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Fax: +49 (0)3578 37335 69 E-Mail: <u>airworthiness@flightdesign.com</u> Service Bulletin

SB-ASTM-CTSW-99; SB-ASTM-CTLS-99, SB-ASTM-MC\_\_-99; Revision 08

Date of Initial Publication: **20-Oct-2014**Publication Date of this Revision: **24-Oct-2017** 

# SERVICE BULLETIN

Service Bulletin Equipment Manufacturer Notification SB-ASTM-CTSW-99

SB-ASTM-CTLS-99 SB-ASTM-MC\_\_-99

## **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 MC MC Model: CTSW / CTLS (includes CTLS-HL) MC

Serial Number: Unless otherwise specified in Section 3, all aircraft where equipment

identified within the individual Notification referenced by Section 3 is

installed.

Applicable Countries: Not limited

#### 1.2 Concurrent Documents

All documents listed in Section 3 are considered concurrent.

#### 1.3 Reason

Regulations applicable to LSA aircraft in multiple countries require the manufacturer to address relevant service documents issued by the manufacturer of components that are installed to the aircraft.

#### 1.4 Subject

This document provides reference to Notifications issued by equipment manufacturers that are considered relevant for the aircraft Type and Model identified in Section 1.1. Further supportive information, required to support compliance with the equipment manufacturer's Notification, is provided by reference.



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In some cases Flight Design may decide to issue individual Notifications, mandating compliance with one specific equipment manufacturer's Notification. These Notifications are not listed in Section 3.

**▲** Warning:

This document does not relieve the owner / operator from its duty to verify the knowledge of, and compliance with all applicable Notifications issued by the equipment manufacturer.

#### 1.5 Compliance

Individual compliance schedules are identified in Section 3, along with each individual Notification.

Verification if all equipment manufacturer notifications are complied with is required at each annual inspection. This includes verification of those information referenced by this document, and verification for further Notifications issued by the manufacturer directly.

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

#### 1.6 Approval

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

#### 1.7 Type of Maintenance

Individual type of maintenance (Line or Heavy) is identified in Section 3, along with each individual Notification.

#### 1.8 Personnel Qualifications

Individual personnel qualification requirements are identified in Section 3, along with each individual Notification.

The following codes of qualification are used:

- 1. Owner / Operator
- 2. National maintenance and inspection regulations as applicable for line maintenance apply. It is the duty of the owner / operator to identify the equivalent level for its country of operation.
- National maintenance and inspection regulations as applicable for heavy maintenance apply. It is the duty of the owner / operator to identify the equivalent level for its country of operation.
- 4. 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.
- 5. Airplane manufacturer.
- 6. Task specific training required.



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#### 1.9 Release to Service

Compliance with this SB must be confirmed by an aircraft inspector according to the national applicable regulations for the country of registry of the aircraft.

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

#### 1.10 Weight and Balance

In cases where the effect to empty aircraft weight and CG is significantly below 0.45 kg (1 lb), reweighing of the aircraft may be omitted in compliance with FAA publication AC 43.13-1B. Unless otherwise explicitly specified within Section XY, it is in the responsibility of the person providing release to service to verify, if this exemption is applicable. The decision must be recorded, along with the release to service.

#### **▲** Warning:

When the exemption according to AC 43.13-1B has been used already for earlier maintenance events on the aircraft, or when other maintenance events are conducted in parallel and the weight changes of the individual events add up to more than 0.45 kg (1 lb), re-weighing of the aircraft is required for the sum of the effects.

#### 1.11 References

References are provided directly in Section 3, as applicable.

#### 1.12 Superseded Documents

- 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: <a href="https://www.flightdesign.com">www.flightdesign.com</a> 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: www.flightdesignUSA.com

E-Mail: airworthiness@flightdesignUSA.com

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

#### 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.



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#### 2 Resources

See individual Notifications listed in Section 3.

#### 3 Instructions

The subsequent information is provided in groups by equipment manufacturer.

Webpage addresses are subject to change and not under control of Flight Design. In case the listed web address is not functional, check for updated web address of the equipment manufacturer. When unable to locate the correct web address, contact Flight Design.

Each individual item is applicable to a specific aircraft, when the relevant equipment is installed to this aircraft, and when the referenced Notification identifies the individually installed equipment as affected. Definitions provided by Flight Design as part of this table may supersede the definitions of the equipment manufacturer Notification.

When concurrent FD documents are listed, these FD documents are mandatory to demonstrate compliance with the relevant Notification.

Notes are always provided at the end of each individual table, identified by numbers per each individual table.

It is possible that Flight Design has decided to issue individual Notifications, mandating compliance with a Notification issued by one equipment manufacturer. These Notifications are not listed in Section 3.

**▲** Warning:

Presence of information in the subsequent tables does not relieve the owner / operator from its duty to verify the knowledge of, and compliance with all applicable Notifications issued by the equipment manufacturer and through the channels of the equipment manufacturer.

• Note:

Document references are always intended to point to the latest revision of a document as issued by the document owner, unless explicitly identified otherwise.



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#### 3.1 Notifications issued by ROTAX

ROTAX notifications are published by and under the responsibility of ROTAX at the following web location:

http://www.flyrotax.com/customer-serviceImpressum/technical-publications.aspx

Equipment Manufacturer Document	Document Title	Applicability (Type / Model)	Mandatory / Optional / On Condition	Compliance	Type of Maint.	Personnel Qualification (see Sect. 1.8)	Concurrent FD Document	Notes
SB-912-065UL SB-914-046UL SB-912-065 SB-914-046	Periodic inspection of the float buoyancy for ROTAX® Engine Type 912 and 914 (Series)	CT / CTSW; CTLS MC / MC	Mandatory	As per Rotax SB	Heavy	3. 6. as per Rotax SB	n/a	n/a
SB-912-066 SB-914-047 SB-912-066UL SB-914-047UL	Change of CHT sensor location and measurement method for ROTAX® Engine Type 912 and 914 (Series)	n/a	n/a	n/a	n/a	n/a	n/a	1)
SB-912-067 / SB-914-048 SB-912-067UL SB-914-048UL	Exchange of floats on ROTAX® Engine Type 912 and 914 (Series)	CT / CTSW; CTLS MC / MC	Mandatory	As per Rotax SB	Heavy	3. 6. as per Rotax SB	n/a	n/a
SB-912-068 / SB-914-049 SB-912-068UL/ SB-914-049UL	Specification / change of engine configuration and/or type plate for ROTAX® Engine Type 912 and 914 (Series)	CT / CTSW; CTLS MC / MC	Mandatory	As per Rotax SB	Heavy	3. 6. as per Rotax SB	n/a	n/a
SI-912i-001 / SI-912-016 / SI-914-019	Selection of Suitable Operating Fluids for ROTAX® Engine Type 912i, 912 and 914 (Series)	CT / CTSW; CTLS MC / MC	Mandatory	As per Rotax SB	n/a	n/a	n/a	n/a
SB-914-050; SB-914-050 UL	Replacement of the overload clutch of ROTAX® Engine Type 914 (Series)	CT / CTLS	Mandatory	As per Rotax SB	Heavy	3. 6. as per Rotax SB	n/a	2)
ASB-912 i- 005iS	The use of lithium-ion batteries in combination with the ROTAX® Engine Type 912 i Series	CTLS	n/a	n/a	n/a	n/a	n/a	3)



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Equipment Manufacturer Document	Document Title	Applicability (Type / Model)	Mandatory / Optional / On Condition	Compliance	Type of Maint.	Personnel Qualification (see Sect. 1.8)	Concurrent FD Document	Notes
SB-912 i-006; SB-912 i-006iS	Exchange of Stator Assy. of ROTAX® Engine Type 912 i (Series)	CTLSi-LSA CTLSi	Mandatory	As per Rotax SB	Heavy	3. 6. As per Rotax SB	Service Instruction: PF 7600 6001_00	n/a
ASB-912-069 / ASB-914-051 ASB-912-069UL / ASB-914-051UL	Exchange of floats on ROTAX® Engine Type 912 and 914 (Series)	CT / CTSW; CTLS MC / MC	Mandatory	As per Rotax SB	Heavy	3. 6. As per Rotax SB	n/a	n/a
ASB-912 i-007, ASB-912 i-007iS	Checking of the correct positioning of sealing plug in ignition housing for ROTAX® Engine Type 912 i (Series)	CTLSi-LSA CTLSi	Mandatory	As per Rotax SB	Heavy	3. 6. As per Rotax SB	n/a	n/a
SB-912 i-008 R1 / SB-912-070 R1 / SB-914-052 R1 SB-912 i-008iS / SB-912-070UL / SB-914-052UL	Inspection and/or replacement of the valve push-rod assy., rocker arm left and rocker arm right for ROTAX® Engine Type 912 i, 912 and 914 (Series)	CT / CTSW; CTLS; CTLS-LSA	Mandatory	As per Rotax SB	Heavy	3. 6. as per Rotax SB	n/a	n/a

## Notes:

- 1) On Flight Design aircraft the measured temperature is already identified as coolant temperature, with the appropriate limitations applicable to the coolant. Therefore this Rotax SB is not applicable to Flight Design aircraft models.
- 2) Rotax SB is not applicable to engines delivered on Flight Design aircraft ex factory. But this still leaves the option that a customer has exchanged the engine, and has installed an affected engine.
- 3) Aircraft delivered from Flight Design can be optionally equipped with a Li-Fe-Po4 (Lithium Iron Phosphate) battery manufactured by Super B. These batteries are equipped with an internal electronic battery management system. Therefore the batteries satisfy the requirements identified by Rotax, and this Rotax ASB does not require any action to be taken on Flight Design aircraft, as long as one of the Flight Design approved batteries is installed.



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#### 3.2 Notifications issued by DYNON AVIONICS

Dynon notifications are published by and under the responsibility of Dynon at the following web location:

http://www.dynonavionics.com/docs/support bulletins.html

Equipment Manufacturer Document	Document Title	Applicability (Type / Model)	Mandatory / Optional / On Condition	Compliance	Type of Maint.	Personnel Qualification (see Sect. 1.8)	Concurrent FD Document	Notes
Service Bulletin 101014	Technical Service Bulletin - Heated AOA/Pitot Probe	CT / CTLS-LSA; CTLSi-LSA; CTLSt-HL-LSA	Mandatory	Compliance shall be shown latest by 19-Jan-2015	Heavy	3. 4.	SI-ASTM- CTLS-49	1)

#### Notes:

#### 3.3 Notification issued by BRS Inc.

Currently no Notification referenced from here.

#### 3.4 Notifications issued by JUNKERS PROFLY

Currently no Notification referenced from here.

#### 3.5 Notifications issued by GARMIN

Currently no Notification referenced from here.

#### 3.6 Notifications issued by NEUFORM

Currently no Notification referenced from here.

<sup>1)</sup> Interim Operating Recommendations: Affected aircraft shall be operated as if the aircraft is equipped with an Unheated AOA/Pitot Probe, until the affected probe is replaced.



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# **Appendix**

#### 4.1 **Changes to Previous Revision**

ROTAX Service Bulletins SB-912 i-008 R1/ SB-912-070 R1 / SB-914-052 R1, SB-912 i-008iS / SB-912-070UL / SB-914-052UL added.

#### 4.2 **Feedback Template**

No feedback required.