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Service Bulletin

SB-LTUL-CTSW-12 SB-LTUL-CTSL-03 SB-ASTM-CTSW-12 Revision 00

Date of Initial Publication: **11-Nov-2014**Publication Date of this Revision: **11-Nov-2014**

Service Bulletin

Inspection of BRS Handle Bracket
SB-LTUL-CTSW-12
SB-LTUL- CTSL-03
SB-ASTM-CTSW-12

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

Type: CT

Model: CTSW; CTSW-LSA; CT Supralight

Serial Number: All aircrafts with Airframe Emergency Parachute System BRS 1050 or

1350 installed, from S/N 05-01-01 / D-05-01-01 and E-09-02-11

onwards.

Applicable Countries: Not limited

1.2 Concurrent Documents

- none -

1.3 Reason

During routine maintenance on a single training and rental aircraft after nearly 2.000 hrs. of operation, cracks were observed on the BRS handle bracket that attaches the activation handle to the bulkhead behind the pilot seats. The cracks were identified in the bend radius at the base of the plate. A failure of this bracket could affect the correct operation of the rescue system. Cross checking with established service centers did not show that this is a common issue.



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1.4 Subject

Inspection the BRS handle bracket for the absence of cracks in the bend radius at the base plate. See Fig. 1 for identification of the bracket.

Replacement of the part if cracks are detected. In this case, supply information to Flight Design is considered mandatory, using the Service Difficulty Report (SDR) form.

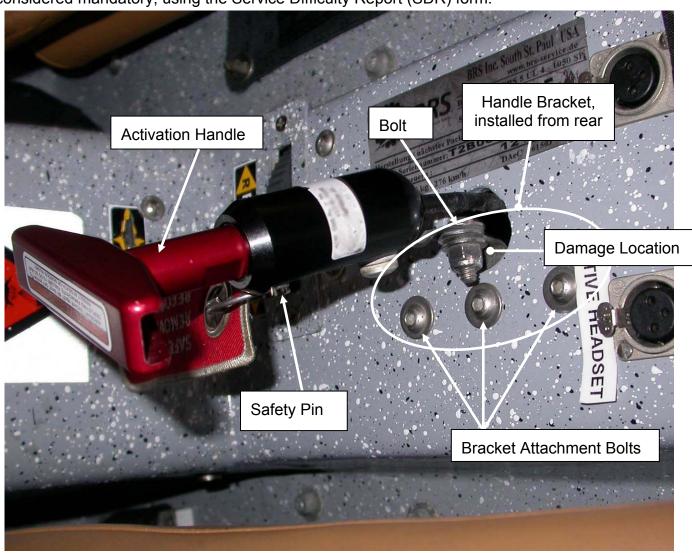


Fig.1 - Handle Installation from Cabin Side.

1.5 Compliance

Conduct of the inspection is required as part of every regular 100 hrs inspection.

Conduct of one initial inspection of this bracket is required within the next 6 weeks on aircraft having more than 1.000 hrs of operation.

In the case that cracks are detected, the part must be exchanged before the next flight.



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▲ Warning:

Non-compliance with these instructions could result in further damages, personal injuries or death.

1.6 Approval

For LSA aircraft:

This SB is approved by the aircraft manufacturer i.a.w. ASTM F2483 for conduct on 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.

For aircraft other than LSA:

Not applicable.

1.7 Type of Maintenance

Line

1.8 Personnel Qualifications

Qualification RLSA-M or equivalent inspector with qualification for inspections on this kind of airframe, per national regulations.

1.9 Release to Service

Conduct of the inspection shall be documented by an aircraft inspector according to the national applicable regulations for the country of registry of the aircraft.

1.10 Weight and Balance

- n/a -

1.11 References

- n/a -

1.12 Superseded Documents

- n/a -

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: www.flightdesign.com under "Dealer Location".

Specific contact in USA:

Flight Design USA

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

1.14 <u>Disclaimer</u>

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 Workshop Conditions

- n/a -

2.2 Parts

- n/a -

2.3 Materials

- n/a -

2.4 Tools

- 1. Flashlight;
- 2. Magnifying glass.

2.5 Special tools

- n/a -

2.6 Manpower

The described task can be performed within approximately 0.5 hours (time of inspection).

2.7 Cost

- n/a -



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3 Instructions

3.1 Inspection

▲Warning: Before conducting the inspection, positively confirm that the safety pin is securely inserted into the activation handle, making it impossible to inadvertently activate the rescue system.

 When the handle bracket is sealed with a fabric or leather cover, then remove this cover before conducting the inspection (Fig. 2).



Fig. 2

- Open on the right side baggage compartment door.
- Ensure accessibility of the bending radius for inspection. Carefully move the Bowden cable up or down, so that you can get unhindered access.
- Use a flashlight and magnifying glass, and inspect for signs of cracking. Typically cracks will start from the edge of the metal lug, and grow across the lug at one position of the bending radius. Most likely you will be best able to detect the crack from the rear side, which is the outside of the bend.
- Fig. 3 shows the where you need to inspect the bracket handle from the rear side.



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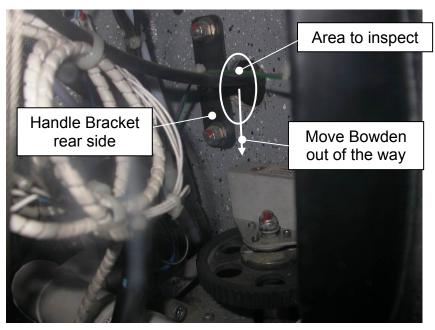


Fig.3- Handle bracket from luggage area side.

 Continue inspection from cabin side. The cover flange identified in Fig. 4 may hinder good access. In case of doubt, remove the bracket and conduct the inspection disassembled.

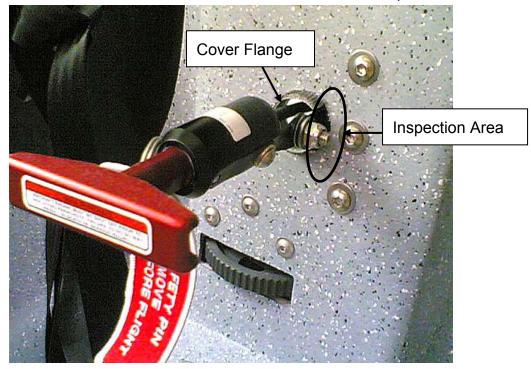


Fig. 4

▲Warning: Even when cracks are more likely to be visible from the rear, this does not exclude the possibility for a crack to become visible at first from the front side.



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▲ Warning:

In case of doubt remove the handle bracket for a better inspection possibility. Fig. 1 above shows the bolts that are required to be removed in order to remove the bracket. For re-installation, use new self-locking nuts and apply tamper proof torque marker.

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3.2 Correction

If cracks are detected in the bend radius to the base plate of the handle bracket, the part must be exchanged.

- Obtain new bracket from either Flight Design or BRS, under reference to this SB.
- Remove the old bracket by removing the bolts identified in Fig. 1.
- Install the new bracket in reverse order. Use new self locking nuts and mark nuts with tamper proof torque marker.
- Take pictures in high resolution of the cracked area on the removed part. The crack might be more visible when you remove the finish with sand paper.
- Permanently destroy the removed bracket, to avoid unintended re-installation. Repeated bending of the cracked area will make it break completely.
- Inform Flight Design using the Service Difficulty Reporting form (SDR). Provide full aircraft details and pictures of the cracked part.

3.3 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 Changes to Previous Revision

Original Issue – no changes

4.2 <u>Feedback Template</u>

In those cases where you identify cracks during the check defined within Section 3.1 of this SB, you are mandated to provide feedback to Flight Design. Use the form Service Difficulty Report (SDR) provided within the aircraft maintenance manual for this purpose, and enhance with meaningful pictures.

▲Warning: When this feedback has not been submitted after identification of discrepancies, this SB is considered not complied with.