



SERVICE BULLETIN

NUMBER: SB 500-32-008, REV B
MODEL: ECLIPSE EA500
SUBJECT: MASTER CYLINDER INSPECT/REPLACE

1. PLANNING INFORMATION

A. Effectivity

Aircraft Serial Numbers 000001-000110.

B. Reason

Field reports received indicate a condition where the master cylinder was making a popping sound. Returned units for this condition have been examined and determined to be missing the PN 101-63000 Washer Seal (elastomeric) permitting metal to metal contact between the piston and check valve. Failure to comply with this service bulletin results in a slight increase of brake pedal travel to start the generation of pressure.

C. Description

This document executes and supplements “Parker Service Bulletin 7095 Eclipse Model E500 - P/N 10-94 Master Cylinder - Inspect/Replace”, and provides the necessary instructions to inspect, remove and replace the referenced brake master cylinder assemblies and service the brake system.

D. Relevant Publications

Parker Service Bulletin 7095 Eclipse Model E500 - P/N 10-94 Master Cylinder - Inspect/Replace.

E. Compliance

Eclipse Aviation Corporation considers this to be an mandatory inspection and or part replacement that must be accomplished at next maintenance interval, scheduled or unscheduled, whichever comes first. May be delayed up to 20 flight hours but not to exceed 60 days from next maintenance event.

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

F. Approval

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





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G. Labor Requirements

The following information is for planning purposes only.

(1) Estimated labor hours to perform:

Suggested number of personnel: 1

Set-up: 0.5 Hours

Inspection: 0.2 Hours

Part replacement: 2.0 Hours (0.5 per cylinder)

Adjustment/ Test: 3.0 Hours

Close up: 0.8 Hours

Total labor hours: 6.5

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

No change

I. Electrical Load Data Change

No change

J. Software Accomplishment Summary

No change

K. References

Parker Service Bulletin 7095 Eclipse Model E500 - P/N 10-94 Master Cylinder - Inspect/Replace.

Aircraft Maintenance Manual (AMM), P/N 06-11775, latest revision.

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

L. Publications Affected

None



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2. MATERIAL INFORMATION

A. Materials

Order Non-kitted Parts if required

(1) Non-Kitted Parts

Non-Kitted parts must be ordered separately.

Part Number	Description	Qty	Unit of Issue
10-94 OR 10-100	Parker Hannifin, Brake Master Cylinder	As Needed	EA
MS29512-04	Packing, Preformed	As Needed	EA
MS24665-132	Pin, Cotter	As Needed	EA

B. Consumables

The following consumables are required for this Service Bulletin.

Material	Specification	Use
Hydraulic Fluid	MIL-PRF-87257	Brake system

C. Tooling

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

Nomenclature	Specification	Use
Pressure pump	400 psig maximum, 1 gpm maximum	Bleed brake system
Pressure gauge, 2 each	0–600 psi	Bleed brake system
Shut off Valve, 2 each	rated to 1500 psi minimum	Bleed brake system
0.25 Flexible hose with fittings	rated to 1500 psi minimum	Bleed brake system

D. Interchangeability/Intermixability of Parts

None

E. Part Re-identification

None.



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3. ACCOMPLISHMENT INSTRUCTIONS

A. Procedure

- (1) Make aircraft safe for maintenance. Refer to AMM 20-00-01.
- (2) Remove crew seats if needed. Refer to AMM 25-11-10 COCKPIT SEAT-REMOVAL.
- (3) Locate the data plate on pilots and co-pilots brake master cylinder. Determine the serial number and date code stamp.
- (4) Refer to Effectivity section on the Parker Service Bulletin 7095 Eclipse Model E500 - P/N 10-94 Master Cylinder - Inspect/Replace.
- (5) If the affected serial numbers or date codes do not appear in the effectivity section then compliance with this Service Bulletin has been achieved, no further action is required. If the affected serial numbers or date codes do appear in the effectivity section then cylinder replacement is required.
- (6) Order master cylinder(s), packing(s), and cotter pin(s) as required.
NOTE: Verify the new master cylinder meets the requirements in the Materials section of the Parker Service Bulletin 7095 Eclipse Model E500 - P/N 10-94 Master Cylinder - Inspect/Replace.
- (7) Replace affected master cylinder(s). Refer to AMM 32-41-11 MASTER CYLINDER ASSEMBLY-REMOVAL/INSTALLATION.
- (8) Install crew seats if removed. Refer to AMM 25-11-10 COCKPIT SEAT-INSTALL.
- (9) Bleed brake system and test. Refer to AMM 32-40-00-061-801 WHEELS AND BRAKES-SERVICING.
- (10) Remove all tools, equipment and unwanted material from the work area.
- (11) If all other maintenance is complete, return the aircraft to service. Refer to AMM-20-00-02.



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B. Limitations and Procedures

None.

C. Parts Disposition

Return defective Master Cylinders to Eclipse Aviation.

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 or Eclipse Aviation Designated 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
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