

Maintenance Manual DG-1000M

No.	Page	Description	Date
11	0.2, 0.5, 0.6, 6.1, diagrams 7 + 20	Drive belt tensioning bolt, manual revision TN1000/40	September 2018
12	0.1, 0.7, Enclosure 1 page 2 and diagram 2a	Rudder control operated by hand TN1000/36 Revision 1	January 2019
13	0.2, 0.6, 0.12, diagram 13, diagram 16A	TN1000/43, fuel injection system	September 2019
14	0.2, 0.7, enclosure 3 incl. diagram 2b	TN1000/36 Revision 2 Manual rudder control	May 2020
15	Title, 0.2 - 0.4, 0.6, 0.7, 0.12, 0.14, 1.3, 1.10, 1.12, 1.24, 2.6, 8.1, 8.3, 8.4, diagrams 5, 7, 12, 12a, drawing 10R146	TN1000/45 Manual revision	October 2021
16	0.2, 0.6, 0.7, Enclosure 1 page 3 and diagram 2b	TN1000/36 Revision 3 Manual rudder control	February 2023
17	0.2 – 0.4, 0.6, 1.20, 1.25, 1.30, 8.1	TN1000/47 Spindle drive	October 2023
18	0.2, 0.3, 1.3, 1.4	TN1000/50 adjustment of elevator free play	December 2023

Maintenance Manual DG-1000M

0.2 List of effective pages

Section	page	issued	replaced	replaced	replaced
0	Title	October 2010	October 2021		
	0.1	"	See list of amendments		
	0.2	"	See list of amendments		
	0.3	"	See list of amendments		
	0.4	"	See list of amendments		
	0.5	"	See list of amendments		
	0.6	"	See list of amendments		
	0.7	"	See list of amendments		
	0.8	"	October 2012	July 2017	
	0.9	"	October 2012		
	0.10	"			
	0.11	"	July 2014		
	0.12	"	October 2012	October 2021	
	0.13	"	October 2012	July 2014	July 2017
	0.14	"	October 2012	July 2014	July 2017
			October 2021		
	0.15		July 2017		
	1.1	October 2010			
	1.2	"	October 2012		
	1.3	"	July 2014	October 2021	December 23
	1.4	"	July 2014	December 23	
	1.5	"	October 2012		
	1.6	"			
	1.7	"			
	1.8	"	October 2012		
	1.9	"	October 2012		
	1.10.	"	October 2012	July 2014	October 2021
	1.11	"	October 2012	July 2015	
	1.12	"	October 2012	October 2021	
	1.13	"			
	1.14	"			
	1.15	"			
	1.16	"			
	1.17	"			
	1.18	"			
	1.19	"			
	1.20	"	October 2012	October 2023	
	1.21	"			
	1.22	"			
	1.23	"			

1.2.3 Elevator stops

The elevator stops are located at the rear control column and can be adjusted with a 10 mm open end wrench.

1.2.4 Elevator control circuit free play

With the elevator held fixed in the zero position, the free play at the top of the control column can be ± 2 mm (± 0.08 in.).

Free play within the automatic elevator connection

Within the automatic elevator connection there should be no free play noticeable in the zero position when the elevator is moved at its trailing edge.

Any free play can be reduced by screwing in the adjustment screw on the automatic connector funnel.

Warning: In case the adjustment screw was turned in too far, the roller will jam inside the funnel and can't be moved or only with larger force to the front of the funnel. Moving the horizontal tailplane backwards for rigging might not be possible or only with large effort. Each time a bending force will act on the rod end which might lead to failure of the rod end with time.

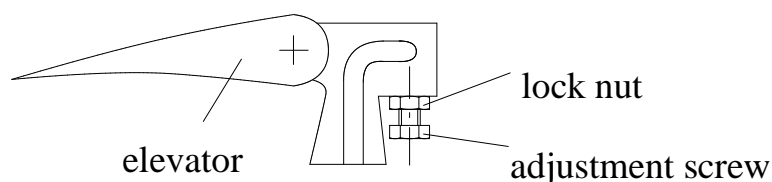
For this reason, after adjusting the free play it is necessary to check if the roller can be moved without force in the funnel.

To accomplish this, remove the complete rod end with the roller or remove the roller from the rod end and stick it on an 8 mm f7 pin and move the roller in the funnel. Prior to removal of the rod end, mark it's position.

If the roller can't be moved without force completely to the front you must turn back the adjustment screw and bend back the sheet metal which was bent by the adjustment screw. Then adjust the free play again.

In case the roller has too much free play on the rod end or if the roller is no more round you must replace the roller by a new one 5St95/3.

In case the glider was operated for a longer time with the adjustment screw turned in too far the rod end must be replaced by a new one 10St97/1.



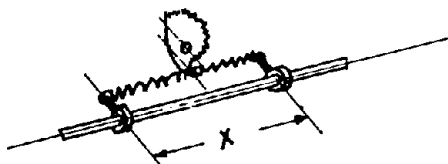
After completion of this work, check the elevator displacements and adjust if necessary.

1.2.5 Trim

Re-adjustment

The trim mechanism should be adjusted so that with full forward (nose down) trim the control column is pulled by the trim springs into it's maximum forward position with a force P of approx. 30 N (6.6 lbs.).

The force P is to be measured with a spring balance at the upper end of the control stick. Read the force, when the stick just starts to move.



The tensioning of the trim mechanism springs is adjusted as shown in the sketch. $x = 340$ mm (13.4 in.)

The springs are located in the rear cockpit on the left hand side.

The correct adjustment should be verified in flight and corrected if necessary.

Trimming should be possible up to 200 – 220 km/h (108 - 119 kts.).

Note: If the DG-1000M can be trimmed up to higher speeds it is likely that the trim is not sufficient in circling flight.

1.2.6 Pilot force reducing rubber-cord

The rubber cord (part No. 30091131 dia. 6 mm white) produces an elevator stick force in push direction. If the trim efficiency of your glider in push direction is reduced, you have to inspect the rubber cord.

The rubber cord is located on the left hand side behind the main bulkhead below the baggage compartment floor. The rubber cord runs from bellcrank 5St19 to a fork beside the left hand front edge of the landing gear box.

The length of the rubber cord when loose should be 470 mm (18.5 in.). If the cord is longer or worn it must be replaced.

The cord must be replaced at least every 6 years.