

Title: IVO Motor Replacement Part			
AG-SB-2021-08-B-EN	Effective Date: 06 Sep 2021	Compliance Category:	
Applicability		A - MANDATORY	
Aircraft type & model:	Affected Serial number(s):	B – RECOMMENDED	
All AutoGyro models	All AutoGyro models fitted with an IVO propeller	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 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 airworthiness@auto-gyro.com.

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 	

Chief Certification Officer	Chief Technical Officer

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

The IVO propeller pitch adjustment motor reliability does not meet AutoGyro and market expectations, despite the many improvements implemented.

The propeller manufacturer, IVO corp, have now incorporated a different electric motor. The new motor has been tested by AutoGyro and a modified version accepted for market release.

This version incorporates capacitors to reduce electrical interference noise and subsequent effect on the aircraft radio reception.

Functional testing demonstrates that this motor offers a substantial improvement in reliability.

This service bulletin provides instructions on how to replace the IVO motor and update the control board software if required.

Manpower estimates

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

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

2.0 -3.0 hrs

Compliance

This bulletin is recommended and has no compliance timeline. It must however be complied with at the next IVO propeller motor replacement.

Customer Support

Materials and labour hours are not covered by this Service Bulletin unless the replacement is covered under warranty and a completed Incident Report submitted.

Tooling required

Standard tools including a suitable Allen key where the instrument panel has to be removed.

If the control board is to be locally upgraded:

- Laptop computer with USB port and MyAVR_Prog Tool software installed.
- MyAVR USB stick (see <u>http://shop.myavr.com/index.php?sp=article.sp.php&artID=200006</u>)
- Connection cable with female 6-pin termination block, normally provided with the USB stick. A longer cable may be purchased.

NOTE! The plastic termination block which fits to the control board may require some fettling to fit to the board, to account for the potting compound poured over the board during manufacture.



Weight and Balance Effects

Nil

Manuals affected

POH & AMM AutoGyro are not affected.

Previous Modifications that affect the SB

None

Accomplishment instructions (Action required to implement this bulletin):

All work is to be carried out in accordance with the latest model-relevant AutoGyro Aircraft Maintenance Manual.

Instructions

Ensure the wheel brake is applied and the ignition/mag switches are switched off/key removed.

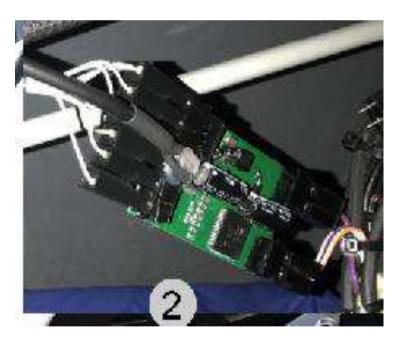
- 1. Remove the propeller spinner if fitted.
- 2. Replace the IVO propeller motor (Pic. 1) with the new version (48213) in accordance with 'RSUK0325 Issue 2 RotorSport IVO-prop Manual' available in the maintenance section of the AutoGyro home page.
- 3. If the software version of the IVO control board (34652) (Pic. 2) is V1.4 then no further action is required. Continue to the functional checks in step 6.
- 4. If the software version of the IVO control board is any other than V1.4, the software must be updated or reverted to V1.4.
- AG-SB-2018-07-B describes the process and options for updating the IVO-prop control board software, and where the actual software version number can be found. This service bulletin AG-SB-2021-08-B is authority to use AG-SB-2018-07-B to upgrade or revert the IVO-prop control board to version V1.4 when installing the new version of motor.
- 6. If an upgrade is to be carried out at location, the software file can be requested from <u>airworthiness@auto-gyro.com</u>.
- 7. If the control board is to be replaced, a bill will initially be raised for the new item, and a credit note issued on receipt of the original item.
- 8. Carry out a functional check in accordance with AG-SB-2018-07-B steps 6 & 7.
- Suitably secure the aircraft and carry out a ground run to check propeller dynamic function and maximum and idle engine speeds. Adjust in accordance with the IVO Manual RSUK0325 Issue 2 RotorSport IVO-prop Manual' available in the maintenance section of the AutoGyro home page.
- 10. Replace the propeller spinner if applicable.
- 11. Carry out a tool and loose article check.



Illustrations



Pic. 1



Pic. 2

Completion of this Service Bulletin must be recorded within the aircraft documentation, in line with the requirements of the country of operation.

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

Contact & Info: airworthiness@auto-gyro.com www.auto-gyro.com AutoGyro GmbH Dornierstr. 14 31137 Hildesheim

Service Bulletin



Nil

List of components (with purchasable part numbers)

48213 Ivoprop replacement motor - interference suppressed 34652 IVO-Controlboard IVO-Endlagenanzeige_v1.4 Software

Interchangeability

Not affected

Parts disposition

a) Disposal requirements - Normal waste

- b) Environmental hazards of parts containing hazardous materials Nil
- c) Scrap requirements (e.g. mutilate scrapped items beyond use) Nil