

VIII. PERIODICAL INSPECTIONS

The following maintenance checks have to be carried out periodically, however, imperatively at the latest annually :

1. Check the whole glider - outside and inside where accessible - for cracks, holes, dents and white spots in the fiberglass.
2. The attachment hinges and pins must be checked for corrosion, tool marks and play. If the front shear pins of the wing/fuselage junction show too much lateral play due to ground loopings, thin metal washers must be added on these pins. The spar pins must show some play, otherwise the wings possibly cannot be rigged at all with different temperatures. Besides here the bearing pressure is so low that there is no danger of wearout.

On the other hand the rear pins of the wing/fuselage junction require more attention. In the case of play (backlash) at these pins they have to be replaced in time against oversize pins. The play at these pins always should be within the tolerances H7/g6.

Good preventive maintenance will increase considerably the service life of all pins and fittings. Always clean and relubricate the pins prior to every rigging. Do not misalign the pins !

3. Check all metal parts for corrosion and, if necessary, repaint them. As priming a zinc-chromate prime has to be used.
4. Make sure that there is no play in the wing/fuselage attachment and in the tail unit/fuselage attachments (see also above point 2).

5. All assembly parts belonging to the control systems (bearings, fittings, stops, and especially the control cables and release cables) must be inspected for their condition.
6. Check operation of the control systems including airbrakes. Check control deflections !
7. If you find some part is operating heavily, check the reason and stop it.
8. Check landing gear tire & rubber springs, inspect brake linings and exchange if necessary. Check whether the brake fluid is sufficient.
9. The tow releases must be inspected according to their "operations and maintenance instructions".
10. The ports for the airspeed indicator system must be checked for cleanness and the flexible pipes must be checked for density and possible stoppings.
11. Check condition and proper operation of all instruments and other equipment.
12. Determine the wing bending oscillation frequency and compare with the value of the last inspection report. For the wing bending oscillation test the fuselage must be rigidly suspended in two supports in order to get comparable values (position of the supports see line drawing on page).
13. Equipment and instrumentation must be compared with the equipment list.
14. After repairs or changes in the equipment the empty weight and the C.G. must be recalculated or redetermined by weighing and must be certified in a weight survey.