Manual amendments

No.	Page	Description	Datem
1	2, 3, 4, 25, 28, 49, 86, 91, 93, 8E101, 8E105	TN 873/27 Manual revision	November 2001
2	1 - 5, 43, 44, 47, 92, diagram 11	TN 800/44 Fuel hoses	October 2016
3	1-6, 33,34, 44, 93, diagrams 3, 9	TN 800/45 Manual revision, coolant hoses	July 2017
4	1-3, 5, 45-47, 47 a, 48, 49	TN 800/45 Manual revision, life time drive belt	May 2023
5	1, 2, 8 - 10	TN 800/50 Adjustment of elevator free play	December 2023
6	Cover page, 1	TN DG-G-17 Update of cover page	August 2025
7	1, 2, 4, 8, drawing 1 St 038	TN 800/52 Control column, control stick suspension, securing the spherical bearings	September 2025

Content		**Page**	**approved**
0	Airworthiness limitations	5	May 23
		6	July 17
1.	**System description and adjustment data**		**issued**
1.1	Wing and tail group setting data	7	Nov. 96
1.2	Elevator control and trim system	8	Sep. 25
		9	Dec. 23
1.3	Rudder control	10	Dec. 23
1.4	Aileron and wing flaps control	11	" "
		12	" "
1.5	Airbrake control and wheel brake	13	" "
1.6	Undercarriage	14	" "
1.7	Tow hooks	15	" "
1.8	Water ballast system	15	" "
1.9	Mass balance and weights of control surface	16	" "
1.10	Fore and aft play of the wings	17	" "
1.11	Power plant	18	April 96
		19	" "
		20	" "
1.12	Retraction-extension mechanism	21	" "
		22	" "
1.13	Fuel system	23	" "
		24	" "
		25	Nov. 01
		26	April 96
1.14	Electrical system	27	" "
		28	Nov. 01
		29	April 96
		30	" "
		31	" "
		32	" "
2.	**Inspections**		
2.1	Daily inspection	33	July 17
2.2	Regular inspections	33	" "
		34	July 17
2.3	Inspection after a heavy landing	35	Nov. 96
		36	" "
		37	" "
2.4	Inspection procedure for increase of service time	38	" "
		39	" "
2.5	Inspection procedures	39	" "

Content	**Page**	**issued**
4.20 Section not effective	(75-77)	
4.21 Section not effective	(78)	
4.22 Calibration of the fuel display in the	80	April 96
DEI	81	" "
4.23 Section not effective	(82)	
4.24 Determ. of the moments of the flaperons	83	Nov. 96
4.25 Internal sealings of control surfaces	84	" "
	(85)	
5. Weight and balance	86	Nov. 01
weighing	87	Nov. 96
6. Instruments and accessories list	88	" "
" " " "	89	April 96
7. List of special tools	90	" "
8. Partslist	91	Nov. 01
" " " "	92	October 16
" " " "	93	July 17
" " " "	94	Nov. 96

Diagrams	**issued**
1 Elevator control circuit, trim	Nov. 93
2 Rudder control circuit, landing gear	" "
3 Aileron, wing flap and spoiler control circuits, fuselage side	July 17
4 Flaperon and spoiler control circuits, wing side	Nov. 93 " "
5 Tow hooks, water ballast system	" "
6 Pitot static system	" "
7 Placards	April 96
8 Powerplant	" "
9 Cooling system	July 17
10a Extension-retraction mechanism type Stross	Nov. 96
10b Extension-retraction mechanism type Magnetic	" "
11 Fuel system	October 16
12 Tailwheel	Nov. 93
14 Engine doors and retaining cable	April 96

Enclosures		**issued**
Equipment list	95	Nov. 96
Checklists for maintenance work	96	" "
EFWK Installation landing gear doors		Oct. 87
6EP27M Installation Dräger oxygen system		28.08.90
8EP35 Installation wing fuel bags		12.10.93
8EP38 Installation ELT		07.08.96
8M110 Drawing Assembly upper drive belt pulley		20.03.96
8V96 Drawing		19.12.94
W 40 Drawing Puller assy. for lower pulley		04.02.95
W51 Drawing Hook spanner for bearings of upper drive belt pulley		20.11.96
8E101 Wiring scheme		12.11.01
8E102 Wiring plan DIN A 1 (in aircraft log)		09.01.96
8E105 Amendment to wiring plan 8E102 TN873/27		09.11.01
1 St 038 Additional control column safeguard acc. to TN 800/52		01.09.25

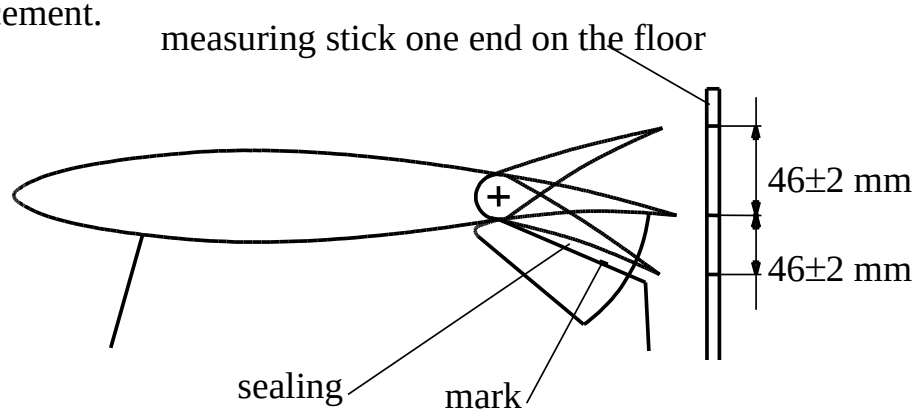
1.2 Elevator control and trim system

1.2.1 Control system

see diagram 1 and drawing 1 St 038

1.2.2 Elevator deflections and tolerances

Up 46 ± 2 mm 1.81 ± 0.08 in.
Down 46 ± 2 mm 1.81 ± 0.08 in.
measured at 134 mm (5.3 in.) from hinge axis which is directly at the edge of the cut-out for the rudder.
Measurement:
Hold a measuring stick with one end on the floor. Deflect the elevator to neutral position by bringing the mark at the sealing in line with the upper end of the fin. Mark the 0-point on the stick. Then mark the up and down displacement.



1.2.3 Elevator stops

The elevator stops are located at the base of the control column and can be adjusted with a 10 mm open ended spanner.

1.2.4 Elevator control circuit free play

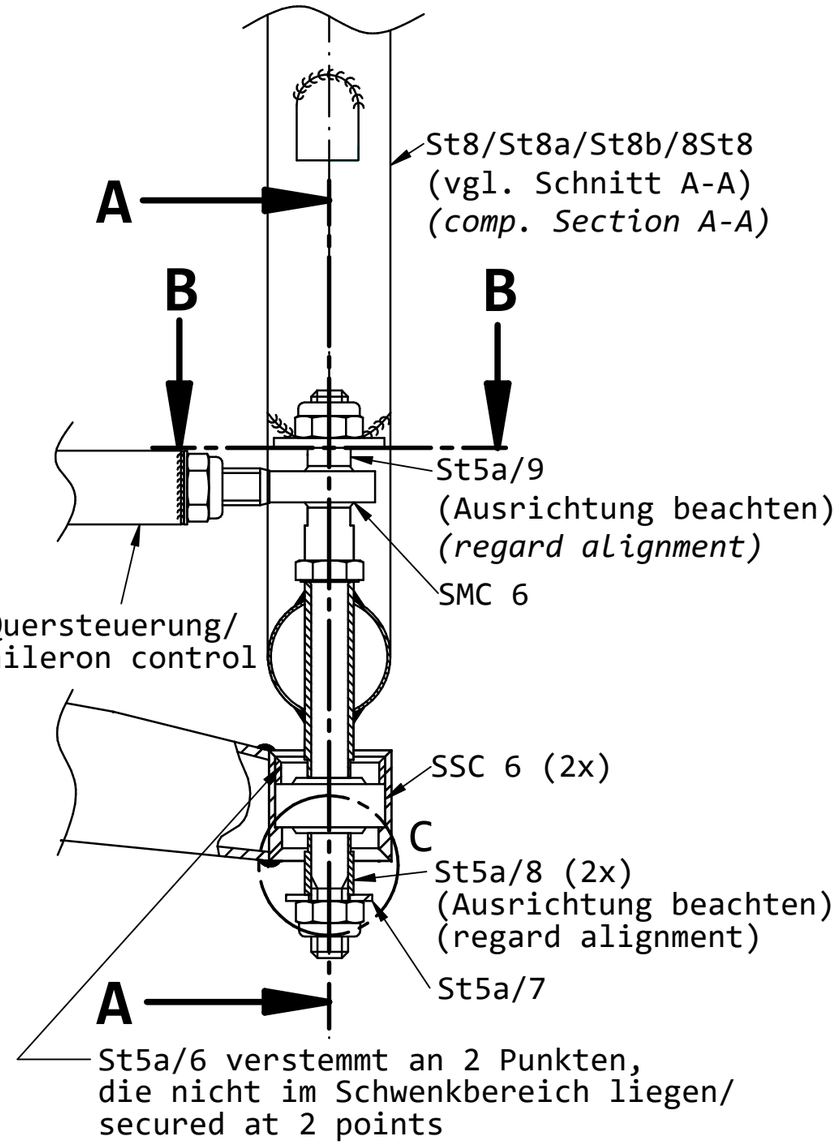
With the elevator held fixed in the zero position, the free play at the top of the control column can be ± 1.5 mm (± 0.06 in.).

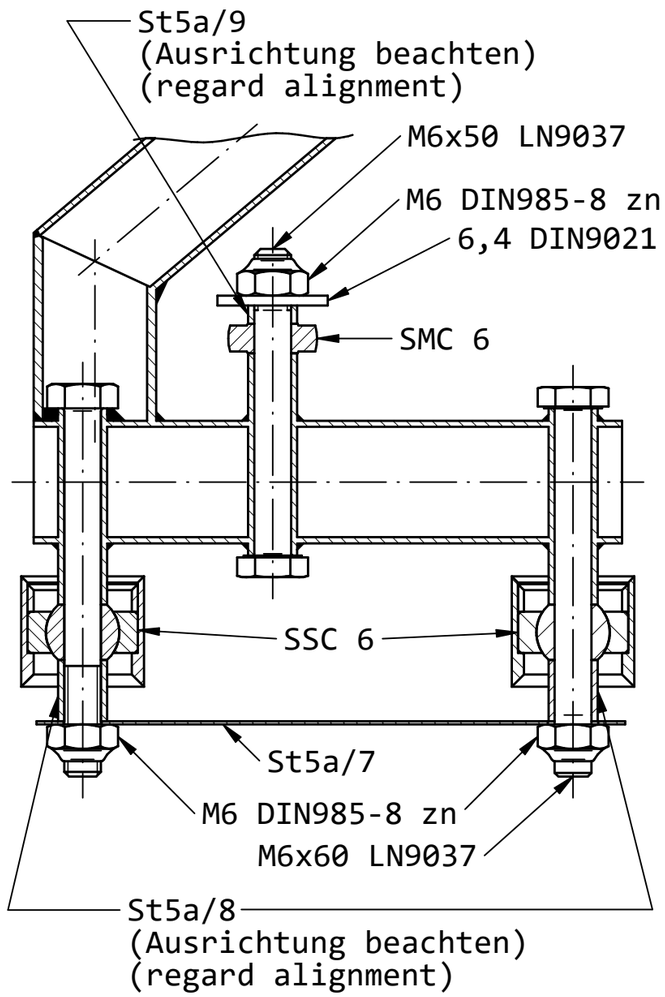
Free play within the automatic elevator connection

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.

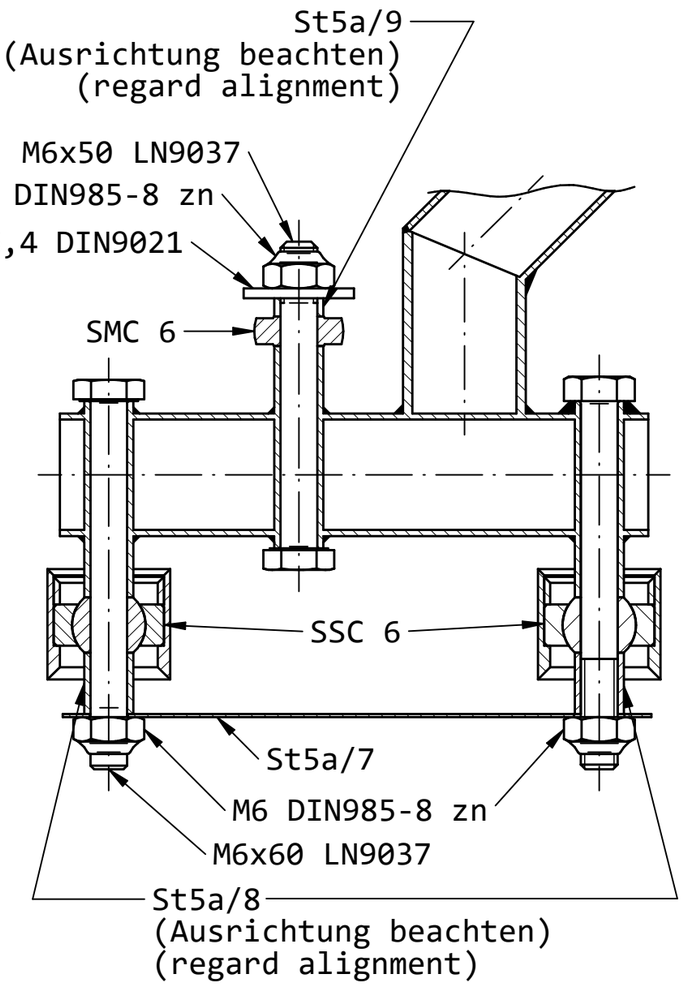
Warning: In case the adjustment screw was turned in too far, the roller will jam inside the funnel and can´t be moved or only with larger force to the front of the funnel. Moving the horizontal tailplane backwards for rigging might not be possible or only with large effort. Each time a bending force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

Diese Zeichnung ist Eigentum der DG Aviation GmbH.
Nicht ausdrücklich freigegebene Vervielfältigung oder Weitergabe an Dritte ist verboten.
DG Aviation GmbH.

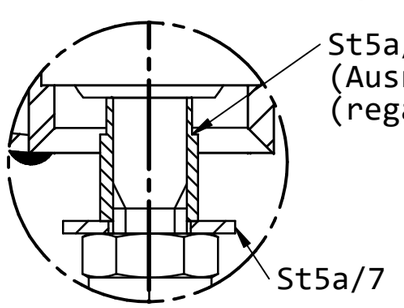




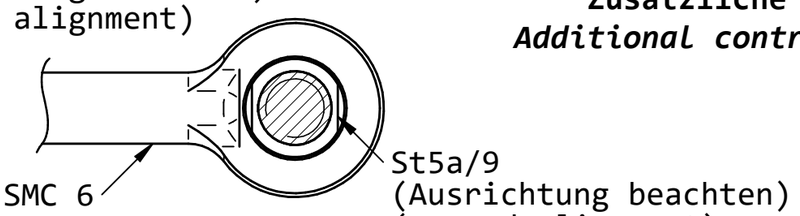
A-A
(bei/with St8/St8a/8St8)



A-A
(bei/with St8b)



C (2:1)



B-B (2:1)

Zusätzliche Sicherungen des Handsteuers gemäß TM DG-SS-10 bzw. TM 800/52
Additional control column safeguard according to TN DG-SS-10 resp. TN 800/52

Ausg.	Beschreibung	ab W-Nr.	Name/Datum
-	Erstausgabe		E. Scharf 01.09.2025

Gepr. (MPI) J. B. Wassenaar 01.09.2025 | Freig. (MPL) W. Dirks 01.09.2025

Zeichnungsnummer: 1 St 038

Titel: **Handsteuersicherung/ Control Column Safeguard**

Toleranzen nach Arbeitsanweisung BA 1
Schweißen nach Arbeitsanweisung SA 1

76646 Bruchsal | Otto-Lilienthal-Weg 2

Maßstab 1	Maßstab 2	Einheiten	Projektion	Format	Seite	Status
1:1	(2:1)	mm [inch]		DIN A3	1 / 1	Musterunterlage

Projekt: DG single seaters, DG-800 | Ausg. .0

INCH / MILLIMETER