat finish for evidence of corrosion (refer to Figure 1). Inspect the upper and lower surfaces of the wing from the wing tip to the wing root.

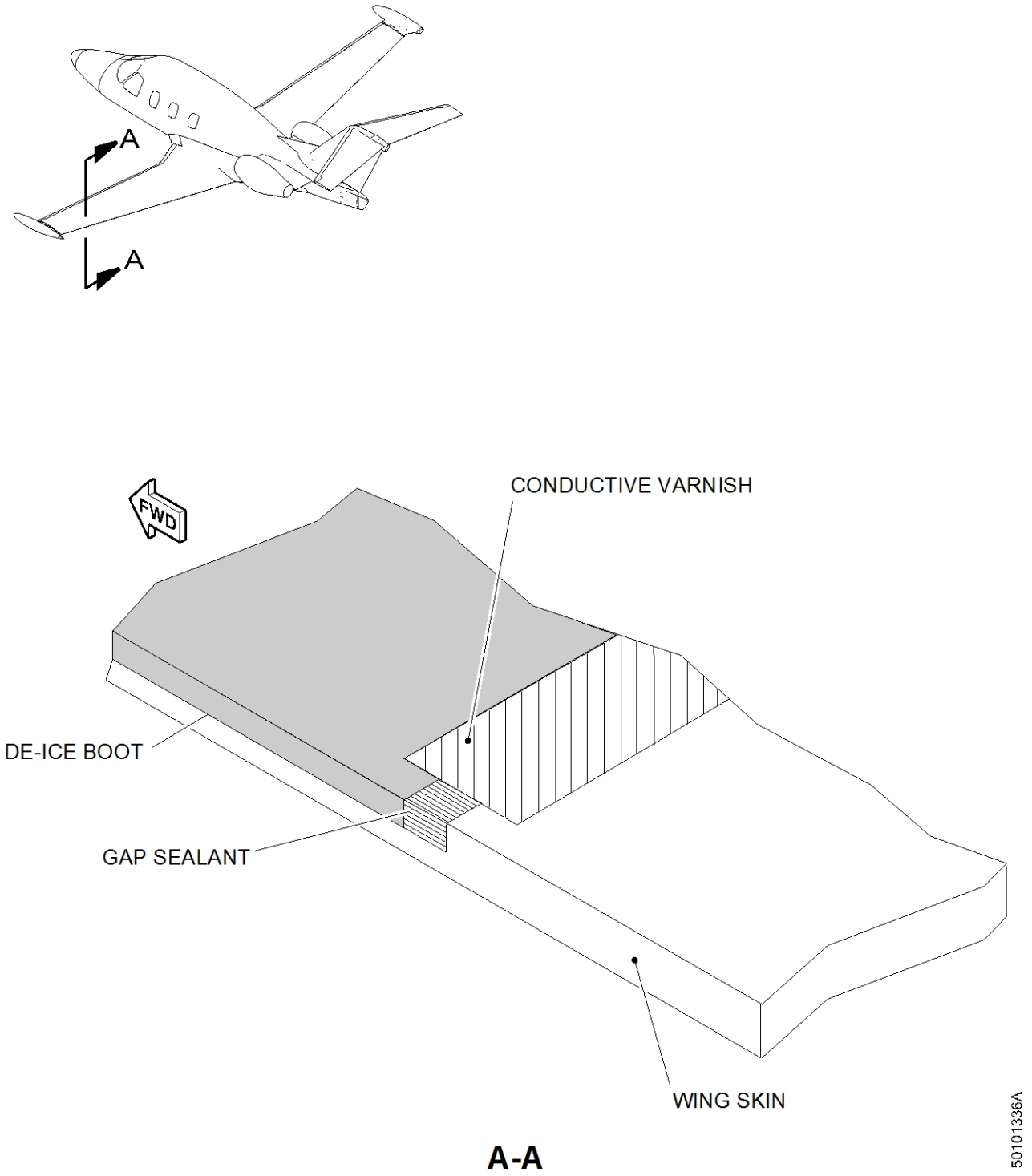
(c) Indication of corrosion may include (but is not limited to) any of the following. Refer to AMM - 20-10-00 - CORROSION:

1. Blister under the varnish.
2. Dull gray appearance of the wing skin if varnish is missing.
3. White powder on the wing skin if varnish is missing.
4. Visible pits in the wing skin.

(d) Do steps (3)(a) – (3)(c) for the right wing.

(e) Do steps (3)(a) – (3)(c) for the left horizontal stabilizer.

(f) Do steps (3)(a) – (3)(c) for the right horizontal stabilizer.



A-A

Left Wing De-ice Boot
Figure 1

(4) Measure Corrosion Damage

CAUTION: USE ONLY NON-METALLIC TOOLS TO REMOVE THE SEALANT.

NOTE: If no corrosion was found proceed to step (6).

(a) At each location where corrosion was found, remove the boot gap sealant a minimum of 0.25-in beyond the affected area.

CAUTION: REMOVE ONLY THE MINIMUM MATERIAL NECESSARY TO MAKE THE AFFECTED AREA FREE OF CORROSION.

(b) Remove the corrosion from the affected area as per AMM - 20-10-00 - CORROSION.

(c) Measure the damaged area. Refer to SRM - 51-10-01-011-801 - CRACK, SCRATCH, GOUGE, AND CORROSION.

(d) Make a drawing of the damaged area with the measured dimensions.

NOTE: There are no SRM repairs for corrosion damage to the wing or horizontal stabilizer structure. All damaged found must be evaluated on an individual basis.

(e) Forward all damage data to Eclipse Aerospace Inc. Service Engineering for repair evaluation. At a minimum the data must include the following information:

1. Serial Number of the aircraft.
2. Location of the damage.
3. Photos of the damage.
4. Drawings of the damage with dimensions of the affected area (including depth).

(5) Repair Corrosion Damage

NOTE: If no corrosion was found proceed to step (6).

(a) Repair all damaged areas as per instructions provided by Eclipse Aerospace Service Engineering.

(6) Corrosion Prevention

NOTE: Bare metal should be treated with protective finish within 24 hours. If time has elapsed, re-prepare the surface. Refer to AMM - 20-10-00 - CORROSION.

NOTE: Chemical conversion coating should be primed or varnished within 72 hours. If time has elapsed, re-prepare the surface. Refer to AMM - 20-10-00 - CORROSION.

(a) Apply a protective covering on the wing/horizontal stabilizer topcoat finish in the areas aft of the varnish application.

(b) Apply chemical conversion coating to the exposed wing/horizontal stabilizer skins as per AMM - 20-09-00 - AIRCRAFT FINISHES.

NOTE: Do not apply primer to areas to be covered by conductive varnish.

(c) If primer was removed from the leading edge skin apply epoxy primer to the affected area. Refer to AMM - 20-09-00 - AIRCRAFT FINISHES.

(d) If boot gap sealant was removed re-apply sealant PR2050-B1/2 to the affected area. Refer to AMM - 30-10-10 - WING DEICE BOOT - INSTALLATION and AMM - 20-08-00 - SEALANTS AND ADHESIVES - MAINTENANCE PRACTICES.

(7) Restore Varnish and Topcoat Finish

(a) Apply conductive varnish to the wing and horizontal stabilizer surfaces, refer to AMM - 30-10-10 - WING DEICE BOOT - INSTALLATION, AMM - 30-10-11 - HORIZONTAL STABILIZER DEICE BOOT – INSTALLATION and AMM - 20-08-00 - SEALANTS AND ADHESIVES - MAINTENANCE PRACTICES.

(b) Apply clearcoat as a protective topcoat over conductive varnish, per AMM - 20-09-00 - AIRCRAFT FINISHES.

(c) Restore the topcoat finish in the repaired areas, and all areas where the finish is missing. Refer to AMM - 20-09-00 - AIRCRAFT FINISHES.

B. Close up

(1) Install the left and right wing-to-body fairings. Refer to AMM - 53-11-12 - FORWARD WING TO BODY FAIRING ASSEMBLY - INSTALLATION.

(2) If all other maintenance is complete, return aircraft to service. Refer to AMM 20-00-02-051-801 RETURN TO SERVICE (AFTER MAINTENANCE).

C. Limitations and Procedures

N/A

D. Parts Disposition

N/A

E. Cost

Contact Eclipse Aerospace Customer Care for cost and availability.

4. PART MARKING

None.

5. RECORD OF COMPLIANCE

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

6. NOTIFYING ECLIPSE AEROSPACE

Upon incorporation of this service bulletin, the operator/maintainer shall complete the attached Compliance Record and send it to Eclipse Aerospace via regular mail, fax, or e-mail.

Mailing Address	Eclipse Aerospace Inc. ATTN: Customer Care 2503 Clark Carr Loop SE Albuquerque, NM 87106
Fax	1-505-241-8802
E-mail	sbcompliance@eclipse.aero

SERVICE BULLETIN COMPLIANCE RECORD

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

OWNER NAME:
_____

ADDRESS: _____
_____

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

COMPLIANCE WITH SB 500-30-002, Rev C

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_____