Service Letter

Inspection of push-pull cable jam nuts
SL-ASTM-CTLS-03
SL-LTUL-CTLS-03
SL-ELA-CTLS-04

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:	CTLS, CTLSi, CTLS-LSA, CTLSi-LSA, CTLS-ELA, CTLSi-ELA
Serial Number:	all aircraft manufactured before January 2021
Applicable Countries:	Not limited

1.2 Concurrent Documents

Not applicable

1.3 Reason

Possible loose jam nuts which are used to fasten the pitch control push-pull cable located on the front and rear support, have the potential of causing significantly reduced control effectiveness and stiffness of the stabilator control system.

1.4 Subject

Information for aircraft owners to inspect the push-pull cable attachment security on the stabilator control system on front and rear push-pull attachment brackets.

1.5 Compliance

Compliance must be shown at 25 Hrs. inspections (in case this inspection has not been performed yet) then at each following 100 Hrs. inspection.

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

1.6 Approval

For Ultralight only:

Not applicable

For ASTM self-declaration basis:

This SL is approved by the aircraft manufacturer i.a.w. ASTM F3198 for conduct on aircraft as defined in 1.1. Subsequent to complete and correct conduct of this SL the aircraft will still meet the requirements of the applicable ASTM design and performance specification.

For EASA TC'd aircraft and within scope of DOA:

The technical content of this document is approved under the authority of the DOA ref. EASA. 21J.416.

1.7 Type of Maintenance

Line

1.8 Personnel Qualifications

Aircraft owner, case dependent supported by an aircraft inspector as per national regulation.

1.9 Release to Service

Conduct of this SL must be inspected by an aircraft inspector according to the national applicable regulations for the country of registry of the aircraft.

1.10 Weight and Balance

Not applicable

1.11 References

Drawings:

Information provided in this SL has been created to ensure provides all required information in line with the Type Design drawing. Therefore, separate availability of these drawings is not required.

Documents:
None

1.12 Superseded Documents

None

1.13 Contact Details

For further information on conduct of this SL, 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 general aviation website: www.flightdesign.com under “Dealer Location”.

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

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

1.14 Disclaimer

This Service Letter 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 Letter is requested to contact Flight Design immediately to clarify the issue.

2 Resources

2.1 Workshop Conditions

No specific workshop conditions.

2.2 Parts

-none-

2.3 Materials

-none-

2.4 Tools

1. Allen key 3 mm;
2. Flashlight;
3. Inspection mirror.

2.5 Special Tools

-none-

2.6 Manpower

The described inspection can be performed within approximately 1 hour (working time).

3 Instructions

3.1 General

Inspection of security of the push-pull jam nuts.

3.2 General Procedures

Evaluate condition of stabilator control system accordance with following steps:

1) Have somebody to help you. This person shall firmly hold the control stick at neutral position.
2) Slightly try to move trailing edge of the stabilator up and down.
3) Total play of the trailing edge must not exceed 3mm.

Perform inspection of push-pull cable attachment to the forward push-pull bracket (see view A on Fig. 1):

1) Remove the tunnel hatch (3) by removing bolts (1) and (2).
2) Perform a visual inspection of the forward attachment point of the push-pull cable. Pay attention to the painted torque stripe marking applied on the jam nuts and threaded sleeve of the push-pull cable. When the marking is clearly visible and undamaged it is a sign that the push-pull cable is properly installed.
3) Slightly shake control stick in the forward and aft directions. Check the front attachment point of push-pull cable for any possible gap and play between the jam nuts (4) and bearing of the front support (5). Any gaps or play must not be observed.
4) Install tunnel hatch (3) back in a reverse order of disassembly.

Perform inspection of push-pull cable attachment to rear push-pull bracket (see view B on Fig. 1):

1) Perform a visual inspection of the rear attachment point of the push-pull cable. Use flashlight and inspection mirror for inspection. Pay attention on painted torque stripe marking applied on the jam nuts (4) and threaded sleeve of the push-pull cable. If the torque stripe marking is clearly visible and undamaged it is a sign that the push-pull cable is properly installed.
2) Slightly shake trailing edge of the stabilator up and down. Check rear attachment point of push-pull cable for possible gap and play between jam nuts (4) and bearing of rear support (6). Any gaps or play must not be observed.

If any abnormalities are found during the inspection, contact the manufacturer for further instructions.

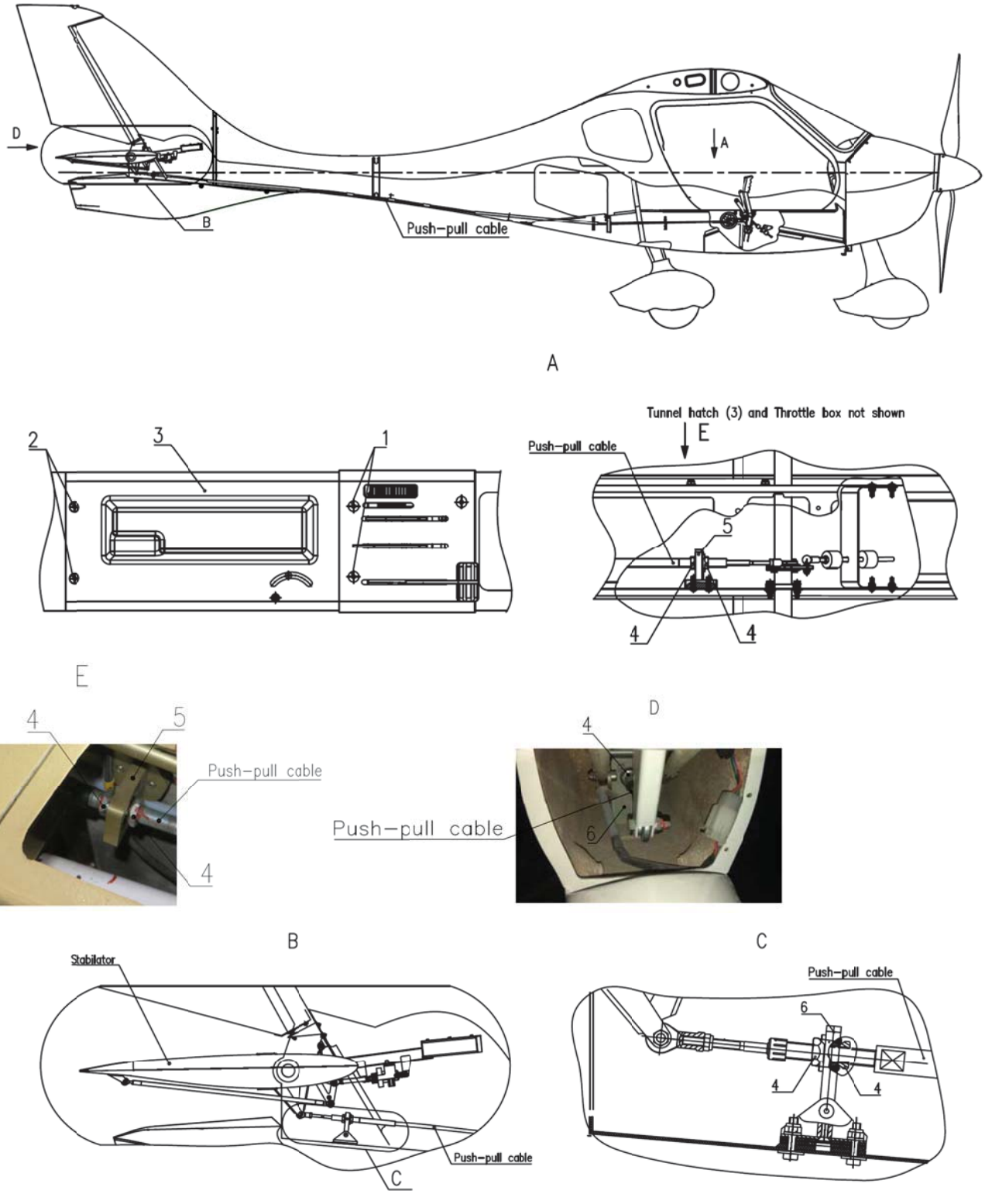
D
A
B
Push–pull cable
A
2
3
1
E
Tunnel hatch (3) and Throttle box not shown
Push–pull cable
E
5
4
4
4
5
Push–pull cable
4
B
Push–pull cable
4
6
D
Stabilator
Push–pull cable
C
C
Push–pull cable
6
4
4

Fig. 1

3.3 Documentation

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

4 Appendix

4.1 Changes to Previous Revision

Original Issue – no changes

4.2 Feedback Template

No specific feedback required.