## **Modification to nosegear**

## **Classification - Mandatory**

Applicability - All tri-gear Europa nosegear fabrications dispatched before end April 1997.

**Compliance - Before the next flight.** 

## Introduction

A case has occurred of failure of the nose gear fork pivot housing attached to the nose leg main tube. Europa Aviation Ltd will supply a replacement nose leg/pivot housing on receipt of the original back at Kirkbymoorside.

## Action

- 1. Remove the lower cowling and support the aircraft in preparation for removal of the nose gear. As a safety precaution, suspend weights around the rear fuselage to limit the weight on the support.
- 2. Remove the <sup>1</sup>/<sub>2</sub>" castellated nut, and withdraw the nose gear fork and nose wheel complete from the nose leg.
- 3. Remove the bungee, undo the four mounting bolts, slide off the safety cable, and remove the nose gear leg assembly complete.
- 4. Mount the nose gear leg and articulation frame in a suitable vise, clamping it by the flat faces of the pivot housing. Remove the two <sup>1</sup>/<sub>4</sub>" bolts attaching the nose leg to the articulation frame. Note the position of the leg relative to the frame.
- 5. The nose leg is bonded to the frame by Loctite this can be softened by heat. Using a hot air gun (do not use a blow torch) heat the nose leg in the two areas where it is bonded to the frame, and heat the frame area as well. Once the whole area is reasonably hot, direct all the heat down the inside of the tube the hot air will escape through the bolt holes. Using a suitable lever passed through the open cross tube of the articulation frame, gently twist the frame relative to the tube. When the unit is hot enough, it will come away quite easily. Completely remove the leg and pivot housing from the rest of the frame.
- 6. Return the nose leg/pivot housing to Europa Aviation at Kirkbymoorside. A replacement unit will be sent on receipt of the original.

- 7. On receipt of the replacement nose leg assembly set the articulation frame so that the cross tube is level. Insert the new nose leg assembly dry, with the top of the pivot housing level to match the cross tube. Thoroughly clean the mating surfaces, then insert the leg partially into the frame.
- 8. Apply a thin film of Loctite 638 to the mating areas of the leg, and slide the leg to the position on the frame noted in 4 above, checking that the pivot housing face is still parallel to the frame cross tube. Leave to cure.
- 9. Using each of the holes in the frame as a guide, drill the new leg 15/64" diameter, then open up the holes to <sup>1</sup>/<sub>4</sub>" diameter.
- 10. Reassemble the nose gear as shown in the manual at chapter 32, commencing at page 8.
- 11. After reassembly annotate the aircraft technical record Mod 41 incorporated.