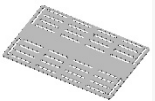


Montageanleitung **Assembly Instruction**

TSG in Mitsubishi HD - **TSG in Mitsubishi HD**

Lieferumfang – scope of supply



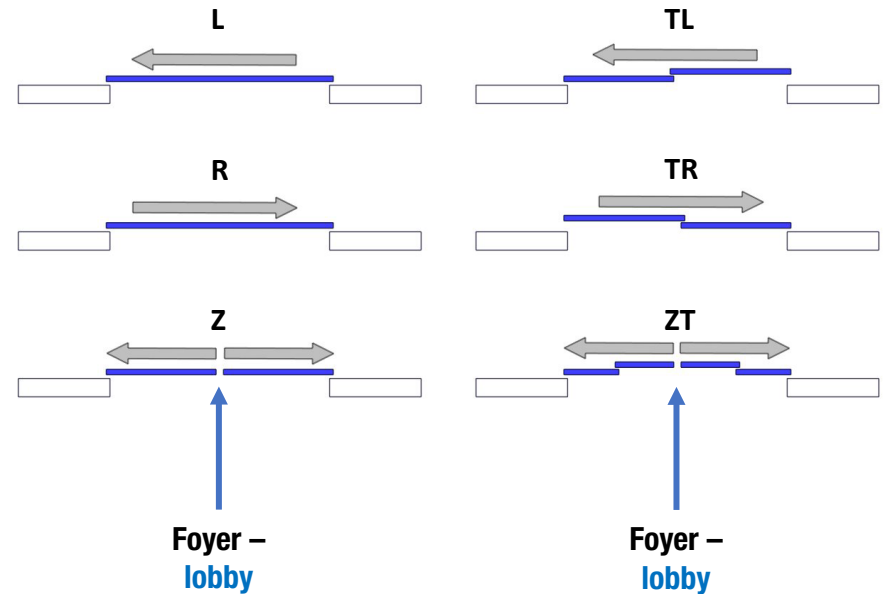
picture	Number	description DE	description EN	quantity
	8.20.00101.04	TSG V4 Lift Door Operator -Electronic extern- 230[VAC]/50-60[Hz]	TSG V4 Lift Door Operator -Electronic extern- 230[VAC]/50-60	1
	8.20.4000x.X1	Motor Gross Links & Getriebe, mit Zahnrad, 24V/5,1A/1:15	motor large left & gearbox, with wheel, 24V/5,1A/1:15	1
	1.20.23200	Kombiwinkel "Hut" (Motor + Stehlager)	universal bracket "hat" (motor + pillow)	1
	1.20.23220	Spannlasche für Kombiwinkel "Hut"	clamping plate for universal bracket "hat"	1
	1.20.60915	Grundplatte Motor für Umbaupakete	base plate motor for conversion package	1
	1.20.60532	Spannwinkel für Motorhalterung	clamping bracket for drive bracket	1
	1.20.60007	TSG Zahnriemenschloß, Stahl, spiegelbildlich	TSG toothed belt lock, steel, mirror image	1
	1.20.60160	Zahnriemenrad, STD8M, d=14H7, D=56[mm], B=15[mm]	timing belt pulley, STD8M, d=14H7, D=56[mm], B=15[mm]	1

picture	Number	description DE	description EN	quantity
	1.20.60900	Bordscheibe vorne für univ. Zahnriemenrad D14,5 Zoll, Anschraubnabe für Taper-Spannbuchse 1210	guard plate front for univ. toothed belt wheel D14,5 Inch, screw-on hub for tapered clamping bush 1210	1
	1.20.60901	Bordscheibe hinten für univ. Zahnriemenrad D14,5 Zoll, Anschraubnabe für Taper-Spannbuchse 1210	guard plate back for univ. toothed belt wheel D14,5 Inch, screw-on hub for tapered clamping bush 1210	1
	1.20.60905	Mitnehmer Zahnriemenschluss für univ. Zahnriemenrad, D=14,5 Zoll	carrier toothed belt lock for univ. toothed belt wheel, D=14,5 Inch	1
	1.20.60910	Führungsblech für Hebelarm Kone MAC 1	guide plate for lever arm Kone MAC 1	2
	1.20.60920	Pufferhalter rechts für univ. Zahnriemenscheibe D14,5 Zoll	buffer holder right for univ. toothed belt wheel D14,5 Inch	1
	1.20.60921	Pufferhalter links für univ. Zahnriemenscheibe D14,5 Zoll	buffer holder left for univ. toothed belt wheel D14,5 Inch	1
	1.20.96110	Zahnriemenrad, STD8M, d=18H7, D=112[mm], B=15[mm]	timing belt pulley, STD8M, d=18H7, D=112[mm], B=15[mm]	1
	1.20.85150	Kugelstehlager UCP 20mm	pillow block bearing UPC 20mm	2
	1.20.23230	Umlenkswelle für 2zu1	diverter shaft for 2to1 transmission	1

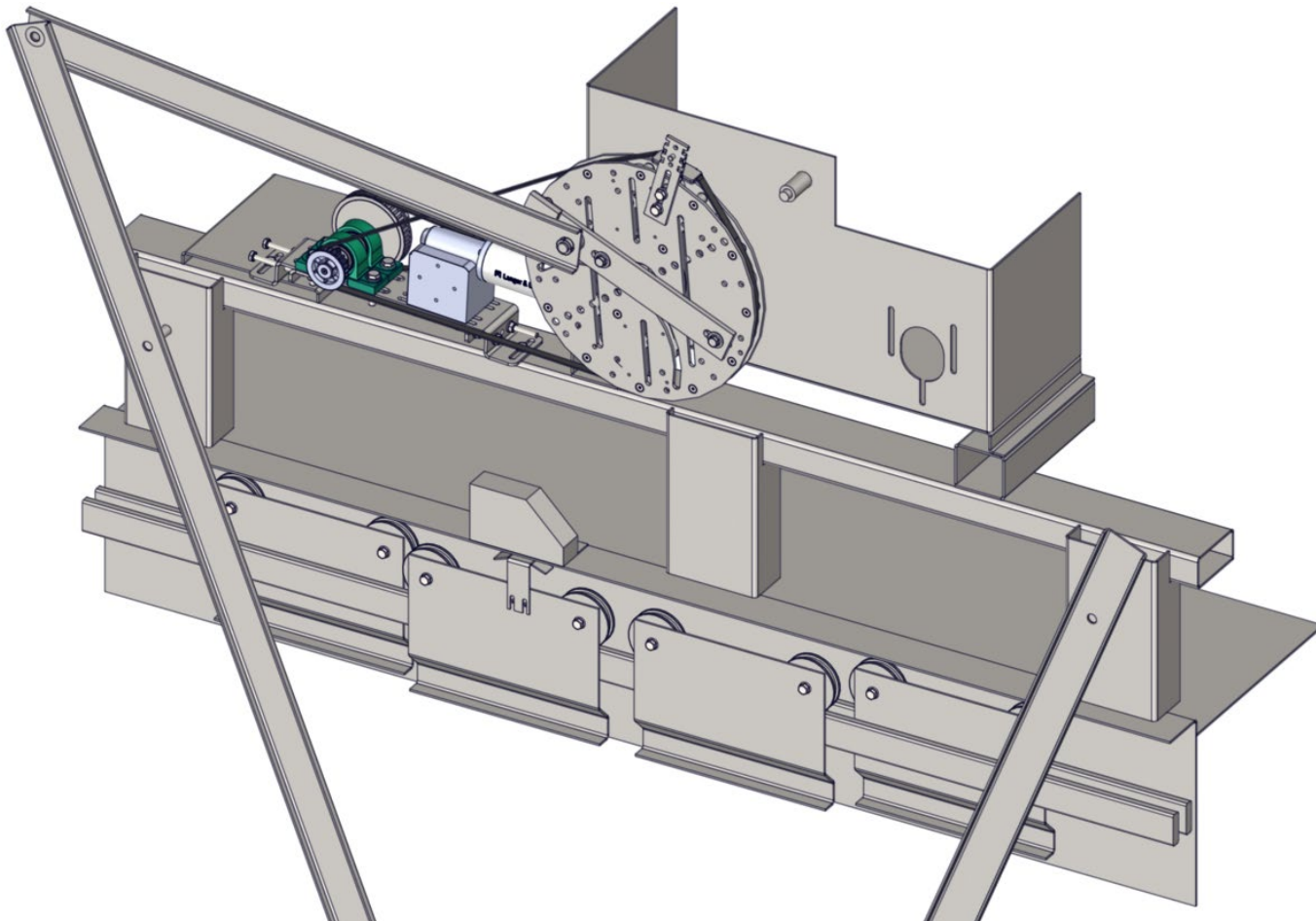
picture	Number	description DE	description EN	quantity
	1.20.60870	Anschraubnabe für Taper-Spannbuchse 1210	screw-on hub for taper bush 1210	1
	1.20.60871,72,73	Taper-Spannbuchse 1210 1/2, 3/4, 1 Zoll	taper bush 1210 1/2, 3/4, 1 Inch	1,1,1
	1.20.61090	Zahnriemen für Sonderantrieb Endlos 584[mm], Breite 12[mm], S8M	belt for special drive endless 584[mm], width 12[mm]	1
	8.20.60002.25	TSG Zahnriemen [2,5m]	TSG toothed belt [2,5m]	1
	1.20.91120	Gummipuffer D30x15, Gewindebolzen M8x20, 75 Shore	rubber-metal bump stop D30x15, threaded stud M8x20, 75 Shore	2
	8.20.13570	Schraubentüte für Universal Zahnriemenrad	screw bag for universal toothed belt wheel	1
	8.20.13575	Schraubentüte für Motoreinheit	screw bag for motor unit	1

Schaubild Türöffnungsrichtungen – door hand diagram

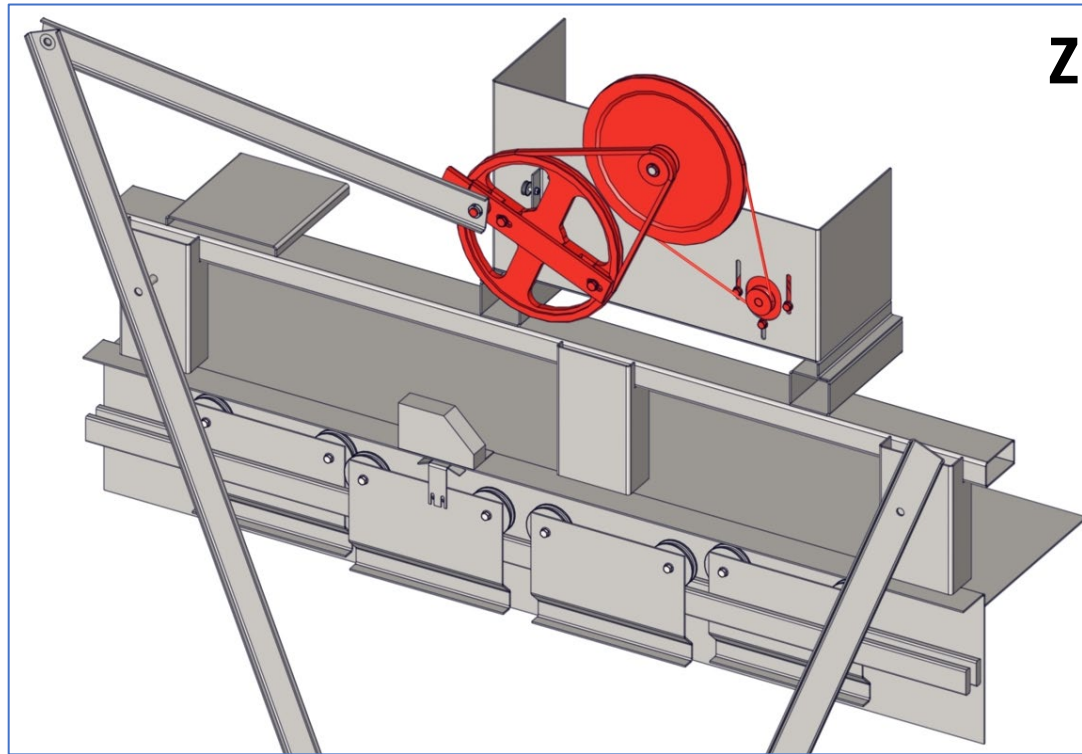
GER	EN-GB	EN-US	FR
L (links öffnend)	L (left opening)	LH (left hand, single slide)	OG (ouverture gauche)
R (rechts öffnend)	R (right opening)	RH (right hand, single slide)	OD (ouverture droite télescopique)
TL (teleskopierend links öffnend)	TL (telescoping left opening)	LH (left hand, two speed)	OG (ouverture gauche télescopique)
TR (teleskopierend rechts öffnend)	TR (telescoping right opening)	RH (right hand, two speed)	OD (ouverture droite télescopique)
Z (zentral öffnend)	C (central opening)	C (center opening)	OC (ouverture centre)
ZT (zentral teleskopierend öffnend)	CT (central telescoping opening)	C (center opening, two speed)	OCT (ouverture centrale télescopique)



TSG in Mitsubishi HD – TSG in Mitsubishi HD



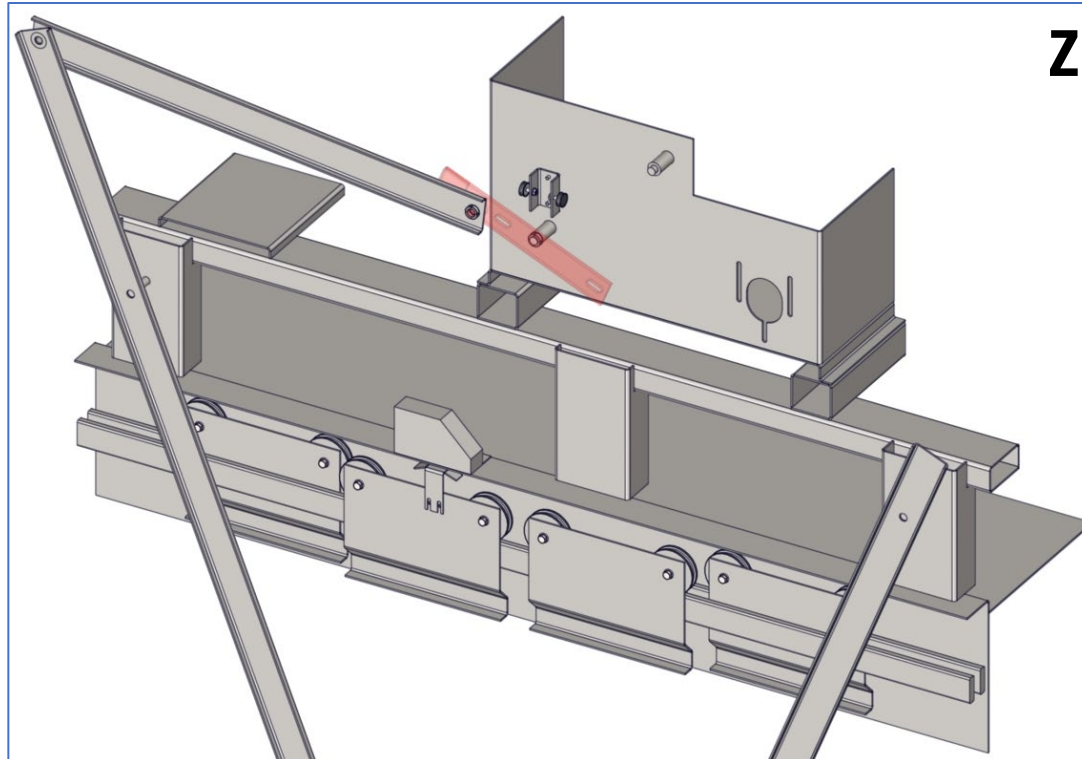
Vor Umbau entfernen – remove before conversion



Z Montage wie bei TR –
C assembly as for TR
TL spiegelbildlich –
LH mirrored

Anbauteile der Seilscheibe werden demontiert und zur Montage der Hebelarme an dem Universalzahnriemenrad wiederverwendet –
the attachments of the sheave are disassembled and reused for the assembly of the lever arms on the universal toothed belt wheel

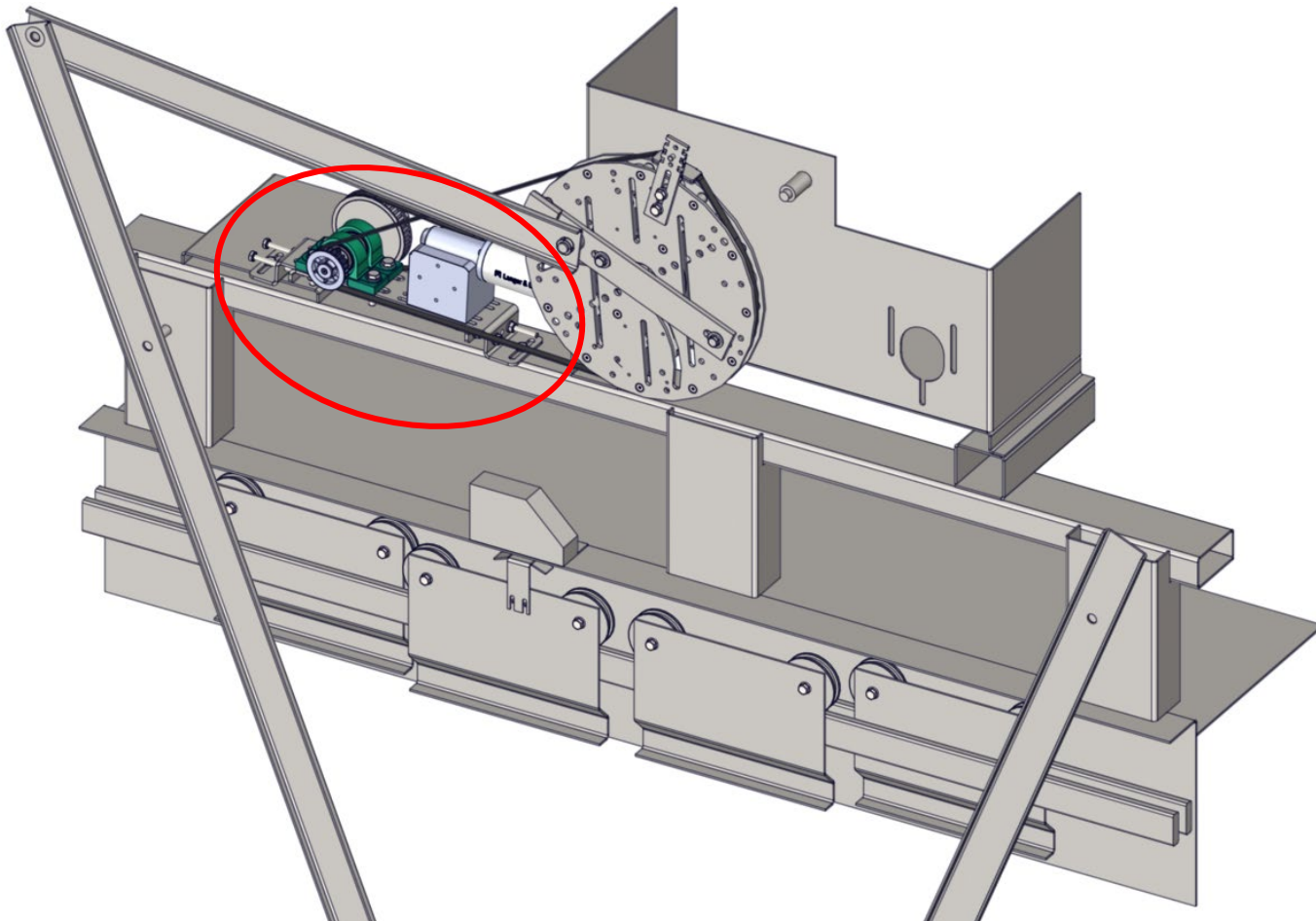
Nach Demontage – after disassembly

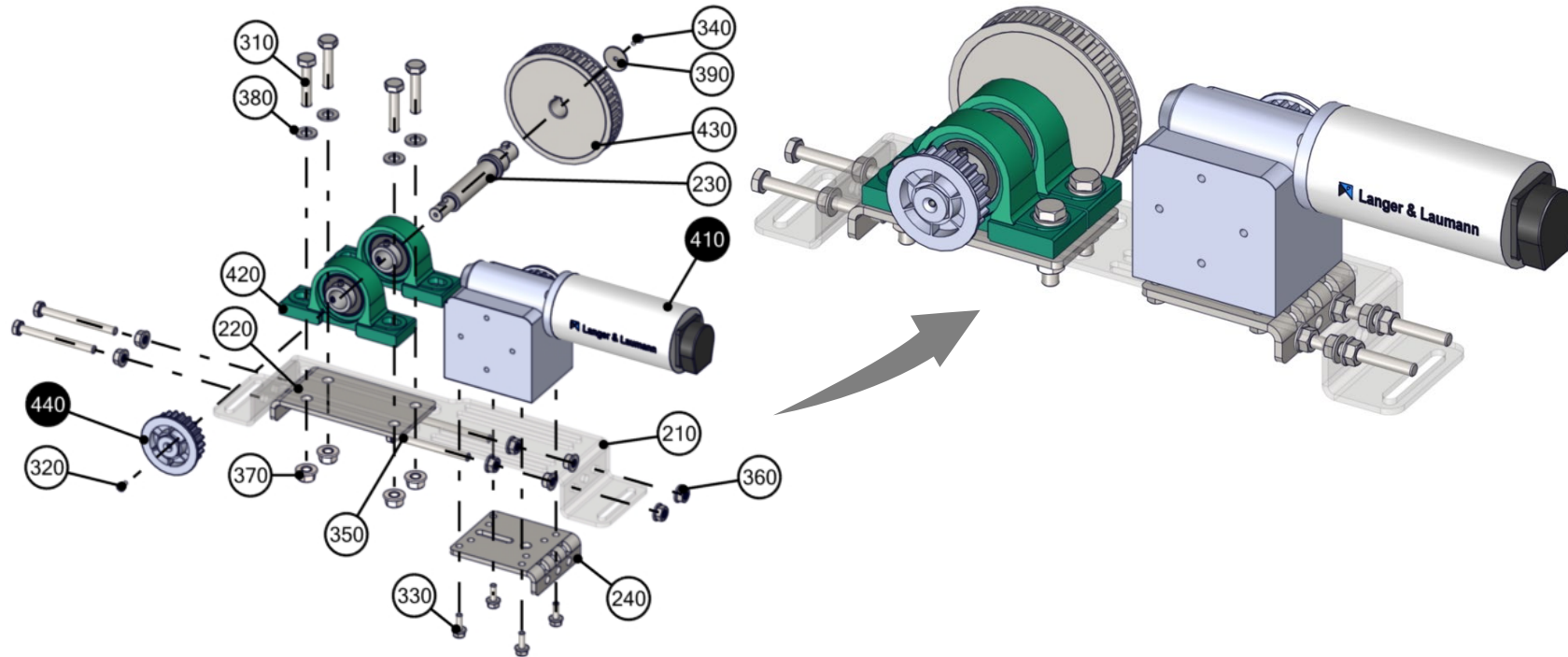


Z Montage wie bei TR –
C assembly as for TR
TL spiegeltbildlich –
LH mirrored

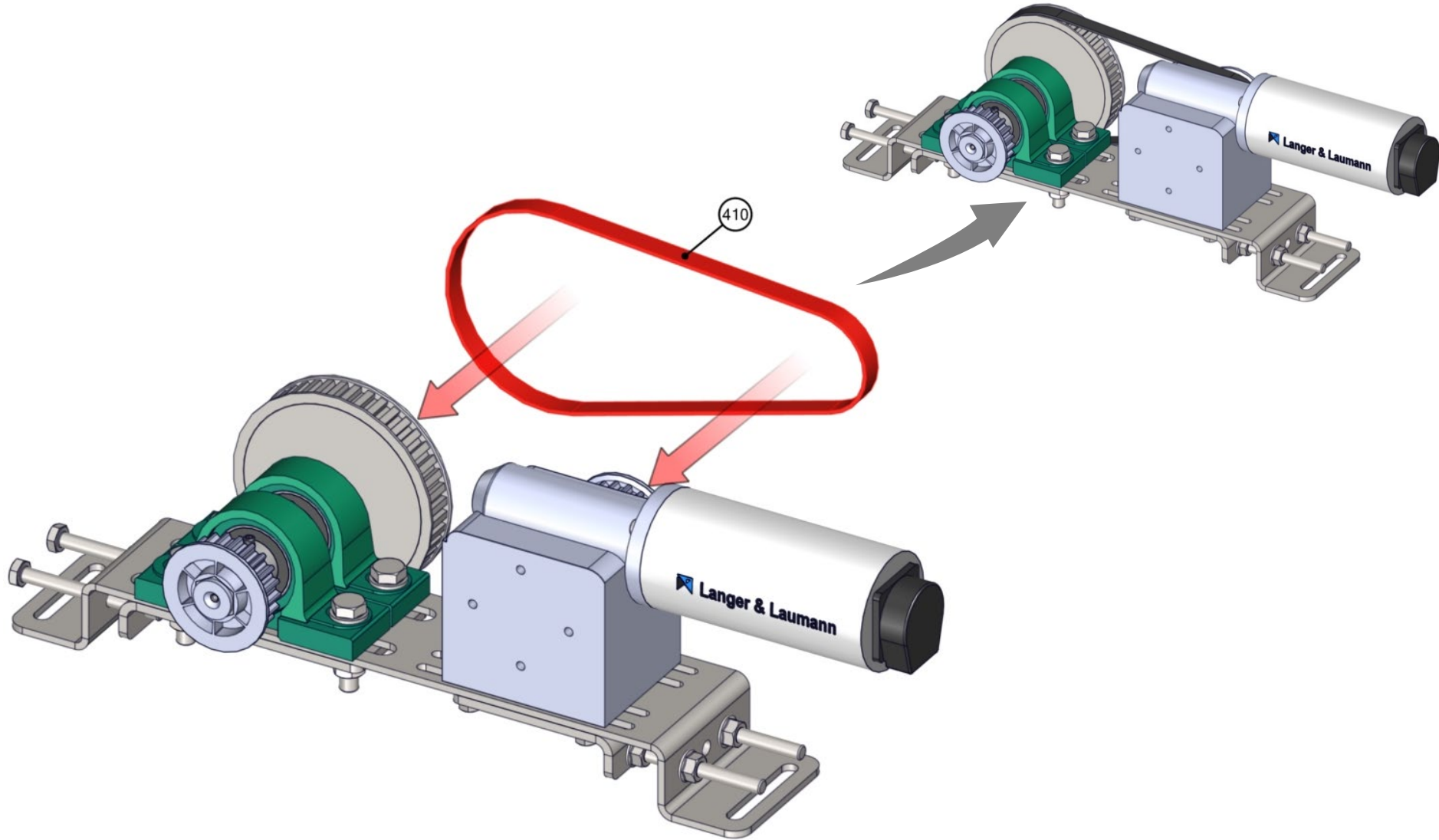
**Anbauteile der Seilscheibe werden demontiert und zur Montage der
Hebelarme an dem Universalzahnriemenrad wiederverwendet –**
**the attachments of the sheave are disassembled and reused for the
assembly of the lever arms on the universal toothed belt wheel**

Montage Motoreinheit – assembly of the motor unit

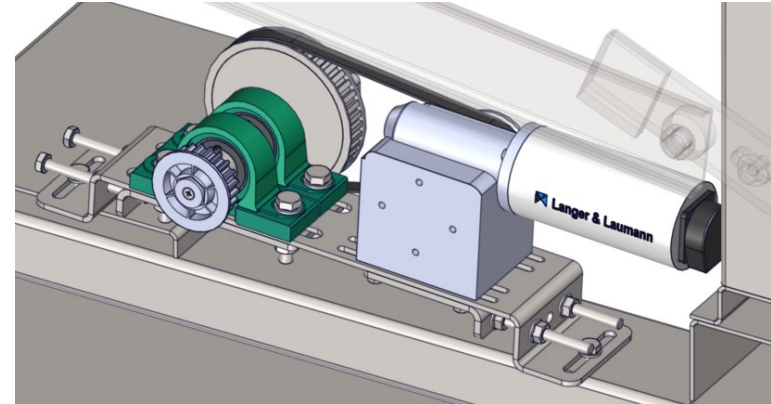
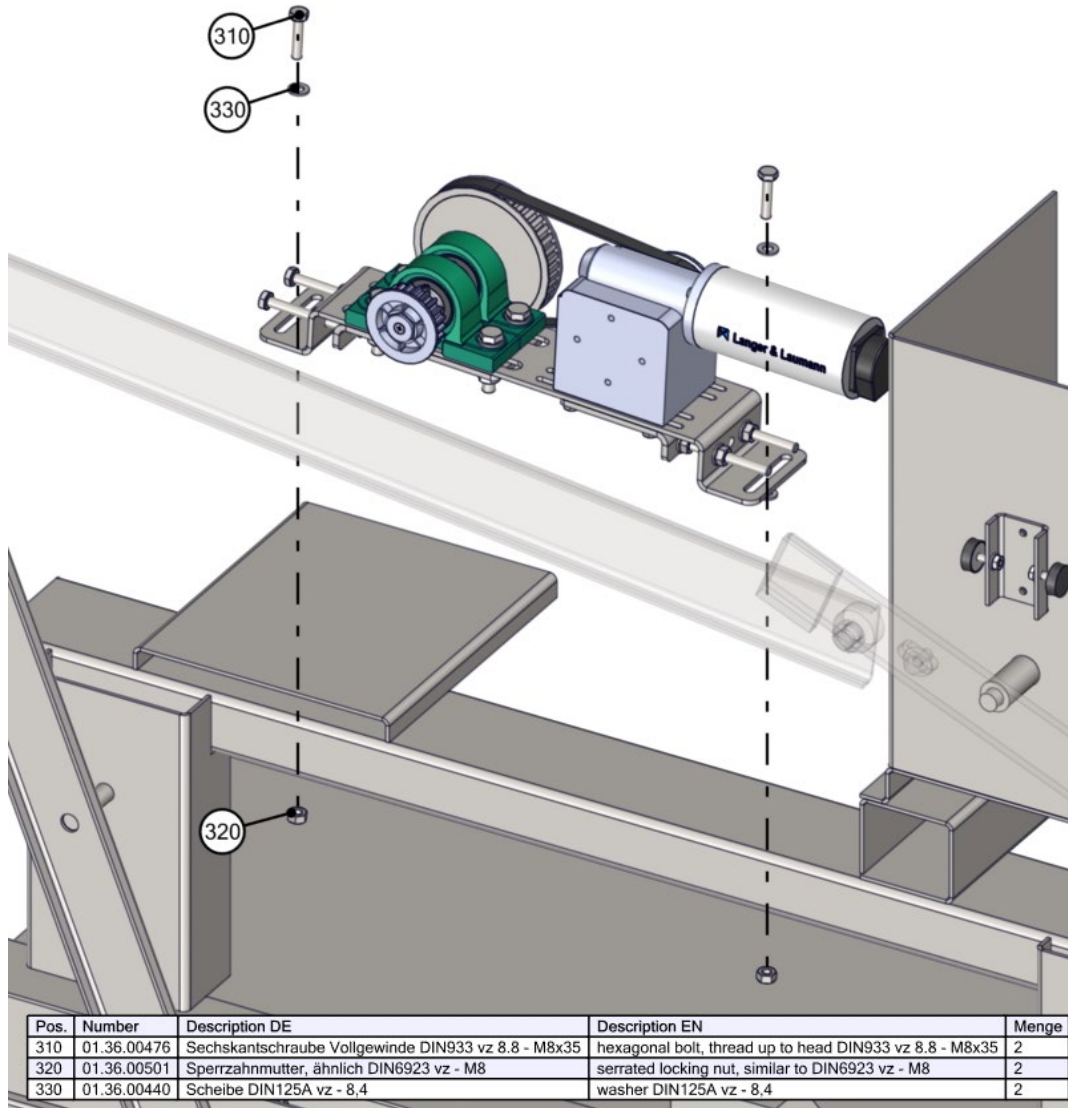




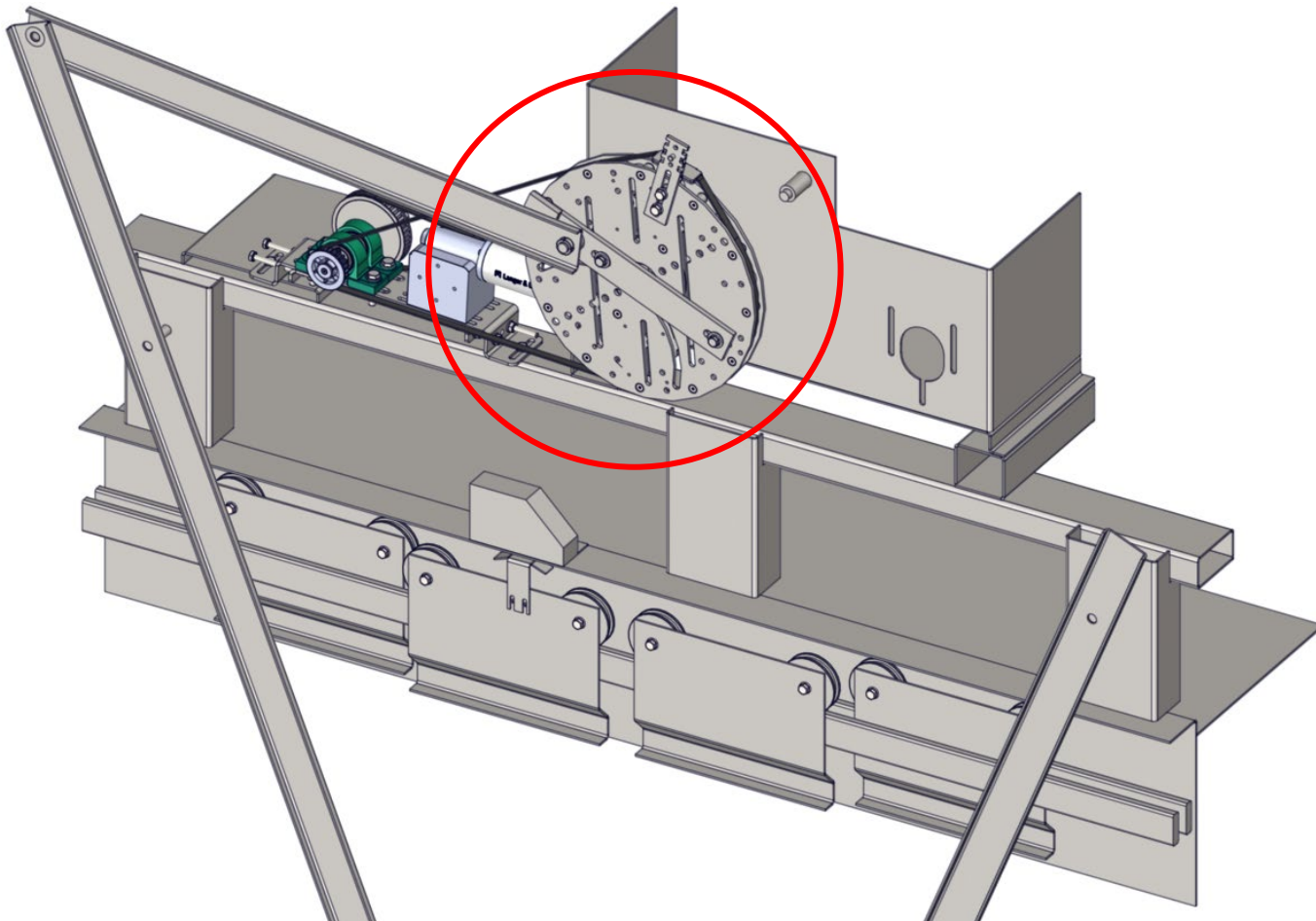
Pos.	Number	Description DE	Description EN	Menge
210	01.20.23200	Kombiwinkel Hut für GAL	universal bracket hat for GAL	1
220	01.20.23220	Spannlasche für GAL	clamping plate for GAL	1
230	01.20.23230	Umlenkswelle für 2zu1 Übersetzung GAL	diverter shaft for 2to1 transmission GAL	1
240	01.20.60532	Spannwinkel für Motorhalterung für GAL	clamping bracket for drive bracket for GAL	1
310	01.36.02112	Sechskantschraube Vollgewinde DIN933 vz 8.8 - M10x45	hexagonal bolt, thread up to head DIN933 vz 8.8 - M10x45	4
320	01.36.00332	Senkschraube vz 4.8 DIN965 - M4x10	countersunk screw w. cross recess DIN965 vz 4.8 - M4x10	1
330	01.36.00138	Sperrzahnschraube WN0274 A2C 8.8 - M6x16	hexagon head serrated screw WN0274 A2C 8.8 - M6x16	4
340	01.36.00003	Flachkopfschraube vz 4,8 7985 4x10	pan head screw DIN7985 vz 4.8 - M4x10	1
350	01.36.02125	Sechskantschraube Vollgewinde DIN933 vz 8.8 - M8x80	hexagonal bolt, thread up to head DIN933 vz 8.8 - M8x80	4
360	01.36.00501	Sperrzahnmutter, ähnlich DIN6923 vz - M8	hexagon flange nut DIN 6923 - M8 - C	8
370	01.36.00503	Sperrzahnmutter, ähnlich DIN6923 vz - M10	ribbed nuts, similar to DIN6923 vz - M10	4
380	01.36.00470	Scheibe ISO 7090-10-140HV (DIN125),vz	washer DIN125A vz - 10,5	4
390	01.36.00451	Kotflügelscheibe DIN522 vz - 4,3x25x1,25	wing repair washer DIN522 vz - 4,3x25x1,25	1
410	08.20.40000.X1	Motor Gross Links & Getriebe, 24V/4,9A/1:15	motor large left & gearbox, 24V/4,9A/1:15	1
420	01.20.85150	Kugellager UCP 20mm	pillow block bearing UPC 20mm	2
430	01.20.96110	TSG Umlenkzahnrad in NT4 (2zu1)	timing belt pulley, STD8M, d=18H7, D=112[mm], B=15[mm]	1
440	01.20.60160	Zahnriemenrad, STD8M, d=14H7, D=56[mm], B=15[mm], mit Nut	timing belt pulley, STD8M, d=14H7, D=56[mm], B=15[mm]	1

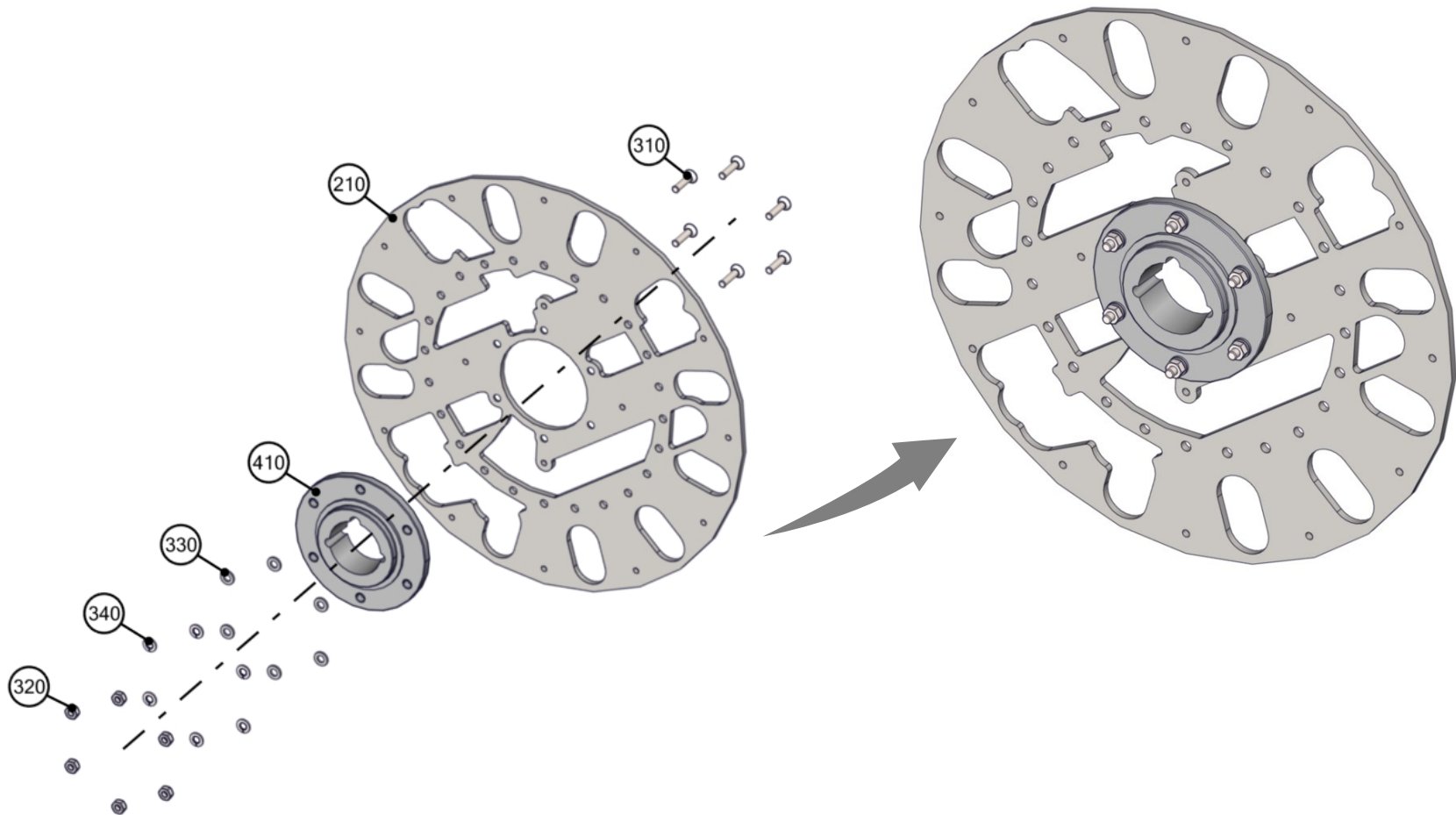


Pos.	Number	Description DE	Description EN	Menge
410	01.20.61090	Zahnriemen für Sonderantrieb Endlos 584[mm], Breite 12[mm]	Belt for special drive endless 584[mm], width 12[mm]	1

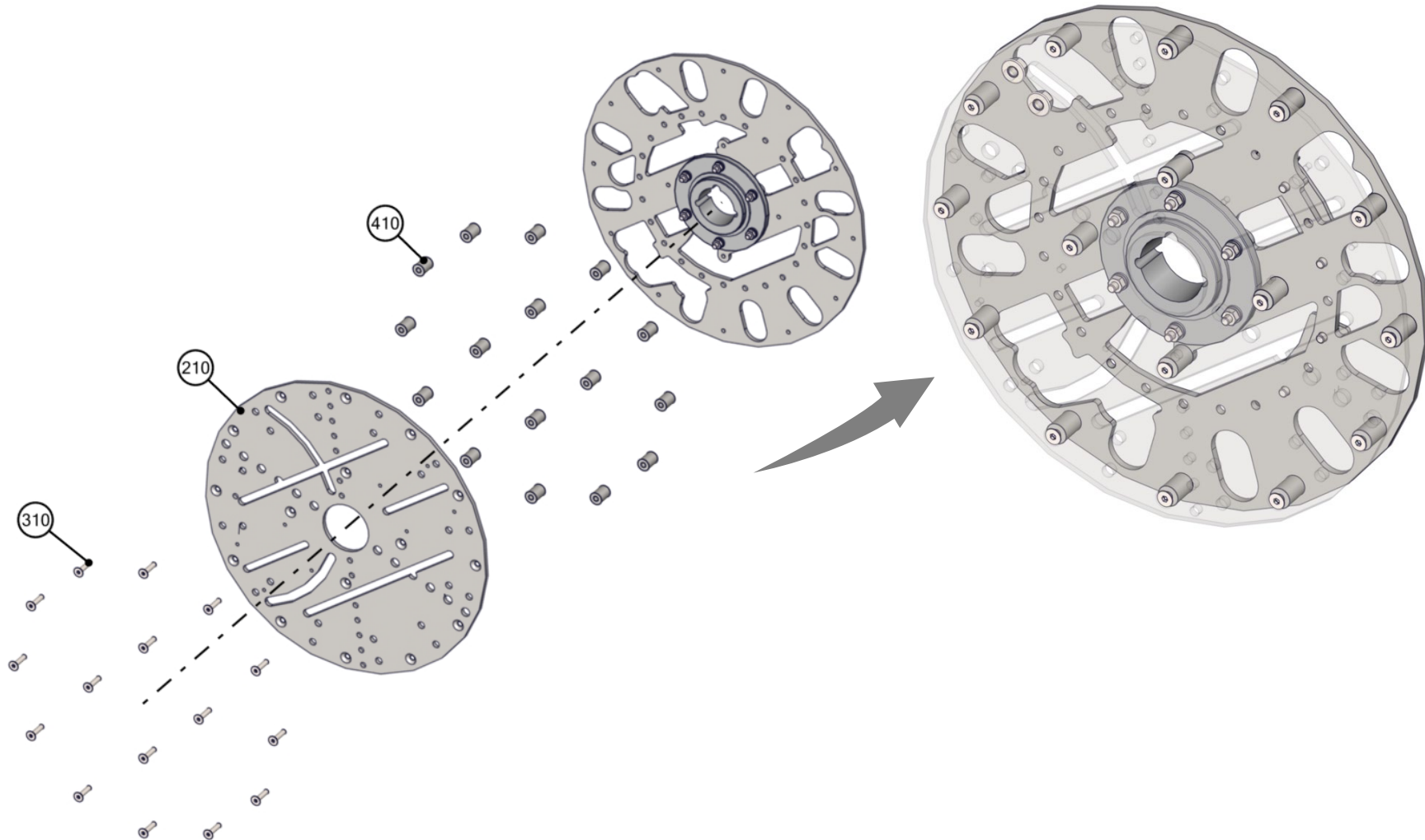


Montage Zahnriemenrad – assembly of the toothed belt wheel

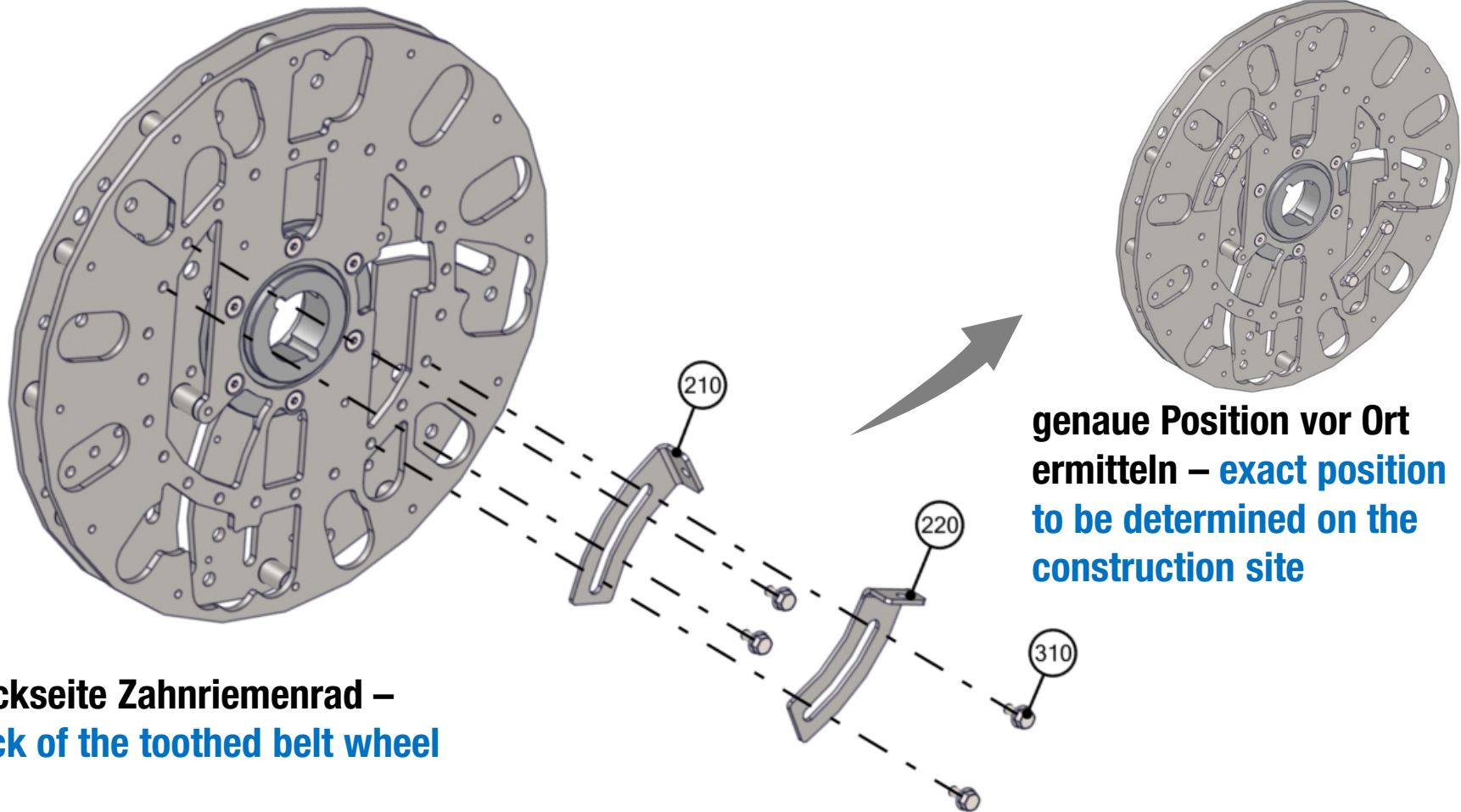




Pos.	Number	Description DE	Description EN	Menge
210	01.20.60901	Bordscheibe hinten für univ. Zahnriemenrad D14,5 Zoll	guard plate back for univ. toothed belt wheel D14,5 Inch	1
310	01.36.00366	Senkschraube m.Innensechskant ISO10642-M6x25-8.8	countersunk head screw w.recessed head ISO10642-M6x25-8.8	6
320	01.36.00200	Sechskantmutter DIN934-8 vz 8.8 - M6	hexagon nut DIN934-8 vz 8.8 - M6	6
330	01.36.05611	Unterlegscheibe, 12 x 6,4 ISO 7089(DIN125)	washer, 12 x 6,4 ISO 7089(DIN125)	6
340	01.36.00171	Federring DIN127-A6-FSt	Federring DIN127-A6-FSt	6
410	01.20.60870	Anschraubnabe für Taper-Spannbuchsen 1210	screw-on hub for taper bushes 1210	1

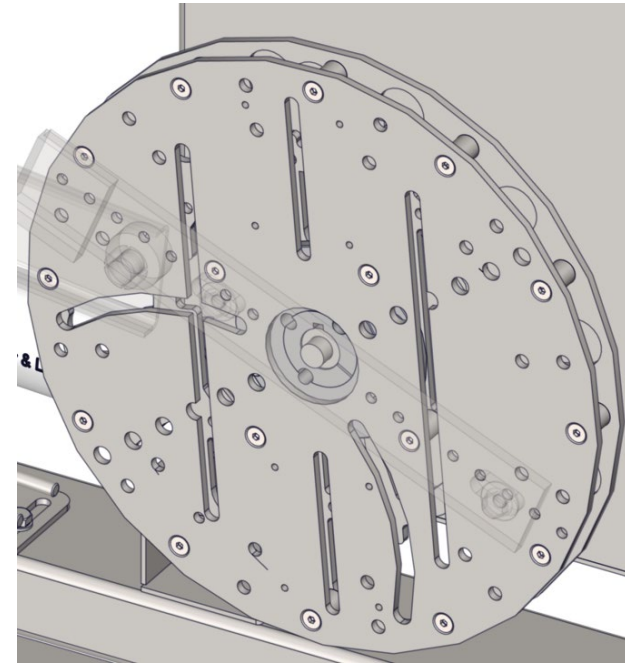
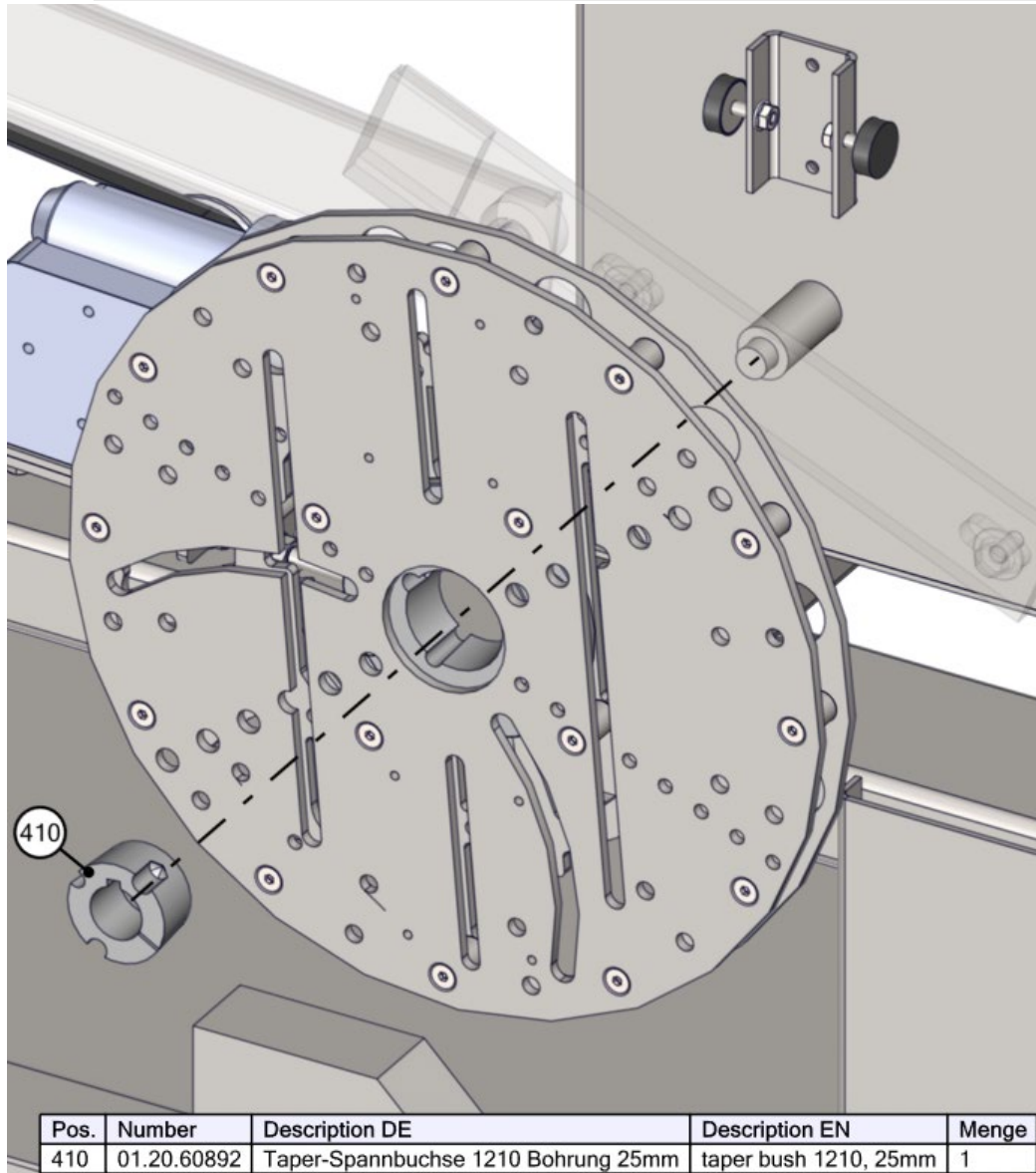


Pos.	Number	Description DE	Description EN	Menge
210	01.20.60900	Bordscheibe vorne für univ. Zahnriemenrad D14,5 Zoll	guard plate front for univ. toothed belt wheel D14,5 Inch	1
310	01.36.00362	Senkschraube m.Innensechskant ISO10642-M6x30-8.8	countersunk head screw w.recessed head ISO10642-M6x30-8.8	16
410	01.36.00881	Distanzhülse Ø15 x 20, Innen Ø6,2 für Universal Zahnriemenscheibe	spacer D15 x 20, d6,2	16

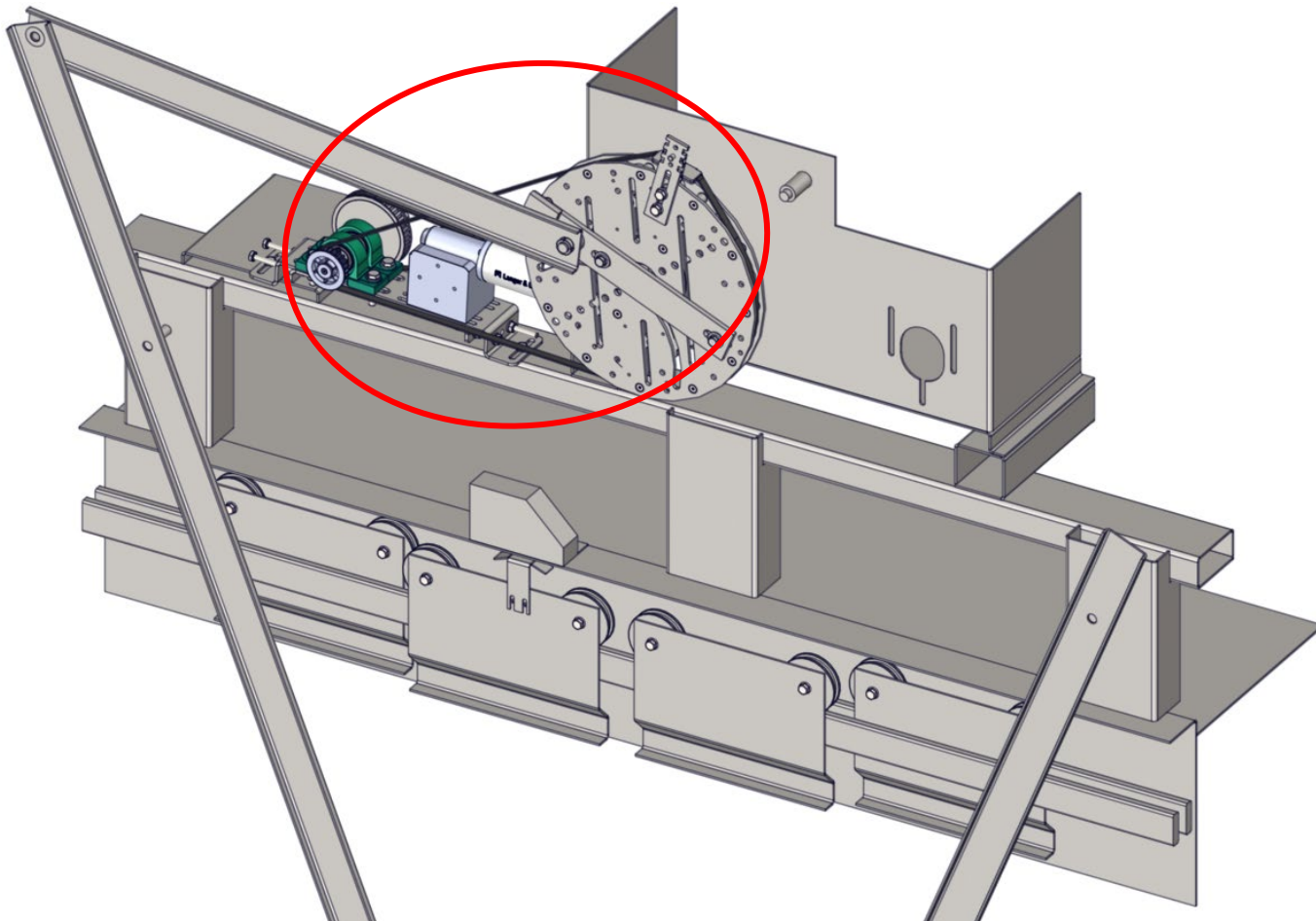


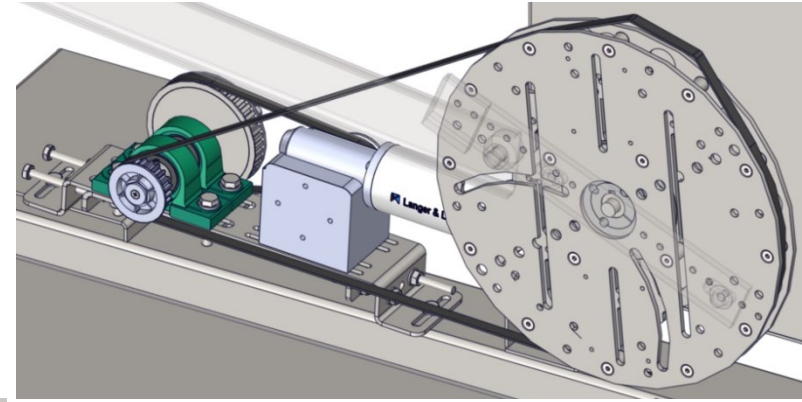
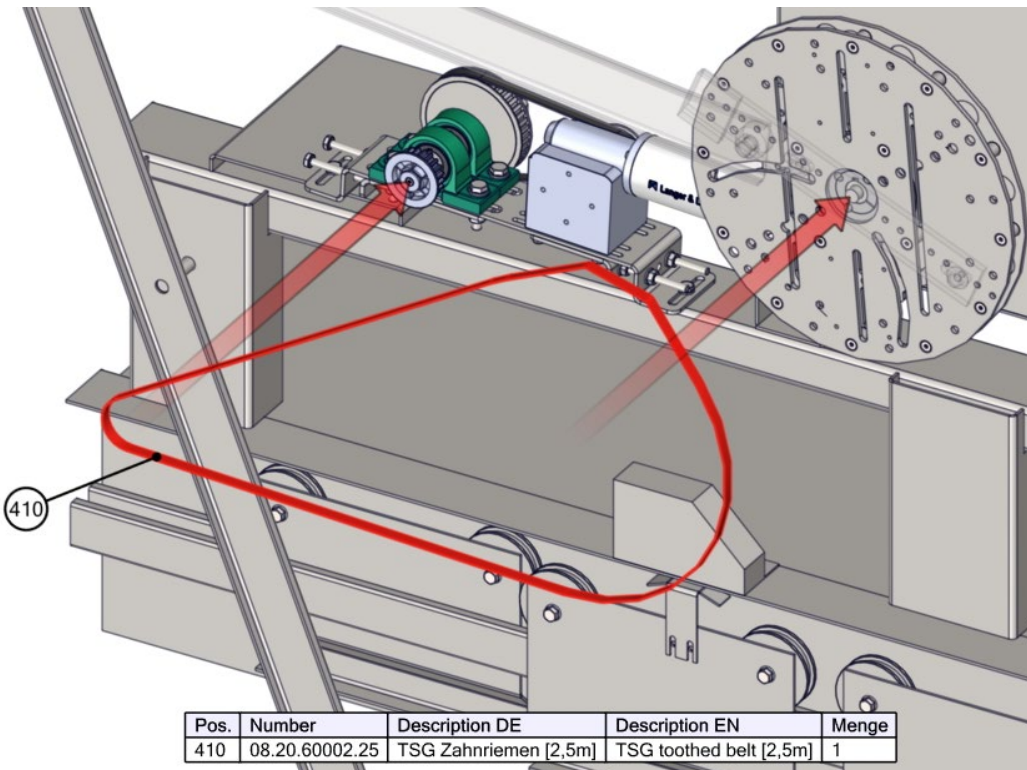
Rückseite Zahnriemenrad – back of the toothed belt wheel

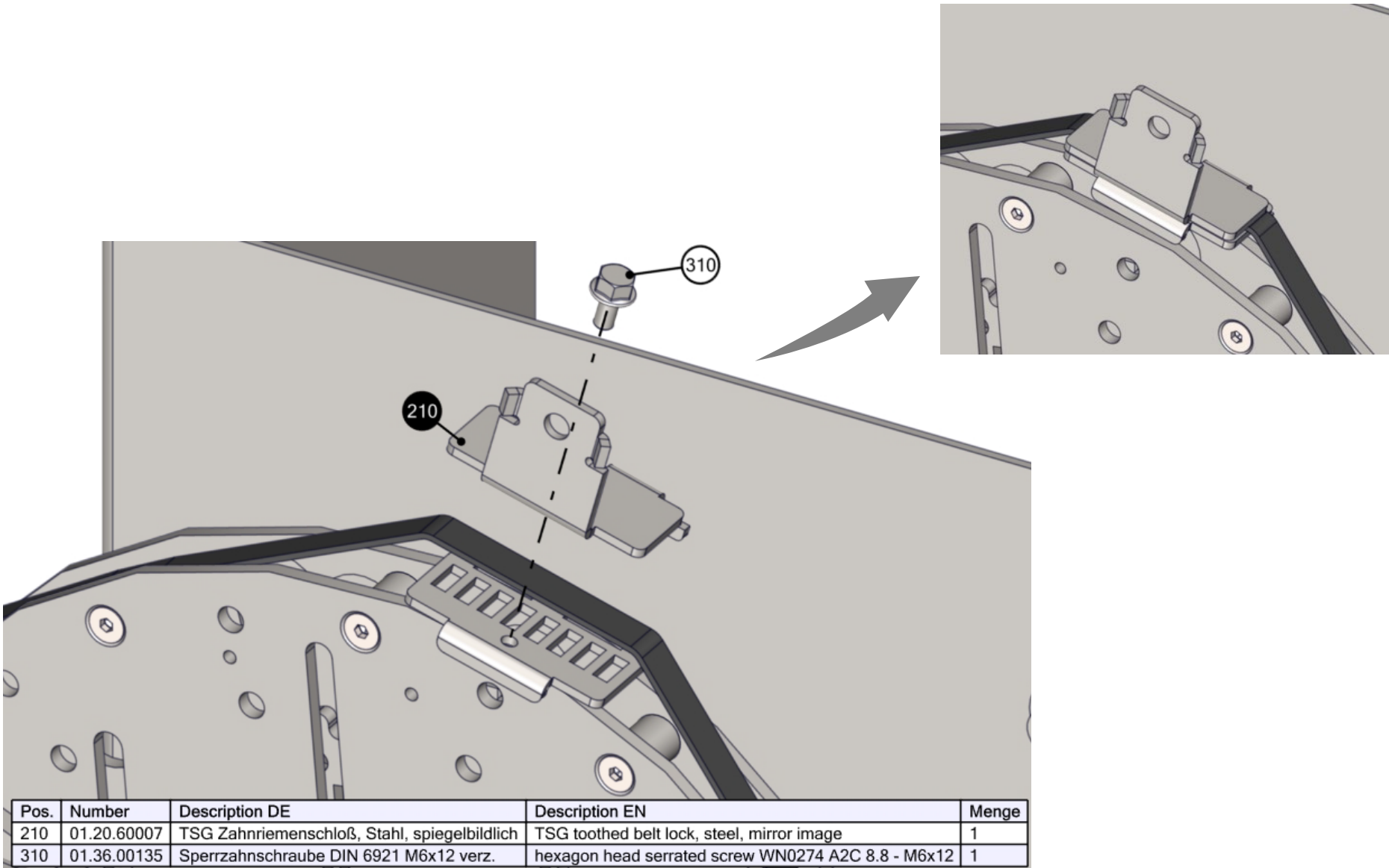
Pos.	Number	Description DE	Description EN	Menge
210	01.20.60920	Pufferhalter rechts für univ. Zahnriemenscheibe D14,5 Zoll	buffer holder right for univ. toothed belt wheel D14,5 Inch	1
220	01.20.60921	Pufferhalter links für univ. Zahnriemenscheibe D14,5 Zoll	buffer holder left for univ. toothed belt wheel D14,5 Inch	1
310	01.36.00140	Sperrzahnschraube DIN 6921 M8x12, 8.8, vz	hexagon head serrated screw WN0274 A2C 8.8 - M8x12	4

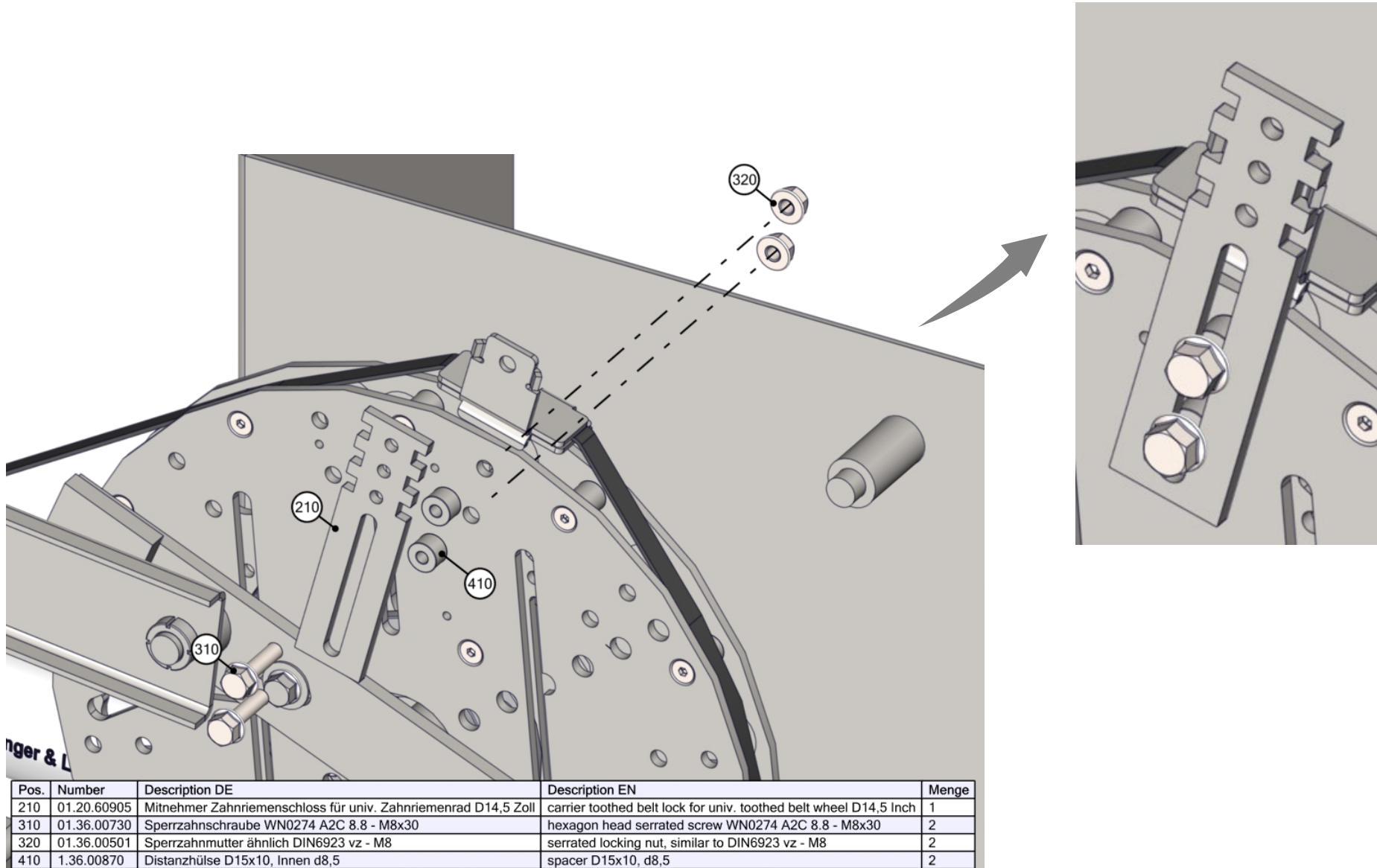


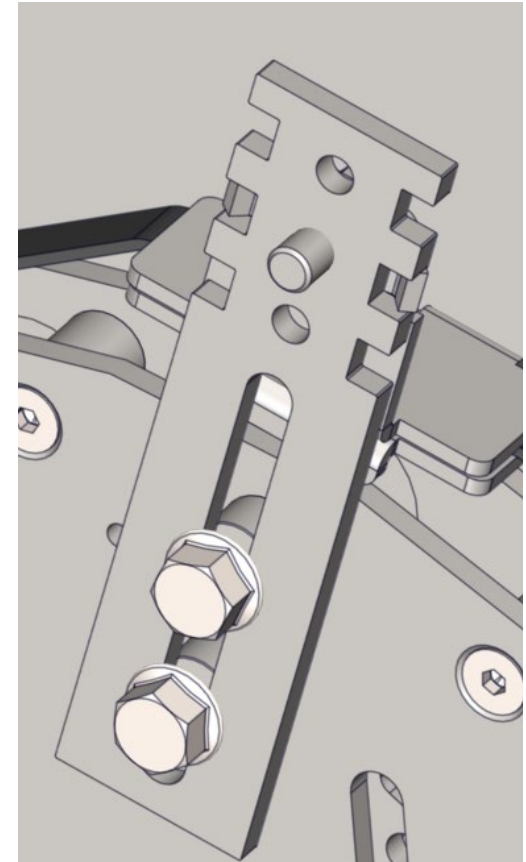
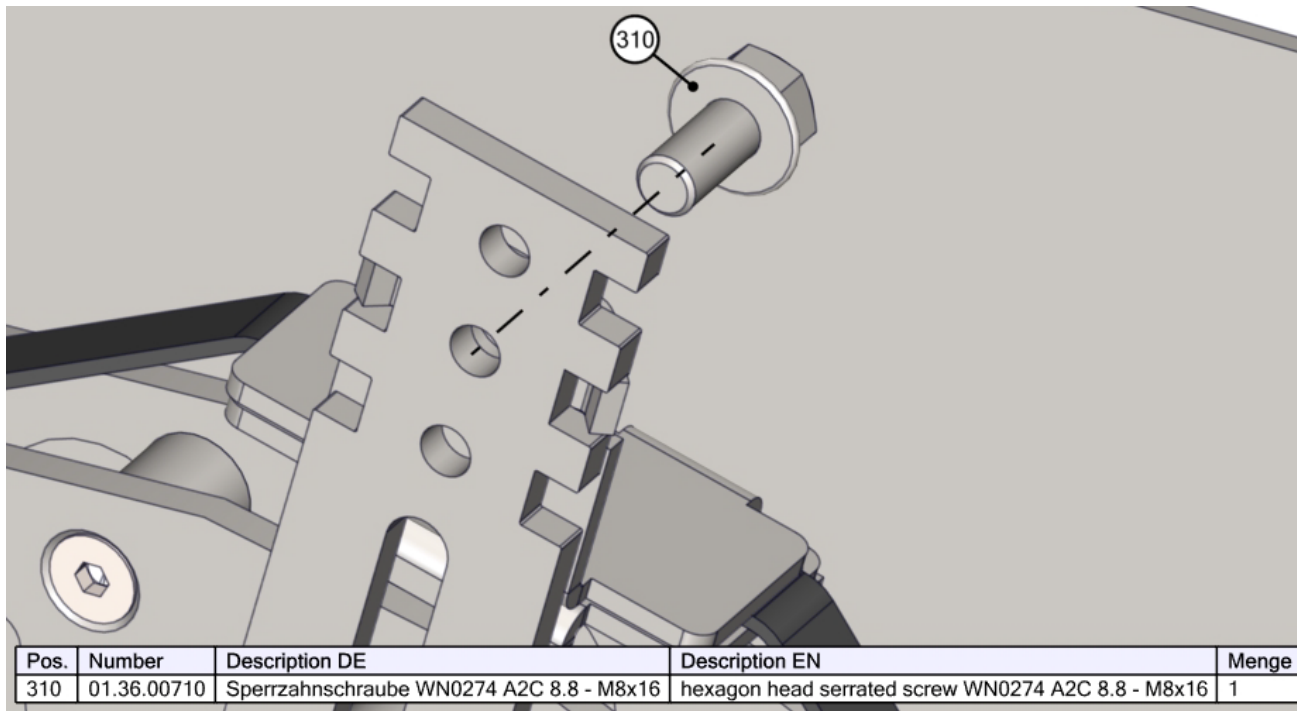
Montage Zahnriemen und Zahnriemenschluss – assembly of the toothed belt and toothed belt lock



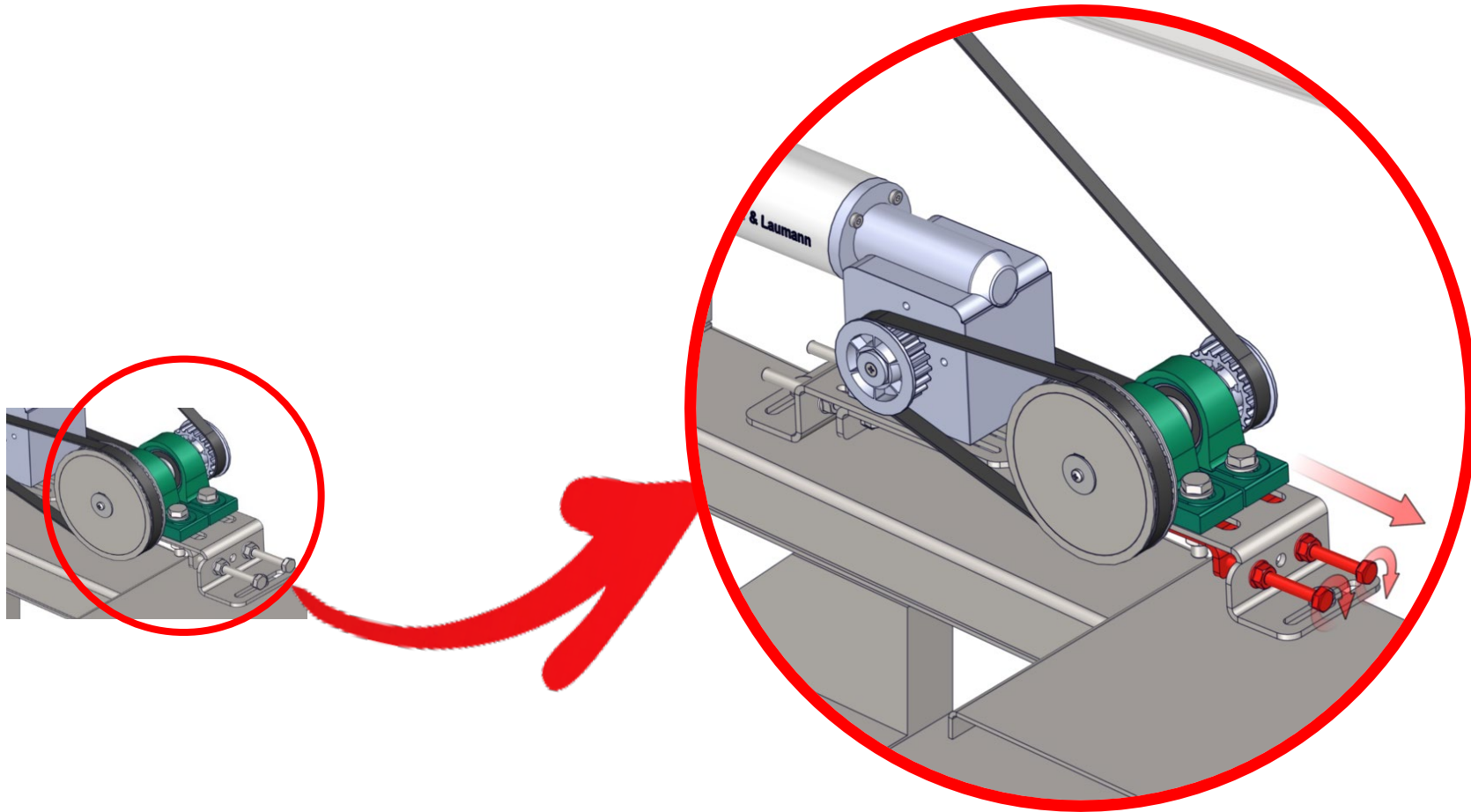




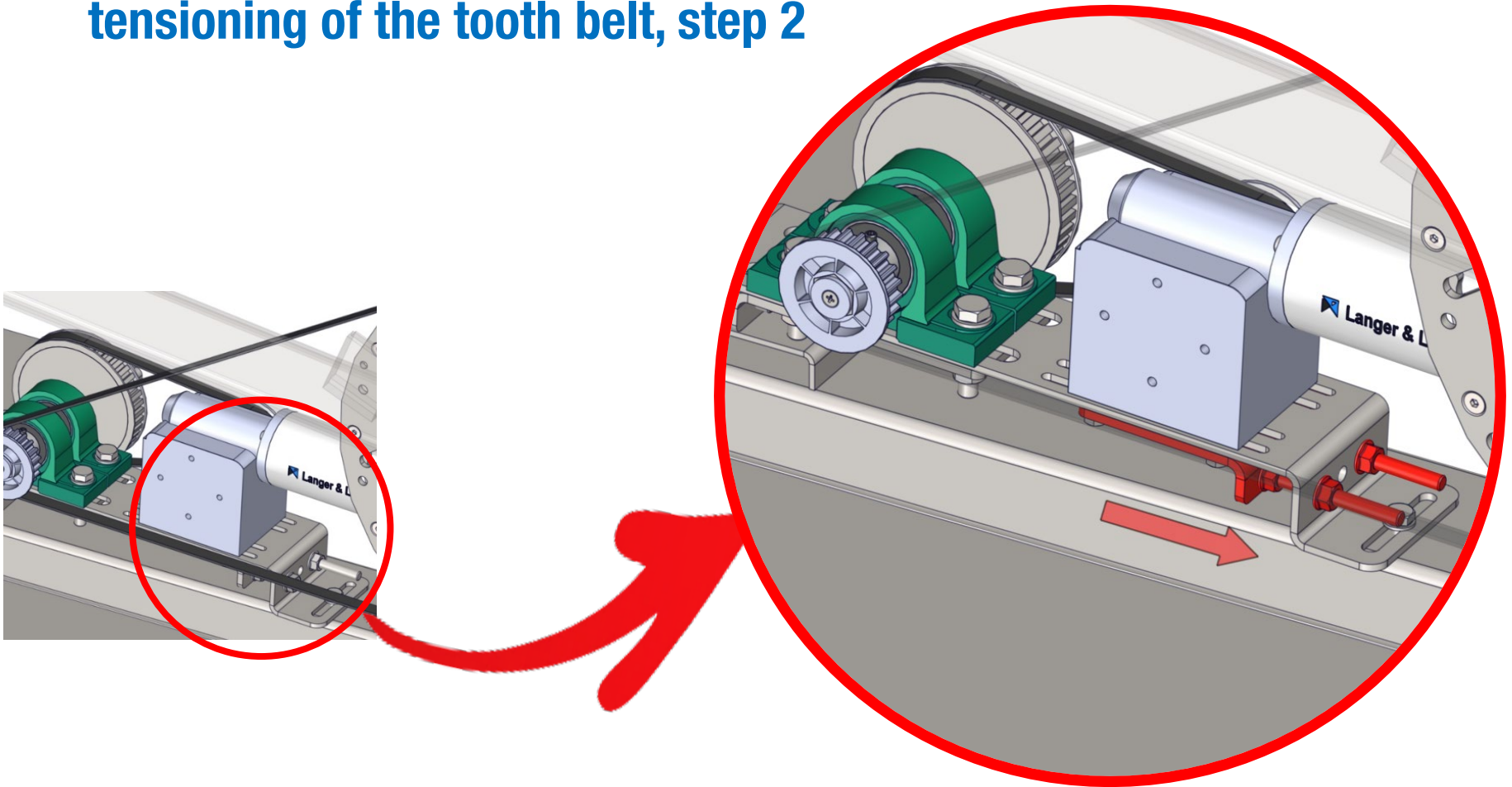




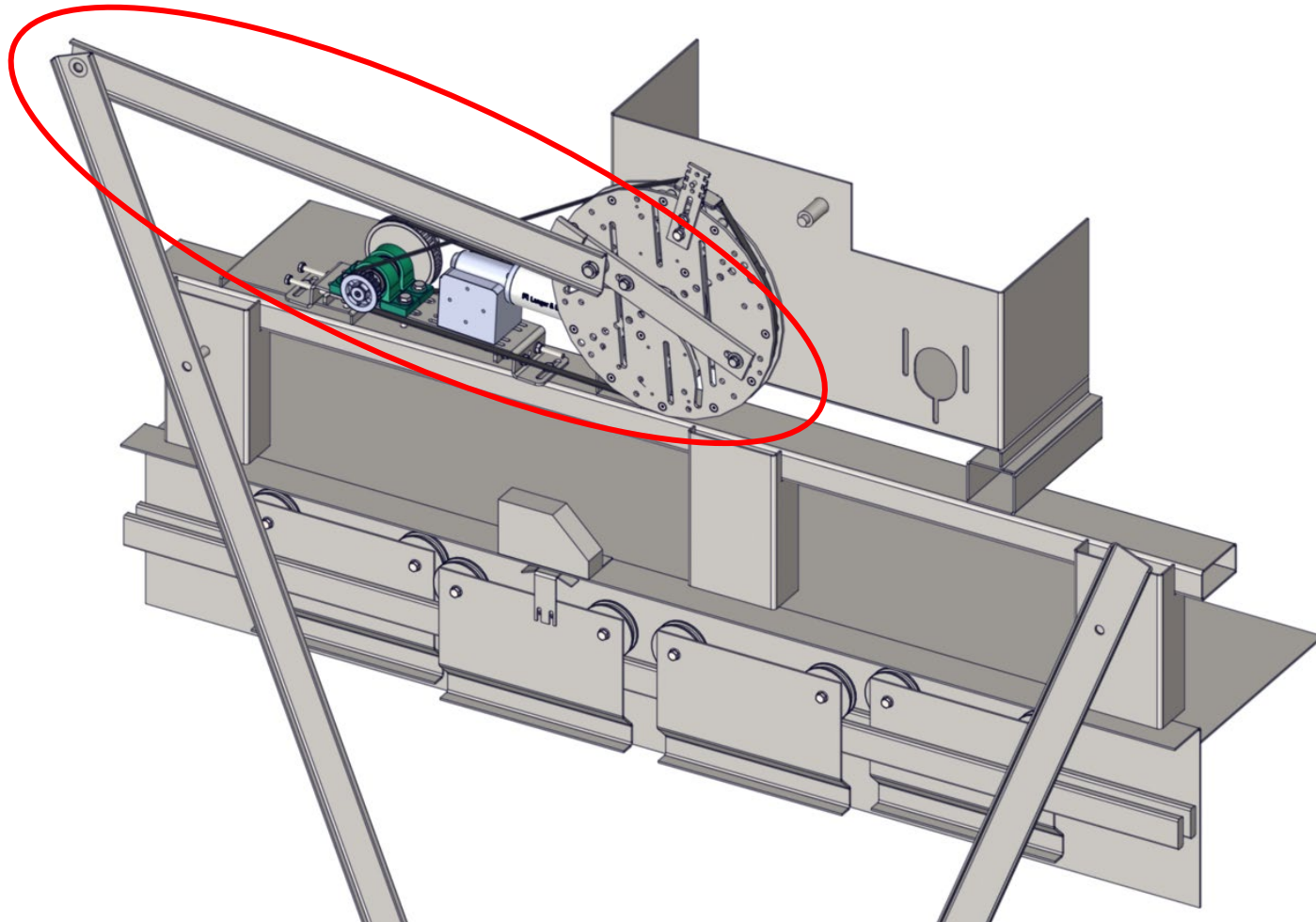
Zahnriemen spannen, Schritt 1 – tensioning of the tooth belt, step 1

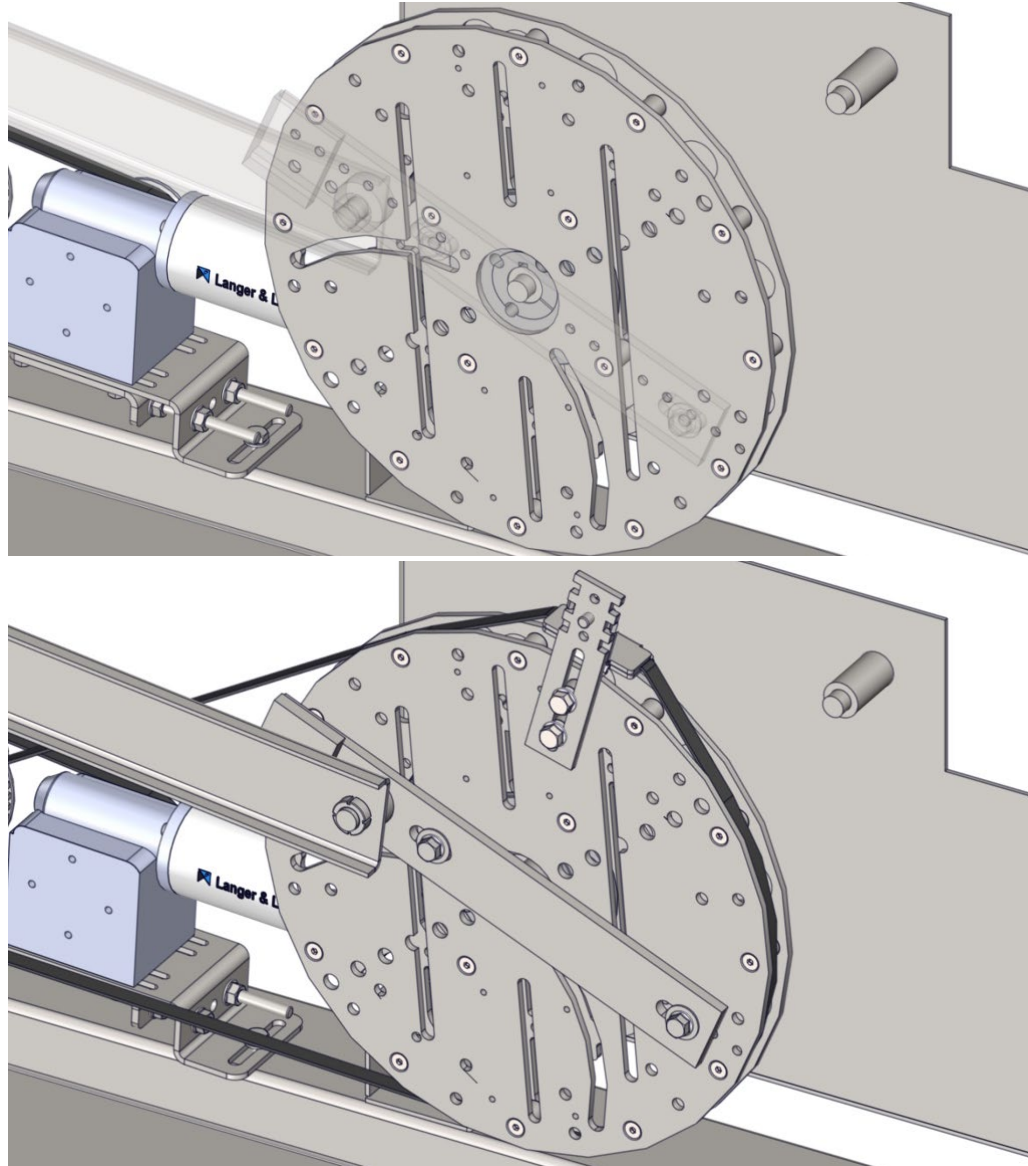


Zahnriemen spannen, Schritt 2 – tensioning of the tooth belt, step 2

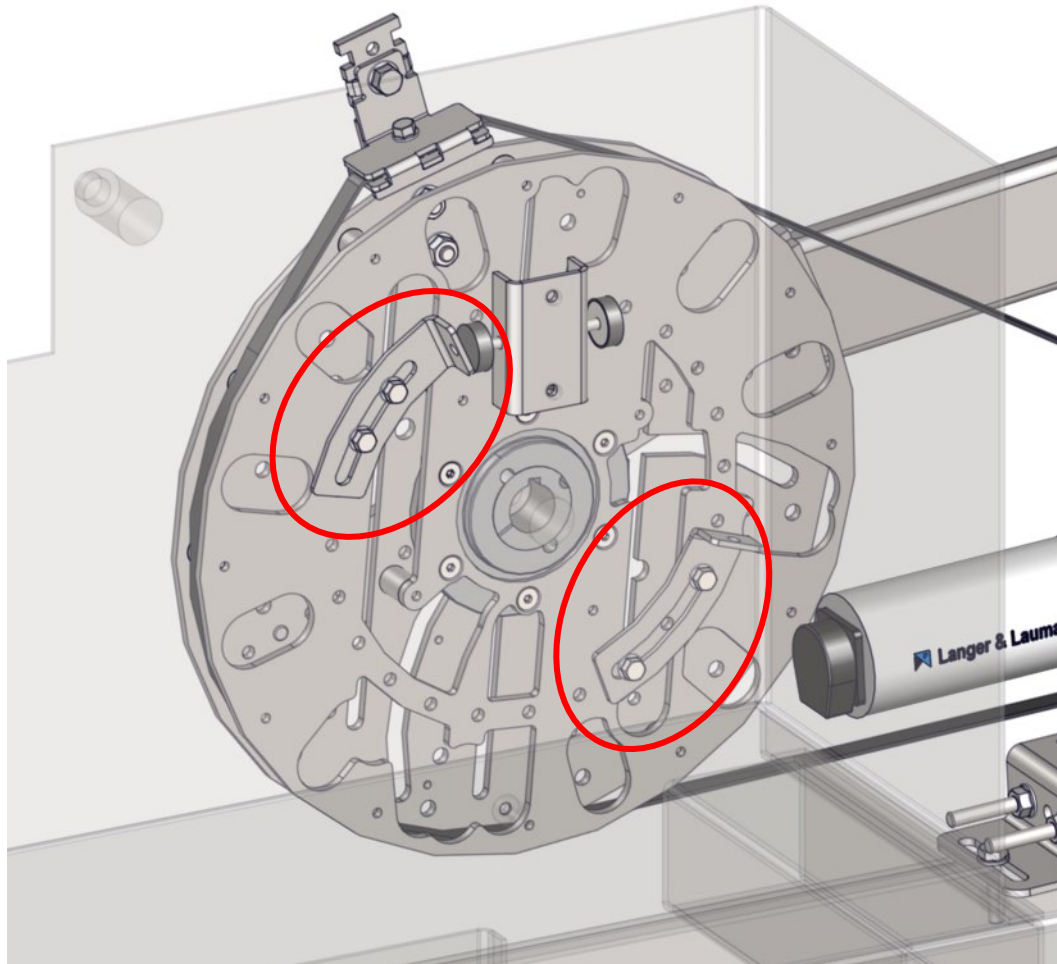


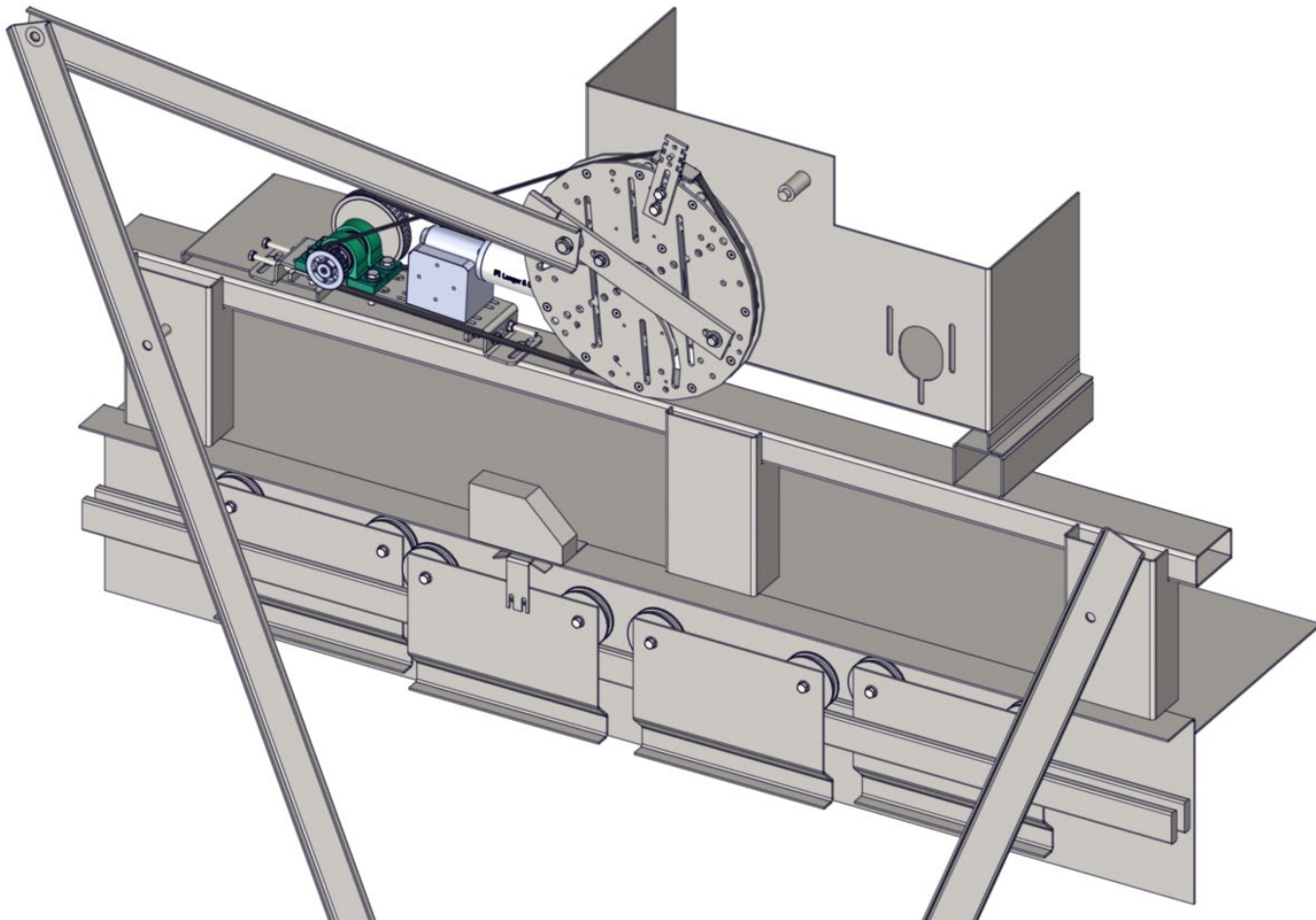
Montage der vorhandenen Hebelarme am Zahnriemenrad – reassemble the existing lever arms on the toothed belt wheel





Justieren der Anschlagpuffer – adjust the bump stop







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