# **SERVICE BULLETIN 01/13**

**Publication Ref. Number: 116** 

**Date:** 16/April/2013

### **SUBJECT**

Inspection of Burner frame centre tube

#### **CATEGORY**

Mandatory before next flight

#### **APPLICABILITY**

Ultramagic BMK-050 and MK-21 burners, in either triple or quadruple assemblies, fitted with Centre Gimbal Block P/N CR-22-2500.

Figure 1 below shows an example of MK21 quadruple burner fitted with centre gimbal block (pointed with arrow for easier identification):

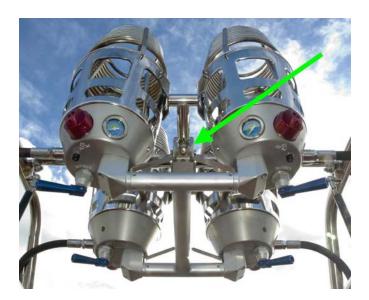


Figure 1 – MK-21 with Centre Gimbal block system

## **REASON**

Ultramagic has been reported of two broken centre tubes during undue road transportation conditions, out of the requirements of section 7.4 on the Ultramagic Flight Manual. These tubes support the burner when this is fitted using centre gimbal block.

The crack occurred in the middle of the tube, beneath the centre gimbal bottom cap.

## **COMPLIANCE**

Inspect the condition of the burner frame centre tube (Figure 2) beneath the centre gimbal bottom cap before the next flight.



Figure 2 – Triple Burner support tube with gimbal block assembled

To do so, proceed as follows:

- Using a 5mm AF Allen key, undo and remove the four M6 x 25 cap head screws and crinkle washers securing the Gimbal Bottom Cap to the Gimbal Block Body Assembly (refer to Figure 3). Note these fixings are positioned in the four corners. Remove the Gimbal Block Bottom Cap.



Figure 3 – Unscrewing the Gimbal Bottom Cap

- Now the tube is accessible for inspection, as shown in Figure 4. Use appropriate illumination to visually inspect the tube and its welding (close-up in Figure 5), making sure that there are no cracks or signs of damage. Use magnifying lenses if necessary.





Figure 4 Figure 5

- If the inspection is satisfactory and no signs of cracks or distortion are found, Gimbal Block Bottom Cap can be reassembled following the reverse procedure of removal. Replace the crinkle washers if these are bent or damaged. If necessary, the indicative torque required is of 4.5 Nm (3.3 lbf ft). Upon completion of re-assembly, adjust the two M5 screws to achieve the desired level of gimbal friction. In this case, it is mandatory to provide Ultramagic with the report of the inspection within a maximum of 10 days.
- **If cracks are found**, Ultramagic S.A must be advised and provided with descriptive data <u>prior to next flight</u>, to establish any possible corrective action. Upon receipt of this information Ultramagic will determine if further flights can be made or if immediate repair/replacement is required.
- The accomplishment of this SB must be logged and signed-off in the aircraft logbook by the operator or an approved maintenance organization. An acceptable Logbook entry is as follows: "SB 01/13 completed and Ultramagic contacted DD/MM/YYYY".

Refer to Ultramagic Maintenance Manual Supplement 8 Iss.2 for further details regarding to the Center Gimbal assembly.

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The content of this document has been approved under the privilege of the Design Organisation Approval nr. EASA.21J.0351