

Max. forward position of C. of Gr. 0,28 m behind BP

Max. rearward position of C. of Gr. 0,38 m behind BP

### Speed ranges on Airspeed Indicator

Red line 200 km/h (maximum)  
Yellow range between 170 and 200 km/h (caution range)  
Green range between 75 and 170 km/h (normal range)

### Power Plant

#### Engine

VW-Limbach 2000 EB 1  
Max. RPM 3400 (59 kW) 5 min.  
Max. continuous RPM 2600

#### Fuel

Aircraft grade gasoline AVGAS 100 L or  
automotive gasoline "Super". 40 litres.

Lubricant See engine manual page 34.

Do not use aircraft grade oil!

Oil pressure max. 4 kp/cm<sup>2</sup>

min. 1,0 at 2500 RPM.

Oil temperature min. 50; max. 120°C

#### Propeller

Hoffmann - 3 position propeller  
HO-V 62 R /L160 T

#### Spark plugs

Bosch WB 240 ERT 1

#### Tachometer

Range 0 - 4000 RPM

Counter adjusted to 3000 RPM

only valid, when Limbach 2000 EB 1 is installed

RPM - Markings

0 - 2600 RPM green range  
3000 - 3400 RPM yellow range  
3400 RPM red line

2. Minimum Equipment

Airspeed indicator with range 50 - 250 km/h  
Altimeter

Tachometer 0 - 4000 RPM

Oil pressure indicator green range 1,0 -  
4,0 kp/cm<sup>2</sup> 4,0 red line

Oil thermometer green range 50 - 120°C  
120° red line

Amperemeter

4-part safety harness at any seat

Back-rest cushion (must be compressed 10 cm), instead of  
a back-pack parachute

Load limit placard

Placard sheet

Flight and Maintenance Manual

Check list

3. Adjustment Data

The angles for elevator - wing incidence as well as aerodynamic wing wash-out can be obtained from the attached 3-view-drawing. In case of rerigging after repairs it is of the utmost importance that the specified tolerances are maintained.

All controls have stops

Rudder: Fixed stop at the lower rudder hinge.

Aileron: Adjustable stops at the stick horizontal tube.

Elevator: Adjustable stop at the control shaft.

8. RPM of the engine at various pitch positions of the propeller:
- a) Fine pitch (take off position)  
Run up on the ground full throttle =  
2600 - 2800 RPM.  
In climb out at 54 knots full throttle =  
3000 RPM.
  - b) Coarse pitch (cruise position)  
Run up on the ground full throttle =  
2200 - 2300 RPM.  
In horizontal flight at 170 km/h ( 92 kts.) and 2600 RPM.

9. Taxying

The powered glider is handled on the ground like every normal tail wheel light aircraft. Yet we have made the experience that with powered gliders there is much damage on the ground from starting the engine on.

a) Starting the engine

For starting the engine the powered glider should be aligned into the wind, especially if the wind is stronger. Stick back is most important before braking. A strong crosswind can blow away the slip stream from the elevator and the aircraft will nose over, even with pulled stick, especially when the ground is sloping downward.

b) Taxying at light wind

Basically it is right to pull the stick back, taxi slowly and carefully, brake intermittently.

## 5. Upkeep and Maintenance

The servicing of engine and propeller must be done according to instructions as set forth in the engine and propeller manual.

### Daily servicing

See check list.

### Inspections

The given periods are related to the engine running time as given by the tachometer.

After the first 25 hours and then every 50 hours the following maintenance work has to be done:

Remove engine cowling.

Maintenance work as given in the engine manual Limbach 2000 EB 1 to be done.

Maintenance work as given in the propeller manual Hoffmann HO - V62 to be done.

**Check the engine cowling for cracks and breakings.**

Check if all DZUS - Fasteners are snapping in properly.

Check engine mounts for cracks and loose bolts.

Check rubber mounts for aging.

Check the baffles for cracks and loosening.

**Check the exhaust system for loose nuts, cracks and burnt through spots.**

Remove the cylindrical cover and inspect the heat exchanger for leaks. Especially cracks at susceptible weldings must be inspected.

In case of doubt an inspection for cracks by a paint intrusion method must be done.

Failures found must be reported to the manufacturer.