

# Service Bulletin

S.B. No: 190

**Title: INSPECTION OF SAB NOSE UNDERCARRIAGE TORQUE LINKS FOR CRACKS**

**Compliance:** At next 50 flying hour check, then at every Annual thereafter.

**Applicability:** T67A, and SAB Nose Undercarriage (Pre Mods M468, M791 aircraft): T67B, T67C Series, T67M, T67M-MkII, T67M200.

The technical content of this Service Bulletin is approved under Authority of Marshall Aerospace Approval Number EASA.21J.181

**INTRODUCTION:**

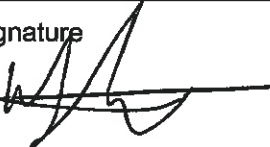


This Service Bulletin is issued following information received from a maintenance organisation who during normal maintenance procedures noted cracks in the SAB undercarriage nosewheel leg torque links on 2 Firefly aircraft. The cracks were visible to the naked eye, i.e. in the paint, refer photograph on sheet 3.

The aircraft hours were 3429 flying hours and 5549 flying hours and the undercarriage were as originally fitted at build. Aircraft fitted with the SAB nose leg (Pre Mod M468 or M791) can be identified by the attachment of the lower strut to the nosewheel. Either this attachment will be a square boss (Pre Mod M425) or round boss (Post Mod M425) and with four attachment bolts, ref Figure 1.

**ACTION:**

- 1 Remove the top and bottom torque links and visually inspect for cracks at positions indicated by Figure 1. Typical crack shown on photograph at Figure 2.
- 2 If any cracking is visible, replace with new item 6B-42-078.
- 3 If no cracking visible, then remove paint from lug areas and perform dye penetrant NDT inspection.

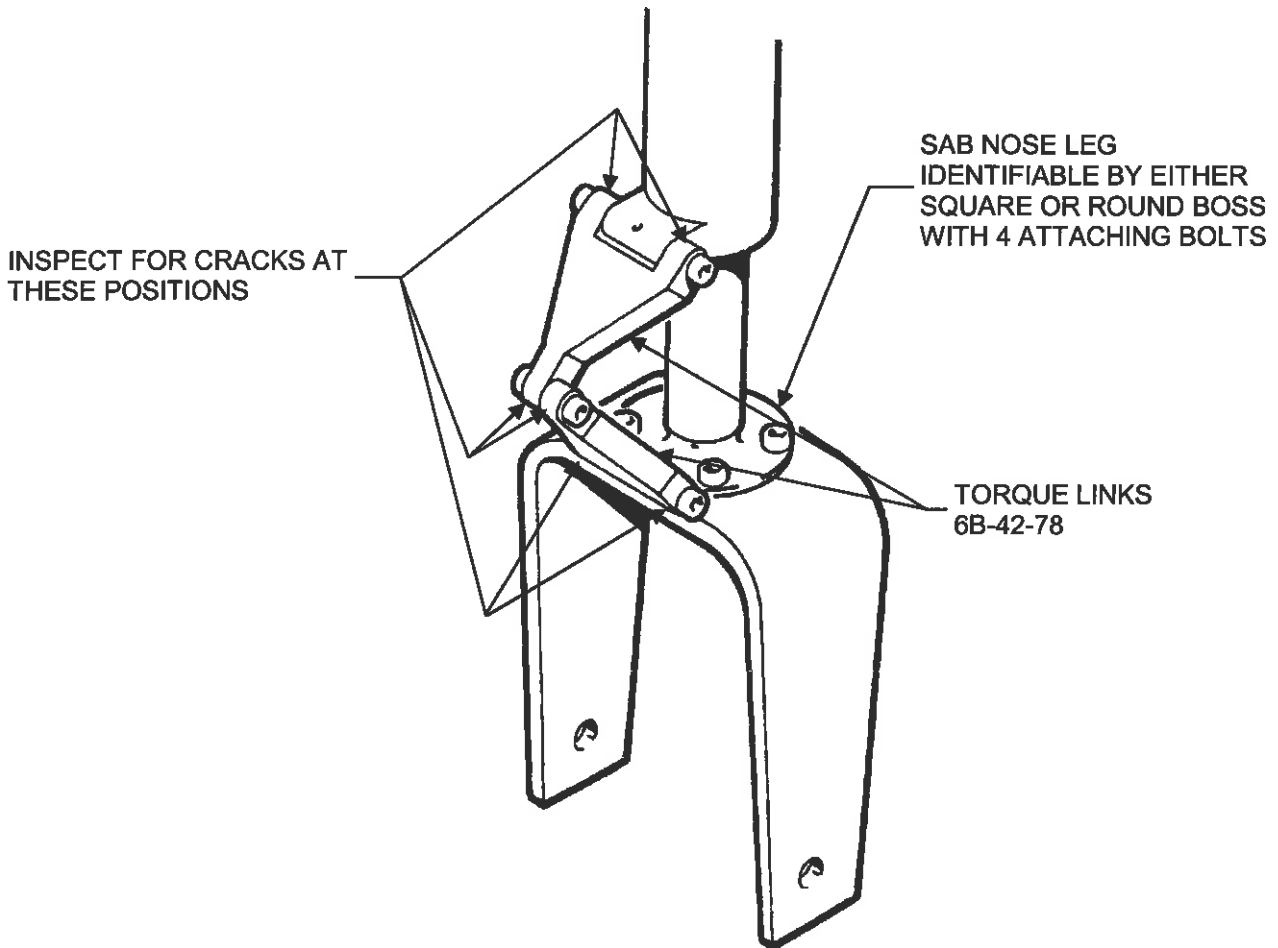
For NDT procedure refer to FAA Advisory Circular AC 43.13-1B Acceptable Methods, Techniques, and Practices - Aircraft Inspection and Repair; Chapter 5 for Non-destructive Inspection techniques including guidance on operative/inspector requirements Paragraph 5-4, Visual Inspection techniques Chapter 5, Section 2 and Penetrant Inspection Chapter 5, Section 5.

Signature  Compiled	Signature  Design CVE	Signature  Approval
Print Name M. J. Rutter	Print Name J. THORP	Print Name P ANDREWS
Date 24 <sup>th</sup> September 2012	Date 2-10-12	Date 3-10-12.
MARSHALL SLINGSBY ADVANCED COMPOSITES Kirkbymoorside, York. YO62 6EZ Tel: 01751 432474 Fax No: 01751 433016 E-mail: <a href="mailto:mike.rutter@marshall-slingsby.com">mike.rutter@marshall-slingsby.com</a> <a href="http://www.marshall-slingsby.com">www.marshall-slingsby.com</a> EASA Design Organisation Approval No. EASA.21J.181 (Marshall Aerospace)		Page 1 of 4 Issue 1

This Service Bulletin has been checked by Design and Airworthiness and has been technically accepted.

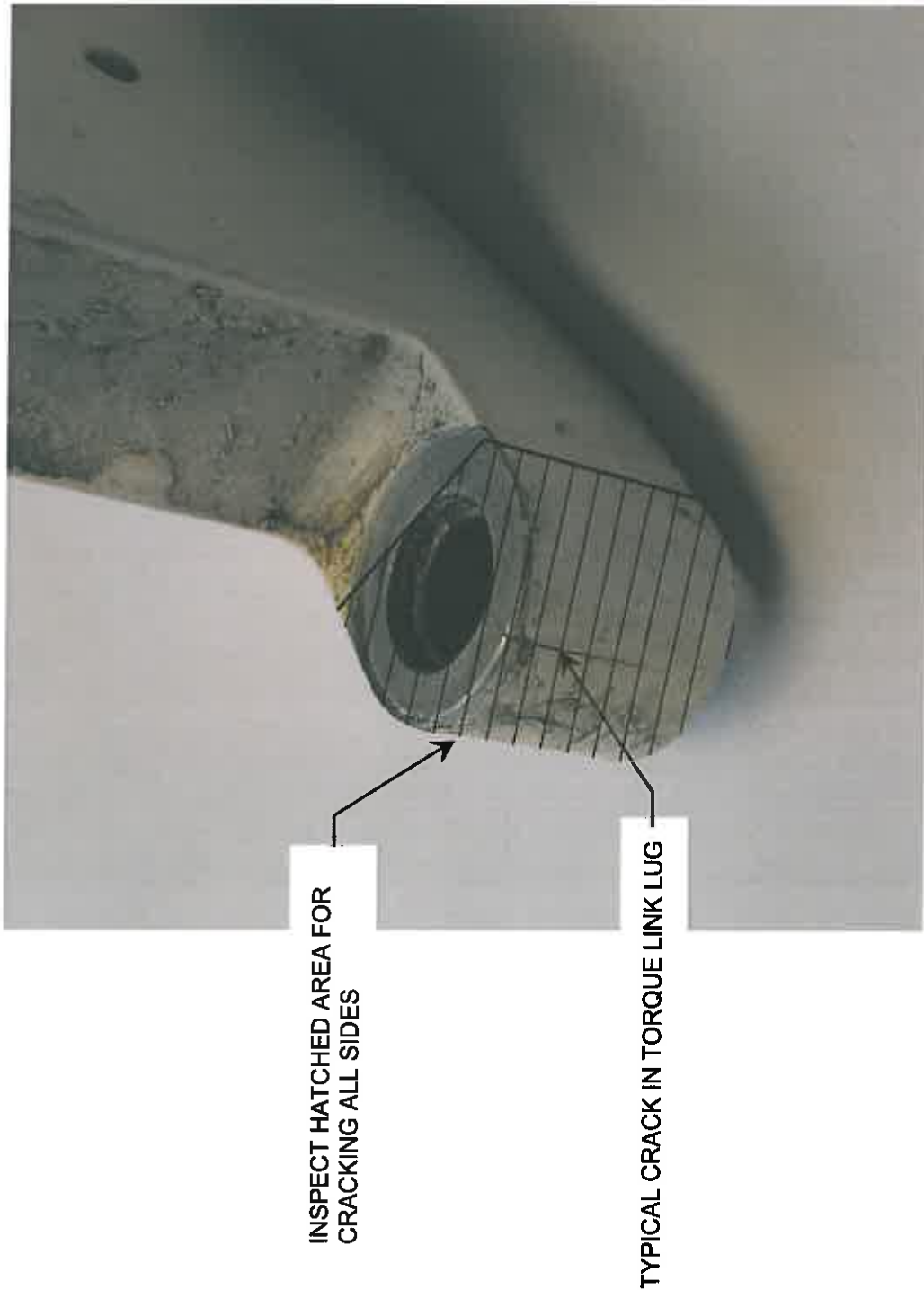
- 4 If no cracks noted from inspection at 3 above, clean and repaint inspected area.
- 5 If cracks found from inspection at 3 above remove cracked link and replace with new item 6B-42-078.
- 6 Record in logbook that inspection accomplished at 50 flying hour check, and complete the attached form at Annex A and return it to the address provided. Subsequently inspect at each annual thereafter for cracking, and complete the attached form at Annex A only if cracks are identified.

Obtain replacement torque links 6B-42-78 from Marshall Slingsby, contact Gemma Hodgson email: [gemma.hodgson@marshall-slingsby.com](mailto:gemma.hodgson@marshall-slingsby.com).



**FIGURE 1**

**SAB NOSE LEG UNDERCARRIAGE TORQUE LINKS  
SHOWING POINTS OF INSPECTION**



**FIGURE 2 PHOTOGRAPH OF TORQUE LINK LUG CRACK**

**SB 190 ANNEX A**

**INSPECTION OF SAB NOSE UNDERCARRIAGE TORQUE LINKS FOR CRACKS**

This form is to be completed and submitted to the address below.

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**Table 1**

Aircraft works number	
Date SB 190 inspection carried out	
Bracket cracked (if so, indicate on figure)	
Total flight hours	
Hours since last SB 190 inspection (if applicable)	
Reporters contact details i.e. Name, Address, e-mail, telephone etc	
Owner's details	