



ALERT

SERVICE BULLETIN

NUMBER: SB 500-57-005
MODEL: ECLIPSE EA500
SUBJECT: WING TIP TANK FASTENER INSPECTION-REPAIR

1. PLANNING INFORMATION

A. Effectivity

Aircraft serial numbers 000039 to 000046.

B. Reason

Tip tank fasteners may be missing on certain extended tip tank aircraft. Extended tip tank aircraft S/N 000047 and up are not affected.

C. Description

This Service Bulletin provides procedures to inspect for the presence of the fasteners in question and to install them if they are missing.

D. Relevant Publications

N/A

E. Compliance

Eclipse Aviation Corporation considers this to be a mandatory inspection and repair (if required) that must be accomplished within 30 days from the issue date of this Service Bulletin.

F. Approval

This Service Bulletin is based on engineering data that is FAA-approved and the inspection and repair (if required) complies with the applicable regulations.

This repair is documented by report EAC COR-500–STR–310.

G. Labor Requirements

The following information is for planning purposes only.

(1) Estimated labor hours to perform:

Inspection: 15 minutes per side

Repair, if required: 2 hours per side

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) Suggested number of personnel: 1

H. Qualification of Personnel:

Airframe & Powerplant (A&P) License

I. Weight and Balance Change

Negligible

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J. Electrical Load Data Change

N/A

K. Software Accomplishment Summary

N/A

L. References

Aircraft Maintenance Manual (AMM) P/N 06-117751, revision 8 or later.

M. Publications Affected

N/A

2. MATERIAL INFORMATION

A. Materials

The following parts and/or kits are required for this Service Bulletin. Quantity is per aircraft. When order kit, use p/n SB500-57-005B

Parts included in SB500-57-005B are listed below for further clarity.

Part Number	Description	Qty Required
HL10VAP6-4 (preferred) or HL10VAZ6-4 (substitute)	Hi-lok Fasteners	8
NAS1149D0332J	Washers	8
HL70-6	Collars	8

B. Consumables

The following consumables are required for this Service Bulletin.

Part Number	Description
PPG Aerospace (PRC-DeSoto) PR-2001	PPG Aerospace (PRC-DeSoto) Class B Sealant
Dynamold DS-108 (DS-108F)	Dynamold DS-108 (DS-108F) Solvent

C. Tooling

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

Nomenclature	Part Number	Use
Borescope Kit	PWC32677 or equivalent	To inspect for missing fasteners

D. Interchangeability/Intermixability of Parts

N/A

E. Part Re-identification

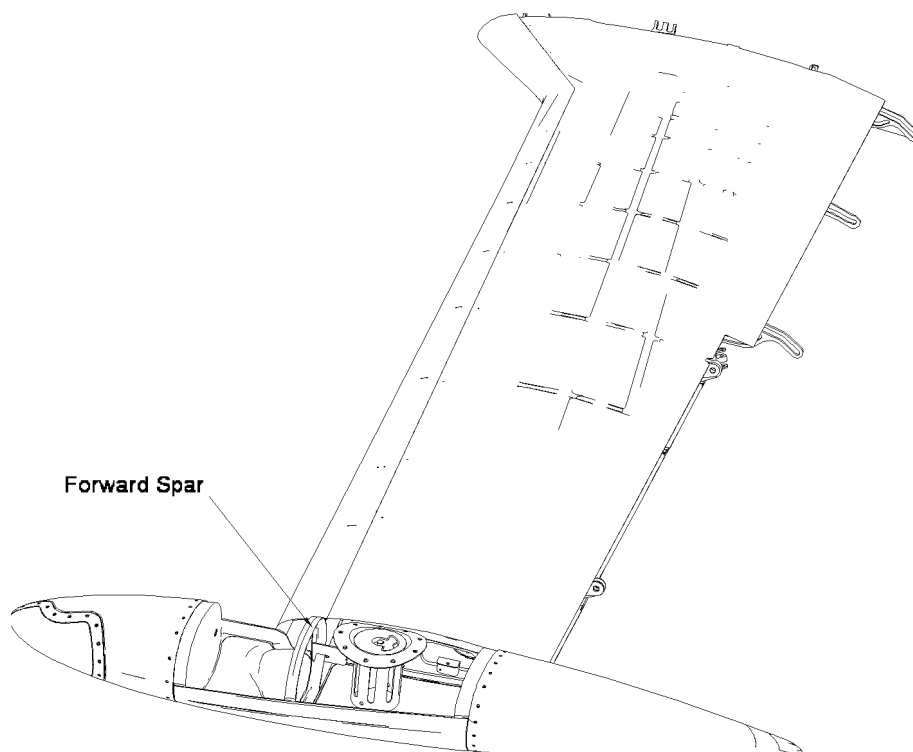
N/A

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3. ACCOMPLISHMENT INSTRUCTIONS

A. Inspection Procedure

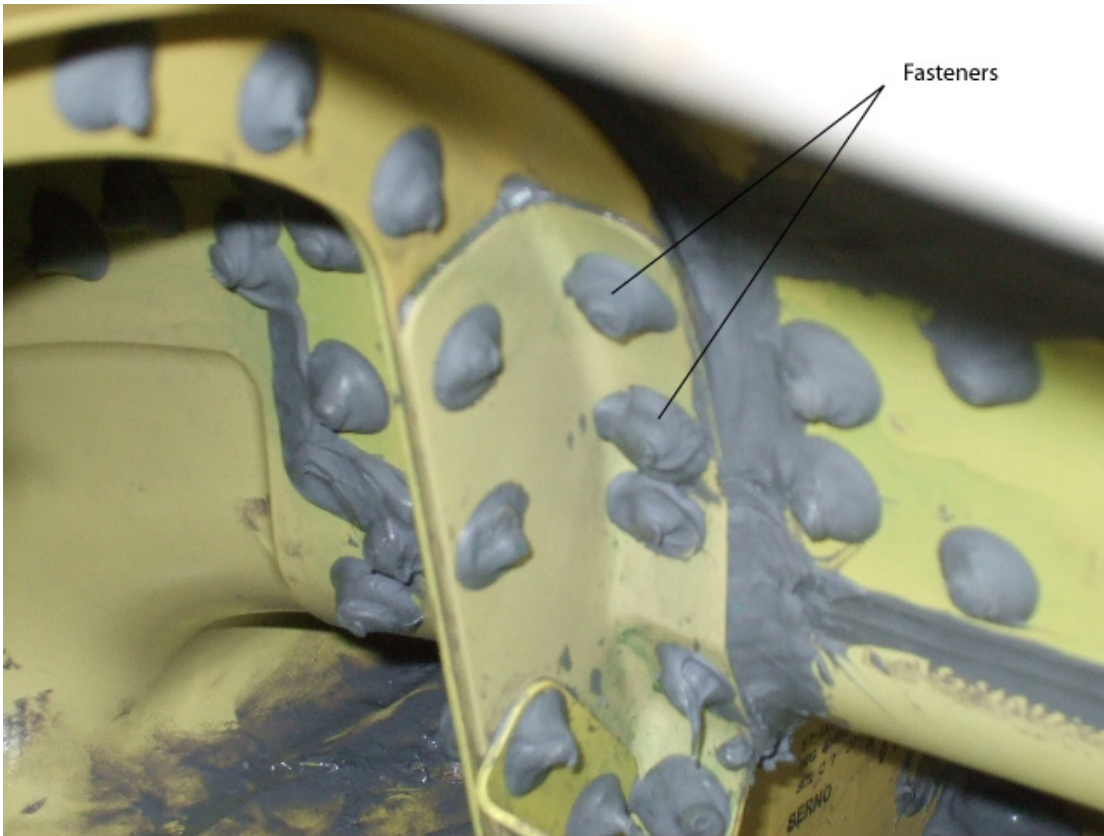
- (1) Inspect both the left and right tip tanks.
- (2) Defuel, if necessary, enough fuel to make sure that the tip tanks are empty.
- (3) Remove tip tank filler cap. Refer to AMM-28-10-10 Fuel Tank Filler Cap – Removal, Config B.
- (4) Navigating through the fuel tank filler port with a borescope, check that two fasteners are installed on the Forward Spar Former and Support as shown in Figure 2.



**Left Wing Tip Tank
Figure 1 (Sheet 1 of 1)**



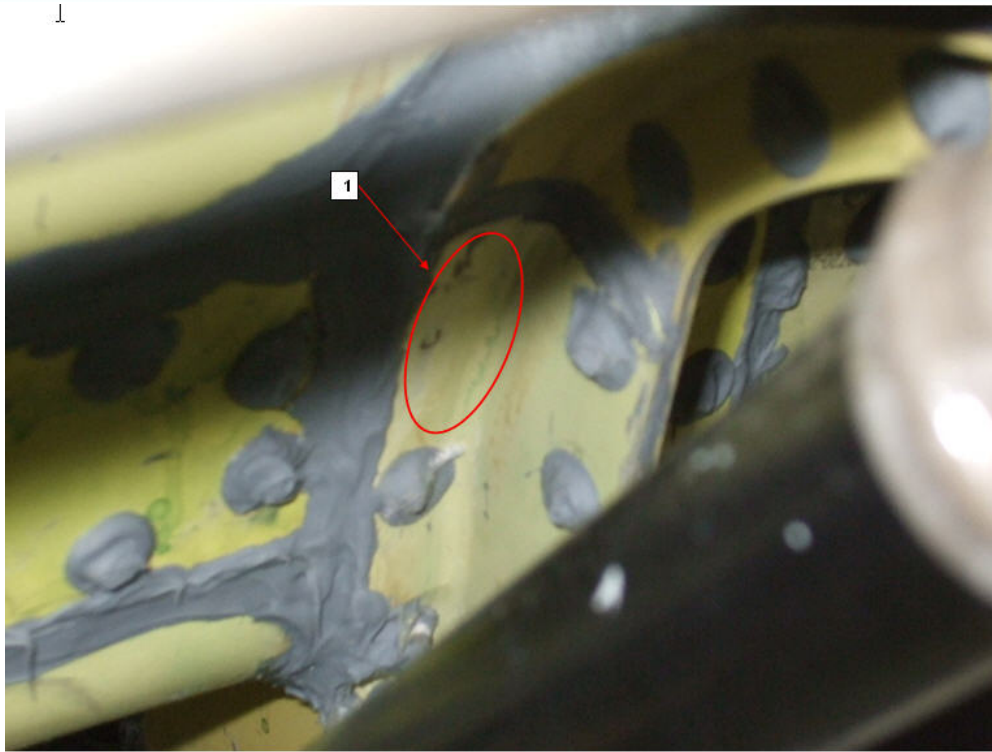
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**Correct Installation of Fasteners - Left Side Tank View Looking Forward and Inboard
Figure 2 (Sheet 1 of 1)**

- (5) If fasteners are missing (1, Fig 3, Sheet 1), proceed to repair procedure. If not, continue to the next step.

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**Missing Fasteners - Right Side Tank, View Looking Forward and Inboard
Figure 3 (Sheet 1 of 1)**

- (6) Remove all tools and equipment from the work area.
- (7) Install tip tank filler cap. Refer to AMM-28-10-10 Fuel Tank Filler Cap – Installation, Config B.
- (8) If no further maintenance is required, return the aircraft to service. Refer to AMM - 20-00-02-051-801 - Return to Service (After Maintenance).

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B. Repair Procedure

Repair procedures are given for the left side and are the same for the right side.

- (1) Remove tip tank access panel 531 MB. Refer to AMM 57-10-11 Wing Access Panel - Removal, Config B.
- (2) Remove fuel filler adapter. Refer to AMM-28-10-11 Fuel Filler Adapter - Removal, Config B.
- (3) Remove tip tank fuel probe from its mounting brackets without disconnecting the wiring. Lay fuel probe to the side to allow access to repair area. Refer to AMM-28-40-10-001-801-B Fuel Gauge Probe - Removal.
- (4) Locate and drill two new holes 0.1850" to 0.1880" diameter (2, Fig 4, Sheet 1) for interference fit installation of HL10VAP6-4 Hi-lok Fasteners .

NOTE: Maintain minimum 0.75" fastener spacing common to all adjacent fasteners.

NOTE: Maintain minimum 0.375" edge distance on all parts.

- (5) Remove any chips and burrs from holes.
 - (6) Clean newly prepared holes and surrounding area with Dynamold DS-108 (DS-108F) or a 50/50 volume percent blend of acetone and isopropyl alcohol.
 - (7) Install two HL10VAP6-4 Hi-lok fasteners wet with PPG Aerospace (PRC-DeSoto) PR-2001 Class B sealant and HL70-6 collars in newly prepared holes (2, Fig 4, Sheet 1). Use NAS1049D0332J washers as necessary to compensate for grip length. Refer to Subtask AMM-20-08-00-051-361-007 for sealant application.
- NOTE: It is acceptable to use one size +/- on the Hi-lok fasteners to compensate for grip length in place of the washers.
- (8) Dome seal new fasteners with PPG Aerospace (PRC-DeSoto) PR-2001 Class B sealant. Refer to Subtask AMM-20-08-00-051-361-008 for sealant application.
 - (9) Remove two existing fasteners (1, Fig 4, Sheet 1).
 - (10) New holes are to be 0.1850" to 0.1880" diameter for interference fit installation of HL10VAP6-4 Hi-lok Fasteners.

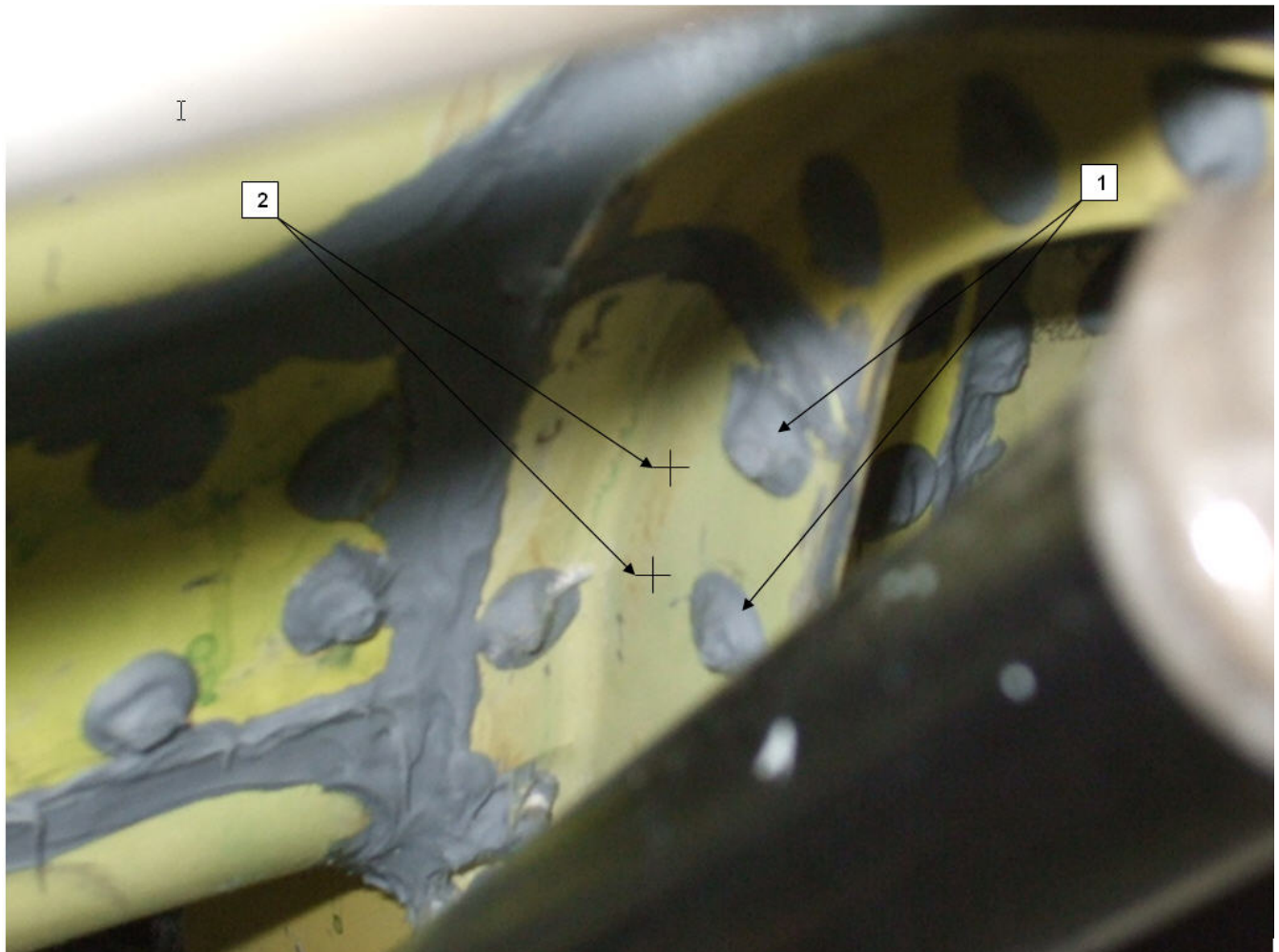
- (11) Remove any chips and burrs from holes.
- (12) Clean area with Dynamold DS-108 (DS-108F) or a 50/50 volume percent blend of acetone and isopropyl alcohol.
- (13) Install two HL10VAP6-4 Hi-lok fasteners wet with PPG Aerospace (PRC-DeSoto) PR-2001 Class B sealant and HL70-6 collars in holes where fasteners were removed (1, Fig 4, Sheet 1). Use NAS1049D0332J washers as necessary to compensate for grip length. Refer to Subtask AMM-20-08-00-051-361-007 for sealant application.

NOTE: It is acceptable to use one size +/- on the Hi-lok fasteners to compensate for grip length in place of the washers.

- (14) Dome seal new fasteners with PPG Aerospace (PRC-DeSoto) PR-2001 Class B sealant. Refer to Subtask AMM-20-08-00-051-361-008 for sealant application.
- (15) Remove all tools, equipment and unwanted material from the work area.

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- (16) Install tip tank fuel probe from its mounting brackets with still the wiring still connected. Refer to AMM-28-40-10-041-801-B Fuel Gauge Probe - Installation.
- (17) Install tip tank access panel 531 MB. Refer to AMM 57-10-11 Wing Access Panel - Installation, Config B.
- (18) Install fuel filler adapter. Refer to AMM-28-10-11 Fuel Filler Adapter - Installation, Config B.
- (19) Remove all tools, equipment, and unwanted material from the work area.
- (20) If no further maintenance is required, return the aircraft to service. Refer to AMM - 20-00-02-051-801 - Return to Service (After Maintenance).



Repair - Right Side Tank, View Looking Forward and Inboard
Figure 4 (Sheet 1 of 1)



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C. Limitations and Procedures

N/A

D. 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

Upon 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.

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