


THE GLIDING FEDERATION OF AUSTRALIA

GFA AD-636
(ISSUE 1)

GFA AIRWORTHINESS DIRECTIVE

- TYPE AFFECTED:** STEMME S-10VT (Rotax 914 F2/S1 engine) Serial No's 11-001 up to & including 11-103.
- SUBJECT:** EXHAUST SYSTEM- INSPECTION FOR CRACKS.
- BACKGROUND:** During maintenance work cracks have been found in a bend of the exhaust pipe from the front left cylinder. This pipe is the most highly stressed thermally. The damage was found in the curvature of the bend near the cylinder flange. Such damage could allow dangerous exhaust gases into the cockpit area and could also cause local or general overheating in the engine compartment.
- DOCUMENTATION:** The LBA has issued AD 2006-0217-E, & Stemme has issued Service Bulletin No A31-10-075, amendment index 01 dated 06 July 2006 or later approved revisions. This SB is attached & becomes part of this AD.
- ACTION REQUIRED:** In accordance with the above SB, and ***WITHIN THE NEXT 10 (TEN) ENGINE HOURS***, carry out a one time inspection of all the exhaust bends, ***EACH CYLINDER, 1 TO 4***, in the area of the bend near the cylinder flanges. Results of the inspection are to be recorded on Page 4 of this AD which is then to be forwarded to the GFA Airworthiness Department. GFA will forward the information on to Stemme AG.
- WEIGHT AND BALANCE:** Not Affected
- IMPLEMENTATION:** The inspection may be carried out by a person holding a GFA 1109 Section 2 Maintenance Authorization for replacement of components or higher & endorsed for Rotax 912 /914 series engines.
- COMPLIANCE:** The requirements of this GFA Airworthiness Directive are mandatory. This Directive is issued pursuant to the Rules and Regulations of the Gliding Federation of Australia.

SIGNED:


SENIOR TECHNICAL OFFICER AIRWORTHINESS



For and on behalf of:

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OF AUSTRALIA

STEMME	Inspection of exhaust-system for cracks	Document Number: A31-10-075
F & D DO: EASA.21J.250		Am.-Index: 01.a

This Service Bulletin provides from page 1 to 2 the original version in German, approved by the EASA, and from page 3 to 4 a translated version in English. The translation has been performed to the best of our knowledge and judgement.

1 Subject:

Inspection of exhaust-system for cracks

2 Affected Powered Sailplane:

Motor glider STEMME S10, model S10-VT;

EASA Type Certificate No. EASA.A.054 / FAA-TCDS: G06CE

affected S/N: S10-VT: 11-001 through 11-103

3 Time of compliance:

within the next 10 engine hours

Note:	<p>If the last scheduled maintenance of the engine has been done not more than 10 hours ago, and if in particular item 17 "Check condition of exhaust bends" (see chapter 5.3.9 "Engine and Engine Mountings" in the S10-VTs maintenance manual) has been done properly and without findings, then an additional inspection in accordance with this SB is not necessary.</p> <p>Just as well the inspection according to this SB may be done during the next scheduled maintenance inspection, if it will not be later than within the next 10 engine hours.</p>
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4 Background Information:

In an individual case deformations and cracks at an exhaust bend were found during maintenance work on the ROTAX 914 F2/S1. The defective exhaust bend was found on the thermally topmost loaded front-left cylinder. The damaged area is located in the curvature bend near the cylinder flange. Due to such a damage exhaust gases may expand into the engine compartment, or CO₂ may leak into the cockpit section.

This Service Bulletin is an immediate measure to avoid potential hazards during operation of the motor glider, furthermore to clarify if there are more affected S/Ns than this mentioned individual case. After receipt of the "response to the manufacturer" (see attachment) it will be decided whether additional measures will be necessary.

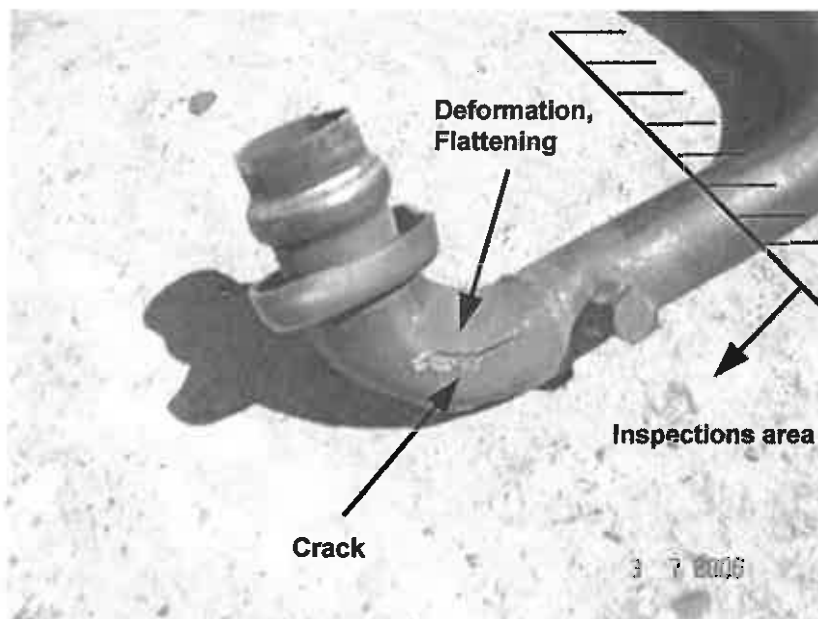
5 Actions:

One-time inspection of all exhaust bends (each cylinder 1 to 4) in the area of the curvature bend near the cylinder flange. Response of the findings to the manufacturer:

- Remove the heat protection wrapping in the area of the curvature bends.
- Visual inspection of the exhaust pipes for deformations, cracks and flattening.
- In case of damages replace the concerned exhaust pipes.
- Recondition the heat protection wrapping (use only material which is approved by the manufacturer, see AMM S10-VT)
- Response of the findings to the manufacturer (see attached form)

Note:	According to the Maintenance Manual an inspection of the condition of the exhaust pipes is scheduled for every 100 flight hours. It is recommended to pay special attention to this item.
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6 Mass and balance:

No changes.

7 Associated documents:

Maintenance Manual Stemme S10-VT

8 Accomplishment and log entry:

An authorized mechanic may carry out the actions described in this service bulletin.

*The completion of this SB must be checked and entered in the airplane's log book by a licensed inspector.
The regulations on the keeping of service records must be adhered to.*

(End)

STEMME F & D DO: EASA.21J.250	Technische Mitteilung / Service Bulletin	Dokumentnummer: A31-10-075
	Rückmeldung / Response form	Änd.-Index: 01.a
		Seite:

Rückmeldung an

**PLEASE RETURN THIS PAGE TO
AIRWORTHINESS DEPARTMENT**

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The Gliding Federation of
Australia
Bld 130 Wirraway Road
ESSENDON AIRPORT VIC
3041

Halter / Owner:

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Baureihe / model:

STEMME S10-VT

Werknummer / Serial number:

11-.....

Baujahr / Year of manufacture:

.....

Motorbetriebszeit / Engine hours

..... (laut Betriebsstundenzähler / acc. to the HOBBS-meter)

Abgasrohr / Exhaust pipe	Befund / Finding
links vorne / fwd. left	
rechts vorne / fwd. right	
links hinten / rwd. left	
rechts hinten / rwd. right	

Datum / Date:

Name / Name: