

MANUAL

Servicebox 586TB / 588TB
INNOVATION



ELMETM
Swedish Spreader Systems

Thank you for purchasing this Servicebox to your 586TB / 588TB!

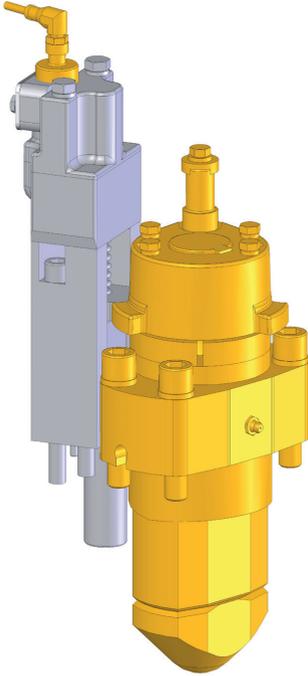
This guide provides the information needed to service and maintain your spreader. A spreader used and serviced properly retain their qualities for a long and profitable life in service, and you get the full advantage of all the features.

Maintenance may only be carried out by qualified personnel.

For more detailed information about spare parts and service instructions, we refer to our manual for the specific spreader.

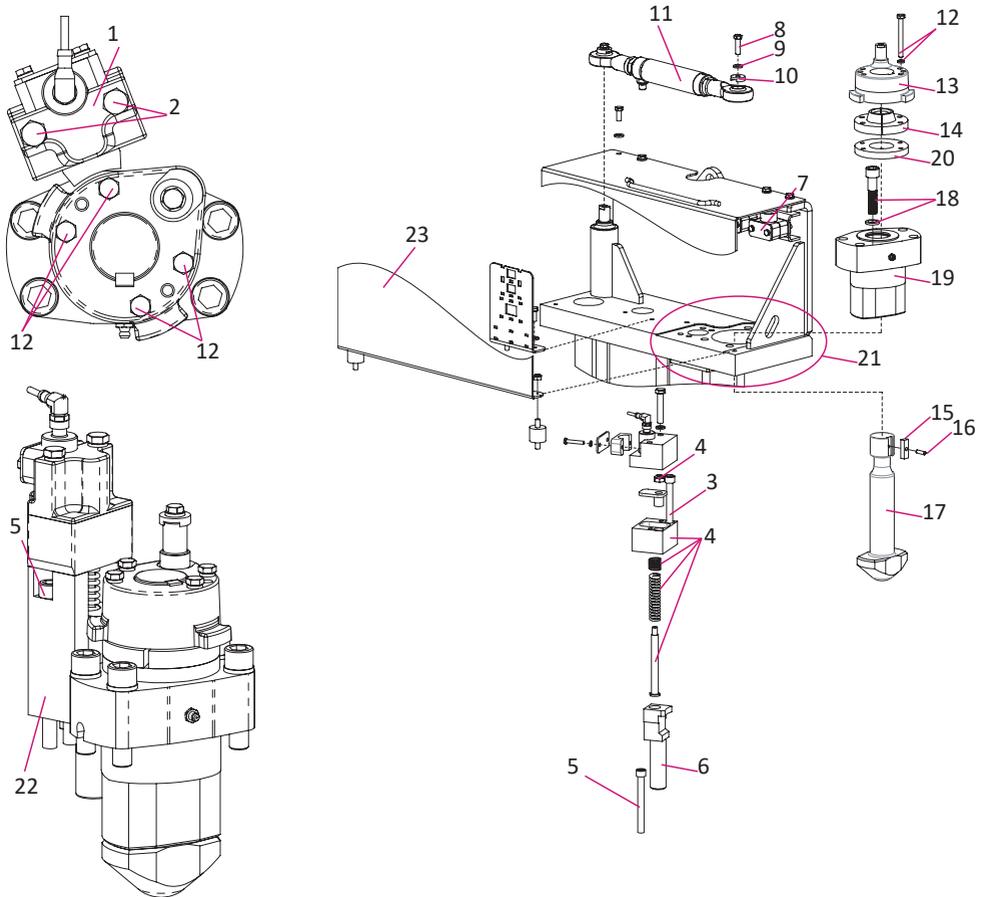
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TWISTLOCK ASSEMBLY

The twistlock is a genuine ELME part, which is certified and marked with a unique serial number.



To remove the twistlock and sleeve, proceed as follows:

- 1 Remove the cover (item 23).
- 2 Remove the sensor bracket (item 1), by loosening and remove the two bolts (item 2).
- 3 Loosen and remove the two screw allens (item 3).
- 4 Remove the seated bracket assembly. This assembly includes nut, indicator, springs, bracket and tie rod (item 4).

- 5 Loosen and remove the screw allen (item 5). Then remove the seated pin (item 6).
- 6 To give space, remove the two sensors (including hose clamps/brackets) by loosening and removing the bolts and the washers (item 7).
- 7 Remove the bolt (item 8), the washer (item 9) and the lock washer (item 10). Turn the twistlock cylinder away (item 11), to give space.
- 8 Remove the four bolts and washers (item 12) from the crank (item 13).
- 9 Lift off the crank and remove the sleeve (item 14), the key (item 15) and the roll pin (item 16) attached to the twistlock (item 17).
- 10 Remove the twistlock (item 17).
- 11 Finally, loosen and remove the bolts and the washers (item 18) from the twistlock sleeve (item 19) and remove it.

Inspection/greasing prior to reassembly

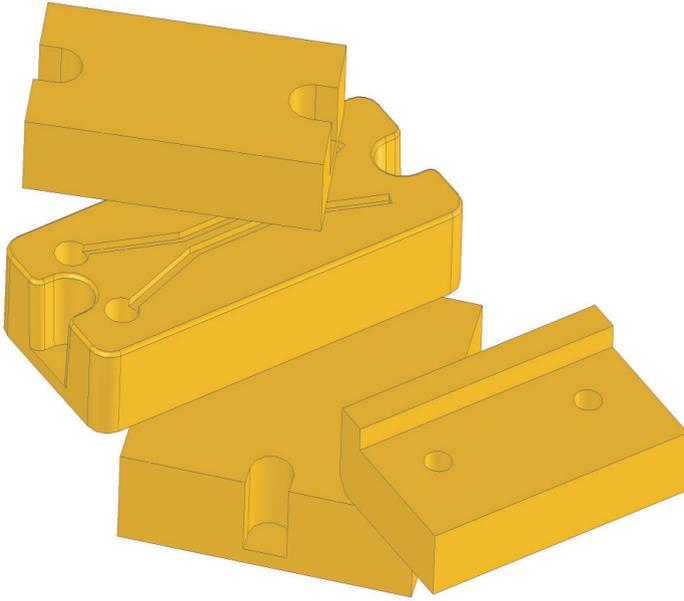
- 12 After removal of all twistlock parts, remove all grease and dirt from the parts and also from the corner of the head. Steam clean or clean with some form of solvent.
- 13 Check the twistlock (item 17) for wear on the head. The sleeve (item 14) and the crank (item 13) should also be inspected for possible wear or damage and replaced if necessary.

It should be noted that the state of the sleeve (item 14) and the recess in the twistlock (item 17) is very important, as these parts are carrying the load when a container is lifted.

- 14 Before reassembling the twist lock parts, it is very important to plentiful grease the bushing inside the twist lock sleeve (item 19), the spacer (item 20) and the surface it is placed on. Also grease the head of the twistlock (item 17) and inside the tower (item 22) before mounting the seated pin (item 6).
- 15 It is also very important to plentiful grease the surface both on top of and underneath the area as shown on the figure on page 4 (item 21) before reassembling.

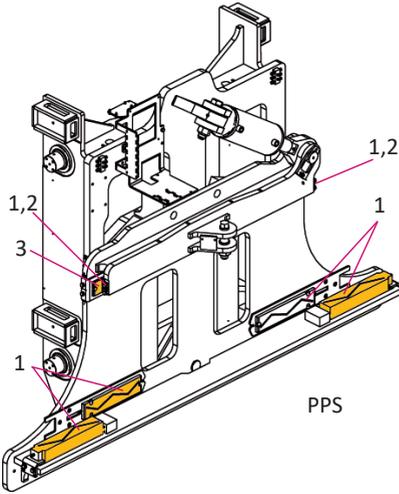
Replacing / Fitting twistlocks

- 16 Replace/reassemble in reverse order, see above (from point 10 and backwards)

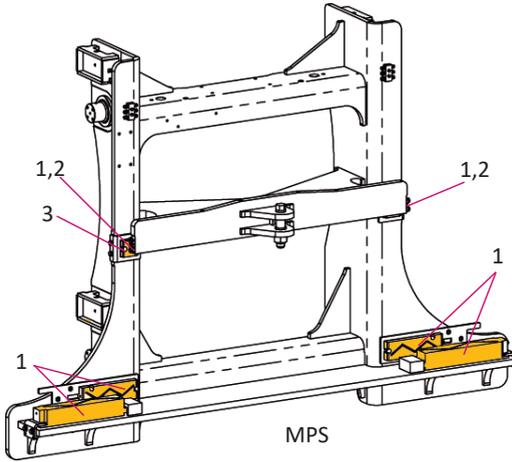
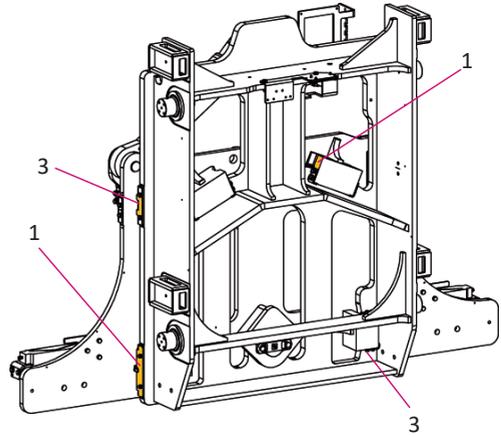


WEAR PADS & SHIMS

To eliminate mechanical friction, there are plastic pads between extension beams and main frame. The pads are positioned for support to reduce and also to absorb horizontal and vertical shock loads, they are mounted in several retainers. This design makes inspection and replacement easy. There are also plastic pads on the carriage and the PPS frame (option), see next two pages.



PPS



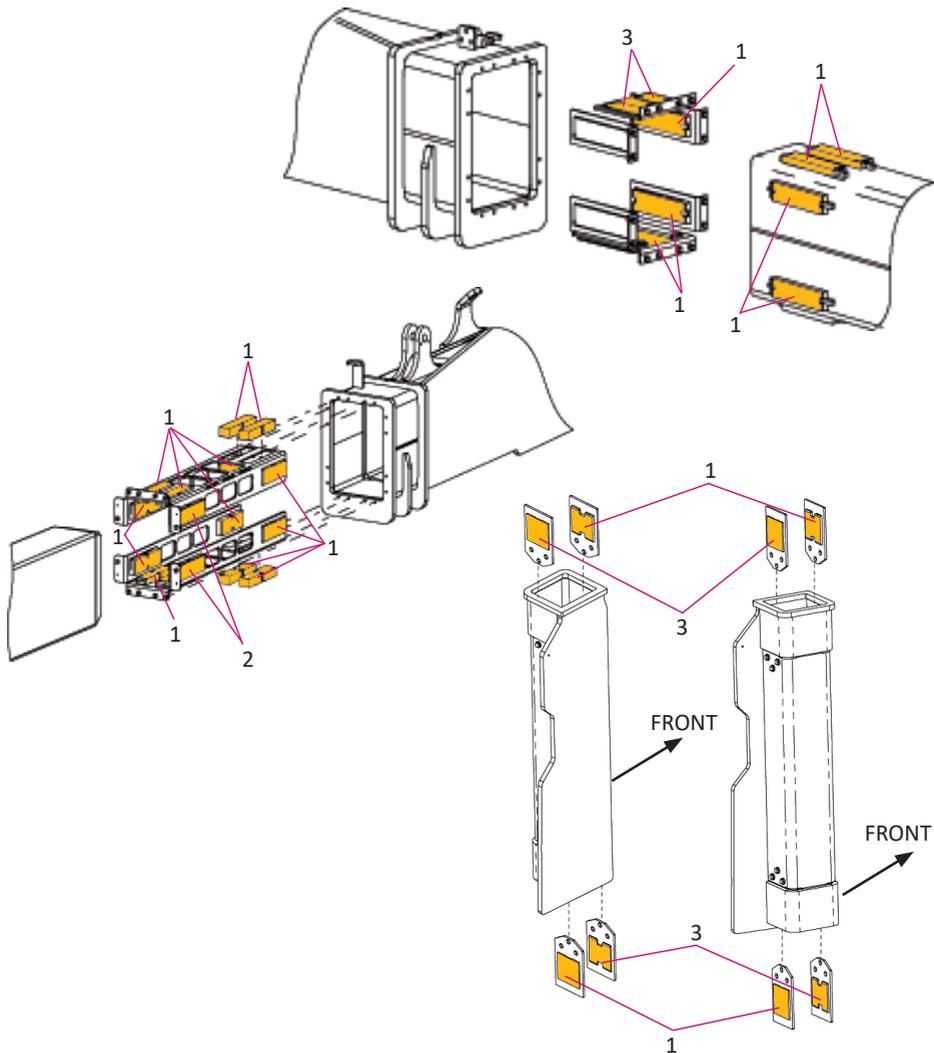
MPS

Plastic wear pads

The plastic wear pads (item 1) should be inspected for wear. Replacing the wear pads can be done with ordinary hand tools and without removing the beams. **The wear pads (items 3) are not likely to wear and are therefore not included in the service box.**

Shims

If the play on the sides of the extension beam is more than 10 mm, it is possible to use different sizes of shims (item 2) to reduce the play. Always check the play in 30ft position or where the extension beam is the greatest. Minimum play should be 1 mm after shimming.



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FLETRACK CHAIN

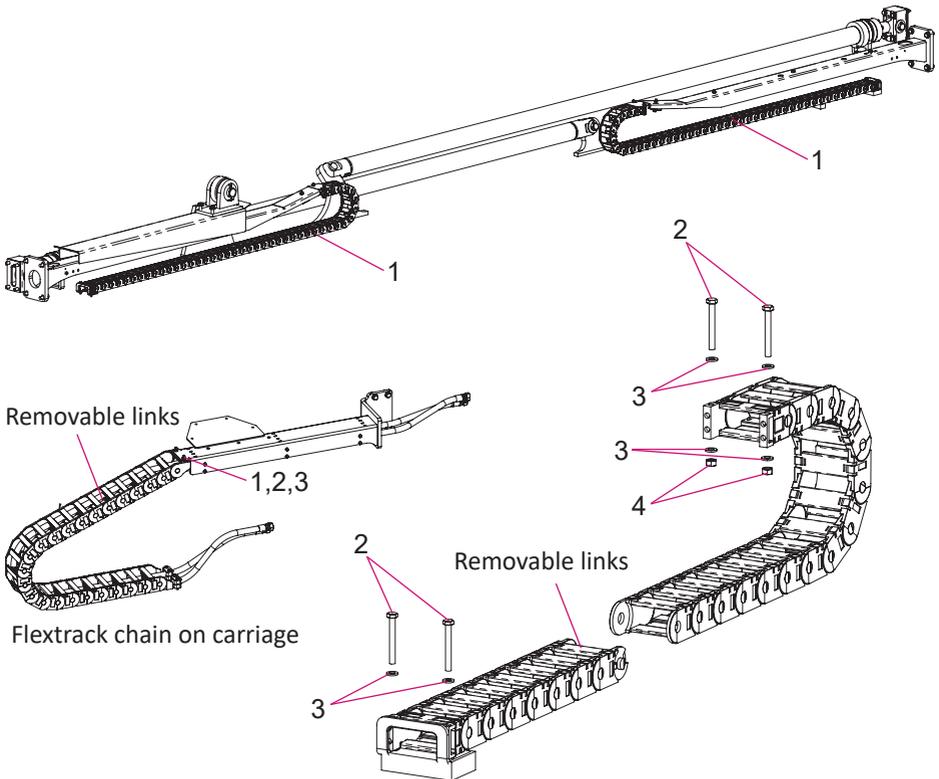
Included in this service box are complete flextrack chains. On this page, you will find instructions how to replace them.

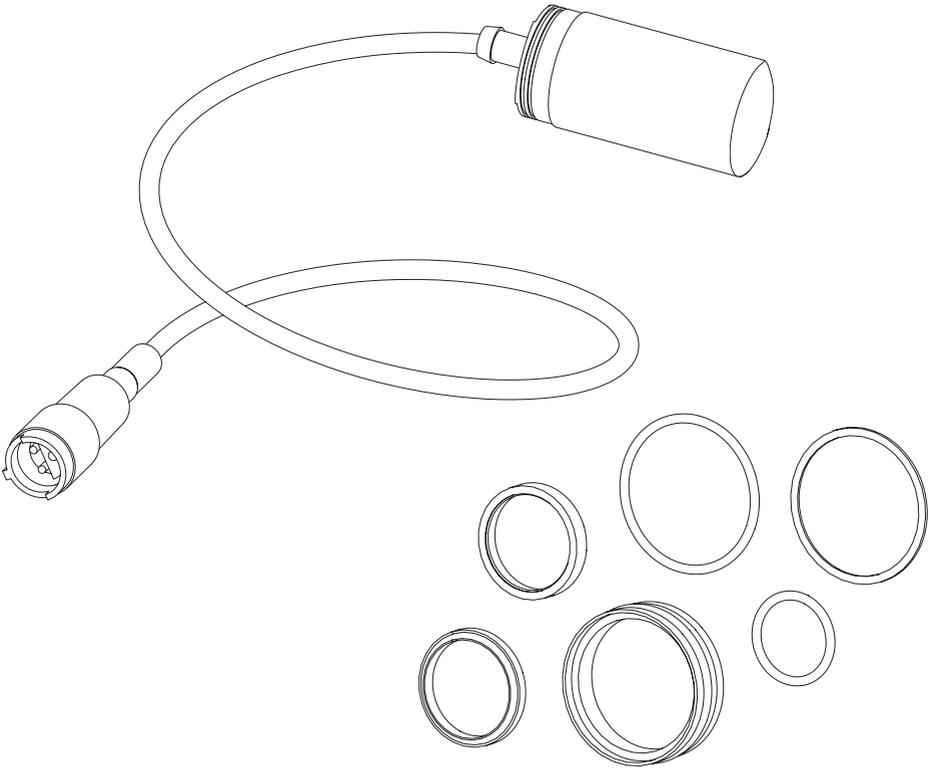
Remove the flextrack chain (item 1) by first opening all links on it.

IMPORTANT! Carefully open each link with a suitable screwdriver or similar.

When all links are opened, unscrew the bolts (item 2), the washers (item 3) and the nuts (item 4) on the brackets mounted in each end of the flextrack chain (item 1).

Remove the flextrack chain. Replace with the new chain, by mounting it in reverse order.





BACK UP PARTS

A number of back up parts are also included in this servicebox, in case of breakdown.

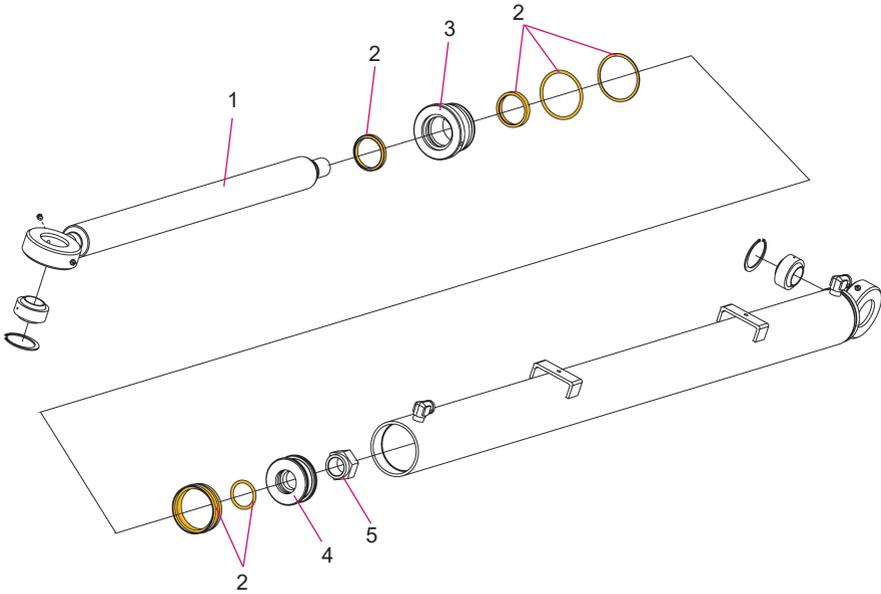
Proximity switch

For replacement of proximity switch / sensor in hook assembly.

Seal kits

For replacement of seal kits in extension, sideshift, tilt and side clamp cylinders.

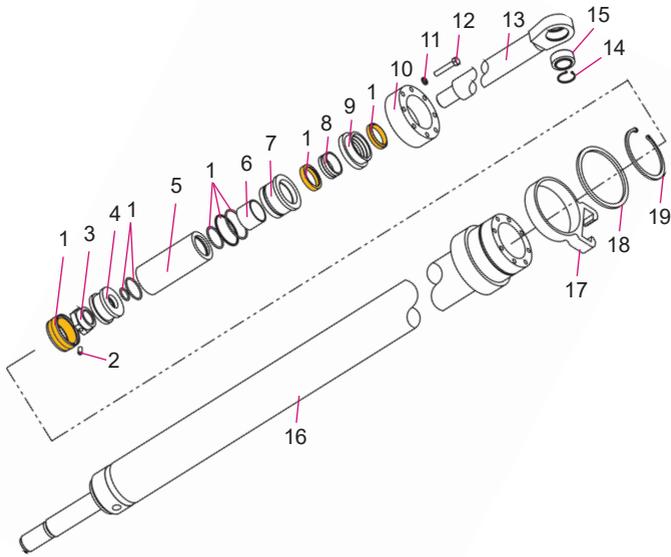
A seal kit for replacement in electro valve is also included in this servicebox.



Seal replacement - Sideshift cylinder and Tilt cylinder (PPS option)

Remove the side shift cylinder or tie up the cylinder when working on the spreader. Loosen gland (item 3) and hydraulic hoses and pull out the piston rod (item 1). Be careful not to damage the piston rod when removing and beware of the oil spill. Remove the nut (item 5), the piston (item 4) and the gland (item 3) from the piston rod. Check the piston rod and cylinder for damages that can cause leakage and repair or replace when necessary.

Carefully remove the seals (items 2), do not damage the surfaces. Clean all parts. Place the new seals with oil or grease. Place the gland and the piston on the piston rod, tighten the nut and secure it with the roll pin. Slide the piston rod assy. into the cylinder and tighten the gland.

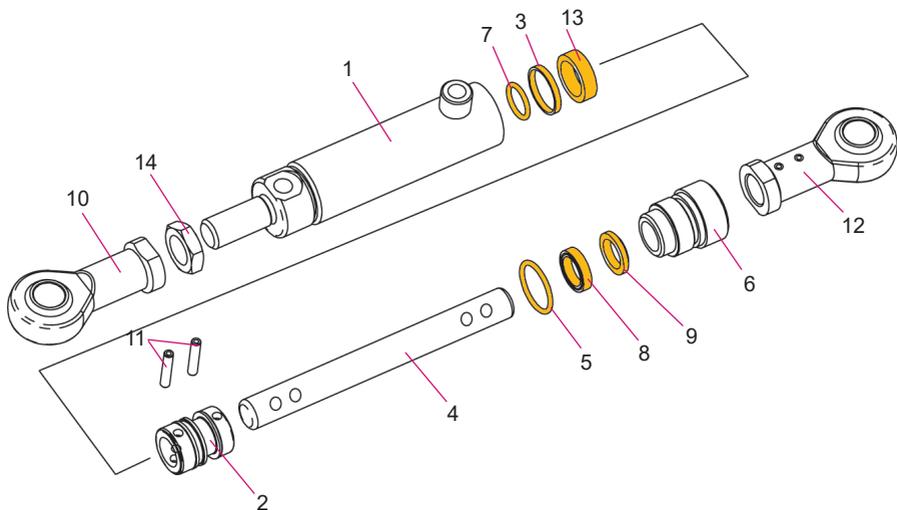


Seal replacement - Extension cylinder

Remove the extension cylinder from the spreader.

Loosen the 8 bolts (item 12) and pull out the piston rod. Be careful not to damage the piston rod and beware of oil spill. (It is best if you attach a hose on the front oil connection of the cylinder and place the other end in a oil bin or a jerry can)
 Remove the roll pin (item 2), the nut (item 3), the piston (item 4), the spacer (item 5), the gland (item 7) and the washer (item 9) from the rod. Be sure that the ring (item 10) stays on the painted part of the rod or take it off.
 Check the piston rod and cylinder for damages that can cause leakage and repair or replace when necessary.

Carefully remove the seals (items 1) from the piston, spacer, gland and washer, do not damage the surfaces. Clean all parts. Place the new seals with oil or grease.
 Place the washer, gland and the piston on the piston rod, tighten the nut and secure it with the roll pin.
 Slide the piston rod assembly into the cylinder and tighten the bolts (torque 23 Nm).



Seal replacement - Twistlock cylinder

Loosen the gland (item 6) and pull out the piston rod (item 4), no need to loosen the rod head. Use a drift punch to remove the roll pins (item 11) from the piston (item 2) and remove the piston and the gland from the rod.

Carefully remove the seals (items 7, 3, 13, 5, 8 and 9), do not damage the surfaces. Check the piston rod and cylinder for damages that can cause leakage and repair or replace when necessary.

Clean all parts. Place the new seals with oil or grease. Place the gland and the piston on the piston rod so that the securing holes line up and place the roll pins. Slide the piston rod assembly in the cylinder and tighten the gland.

Summary of all parts included in the box:

Twistlock Assembly	1x	Twistlock kit (Left)
	1x	Twistlock kit (Right)
	2x	Seated pin
	2x	Nut*
	2x	Compression spring*
	2x	Compression spring*
	2x	Tie rod*
	2x	Seated bracket*
	2x	Indicator*
Wear pads & Shims	4x	Wear pad - Endbeam
	30x	Wear pad - Mainframe
	6x	Wear pad - Carriage
	6x	Shims - Mainframe
	2x	Shims 1 mm - Carriage
	2x	Shims 2 mm - Carriage
Flextrack Chain	2x	Flex track chain - Extension
	1x	Flex track chain - Carriage
Back up Parts	2x	Proximity switch
	1x	Seal kit - Sideshift cylinder
	1x	Seal kit - Extension cylinder
	1x	Seal kit - Twistlock cylinder
	1x	Seal kit - Electro valve
PPS (option)	6x	Wear pads (carriage)
	2x	Shims 1 mm (carriage)
	2x	Shims 2 mm (carriage)
	1x	Seal kit - Tilt cylinder

* these parts are assembled.

Why use Genuine Parts?



ELME GENUINE PARTS

By using ELME genuine parts, you always get parts you can rely on and true peace of mind. If you are using non-genuine parts, you put weak links into a strong, perfectly designed chain of interactive components. Please note that non-genuine parts are made by factories that have not been approved by ELME and they are often manufactured to be as cheap as possible, using inferior materials, workmanship and by reversed engineering. Non-genuine parts are high risk. Real cost and real risk is measured not in the price, but in the cost of the component in the event of failure. Use of non-genuine parts may lead to higher downtime and lower productivity due to more frequent failures. For correct operation of the spreader, only ELME Genuine Parts and accessories which are approved by ELME should be used. If non-genuine parts are used, the warranty is not valid. By using ELME Genuine Parts and accessories approved by ELME, you will maintain original standard. ELME will disclaim all responsibility if parts from third party are used.

INSPECTION/MAINTENANCE

Always inspect your spreader before using it. If any kind of damage is detected – which may affect the function of the spreader - this must be corrected before use. If the spreader needs to be repaired, please contact a specialist and see to that only ELME Genuine Parts are used if need of replacement. This is to ensure that the spreader still is reliable. Repairs made by a non-qualified person or use of non-genuine parts may lead to increased risk of personal injuries or damages. Service and maintenance are necessary to keep capacity and efficiency of the spreader for many years.

MODIFICATION OF THE SPREADER/PRODUCT LIABILITY/WARRANTY

For the avoidance of doubt, ELME is not liable in case of damage due to factors beyond ELME's control or due to a lack of maintenance or the use of non-genuine parts. The spreader should not be modified without consultation with ELME. If so, this means that the spreader is not CE approved and thus ELME has no product liability.



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