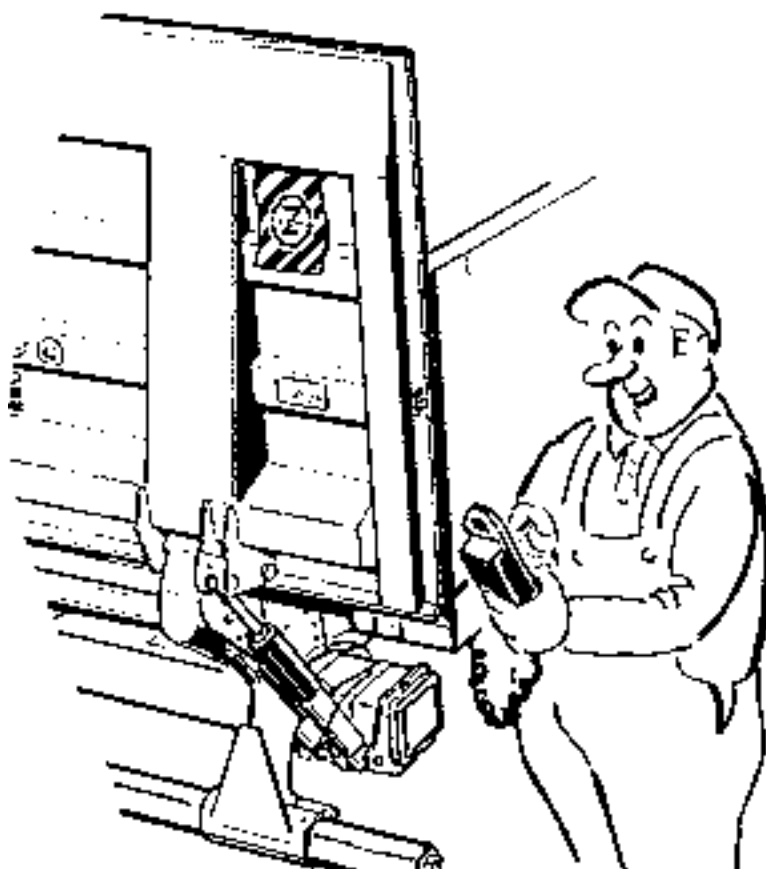


Service instruction

Tail lift Lubrication



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Lubrication

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General Information

Lubrication

Please read all instructions before you start.

Which grease can I use?

In order for guarantees to apply, Zepro's original grease must be used. It can be found in C-Service under Service, article number 33793TL or 33794TL. If you want a larger quantity, contact Zepro Parts: zepparts@hiab.com

If it is discovered in a complaint that another grease has been used, it must be possible to demonstrate on request that the grease is at least equivalent to Zepro's original grease.. The grease must meet ASTM D-4950, SAE J310 and NLGI (grade 2) GC-LB specification and be EP-rated (extreme pressure). Graphite grease must not be used.

How often should I lubricate?

Depending on lift model, bearings and axles there is different lubrication intervals. See the table below for Zepro's recommendations.

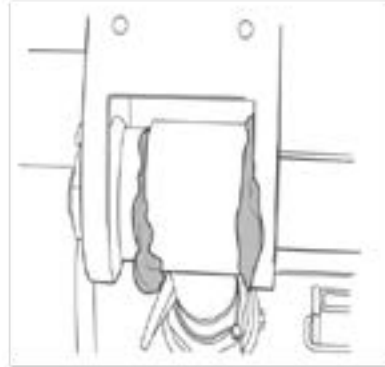
Minimum lubrication / year	1 shift	2 shifts	3 shifts
Z/ZL/ZN 1500/2000/2500 ZDK 250	4	4	4
ZS/ZT MK2 1500-2500	4	4	4
ZHDN 2500	4	4	4
ZHD 1500/2000/2500	4	4	4
ZHD 3000	4*	4*	4*
SZF	8*	16*	24*
ZKZ	8*	16*	24*
ZHZ (helt smörjningsfri)	*	*	*
Övriga modeller	4	8	12

* Includes bearing which is lubrication free. See installation instructions for details.

Generally: More lubrication intervals may be required if you are running in a hostile environment, or washing the lift often.
Contact Zepro for advice..

What should I consider?

Before lubricating should the lift be cleaned, especially lubrication points and nipples should be thoroughly cleaned.
Lubrication should be performed so that a collar with grease is visible on both sides of the bearings to protect against the ingress of water, salt, sand and dirt.
(See image to the right.)



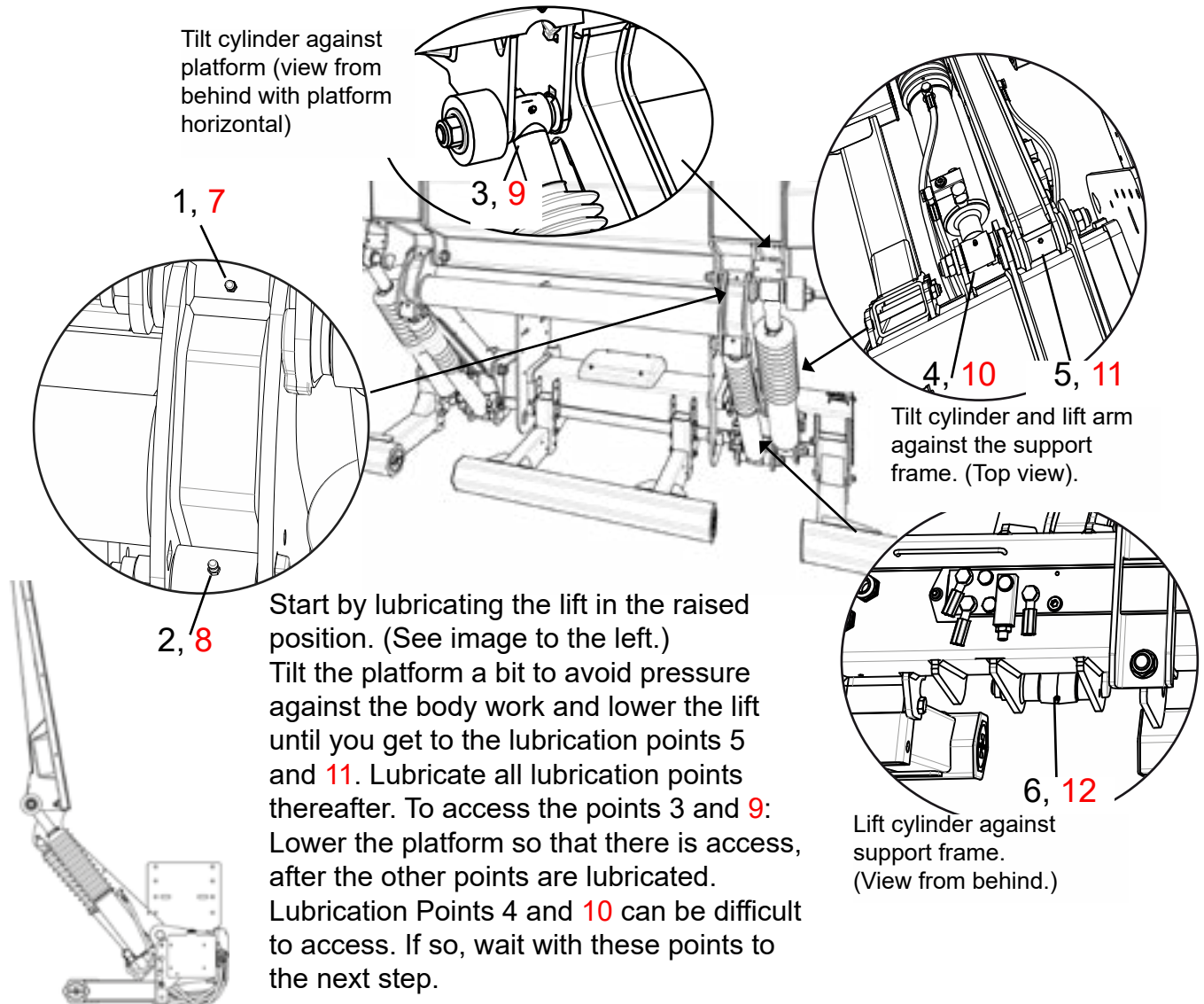
Things to check?

When lubricating, the grease nipples should be checked to ensure they are function correctly and are not damaged, defective nipples should be replaced. If you can not get grease even though the new nipple is assembled, the pivot bolt should be disassembled. Bearings, pivot bolts and lube channels be cleaned, re-grease and assembled back, and then lubricate in the usual way. If necessary, replace pivot bolt and / or bearings.

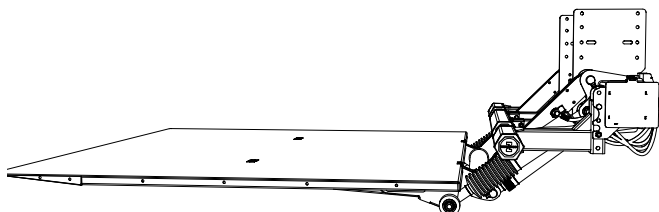
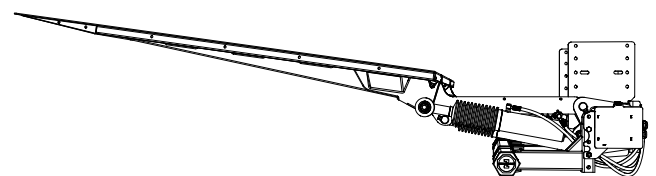
ZHD/ZHDL 1500/2000

The lift has twelve lubrication points: two for each cylinder and four on the lift arm: (See the oval images below with black frames). On these images shows the lubrication points on the lift's right side and is represented with black numbers (1-6).

On the left side of the lift are the lubrication points mirrored, and is represented in text and images below with red numbers (7-12). On some early models are the lubrication points 4 and 10 (Tilt cylinder) on the bottom, in this case lubricate them in the first and second mode.



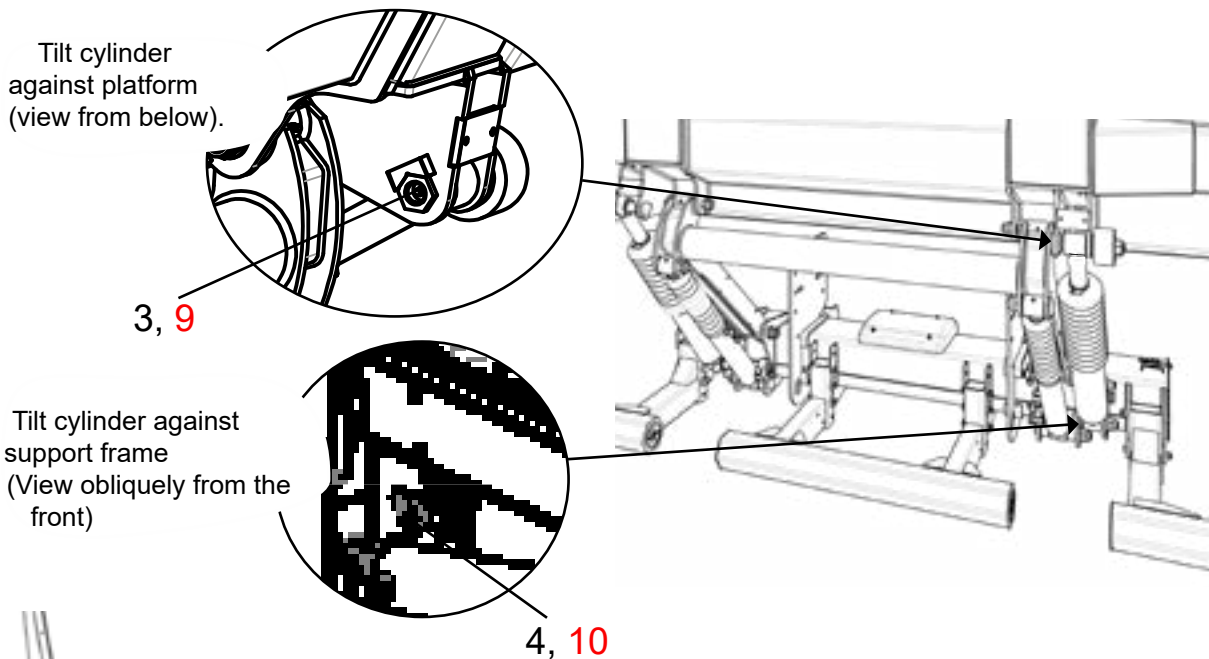
Run down the lift in the approximate location shown on the image to the right. Check that the lubrication points 1 and 7 on the liftarm are reachable. Otherwise, fine-tune the platform closure. Lubricate then all points. Note: Before lubrication of points 3 and 9: Tilt down the platform completely.



At the third lubrication mode, run down the lift into position as shown to the left. Lubricate the points 4 and 10, respectively 5 and 11 once again.

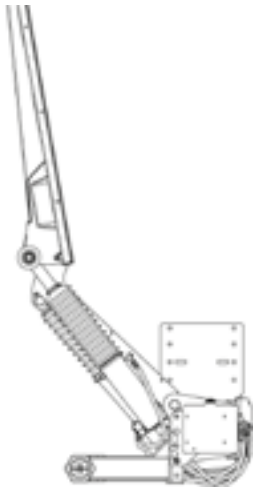
ZHD 2500

The lift has twelve lubrication points: two for each cylinder and four on the lift arm. Lubrication Points 1, 2, 5, 6, 7, 8, 11 and 12 are the same as the ZHD/ZHDL-1500/2000 (See previous page). The difference for this model is that the lubrication points 3, 4, 9 and 10 for tilt cylinders are placed on the pivot bolts (see images below, right side shows). Even here represents in images and text black numbers (1-6) the lift's right side respectively red numbers (7-12) for the lift's left side.

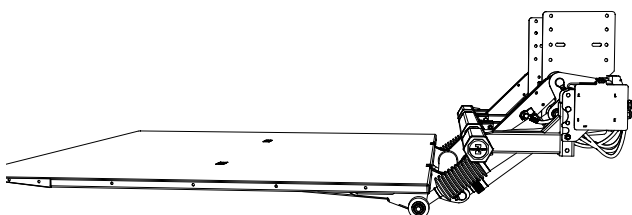
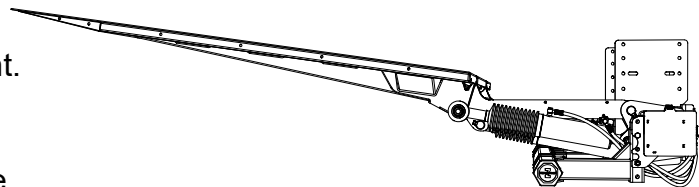


Start by lubricating the lift in the raised position. (See image to the left.)

Tilt the platform a bit to avoid pressure against the body work and lower the lift until you get to the lubrication points 5 and 11. Lubricate all lubrication points thereafter. Lubrication Points 4 and 10 can be difficult to access. If so, wait with these points to the next step.



Run down the lift in the approximate location shown on the image to the right. Check that the lubrication points 1 and 7 respectively 3 and 9 are accessed, otherwise fine-tune the platform closure. Lubricate all lubrication points thereafter.

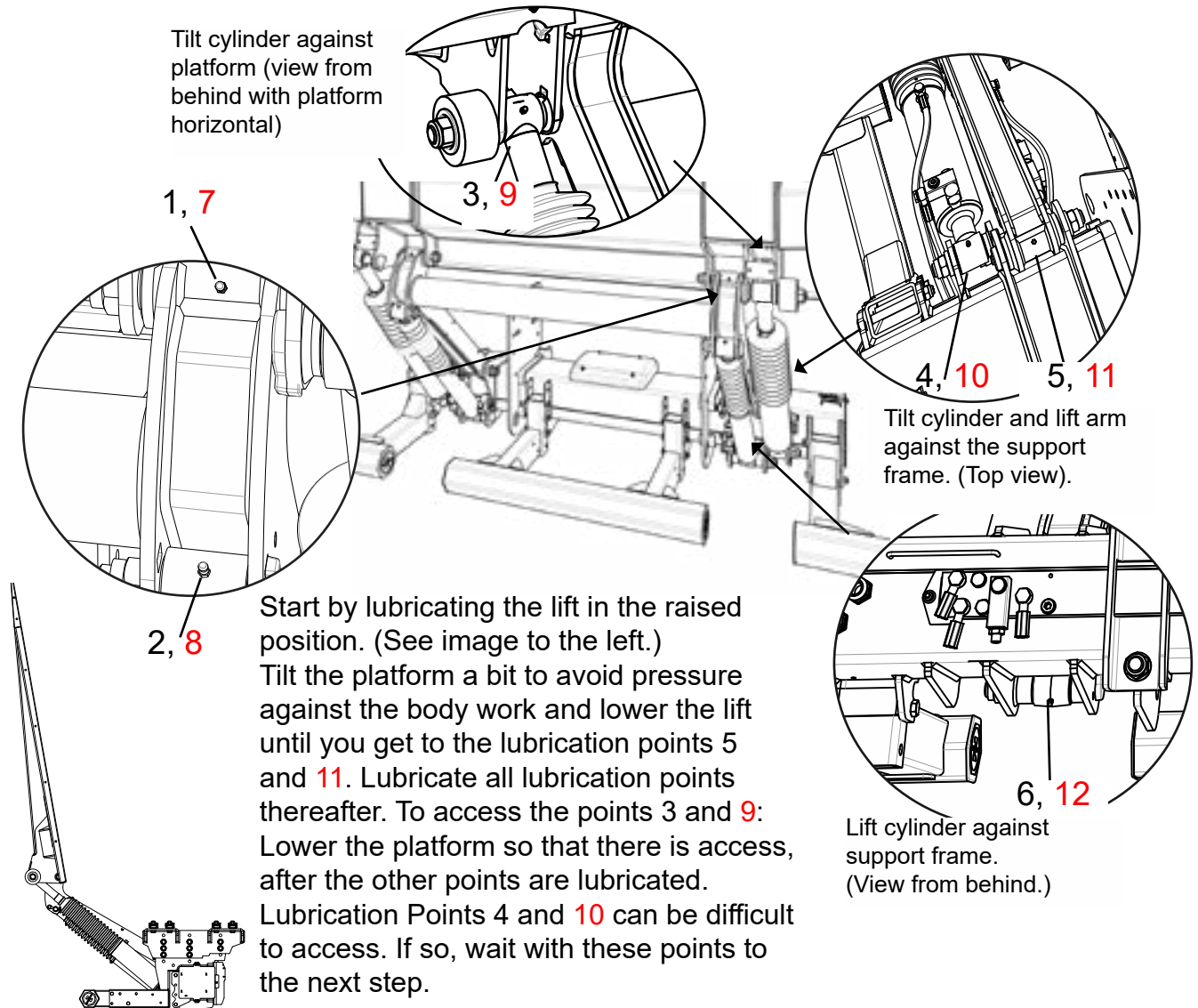


At the third lubrication mode, run down the lift into position as shown to the left. Lubricate the points 4 and 10, respectively. 5 and 11 once again.

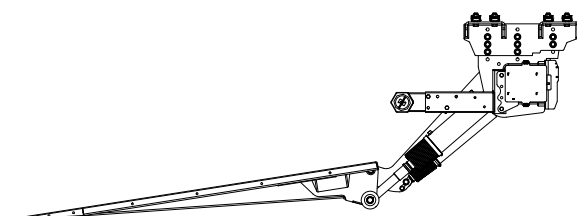
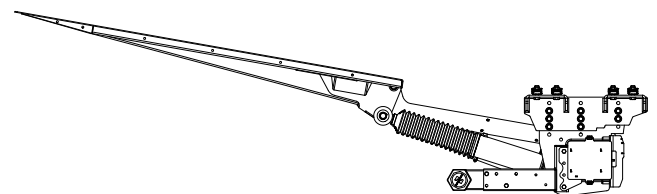
ZHDN 2000/2500

The lift has twelve lubrication points: two for each cylinder and four on the lift arm: (See the oval images below with black frames). On these images shows the lubrication points on the lift's right side and is represented with black numbers (1-6).

On the left side of the lift are the lubrication points mirrored, and is represented in text and images below with red numbers (7-12). On some early models are the lubrication points 4 and 10 (Tilt cylinder) on the bottom, in this case lubricate them in the first and second mode.



Run down the lift in the approximate location shown on the image to the right. Check that the lubrication points 1 and 7 on the liftarm are reachable. Otherwise, fine-tune the platform closure. Lubricate then all points. Note: Before lubrication of points 3 and 9: Tilt down the platform completely.

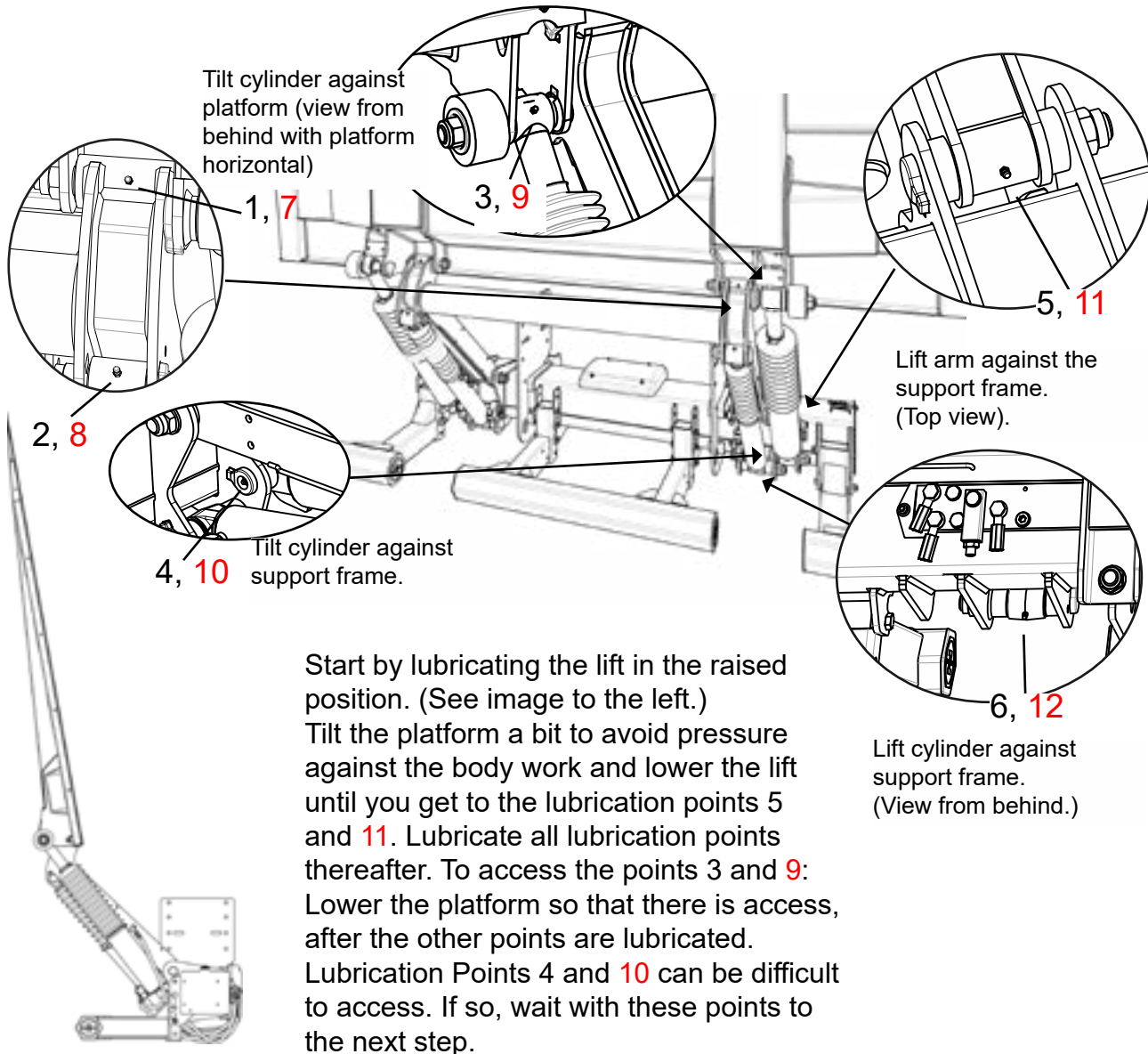


At the third lubrication mode, run down the lift into position as shown to the left. Lubricate the points 4 and 10, respectively 5 and 11 once again.

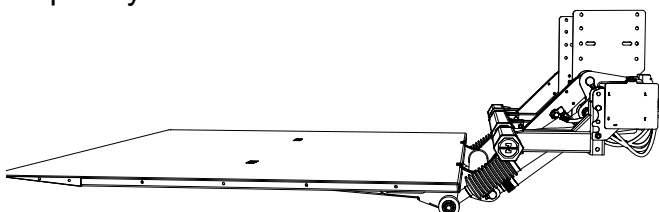
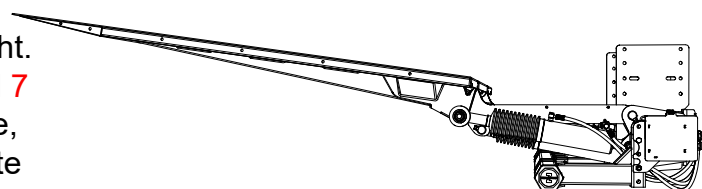
Z/ZL 150/200/250

The lift has twelve lubrication points: two for each cylinder and four on the lift arm: (See the oval images below with black frames). On these images shows the lubrication points on the lift's right side and is represented with black numbers (1-6).

On the left side of the lift are the lubrication points mirrored, and is represented in text and images below with red numbers (7-12).



Run down the lift in the approximate location shown on the image to the right. Check that the lubrication points 1 and 7 on the liftarm are reachable. Otherwise, fine-tune the platform closure. Lubricate then all points. Note: Before lubrication of points 3 and 9: Tilt down the platform completely.



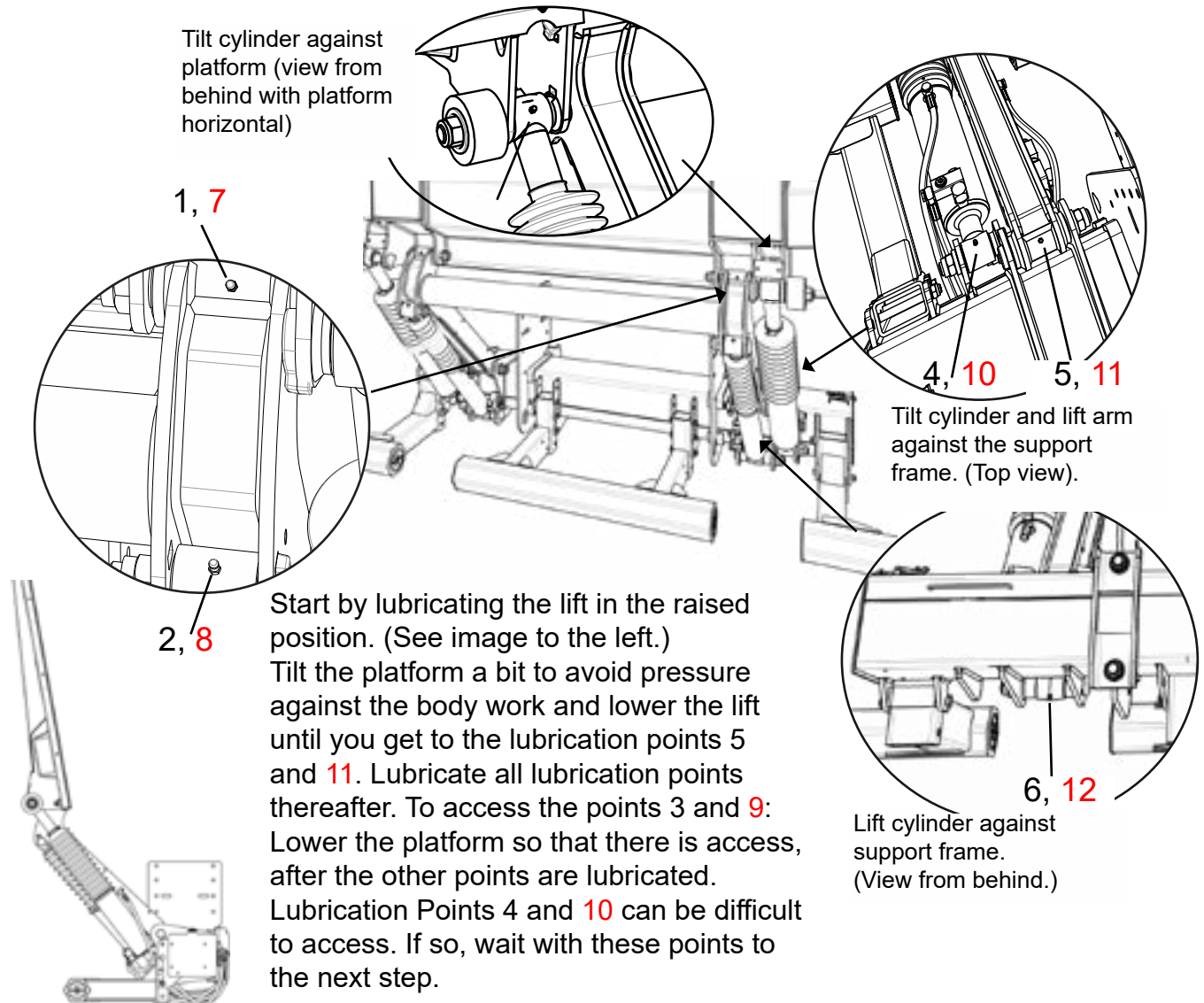
At the third lubrication mode, run down the lift into position as shown to the left. Lubricate points 4 and 10, respectively 5 and 11 once again.

Z/ZL/ZN 1500/2000/2500 ZDK 250

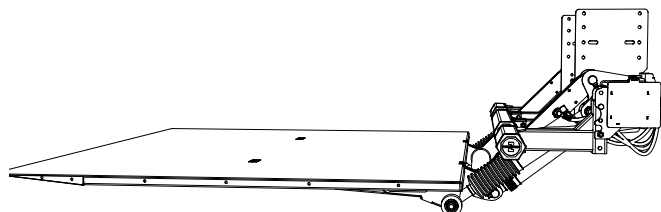
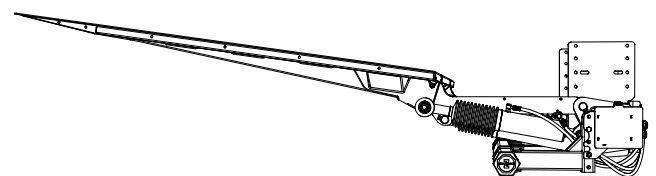
The lift has twelve lubrication points: two for each cylinder and four on the lift arm:

(See the oval images below with black frames). On these images shows the lubrication points on the lift's right side and is represented with black numbers (1-6).

On the left side of the lift are the lubrication points mirrored, and is represented in text and images below with red numbers (7-12).



Run down the lift in the approximate location shown on the image to the right. Check that the lubrication points 1 and 7 on the liftarm are reachable. Otherwise, fine-tune the platform closure. Lubricate then all points. Note: Before lubrication of points 3 and 9: Tilt down the platform completely.

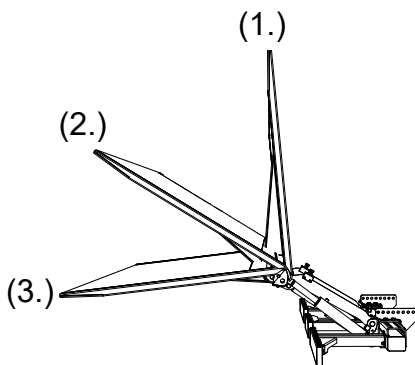
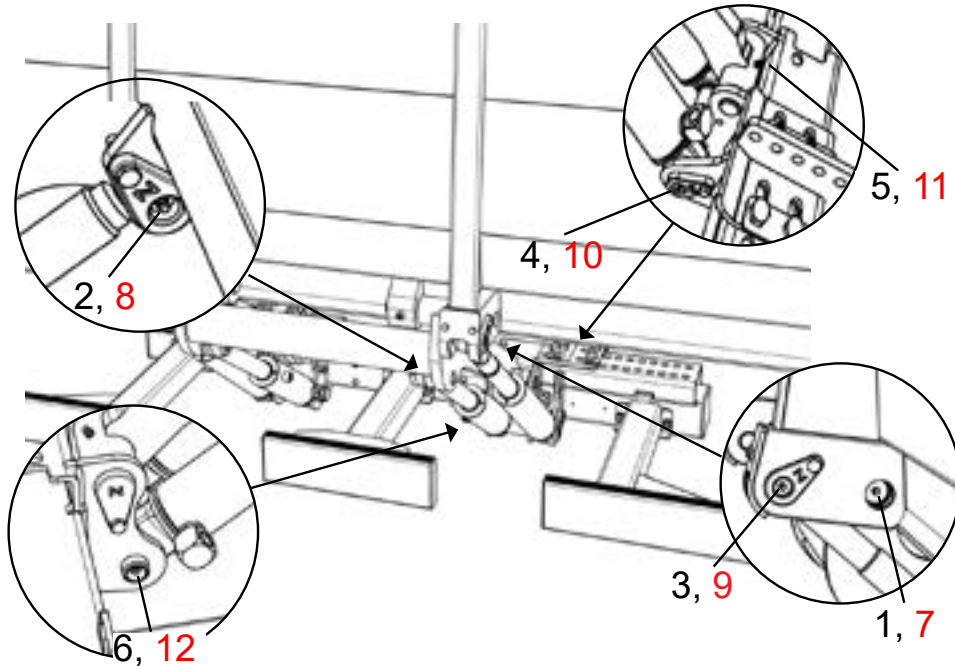


At the third lubrication mode, run down the lift into position as shown to the left. Lubricate the points 4 and 10, respectively 5 and 11 once again.

Z/ZL/ZN/ZU/ZLU/ZNU 45/75

The lift has twelve lubrication points: two for each cylinder and four on the lift arm: (See the oval images below with black frames). On these images shows the lubrication points on the lift's right side and is represented with black numbers (1-6).

On the left side of the lift are the lubrication points mirrored, and is represented in text and images below with red numbers (7-12).



Tilt the platform a bit to avoid pressure against the body work. Start by lubricating the points 1, 7 and 3, 9 in the up position. (1.) Tilt the platform to the position (2.) and lubricate the same points, tilt the platform further to the (3.) and lubricate the same points for a third time. (See image to the left.) These items are now ready.

Lower the lift until it just comes to lubrication points 5 and 11. Lubricate then remaining lubrication points.

Lowering the lift in the approximate location shown on the image to the right. Lubricate all points once again (not the points 1, 7 and 3, 9).



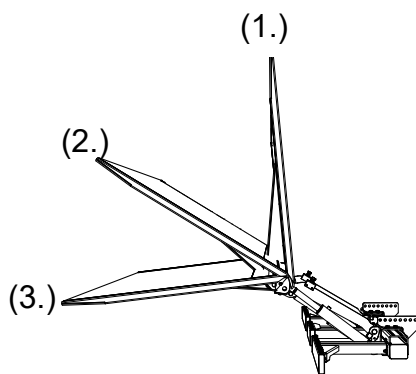
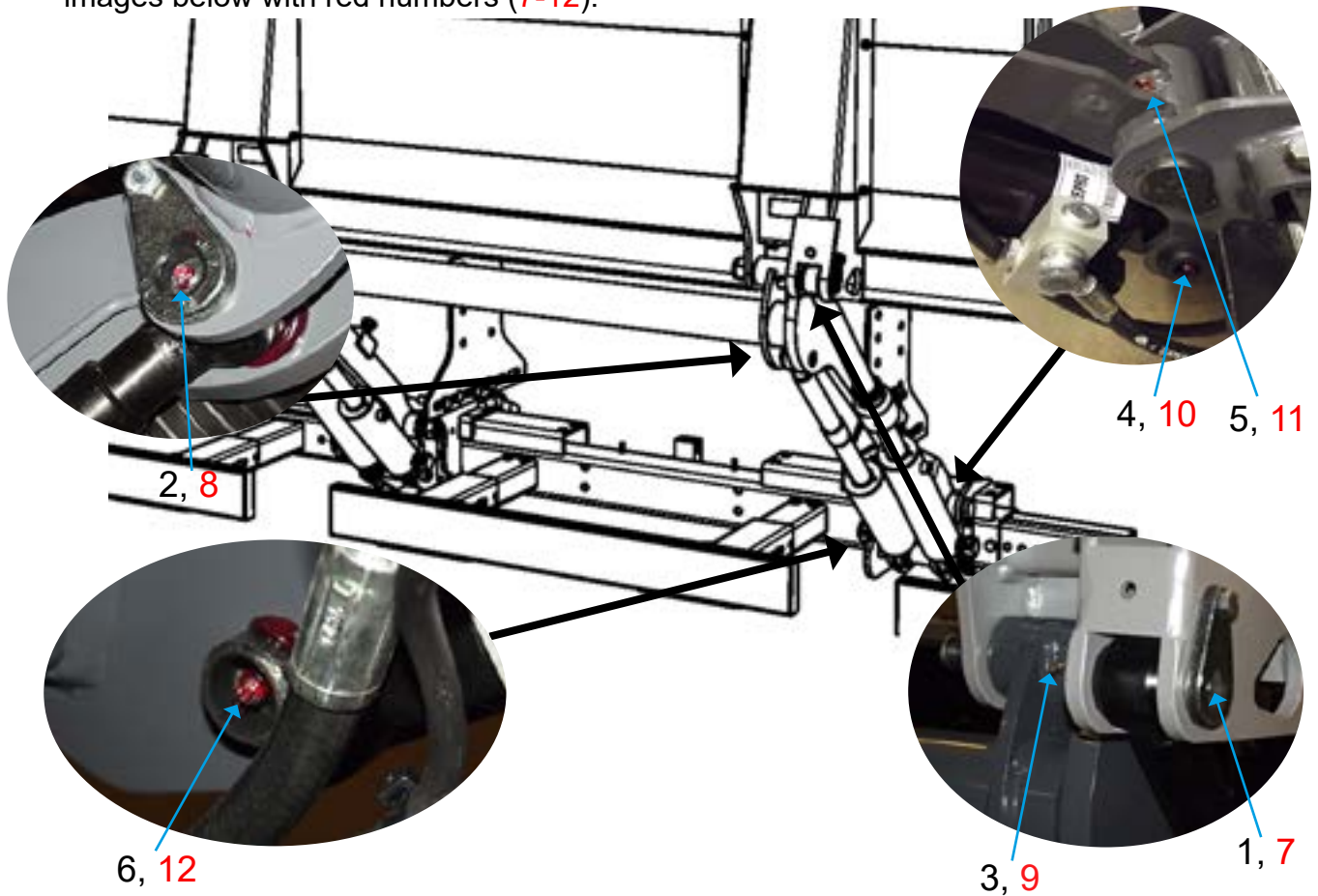
Lowering the lift in the approximate location shown on the image to the left. Lubricate all points once again (not the points 1, 7 and 3, 9).

Z 100

The lift has twelve lubrication points: two for each cylinder and four on the lift arm:

(See the oval images below with black frames). On these images shows the lubrication points on the lift's right side and is represented with black numbers (1-6).

On the left side of the lift are the lubrication points mirrored, and is represented in text and images below with red numbers (7-12).



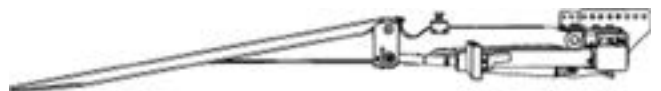
Tilt the platform a little to avoid pressure against the body work. Start by greasing points 1, 7 and 3, 9 in position (1) and (2)

(See picture to the left.)

Tilt the platform further to position (3) a maximum of 10 ° below the horizontal, and the lubricate points 1, 7 a third time. If you are able, lubricate even points 3, 9 These points are now clear.

Then lubricate the remaining grease points once.

Lowering the lift in the approximate location shown on the image to the right. Lubricate all points once again (not the points 1, 7 and 3, 9).

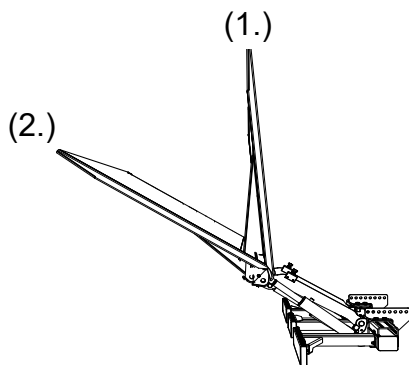
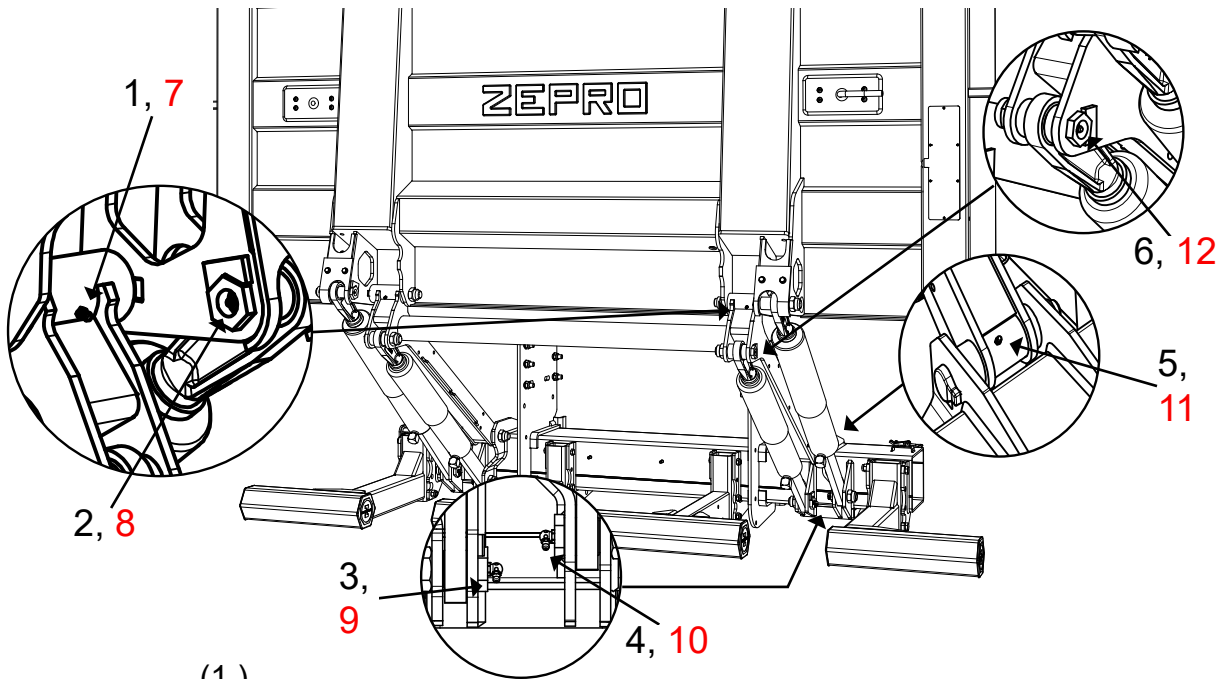


Lowering the lift in the approximate location shown on the image to the left. Lubricate all points once again (not the points 1, 7 and 3, 9).

Z 10/15/20-130/150

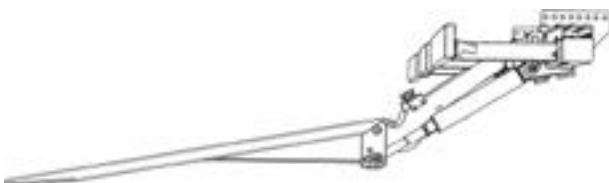
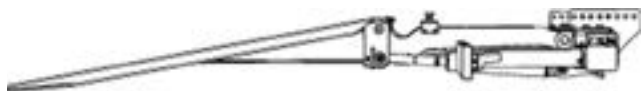
The lift has twelve lubrication points: two for each cylinder and four on the lift arm: (See the oval images below with black frames). On these images shows the lubrication points on the lift's right side and is represented with black numbers (1-6).

On the left side of the lift are the lubrication points mirrored, and is represented in text and images below with red numbers (7-12).



Tilt the platform a bit to avoid pressure against the body work (1.) See position of the platform on the image to the left, and lubricate all points. Tilt the platform to position (2.) approximate 45° and lubricate the points (1, 7), (2, 8) and (6, 12), if it's necessary, lower the lift a bit to reach points (2, 8) and (6, 12). The points (1, 7) are now done.

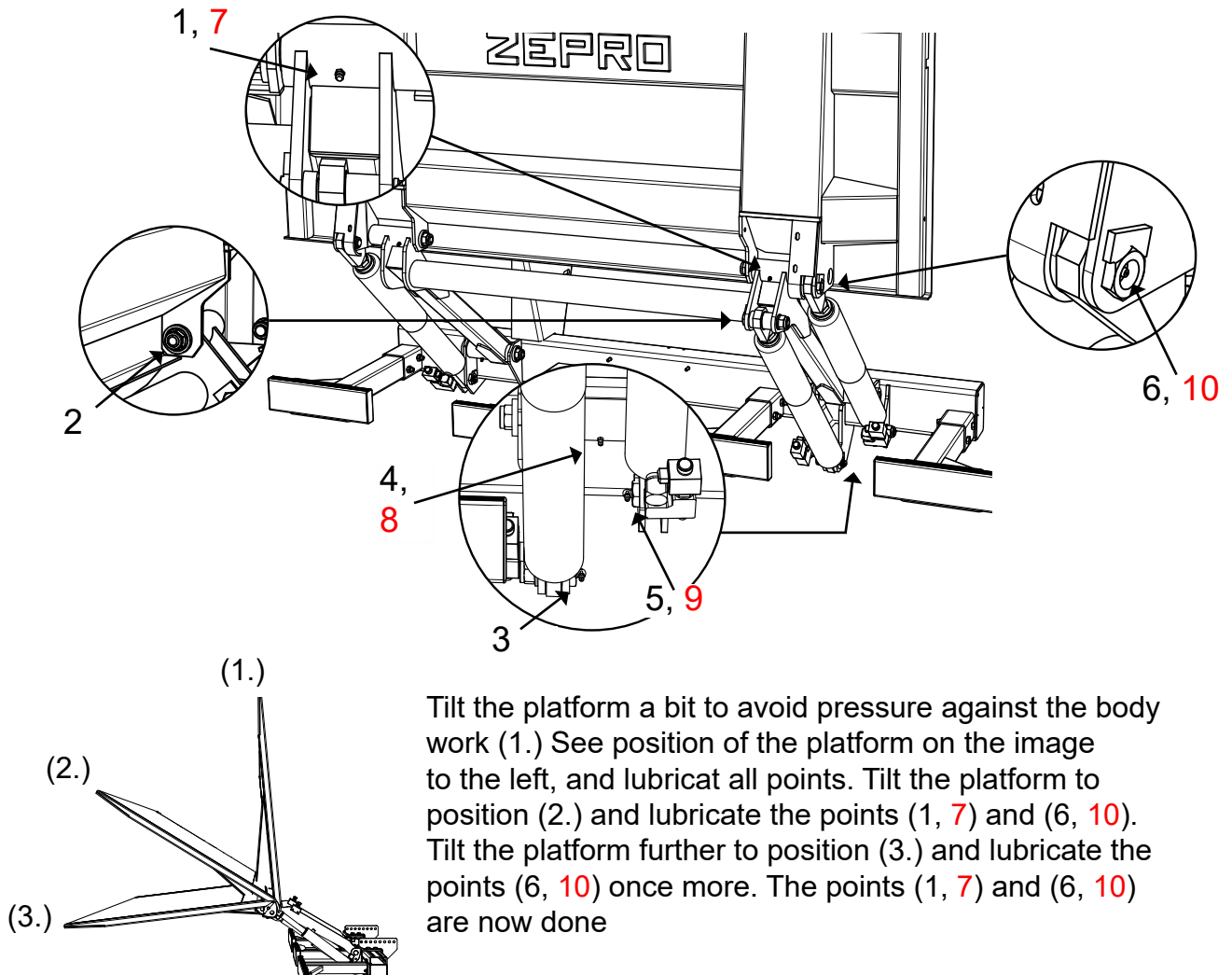
Lowering the lift in the approximate location shown on the image to the right. Lubricate the points (3, 9), (4, 10) and (5, 11) once again.



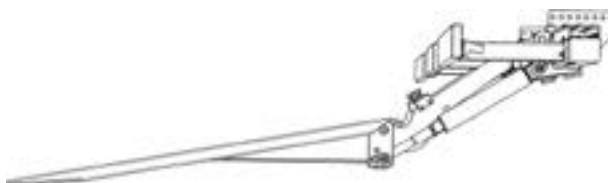
Lower the lift entirely as shown on the image to the left. Lubricate all points a last time, except (1, 7) as they should be done already.

Z 10-135

The lift has ten lubrication points: two for each cylinder and four on the lift arm: (See the oval images below with black frames). On these images shows the lubrication points on the lift's right side and is represented with black numbers (1-6). On the left side of the lift are the lubrication points mirrored, (except there are no lift cylinder on left side) and is represented in text and images below with red numbers (7-10).



Lowering the lift in the approximate location shown on the image to the right. Lubricate all the rest of the points once again.



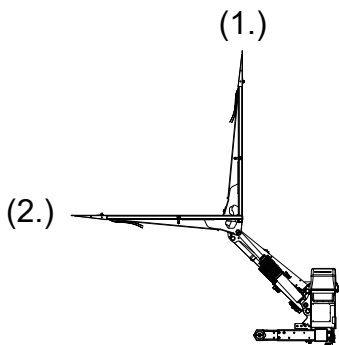
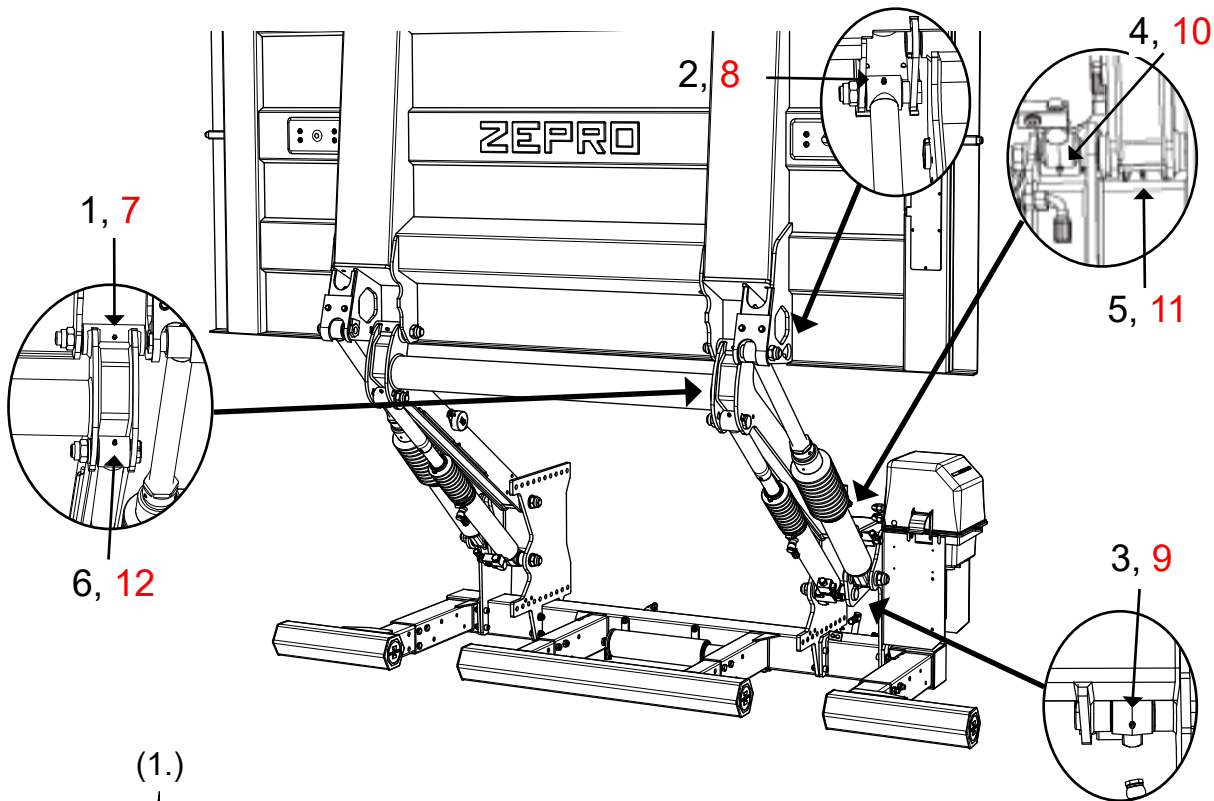
Lowering the lift in the approximate location shown on the image to the left. Lubricate all points a last time. (Except the points (1, 7) and (6, 10) as they are already done.)

ZAHD/ZAEDH-150/200/250

The lift has twelve lubrication points: two for each cylinder and four on the lift arm: (See the oval images below with black frames). On these images shows the lubrication points on the lift's right side and is represented with black numbers (1-6).

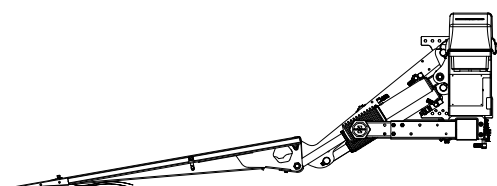
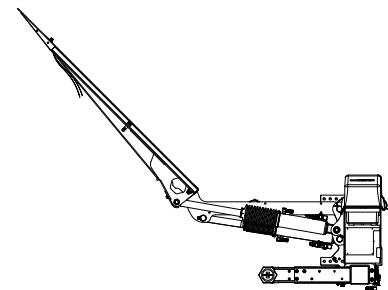
On the left side of the lift are the lubrication points mirrored, and is represented in text and images below with red numbers (7-12).

Note! The images shows a ZAEHD lift, but the lubrication points are the same for a ZAHD.



Tilt the platform a bit to avoid pressure against the body work (1.) See position of the platform on the image to the left. Lubricate the points (1, 7), (6, 12) and (3, 9). Tilt the platform to position (2.) approximate 90° and lubricate the points (2, 8)

Lowering the lift in the approximate location shown on the image to the right. Lubricate the points (1, 7), (6, 12) and (3, 9) again, and also (4, 10) and (5, 11)



Lower the lift entirely as shown on the image to the left. Lubricate the points (4, 10) and (5, 11) a last time. The lubrication of the lift is now complete.

ZHZ 500/600

ZHZ 600 is lubrication free. It has axles of stainless steel and Dynaweave bearings at all articulated points. They should not be lubricated at all, not even initial lubrication. Therefore, lack of lubrication nipples.

Axles and bearings should be kept dry and clean on contact surfaces and are protected against moisture and dirt with o-rings. Check o-rings regularly

ZHD 3000

ZHD 3000 has four grease points, these are on lifting cylinder axes, otherwise, the lift is lubrication free. It has axles of stainless steel and Dynaweave bearings at all the other pivoted points. They should not be lubricated at all, not even initial lubrication. Therefore, lack of lubrication nipples on these places.

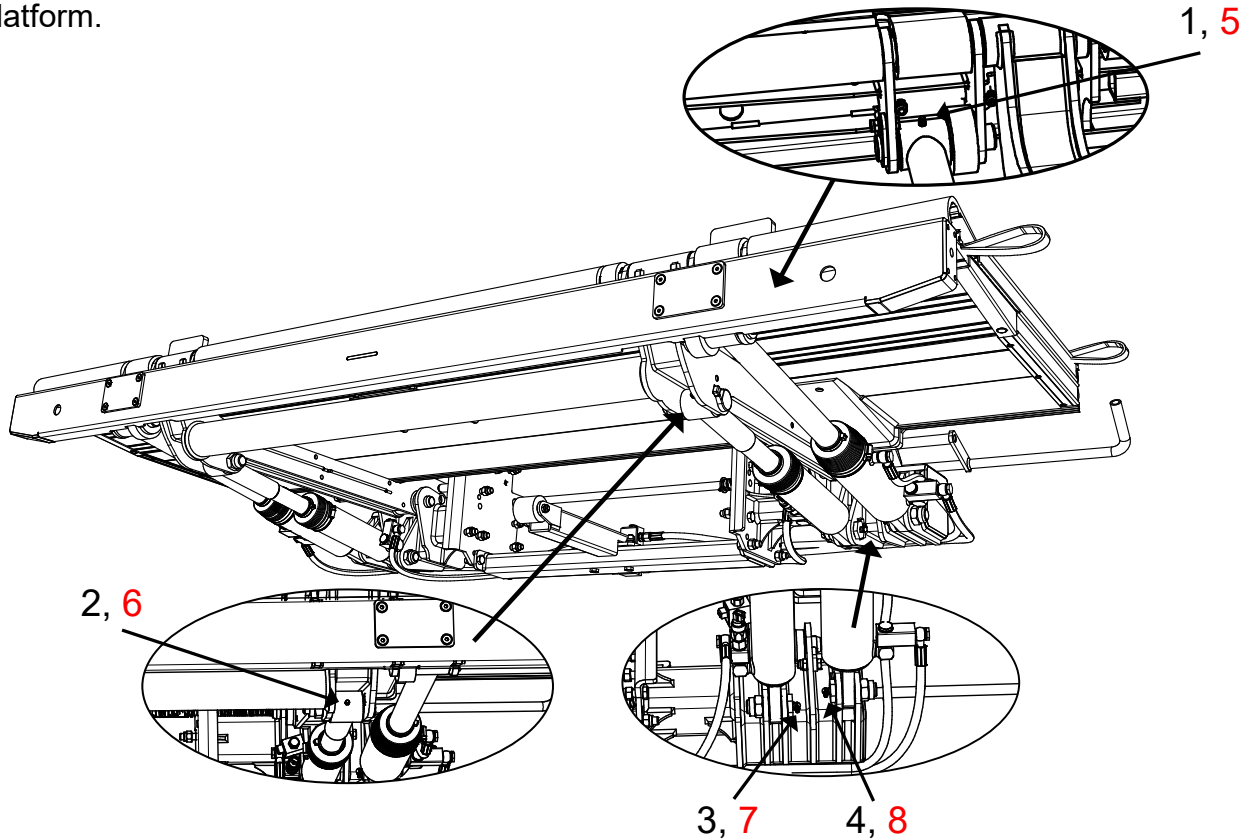
Axles and bearings should be kept dry and clean on contact surfaces and are protected against moisture and dirt with o-rings. Check o-rings regularly

ZKZ 1500

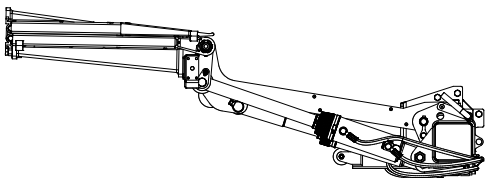
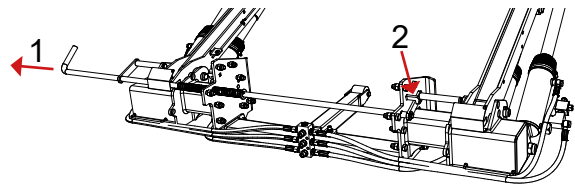
The lift has eight lubrication points: two for each cylinder: (See the oval images below with black frames). On these images shows the lubrication points on the lift's right side and is represented with black numbers (1-4).

On the left side of the lift are the lubrication points mirrored, and is represented in text and images below with red numbers (5-8).

Note! The liftarm has lubrication free axles. Both against the support frame and against the platform.

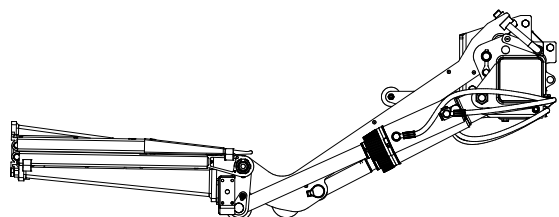


Pull the spring-loaded locking rod, and lock the rod in approved holder, see picture to the right: Arrow 1 (pulling direction) arrow 2 (holder).



Unfold the platform from the lift arm, once is enough, and run the lift arm toward the top, see picture to the left. Lubricate all grease points in this mode.

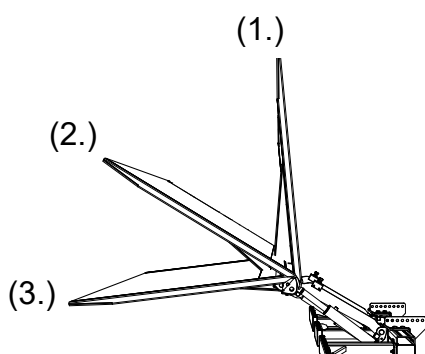
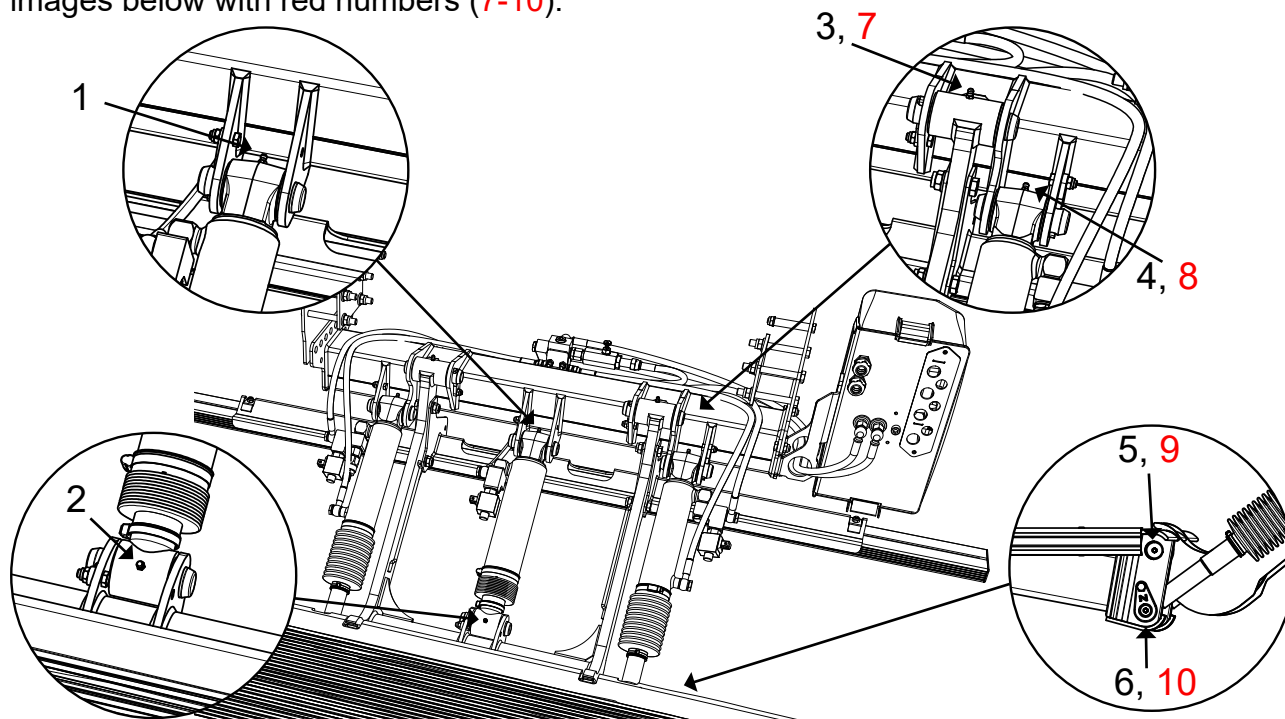
Lower the lift to the ground, see picture to the right, and the lubricate the points (3, 7) and (4, 8) once again.



Z3N/Z3NU 75

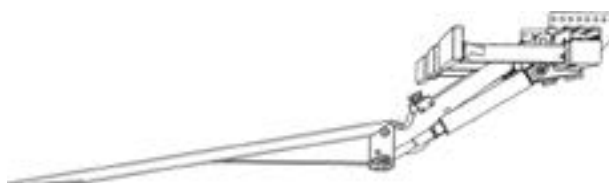
The lift has ten lubrication points: two for each cylinder and four on the lift arm: (See the encircled images below with black frames). On these images shows the lubrication points on the lift's right side and the lift cylinders lubrication points and are represented with black numbers (1-6).

On the left side of the lift are the lubrication points mirrored and are represented in text and images below with red numbers (7-10).



Tilt the platform a bit to avoid pressure against the body work (1.) See position of the platform on the image to the left, and lubricate all points. Tilt the platform to position (2.) and lubricate the points (5, 9) and (6, 10). Tilt the platform further to position (3.) and lubricate the points (5, 9) and (6, 10) once more. The points (5, 9) and (6, 10) are now done

Lowering the lift in the approximate location shown on the image to the right. A little higher than horizontal position, so the points (1, 4 och 8) are still reachable. Lubricate this points and also the points (2, 3 och 7) once more

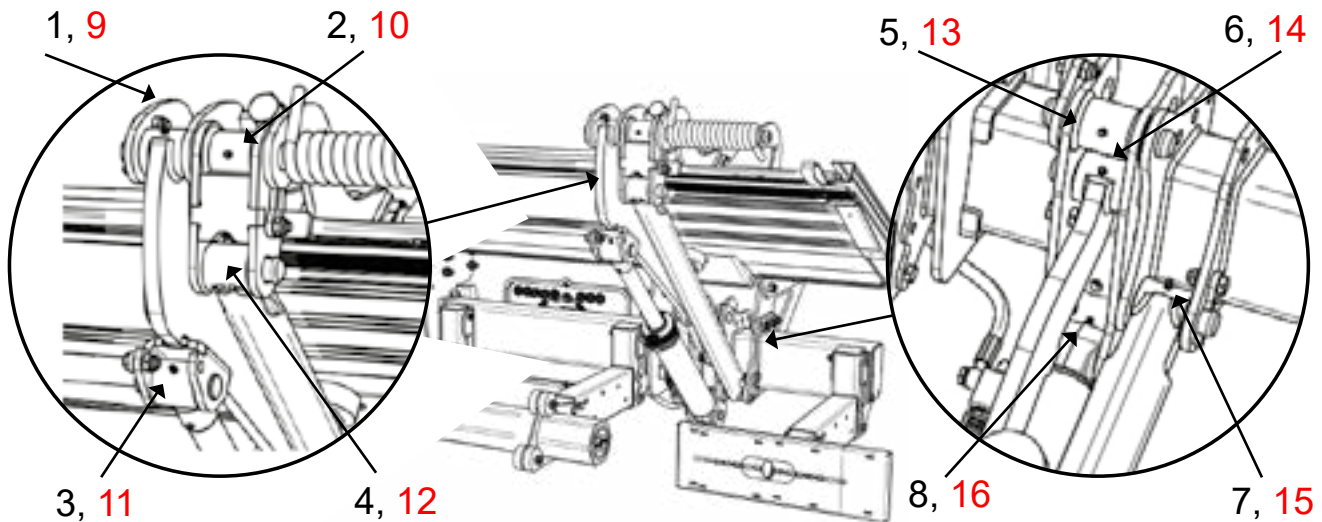


Lowering the lift to the ground as shown on the image to the left. Lubricate the points (2, 3 och 7) a last time.

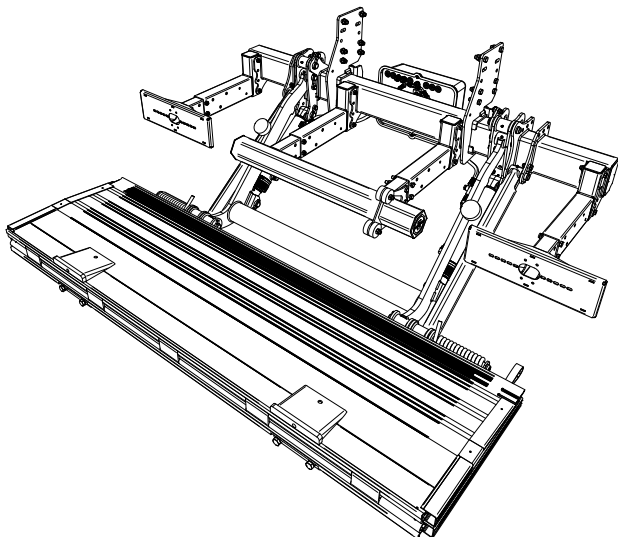
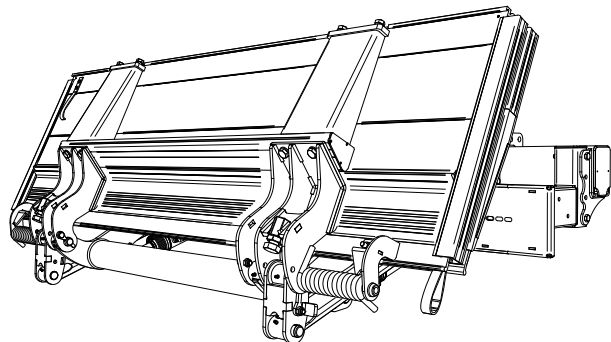
Depending on lubrication equipment: lubricate points (1, 4 and 8) if possible also once more.

ZR 10/15-135

The lift has 16 lubrication points, see the encircled images below. On these images shows the lubrication points on the lift's right side and are represented with black numbers (1-8). On the left side of the lift are the lubrication points mirrored and are represented in text and images below with red numbers (9-16).



Begin by lubricating the points 8 and 16, there the lift cylinders are attached to the tilt links, while the lift is still in transport mode. Then lower the lift without folding the platform, much like the picture to the right shows. In this mode, lubricate points 1-4 and 9-12



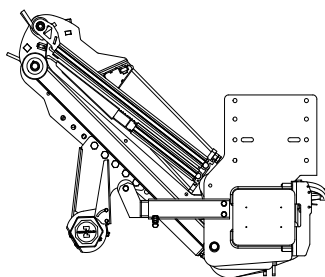
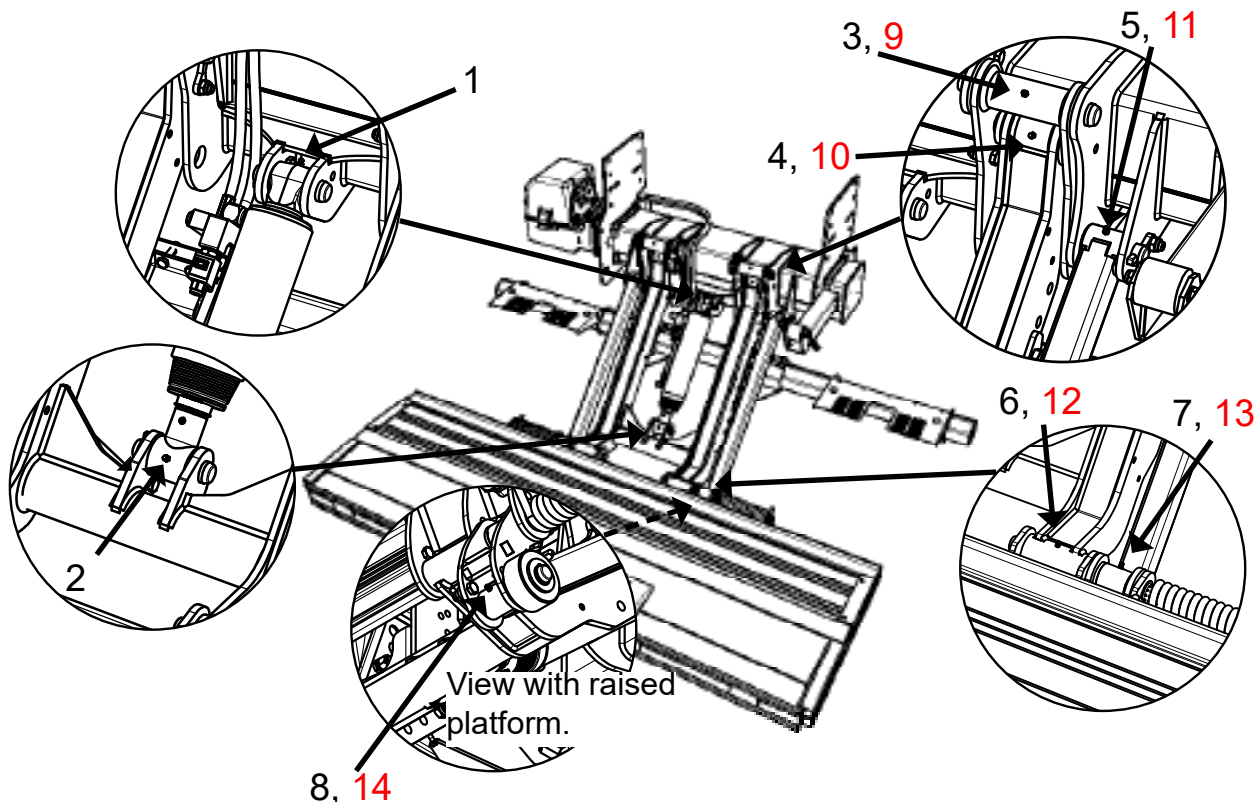
Lower the lift to the ground and fold out the bridge, see the picture to the left. Then lubricate points 5-7 resp. 13-15.

NOTE! Advantageously lubricate all the points accessible at the respective position of the lift. That is, the same point more than once, but at different positions. It only results in a better spread of the grease around the axles if you lubricate the same point at different positions of the lift.

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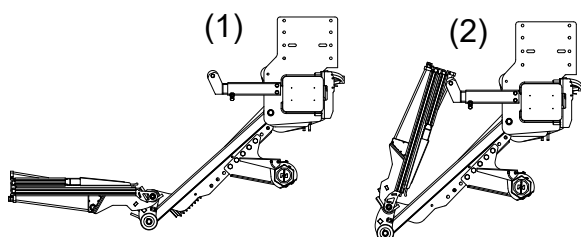
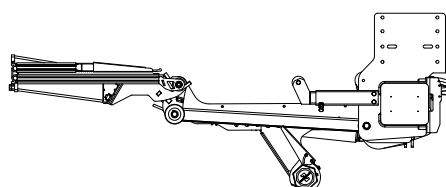
The tail lift has 14 lubrication points: Two for the cylinder, four for the lifting arm, four for the tie rods, two for the hanger and two for the shackles: (See the circled pictures below). On these images shows lubrication points on the lift's right side and for the lift cylinder and is represented with black numbers (1-8).

On the lift left side sits the lubrication points mirrored and is represented in text and image below with red numbers (9-14).



Start by lubricate the points (1, 4 and 10) while the lift is still in transport mode, see the picture to the left. If the grease nipple for the lift cylinder attachment to the support frame (1) shouldn't be sufficiently available: lowering the lift and unfold the bridge and then raise the lift up to max position. If possible, also lubricate the points (5 and 11), the axles for the tie rods against the support frame, in this mode.

Operate the tail lift in the approximate position and unfold the platform shown in the picture to the right. Lubricate the points. (2, 3, 6, 7, 9, 12, 13).



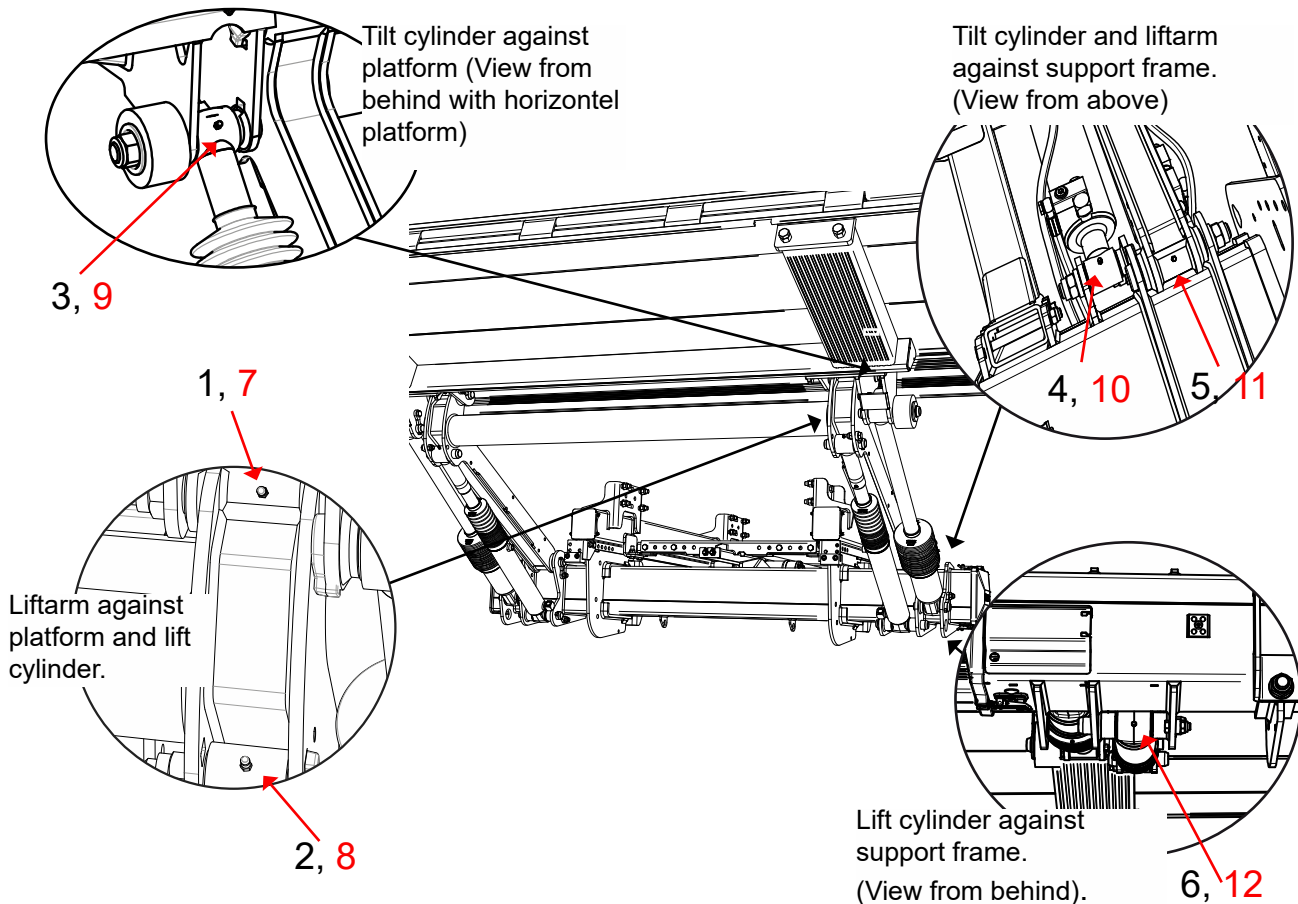
Lower the tail lift completely, as shown in picture 1. to the left. Lubricate all points except the point (1, 8 and 14), (that can not be reached), one more time to get so good dispersion of the grease as possible. Fold then the the platform as shown in the next picture 2. and lubricate the points 8 and 14.

SZL/SZN-1500/2000

The lift has twelve lubrication points: two for each cylinder and four on the lift arm: (See the oval images below with black frames). On these images shows the lubrication points on the lift's right side and is represented with black numbers (1-6).

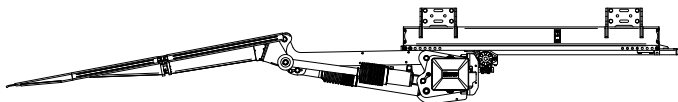
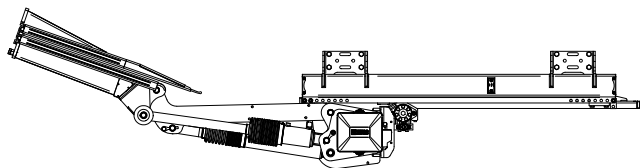
On the left side of the lift are the lubrication points mirrored, and is represented in text and images below with red numbers (7-12).

Note!! On this tail lifts the slide system are lubrication free



Operate the lift to working position and higher it so the liftarm will be horizontal. Tilt up the platform as much as possible. See image to the right.

Lubricate all the points except points 3 and 9, that can be hard to reach in this mode.

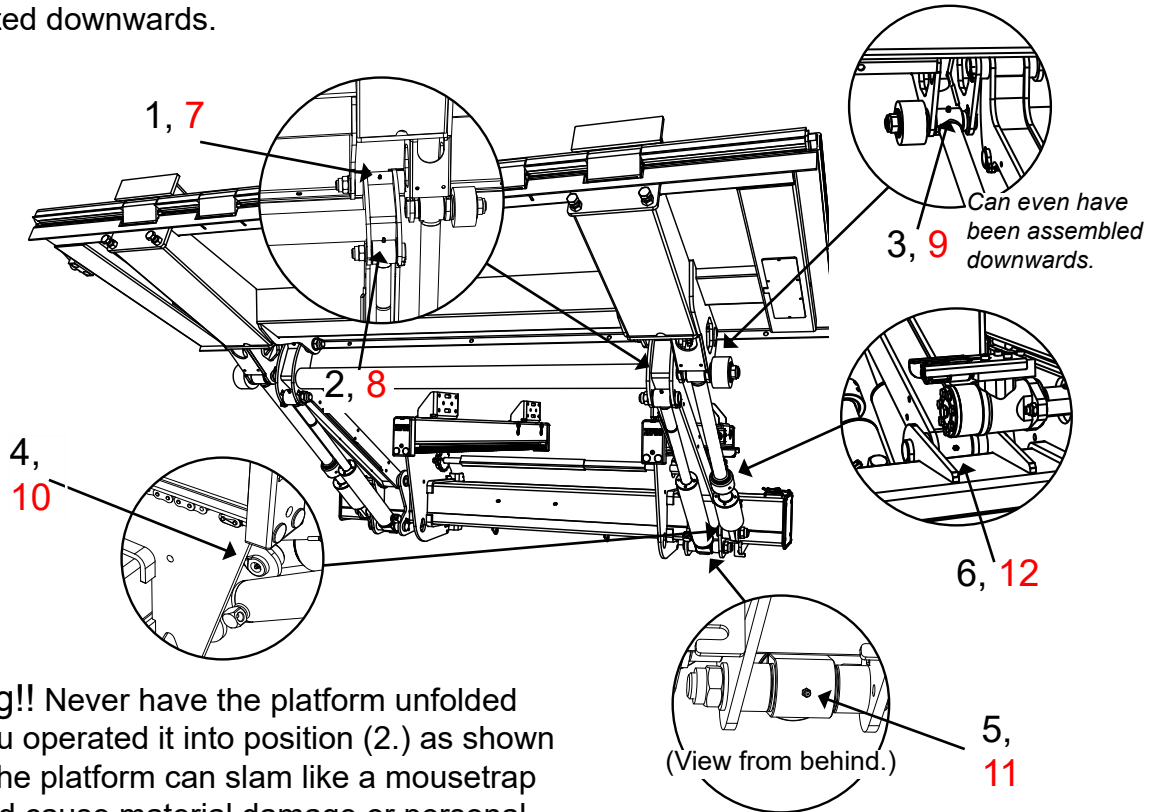


Tilt down the platform and fold out the platform, see image to the left, this for better reach the lubrication points 3 and 9.

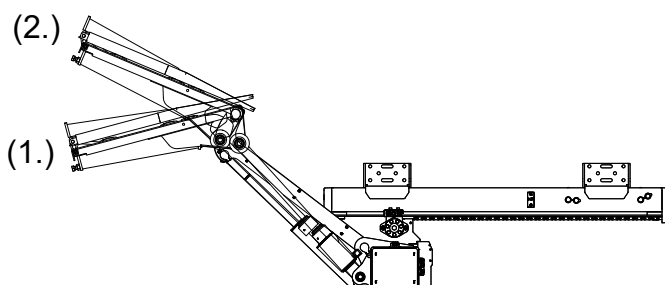
ZD/ZS/ZT 15/20/25

The lift has twenty lubrication points: eight on the slide system (See the page for slide system) two for each cylinder and four on the lift arm, (See the oval images below with black frames) On these images shows the lubrication points on the lift's right side and is represented with black numbers (1-6).

On the left side is the lubrication points mirrored against an imaginary center line thru the tail lift and is represented in text and images below with red numbers (7-12). The lubricating points (2, 8) are located different between the lift models. On ZT-models they are located downwards.



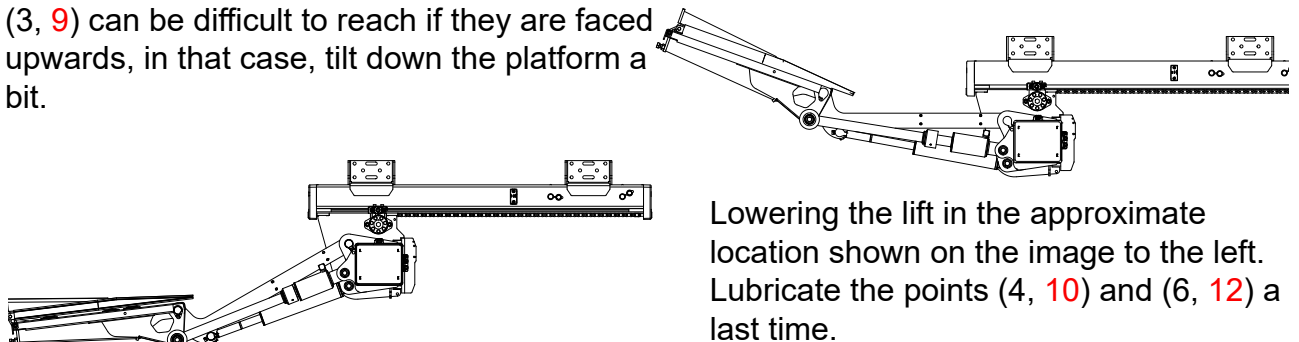
Warning!! Never have the platform unfolded when you operated it into position (2.) as shown below. The platform can slam like a mousetrap that could cause material damage or personal injury. Even make sure that the platform tip doesn't conflict with body work or similar.



Operate the lift into working position and rise the lift and tilt down the platform to position (1.) as shown on image to the left. In this mode, lubricate points (2, 8), (3, 9), (5, 11) and (6, 12). If points (6, 12) is unreachable, just lower the lift a little bit. Tilt up the platform (folded) to position (2.), and lubricate the points (1, 7).

Lowering the lift in the approximate location shown on the image to the right. Lubricate all points in this position. Note that the points (3, 9) can be difficult to reach if they are faced upwards, in that case, tilt down the platform a bit.

Warning!! Always have the platform folded.



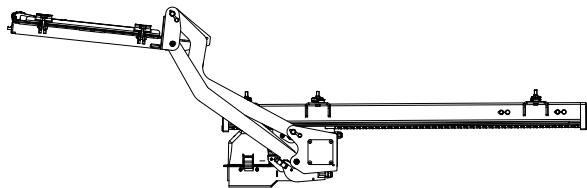
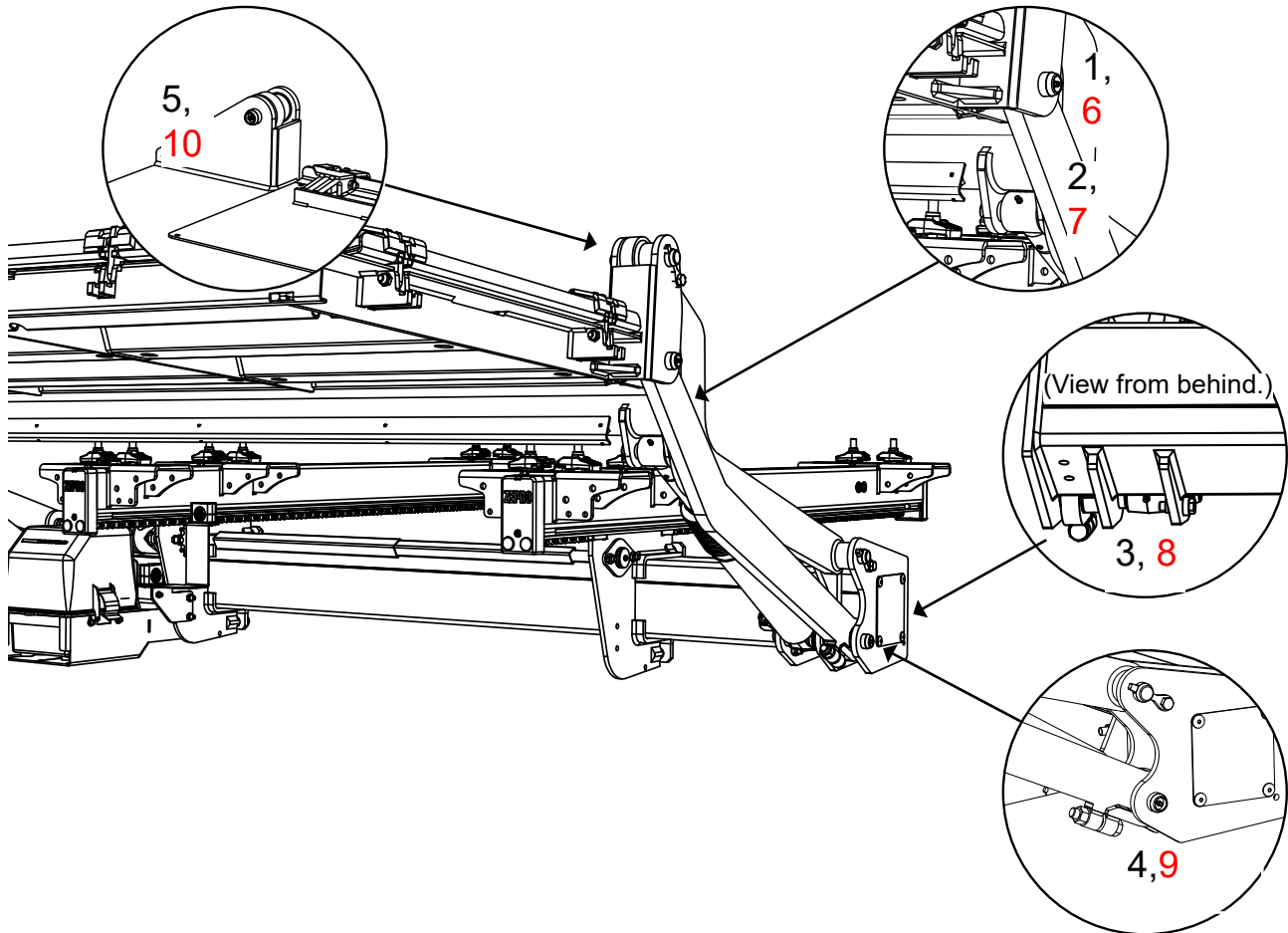
Lowering the lift in the approximate location shown on the image to the left. Lubricate the points (4, 10) and (6, 12) a last time.

SZFT/SZFTN/SZFTS 200-160

The Tail lift has ten lubrication points: Four on the cylinders, four on the tie rods and two for the lift arm, (See the encircled images below with black frames). In these images shows lubrication points on the Tail lift right hand and is represented with black numbers (1-5). On the left side of the lift are the lubrication points mirrored and are represented in text and images below with red numbers (6-10)

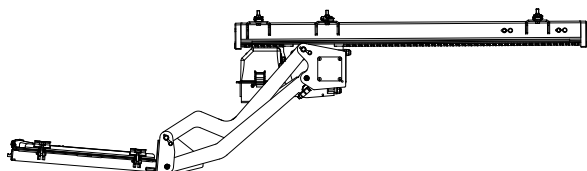
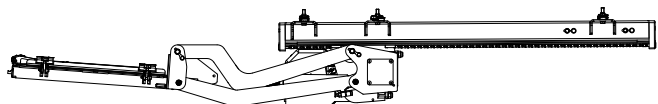
NOTE! The axes between the lift arm and the support frame should not be lubricated at all, not even initial lubrication. Therefore, lack of lubrication nipples.

The slide system has eight lubrication points, (see the section for Slide system).



Raise the lift to maximum (see picture at left). Lubricate all the grease points in this mode.

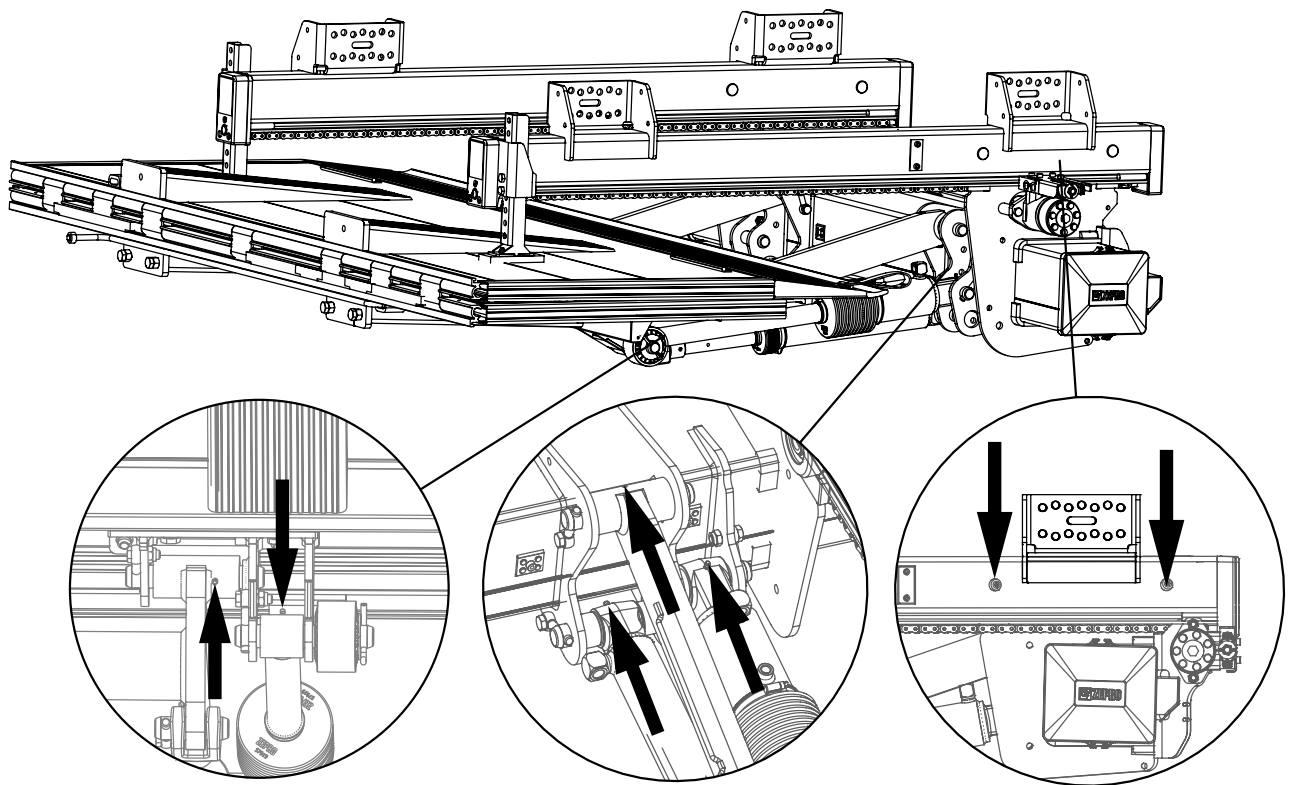
Lowering the lift in the approximate position shown in the picture to the right. Lubricate all points except 3 and 8 once again.



Lowering the lift to the ground as shown in the picture to the left. Lubricate all points except 3 and 8 once again.

ZS-MK2 1500-2500

The lift has 18 lubrication points: eight on the slide system, four on the lift arm, two for each tilt cylinder and one for each lift cylinder (attached to the frame). The attachment of the lifting cylinders to the lifting arm has no lubrication point, the axle is initially lubricated from the factory: (See the circled pictures below). In these pictures, the lubrication points are shown on the right side of the lift. On the left side of the lift, the lubrication points are mirror-inverted, through an imaginary center line through the lift. For the slide system, see also the section for slide system.

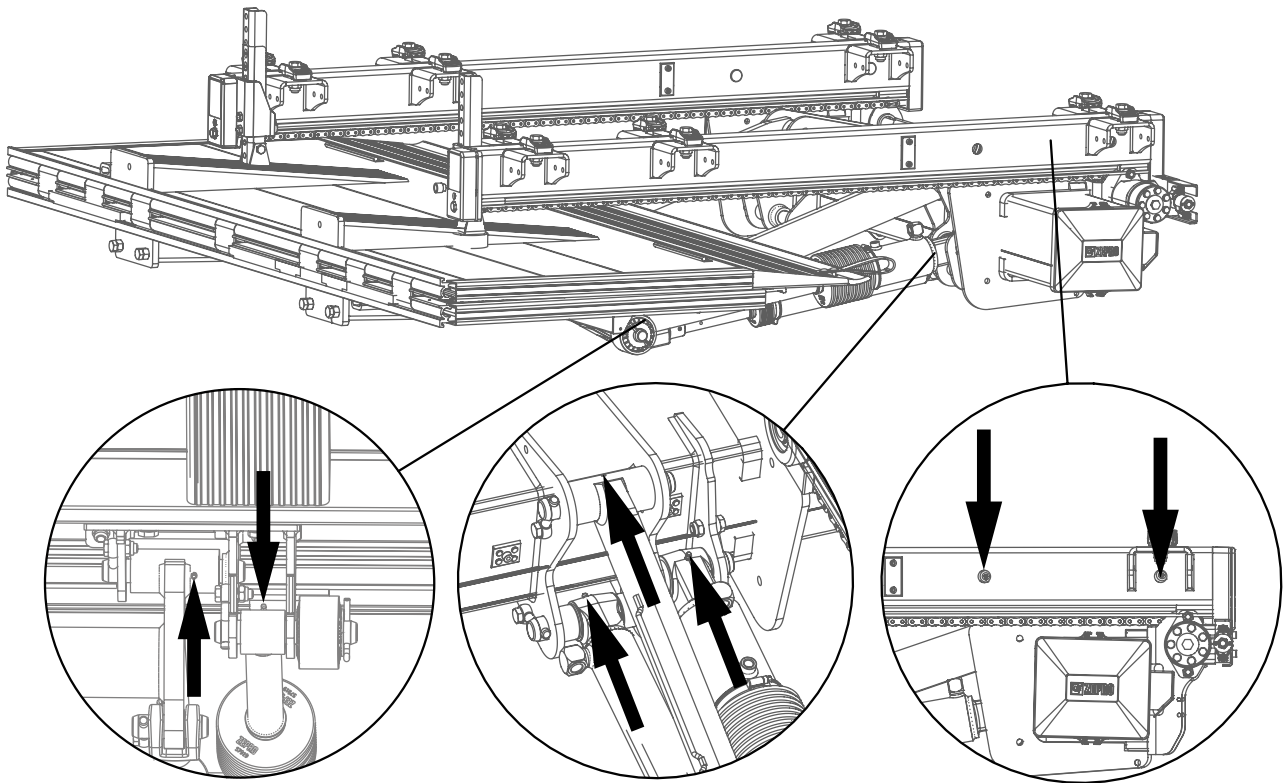


Considering the pressure that, among other things, the platform gives to the axles, it is advantageous if you lubricate the lift 2-3 times at different positions. This provides an easier and better dispersion of the grease.

ZT-MK2 1500-2500

The lift has 18 lubrication points: eight on the slide system, four on the lift arm, two for each tilt cylinder and one for each lift cylinder (attached to the frame). The attachment of the lifting cylinders to the lifting arm has no lubrication point, the axle is initially lubricated from the factory: (See the circled pictures below). In these pictures, the lubrication points are shown on the right side of the lift. On the left side of the lift, the lubrication points are mirror-inverted, through an imaginary center line through the lift.

For the slide system, you may also see the section for slide system.



Considering the pressure that, among other things, the platform gives to the axles, it is advantageous if you lubricate the lift 2-3 times at different positions.

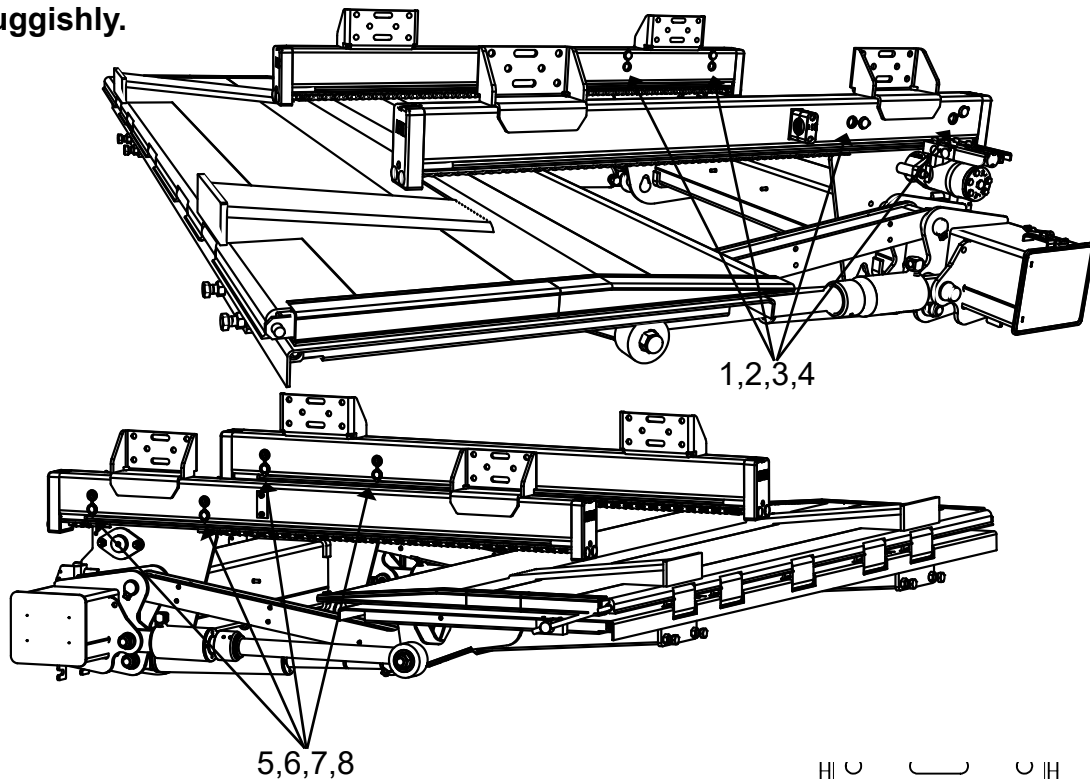
This provides an easier and better dispersion of the grease.

Slide system

The slide system has eight lubrication points, (1-8), shown on the top two images.

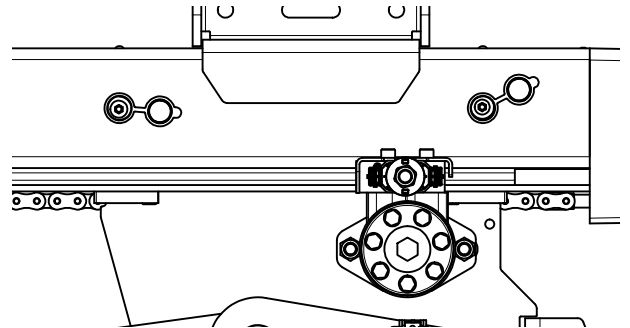
Note. If the slide system is of a cylinder operated model, it has two extra lubrication points for the cylinder. (See the image at the end of the page.)

Note Lubrication of the chains is not recommended, as it can cause them to attract the attention of gravel and dirt, etc., and thus can cause the system to run sluggishly.

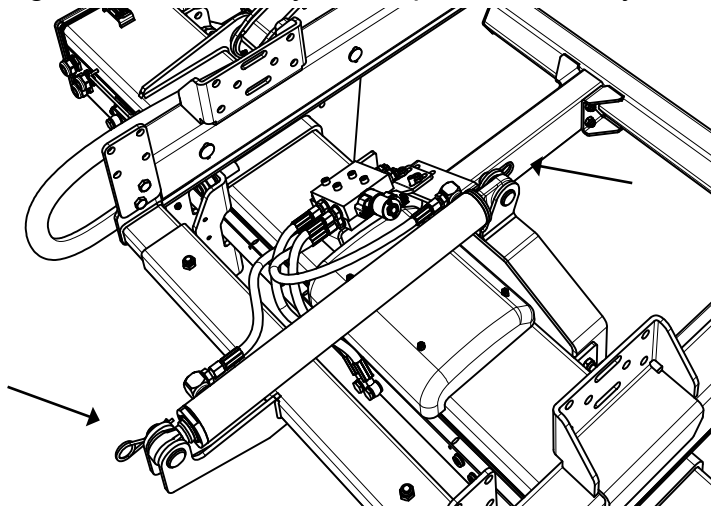


Operate the lift a bit from transport position, just so you have the grease nipples behind the plastic plug on the slide profile. See image to the right. In that mode you are able to reach all the eighth lubrication points.

Note! Make sure the grease ends up where it should and wipe off excess grease as the grease in the slide profiles attract grit and dirt that may seize the slide system.



The image below show a cylinder operated slide system, (ZSSUHD).



Loosen the two pins which hold the two pivot bolt in place. One on each end of the cylinder. See the arrows on the image to the left. Remove the pivot bolt in order to lubricate the bearings with a brush or something similar. Fasten the cylinder again, and do not forget to reattach the two pins that will hold the pivot bolts in place.