

SERVICE BULLETIN – MANDATORY - SB 009

Model:	M24C					
A/C Reg:	G-CGPB	G-CGRT	G-CGRY	G-CGRZ	G-CGTI	
	G-YROR	G-YRAX	G-PLOP	G-CGTK		
A/C SN:	24105964	24106044	24106134	24106004		
	24106094	24116034	24116204	24116214	24116194	

Amendment Record					
Issue	Summary of Changes				Date
1	(Original issue)				02/03/11
Author	Date	Approved	Date	Approved	Date
Rob Littlewood		David Lunn		Rob Littlewood	

SB TITLE – Rudder Pedal Block

REASON (for Mod/Action/Inspection)

Following an in-flight failure of the pilots rudder pedal mounting block (Part No. 514-05-25) a subsequent investigation concluded that the part failed due to an incorrectly machined fillet radius. The fillet radius had a sharp inclusion machined into the radius that significantly increased the stress at the base of the pivot boss that led to the part breaking after only 55 hours.

The resulting investigation concluded with the recommendation that all rudder pedal blocks fitted to the UK fleet should be replaced with a redesigned bracket before further flight is permitted.

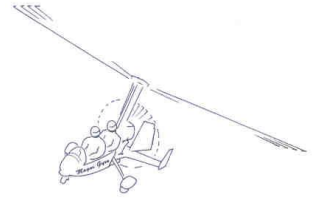
This service bulletin defines the procedure to remove the two previous pedal blocks and replace both with the redesigned brackets.

COMPLIANCE (Include Date of Effectivity and Timescales for embodiment)

This service bulletin is effective from 02/03/2011.

The service bulletin has been classified as mandatory by the CAA and must be embodied before further flight.

Compliance is mandatory and must be embodied by an approved engineer.



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REFERENCE DOCUMENTS

Magni Gyro Ltd Drawing Nos. 514-05-24.

OTHER PUBLICATIONS

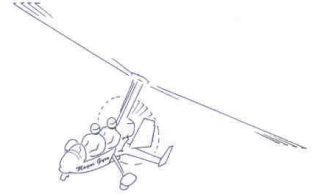
None

TOOLING



MATERIALS AVAILABILITY

Part No. 514-05-24 – Issue B is available immediately from Magni Gyro Ltd. Two off parts are required, per aircraft, for the embodiment of this service bulletin.



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MAN HOURS

2

WEIGHT & BALANCE

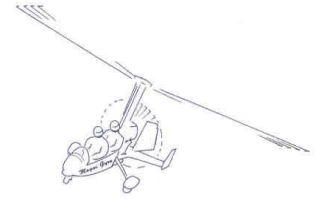
No change

ELECTRICAL LOAD

No change

AUTHORISED PERSONNEL

The modification can only be embodied by Magni Gyro authorised engineers.



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ACCOMPLISHMENT INSTRUCTIONS

010

Ensure that the aircraft magneto switches are “off”, the master switch is “off” and that the circuit breakers at the bottom of the instrument panel are “pulled” (off).

020

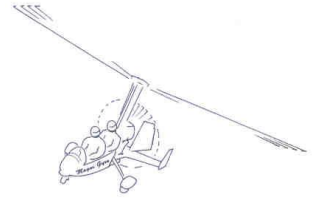


Remove the floor mat on passenger side

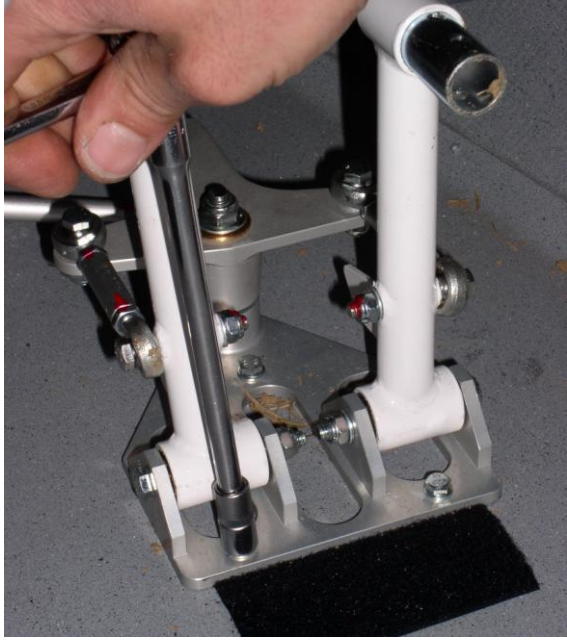
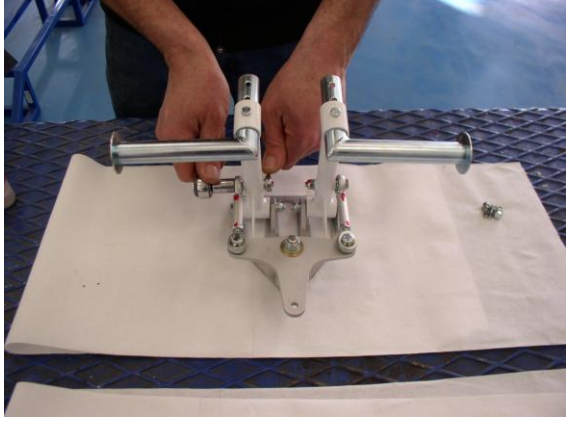
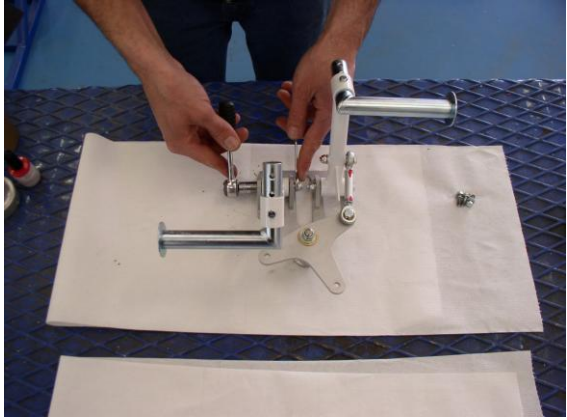
030

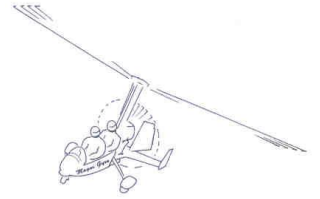


Remove the bolt connecting the central rudder control rod (part 522) to the pedal block link (part 517) by removing the M6x25 bolt.



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040		Remove the three M5x16 bolts connecting the control block to the floor.
050		Disconnect the pedal block link (Part 517) from the rudder control rod (part 521) by removing the M6x40 bolt.
060		Disconnect and remove the rudder pedals (Part 519) by removing the M6x55 bolt. Pedals (part 519)



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070

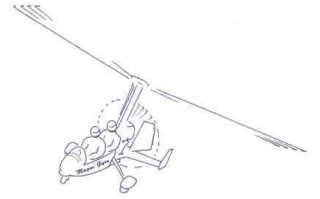


Place the rudder pedals on the new pedal block using the M6x55 screw, one washer on the nut side, and a new nyloc nut.

080

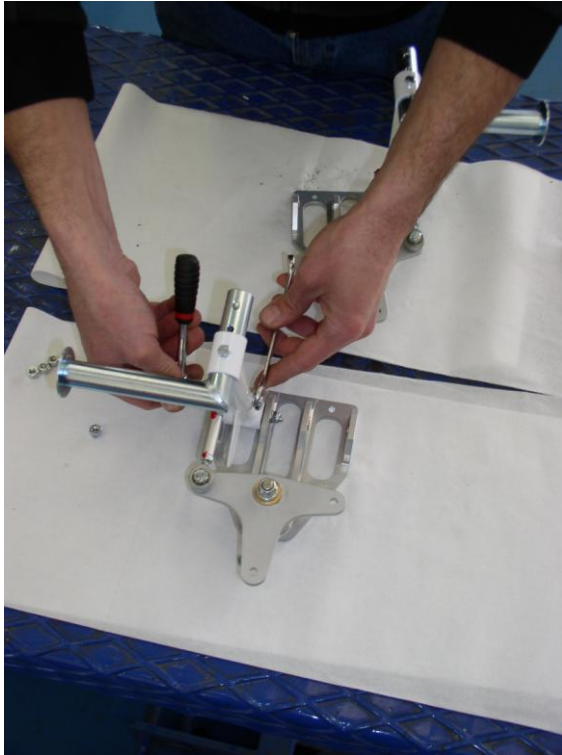


Replace the control rod (part 521) on the new pedal block link, securing with the M6x25 bolt, one washer on the head side (under the rod end bearing), one washer on the nut side, and a new nyloc nut.



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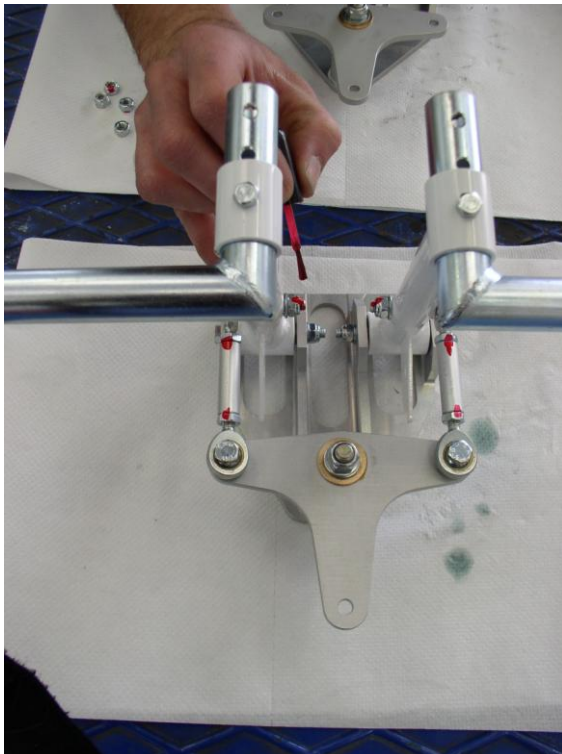
090



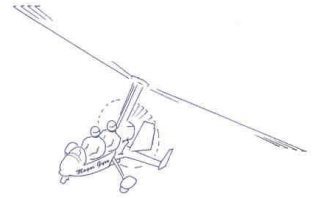
Connect the control rod (Part 521) to the rudder pedal using a M6x40 bolt, one washer on the nut side, and a new nyloc nut on the bolt.

Ensure full and free movement of the pedal linkages.

100



Use tamper evident paint to mark each nut position on the bolt.



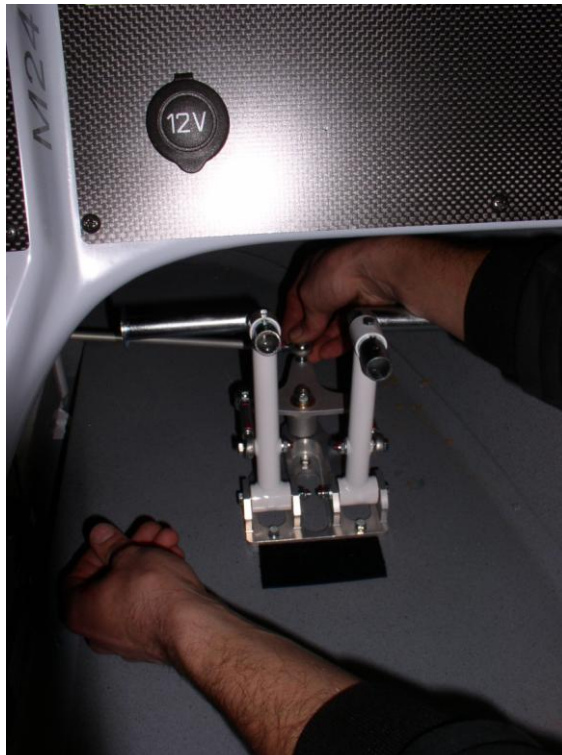
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110

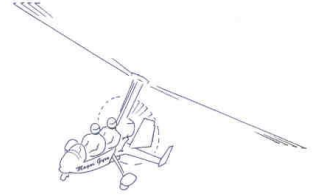


Secure the rudder control block to the floor using the M5x16 bolts. Make sure to maintain position of the Velcro for the floor mat under the rudder pedals.

120



Secure the rudder control rod (part 522) to the pedal block link (Part 517) with the M6x25 bolt, one washer on the head side (under the rod end bearing), one washer on the nut side, and a new nyloc nut.



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130		Repeat all steps for pilot side rudder control block.
<p>FUNCTIONAL CHECKS</p> <p>Check:</p> <ol style="list-style-type: none">1. Full and free movement of the pilot rudder pedal linkages.2. Full and free movement of the co-pilot rudder pedal linkages. <p>Re-set circuit breakers and check that the Master switch powers up the aircraft correctly.</p>		
<p>CONTINUED AIRWORTHINESS</p> <p>The actions in this service bulletin must be completed by a CAA approved person. Update the aircraft logbook to reflect the work carried out, including reference to the Service Bulletin number. The person undertaking the modifications must sign the aircraft logbook and include their CAA authorisation number.</p>		
<p>INFORMATION / INSTRUCTIONS PREPARED BY SUB-CONTRACTORS / VENDORS</p>		

Note Details of the embodiment of this Service Bulletin, together with any associated Magni Gyro modifications, DQNs and Concession Reports are to be recorded in the aircraft technical records.