



Major Repair and Alteration (MRA-LSA)

- LSA Aircraft Only -

ID: 12-06-005

Rev.: 00

Date: 20-Jun-12

MRA-LSA template is required **to authorize** any Major Repair or Alteration that is not covered by the Aircraft Maintenance Manual in the applicable version for the affected LSA aircraft. This template is usable for aircraft that are operated on the basis of a manufacturer self declaration, and not on basis of a type certificate issued by the relevant authority.

Title: Instructions for Removal of BRS 1350 HS Parachute and Rocket from the Aircraft CTLS during Maintenance

Block 1 – Aircraft Data - to be filled by manufacturer only -


| | | | | | | | |
|-----------------|-----|---------------|------|-------------|--|----------------------|--|
| AC Type: | LSA | Model: | CTLS | S/N: | | Registration: | |
|-----------------|-----|---------------|------|-------------|--|----------------------|--|

Owner Name & Address:

| | | | | |
|--------------------|----------------------|----------------------|----------------------|---------------------------|
| Equipment: | Manufacturer: | Type / Model: | TT since New: | TT since Overhaul: |
| Powerplant: | Rotax | Rotax 912 | | |
| Propeller: | | | | |

Block 2 – MRA Approval - to be filled by manufacturer only -

Hereby the aircraft manufacturer confirms that aircraft being altered or repaired still meets the requirements of the applicable ASTM design and performance specification subsequent to the correct and complete conduct of the repair or alteration as specified in this MRA-LSA.

| | | | | | |
|-----------------------|--|--------------|------------------|------------------------------|---|
| Approval Date: | | Name: | Sergii Pylypenko | Stamp & Signature |  |
|-----------------------|--|--------------|------------------|------------------------------|---|

Disclaimer: Single: Multiple:

Information provided within this MRA-LSA only cover the mechanical installation and are not to be considered task specific training. Correct function of all installed equipment or repairs performed are the still the responsibility of the repairman or installer as this cannot be checked by Flight Design. Installations or repairs must be signed off by the responsible repairman to be in compliance with all applicable regulations and requirements. By this acknowledgment a repairman takes the responsibility to confirm that all work was done in accordance with all Flight Design supplied instructions and with best workmanship. Information within this MRA-LSA are provided solely on the basis of the aircraft configuration information available to the manufacturer at the time of generating this MRA-LSA. Any earlier alteration or repair to the aircraft that has not been formally made transparent to and approved by the manufacturer invalidates the information provided in this MRA-LSA at the sole accountability of the requester.

Block 3 – Conformity Statement; Return to Service - to be filled by customer -

Hereby I certify that the repair and/or alteration made to the unit(s) identified in block 3 has been conducted correct and complete as defined by this MRA and all referenced documents. Potentially unclear aspects have been clarified with the manufacturer. No issues were observed that might hinder release to service.

| Certificate Holder Name & Address | Required Level of Certification <small>(required to be marked by manufacturer. Multiple markings identify "or")</small> | Certificate Type and Number |
|-----------------------------------|--|-----------------------------|
| | <input type="checkbox"/> Pilot/Owner | |
| | <input checked="" type="checkbox"/> LSA Repairman Maintenance | |
| | <input checked="" type="checkbox"/> A&P | |
| Date: | <input checked="" type="checkbox"/> Cert. Repair Station | |
| Signature: | <input checked="" type="checkbox"/> Manufacturer | |
| | <input type="checkbox"/> Task Specific | |

Return to Service:
Return to Service is achieved by confirming completion of the MRA by the responsible repairman with minimum required level of qualification in the aircraft logbook. National requirements might request additional steps. It is the duty of the person signing the Release to Service to verify, that all applicable national regulations have been obeyed. This is confirmed by signing the Release to Service.



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Block 4 – Instructions for Conduct - to be filled by manufacturer only -

Applicable References:

[1] BRS Document No. 020031-ic "Instructions for Continued Airworthiness: BRS-1350HS for Flight Design GmbH CTLS"; latest released version as applicable for the Aircraft S/N (when limited).

| Step | Instruction: |
|------|---|
| 1 | In cases when maintenance activity require removal of the parachute and / or rocket of the BRS 1350 HS system from the aircraft (mainly for the purpose of re-pack or exchange due to lifecycle or damage reasons), follow instructions provided by [1] to conduct the removal and initiate shipping to the rescue system manufacturer, BRS Inc.. Qualification of staff may be more stringently defined within [1]. In this case, definitions as per [1] prevail. |

Block 5 – Verification - to be filled by manufacturer only -

Applicable References:

[1] BRS Document No. 020031-ic "Instructions for Continued Airworthiness: BRS-1350HS for Flight Design GmbH CTLS"; latest released version as applicable for the Aircraft S/N (when limited).

1. Verification on Ground:

Typically the aircraft shall not be operated with the Airframe Emergency Parachute System removed. In case this cannot be avoided, for example for maintenance related ferry flights, the following steps are mandatory:

1. Mark the handle of the system inside the cockpit permanently and well legible with a red label / white font as "System NOT Installed"
2. Install warning sticker (red label, white font, permanently, well legible, in front of the pilot) stating "WARNING: Airframe Emergency Recovery System NOT Installed!"
3. Ensure that all loose ends of harnesses and activation cables are properly fixed to the aircraft structure using cable ties in a way that they cannot interfere under any circumstances with flight controls or other systems.
4. Re-scale the aircraft after system removal.
5. Generate new equipment list that does not include the Airframe Emergency Parachute System.

2. Verification in Flight:

n/a

3. Documentation:

Document completion of the removal in the aircraft logbook, with reference to and signature of the person conducting the removal.

In cases where the aircraft must be operated with the system removed, document verification, generation of new equipment list and generation of new weight and balance sheet in the aircraft logbook and documents, as required by national regulations.

Block 6 – Operating Information - to be filled by manufacturer only -

Applicable References:

[1] BRS Document No. 020031-ic "Instructions for Continued Airworthiness: BRS-1350HS for Flight Design GmbH CTLS"; latest released version as applicable for the Aircraft S/N (when limited).

1. Airworthiness Limitations (incl. mandatory time limits):

Refer to [1]

2. Operating Instructions:

Refer to [1]

Block 7 – Instructions for Continued Airworthiness (ICA) - to be filled by manufacturer only -

Applicable References:

[1] BRS Document No. 020031-ic "Instructions for Continued Airworthiness: BRS-1350HS for Flight Design GmbH CTLS"; latest released version as applicable for the Aircraft S/N (when limited).

| |
|---|
| 1. Servicing Information: |
| n/a |
| 2. Scheduled Inspections, Maintenance Information: |
| Refer to [1] |
| 3. Troubleshooting Information: |
| n/a |
| 4. Removal / Installation Information: |
| Reference [1] enhances the ICA of the installed system in this respect. |
| 5. Diagrams / Engineering Drawings: |
| n/a |
| 6. Special Inspections: |
| n/a |
| End of MRA-LSA |

Instructions How to Use Form MRA-LSA-B

Purpose:

Form MRA-LSA-B is used to provide the approval for a Major Repair or Alteration for a Light Sport Aircraft, when the Light Sport Aircraft has received the Certificate of Airworthiness on the basis of a Manufacturer Self Declaration of Compliance.

A Major Repair in that sense is any repair where instructions are not provided by a manufacturer issued Instruction of Continued Airworthiness (Aircraft Maintenance Manual, Service Bulletin or similar).

A alteration in that sense is any modification to the aircraft or to its equipment that is not specified within a manufacturer issued Instruction of Continued Airworthiness (Aircraft Maintenance Manual, Service Bulletin, Service Instruction or similar).

In cases where the aircraft has received the Certificate of Airworthiness on the basis of a Type Certificate or Restricted Type Certificate, other procedures apply and this template cannot be used.

Form MRA-LSA-B is filled solely by the manufacturer. The only exception is Block 4 that is provided for the Customer to log correct conduct of the instructions.

The following text provides explanation to each block used in the template. In case of doubt, additional information can be obtained only from the relevant aircraft manufacturer.

Title:

A meaningful title is provided to allow identification of the MRA by subject.

Block 1:

This provides the complete aircraft identification data for the aircraft where the Major Repair or alteration is approved for.

“TT” abbreviates “Total Time”. This information references the Major Repair or alteration to the configuration status of the aircraft and possibly affected appliances as the basis for the validity of the approval.

Warning: Change of configuration in other areas might invalidate the approval, in case of doubt contact manufacturer.

Block 2:

This block provides the explicit manufacturer approval for the Major Repair or Alteration, as typically required by LSA rules in those countries where the aircraft receives the Certificate of Airworthiness on the basis of a Manufacturer Self Declaration of Compliance.

Warning: National Regulations may require different process. It is the duty of the qualified person conducting the Major Repair or Modification to verify that all applicable national regulations are obeyed. By signing Block 3 the person signing confirms that this has been considered.

Tic-mark for “Single” and “Multiple” are for manufacturer internal use, only.

Block 3:

This block serves for the customer to log completion of the MRA and compliance with all instructions of the MRA.

The manufacturer highlights by Tic-Mark the minimum qualification that is required to perform the task. Noncompliance invalidates the approval. The customer must insert all data for the person conducting and signing the MRA.

Warning: National Regulations may require additional qualifications. It is the duty of the qualified person conducting the Major Repair or Modification to verify that all applicable national regulations are obeyed. By signing Block 3 the person signing confirms that this has been considered.

Release to Service of the aircraft is not achieved by signing Block 3 of the MRA. Release to Service is achieved by making the necessary entries to the aircraft logbook, subsequent to confirming completion by filling and signing Block 3 of this MRA.

Warning: National Regulations may require different procedures to achieve Release to Service. It is the duty of the person providing the Release to service to verify that all applicable national regulations are obeyed.

Block 4:

Instructions to conduct the MRA are provided either in steps or by reference to a separate document (Service Instruction, for example). The number of lines providing stepwise instructions can be enhanced as required. References to applicable drawings are provided in the "References" field.

Block 5:

Instructions for ground and flight testing / verification that complies with the original ASTM production acceptance testing standard, as appropriate, to verify the alteration was performed correctly and the aircraft is in a condition for safe operation.

Documentation instructions to be complied-with after successful conduct and verification of the MRA. This documentation is also intended to support release to service, but does not replace it. Refer to the instructions for Block 3, above.

Block 6:

This block provides all information required to safely operate the aircraft after conduct of the MRA. This comprises all information that is typically provided by the Pilot's Operating Handbook (POH). This information does not replace the current POH of the aircraft. It provides additional information and must be kept available with the POH.

It is possible to replace information on this sheet by a reference to a POH Supplement.

Block 7:

This block provides all information required to maintain the aircraft in an airworthy condition after conduct of the MRA. This comprises all information that is typically provided by the Aircraft Maintenance Manual (AMM). This information does not replace the current AMM of the aircraft. It provides additional information and must be kept available with the AMM.

It is possible to replace information on this sheet by a reference to a AMM Supplement.

Documentation of Completed MRA:

Subsequent to the completion of the MRA and filling and signing Block 3 of this MRA, the original of the MRA must be put to the official aircraft documentation.

It is highly recommended to submit the completed MRA form to the manufacturer. This way the manufacturer has a chance to provide valuable information to the customer on the basis of the actual aircraft configuration.