

429.

Gerstlauer Euro Fighter – service bulletin

The following service bulletin has been issued by German ride manufacturer Gerstlauer in relation to a Euro Fighter ride. However, the committee believes the content of the bulletin would apply to all Euro Fighters and may apply to other Gerstlauer rides that use similar vehicles. The manufacturer suggests it is an improvement in the ability to adjust the position of the restraint.

The information contained within is that of the manufacturer and not NAFLIC. When following the advice from the manufacturer, you are reminded of your duties and responsibilities under HSG175 regarding modifications.

Committee Members: Mr. D Dadswell (Chairman), Mr. A Mellor (Secretary), Mr. P Smith, Mr. J Green, Mr. D Cox, Mr. M Thirkettle, Mr. I Davies, Mr. J Shilling & Mr. D Inman

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Supported By:



January 2017

Service Bulletin 2017-01#01

Changing of minimum closing position

Ride in Question:	2068 Eurofighter
Drawing/position in question:	1025-01-05-00-00 j Assembly - Restraints
Reason for Information:	Due to further tests and new findings, we want to continuously improve our rides.
Reason for Change:	Achieving the best possible security for the operation of the ride and the safety of your ride passengers. We recommend implementing and documenting the described measures in reasonable time.
Measures to be taken:	A: Mechanical adjustments (Material from Gerstlauer; adjustment/change by customer on site) Changing the minimum closing position of the restraint by installing new mount for the limit switch. B: Tests to be conducted after adjustment <ul style="list-style-type: none">- Test runs without passengers- Regular tests
Date for Implementation:	During annual maintenance. At the latest before season opening.
Regular Tests:	Independent of the following described modifications, both operating and maintenance instructions remain valid. Therein described tests still have to be carried out.

All works may only be done by qualified specialist staff. The knowledge and observance of the operating and maintenance instructions is presumed.

The following description refers to one seat each. The described procedure is to be repeated on every further seat of each vehicle.

Required parts for the adjustment (connecting elements):

Limit switch to angle (group 1)

- 1 angle support 1018-01-05-00-04c
- 2 bolts DIN 912 M4x20 8.8 galv.
- 2 nuts DIN 985 M4-8 galv.

Angle to seat carrier (group 2)

- 2 bolts DIN 7991 M4x12 8.8 galv.
- 2 washers DIN 125 B-4.3 galv.
- 2 washers DIN 985 M4-8 galv.

Torque specification bolted connection:
Screw locking:

M4: 3Nm
Loctide 243

NOTICE:

Do not loosen any electrical connections during the whole procedure.

A: Mechanical adjustment

1. Preparation:

- Remove all connecting elements, covers etc. in order to enable free access to the limit switch.
- Remove the existing angle support including the limit switch.
- Remove the limit switch from the angle support.

2. Implementation:

- Mount the limit switch with the new connecting elements on the new angle support (connecting elements group 1).
- Apply a colour mark between nut and bolt.
- Mount the new angle support with the mounted limit switch hand-tight to the seat carrier (connecting elements group 2).
- Adjust the switching position according to the indications on drawing 1025-01-05-00-00 j.
- Tighten the bolt connection of angle support on seat carrier.
- Control the adjustment of the switching position.
- Apply a colour mark in order to immediately detect a dislocation of the angle support and the seat carrier.

3. Final works

- Remount the removed connecting elements, covers etc. to their original position.

The above described procedure needs to be carried out precisely and documented for each vehicle separately on the attached control sheet.

B: Tests to be conducted after adjustment

- **Test run without passengers:**
Before the first test run (without passengers) all switch positions must be checked again according to the electrical documentation in order to verify proper functioning (see following description).
- **Regular tests:**
 - Examination of switch setting for monitoring the minimum closing position**
 - The examination of the switch setting for monitoring the minimum closing positions must be done and documented separately for every vehicle
 - In case of a distance of more than 400mm between the back rest and the restraint (see drawing 1025-01-05-00-00 j), the switch must not be actuated.
 - Before the first ride operation with passengers, at least 20 test runs without passengers must be made. Thereafter the switch setting for monitoring the minimum closing position for every vehicle must be checked again to verify that it is correct.
 - Upon completing the foregoing adjustment, after the first day of ride operation and before 200 rides, the switch setting for monitoring the minimum closing position has to be checked again to verify that it is correct.
 - Upon completing the foregoing adjustment, after the first week of ride operation and before 1,000 rides, the switch setting for monitoring the minimum closing position must be checked again to verify that it is correct.
 - Thereafter this must be done weekly.

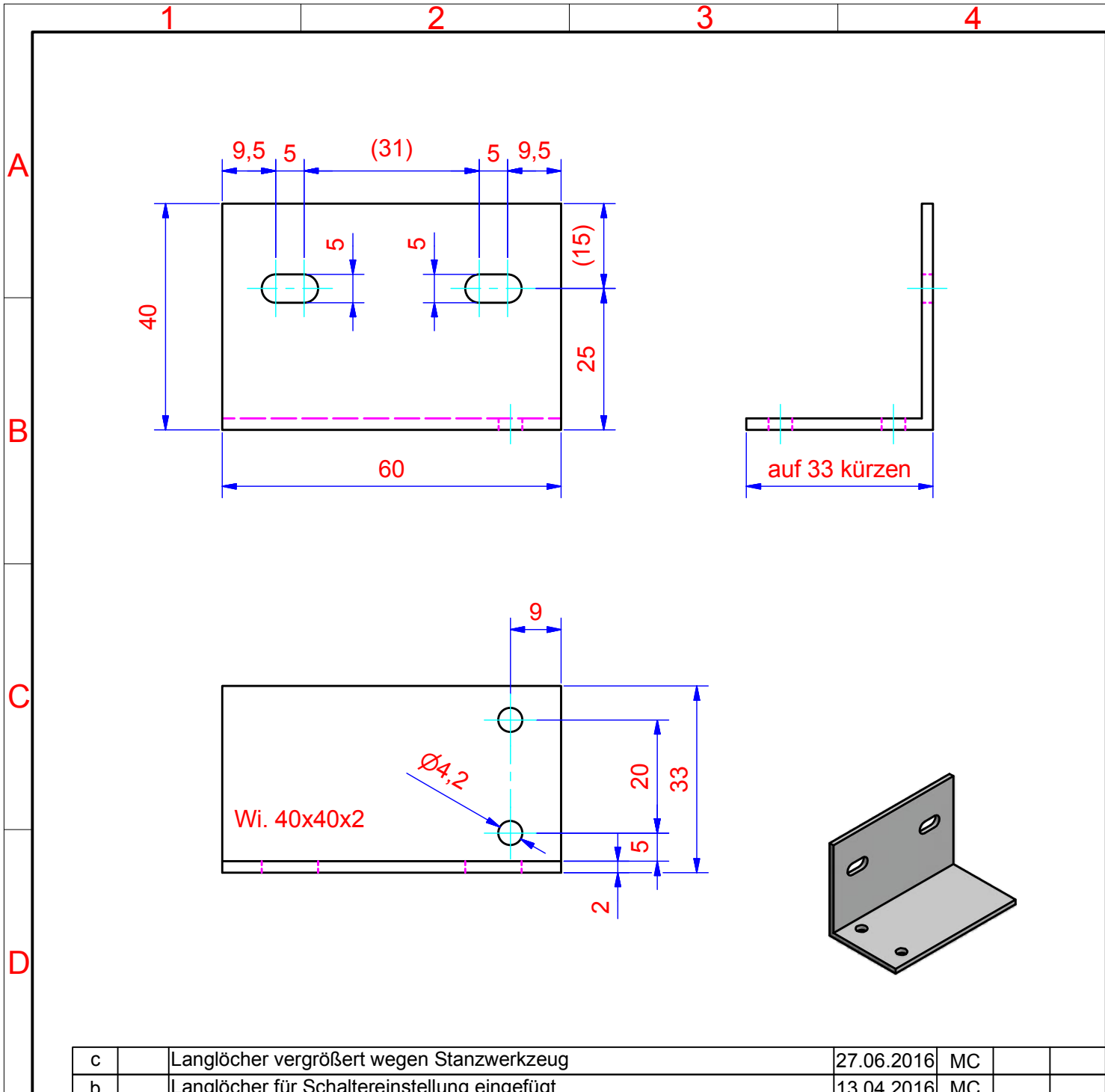
Please Return To Gerstlauer A Signed Copy Of This Letter AS ATTACHED To This Original NO LATER Than February 28th, 2017!

Please do not hesitate to contact us if you have any questions.

Best regards,

Gerstlauer Amusement Rides GmbH

i.A. Hans-Jürgen Werner
After Sales Manager
hans-juergen.werner@gerstlauer-rides.de
(49) 8281 9968-16



c		Langlöcher vergrößert wegen Stanzwerkzeug	27.06.2016	MC		
b		Langlöcher für Schaltereinstellung eingefügt	13.04.2016	MC		
a		Schrägschnitt entfällt / Länge geändert	19.06.2007	DK		
Ind.	Anz.	Änderung	Datum	Gez.	Gepr.	Ges.

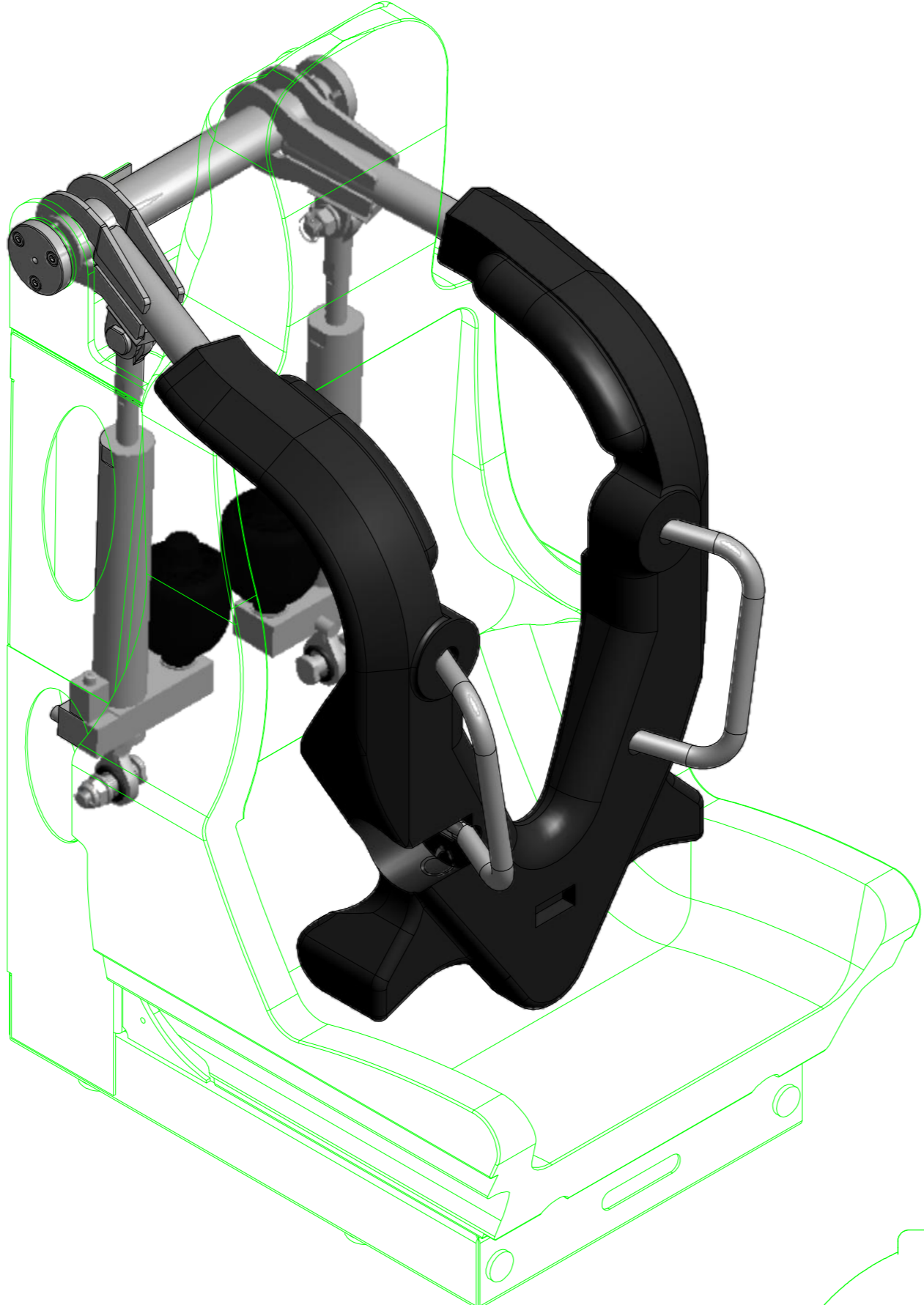
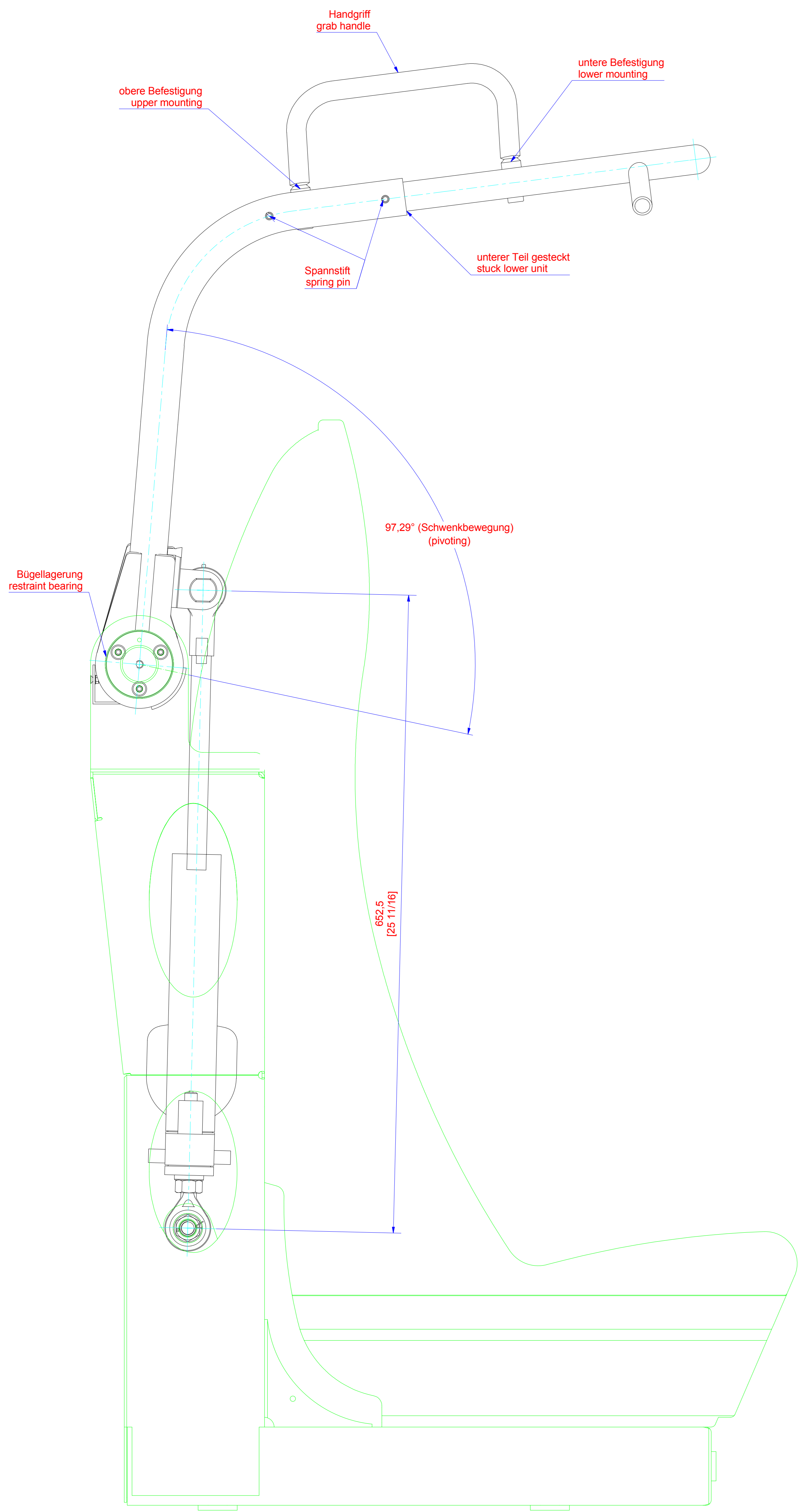
Kanten gebrochen
 Maße ohne Toleranzangabe nach DIN 7168 m

Gerstlauer Amusement Rides GmbH

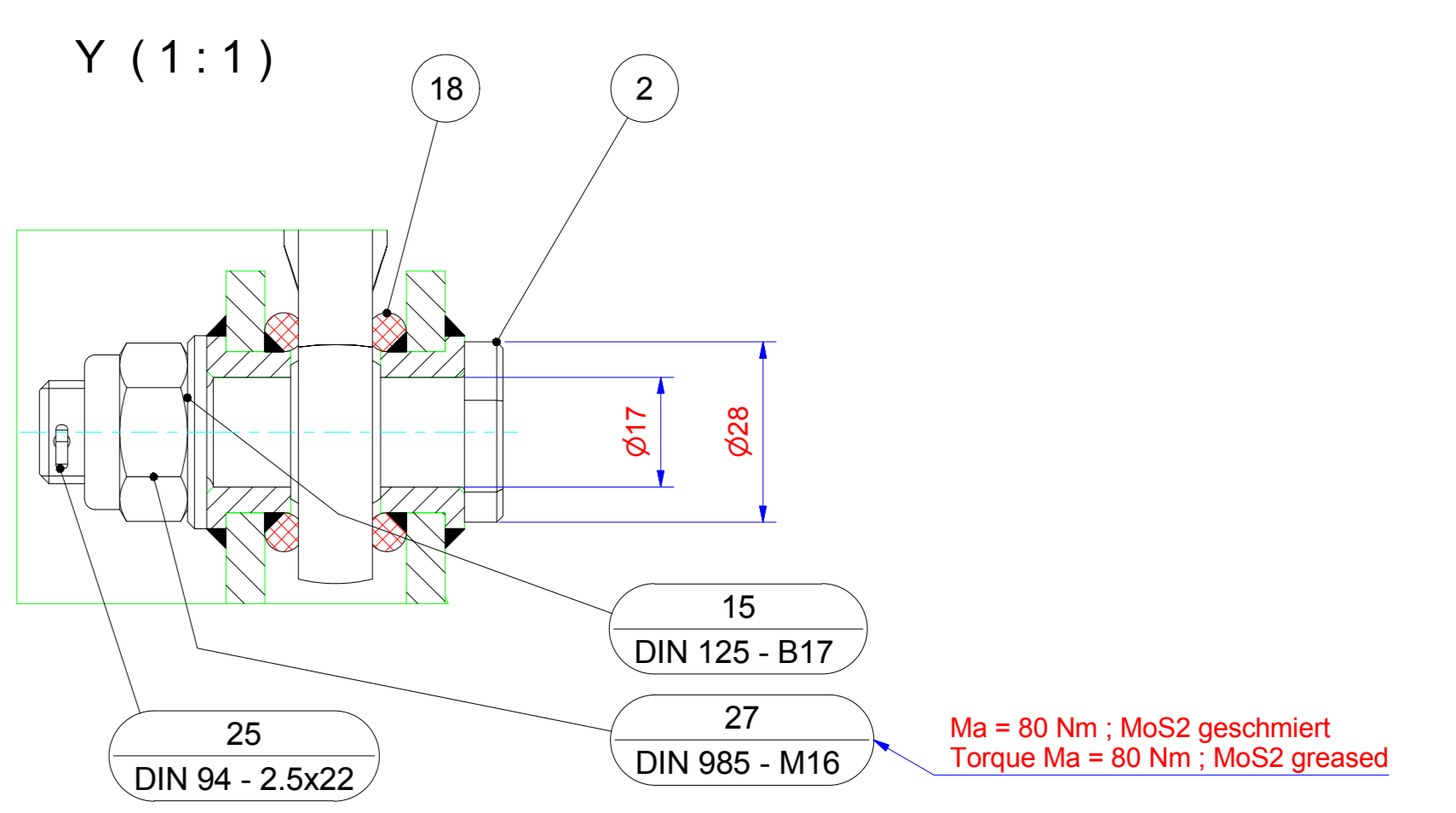
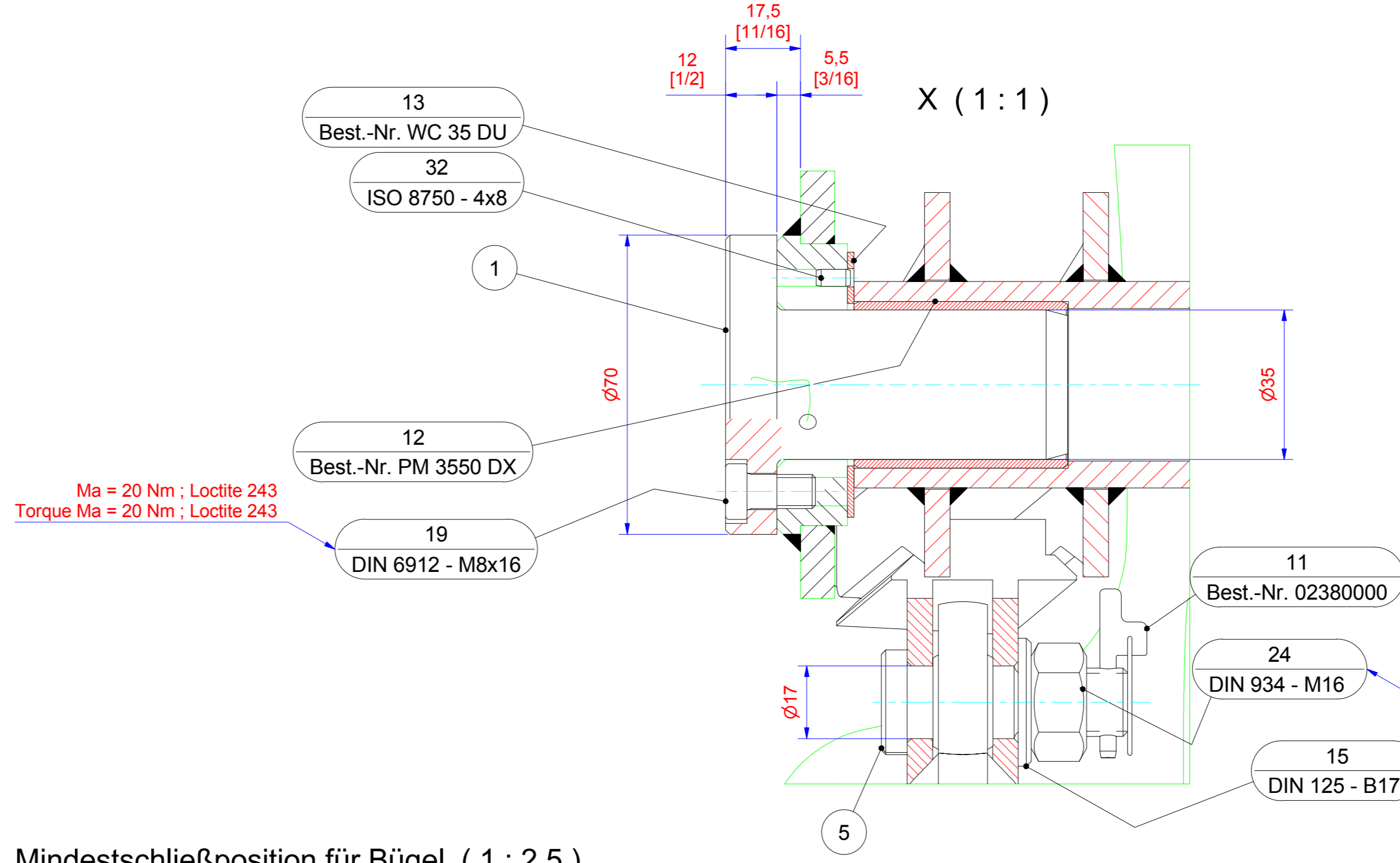
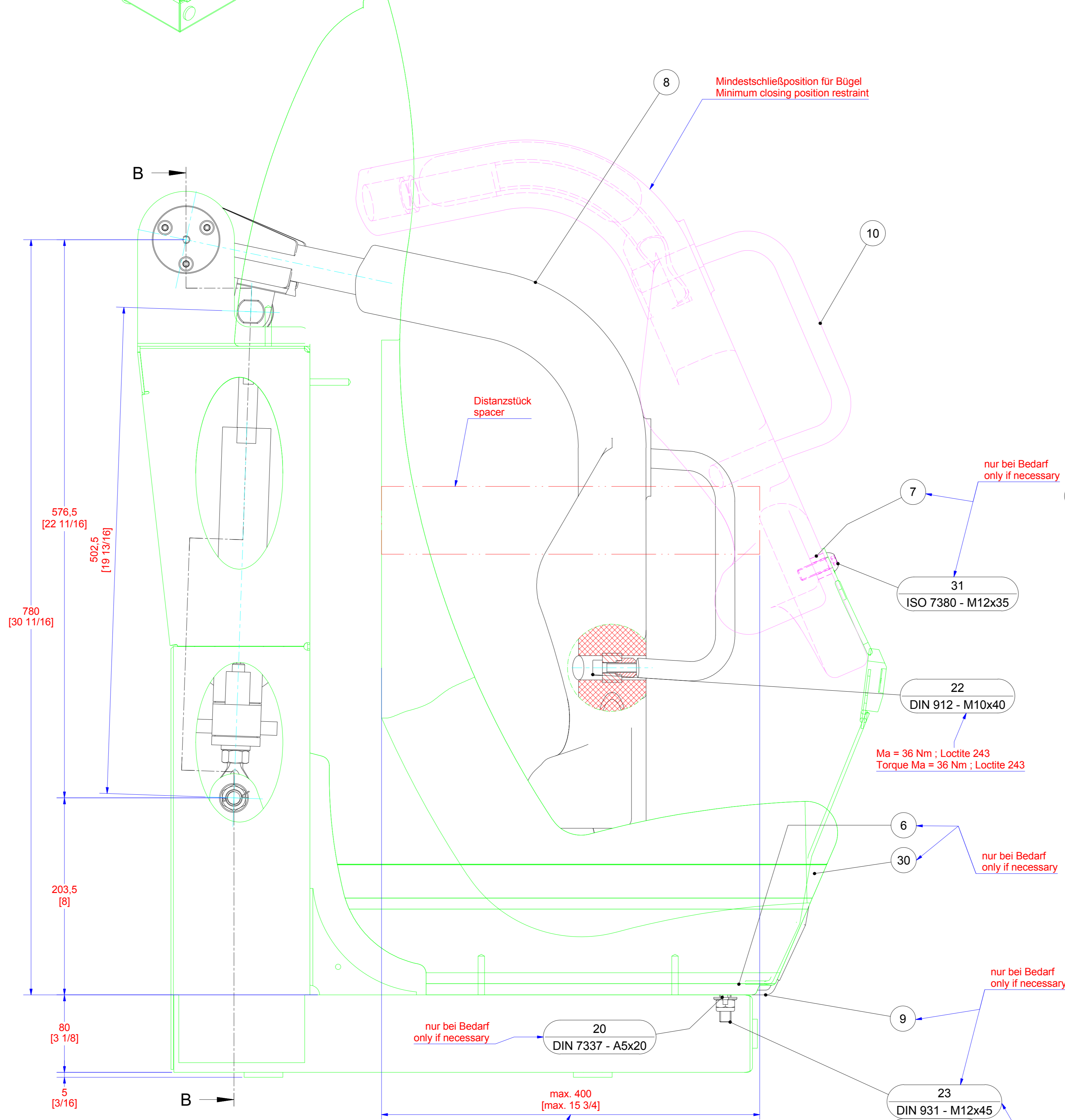
Industriestr. 17 - 86505 Münsterhausen - Tel.: +49 (0) 8281 / 9968-0 - Fax: +49 (0) 8281 / 9968-33

Aus dieser Zeichnung dürfen keine nicht direkt bezeichneten Maße entnommen werden. <u>Vertraulich</u> No measurements may be taken from this drawing, otherwise clearly indicated <u>Confidential</u>	Maßstab		Gewicht		Werkstoff/Din		Stückzahl:	
	1 : 1		0.02 kg		Al			
	Gez.:	18.02.2003	Name	JH	Benennung Winkel			
Gepr.								
Ohne unsere Genehmigung darf diese Zeichnung weder kopiert noch vervielfältigt, noch dritten Personen oder Konkurrenzfirmen zugänglich gemacht werden (§1 und §11 des Gesetzes vom 19. Juli 1901)					Zchg. Nr.:		Bl. 1	
					1018-01-05-00-04		von	
					EDV Nr.		1	
							A4	

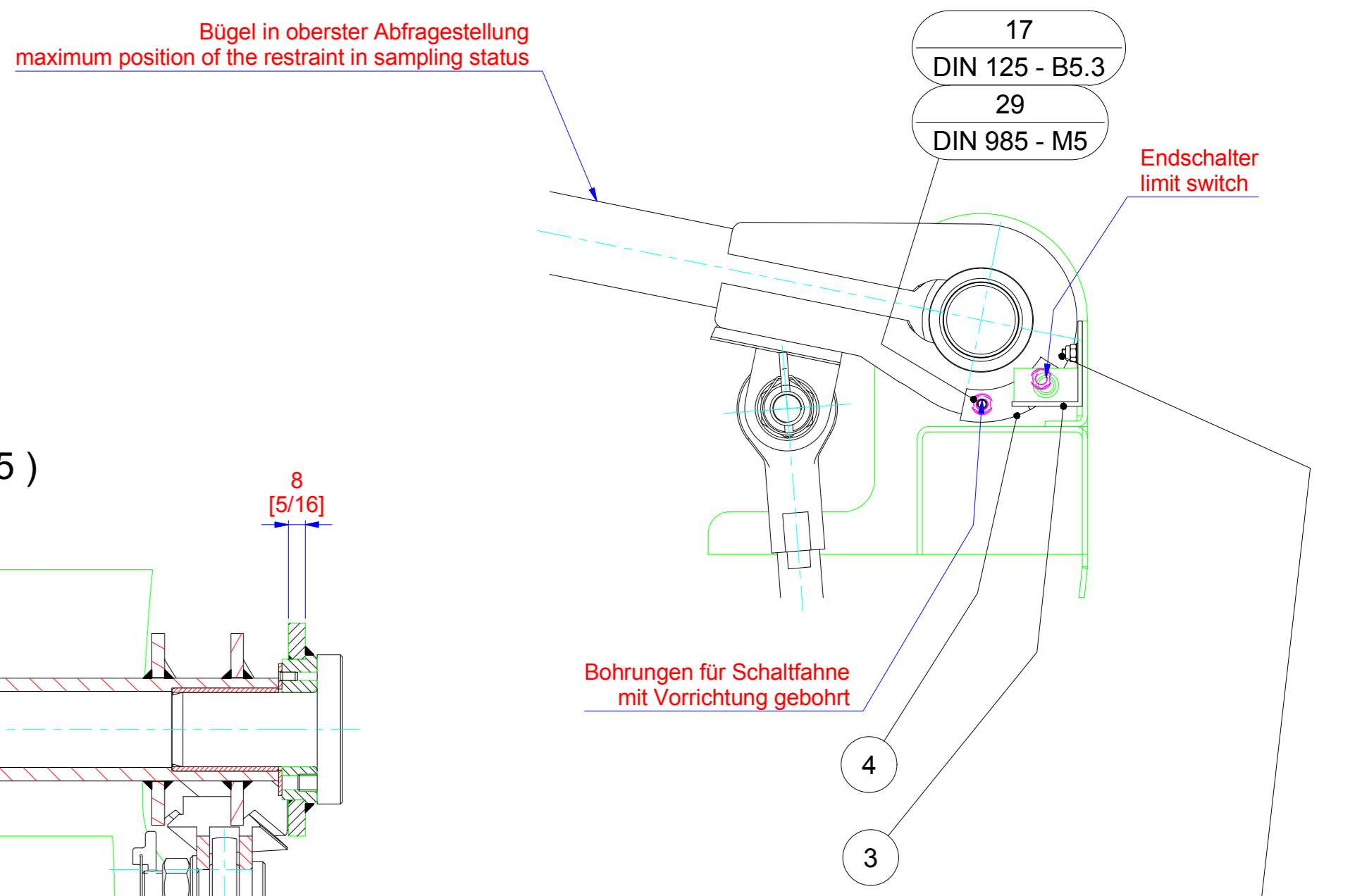
Bügel geöffnet (1 : 2,5)
restraint open



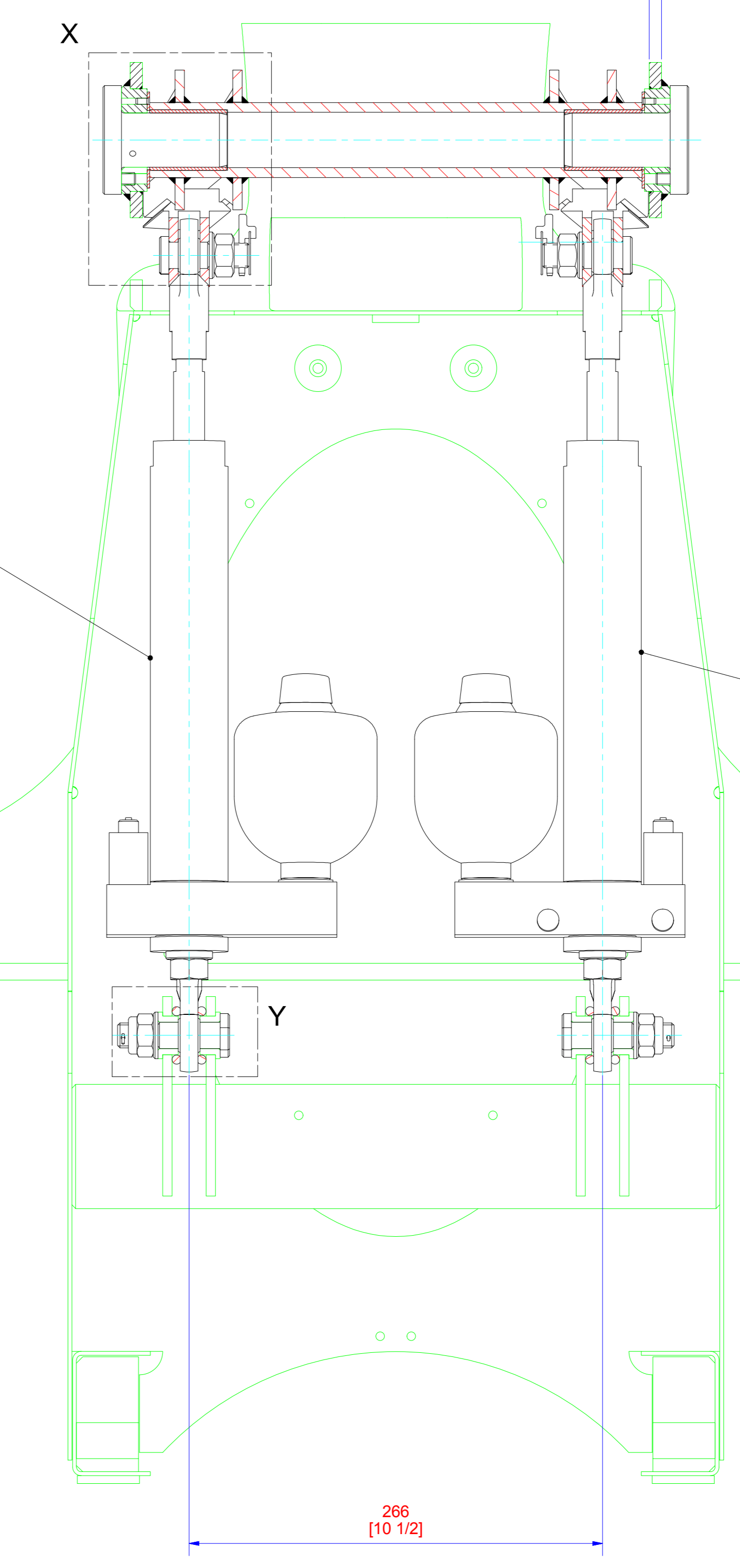
Mindestschließposition für Bügel (1 : 2,5)
Minimum closing position restraint



Ansicht auf Endschalter (1 : 2,5)
view of the limit switch



B-B (1 : 2,5)



Um die Mindestschließposition einzuhalten, darf der Abstand zwischen Rückenlehne des Sitzes und der Polsterung des Sicherheitsbügels maximal das eingezeichnete Einstellmaß betragen. Erst dann darf der elektrische Schließerkontakt des Endschalters geschlossen sein. Der Endschalter wird mechanisch am Schalter durch Verschieben eingestellt, dass er auf ca. halber Strecke von der Schräge an der Schaltbocke schaltet. Bei geschlossenem Sicherheitsbügel soll der Endschalter mechanisch nicht komplett betätigt sein und noch ca. 1mm Schaltwegreserve haben.

The distance between the seat's back rest and the restraint's padding must be less than the shown adjustment measure in order to meet the minimum closing position. Only then the electrical contact (normally open) of the limit switch must be closed. The limit switch is adjusted mechanically by shifting the switch and should be actuated in the midway of the cam. If the restraint is closed, the mechanic stroke of the limit switch must not be used completely. There should be approx. 1mm stroke left as a buffer.

Diese Zeichnung ist Bestandteil der Betriebsanleitung
This drawing is part of the operating instruction

Ind.	Anz.	Änderung	Datum	Gez.	Gepr.	Ges.
j		Bügelanschläge entfernt	12.07.2016	MC		
i		Text geändert / text changed	31.03.2016	MC		
h		Maß für Mindestschließstellung verringert (war 420mm) / Measurement for minimum closing position reduced (was 16 15/32)	26.01.2016	MC		
g		Verdrosselung für Bügelzylinder durch O-Ringe ersetzt / Stückliste neu	16.09.2010	jh		
f		3-d Modelle erstellt / Stückliste neu	22.04.2009	jh		
e		Pos. 35 bis 43 hinzu	19.12.2006	us		
d		Pos. 31 bis 33 hinzu	14.07.2006	jh		
c		sämtliche O-Ringe sind entfallen	16.11.2005	jh		
b		Pos. 29 und 30 hinzu / Pos. 12 und 13 Stückzahl geändert / Pos. 2 Zchg.Nr. geändert	20.09.2005	jh		
a		Pos 24 bis 28 hinzu	29.08.2005	jh		

Kanten gebrochen
Maße ohne Toleranzangabe nach DIN 7168 m

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Aus dieser Zeichnung dürfen keine nicht direkt bezeichneten Maße entnommen werden.	Maßstab	Gewicht	Werkstoff/Dm	Stückzahl
Vertraulich	1 : 2,5	33.84 kg		
No measurements may be taken from this drawing, otherwise clearly indicated	Gez.: 22.08.2005	us	Benennung	Zchg. Nr.
Confidential			Sicherheitsbügel - Einbau	1025-01-05-00-00
			restraint - assembly	EDV Nr.



Gerstlauer Amusement Rides GmbH - Industriestraße 17 - 86505 Münsterhausen
 aftersales@gerstlauer-rides.de

Benennung Baugruppe / Description: **Zeichnungsnummer / Drawing no.:** **Preis gültig bis / Prices valid to:**
Sicherheitsbügel - Einbau / restraint - assembly **1025-01-05-00-00j**

Pos	Stk. Pcs.	Benennung	Description	Zeichnungsnr. / DIN Drawing no. / DIN	Rev. Index	Material / Güte Material / Qty.	Warenmaße Measures	Preis in € Price in €	Vorauss. Lieferz. in Wochen EXW Appr. del. time in weeks EXW
1	2	Zapfen	Journal	1018-01-05-00-01	c		Ø70x80		2
2	2	Gewindebolzen	Threaded bolt	1018-01-05-00-03			Ø28x72		2
3	1	Winkel	Angle	1018-01-05-00-04	c				
4	1	Schaltfahne	Cam switch	1018-01-05-02-00	a				2
5	2	Gewindebolzen	Threaded bolt	1025-01-05-00-02			Ø28x58		2
6	1	Gurt kpl.	Seat belt	1025-01-05-00-11	a				
7	1	Aluklotz	Aluminum block	1025-01-05-00-13			50x23x15		
8	1	Sicherheitsbügel	Restraint	1025-01-05-01-00	g				
9	1	Gurthalter	Support for seat belt	1025-01-05-02-00					
10	2	Handgriff	Hand grip	3000-06-04-00	f				6
11	2	Sicherheitsklappstecker	Retractable safety pin	Best.-Nr. 02380000					2
12	2	Gleitlager	Plain shaft bearing for machinery	PM 3550 DX			Ø35xØ39		
13	2	Anlaufscheibe	DU washer	WC 35 DU			1,5xØ38xØ62		
14	2	Scheibe	Washer	DIN 125 - B13		St			
15	4	Scheibe	Washer	DIN 125 - B17		St			
16	2	Scheibe	Washer	DIN 125 - B4.3		St			2
17	2	Scheibe	Washer	DIN 125 - B5.3		St			
18	4	O-Ring	O-ring	DIN 3771 - 25x6		Vollgummi			2
19	6	Zylinderschraube	Cylinder head screw	DIN 6912 - M8x16		8.8			2
20	2	Blindniet	Blind rivet	DIN 7337 - A5x20		St			
21	2	Senkschraube	Countersink screw	DIN 7991 - M4x12		8.8			2
22	4	Zylinderschraube	Cylinder head screw	DIN 912 - M10x40		8.8			2
23	1	Sechskantschraube	Hexagon bolt	DIN 931 - M12x45		8.8			

Angegebene Lieferzeiten bezogen auf die auf einer Stückliste genannte Menge. Lieferzeit größerer Bestellmengen auf Anfrage.
 Indicated delivery times refer to quantity stated on spare part list. Delivery time for larger quantities on request.



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Benennung Baugruppe / Description: **Zeichnungsnummer / Drawing no.:** **Preis gültig bis / Prices valid to:**
Sicherheitsbügel - Einbau / restraint - assembly **1025-01-05-00-00j**

Pos	Stk. Pcs.	Benennung	Description	Zeichnungsnr. / DIN Drawing no. / DIN	Rev. Index	Material / Güte Material / Qty.	Warenmaße Measures	Preis in € Price in €	Vorauss. Lieferz. in Wochen EXW Appr. del. time in weeks EXW
24	2	Sechskantmutter	Hexagon nut	DIN 934 - M16		8			
25	2	Splint	Pin	DIN 94 - 2.5x22		St			2
26	1	Sechskantmutter	Hexagon nut	DIN 985 - M12		8			
27	2	Sechskantmutter	Hexagon nut	DIN 985 - M16		8			
28	2	Sechskantmutter	Hexagon nut	DIN 985 - M4		8			2
29	2	Sechskantmutter	Hexagon nut	DIN 985 - M5		8			
30	1	Schrumpfschlauch	Heat shrink tube	Best.-Nr.: 07718381			Größe 38,1/19,0 - Länge 140mm		
31	1	Flachkopfschraube	Flat headed screw	ISO 7380 - M12x35		A2			3
32	2	Spannstift	Spring pin	ISO 8750 - 4x8					2
33	2	Verriegelungseinheit	Restraint cylinder (Hoerbiger)	LE-32-1					3

Angegebene Lieferzeiten bezogen auf die auf einer Stückliste genannte Menge. Lieferzeit größerer Bestellmengen auf Anfrage.
 Indicated delivery times refer to quantity stated on spare part list. Delivery time for larger quantities on request.

Fahrzeug / Vehicle						Kontrolle / control
Prüfung bzw. Wartung durchgeführt am: date of test or maintenance:			Sachkundiger Prüfer °: skilled tester / person °:			
Prüfung der Mindestschließposition / Testing of the minimum closed position (siehe auch Zg. 1025-01-05-00-00 Version j / look at drawing 1025-01-05-00-00 Version j) Bedienungsanleitungen beachten / for further information look in the technical descriptions of the components						
	20 Leerfahrten ohne Fahrgäste (einmalig) 20 test rides without passengers (one-time)	1 Tag oder 200 Fahrten (einmalig) 1 day or 200 rides (one-time)	wöchentlich oder 1000 Fahrten (regelmäßig) weekly or 1,000 rides (regularly)	zu prüfende Komponente component to be tested	Wartungsarbeiten und Kontrolle maintenance work and control	
	*	*	*	Sicherheitsbügel - Positionsschalter / restraints - position switch	Funktionskontrolle, Verschmutzung, Beschädigungen, auf festen und ordnungsgemäßen Sitz prüfen / function, clean, damage, visual control check for correct position	

° Sachkundige Prüfer sind Personen, die über eine einschlägige Berufsqualifikation verfügen, sowie mit der Ausführung der oben genannten Arbeiten vertraut sind. Diese Prüfer sind von der verantwortlichen und qualifizierten Aufsichtsperson der Anlage zu bestimmen.

° Qualified specialists are persons who have an appropriate professional qualification and are also familiar with the execution of the work mentioned above. These specialists are to be named by the authorized and qualified person of the ride.

- Bitte beachten Sie die aktuellen nationalen Bestimmungen! -

- Beachten Sie auch die Sicherheitshinweise in der Betriebsanleitung der Anlage und in der zusätzlich mitgelieferten Dokumentation. -

Please observe current national regulations!

- Also refer to the safety notes in the operation instructions for the ride and in the additionally provided documentation. -



Technische Änderungen bzw. Ergänzungen bleiben vorbehalten / Technical changes respectively additions reserved.