RotorSport UK Ltd Service Bulletin (CofA)

Title: Control cable clamps		
SB-C-002 Iss1	**Related documents** Modification: MC-329 CCAR No.: None	**Compliance Category:** ~~**OPTIONAL**~~ or **RECOMMENDED or** ~~**MANDATORY**~~
Applicability		
Aircraft type & model: **Cavalon pro**	**Aircraft serial Nos. affected:** **RSUK/CVLN/011**	
The maintenance manual to be referenced is this stated or subsequent issue.		RSUK0335 Iss1

This form is the response from RotorSport UK Ltd either against a problem found in the product in service requiring a containment or rectification action, or as service information for aircraft modification incorporation. For help, contact RotorSport on 44(0)1588 505060, or email compliance@rotorsport.org.

The technical content of this document is approved under the authority of the UK CAA Design Organisation Approval Ref: **DAI/9917/06**

Documentation (Service Bulletin Completion action)

a) Entries within the aircraft logbooks, eg CAA BCAR A6-1 Authorised Person to certify that the work is completed by writing ''*SB-C-002 Control cable clamps incorporated'* in the aircraft logbook white pages, and record the action in the pink pages entitled 'Aircraft Modifications'. Both entries must be signed by the CAA Authorised Person together with their CAA Authorisation number.

b) Completion of an SB worksheet (attached). This must contain a CRS statement, and a final check item that no tools or equipment have been left within the aircraft)

c) Type certificate change application document. This is required where the SB will affect the type certificate limitations, eg airspeed change or MTOW change and enables the owner to request the certificate change required

d) Any other Certificate of Release to Service form requirements.

e) As a primary flying control has been disturbed dual-inspection of the installation is required.

Document approval signatures			
Engineering Manager	**CVE (as required)**	**Chief Test Pilot (if flight performance or safety effect)**	**Head of Airworthiness**
Gerry Speich Oct 19 2015 6:51 AM CoSign	**Not required as MC-329 approved**	Gerry Speich Oct 19 2015 9:30 AM CoSign	Andy Lyons Oct 19 2015 1:38 PM cosign

Reason and overview of the Service Bulletin (cause of problem if known)

Under certain circumstances operating clearances in the push-pull control cables (for pitch and roll control) can allow the transmission of rotor vibration to the control stick. Fitment of these clamps enables the clearance to be adjusted and the vibration reduced (See Fig 2).

Manpower estimates

Accomplishment of this Service Bulletin requires the following personnel

(i) A6-1 (para 11) plus type approval Authorised engineer
(ii) Second A6-1 Authorised engineer (for duplicate inspection)

Estimated man-hours to complete the task as a stand-alone item are; 1 hour

Tooling required

Hand tools only

Weight and Balance Effects

Nominal weight increase 100g. Negligible effect on aircraft CG

Manuals affected

AMM RSUK0288 amended to recognise the purpose and adjustment of the clamp(s).

Previous Modifications that affect the SB

None

Accomplishment instructions (Action required to implement this bulletin):

Effective date of this SB is 25.09.15

There is no relevant AD or other outside body documentation to be referenced.

Instructions

1. Ensure before fitment that the rotor head pitch and roll bolts are properly tightened for minimum free play and stick loads.
2. Remove the fuel drain inspection cover adjacent to the suspension bow (Fig 1)
3. Apply Loctite 243 to the screw threads and fit one clamp to each control cable. Position so that the clamp is at the lowest point of the curve, clear of contact with the body (Fig 2).
4. Ensure clamps are fitted, and any cut cable ties replaced, such that the clamp components cannot rub or fret to the aircraft or other cables in the centre channel.
5. Tighten the screws equally to 1Nm.
6. By moving the control stick, establish that the free play in the cable has been reduced to a minimum consistent with free movement. Adjust the clamp screws as required
7. When operating movement is considered satisfactory attach a force gauge to the control stick just below the PTT-button (Fig 3) and verify that the stick forces do not exceed the maximum allowable values:
   - In pitch moving aft 0.9kg, in pitch moving forward 2.1kg
   - In roll moving left or right 1.0kg

   Checking is easiest without the rotor fitted.
8. Replace the inspection cover

Illustrations

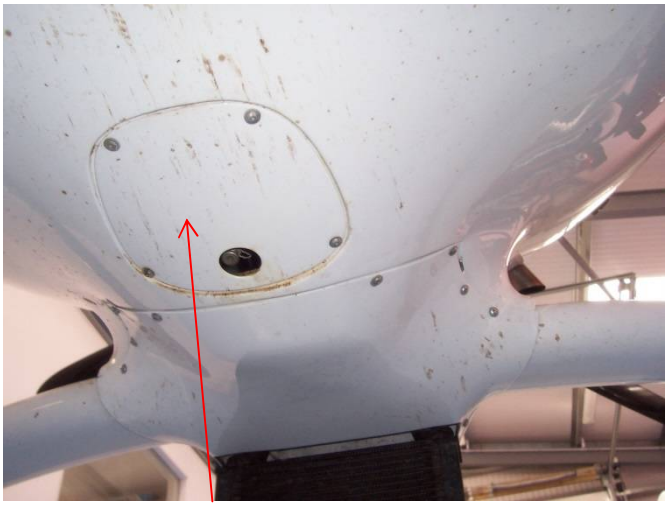

Fig 1 Fuel drain inspection cover

Fig 2 Control cable clamp

Fig 3 Force gauge to measure stick load

Material information (Parts required to be made to implement this service bulletin):

No parts are required to be made during embodiment

List of components (with purchasable part nos)

RSD7246 Clamp assembly (2-off required)

Interchangeability

Components are interchangeable if required

Parts disposition

a) Disposal requirements – Not applicable
b) Environmental hazards of parts containing hazardous materials – Not applicable
c) Scrap requirements (e.g. mutilate scrapped items beyond use) – Not applicable

Service Bulletin implementation Worksheet

Aircraft type:	**Serial no:**	**G-**
Worksheet completed by:		**Document ref:**
Worksheet cross-checked by (if applicable):		**SB-C-002 Iss 1**

Purpose – record service bulletin implementation actions taken to inspect aircraft and return to service.

Maintenance manual referred-to and issue level:	

Note: attach SB sheets to this document

Task	Notes	Eng'r check/date	Inspector check/date
Remove fuel-drain cover, check no damage or cracks			
Fit and adjust clamps, ensure no contact with body or cover			
Verify stick forces within limits	Duplicate inspection required		
Ensure clamps are fitted, and any cut cable ties replaced, such that the clamp components cannot rub or fret to the aircraft or other cables in the centre channel.			
Replace cover			

Customer acceptance:	
Name: Signature/date:	Aircraft hobbs meter reading: Confirm logbooks annotated:

Certificate Release to Service:

'The work recorded has been carried out in accordance with the requirements of the Air Navigation Order for the time being in force and in that respect the aircraft and equipment is considered fit to release to service. I confirm that no tools, equipment or debris have been left in the aircraft'

Engineer signature and date: CAA CRS Authorisation ref :	Location where work completed