

FAA: Coness Date: AUG 10 2004

## Service Bulletin No. 25

Page 1 of 2 Date: 08/13/04

**SUBJECT:** Elevator Trim Tab Hinge

<u>AIRPLANES AFFECTED</u>: All Maule Models delivered from the factory between June 23, 2003 and August 1, 2004. Replacement trim tabs or hinges shipped from the factory during this period should also be inspected in accordance with this Service Bulletin.

<u>STATUS:</u> This Service Bulletin is cautionary concerning the possibility of premature wear of the elevator trim tab hinge pin. (Trim Tab Assembly P/N 3231E)

BACKGROUND: Maule has discovered that a commercial part number hinge may have been installed in a few airplanes instead of the specified MS20257P3 military type hinge. Combined errors on the part of Maule and the hinge supplier appear to have caused this discrepancy. The MS part is an aluminum piano hinge with a cadmium plated corrosion resistant steel pin. The commercial hinge is identical to the MS part except that the hinge pin is aluminum. The concern is that the aluminum pin will wear more rapidly than the steel pin. The above airplanes and parts listed under "airplanes affected" have the potential for having this problem. It is not possible for Maule to determine which of these airplanes may actually have the problem, if any.

<u>COMPLIANCE</u>: Compliance with this Service Bulletin is recommended at the next 100-hour or annual inspection as applicable.

## **ACTION TO BE TAKEN:**

Starting at the outboard end of the hinge, remove the screws attaching the hinge to the elevator. Loosen the last screw at the inboard end slightly, but leave it in place to react the load of the control cables. Pivot the tab away from the elevator and look at the underside of the hinge for the MS part number. This number is stamped with 1/16 characters adjacent to the pin approximately every 3 inches along the hinge and is visible through the paint. The presence of the number identifies the hinge as being proper and it may be permanently reinstalled.

The absence of the MS number or any number identifies the hinge as a commercial part and it must be replaced. The pin is not readily removable from the hinge, and it is recommended that the entire trim tab be replaced. Maule will supply a new trim tab with the correct hinge, painted and balanced at no charge in exchange for the original tab. The screw holes are located at assembly, so the new tab will not have the holes drilled. The holes may be located from the original tab. If preferred, the original tab may be returned to Maule first, and Maule will locate and drill the holes in the replacement tab and paint it the desired color.

Note: The swing out window uses the same hinge, and the aluminum pins may be installed in the windows of the affected airplane. In this location, the pin material is not critical as wear and loads are minimal. No action is required.

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## **COMPLIANCE RECORD SHEET**

Aircraft Model		
Aircraft Serial No		
Action taken (PLEASE CHECK):		
( ) Complied with this Maule Service Bulletin No	o. 25	
( ) Inspected and found satisfactory		
<ul> <li>Inspected Trim Tab Hinge and found p number. Replaced trim tab with new o Maule.</li> </ul>		
Total Time on airplane Hours		
Owner's Name		
Owner's Address		
City	State_	Zip
Certified bySignature	Title	
Signature		Owner, A & P. IA. Etc.
Date performed		-
If you no longer own this airplane, please fill in ne dress below:	w owner's	information and return to factory ad-
New Owner's Name		
New Owner's Address		
City	State_	Zip
Please mail this completed Compliance Record S	heet to:	
Maule Aerospace Technology, Inc.		

Maule Aerospace Technology, Inc. Attention: Virginia Davis, Engineering Records 2099 Georgia Highway 133 South

Moultrie, GA 31788 USA