NUMBER: SB 500-54-005, Rev A

MODEL: ECLIPSE EA500

SUBJECT: Right Pylon Inspection and Repair

Recommended

www.ECLIPSE.aero

1. PLANNING INFORMATION

A. Effectivity

Aircraft Serial Numbers: 000001-000262, 000266-000267

B. Reason

The right pylon frame attachment to the fuselage rivets may become damaged.

C. Description

This Service Bulletin provides instructions to inspect and repair structure where the right pylon frame attaches to the fuselage.

D. Compliance

Eclipse Aerospace Incorporated considers this to be an option that can be accomplished at the operators discretion.

Aircraft that have been previously repaired via Technical Service Request (TSR) are considered to be in compliance with this Service Bulletin

E. Approval

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

F. Labor Requirements

The following information is for planning purposes only.

(1) Estimated labor hours to perform:

Suggested number of personnel: 1

Estimated in service days: 1

Total labor hours: 3

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.

G. Weight and Balance Change

N/A

H. Electrical Load Data Change

N/A

I. Software Accomplishment Summary

N/A

J. References

06-117751, EA500 AMM, current revision

06-117755, EA500/EA550 Structural Repair Manual

K. Publications Affected

None.

2. MATERIAL INFORMATION

A. Materials

Part Number	Description	Qty	Unit of Issue
HL12-5 or HL20PB5 [1]	Hi-Lok Pin	As Req'd	EA.
HL70-5 or HL86 [1]	Hi-Lok Collar	As Req'd	EA.

[1] HL20PB5 and HL86 are alternates to HL12-5 and HL70-5 and must be used together.

B. Interchangeability/Intermixability of Parts

N/A

C. Part Re-identification

None

D. Consumables

Material	Specification	Use
Abrasive	320 grit	Removal of access paint and sealant.
Sealant	PR-2001 or equivalent	For aerodynamic smoothing, fillet sealing, fastener sealing, and sealing joints and seams.
Alodine	MIL-C81706, Henkel Alodine 1201 or Touch-n-Prep 1132	Chemical conversion coating for aluminum.
Primer	MIL-PRF-85582	Apply to components that will not require a polyurethane top coat.
Primer	MIL-PRF-23377	Apply to components that will require a polyurethane top coat.
Adhesion Promoter	CA100	Assist top coat or primer to adhere to surfaces.

E. Tooling

N/A

F. Cost

Contact Eclipse Aerospace Customer Care for information and availability.

3. ACCOMPLISHMENT INSTRUCTIONS

NOTE: Inspections are to be performed by visual means under minimum 10X magnification.

NOTE: "Indications" refer to any sign of discrepancy, including but not limited to cracks, gouges, creases, deformation, and dents.

A. Job Set-up

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

(2) Remove the right pylon leading edge skin per AMM-54-30-11-001-801 – Leading Edge Pylon Skin – Removal.

B. Inspection

(1) Inspect the area where the Frame, Pylon, Aft Fuselage, RH (p/n 53-114187) attaches to the aft fuselage for damaged rivets. Refer to Figure 1, Figure 2, and Figure 3.

(a) If damage is noted, proceed to the Repair section.

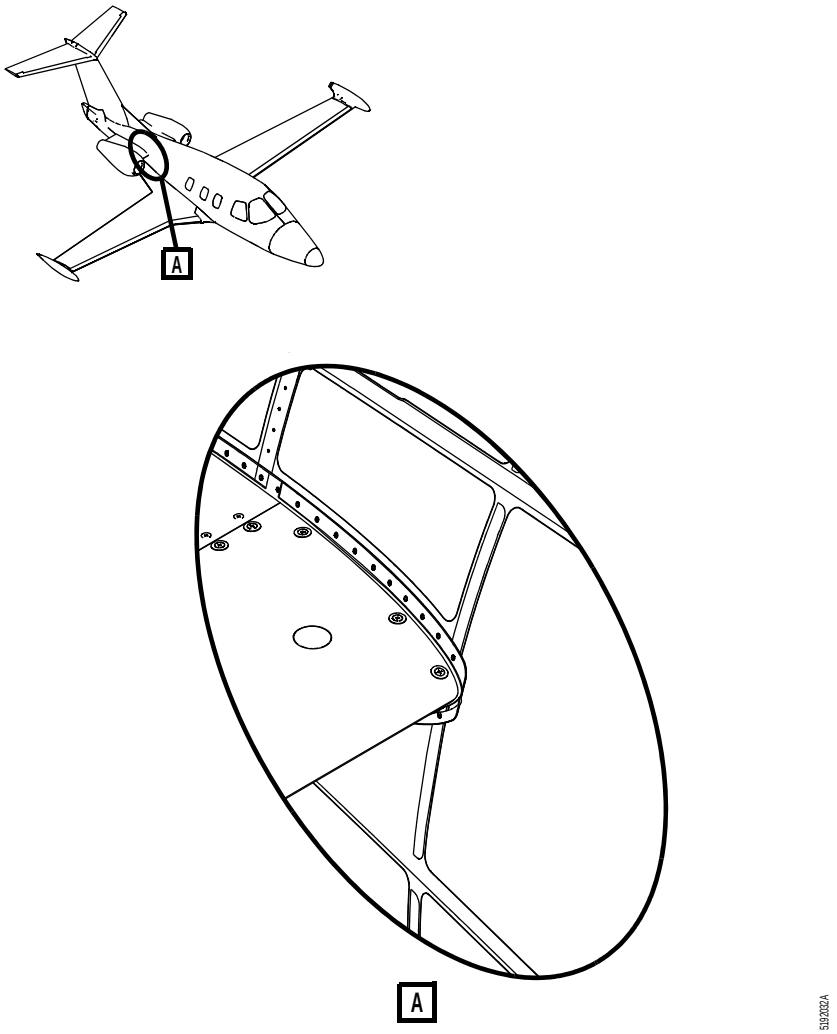

Figure 1. Area of Inspection

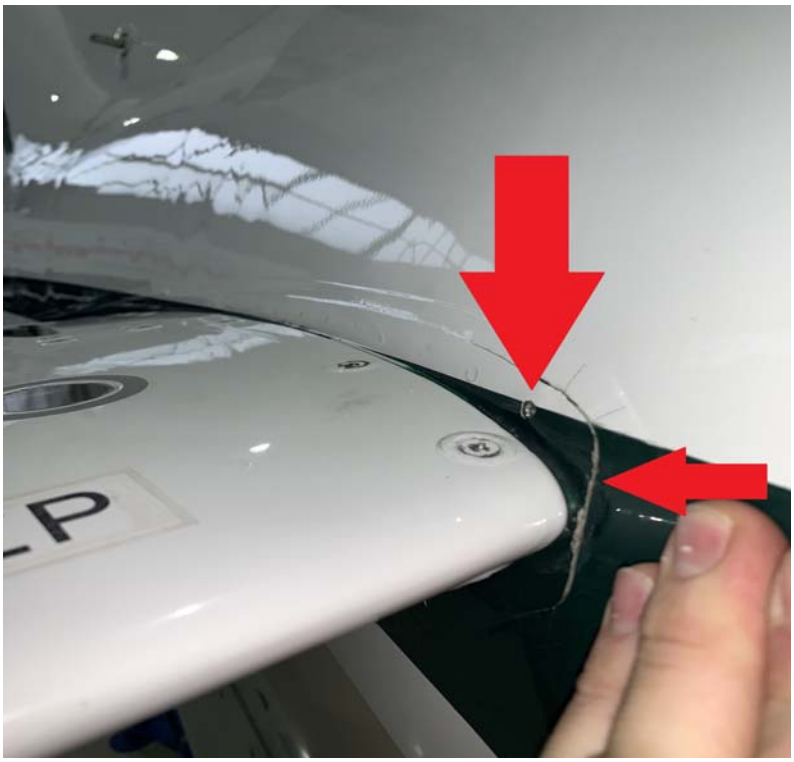

Figure 2. Example of Damage

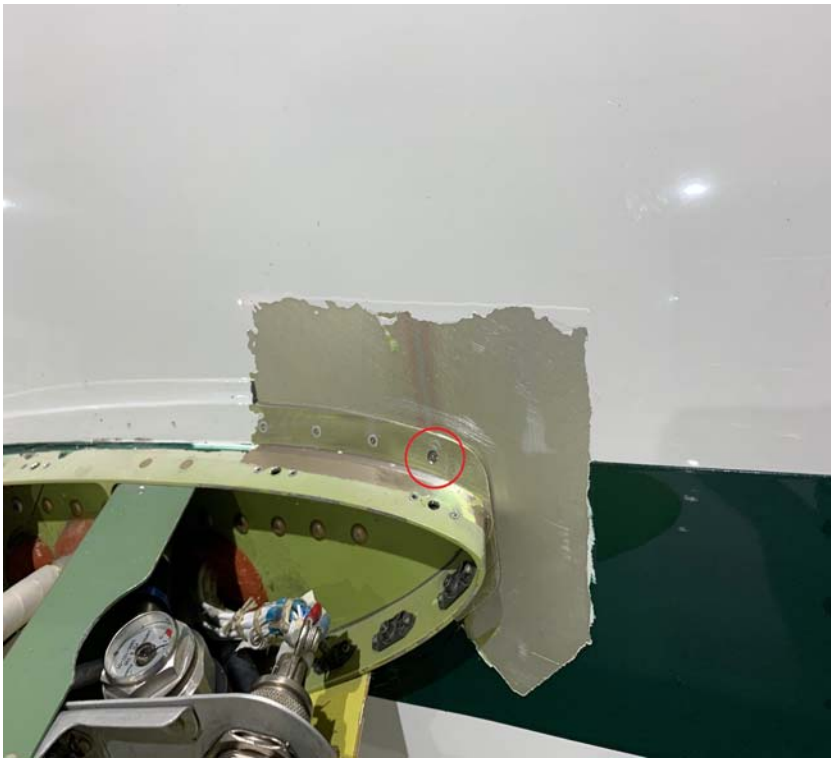

Figure 3. Example of Damage - Paint Removed

C. Repair

NOTE: It is acceptable to wet install HL20PB5 pins with HL86 collars as an alternate fastener to the HL12.

(1) Remove damaged fastener and discard.

(2) Inspect the hole for signs of out-of-round and other indications in each of the pylon frame (outside), skin, and fuselage frame (inside).

(3) From the inside of the aircraft, for a minimum distance of 1.0 in. all around the hole, prepare a bare aluminum surface by removing all surface finish (i.e. primer). Inspect the prepared bare aluminum skin and frame for indications. For a minimum distance of 4.0 in. all around the bare area, inspect for indications.

(4) From the outside of the aircraft, for a minimum length of 2.0 in. centered approximately about the hole, prepare a bare surface on the pylon frame. Specifically, expose the aluminum in the corner radius between the flange common to the skin and the flange common to the leading edge pylon composite fairing. Inspect the radius for indications.

(a) If indications are found, provide detailed documentation to Eclipse Service Engineering and await further disposition. If no indications are found, proceed.

(5) Remove one fastener immediately aft of the one that was removed in step 1.

(6) At each of the two hole locations, ensure minimum distance of 0.3 in. from center of hole to edges in both outside pylon frame and inside fuselage frame. Also, ensure the maximum countersink diameter is 0.173 in.

(a) If any edge distance or countersink does not meet these requirements, stop and report to Eclipse Service Engineering for further disposition. If these requirements are met, proceed.

(7) Open each of the two holes to a final diameter of 0.1625/0.1645 in.

(8) At each of the two locations, wet install HL12-5 pins and HL70-5 collars. Refer to SRM 51-00-00 - Standard Practices and Structures

(9) Restore sealing & surface finishes to original specification (e.g. chemical conversion coating, primer and topcoat). Bare aluminum is not permitted after repair is completed. Refer to AMM 20-08-00 - Sealants and Adhesives -Maintenance Practices, AMM 20-09-00 - Aircraft Finishes, and SRM 51-00-00 - Standard Practices and Structures.

(10) Using a permanent marker, mark the inside of the aircraft in the repair area with this SB number.

D. Job Close-up

(1) Install the right leading edge pylon skin per AMM-54-30-11-001-801 – Leading Edge Pylon Skin – Installation.

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

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

E. Limitations and Procedures

N/A

F. Parts Disposition

N/A

4. RECORD OF COMPLIANCE

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

5. NOTIFYING ECLIPSE AEROSPACE

On completing 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 Incorporated ATTN: Service Engineering 3520 Spirit Drive SE Albuquerque, NM 87106
Fax	1-505-241-8802
E-mail	sbcompliance@eclipse.aero

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SERVICE BULLETIN COMPLIANCE RECORD

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

OWNER NAME: _____

ADDRESS: _____

_____

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

COMPLIANCE WITH SB 500-54-005, 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 _____