
Modification to tri-gear nosewheel bungee

Classification: Mandatory

Applicability: All tri-gear Europas delivered before end September 1997

Compliance: Before next flight

Introduction

A case has occurred of the existing bungee restraint on the nose wheel assembly being insufficiently strong. New stronger bungee is introduced by this Mod, and change to the undercarriage mounting frame is also described.

Action

If your undercarriage mounting frame is post Mod 37 standard, it will look like the view in figure 1. In this case, remove the two inner support tubes marked in the figure by hacksawing them off close to the ends and carefully filing away the weld metal leaving the horizontal tubes intact. To save weight you may also remove the tubes marked on the drawing, which are needed only for the monowheel version of the Europa.

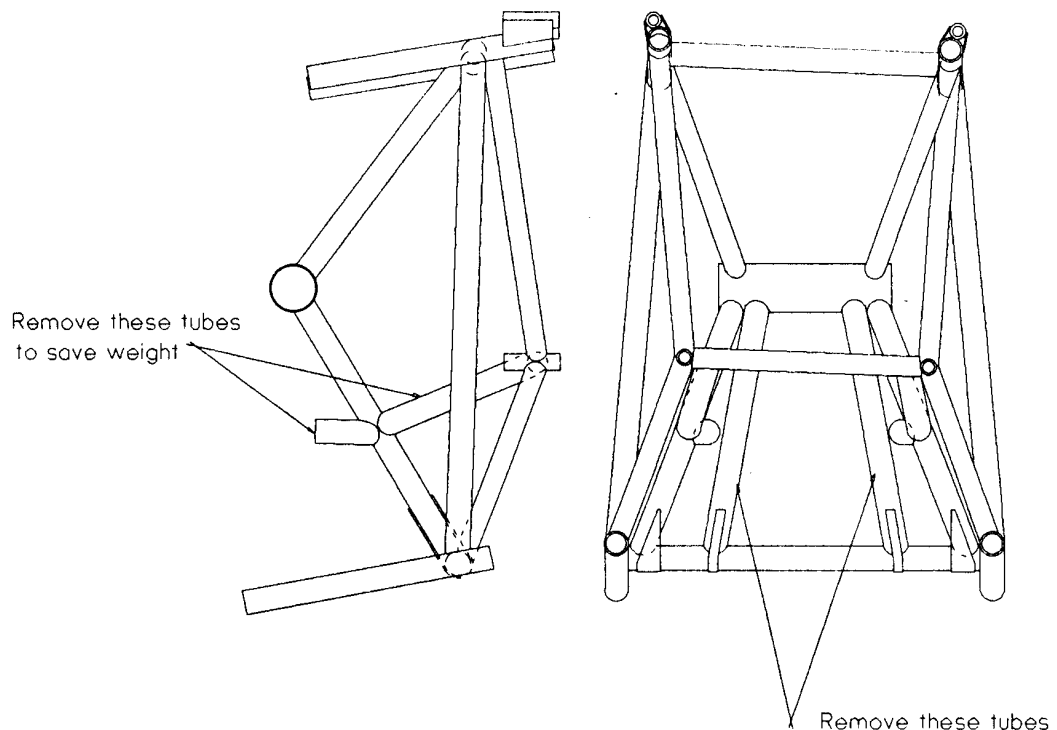


Figure 1. Modification to undercarriage mounting frame.

Discard the original bungee, and install the new thicker bungee; which is approximately twice as stiff as the previous material. You will find it helpful to spray the tubes around which the bungee passes with a silicone spray - this will reduce the friction and make stretching it evenly much easier. The routing for the bungee is as shown in the photographs in figure 2.

Start by tying one end of the bungee to the lower horizontal tube of the landing gear mounting frame with a round turn and two half hitches. Secure the ends with a couple of cable ties. Lead the bungee forward underneath the cross bar of the nose gear frame, then back and up behind the large central tube of the landing gear frame. Follow this with three turns around the tubes as shown. Cross over by passing the bungee over the top of the back section of the nose gear frame. You then repeat the whole process as a mirror image of the first side.

The bungee should be tensioned such that a load of between 400 and 500 lb applied at the nosewheel will just start to move the nose gear leg off the stop. This should be achieved by extending it by approximately 75% of its initial length. You can judge this by checking the distance between blue stripes - this is 12 mm initially, and so should be approximately 21 mm after stretching.