



SERVICE BULLETIN

NUMBER: SB 500-27-001, REV B
MODEL: ECLIPSE EA500
SUBJECT: ELEVATOR HINGE COVER INSPECTION / MODIFICATION

1. PLANNING INFORMATION

A. Effectivity

Aircraft Serial Numbers (S/N) 000039 through 000054.

B. Reason

The dimensions of some existing elevator hinge covers may result in increased aerodynamic drag. Rev B provides clarification on over sized covers.

C. Description

This Service Bulletin (SB) inspects the existing elevator trim covers and replaces or reworks, if necessary, the existing elevator hinge covers to conform to type design.

D. Relevant Publications

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

E. Compliance

Eclipse Aviation Corporation considers this to be a recommended modification that can be accomplished at the operator's discretion.

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.

G. Labor Requirements

The following information is for planning purposes only.

(1) Estimated labor hours to perform:

Suggested number of personnel: 2

Inspection: 1 hour per person

Rework (including removal, balance, and installation): 11 hours per person

Total labor hours: 24

H. Qualification of personnel:

A person properly authorized under 14 CFR 43 to perform aircraft maintenance.



SERVICE BULLETIN

I. References

Aircraft Maintenance Manual (AMM), P/N 06-117751, Rev. 7 or later.

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

Structural Repair Manual (SRM), P/N 06-117755, latest Rev.

J. Publications Affected

Aircraft Maintenance Manual (AMM), P/N 06-117751, Rev. 7 or later addresses the changes resulting from this modification.

2. MATERIAL INFORMATION

A. Consumables

The following consumables are required for this Service Bulletin.

Material	Specification	Use
Alodine	1201 or equivalent	Chemical conversion coating for aluminum.
Marker	Sharpie® T.E.C. Markers (NEW/MK-13401-BK) or Equivalent in lieu of a rubber stamp or ink jet.	Mark areas of elevator hinge covers that require rework.
Primer	MIL-PRF-23377 or MIL-PRF-85582	Primer elevator hinge cover.
Polyurethane Paint	CA8800/11050	Paint elevator hinge cover.

B. Tooling

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

Nomenclature	Specification	Use
High Speed Cut Out Wheel	N/A	Rework elevator hinge cover.
Inclinometer/Protractor	Macklanburg Duncan PRO-360	Measure elevator and elevator trim tab travel.



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3. ACCOMPLISHMENT INSTRUCTIONS

A. Procedure

- (1) Make aircraft safe for maintenance. Refer to AMM 20-00-01.

NOTE: Refer to the appropriate section (s) of the Structural Repair Manual (SRM) to obtain instructions for performing fastener installation, sheet metal preparation, repairs (including drilling of oversized fastener holes), and modifications.

NOTE: The following procedure applies to both left and right elevators.

- (2) Check that there is clearance between the elevator hinge and elevator hinge cover.
- (3) Measure and record the slot width of 12 elevator hinge covers (top and bottom). Refer to DETAILS A, B, D, E, F, and H of (Figure. 1).
- (4) If slot width(s) are within tolerance, no further action is needed.

- (a) If slot widths are larger than specified, replace elevator hinge covers as follows:

NOTE: Make sure the new elevator hinge covers are painted prior to installation.

1. If replacing upper elevator hinge cover(s), remove the two screws that secure old elevator hinge cover to elevator and replace with new elevator hinge cover part number ending with -2002.
2. If replacing lower hinge cover(s), remove rivets that secure old hinge cover to elevator and replace with new elevator hinge cover part number ending with -2002.
3. Balance elevator(s). Refer to SRM 51-60-02.

NOTE: Install upper hinge covers when balancing the elevator.

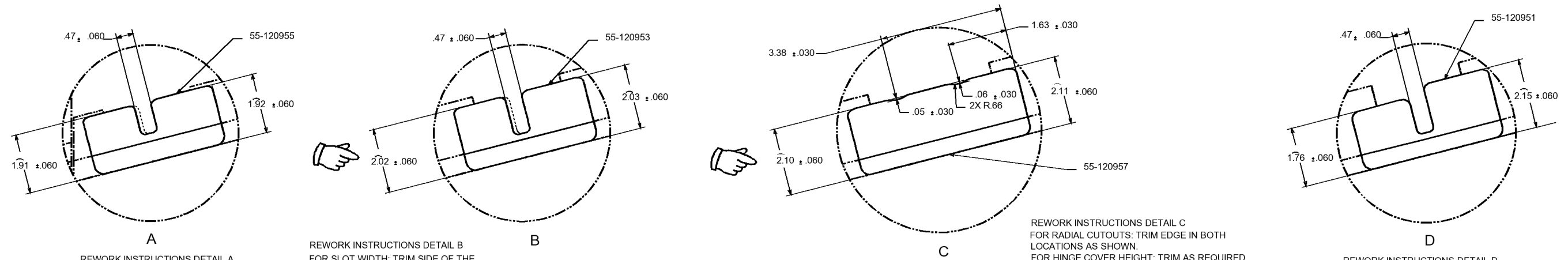
- (b) Remove upper elevator hinge covers.

CAUTION: DO NOT RIG ELEVATORS WHEN PERFORMING THE NEXT STEP.

- (c) Install elevator(s) only. Refer to AMM 27-33-16.

NOTE: Upper hinge covers will be installed as part of the elevator installation.

- (d) Do an elevator functional test. Refer to SUBTASK AMM 27-00-00-071-B-701-005.
- (e) Do an elevator trim functional test. Refer to SUBTASK AMM 27-00-00-071-B-701-006.
- (5) If all other maintenance is complete, return aircraft to service. Refer to AMM 20-00-02-051-921-001.

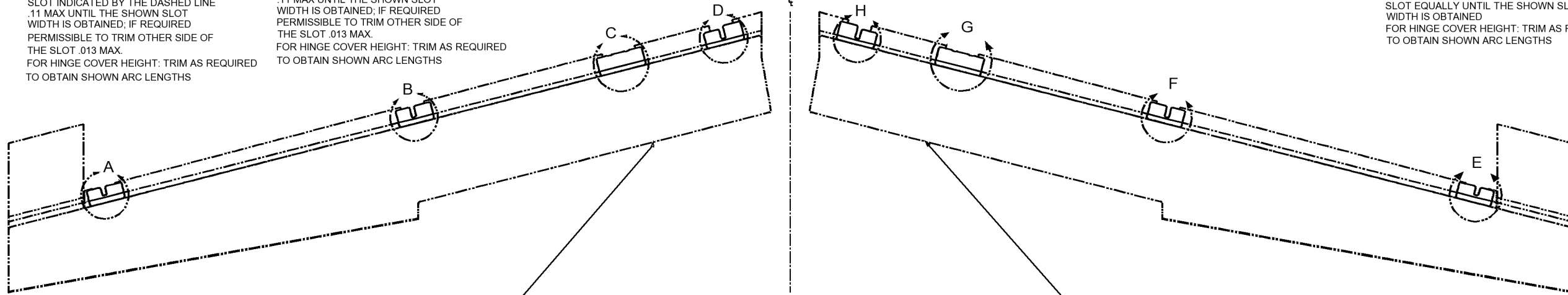


REWORK INSTRUCTIONS DETAIL A
 FOR SLOT WIDTH: TRIM SIDE OF THE SLOT INDICATED BY THE DASHED LINE .11 MAX UNTIL THE SHOWN SLOT WIDTH IS OBTAINED; IF REQUIRED PERMISSIBLE TO TRIM OTHER SIDE OF THE SLOT .013 MAX.
 FOR HINGE COVER HEIGHT: TRIM AS REQUIRED TO OBTAIN SHOWN ARC LENGTHS

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REWORK INSTRUCTIONS DETAIL C
 FOR RADIAL CUTOUTS: TRIM EDGE IN BOTH LOCATIONS AS SHOWN.
 FOR HINGE COVER HEIGHT: TRIM AS REQUIRED TO OBTAIN SHOWN ARC LENGTHS

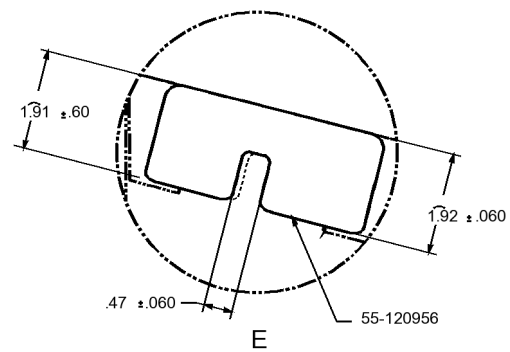
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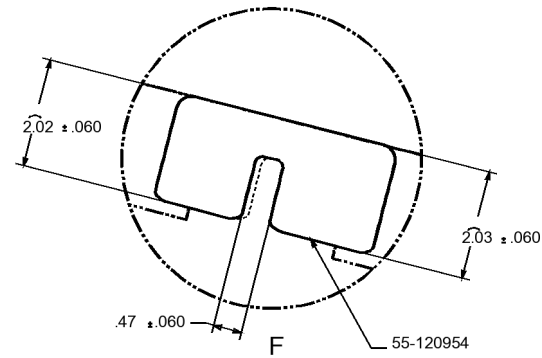
(55-111277, LH ELEVATOR ASSY)
 *FOR ALL TRIMMED AREAS, TOUCH UP CHEMICAL CONVERSION COAT PER EAC P1009 AND PAINT AND PRIME PER EAC P1024

VIEW LOOKING DOWN ON LH AND RH ELEVATORS COVER LOCATIONS SYMMETRICAL ABOUT

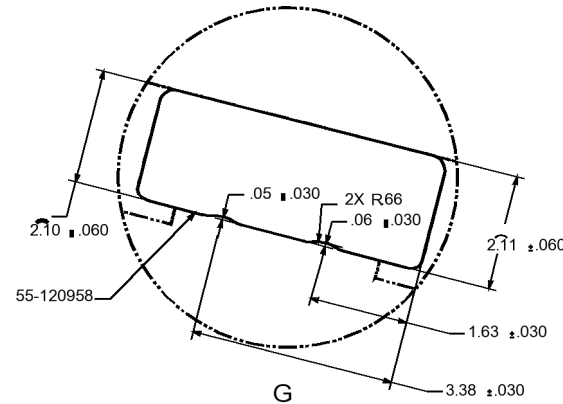
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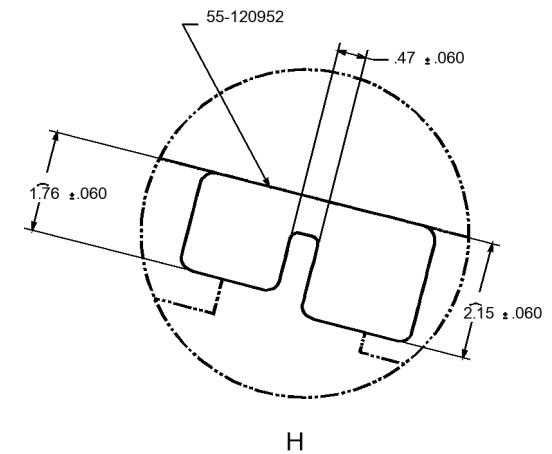
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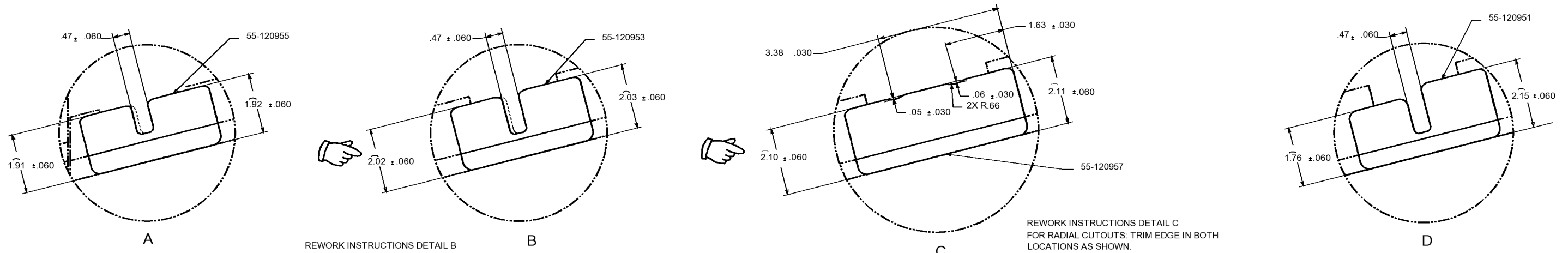
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**Slot Width Measurements of Elevator Hinge Covers, View Looking Down
 Figure 1 (Sheet 1 of 2)**

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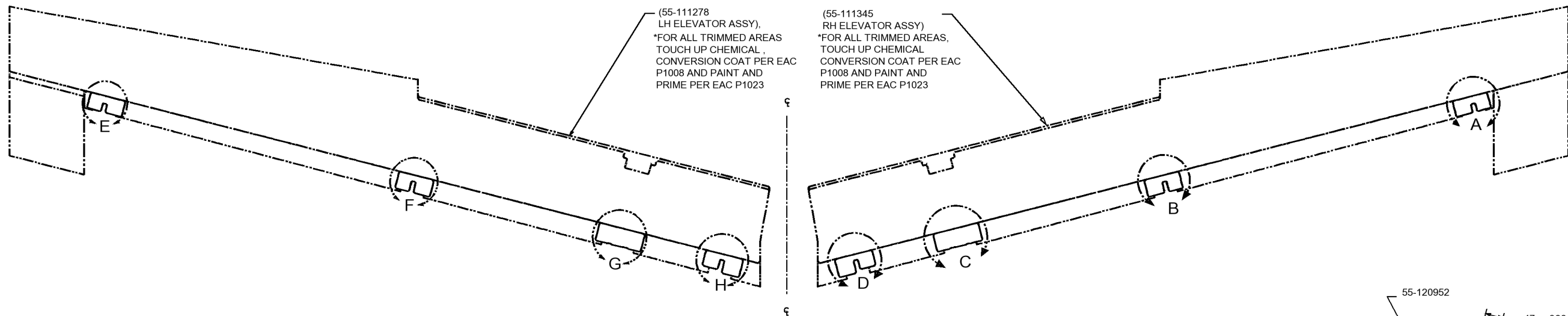


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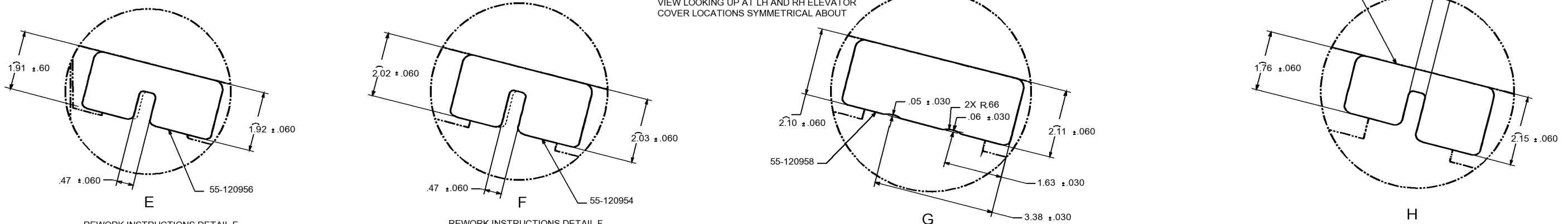
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Slot Width Measurements of Elevator Hinge Covers, View Looking Up
 Figure 1 (Sheet 2 of 2)



ECLIPSE
AVIATION

RECOMMENDED

SERVICE BULLETIN

B. Cost

Eclipse Aviation Corporation (EAC) will assume the cost (Parts and Labor) of this SB if it is accomplished within one year of the original issue date (18 Oct 2007) of this SB .

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
Fax	1-505-241-8802
E-mail	customercare@EclipseAviation.com

