



A Mahindra Aerospace Company

SB-GA8-2012-67

Issue 1

OPTIONAL

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Service Bulletin

Subject:

Flap and Aileron Hinge Wear Repair

Applicability:

All GA8 and GA8-TC 320 aircraft.

Amendments:

Nil. (Initial issue).

Background:

Flap and aileron drop arms were found with a worn bolt hole. In consequence, for flap and aileron drop arms, the elongated hole is to be reamed out and a bush is required to be installed.

This Service Bulletin approves the repair of worn flap and/or aileron drop arms by the installation of bushes.

Compliance:

This Service Bulletin may be incorporated at the owner's discretion.

Weight and Balance:

No effect on weight and balance.

Approval:

This modification has been approved pursuant to Regulation CASR 21.095.

Instructions:

For aileron and flap drop arms.

1. Carry out a general inspection of the aileron and flap drop arms.
2. If the hinge bolt hole in the aileron and/or flap drop arm is worn or damaged follow the procedure below, otherwise skip to Step 3:
 - a. Remove the affected aileron or flap in accordance with GA8 Service Manual;
 - b. Drill a 1/16 inches lubrication hole in the aileron or flap drop arm, countersink at 100° and deburr. See Figure 1 as reference;

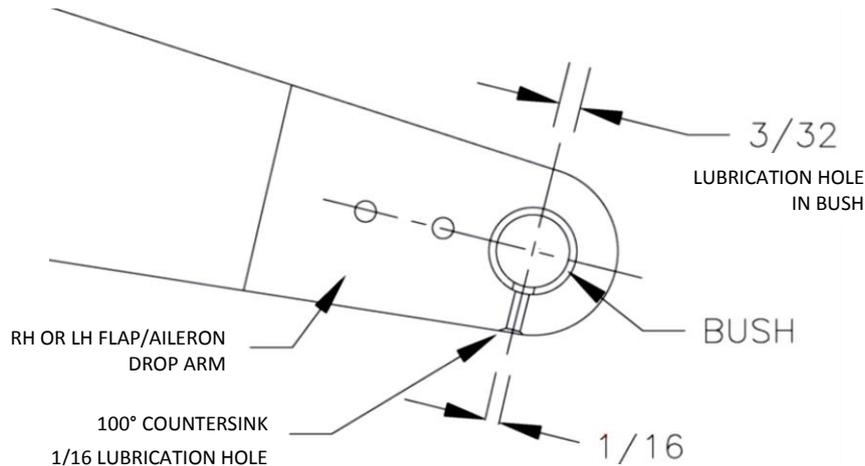


Figure 1 – Lubricating hole

- c. Drill / ream out the worn hole to 0.375 ± 0.0005 inches ensuring it is centred on the original centre of the hole diameter;

WARNING:

IF THE HOLE EXCEEDS THE MAX ALLOWABLE TOLERANCE (0.375 ± 0.0005 inches), THE HINGE BRACKET NEEDS TO BE REPLACED.

- d. Drill a 3/32 inches lubrication hole through the centre of a NAS76-04-016 plain bushing and deburr. If the NAS76-04-016 bushing is not available a bushing can be manufactured as per Figure 2.

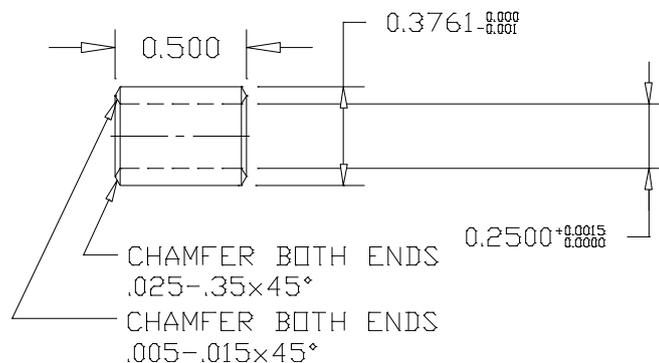


Figure 2 – Bushing manufacturing details (Alum. Bronze AMS 4631)

- e. Apply Loctite ® 680™ (or an equivalent high strength bonding compound designed for bonding of cylindrical parts) to the bush and carefully press it into the aileron or flap drop arm ensuring that its lubrication hole aligns with the lubrication hole in the aileron or drop arm, as shown in Figure 3.

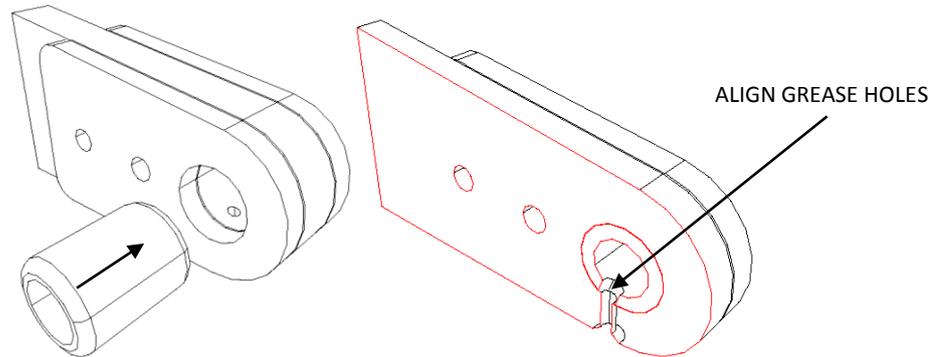


Figure 3 – Bush Installation detailed.

- f. Squeeze general purpose grease into the grease hole so that the Loctite ® 680™ doesn't block the hole and then allow the Loctite ® 680™ to cure.
- g. Re-install the aileron or flap in accordance with GA8 Service Manual;
- h. Re-rig the aileron or flap and carry out a functional check including free play and travel limits as specified in GA8 Service Manual.
3. Ensure the bolts are lubricated with general purpose grease.

NOTE:

The GA8 Service Manual requires the flap bolts to be lubricated with general purpose oil every 100 hours. After the installation of these bushings they shall be lubricated with general purpose grease every 100 hours.

Documentation:

Update aircraft log book to reflect incorporation of this Service Bulletin.

Compliance Notice:

Complete the Document Compliance Notice and return to GippsAero by mail, fax or email.

DOCUMENT COMPLIANCE NOTICE



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Document:

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Aircraft Serial Number: GA8-_____

Service Bulletin SB-GA8-2012-67 Issue 1 has been incorporated in the above aircraft.

Date: _____

Signed

Print Name: _____

Please post or fax this compliance notice to:

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