

# ECLIPSE Modification Bulletin



NUMBER: MB 500-32-003, Rev C  
MODEL: ECLIPSE EA500  
SUBJECT: ABS Pressure Switch and Harness Reroute

**Mandatory**  
[www.ECLIPSE.aero](http://www.ECLIPSE.aero)

## 1. PLANNING INFORMATION

### A. Effectivity

Aircraft Serial Numbers: 000001 to 000262, 000266 to 000267, Post MB 500-32-002 (Revisions A, B, C or D)  
Anti-Skid Brake System Installation

### B. Reason

This Modification Bulletin has been prepared for the upgrade of the Anti-Skid Brake System (ABS) installation. Revision C of this Modification Bulletin clarifies the compliance statement to communicate that this is a mandatory upgrade that must be accomplished at the next 300 hour inspection. Revision B of this Modification Bulletin improves the harness routing and ABS installation.

### C. Description

This Modification Bulletin provides procedures to upgrade the existing ABS installation on an Eclipse aircraft.

### D. Relevant Publications

06-122204, EA500 AFM, current revision  
06-117751, EA500 AMM, current revision  
06-117753, EA500 WDM, current revision  
06-121770-07, EA500 AFM, Supplement for ABS, current revision  
06-124051, EA500 AMM, Supplement for ABS, current revision  
06-124052-0001, EA500 WDM, Supplement for ABS, current revision

### E. Compliance

Eclipse Aerospace Incorporated considers this to be an mandatory upgrade that must be accomplished at the next 300 hour inspection.

This Modification Bulletin must be accomplished at an Eclipse Aerospace Authorized Service Center.

Rev C does constitute compliance if Rev A or B and SEM 500-00174 have been accomplished.

### F. Approval

This Modification 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) Suggested number of personnel: 2–3

Estimated labor hours to perform:

- Job Setup/CloseUp: 4 Hours
- Wire Fabrication/Installation: 4 Hours
- Structure Installation: 24 Hours
- Adjustment/Test and Return to Service: 4 Hours

**Total labor hours: 36**

The above is an estimate based on properly equipped and experienced personnel complying with this Modification 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**

MB 500-32-002, Anti-Skid Brake System Installation  
06-117751, EA500 AMM, current revision  
06-121770-07, EA500 AFM, Supplement for ABS, current revision  
06-124051, EA500 AMM, Supplement for ABS, current revision  
06-124052-0001, EA500 WDM, Supplement for ABS, current revision

**L. Publications Affected**

06-117751 – EA500 AMM, current revision  
06-117753 – EA500 WDM, current revision

**M. Export Control**

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## 2. MATERIAL INFORMATION

### A. Materials

Order non-kitted parts as required by aircraft configuration and Modification Bulletin kit part number MBK500-32-002B, or most current revision. It is permissible to substitute parts in the kits per EAC-102-Appendix-C.

- (1) Non-kitted parts. Non-kitted parts must be ordered separately.

Part Number	Description	Qty	Unit of Issue
32-124680-1001 <sup>[1]</sup>	TUBE ASSY, INBOARD ABS TO BRAKE, LH - WING	1	EA.
32-124682-1001 <sup>[1]</sup>	TUBE ASSY, OUTBOARD ABS TO BRAKE, LH - WING	1	EA.
32-124684-1001 <sup>[1]</sup>	TUBE ASSY, INBOARD ABS TO BRAKE, RH - WING	1	EA.
32-124686-1001 <sup>[1]</sup>	TUBE ASSY, OUTBOARD ABS TO BRAKE, RH - WING	1	EA.
AS5176J03 <sup>[2]</sup>	FITTING, SLEEVE, FLARED	4	EA.
AN818-3D <sup>[2]</sup>	NUT, TUBE COUPLING, SHORT	4	EA.

<sup>[1]</sup> Order if not reworking 32-123876-1001 and 32-123877-1001.

<sup>[2]</sup> Use to rework 32-123876-1001 and 32-123877-1001 into the four new tube assemblies.

- (2) **Kit MBK500-32-003B**

Part Number	Description	Qty	Unit of Issue
<b><i>MBK500-32-003-01B, ABS Pressure Switch Installation and Wire Harness Rework</i></b>			
32-124678-1001	TUBE ASSY, PRESSURE SWITCH, ABS-WING	2	EA.
32-124689-1002	PLATE ASSY, ABS LH - WING	1	EA.
32-124690-1002	PLATE ASSY, ABS RH - WING	1	EA.
32-124695-1001	BRACKET ASSY, ABS LH - WING	1	EA.
32-124696-1001	BRACKET ASSY, ABS RH - WING	1	EA.
AS5174J0403	FITTING, UNION AND REDUCER, FLARED	4	EA.
AS5174J0404	FITTING, UNION AND REDUCER, FLARED	2	EA.
AS5192J04	FITTING, TEE, INTERNAL STRAIGHT THREAD PORT	2	EA.
CB3001AA3-16HP750	STANDOFF, LOCKING THREAD, ADHESIVE BONDED	2	EA.
CB4020V3N8750	MOUNT, CABLE TIE, RIGHT ANGLE, COMPOSITE	2	EA.
CB9120V5	MOUNT, CABLE TIE ANCHOR	2	EA.
CR4H-M0	CONNECTOR RING	6	EA.
D403101	SCD - PRESSURE SWITCH, 50 PSI	2	EA.
HL10VAP6-4	HI-LOK PIN, PROTRUDING SHEAR HEAD, TITANIUM	4	EA.

Part Number	Description	Qty	Unit of Issue
HL70-6	HI-LOK COLLAR, SHEAR APPLICATION	4	EA.
M39029/30-218	CONTACT, SOCKET, #16 FOR #16 WIRE	6	EA.
M39029/30-219	CONTACT, SOCKET, #12 FOR #12 WIRE	4	EA.
M81824/1-1	SPLICE, ENV, RD, 26-20, (ALT: D-436-36)	2	EA.
M85049/8-13W	CONNECTOR ACCESSORIES, ELECTRICAL, BACKSHELL	2	EA.
M85049/51S10W	BACKSHELL, 90°, CIRCULAR	2	EA.
MS21042-04	NUT, SELF-LOCKING, REDUCED HEIGHT	2	EA.
MS21042L3	NUT, SELF-LOCKING, REDUCED HEIGHT	2	EA.
MS21919WDG6	CLAMP, LOOP TYPE, CUSHIONED SUPPORT	8	EA.
MS21919WDG8	CLAMP, LOOP TYPE, CUSHIONED SUPPORT	2	EA.
MS21919WDG12	CLAMP, LOOP TYPE, CUSHIONED SUPPORT	4	EA.
MS21919WDG14	CLAMP, LOOP TYPE, CUSHIONED SUPPORT	2	EA.
MS29512-04	PACKING, PREFORMED, HYDROCARBON FUEL RESISTANT, TUBE FITTING, "O" RING	6	EA.
MS3456W10SL-3S	CIRC CONN, PLUG (CONTACTS INCLUDED: 32S03P01, 32S04P01)	2	EA.
MS3367-1-0	STRAP, TIEDOWN, ELECTRICAL COMPONENTS, ADJUSTABLE, SELF - CLINCHING, PLASTIC, TYPE I, CLASS I	20	EA.
NAS1801-04-6	SCREW, HEX HEAD, CRUCIFORM RECESS, FULL THREAD, ALLOY STEEL, 160,000 PSI TENSILE	8	EA.
NAS1801-3-12	SCREW, HEX HEAD, CRUCIFORM RECESS, FULL THREAD, ALLOY STEEL, 160,000 PSI TENSILE	2	EA.
NAS1149G0316P	WASHER, FLAT	2	EA.
NAS1149GN816P	WASHER, FLAT	10	EA.
NAS433DD3-12N	SPACER	2	EA.

## B. Work Instructions

The Work Instructions have precedence if any conflicts arise between the work instructions and this Modification Bulletin.

Part Number	Description
32-123860-1004-WI	ABS Installation

### C. Drawings

The Work Instructions have precedence if any conflicts arise between the work instructions and this Modification Bulletin.

Part Number	Description
32-124673-1003	ABS Mod, Aircraft Wire Harness — Wing
32-123860-1004	ABS Installation
32-123956-1002	Instl, Wire Harness Assy — ABS, Aft fuselage / Wing

### D. Interchangeability/Intermixability of Parts

None

### E. Part Re-identification

Refer to Accomplishment Instructions below.

### F. Consumables

The following consumables are required for this Modification Bulletin.

Specification	Material	QTY	Units of Issue
M27500-24SD2T23	Wire, 24 AWG, 2 Cond, Shielded	90	inches
1231	Overbraid Sleeve, Alpha Wire, Flat Width, 1/4", (~D=0.159), QQ-B-575B	90	inches

<sup>(1)</sup> Permissible to substitute M27500-22SD2T23. Change marking from "WIRE"-24 TO "WIRE"-22.

### G. Tooling

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

Nomenclature	Specification	Use
Crimp Tool	M22520/1-01 or M22520/7-01	Wire Harness Modification
Positioner	M22520/1-02	Wire Harness Modification
Removal/Install Tool	M81969/14-03	Wire Harness Modification
Flare Tool	Compatible with stainless steel tubing	Brake Line Rework

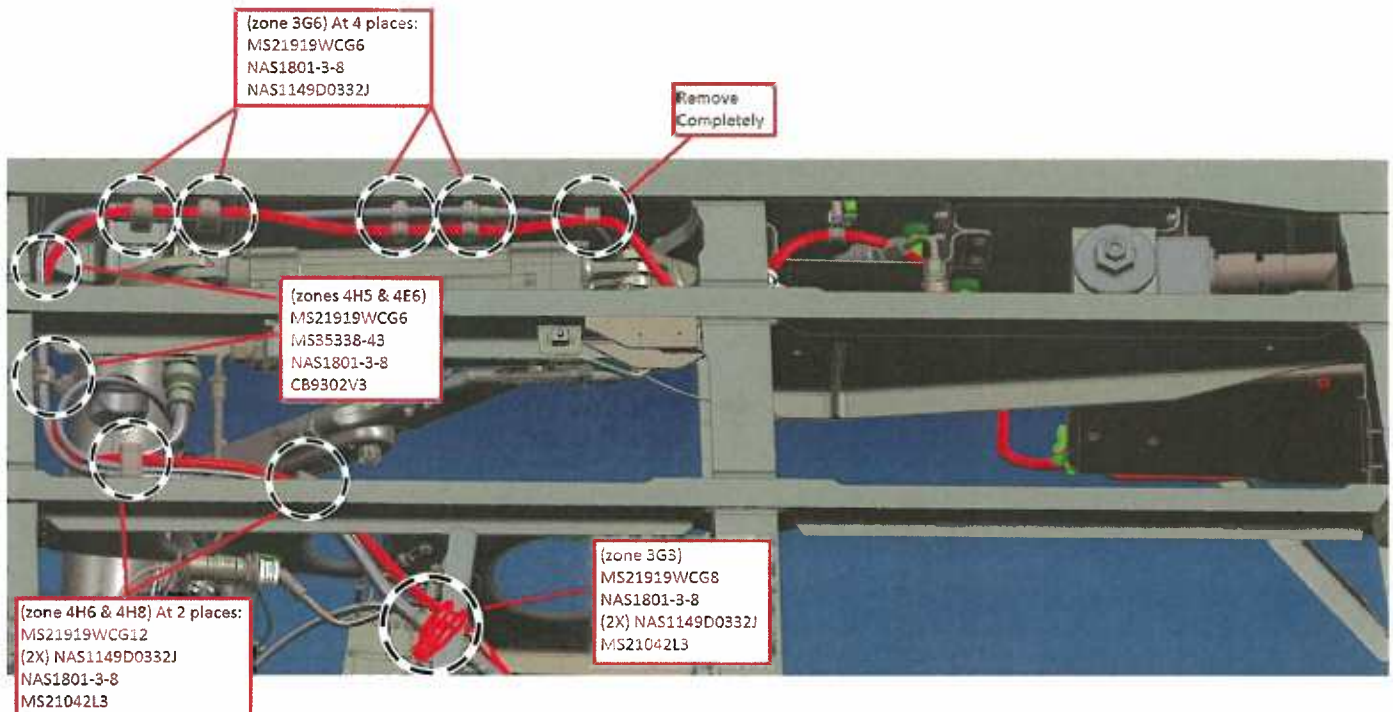


# ECLIPSE Modification Bulletin

## 3. ACCOMPLISHMENT INSTRUCTIONS

### A. Procedure

- (1) Make aircraft safe for maintenance. Refer to AMM 20-00-01 - MAKE AIRCRAFT SAFE FOR MAINTENANCE.
- (2) Prepare aircraft for modification per 32-123860-1004-WI.
- (3) Remove existing wire harness from the BCM to the WST disconnect branch, shown in red in (Figure 1).



**Wire Harness Modification Removal  
Figure 1 (Sheet 1 of 1)**

- (4) With the ABS wire harness remove, replace the noted provisions to the original hardware stack up (pre-ABS). Refer to 39-108113 and (Figure 1).  
 NOTE: 39-108113-1009 - Aircraft 0001-0129 / 39-108113-1010 - Aircraft 0130-0239 / 39-108113-1011 - Aircraft 0240-0284
- (5) Install the following provisions, (LH shown in drawing reference, RH mirrored, quantity reflects total for both) refer to drawing 32-123956-1002:
  - (a) Remove existing clickbond and replace with P/N CB3001AA3-16HP750 in the location shown in Section F-F.
  - (b) P/N CB4020V3N8-750 (X2) in the location shown in Detail AA.
  - (c) P/N CB9120V5 (X2) in the location shown in Section AC-AC.
- (6) If reworking existing brake lines:
  - (a) Remove P/N 32-123876-1001 (RH) and rework into part numbers 32-124684-1001(RH) and 32-124686-1001 (RH) using P/N AS5176J03 (X2) flare fitting and AN818-3D (X2) nut.  
 Refer to detail part drawing 32-124683-2001 (inboard) and 32-124685-2001 (outboard) for tube lengths.

- (b) Remove P/N 32-123877-1001 (LH) and rework into part numbers 32-124680-1001 (LH), 32-124682-1001 (LH) using P/N AS5176J03 (X2) flare fitting and AN818-3D (X2) nut.

Refer to detail part drawing 32-124679-2001 (inboard) and 32-124681-2001 (outboard) for tube lengths.

- (7) Install ABS Plate Assembly 32-124689-1002 (LH), 32-124690-1002 (RH) and ABS Bracket Assembly 32-124695-1001 (LH) 32-124696-1001 (RH) according to 32-123860-1004-WI, ABS Installation instructions.
- (8) Install brake lines, ABS Brake Pressure Limit Switch, and associated hardware according to 32-123860-1004-WI, ABS Installation instructions.
- (9) Modify harness 32-123955-1004 per 32-124673-1003, ABS Modification, Aircraft Wire Harnesses – Wing.

NOTE: If this rework is performed on aircraft utilizing 32-123956-1002 (Instl, Wire Harness Assy- ABS, Aft Fuselage / Wing) for routing guidance, the dimensions are for reference only. Use the aircraft as a 3D formboard.

NOTE: Part mark harness per E510-PS-0008. Add 32-124673-1003 to existing label near 32P01. Use an additional label and/or replace existing label if needed, but all existing part marking must be retained.

- (10) Install modified wire harness per installation drawing 32-123956-1002.
- (11) Perform the applicable adjustments and tests per 32-123860-1004-WI.
- (12) If all other maintenance is complete, return the aircraft to service. Refer to the AMM 20-00-02 RETURN TO SERVICE (AFTER MAINTENANCE).

## B. Limitations and Procedures

Upon completion of this MB the following documents must be used:

- 06-121770-07, EA500 AFM, Supplement for ABS, current revision
- 06-124051, EA500 AMM, Supplement for ABS, current revision
- 06-124052-0001, EA500 WDM, Supplement for ABS, current revision

## C. Cost

Contact Eclipse Aerospace Inc. for cost and availability.

## 4. RECORD OF COMPLIANCE

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

## 5. NOTIFYING ECLIPSE AEROSPACE

On completing this modification 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 2503 Clark Carr Loop SE Albuquerque, NM 87106
Fax	1-505-241-8802
E-mail	sbcompliance@eclipse.aero

### MODIFICATION BULLETIN COMPLIANCE RECORD

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

OWNER NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE NO. (\_\_\_\_) \_\_\_\_\_ FAX NO. (\_\_\_\_) \_\_\_\_\_

#### COMPLIANCE WITH MB 500-32-003, Rev C

#### Description of Work Performed

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

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WORK PERFORMED

BY \_\_\_\_\_ (PRINTED)

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COMPANY \_\_\_\_\_

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