



## **SERVICE BULLETIN SB-EV97-UK-015 Issue 1**

### **Kit Built Eurostar AIRCRAFT**

**24 June 2013**

## **INSPECTION OF UNDERCARRIAGE LEG SUPPORT FOR CRACKS**

**Classification**:- Recommended

### **Nature of Defect**

On a number of high hour EV-97's, cracks have been detected in the outboard end of the vertical support to the undercarriage leg. The cracks so far detected occur between the hole for the bolt securing the leg to the cross member, and adjacent inboard two rivets. To date cracks have been found on only the rear plates.

The crack can be seen in the photo on the right evidenced by the horizontal line emanating from beneath the bolt head. Rear of right hand plate shown, the photo is taken through a mirror.



### **Airworthiness Implications**

Continued propagation of the crack reduces the undercarriage strength and ultimately could lead to complete failure of the leg attachment during landing or taxiing.

### **Aircraft Affected**

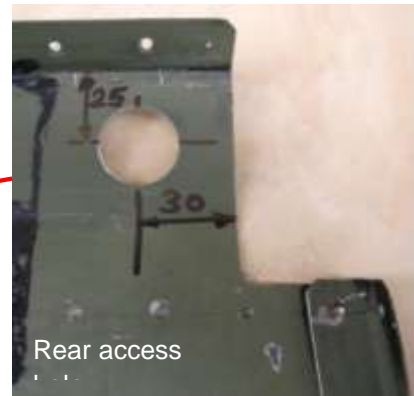
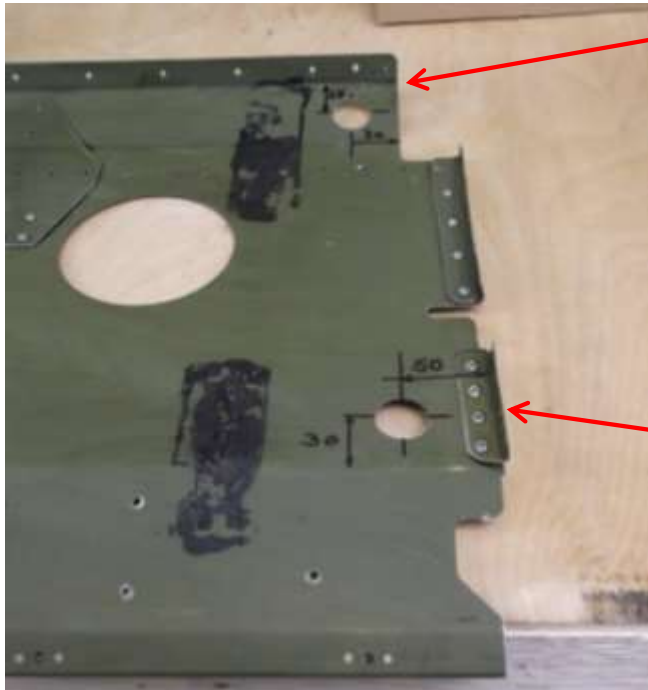
The inspection must be carried out on all factory built EV-97 teamEurostar aeroplanes which have complete more than 1000 hours. Inspection is also advised on aeroplanes which have completed less than 1000 hours, at the owner's discretion.

### **Inspection Required**

All aeroplanes which have completed over 1000 hours are to be inspected within 4 weeks of the date of this bulletin. Thereafter all aeroplanes shall be inspected at 100 hour intervals, or annually, during the Permit Renewal Inspection, whichever occurs sooner.

In order to gain access for inspection it is necessary to bore 25mm holes in the seat pan where these are not present. All EV-97 aeroplanes built from 2008 on, already have large holes in the corners of the seat pan which permit inspection without boring further holes in the rear. Forward inspection holes are required on all aeroplanes.

- Remove the seat cushion on each side;
- Where necessary (see above) bore inspection access holes in the seat pan as shown below. It will normally be necessary to use a hole saw. Double check that the hole is located correctly, drill no further than necessary (hold back the cutter just before complete penetration), and carefully collect all swarf.



*Left hand seat pan shown, looking rearward.*

- Illuminate the area with a good torch. The forward support plate can be illuminated by shining the torch through the hole in the front of the cross member.
- Note the location and extent of any crack.
- In the aeroplane's log book have an appropriately authorised (category 'H' – All Metal) LAA Inspector sign off the boring of the holes where this has taken place.

### **Notification & Recording**

If any crack is found, notify the LAA and Light Sport Aviation. Whether or not a crack is found, record compliance with this bulletin in the aeroplane's log book; keep a copy of the bulletin in the aeroplane's records.

### **Repair Scheme**

A repair scheme design is currently being prepared. Its form will, to some extent, depend on the nature of the reported cracks.

### **End of Report**

**Steve Pike**