

## 2.3 Landing gear

### 2.3.1 Main landing gear

The main wheel consists of:

- Rim: either:
- TOST 5" SBP Penta 125-77,5-1 1/4"  
EB 77,5 mm, Bearing 30mm, GB 120mm, BS 162mm  
P/N Co. TOST: 055572
  - Cleveland 40-78B
- Tyre: either:
- 5.00-5 6PR Condor, P/N Co. TOST: 065091
  - 5.00-5 6PR Michelin AIR, P/N Co. TOST: 067511
  - Alternatively comparable but certified tyres 5.00-5 6PR can be fitted as long as they match the tolerances in terms of shape and size. They also need to fit into the wheel attachment fork and must not interfere with the landing gear elements or structure.
- Tube: For Tost rim e.g.:  
5.00-5 valve 90° TR87, P/N Co. Tost: 065995  
For Cleveland rim e.g.:  
5.00-5 valve 90° TR67, P/N Co. Tost: 065092
- Brake disc: For TOST rim:  
162-36.3-5 w/o ventilation, P/N Co. TOST: 057272  
For Cleveland rim:  
162-55-5
- Brake caliper: either:
- Cleveland 30-9
  - TOST BZT2 5L, DOT4, NPT 1/8  
P/N Co. TOST: 080203

An overview on the different batteries including the numbering and description of possible locations is given in the aircraft flight manual section 7.10.

### Battery types

Batteries that may leak or emit toxic gases (e.g. conventional lead/acid batteries), are not permissible. In detail the following batteries can be used:

- a) Battery in the cockpit below footrest (Battery 1 and 2)
  - LiFePO4-system: “Avionic battery type 1L”  
(P/N 99.000.1052)
  - Lead-gel-system: “Avionic battery type 1P”  
(P/N 99.000.1051)
  
- b) Battery in in vertical fin (Battery 3)
  - LiFePO4-system: “Avionic battery vertical fin Type 1L”  
(AS-P/N 99.000.1061)
  - Lead-gel-system: “Avionic battery vertical fin Type 1P”  
(AS-P/N 99.000.1062)

### **WARNING**

*The mass of batteries in the vertical fin and below the footrest has a significant influence on the C of G position. This must be taken into account if battery types with different masses are to be used.*

## 10.3 Removal and Re-assembly of landing gear

### Removing the wheel only

- 1) First proceed as described in Section 2.3.4 “Exchange of Brake Pads”: dismount the wheel brake cylinder. Do not disconnect the brake hose!
- 2) Loose screw through the wheel axle and remove it.
- 3) Remove aluminium distance disc between axle and wheel fork (at the side without brake disc).
- 4) Slide wheel lateral so that the torque plate get loosen from the thrust bearing at the wheel fork. Subsequent take the wheel downward from the wheel fork.

### Removing the landing gear

- 1) Undo the springs from the landing gear doors.
- 2) Remove the wheel. In this case, first unscrew the brake hose from the wheel brake cylinder and tape the openings so that no brake fluid may run out. Further steps like shown above “Removing the wheel only”.
- 3) Take off the two tension springs from the horizontal struts.
- 4) Unscrew the shock absorber legs and the horizontal struts from the wheel fork.
- 5) Remove cover in the upper baggage compartment (right)
- 6) Undo the bolts, which connect the A-strut on the right side with the actuating lever and on the left side with the bearing. Pull the actuating lever and the bearing sideways out of the A-strut.

Installing the landing gear back in place is done in the reverse order. When installing the shock absorber legs be sure that the flat side of the rubber buffer discs shows upwards!

Check the brake system for leaks, action and effective brake operation!