

Trim noseheavy:
press together the green
trim knob(left cockpit
wall) and push forwards.



Trim tailheavy:
press together the green
trim knob and push backwards.



Landing gear retracted: Black handle on lower LH cockpit wall pulled back.



Landing gear extended



Tow release:
Yellow knob LH of stick



Open canopy:
Move white knobs LH and RH
on upper side of canopy
frame forward.



To jettison canopy:
Pull red handle above instrument panel; the normal canopy locking mechanism must be opened before !!!

ASW 20 - Flight Manual

Aerobatics

Without water ballast semi-aerobatics are approved for the ASW 20. Further particulars see page 29.

Seating position:

1. Do not use soft seat or back cushions which are thicker than 2 cm.

2. The backrest must be adjusted such that the pilot is seated with his head just below the canopy and as far forward as possible. When the stick is in the normal position (trim 10 mm off the front edge of the slotted gate), the upper arm should rest against the body while the elbow rests on the upper thight. Such a comfortable seating position is preventive against PIO (pilot induced oscillations).

Extreme Pilot Sizes

Tall pilots can fly without the adjustable seatrest, however, they have to use a stiff cushion that levels the edge of the towing hook fairing and the box of the wheel. They should also use gym shces with heels as low as possible so that they can use the most forward pedal position.

Small pilots should check prior to start if they can apply full rudder deflections and if they cannot fall off the pedals with their feet. If necessary, a board with a support for the heels can be installed on the pedals.

Do not use soft (lead or sand) seat cushions. We recommend to use only trim weights in the fuselage nose and seat cushions made from a foam which cannot be compressed (Styrofoam, Conticell or safety foam like Dunlopillo etc.).

Limit Load Factors

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At 175 km/h ( 94 knots ):
maximum positive load factor
maximum negative load factor
reducing proportionally with airspeed to
maximum positive load factor
maximum negative load factor
at 265 km/h ( 143 knots ).
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1.4.

Weight and Balance Information
Payload in cockpit (pilot plus parachute):
 minimum 70 kg (154 lbs)
 maximum 115 kg (253 lbs)
For possible exceptions see page 31 !

If the useful load is below the minimum, the shortfall below the minimum payload must be made good by the addition of trim weights in the fuselage ROSE (this is available as an optional extra, see page 20a).

We recommend that unexperienced pilots and/or pilots who fly this model for the first time, do not make their first flights with the rearmost C.G. position, i.e. they should not go for a just still acceptable minimum payload, but should stay approx. 10 - 15 kg above the minimum useful load in the pilot seat. Light pilots should fix about 4 trim discs more than the actually required minimum.

The loading of the baggage compartment has no significant effect on the CG location. It must not, however, be loaded by more than 15 kg (33,1 lbs). Hard objects weighing more than 1 kg (2.21 lbs) should be carefully secured in the baggage area in order to prevent accidents.

Loading of Water Ballast

The maximum all up flying weight of 454 kg (1000 lbs) must not be exceeded. For the determination of the proper amount of water ballast the following table may be used:

Payload [lb] for Pilot + Parachute

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(150	175	200	225	250
525	full	full	full	30	27
550	full	full	30	27	24
<i>57</i> 5	full	30	27	24	+
600	30	27	24	+	+
625	27	24	+	+	+

Water Ballast in US Gallons

→ These weight combinations exeed max. permissible weight of non lift producing components.

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The Pitot and Static Pressure Ports

must be sealed off by taping for the transport on an open trailer provided that the instrument manufacturers allow this.

The Safety Harness

must be regularly checked for tears and corrosion spots.

If the safety harness installed is the asymmetric Autoflug type (Boberg), it must be checked that the short lap belt is installed on the right cockpit wall (in flight direction).

2.6. Overhaul

The tow coupling must be removed after every 2000 launches or every 3 years at the latest and has to be sent to the manufacturer for reconditioning.

For the Tost combi-release some facilities are valid (see accompanying paper in the log-book).

The rudder cables are to be renewed as soon as any wear spots are noticed.

2.7. Repairs

Smaller repairs on fiberglass components can be effected by the owner in accordance with the guidelines as set forth in the Repair Manual for the ASW 12, ASW 15, ASW 17, and the ASW 19.

All major repairs and overhauls have to be effected by the manufacturer. In case of doubt information and advise can be obtained from the Schleicher Company.

2.8. Notes for the Inspection

The dive brake boxes have no water drain.

After rain showers the boxes must, therefore, be dried with a sponge etc. For better sealing of the dive brake covering plates grease as used for accumulator maintenance has been found suitable.