

Title: Door adjustment Cavalon		
AG-SIL-2024-03-EN		Released: 1 st of September 2024
Applicability		
Aircraft type & model: Cavalon	Affected Serial number(s): All	
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.</p> <p>For help, contact AutoGyro, email: airworthiness@auto-gyro.com.</p>		

Documentation (Service Information Letter Completion action)

The purpose of this document is to provide maintenance personnel with information over and above that currently available in the relevant AMM. Its compliance must be properly documented, if such procedure is required by the relevant authority

Document approval signatures	
Head of Engineering	Head of Airworthiness
The technical content of this document is approved under the authority of the UK CAA Design Organisation Approval Ref: DAI/9917/06	

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Reason and overview of the Service Information Letter

The AutoGyro slam-shut door catches are effective and easy to use. Like all cable controlled systems, there may be settling in during the first hours of flight or over time that requires adjustment. The purpose of this SIL is to communicate the means to do this.

Note; it may be that a door comes open in flight as a result of latch system wear or mis-adjustment. The normal airflow around the body means that the doors are pushed closed, and there is no danger of a door opening fully or becoming dislodged in flight.

Manpower estimates

A max of 1 hour is estimated to adjust the door in case an adjustment is necessary.

Compliance

There are no compliance requirements associated with this SIL.

Customer Support

Can be contacted if necessary.

Tooling required

Standard tools

Weight and Balance Effects

Nil

Manuals affected

POH & AMM AutoGyro is not affected

Previous Modifications that affect the SIL

None

Accomplishment instructions (Action required to implement this SIL):

Construction

The door catch system comprises a sprung loaded lever, which, when operated, pulls two cables towards the centre of the door. These two cables are each attached to a spring loaded latch pin. The springs extend the pin out of their holders when the lever is released. The pins each engage behind a latch plate mounted on the aircraft body at the front and rear of the door.

Probable causes of latch disengagement;

1. Insufficient lubrication of the pin or the latch plate. The pin slide surfaces should be lightly oiled, it must move freely and smoothly inside the housing. The latch plate requires a light grease to enable the pin to slide over it.
2. Misadjusted pin. The pin must be able to extend properly behind the latch plate in order to secure the door
3. Misadjusted latch plate. The lateral position of the pin must be set such that the door is flush to the body when closed, and that the door can be closed further against the door seal so that there is some free play. In the fore and aft direction, the latch plate may be adjusted forwards to increase the contact surface to the pin.

Check for grease



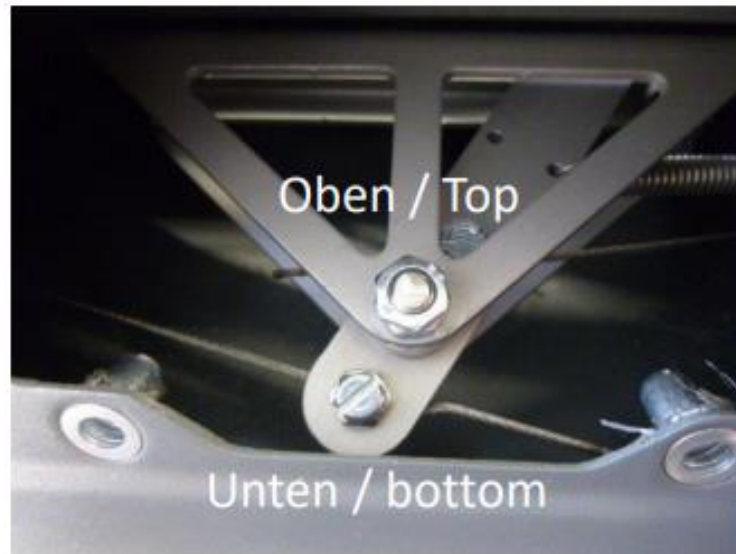
Always check if there is a little bit of grease, vibrations and parts without grease can cause the door opening



Oil this surface

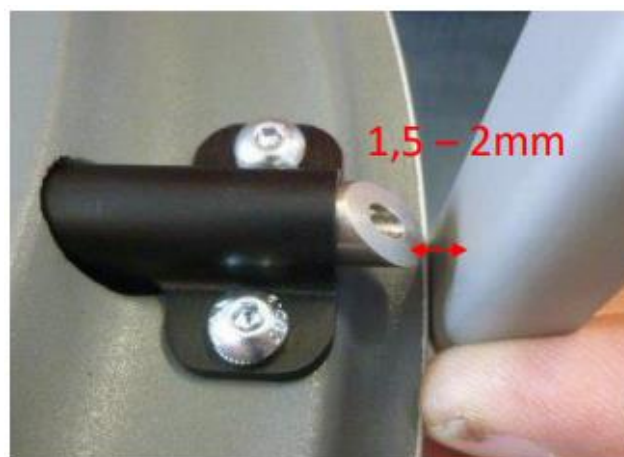
Adjustment (pins)

1. Open the maintenance cover on the bottom of the door. Access is then possible to the two latch pin cables.



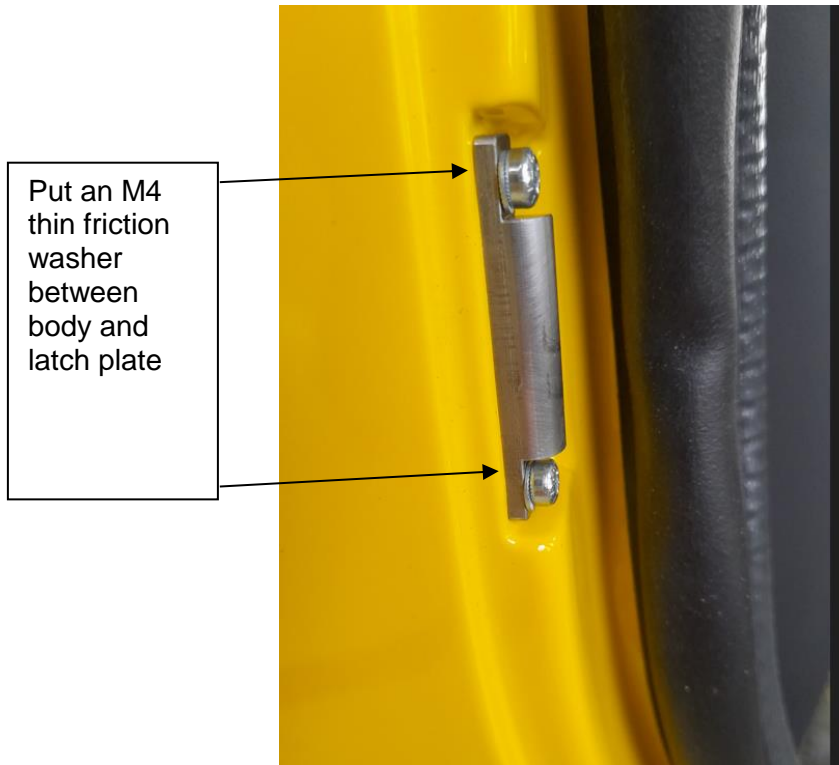
Top = latch pin cable assy (snapper) short
 Bottom = latch pin cable assy (snapper) long

2. Loosen one cable clamp screw at a time and adjust the wire clamping so that the locking pin is set to a gap of 1.5 - 2mm between the pin and outer edge of the door as per the photo below. Be carefully while loosening the screws, the pins are spring loaded!
3. After adjustment securely tighten the cables.
4. Check: When the lever is in fully open position, both snappers must still be moveable about a minimum of 0.5mm axial in their position. This is to prevent overstretching of the cables when operating the door opening lever.
5. Close the door and ensure it opens and closes effectively.
6. Refit and the access hatch and fastenings.



Adjustment (latch plate)

If the adjustment done on the door pin is not sufficient than small washers can be added under the latch plate to reduce the distance between the plate and the pin.



Any life-limit changes must be recorded within the aircraft documentation, in line with the requirements of the country of operation.

Nil

Material information (Parts required relevant to this service information letter):

Nil

List of components (with purchasable part numbers)

Nil

Interchangeability

Not affected

Parts disposition

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