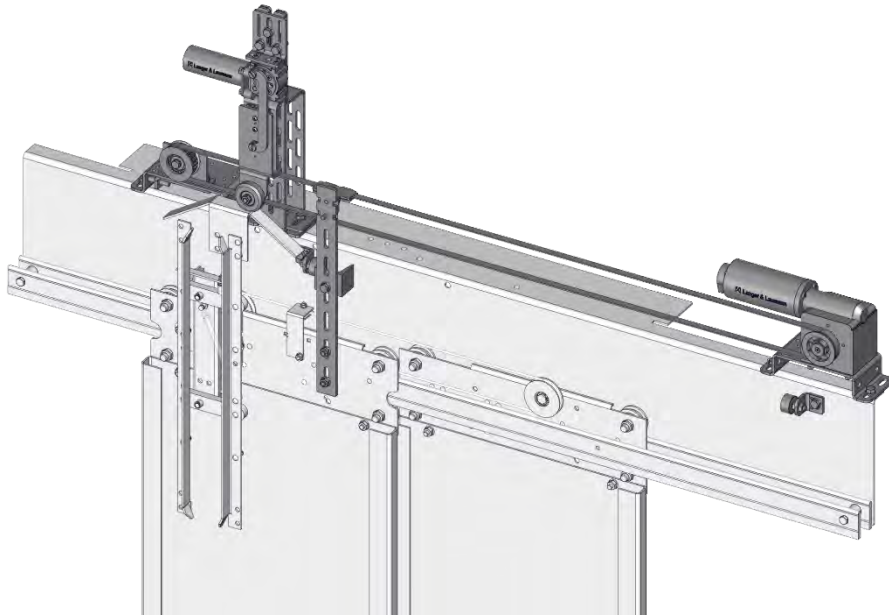


Montageanleitung **Assembly Instruction**

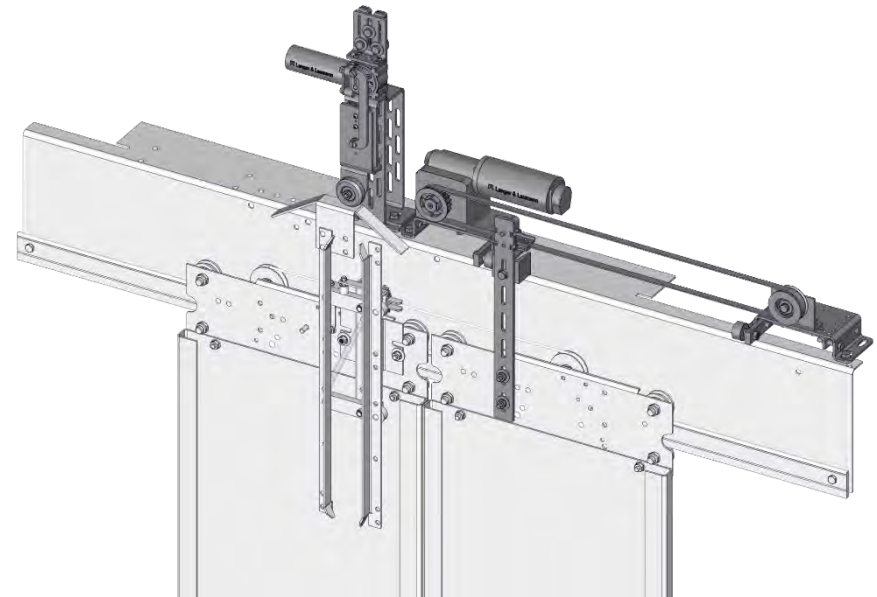
TSG in Thyssen M2T/Z D6 - **TSG in Thyssen M2T/Z D6**

TR + TL S. 8 bis 34 / Z S.35 bis 56 –
TR + TL p. 8 to 34 / C p. 35 to 56

TSG in Thyssen M2T D6 - **TSG in Thyssen M2T D6**



TR + TL S. 7 bis 33 –
TR + TL p. 7 to 33



Z S. 34 bis 55 –
C p. 34 to 55

Lieferumfang – scope of supply



picture	Number	description DE	description EN	quantity
	8.20.xxxxx.04	TSG-Elektronik	TSG-electronic	1
	8.20.400xx.xx	TSG-Motor	TSG-motor	1
	1.20.60060	TSG Kombiwinkel, Ausführung 'Hut'	TSG universal bracket, version 'hat'	2
	1.20.60013	TSG Halter für Umlenkrad	TSG bracket for counter roller	1
	1.20.60003	TSG Umlenkrad	TSG counter roller	1
	1.20.60004	TSG Türflügelmitnehmer	TSG door panel coupler	1
	1.20.60005	TSG Zahnriemenschloß, Stahl	TSG toothed belt lock, steel	1
	1.20.60020	TSG Anschlag für Türflügelmitnehmer	TSG stopper for door coupler	1

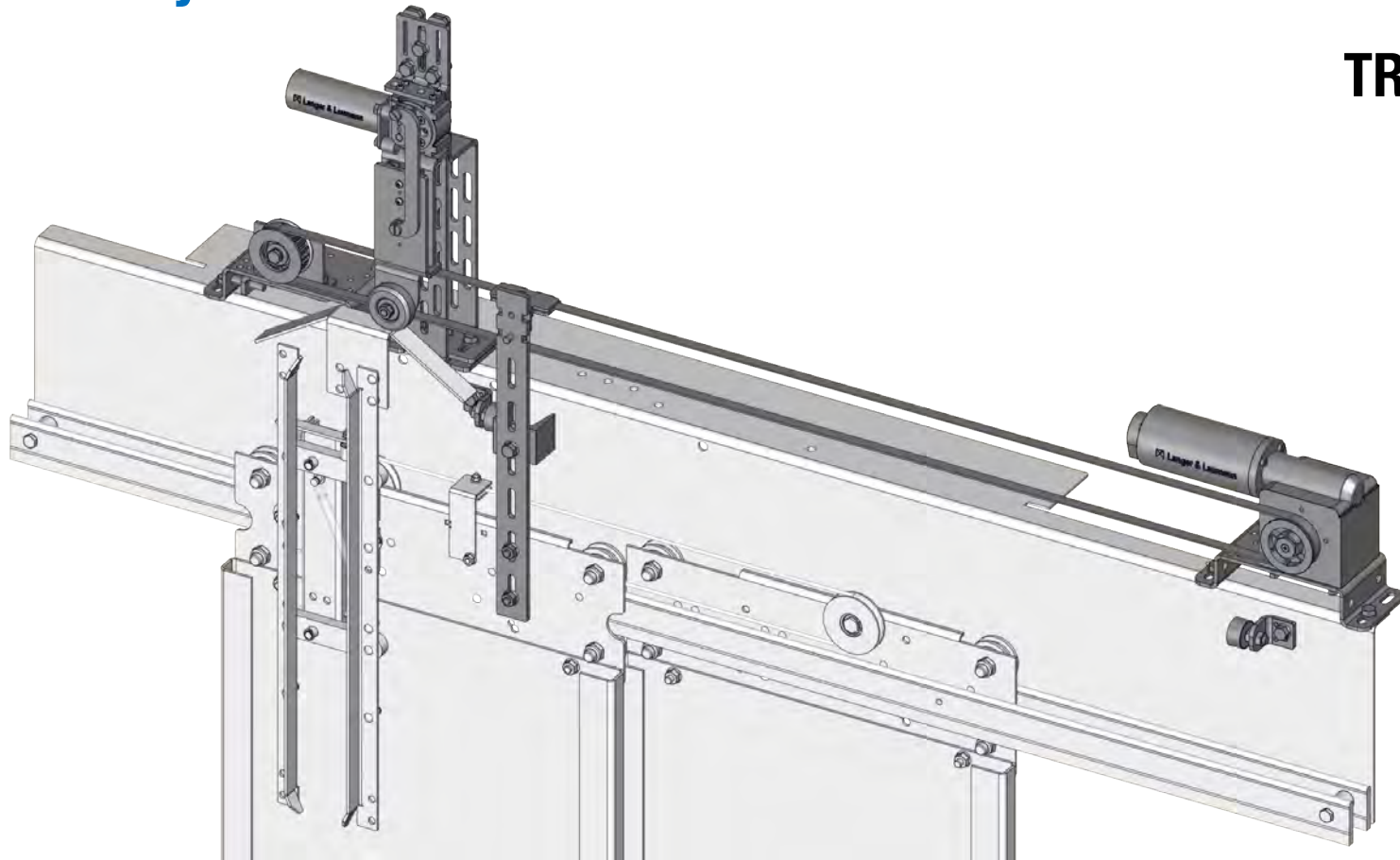
picture	Number	description DE	description EN	quantity
	1.20.60037	Halterung Puffer, Standardversion	bracket buffer, standard version	2
	1.20.60110	Spannlasche für Spannstation, normale Ausführung	clamping tab for clamping station, normal execution	1
	1.20.91120	Gummipuffer D30x15, Gewindebolzen M8x20, 75 Shore	rubber-metal bump stop D30x15, threaded stud M8x20, 75 Shore	2
	x.20.xxxxx.40	TSG Zahnriemen [4,0m]	TSG toothed belt [4,0m]	1
	1.20.59070	Halterung Puffer für M3TK	rectangular stop for M3TK	2
	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
	8.20.831xx	TSG Sinusantrieb	TSG Sinus Drive	1
	1.20.94050	Haltewinkel für TSG Sinusantrieb	mounting bracket for TSG Sinus Drive	1

picture	Number	description DE	description EN	quantity
	1.20.94080	Rollenhalter für TSG Sinusantrieb	wheel holder for TSG Sinus Drive	1
	1.20.41010	Rad mit Kugellager	wheel with ball bearing	1
	1.20.41020	Gleitlager für Rad mit Kugellager	slide bearing for wheel with ball bearing	1
	1.36.00386	Senkkopfschraube mit Innensechskant DIN7991 vz 8.8 - M8x30	countersunk head screw w.recessed head DIN7991 vz8.8 - M8x30	2
	1.36.00176	Sechskantschraube Vollgewinde DIN933 vz 8.8 - M8x25	hexagonal bolt, thread up to head DIN933 vz 8.8 - M8x25	2
	1.36.00720	Sperrzahnschraube WN0274 A2C 8.8 - M8x20	hexagon head serrated screw WN0274 A2C 8.8 - M8x20	18
	1.36.00501	Sperrzahnmutter, ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	17
	1.36.00710	Sperrzahnschraube WN0274 A2C 8.8 - M8x16	hexagon head serrated screw WN0274 A2C 8.8 - M8x16	2
	1.36.00725	Sperrzahnschraube WN0274 A2C 8.8 - M8x25	hexagon head serrated screw WN0274 A2C 8.8 - M8x25	6

picture	Number	description DE	description EN	quantity
	1.36.00135	Sperrzahnschraube WN0274 A2C 8.8 - M6x12	hexagon head serrated screw WN0274 A2C 8.8 - M6x12	7
	1.36.00177	Sechskantschraube Vollgewinde DIN933 vz 8.8 - M8x100	hexagonal bolt, thread up to head DIN933 vz 8.8 - M8x100	2
	1.36.00430	Sechskantmutter DIN934-8 vz 8.8 - M8	hexagon nut DIN934-8 vz 8.8 - M8	5
	1.36.00121	Sechskantdistanzmuffe vz 8.8 - M8x40	hexagonal spacer sleeve vz 8.8 - M8x40	2
	1.36.00115	Sechskantschraube Vollgewinde DIN933 vz 8.8 - M8x40	hexagonal bolt, thread up to head DIN933 vz 8.8 - M8x40	2
	1.36.00470	Scheibe DIN125A vz - 10,5	washer DIN125A vz - 10,5	5
	1.36.00169	Federring DIN127 vz - M8	lock washer DIN127 vz - M8	2
	1.36.00475	Sechskantschraube Vollgewinde DIN933 vz 8.8 - M8x30	hexagonal bolt, thread up to head DIN933 vz 8.8 - M8x30	3
	1.36.00730	Sperrzahnschraube WN0274 A2C 8.8 - M8x30	hexagon head serrated screw WN0274 A2C 8.8 - M8x30	1

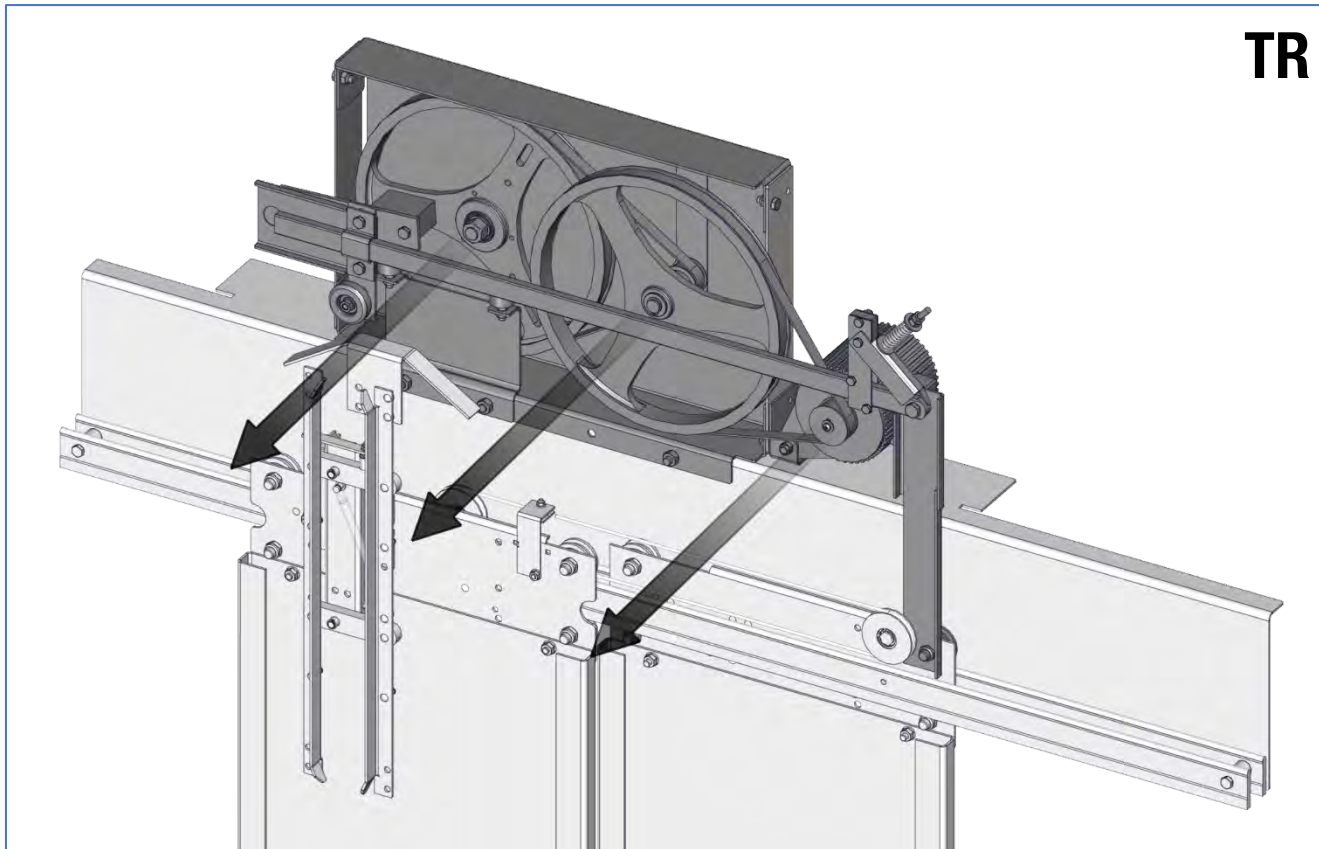
TSG in Thyssen M2T D6 TR + TL – TSG in Thyssen M2T D6 TR + TL

TR



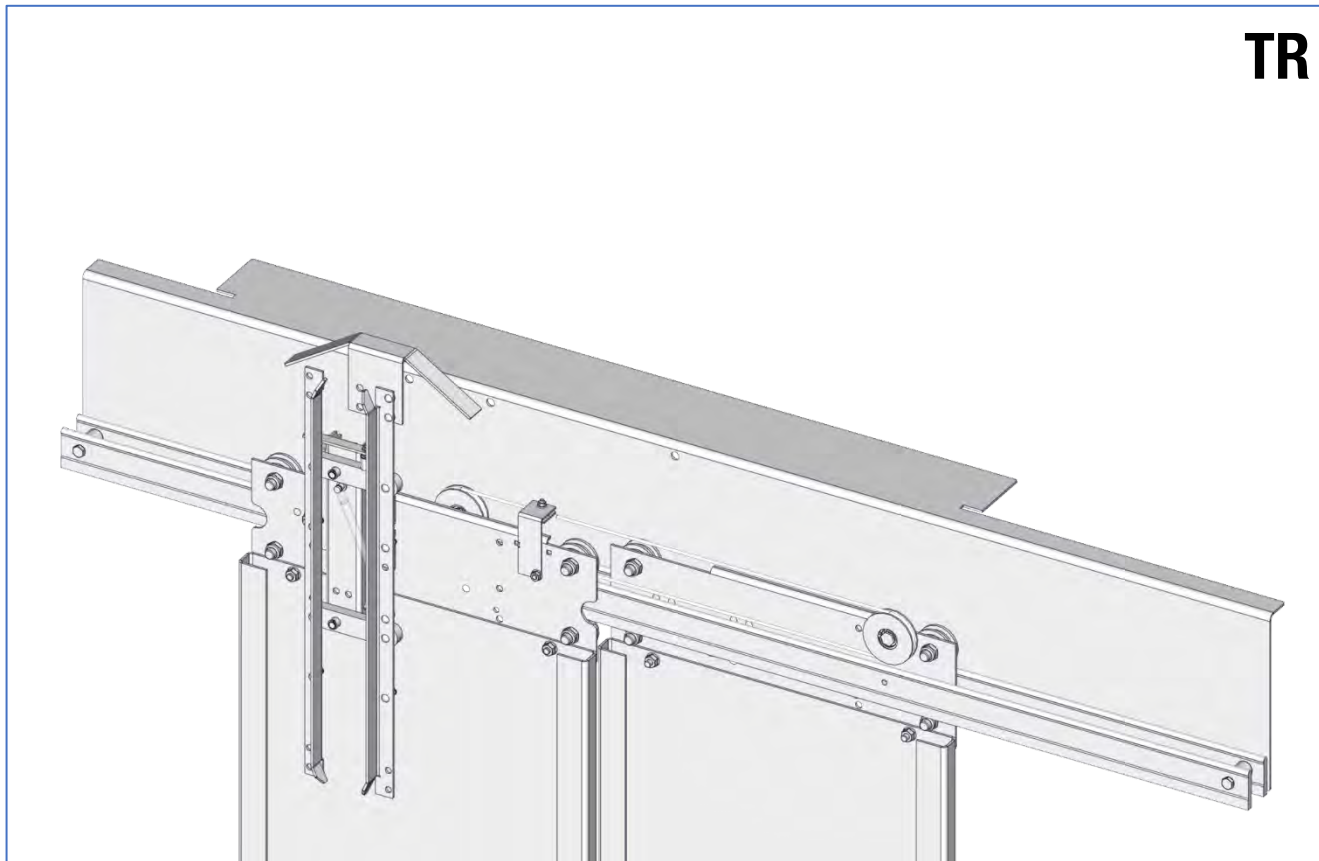
TL spiegelbildlich –
TL mirrored

Vor Umbau entfernen – **remove before conversion**



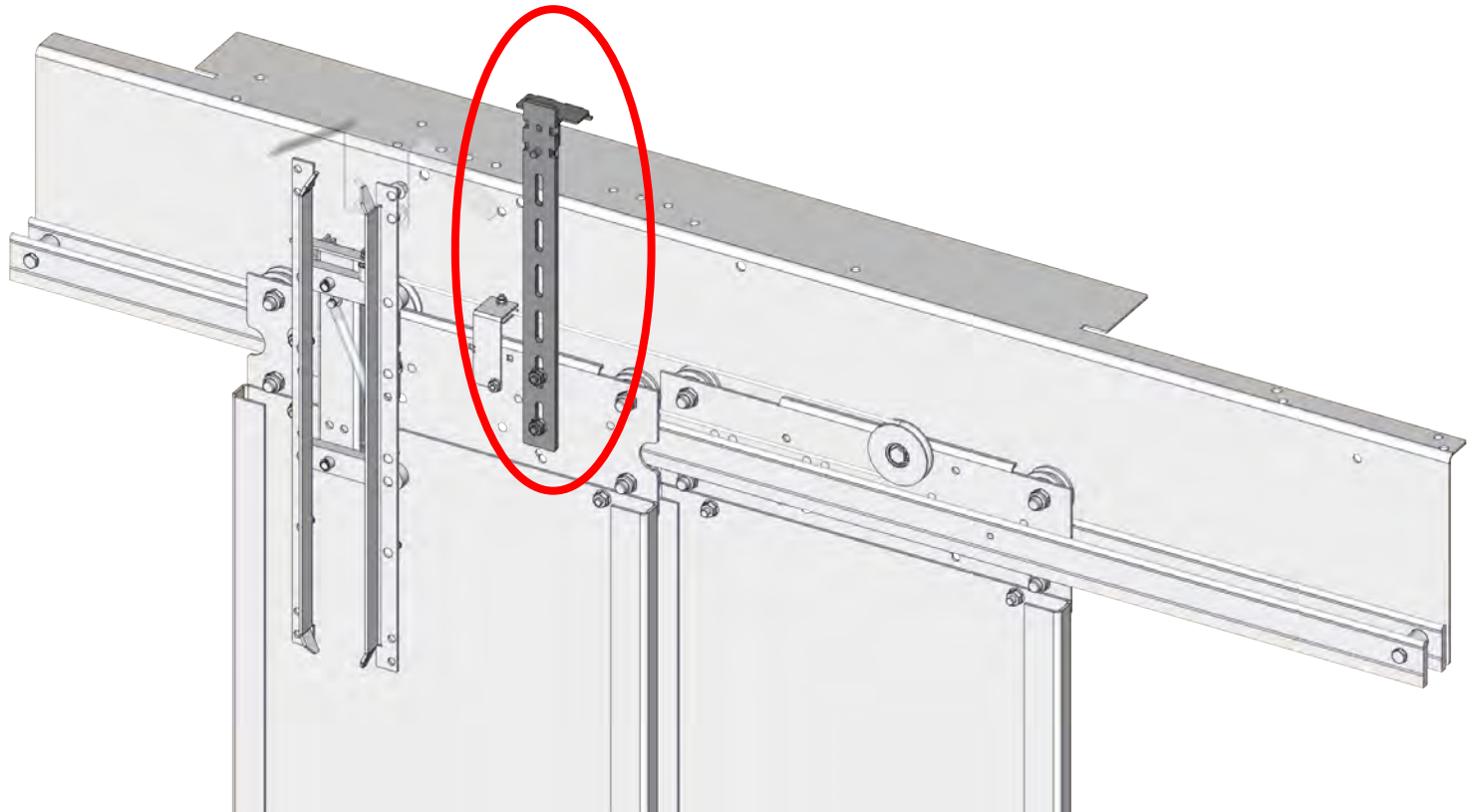
TL spiegelbildlich –
TL mirrored

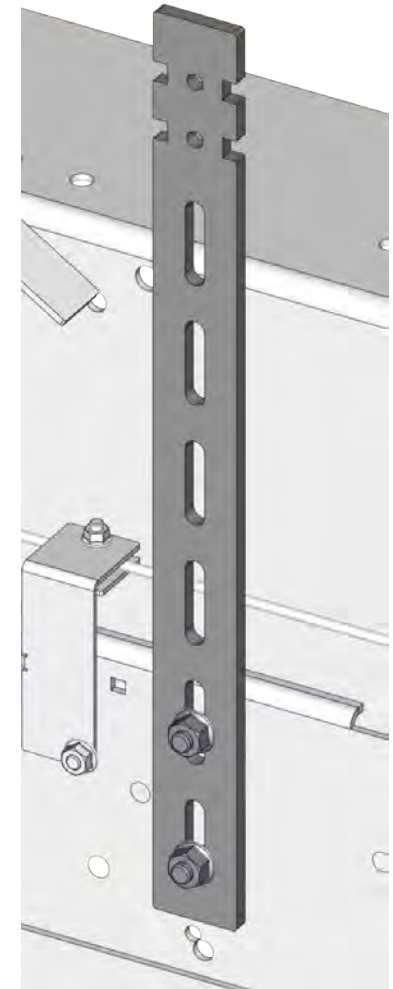
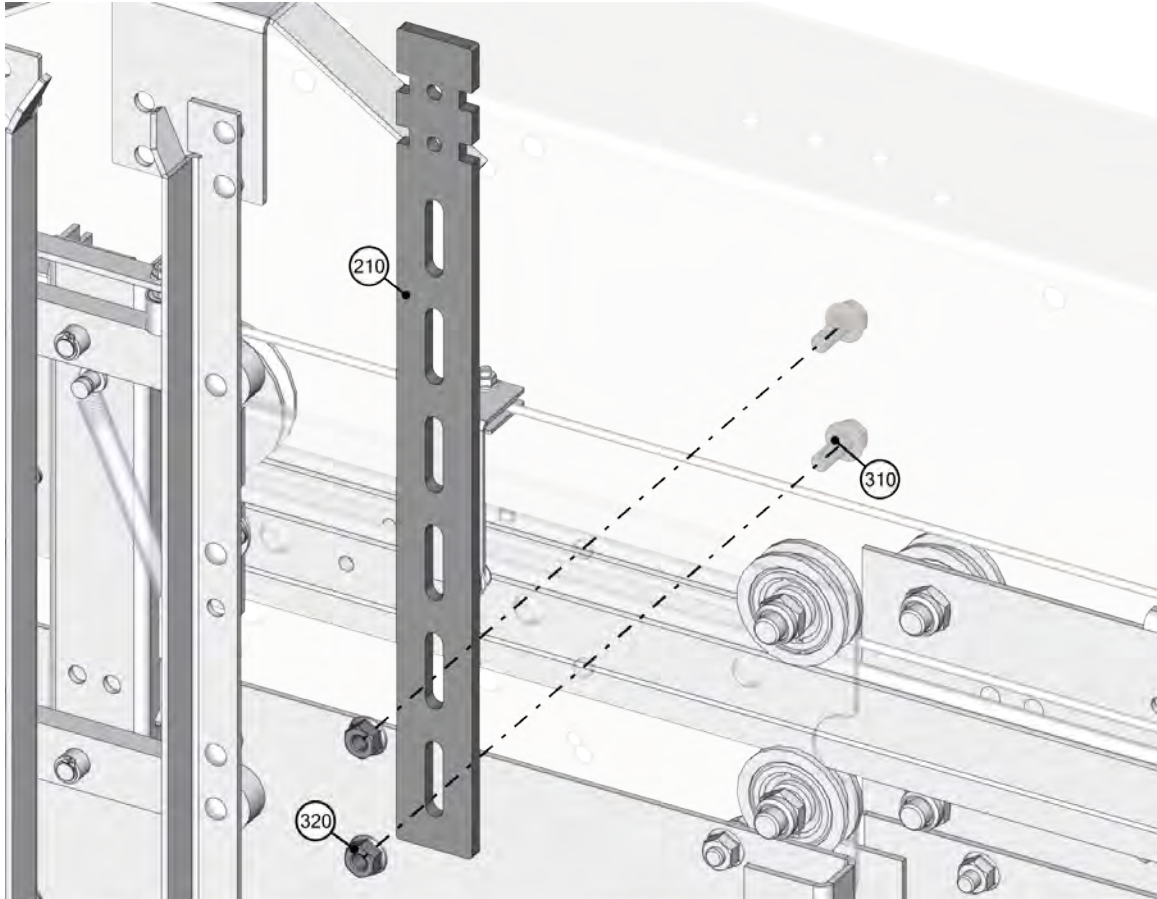
Nach Demontage – after disassembly



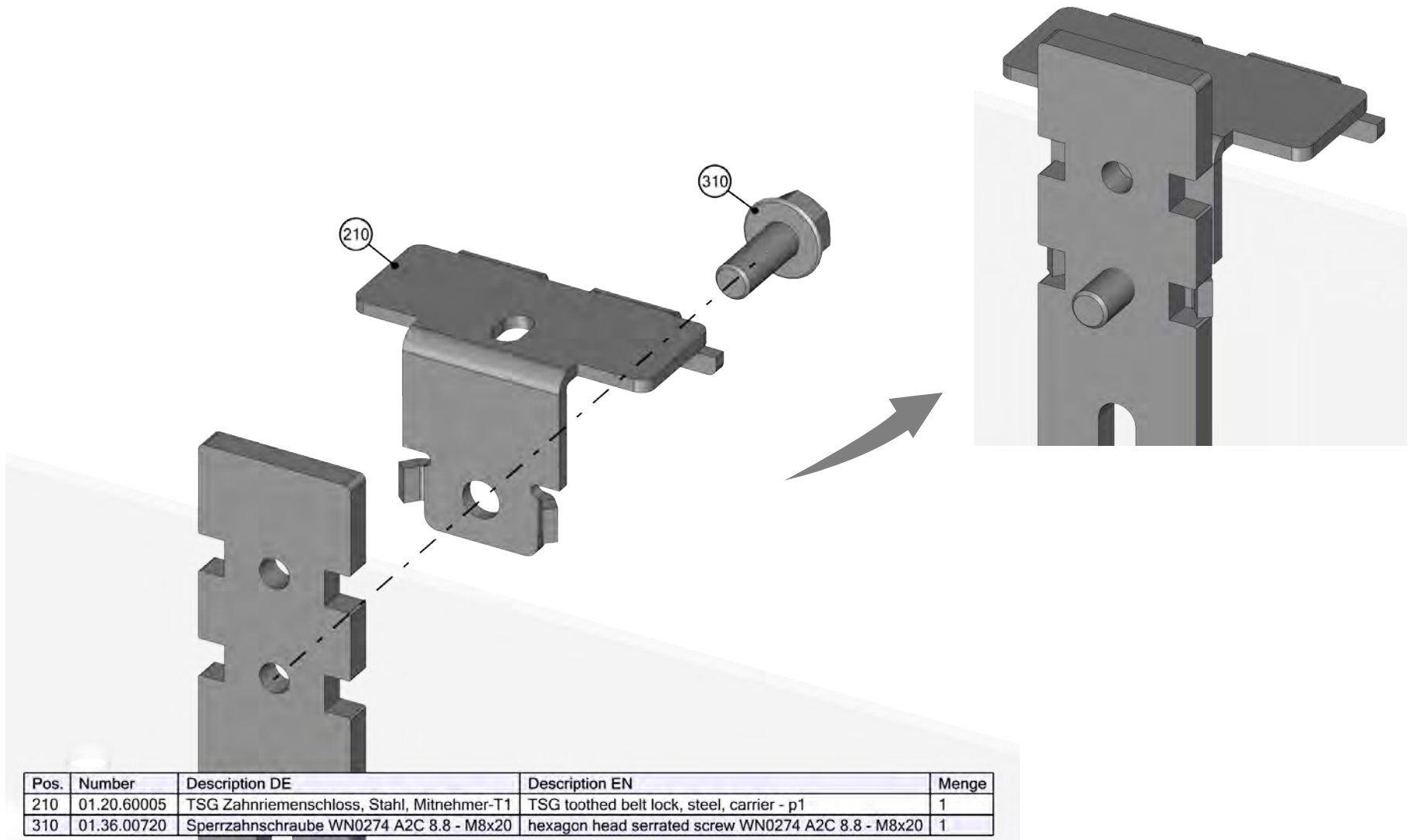
TL spiegelbildlich –
TL mirrored

Montage Türflügelmitnehmer – assembly of the door panel coupler

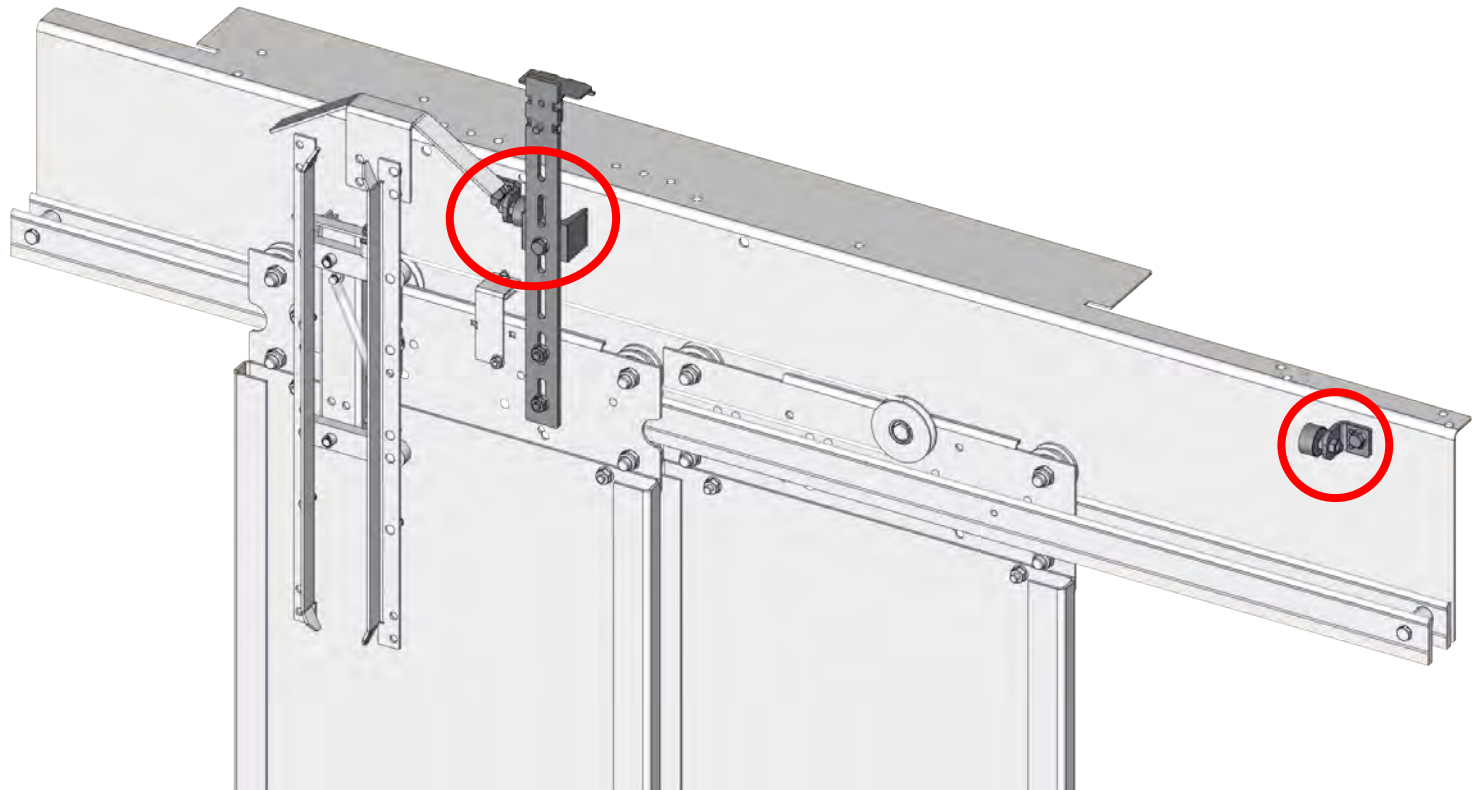


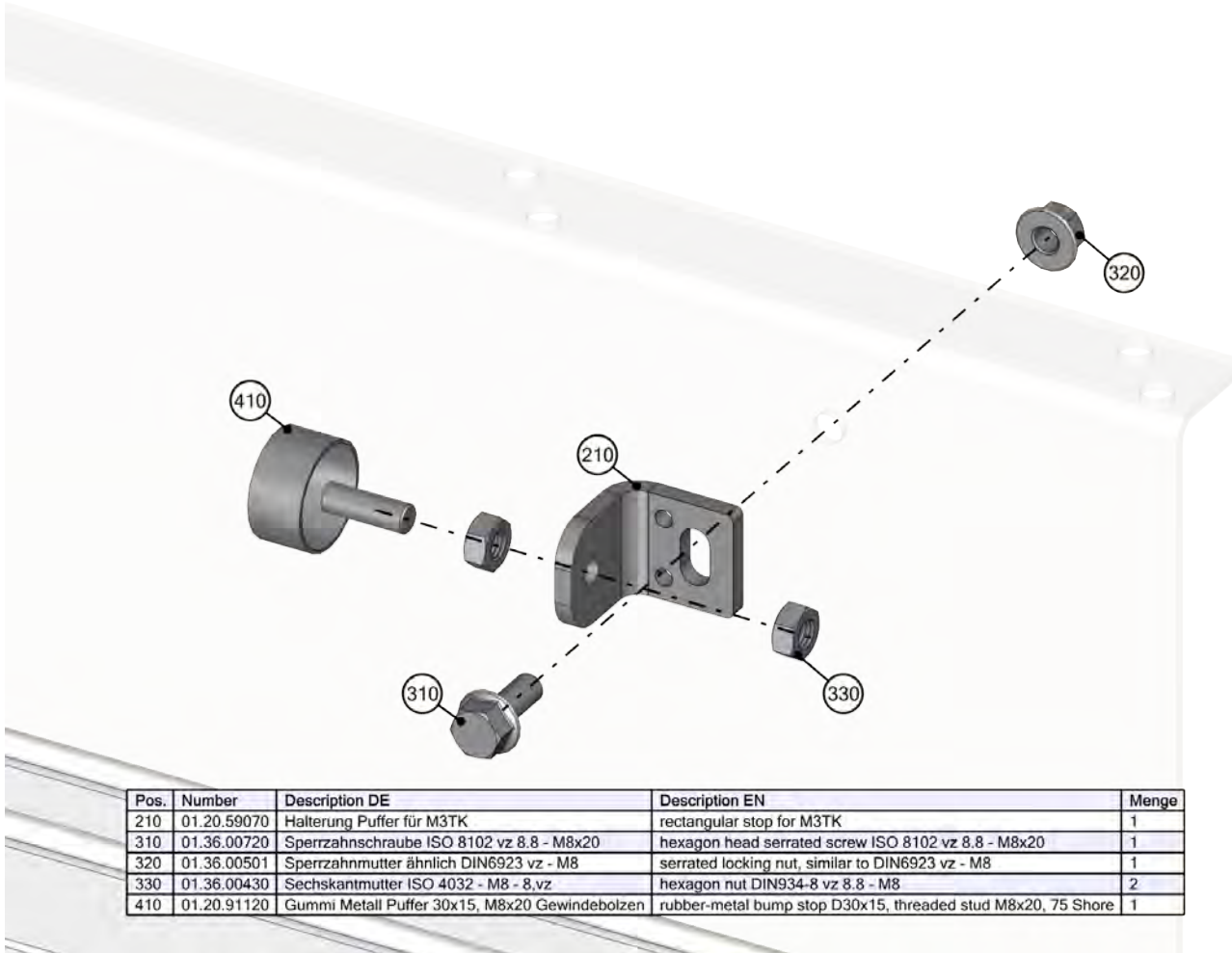


Pos.	Number	Description DE	Description EN	Menge
210	01.20.60004	Türflügelmitnehmer 375x35x6	TSG door panel coupler 375x35x6	1
310	01.36.00720	Sperrzahnschraube ISO 8102 vz 8.8 - M8x20	hexagon head serrated screw ISO 8102 vz 8.8 - M8x20	2
320	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	2

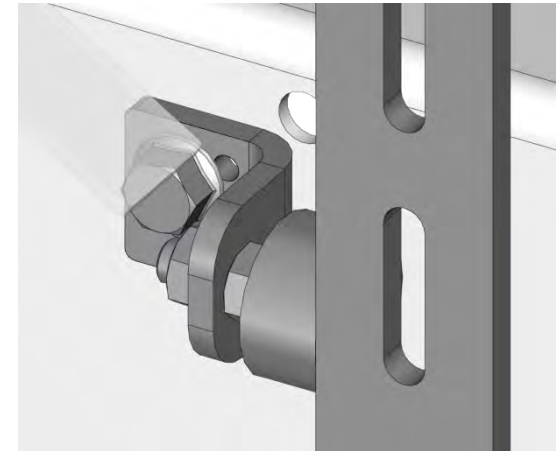
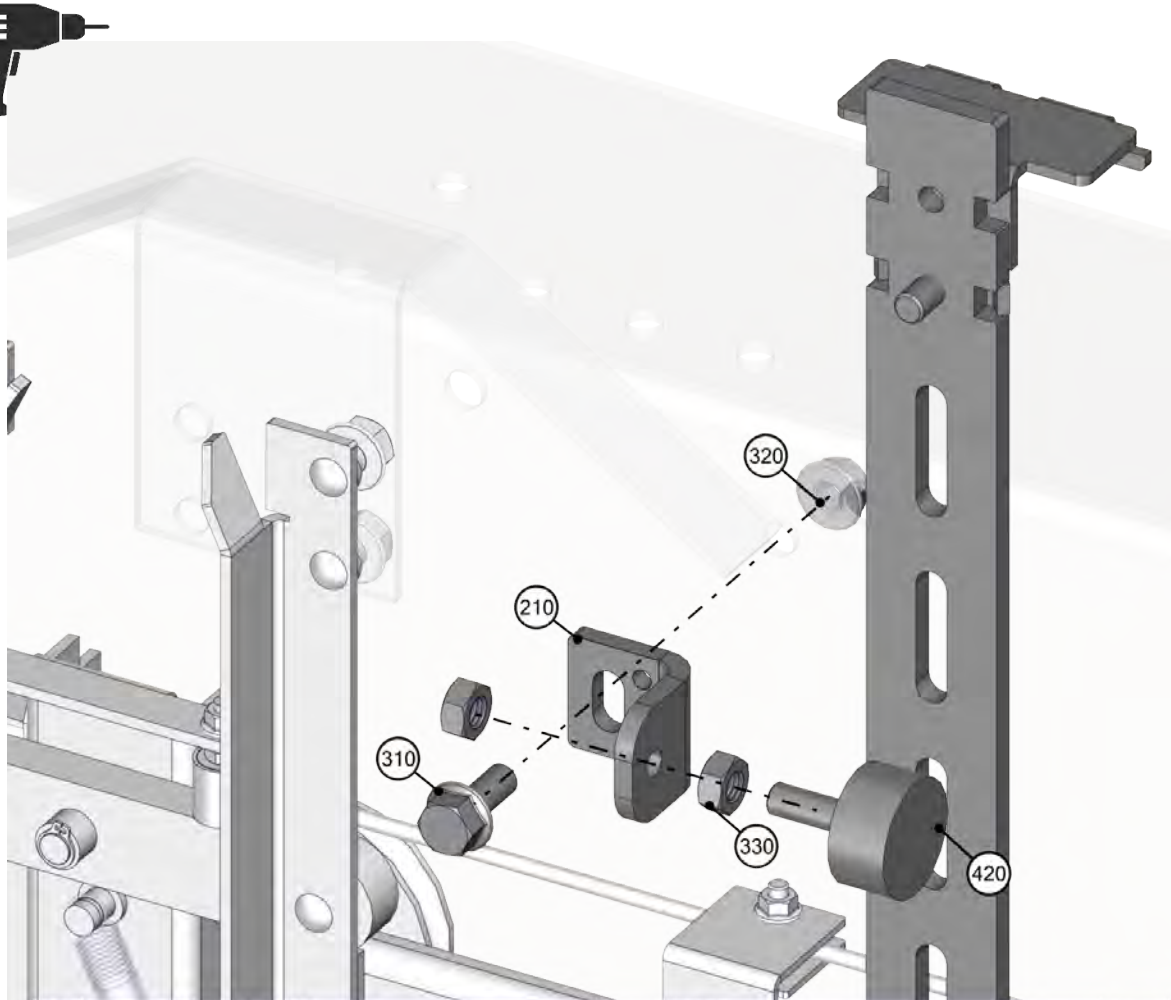


Montage Puffer und Anschlag – assembly of the buffers and bump stop

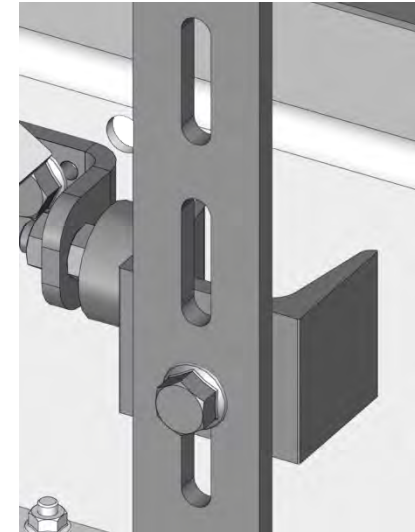
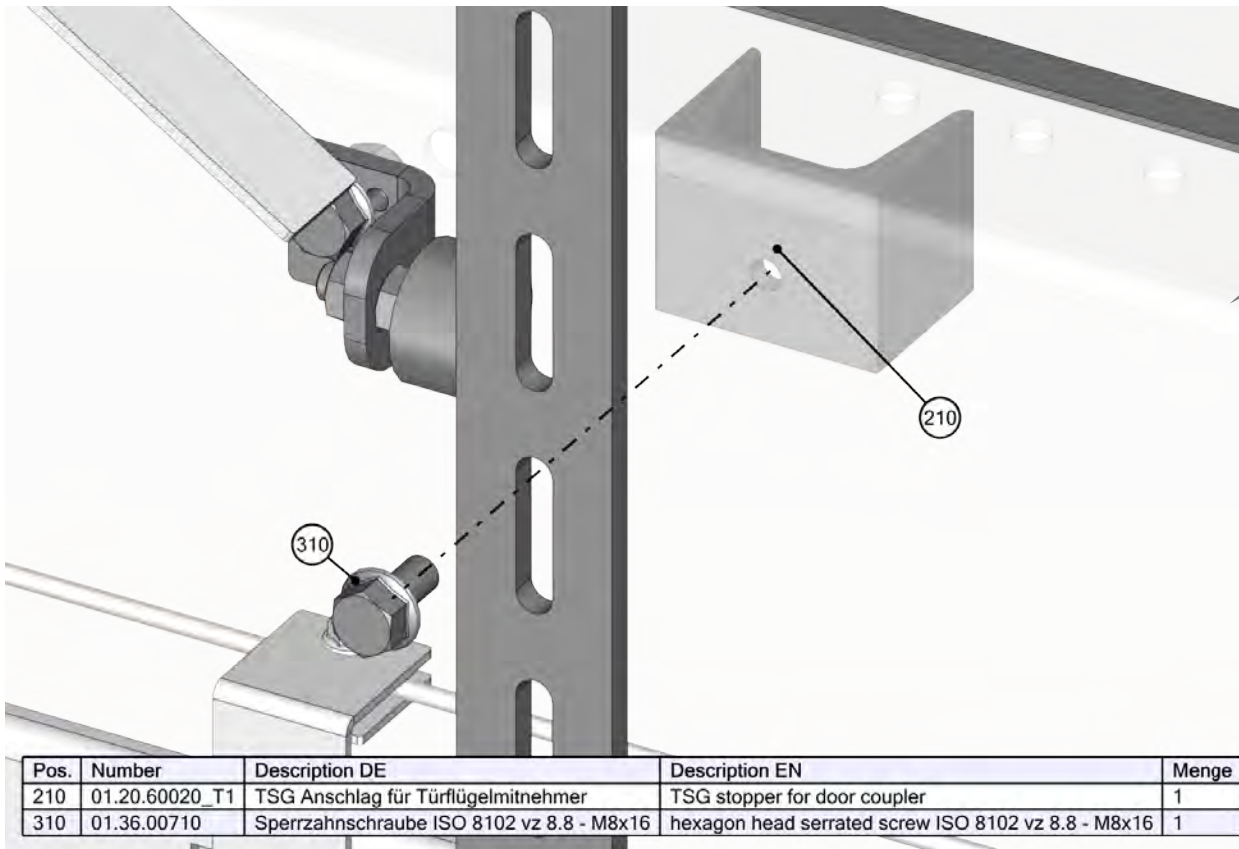




Pos.	Number	Description DE	Description EN	Menge
210	01.20.59070	Halterung Puffer für M3TK	rectangular stop for M3TK	1
310	01.36.00720	Sperrzahnschraube ISO 8102 vz 8.8 - M8x20	hexagon head serrated screw ISO 8102 vz 8.8 - M8x20	1
320	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	1
330	01.36.00430	Sechskantmutter ISO 4032 - M8 - 8.vz	hexagon nut DIN934-8 vz 8.8 - M8	2
410	01.20.91120	Gummi Metall Puffer 30x15, M8x20 Gewindebolzen	rubber-metal bump stop D30x15, threaded stud M8x20, 75 Shore	1

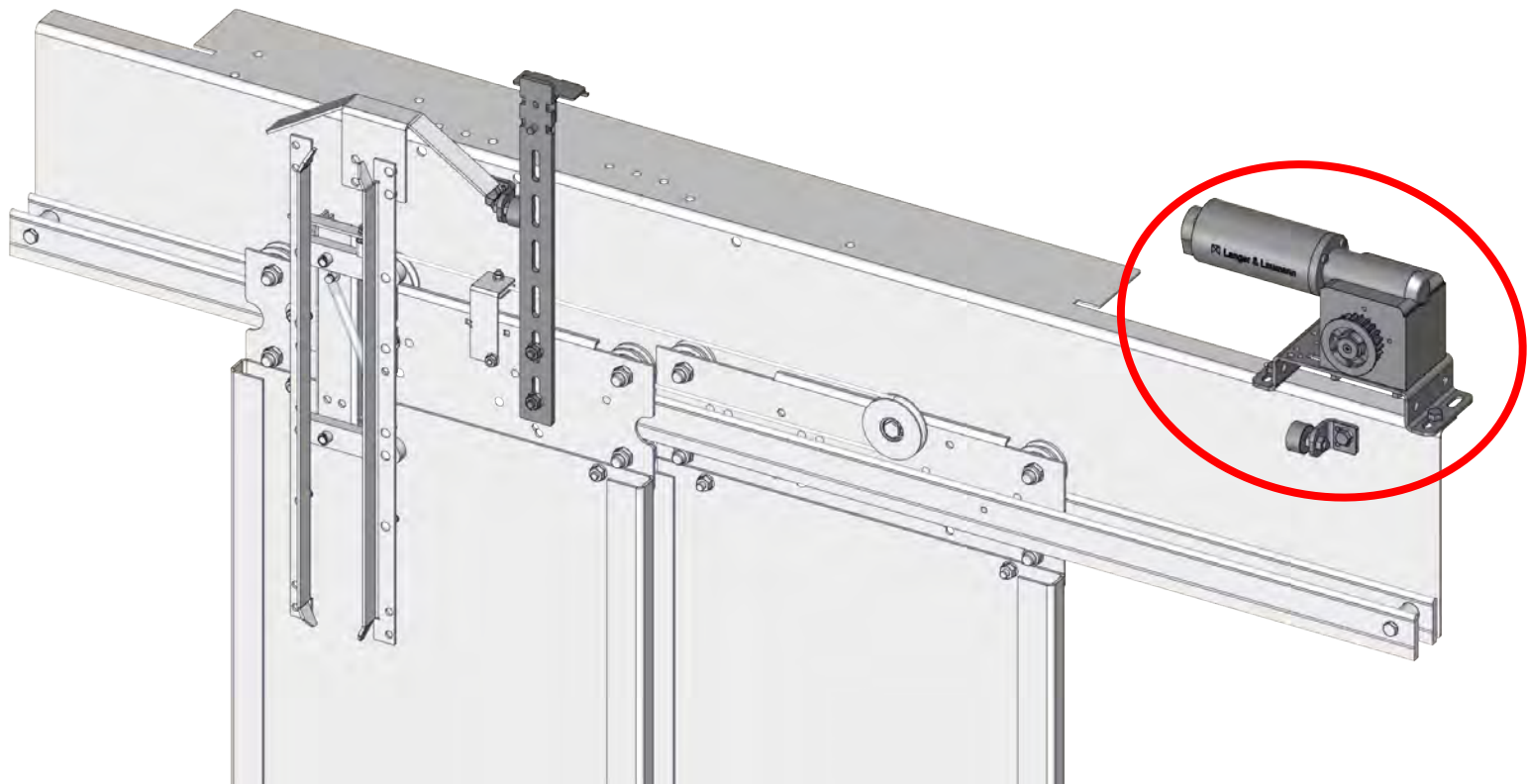


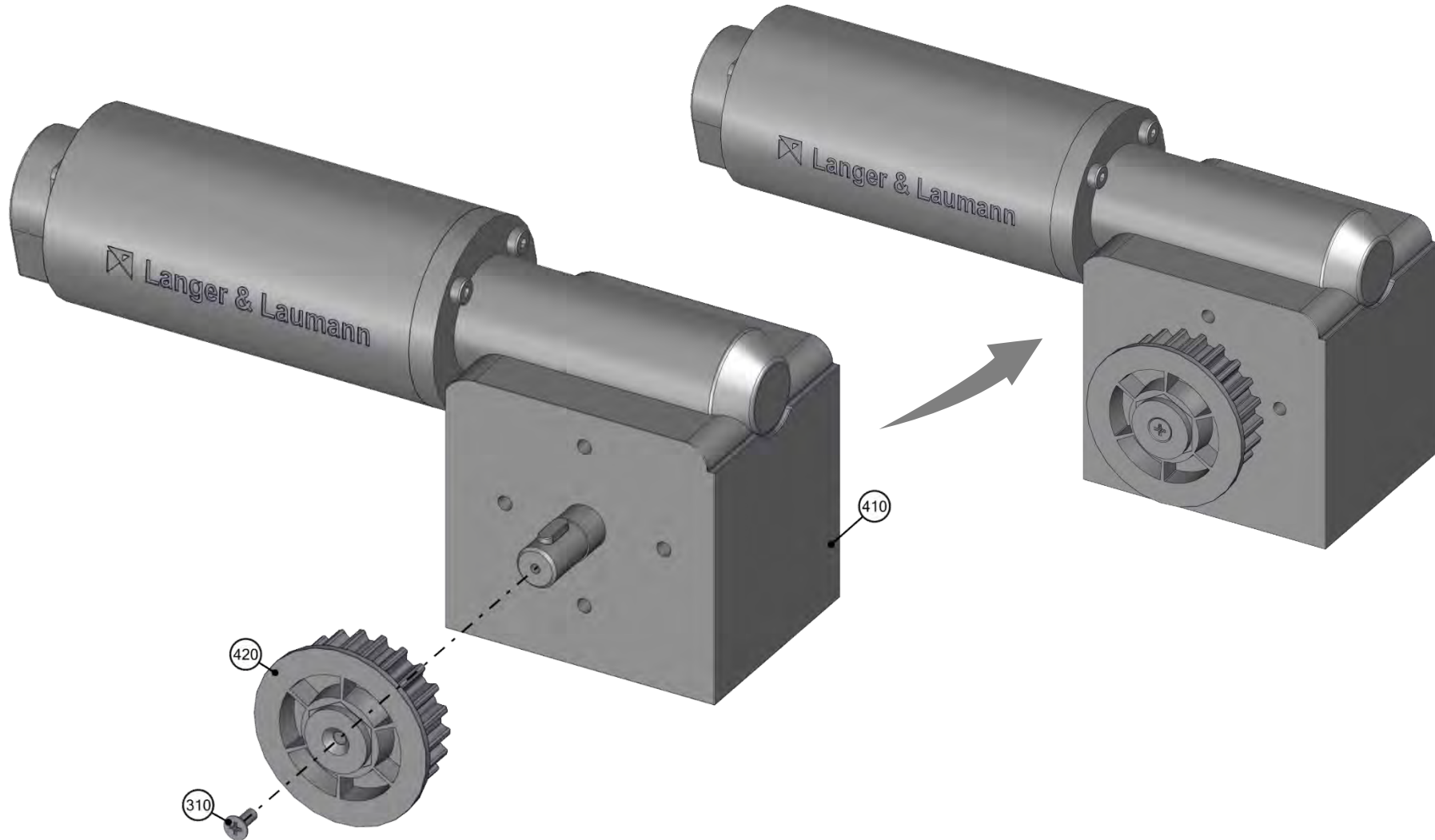
Pos.	Number	Description DE	Description EN	Menge
210	01.20.59070	Halterung Puffer für M3TK	rectangular stop for M3TK	1
310	01.36.00720	Sperrzahnschraube ISO 8102 vz 8.8 - M8x20	hexagon head serrated screw ISO 8102 vz 8.8 - M8x20	1
320	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	1
330	01.36.00430	Sechskantmutter ISO 4032 - M8 - 8.vz	hexagon nut DIN934-8 vz 8.8 - M8	2
420	01.20.91120	Gummi Metall Puffer 30x15, M8x20 Gewindebolzen	rubber-metal bump stop D30x15, threaded stud M8x20, 75 Shore	1



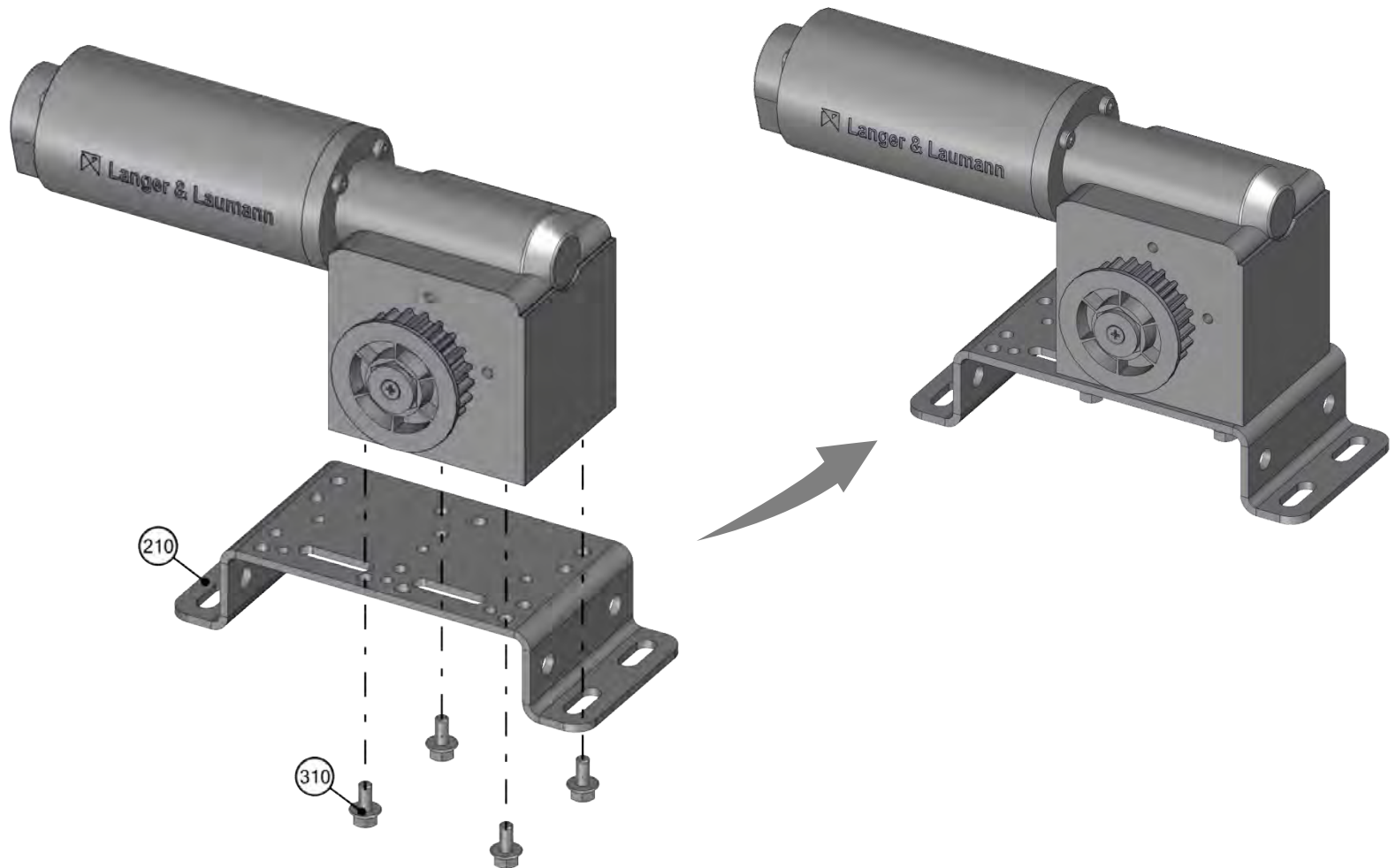
Pos.	Number	Description DE	Description EN	Menge
210	01.20.60020_T1	TSG Anschlag für Türflügelmitnehmer	TSG stopper for door coupler	1
310	01.36.00710	Sperrzahnschraube ISO 8102 vz 8.8 - M8x16	hexagon head serrated screw ISO 8102 vz 8.8 - M8x16	1

Montage Motor – assembly of the motor

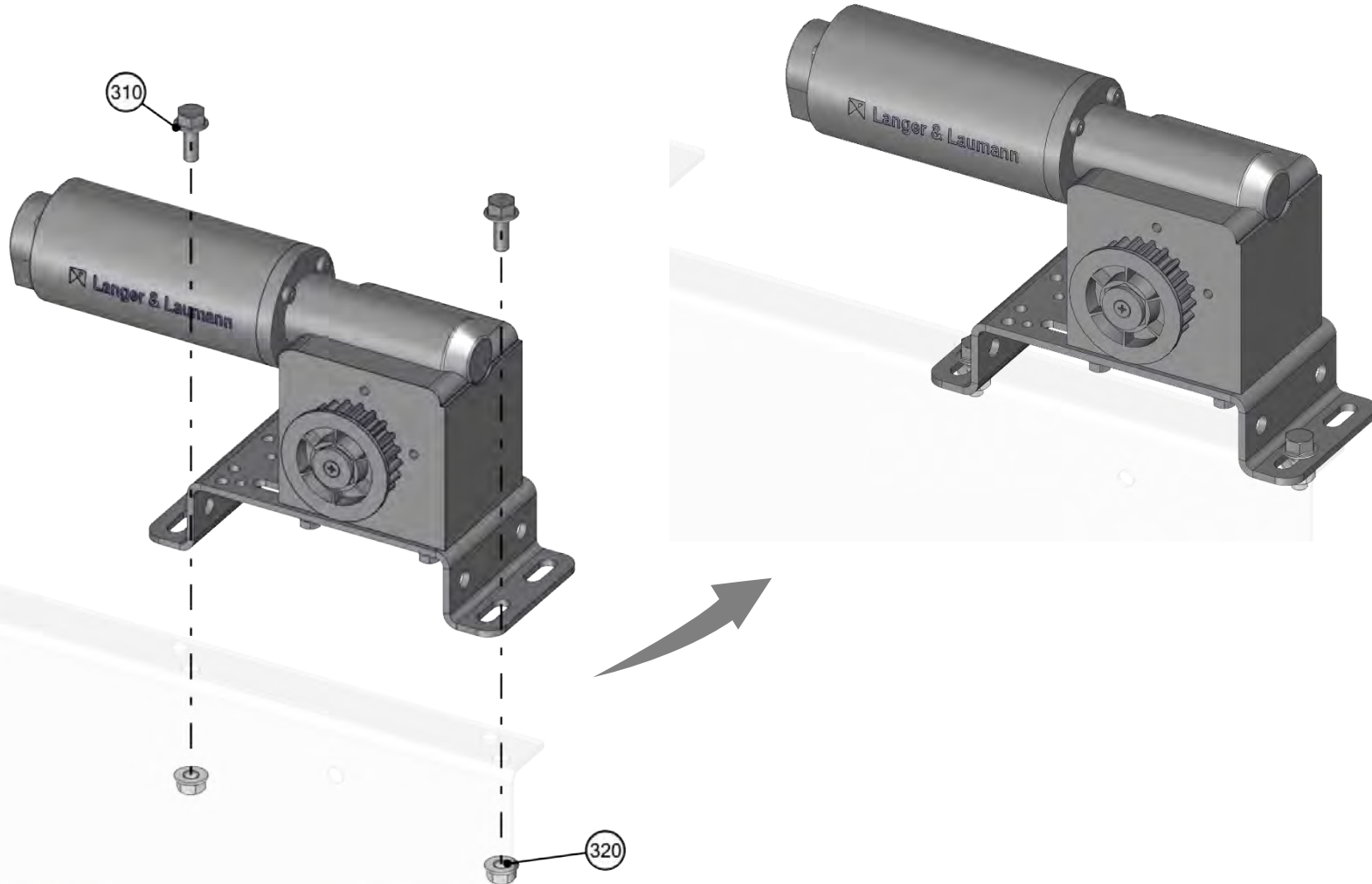




Pos.	Number	Description DE	Description EN	Menge
310	01.36.00332	Senkkopfschraube mit Kreuzschlitz DIN965 vz 4.8 - M4x10	countersunk screw w. cross recess DIN965 vz 4.8 - M4x10	1
410	08.20.40000.X1	Motor Gross Links & Getriebe, 24V/4,9A/1:15	Motor Large Left & Gearbox, 24V/4,9A/1:15	1
420	01.20.60160	Zahnriemenrad, STD8M, d=14H7, D=56[mm], B=15[mm], mit Nut, mit 1 Bordscheibe	timing belt pulley, STD8M, d=14H7, D=56[mm], B=15[mm]	1

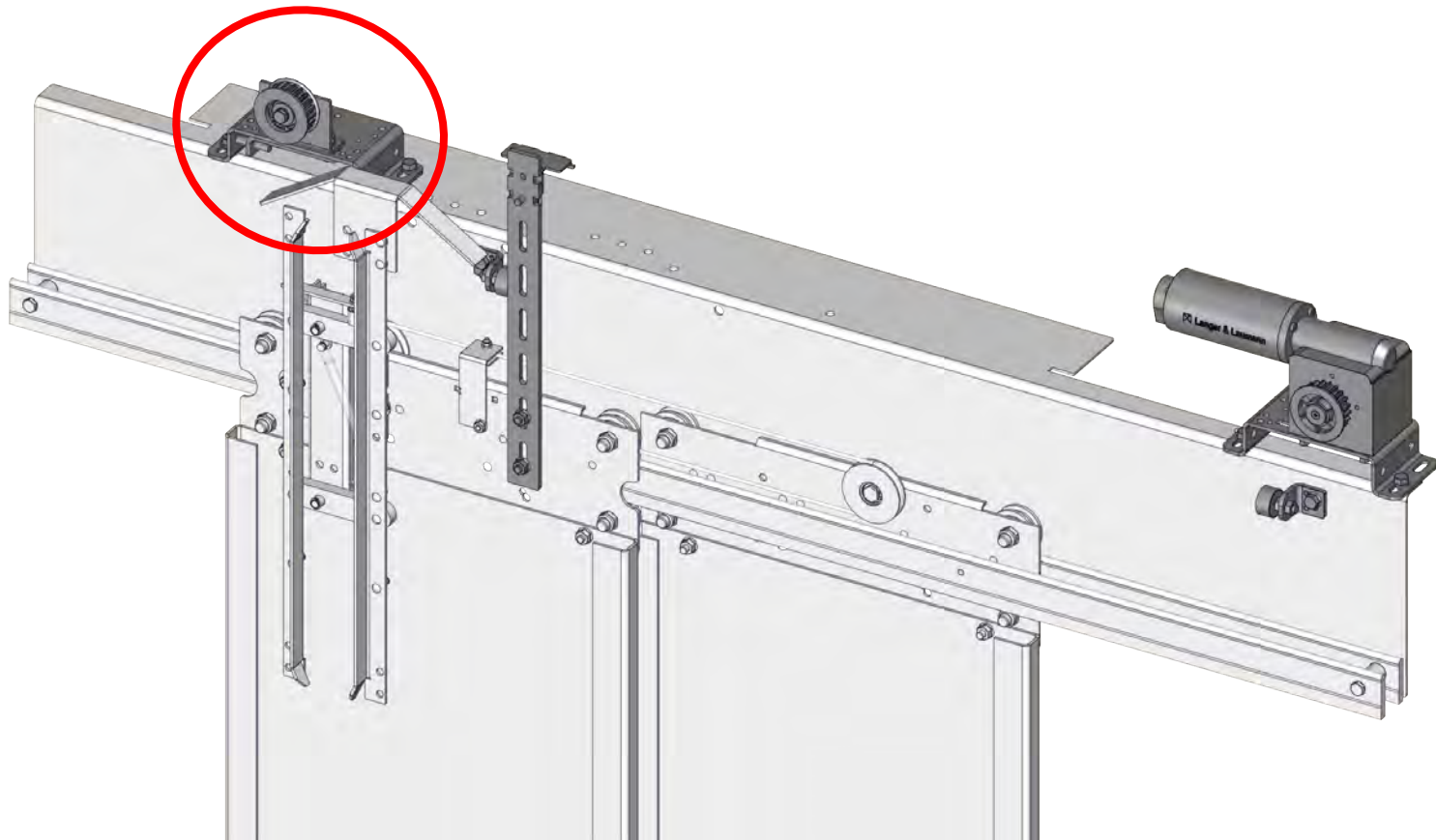


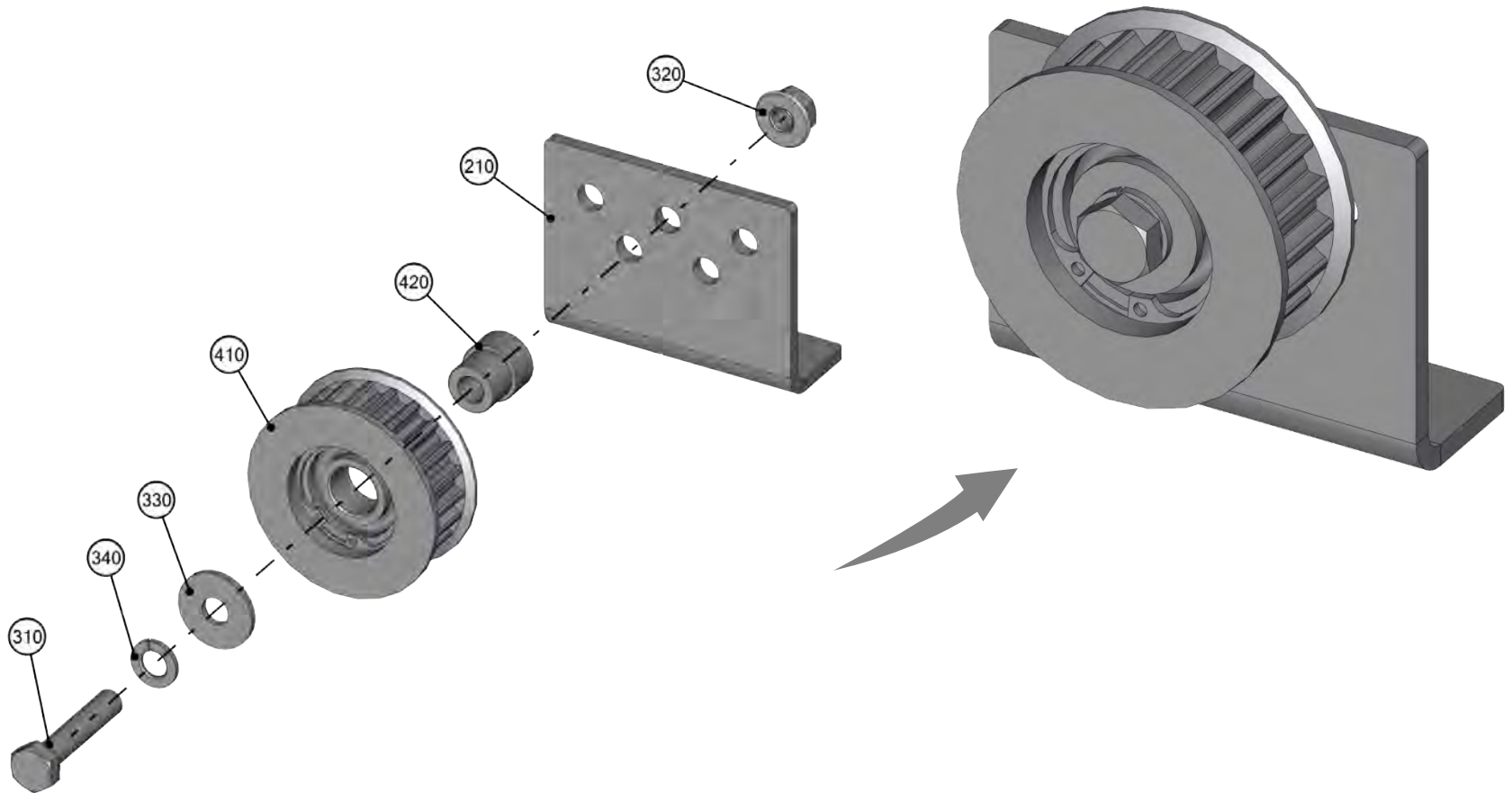
Pos.	Number	Description DE	Description EN	Menge
210	01.20.60060	TSG Kombiwinkel, Ausführung "Hut"	TSG universal bracket, version "hat"	1
310	01.36.00135	Sperrzahnschraube ISO 8102 vz 8.8 - M6x12	hexagon head serrated screw ISO 8102 vz 8.8 - M6x12	4



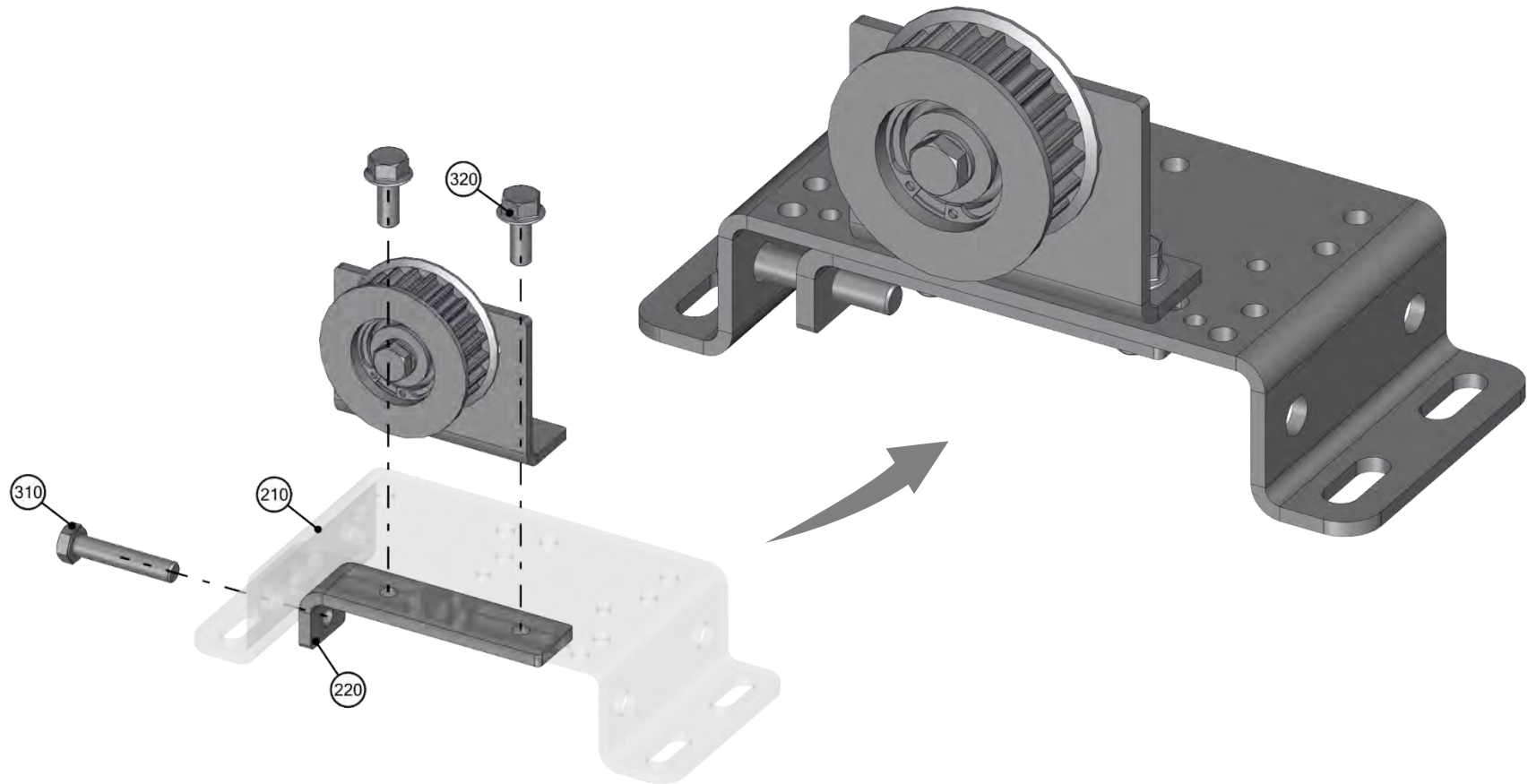
Pos.	Number	Description DE	Description EN	Menge
310	01.36.00720	Sperrzahnschraube ISO 8102 vz 8.8 - M8x20	hexagon head serrated screw ISO 8102 vz 8.8 - M8x20	2
320	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	2

Montage Umlenkrolle – assembly of the counter roller

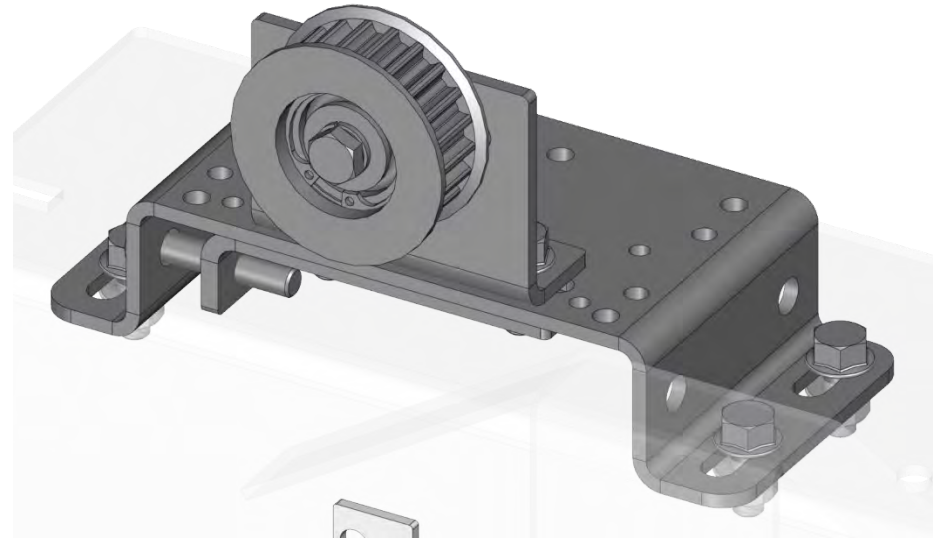
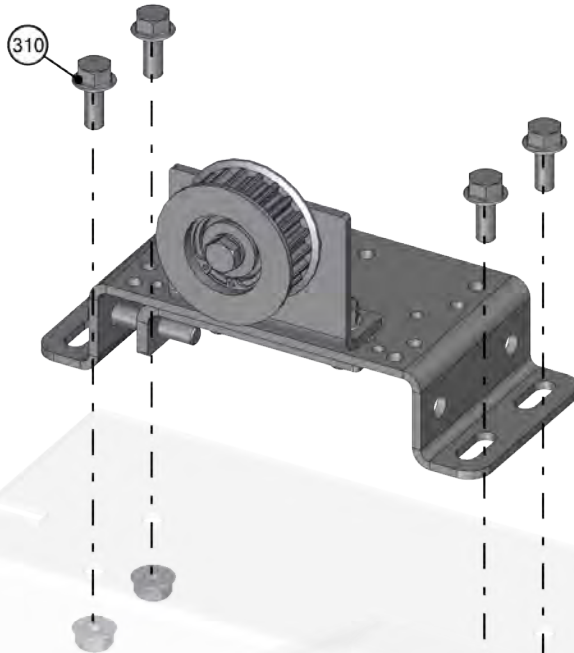




Pos.	Number	Description DE	Description EN	Menge
210	01.20.60013	Halterung Umlenkrolle für Spannstation_T1	TSG bracket for counter roller	1
310	01.36.00115	Sechskantschraube Vollgewinde DIN933 vz 8.8 - M8x40	hexagonal bolt, thread up to head DIN933 vz 8.8 - M8x40	1
320	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	1
330	01.36.00450	Kotflügelscheibe DIN522 vz - 8,4x20x1,25	wing repair washer DIN522 vz - 8,4x20x1,25	1
340	01.36.00169	Federring DIN127 vz - M8	lock washer DIN127 vz - M8	1
410	01.20.60003	Tüte Umlenkrad	bag counter roller	1
420	01.20.60003	Hülse für TSG Umlenkrad	sleeve for TSG counter roller	1

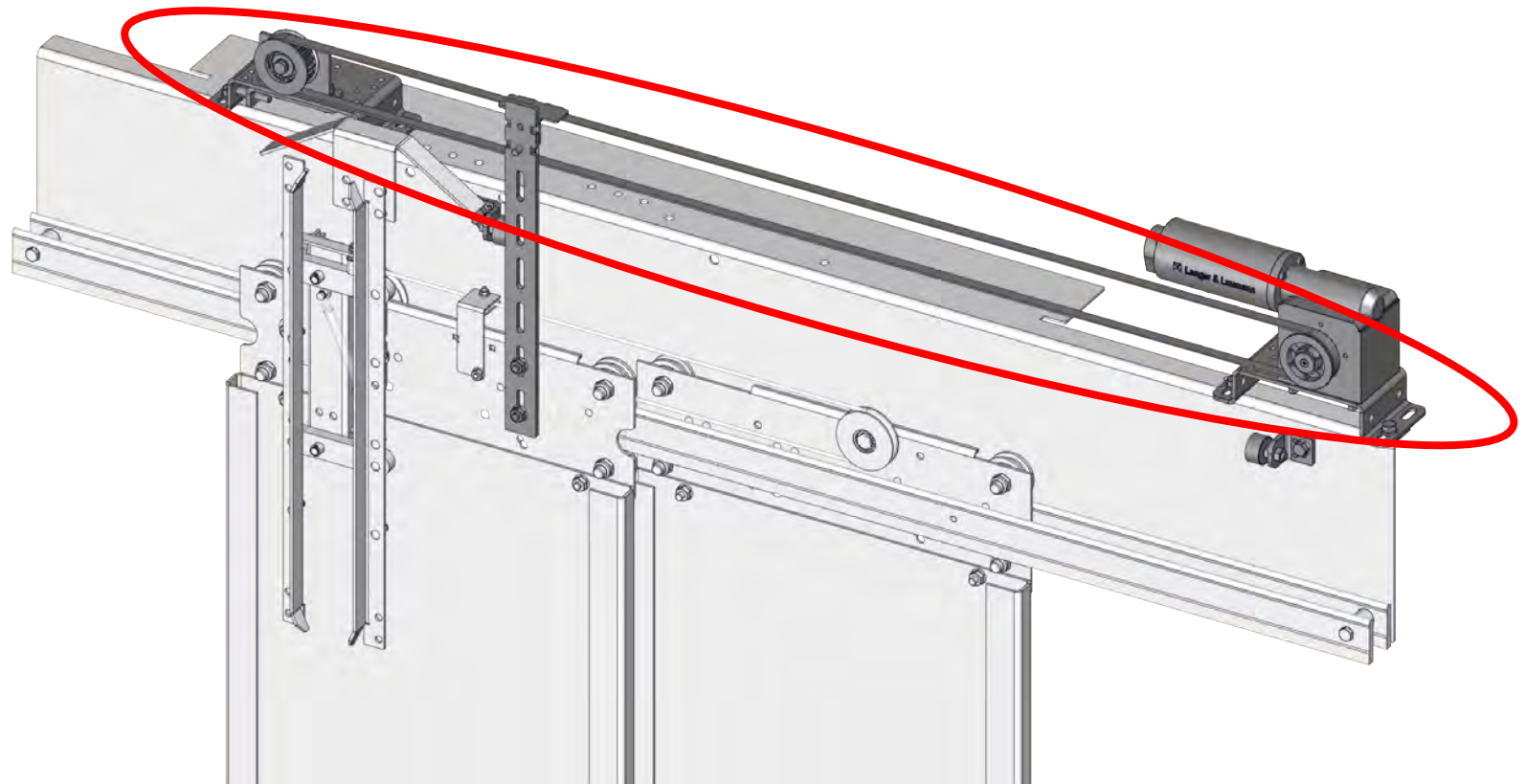


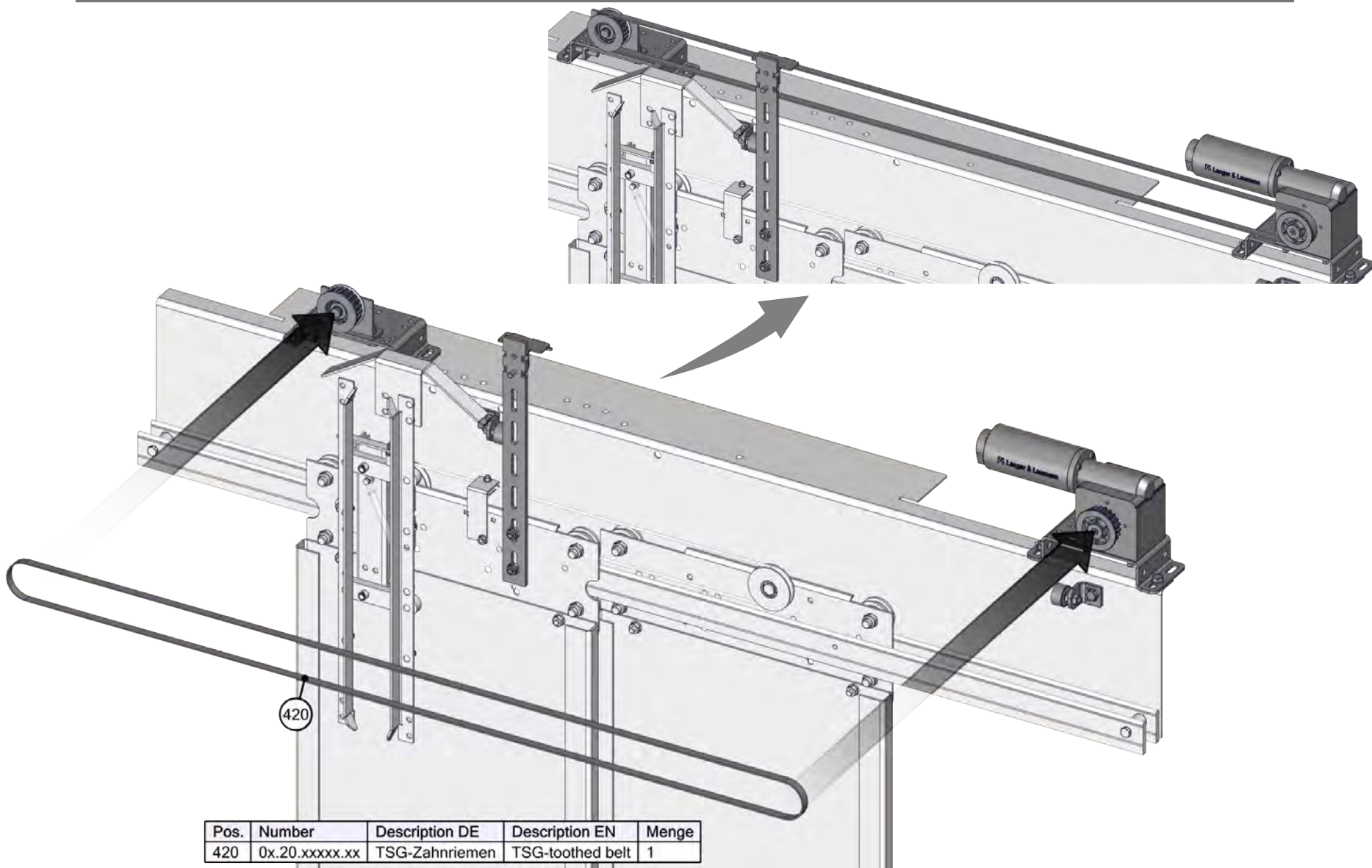
Pos.	Number	Description DE	Description EN	Menge
210	01.20.60060	TSG Kombiwinkel, Ausführung "Hut", für TSG Motor oder Umlenkrad	TSG universal bracket, version "hat"	1
220	01.20.60110	Spannlasche für Spannstation	Clamping tab for clamping station, normal execution	1
310	01.36.00115	Sechskantschraube Vollgewinde DIN933 vz 8.8 - M8x40	hexagonal bolt, thread up to head DIN933 vz 8.8 - M8x40	1
320	01.36.00720	Sperrzahnschraube WN0274 A2C 8.8 - M8x20	hexagon head serrated screw WN0274 A2C 8.8 - M8x20	2

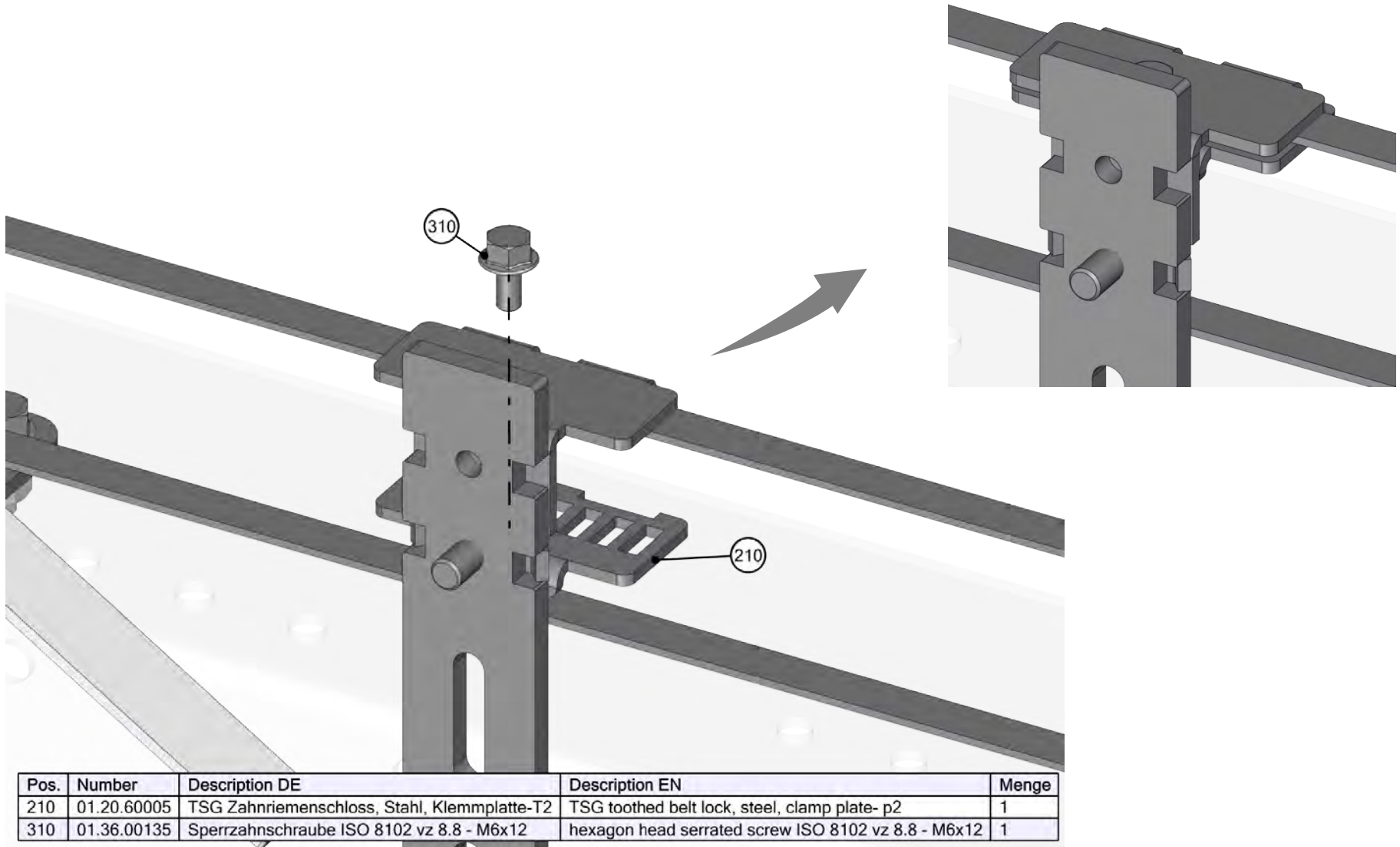


Pos.	Number	Description DE	Description EN	Menge
310	01.36.00720	Sperrzahnschraube ISO 8102 vz 8.8 - M8x20	hexagon head serrated screw ISO 8102 vz 8.8 - M8x20	4
320	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	4

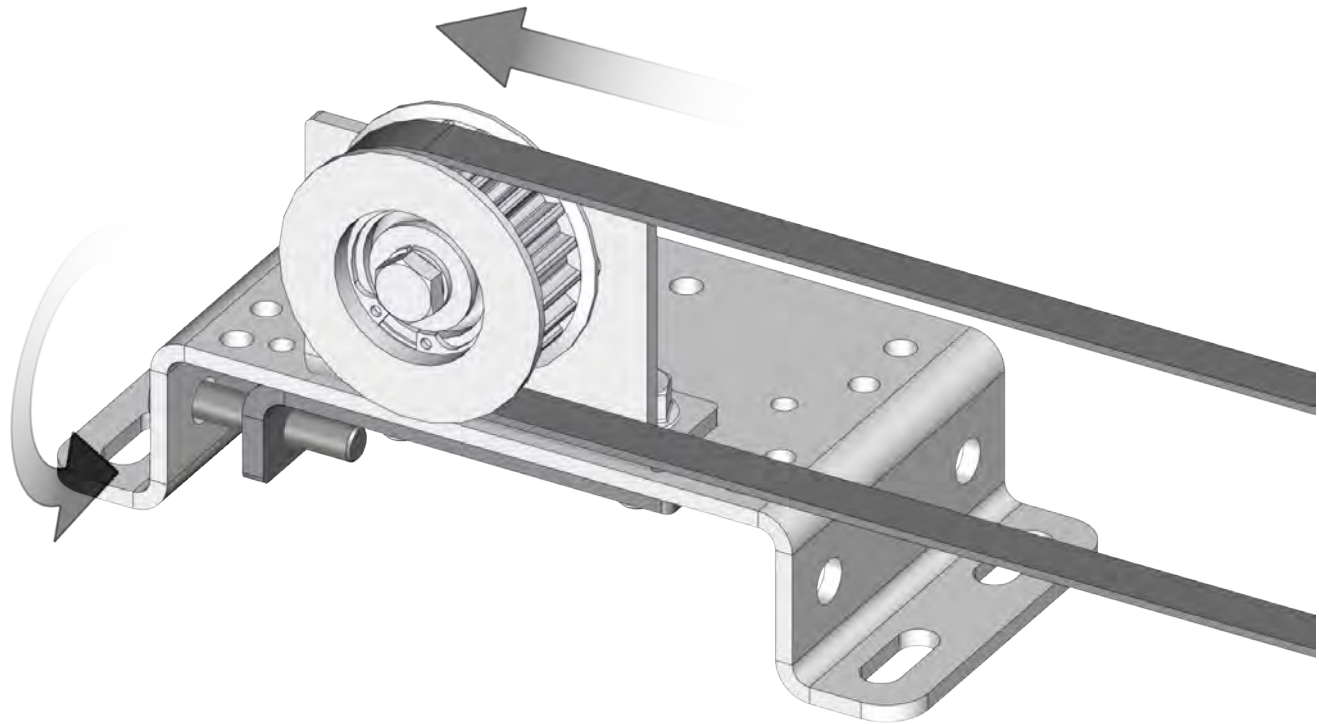
Montage Zahnriemen und Anschlag – assembly of the toothed belt and bump stop



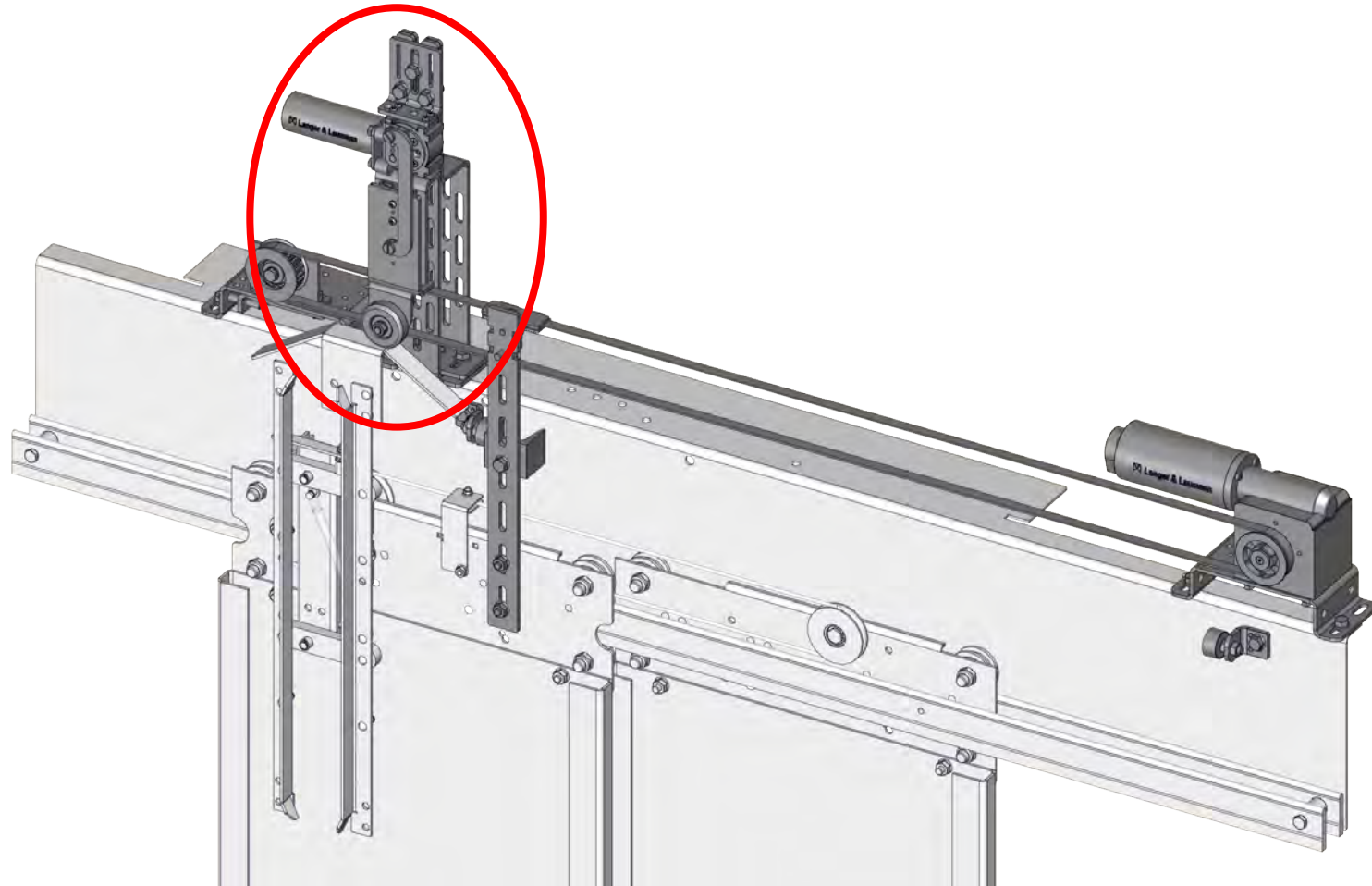


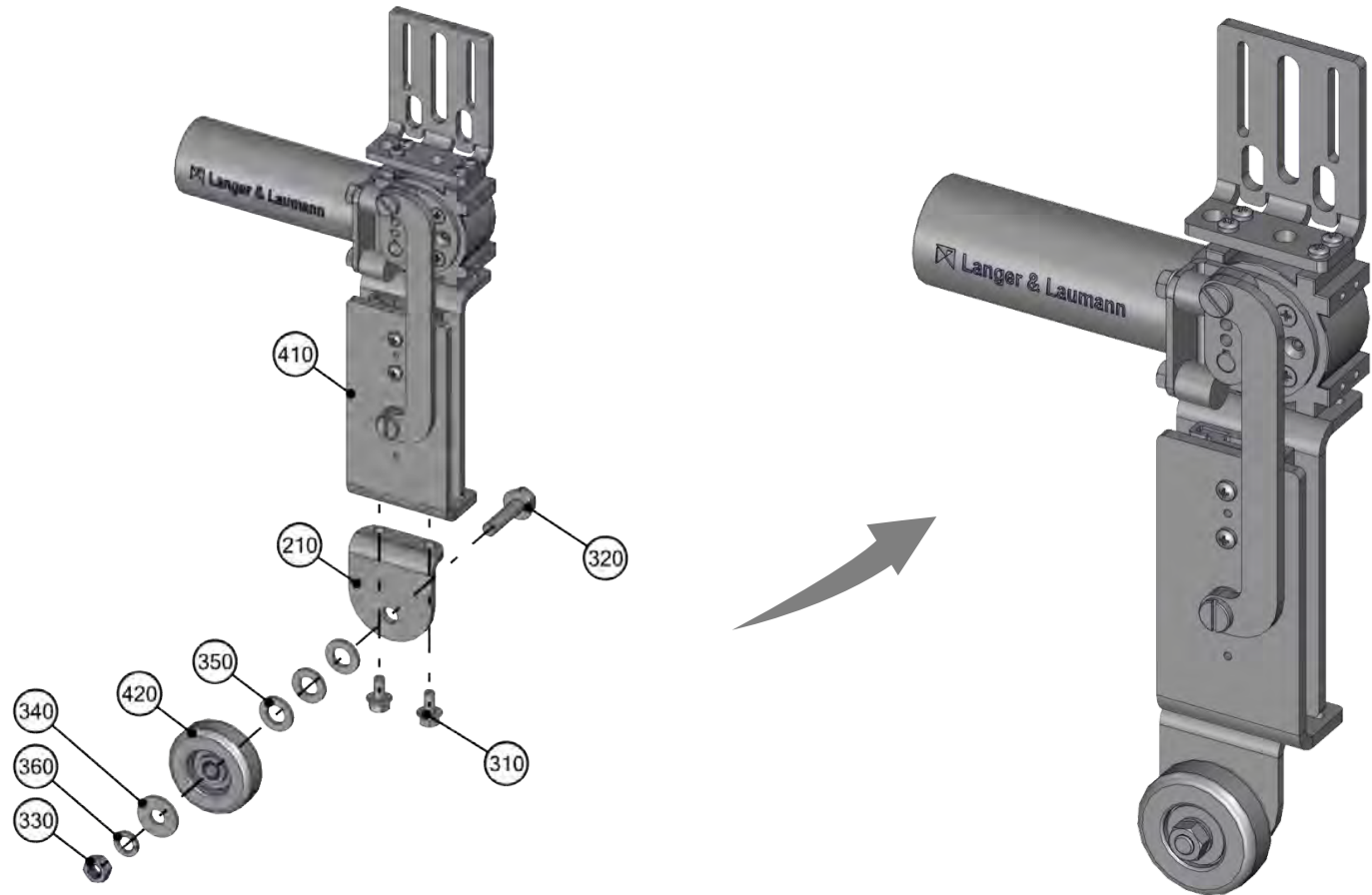


Zahnriemen spannen – tensioning of the toothed belt

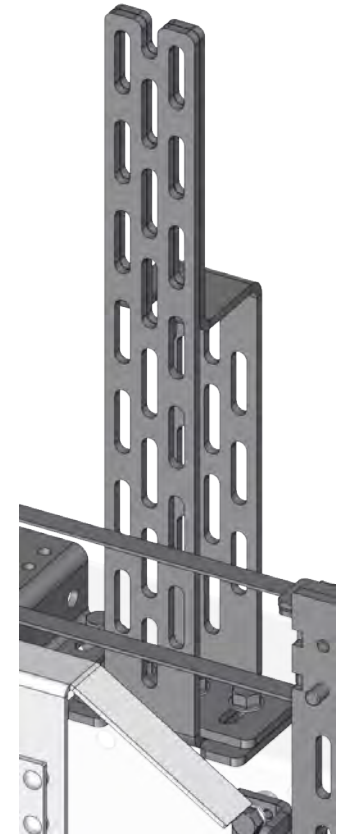
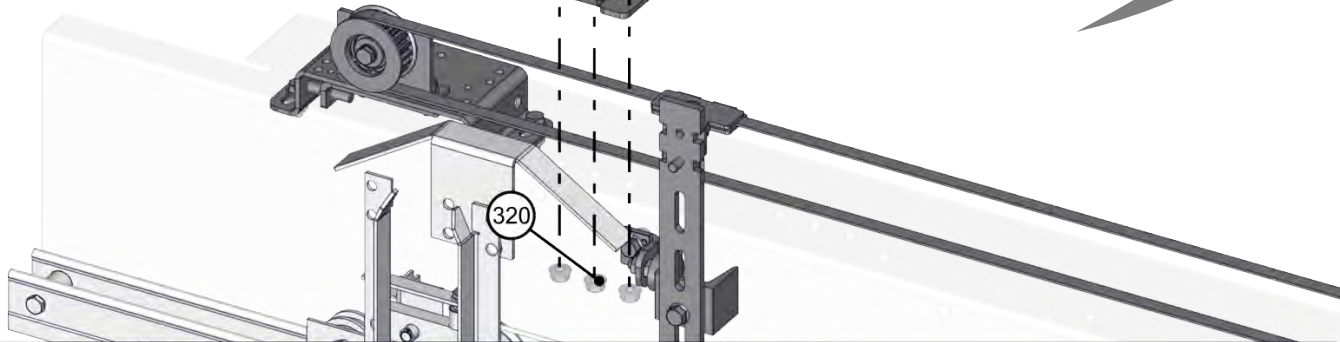
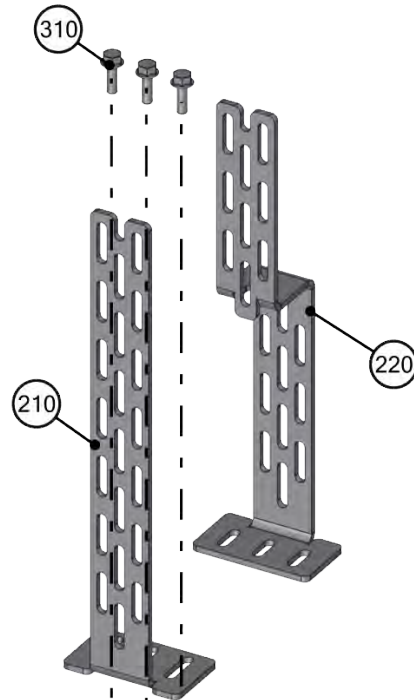


Montage Sinusantrieb – assembly of the Sinus Drive

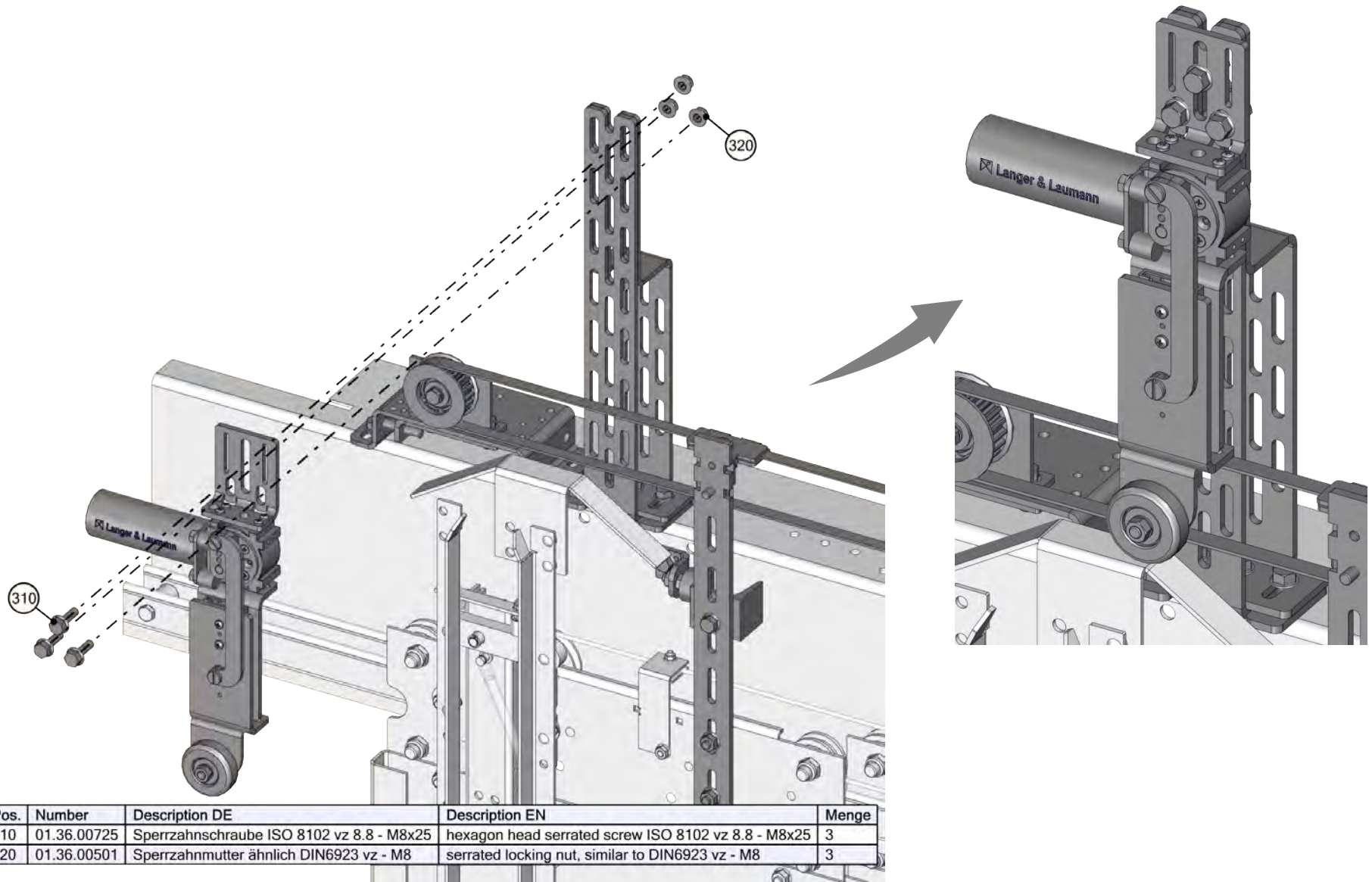


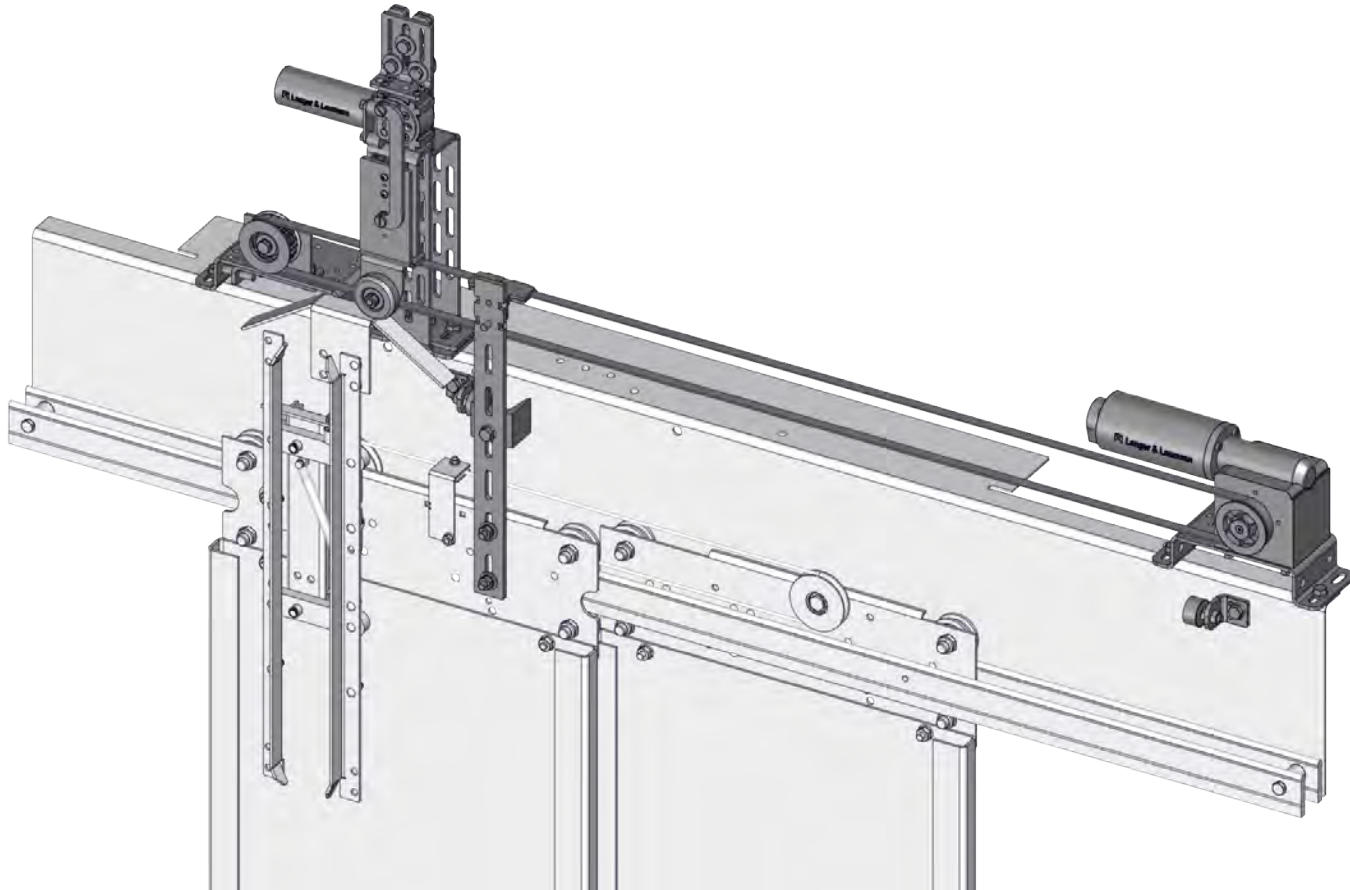


Pos.	Number	Description DE	Description EN	Menge
210	01.20.94080	Rollenhalter für TSG Sinusantrieb	wheel holder for TSG Sinus Drive	1
310	01.36.00135	Sperrzahnschraube DIN 6921 M6x12 verz.	hexagon head serrated screw WN0274 A2C 8.8 - M6x12	2
320	01.36.00730	Sperrzahnschraube WN0274 A2C 8.8 - M8x30	hexagon head serrated screw WN0274 A2C 8.8 - M8x30	1
330	01.36.00430	Sechskantmutter ISO 4032 - M8 - 8,vz	hexagon nut DIN934-8 vz 8.8 - M8	1
340	01.36.00450	Kotflügelscheibe DIN522 vz - 8,4x20x1,25	wing repair washer DIN522 vz - 8,4x20x1,25	1
350	01.36.00470	Scheibe ISO 7090-10-140HV (DIN125),vz	washer DIN125A vz - 10,5	3
360	01.36.00169	Federring DIN127 vz - M8	lock washer DIN127 vz - M8	1
410	08.20.83111	TSG Sinusantrieb links für Riegelbetätigung (ohne TSG Elektronik)	TSG Sinus Drive left for interlock operation (without TSG electronic)	1
420	01.20.41010	Rolle mit Kugellager	wheel with ball bearing	1

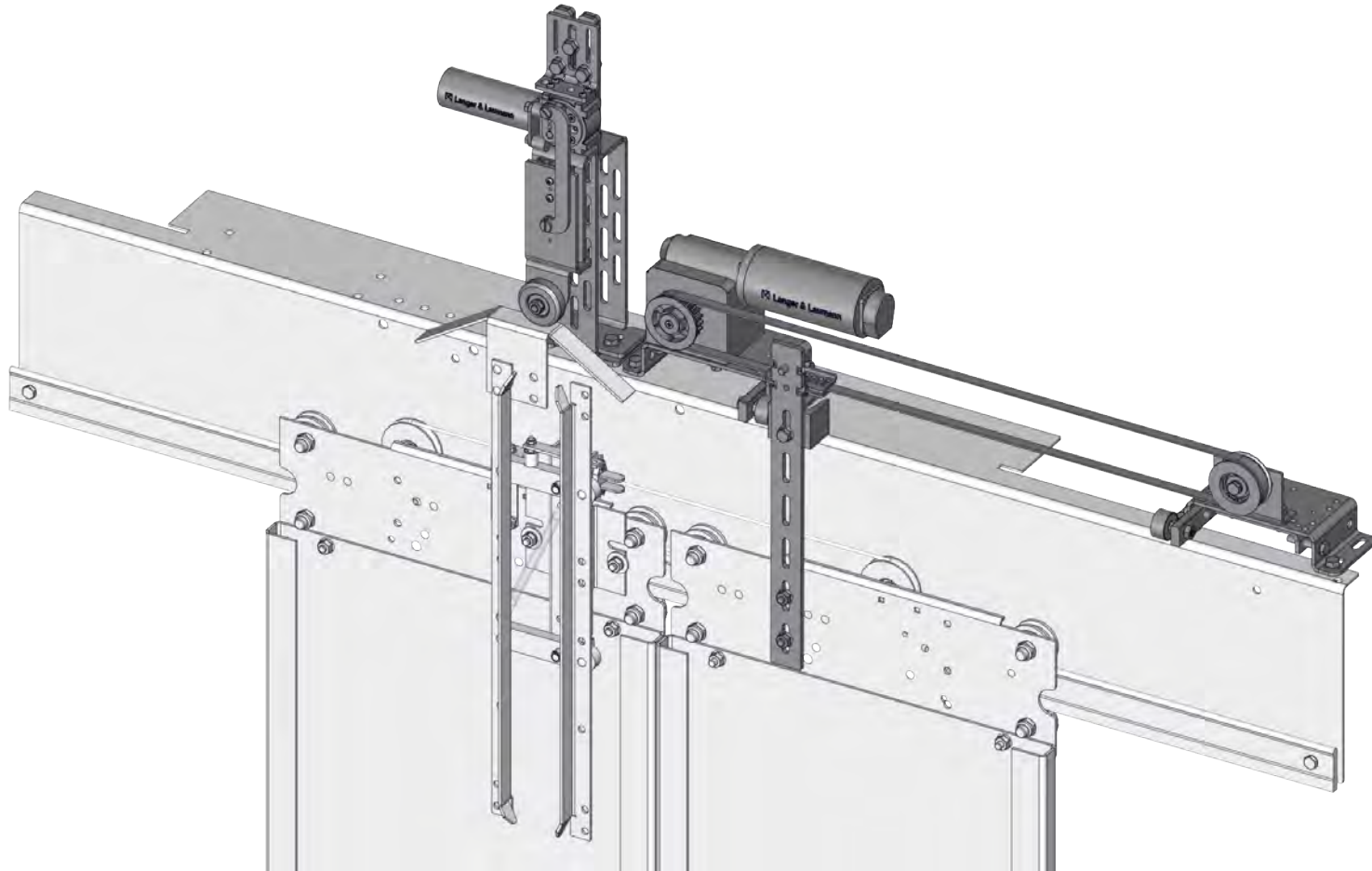


Pos.	Number	Description DE	Description EN	Menge
210	01.20.94100	Winkel zur Befestigung an Türmaschine für TSG Sinus Hubantrieb	bracket for mounting at door mashine for TSG Sinus Drive	1
220	01.20.94101	Gegenwinkel zur Befestigung an Türmaschine für TSG Sinusantrieb	counter bracket for fixing at door machine for TSG Sinus Drive	1
310	01.36.00725	Sperrzahnschraube ISO 8102 vz 8.8 - M8x25	hexagon head serrated screw ISO 8102 vz 8.8 - M8x25	3
320	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	3

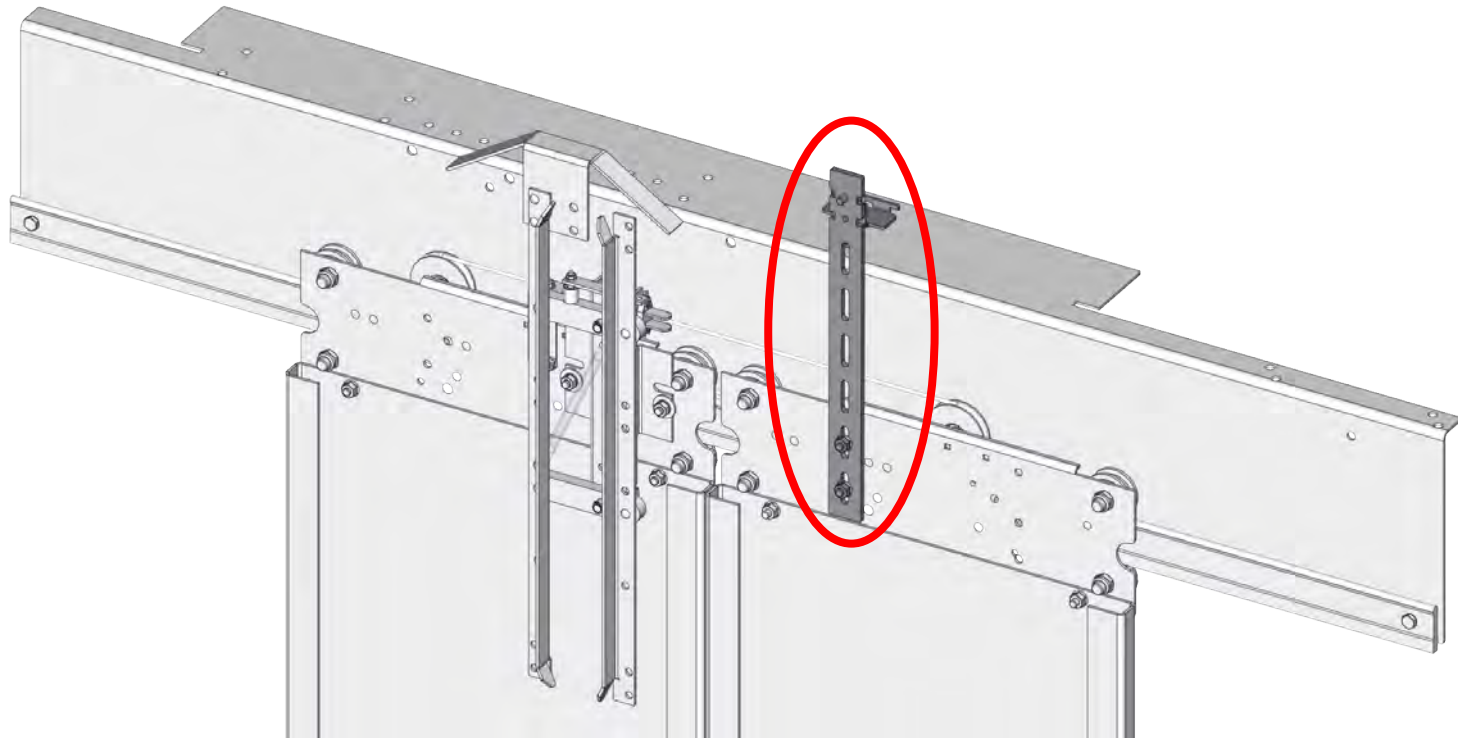


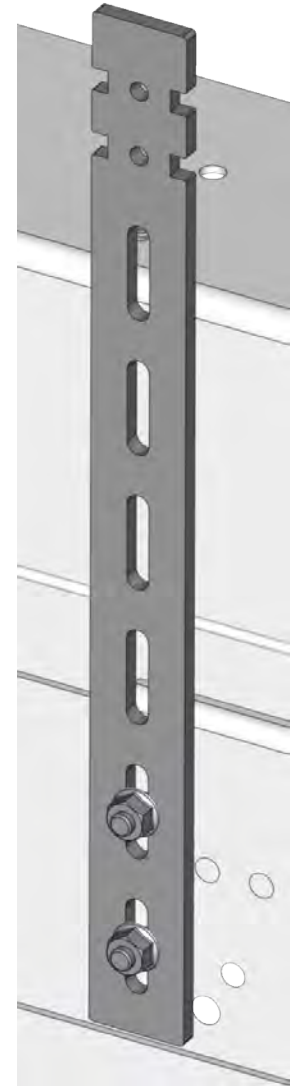
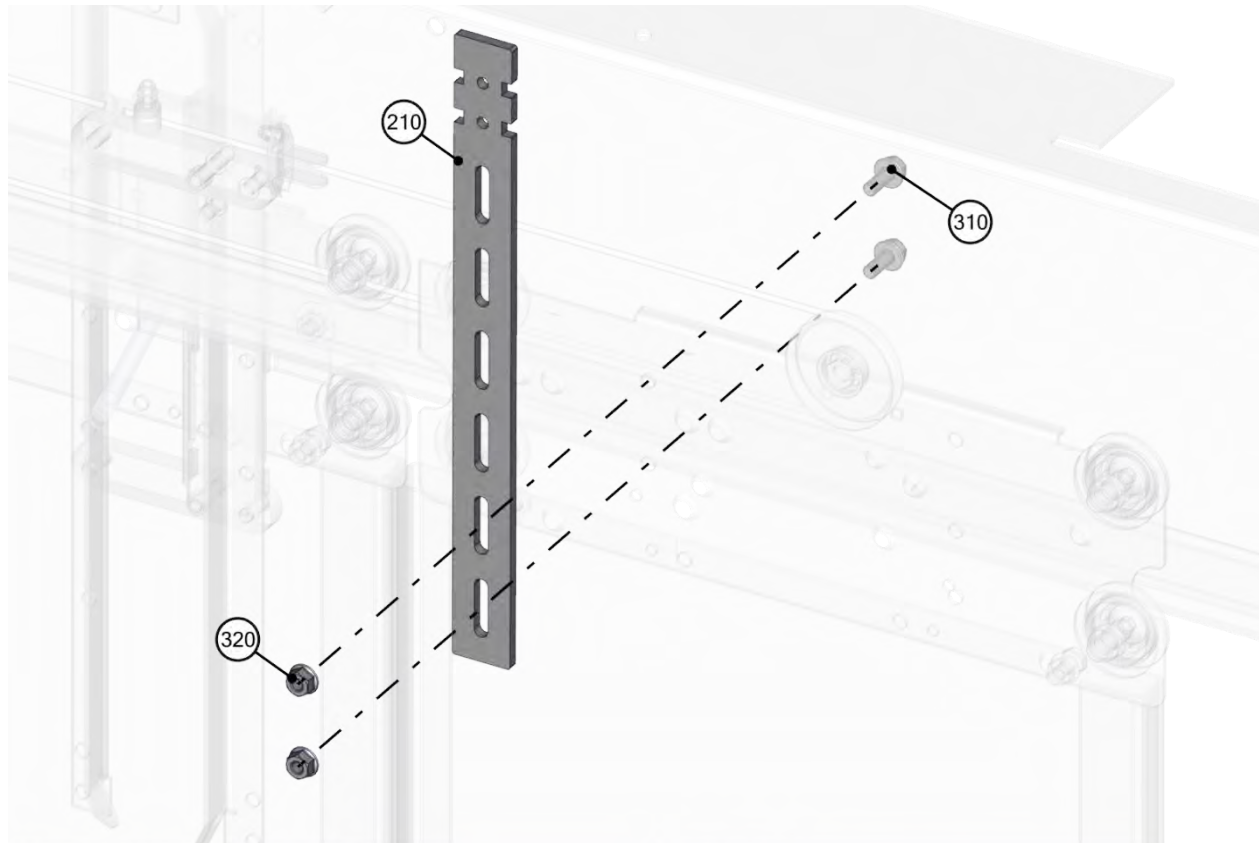


TSG in Thyssen M2Z D6 – **TSG in Thyssen M2Z D6**

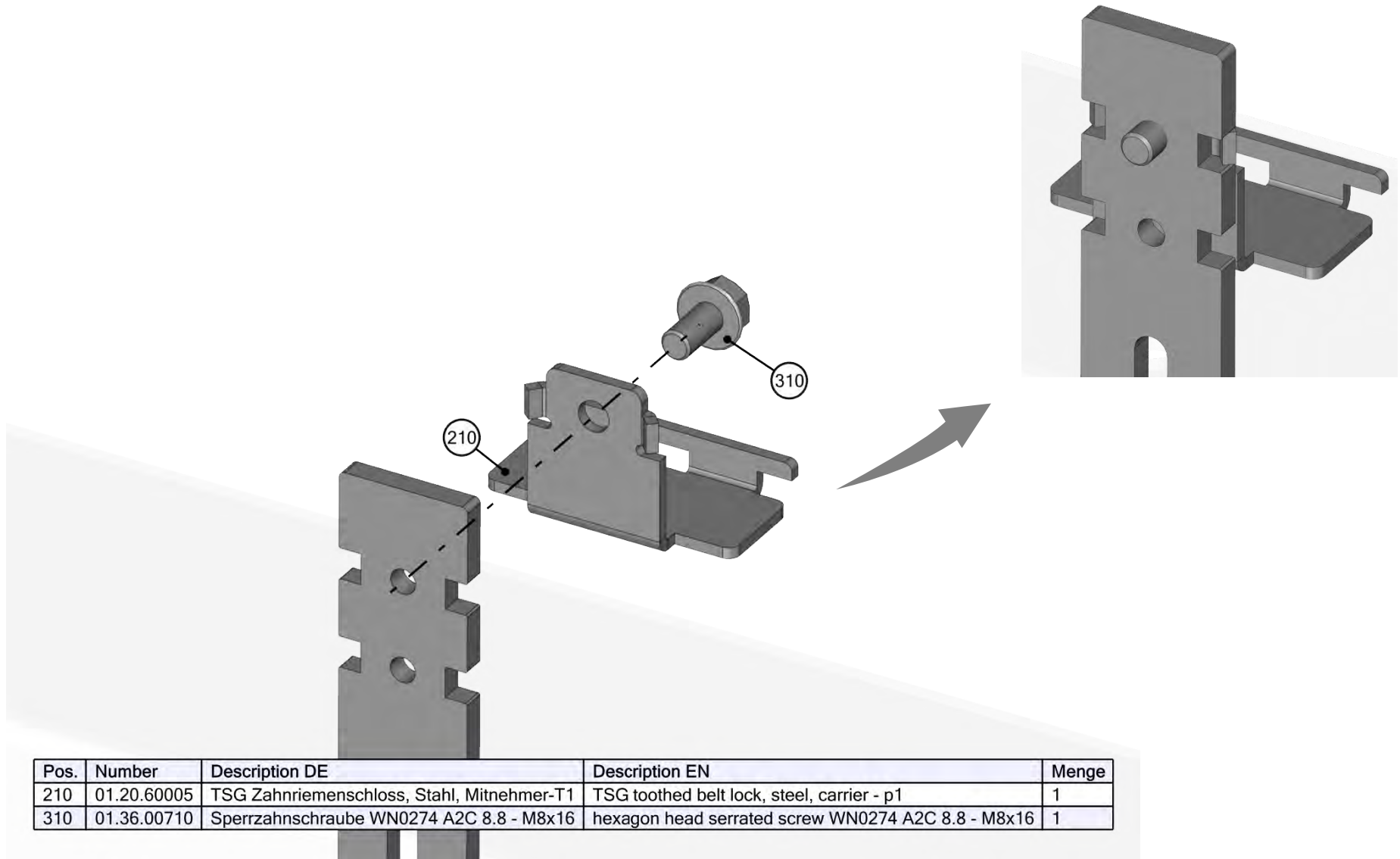


Montage Türflügelmitnehmer – assembly of the door panel coupler

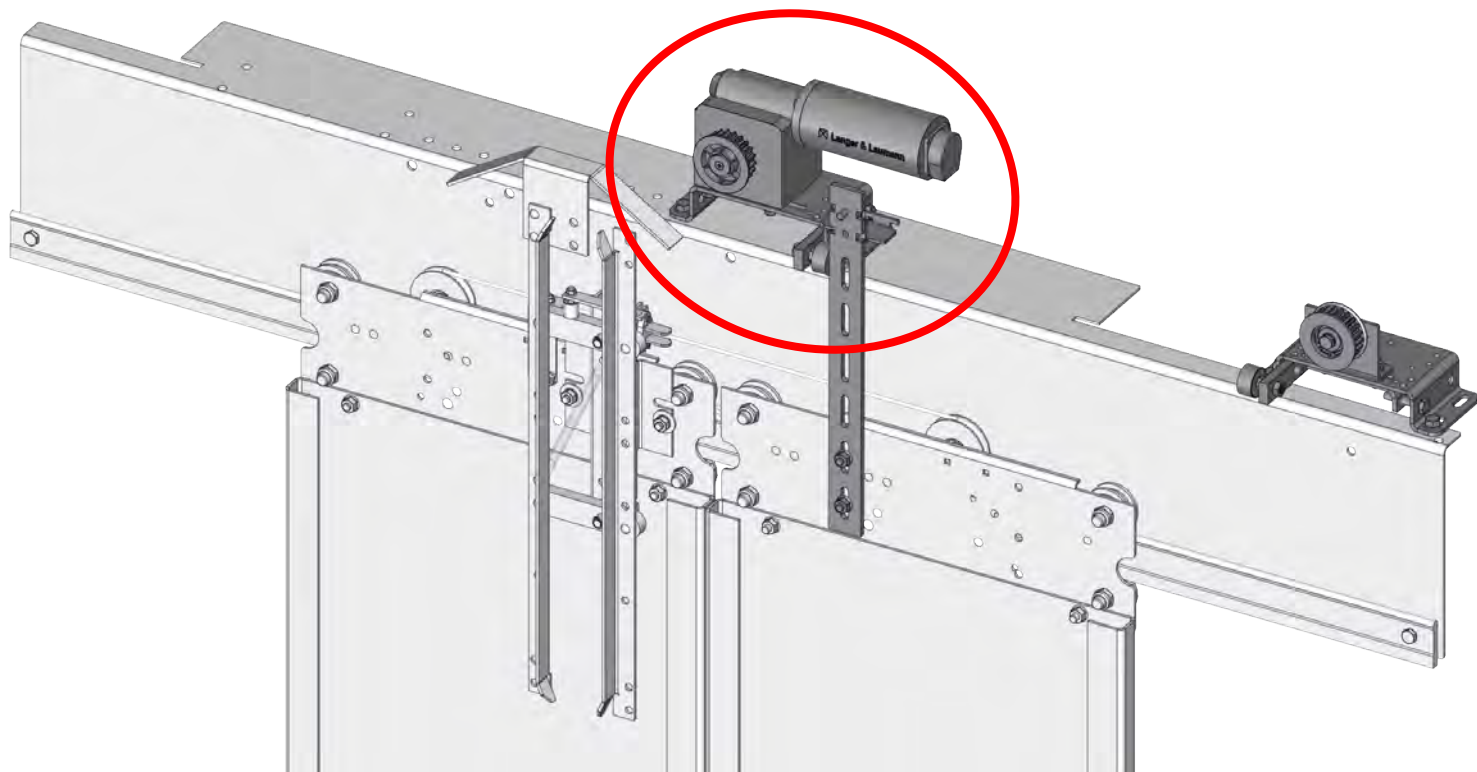


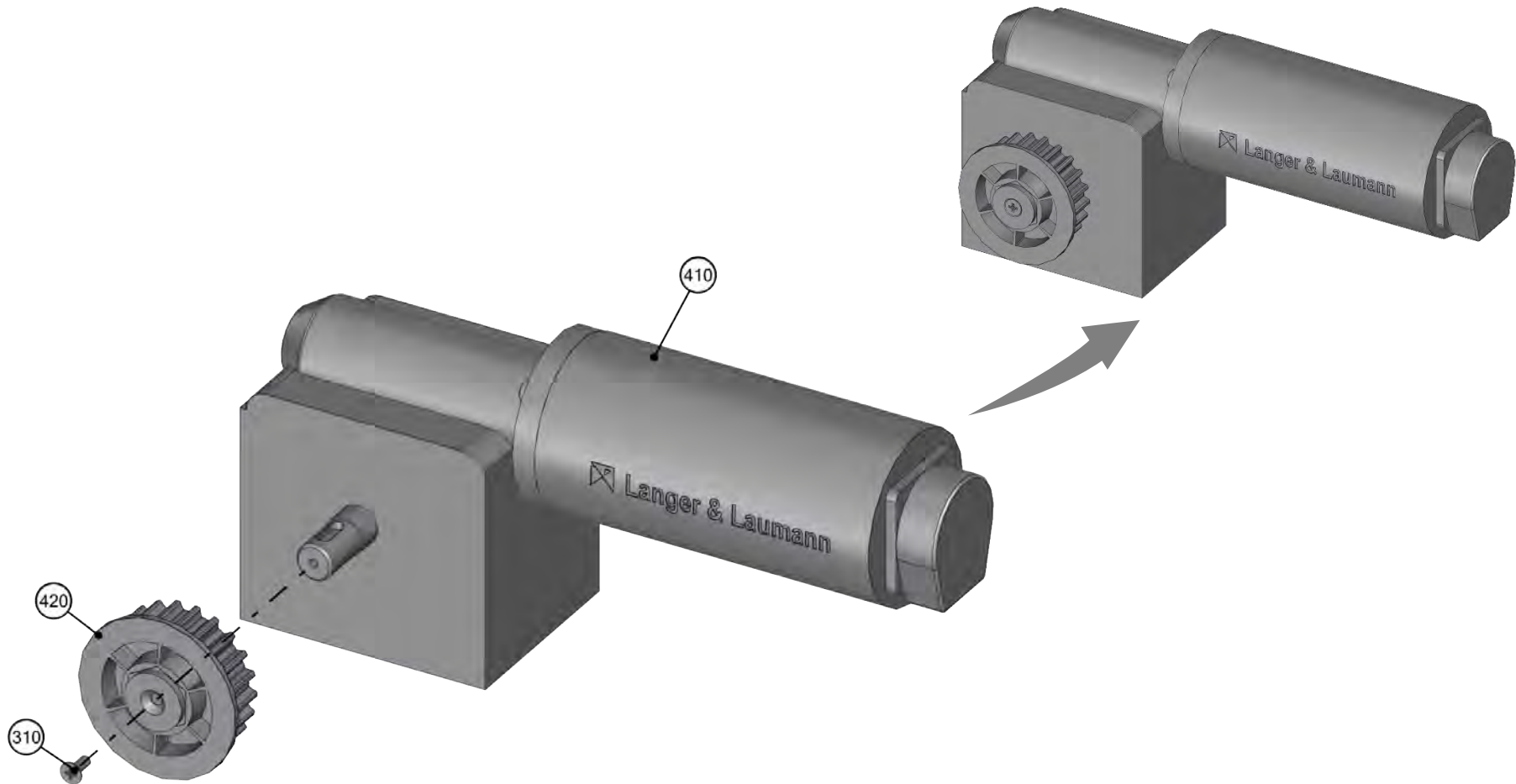


Pos.	Number	Description DE	Description EN	Menge
210	01.20.60004	Türflügelmitnehmer 375x35x6	TSG door panel coupler 375x35x6	1
310	01.36.00720	Sperrzahnschraube ISO 8102 vz 8.8 - M8x20	hexagon head serrated screw ISO 8102 vz 8.8 - M8x20	2
320	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	2

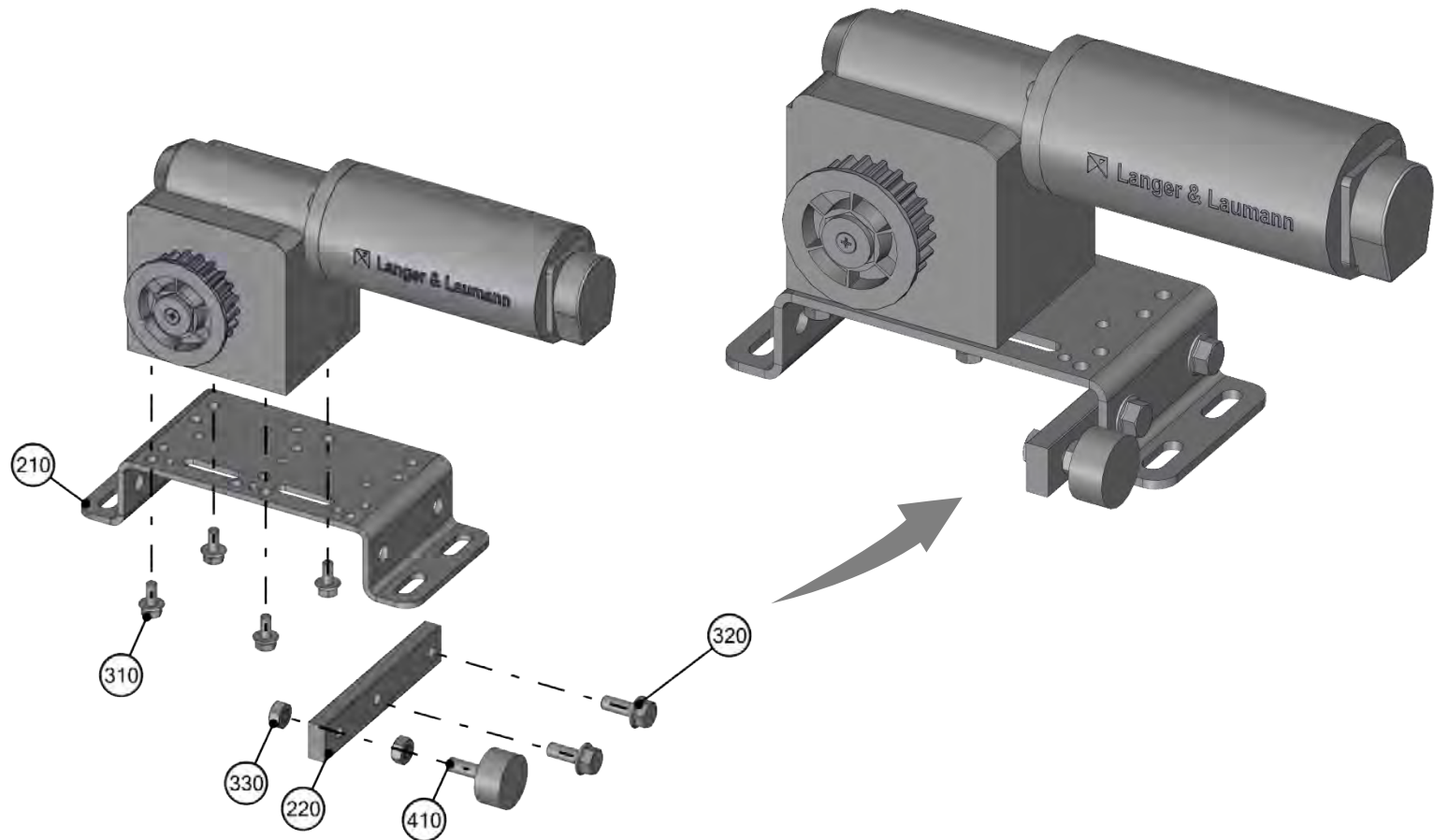


Montage Motor – assembly of the motor

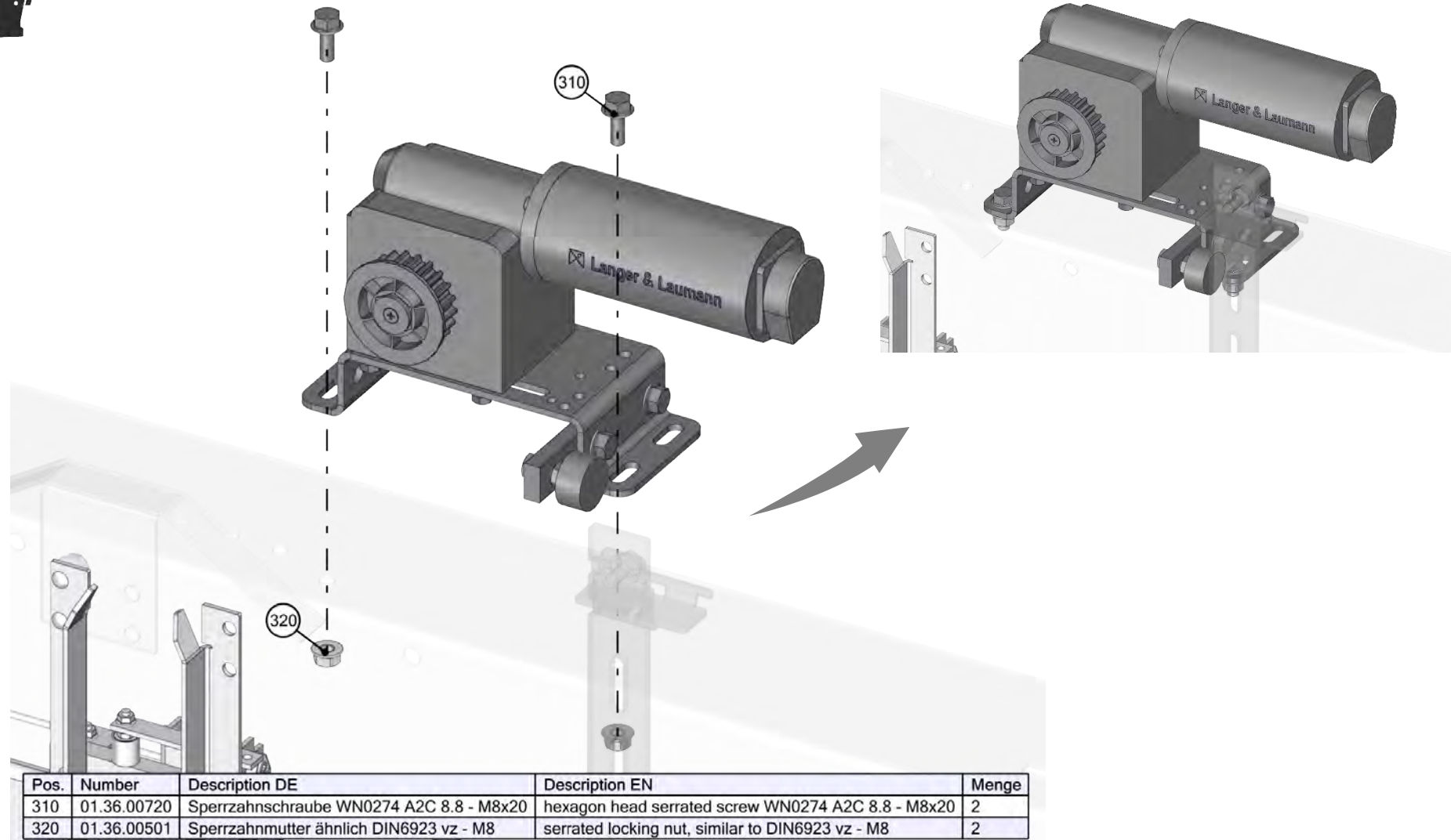




Pos.	Number	Description DE	Description EN	Menge
310	01.36.00332	Senkschraube vz 4.8 DIN965 - M4x10	countersunk screw w. cross recess DIN965 vz 4.8 - M4x10	1
410	08.20.40001.X1	TSG-Motor	TSG-motor	1
420	01.20.60160	Zahnriemenrad, 8M, d=14H7, D=56[mm]	timing belt pulley, 8M, d=14H7, D=56[mm]	1

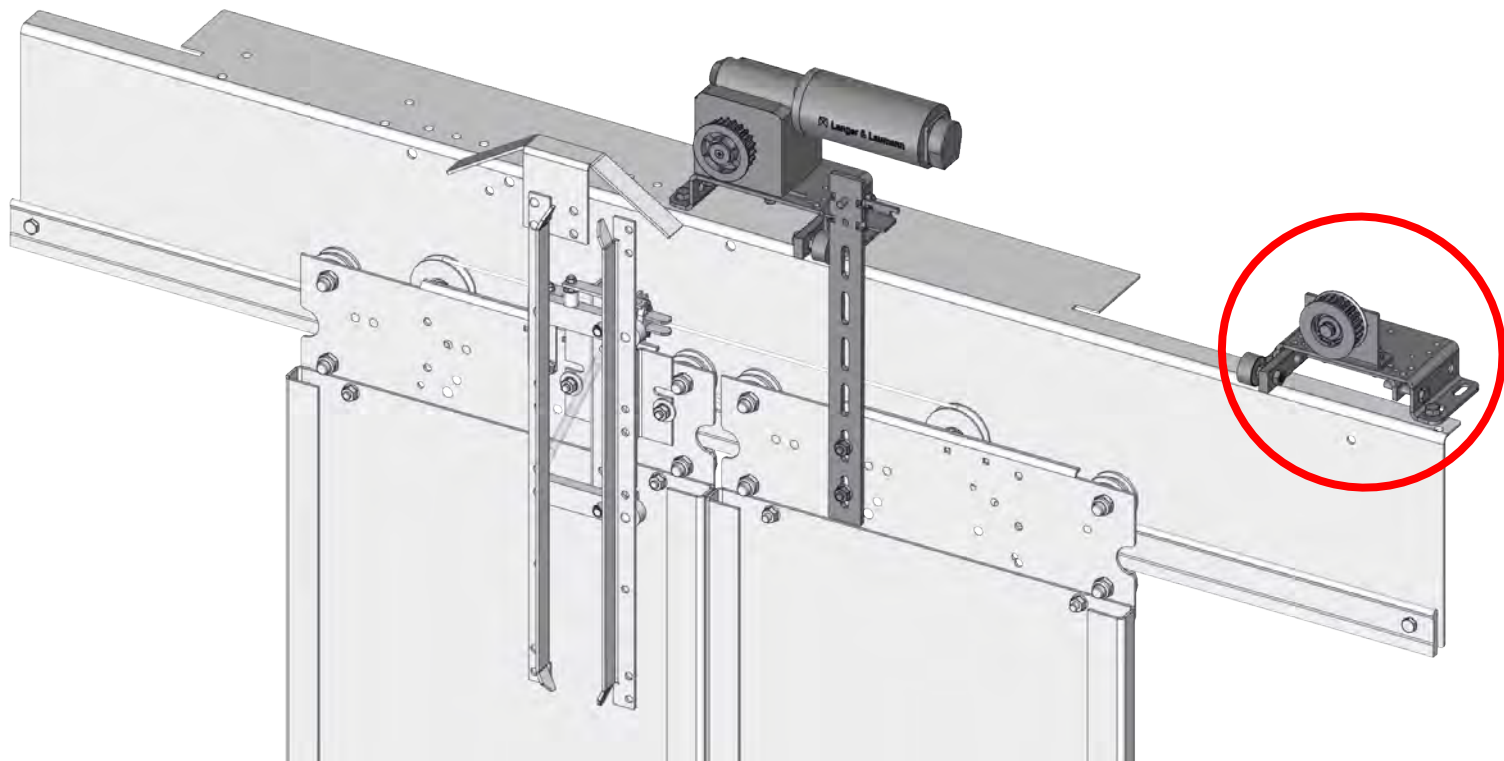


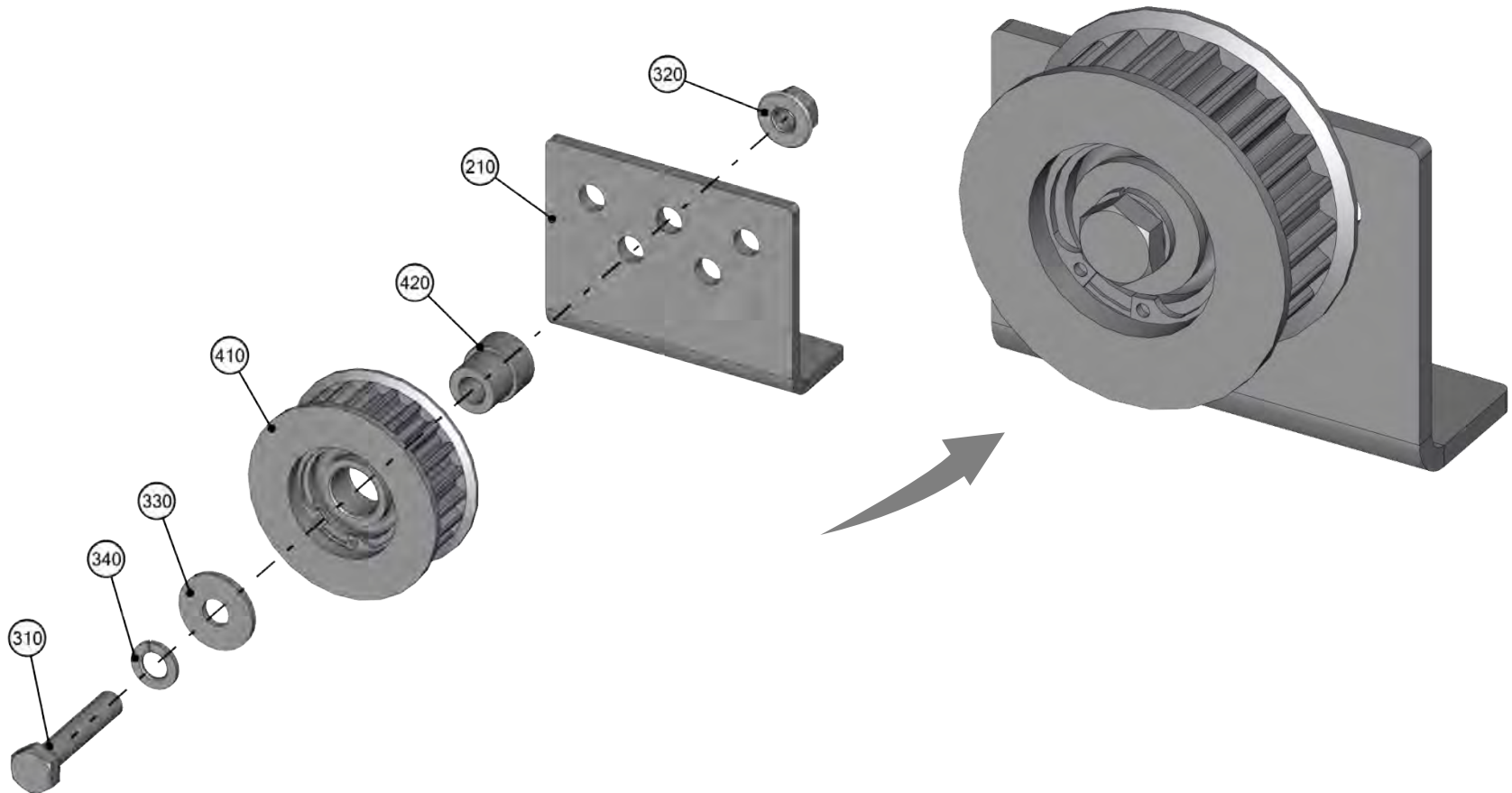
Pos.	Number	Description DE	Description EN	Menge
210	01.20.60060	TSG Kombiwinkel, Ausführung "Hut", für TSG Motor oder Umlenkrad	TSG universal bracket, version "hat"	1
220	01.20.60037	Halterung Puffer Standardversion	bracket buffer, standard version	1
310	01.36.00135	Sperrzahnschraube DIN 6921 M6x12 verz.	hexagon head serrated screw WN0274 A2C 8.8 - M6x12	4
320	01.36.00720	Sperrzahnschraube WN0274 A2C 8.8 - M8x20	hexagon head serrated screw WN0274 A2C 8.8 - M8x20	2
330	01.36.00430	Sechskantmutter ISO 4032 - M8 - 8,vz	hexagon nut DIN934-8 vz 8.8 - M8	2
410	01.20.91120	Gummi Metall Puffer 30x15, M8x20 Gewindebolzen	rubber-metal bump stop D30x15, threaded stud M8x20, 75 Shore	1



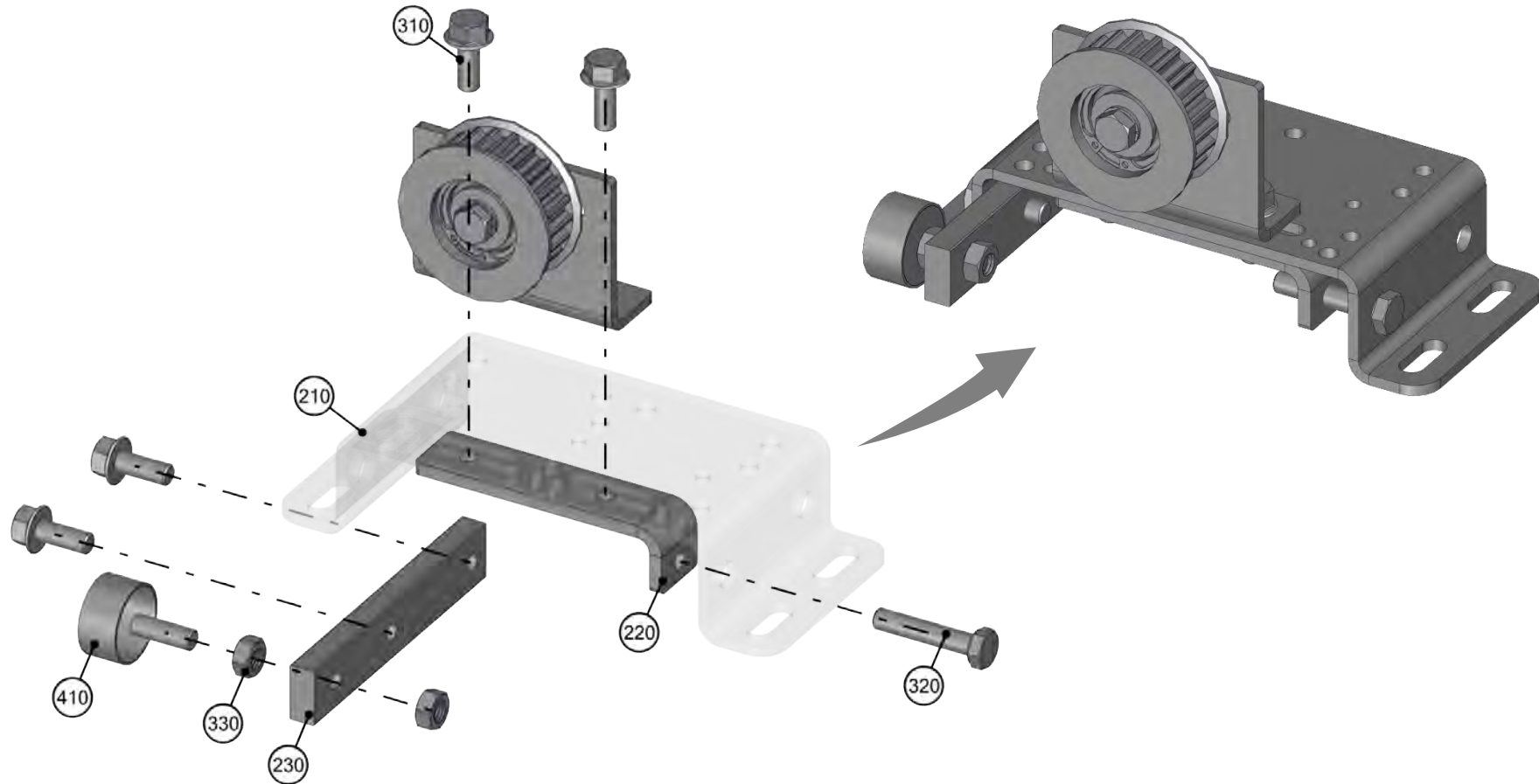
Pos.	Number	Description DE	Description EN	Menge
310	01.36.00720	Sperrzahnschraube WN0274 A2C 8.8 - M8x20	hexagon head serrated screw WN0274 A2C 8.8 - M8x20	2
320	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	2

Montage Umlenkrolle – assembly of the counter roller

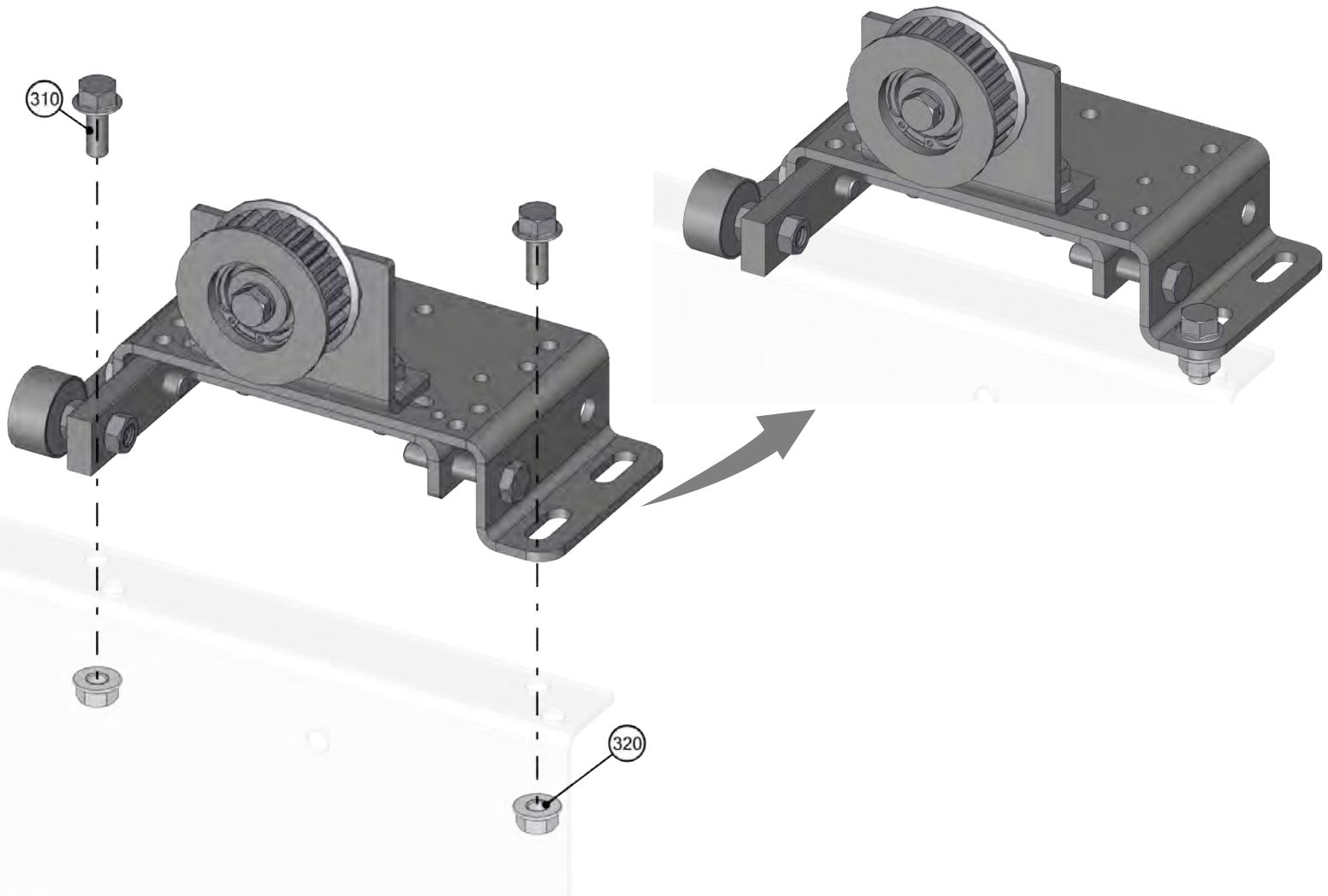




Pos.	Number	Description DE	Description EN	Menge
210	01.20.60013	Halterung Umlenkrolle für Spannstation_T1	TSG bracket for counter roller	1
310	01.36.00115	Sechskantschraube Vollgewinde DIN933 vz 8.8 - M8x40	hexagonal bolt, thread up to head DIN933 vz 8.8 - M8x40	1
320	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	1
330	01.36.00450	Kotflügelscheibe DIN522 vz - 8,4x20x1,25	wing repair washer DIN522 vz - 8,4x20x1,25	1
340	01.36.00169	Federring DIN127 vz - M8	lock washer DIN127 vz - M8	1
410	01.20.60003	Tüte Umlenkrad	bag counter roller	1
420	01.20.60003	Hülse für TSG Umlenkrad	sleeve for TSG counter roller	1

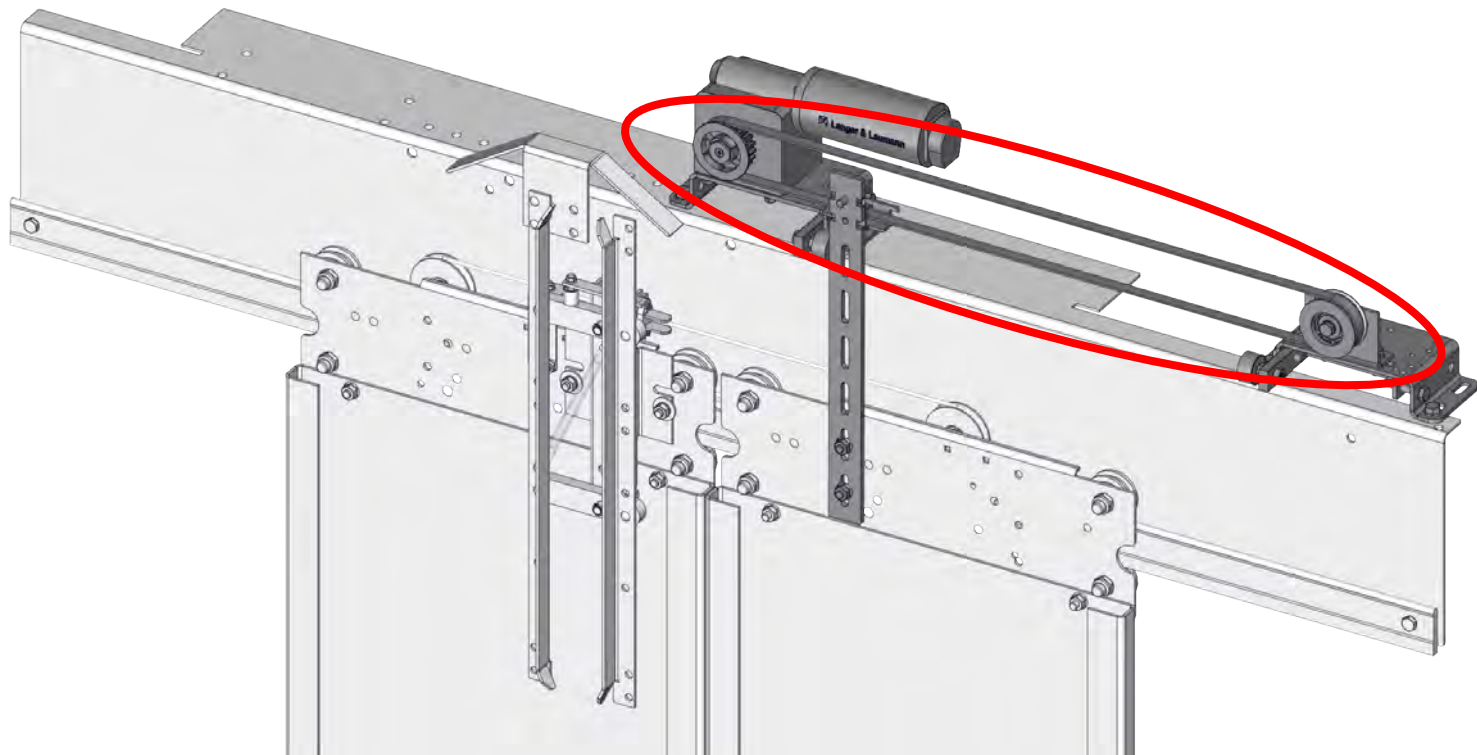


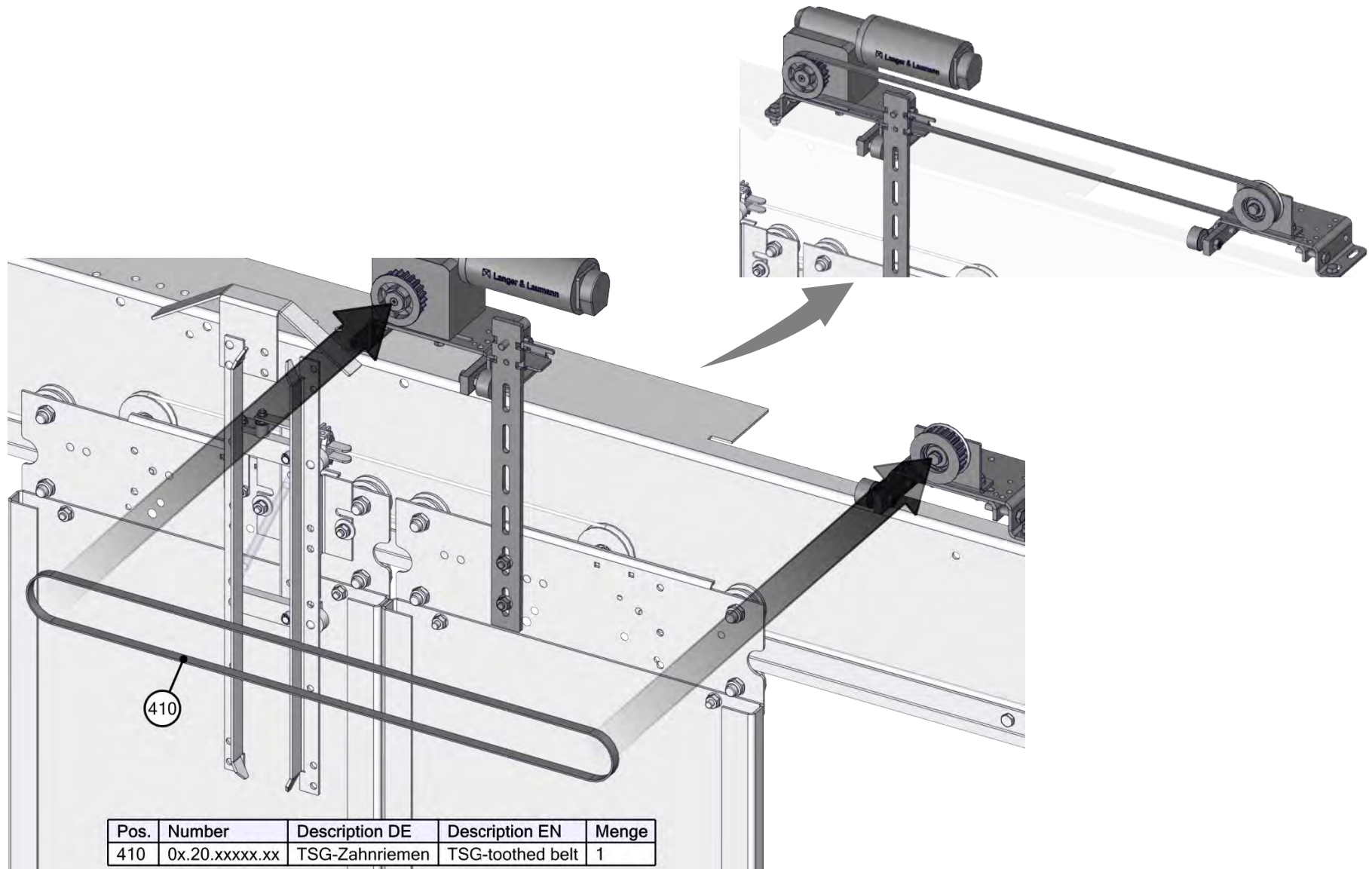
Pos.	Number	Description DE	Description EN	Menge
210	01.20.60060	TSG Kombiwinkel, Ausführung "Hut", für TSG Motor oder Umlenkrad	TSG universal bracket, version "hat"	1
220	01.20.60110	Spannlasche für Spannstation	Clamping tab for clamping station, normal execution	1
230	01.20.60037	Halterung Puffer Standardversion	bracket buffer, standard version	1
310	01.36.00720	Sperrzahnschraube WN0274 A2C 8.8 - M8x20	hexagon head serrated screw WN0274 A2C 8.8 - M8x20	4
320	01.36.00115	Sechskantschraube Vollgewinde DIN933 vz 8.8 - M8x40	hexagonal bolt, thread up to head DIN933 vz 8.8 - M8x40	1
330	01.36.00430	Sechskantmutter ISO 4032 - M8 - 8,vz	hexagon nut DIN934-8 vz 8.8 - M8	2
410	01.20.91120	Gummi Metall Puffer 30x15, M8x20 Gewindebolzen	rubber-metal bump stop D30x15, threaded stud M8x20, 75 Shore	1

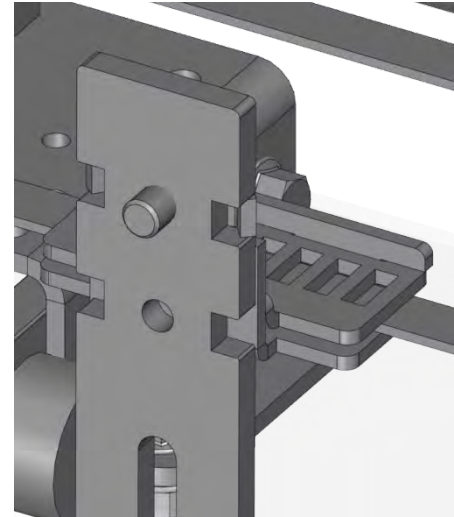
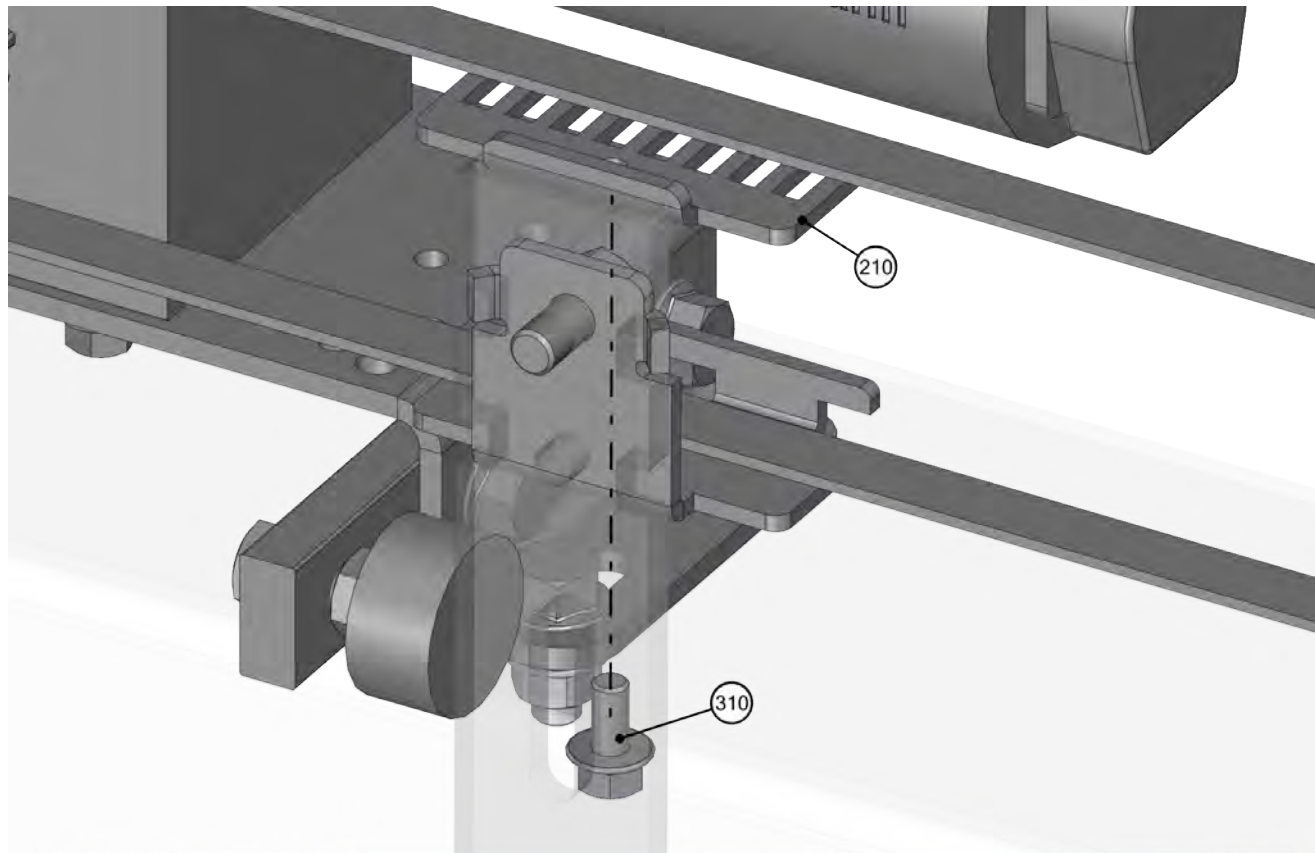


Pos.	Number	Description DE	Description EN	Menge
310	01.36.00720	Sperrzahnschraube WN0274 A2C 8.8 - M8x20	hexagon head serrated screw WN0274 A2C 8.8 - M8x20	2
320	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	2

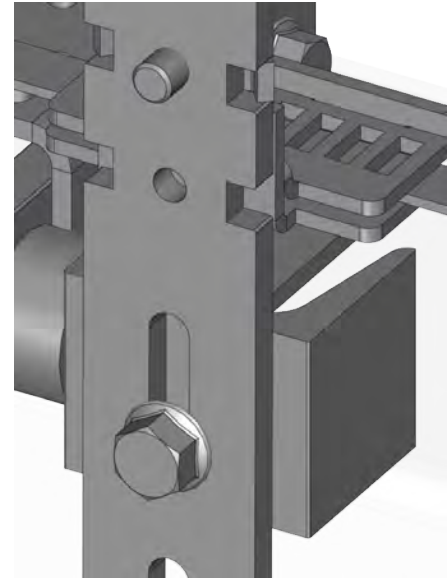
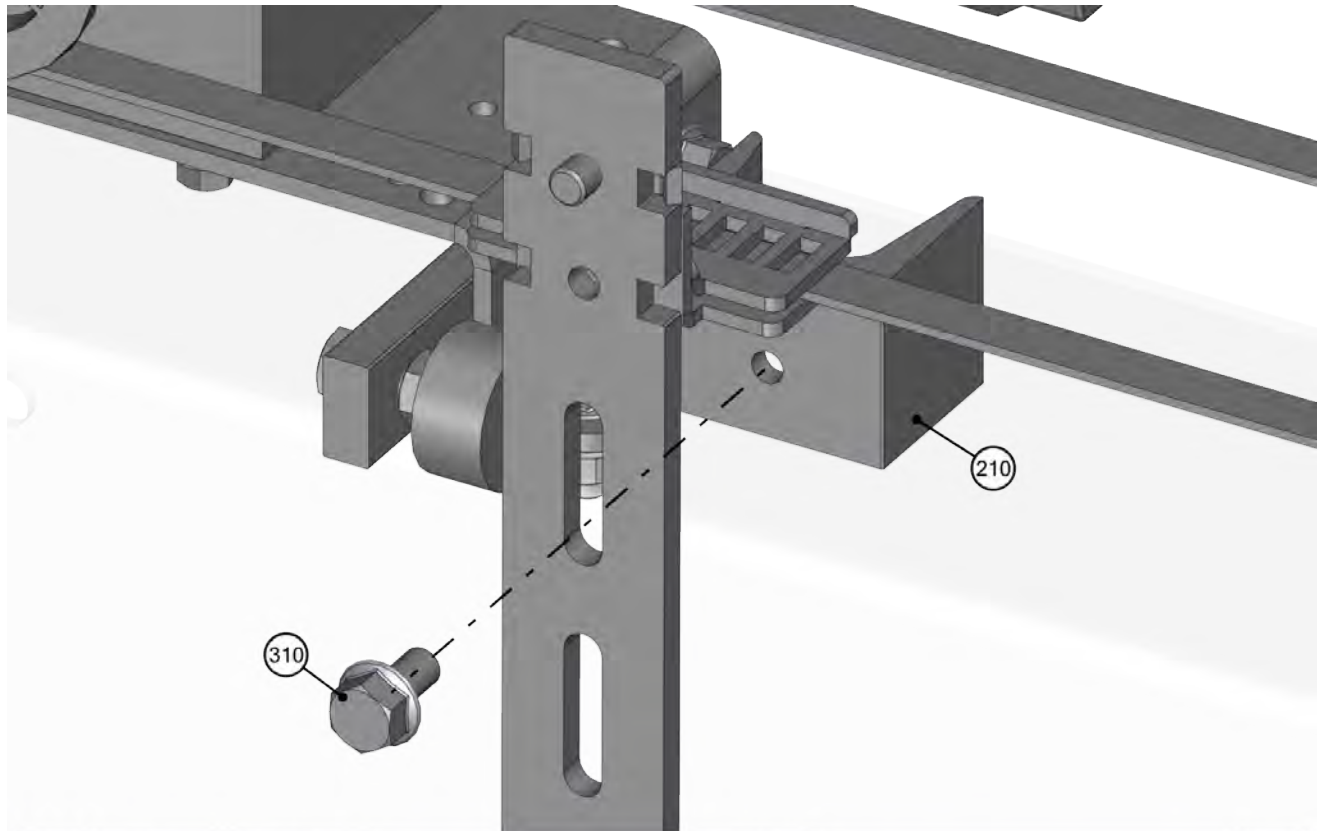
Montage Zahnriemen und Anschlag – assembly of the toothed belt and bump stop





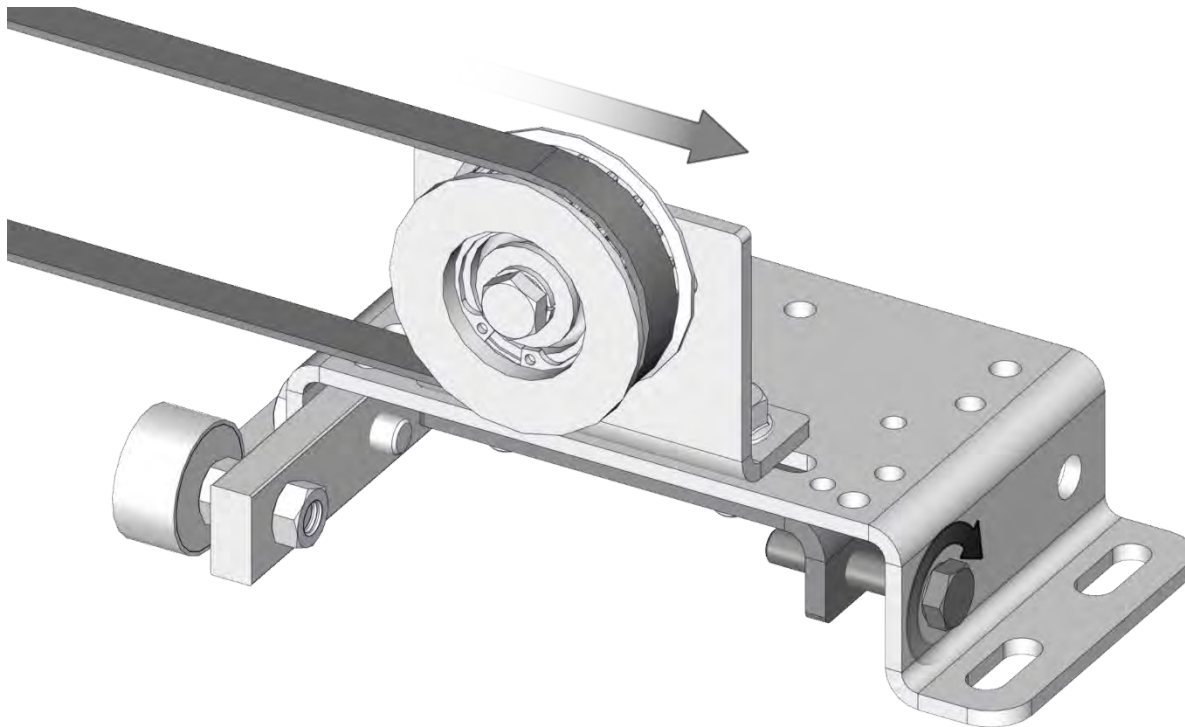


Pos.	Number	Description DE	Description EN	Menge
210	01.20.60005	TSG Zahnriemens Schloss, Stahl, Klemmplatte-T2	TSG toothed belt lock, steel, clamp plate- p2	1
310	01.36.00135	Sperrzahnschraube DIN 6921 M6x12 verz.	hexagon head serrated screw WN0274 A2C 8.8 - M6x12	1

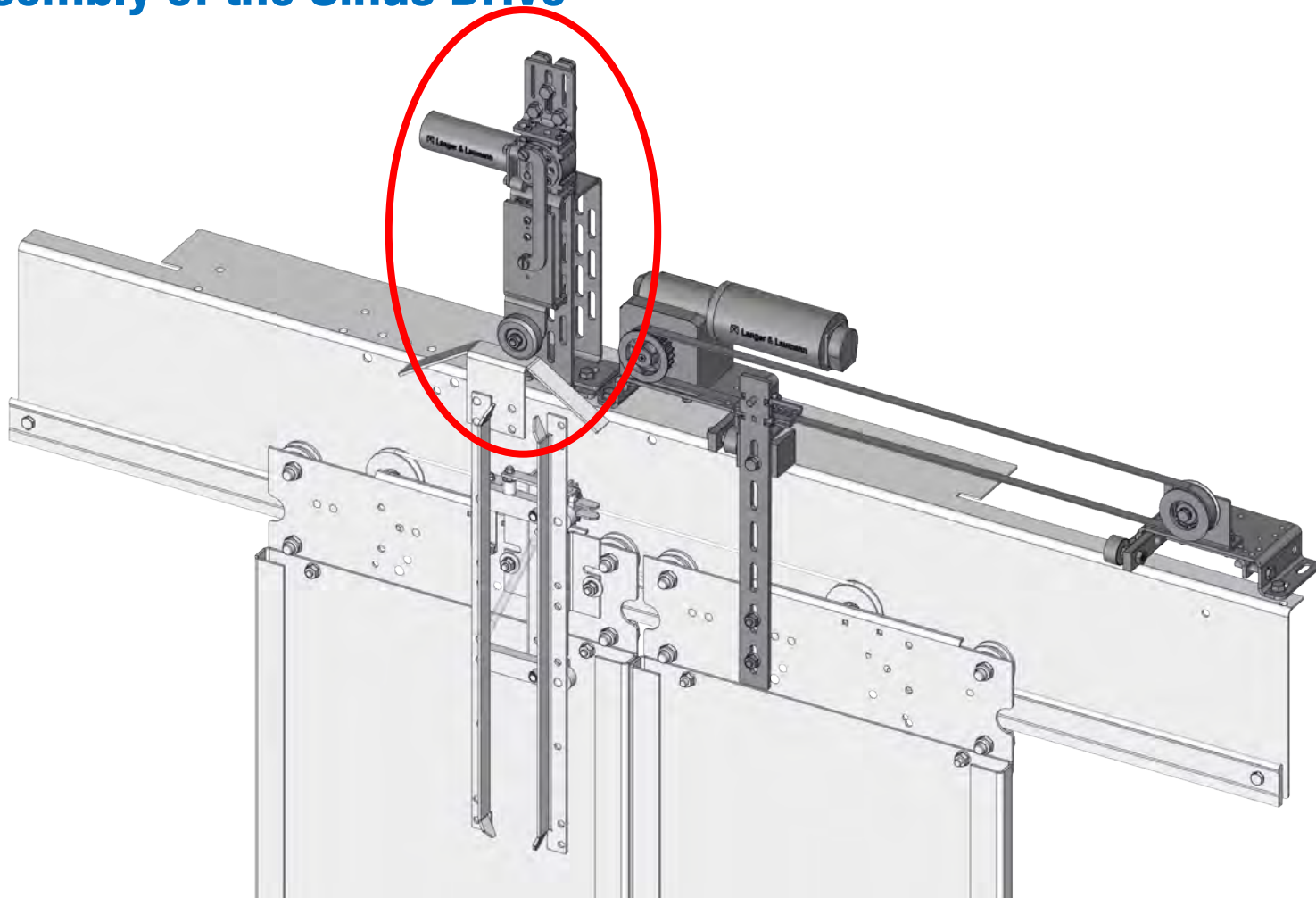


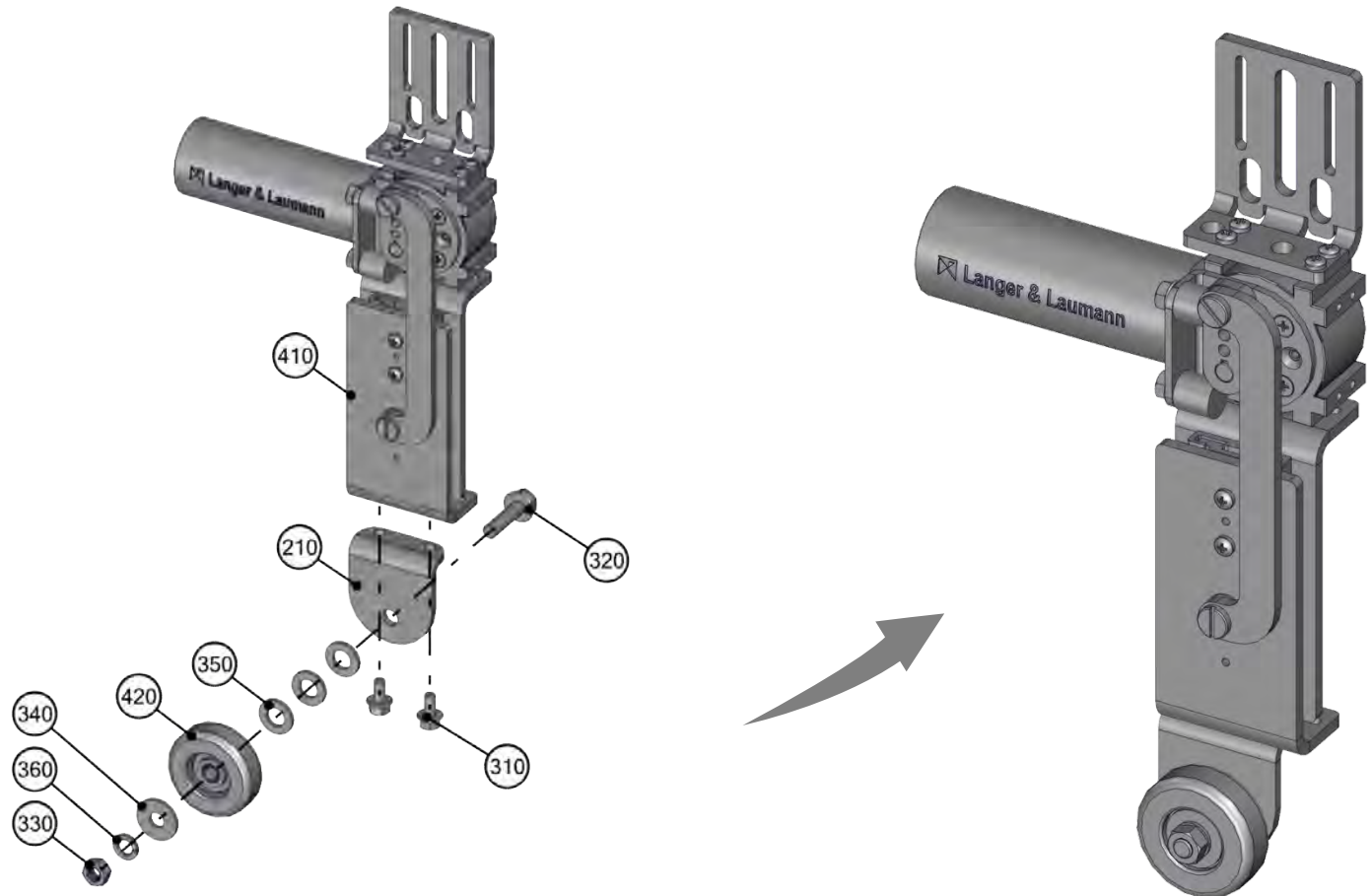
Pos.	Number	Description DE	Description EN	Menge
210	01.20.60020	TSG Anschlag für Türflügelmitnehmer	TSG stopper for door coupler	1
310	01.36.00710	Sperrzahnschraube WN0274 A2C 8.8 - M8x16	hexagon head serrated screw WN0274 A2C 8.8 - M8x16	1

Zahnriemen spannen – tensioning of the toothed belt

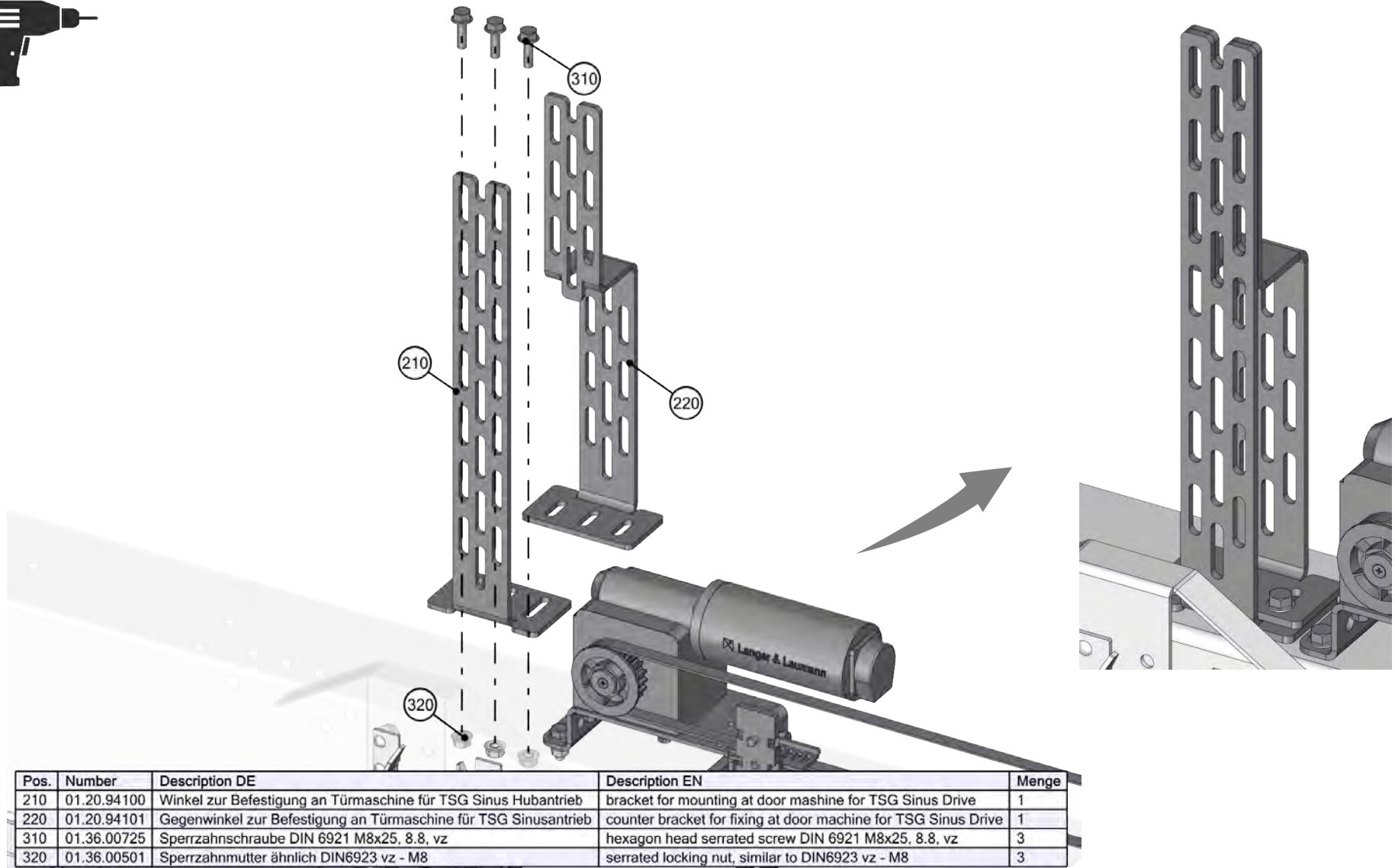


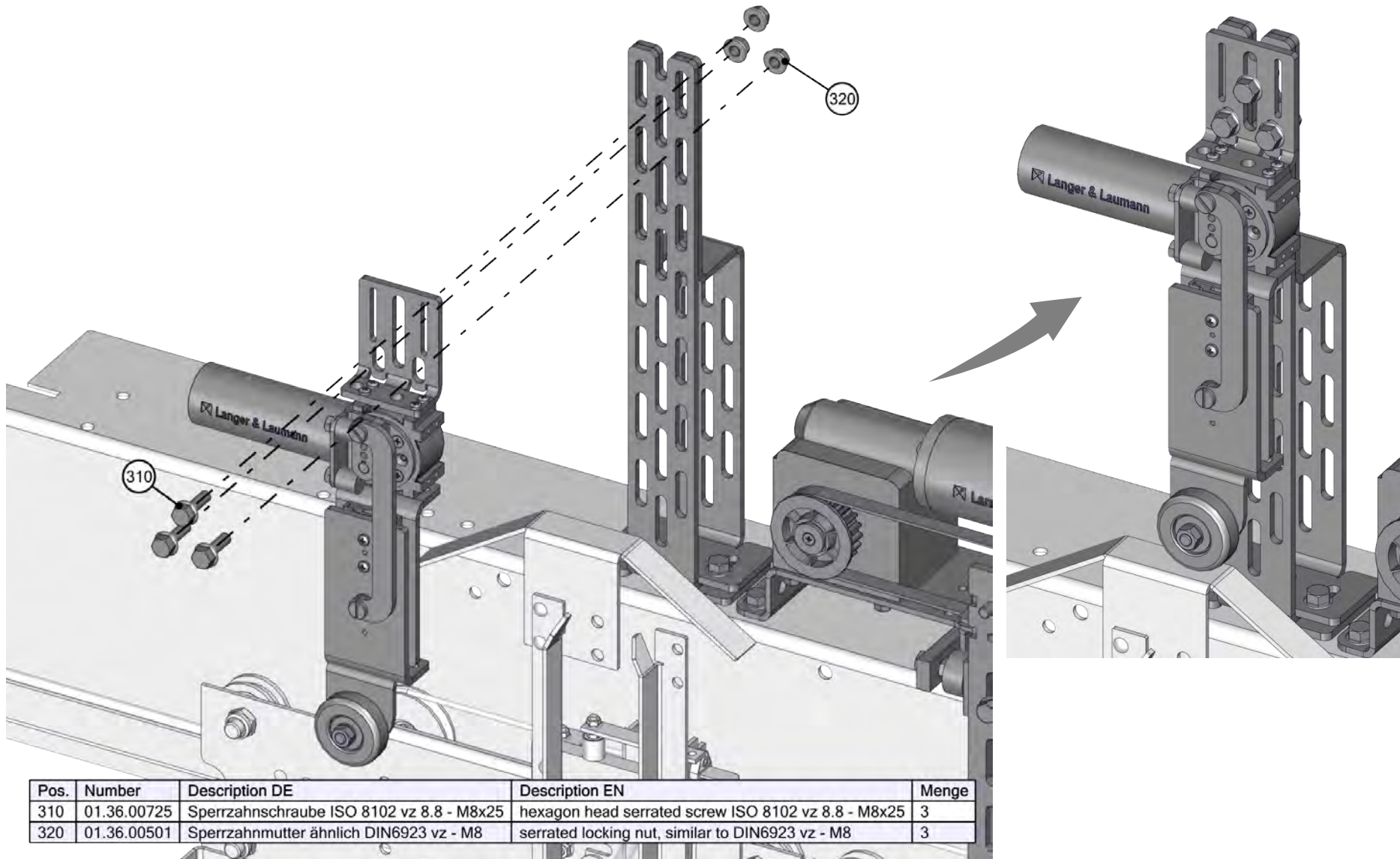
Montage Sinusantrieb – assembly of the Sinus Drive

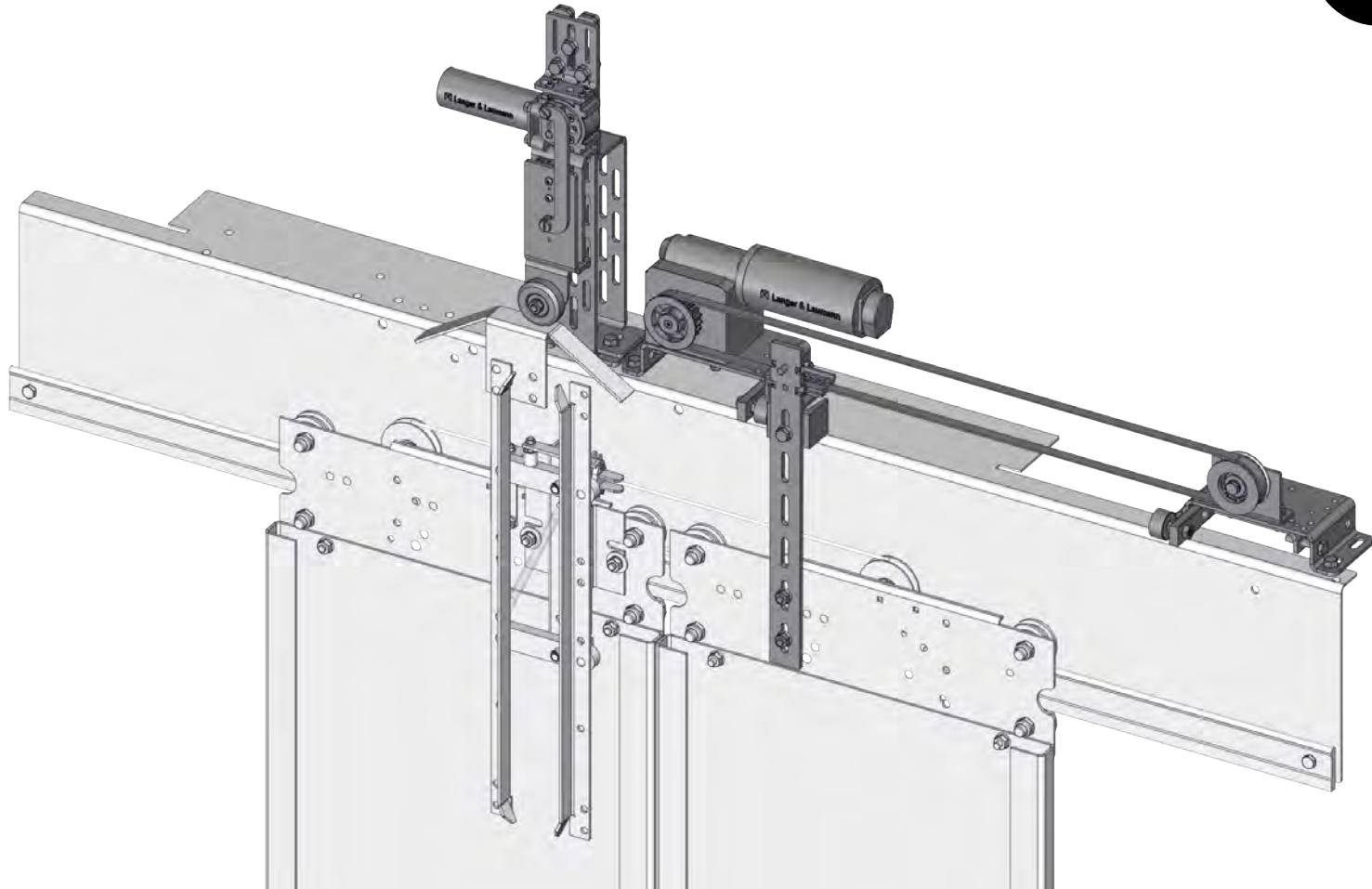


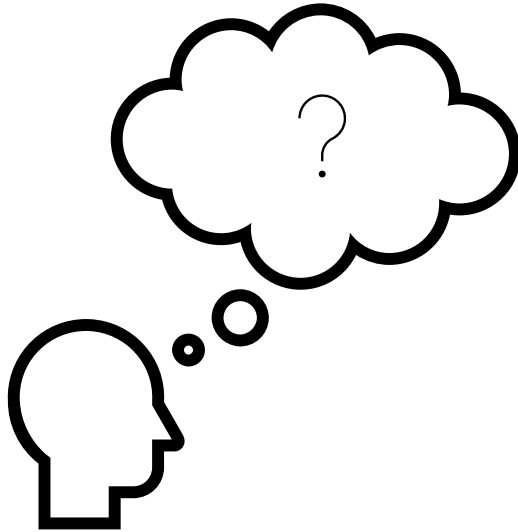


Pos.	Number	Description DE	Description EN	Menge
210	01.20.94080	Rollenhalter für TSG Sinusantrieb	wheel holder for TSG Sinus Drive	1
310	01.36.00135	Sperrzahnschraube DIN 6921 M6x12 verz.	hexagon head serrated screw WN0274 A2C 8.8 - M6x12	2
320	01.36.00730	Sperrzahnschraube WN0274 A2C 8.8 - M8x30	hexagon head serrated screw WN0274 A2C 8.8 - M8x30	1
330	01.36.00430	Sechskantmutter ISO 4032 - M8 - 8,vz	hexagon nut DIN934-8 vz 8.8 - M8	1
340	01.36.00450	Kotflügelscheibe DIN522 vz - 8,4x20x1,25	wing repair washer DIN522 vz - 8,4x20x1,25	1
350	01.36.00470	Scheibe ISO 7090-10-140HV (DIN125),vz	washer DIN125A vz - 10,5	3
360	01.36.00169	Federring DIN127 vz - M8	lock washer DIN127 vz - M8	1
410	08.20.83111	TSG Sinusantrieb links für Riegelbetätigung (ohne TSG Elektronik)	TSG Sinus Drive left for interlock operation (without TSG electronic)	1
420	01.20.41010	Rolle mit Kugellager	wheel with ball bearing	1









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