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INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

## MAINTENANCE MANUAL

for the

MOTORGLIDER

# DG-500MB

Commercial designation ***DG-505MB***

Model: DG-500MB

German Data Sheet No.: 843

Factory Serial No.: \_\_\_\_\_

Year of Construction: \_\_\_\_\_

Registration No.: \_\_\_\_\_

Issued: September 1998

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### Manual amendments

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1	2, 3, 4, 34, 57, 63, 64, 93, drawing W57	Engine, powerplant drive belt tension, DEI- circuit breaker, manual revision TN 843/13	Oct. 1999	
2	2, 3, 4, 11, 19, 27, 45, 47, 48, 49, 51, 62, 71, 79, 91, wiring diagram 5E101, drawing W40	Greasing schedule, new attachment of the throttle cable from ser.no 5E213 on, manual revision TN 843/16	Jan. 2001	
3	2, 3, 4, 5, 23 - 28, 30 - 34, 36a, 37, 49 - 51, 54, 72, 73, 78, 79, 84, 91, 93, wiring schemes 5E101 issues G and H, 5E218	Engine control, manual extension and retraction control, carburettors, engine doors rubber cord, manual revision TN 843/17	March 2002	
4	2, 4, 24, 91, diagram 13b, wiring scheme 5E101 issue I, drawing 5E218	Extension-retraction unit, TN 843/18 issue 2	June 2003	
5	2, 3, 4, 24, 25, 47, 48, 50, 64, 65, 68, 73, 75, 76, diagram 18, drawing 5M110	Manual revision Powerplant: retaining cable mounting in fuselage TN 843/19	March 2004	

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1.12. Retraction - extension mechanism

1.12.1 **Layout** see diagram 13b

1.12.2 **The retraction-extension mechanism** (spindle drive) consists of a 12 V electrically driven sealed ball screw shaft type Stross BSA10 special version for DG-500MB.

1.12.3 **Extension time of the spindle drive**

The time for extension is approx. 12-13 seconds. If the extension takes longer than 15 seconds the spindle drive must be replaced.

Measure at room temperature, with full batteries and via the ignition switch.

1.12.4 **Adjusting the powerplant retaining cable**

Extend the engine via the ignition switch until the extension will be switched off by the position switch.

**without retaining cable shock absorber:** It should be possible in this position to pull out the retaining cable approx. 25mm (1 in.) before it comes to its stop. If necessary adjust via the adjustment screw at the rear engine bay bulkhead. Secure the adjustment screw by fastening its lock nut.

**with retaining cable shock absorber (from ser. no. 5E243B20 on and retrofit according to TN843/19):** It should be possible in this position to pull out the retaining cable approx. 15mm (.6 in.) before it comes to its stop. If necessary adjust via the adjustment screw. Secure the adjustment screw by fastening its lock nut.

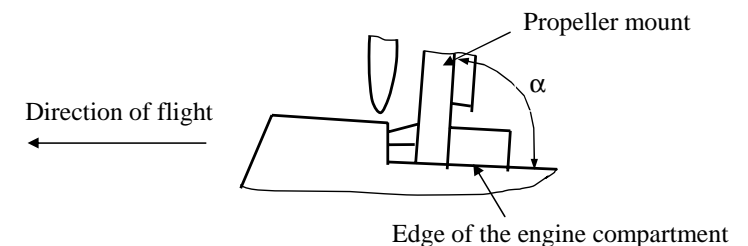
1.12.5 **Position switches**

Position engine retracted: via a switch actuated by the propeller mount

Position engine extended: via a switch actuated by the muffler frame

1.12.6 **Adjustment of the powerplant positions**

**Position engine extended for operation:**



1.12.6 cont. Position engine extended

Extend the engine via the ignition switch until the extension will be switched off by the position switch. The angle  $\alpha$  must be  $83^\circ$  (without retaining cable shock absorber) and  $82^\circ$  (with retaining cable shock absorber). If necessary, the angle has to be corrected by bending the metal lever of the limit switch. In this position the green control light "engine extended" must be on.

**Position engine retracted:**

When the propellermount touches the stop (at the upper part of the propellermount) the spindrive should not be switched off, but should move the powerplant backwards for another 2-3 mm (.08-.12 in.) before the position switch is actuated. This prevents the powerplant from moving upwards with negative g-loads (flexibility of the rubber mounts). Disengage the engine door control pushrods from the doors to execute the measurement.

1.13 **Fuel system**

1.13.1 **Layout** see diagram 14

1.13.2 **Tanks**

The fuselage tank is permanently fixed and has 40 litres (10.6 US gal.) capacity which can be used down to at least 1 l (0.26 US gal.). The tank can be drained via a drainer located in the landing gear box at its rear wall. The tank can be flushed after removing the drainer. The vent outlet of the fuselage tank is at the bottom of the fuselage.

In addition fuel bags may be installed in the wings, see section 1.13.9. After opening the respective valve the content of the bag can be drained into the fuselage tank.

Filling the fuselage tank may be done with an electric fuel pump system (permanently installed (optional) or separate Z02/2).

A pressure switch (connected with a T-fitting to the outlet of the fuel tank) switches off the electric power to the pump system when the fuel tank is filled completely.

In case of automatic switch off the fuel tank will be filled completely only in the nose down attitude of the fuselage (the nose wheel must contact the ground).

Filling is also possible via the fuel filler opening on the fuselage exterior surface.

3.5 **Servicing the engine**

**Note:** If you don't operate the engine for periods longer than 2 months you must preserve your engine according to the instructions in the engine manual. The same applies for any overseas transportation.

3.5.1 **25 hour inspection**

The following checks and maintenance work should be done every 25 hours engine time. Items 1, 2, 3, 7, 8, 10, 13 and 25 should be executed at least 1 year after the last 25 hour inspection, preferably with the annual inspection.

In your aircraft log you will find stickers on which you can enter the next maintenance dates. Fix these stickers in a visible place in the cockpit, preferably on the right side console. Checklists for this maintenance work are in the enclosures of this manual. Please complete the checklist when executing the inspection and file it in the aircraft log.

1. General visual inspection.
2. Change spark plugs.  
Check if the spark plug connectors have a tight fit on the spark plugs after you have exchanged the spark plugs. If not, the connector must be replaced..
3. Exchange the fuel filter. Filter types see sect. 8. Paper filters should under **no** circumstances be used. Assembly see diagram 14a.
4. Measure fuel flow (see sect. 1.13.3). Therefore disconnect the hose at the lower end of the primer filter. Hold the hose into a measuring container. Switch on the electric fuel pump with the ignition switch. Determine the time for supplying 1 litre of fuel. For the measurement a minimum of 10 l of fuel should be in the fuselage tank. Note down the value, max. time is 90 seconds for 1 litre.
5. Remove the carburettor cover and membrane, remove the needle valve, flush the carburettor by switching on the fuel pump. The fuel must spout out as a powerful stream. If a large amount of fuel leaks out of the carburettor when you remove the membrane this is a sign that:
  - a) a dirt particle prevents the needle valve from closing completely.
  - b) the main nozzle is clogged (dirty), so that the engine can't receive the full amount of fuel. In this case you have to disassemble the main nozzle and to clean its chamber, see sect. 1.13.7b) 2..

Check the connection of the throttle cable for damage and wear.

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- 6.a) Check the filter of the primer valve. The filter is installed in the hose connector between T-type connector and primer valve. Loosen the hose clamps and take out the connector with the filter. Flow fuel through the filter in reverse direction and check that as the fuel comes out of the filter any dirt is removed. Reinstall the filter.
- b) Check the function of the primer valve and nozzles (engine must be cold). Switch the primer switch in auto position. Remove the air intake filters. Press the switch 47 to the left, switch on the DEI and then switch on the ignition. Now the DEI must show **P** on the centre display and fuel must be injected via the nozzles into the intake manifolds of both carburettors. Test only for 2-3 seconds, otherwise you may flood the engine. Check the hoses which connect the primer valve to the carburettors for any damage.
  - o) Leak test of the primer valve: When only the ignition is switched on (fuel pump running) no fuel must be injected by the primer.
7. Check all fuel lines for any wear, kinks, tight fit and leaks. Check especially the fuel lines in the engine compartment, switch on the ignition to run the fuel pump.
8. Check the intake airfilters of the carburettors for excessive dirt and wear, wash with pure petroleum spirit and blow compressed air in reverse direction through the filters. Spray the outside with oil for filters with cotton fabric, reinstall the filters. We recommend exchange of the filters every 25 hours. Also new filters must be sprayed with filter oil.
9. Check all cables and associated levers and the propellerbrake (see sect. 1.11.8 and 1.11.9). Replace levers and pins of the brake in case of excessive free play. Replace cables when worn.
10. Clean engine and radiator
11. Check cooling system for leaks, refill coolant if necessary, check antifreeze. Check the radiator and its mounting. To check the water pump, switch on the ignition. You should hear a buzz.
- 12.a) Remove the exhaust manifold.
  - b) Check the cylinders and pistons via the exhaust ports for seizing marks, for carbon remains and for sticking piston rings. Press against the piston rings with a suitable tool. The rings must be movable. Black remains on the outside of the pistons below the rings indicate sticking or damaged piston rings, this is not acceptable. Illuminate the combustion chamber and check for combustion deposits. Use a torch and mirror for these checks. If seizing marks are detected the engine must not be used. Excessive combustion deposits have to be removed.

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15. Check the rubber engine mounts, especially for cracks. Therefore apply strong pressure to the propeller mount in forward, backward and sideways direction.
16. Check and grease the starter motor gear shaft (don't grease the starter motor gear) Check starter motor for tight mounting. There should be no excessive radial free play of the starter motor gear axle. With too much free play the starter must be exchanged.
17. Clean the starter ring gear and check for damage. Check if the starter ring gear was bent forwards by the starter motor. There should be approx. 1mm (.04 in.) clearance between starter ring gear and drive belt.
18. Remove the fairings which protect the drive belt. Check the drive belt for wear and tension (see sect. 1.11.5). If the drive belt shows signs of wear or if there are cracks/tears at the base of the belt teeth, the drive belt must be replaced. Check the 6 rollers which guide the drive belt for tight fit to their mounting brackets and for easy turning. If there is any significant friction in their bearings, the rollers have to be replaced. Check the roller mounts for proper attachment to the propellermount.
19. Clean the spindle drive. Operation test. The bare surface of the spindle drive piston must be greased slightly. If necessary apply some grease. Check the rubbermounts at the front and rear attachment of the spindle drive for wear. The fork at the rear attachment must rotate without twisting the rubbermount.
20. Check all the hinges on the engine compartment doors for proper fit and any cracks, tears etc. Check if hinge pins are secured properly. Check the engine door rubber cord and its retaining cord for wear and function.
21. Oil all hinge points of the powerplant.
22. Check the time taken to extend the power plant. Batteries must be fully charged. If it takes longer than described under sect. 1.12.3 first check the wiring of the spindle drive for any damage. If no other reason for the slow extension can be detected the spindle drive has to be replaced.
23. Check the engine retaining cable for wear and kinks. Check thimble and bolt of the upper cable connection for wear. Check the adjustment of the retaining cable according to sect. 1.12.4. If necessary adjust the cable at the adjustment screw in the rear end of the engine bay.
24. Check the main bearings of the upper pulley for any free play.
25. Check the tension of the propeller bolts: remove the lockwire, loosen the propeller bolts and retorque them with a torque wrench, torque value see sect. 1.11.10. Secure again with lockwire.

- 4.11 ff Remove the sealing cap 8M118/1.  
The groove in the front end of the axis shall point downwards. This is the lowest position of the eccentric. From this position rotate the axis in a clockwise direction (see a) 5.) from 1 mounting hole to the next and fix the axis min. 2 bolts in each position to check the drive belt tensioning. Proceed until the correct tensioning is reached. During this the axis should not be rotated more than 180° (groove in upper position). However it should be impossible to reach this position.
- e) **Reassembly**
1. Reassembly is the reverse of disassembly. Use Loctite 243 to secure all screws and bolts except for the propeller mounting bolts.  
Caution: When reassembling the drive belt covers be careful to use the correct screws. Screws which are too long will damage the belt!
  2. If the position of the axis has been changed the fork 8M119 must be brought to vertical position again. Screw out the fork (axis already assembled with all 6 bolts). Loosen the distance washer 23 x 32 x 1 from the axis 8M115. Apply a suitable 2 component metal adhesive (e.g. UHU Plus 300) between 8M115 and the washer. Screw in the fork 8M119 again using Loctite 243 for securing until the fork is in vertical position. The glue should be pressed together to less than 1 mm thickness. Let the glue cure before operating the engine.
  3. Adjust and secure the proximity switch according to section 1.14.15.
- f) **Changing the relation of propeller to engine**  
see sect. 1.11.4
1. Execute work according to a), b) and c) items 1,2 and 3.
  2. Mark upper drive belt pulley and drive belt with a felt pen or with tape.
  3. Move drive belt forward as far as possible on both pulleys. Then lift the belt off the upper pulley and rotate the pulley against the drive belt.
- g) **Measuring the drive belt tension and tolerances**  
please refer to drawing W57 (enclosed in MM)
1. Remove the left (in sense of flight) drive belt cover.
  2. Insert the measuring tool W57 from the right hand side (inside) through the additional hole between the two upper roller tracks. Lay the Perlon cord around the left hand side of the propeller mount and fix it to the other side of W57. Hang a min. 100N (10kg, 22lbs.) spring balance into the cord. Measure the distance between the drive belt surface and the outer side of the propellermount at the same station from the left hand side through the opposite thread with the probe of a vernier caliper.  
First measure with no load on W57 and then with 100N (10kg, 22lbs.).
  3. The difference should be min. 6 mm (0.236 in.) and should not exceed 11 mm (0.433 in.). If the difference is smaller than 6 mm the tension is too high and the load on the crankshaft is excessive. If the tension is too low the drive belt may slip and the relation propeller to engine will change.

**Caution:** After installation of a new drive belt check the belt tension again after approx. 30 minutes engine time, readjust if necessary.

4.12 **Replacing the bearings of the upper drive belt pulley**  
see drawing 5M110 (enclosed to this manual)

a) **Removing the bearings**

1. Remove the propeller.
2. Remove the proximity switch. Its best to remove the switch together with its mounting plate 8M138. Mark the position prior to removal.
3. Remove the drive belt see sect. 4.11.
4. Remove the sealing cap 8M118/1.
5. Bend up the securing washer 20 DIN 462.
6. Screw off the nuts KM4 one after the other.

**Note: left hand thread.**

- Use one of the 2 specially bent hook spanners according to drawing W51 (encl. with this manual). Remove the antirotation securing washer.
7. Now you can pull off the complete pulley 5M111 from the shaft 8M115.
  8. Take the inner ring and the rollers of the front bearing out of the pulley.
  9. To remove the outer rings of both bearings from the pulley you have to produce 2 pieces of round material each 100 mm (4 in.) long and with 47 mm (1.85 in.) and with 53 mm (2.09 in.) diameter.
  10. Press out the outer rings together with the Nilos rings carefully using a press or a hammer.
  11. Pull off the inner ring of the rear bearing together with part 8M117/1 from shaft 8M115. Use a suitable puller assy..

b) **Installation of the new bearings**

1. To press the outer rings of both bearings into the pulley you have to produce 2 pieces of round material each 30 mm (1.6 in.) long and with 51 mm (2 in.) and with 57 mm (2.24 in.) diameter.
2. Press in new outer ring together with new Nilos rings.
3. To press the inner ring of the rear bearing to the shaft you have to produce a piece of tube with 32 mm (1.26 in.) inside diameter and 90 mm (3.54 in.) long.
4. Press the inner ring together with part 8M117/1 to the shaft.
5. Fill the space for both bearings with grease.

4.14 **Replacement of the engine retaining cable**

Please refer to diagram 17 and diagram 18 with retaining cable shock absorber (standard from ser. no. 5E243B20 or retrofitted according to TN 843/19)

1. Extend the powerplant.
2. Remove the access panel from the rear engine bay floor.
3. Remove the engine retaining cable from the propeller mount. Let the cable retract slowly, otherwise the retraction bungee may jump from its pulley located inside the rear end of the fuselage. The bungee pulley is accessible via the access hole inside the tailwheel box.
4. Pull out the bungee via the access hole in the rear engine bay floor until you reach the terminal of the retaining cable.
5. Fix the bungee to the floor to prevent it from disappearing into the fuselage boom.
6. Cut off the retaining cable and pull it out. Don't damage the bungee! Don't lose the steel washer.
7. The new retaining cable has to be stretched with 500 daN (1125 lbs.) before installation. Attach the new cable with thimble and Nicopress sleeve to the bungee. Press the Nicopress sleeve.
8. Push the retaining cable via the adjustment screw through the rear engine bay bulkhead and pull it forwards. Don't forget to install the steel washer between Nicopress sleeve and bulkhead.
9. Let the bungee retract slowly into the aft fuselage
10. Install the retaining cable together with thimble and Nicopress sleeve to the propeller mount. Don't press the sleeve. Adjust the position of the powerplant according to section 1.12.4. Tighten the cable and press the Nicopress sleeve. Cut off the excess cable.
11. Check again the length of the retaining cable. See section 1.12.4. Adjustment is possible at the adjustment screw at the rear bulkhead.
12. Reinstall the access cover to the rear engine bay floor.

Material:

Steel cable diameter 3.2 mm (1/8 in.) type see sect. 4.2 approx. 2.3 m (91 in.) long  
 2 thimbles 3mm DIN 6899A  
 3 Nicopress sleeves 28-3-M  
 Tesaband 651 (self-adhesive textile tape)

4.16 cont.

4.16.2 **Removal of the engine from the propeller mount**

General notes:

Before removing the engine from the propeller mount screw four long bolts M 10 resp. M12 into the 4 threads at the lower end of the engine block. This facilitates handling on the workbench because the powerplant can be placed on the screws.

**Necessary tools**

Socket wrenches: 6, 7, 17, 19 mm

Open end spanner 30 mm

Wrench for spark plugs 21 mm (13/16 in.)

Allen key wrenches: 3, 4, 5, 6 mm

1 wire cutter

1 hot-air gun

1 small screwdriver

1 flange bolt (incl. in SOLO tool kit)

1 puller assembly W40 (drawing encl. to this manual) with

1 bolt M 12 x 90 DIN 933-8.8 and

4 bolts M5 x 20 DIN 912-10.9

1 sharp knife

1 roll insulating tape

1 bucket

1. Remove the drive belt fairings from the propeller mount by unscrewing the 20 bolts with a 3 mm Allen key wrench.
2. Remove the drive belt according to section 4.11a) and c).
3. Pull off the lower drive belt pulley including starter ring gear from the crankshaft:
  - a) Remove the front retaining ring from the pulley.
  - b) First heat the screw at the crankshaft with the hot-air gun, then remove it with a 19mm socket wrench.
  - c) Put the factory supplied flange bolt in the crankshaft thread.
  - d) Install the puller assy. W40 with 4 bolts M5x20 DIN 912-10.9 to the drive belt pulley. Then screw the bolt M12x90 DIN 933-8.8 into the puller to pull off the pulley from the crankshaft. Secure the puller with a 30 mm open end spanner against rotation. If the pulley resists coming off you should hit the head of the bolt M12x90 with a hammer to loosen the pulley.

4.16 cont.

15. Removal of the propeller brake: Unscrew the propeller brake fixing plate from the engine's rear side by removing three screws with a 6 mm Allen key wrench.

16. Close the opening of the exhaust manifold with tape and seal the airfilter with a plastic bag or similar.

**Removal of further attachments** (don't execute for shipping the engine for repair or overhaul):

17. Spark plugs: Unscrew spark plugs with a 21 mm (13/16") socket wrench. Seal the cylinder holes with tape.

18. Exhaust manifold: The exhaust manifold can be removed by unscrewing the four bolts at the cylinder outlet with a 6mm Allen key wrench. Seal the cylinder outlets with tape.

19. Air intake filter: To remove the air intake filter from the carburettor loosen the clamp at the carburettor with a small screwdriver. Seal the carburettor intake with tape.

20. Remove both coolant inlets using a 3 mm Allen key wrench. Seal outlets with tape.

#### 4.16.3 Reinstallation of the powerplant

Reverse the procedures for removal mentioned above. Note sections 4.11 and 4.15!

Use only new selflocking nuts for reinstallation. Use Loctite 243 to secure all threads and screws without selflocking nuts.

Use new gaskets for the coolant outlet.

#### Reinstallation of the starter ring gear

1. When reinstalling the starter ring gear adjust the propeller position versus the engine compression point according to sect. 1.11.4 via the drive belt.
2. Install the screw at the crankshaft without using Loctite and tighten with a torque of 100Nm (73 ft lb).
3. Tighten the drive belt according to sect. 4.11e).

4. Reinstall the proximity switch and check its adjustment according to sect. 1.14.15 and correct if necessary.
5. Reconnect the spindle drive.
6. Rig the wings to the fuselage and secure the glider. Start the engine, apply full throttle for a short while (max. 30 seconds) and stop the engine again.
7. Retorque the screw at the crankshaft with 100Nm, to accomplish this the spindle drive must be disconnected again.
8. Start the engine, apply full throttle for a short while (max. 30 seconds) and stop the engine again, retorque again. Repeat this procedure until the screw can't be turned any more with the same torque. Normally it is necessary to repeat the procedure 4 times. After the last retorque remove the screw, apply Loctite 243 and torque again with 100 Nm.
9. Install a new selflocking nut M10DIN985-8zn to the spindle drive bolt.  
Check if the propeller position versus the engine compression point is still in the limits. If necessary correct according to sect. 4.11 f).

#### 4.17 Removal and assembly of the engine doors

See diagram 16.

It is not necessary to cut the rubber cords for removal and assembly of the engine doors. But it is necessary to remove the access panel to which the rubber cord is fixed. As it is easy to remove the doors, we recommend that you always remove both doors.

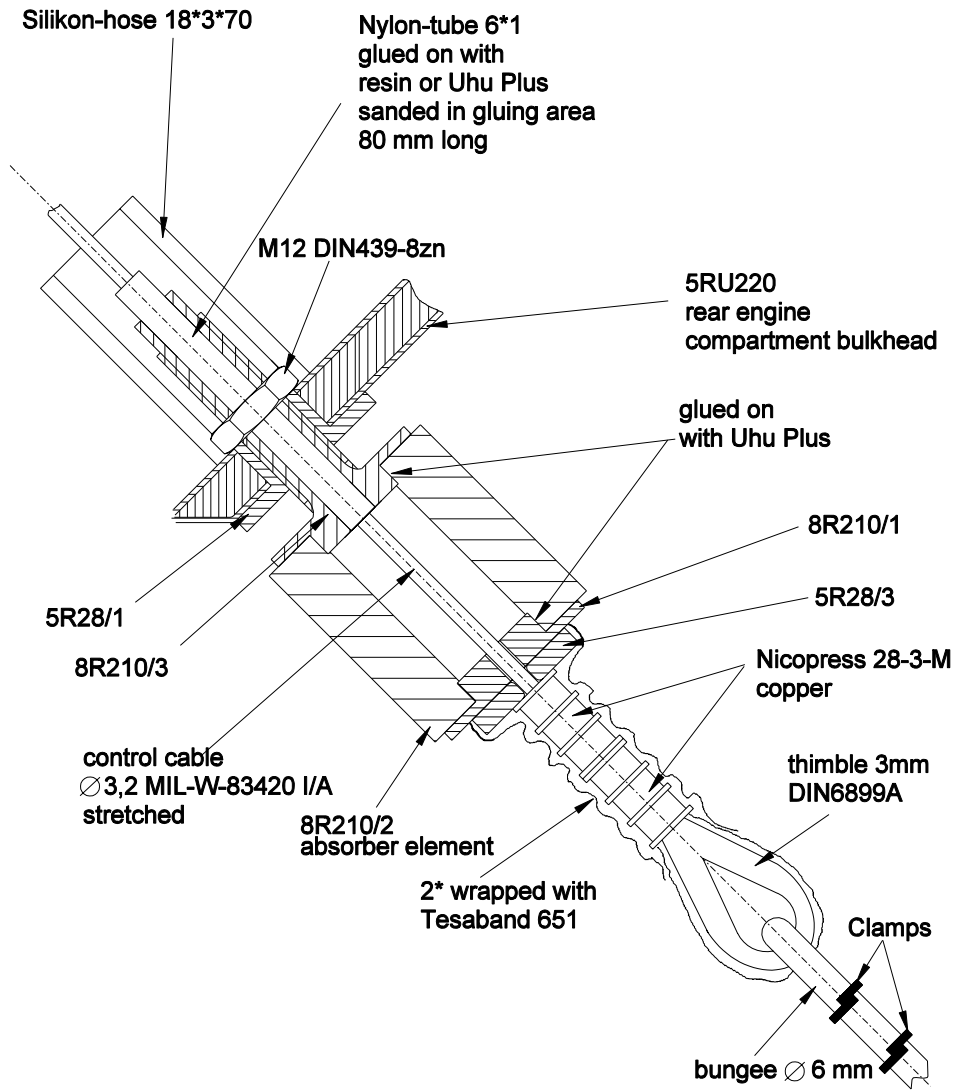
- a) Removal of the left engine door, e.g. for working on the carburettors:  
Extend the engine so far that the doors are just open and the rubber cords at the end of the doors no longer touch the propeller. Remove the securing spring from the rod end (toggle joint) at the upper end of the engine door control pushrod. Pull the rod end from its ball at the engine door hinge. Pivot the rod carefully downwards into the engine bay.  
Pull the spring pins out of the hinge pins of the engine door. Remove the hinge pins. Move the left engine door far enough backwards so that you can lift the rear rubber cord on top of the propeller. Lift the engine door and lay it down on the ground on the right hand side of the glider.
- b) Removal of both engine doors:  
Disassemble rod end and hinge pins of both engine doors according to a). Lift both doors away together.
- c) Assembly is the reverse of disassembly.



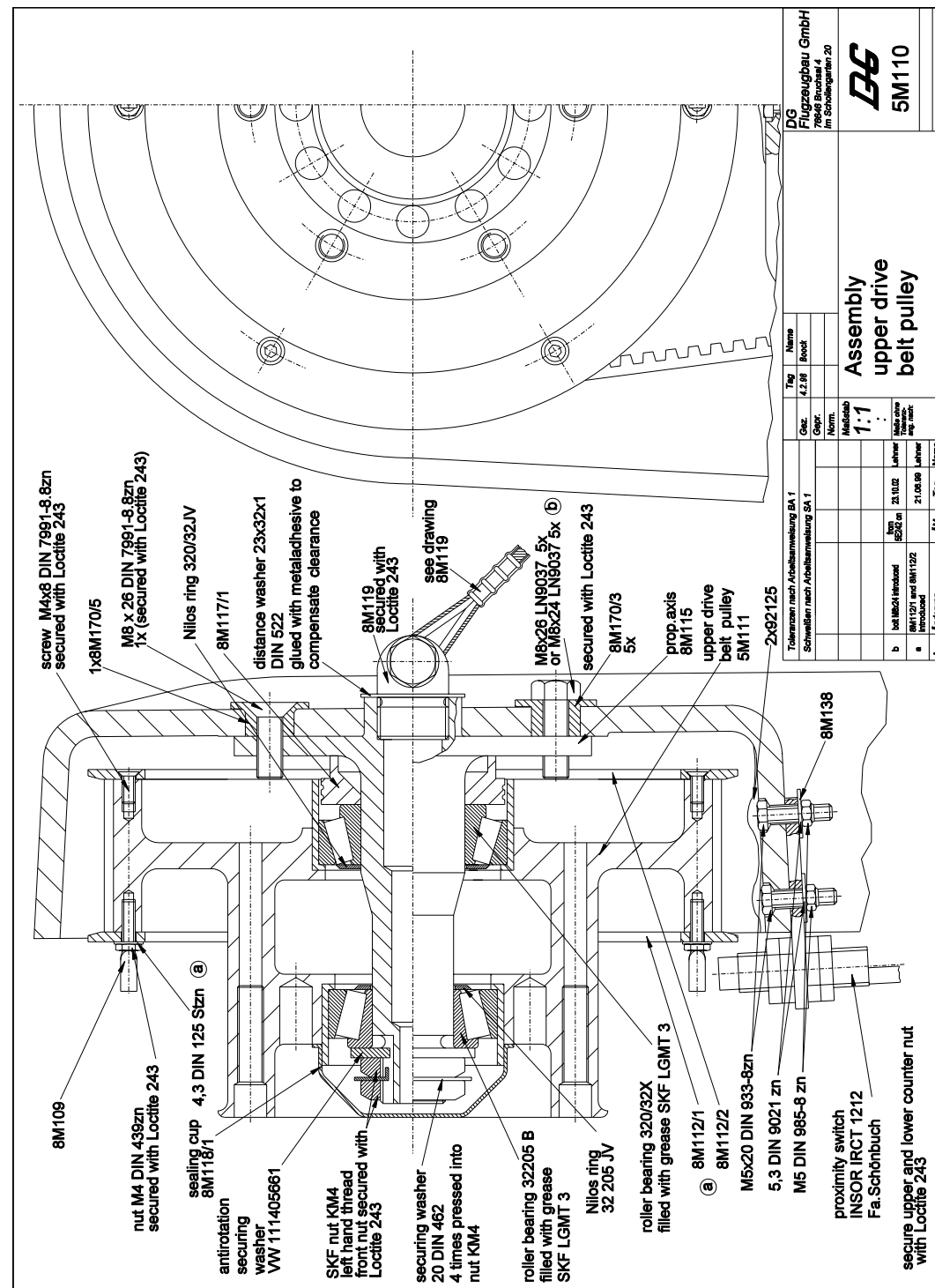
# Retaining cable mounting in fuselage

# diagram 18

from ser.no. 5E243B20 on

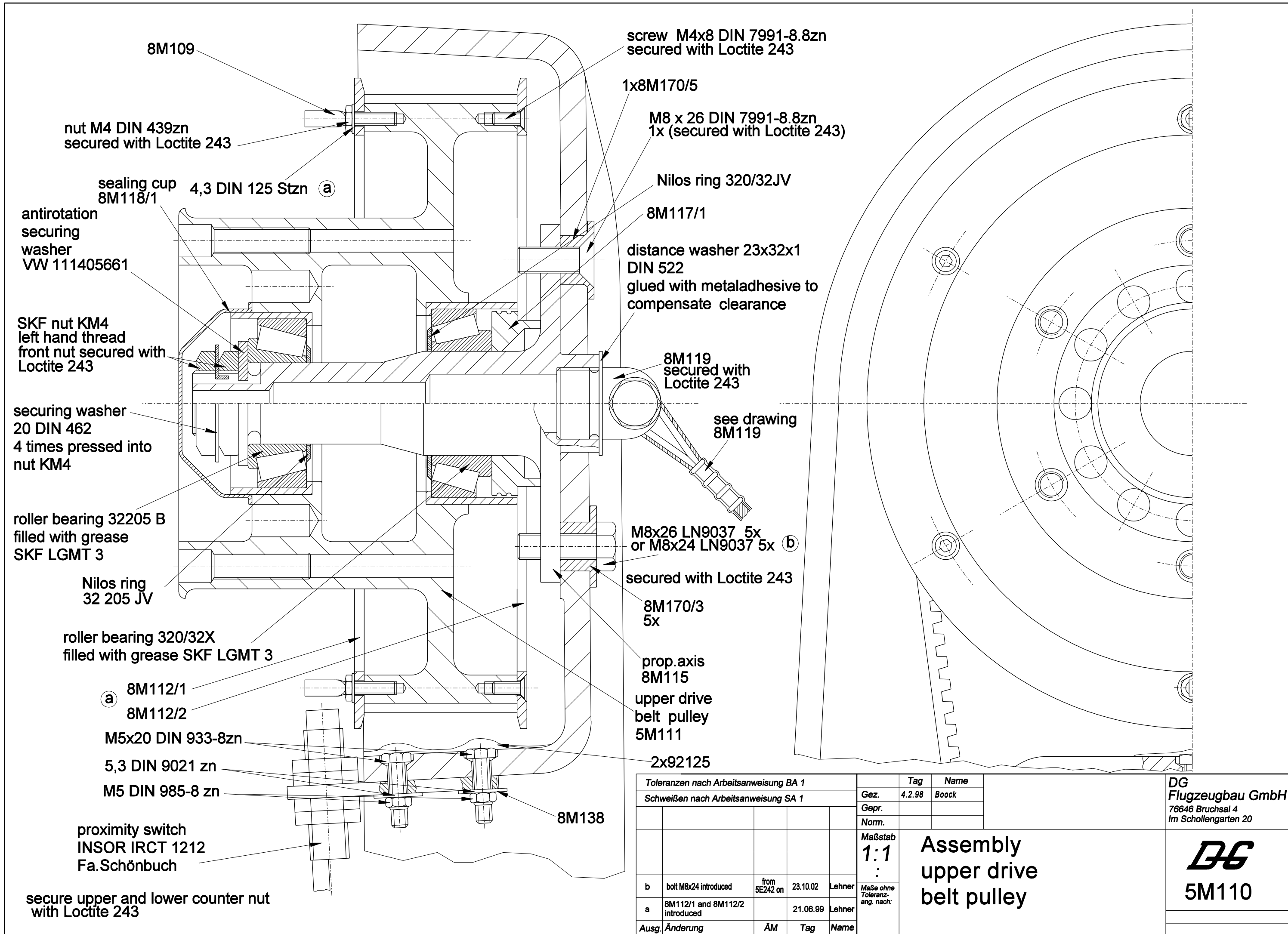


issued March 2004  
TN 843/19



DG Flugzeugbau GmbH 78639 Börsfeld im Schöckingerhof 20		DFG 5M110	
Titel	Name	Gez.	Norm.
4.2.08	Recht		
Toleranzen nach Antriebsleistung BA 1 Schwellen nach Antriebsleistung SA 1		Maßstab	1:1
		Maßstab	
		Leiter	23.10.02
		Leiter	21.08.99
		Änderung	

Assembly  
upper drive  
belt pulley



screw M4x8 DIN 7991-8.8zn  
secured with Loctite 243

1x8M170/5

M8 x 26 DIN 7991-8.8zn  
1x (secured with Loctite 243)

Nilos ring 320/32JV

8M117/1

distance washer 23x32x1  
DIN 522  
glued with metaladhesive to  
compensate clearance

8M119  
secured with  
Loctite 243

see drawing  
8M119

M8x26 LN9037 5x  
or M8x24 LN9037 5x (b)

secured with Loctite 243

8M170/3  
5x

prop.axis  
8M115  
upper drive  
belt pulley  
5M111

2x92125

8M138

8M109

nut M4 DIN 439zn  
secured with Loctite 243

sealing cup 4,3 DIN 125 Stzn (a)  
8M118/1

antirotation  
securing  
washer  
VW 111405661

SKF nut KM4  
left hand thread  
front nut secured with  
Loctite 243

securing washer  
20 DIN 462  
4 times pressed into  
nut KM4

roller bearing 32205 B  
filled with grease  
SKF LGMT 3

Nilos ring  
32 205 JV

roller bearing 320/32X  
filled with grease SKF LGMT 3

(a) 8M112/1  
8M112/2

M5x20 DIN 933-8zn

5,3 DIN 9021 zn

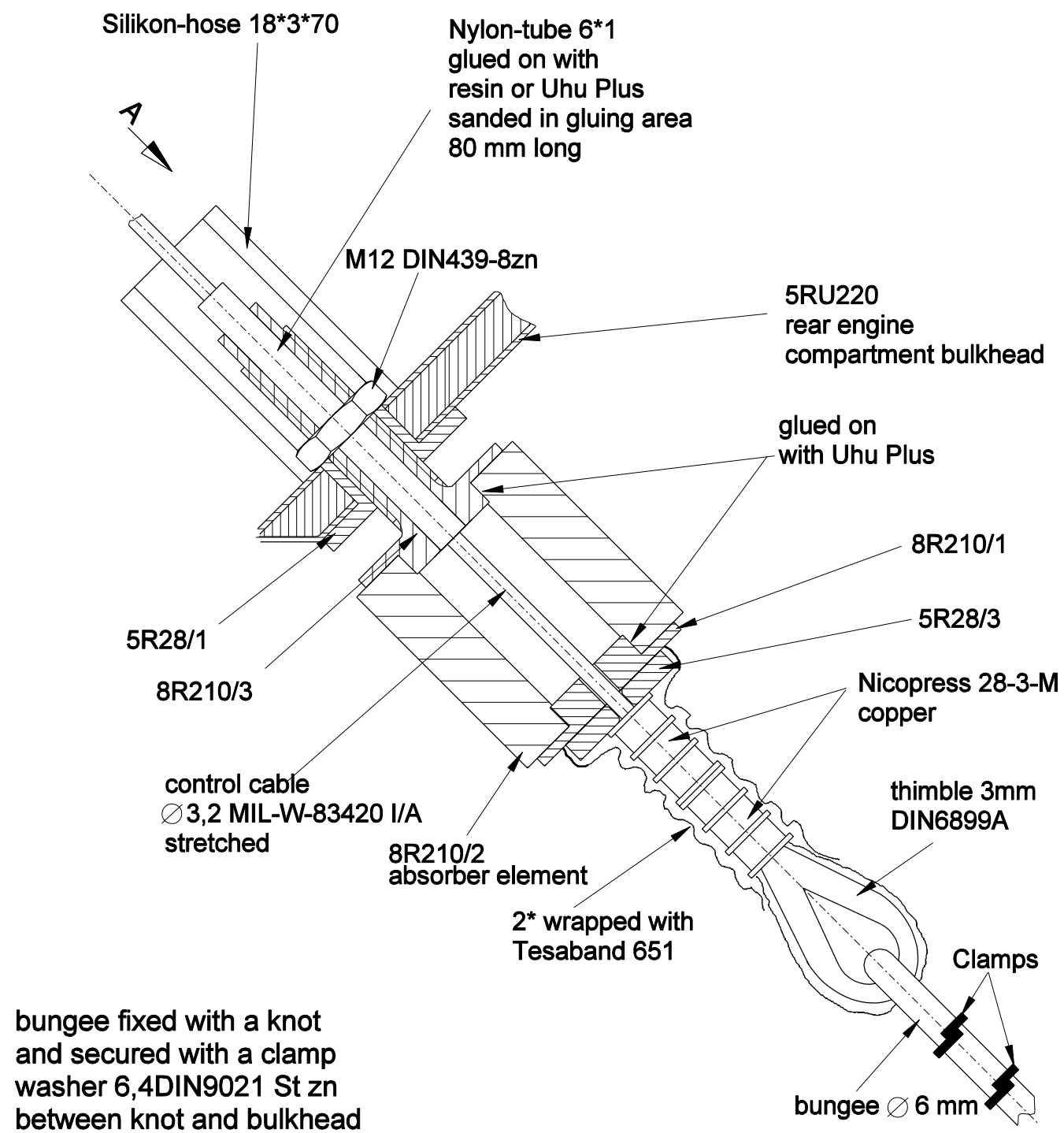
M5 DIN 985-8 zn

proximity switch  
INSOR IRCT 1212  
Fa.Schönbuch

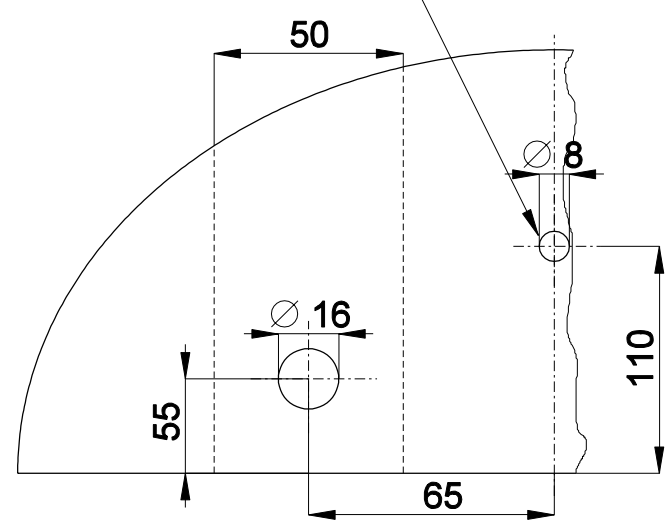
secure upper and lower counter nut  
with Loctite 243

Toleranzen nach Arbeitsanweisung BA 1					Gez.	Tag	Name
Schweißen nach Arbeitsanweisung SA 1					4.2.98		Boock
					Gepr.		
					Norm.		
					Maßstab	1:1	
					Maße ohne Toleranzang. nach:		
b	bolt M8x24 introduced	from 5E242 on	23.10.02	Lehner			
a	8M112/1 and 8M112/2 introduced		21.06.99	Lehner			
Ausg.	Änderung	ÄM	Tag	Name			

<p><b>Assembly upper drive belt pulley</b></p>		<p>DG Flugzeugbau GmbH 76646 Bruchsal 4 Im Schollengarten 20</p>	
		<p><b>5M110</b></p>	



bungee fixed with a knot  
and secured with a clamp  
washer 6,4DIN9021 St zn  
between knot and bulkhead



view A not to scale

Toleranzen nach Arbeitsanweisung BA 1		Tag	Name	DG Flugzeugbau GmbH 76646 Bruchsal 4 Im Schollengarten 20
Schweißen nach Arbeitsanweisung SA 1		Gez.	9.03.04 Dirks	
		Gepr.		
		Norm.		<b>1:1</b> Retaining cable mounting in fuselage : Maße ohne Toleranz- ang. nach:
		Maßstab		
b	Fangseildämpfer	ab	9.03.04	W.Dirks
Ausg.	Änderung	5E243	Tag	Name
				DG
				<b>DG</b>
				5R225