Installation of airbrake and aileron quadrant belcranks including FRP basis plate into the wing root rib.
This installation is necessary if a wing(pair) is exchanged against a new one.

1. Remove the "trumpet type" fittings of airbrake and aileron controls from their support fittings of the fuselage.

2. The aileron and airbrake quadrant belcranks incl. the L-type supports riveted to them are now connected to the fuselage fittings by 6mm diametre pins. If necessary the hollow rivets must be reamed to 6mm diametre first. In order to insert the pins, some FRP must be rasped off from the fuselage near the spar opening. Two spacer bushings diam. 8x1, 14mm long, left and right of the belcrank must be used to center the belcranks properly. Additionally washers may be needed. Now align the L-type support fittings parallel with the wing root rib by use of 2 templates (see sketch below).

3. Fit the FRP basis plate to the wing root rib by 2 guide pins of 6mm diametre (no bolt and nut), so that it can be removed in spanwise direction.

4. Now rig the wings to the fuselage and check that there is still some space between basis plate and the L-type support fittings of the quadrant belcranks by use of some children's plasticine or putty. If necessary sand the FRP basis plate and try again.

5. Derig the wings. Apply epoxy glue to the L-type support fittings, rig the wing to the fuselage and let the epoxy glue cure. Quickly curing epoxy glue like "5-Minute Epoxy" may be used.

6. Derig the wing (carefully)! The FRP basis plate slips from the root rib now. Remove the airbrake and aileron quadrant belcranks incl. FRP basis plate from the fuselage support fittings. Drill the holes for the bolts of the L-type support fittings and countersink from the rear side. Now bolt FRP basis plate and L-type support fittings together by countersunk screws.

7. The FRP basis plate is now glued to the wingroot rib and fixed with 3 self-tapping screws. Use epoxy glue mixture as normal for FRP repairs. The guiding pins, see 2. above, can be removed now.

8. Install the "trumpet type" fittings back to their fuselage supports.

9. Rig the sailplane and carefully check for clear movement and low play of aileron and airbrake control circuits.

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