

- 1) Remove the tube for the oxygen cylinder.
- 2) Cut an access hole into the recess for the tube for the oxygen cylinder (in the front main bulkhead) according to drawing Z98.
Drill 4 holes diameter 5 mm for the rivet nuts and install the nuts.
- 3) **Applies only for NOAH with pressurised gas cylinder made from steel in motorgliders DG-800 and DG-800B:**
Make a cut-out into the bulkhead which supports the tube for the oxygen cylinder for part Z97 according to the pattern from drawing Z93, sand the gluing surfaces..
Fix the holder Z91/1 with a hose clamp to the pressurised gas cylinder. Slip the GFRP-part Z97 on the rear end of the pressurised gas cylinder. Then insert the cylinder until it comes to the stop in the bulkhead. Position the cylinder as close as possible to the landing gear box. Mark the gluing surface for the holder Z91/1 on the fuselage shell.
Take out the pressurised gas cylinder and roughen the gluing surface.
Apply resin mixed with cotton-flocks to the gluing surfaces of parts Z91/1 and Z97 and glue in the whole assembly (cylinder still installed).
- 4) **Applies only for NOAH with pressurised gas cylinder made from aluminium (later version) in motorgliders DG-800 and DG-800B:**
Cut out the lower flange of the bulkhead which supports the tube for the oxygen cylinder according to drawing Z93, be careful not to damage the tubes, hoses and wires which are located below the bulkhead.
Fix the holder Z109/1 with a hose clamp to the pressurised gas cylinder. Then insert the cylinder until it comes to the stop in the bulkhead. Position the cylinder as close as possible to the landing gear box. The bulkhead is the rear stop for the cylinder. Z109/1. Mark the gluing surface for the holder Z91/1 on the fuselage shell.
Take out the pressurised gas cylinder and roughen the gluing surface.
Apply resin mixed with cotton-flocks to the gluing surface and glue in the holder (cylinder still installed).
- 5) **Other DG single seaters:** The bulkhead see item 3+4 is not installed.
For the pressurised gas cylinder a complete holder with 2 hose clamps Z91/2 (steel cylinder) resp. Z109/2 (Aluminium cylinder = later Version) will be used. Fix the holder with 2 hose clamps to the pressurised gas cylinder.
Position the cylinder as close as possible to the landing gear box.
Position the cylinder so that the high pressure hose fits into the cut-out of the access hole (see. item 2).
Mark the gluing surface for the holder on the fuselage shell.
Take out the pressurised gas cylinder and roughen the gluing surface.
Apply resin mixed with cotton-flocks to the gluing surfaces and glue in the holder (cylinder still installed).
- 6) Drill a hole diameter 6 mm into the lower right edge of the support for the instrument panel according to drawing Z92.
Roughen the gluing surfaces for the holder for the pulley Z88/1 with GFRP-plate Z88/2 and the bracket Z84/1 at the right hand side bulkhead which supports the seat shell. Apply resin mixed with cotton-flocks to glue in the parts.
Roughen the Nylon-tube for the operating cable and insert it into the 6mm hole. Adapt a suitable foam block made from Rohacell 51. Glue the block to tube and bulkhead with resin mixed with cotton-flocks. Fix tube and bracket with glass-fibre fabric 3x92125 according to drawing Z92.
After curing assemble the pulley and the pulley cover 4RU43 according to drawing Z92, don't glue on the cover!

Important advice for items 7 and 8:

The goose neck microphone must be installed in front of the actuation unit. If this is not the case the microphone must be relocated.

- 7) **Applies only for DG-single seaters which have three M6 threads at the right hand side cockpit wall:**

Install actuation unit (assembled according to drawing Z80), pulley and pulley cover 6RU50 and the adjusting screw on plate Z85 according to drawing Z92.

Fix plate Z85 by the three threads at the right hand side cockpit wall. Adjust the plates with washers so that there will be 7-10mm clearance between the part X of the actuation unit and the cockpit edge flange. If this clearance can't be achieved the part X must be bent accordingly.

Drop a plumb line from the pulley to the baggage compartment floor and make a 6mm wide slot from this point to the outside of the floor for the Bowden outer (for the cable to the actuation handle). If necessary make a small cut-out for the Bowden outer into the flange of the main bulkhead.
- 8) **Applies only for DG-single seaters which have no threads at the right hand side cockpit wall:**

Bolt 2 holders Z90 to the actuation unit according to drawing Z100. Mark and roughen the glue areas at the fuselage wall. Shorten the rear holder just so far that the holder can be glued to the fuselage wall and not to the flange of the bulkhead. Glue the holders to the wall (actuation unit still installed). Insert a 9mm thick plate between the part X of the actuation unit and the cockpit edge flange as spacer for the gluing work.

Glue in pulley holder Z88/1 according to drawing Z100.

After curing assemble the pulley and the pulley cover 4RU43 according to drawing Z100, don't glue on the cover!
- 9) Install the Bowden outer between the actuation unit and the pressurised gas cylinder. Drill a 9mm hole for the Bowden outer into the main bulkhead in front of the recess for the oxygen bottle tube below the map pocket according to drawing Z98. Insert a rubber grommet into the hole. Run the Bowden outer around a large arc so that it does not kink

Insert the Bowden inner and fix it according to drawing Z80 to the actuation unit.

- 10) Install the Bowden outer for the cable to the actuation handle.

For the version with threads (see item 7) the outer runs through the slot in the baggage compartment floor to the front.

For the version without threads (see item 8) the outer runs through a 9mm hole in the rear seat shell. Drill the hole 50mm in front of the rear end of the seat shell directly abeam the lower end of the map pocket and install a rubber sleeve in the hole.

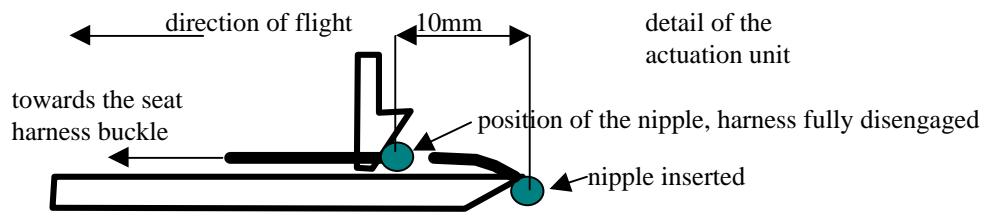
Fix the Bowden inner according to drawing Z80 to the actuation unit and insert it into the inner and fix it according to drawing Z101 to the operating handle.
- 11) **Seat harness type Schroth:**

Please refer to drawing Z86: Only the seat harness buckle type Schroth 4-01-010806 (without extra free travel prior to opening and fitting with mounting holes) can be used.

Drill a 2mm hole according to the drawing into the seat harness buckle. Install parts Z87/1 and /2 at the harness fitting and the Bowden outer Z96.

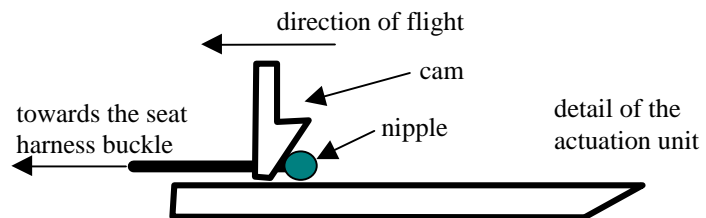
Insert the Bowden inner from the actuation unit and fix it to the seat harness buckle with a loop and a Nicopress-sleeve 28-1C according to drawing Z86.
- 12) **Seat harness type Gadringer BAGU 5202:** Please refer to drawing Z95: Instructions see item 11 but with fittings 11 Z95/1 und/2.

- 13) **Function test:**): Pull out the NOAH handle slowly and check the following items:
- The seat harness buckle must fully release the seat harness approx. 10mm before the nipple of the Bowden-cable (running to the buckle) is inserted in the groove of the actuation unit, measure at the part X of the actuation unit.



- The nipple of the Bowden cable must be inserted in the groove of the actuation unit before the seat harness buckle comes to its stop. The cable which runs to the pressurised gas cylinder must not be tightened but have approx. 10mm freeplay (Clevis pin in the slotted hole of the actuation unit).
- Move the cam of the actuation unit back to its initial position and release the nipple, the seat harness buckle must move back or must be turned back to its locked position.

Make sure that the nipple is positioned **behind** the cam, see sketch.



- Glue the GFRP block Z89 to the canopy frame according to drawing Z92. There must be 5 mm clearance to part X of the actuation unit with the unit in the most forward position. This position must be kept for the following work.
- Drill a 40 mm hole C into the adjustable seat back according to drawing Z92.
- Install the pressurised gas cylinder and screw the high pressure hose to the valve of the cylinder.
- Move the cylinder to it's final place and fix it with the hose clamp(s).
- Install the oxygen cylinder tube and fix it with a self tapping screw..
Remove the transport securing (split pin 4x28 DIN94).
Close the access hole with the cover plate ZI02 (4 screws M3 x 12 DIN963).
- Install the airbag and its cover according to drawing Z99. Push the terminal of the high pressure hose onto the nipple of the airbag and secure with the U-shaped wire clip according to drawing Z92.
- Wrap the sticker symmetrically around the operating handle and over the guiding tube of the operating cable according to drawing ZI01. Press together both halves of the placard so that they stick together and to the guiding tube.