

SERVICE BULLETIN NO. MSB1078-186/3

I. TECHNICAL DETAILS

1.1 Category:

Mandatory

1.2 Airplanes affected:

G 115E all S/N
G 115EG all S/N

1.3 Time of Compliance:

Part A: Next 50 hours inspection or next regular inspection whichever comes first, before receipt of material for terminating action.

Note: Replacement of an affected trim tab arm in accordance with the instructions of MSB 1078-186 at original issue is acceptable to comply with Part A of this Service Bulletin.

Accomplishment of MSB 1078-186/1 is acceptable to comply with Part A of this Service Bulletin.

Part B: Terminating action: Next 50 hours inspection or next regular inspection whichever comes first, after receipt of material.

1.4 Subject:

ATA-Code: 55-20 Elevators and Trim tab
 Inspection of elevator trim tab arm

1.5 Reason:

Grob received a report from a fleet operator that an elevator trim tab arm P/N 115E-3758 was found cracked from a rear mounting hole (either L/H or R/H) to the rear edge of the trim tab arm.

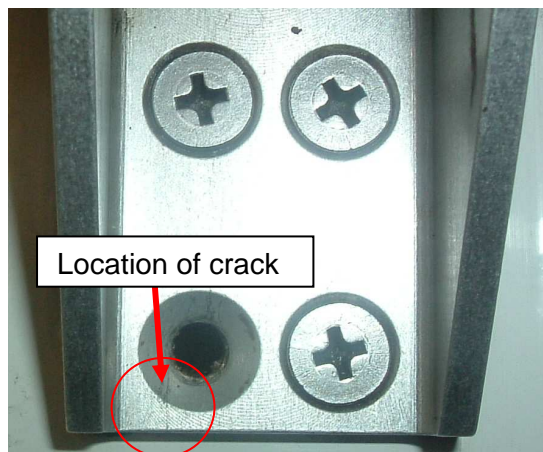


Fig. 1

Dye penetrant check of defective items revealed, that a visual inspection of an installed item mandated with MSB1078-186 at original issue may not be sufficient to detect every crack on the bracket (Fig. 2).



Fig. 2

Therefore a dye penetrant check or more significant NDT of the dismantled parts has been mandated by MSB1078-186/1 to ensure safe operation until the terminating action will be accomplished.

Investigation of defective parts revealed corrosion cracking as cause for cracks. To prevent future cracking, the Trim Tab Arm 115E-3758 is replaced by 115E-3758/1, which is manufactured from an alloy resistant to corrosion cracking. In addition to that, shaping is improved and a paint coat is applied.

Revision 3 makes reference to Temporary Revisions of the related AMMs, that introduce shimming procedure for installation of Trim Tab Arms.

1.6 Concurrent documents:

G 115E: AMM TR No. 05-21, TR No. 55-02
G 115EG: AMM / JG TR No. 05SMC-03, 05SMC-04, 05GV-04, 55-01, 55-01

1.7 Approval Note:

The technical content of this document is approved under the authority of EASA Design Organization Approval No. EASA.21J.030.

These information or instructions relate to change no. MÄM1078-161 which has been approved under the authority of EASA Design Organisation Approval No. EASA.21J.030.

1.8 Accomplishment/ Instructions

Part A

- 1.8.1 Ensure that the aircraft is safe for parking I.A.W. G 115E AMM chapter 10-10 and G 115EG Job Guide in analogy.
- 1.8.2 Inspect elevator trim tab operating arm for signs of cracking, especially both upper and lower surfaces from the rear bolt mounting holes to the rear of the operating arm.
- 1.8.3 Remove trim tab I.A.W. G 115E AMM chapter 55-20 para. 3B and G 115EG Job Guide in analogy
- 1.8.4 Remove trim tab arm (item 10 in Fig. 3) by removing nut, washer and bolt (item 20, 30, 40 in Fig. 3)

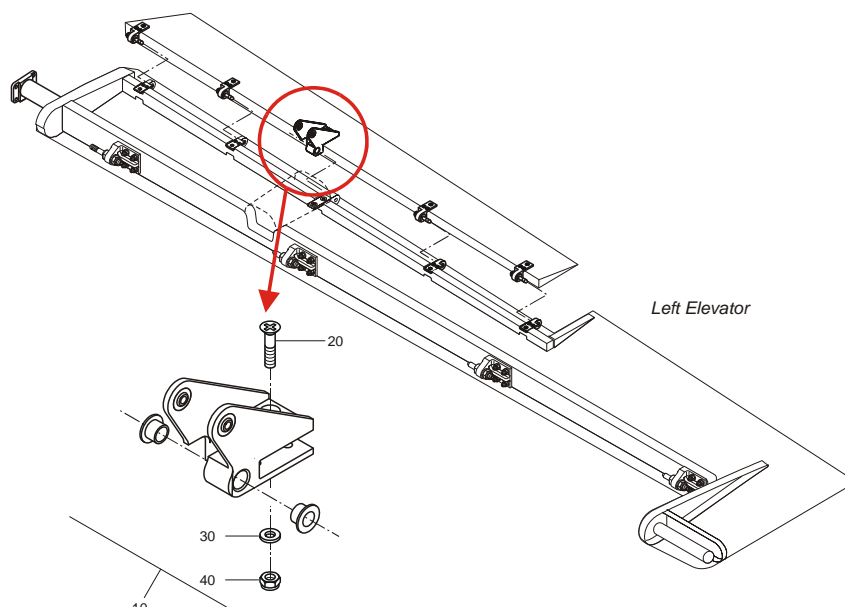


Fig. 3

1.8.5 Perform dye penetrant check or more significant NDT on trim tab arm P/N 115E-3758

1.8.6 If no crack is found, clean trim tab bracket and proceed with 1.8.8

1.8.7 If a crack is confirmed, the trim tab arm has to be replaced by a new item.

Note: Any finding has to be reported to Grob with aircraft S/N and flight hours.

1.8.8 Install trim tab arm P/N 115E-3758 using bolt, washer and new locking nut (item 20, 30, 40 in Fig. 3). Apply correct torque value I.A.W. G 115E AMM chapter 20-10 and G 115EG Job Guide in analogy.

Note: In place of installing the original trim tab arm according 1.8.8, you may proceed with 1.8.14 of Part B following receipt of new material.

1.8.9 Install trim tab I.A.W. G 115E AMM chapter 55-20 para. 3C and G 115EG Job Guide in analogy

Note: Make sure, that the bolt holes of trim rods 3 are in alignment with the trim arm and the bolts may be installed easily. If necessary adjust accordingly I.A.W. G 115E AMM chapter 27-31 para. B and G 115EG Job Guide in analogy.

1.8.10 Return aircraft to service as per relevant procedures and regulations.

Part B Terminating Action

1.8.11 Ensure that the aircraft is safe for parking I.A.W. G 115E AMM chapter 10-10 and G 115EG Job Guide in analogy.

1.8.12 Remove trim tab I.A.W. G 115E AMM chapter 55-20 para. 3B and G 115EG Job Guide in analogy

1.8.13 Remove trim tab arm (item 10 in Fig. 3) by removing nut, washer and bolt (item 20, 30, 40 in Fig. 3)

1.8.14 Install new trim tab arm **P/N 115E-3758/1** (item 4 of List 2.2) using bolt, washer and new locking nut (item 20, 30, 40 in Fig. 3). Apply correct torque value I.A.W. G 115E AMM chapter 20-10 and G 115EG Job Guide in analogy.

1.8.15 Install trim tab I.A.W. G 115E AMM chapter 55-20 para. 3C and G 115EG Job Guide in analogy

Note: Make sure, that the bolt holes of trim rods 3 are in alignment with the trim arm and the bolts may be installed easily. If necessary adjust accordingly I.A.W. G 115E AMM chapter 27-31 para. B and G 115EG Job Guide in analogy.

1.8.16 Return aircraft to service as per relevant procedures and regulations.

1.9 Repetitive Actions

Repeat special inspection in para 1.8 Part A every 200FH until the terminating action Part B is accomplished.

For regular inspection refer to G 115E AMM, Chap. 05-20, para. 10 and G 115EG Job Guide in analogy.

II. PLANNING INFORMATION

2.1 Weight and CG

N/A

2.2 Material and Availability

Item	P/N	Description	Qty. / A/C
1	115E-3758	Trim Tab Arm (pre-modification)	1
2	LN9348-05	Lock Nut	4
3	LN9348-06	Lock Nut	1
4	115E-3758/1	Trim Tab Arm (post modification)	1
5	115E-3751.17	Shim	AR
6	115E-3751.18	Shim	AR
7	115E-3751.19	Shim	AR
8	115E-3751.20	Shim	AR

2.3 Special Tools

N/A

2.4 Labor costs

N/A

2.5 Reference documents

Corresponding AMM and IPC

2.6 Credit

N/A

III. REMARKS

The instructions in paragraph 1.8 have to be accomplished and certified in the logbook by authorized staff:

- in EASA countries according to Article 5 VO EG 2042/03 (VO EG 1056/2008) Appendix III – Part 66
- in non-EASA countries according to national regulations with respect to maintenance.

If you have sold your aircraft in the meantime, we kindly ask you to forward this information to the new owner and to provide us with the name and address of the new owner as well as with the respective serial number.

For questions and assistance please contact:

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