SLINGSBY SAILPLANES, KIRKBYMOORSIDE, YORK

TECHNICAL INSTRUCTION No. 59 June, 1973

KESTREL Modification No. 16.

Fitting of Hardened Steel pins
to Kestrel Fuselage Rigging Bars

This modification is optional and may be embodied on any Kestrel glider. There are two production standards making it necessary to determine which standard is incorporated in your glider. The difference between the two standards is the diameter of the rigging bars, which are either 20/mm or 13/16ths", when ordering your kit of parts the figure for your machine must be given.

Procedure

1. To remove the existing rigging bars first drill a 3/8th" diameter hole in the centre of the bar, and by turning the rigging bar with a tommy bar break the resin bond of the fibre-glass to the rigging bar.

2. Having freed the bar saw out sufficient tube from the centre of the tie bar to allow the bar to be drifted inwards. Remove any paint from the bars which will prevent them moving easily through the fibreglass. Remove all traces of grease and oil from the bars with a suitable degreasing agent.

3. Using a shaped aluminium drift, which locates only on the end of the pin, drift one half of the bar inwards until it is completely out of the wheelbox (or fuselage in the case of the rear pick-up.) Repeat for the other half.

4. There should now be two bearing bushes left in the wheelbox or fuselage. To remove these one of the half bars already is used as a drift, but it is advisable to first rub down the outside of the bar to make the drift a sliding fit in the bush and glassfibre.

5. The wheelbox is now prepared to accept the new bar. The bar must be a tight sliding fit in the fibreglass. If it is necessary, ream out the fibreglass removing the minimum from the layer of resin that covers the glass. The rigging bar must also correspond in length to the fuselage. It is best here to remove about .010" of resin mix from each face using a fine file.

6. After having completed a dry run assemble the new rigging bar assembly into the fuselage (see drawing T59A-03-6) first coating the holes and the outside faces of the fuselage with epoxy resin Epikote 162/Epicure 113 System) or epoxy adhesive (Araldite AY 105H plus HY 953F) and the bar with resin where it will rest in the fibreglass. Care must be taken not to get any resin on the flap controls on the aft rigging bar.

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7. Ensure that the bushes are pressed well home and are locating on the shoulder of the rigging bar. Leave to cure at least 24 hours in a temperature in excess of 25° C. or 48 hours at 20°C. If any other aircraft approved epoxy resin/adhesive system is used refer to suppliers instructions for full cure.

Parts required

1) Kit of parts T59A-03-4 for 20 mm diameter bars.
or Kit of parts T55A-03-5 for 13/16th" diameter bars.

2) Drawing No T59A-03-6

These parts can be obtained from Slingsby Sailplanes, Kirkbymoorside, York.

59D-10-100