Service Bulletin



Flight Design GmbH Sielminger Str. 51 D-70771 L.-Echterdingen Tel.: +49(0)7021 80460-0 Fax: +49(0)7021 80460-69 E-Mail: airworthiness@flightdesign.com

Date of Initial Publication: **19-Jul-2012** Publication Date of this Revision: **30-Jul-2012**

SB-ASTM-CTSW-10

Revision 01

Service Bulletin

Inspection of the Rescue System Rear Harness Connection SB-ASTM-CTSW-10

Repeating Symbols:

Please pay attention to the following symbols throughout this document emphasizing particular information.

- ▲ Warning: Identifies an instruction, which if not followed may cause serious injury or even death.
- **Caution:** Denotes an instruction which if not followed, may severely damage the aircraft or could lead to suspension of warranty.
- **Note:** Information useful for better handling.

1 Planning Information

1.1 Affected Aircraft

Туре:	СТ
Model:	CTSW LSA
Serial Number:	from 06-01-07(included) to 06-11-13(included); only those with installed BRS1350 HS Airframe Emergency Parachute System
Applicable Countries:	USA

1.2 <u>Concurrent Documents</u>

- none -

1.3 <u>Reason</u>

When removing the parachute canister for the mandatory first repack after 6 years, deviations from Type Design have been observed on some few aircraft affecting the Airframe Emergency Parachute System installation.

Deviations affect the rear balancing belt installation and can lead to a different attitude of the aircraft than designed, in case of activation of the Airframe Emergency Parachute System, having the aircraft suspended tail low instead of tail high.

Analysis of the reported deviations shows that there is a chance for similar cases on the aircraft listed in Section 1.1 of this document.

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1.4 Subject

Verification of the installation of the Airframe Emergency Parachute System in the area of the luggage compartment, namely installation and routing of the rear balancing belt, in line with the applicable design information.

Correction of deviations, if observed.

1.5 <u>Compliance</u>

The subject of this Safety Directive is not of an immediate airworthiness concern; however, Flight Design requires that the Inspection as per Section 3.1 of this document be conducted prior to next flight.

If deviations are observed, the national Flight Design representative or the aircraft manufacturer must be contacted for further instruction depending on the nature of the deviation within one week after inspection.

Correction of observed deviations shall be achieved within 6 weeks following the initial inspection.

▲ Warning: Non-compliance with these instructions could result in personal injuries or death.

1.6 <u>Approval</u>

This SB is approved by the aircraft manufacturer i.a.w. ASTM F2483-05 for conduct on affected aircraft as defined in 1.1. Subsequent to complete and correct conduct of this SB the aircraft will still meet the requirements of the applicable ASTM design and performance specification.

1.7 <u>Type of Maintenance</u>

Line

1.8 <u>Personnel Qualifications</u>

Initial Inspection:

Owner/Operator

Correction of deviation:

For US LSA aircraft: Repairman, Light Sport Aircraft-Maintenance (RLSA-M) – holds a repairman certificate (light sport aircraft) with a maintenance rating, A&P, IA or an FAA repair station.

For aircraft with registration in other countries: Adequately qualified person as per national regulation to conduct maintenance on Airframe Emergency Parachute System installations to LSA aircraft.

1.9 <u>Release to Service</u>

Conduct of this SB must be logged in the aircraft log book with date and signature of the responsible Person according to national regulations.



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When correction of deviations is required, inspection and correction of the deviation have to be logged individually.

1.10 Weight and Balance

n/a

1.11 <u>References</u>

Latest issues of:

[1] PARACHUTE INSTALLATION MANUAL (PIM) BRS 1350 HS Flight Design GmbH, CTSW Aircraft, BRS Document Number 020008-PM issued 14 April 2008. Document is part of the delivered data package or can be obtained as pdf copy from Flight Design.

1.12 <u>Superseded Documents</u>

- none -

1.13 Contact Details

For further information on conduct of this SB, or to report any Safety of Flight or Service Difficulty issues contact your Distributor responsible for your country. Your Distributor can be located via the Flight Design website: <u>www.flightdesign.com</u> under "Dealer Location".

Specific contact in USA:

Flight Design USA P.O. Box 325 South Woodstock, CT 06267 Tel: 860 963 7272 / Fax: 860 963 7152 Web: <u>www.flightdesignUSA.com</u> E-Mail: <u>airworthiness@flightdesignUSA.com</u>

In cases where the local distributor is not known or available contact Flight Design GmbH directly: <u>airworthiness@flightdesign.com</u>.

1.14 Disclaimer

This Service Bulletin has been generated with utmost care. Nevertheless errors and misunderstandings can never be fully excluded. In case of any doubts the applicant of this Service Bulletin is requested to contact Flight Design immediately to clarify the issue.

2 Resources

2.1 <u>Parts</u>

n/a

2.2 <u>Materials</u>

n/a



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2.3 <u>Tools</u>

n/a

2.4 Special tools

n/a

2.5 <u>Manpower</u>

0.5 hrs for inspection and paperwork.

Manpower required for possible rectification of deviations depends from the nature of the deviation.

3 Instructions

3.1 Inspection for Correct Installation

Verify the installation of the 120" Kevlar Rear Harness as per the Parachute Installation Manual (PIM) [1] valid for this aircraft.

Verify that:

- Rear harness is present and attached at the lower end to the landing gear bracket, on top of the tunnel inside the luggage compartment area. See [1] chapters 3.1- 3.2, or Fig.1 in this document, below (variants of both documents are acceptable and provide interchangeable results).



Fig. 1

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- The harness is routed upwards along the rear side of the main bulkhead, along the right side (in direction of flight) support tube of the parachute bracket towards the parachute canister, where it is connected together with the front harness belts to the quick link that is stowed at the right upper side of the parachute canister – see Fig. 2.

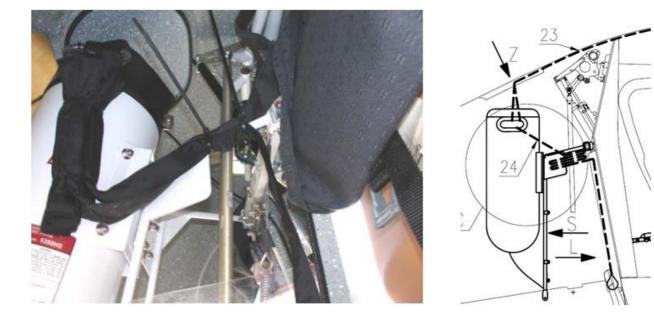


Fig. 2

The routing is such that it does not get blocked by any structural component or control system element when extracted. The complete rear harness is properly affixed in position using cable ties so that it cannot entangle with any part of the aircraft controls – see Fig. 3.



Fig. 3



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3.2 Inspection shows Correct Installation

If the rear harness belt is installed as described in this document and in [1], no further action is required.

3.3 Inspection shows Incorrect Installation

If the rear harness belt installation shows a deviation compared to the description in this document or in [1], take meaningful pictures of the installation and send the pictures, along with a filled Service Difficulty Report template providing information of aircraft S/N and your complete contact data to your relevant Flight Design dealer, or directly to Flight Design GmbH. You will receive further instructions on how to correct the installation right away.

Until the situation is corrected, apply a legible and easily visible label to the instrument panel informing the pilot:

WARNING: Airframe Emergency Parachute System DEACTIVATED

The label shall be removed again when the rectification as per Flight Design instructions is completed.

3.4 Documentation

Conduct of this SB must be logged in the aircraft log book with date and signature of the responsible Person conducting the SB. National regulations have to be considered.

4 Appendix

4.1 <u>Changes to Previous Revision</u>

Chapter 1.11: Reference to BRS document updated

Chapter 3.1: detail reference in [1] changed, routing description of the rear harness updated, Fig.2 is changed, Fig. 3 is added.

4.2 <u>Feedback Template</u>

Use Template "Service Difficulty Report" provided within the applicable CTSW Maintenance Manual to report any observed deviation.