

MICROLIGHT AIRWORTHINESS APPROVAL NOTE

MAAN NO: 2983

ISSUE 1

DATE: 26 JULY 2024

TITLE: Microlight Airworthiness Approval Note 2983: inspection of Semperit fuel hose for defects

APPLICABILITY: All BMAA administered aircraft.

STAGE: AUTHORISATION

1. INTRODUCTION

This MAAN authorises the issue of a service bulletin in response to in-service experience of Semperit fuel hose used in the aircraft's fuel system.

2. BASIS FOR APPROVAL

The basis for approval of this service bulletin is BCAR Section S issue 8. Paragraphs affected are S951 and S993.

3. DESCRIPTION

There have been a significant number of cases of defects developing in Semperit fuel hose. Most failures so far appear to be cracking mainly in the outer sheathing, but there is at least one case where the cracks have started to encroach on the inner core.

BMAA Service Bulletin 2983, appended to this MAAN, highlights the potential problem to owners, emphasises the importance of inspecting the fuel hosing on their aircraft and replacement as necessary.

4. TECHNICAL INVESTIGATION

Several reports were initially made to BMAA regarding cracking and hardening that had been observed in Semperit fuel hose used in the fuel systems of BMAA administered aircraft. Following these initial reports, a note was issued to BMAA inspectors and potentially affected owners to warn them of potential risks and encourage a detailed inspection of any fuel hosing on their aircraft. Since the issue of this note, further reports have been received by the BMAA that show severe cracking in Semperit branded fuel hosing. The Semperit branding of the fuel hosing remains the uniquely correlative factor between all of these reports, and at the time of issue of this Bulletin no specific causal or contributory factors for this cracking have been confirmed.

With this information available, BMAA Technical Office has seen it fit to highly recommend that all owners of BMAA administered aircraft inspect their aircraft to determine if any Semperit fuel hose is present in any part of the aircraft's fuel system. If any such hosing is identified, it should be replaced with a suitable replacement at the earliest possible convenience.

Any hosing replaced by something of an equivalent specification would not be considered a modification, and therefore, no direct BMAA oversight is required.

5. FLIGHT TESTING

Not applicable.

6. MANUALS, PLACARDS AND INFORMATION

A copy of this service bulletin must be retained with the Aircraft Manual.

7. NOISE CERTIFICATION

Not affected.

8. RADIO

Any radio installation is not affected.

9. INSPECTION

To the service bulletin appended to this MAAN.

10. WEIGHT AND BALANCE

Not affected.

11. SIGNIFICANT FEATURES AND LIMITATIONS

See section 3. All limitations remain unchanged.

12. CERTIFICATION

I authorise issue of BMAA Service Bulletin 2983 Issue 1, as appended to this MAAN.

Prepared by:

Checked & authorised by:



M D Bailey
Design Approval Engineer
British Microlight Aircraft Association



R Patrick
Chief Technical Officer
British Microlight Aircraft Association

Initial Distribution.

MAAN (including SB):

CAA Aircraft Certification Section (Gatwick)
CAA Applications and Approvals Section (Gatwick)
Manufacturers & kit importers
MAAN File 2983

Service bulletin:

Owners of BMAA administered aircraft
BMAA Inspectors

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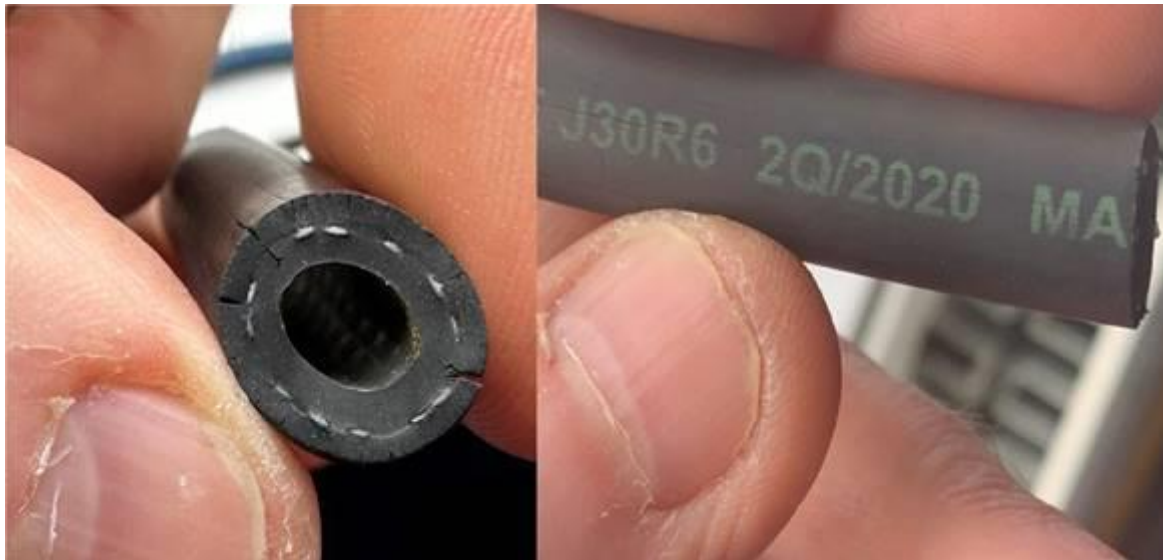
1 Introduction

This service bulletin is intended to highlight defective Semperit fuel hose used in fuel systems which has been reported in several BMAA administered aircraft.

2 Semperit Fuel Hose Cracking

The BMAA has received several reports of severe cracking and/or hardening in Semperit fuel hose that has been used in fuel systems of BMAA administered aircraft. Most of the cracking has been observed in the outer sheathing of the hose, but at least one report has observed cracking that has encroached onto the inner core of the hose.

Images below show the various degrees of cracking that have been observed in the hosing.





The Semperit branding of the fuel hosing remains the uniquely correlative factor between all of these reports, and no specific causal or contributory factors for this cracking have been confirmed at the time of this bulletin's issue.

3 Action

Owners and operators of BMAA administered aircraft should establish if their aircraft has Semperit fuel hose used in the aircraft fuel system, ensuring that all fuel hosing is identified including in areas not readily visible such as inside wings and behind bulkheads etc.

If any Semperit fuel hose is identified it should be carefully checked for any cracking or hardening. More details can be paragraph 8.15 of Til 044 SIGMA. https://www.bmaa.org/files/til_044_sigma.pdf

If any cracking or hardening of fuel hose is found it must be replaced before further flight. If no cracking or hardening is found the hose should have a detailed inspection every 30 days if used regularly or before next flight if more than 30 days has elapsed since last inspection. Flight must not occur without the hose having been inspected in the preceding 30 days.

If any Semperit fuel hose is identified it should be replaced with an alternatively branded hosing of a suitable specification at the earliest possible stage. Contact the aircraft Type Approval holder for a suitable alternative if applicable.

Any hosing replaced by something of an equivalent specification would not be considered a modification and therefore no direct BMAA oversight is required.

Owners and operators are requested to report any defective hosing found to the BMAA at: <https://www.bmaa.org/information-library/aircraft-technical-information/technical-occurrence-report-form>

This Service Bulletin should be kept with the aircraft Manual.

Note: The technical content of this document is approved by the BMAA, UK CAA organisation approval ref. DAI/8909/84

4 Contact Details

British Microlight Aircraft Association
6 Somerville Court
Banbury Business Park
Adderbury
Banbury
Oxfordshire
OX17 3SN

01869 338888

technical.office@bmaa.org

www.bmaa.org