

ref SB141 Hang Bolt Locking Plate

**SERVICE BULLETIN NUMBER 141, Issue 4.**

<b>TITLE</b>	Hang Bolt Locking Plate (modification M308).
<b>CLASSIFICATION</b>	P&M Aviation have classified this bulletin as essential.
<b>COMPLIANCE</b>	Within the next 25 hours or at next permit revalidation if sooner.
<b>APPLICABILITY</b>	P&M QuikR, GTR.

**1) INTRODUCTION**

Some instances of the hang bolt head rotating have been found with damage to the safety lanyard. The pinch nut slackens off, promoting wear in the assembly. The bolt rotation is driven by yawing loads between the trike and wing in turbulence.

The problem seems to be most prevalent on the QuikR and GTR where the hang bolt is inserted from the RH side. Modification M308 is essential for these wings. The modification may also be fitted to the Q2, Quik and GT450 wings if desired.

Note the hang bolt is intended to be tight and the bearing surface should be between the pylon top bearings and the pylon sleeve, not the hang bolt. Sometimes the nylon bearings swell and stick in the sleeve, new bearings are made in acetal which does not swell.



Fig 1 twisted lanyard

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**2) ACTION**



**Fig 2 Locking Plate ZMS-365 ( Modification M308)**

- 1) Unscrew the rear right hand side M6 fastener which secure the hang bracket block. It may be necessary to apply some heat to the block with a hot air gun to soften the Loctite.
- 2) Fit the locking plate ZMS-365 and align it using the hang bolt with the head locating in the locking plate. The scallop goes forwards, to clear the upright channels when folding the control frame back. Coat the threads of the countersunk M6 x 35mm fastener FSM6-35 with Loctite 222 and tighten to 10NM torque. Note it is possible to fit the locking plate to a fully rigged aircraft by passing the lanyard through the hexagonal hole.

**Warning: Never leave the hang bolt in the wing hang bracket when de-rigging the wing as if the control frame is folded back, the uprights, top fittings and hang bolt will all be damaged. Always keep the bolt and nut, secured with the lanyard, in the top of the trike pylon. This will also ensure the trike pylon bushes are retained during transport.**

**3) Documentation**

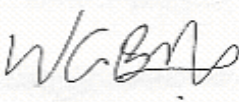
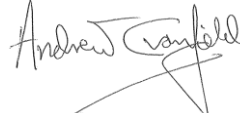
The aircraft technical log must be signed " Service bulletin SB141 (hang bolt locking plate) carried out" by an owner/operator against his or her pilot's licence number. The M6 bolt securing the locking plate must be checked for security every 50 hours.

**4) Continued Airworthiness**

At each permit revalidation, the inspector must check the technical log has been signed, the service bulletin has been complied with, that the hang bolt head is locked by the locking plate and that the pinch nut is secure.

**ISSUED BY** W.G.Brooks

**DATE**

Approved		Date 06/10/ 2016	Checked		Date
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