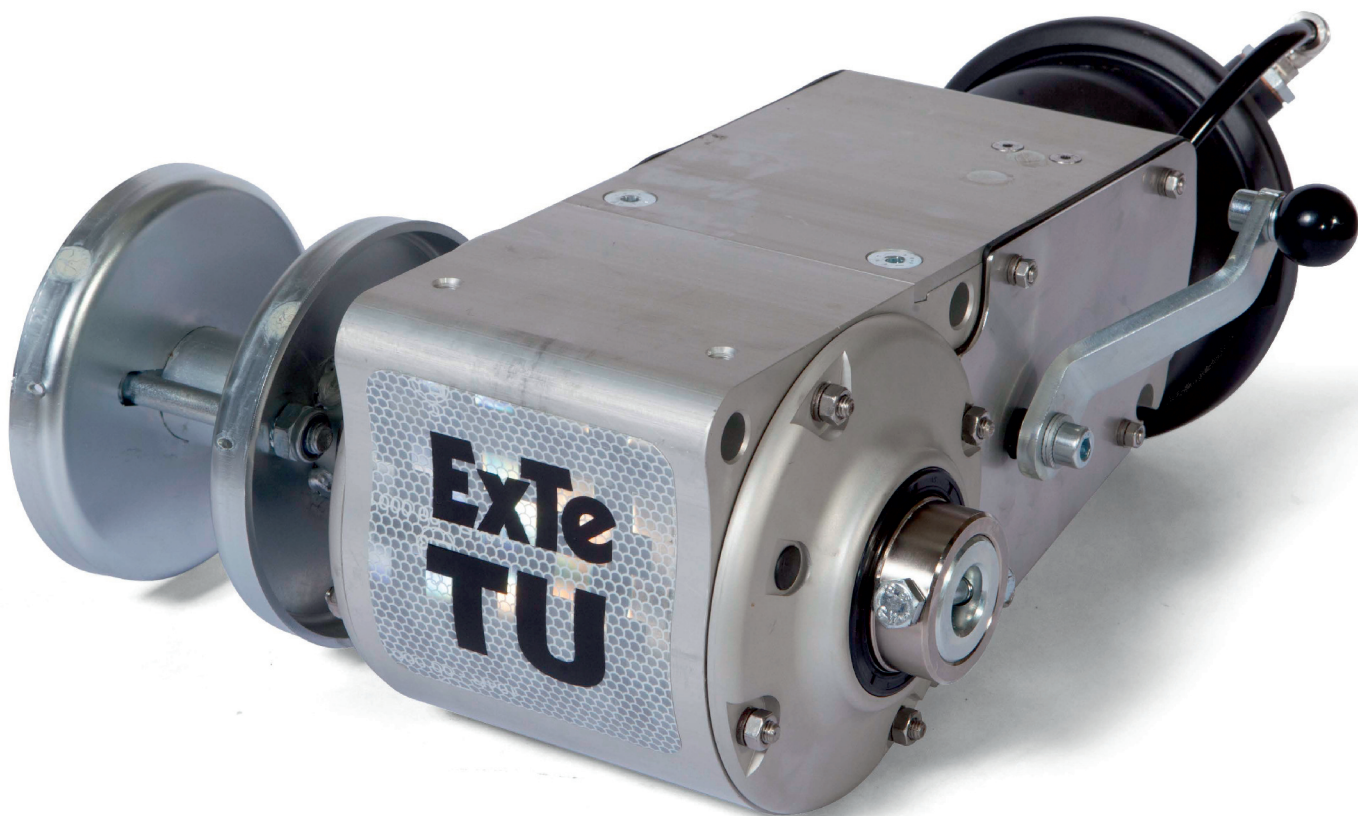




Users
Manual

TU T - Series Tension Unlimited

ENG Part.Nr 802380

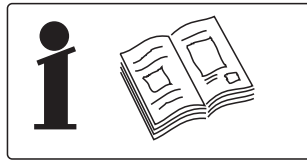


ExTe

Securing cargo. We invented the concept.



Contents



Read and understand the instructions before using the tensioner. Incorrect installation and improper use can result in malfunction, damage or serious injury!

Mounting Options and Accessories

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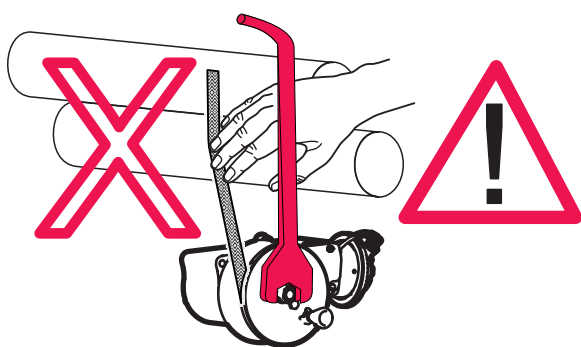
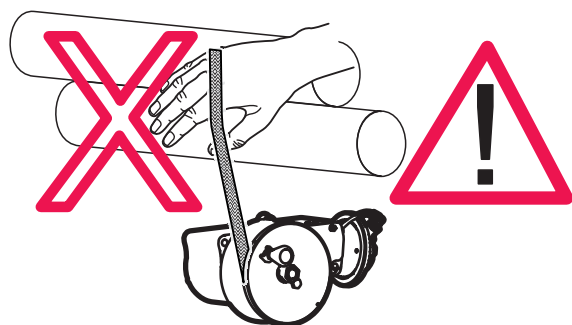
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When ordering spare parts , or any other contact with ExTe , specify tensioner model **TU / Tension Unlimited or 802380** to minimize the risk of incorrect dispatch.
The tensioner TU / Tension Unlimited termed in the text here after only as TU.

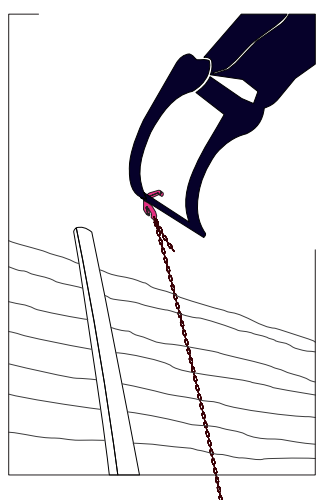
Safety Precautions



Be careful when using the tensioner so that you do not have hands, fingers or any other part of the body between strap/chain and the load or truck/trailer frame when turning the air valve on and the tensioner starts working !



Never leave tools left on the tensioner !
Risk of injury when releasing or turning on the air valve and tensioner start working !

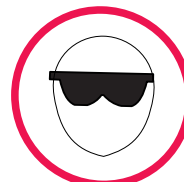
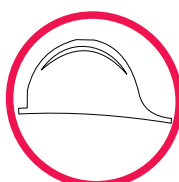


When throwing or lifting strap or chain, take care to ensure the anchor point end reaches the other side, and does not fall back towards you
If this maneuver is performed by someone other than yourself , stay outside the danger area of sling range.



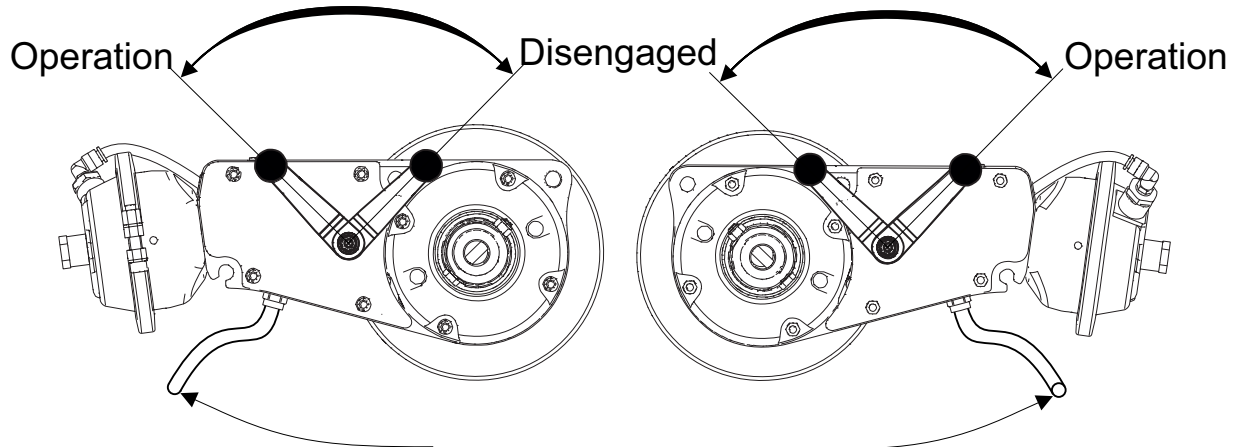
The tensioner is intended for load securing only.

Always wear GLOVES , HELMET and EYE PROTECTION when using TU tensioner.



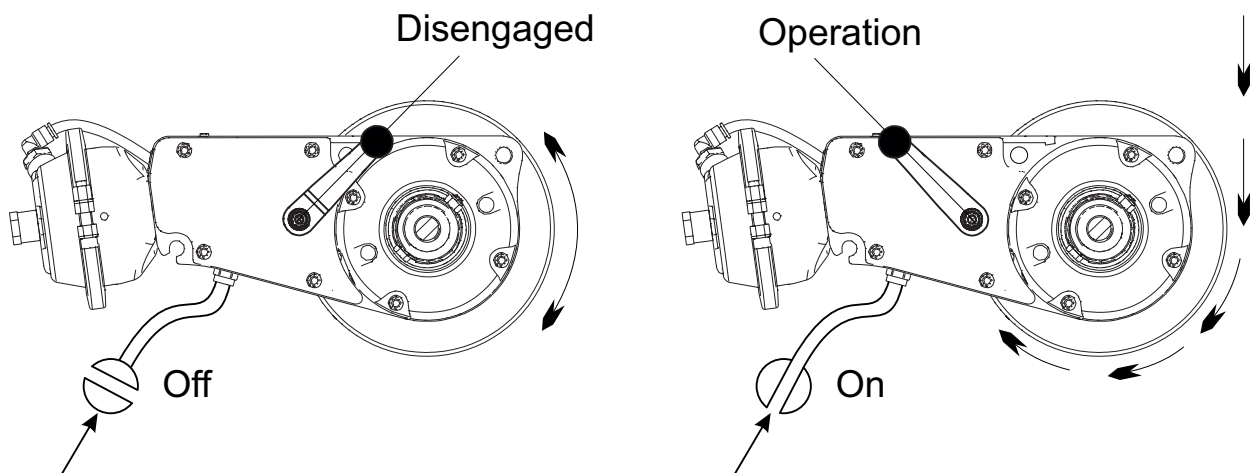
Function

TU is a lashing tensioner, only intended for securing loads on trucks or other vehicles.
Working pressure max 8.0 bar for guaranteed function.
The tensioner is driven by compressed air .



Working pressure 4.5 bar = approx 450 kg of pulling power
Working pressure 8.0 bar = approx 850 kg of pulling power

Follow the vehicle manufacturer's instructions for connecting the air supply!



Air pressure **MUST** be relieved **BEFORE** releasing the mechanism !

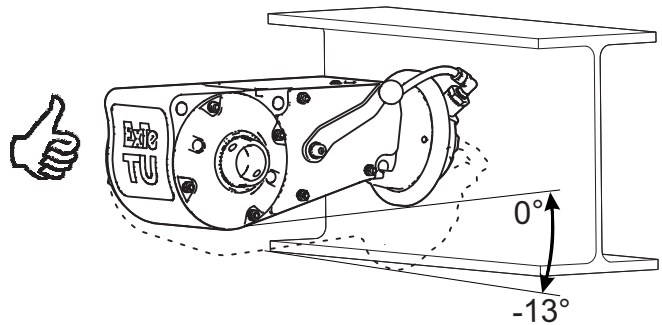


Several TU can be connected to a common main valve.
(Kit 802301)

Installation Instructions

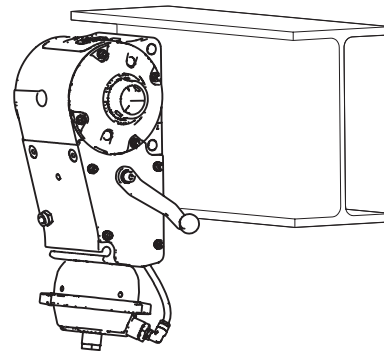
TU must be fitted with ExTe original mounting brackets for secure anchoring .

TU must be mounted horizontally (max 13° tilting backwards, see 803140, 803132.) So that condensed water will be drained out of the tensioner by drainage holes in the bottom.



Exceptions to the above may be permitted in some special applications, for example Australian market. (See fig.)

WARNING, the mechanism may **FREEZE** in colder areas where condensed water must be drained out through the air cylinder, due to water that may collect in the membrane during standby!



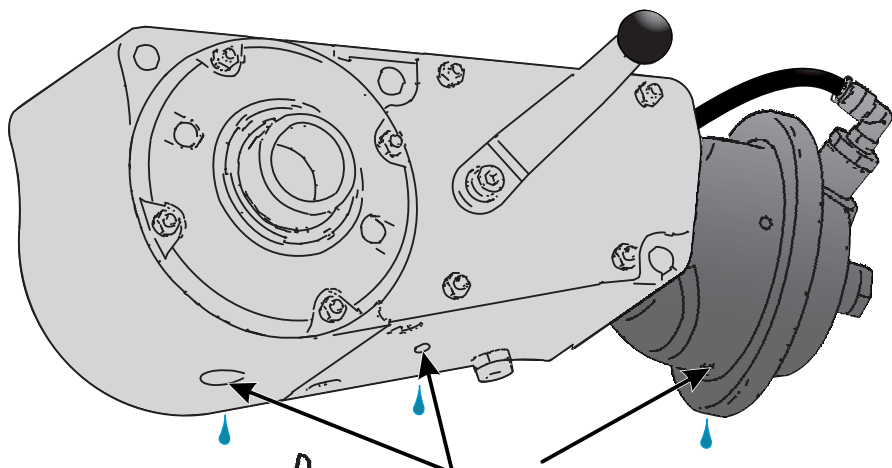
Never lubricate the TU- tensioner!

It has self-lubricating bushings.

If the shaft is lubricated with grease, spray or any oil, it will bind graphite and dust making the shaft difficult to turn or even seize completely!



AVOID spraying directly on the tensioner with high pressure washer!

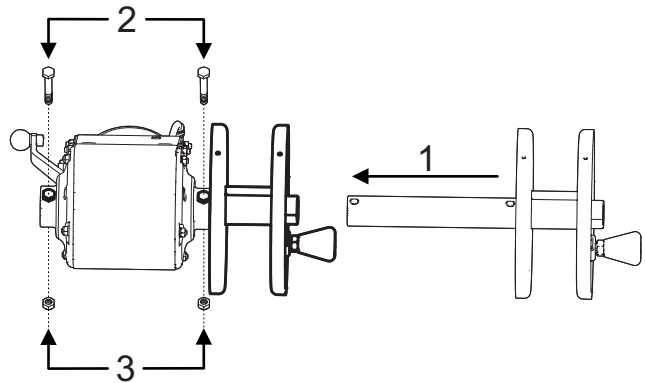


Check and clear drainage holes occasionally so that any water can drain.

Installation Instructions

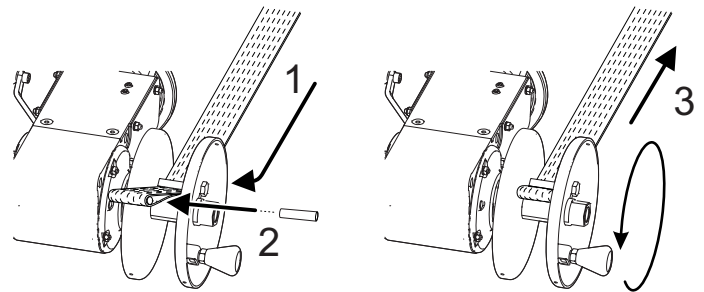
Mounting the spool.

- 1, Insert spool axel in to TU.
- 2, Mount the M8 bolts.
- 3, Mount and tighten the nuts.



Mounting webbing strap, standard mount.

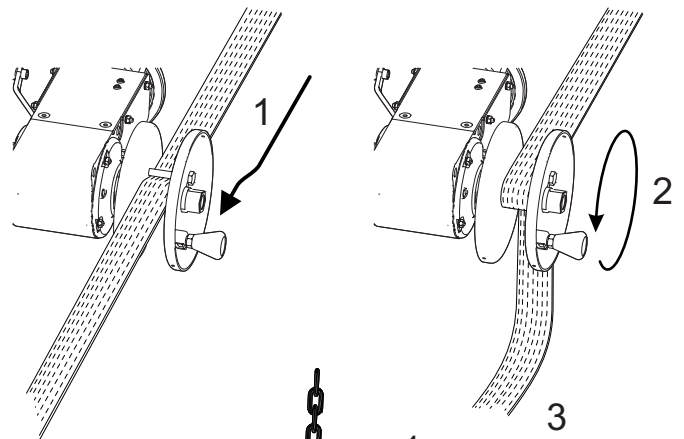
- 1, Insert strap between axel and stop screw.
- 2, Insert stop into the end loop. (801980 / 801981)
- 3, Pull back the webbing strap to lock.



Pay attention to which direction the spool rotates!

Mounting webbing strap, "slip through".

- 1, Insert strap between axel and stop screw and pull to stretch the strap.
- 2, Crank to lock.
- 3, Secure loose end.



OBS! This way the spool fills up twice as fast!



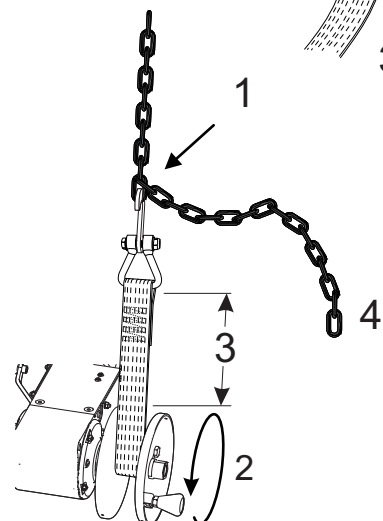
1-2, Always stretch the webbing strap or chain by hand before turning on the tensioner to avoid loose webbing or overfill on the spool.

3, Make sure there is enough strap pulled out when using short strap with hook to chain, in case of cargo settles during transport.

4, Always secure loose ends!



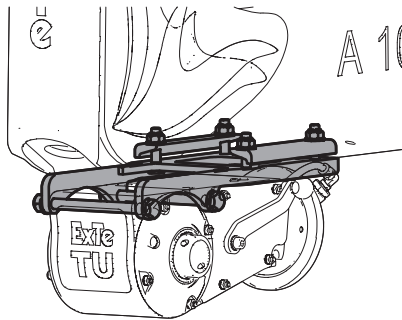
The release handle should always be mounted on the opposite side of the spool!
If not, loose webbing could accidentally release the handle/tension when operating!



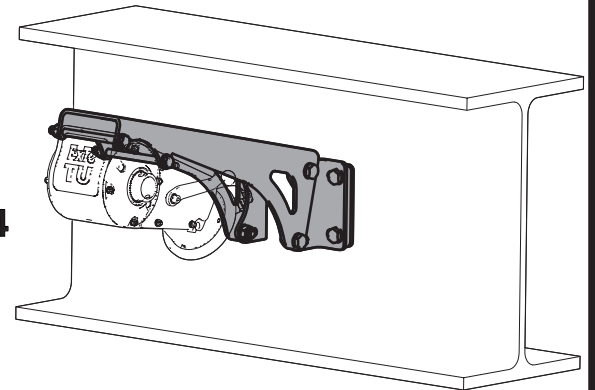
Accessories

Brackets overview

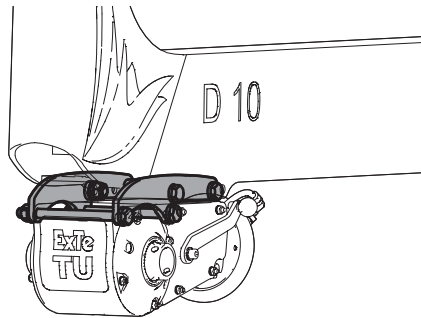
A - series
Page 8,9



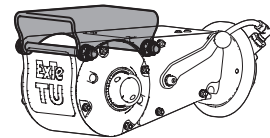
Frame
Page 14



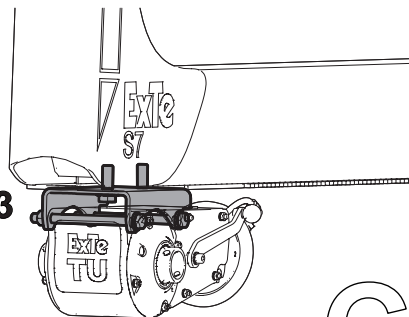
D - series
Page 10,11



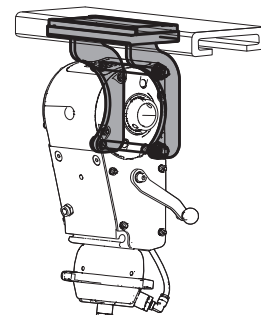
Weld
Page 15



S - series
Page 12,13



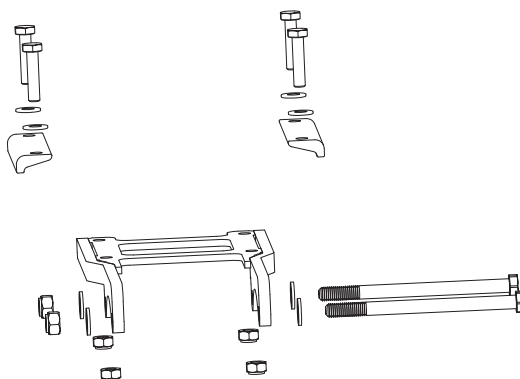
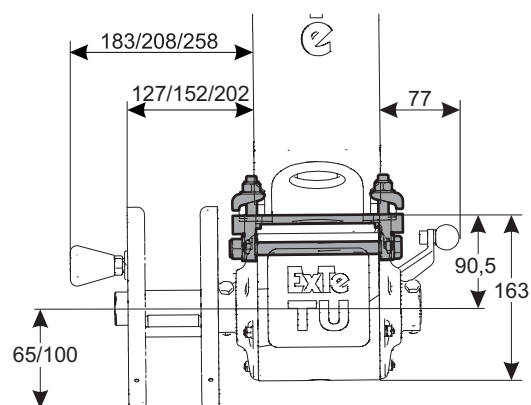
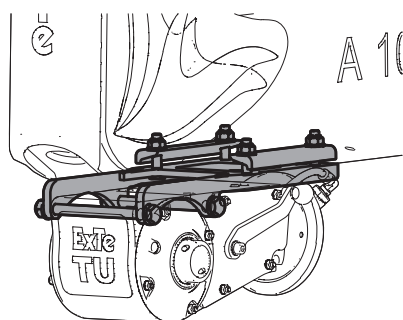
Channel
mount
Page 16



Accessories

Brackets A-series

11

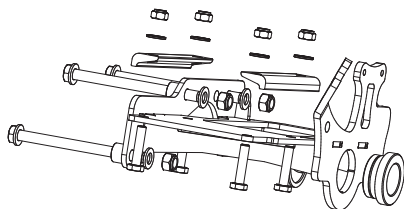
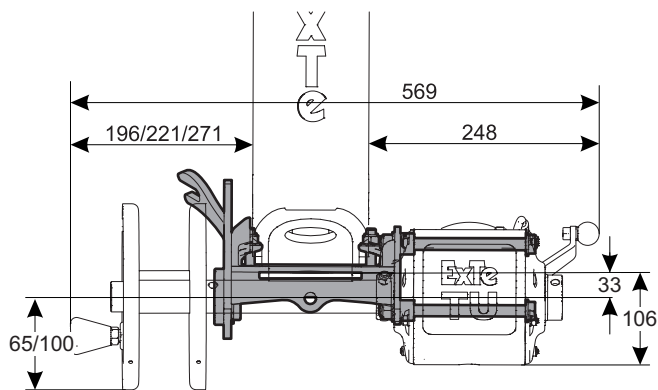
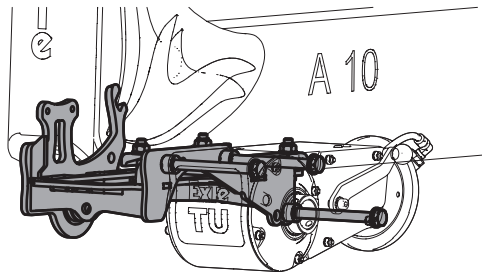


Tillbehör / Accessories				
Pos	Qty	Art.nr	Benämning	Description
11	1	800870	Fäste komplett A-serien	Bracket assy A-series

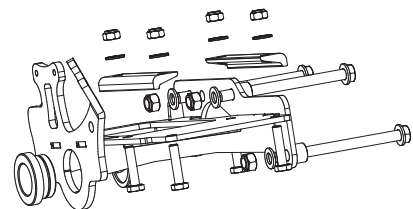
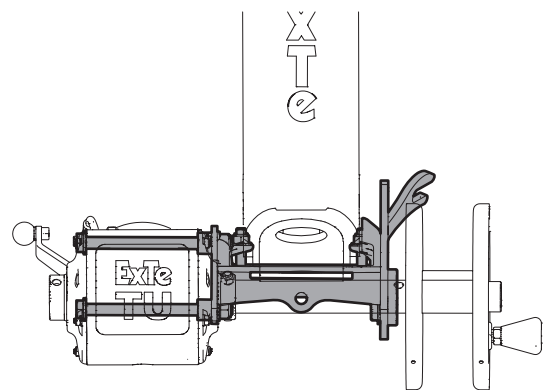
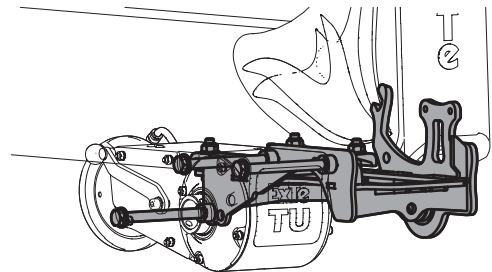
Accessories

Brackets A-series

12



13

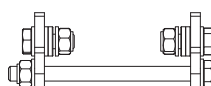
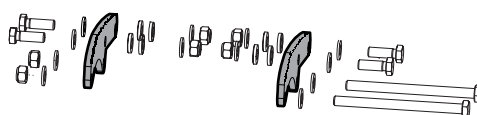
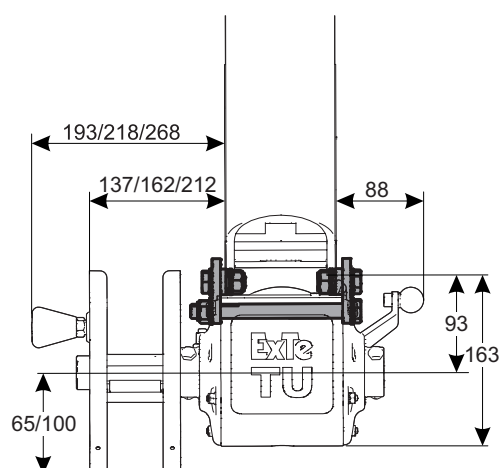
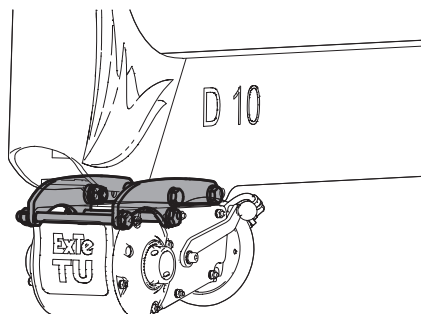


Tillbehör / Accessories					
Pos	Qty	Art.nr	Benämning	Description	
12	1	800852	Fäste sidomont. Vänster A-serien	Bracket side mount Left assy A-series	
13	1	800851	Fäste sidomont. Höger A-serien	Bracket side mount Right assy A-series	

Accessories

Brackets D-series

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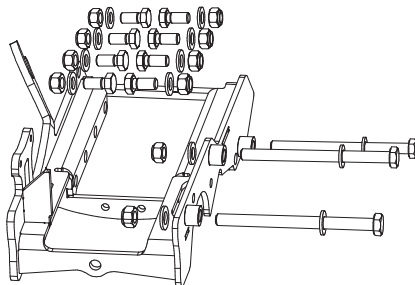
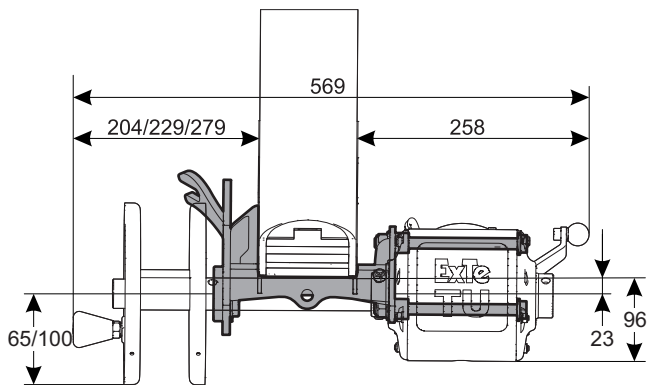
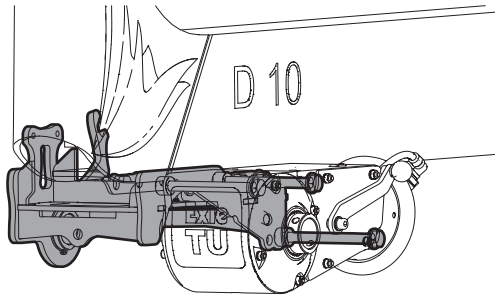


Tillbehör / Accessories				
Pos	Qty	Art.nr	Benämning	Description
21	1	803135	Fäste komplett D-serien	Bracket assy D-series

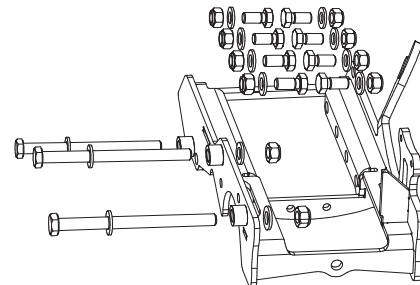
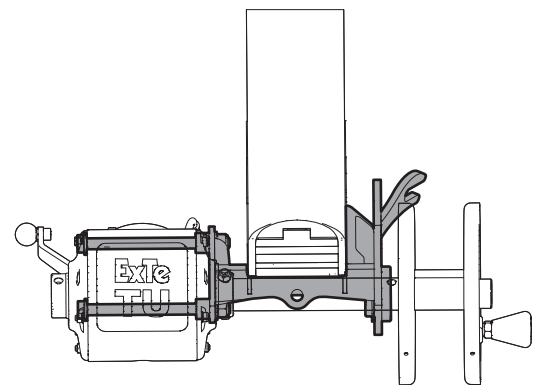
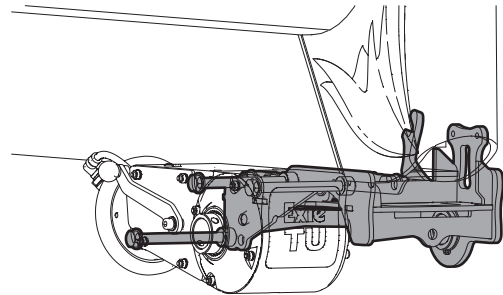
Accessories

Brackets D-series

22



23

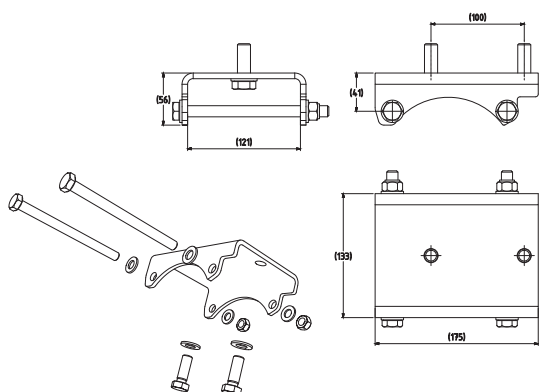
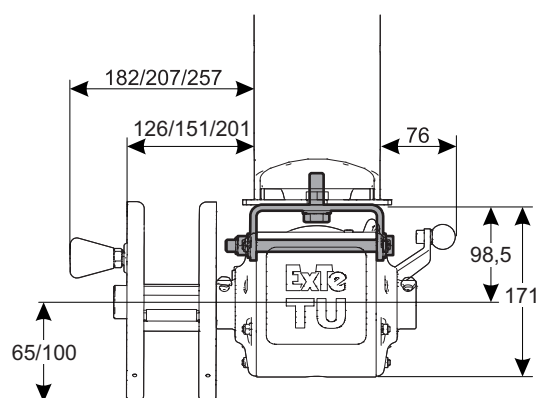
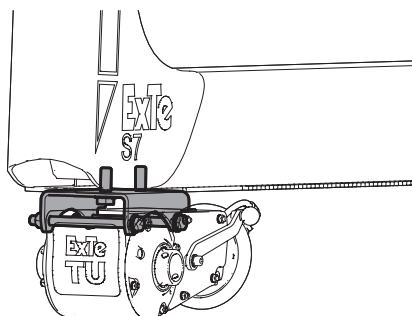


Tillbehör / Accessories				
Pos	Qty	Art.nr	Benämning	Description
22	1	803854	Fäste sidomont. Vänster D-serien	Bracket side mount Left assy D-series
23	1	800853	Fäste sidomont. Höger D-serien	Bracket side mount Right assy D-series

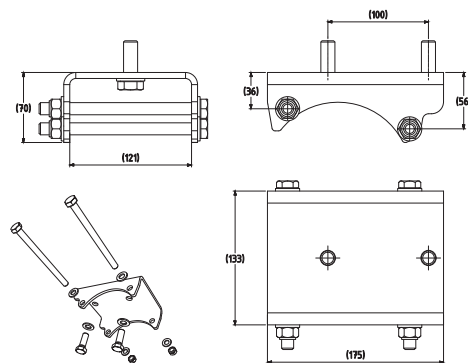
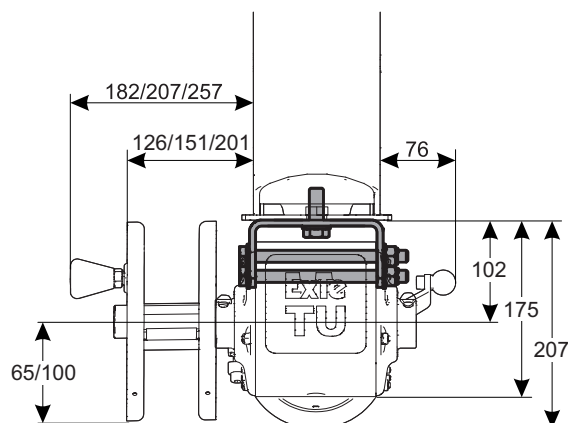
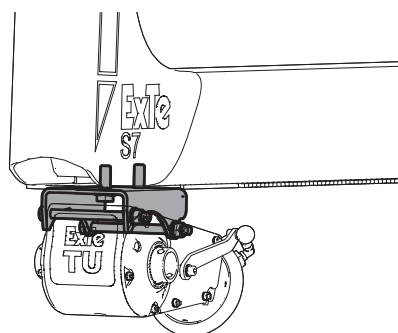
Accessories

Brackets S-series

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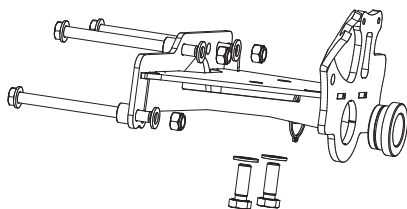
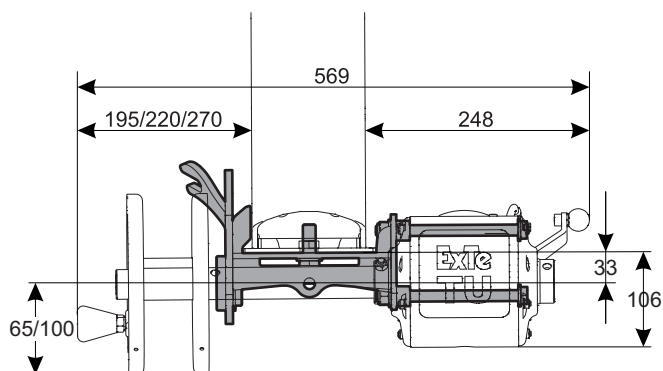
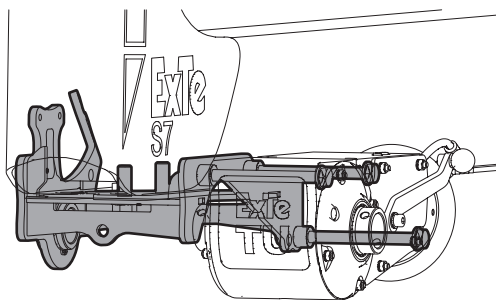


Tillbehör / Accessories					
Pos	Qty	Art.nr	Benämning	Description	
31	1	803131	Fäste rakt komplett S-serien	Bracket horizontal assy S-series	
32	1	803132	Fäste vinklat komplett S-serien	Bracket angled assy S-series	

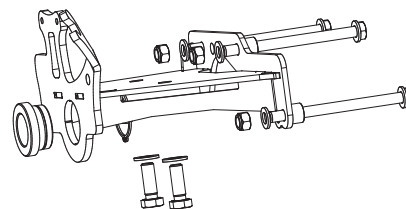
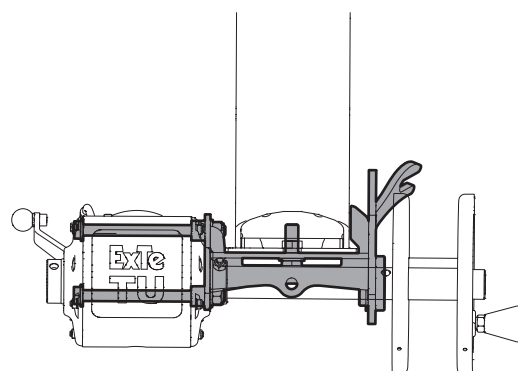
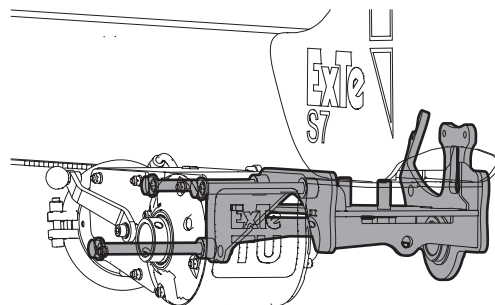
Accessories

Brackets S-series

33



34

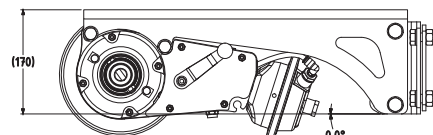
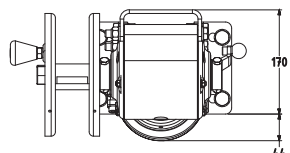
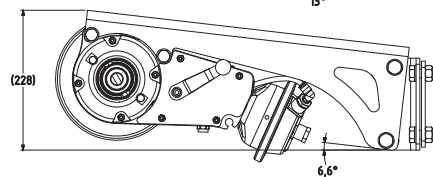
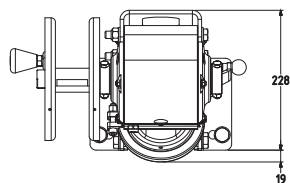
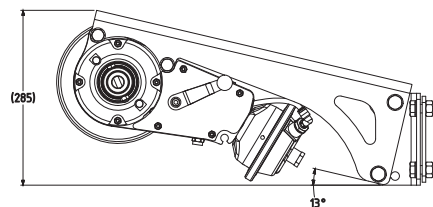
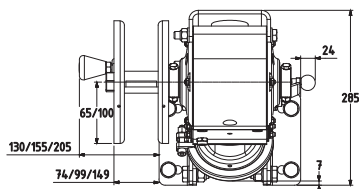
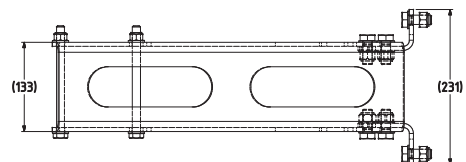
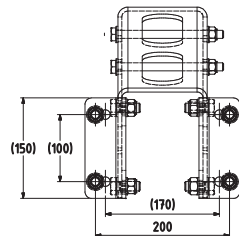
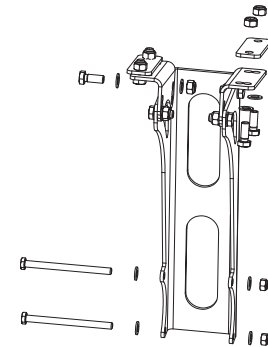
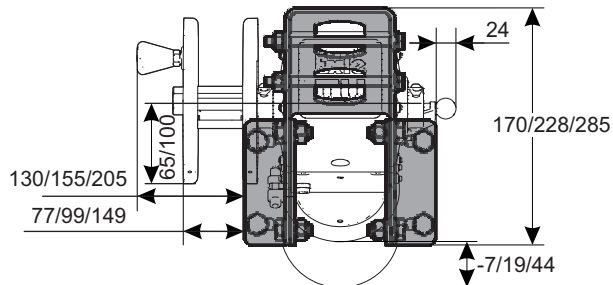
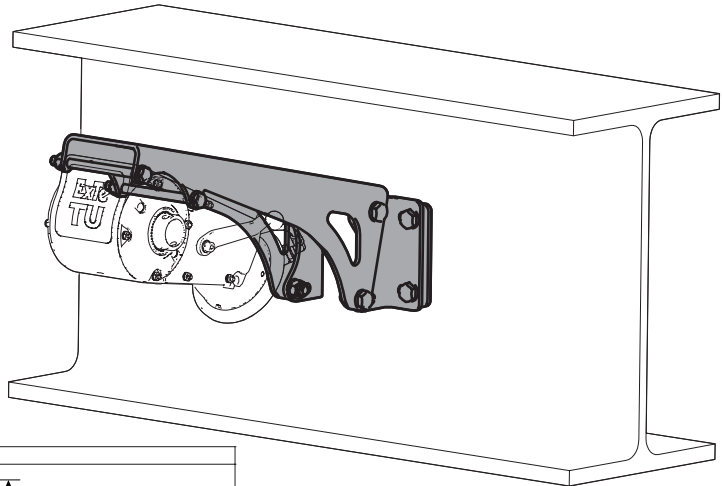


Tillbehör / Accessories				
Pos	Qty	Art.nr	Benämning	Description
33	1	800856	Fäste sidomont. Vänster S-serien	Bracket side mount Left assy S-series
34	1	800855	Fäste sidomont. Höger S-serien	Bracket side mount Right assy S-series

Accessories

Frame mount

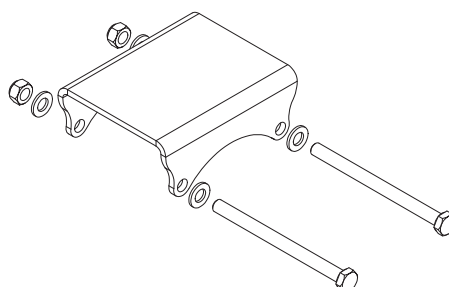
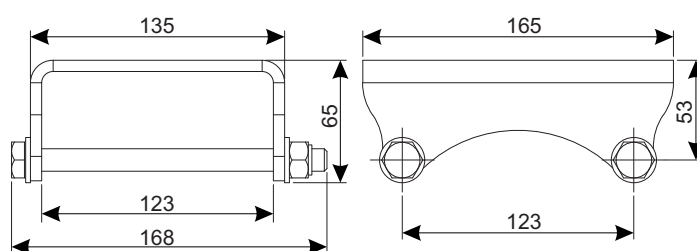
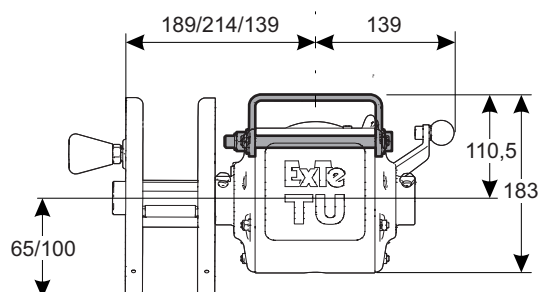
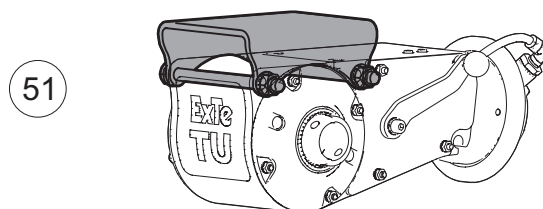
41



Tillbehör / Accessories				
Pos	Qty	Art.nr	Benämning	Description
41	1	803140	Fäste rammonterat justerbart komplett	Bracket frame mount adjustable assy

Accessories

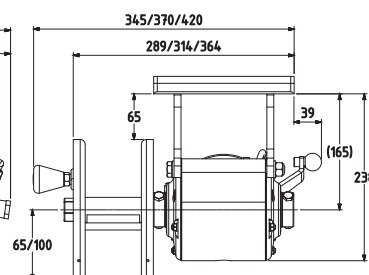
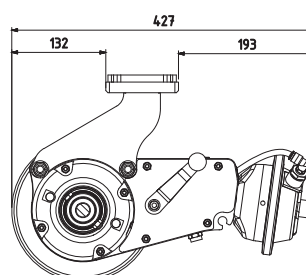
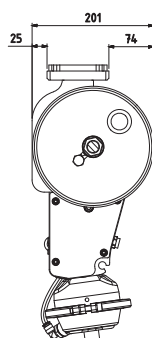
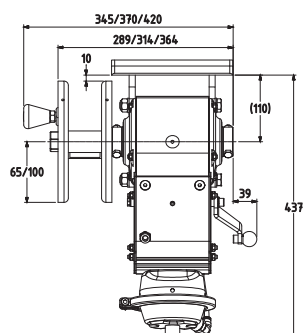
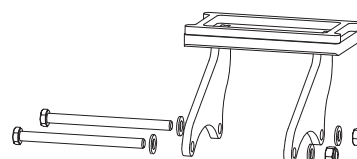
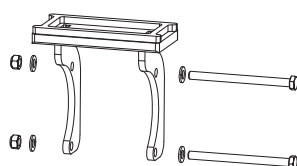
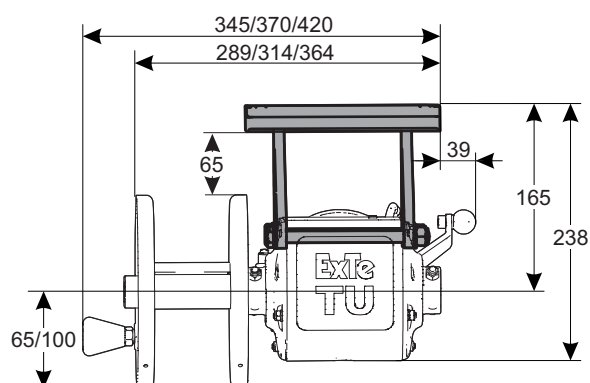
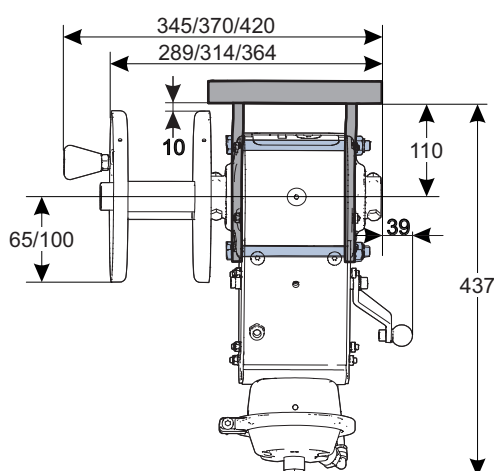
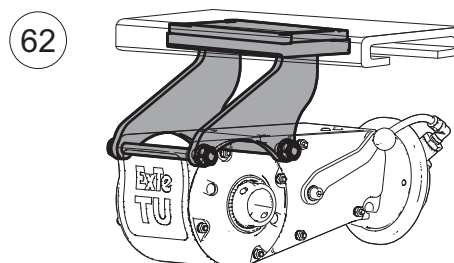
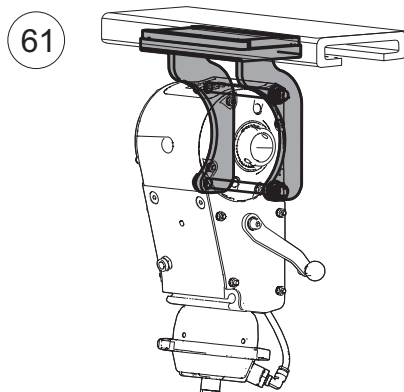
For welding



Tillbehör / Accessories				
Pos	Qty	Art.nr	Benämning	Description
51	1	803137	Fäste insvetsnsning flak TU	Bracket for welding floormount TU

Accessories

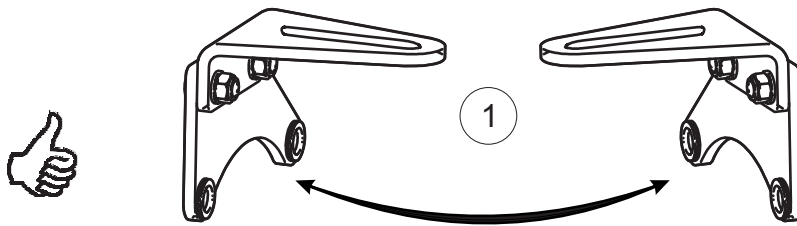
Channel mount



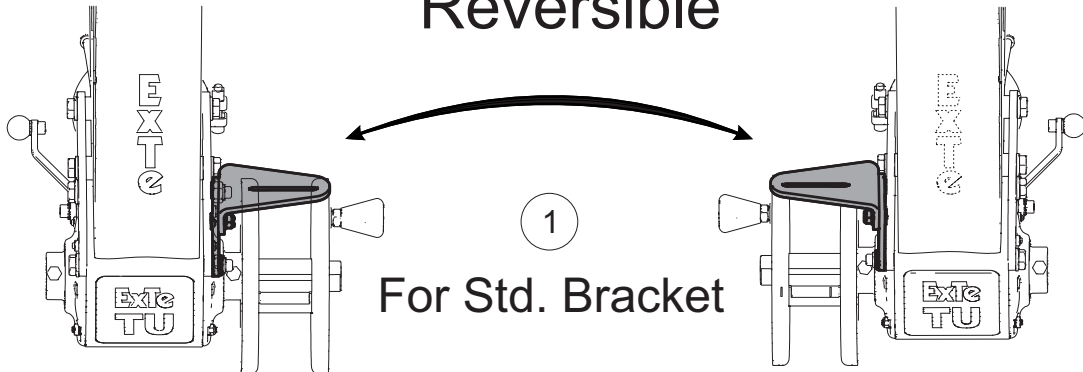
Tillbehör / Accessories				
Pos	Qty	Art.nr	Benämning	Description
61	1	803141	Glidfäste vertikalt TU UH	Bracket vertical TU for channel mount
62	1	803142	Glidfäste horisontellt TU UH	Bracket horizontal TU for channel mount

Accessories

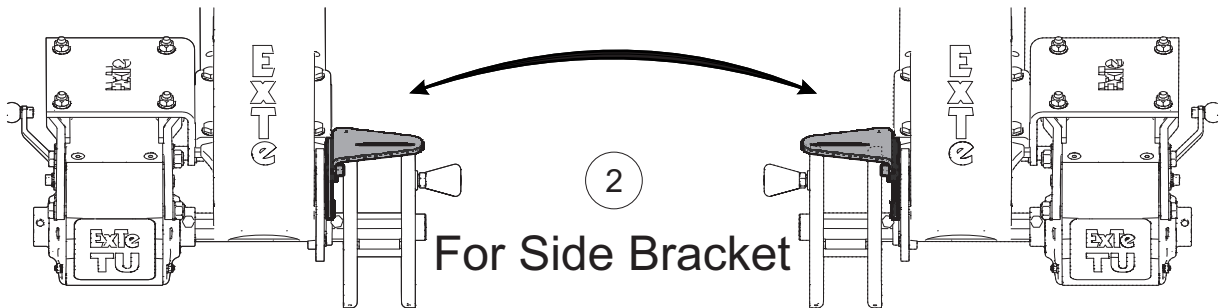
Strap Guides



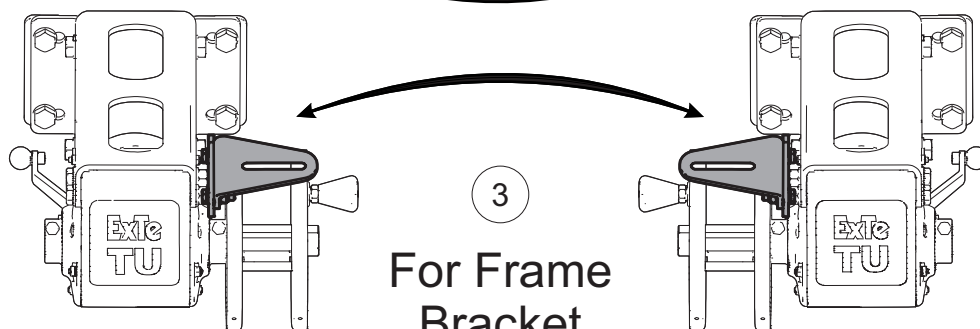
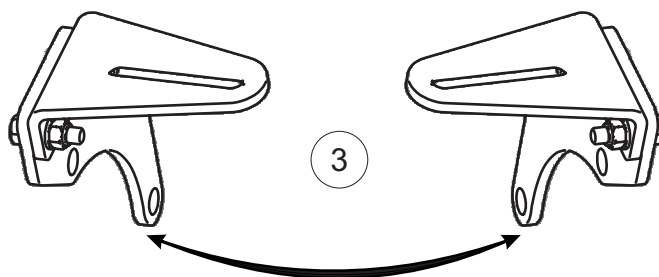
Reversible



For Std. Bracket



For Side Bracket

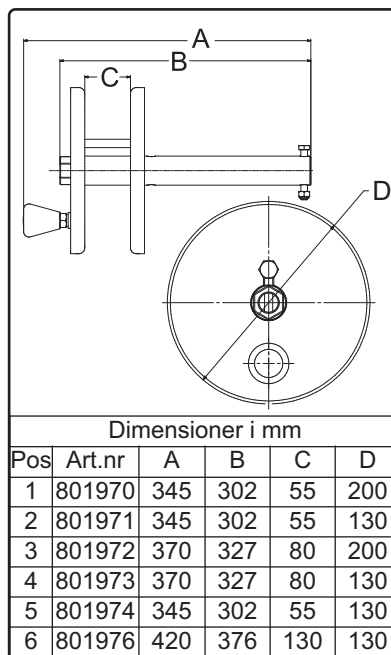
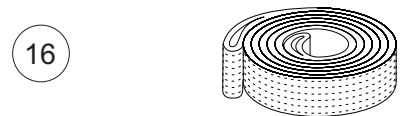
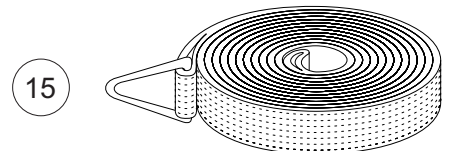
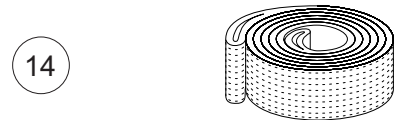
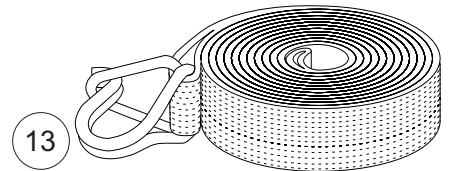
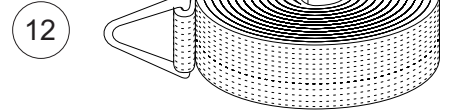
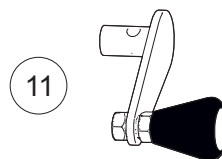
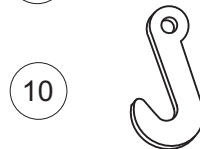
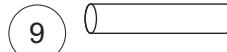
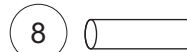
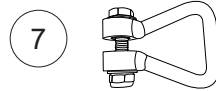
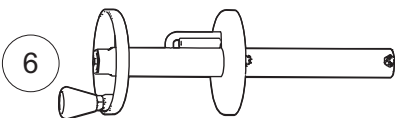
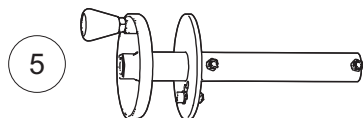
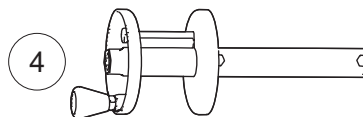
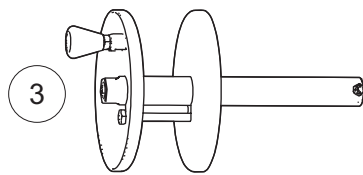
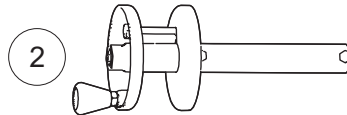
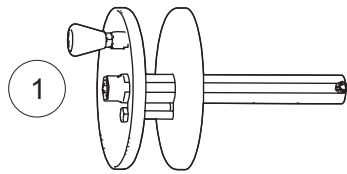


For Frame
Bracket

Reservdelar / Spare parts					
Pos	Qty	Art.nr	Benämning	Description	
1	1	800867	Bandstyrning kompl. fäste TU	Strap guide assy bracket TU	
2	1	800868	Bandstyrning kompl. sidofäste TU	Strap guide assy bracket side mount TU	
3	1	800864	Bandstyrning kompl. ramfäste TU	Strap guide assy bracket frame mount	

Accessories

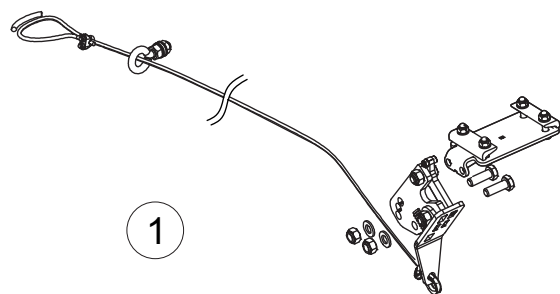
Spools / Straps



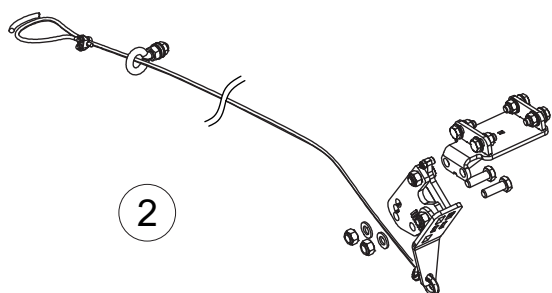
Tillbehör / Accessories						Lashing Capacity(LC)
Pos	Qty	Art.nr	Benämning	Description		
1	1	801970	Stor trumma kompl. Band 50 mm	Large spool assy. Webbing strap 50 mm		
2	1	801971	Liten trumma kompl. Band 50 mm	Small spool assy. Webbing strap 50 mm		
3	1	801972	Stor trumma kompl. Band 75 mm	Large spool assy. Webbing strap 75 mm		
4	1	801973	Liten trumma kompl. Band 75 mm	Small spool assy. Webbing strap 75 mm		
5	1	801974	Trumma kortl. kätting kompl. std	Drum Short linked chain assy. Std		
6	1	801976	Liten trumma bred kompl. Band 50 mm	Small wide spool assy Webbing str. 50 mm		
7	1	800250	Bandbygel (50mm)	Webbing strap loop (50mm)		
8	1	801980	Låssprint (50mm)	Locking pin (50mm)		
9	1	801981	Låssprint (75mm)	Locking pin (75mm)		
10	1	800252	Krok separat	Hook		
11	1	802127	Vevhandtag spännare TU	Crank handle TU		
12	1	800231	Band 10m 75mm	Webbing strap 10m 75mm		5 Ton
13	1	800229	Band 8,5m 75mm Dubbl J-krok	Webbing strap 8,5m 75mm Double J Hook		5 Ton
14	1	800232	Band 2m 75mm	Webbing strap 2m 75mm		5 Ton
15	1	780050	Band 10m 50mm 5 Ton	Webbing strap 10m 50mm 5Ton		2.5 Ton
16	1	800245	Band 2m 50mm	Webbing strap 2m 50mm		2.5 Ton
17	1	800248	Kätting 6mm 8m	Chain 6mm 8m		
18	1	800689	Kortlänkad kätting 1.5m	Short linked chain 1.5m		

Accessories

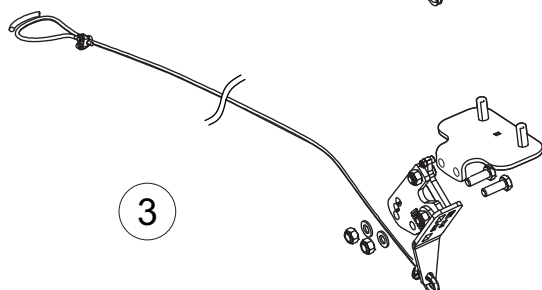
Releaser / Kits



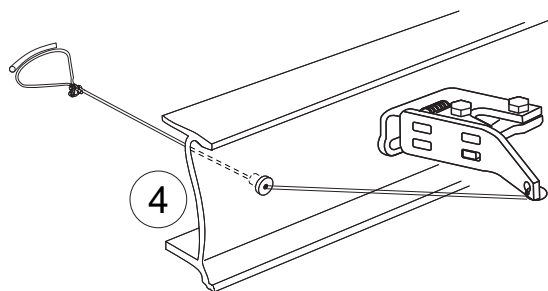
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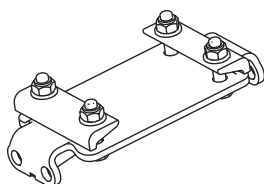
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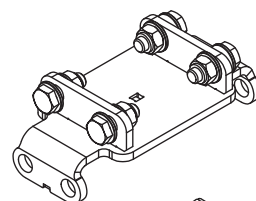
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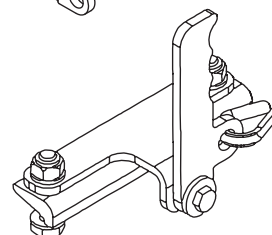
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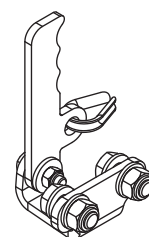
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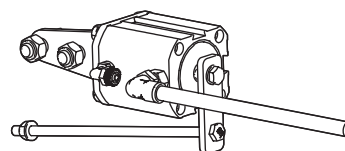
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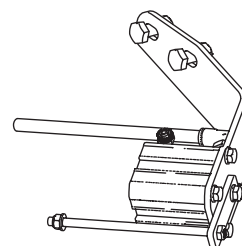
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8



9



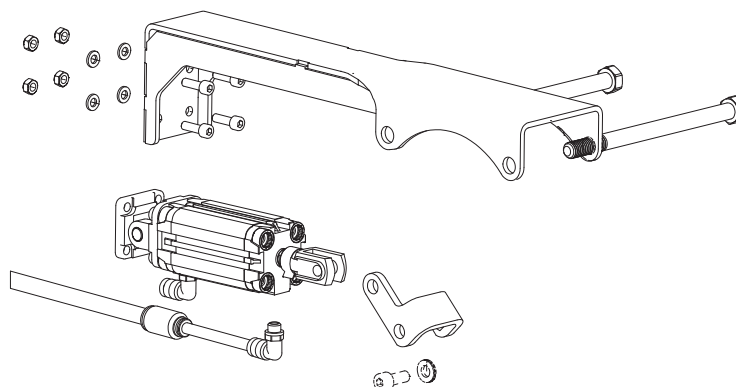
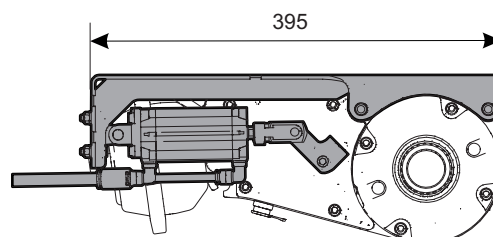
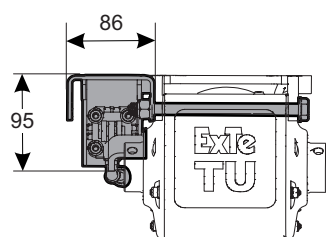
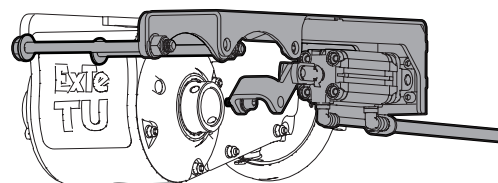
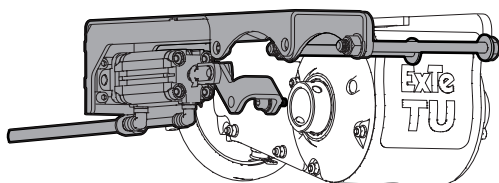
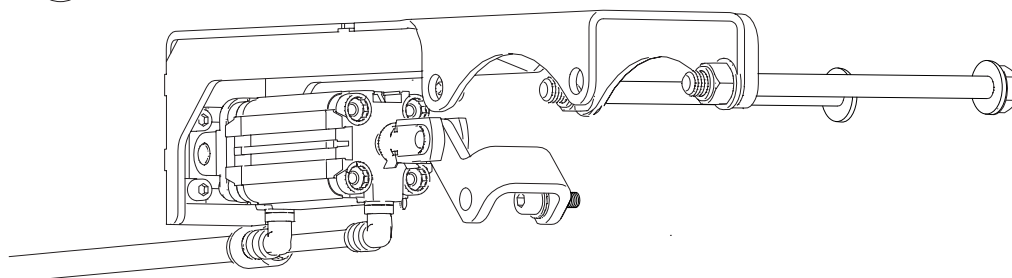
10

Tillbehör / Aecessories				
Pos	Qty	Art.nr	Benämning	Description
1	1	802295	Utlösare A-serien sats	Release A-series kit
2	1	803070	Utlösare D-serien sats	Release D-series kit
3	1	803136	Utlösare S-serien sats	Release S-series kit
4	1	802075	Utlösare rammonterad sats	Release frame mount kit
5	1	800437	Dubbelt utlösarfäste A-serien	Dual release attachment A-series
6	1	803047	Dubbelt utlösarfäste D-serien	Dual release attachment D-series
7	1	802181	Utlösarhandtag A-serien	Release handle A-series
8	1	803027	Utlösarhandtag D-serien	Release handle D-series
9	1	802187	Luftstyrning utlösare bankemonterad	Pneumatic release bolster mount kit
10	1	802188	Luftstyrning utlösare rammonterad	Pneumatic release frame mount kit

Accessories

Pneumatic release

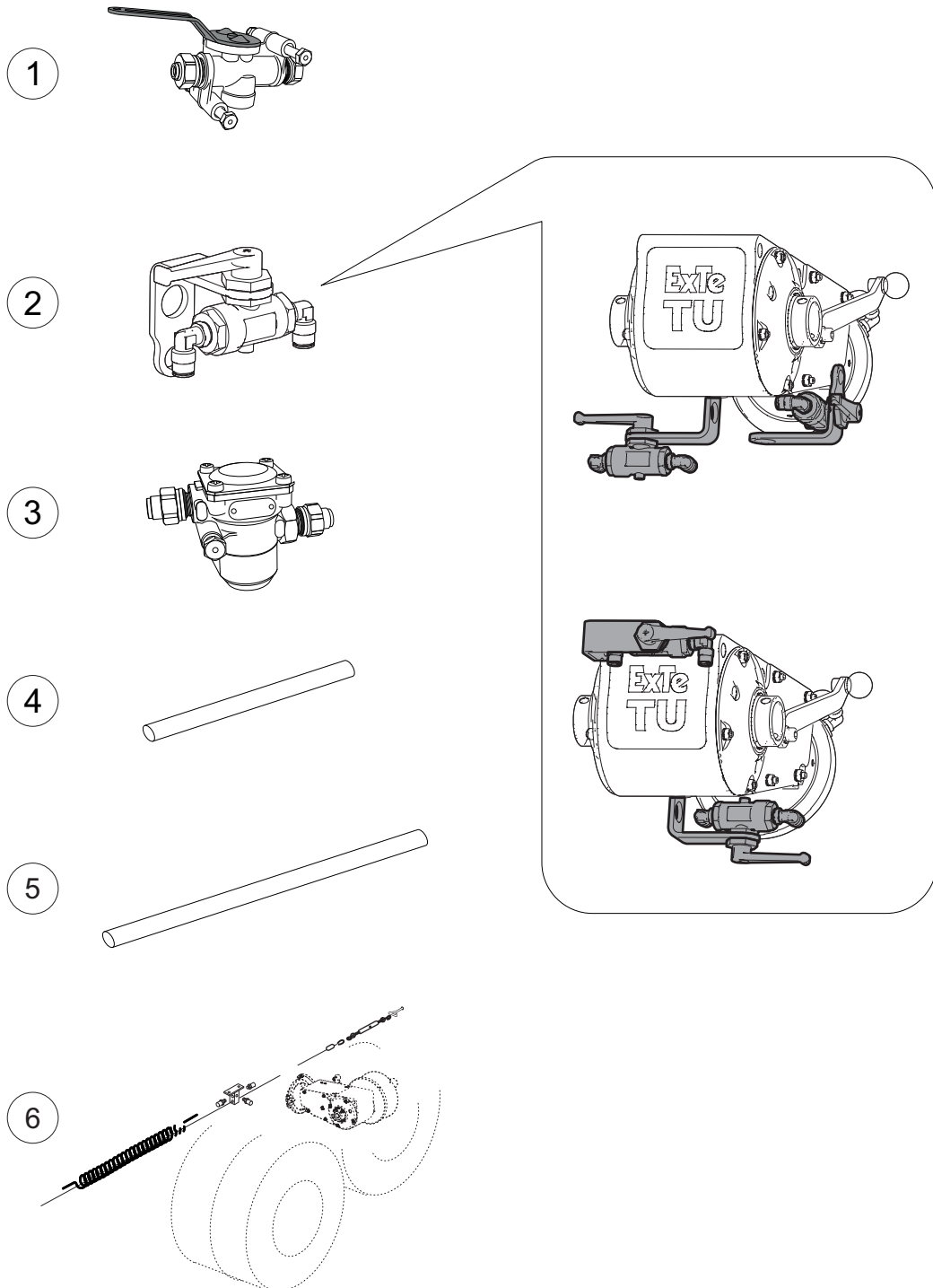
1



Luftsatser / Air kits				
Pos	Qty	Art.nr	Benämning	Description
1	1	802365	Luftstyrd frikopplare sats TU	Pneumatic release assy TU

Accessories

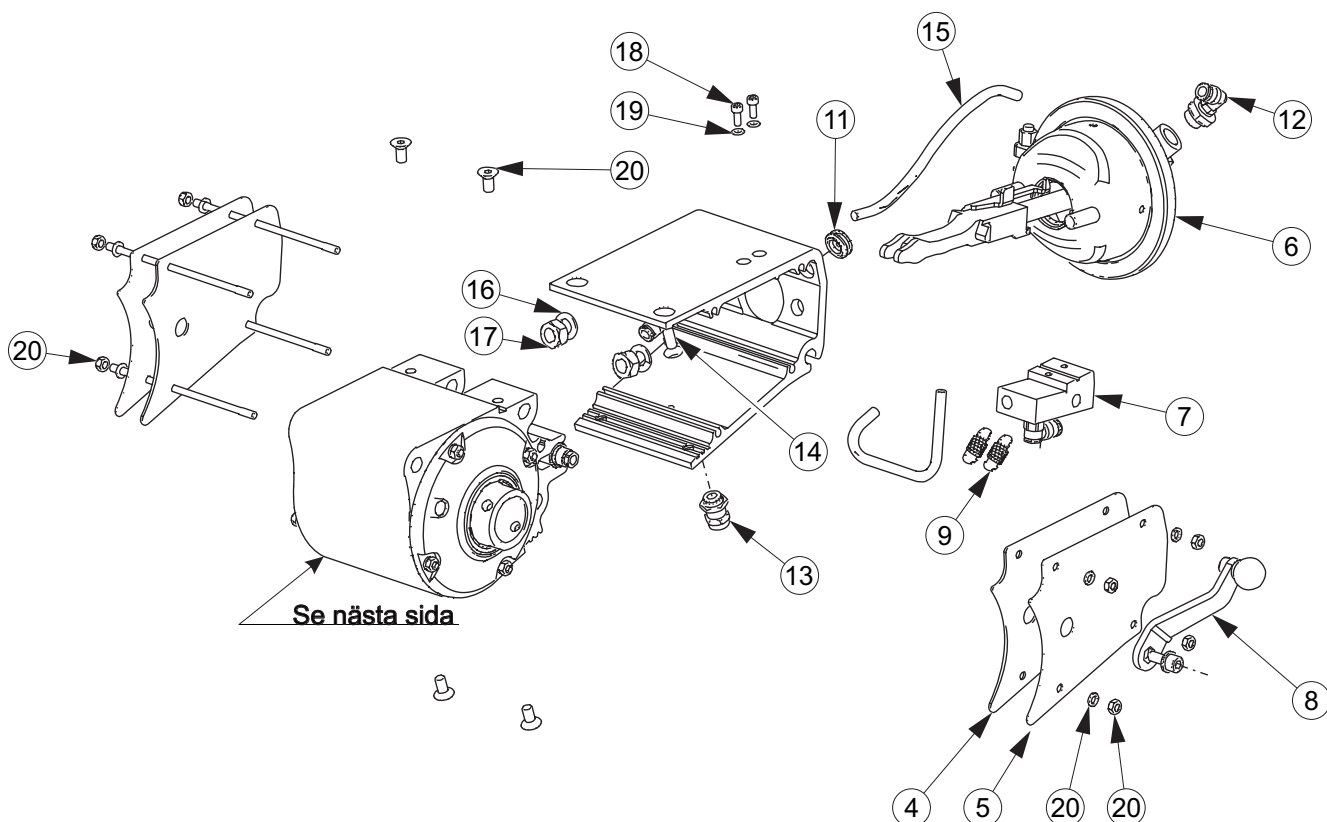
Pneumatic Kits



Luftsatser / Air kits					
Pos	Qty	Art.nr	Benämning	Description	
1	1	802301	Huvudkran sats	Main valve kit	
2	1	802308	Kransats TU	Valve kit TU	
3	1	802379	Tryckbegränsningsventil TU 4,5 sats	Pressure release valve TU 4,5 kit	
4	1	802304	Slangsats bil 8mm x 10m	Hose truck 8mm x 10m	
5	1	802305	Slangsats släp 8mm x 15m	Hose trailer 8mm x 15m	
6	1	802306	Slangsats bankemonterad under	Hose kit bolster mount below	

Spare Parts

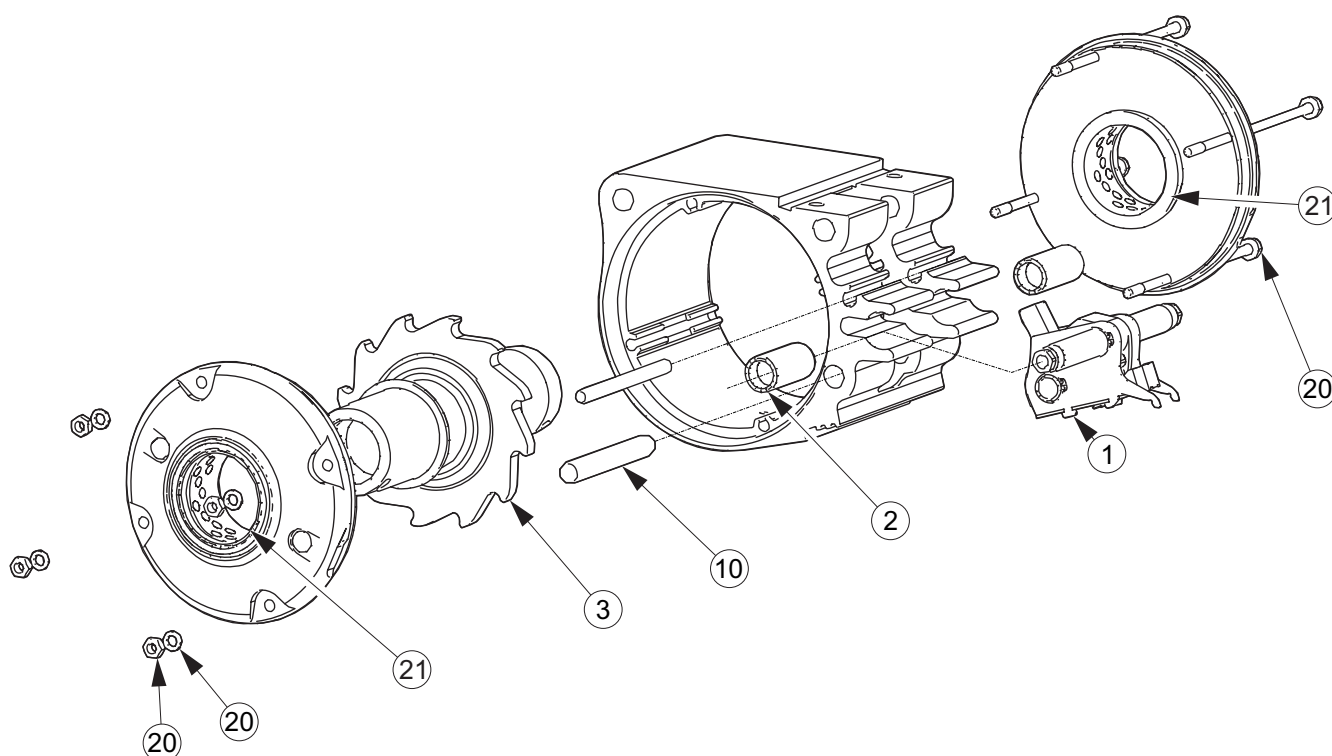
Exploded View 1



Pos	Qty	Art.nr	Benämning	Description
1	1	802371	Spärrkassett (Sid 23)	Ratchet mechanism (Pg 23)
2	2	802372	Bussning exenteraxel (Sid 23)	Bushing eccentric shaft (Pg 23)
3	1	802373	Röraxel (Sid 23)	Tube shaft (Pg 23)
4	2	802374	Tätning sidoplåt	Sealing side plate
5	2	802375	Sidoplåt	Side plate
6	1	802376	Cylinder komplett	Brake actuator complete
7	1	818200	Ventil komplett	Valve complete
8	1	802377	Frikopplingshandtag	Release handle
9	2	240071	Dragfjäder	Tension spring
10	1	800270	Cylindrisk pinne (Sid 23)	Cylindric rod (Pg 23)
11	1	802059	Gummigenomföring	Rubber grommet
12	1	802061	L Koppling svivel	L Coupling swivel
13	1	802158	Koppling	Coupling
14	1	802058	L Koppling svivel	L Coupling swivel
15	2	802062	Slang	Air hose
16	2	800156	Bricka	Washer
17	2	800157	Mutter	Nut
18	2	211240	Skruv	Screw
19	2	211957	Bricka	Washer
20	1	802356	Skrufsats TU	Screw kit TU
21	1	802355	Lagersats TU (Sid 23)	Bushing kit TU (Pg 23)

Spare Parts

Exploded View 2



Pos	Qty	Art.nr	Benämning	Description
1	1	802371	Spärrkassett	Ratchet mechanism
2	2	802372	Bussning exenteraxel	Bushing eccentric shaft
3	1	802373	Röraxel	Tube shaft
10	1	800270	Cylindrisk pinne	Cylindric rod
20	1	802356	Skruvsats TU	Screw kit TU
21	1	802355	Lagersats TU	Bushing kit TU

Declaration of Conformity

The declaration of incorporation of partly completed machinery, TU-Tension Unlimited part.nr. 802380 is manufactured in accordance with:

- EN ISO 14121 Safety of machinery - Principles for risk assessment.
- EN ISO 12100-1 Safety of machinery - Basic terminology, methodology.
- EN ISO 12100-2 Safety of machinery - Technical principles.

And in compliance with the following standards and directives:

- 2006/42/EG, Annex 2 B
- EN 12195-2
- AS/NZS 4380: 2001

Manufacturer

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