

Montageanleitung **Assembly Instruction**

MacPuarsa Zahnriemen **MacPuarsa tooth belt**

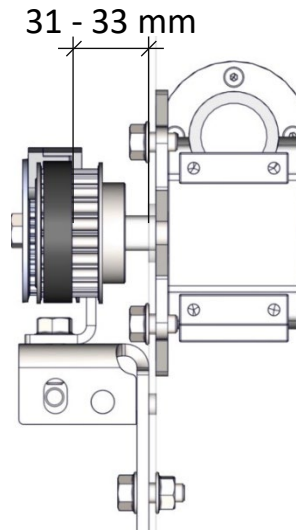
TSG in MacPuarsa – TSG in MacPuarsa

**Variante 1 –
variant 1**



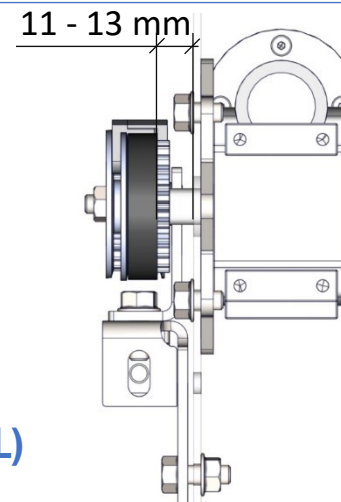
**Zahnriemenrad 1.20.60112 mit Kombiwinkel 1.20.30627 (TL) -
timing belt pulley 1.20.60112 with universal bracket 1.20.30627 (TL)**

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**Zahnriemenrad 1.20.60160 mit Kombiwinkel 1.20.60070 (TL) -
timing belt pulley 1.20.60160 with universal bracket 1.20.60070 (TL)**

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**Variante 2 –
variant 2**

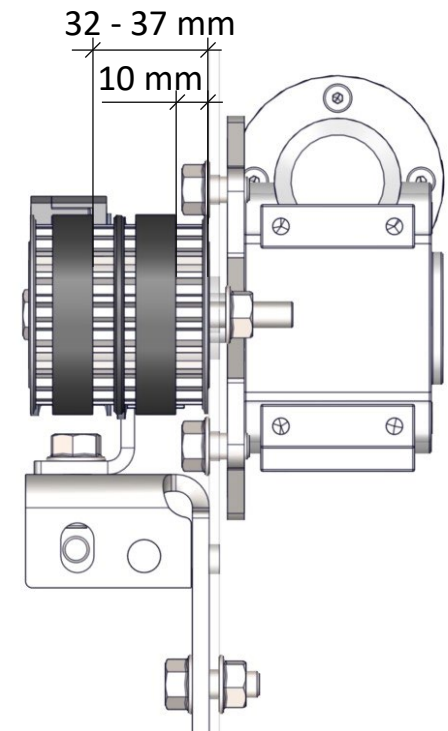
TSG in MacPuarsa – TSG in MacPuarsa

**Variante 3 –
variant 3**



**Zahnriemenrad 1.20.60112 mit Kombiwinkel 1.20.30627 (TL) -
timing belt pulley 1.20.60112 with universal bracket 1.20.30627 (TL)**

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Lieferumfang – scope of delivery



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
	8.20.40003.K1	Motor Gross Links & Getriebe, ohne Zahnrad, 24V/5,1A/1:15	Motor Large Left & Gearbox, without wheel, 24V/5,1A/1:15	1
	1.20.60013 + 1.20.60015	TSG Halter für Umlenkrad (mit Senkungen)	TSG bracket for counter roller (with countersink)	1
	1.20.60350	Motoradapterplatte sternförmig	motor adapter plate star-shaped	1
	1.20.60112	Zahnriemenrad, HTD8M, d=14H7, D=56[mm], B=24[mm], mit Nut, mit 2 Bordscheiben	timing belt pulley, HTD8M, d=14H7, D=56[mm], B=24[mm], with	1
	1.20.30627	TSG Kombiwinkel Gegenseite, schmale Bauform (Tiefe=55mm)	TSG universal bracket, counter side (small version)	1
	1.20.60070	TSG Kombiwinkel Gegenseite, schmale Bauform (Tiefe=35mm)	TSG universal bracket counter side, slim design (35mm)	1
	1.20.30800	Futterblech, b=4[mm], mit 3 Langlöcher	shim stock, b=4[mm], with 3 slotted holes	3

picture	Number	description DE	description EN	quantity
	1.20.60003	TSG Umlenkrad	TSG counter roller	1
	1.20.41020	Gleitlager für Rad mit Kugellager, d1:8mm / d2: 10mm / Breite: 10mm	slide bearing with wheel	1
	1.20.60006	TSG Zahnriemenschloß, Kunststoff	TSG toothed belt lock, plastic	1
	1.20.92294	Achse für Doppelzahnriemenscheibe	axle for double timing belt pulley	1
	1.20.92300	Doppelzahnriemenscheibe D=56mm, Breite: 48mm, S8M	double timing belt pulley D=56mm, high: 48mm, S8M	1
	1.20.61120	Zahnriemen für Sonderantrieb Endlos	Belt for special drive endless 640, 656,	1
	1.20.61130	640, 656, 712[mm], Breite 12[mm], S8M	712 [mm], width 12[mm], S8M	1
	1.20.61140			1
	1.36.00387	Senkkopfschraube mit Innensechskant DIN7991 vz 8.8 - M8x40	countersunk head screw w.recessed head DIN7991 vz8.8 - M8x40	1
	1.36.01035	Schreibe großer Durchmesser DIN9021 vz - 8,4	washer with large outside diameter DIN9021 vz - 8,4	5
	1.36.02121	Sechskantschraube Vollgewinde DIN933 vz 8.8 - M8x60	Hexagonal bolt, thread up to head DIN933 vz 8.8 - M8x60	1

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	1
	1.36.00501	Sperrzahnmutter, ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	1
	1.36.01030	Scheibe großer Durchmesser DIN9021 vz - 10,5	washer with large outside diameter DIN9021 vz - 10,5	2
	1.36.01035	Scheibe großer Durchmesser DIN9021 vz - 8,4	washer with large outside diameter DIN9021 vz - 8,4	6
	1.36.01036	Scheibe großer Durchmesser DIN9021 vz - 6,4	washer with large outside diameter DIN9021 vz - 6,4	1
	8.20.13380	Schraubentüte für Motoradapterplatte sternförmig	screw bag for adapter plate star-shaped	1
	8.20.13340	Schraubentüte	screw bag	1
	8.20.60002.40	TSG Zahnriemen [4,0m]	TSG toothed belt [4,0m]	1

Vor Umbau – before conversion



TL

**TR spiegelbildlich –
dr mirrored**

Nach Demontage – after disassembly



TL

TSG in MacPuarsa Variante 1 – **TSG in MacPuarsa variant 1**

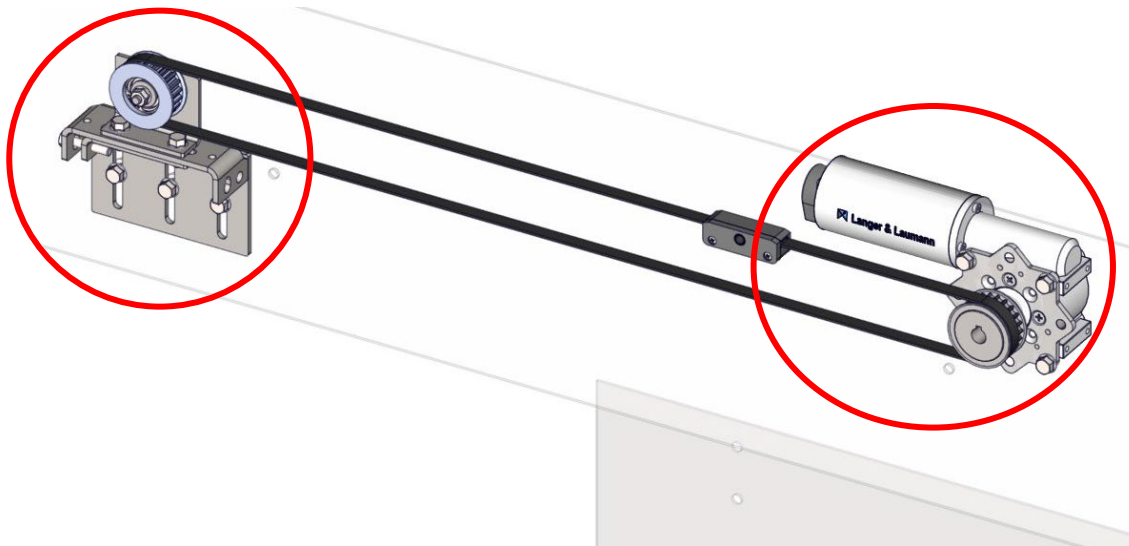


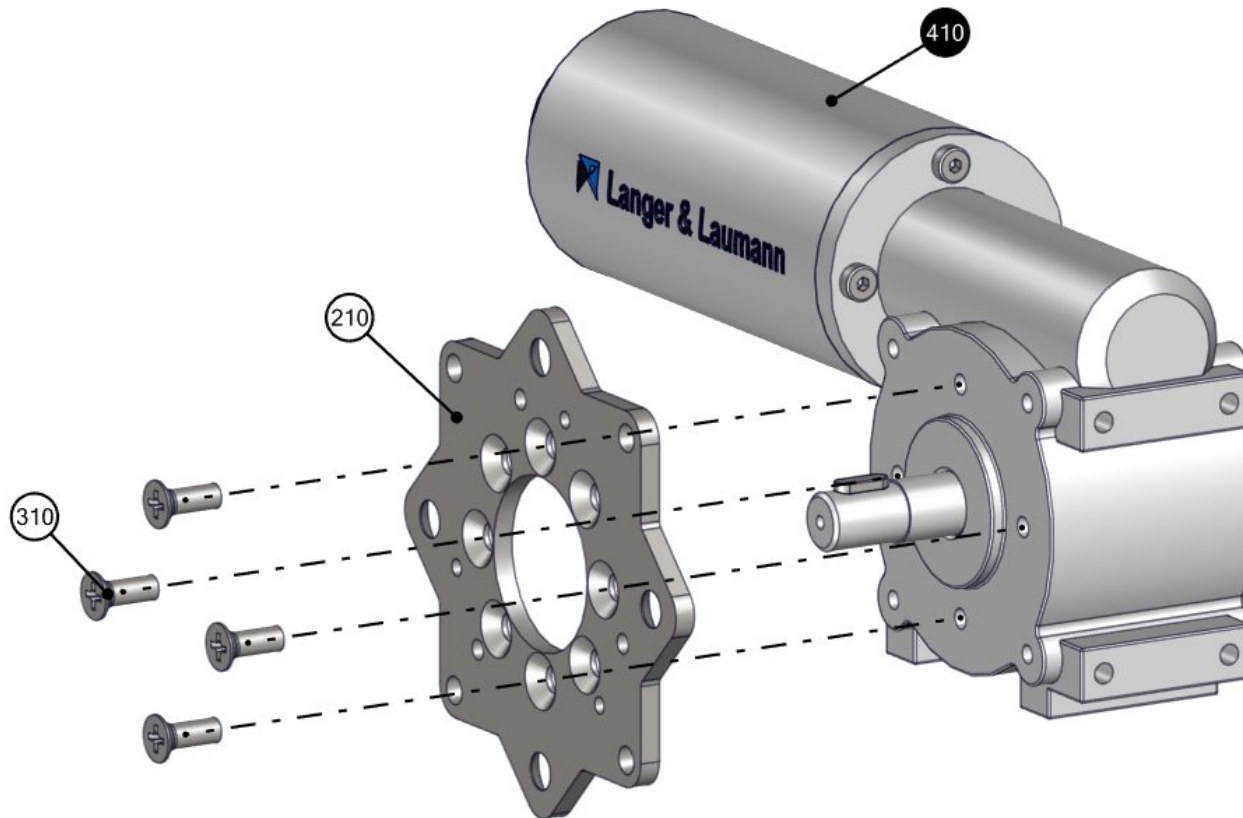
Zahnriemenrad 1.20.60112 mit Kombiwinkel 1.20.30627 (TL) -
timing belt pulley 1.20.60112 with universal bracket 1.20.30627 (TL)

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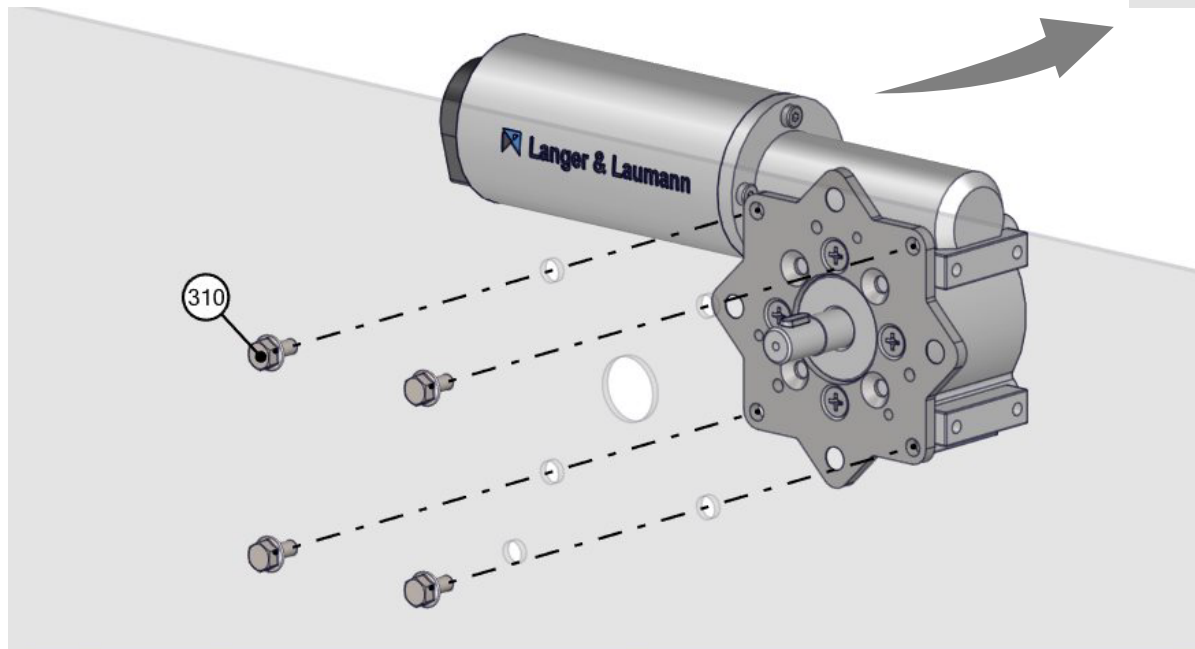
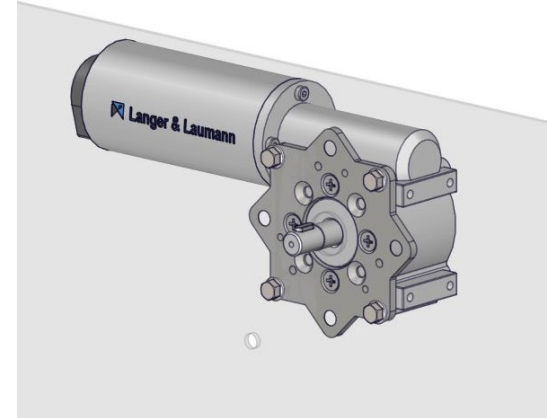
Montage TSG und Umlenkrollen – assembly of the TSG and pulleys

TL

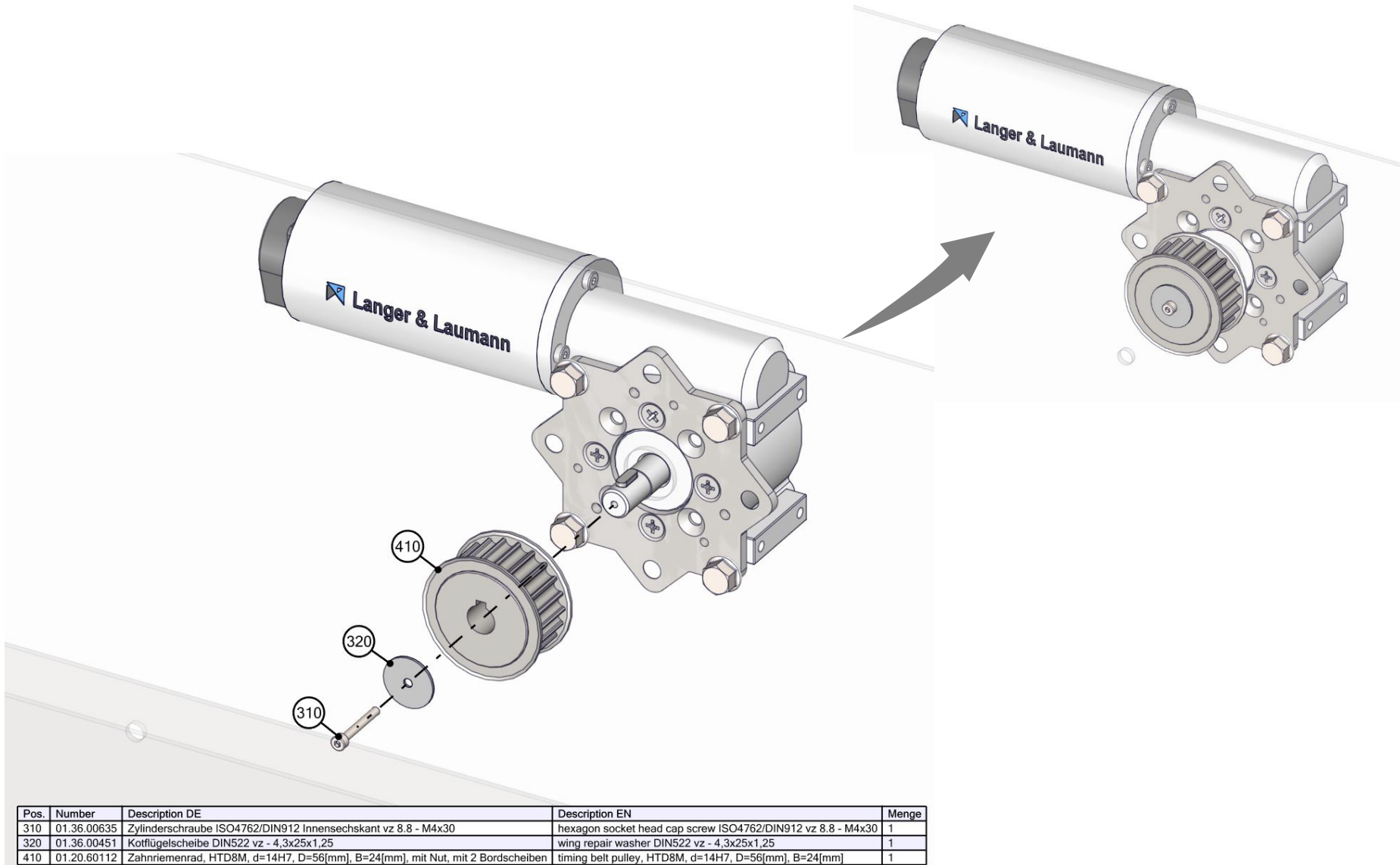




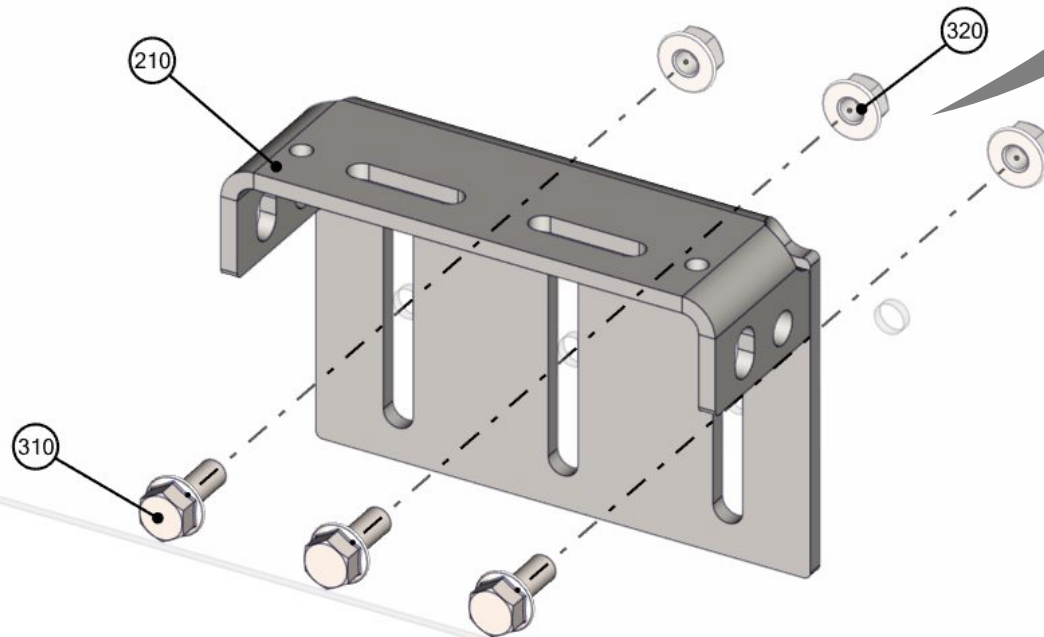
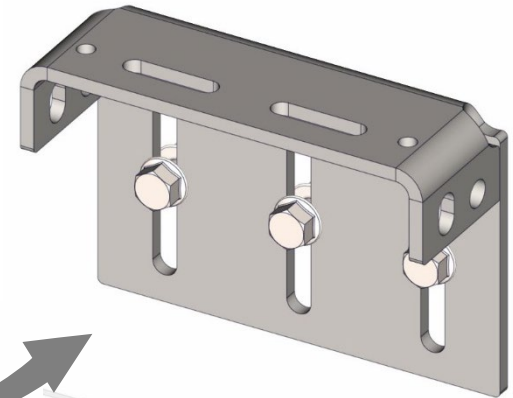
Pos.	Number	Description DE	Description EN	Menge
210	01.20.60350	Motoradapterplatte sternförmig	motor adapter plate star-shaped	1
310	01.36.00360	Senkschraube DIN 965, M6x16 - 4,8 , vz	countersunk head screw w.recessed head DIN7991 vz8.8 - M6x16	4
410	08.20.40003.K1	Motor Gross Links & Getriebe, ohne 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	01.36.00140	Sperrzahnschraube DIN 6921 M8x12, 8.8, vz	Hexagon head serrated screw WN0274 A2C 8.8 - M8x12	4

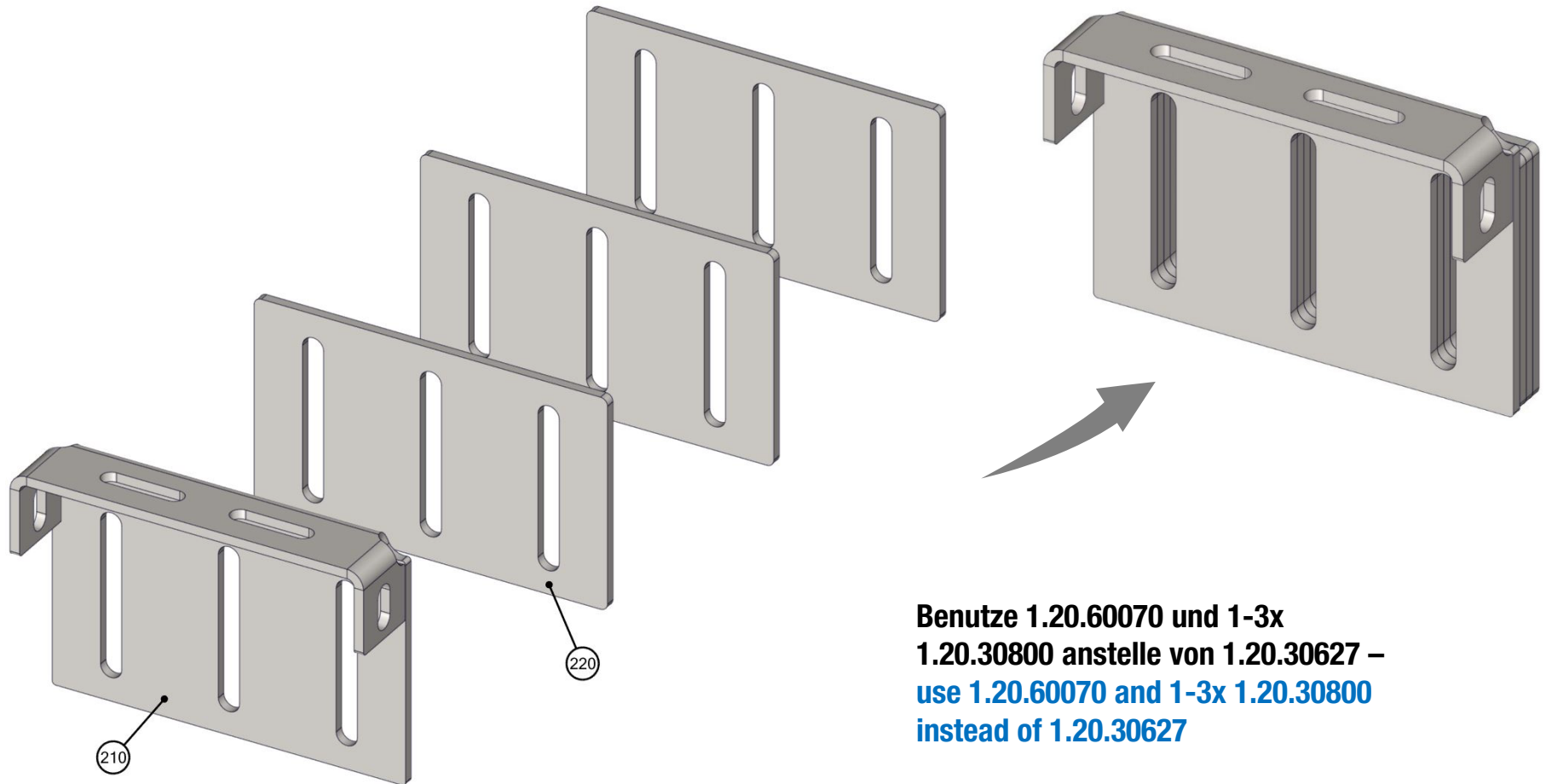


Montage Umlenkrolle – assembly of the TSG and pulleys



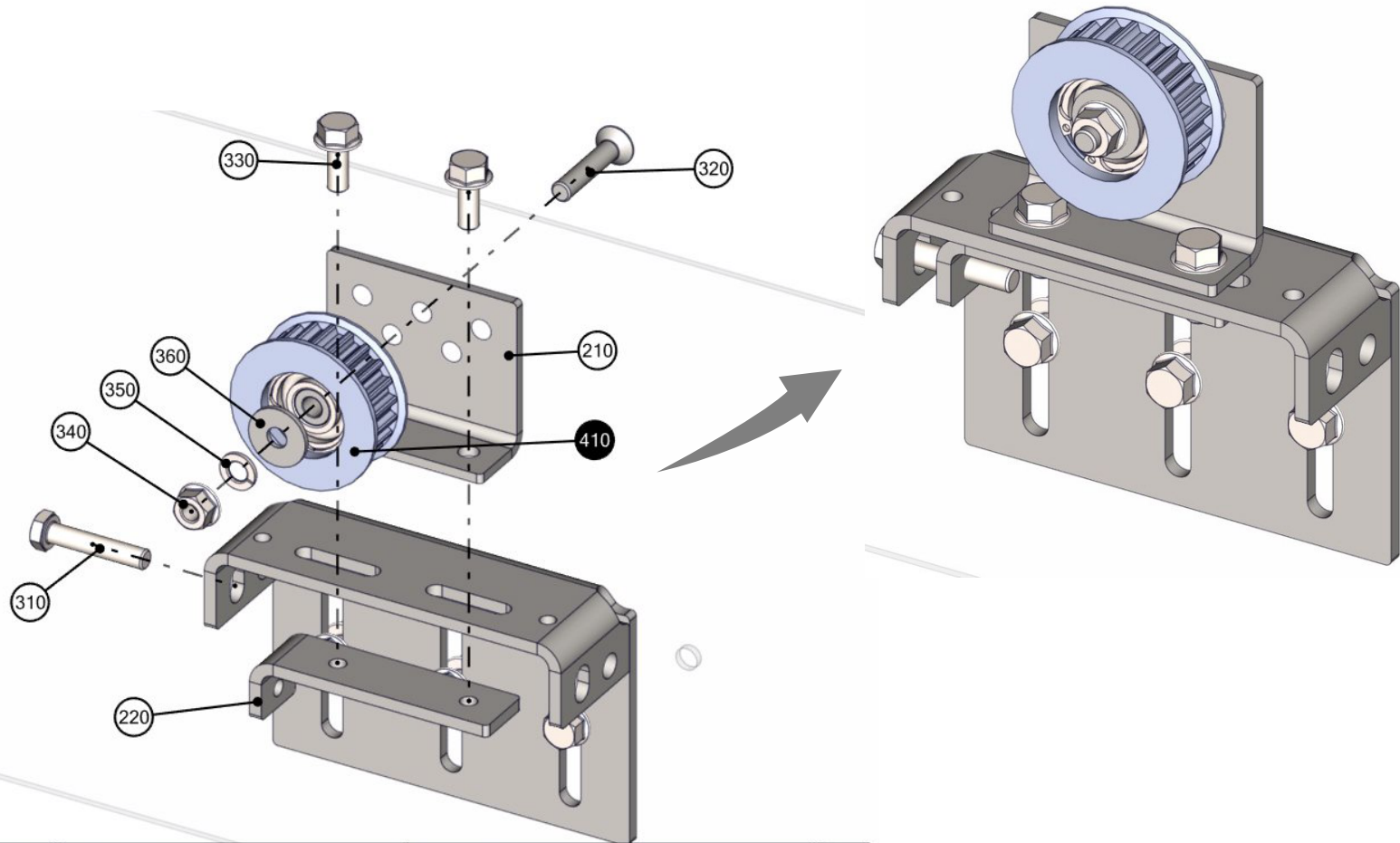
Pos.	Number	Description DE	Description EN	Menge
210	01.20.30627	Kombiwinkel Gegenseite (schmale Form), für Schindler Varidor10	TSG universal bracket, counter side (small version)	1
310	01.36.00720	Sperrzahnschraube WN0274 A2C 8.8 - M8x20	hexagon head serrated screw WN0274 A2C 8.8 - M8x20	3
320	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	3

Alternative Montage, für den Fall, dass der Zahnriemen schleift – alternative assembly, in case the toothed belt grinds



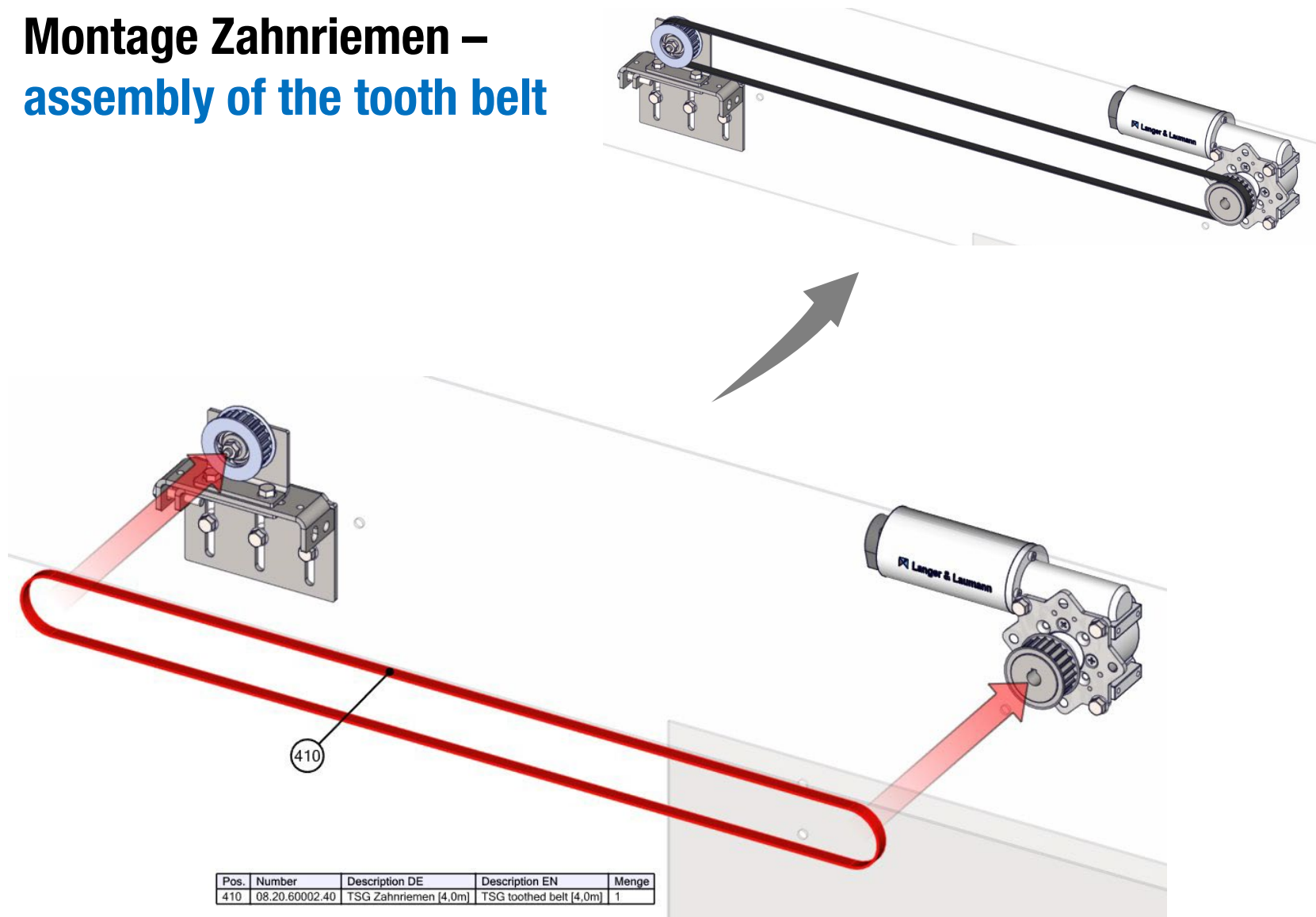
**Benutze 1.20.60070 und 1-3x
1.20.30800 anstelle von 1.20.30627 –
use 1.20.60070 and 1-3x 1.20.30800
instead of 1.20.30627**

Pos.	Number	Description DE	Description EN	Menge
210	01.20.60070	Winkel für Spannstation schmale Ausführung	TSG universal bracket counter side, slim design (35mm)	1
220	01.20.30800	Futterblech, b=4[mm], mit 3 Langlöcher	shim stock, b=4[mm], with 3 slotted holes	3

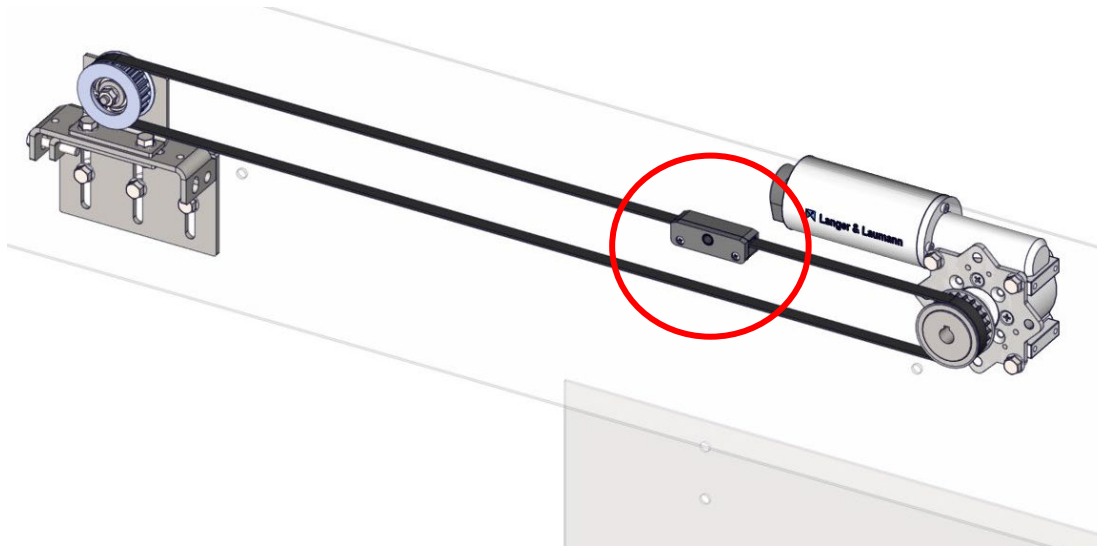


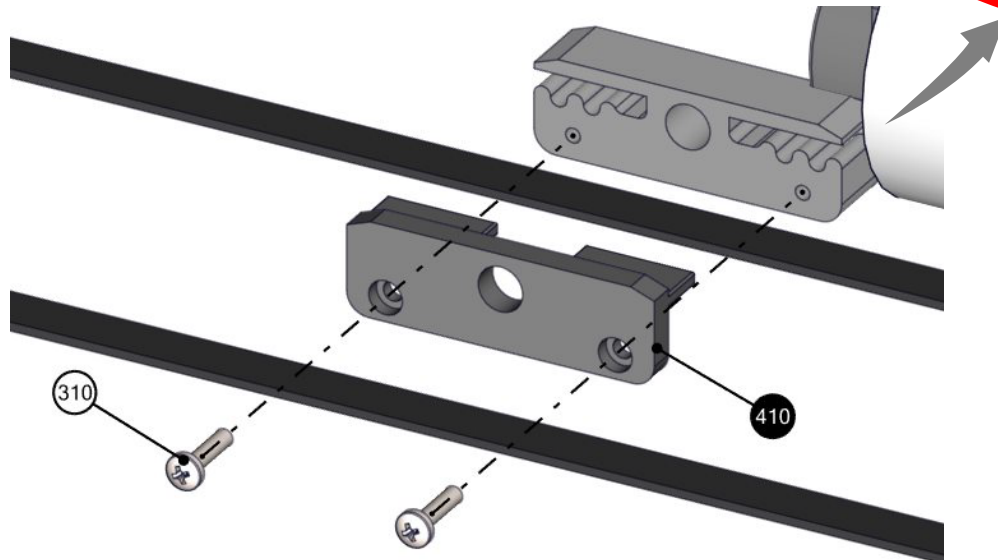
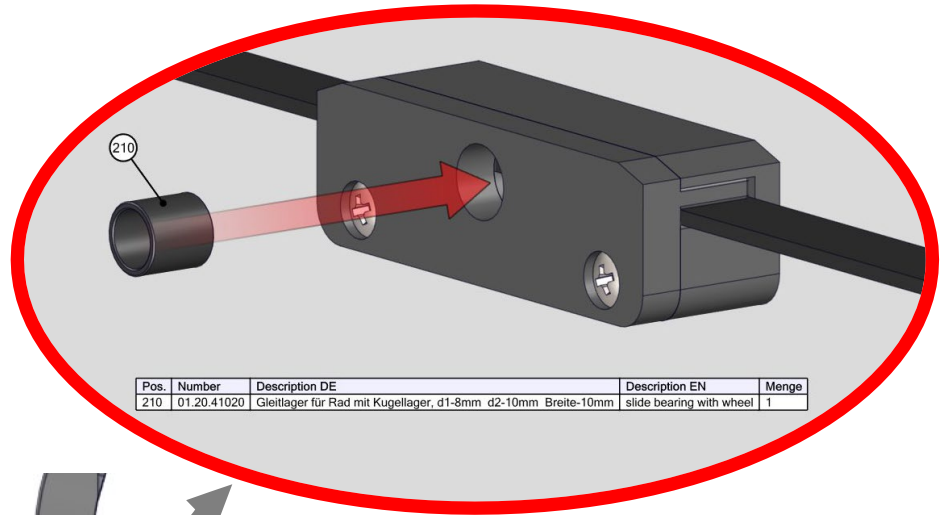
Pos.	Number	Description DE	Description EN	Menge
210	01.20.60015	TSG Halter für Umlenkrad (mit Senkungen)	TSG bracket for counter roller (with countersink)	1
220	01.20.60110	Spannlasche für Spannstation	clamping tab for clamping station, normal execution	1
310	01.36.00115	Sechskantschraube Vollgewinde DIN933 vz 8.8 - M8x40	hexagonal bolt, thread up to head DIN933 vz 8.8 - M8x40	1
320	01.36.00387	Senkschraube m.Innensechskant ISO10642-M8x40	countersunk head screw w.recessed head DIN7991 vz8.8 - M8x40	1
330	01.36.00720	Sperrzahnschraube WN0274 A2C 8.8 - M8x20	hexagon head serrated screw WN0274 A2C 8.8 - M8x20	2
340	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	1
350	01.36.00169	Federring DIN127 vz - M8	lock washer DIN127 vz - M8	1
360	01.36.00450	Kotflügelscheibe DIN522 vz - 8,4x20x1,25	wing repair washer DIN522 vz - 8,4x20x1,25	1
410	01.20.60003	Tüte Umlenkrad	TSG counter roller	1

Montage Zahnriemen – assembly of the tooth belt



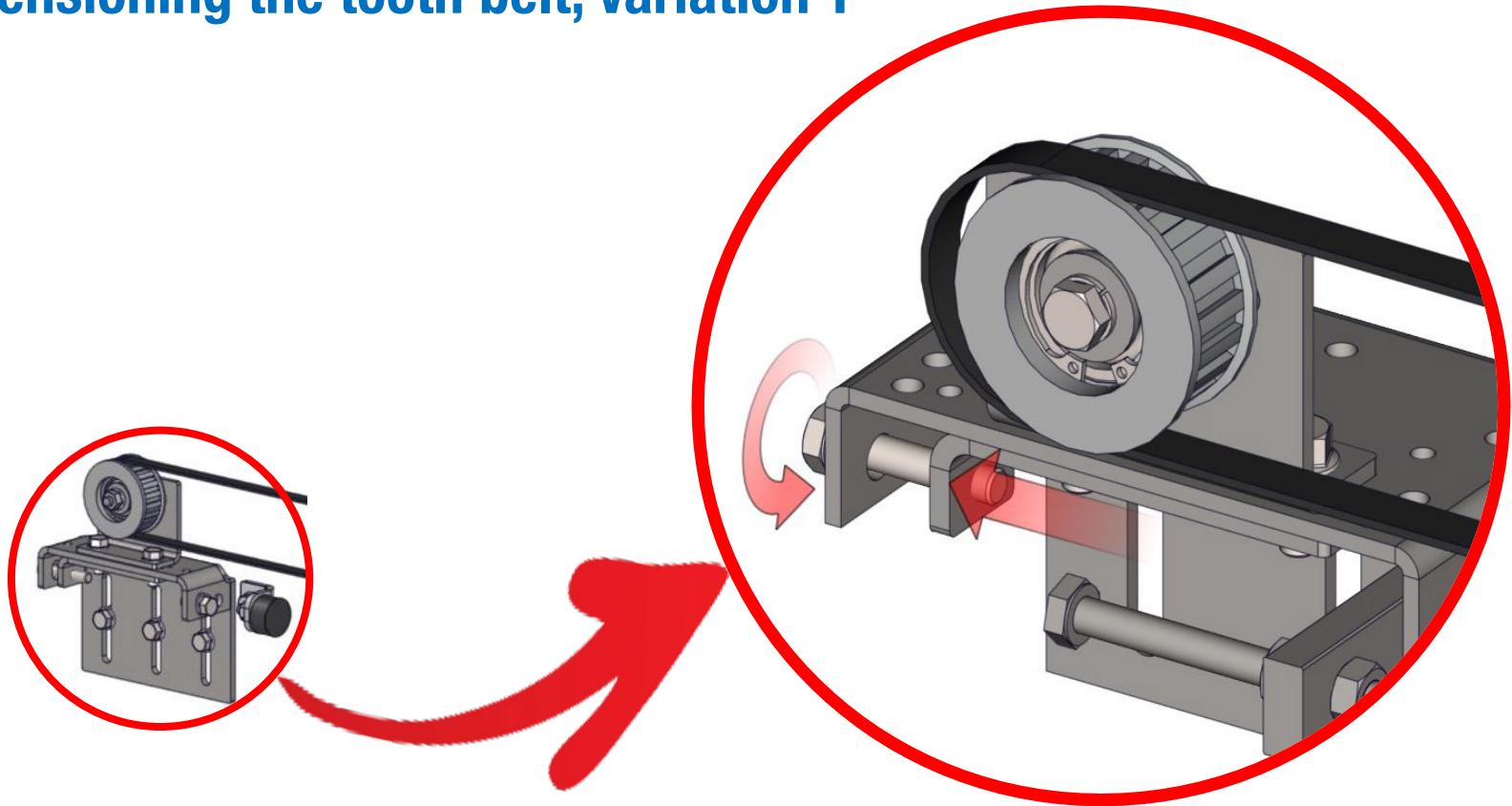
Montage Zahnriemenschloss – assembly of the tooth belt lock



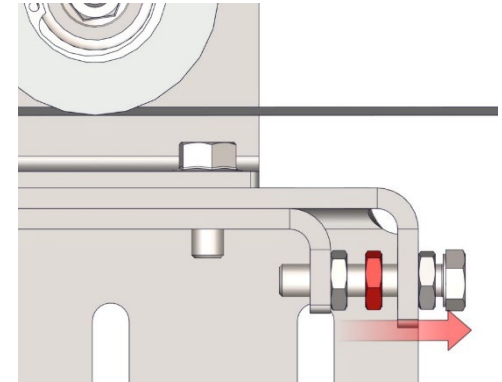
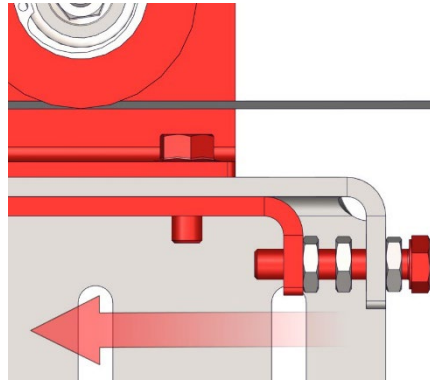
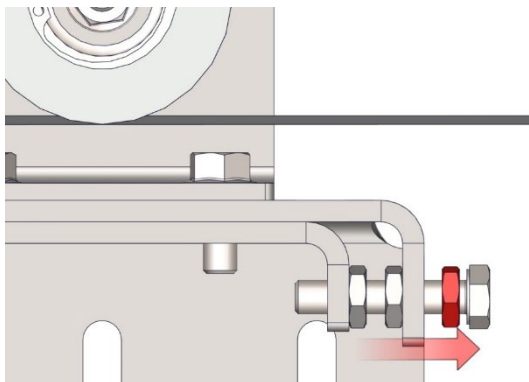
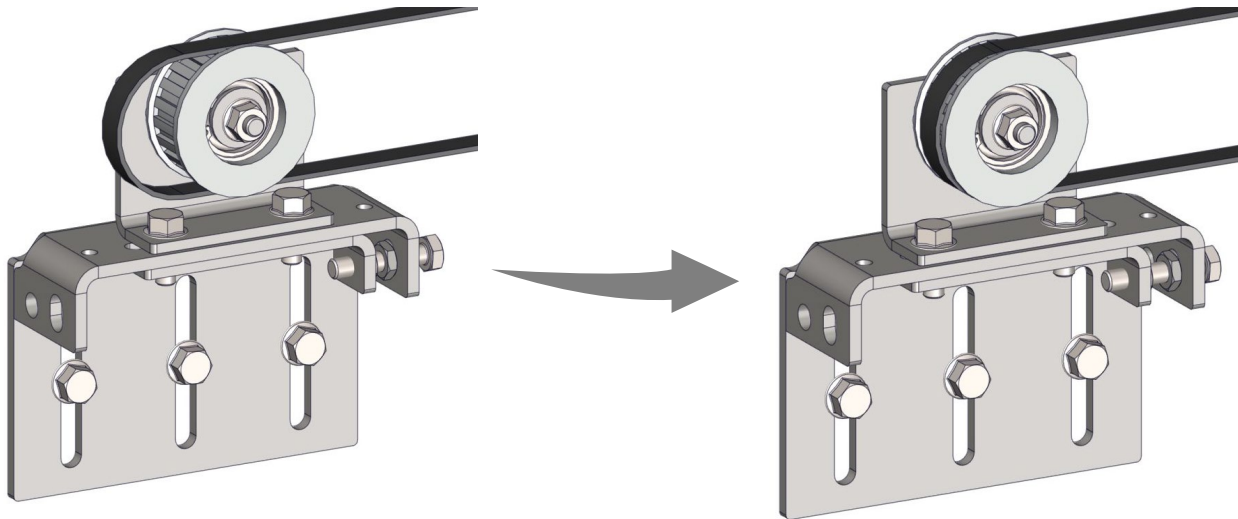


Pos.	Number	Description DE	Description EN	Menge
310	01.36.00007	Flachkopfschraube DIN7985 vz 4.8 - M4x16	pan head screw DIN7985 vz 4.8 - M4x16	2
410	01.20.60006	TSG Zahnriemenschloß, Kunststoff	TSG toothed belt lock, plastic	1

Zahnriemen spannen, Variante 1 - tensioning the tooth belt, variation 1



Variante 2 – variation 2





Montage Zahnriemenschloss an Türblatt – assembly of the tooth belt lock to door panel



TSG in MacPuarsa Variante 2 – **TSG in MacPuarsa variant 2**

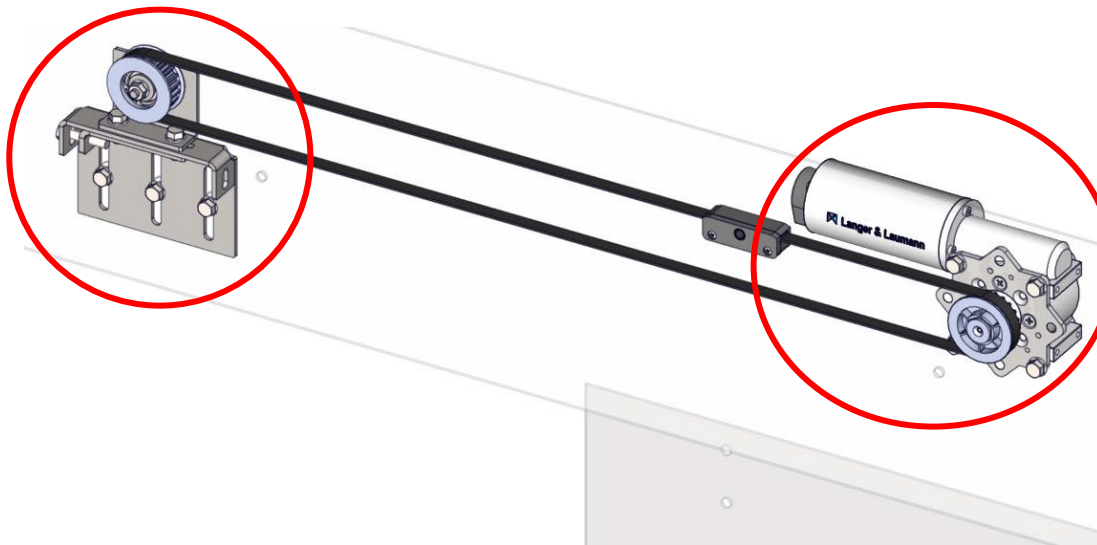


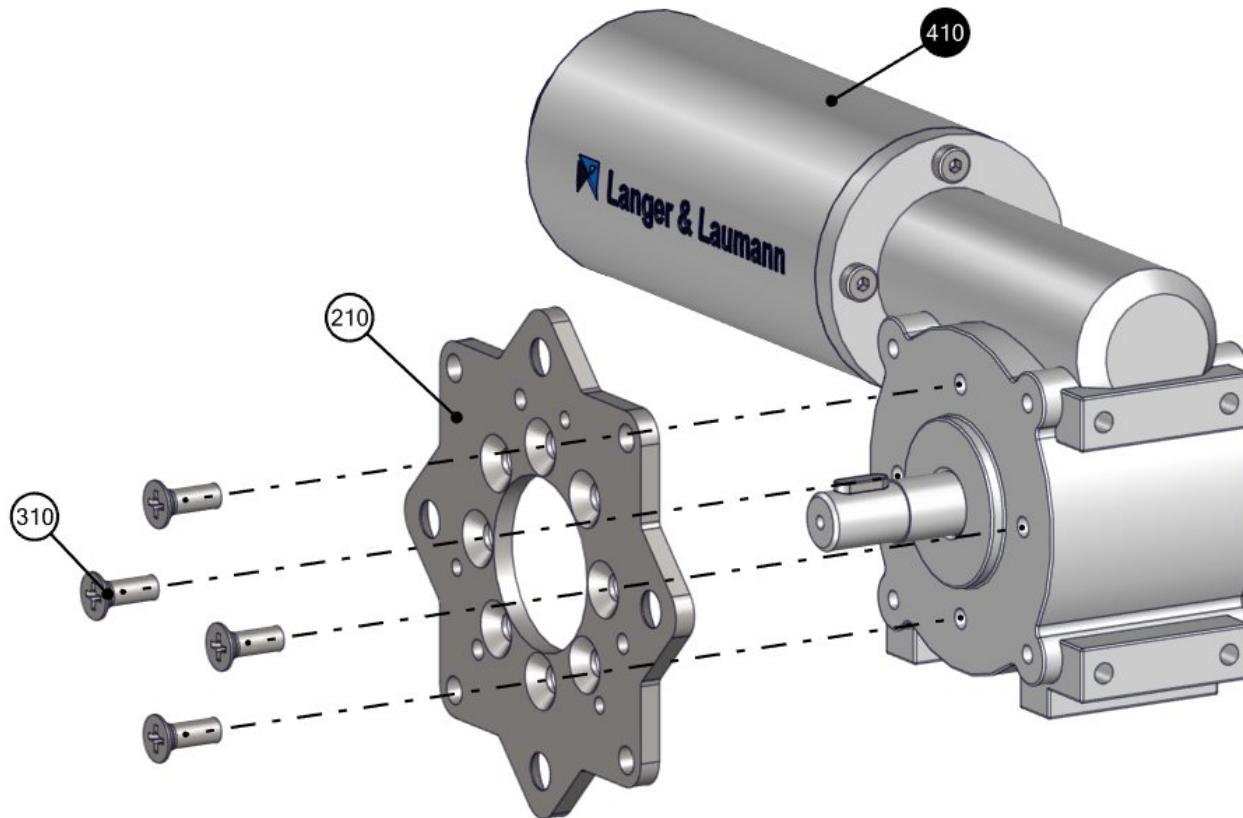
Zahnriemenrad 1.20.60160 mit Kombiwinkel 1.20.60070 (TL) -
timing belt pulley 1.20.60160 with universal bracket 1.20.60070 (TL)

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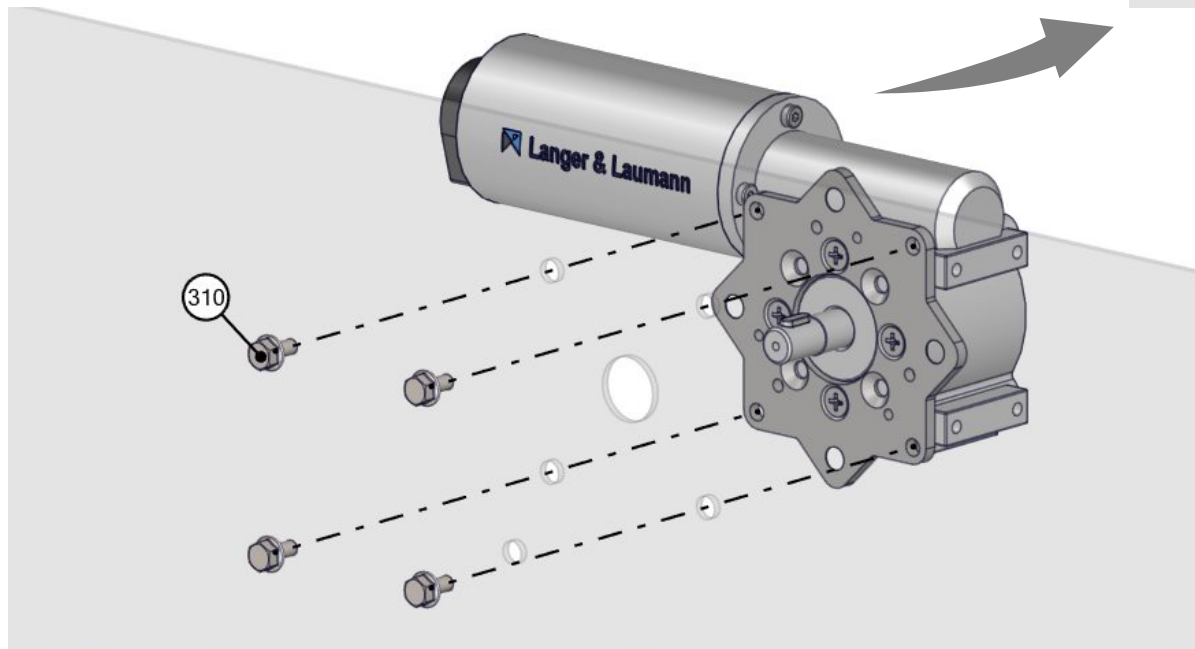
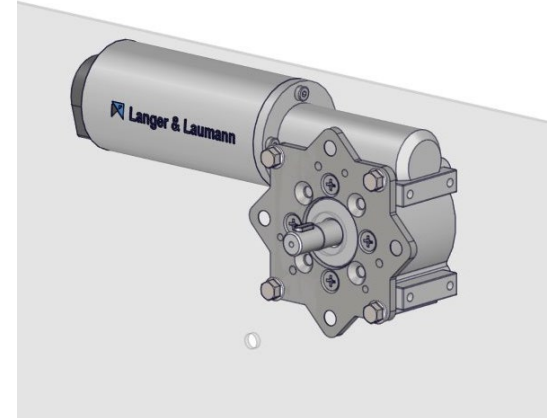
Montage TSG und Umlenkrollen – assembly of the TSG and pulleys

TL

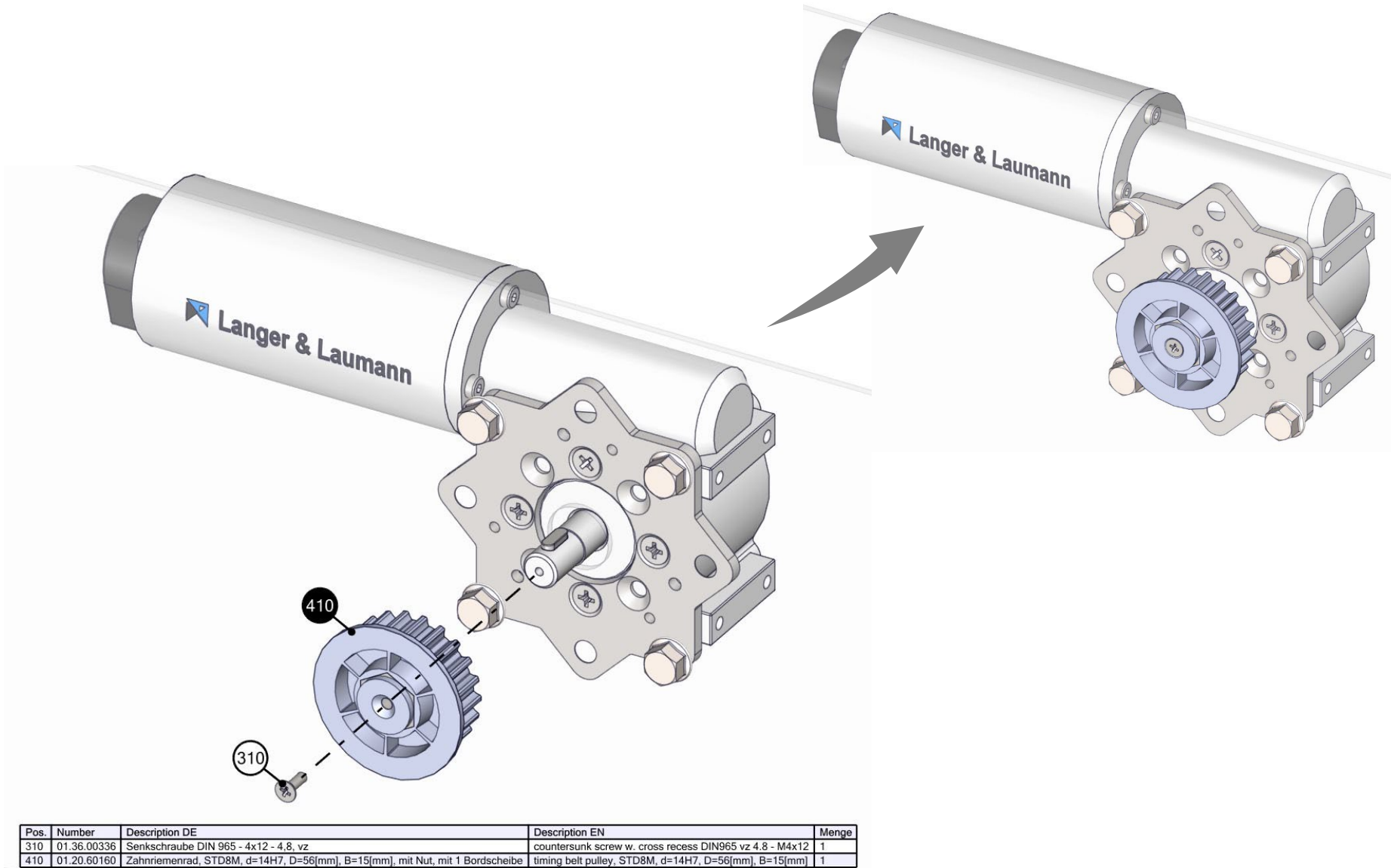




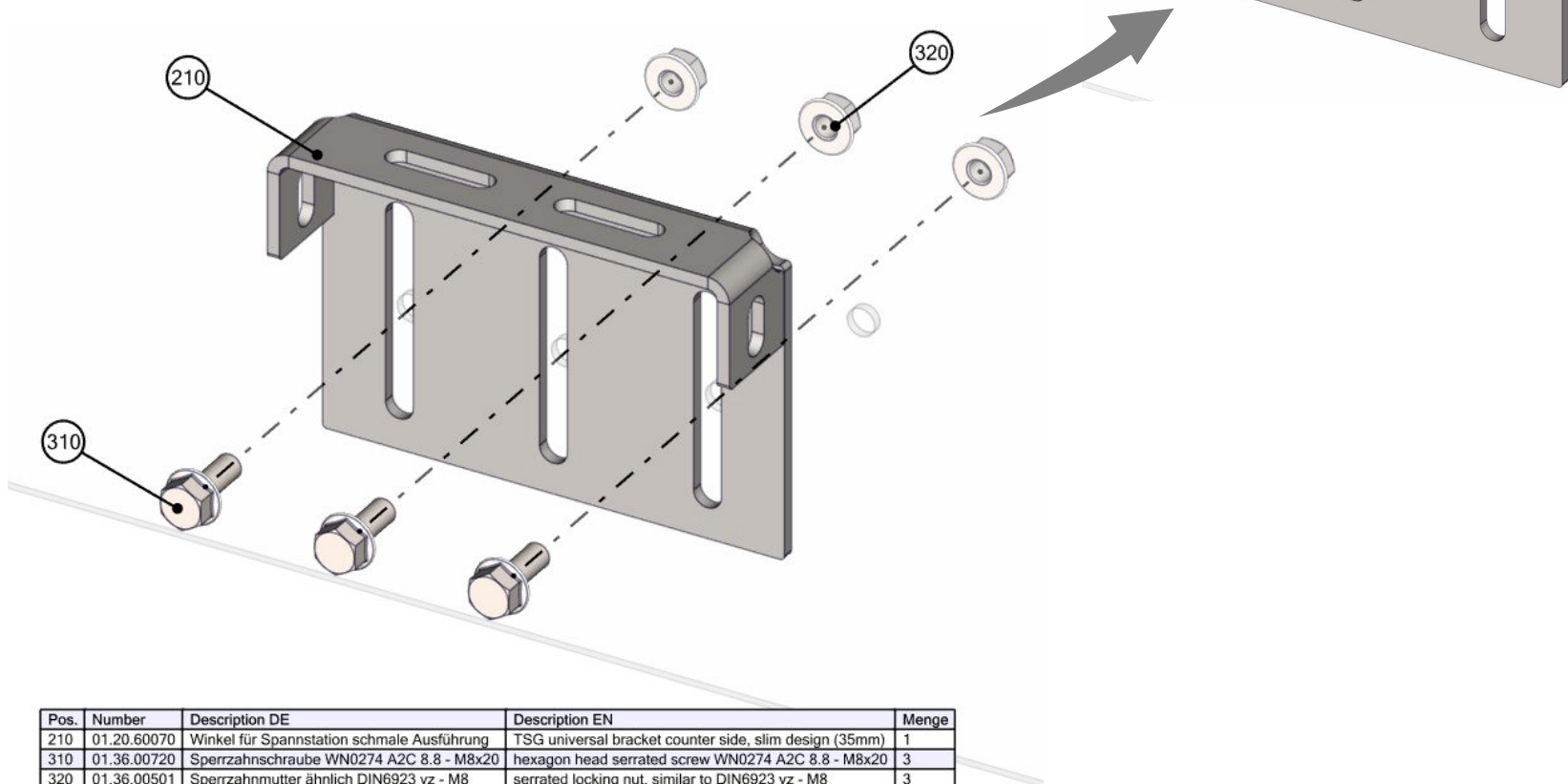
Pos.	Number	Description DE	Description EN	Menge
210	01.20.60350	Motoradapterplatte sternförmig	motor adapter plate star-shaped	1
310	01.36.00360	Senkschraube DIN 965, M6x16 - 4,8 , vz	countersunk head screw w.recessed head DIN7991 vz8.8 - M6x16	4
410	08.20.40003.K1	Motor Gross Links & Getriebe, ohne Zahnrad, 24V/5,1A/1:15	Motor Large Left & Gearbox, without wheel, 24V/5,1A/1:15	1



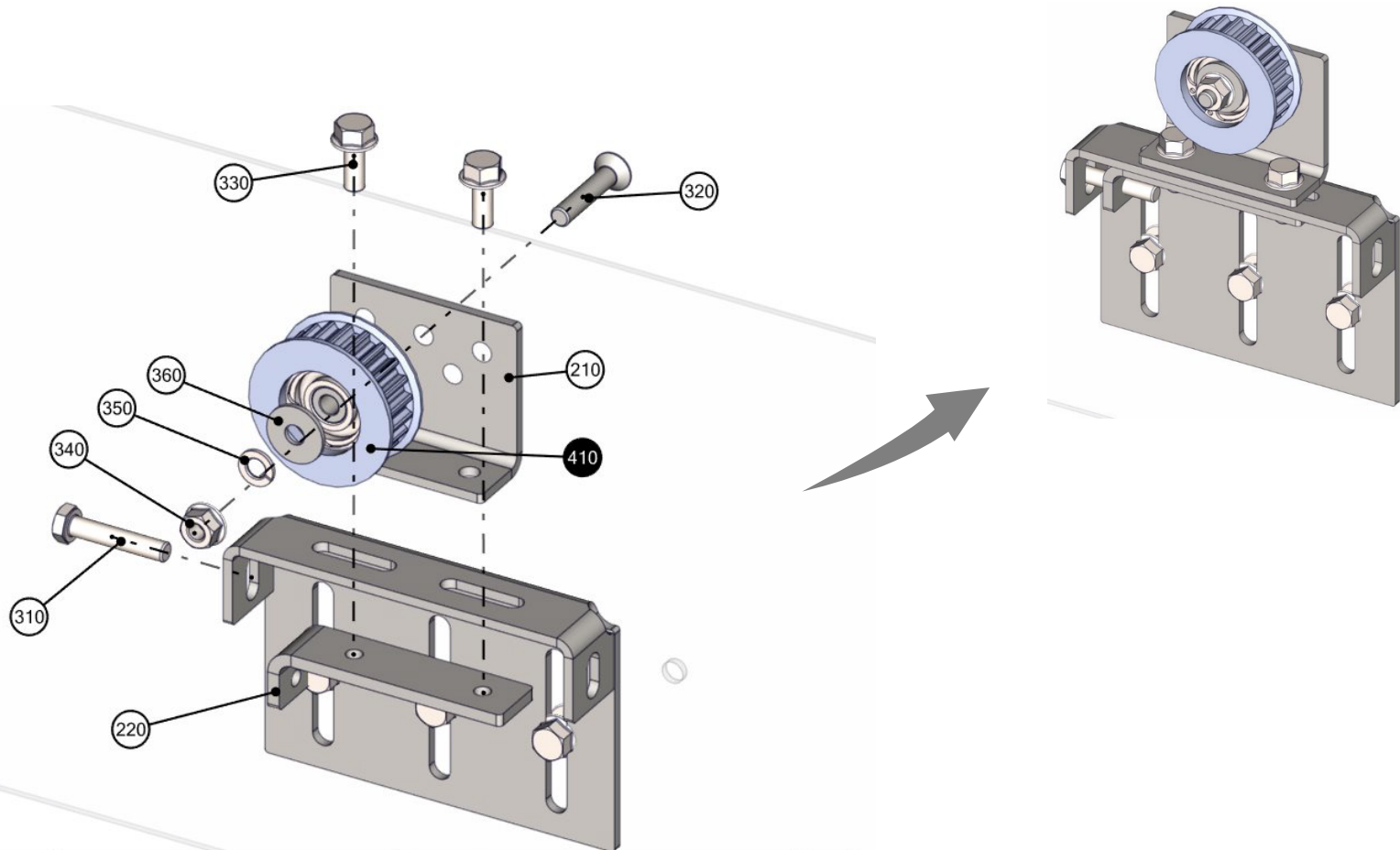
Pos.	Number	Description DE	Description EN	Menge
310	01.36.00140	Sperrzahnschraube DIN 6921 M8x12, 8.8, vz	Hexagon head serrated screw WN0274 A2C 8.8 - M8x12	4



Montage Umlenkrolle – assembly of the TSG and pulleys

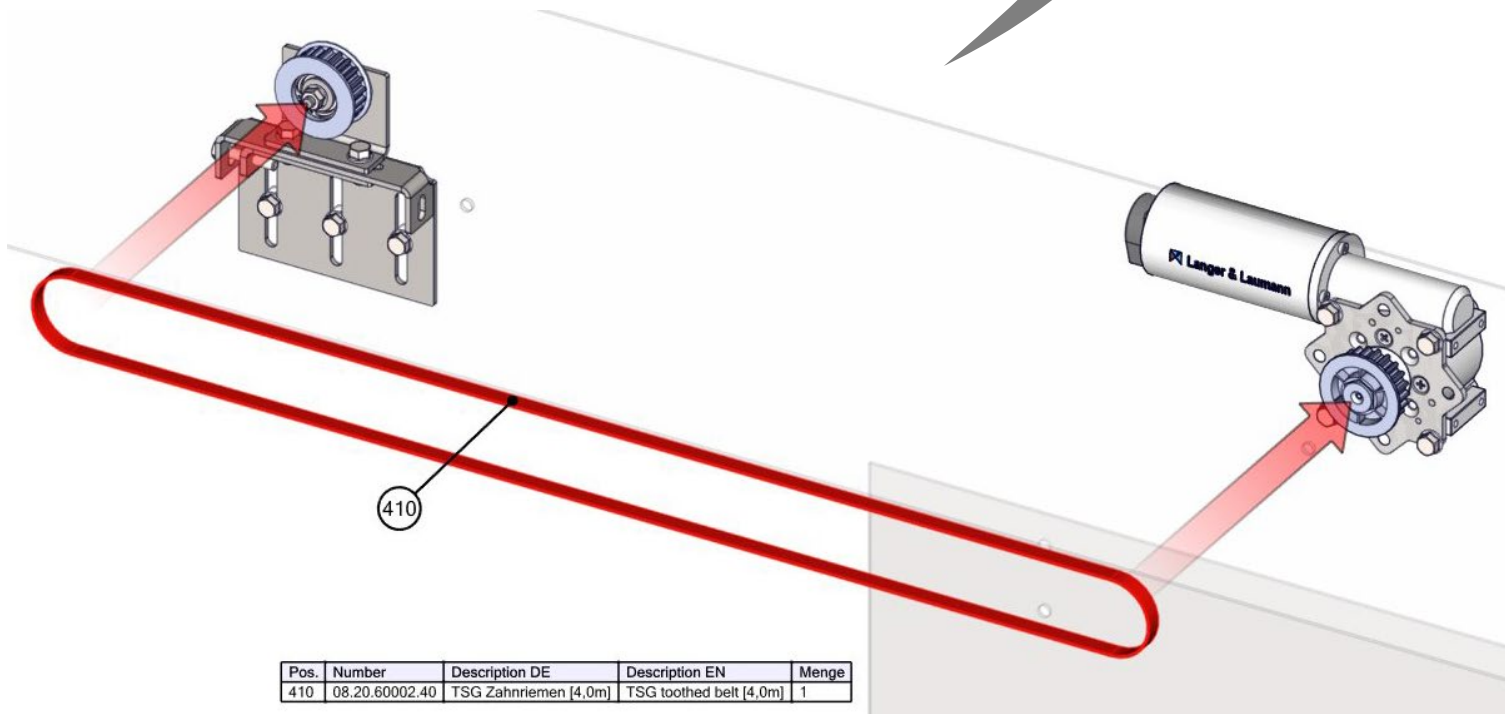


Pos.	Number	Description DE	Description EN	Menge
210	01.20.60070	Winkel für Spannstation schmale Ausführung	TSG universal bracket counter side, slim design (35mm)	1
310	01.36.00720	Sperrzahnschraube WN0274 A2C 8.8 - M8x20	hexagon head serrated screw WN0274 A2C 8.8 - M8x20	3
320	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	3

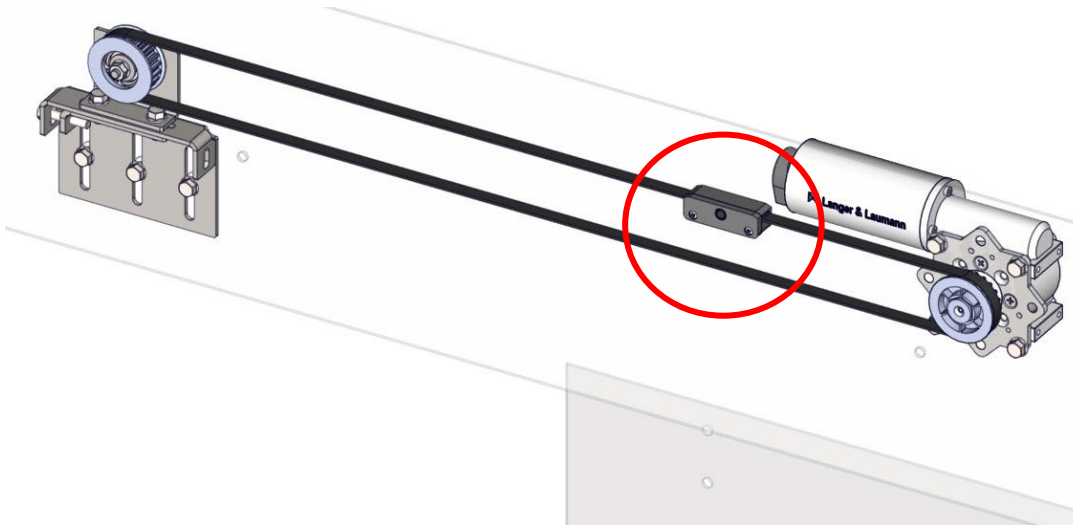


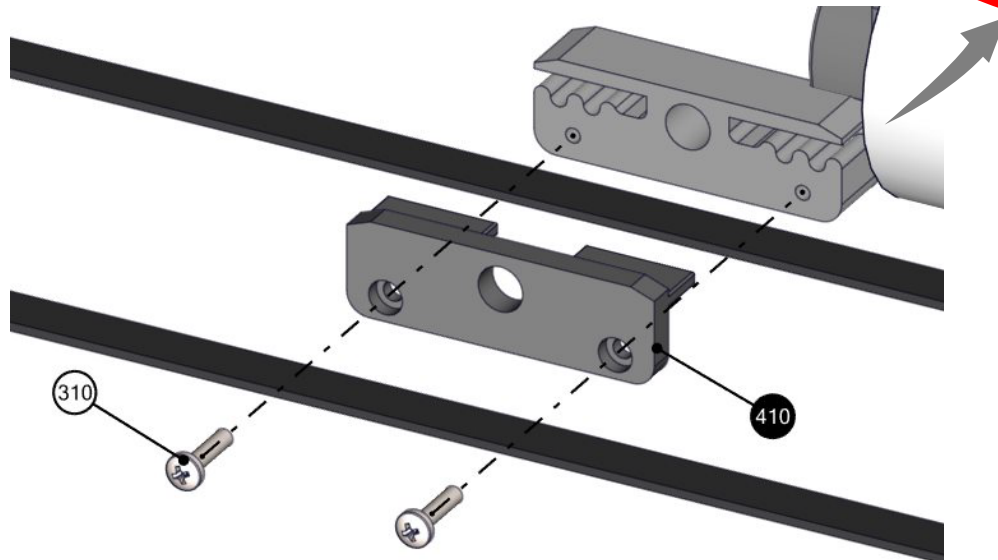
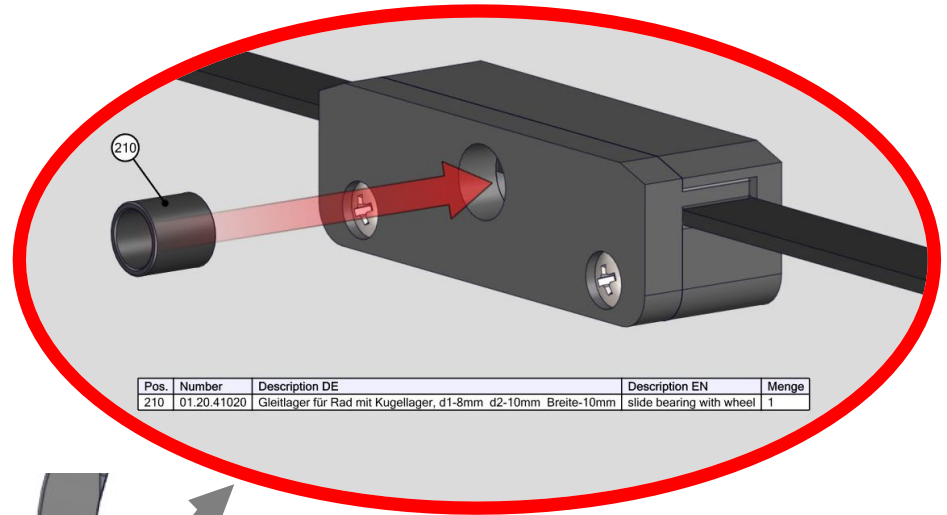
Pos.	Number	Description DE	Description EN	Menge
210	01.20.60015	TSG Halter für Umlenkrad (mit Senkungen)	TSG bracket for counter roller (with countersink)	1
220	01.20.60110	Spannlasche für Spannstation	clamping tab for clamping station, normal execution	1
310	01.36.00115	Sechskantschraube Vollgewinde DIN933 vz 8.8 - M8x40	hexagonal bolt, thread up to head DIN933 vz 8.8 - M8x40	1
320	01.36.00387	Senkschraube m. Innensechskant ISO10642-M8x40	countersunk head screw w. recessed head DIN7991 vz8.8 - M8x40	1
330	01.36.00720	Sperrzahnschraube WN0274 A2C 8.8 - M8x20	hexagon head serrated screw WN0274 A2C 8.8 - M8x20	2
340	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	1
350	01.36.00169	Federring DIN127 vz - M8	lock washer DIN127 vz - M8	1
360	01.36.00450	Kotflügelscheibe DIN522 vz - 8,4x20x1,25	wing repair washer DIN522 vz - 8,4x20x1,25	1
410	01.20.60003	Tüte Umlenkrad	TSG counter roller	1

Montage Zahnriemen – assembly of the tooth belt



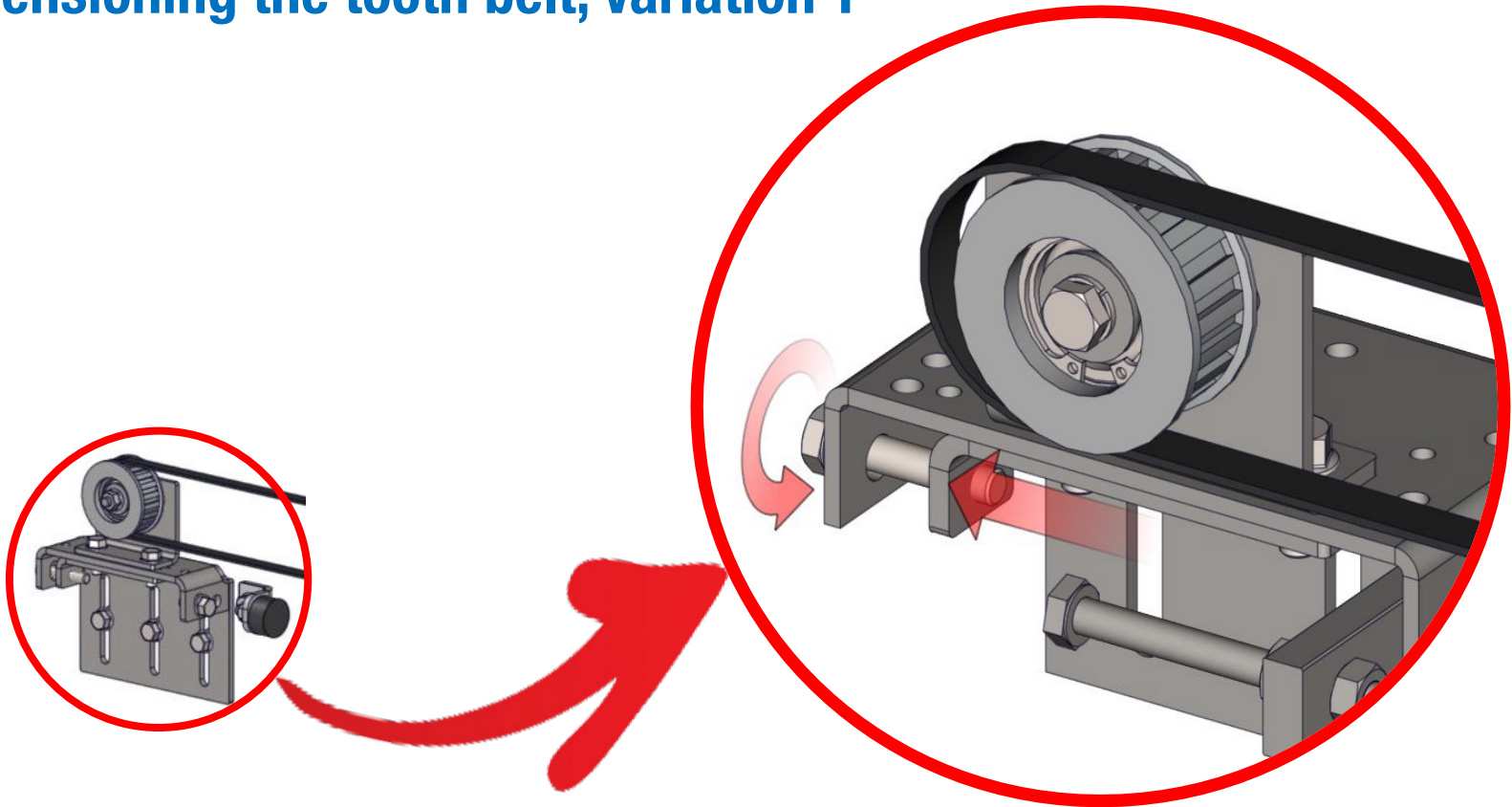
Montage Zahnriemenschloss – assembly of the tooth belt lock



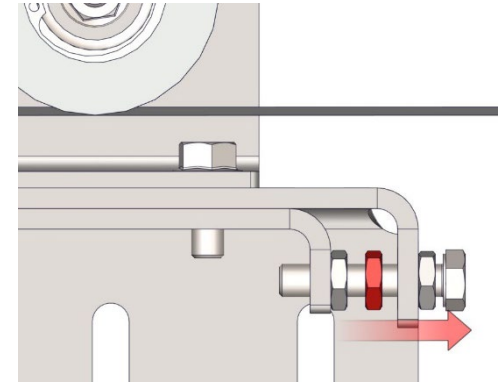
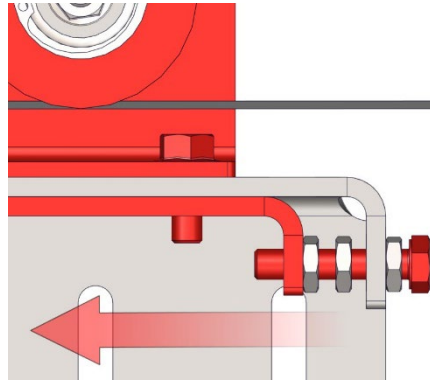
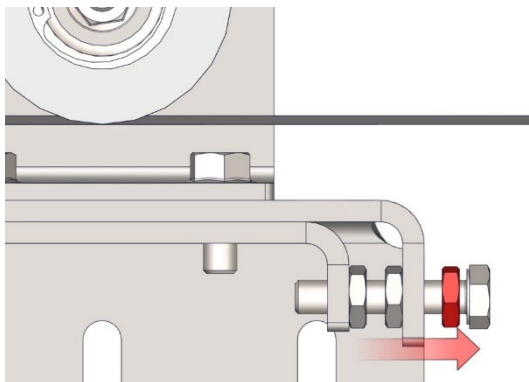
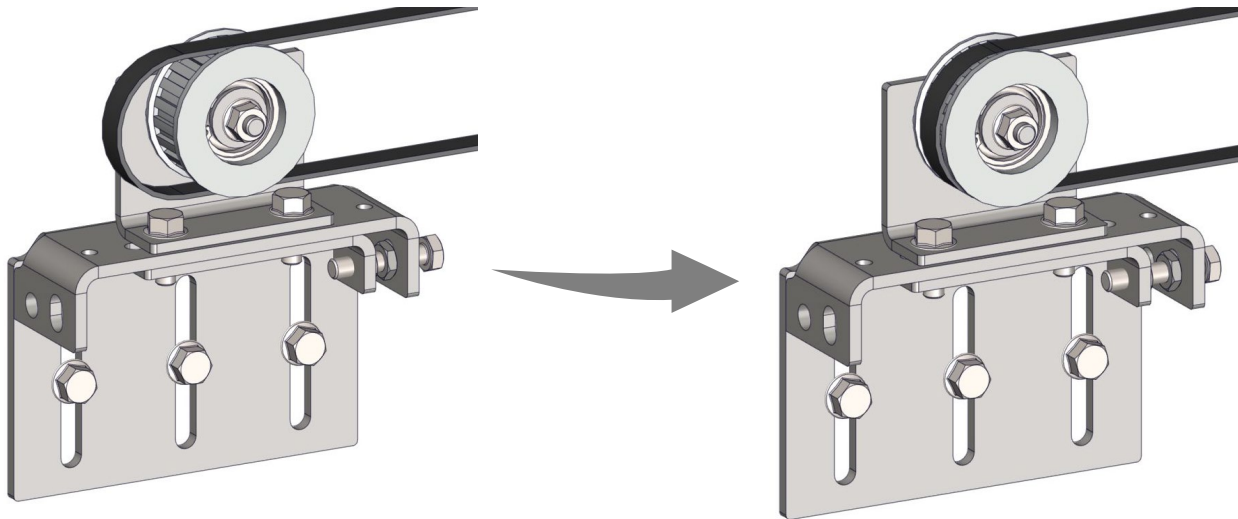


Pos.	Number	Description DE	Description EN	Menge
310	01.36.00007	Flachkopfschraube DIN7985 vz 4.8 - M4x16	pan head screw DIN7985 vz 4.8 - M4x16	2
410	01.20.60006	TSG Zahnriemenschloß, Kunststoff	TSG toothed belt lock, plastic	1

Zahnriemen spannen, Variante 1 - Tensioning the tooth belt, variation 1



Variante 2 – variation 2





Montage Zahnriemenschloss an Türblatt – assembly of the tooth belt lock to door panel



TSG in MacPuarsa Variante 3 – **TSG in MacPuarsa variant 3**



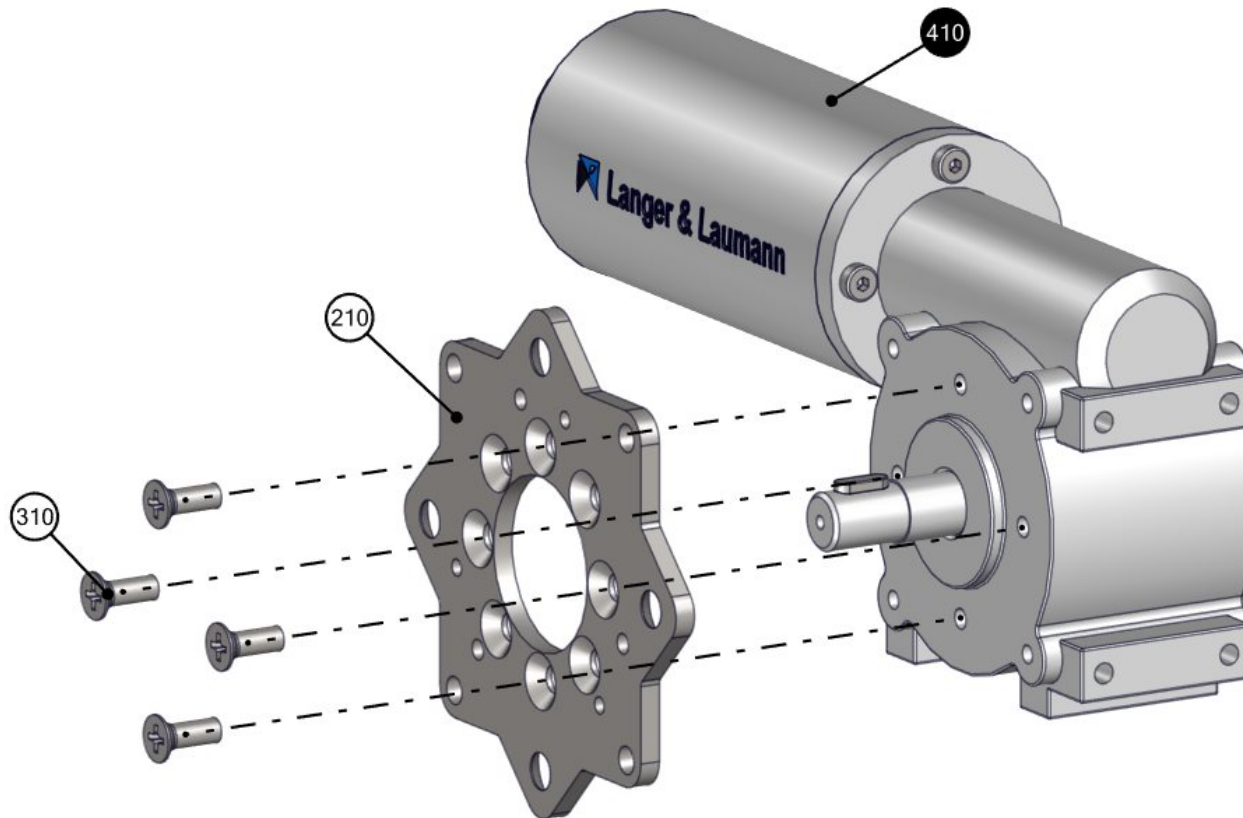
Zahnriemenrad 1.20.60160 mit Kombiwinkel 1.20.30627 (TL) -
timing belt pulley 1.20.60160 with universal bracket 1.20.30627 (TL)

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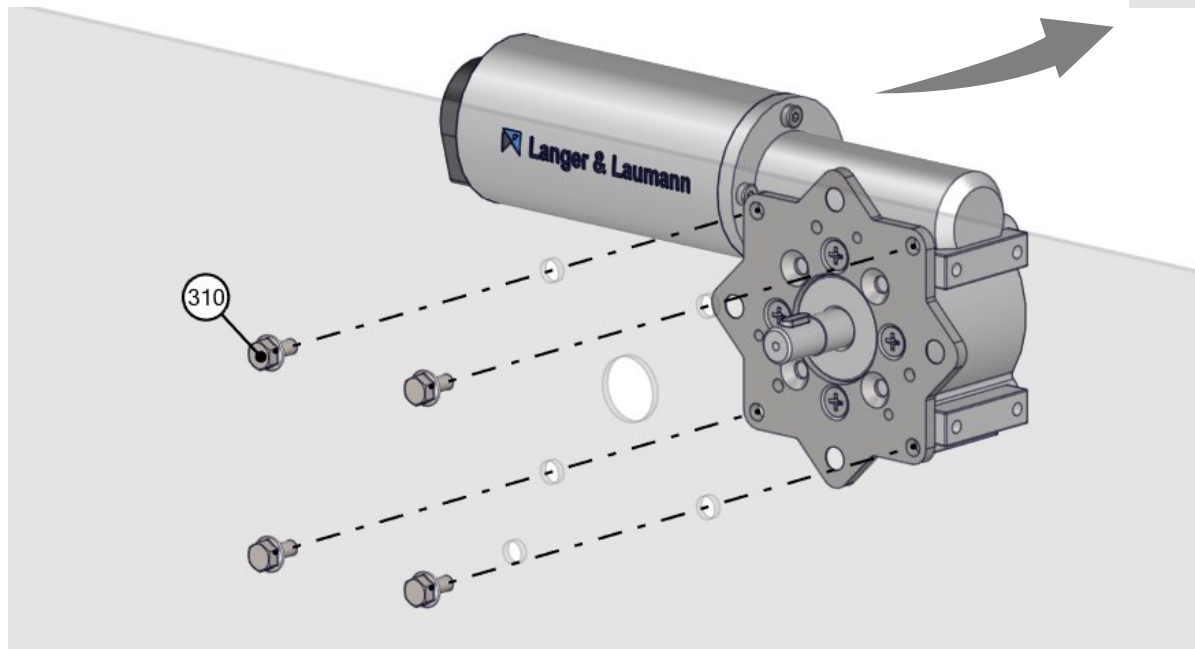
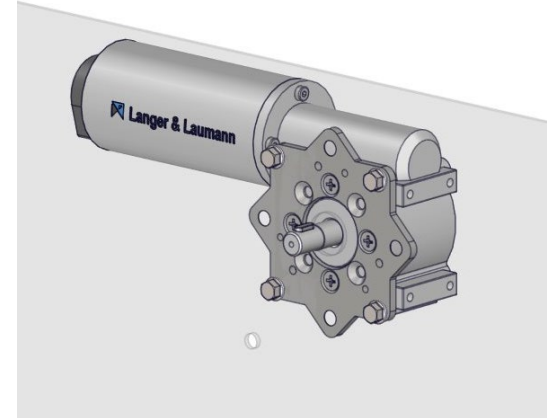
Montage Motor – assembly of the motor

TL

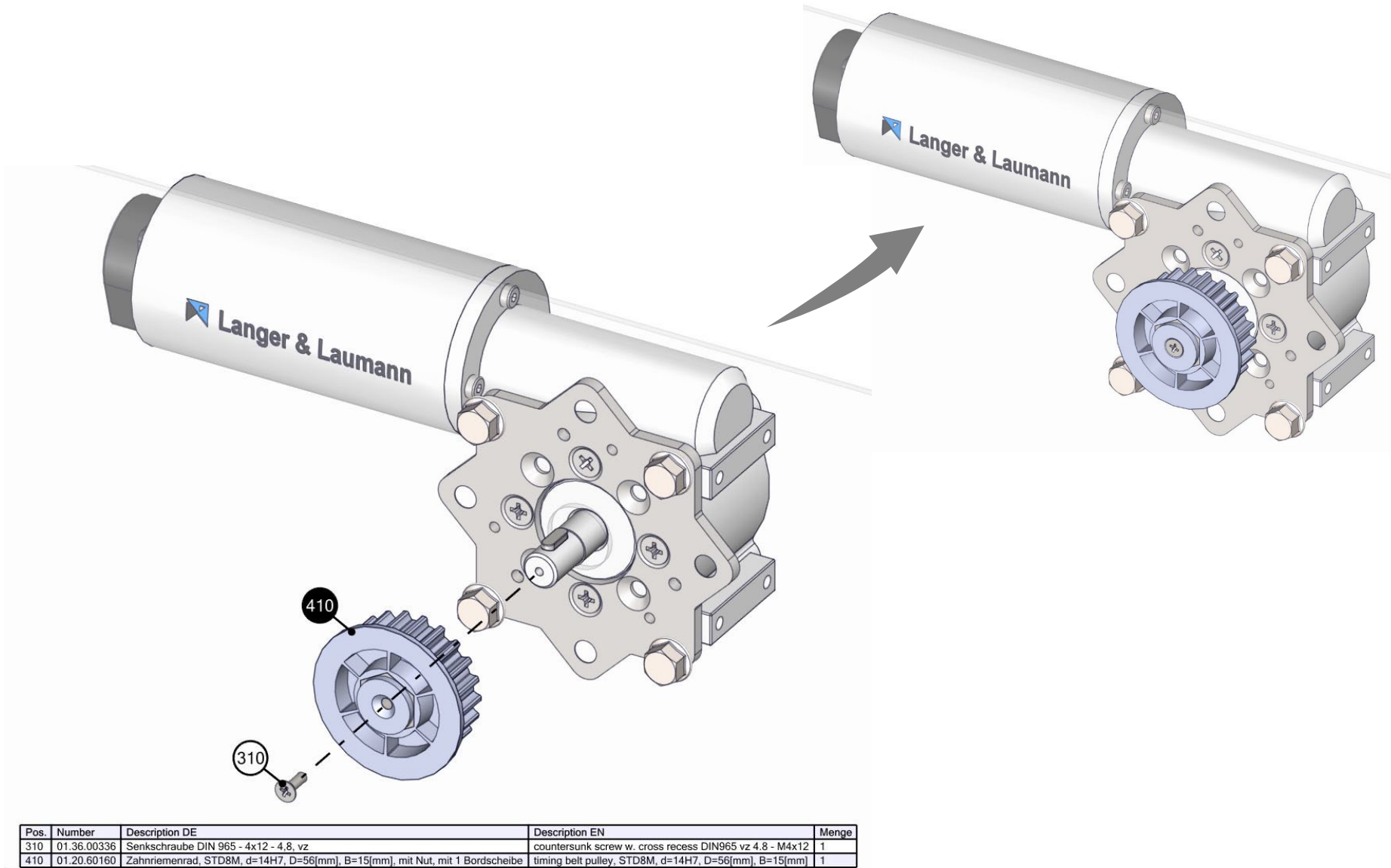




Pos.	Number	Description DE	Description EN	Menge
210	01.20.60350	Motoradapterplatte sternförmig	motor adapter plate star-shaped	1
310	01.36.00360	Senkschraube DIN 965, M6x16 - 4,8 , vz	countersunk head screw w.recessed head DIN7991 vz8.8 - M6x16	4
410	08.20.40003.K1	Motor Gross Links & Getriebe, ohne Zahnrad, 24V/5,1A/1:15	Motor Large Left & Gearbox, without wheel, 24V/5,1A/1:15	1



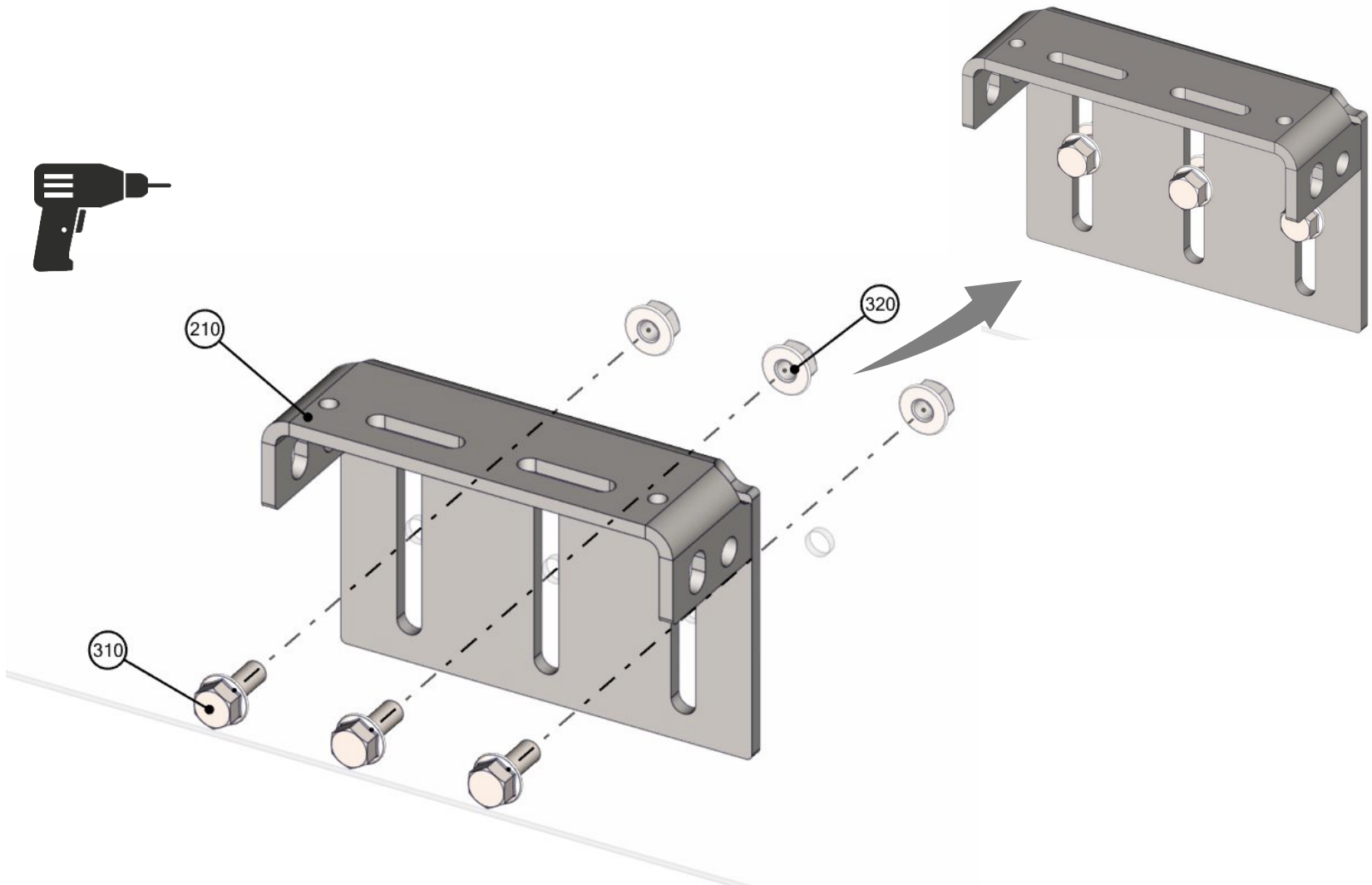
Pos.	Number	Description DE	Description EN	Menge
310	01.36.00140	Sperrzahnschraube DIN 6921 M8x12, 8.8, vz	Hexagon head serrated screw WN0274 A2C 8.8 - M8x12	4



Montage Umlenkrolle – assembly of the TSG and pulleys

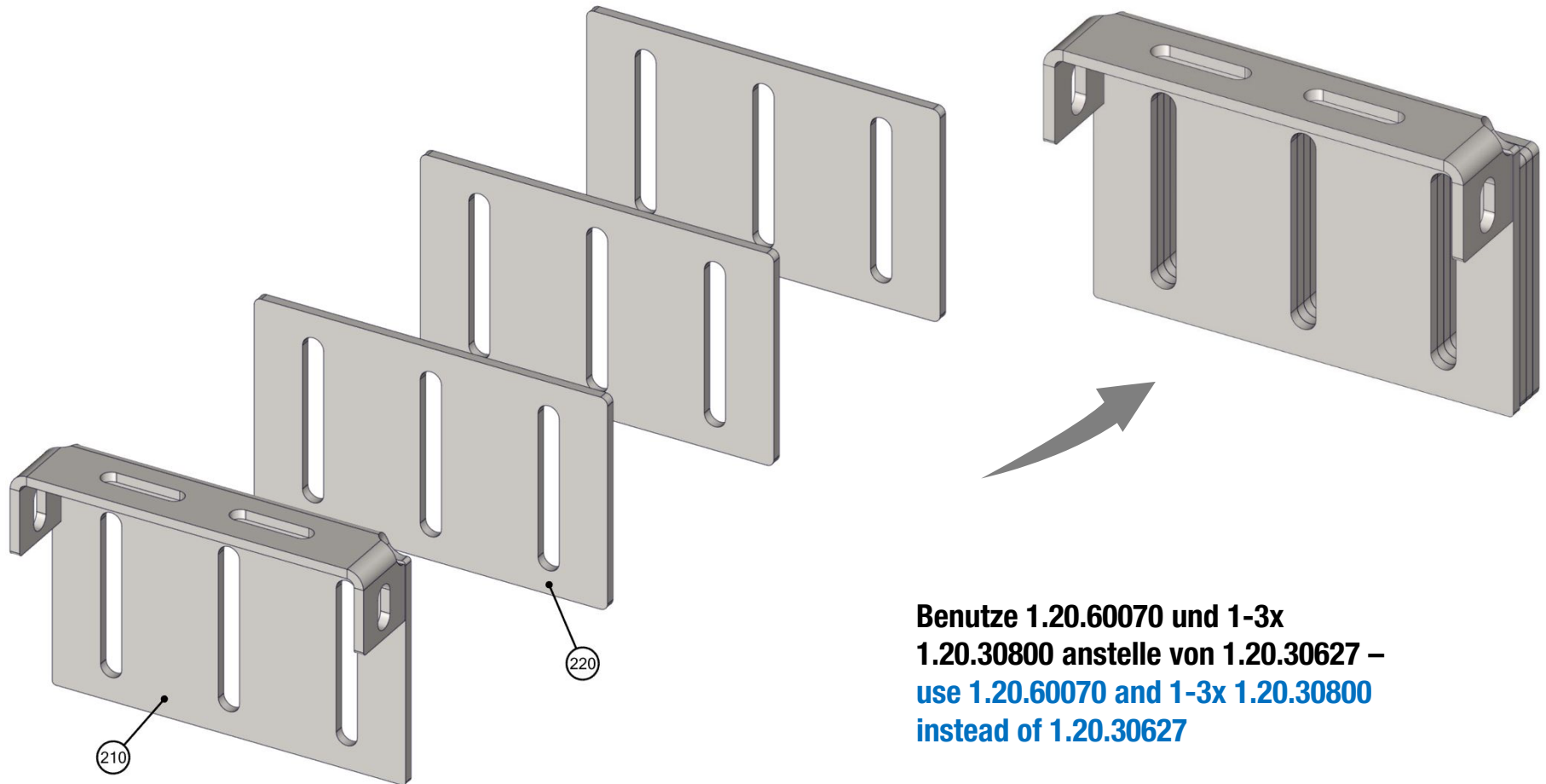
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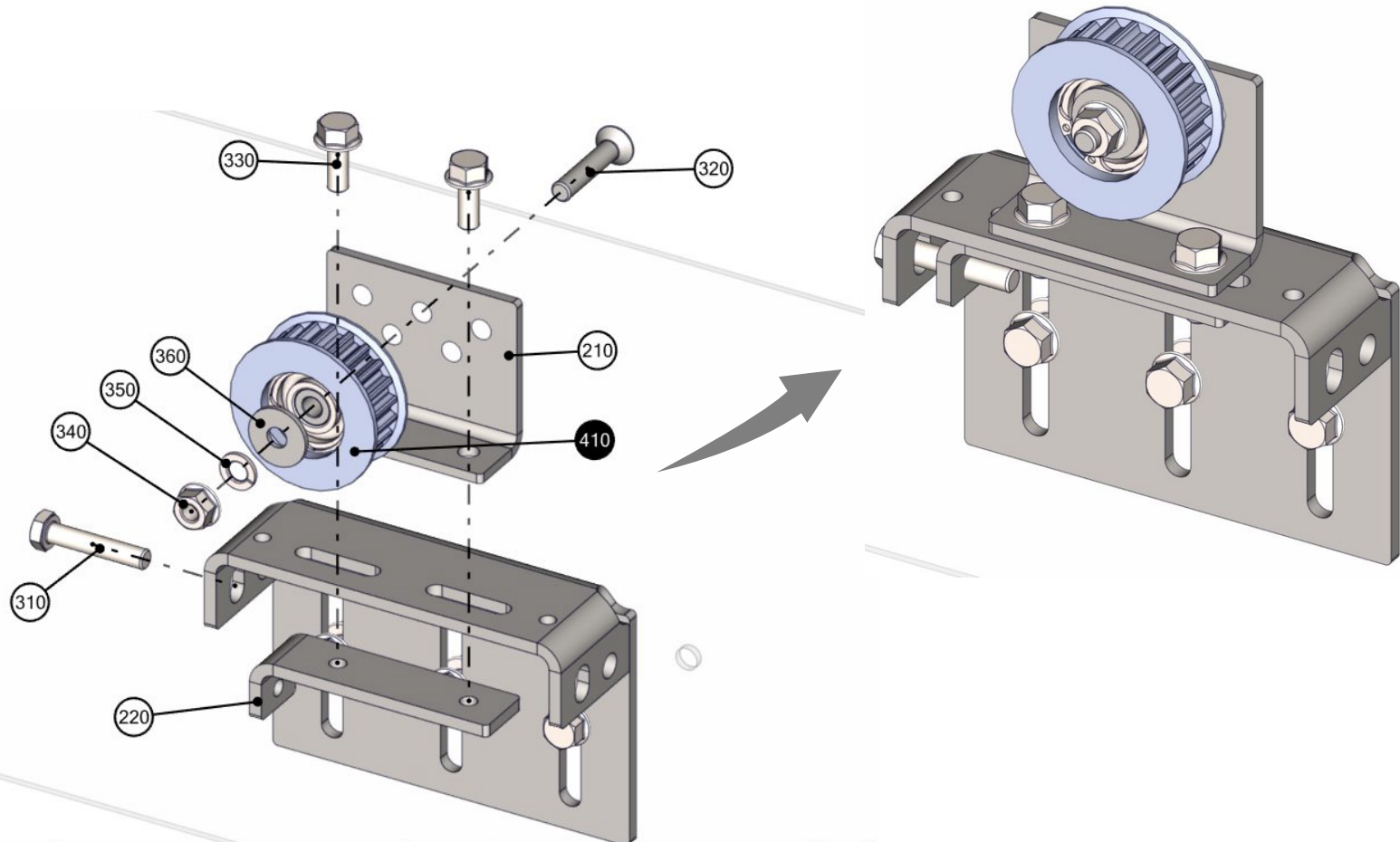
Pos.	Number	Description DE	Description EN	Menge
210	01.20.30627	Kombiwinkel Gegenseite (schmale Form), für Schindler Varidor10	TSG universal bracket, counter side (small version)	1
310	01.36.00720	Sperrzahnschraube WN0274 A2C 8.8 - M8x20	hexagon head serrated screw WN0274 A2C 8.8 - M8x20	3
320	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	3

Alternative Montage, um Zahnriemenführung zu verbessern – alternative assembly, to improve the fitting of the tooth belt

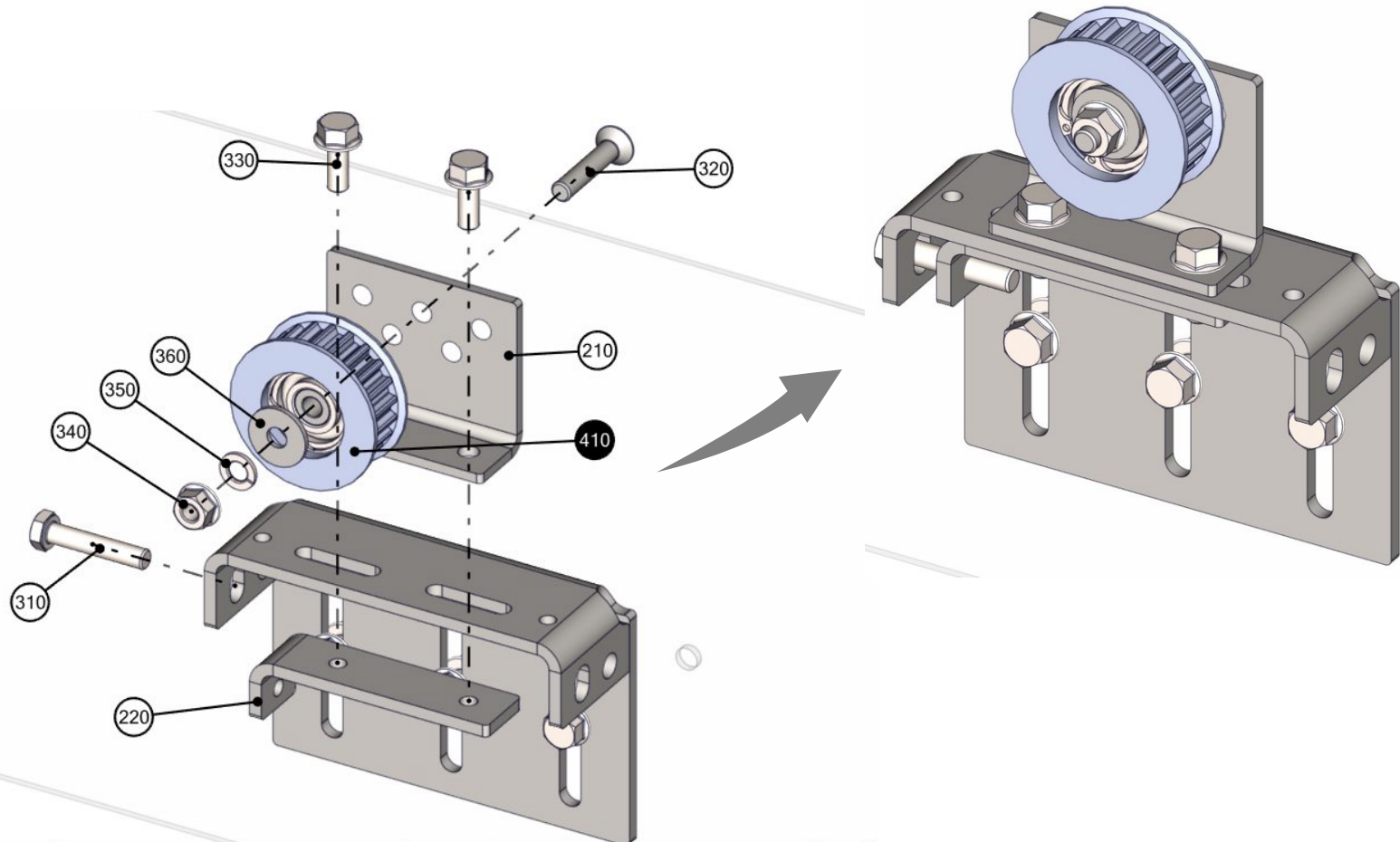


**Benutze 1.20.60070 und 1-3x
1.20.30800 anstelle von 1.20.30627 –
use 1.20.60070 and 1-3x 1.20.30800
instead of 1.20.30627**

Pos.	Number	Description DE	Description EN	Menge
210	01.20.60070	Winkel für Spannstation schmale Ausführung	TSG universal bracket counter side, slim design (35mm)	1
220	01.20.30800	Futterblech, b=4[mm], mit 3 Langlöcher	shim stock, b=4[mm], with 3 slotted holes	3



Pos.	Number	Description DE	Description EN	Menge
210	01.20.60015	TSG Halter für Umlenkrad (mit Senkungen)	TSG bracket for counter roller (with countersink)	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	01.36.00387	Senkschraube m. Innensechskant ISO10642-M8x40	countersunk head screw w. recessed head DIN7991 vz8.8 - M8x40	1
330	01.36.00720	Sperrzahnschraube WN0274 A2C 8.8 - M8x20	hexagon head serrated screw WN0274 A2C 8.8 - M8x20	2
340	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	1
350	01.36.00169	Federring DIN127 vz - M8	lock washer DIN127 vz - M8	1
360	01.36.00450	Kotflügelscheibe DIN522 vz - 8,4x20x1,25	wing repair washer DIN522 vz - 8,4x20x1,25	1
410	01.20.60003	Tüte Umlenkrad	TSG counter roller	1

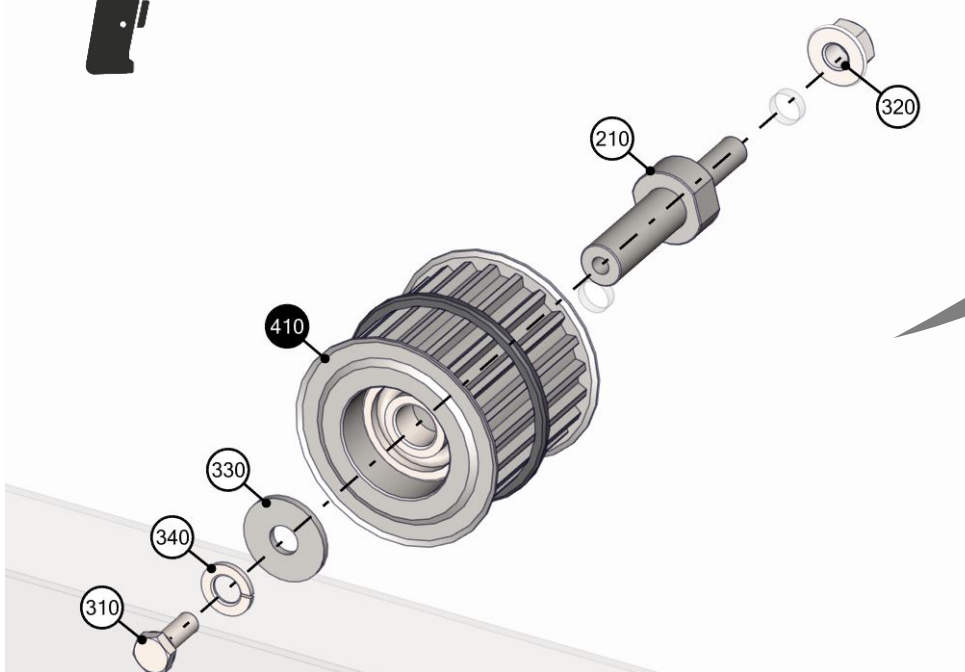


Pos.	Number	Description DE	Description EN	Menge
210	01.20.60015	TSG Halter für Umlenkrad (mit Senkungen)	TSG bracket for counter roller (with countersink)	1
220	01.20.60110	Spannlasche für Spannstation	clamping tab for clamping station, normal execution	1
310	01.36.00115	Sechskantschraube Vollgewinde DIN933 vz 8.8 - M8x40	hexagonal bolt, thread up to head DIN933 vz 8.8 - M8x40	1
320	01.36.00387	Senkschraube m. Innensechskant ISO10642-M8x40	countersunk head screw w. recessed head DIN7991 vz8.8 - M8x40	1
330	01.36.00720	Sperrzahnschraube WN0274 A2C 8.8 - M8x20	hexagon head serrated screw WN0274 A2C 8.8 - M8x20	2
340	01.36.00501	Sperrzahnmutter ähnlich DIN6923 vz - M8	serrated locking nut, similar to DIN6923 vz - M8	1
350	01.36.00169	Federring DIN127 vz - M8	lock washer DIN127 vz - M8	1
360	01.36.00450	Kotflügelscheibe DIN522 vz - 8,4x20x1,25	wing repair washer DIN522 vz - 8,4x20x1,25	1
410	01.20.60003	Tüte Umlenkrad	TSG counter roller	1

Montage Doppelzahnriemenscheibe – assembly of the double timing belt pulley

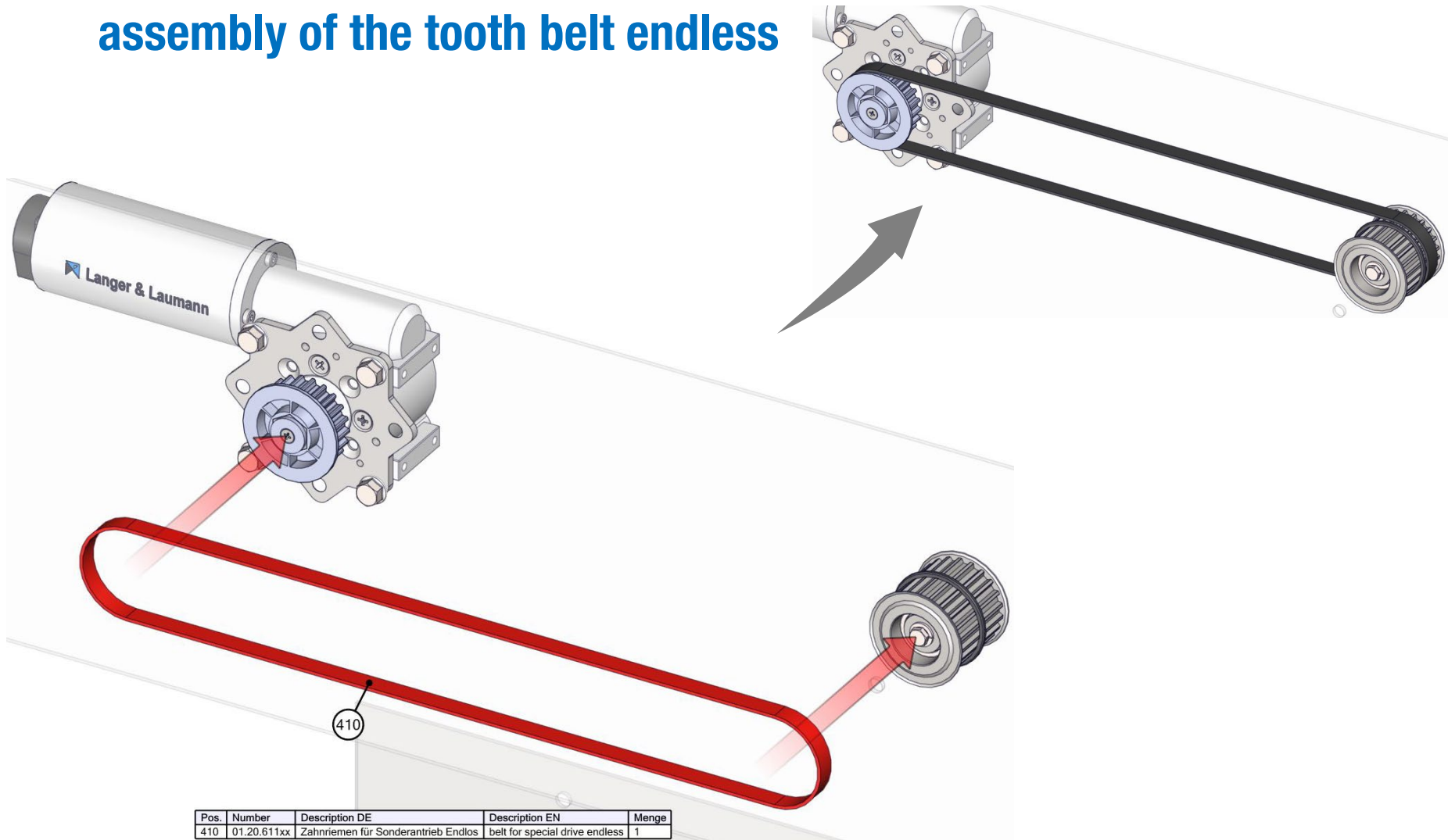
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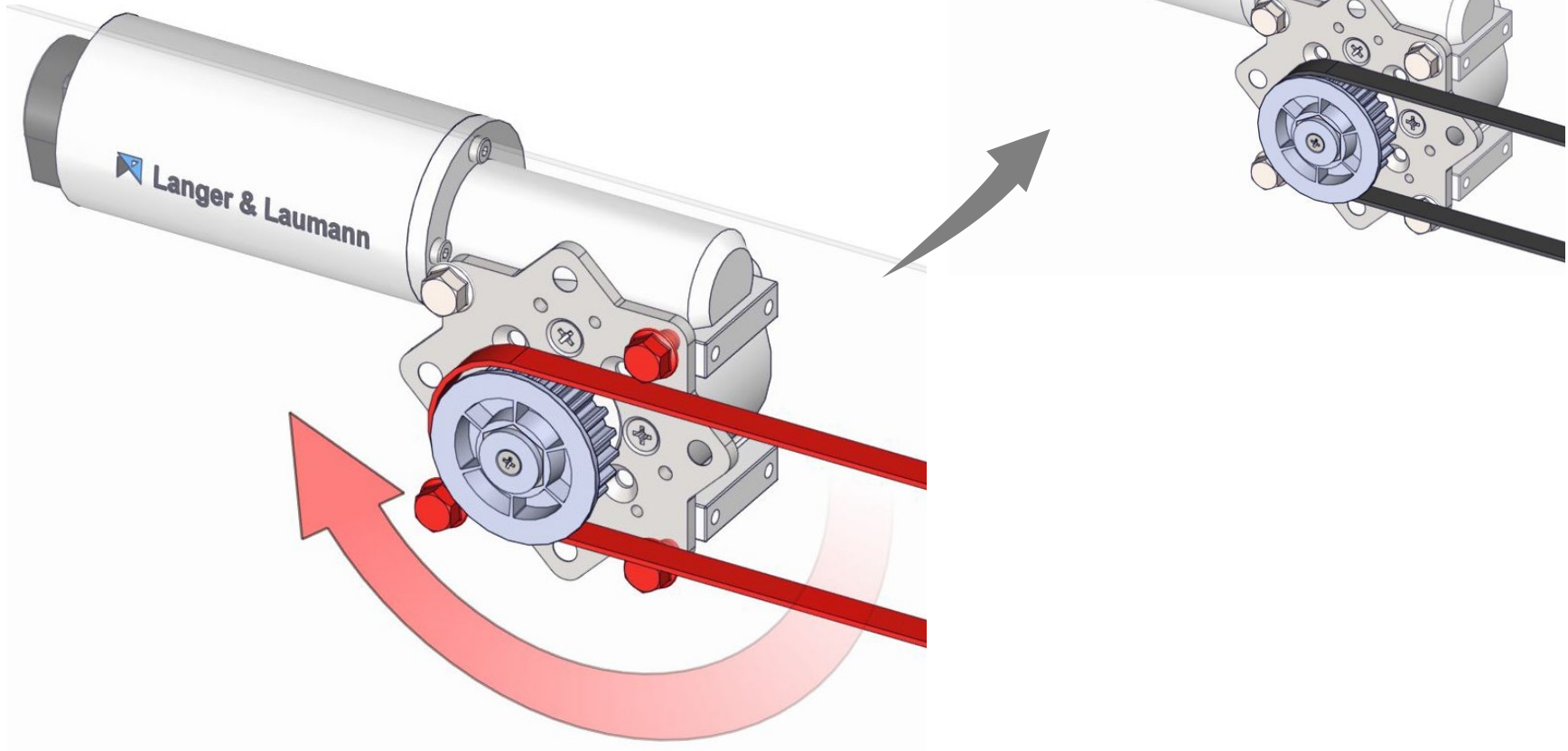


Pos.	Number	Description DE	Description EN	Menge
210	01.20.92294	Achse für Doppelzahnriemenscheibe an Sematic	axle for double timing belt pulley	1
310	01.36.00111	Sechskantschraube ISO 4017 - M6x16 - 8.8, vz	hexagonal bolt, thread up to head DIN933 vz 8.8 - M6x16	1
320	01.36.00501	Sperrzahnmutter ähnlich 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	01.20.92300	Doppelzahnriemenscheibe Wirk-Ø=56mm ,S8M	double timing belt pulley D=56mm, high: 48mm,S8M	1

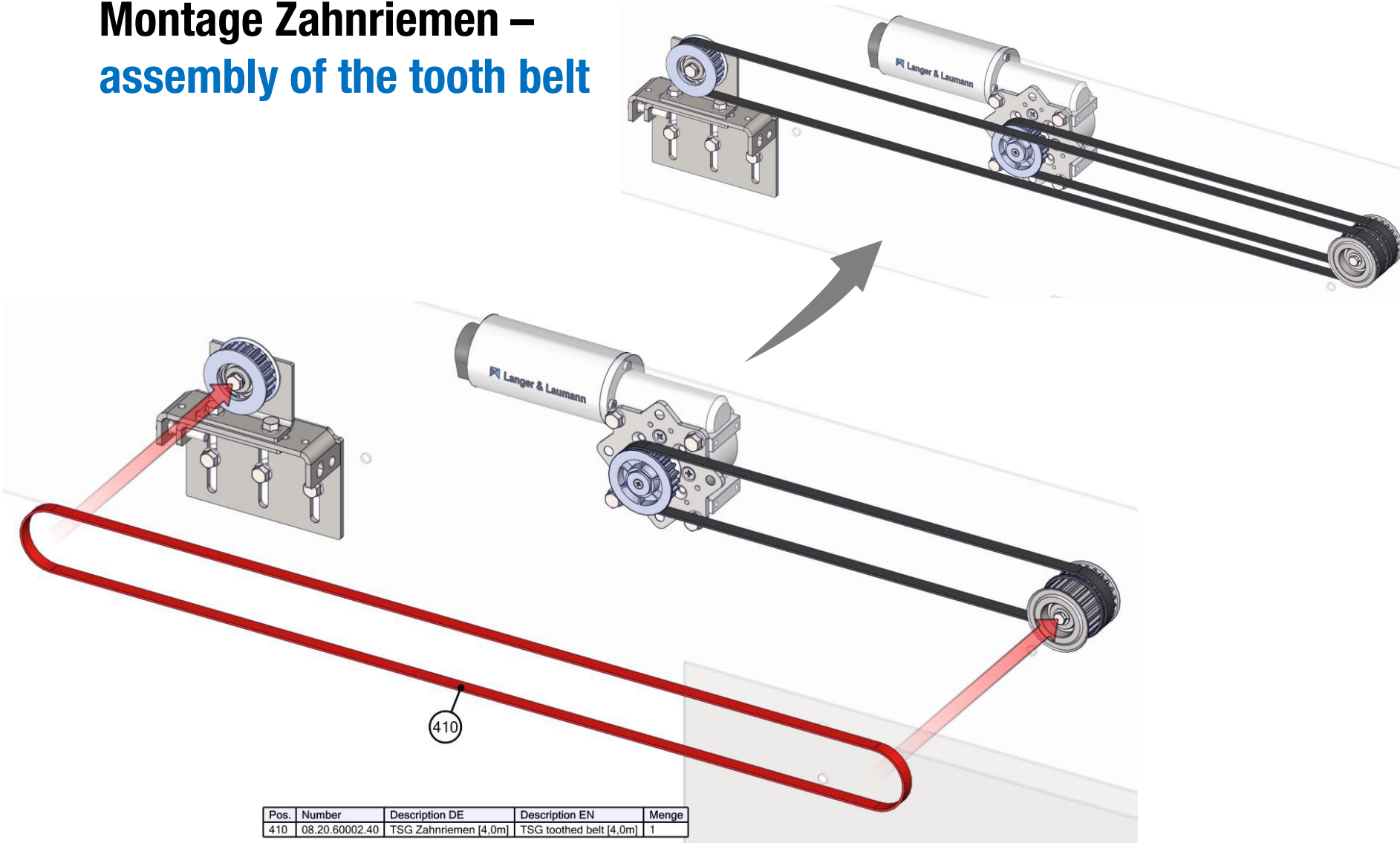
Montage Endloszahnriemen – assembly of the tooth belt endless



Endloszahnriemen spannen - tensioning the tooth belt endless

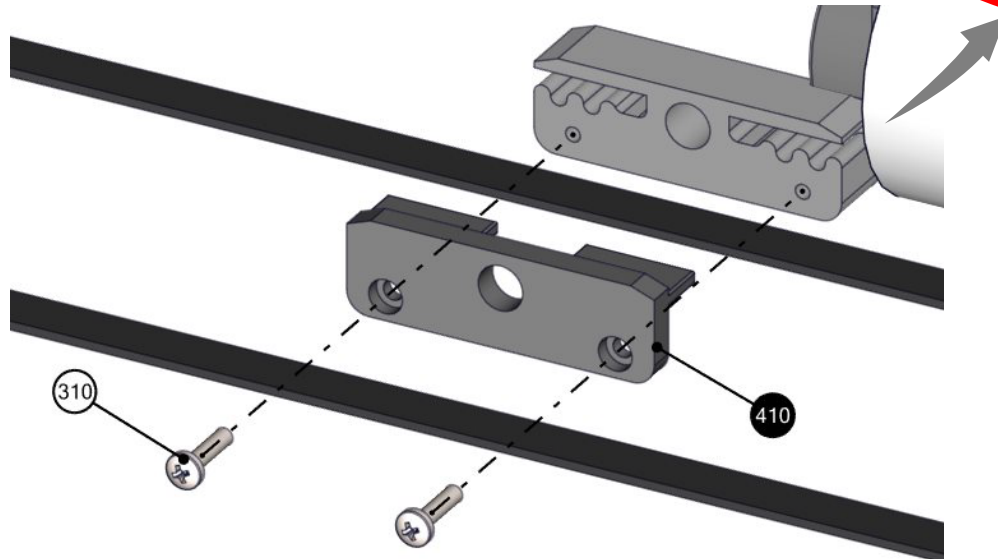
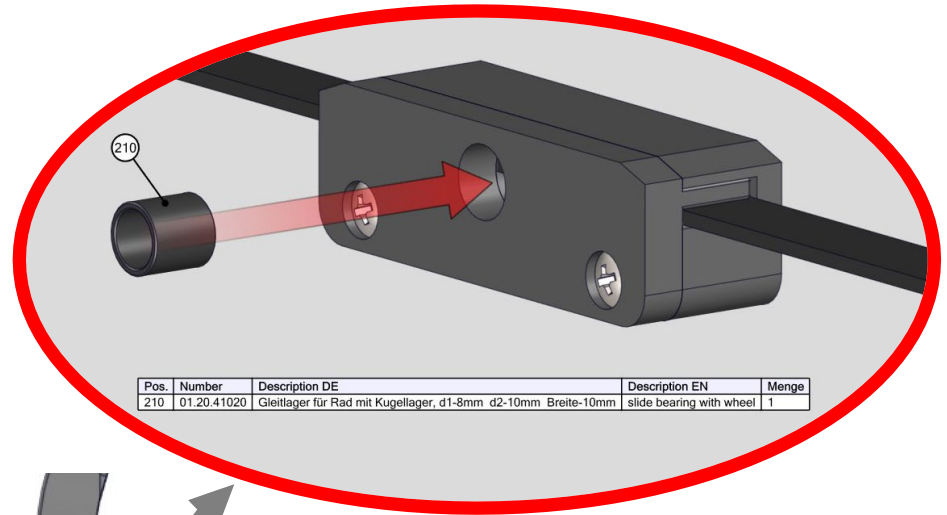


Montage Zahnriemen – assembly of the tooth belt



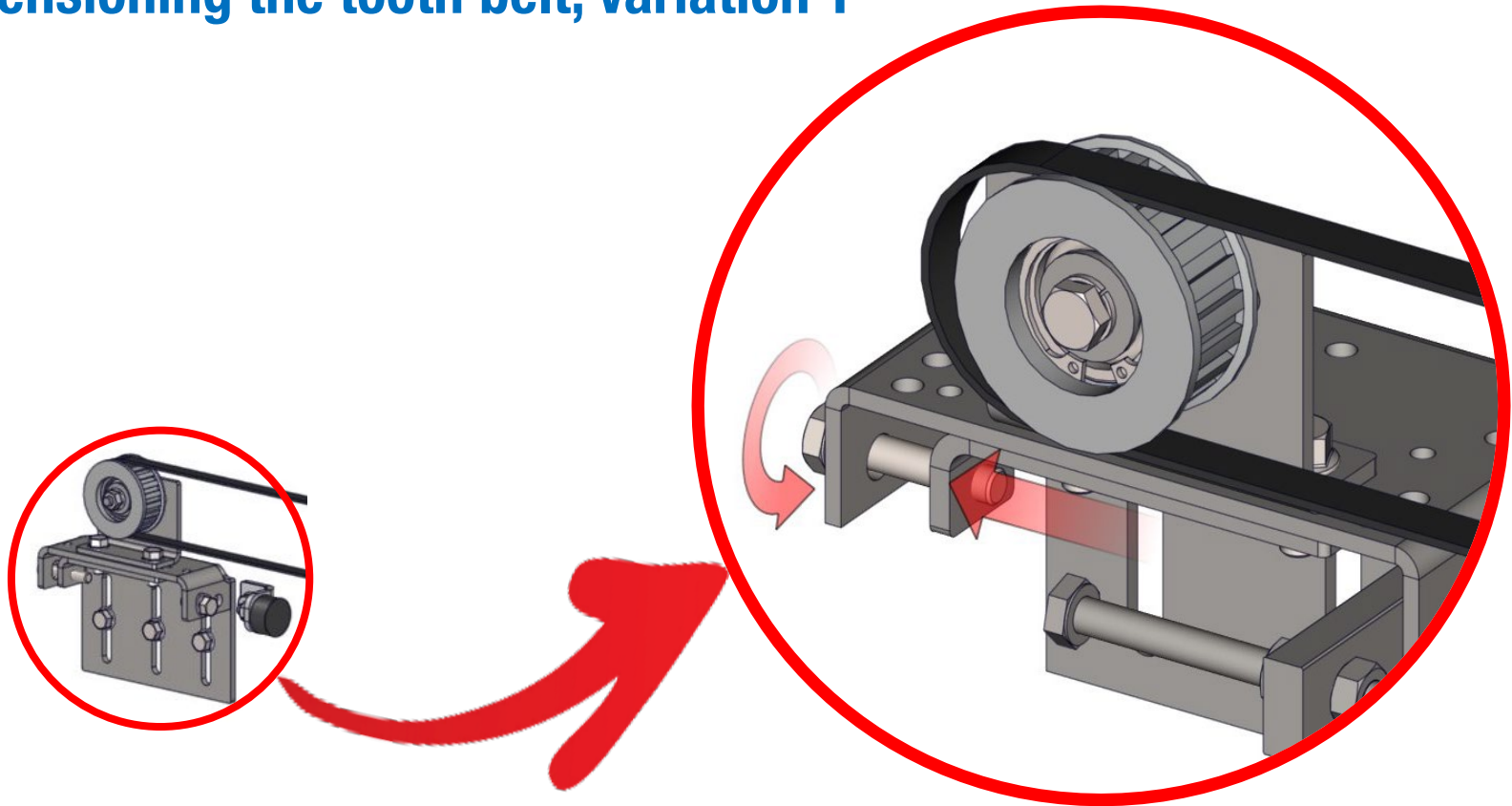
Montage Zahnriemenschloss – assembly of the tooth belt lock



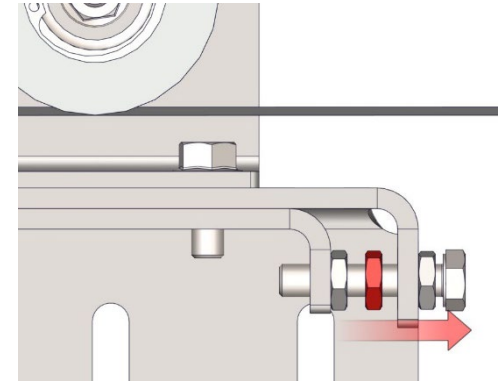
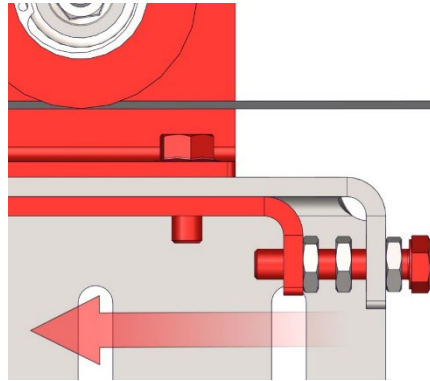
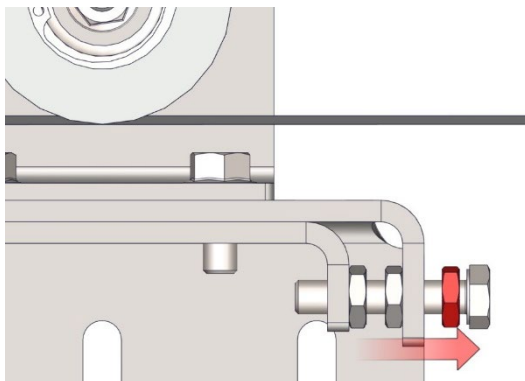
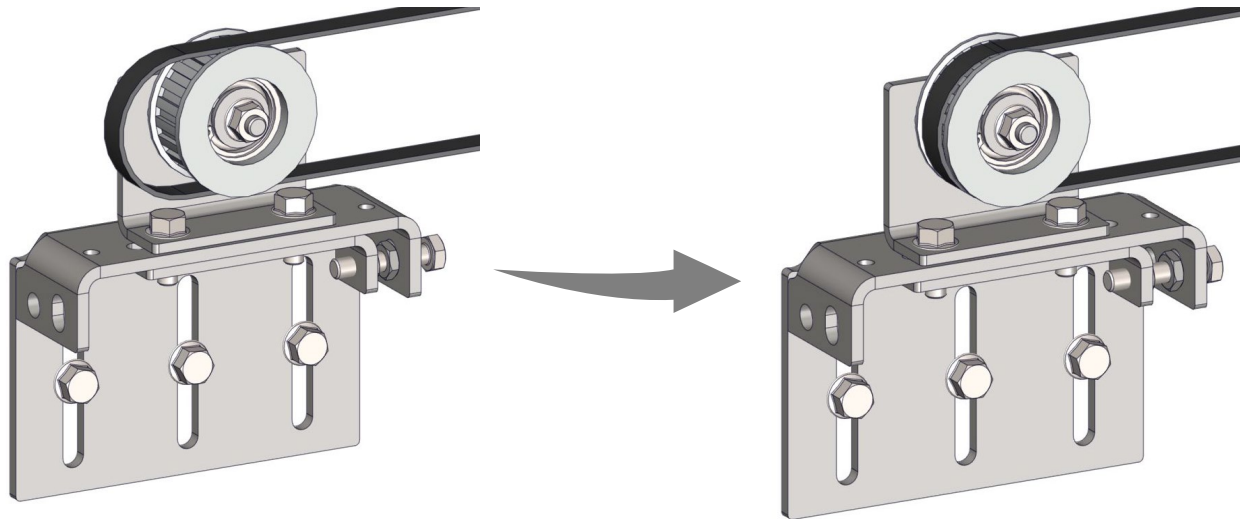


Pos.	Number	Description DE	Description EN	Menge
310	01.36.00007	Flachkopfschraube DIN7985 vz 4.8 - M4x16	pan head screw DIN7985 vz 4.8 - M4x16	2
410	01.20.60006	TSG Zahnriemenschloß, Kunststoff	TSG toothed belt lock, plastic	1

Zahnriemen spannen, Variante 1 - tensioning the tooth belt, variation 1



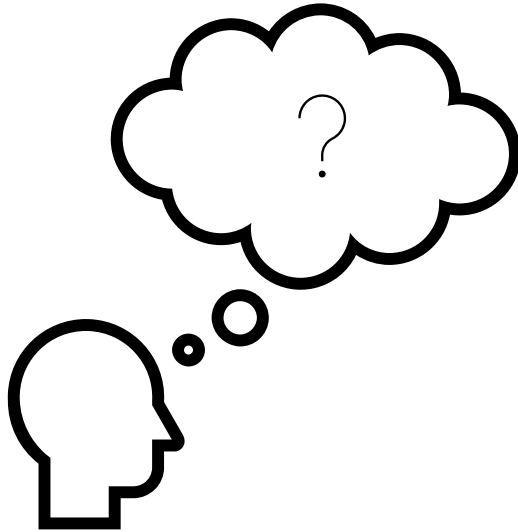
Variante 2 – variation 2





Montage Zahnriemenschloss an Türblatt – assembly of the tooth belt lock to door panel





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