

RotorSport UK Ltd Service Bulletin (Permit)

Title: Cavalon mast-cowl infill		
SB-108 Iss1	Related documents Modification: None- rationalisation only CCAR No.: None	Compliance Category: OPTIONAL or RECOMMENDED or MANDATORY
Applicability		
Aircraft type & model: Cavalon	Aircraft serial Nos. affected: RSUK/any	
The maintenance manual to be referenced is this stated or subsequent issue.		RSUK0288 Iss: 4
<p>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.</p> <p>The technical content of this document is approved under the authority of the UK CAA Design Organisation Approval Ref: DAI/9917/06</p>		

Documentation (Service Bulletin Completion action)

- a) Entries within the aircraft logbooks, eg CAA BCAR A3-7 Authorised Person to certify that the work is completed by writing '*SB-108 Cavalon mast cowl infill 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 the SB worksheet attached. This must contain a PMR statement, and a final check item that no tools or equipment have been left within the aircraft)
- c) A Type approval change application document is not required.
- d) Any other Permit Maintenance Release to Service form requirements.

Document approval signatures			
Engineering Manager	CVE (as required)	Chief Test Pilot (if flight performance or safety effect)	Head of Airworthiness
	Not required	Not required	

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

Cavalon gyroplanes have a systems compartment between the cockpit rear bulkhead and the firewall. This compartment contains the fuel pumps/filters, battery/regulator, pneumatics box and (if a 914-series engine) the Turbo control unit (TCU).

Due to the construction of the composite lower mast as part of the body, any water entering the mast cowlings immediately below the rotor head can fall through the hollow body construction and enter the systems compartment, where it could have a detrimental effect on equipment in the compartment. The problem does not occur in flight but could happen when aircraft are parked in the open during heavy rainfall.

In order to prevent this passage of water, a special weathertight sealing foam (Kompriband) is installed in the lower mast area, but it has been found on some aircraft in service that this is not positioned to the standard required.

Because the foam fitment is not clearly shown in the aircraft AMM, this service bulletin describes how the Kompriband should be inspected for correct fitment, and if necessary re-installed. It also provisions an additional drain hole in the mast cowling immediately above the foam layer for improved water drainage.

Manpower estimates

Accomplishment of this Service Bulletin requires the following personnel

- (i) A3-7 Authorised engineer

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

Tooling required

Hand tools only

Weight and Balance Effects

No change from the approved configuration

Manuals affected

POH RSUK and AMM RSUK are/not affected.

Previous Modifications that affect the SB

None

Accomplishment instructions (Action required to implement this bulletin):

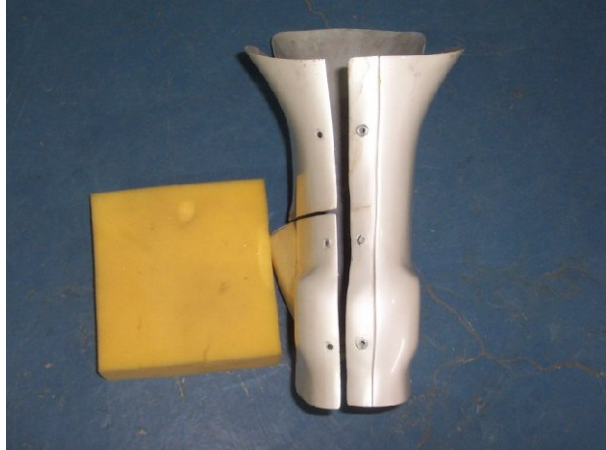
Effective date of this SB is 01.02.16

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

No new parts are introduced by this service bulletin, simply rationalisation of the fit of the Kompriband foam and positioning the drain hole.

Instructions

1. Remove the mast cowlings – early aircraft have a single moulding split at the rear, later aircraft (RSUK/CVLN/009 onwards) have a two-piece assembly.



Single piece mast-cowling with split at rear



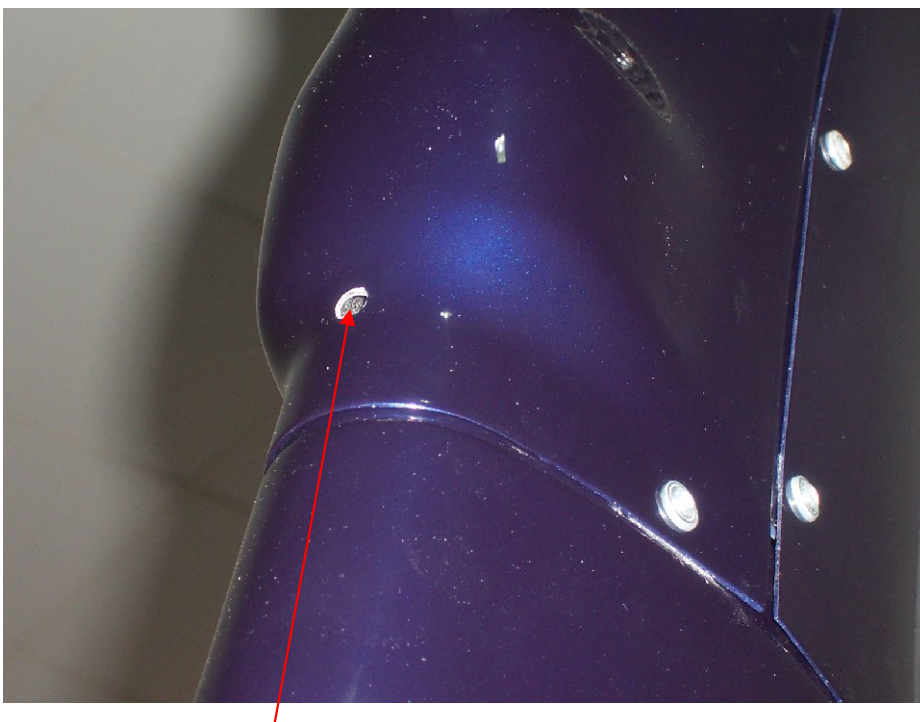
Two-piece mast cowling with vertical joint each side

The cowlings are held in place by M4 socket-head screws and plastic washers

- Using the photograph below for reference, re-arrange, or if necessary fit new Kompriband foam into the lower mast, filling the apertures through which the push-pull cable and air cylinder pass. Ensure that the foam does not make contact with the pre-rotator shaft.



- Before re-fitting the mast cowl(s) drill a drain-hole 6.0-6.5mm diameter through the rear face of the cowling, just above the level of the Kompriband top surface. With the two-piece cowling the hole may be on centre-line, with the one piece cowling position the hole slightly to the right of centre to avoid disturbing the split junction. Touch-up the paint edge if required.



Drain hole in two-piece cowling

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

No parts are manufactured as such, the Kompriband can be shaped with scissors

List of components (with purchasable part nos)

Kompriband (supplied as a consumable)

Interchangeability

Not affected

Parts disposition

- a) Disposal requirements – None
- b) Environmental hazards of parts containing hazardous materials - None
- c) Scrap requirements (e.g. mutilate scrapped items beyond use) – None

Service Bulletin implementation Worksheet			
Aircraft type: Cavalon	Serial no:	G-	
Worksheet completed by:		Document ref:	
Worksheet cross-checked by (if applicable):		SB-108 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 cowling(s), check for damage	Consult RSUK if cracks found		
Re-fit/fit Kompriband foam			
Drill drain hole (deburr and touch-up paintwork if required)			
Refit cowling(s)			

Customer acceptance:	
Name:	Aircraft hobbs meter reading:
Signature/date:	Confirm logbooks annotated:
Permit Maintenance Release:	
<i>'The work recorded above has been completed to my satisfaction and in that respect the aircraft is considered fit for flight. I confirm that no tools, equipment or debris have been left in the aircraft'</i>	
Engineer signature and date:	Location where work completed
CAA PMR Authorisation ref :	