RotorSport UK Ltd Service Bulletin (Permit)

Title: MTOsport 2017 mast drain hole		Release date 17.06.2019
SB-133 lss1	Related documents Modification: CCAR No.: None	Compliance Category:
Applicability		RECOMMENDED or
Aircraft type & model: MTOsport 2017	Aircraft serial Nos. affected: Serial 001 to 011	MANDATORY
The maintenance manual to be referenced is this stated or subsequent issue.		e. RSUK0395 Iss 1

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 A3-7 Authorised Person to certify that the work is completed by writing '*SB-133 Mast drain hole 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				
Engineering Manager	CVE (as required)	Chief Test Pilot (if flight performance or safety effect) Not required	Head of Airworthiness	

RotorSport UK Ltd Service Bulletin (Permit)

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

It has been found that during production of the main frame, the main mast root drain hole (See appendix) may have been left out of the frame assembly on a small number of MTO2017 frames currently in the world market.

This may lead to flushing fluids used during the electrochemical polishing process remaining trapped in the front mast tube.

The fluid entrapment is not a safety issue, but undesirable.

This Service Bulletin issues instructions on how to check that the drain hole is present, and release any fluid should the drain hole not be present.

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 is; approx. 30-45mins, depending on findings.

<u>Compliance</u>

Before, or at the latest at, next scheduled servicing.

Tooling required

Normal hand tools.

Weight and Balance Effects

No effect

Manuals affected

No effect

Previous Modifications that affect the SB

None

Accomplishment instructions (Action required to implement this bulletin):

The task is to be carried out in accordance with AutoGyro SB, number AG-SB-2019-01-A-EN attached as an appendix to this document.

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

No parts made during embodiment

List of components (with purchasable part nos)

None

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) Normal plastic waste or recycling.



AG-SB-2019-01-A-EN		Compliance Category:
Applicability		A - MANDATORY
Aircraft type & model:	Affected Serial number(s):	B - RECOMMENDED
MTO2017	All MTO2017 models	C - OPTIONAL
The maintenance manual to be referenced is this stated or subsequent issue.		As per AutoGyro website
This form is the response from AutoGyro		bund in the product in service requiring craft modification incorporation.

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 Code	<u>s</u>
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

Chief Certification Officer	Chief Technical Officer
Contact & Info:	AutoGyro GmbH
airworthiness@auto-gyro.com	Dornierstr. 14

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

It has been found that during production of the main frame, the main mast root drain hole (fig 1) may have been left out of the frame assembly on a small number of MTO2017 frames currently in the market.

This may lead to flushing fluids used during the electrochemical polishing process remaining trapped in the forward mast tube.

This Service Bulletin issues instructions on how to check for presence of the drain hole and how to release any fluid should the drain hole not be present.

Manpower estimates

The task may only be performed by an organization or individual entitled and trained to carry out maintenance on AutoGyro aircraft.

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

approx. 30-45 minutes dependent on findings.

<u>Compliance</u>

Before, or at the latest at, next scheduled servicing.

Customer Support

Not applicable. Labour hours and materials are not covered by this SB.

Tooling required

Standard tools.

Weight and Balance Effects

Nil

Manuals affected

POH AutoGyro and AMM AutoGyro are not affected.

Previous Modifications that affect the SB

None

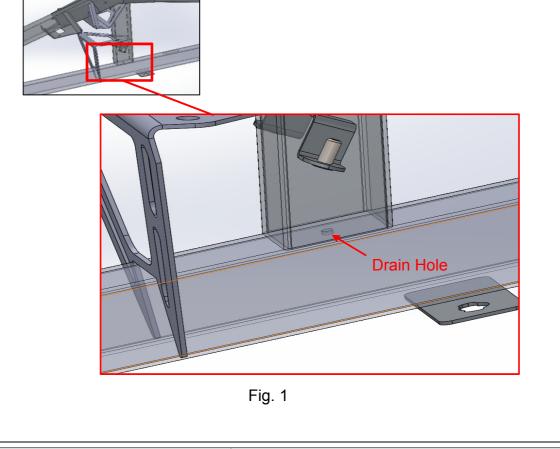
Accomplishment instructions (Action required to implement this bulletin):

Effective date of this SB is 1st April 2019.



Instructions

- 1. Initially find out if a hole is present:
 - a. Remove the mast fairing if fitted.
 - b. Remove the screws attaching the side fairings to the mast (fig 2).
 - c. Carefully pull either the left or the right side cowling to the side to gain access to the lower screw hole.
 - d. Using a suitable syringe inject 500ml of distilled water into one of the lower of the mast securing holes (fig 3).
 - e. If distilled water is observed emanating from the rear keel tube lower drain hole (fig 4) then the mast drain hole is present. No further action is required. Re-assemble the side & mast fairings.
- 2. If no fluid is seen to escape from the keel tube drain hole, remove the oil cooler air-scoop (if fitted) to gain access to the mast root.
- 3. Position a suitable receptacle under the aircraft to catch any fluid that may be released.
- 4. Centre-punch, then drill a 5mm hole on the left rear side of the mast root 5mm above the weld, 8mm forward of the rear vertical curved edge (fig 5) and allow any trapped fluid to fully drain.
- 5. De-burr the 5mm hole.
- 6. If clear fluid (water) escapes from the 5mm hole, go to step 8.
- 7. If coloured fluid emits, then the cavity requires flushing:
 - a. Tape over the previously drilled 5mm hole.
 - b. Using a suitable syringe, inject 500ml of distilled water into one of the lower of the mast securing holes (fig 3), remove the tape and allow to drain.
 - c. Carry out steps a. and b. a minimum of 3 times or until clear water drains from the hole.
- 8. Remove any residue fluid from the frame/components and dry the area.
- 9. Re-assemble the oil cooler fairing, side and mast fairings.



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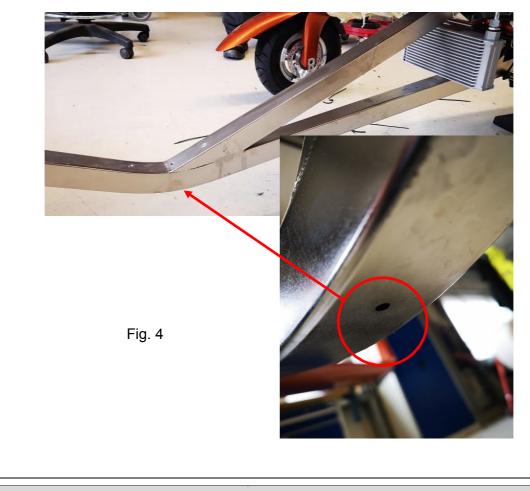




Fig. 2

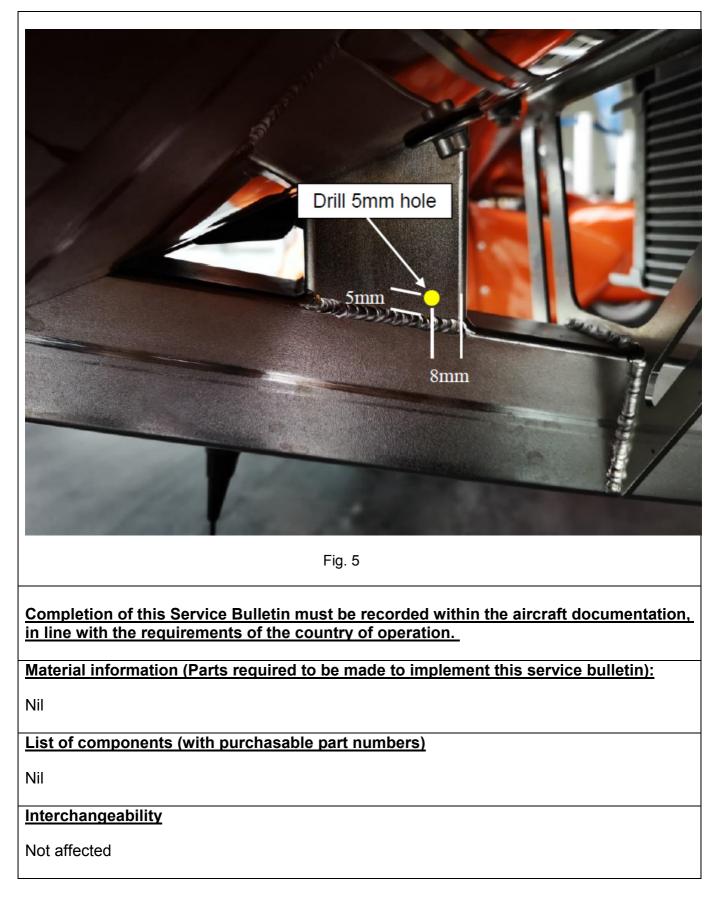


Fig. 3



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Parts disposition

a) Disposal requirements - Disposal of oil and/or chemical fluids iaw local directives

b) Environmental hazards of parts containing hazardous materials – Environmental hazards associated with the disposal or storage of chemical substances

c) Scrap requirements (e.g. mutilate scrapped items beyond use) – Not applicable