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## **SERVICE LETTER**

### **No. 23 Rev.2**

(Supersedes the previous issue dated 12 November 2015)

Design Organisation Approval No. AS-SL/21/007 dated 29 September 2021

### **SUBJECT: RUDDER HINGES**

**AIRCRAFT AFFECTED:** All P.68 aircraft variants

## **ALERT**

### **TO ALL OWNERS / OPERATORS AND MAINTENANCE ORGANISATIONS OF P.68 AIRCRAFT VARIANTS:**

The purpose of this **ALERT** Service Letter is to clarify in detail the instructions for the check of the rudder hinges, scheduled for every 200 flight hours or 1 year, whichever occurs first.

#### **Instructions how to check the Rudder Hinges:**

1. Remove the screws attaching the fuselage/tail fairing assembly to the airframe structure and remove the top and bottom fairings;
2. Carefully clean the upper and lower rudder hinges with Methyl-Ethyl-Ketone or equivalent cleaning solvent and leave them to dry at air;
3. Visually check the upper and lower rudder hinges for looseness, security and safety. Check travel;

4. With the aid of a powerful light source and 10x magnifying glass, visually check the upper and lower rudder hinges for corrosion, cracks and general condition;
5. In presence of any damage, fill out the forms hereunder and send them to Vulcanair via e-mail at [continued.airworthiness@vulcanair.com](mailto:continued.airworthiness@vulcanair.com) or via fax at No. +39.081.5918172. Vulcanair will supply you a suitable repair suggestion;

<b>WARNING</b> <b>NO DAMAGE IS PERMISSIBLE</b>
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6. In case of doubts, referring to removal/installation procedure laid out in the latest applicable revision of the Aircraft Maintenance Manual, remove the rudder and inspect more accurately the hinges, with particular care their pivot/attachment holes, using a Dye Penetrant solution for manual non-destructive testing, in accordance with the following specific instructions (ref. MIL-I-25135):
  - Penetrant System: TYPE II (Visible Dye)
  - METHOD C (Solvent Removable)
  - Developer: FORM D (Non-aqueous)
  - Solvent Remover: CLASS 1 (Halogenated)
7. In absence of damage, if the rudder has been previously removed, reinstall it as per the removal/installation procedure laid out in the applicable Aircraft Maintenance Manual, then hand lubricate the hinges as per the Lubrication Chart in the Aircraft Maintenance Manual and reinstall the top and bottom fuselage/tail fairings as previously.

**In presence of any damage, fill out the following forms and mail or fax them to Vulcanair**

**AIRCRAFT AND OWNER-OPERATOR DATA**

<b>OWNER/OPERATOR</b> (include mailing address, phone number, fax number and e-mail address).	
<b>AIRCRAFT MODEL</b>	
<b>SERIAL NUMBER OF AIRCRAFT</b>	
<b>YEAR OF CONSTRUCTION</b>	
<b>AIRCRAFT REGISTRATION</b>	
<b>TOTAL AIRFRAME TIME</b>	
<b>AVERAGE FLIGHT HOURS PER YEAR</b>	
<b>TYPE OF OPERATION CONDUCTED</b>	
<b>AREAS OF OPERATION AND ENVIRONMENTAL CONDITIONS:</b> (Mild, Hot, Cold, Humid, Dry, Rainy, Saline, Sandy)	

<b>PREVIOUS REPLACEMENTS OF THE UPPER AND/OR LOWER HINGES OR REPAIRS CARRIED OUT</b>		
Date	Flight Hours	Reason for Replacement and/or Description of Repair

**RUDDER HINGES INSPECTION RESULTS**

<b>ITEM</b>	<b>INSPECTION RESULTS</b>
<b>UPPER HINGE</b>	
<b>LOWER HINGE</b>	