

Title: Cavalon, Calidus, MTOSport 2017 Rotax 915 /916 iS Dual Engine Generator Failure Risk		
AG-SB-2024-07-A-EN iss 3	Effective Date: 19.12.2024	Compliance Category: A - MANDATORY B – RECOMMENDED C – OPTIONAL
Applicability		
Aircraft type & model: Calidus, Cavalon, MTOSport 2017	Affected Serial number(s): See list	
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 airworthiness@auto-gyro.com.</p>		

This SB is updated 19.12.2024 to remove cessation of flight and to permit aircraft operation in accordance with that published in the Rotax SB912 i-016iS SB-915 i-016iS SB-916 i-006iS.

Documentation (Service Bulletin Completion action)

The accomplishment of this Service Bulletin, or the decision of its rejection, must be properly documented within the aircraft records, in line with the requirements of the responsible aviation Regulatory Authority.

A worksheet may be attached to this bulletin to aid correct embodiment of this SB. This should be completed and retained with the aircraft records.

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

Document approval signatures

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

AutoGyro has been made aware of a potential dual generator failure issue within the Rotax iS engines supplied to AutoGyro as per the below list of affected aircraft later in this document. The iS engine contains two generators, one that supplies the engine demand and one that supplies the aircraft demand. Normally a failure of the engine generator is failsafe; the management system automatically assigns that aircraft generator to the engine, and the engine continues to run normally.

In the unlikely event that the aircraft supply generator also fails, then the engine may stop. A dual failure is a known risk and mitigated by the fitment of the 'Battery Backup' switch. Activation of this switch enables the engine to be electrically powered from the battery alone, allowing engine restart (if stopped / required) and continued safe flight to a precautionary or normal landing. See also AutoGyro PIL-2024-01-EN (provided at the rear of this document).

Previously the risk of failure of both generators at the same time was assessed as very unlikely, whereas recent service information has shown that a Rotax engine manufacturing fault may exist where both generators become unserviceable at the same time due to a full or part blockage of the stator cooling supply. This may be an on-off failure, or a gradual reduction of generating capacity over a relatively short time period.

It is not possible to establish at this time which specific engines are affected by this blockage or yet to predict the time to failure. The list of affected engines within this SB and within the Rotax SB includes all those engines affected, but not all those in the list may have the blockage.

Previously this AutoGyro bulletin mandated cessation of flight. This requirement has been removed following the publication of the Rotax service bulletin, within which Rotax permit continued engine operation within specified limits. Instead, AutoGyro mandates inspection and rectification as required within Rotax Service Bulletin SB-912 i-016iS_SB-915 i-016iS_SB-916 i-006iS.

This Rotax bulletin provides a means to check the serviceability of the generators, to ensure correct generator cooling, and provide a means to rectify any fault found with the cooling supply or generator.

Affected aircraft with engine number.

NOTE: this list must be read in conjunction with the list published in the corresponding Rotax Service Bulletin. The Rotax published list take precedence.

Type	Engine no	Aircraft serial	Type	Engine no	Aircraft serial
916 iS3 A	10,004,830	C00583	915 iS3 A	10,000,602	V00566
916 iS3 A	10,003,679	C00588	915 iS3 A	10,003,706	V00567
916 iS2 A	10,004,835	C00589	916 iS3 A	10,001,818	V00571
916 iS2 A	10,006,606	C00590	915 iS3 A	10,000,286	V00572
916 iS2 A	10,006,603	C00591	916 iS3 A	10,001,821	V00573

915 iS3 A	9,133,878	M01983	916 iS3 A	10,001,939	V00574
915 iS3 A	10,000,284	M01985	915 iS3 A	10,000,608	V00575
915 iS3 A	9,133,868	M01988	915 iS3 A	10,002,933	V00576
915 iS3 A	9,133,929	M01990	916 iS3 A	10,004,759	V00577
915 iS3 A	9,134,197	M01994	915 iS3 A	10,000,605	V00578
915 iS3 A	10,003,707	M02006	915 iS3 A	10,004,308	V00579
916 iS3 A	10.001.945	M02009	915 iS3 A	10,003,869	V00580
916 iS3 A	10,001,946	M02010	915 iS3 A	10,003,871	V00581
916 iS3 A	10,001,940	M02017	915 iS3 A	10,003,870	V00582
916 iS3 A	10,007,534	M02021	916 iS3 A	10,001,820	V00584
915 iS3 A	10,003,872	M02022	916 iS3 A	10,003,678	V00584
916 iS3 A	10,007,535	M02027	916 iS3 A	10,004,761	V00586
915 iS3 A	9,133,867	V00541	916 iS3 A	10,004,834	V00587
915 iS3 A	10,000,287	V00542	916 iS3 A	10,004,833	V00588
915 iS3 A	10,000,609	V00545	916 iS3 A	10,004,832	V00589
915 iS3 A	10,000,316	V00546	916 iS3 A	10,004,831	V00590
915 iS3 A	10,000,603	V00548	916 iS3 A	10,005,664	V00591
915 iS3 A	9,133,926	V00549	916 iS2 A	10,006,604	V00592
915 iS3 A	9,133,760	V00551	916 iS2 A	10,006,608	V00593
915 iS3 A	9,133,877	V00552	916 iS3 A	10,004,760	V00594
915 iS3 A	9,133,876	V00553	916 iS3 A	10,004,758	V00595
915 iS3 A	9,133,927	V00554	916 iS3 A	10,005,550	V00596
915 iS3 A	9,133,930	V00555	916 iS2 A	10,006,609	V00597
915 iS3 A	9,133,928	V00556	916 iS3 A	10,004,661	V00598
916 iS3 A	9.133.932	V00557	916 iS3 A	10,006,657	V00603
915 iS3 A	9,134,265	V00558	915 iS3 A	10,006,663	V00604
915 iS3 A	10,000,283	V00559	916 iS3 A	10,006,658	V00607
915 iS3 A	9,134,196	V00560	916 iS3 A	10,006,656	V00608
915 iS3 A	9,133,879	V00562	916 iS3 A	10,006,659	V00609
915 iS3 A	10,000,285	V00565	915 iS3 A	10,006,664	V00610
916 iS2 A	10,006,610	V00611			

Manpower estimates

See Rotax SB SB-912 i-016iS_SB-915 i-016iS_SB-916 i-006iS. Allow an additional 6 hours to prepare for inspection and to return the aircraft back to service. Time to rectify any fault found depends on the actions required, and in some cases may require engine removal.

Compliance

None

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Customer Support

Can be contacted for questions.

Tooling required

The Rotax SB SB-912 i-016iS_SB-915 i-016iS_SB-916 i-006iS specifies the implementation requirements and the special tools required.

AutoGyro special tool 35790 (existing) or 50060 (new low profile version for easy access) is required in order to remove the pre rotator gearbox clutch drive gear.

Weight and Balance Effects

None

Manuals affected

POH & AMM AutoGyro is not affected

Previous Modifications that affect the SB

None

Accomplishment instructions (Action required to implement this bulletin):

See Rotax SB SB-912 i-016iS_SB-915 i-016iS_SB-916 i-006iS

Any life-limit changes 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):

None, this SB is information only, the Rotax SB will advise parts required

List of components (with purchasable part numbers)

See Rotax SB SB-912 i-016iS_SB-915 i-016iS_SB-916 i-006iS

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