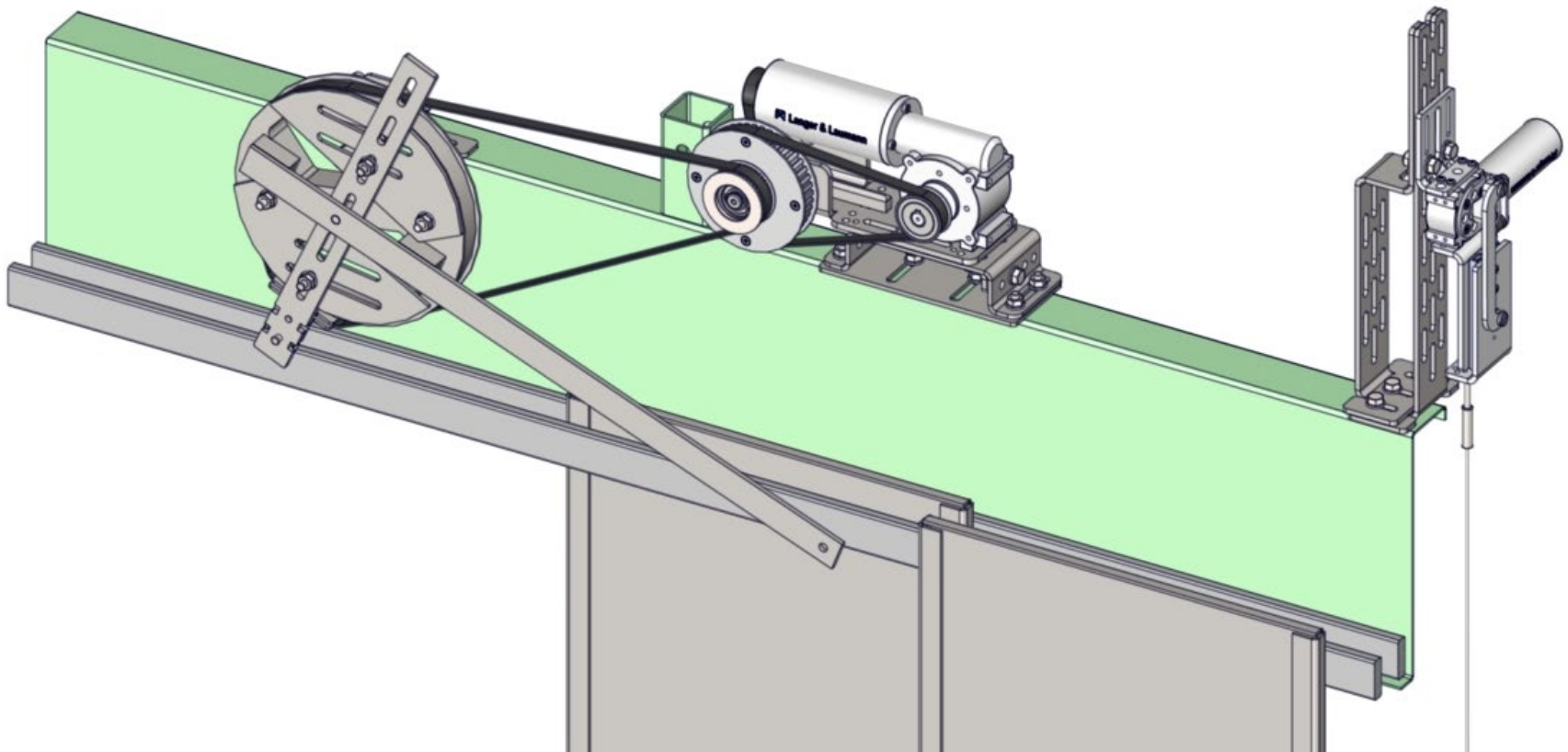


Montageanleitung **Assembly Instruction**

QKS8 Lite – **QKS8 Lite**

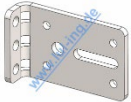
Option: Montage des TSG Sinusantriebs bei Schachtdrehtüren S.25 –
option: assembly of the TSG Sinus Drive for shaft swing door p.25

QKS8 Lite – QKS8 Lite



Lieferumfang – scope of supply



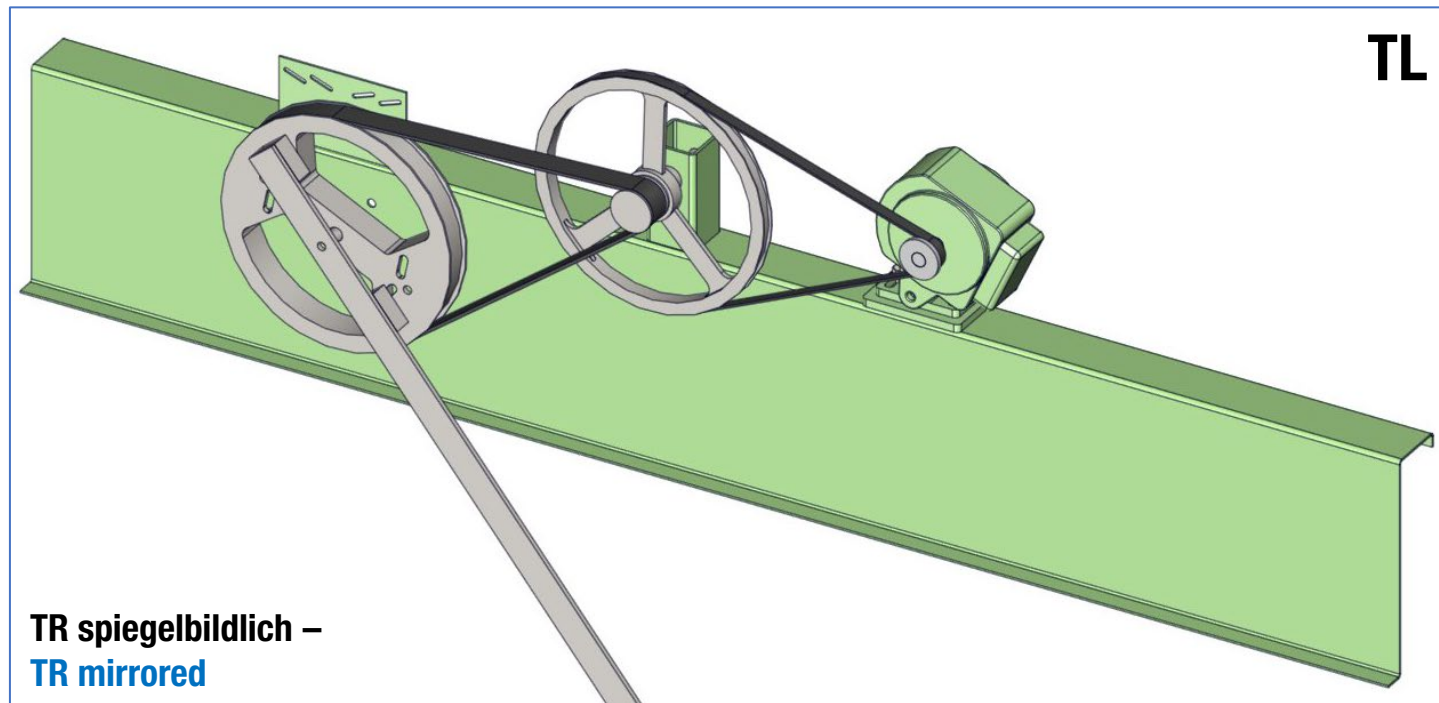
picture	Number	description DE	description EN	quantity
	8.20.00101.04	TSG V4 Lift Door Operator -Electronic extern-	TSG V4 lift door operator -electronic extern- 230[VAC]/50-60	1
	8.20.4000x.X1	Motor Gross Links/Rechts & Getriebe, ohne Zahnrad, 24V/1:15	motor large left/right & gearbox, without wheel, 24V/1:15	1
	1.20.60061	TSG Motorspannwinkel, Ausführung 'Hut' (nur K-Antriebe)	TSG motor clamping bracket, 'hat' version (only K drives)	1
	1.20.60530	Spannwinkel für Motorhalterung	clamping bracket for drive bracket	1
	1.20.60090	Halterung Doppelzahnriemenscheibe für 2zu1 auf TSG	bracket double toothed pulley for 2to1 on TSG	1
	1.20.92130	Haltewinkel Motor und Umlenkung QKS Lite	angle bracket motor and counter roller QKS Lite	1
	1.20.60290	Pufferhalter symetisch 45°	buffer bracket symmetric 45°	1
	1.20.35230	Montagewinkel für Antriebsplatte QKS8 Lite	angle bracket for drive plate QKS8 Lite	2

picture	Number	description DE	description EN	quantity
	1.20.60004	TSG Türflügelmitnehmer	TSG door panel coupler	1
	1.20.60007	TSG Zahnriemenschloß, Stahl, spiegelbildlich	TSG toothed belt lock, steel, mirror image	1
	1.20.30200	Doppelzahnriemenscheibe EXZENTRISCH	double timing belt pulley, excentric	1
	1.20.30217	Gummipuffer E, 20x13,5 M6x6 Innengewinde NK 68 Shore	rubber-metal bump stop E, 20x13,5 M6x6 NK 68 Shore	1
	1.20.60165	Zahnriemenrad, V2A, STD8M, d1=14H7, d2=15,3, D=39[mm], B=15[mm], mit Nut, mit 2 Bordscheiben	pulley, V2A, STD8M, d1=14H7, d2=15,3, D=39[mm], B=15[mm], with keyway, with 2 disks	1
	1.36.00720	Sperrzahnschraube WN0274 A2C 8.8 - M8x20	hexagon head serrated screw WN0274 A2C 8.8 - M8x20	4
	1.36.00501	Sperrzahnmutter, ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	18
	1.36.00114	Sechskantschraube Vollgewinde DIN933 vz 8.8 - M6x70	hexagonal bolt, thread up to head DIN933 vz 8.8 - M6x70	1
	1.36.00502	Sperrzahnmutter, ähnlich DIN6923 vz - M6	ribbed nuts, similar to DIN6923 vz - M6	3

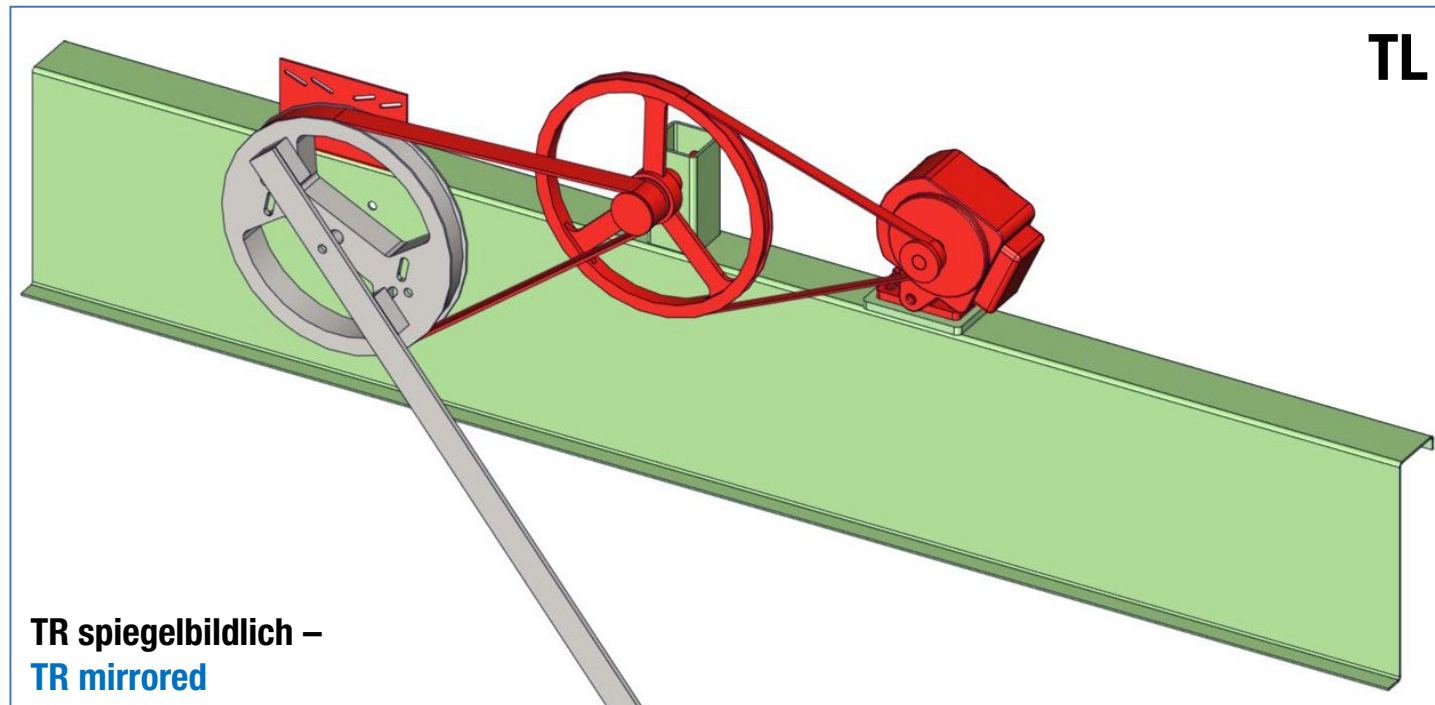
picture	Number	description DE	description EN	quantity
	1.36.00725	Sperrzahnschraube WN0274 A2C 8.8 - M8x25	hexagon head serrated screw WN0274 A2C 8.8 - M8x25	6
	1.36.00520	Flachrundschrabe Vierkantansatz mit Mutter DIN603 vz 4.8 – M8x25	round head screw w. square neck and nut DIN603 vz4.8 - M8x25	2
	1.36.00139	Sperrzahnschraube WN0274 A2C 8.8 - M6x25	hexagon head serrated screw WN0274 A2C 8.8 - M6x25	4
	1.36.00749	Sperrzahnschraube WN0274 A2C 8.8 - M8x50	hexagon head serrated screw WN0274 A2C 8.8 - M8x50	1
	1.36.00375	Senkkopfschraube mit Innensechskant DIN7991 vz 8.8 - M8x16	countersunk head screw w.recessed head DIN7991 vz8.8 - M8x16	4
	8.20.8311x	TSG Sinusantrieb links/rechts für Riegelbetätigung	TSG Sinus Drive left/ right for interlock operation	1
	1.20.94100	Winkel zur Befestigung an Türmaschine für TSG Sinusantrieb	bracket for mounting at door machine for TSG Sinus Drive	1
	1.20.94101	Gegenwinkel zur Befestigung an Türmaschine für TSG Sinusantrieb	counter bracket for fixing at door machine for TSG Sinus Drive	1
	1.20.62250	Schraubterminal mit Außengewinde für 2:1 Übersetzung	screw terminal with external thread for 2to1 transmission	1

picture	Number	description DE	description EN	quantity
	1.20.61090	Zahnriemen für Sonderantrieb Endlos 584[mm], Breite 12[mm], S8M	timing belt for special drive endless 584[mm], width 12[mm]	1
	8.20.60002.25	TSG Zahnriemen [2,5m]	TSG timing belt [2,5m]	1
	1.20.62000	Drahtseilklemme für Seilverlängerung	wire rope clamp for rope extension	2
	1.20.62260	Drahtseil verzinkt für 2:1 Übersetzung Drahtseil, Seil-Ø:3mm für Seilverlängerung	wire rope galvanised for 2:1 transmission, rope-Ø:3[mm] for rope extension	1
	1.36.05150	Gewindestift m. Innensechskant, DIN 913, M6x20	hexagon socket set screw, DIN 913, M6x20	4

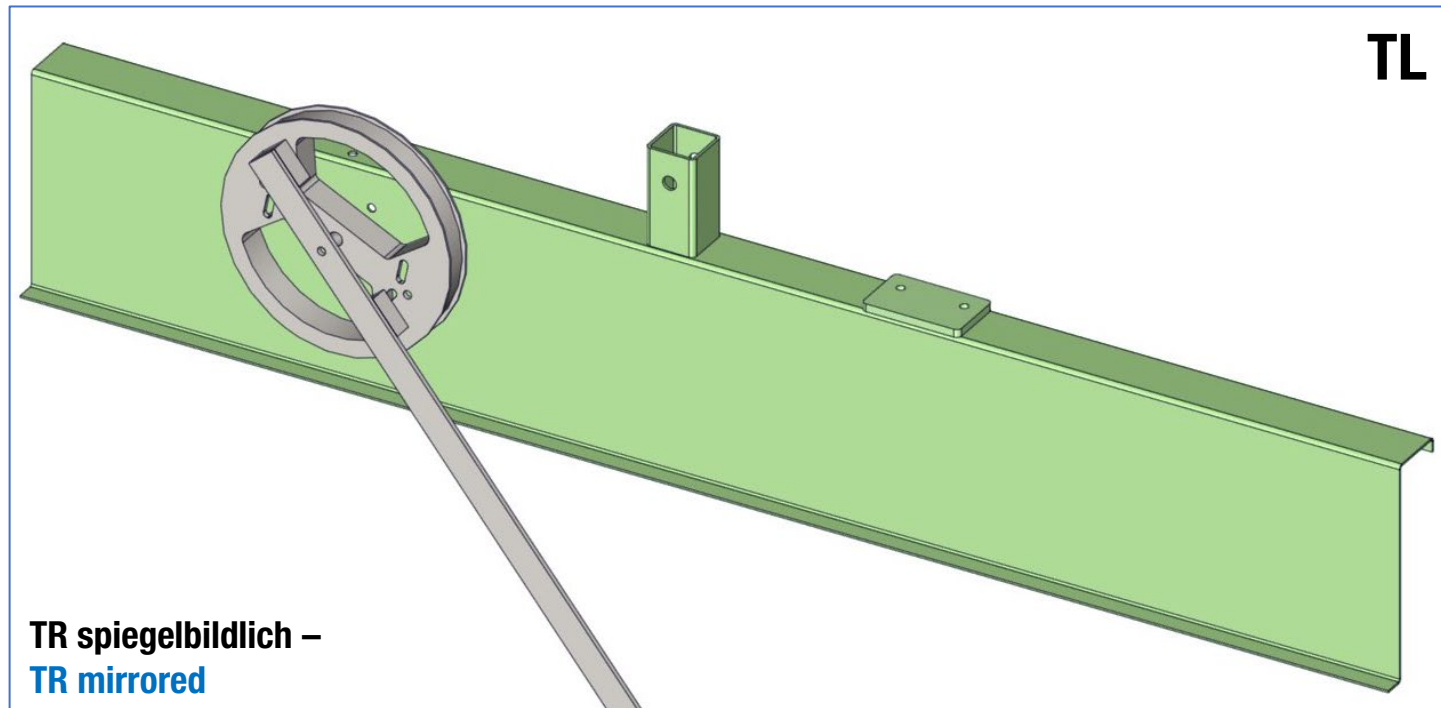
Vor Umbau – before conversion



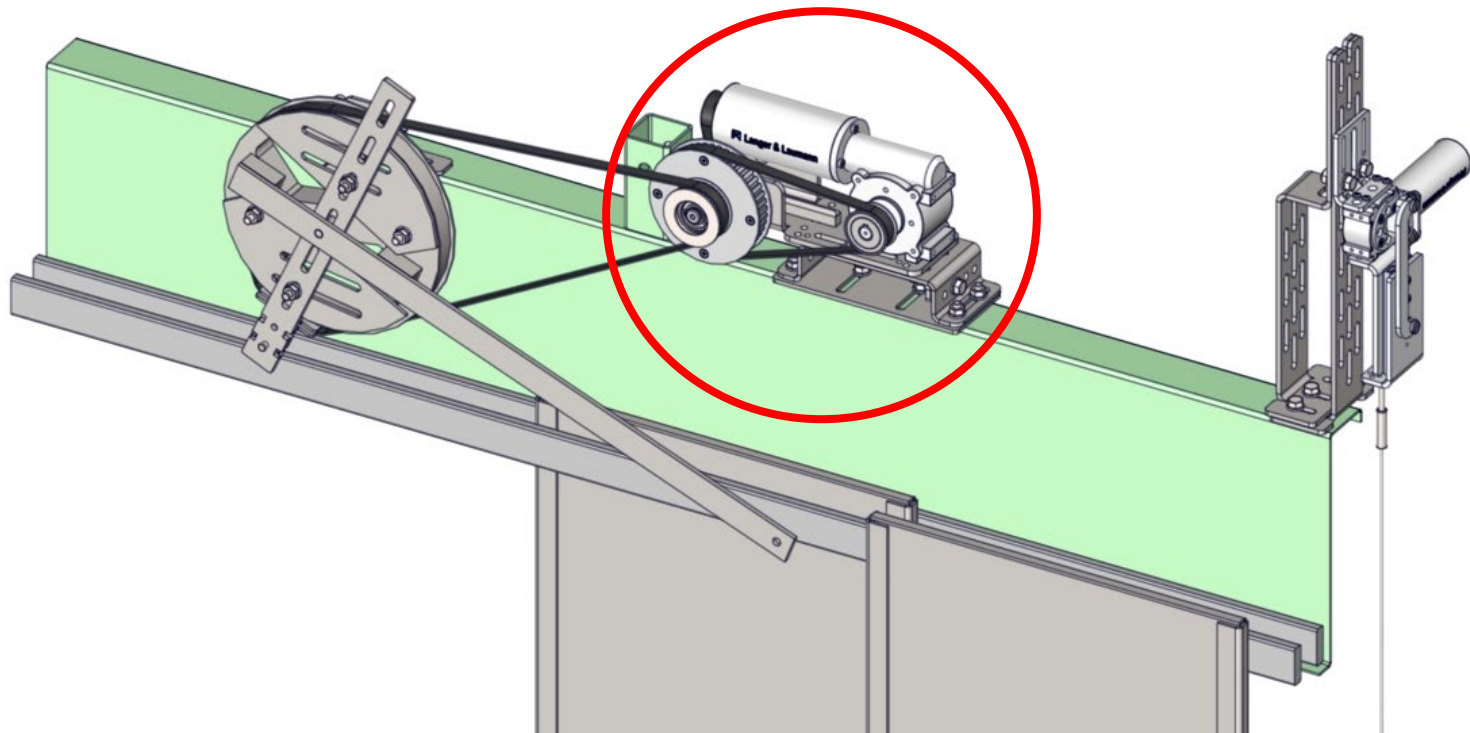
Vor Umbau entfernen – remove before conversion

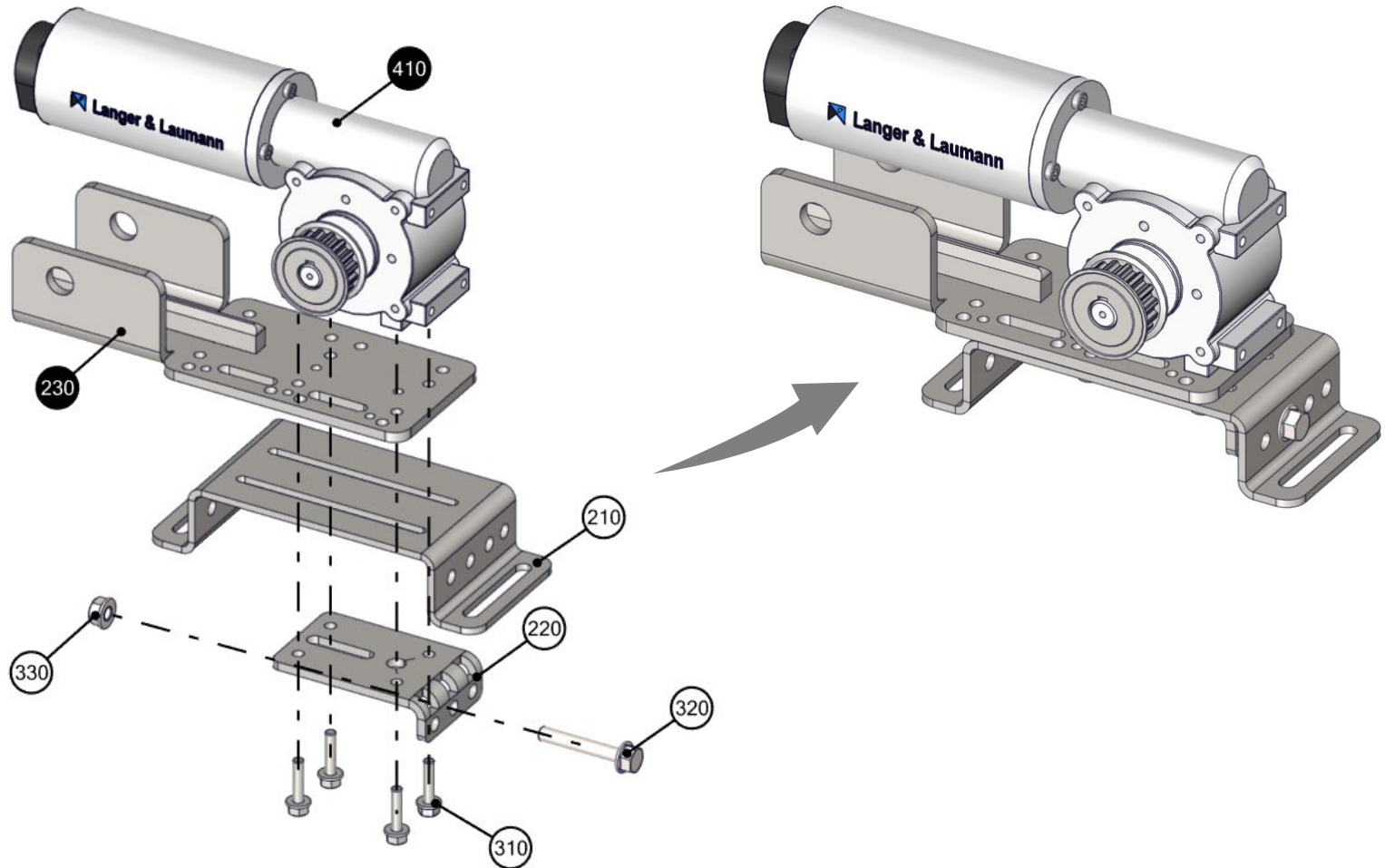


Nach Demontage – after disassembly

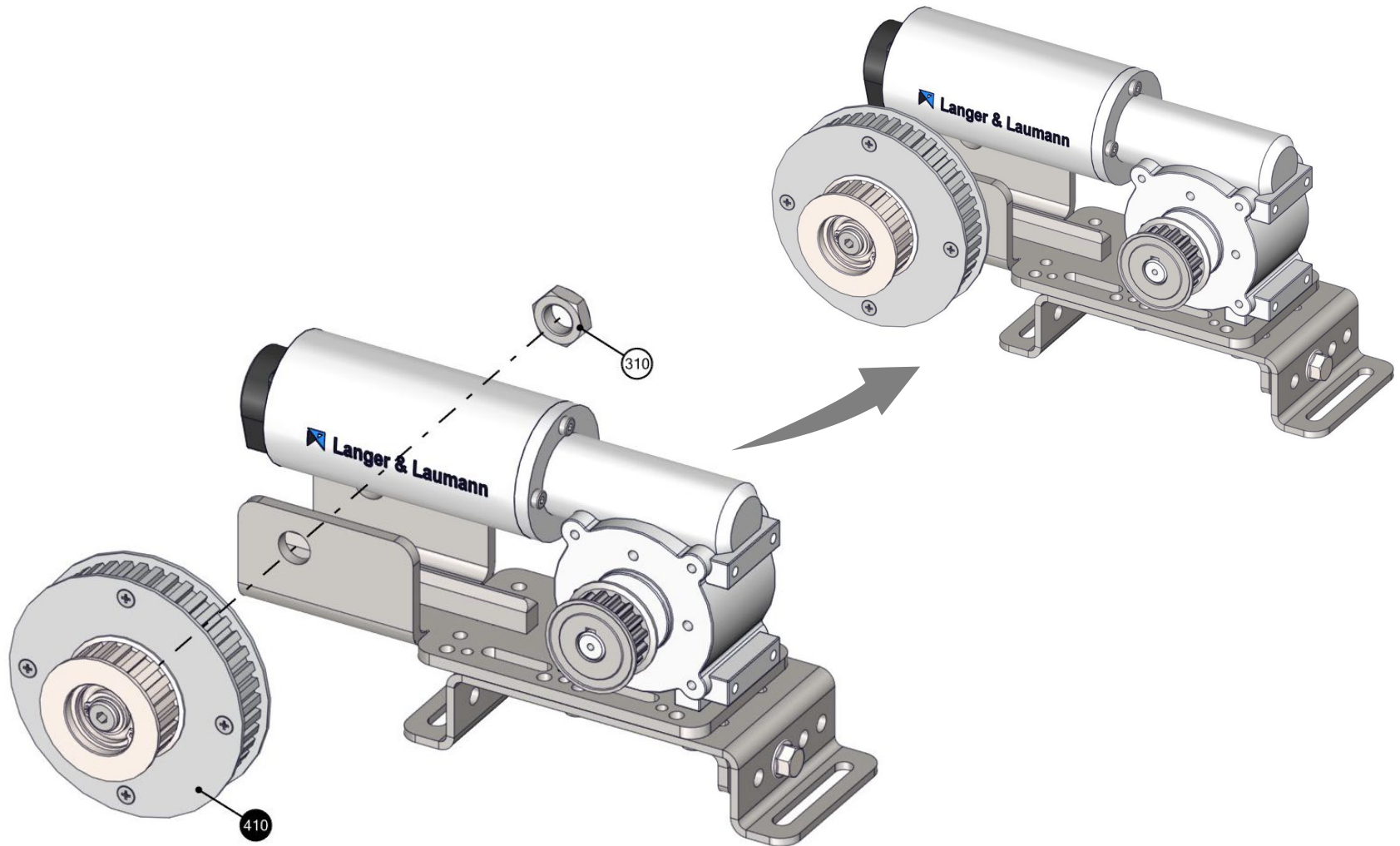


Montage Motor – assembly of the motor

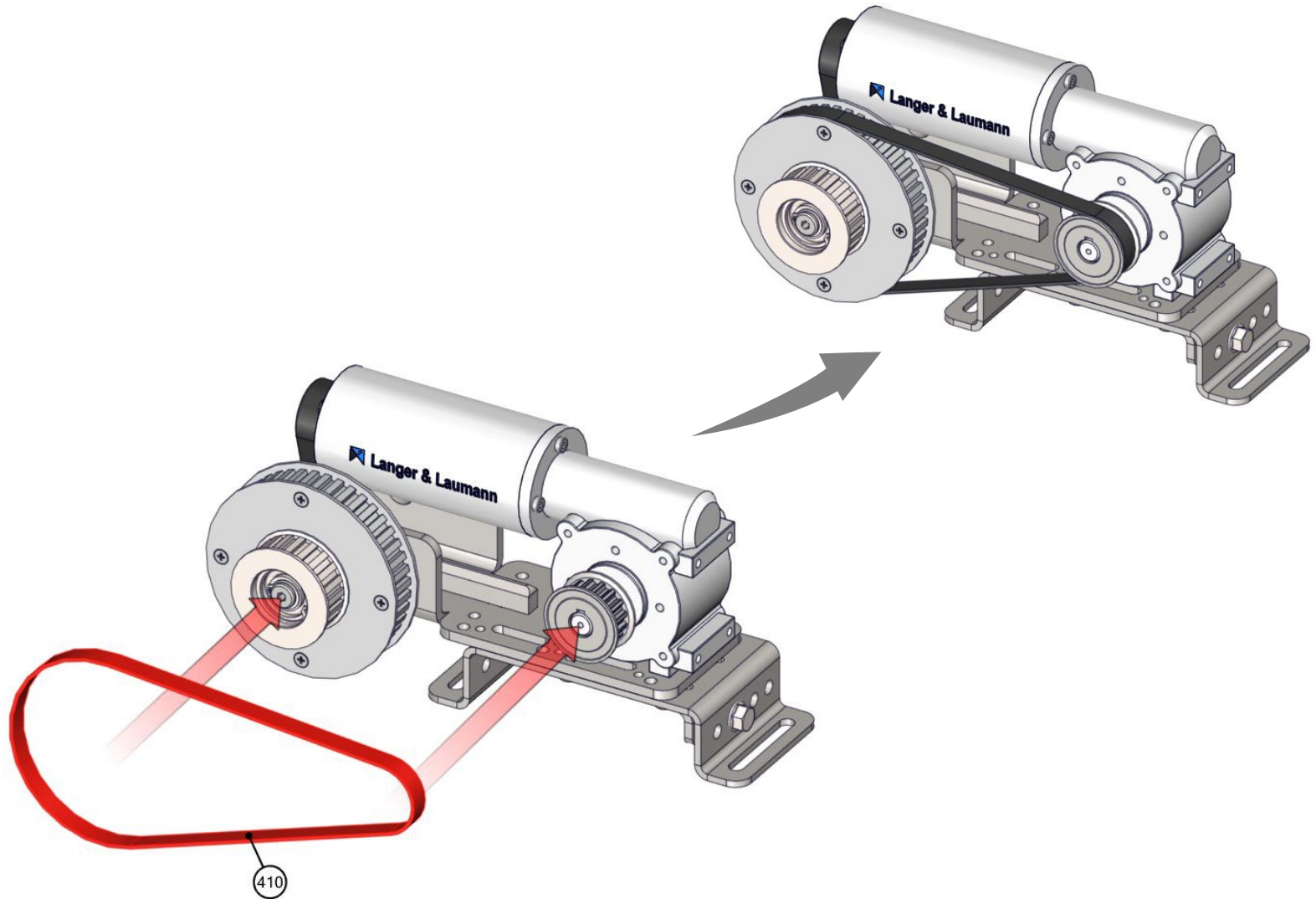




Pos.	Number	Description DE	Description EN	Menge
210	01.20.60061	TSG Motorspannwinkel, Ausführung Hut (nur K-Antriebe)	TSG motor clamping bracket, 'hat' version (only K drives)	1
220	01.20.60530	Spannwinkel für Motorhalterung für Thy F9	clamping bracket for drive bracket for Thy F9	1
230	01.20.60090	Halterung Doppelzahnriemenscheibe für 2 zu 1 auf TSG Kombiwinkel	bracket double toothed pulley for 2to1 on TSG	1
310	01.36.00139	Sperrzahnschraube DIN 6921 M6x25, 8.8, vz	hexagon head serrated screw WN0274 A2C 8.8 - M6x25	4
320	01.36.00749	Sperrzahnschraube DIN 6921 M8x50, 8.8, vz	hexagon head serrated screw WN0274 A2C 8.8 - M8x50	1
330	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	1
410	08.20.40003.K1	Motor Gross Links & Getriebe, ohne Zahnrad, 24V/5,1A/1:15	motor large left & gearbox, without wheel, 24V/5,1A/1:15	1



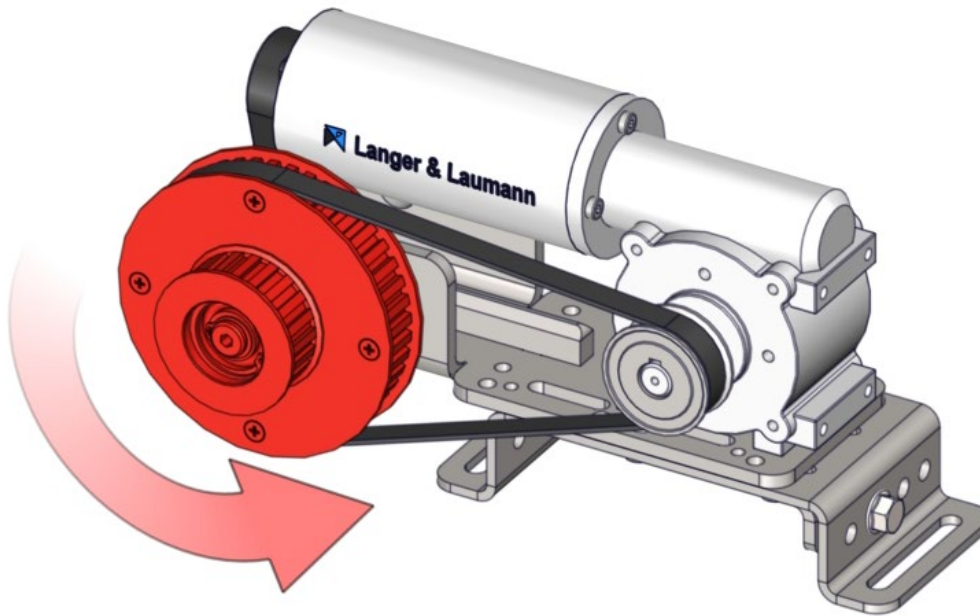
Pos.	Number	Description DE	Description EN	Menge
310	01.36.00428	Sechskantmutter SW30 niedrige Form - M16x1, Sonderanfertigung WIAG	hexagon nut SW30 low profile - M16x1, special design	1
410	01.20.30200	Doppelzahnriemenscheibe EXZENTRISCH	double timing belt pulley, excentric	1



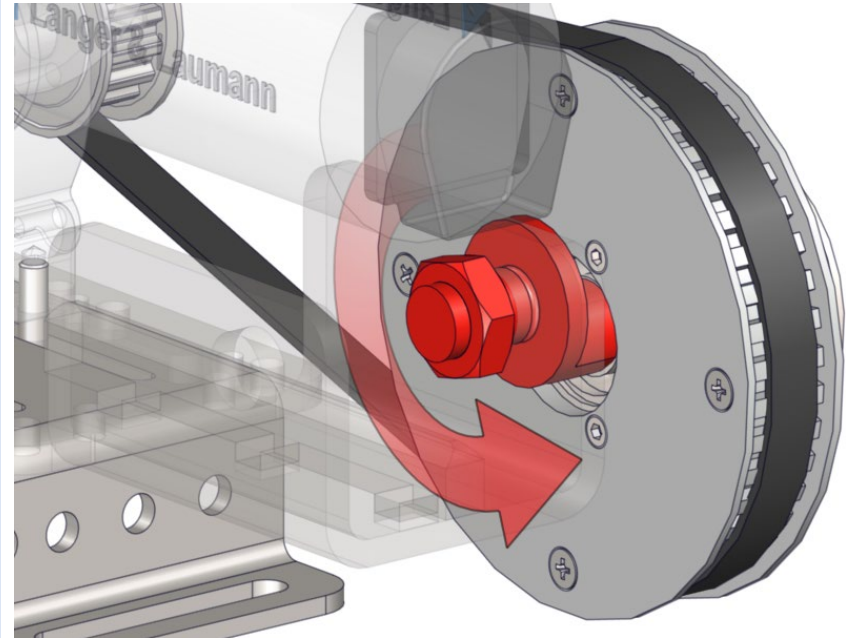
Pos.	Number	Description DE	Description EN	Menge
410	01.20.61090	Zahnriemen für Sonderantrieb Endlos 584[mm], Breite 12[mm], S8M	belt for special drive endless 584[mm], width 12[mm]	1

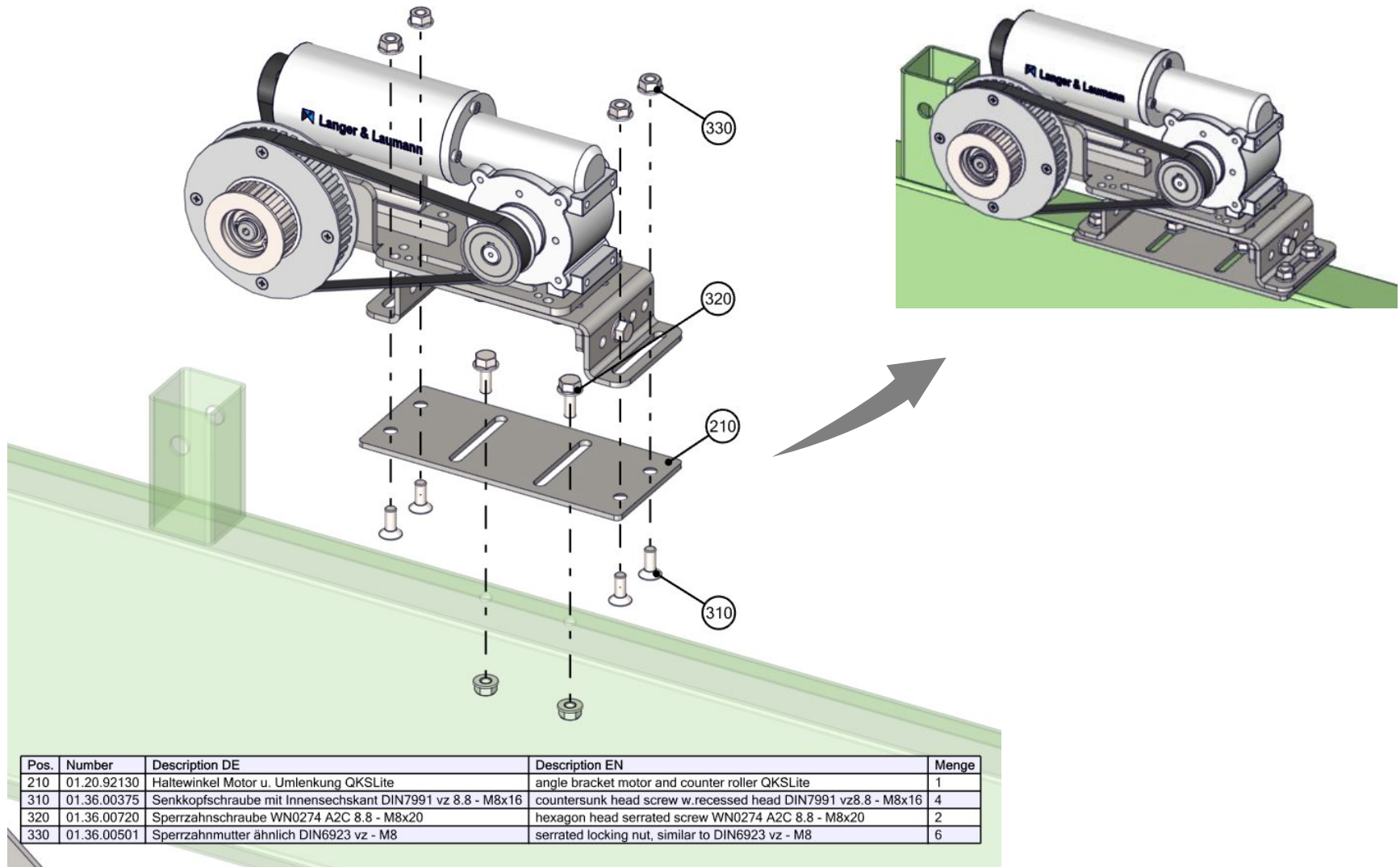
Endloszahnriemen (kurzer Zahnriemen) spannen – tensioning of the timing belt (short timing belt)

Spannen über exzentrische Welle –
tensioning via eccentric shaft

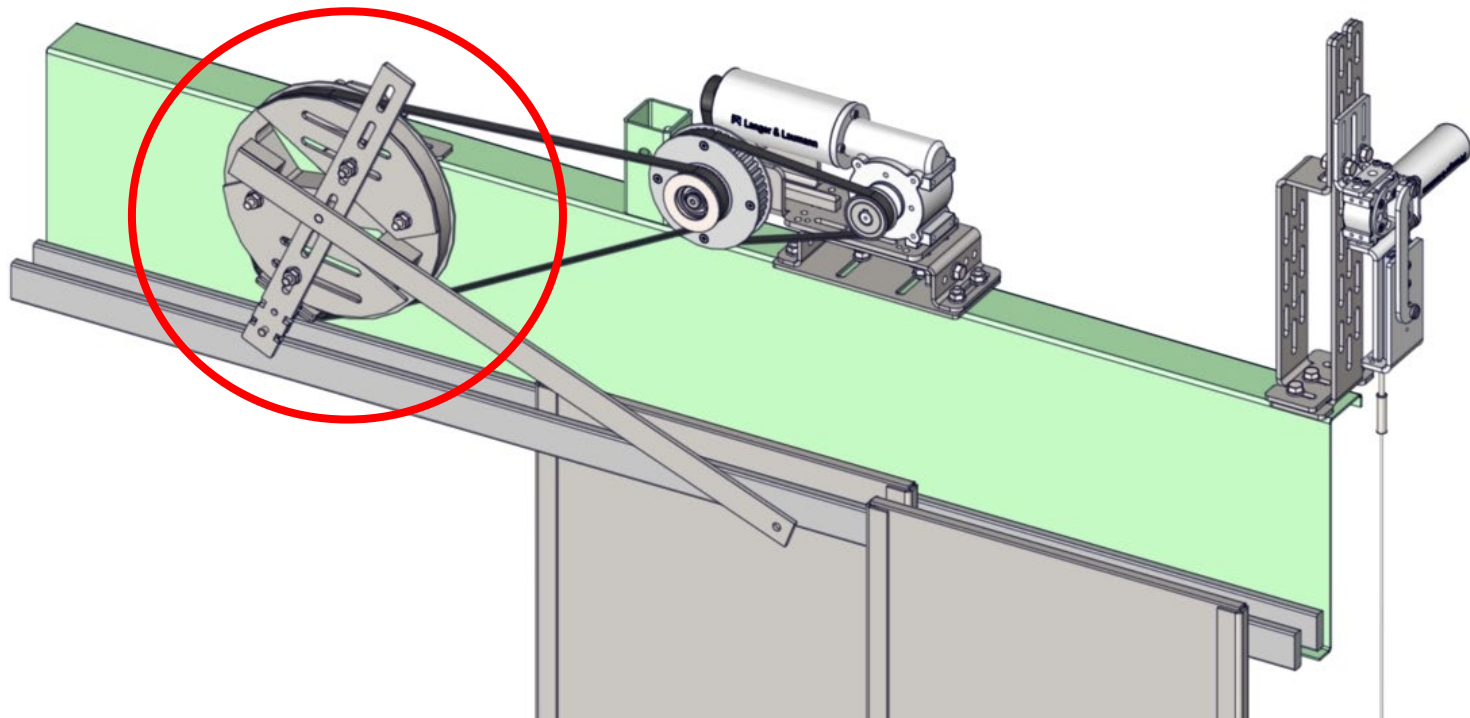


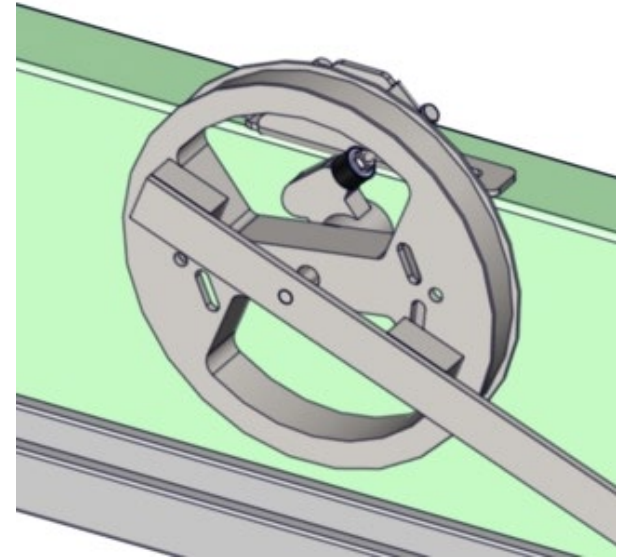
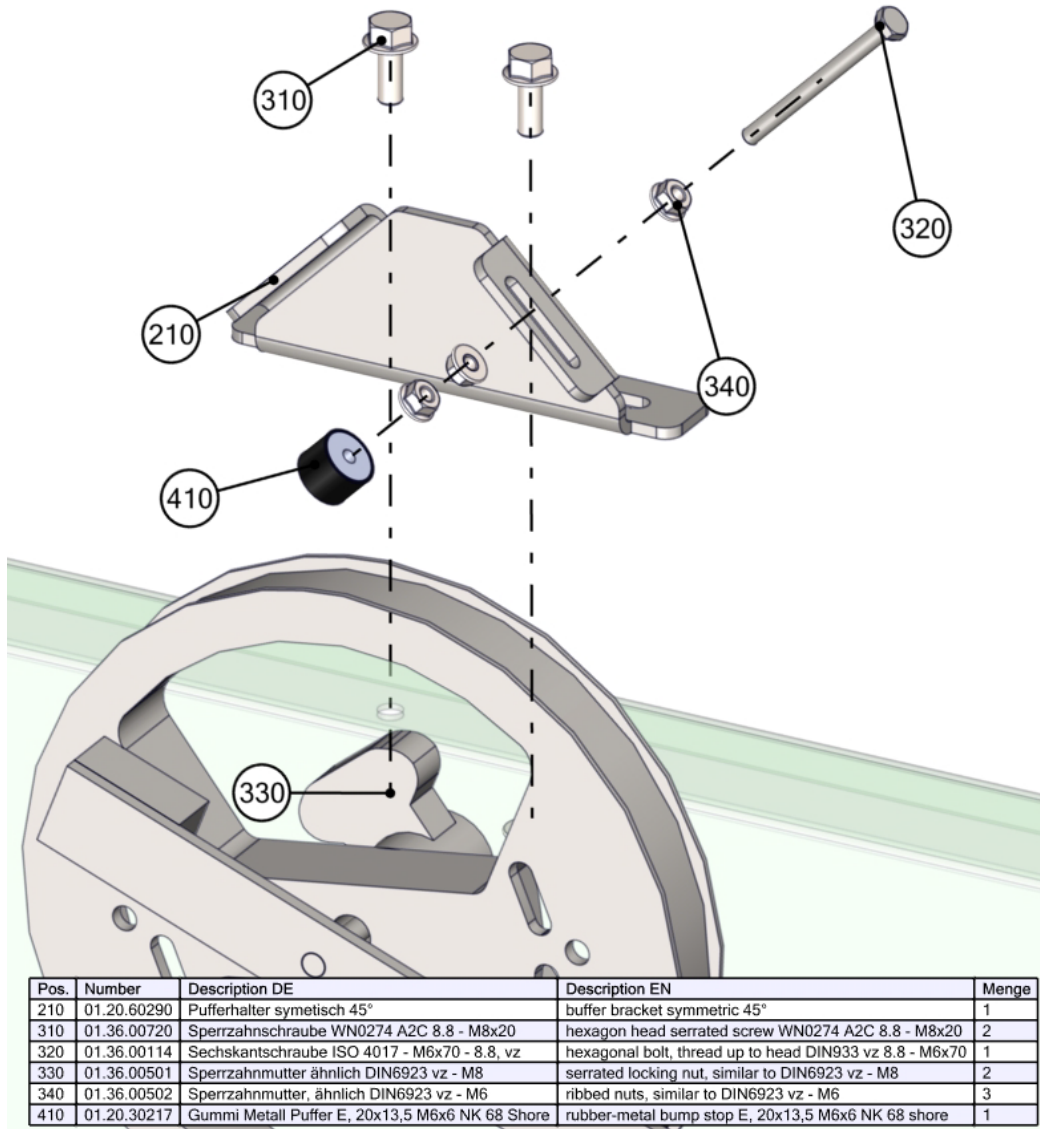
Mit Sechskantmutter feststellen –
lock with hexagon nut

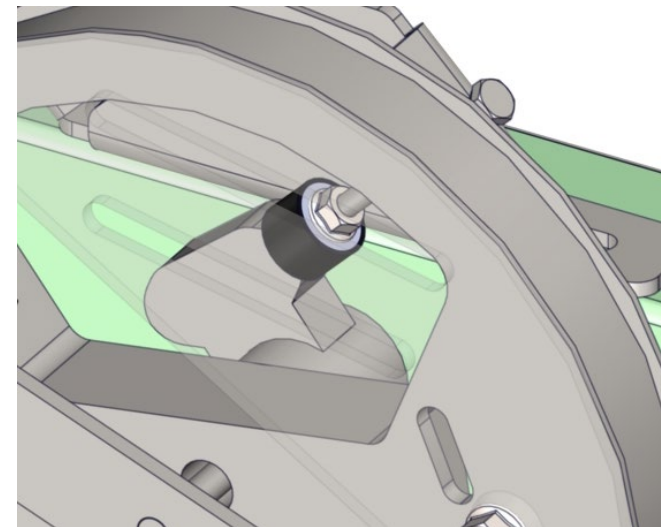
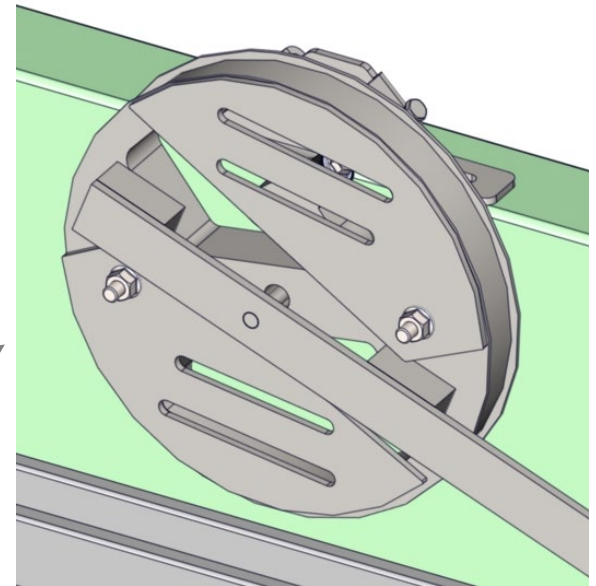
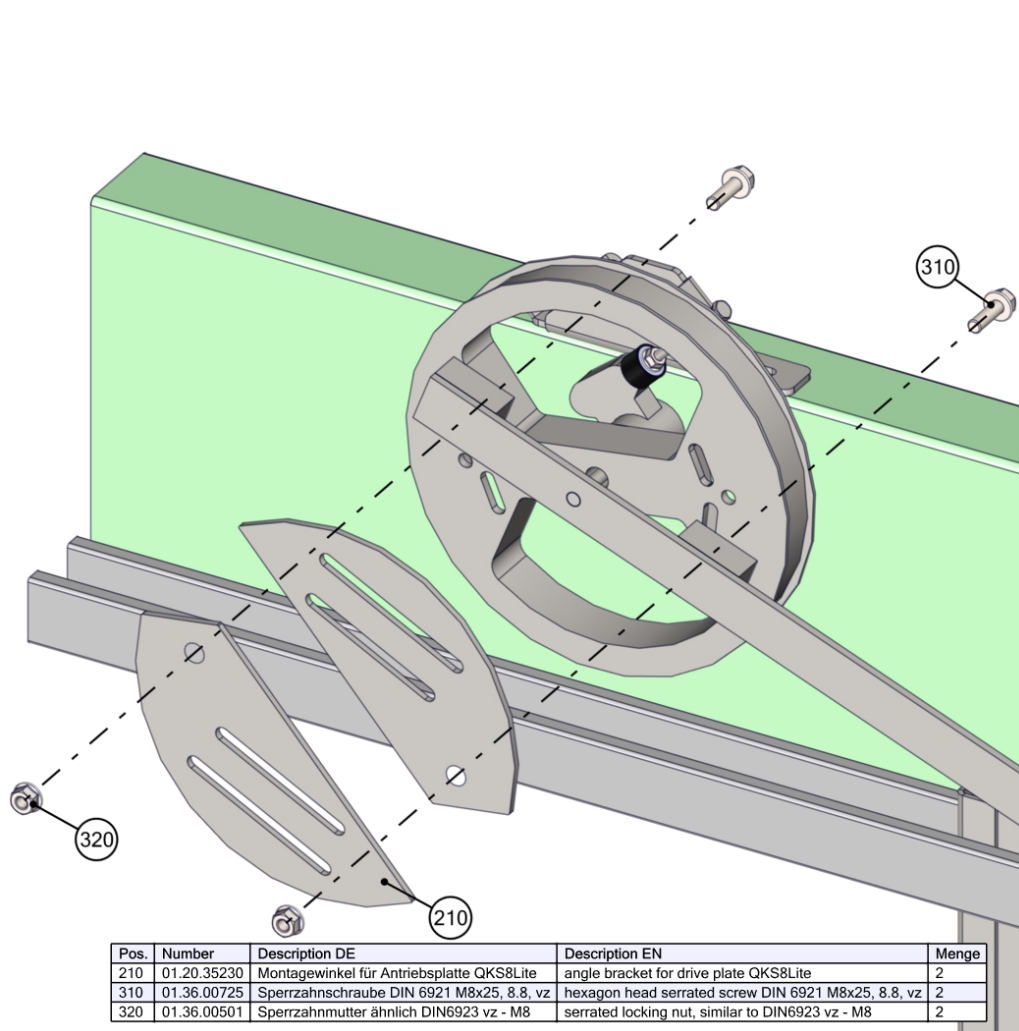


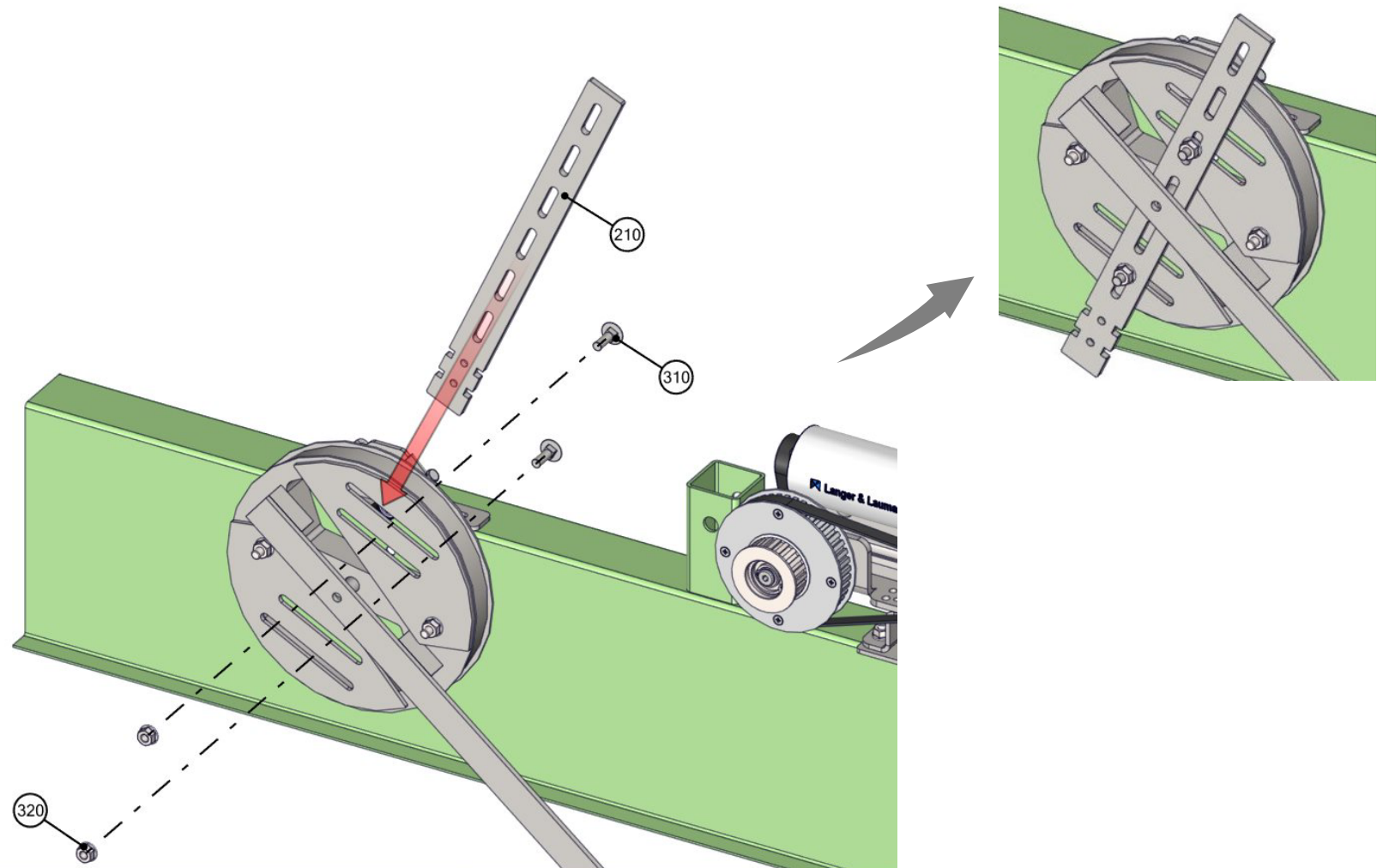


Montage Umlenkung – assembly of the reverse unit



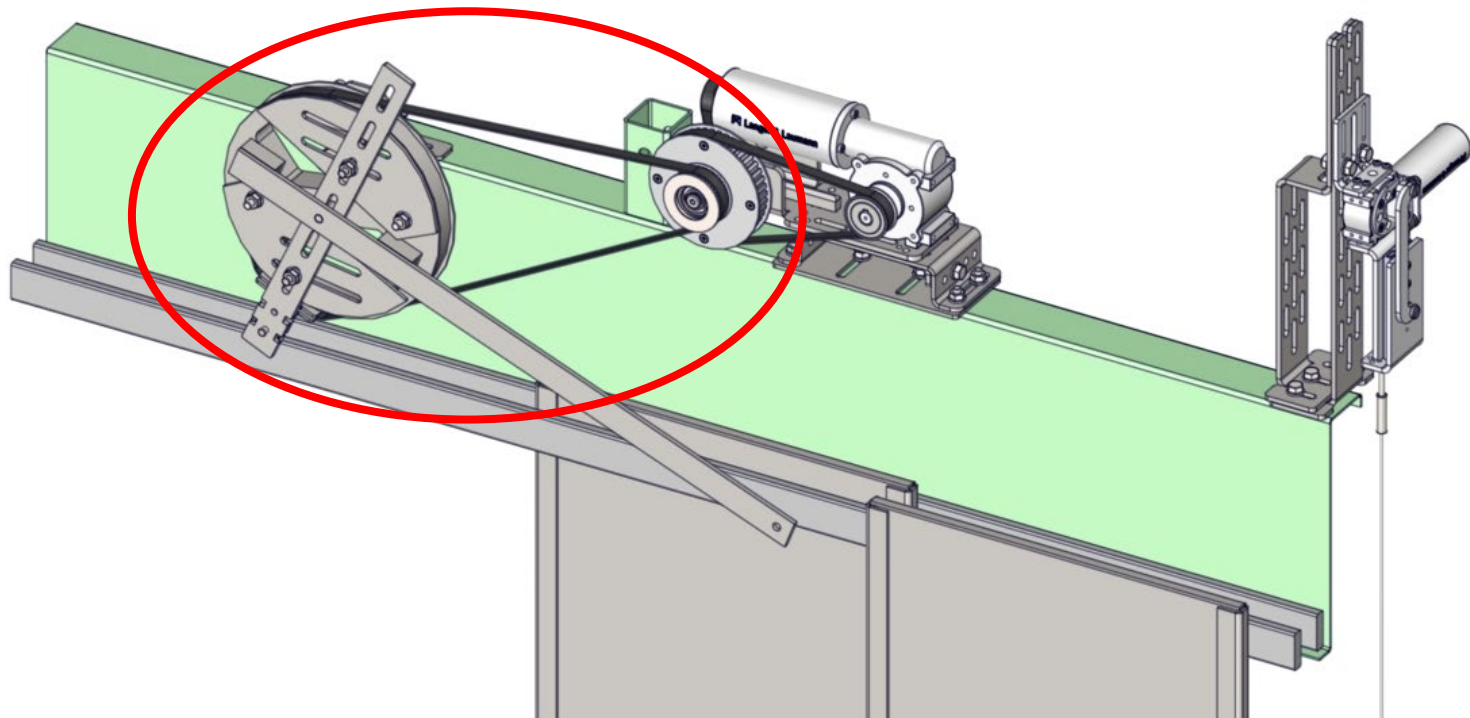


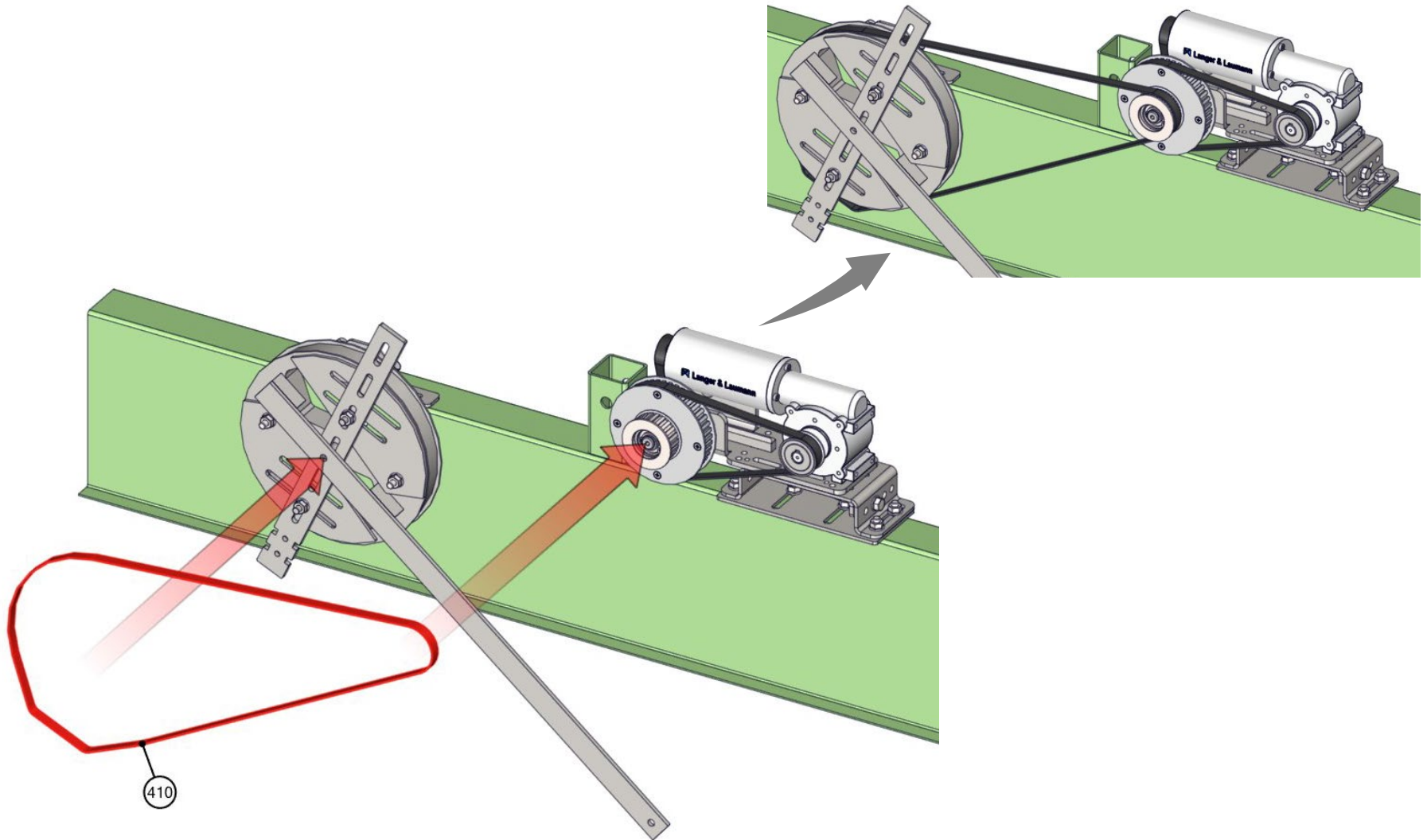




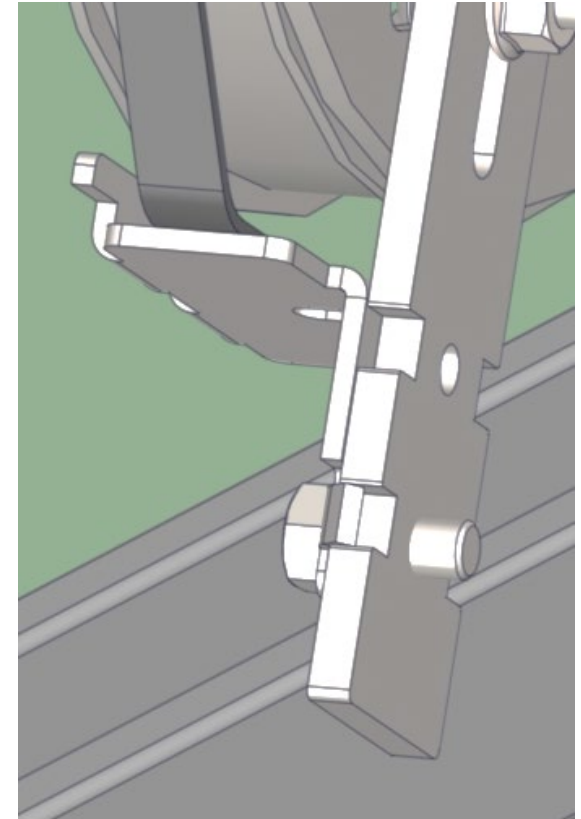
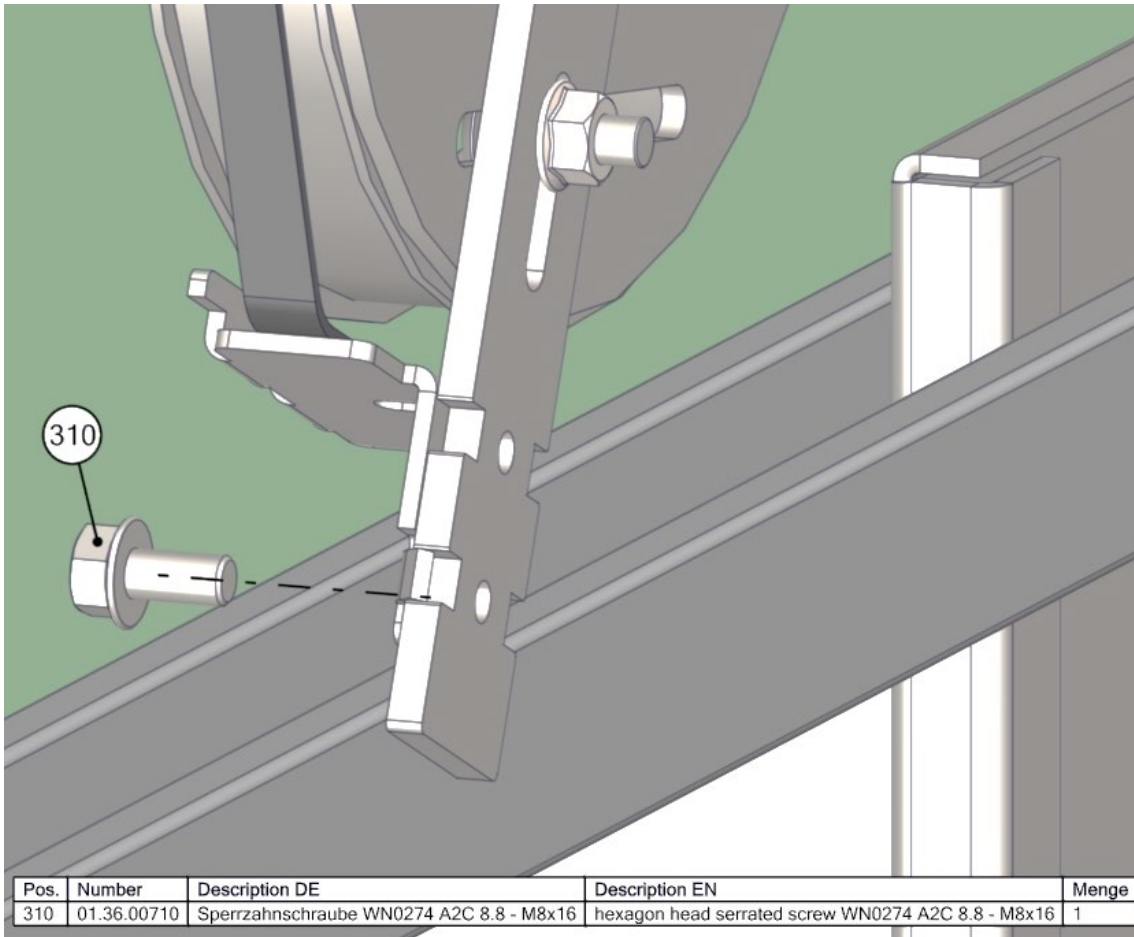
Pos.	Number	Description DE	Description EN	Menge
210	01.20.60004	Türflügelmitnehmer 375x35x6	TSG door panel coupler 375x35x6	1
310	01.36.00520	Flachrundschrabe Vierkantansatz, DIN 603, 8x25	truss-head screw with shoulder, DIN 603, 8x25	2
320	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	2

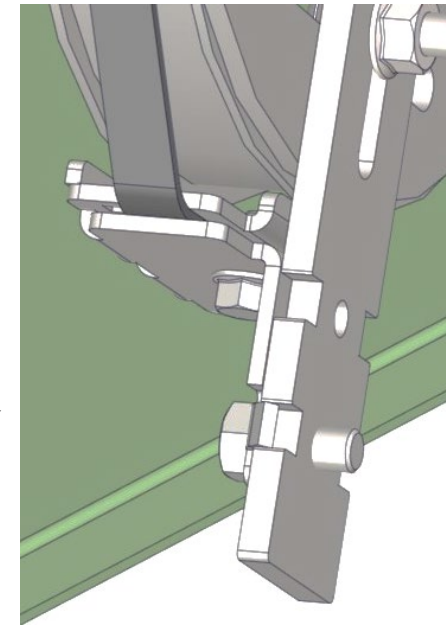
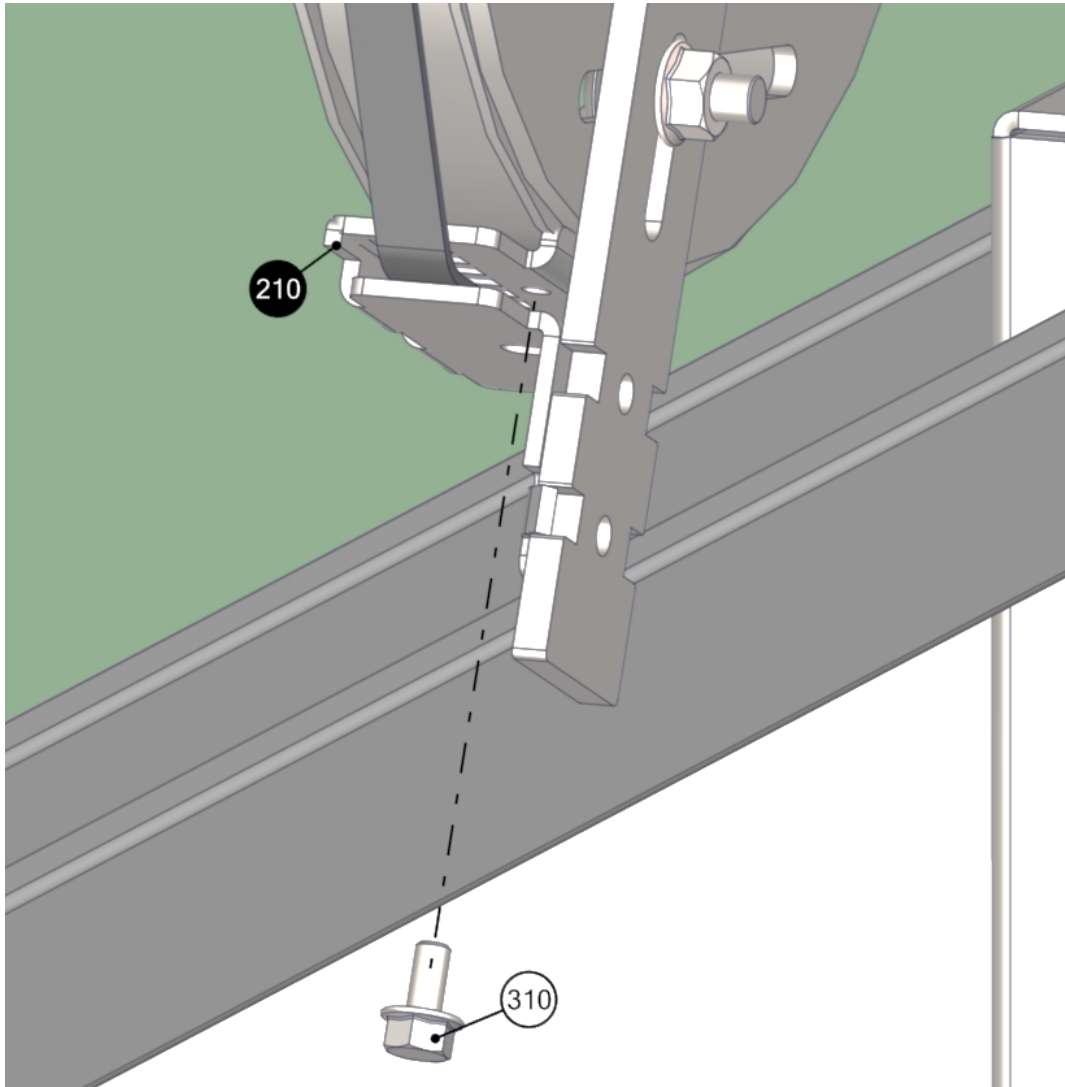
Montage Zahnriemen – assembly of the toothed belt





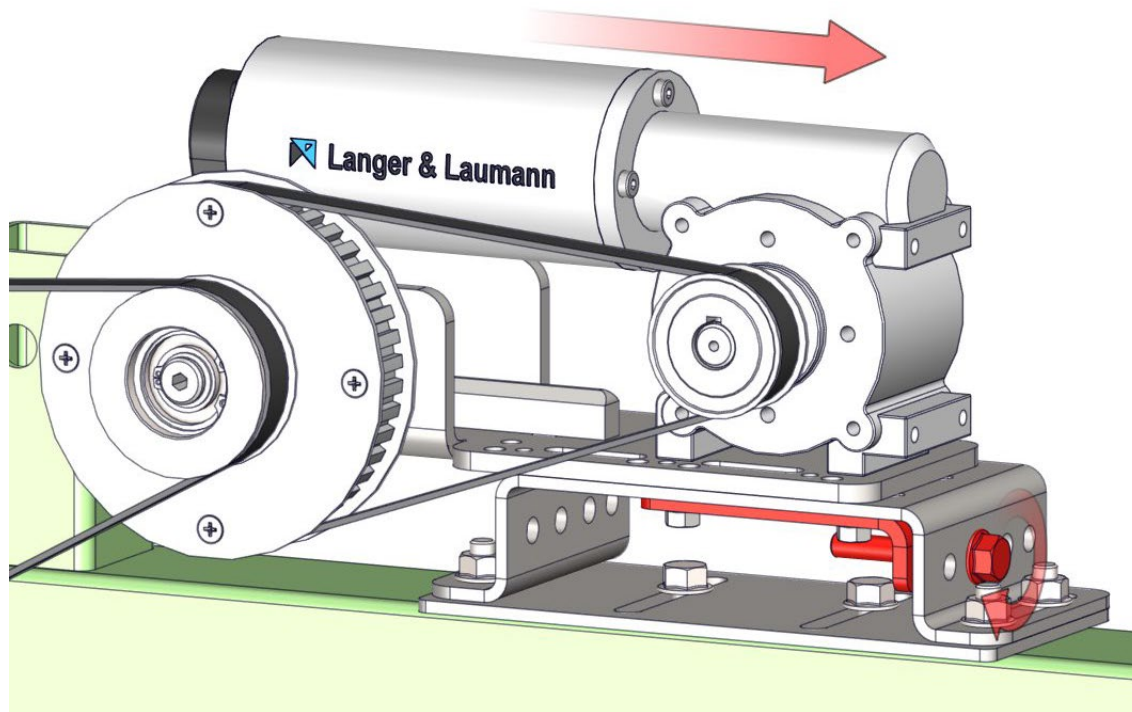
Pos.	Number	Description DE	Description EN	Menge
410	08.20.60002.25	TSG Zahnriemen [2,5m]	TSG toothed belt [2,5m]	1



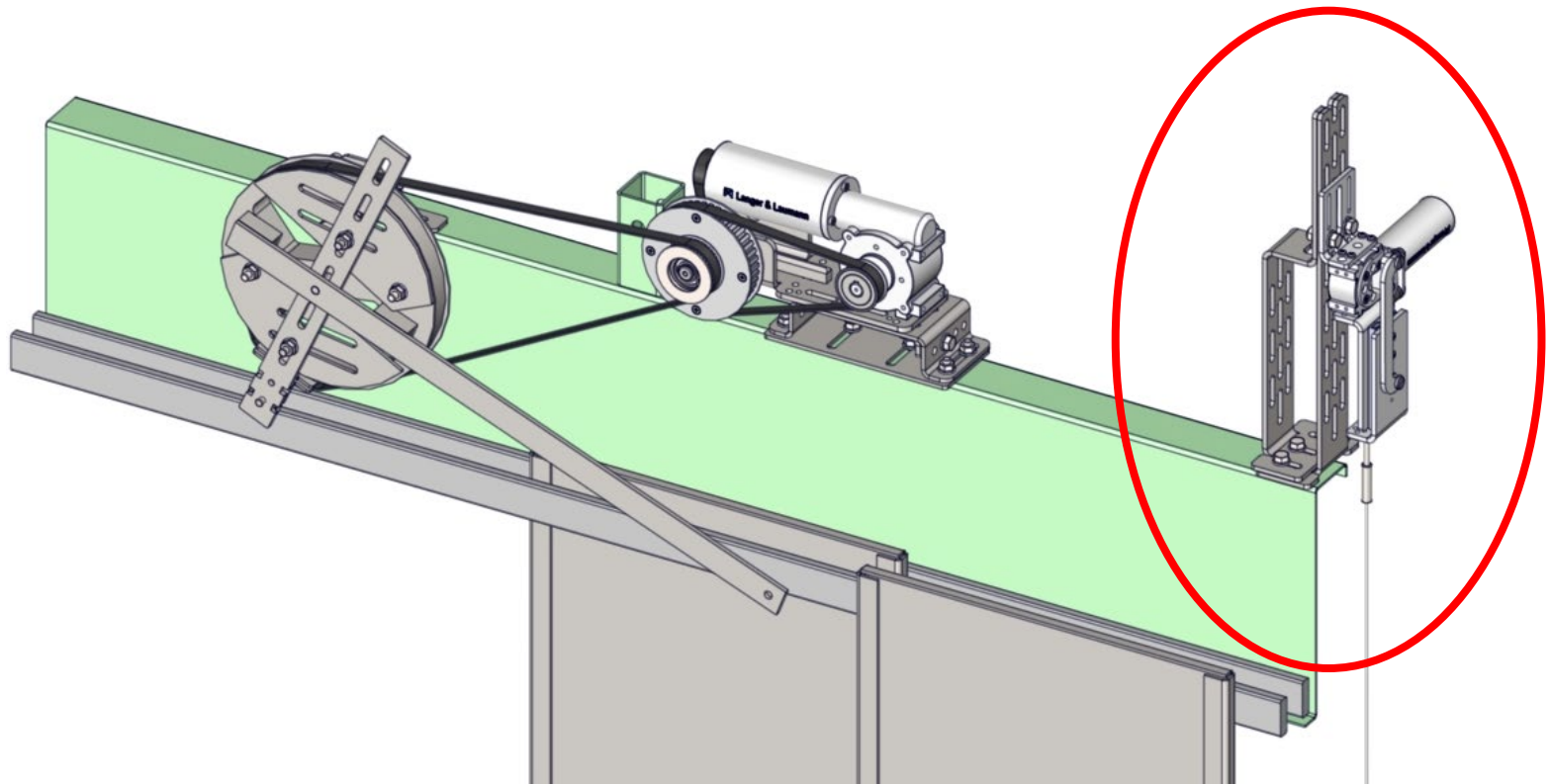


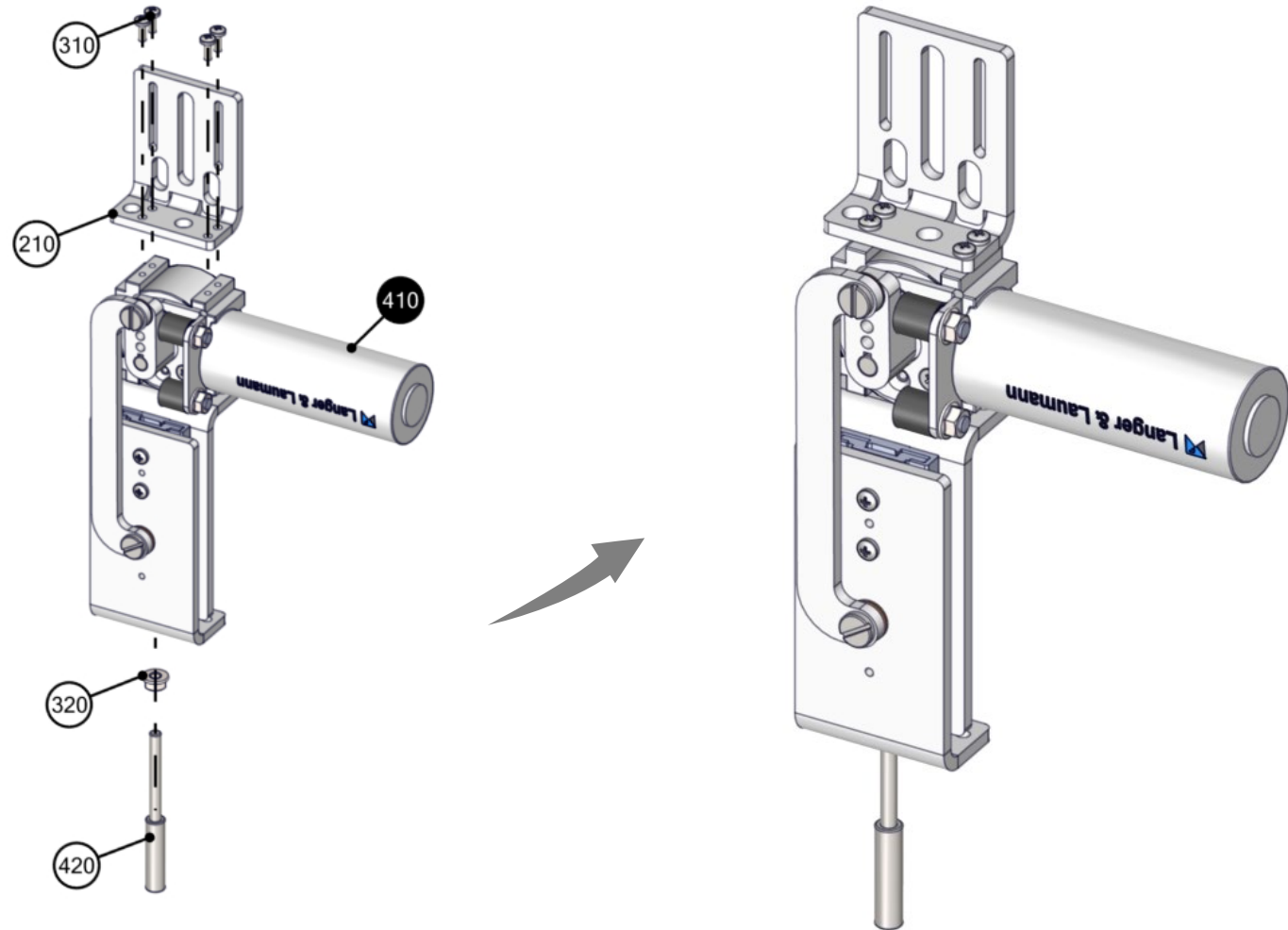
Pos.	Number	Description DE	Description EN	Menge
210	01.20.60007	TSG Zahnriemenschloß, Stahl, spiegelbildlich	TSG toothed belt lock, steel, mirror image	1
310	01.36.00135	Sperrzahnschraube DIN 6921 M6x12 verz.	hexagon head serrated screw WN0274 A2C 8.8 - M6x12	1

Zahnriemen (langer Zahnriemen) spannen – tensioning of the timing belt (long timing belt)

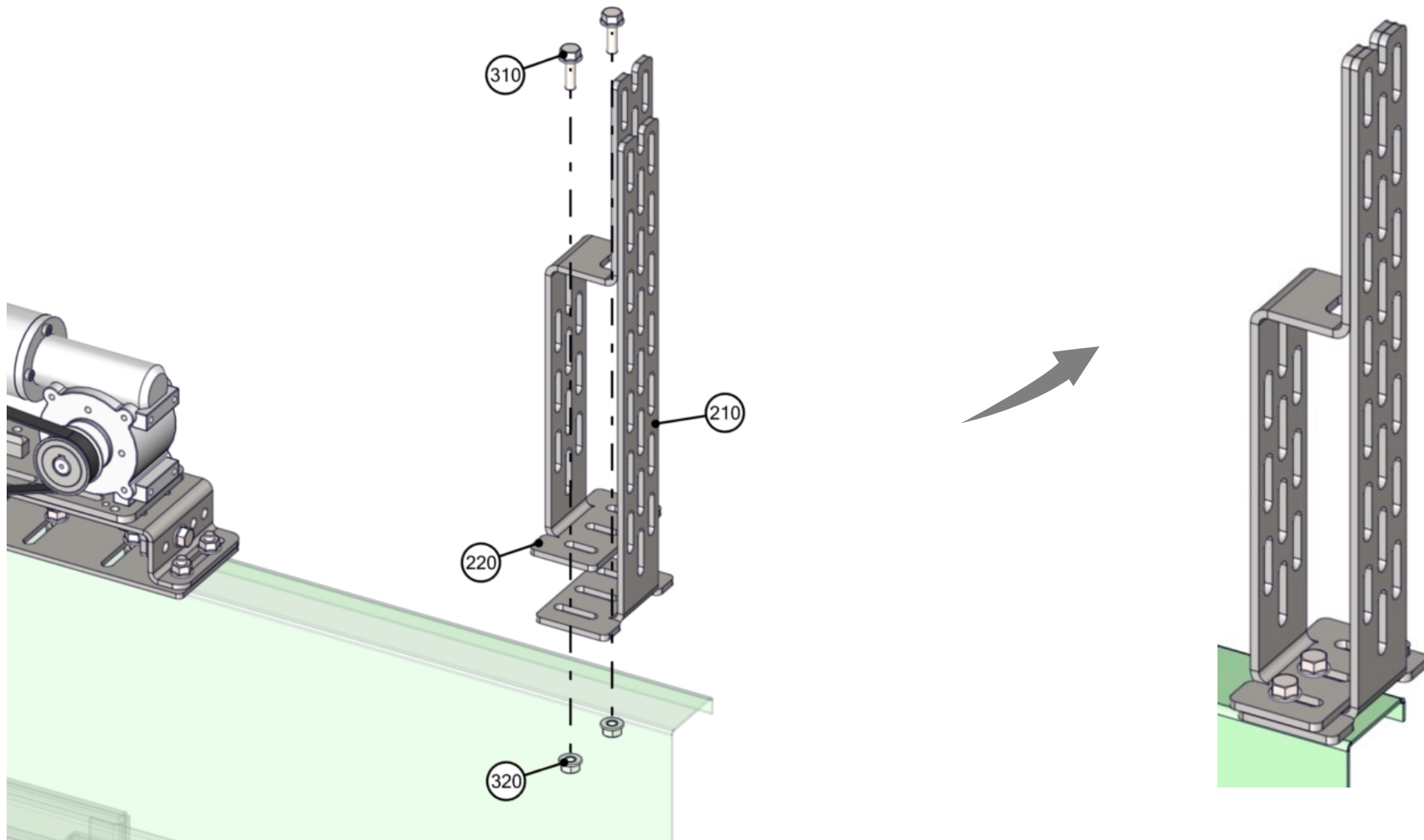


Option: Montage TSG Sinusantrieb bei Schachtdrehtüren –
option: assembly of the TSG Sinus Drive for shaft swing door

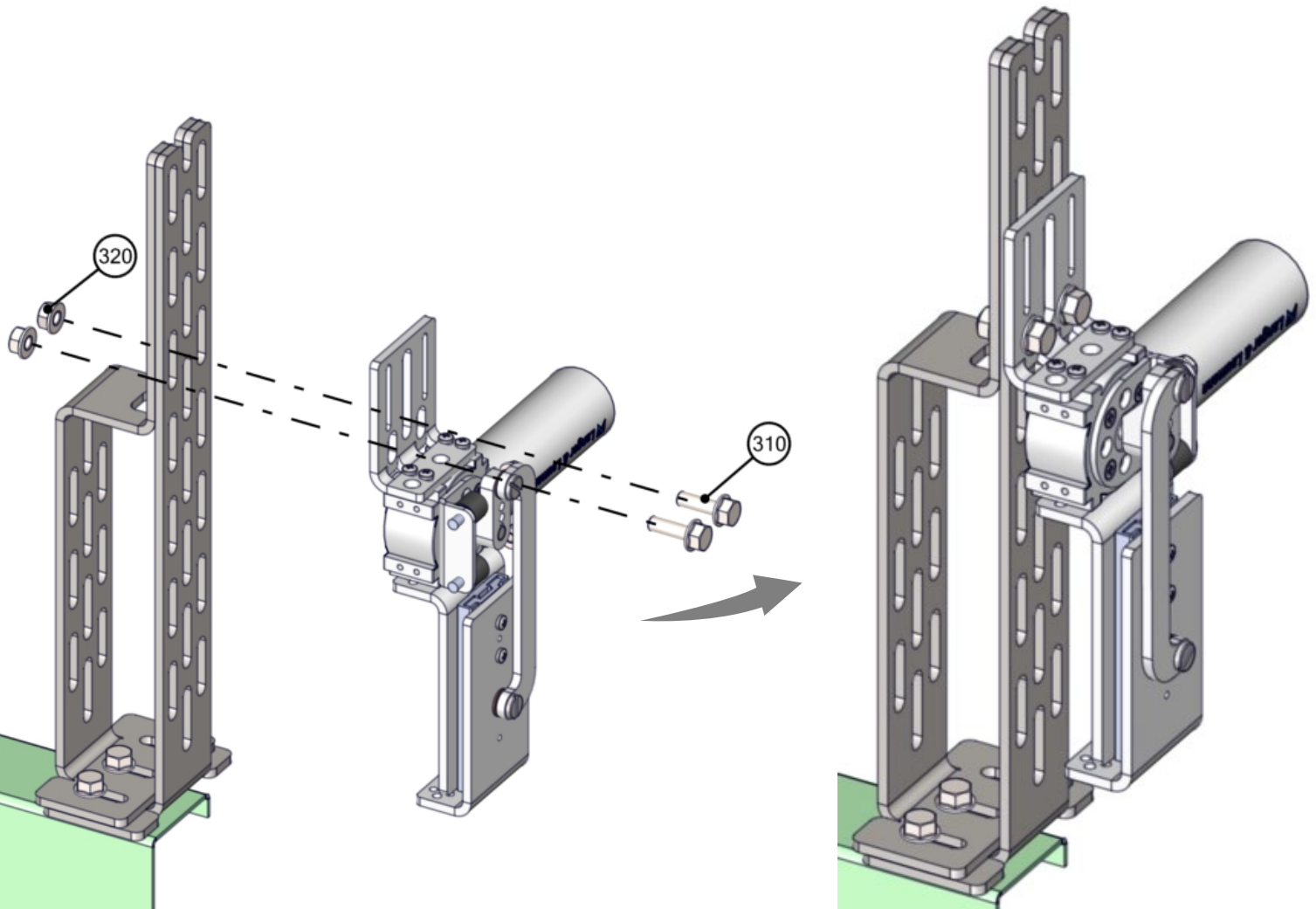




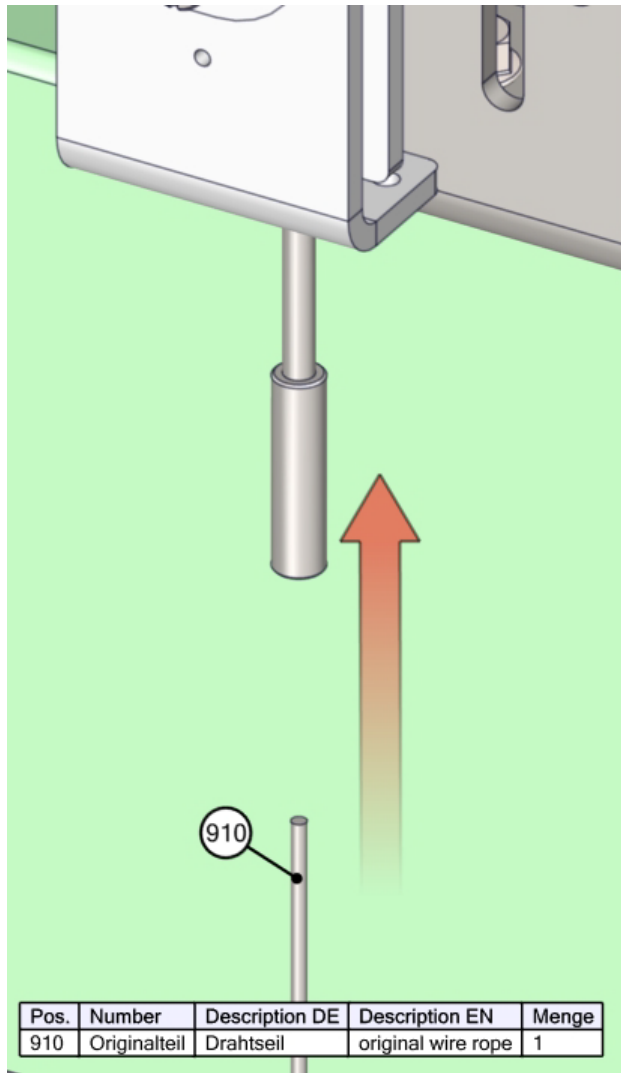
Pos.	Number	Description DE	Description EN	Menge
210	01.20.94050	Haltewinkel für TSG Sinusantrieb	mounting bracket for TSG Sinus Drive	1
310	01.36.00003	Flachkopfschraube vz 4,8 7985 4x10	pan head screw DIN7985 vz 4.8 - M4x10	4
320	01.36.00502	Sperrzahnmutter, ähnlich DIN6923 vz - M6	ribbed nuts, similar to DIN6923 vz - M6	1
410	08.20.83112	TSG Sinusantrieb rechts für Riegelbetätigung (ohne TSG Elektronik)	TSG Sinus Drive right for interlock operation	1
420	01.20.62250	Schraubterminal mit Außengewinde für 21 Übersetzung Drahtseil-Ø mm 3 und 4	screw terminal with external thread for 2to1 transmission	1



Pos.	Number	Description DE	Description EN	Menge
210	01.20.94100	Winkel zur Befestigung an Türmaschine für TSG Sinus Hubantrieb	bracket for mounting at door mashine for TSG Sinus Drive	1
220	01.20.94101	Gegenwinkel zur Befestigung an Türmaschine für TSG Sinusantrieb	counter bracket for fixing at door machine for TSG Sinus Drive	1
310	01.36.00725	Sperrzahnschraube DIN 6921 M8x25, 8.8, vz	hexagon head serrated screw DIN 6921 M8x25, 8.8, vz	2
320	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	2

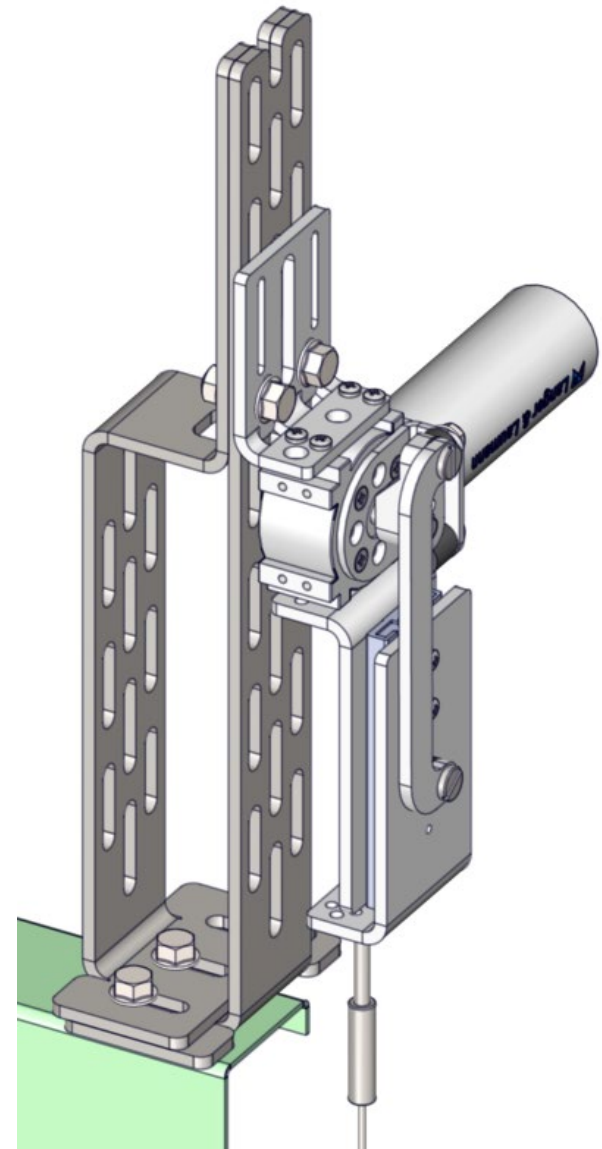


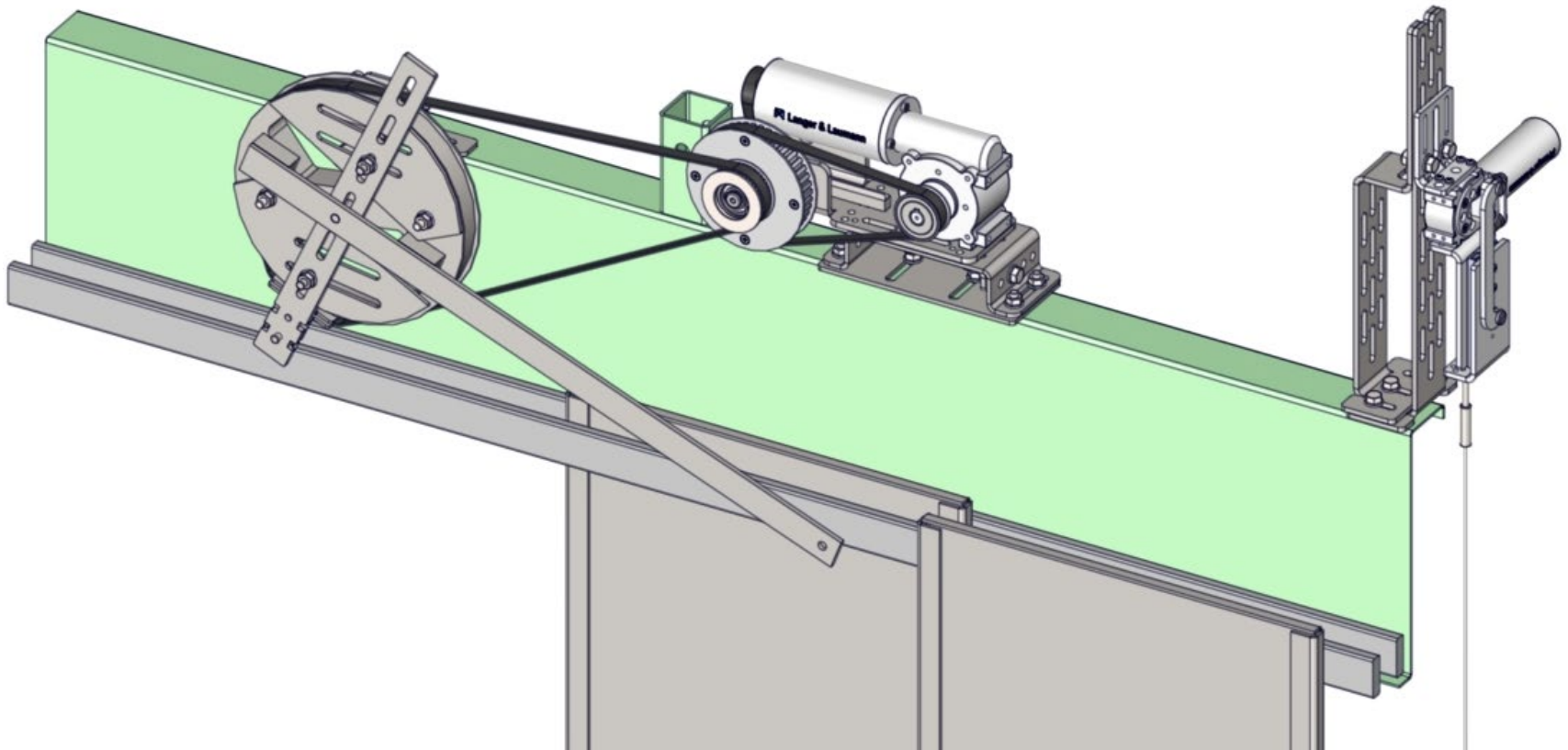
Pos.	Number	Description DE	Description EN	Menge
310	01.36.00725	Sperrzahnschraube DIN 6921 M8x25, 8.8, vz	hexagon head serrated screw DIN 6921 M8x25, 8.8, vz	2
320	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	2



**Bei Bedarf vorhandenes
Drahtseil verlängern –
extend existing wire rope
if necessary**

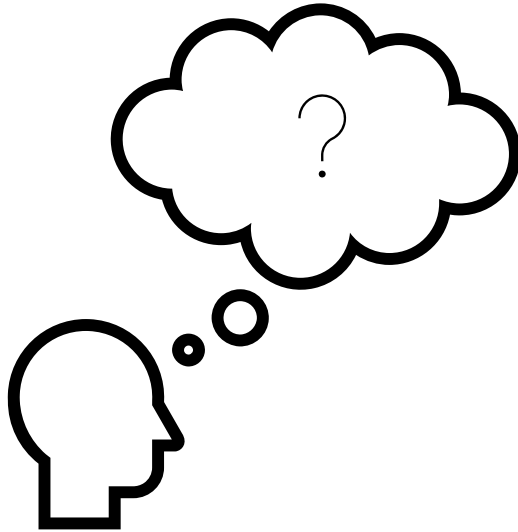
- 1.20.62000
- 1.20.62260





Empfehlungen für Parametereinstellung – recommendation for parameter settings

Parameter	Value	Function
P3	45	Max. Close speed
P4	10	Locking and unlocking speed
P7	0	Locking and unlocking distance
c2	0	Length of unlocking distance in Open direction
c3	10	Unlocking speed in Open direction
c4	0	Length of unlocking distance in Close direction
c5	10	Locking speed in Close direction
cC	15	Holding torque in Open direction without input signal "Open door"
cF	15	Holding torque in Close direction with input signal "Close door"
bb	20	Catch range for Door Closed position
bC	20	Catch range for Door Opened position



Langer & Laumann Ingenieurbüro GmbH
Wilmsberger Weg 8
48565 Steinfurt
Germany

Tel.: +49 (2552) 92791 0

support@lul-ing.de
www.lul-ing.de