



# RotorSport UK Ltd Service Bulletin (Permit)

<b>Title: Pneumatic clutch III Pressure Plate inspection</b>		
<b>SB-128 Iss1</b>	<b>Related documents</b> Modification: MC- none CCAR No.: None	<b>Compliance Category:</b>
<b>Applicability</b>		<b>OPTIONAL or RECOMMENDED or MANDATORY</b>
<b>Aircraft type &amp; model:</b> MTOS2017 Cavalon	<b>Aircraft serial Nos. affected:</b> RSUK/MT02/004,06,07 and 08 RSUK/CVLN/027	
The maintenance manual to be referenced is this stated or subsequent issue.		MTOS2017 RSUK0395 Iss1 Calidus RSUK0061 Iss7 Cavalon RSUK0288 Iss5
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 <a href="mailto:compliance@rotorsport.org">compliance@rotorsport.org</a> .  The technical content of this document is approved under the authority of the UK CAA Design Organisation Approval Ref: <b>DAI/9917/06</b>		

### 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-128 Pneumatic clutch III pressure disc inspection 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) No Type Approval change application document is required. (This is required where the SB will affect the type approval limitations, eg airspeed change or MTOW change and enables the owner to request the permit change required)
- d) Any other Permit Maintenance Release to Service form requirements.

Document approval signatures			
<b>Engineering Manager</b>  	<b>CVE (as required)</b>  Not required, rectification not modification	<b>Chief Test Pilot (if flight performance or safety effect)</b>  Not required	<b>Head of Airworthiness</b>   3 Oct 2018

# RotorSport UK Ltd Service Bulletin (Permit)

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

It has been found that the threaded holes in the first batch of pneumatic clutch III (2017) Pressure Plate front (2) are not sufficiently countersunk to accept the countersunk screws securing the Pressure Disc PKII (1). The effect is that the screws may be unable to properly clamp the disc and plate together, possibly leading to looseness, rattle noise, and wear of this connection.

The normal symptom is a rattle noise from the pre-rotator area when rotating the propeller for gurgling the oil and checking the oil level.

This bulletin issues instructions for the inspection of the clutch, countersinking of the threaded holes, and replacement of any damaged parts as required.

Note: No Modification Classification document is required as the action is viewed as inspection/correction of a manufacturing deficiency.

## **Manpower estimates**

Accomplishment of this Service Bulletin requires the following personnel

- (i) A3-7 or LAA Authorised person to release the aircraft to service

Estimated man-hours to complete the task as a stand-alone item are; 4 to 8 hours

## **Tooling required**

45° countersink tool may be required.

## **Weight and Balance Effects**

No significant effect

## **Manuals affected**

POH RSUK-series and AMM RSUK-series are not affected.

## **Previous Modifications that affect the SB**

None

## **Accomplishment instructions (Action required to implement this bulletin):**

Effective date of this SB is 30.08.18

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

### Instructions

See text of Auto-Gyro document AG-SB-2018-05-B-EN appended

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

No parts manufactured during embodiment

# RotorSport UK Ltd Service Bulletin (Permit)

## List of components (with purchasable part nos)

See text of Auto-Gyro document AG-SB-2018-05-B-EN appended

## Interchangeability

Not affected

## Parts disposition

- a) Disposal requirements – Normal waste
- b) Environmental hazards of parts containing hazardous materials - None
- c) Scrap requirements (eg mutilate scrapped items beyond use) – Not applicable

# RotorSport UK Ltd Service Bulletin (Permit)

Service Bulletin implementation Worksheet			
Aircraft type:	Serial no:	G-	
Worksheet completed by:		Document ref:	
Worksheet cross-checked by (if applicable):		SB-128 iss 1	
Purpose – record service bulletin implementation actions taken to inspect aircraft and return to service.			
Maintenance manual referred-to and issue level:			
<b>Note: attach SB sheets to this document</b>			
Task	Notes	Eng'r check/date	Inspector check/date
Detailed instructions are provided in Auto-Gyro document AG-SB-2018-05-B-EN appended. The tasks listed below are abbreviated			
Remove clutch as AMM.			
Inspect clutch parts / replace as necessary and make note to right			
Rework 4-off countersinks as required			
Refit screws with Loctite.			
Reassemble and replace assembly into the aircraft.			
Test that the pre rotator clutch function is satisfactory			

Customer acceptance:	
Name:	Aircraft hobbs meter reading:
Signature/date:	Confirm logbooks annotated:
Permit Maintenance Release:	
<b><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></b>	
Engineer signature and date:	Location where work completed
CAA PMR Authorisation ref :	

<b>Title: Pneumatic Clutch III (2017) – Pressure Disc Inspection</b>		
<b>AG-SB-2018-05-B-EN</b>		<b>Compliance Category:</b>
<b>Applicability</b>		<b>A – MANDATORY</b> <b>B – RECOMMENDED</b> <del><b>C – OPTIONAL</b></del>
<b>Aircraft type &amp; model:</b> All MTO2017 and all Calidus/Cavalon with rotor head III fitted	<b>Affected Serial number(s):</b> All MTO2017 and all Calidus/Cavalon with rotor head III fitted	
The maintenance manual to be referenced is this stated or subsequent issue.		As per AutoGyro website
<p>This form is the response from AutoGyro GmbH 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 AutoGyro on 49(0)5121 88056-00, or email <a href="mailto:airworthiness@auto-gyro.com">airworthiness@auto-gyro.com</a>.</p>		

**Documentation (Service Bulletin Completion action)**

The accomplishment of this Service Bulletin, or the decision of its rejection, must be properly documented, if such procedure is required by the relevant authority

**Category Codes**

A – Mandatory – failure to comply result in a significant reduction of flight safety, injury or death  
 B – Recommended – failure to comply may result in reduced safety margin, injury and/or equipment damage  
 C - Optional – improves operating behavior, reliability and/or maintainability

<b>Chief Certification Officer</b>	<b>Chief Technical Officer</b>

<b>Contact &amp; Info:</b> <a href="mailto:airworthiness@auto-gyro.com">airworthiness@auto-gyro.com</a> <a href="http://www.auto-gyro.com">www.auto-gyro.com</a>	<b>AutoGyro GmbH</b> Dornierstr. 14 31137 Hildesheim
--	--

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

It has been found that the threaded holes in the first batch of pneumatic clutch III (2017) Pressure Plate front (2) are not sufficiently countersunk to accept the countersunk screws securing the Pressure Disc PKII (1). The effect is that the screws are unable to properly clamp the disc and plate together, possibly leading to looseness, rattle noise, and wear of this connection.

This bulletin issues instructions for the inspection of the clutch, countersinking of the threaded holes, and replacement of any damaged parts as required.

**Manpower estimates**

The task may only be performed by an organization or individual entitled and trained to do.

Estimated man-hours to complete the task as a stand-alone item is:

approx. 4 to 8hours depending on the installation and documentation requirements.

**Tooling required**

45° countersink tool may be required.

**Weight and Balance Effects**

No significant effect

**Manuals affected**

POH AutoGyro and AMM AutoGyro are not affected.

**Previous Modifications that affect the SB**

None

**Accomplishment instructions (Action required to implement this bulletin):**

Effective date of this SB is 30<sup>th</sup> August 2018

**Instructions**

1. Remove any cowlings required to gain access to the clutch assembly.
2. Remove the pneumatic clutch from the engine in accordance with AMM job card 63-11-10 4-1.
3. Remove the center screw retaining the pressure plate assembly (31713) to the clutch in accordance with AMM job card 63-11-10 8-1 part 4.
4. Remove the pressure plate assembly (31713) from the clutch and remove the 4 countersunk screws (3) securing the pressure disc (1) to the pressure plate front (2).
5. Inspect for signs of rotational movement of the pressure disc (1) on the pressure plate front (2), and/or elongated holes in the disc (1). If damaged, replace (article 23604).
6. Inspect the complete clutch assembly for any further damage and replace any affected parts (eg. 31713 Pressure Plate Mounted).
7. Inspect the pressure plate front (2) and ensure that the threaded holes (4) are countersunk to a

- depth of 1mm with a 45° countersink. If not, re-work with a suitable countersink tool.
8. Re-assemble the clutch in reverse order of disassembly.
  9. Assemble the clutch to the engine in accordance with AMM job card 63-11-10 4-1.
  10. Re-fit any cowlings previously removed.
  11. Ground run the aircraft in a suitably secured area, including a pre-rotation clutch functional check.
  12. Note the SB action within the aircraft documentation.

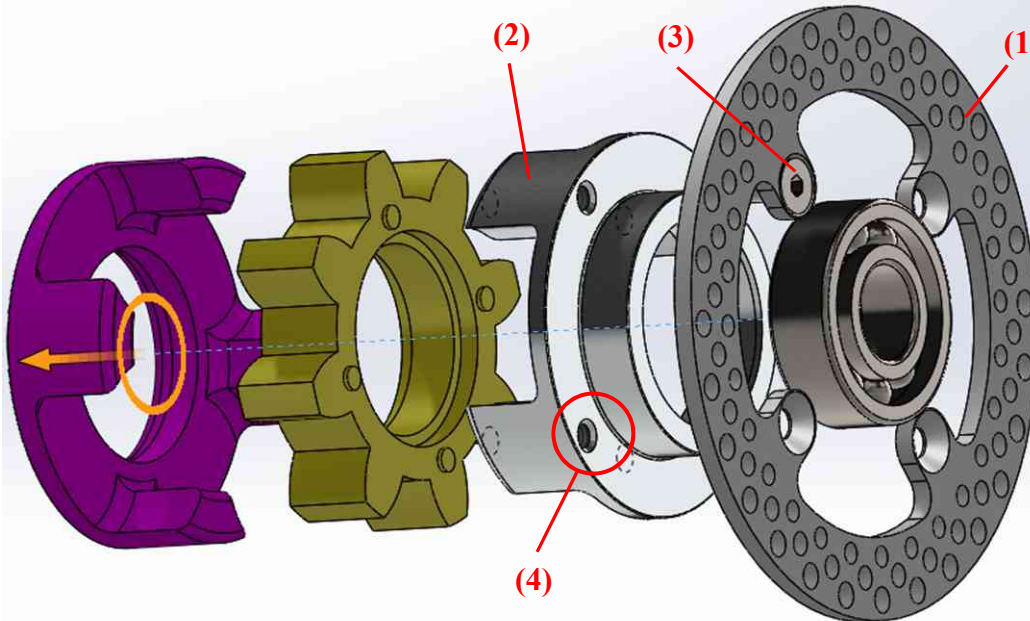


Fig. 1 - Pressure Plate Assembly (31713)

**Completion of this Service Bulletin must be recorded**

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

23604 Pressure Disc PKII (if required)  
 31713 Pressure Plate Mounted (if required)

**List of components (with purchasable part nos)**

Consumables used: Loctite Blue 243 (30483)

**Interchangeability**

Not affected

**Parts disposition**

- a) Disposal requirements – Normal waste
- b) Environmental hazards of parts containing hazardous materials - None
- c) Scrap requirements (e.g. mutilate scrapped items beyond use) – Not applicable