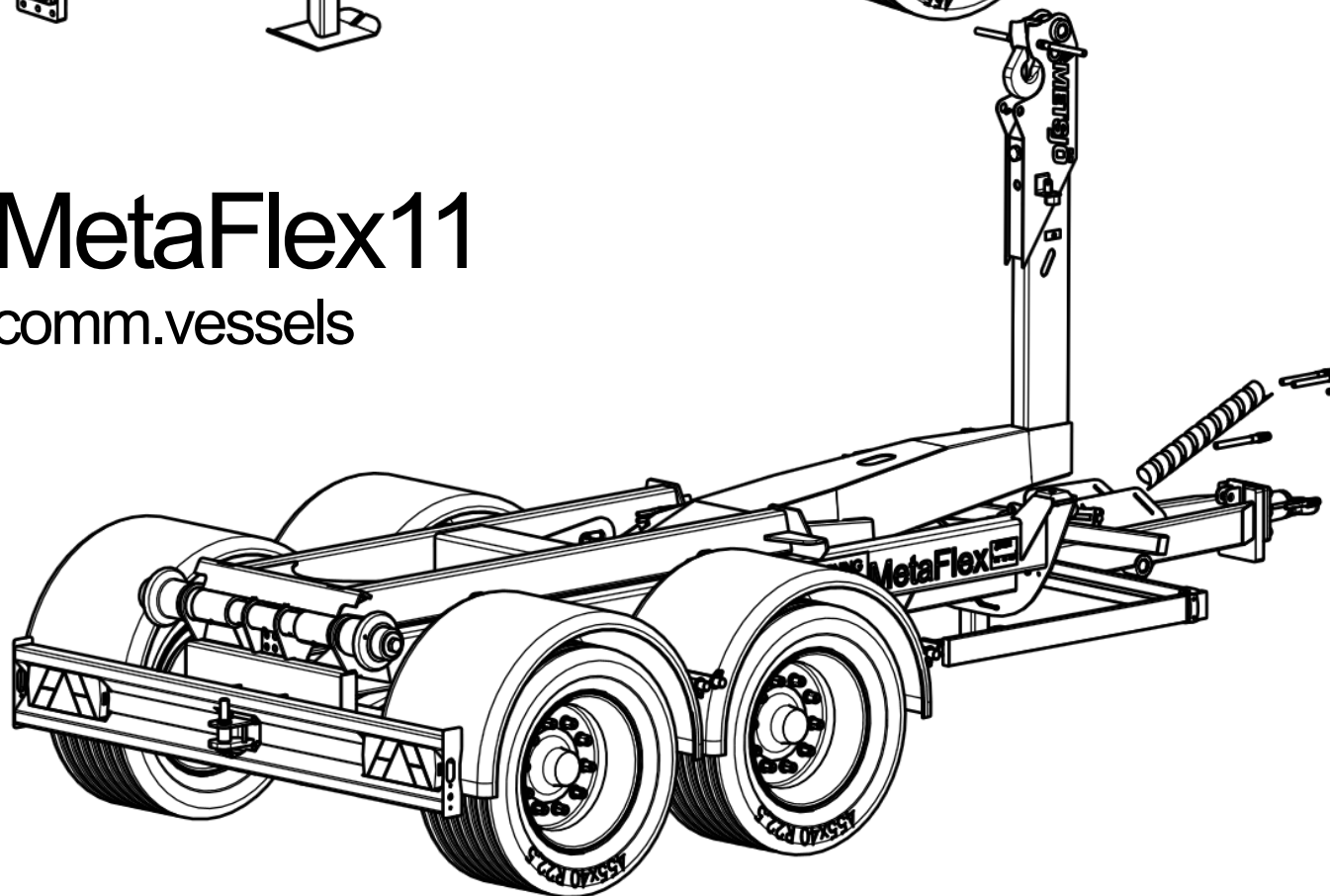


# MetaFlex11

comm.vessels



This trailer is built by “Ivarssons i Mestjö AB”

Before you begin to use the trailer, you should be familiar with its functions and operations. This is done by carefully reading throughout this user's manual and at the same time practically seeing where on the trailer the future settings and adjustments will be made.

For your ease and to avoid future mistakes in connection with maintenance and spare parts questions, we advise you to write down the type of the trailer, its serial number and manufacturing year. This information you can also find on the manufacturer's plate which is placed on the left side of chassis frame.

Serial number .....

Manufacturing year.....

“Ivarssons i Mestjö AB” keep the right to make changes in the construction and specification of the trailer.

### **EG-Conformity declaration CE**

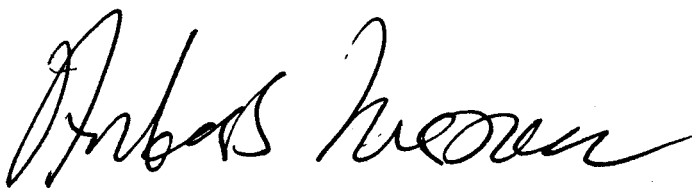
Manufacture Ivarssons i Mestjö AB 58592 Linköping 013-59310

This machine is built according the following standards

89/392 EG 91/368/EEG.

harmonised norms

Bosch el.System.Hydraul. System PRN 982.



Anders Ivarsson

## Driving instructions

The tractor should be chosen according to the terrain

Recommended tractor: 110 Hp

A loaded trailer should always be connected to the tractor.

Connect always:

- The brake hose 3/8 hose
- The tipping/shifting 1/2 hose double acting hose
- The lightning system

The driver should be careful that the hoses are not placed somewhere where they can be squeezed by the frame during the shifting process. The maximum approved payload on the tractor is 3 tons.

## Disconnecting from the tractor

1. The disconnection of the trailer should always take place on a flat and solid ground
2. Place the wheel wedges on the front and rear axle
3. Lower the support leg until it reaches the ground
4. Dismount the electrical connections and the hydraulic hoses, which should NOT be under pressure.
5. Release the hitch hook

**Warning: The trailer is not equipped with a negative braking system**

## Tipping

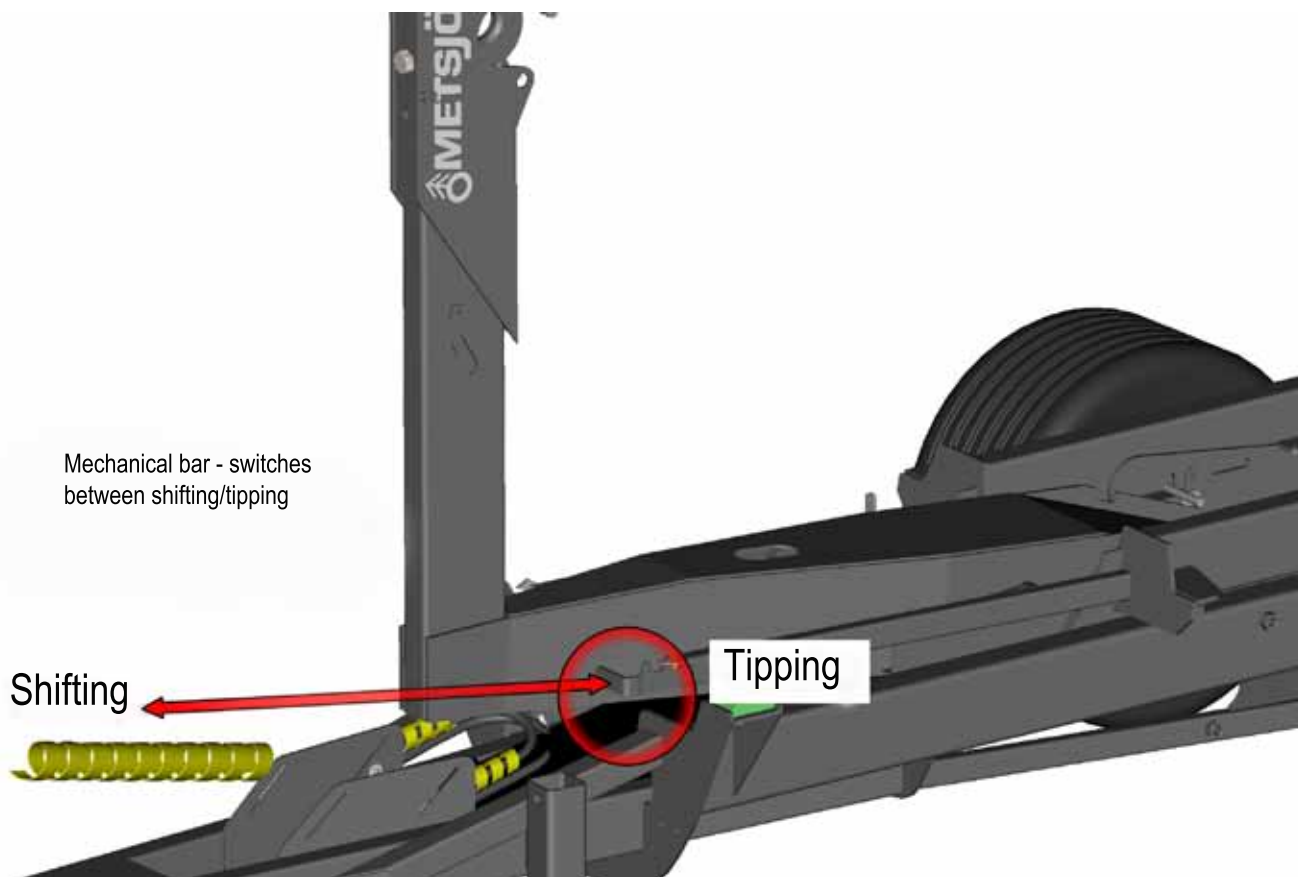
1. Check if the hitch hook or drawbar is locked to avoid negative suspension
2. Assure yourself that the weight of the load is evenly divided over the trailer
3. Check if the tailgate is opened (hydraulic/mechanical tailgate)
4. Tipping should take place on a flat and solid surface
5. Secure area while tipping: 15 meters in radius
6. The tractor must always be connected to the trailer during tipping
7. Never drive with a container which is up-tipped
8. Always tip with the maximum length of the tipping cylinder
9. The system is NOT equipped with a chock valve ( Attention!: Lowering a loaded container while tipping, can cause a hydraulic pressure that is over 230 bars)
10. Check if the brakes are released while driving the trailer

## ATTENTION

- While working under a container, the ball valve that is on the tipping cylinder must **ALWAYS** be closed
- Hydraulic system for 230 bars
- Maximum load on the rear coupler: Vertical 1 ton, Horizontal 23 000 kg
- Tighten the wheel studs after the first 10-50 work hours, as well as every 150 work hours (320 NM)
- Controll if the hitch is not worn out (inner diameter 50mm)

## Shifting containers

- Place the mechanical switch bar into position "shifting"
- Put pressure on the hydraulics and the shifting-arm will begin its cycle
- Make sure that the hook is correctly connected to the container
- Now the shifting process can begin
- The tractor can be unbraked
- The frame of the hook-lift container must rest over the rollers of the trailer



### Attention:

#### Do not shift and tip containers, if:

- The hitch hook or drawbar is not locked to avoid negative suspension
- The load is not evenly divided over the trailer and container
- The trailer and the body are not in the same line
- There is load which can fall of the body during the shifting process
- The hydraulic and electrical hoses are incorrectly connected

**ATTENTION: While working under a container, the ball valve that is on the tipping cylinder must ALWAYS be closed**

Optional equipment:

Switching between tipping/ shifting from driver's seat, 10926

Bogie lift/pressure axle 1-2, 108746

Requires 1 double acting hydr. connection. In floating position when active

## General information

### Never overload the axles, brakes and chassis

- Do not overload the trailer in violation of applicable regulations so that the permitted total weight of the vehicle is exceeded.
- Regularly check the tire pressure. The right value you can find on our web-page or on the manufacturer's homepage
- Do not exceed the permitted load on the braking system
- Do not overload the trailer unilateral with uneven stowing of the load
- Do not mounted tires and rims which are not approved for the trailer. Please check all the features of the standard tires before changing them
- Avoid overloading by using rims with side impact or with unauthorised offset.
- Do not exceed the maximum speed.
- Assure yourself before every usage that the brakes and the brake system work correctly
- Assure yourself before every usage that the axles are in the right position (axle lift, steering axle, axle suspension and lock)
- The warranty does not cover wearing down through usage and unauthorised changes which are done on the trailer

In order to maintain the operating and traffic safety of the trailer, it should be serviced according the specified intervals. The relevant operational and service requirements of the trailers manufacturer, respectively from other part suppliers should be considered. Warranty claims and parts which are worn out, should only be changed in Ivarssons i Metsjö's workshop or other AUTHORISED workshops by people who have the necessary training and technical background.

Only original Metsjö spare parts must be used.

Metsjö takes product responsibility for these parts.

Metsjö cannot assure that the trailer would not be a security risk if any other spare parts than the original are mounted. This is valid even if the repairs are done by an authorised workshop.

The warranty expires when using spare parts other than genuine parts from Metsjö

## Axle system with communicating vessels

The axle rests on two hydraulic cylinders

The hydraulic hoses are connected per side

The whole trailer can be adjusted in height

Oil type ATF (works also with the tractor's hydraulics) - the trailer is pumped with the tractor's pump to the required height. Cylinder length 350mm

There is a requirement of around min. 80mm for driving in different terrains

The height adjustment should always take place on a flat and solid ground

Step by step:

1. Open the ball valve ( 2 pcs. per side)
2. Adjust the height
3. Close the ball valve



Working position 80-120mm between frame and axle

## Axle-lift

A dA double-acting cylinder+ the oil divides between the active cylinders-the axle is lifted

Lift power-25% of the load that rests on the axles

The system has a release valve set at 250 bar drained by the free return

It is very important that the hydraulic function is in "floating" position when we are driving the trailer

We can have multiple axles that can be lifted, but we can drive with only one lifted axle

## Steering axle

The axle is hydraulically and automatically lock while reversing

Axle locked - single acting system, steering axle - in floating position

If driving faster than 40km/h the axle should be locked

The axle can be locked in any position

While driving in tough terrains and ice the axle must be locked

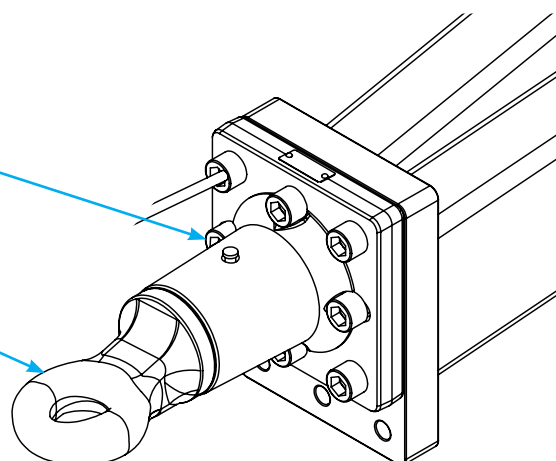
# Maintenance and care

- Tighten the wheel bolts every 10-50 work-hours and also after 150 use-hours (560 NM).
- The axel suspension bolts ( 4 pcs. per side of the axle) should also be tightened after the first 10-50 work-hours and also after 150 use-hours (Moment 750 NM crosswise).

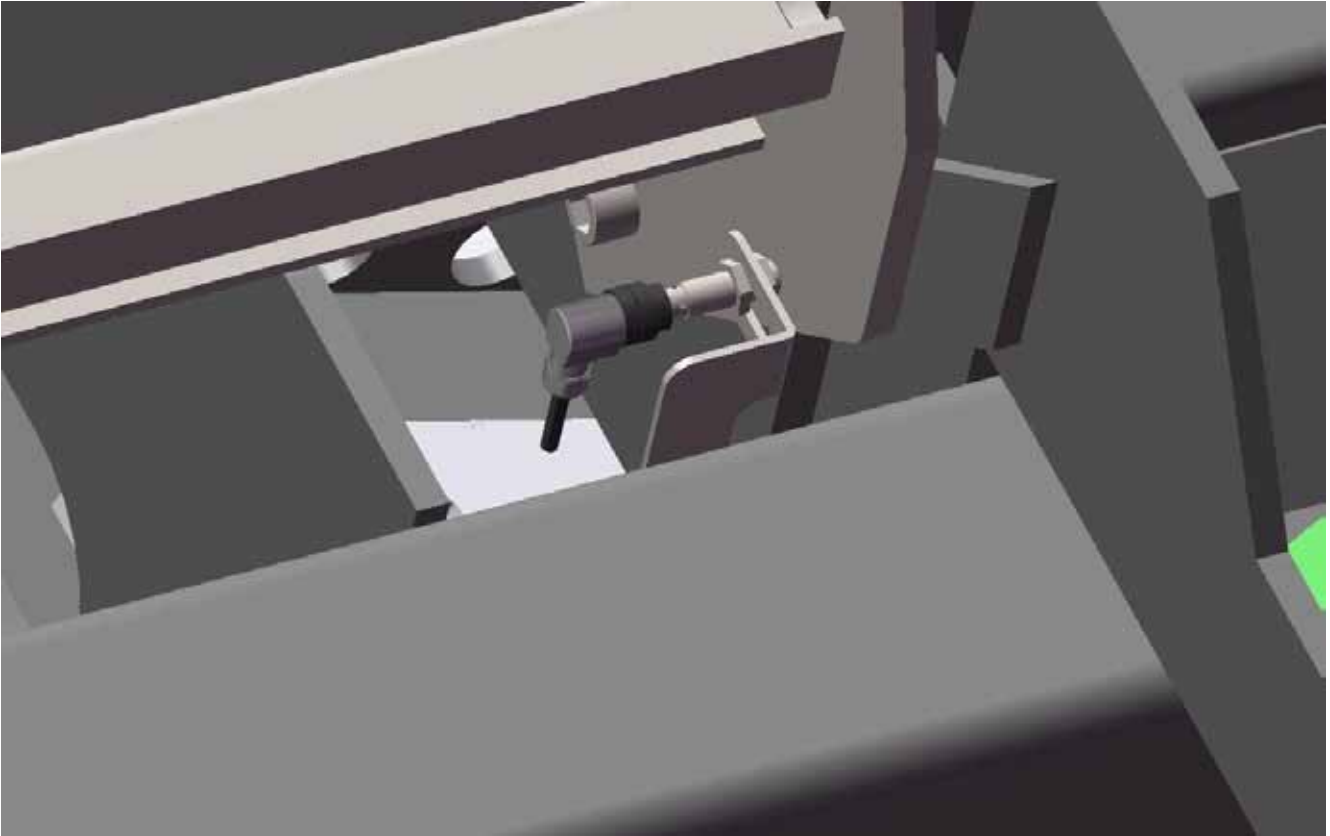


- Check the air pressure of the tires regularly
  - Check the brakes regularly
  - Standard tires 560/60x22,5R Rim connection 280-335/10-27
  - Check the condition of the drawbar - if it damaged or worn out
- The bolts must be correctly tightened.

Drawbar inner diam. 50.



# Axle suspension lock while Tipping/ Shifting



The sensor is mounted as shown on the picture. Works while tipping or shifting containers

## Functions:

While tipping a container, a number of valves are activated through the sensor. This closes the oil amount that is in the rear axle. This makes the trailer more stable while tipping / shifting - prevents negative forces on the tractor. When the oil is locked you cannot use the height and lateral control of the trailer. If you raise the trailer the last axle does not follow with the other axles. If you sink the machine a lot of pressure comes on the chassis when the container is lowered down.

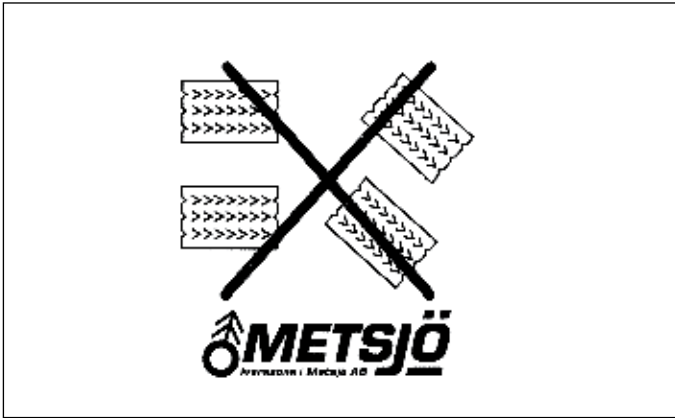
It is possible to avoid this through mounting a metal plate on the sensor, but one has to be very careful while doing this.

**ATTENTION: It is very important that driver is noticed that this feature is out of order**





## Symbol description



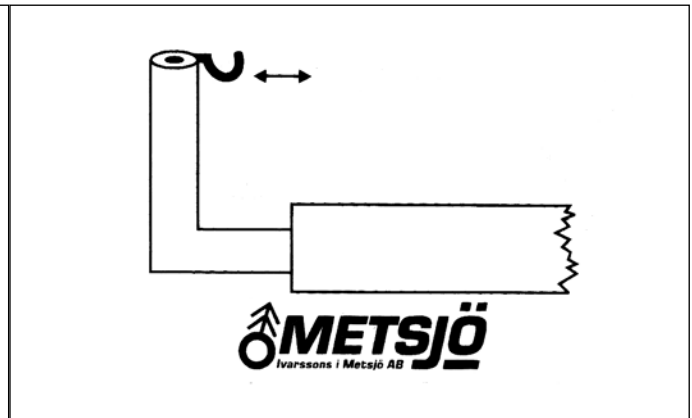
Lock self-steering axle - yellow



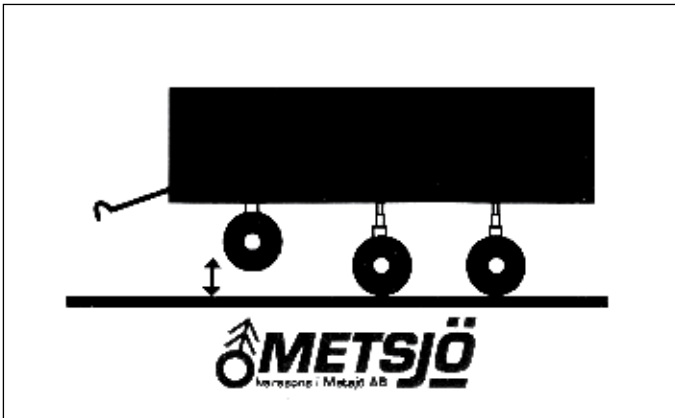
Unloading auger



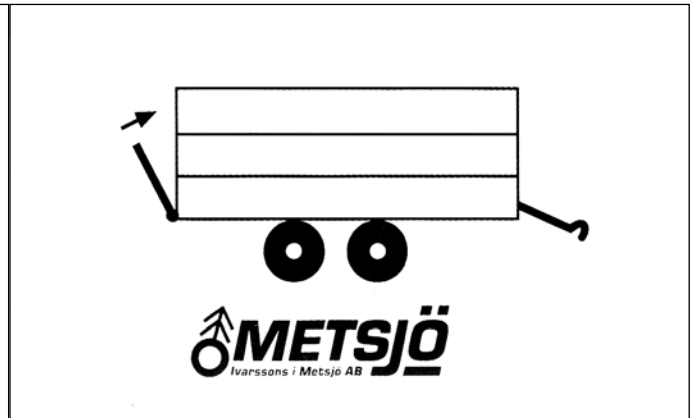
Hydr.socket on the hook-lift arm - red



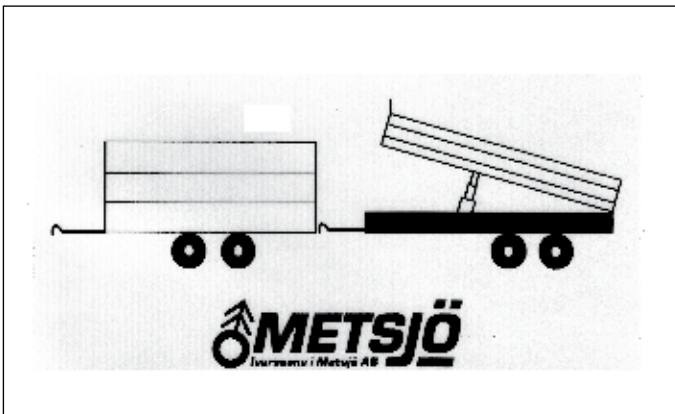
Adjustment of the hook-lift arm - red



Axle lift - green



Hydraulic tailgate- orange

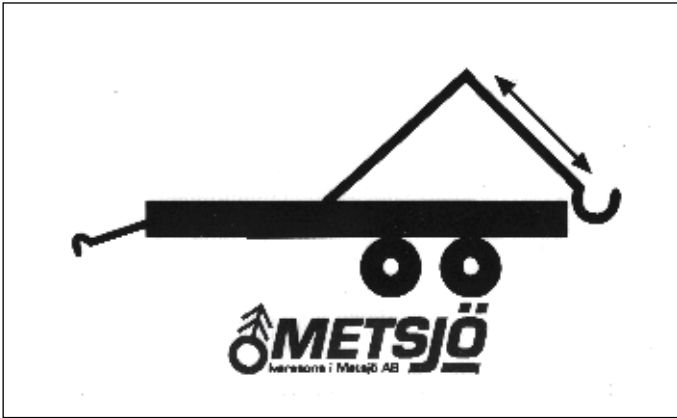


Tipping second trailer- red



Quick sinking of the tipping cylinder

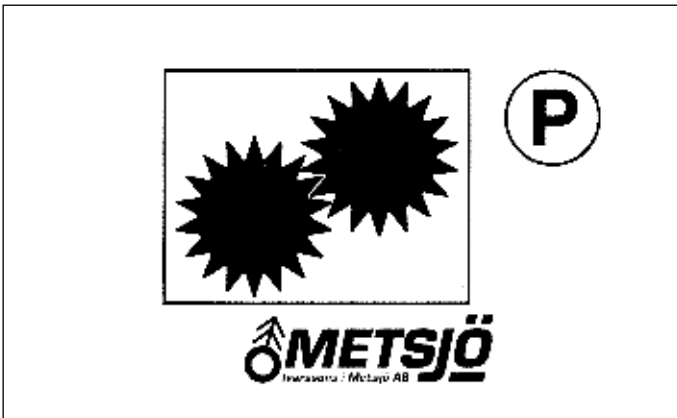
## Symbol description



Shifting containers - blue



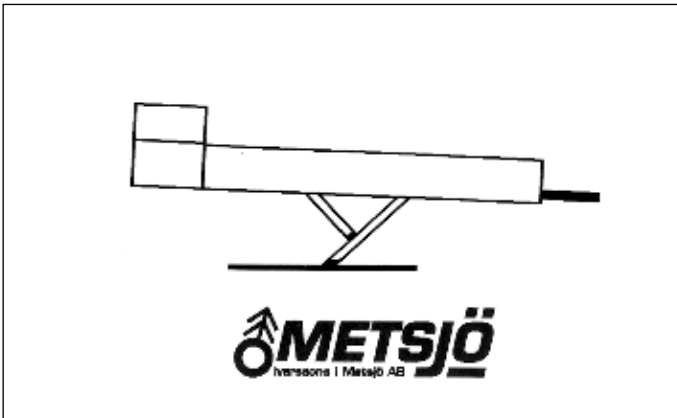
High tipping - blue



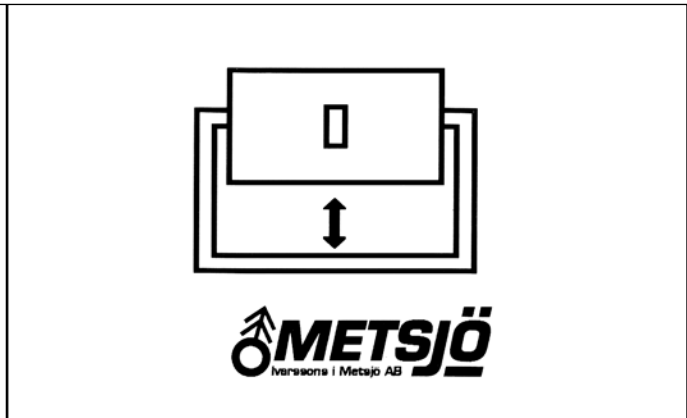
Hydraulic assist drive



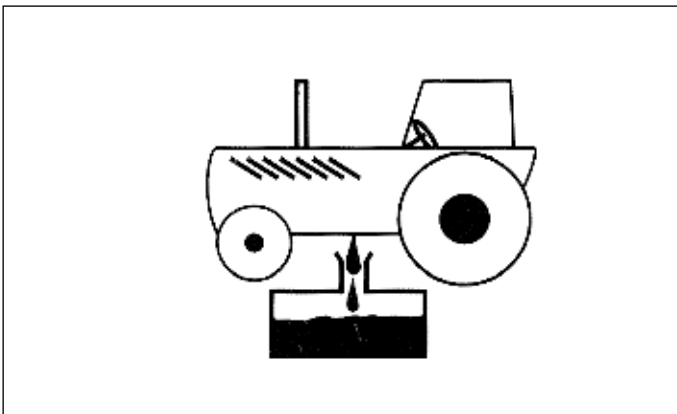
Hydraulic brakes



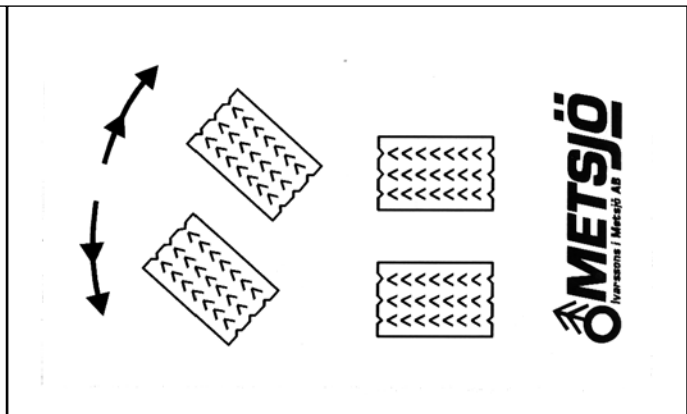
Hydraulic jack



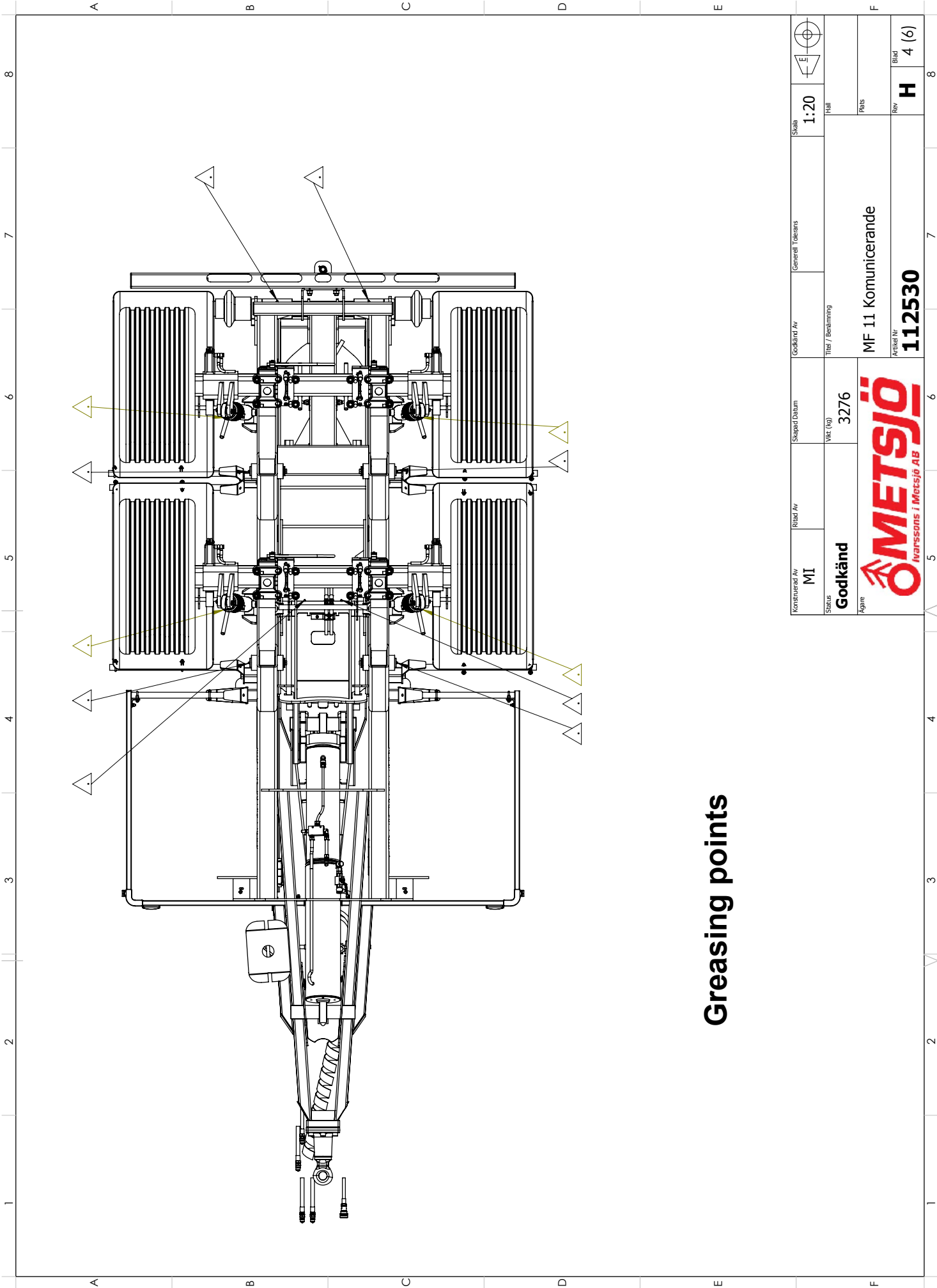
Hydraulic grain shutter



Free return - black



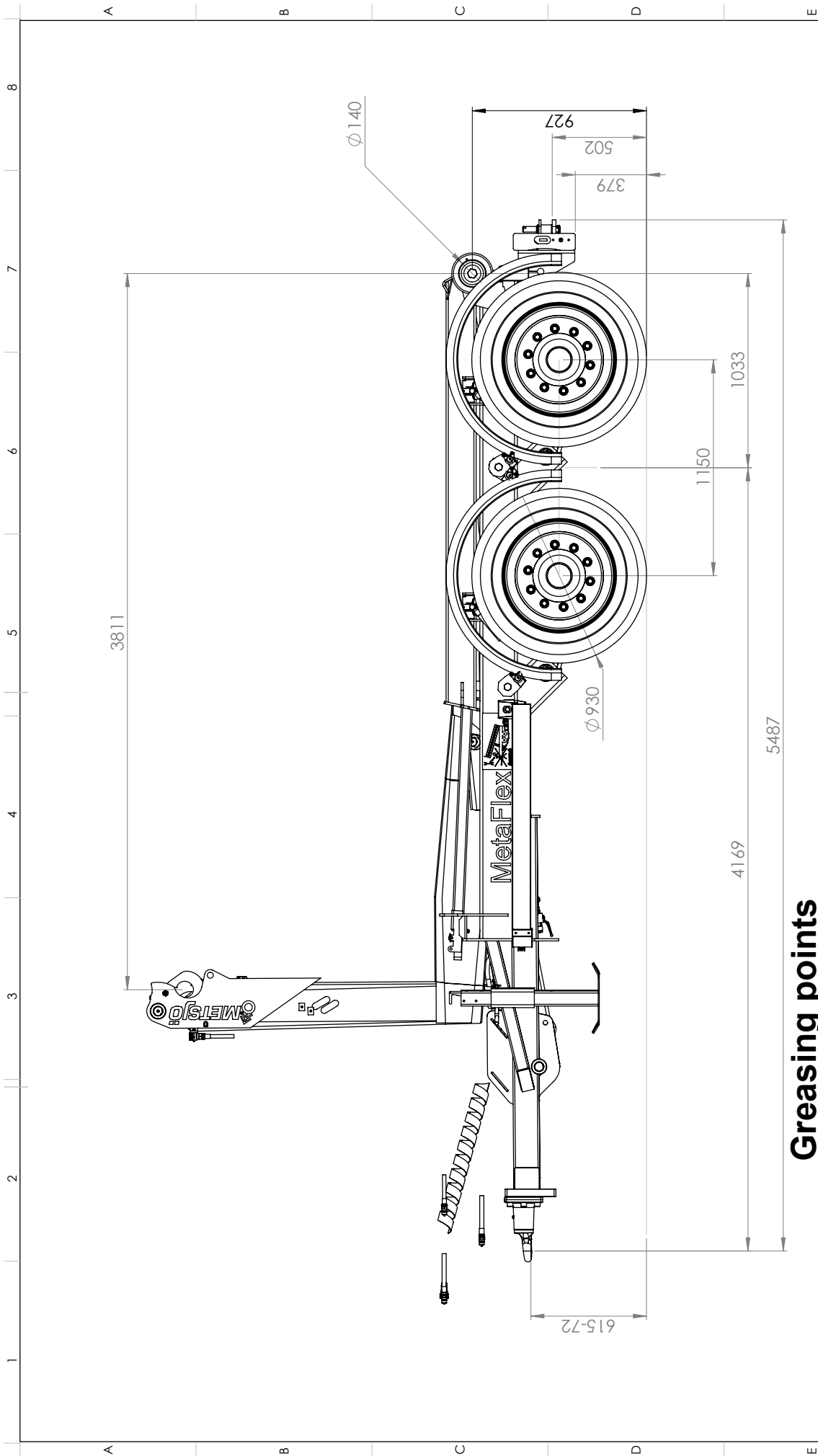
Forced steering




## Greasing points

Konstruktör Av <b>MI</b>	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala <b>1:20</b>	
Status <b>Godkänd</b>		Vikt (kg) <b>3276</b>	Titel / Benämning <b>MF 11 Komunicerande</b>		Häll	
Ägare <b>METSJÖ</b> Ivarssons i Metsjö AB			Artikelnr <b>112530</b>		Rev <b>H</b>	Blad <b>4 (6)</b>

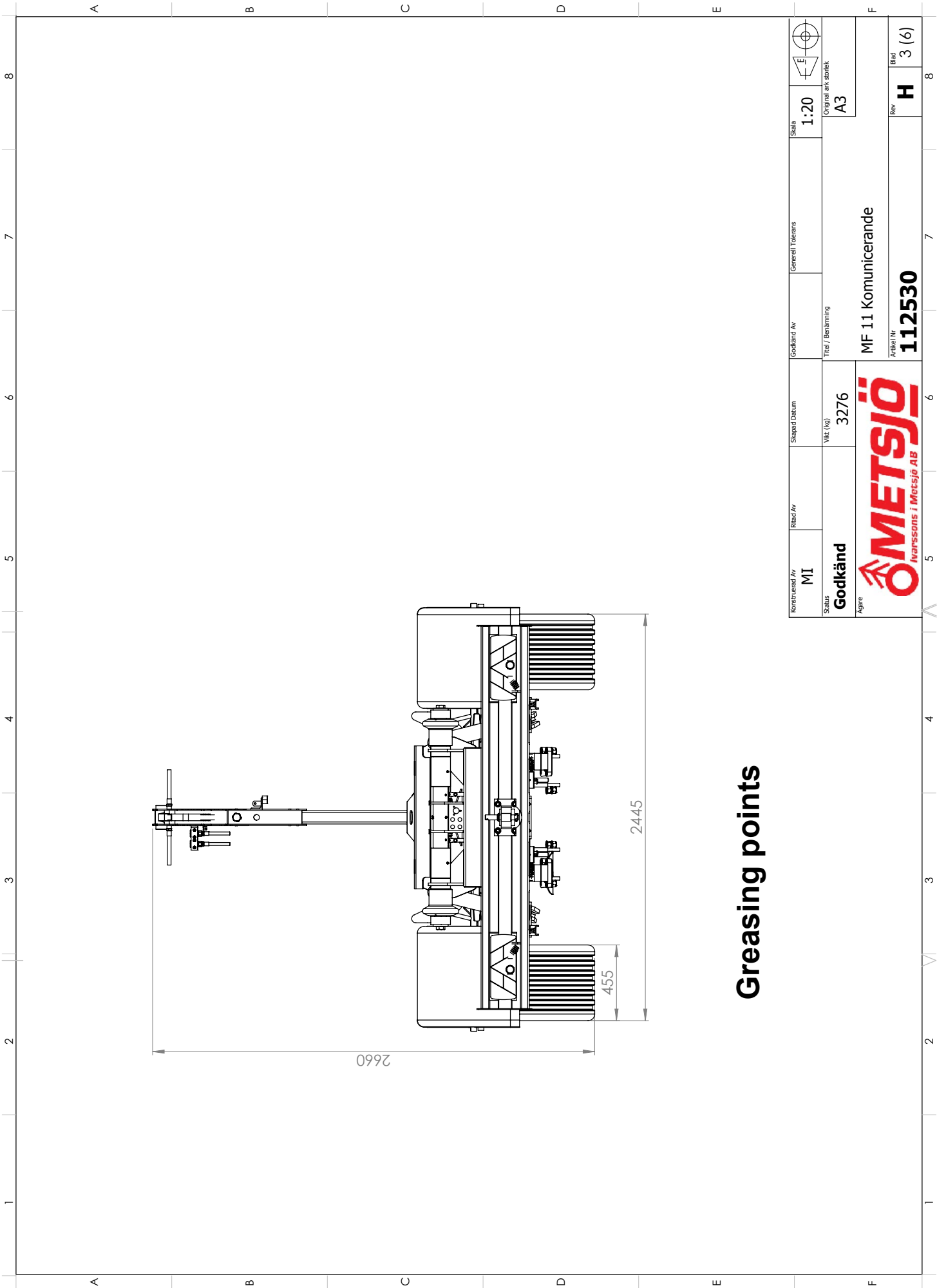
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## Greasing points

Konstruktör Av <b>MI</b>	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Status <b>1:20</b>	Original storlek
Status <b>Godkänd</b>	Vikt (kg) <b>3276</b>	Titel / Benämning <b>MF 11 Kommuniserande</b>		Original storlek <b>A3</b>		
			Artikel Nr. <b>112530</b>			
Ivarssons i Metsjö AB			Rev <b>H</b>			
			Blad <b>2 (6)</b>			

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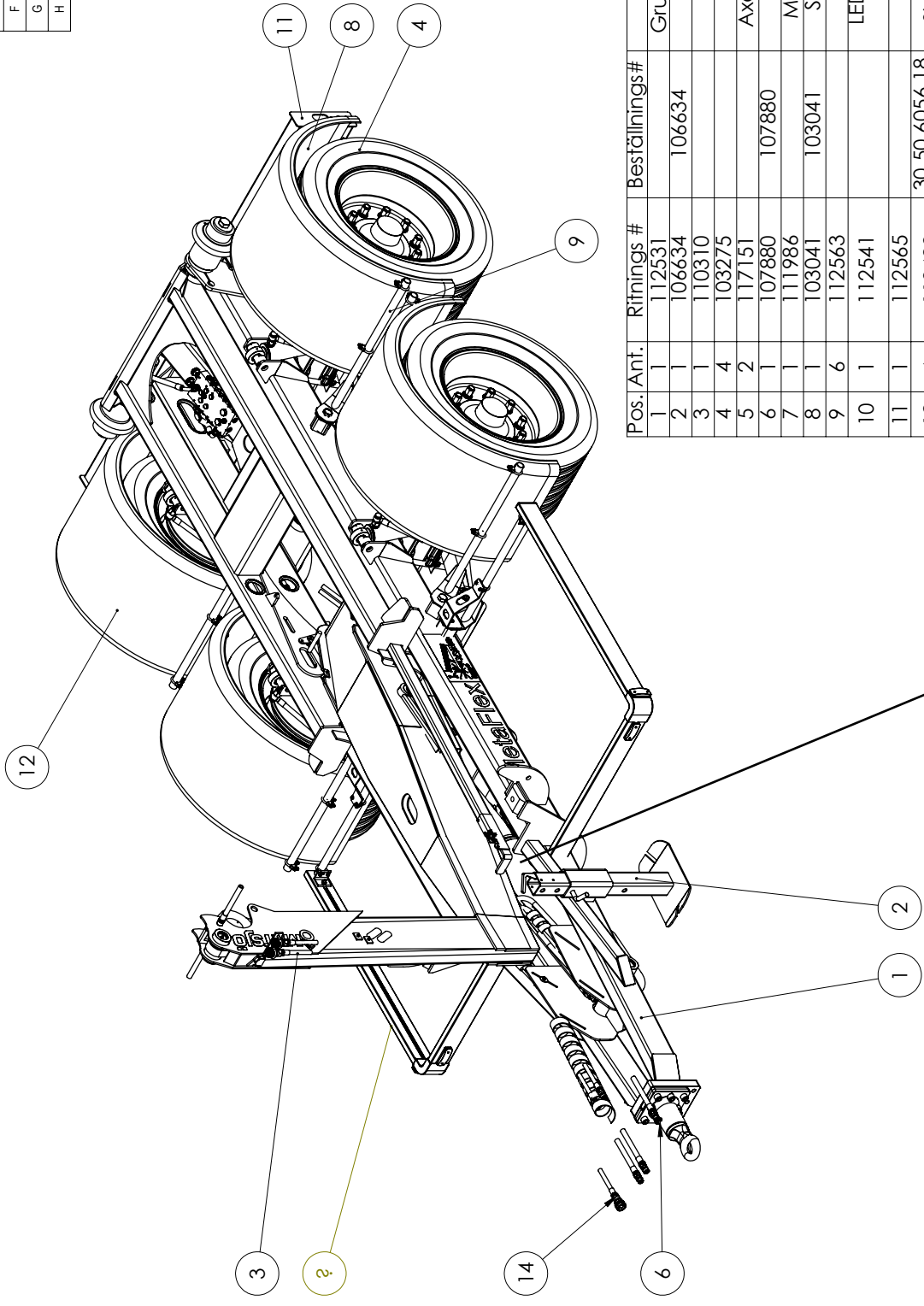
## Greasing points

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Status <b>Godkänd</b>		Ver. (sp)	Titel / Benämning		Original ark. storlek <b>A3</b>	
Agare		<b>3276</b>	<b>MF 11 Komunicerande</b>			
			Artikel Nr	Rev	Blad	
			<b>112530</b>	<b>H</b>	<b>3 (6)</b>	

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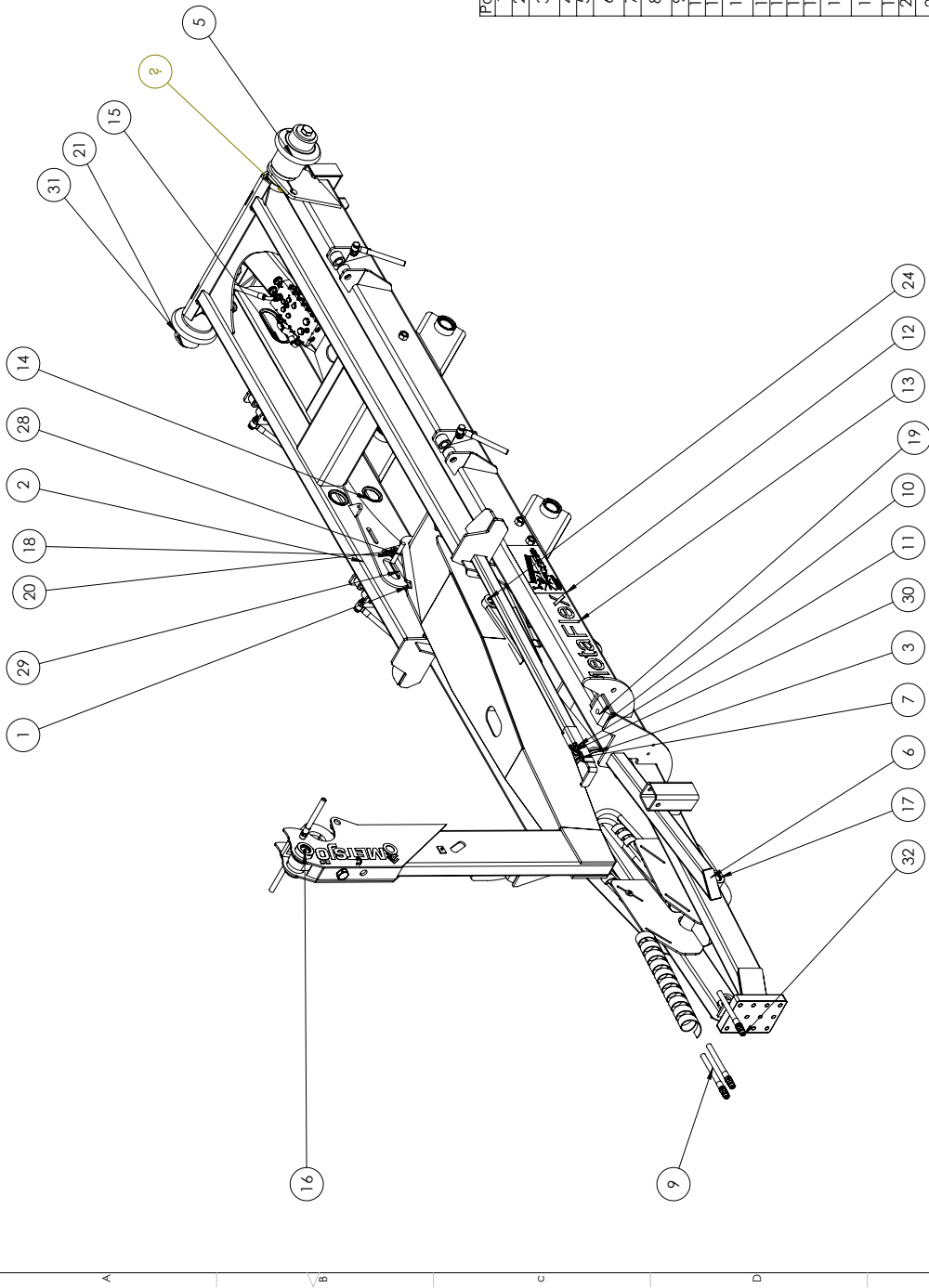
Standard tipping cylinder Art: 10181321,1  
 Flex 11 Cyl LL200/100/60 telescopic double acting chrome  
 Art. 119407  
 Telescopic cylinder sealings MF11 Cylinder LL 200/100/60 (10180132,1)



Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	112531		Grundmonterad F11 komkärll	1495
2	1	106634	106634	Stöben Stå komp	13
3	1	110310		Uttag Torn MF 11	2
4	4	103275		Hjul 10 bult	104.60
5	2	117151		Axel MF stel. Nya fjäderblad	493
6	1	107880	107880	Dragögla 50 scharm.	25
7	1	111986		Morrhår / sid skydd Flex 11	13.52
8	1	103041	103041	Sidmarkering fram o bak	5.74
9	6	112563		skärnhållare	4
10	1	112541		LED belysning bak, triangel, HoV	1
11	1	112565		VBG balk bak	45
12	4	113428	30.50.6056.18 70	Skärm 600x1120x615 BxLxH	
13	1	105366		Bakdrag kit.. Käffliadrag	9
14	1	113747		Hyd broms MF 11 Komkärll	1
15	1	117682	117682-Grå	Sveitsat torn MF11 H-1450	220.88
Konstruktör Av		Ritad Av	Skapad Datum	Godkänd Av	
MI				General Tolertans	
Status		Vikt (kg)	Skala		
Godkänd		3276	1:20		
Agens		Titel / Beställning		Håll	
		MF 11 Komunicerande		Plats	
		Artikelnr		Rev	Blad
		112530		H	1 (6)

Nr	Ändring	Datum	Godk av
F		2013-08-12	
G		2014-10-22	
H		2015-03-10	

Nr	Ändring	Datum	Godk av
B		2012-03-14	
C		2012-07-24	
D		2013-08-09	



POS. Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	112526		Svetsat chassis MF 11 comkärl	664.85
2	102885		MF11 torn-lippram-tornmat	465.37
3	100544	10180131.1	Cyl F16 210/100/45 LL50 1762-4692	
4	101278		lippladsaxel F11-30	38.26
5	100504	100504-Grå	Rulle lipplad	20.47
6	104564	104564	Sprint lippkolv nedre MF11 - MF 16 50L365	
7	110968	110968-Grå	Löspeslag MF11	
8	101011	10400468	Tillverkskylt i vasson i Metsjö NIBAR	0.04
9	111794		STD Hydraulik MF11	3
10	101918	454998N06	Amicler grön slipplatta 120x80x30	0.24
11	100333	10400060.2	Ringsprint 10m-40 nick parim	0.04
12	101081	10400469	Dekal varning fipp (gul) bredd 300mm höjd 170mm	0.01
13	103046	10400472	Dekal Metalflex utskuren text	0.00
14	103291	416007	Kantskydd 15x12 6-8 PVC Svart	0.01
15	102742	416007	Kantskydd 15x12 6-8 PVC Svart	0.03
16	100491	10400162	Smörjlippl M10x1 rak	
17	101785	472050	Segersäcking 3GH 50 Din 472, för invändig montering	
18	109791	M10NYÖCKNIK	Mutter M10 FZB nylock	
19	109839	933810045.1	Bult M10x45 FZB Heilgånga	
20	109838	M10x40Std	Bult M10x40 FZB Heilgånga	
21	ISO 4017 -	10191757		
22	109868	91412025	Stoppskruv M12x25 Insex	
23	914120161	914120161	M12x16Stopp	
24	102735		50368 övrekolvaxel MF 11	5.54
25	100562	100562-Grå	Kolvrok MF11-16 HO	8.67
26	100561	100561-Grå	Kolvrok MF 11-16 Vg	8.67
27	105734		Sprint tornad MF11	
28	104959	104959-Grå	Tornlås F11	5
29	10128	110128-Grå	lipplås MF11	4
30	110965	110965-Grå	Reglage F11	
31	113394		Stopping F11 comkärl	3
32	113529		Hydraulik komkärl MF11	8

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Godkänd

1356

Grundmonterad F11 comkärl

112531

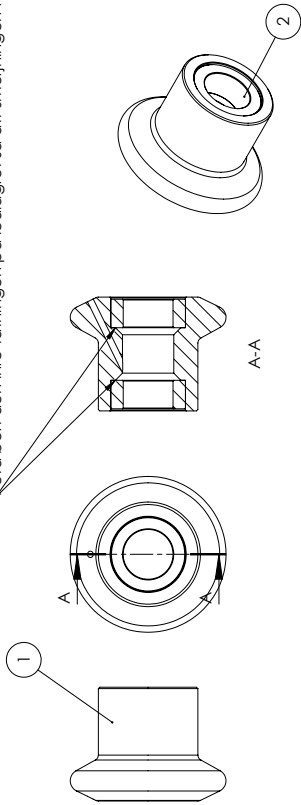
D

1 (1)

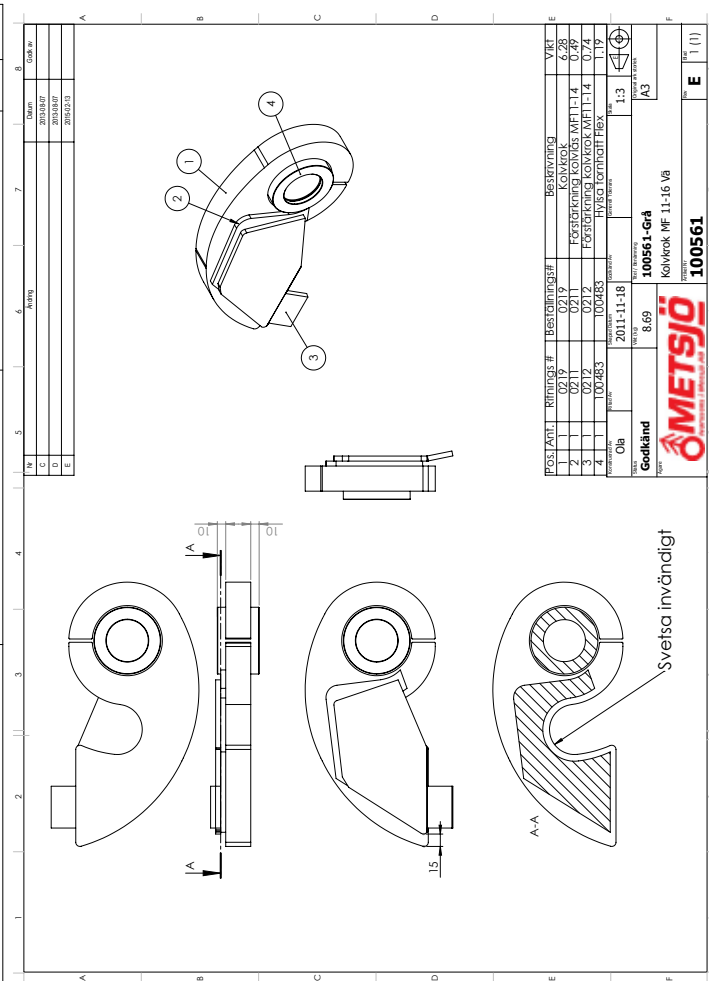


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D		2013-02-14	
E		2013-03-07	

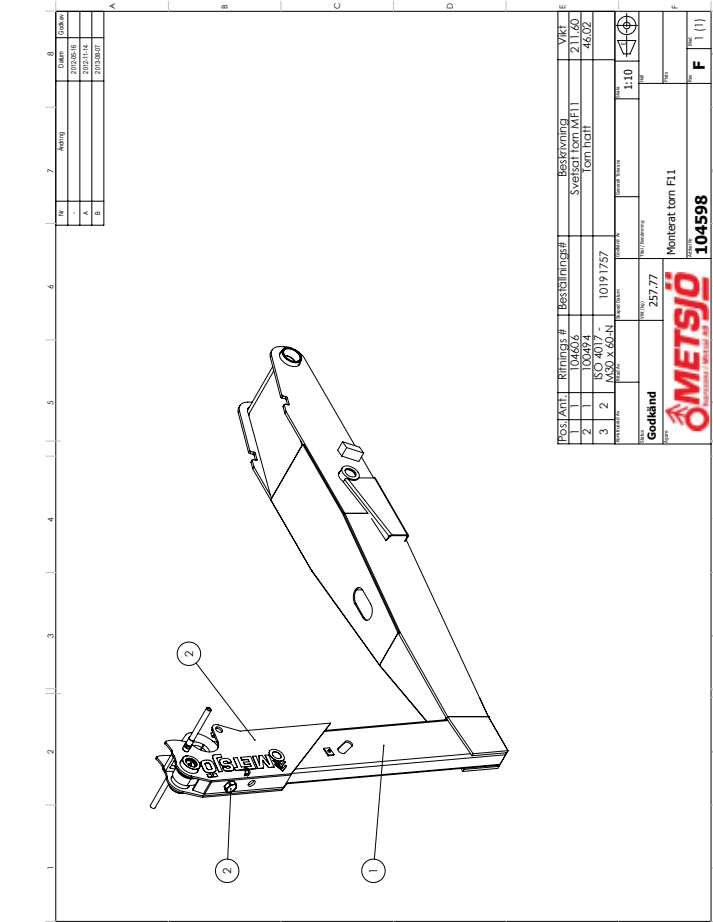
Peta bort den inre tätningen på ledlagret så att smörjningen fungerar



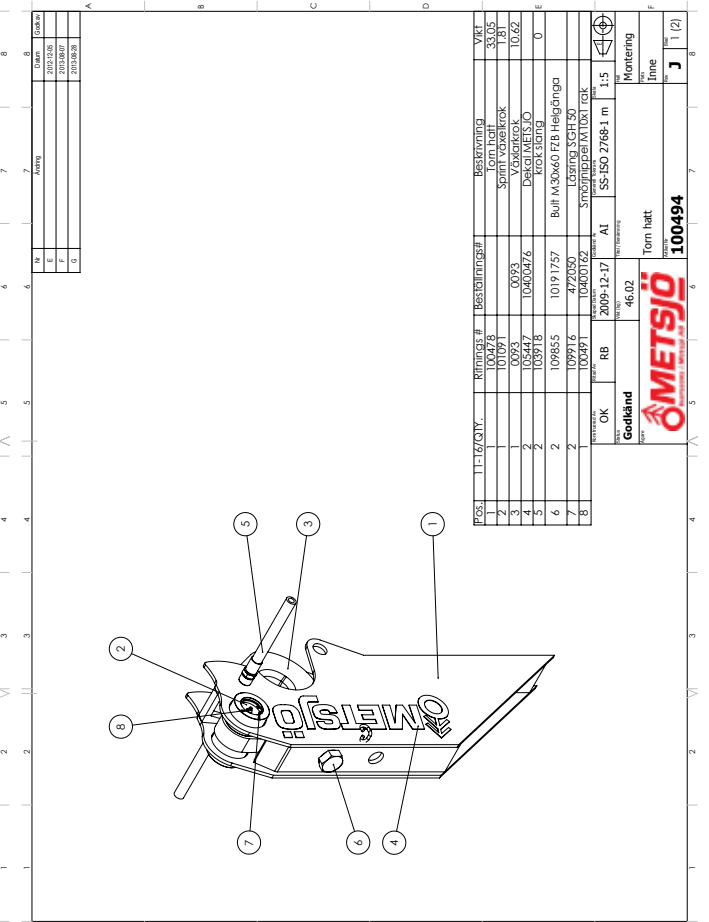
Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	VIKT
1	1	100502	10180055	Fickväxelrulle	17,46
2	2	100503	10180055	Ledlager 70x105 L43	1,51
OK			2011-03-15	AI	SS-ISO 2768-1 f
Godkänd			20.47	100504-Grå	1:5
				Rulle tipped	
				100504	B 1 (1)



Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	VIKT
1	1	0219	0219	KONKROK	6,28
2	1	0211	0211	FÖRSTÄRKNING KONKROK MF 11-14	0,49
3	1	0212	0212	FÖRSTÄRKNING KONKROK MF 11-14	0,74
4	1	00853	00853	BYGGSTÄNKING FIBER	1,19
OK			2011-11-18	AI	1:3
Godkänd			8,69	100561-Grå	A3
				Konkrok MF 11-16 VA	
				100561	E 1 (1)

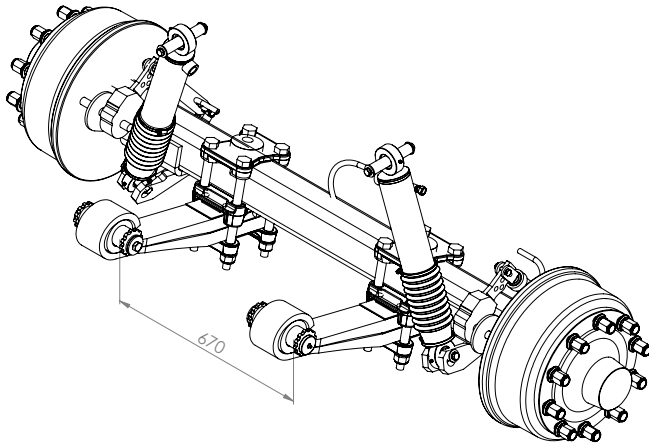


Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	VIKT
1	1	104936	10191757	Svetsat torn MF11	211,60
2	1	104934	10191757	NO 40	46,02
3	2	NO 40 A 60 A 1	10191757	NO 40 A 60 A 1	
OK			257,77	Monterat torn F11	1:10
Godkänd				104598	F 1 (1)



Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	VIKT
1	1	104938	0093	Svetsat torn MF11	33,05
2	1	0093	0093	VÄRMSKROK	10,62
3	1	10490476	10191757	DEKAL METSJO	
4	2	103918	10191757	KROK STÅNG	0
5	2	109855	472080	Bult M30x60 FZB Heiligånga	
6	2	109916	1040162	LÅSNING SGT 50	
7	2	104937	1040162	SMÖRJNINGSPÅL TORI GRÅ	
8	2	2009-12-17	AI	SS-ISO 2768-1 m	1:5
OK			46,02	Montering	
Godkänd				100494	J 1 (2)

Nr	Ändring	Datum	Godk av
-		2012-12-20	
A		2012-12-20	
B		2012-12-20	

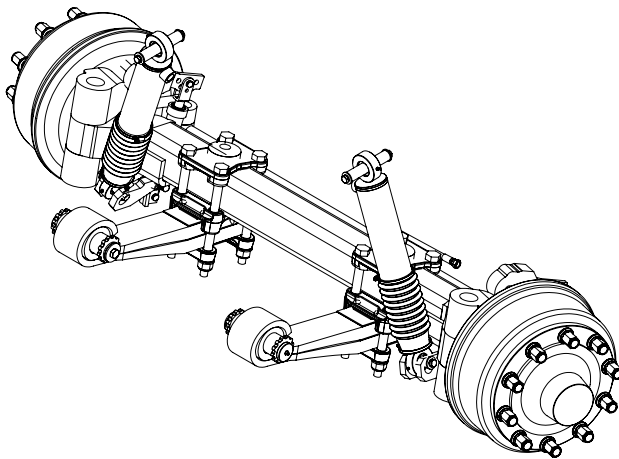


Pos.	Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	1	117166		Axel stel MF	472
2	1	109264		Sprinter led axel	7
3	1	109217		Cylindrar komunicerande kärll	32
4	1	109192		Broms hydraulisk stel axel	5
5	20	101289	410121160	Hjulmutter M22x1,5	0,28

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	Hall
					1:10	
Status	Vikt (kg)	Titel / Benämning		Häll		
Godkänd	522	Axel MF stel. Nya fjäderblad		Plats		
Agens			Artikel Nr	Rev	Bad	
			117151	B	1 (1)	

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Nr	Ändring	Datum	Godk av
-		2012-12-20	

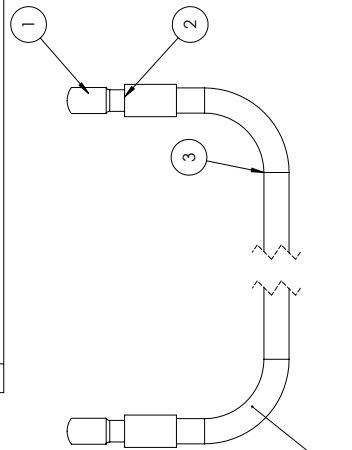


Pos.	Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	1	117167		Axel styr	579
2	1	109217		Cylindrar komunicerande kärll	32
3	1	109390		Broms hydraulisk styrbar axel	5
4	1	109264		Sprinter led axel	7
5	20	101289	410121160	Hjulmutter M22x1,5	0,28

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	Hall
					1:10	
Status	Vikt (kg)	Titel / Benämning		Häll		
Godkänd	629	Axel MF styr. Nya fjäderblad		Plats		
Agens			Artikel Nr	Rev	Bad	
			117153	-	1 (1)	

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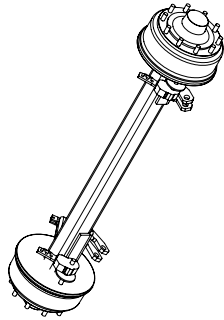
Nr	Ändring	Datum	Godk av
-		2011-05-10	
A		2012-12-03	
B		2014-08-11	



Slanglängd 1400mm

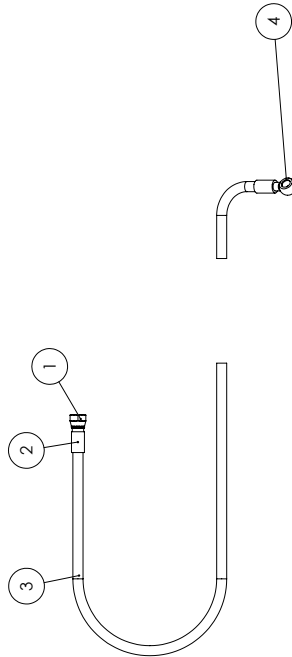
Pos./Ant.	Artikeleinr 1	Artikeleinr 2	Beskrivning	Vikt
1	2	101088	A502910404 Banjo 1/4" - stolpe 1/4"	0.02
2	2	101037	1100000404 Hylsa 1/4" 1W	0.02
3	1	101566	241804 Hydraulslang 1/4"	
Godkänd	LH	MI	2011-05-10	AI
Godkänd	0			1:2
<b>Godkänd</b> <b>METSJÖ</b> Hydraulsystem / Metallvaru AB				
Slang broms stel axel				
Godkänd 109522 Axeltavla <b>METSJÖ</b> Hydraulsystem / Metallvaru AB 109522 Axeltavla <b>B</b> 1 (1)				

Nr	Ändring	Datum	Godk av
-		2011-05-10	
A		2011-05-20	
B		2013-01-12	



Pos./Ant.	Artikeleinr 1	Artikeleinr 2	Beskrivning	Vikt
1	1	105064	410121090 Axeltavla 120x120, 10 Bolt	320
2	1	MI	2011-05-20	AI
3	1			1:20
Godkänd				
Godkänd				
<b>Godkänd</b> <b>METSJÖ</b> Hydraulsystem / Metallvaru AB 109191 Axeltavla <b>B</b> 1 (1)				

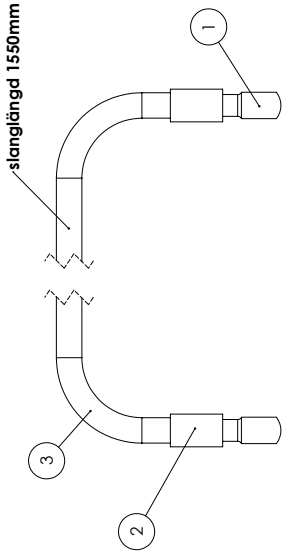
Nr	Ändring	Datum	Godk av
B		2012-12-03	
C		2013-08-09	
D		2014-08-11	



Pos./Ant.	Artikeleinr	Beställingsnr	Beskrivning	Vikt
1	101789	A500010604	Stolpe 1/4" - INVR 3/8"	
2	101037	1100000404	Hylsa 1/4" 1W	0.02
3	101518	241804	Hydraulslang 1/4"	0.10
4	101088	A502910404	Banjo 1/4" - stolpe 1/4"	
5	101566	241804	Hydraulslang 1/4"	0.02
Godkänd	LH	MI	2011-04-15	AI
Godkänd	0.21			1:5
<b>Godkänd</b> <b>METSJÖ</b> Hydraulsystem / Metallvaru AB 101519 komplett bromslang ram axel <b>101519</b> Axeltavla <b>D</b> 1 (1)				

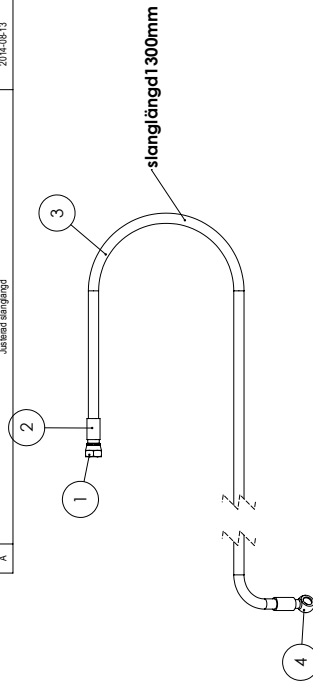
Pos./Ant.	Artikeleinr 1	Artikeleinr 2	Beskrivning	Vikt
1	1	101360	Bromscylinder 45/32 r.b. 320 sl	3.13
2	1	109522	109522 Slang broms stel axel	
3	1	109522	109522 komplett bromslang ram axel	0.05
4	1	101519	101519 komplett bromslang ram axel	0.21
5	1	104392	268110 Banjoubult 1/4" dubbel	
6	1	104392	268110 Banjoubult 1/4" enkel	
7	1	104392	268110 Banjoubult 1/4" enkel	
8	1	109522	450100 Bult M10x47 FB Högånga	
9	1	109522	450100 Bult M10x47 FB Högånga	
10	1	109791	Mutter M 10 FB nylock	
11	1	109925	Mutter M 10 FB nylock	
Godkänd	MI	MI	2011-05-10	AI
Godkänd				1:5
<b>Godkänd</b> <b>METSJÖ</b> Hydraulsystem / Metallvaru AB 109192 Broms hydraulisk stel axel <b>109192</b> Axeltavla <b>C</b> 1 (1)				

Nr	Andring	Datum	Godk av
-	Jämbörd slanglängd	2014-05-10	
A		2014-05-13	



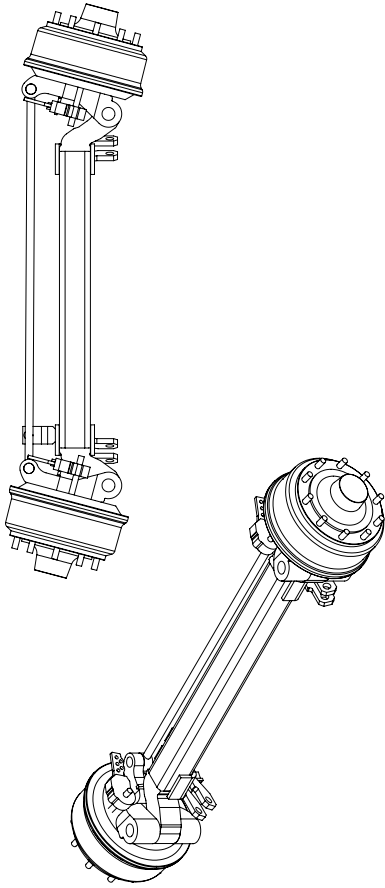
Pos./Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	101088	A502910404	Banjö 1/4" - stolpe 1/4"	0.02
2	101037	1100000404	Hylsa 1/4" LW	0.02
3	101566	241B04	Hydraulslang 1/4" korsett isolera	
Storlek	LH	2011-05-10	AI	1.2
Varuslag				
Godkänd				
bromssläng BPW styraxel mellan cvl				
<b>METSJÖ</b>				
109531				

Nr	Andring	Datum	Godk av
-	Jämbörd slanglängd	2014-05-10	
A		2014-05-13	



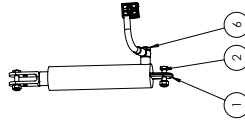
Pos./Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	101789	A500010604	Stolpe 1/4" - INV R 3/8"	0.02
2	101037	1100000404	Hylsa 1/4" LW	0.10
3	101518	241B04	Hydraulslang 1/4"	
4	101088	A502910404	Banjö 1/4" - stolpe 1/4" korsett isolera	
Storlek	LH	2011-05-10	AI	1.5
Varuslag				
Godkänd				
Bromssläng BPW styraxel ram-axel				
<b>METSJÖ</b>				
109534				

Nr	Andring	Datum	Godk av
-		2014-05-10	
A		2014-05-13	



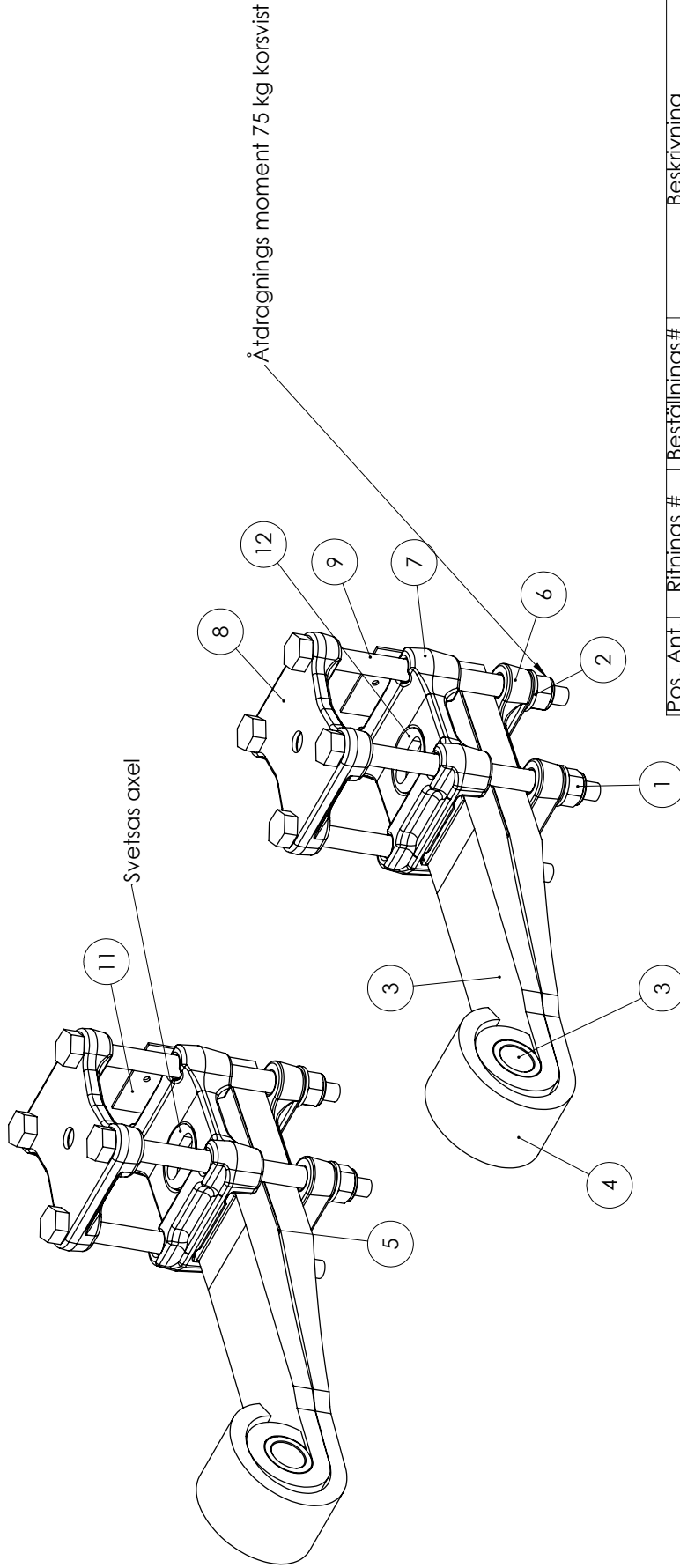
Pos./Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	109389	410121080	Åxel styrbor # 20	427
2	MI	2011-05-20	AI	55-150 2768-1 m
3				1:10
Godkänd				
Åxel # 20 styr				
<b>METSJÖ</b>				
109400				

Nr	Andring	Datum	Godk av
-		2014-05-10	
A		2014-05-13	



Pos./Ant.	Styrhyt.	Ritning #	Beskrivning	Vikt
1	2	101301	Bromsytare A5732 md.320 SI	3.13
2	4	109838	BUF M10x40 F28 Höggång	
3	4	109791	M10NYÖRNRIK IG	
4	1	109531	Bromssläng BPW styraxel mellan CVL	0
5	1	109534	Bromssläng BPW styraxel ram-	0.17
6	1	101559	268100	
7	5	101087	450100	
8	2	104392	268110	
9	2	109554	Komplet dubben 12 kammer	0.05
10	2	109255	6338100701	
Storlek	UH	2011-05-20	AI	1.6
Varuslag				
Godkänd				
Broms hydraulisk styrbar axel				
<b>METSJÖ</b>				
109390				

Nr	Ändring	Datum	Godk av
F		2013-02-27	
G		2013-04-22	
H		2013-04-22	



Pos. Ant.	Rifnings #	Beställnings#	Beskrivning	Vikt
1	8	109795	Muffar M24 F2B nylock	
2	8	109915	Bricka 31x45x4 Härd	
3	2	114448	Lenkerblad 1	20
4	2	112583	Lenkerblad 2 Nr:629992402	
5	2	116995	Mellanlåg	
6	2	113514	BPW axelinfästning underdel	
7	2	114418	Mellandel fjäderfäste	
8	2	114419	BPW axelinfästning överdel	
9	8	116994	M24x320 10.9	
10	2	114450	Styrflapp	
11	2	117283	Mellanlåg	
12	2	117338	Svetsring bladfjäderfästet	

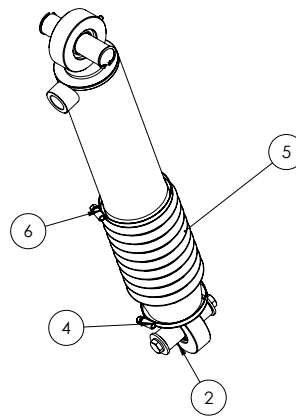
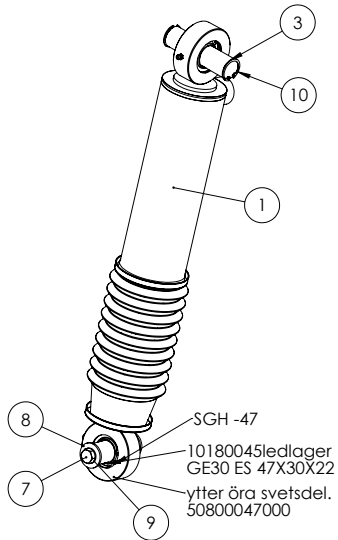
Konstruktör Av	MI	Skapad Datum	2013-04-22	Godkänd Av	AI	Skala	1:5
Ritad Av	MI	Vikt (kg)	122	Titel / Benämning	117144	Generell Tolerans	SS-ISO 2768-1 m
Status	Godkänd						
Aggare							
				Axel fjädrar			
				Anordnr		117144	
				Rev		F 1 (2)	



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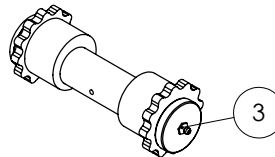
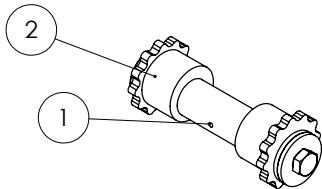
Nr	Ändring	Datum	Godk av
D		2013-08-09	
E		2013-11-07	
F		2014-01-16	



Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	2	109215	10180043.1	Cylinder kom kärl	15
2	2	100136	30L85	Sprint komkärll nedre	0.43
3	2	117457		Sprint komkärll övre. L=112	
4	2	101294	NORMA709009	Slangklammer 70-90/9 W1S	
5	2	101290	10400138	Dammask komkärll slag 250	0.09
6	2	101293	NORMA80100	Slangklammer 80-100/12W1S	
7	4	109842	104000140	Bult M12x20 FZB Helgänga	
8	4	109900	104000141	Bricka 12,5x35x3 FZB	
9	4	109914	104000142	Fjäderbricka M12 FZB	
10	4	109911	472031	Låsring SGH 31	

Konstruerad Av	Ritad Av	MI	Skapad Datum	2011-04-20	Godkänd Av	AI	Generell Tolerans	SS-ISO 2768-1 m	Skala	1:5	
Status	Godkänd		Vikt (kg)	32	Titel / Benämning		Cylindrar komunicerande kärll		Hall		
Ägare			Ivarssons i Metsjö AB		Artikel Nr	109217		Rev	B	Blad	1 (1)

Nr	Ändring	Datum	Godk av
-		2011-05-10	
A		2011-05-16	
B		2011-05-26	



Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	2	100142	1-1A	Sprint bakaxel	1.94
2	4	100143	1-31	Hylsa justerbar bakaxel	0.70
3	2	100491	10400162	Smörjnippel M10x1 rak	
4	4	109903		Bricka 17,5x56x5 FZB	
5	2	109849		Bult M16x40 FZB Helgänga	

Konstruerad Av	Ritad Av	MI	Skapad Datum	2011-04-20	Godkänd Av	AI	Generell Tolerans	SS-ISO 2768-1 m	Skala	1:5	
Status	Godkänd		Vikt (kg)	7	Titel / Benämning		Sprintar led axel		Hall		
Ägare			Ivarssons i Metsjö AB		Artikel Nr	109264		Rev	B	Blad	1 (1)

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Nr	-	Ändring	Datum	Godk av
			2012-03-07	

Pos.	Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	1	103836	A500510808	Stolpe 1/2" - 90°	
2	2	101013	1100000808	Hylsa 1/2" LW	0.03
3	1	108343	A502910808	Banjobult 1/2" - stolpe 1/2"	
4	2	101012	241B08	Hydraulslang 1/2"	0.05

Konstruerad Av	LH	Ritad Av	LH	Skapad Datum	2012-03-07	Godkänd Av	AI	Generell Tolerans	Skala	1:1
Status	<b>Godkänd</b>		Vikt (kg)	8		Titel / Benämning		Hydraulik komkärll MF 11		
Ägare						Artikel Nr	<b>113531</b>		Rev	A

Nr	-	Ändring	Datum	Godk av
			2012-03-22	

Pos.	Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	1	103836	A500510808	Stolpe 1/2" - 90°	
2	2	101013	1100000808	Hylsa 1/2" LW	0.03
3	2	101012	241B08	Hydraulslang 1/2"	0.05
4	1	101014	5001200808	Stolpe 1/2" - UIV 1/2"	

Konstruerad Av	LH	Ritad Av	LH	Skapad Datum	2012-03-22	Godkänd Av	AI	Generell Tolerans	Skala	1:1
Status	<b>Godkänd</b>		Vikt (kg)	0		Titel / Benämning		Fyll slang komkärll MF 11		
Ägare						Artikel Nr	<b>113534</b>		Rev	1 (1)

Nr	-	Ändring	Datum	Godk av
			2012-03-07	
	A		2014-11-26	

Pos.	Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	1	103900		samlingsblock 2-axlar	6
2	4	113531		Slang komkärll MF 11	0
3	4	111779	70101208A	Adapter 1/2"INV-3/4"UTV	
4	4	101005	688103	Banjobult 1/2" Enkel	
5	9	101007	450103	Tredo-bricka 1/2"	
6	4	101477	450105	Tredo-bricka 3/4"	
7	1	113534		Fyll slang komkärll MF 11	0
8	1	101016	5C105956205	Snabbkoppling Hane 1/2"	

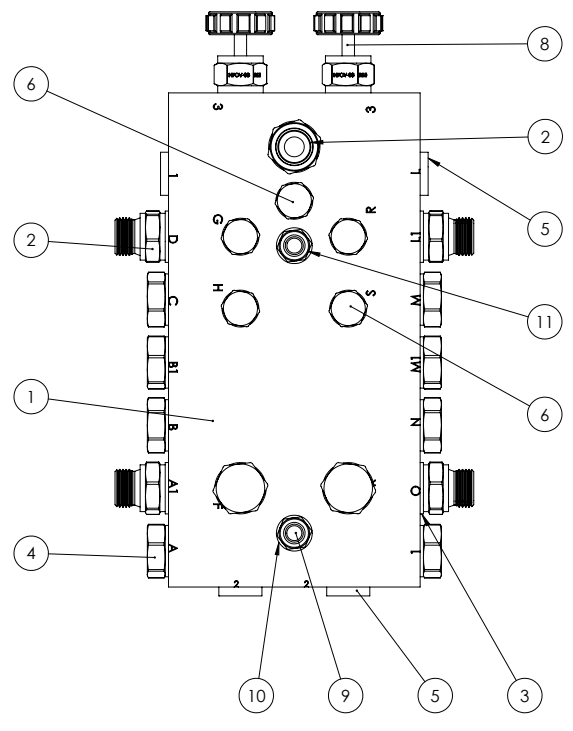
Konstruerad Av	LH	Ritad Av	LH	Skapad Datum	2012-03-07	Godkänd Av	AI	Generell Tolerans	Skala	1:20
Status	<b>Godkänd</b>		Vikt (kg)	8		Titel / Benämning		Hydraulik komkärll MF11		
Ägare						Artikel Nr	<b>113529</b>		Rev	A

Nr	Ändring	Datum	Godk av
C		2013-12-04	
D		2014-01-10	
E		2015-04-28	

## Höjdregering

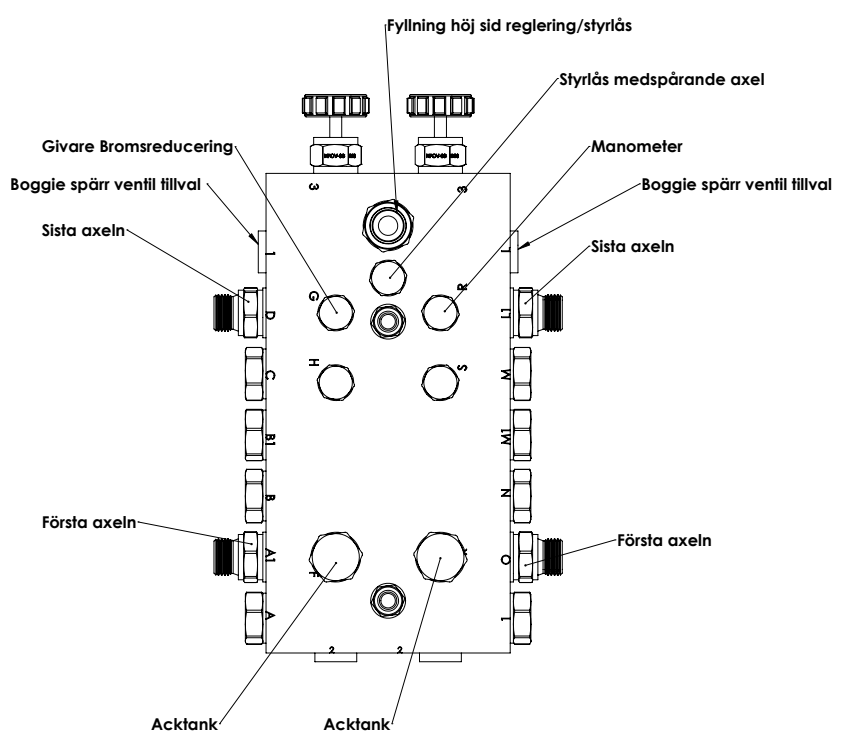
Tillvägagångssätt:

- 1) Öppna ventilerna (2 st) placerade på ventilblocket se ritning 103900 position 8.
- 2) Reglera höjden med den funktionsmärkta styrlåsen "3". Stäng ventilen.
- 3) Väg av vagnen i vattring.



Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	103190	103190	Samplingsblock VB200701	
2	5	102987	60000808	Adapter 1/2"UTV-1/2"UTV	
3	15	101007	450103	Tredo-bricka 1/2"	
4	10	101557	Propp08	Propp 08-1/2"	
5	4	106342	106342	Insexplugg 3/4" UNF till samplingsblock	
6	5	103078	Propp04	Propp 04-1/4"	
7	5	101087	450100	Tredo-bricka 1/4"	
8	2	108021	108021	Avstängnings kran Höj sid regnFCV-08	0
9	2	ISO 4017 - M10x 70-N	M10x25Std		
10	4	109899	1251051	Bricka 10,5x20x2 FZB	
11	2	109791	M10NylockNik lad	Mutter M10 FZB nylock	

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	
LH	LH	2011-10-10	AI		1:2	
Status	Vikt (kg)	Titel / Benämning		Mått		
Godkänd	6					
Ägare		samlingsblock 2-axlar			Plats	
		Artikel Nr			Rev	
		103900			G 1 (3)	



Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	
LH	LH	2011-10-10	AI		1:2	
Status	Vikt (kg)	Titel / Benämning		Mått		
Godkänd	6					
Ägare		samlingsblock 2-axlar			Plats	
		Artikel Nr			Rev	
		103900			G 2 (3)	

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Nr	Ändring					Datum	Godk av
-						2011-10-27	
A						2013-08-07	
B						2015-05-04	

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	101009		komplett 1/2 kran	0.86
2	1	111808		Tipp slang till kulventil MF11	0
3	6	101007	450103	Tredo-bricka 1/2"	
4	2	101005	688103	Banjobult 1/2" Enkel	
5	1	111795		Tippslang nedre MF11	0
6	2	108806	RBP-320SV	klammer Dubbel 20 rör	0
7	2	101016	5C105956205	Snabbkoppling Hane 1/2"	
8	2	109227	552450032	Skyddsspiral 32-26 Gul	0.04
9	1	100563	AP-B3	Svetsplatta D20	0.08
10	1	109833		Bult M8x65 FZB Helgänga	
11	1	109832	9338080501	Bult M8x50 FZB Helgänga	
12	1	109790	M8NyllockNiklad	Mutter M8 FZB nylock	
13	1	109897	SRKB09035301	Bricka 9x35x3 FZB	
14	1	127178	552410050	65Skyddsspiral 54-48 Gul 1m	0.31

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala
LH	LH	2011-10-26	AI		1:5
Status	Vikt (kg)		Titel / Benämning		Original ark storlek
Godkänd	3		STD Hydraulik MF11		A3
Agare			Artikel Nr	Rev	Blad
			111794	A	1 (1)

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Nr	Ändring					Datum	Godk av
A						2012-11-01	
B	Justerad					2013-03-18	
C						2013-08-07	

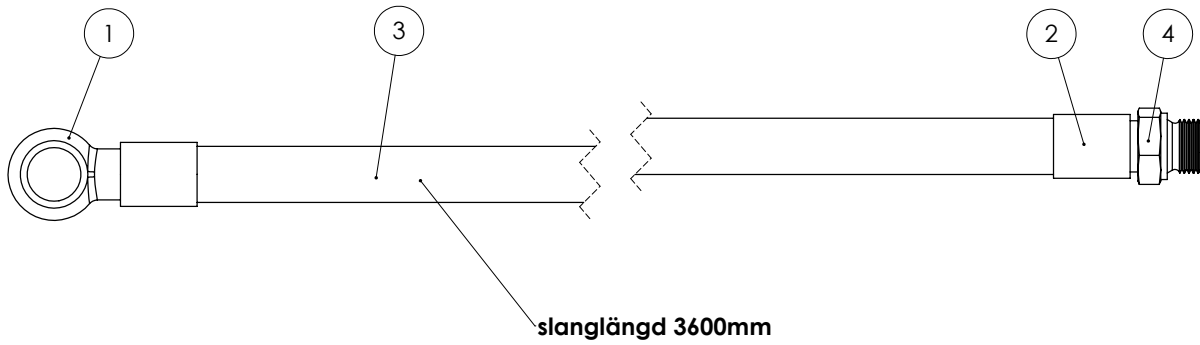
  
  

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	101002	471603	Kulventil 1/2"	0.65
2	1	101003	461333	Banjo 1/2 - UF 1/2	0.08
3	1	101005	688103	Banjobult 1/2" Enkel	
4	3	101007	450103	Tredo-bricka 1/2"	
5	1	101008	40100808	Adapter INV R 1/2 - UTV 1/2"	

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala
LH	LH	2011-05-06	AI		1:1
Status	Vikt (kg)		Titel / Benämning		Häll
Godkänd	0.86		komplett 1/2 kran		Montering
Agare			Artikel Nr	Rev	Blad
			101009	-	1 (1)

Nr	Ändring	Datum	Godk av
-		2011-10-31	
A	Justerad slanglängd	2013-04-05	

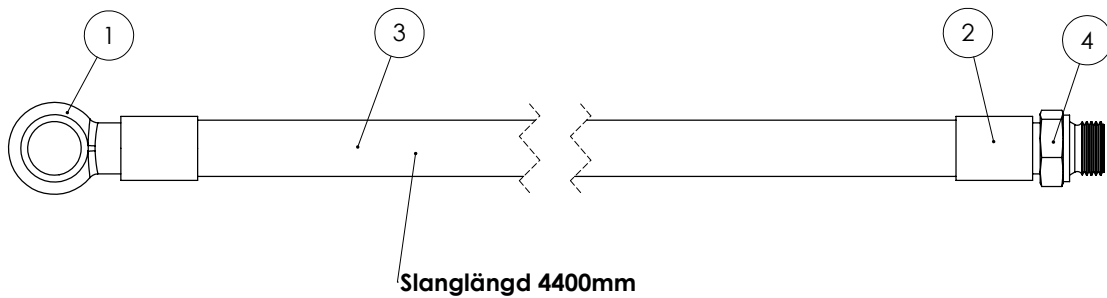


Pos.	Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	1	108363	A502910808	Banjo 1/2" - stolpe 1/2"	
2	2	101013	1100000808	Hylsa 1/2" 1W	0.03
3	2	101012	241B08	Hydraulslang 1/2"	0.05
4	1	101014	5001200808	Stolpe 1/2" - UTV 1/2"	

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	
	LH	2011-10-31	AI		1:2	
Status	Vikt (kg)		Titel / Benämning		Hall	
<b>Godkänd</b>	0					
Agare				Tipp slang till kulventil MF11		Plats
				Artikel Nr	Rev	Blad
				<b>111808</b>	-	1 (1)

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Nr	Ändring	Datum	Godk av
-		2011-10-31	
A	Justerad slanglängd	2013-04-05	

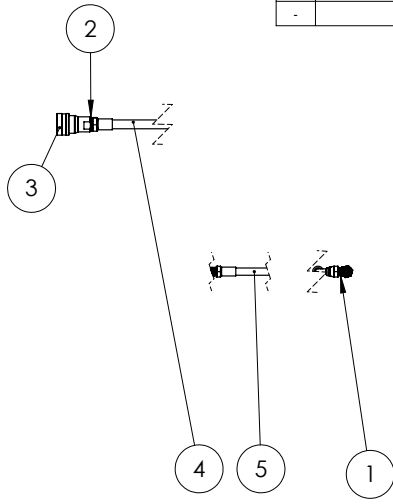


Pos.	Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	1	108363	A502910808	Banjo 1/2" - stolpe 1/2"	
2	2	101013	1100000808	Hylsa 1/2" 1W	0.03
3	1	101012	241B08	Hydraulslang 1/2"	0.05
4	1	101014	5001200808	Stolpe 1/2" - UTV 1/2"	

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	
LH	LH	2011-10-31	AI		1:2	
Status	Vikt (kg)		Titel / Benämning		Hall	
<b>Godkänd</b>	0					
Agare				Tipp slang nedre MF11		Plats
				Artikel Nr	Rev	Blad
				<b>111795</b>	-	1 (1)

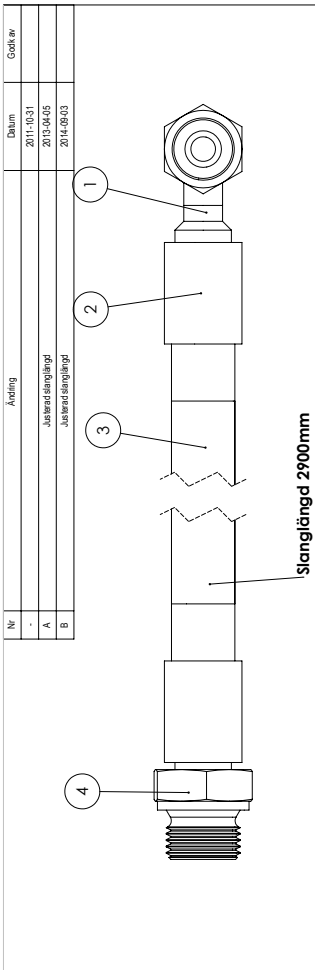
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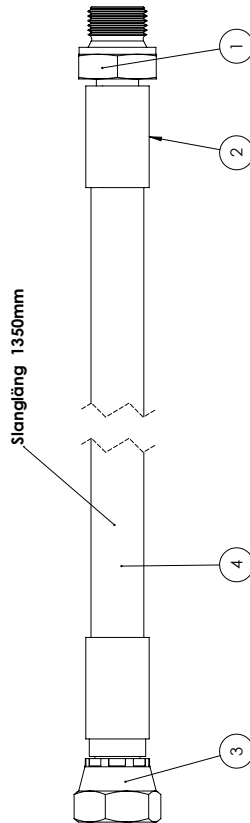
Pos.	Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	1	101517	48500606	T-koppling 3/8" ut/ut/ut	0.08
2	1	101007	450103	Tredo-bricka 1/2"	
3	1	101048	FT11313002	Snabbkopplingshona Broms 1/2"	0.46
4	1	111882		Bromssläng MF 11 Tryck	0
5	1	113750		Broms slang första axel F11 komkärl	0

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	
LH	Lh	2012-03-21	AI		1:10	
Status	Vikt (kg)	Titel / Benämning		Hall		
Godkänd	1	Hyd broms MF 11 Komkärl				
Agare			Artikel Nr	Rev	Blad	
			113747	-	1 (1)	



Pos.	Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	1	103339	A500510606	Stolpe 3/8" - 90°	0.03
2	2	102555	110000606	Hyfsa 3/8" LW	0.03
3	1	101036	241B06	Hydraulslang 3/8"	
4	1	102553	5001200806	Stolpe 3/8" - UTV 1/2"	

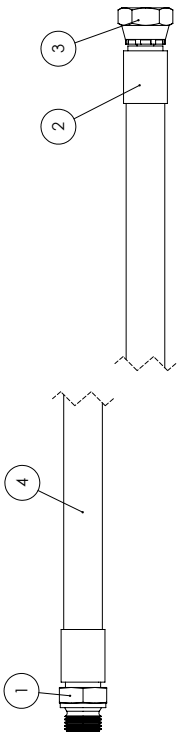
Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	
LH	LH	2011-10-31	AI		1:1	
Status	Vikt (kg)	Titel / Benämning		Hall		
Godkänd	0	Bromssläng				
Agare			Artikel Nr	Rev	Blad	
			111882		1 (1)	



Pos.	Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	1	113748	UF	Stolpe 1/4" - 3/8" UTV	0.02
2	2	101037	110000404	Hyfsa 1/4" LW	
3	1	101789	A500010604	Stolpe 1/4" - INV R 3/8"	0.01
4	2	107197	241B04	Hydraulslang 1/4"	

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	
LH	LH	2012-03-21	AI		1:1	
Status	Vikt (kg)	Titel / Benämning		Hall		
Godkänd	0	Broms slang första axel F11 komkärl				
Agare			Artikel Nr	Rev	Blad	
			113750	-	1 (1)	

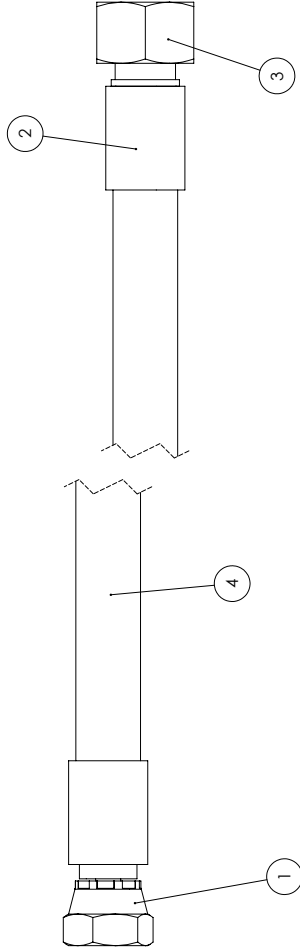
Nr	Ändring	Datum	Godkär
C	Justerad Slanglängd	2013-02-18	
D		2013-11-08	
E		2014-09-03	



Vagns model	Slanglängd	Pos. Ant.	Artikelnr	Beställningsnr	Beskrivning	Vikt
NO	6250mm	1	101014	5001200808	Stolpe 1/2" - INV 1/2"	
Justerad	6250mm	2	101013	1100000808	Hylsa 1/2" LW	0.03
Justerad	7350mm	3	107919	A500010808	Stolpe 1/2" - INV R 1/2"	
MIX	8400mm	4	101012	241B08	Hydraulslang 1/2"	0.05
MQ 60	10000mm					
MQ 75	mm					
MQ 95						

Skisserat Av: LH  
 Godkänd Av: LH  
 Skapad: 2013-01-24  
 Rev: 0  
 Titel / Beskrivning: Slang uttag bak  
 Märkt: **GODKÄND**  
**METSJÖ**  
 Artikel Nr: **106930**  
 Skar: C  
 Best: 1 (1)

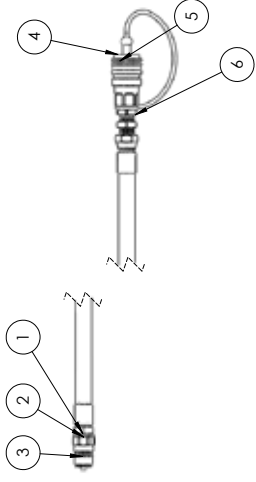
Nr	Ändring	Datum	Godkär
A		2012-12-13	
B	Justerad Slanglängd	2014-08-12	
C	Justerad Slanglängd	2014-09-03	



Vagns model	Slanglängd	Pos. Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
Mid	1300mm	1	101516	A500010606	Stolpe 3/8" - INV R 3/8"	
Metax		2	102355	1100000606	Hylsa 3/8" LW	0.03
MF 11		3	117027	5016900806	Stolpe 3/8" - ROR 15L	
MF 18	850mm	4	101036	241B06	Hydraulslang 3/8"	0.03
MF 24						
MQ 60						
MQ 75						
MQ 95						

Skisserat Av: LH  
 Godkänd Av: LH  
 Skapad: 2011-10-26  
 Rev: 0  
 Titel / Beskrivning: Broms slang uttag bak  
 Märkt: **GODKÄND**  
**METSJÖ**  
 Artikel Nr: **111824**  
 Skar: B  
 Best: 1 (1)

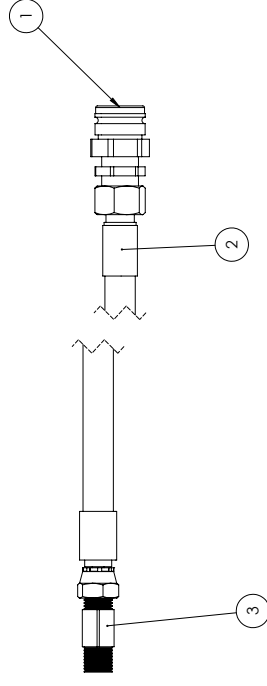
Nr	Ändring	Datum	Godkär
-		2010-12-14	
A		2011-01-14	



Pos. Ant.	Artikelnr	Beställningsnr	Beskrivning	Vikt
1	106930		slang bakuttag MQ MF	0
2	101007	450103	Tredo-bricka 1/2"	
3	101016	471004	Snabbkoppling Hana 1/2"	
4	103358	471015	Darmskydd Hana	0.0
5	103270	471005	Snabbkoppling Hona 1/2"	
6	103283	40800808	Skottgenomgång 1/2"	

Skisserat Av: LH  
 Godkänd Av: LH  
 Skapad: 2013-01-24  
 Rev: 0  
 Titel / Beskrivning: Hydrauluttag bakNo, Mid, Mx, MQ 60/75/95  
 Märkt: **GODKÄND**  
**METSJÖ**  
 Artikel Nr: **106643**  
 Skar: C  
 Best: 1 (1)

Nr	Ändring	Datum	Godkär
-		2011-10-26	
A		2012-12-13	



Pos. Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	106641	F131322503	Snabbkopplingshane Broms	0.24
2	111824		Broms slang uttag bak	0
3	101517	48500606	Koppling 3/8" ut/0/0/0/1	0.08

Skisserat Av: LH  
 Godkänd Av: LH  
 Skapad: 2011-06-21  
 Rev: 0  
 Titel / Beskrivning: Bromsuttag bak  
 Märkt: **GODKÄND**  
**METSJÖ**  
 Artikel Nr: **106642**  
 Skar: B  
 Best: 1 (1)

Nr	-	Ändring	Datum	Godk av
A	-		2012-11-01	
B	-		2013-02-14	
	-		2013-06-11	

Pos.	Ant.	Rifnings #	Beställnings#	Beskrivning	Vikt
1	1	100538	100538-Grd	Sveitsst stödben	12,30
2	1	100323	100323	Sprint stödben	0,54
3	1	100333	10400060.2	Ringsprint 10m-40 nick parm	0,04

Skapad datum	2013-02-18	AI	1:5	
Reviderad av				
Godkänd	13	106634		
Skapad av				
Reviderad av				
Godkänd				
Skapad av				
Reviderad av				
Godkänd				
Skapad av				
Reviderad av				
Godkänd				
Skapad av				
Reviderad av				
Godkänd				

Nr	-	Ändring	Datum	Godk av
A	-		2011-05-30	
	-		2011-06-01	

Pos.	Ant.	Rifnings #	Beställnings#	Beskrivning	Vikt
1	1	101059	654430	Artikelnr 2	
2	8	109859		Dragögla 50 Scharmuller	
				M20x65 Insex 12.9	

Skapad datum	2011-05-27	AI	1:5	
Reviderad av				
Godkänd	25			
Skapad av				
Reviderad av				
Godkänd				
Skapad av				
Reviderad av				
Godkänd				
Skapad av				
Reviderad av				
Godkänd				

Nr	-	Ändring	Datum	Godk av
	-		2011-12-14	

Pos.	Ant.	Artikelnr	Beställnings#	Beskrivning	Vikt
1	1	112540		LED belysning bak triangel H.	
2	1	111631		LED belysning bak triangel V.	

Skapad datum	2011-12-14	AI	1:5	
Reviderad av				
Godkänd	1			
Skapad av				
Reviderad av				
Godkänd				
Skapad av				
Reviderad av				
Godkänd				

Nr	-	Ändring	Datum	Godk av
A	-		2010-10-05	
	-		2013-06-11	

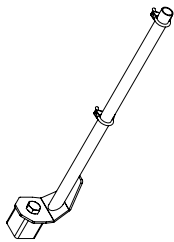
  
  

Pos.	Ant.	Rifnings #	Beställnings#	Beskrivning	Vikt
1	1	100203	100203-GRÄ	Bullbjort bakdrag	7,25
2	1	102198	102198	Dragspinn	1,72
3	1	100333	10400060.2	Ringsprint 10m-40 nick parm	0,04
4	4	109858	9121220060	Bullr M20x60 Insex 12.9	
5	8	109905	BR82 10	Bricka 21x36x3 FZB	
6	4	109794	982001	Mötrer M20 FZB nylock	

Skapad datum	2013-02-14	AI	1:3	
Reviderad av				
Godkänd	9			
Skapad av				
Reviderad av				
Godkänd				
Skapad av				
Reviderad av				
Godkänd				

Nr	-	Datum	2011-12-19	Godk av	
Ändring					



Pos./Ant.	Artikelnr. 1	Artikelnr. 2	Beskrivning	Vikt
1	2	105630	Rörklammer 35	0
2	1	101970	Svetsad skärmhållare	2.79
3	1	102196	Skärmslitslance	0.61
4	1	9338240802	M24x80FzBhålv	

Godkänningsnr.	MI	2011-12-19	AI	1:10
Skapad datum	MI	2011-12-19	AI	1:10
Vikt (kg)	4			
Godkänd	skärmhållare			
<b>METSJÖ</b> Innovations i Metsjö AB				
112563				
Godkänd				
1 (1)				

Nr	-	Datum	2012-02-28	Godk av	
Ändring					

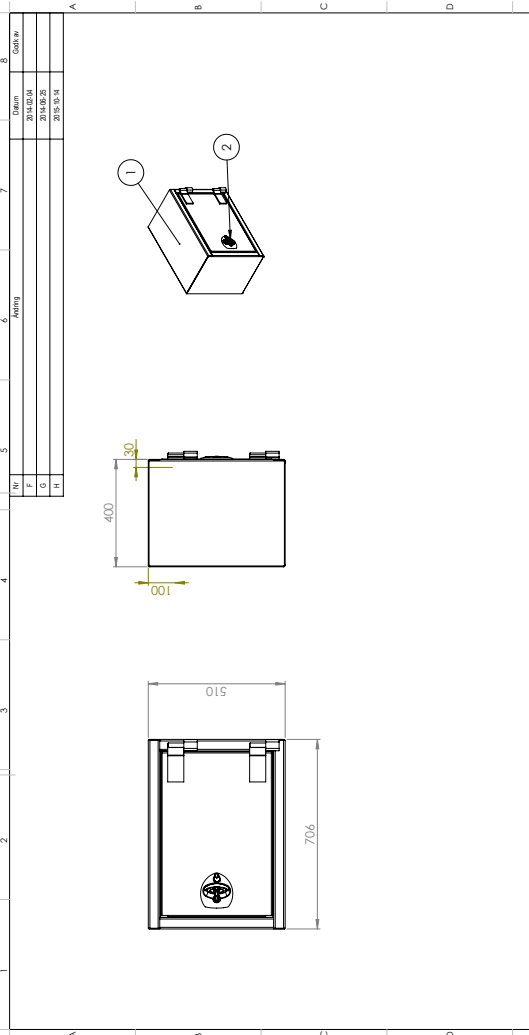
Skapad datum	2012-02-28	Skala	1:10
Godkänningsnr.	Ola	Generell. Beskrivning	
Vikt (kg)	5.0	Text / Komment.	
Godkänd	30.50.6056.1870		
Skärm 600x1120x615 BxLxH			
<b>METSJÖ</b> Innovations i Metsjö AB			
113428			
Godkänd			
1 (1)			

Pos./Ant.	Artikelnr. 1	Artikelnr. 2	Beskrivning	Vikt
1	2	106527	Täckkåpa till profil	
2	2	106487	Underlagsgreppskåpa	
3	2	938103001	MULOx30FzB	
4	2	9851001	Mutter M10 FzB tvärsk	
5	4	105630	Rörklammer 35	0
6	2	112110	Skärmhållare	1.21
7	2	08790	Åttio skruvar	
8	2	08790	Fäste beslagning	

Godkänningsnr.	AI	2011-11-23	AI	1:20
Skapad datum	AI	2011-11-23	AI	1:20
Vikt (kg)	7.26			
Godkänd	Mortjär / sid skydd Flex 11			
<b>METSJÖ</b> Innovations i Metsjö AB				
111986				
Godkänd				
1 (1)				

Pos./Ant.	Artikelnr. 1	Artikelnr. 2	Beskrivning	Vikt
1	2	106527	Täckkåpa till profil	
2	2	106487	Underlagsgreppskåpa	
3	2	112033	Sidomärkning Ötorgge med	0.06
4	1	107794	Diad 12-24V	0
5	1	122471	sid m. tillval	0
6	4	1079797	Kopplingsbox 6-pol	0
7	4	118102	Mutter M6 FzB tvärsk	
8	8	118189	Bult M6x2 FzB Högglipa	

Godkänningsnr.	MI	2011-04-01	AI	1:15
Skapad datum	MI	2011-04-01	AI	1:15
Vikt (kg)	5.74			
Godkänd	103041			
<b>METSJÖ</b> Innovations i Metsjö AB				
103041				
Godkänd				
1 (1)				



Pos. Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	100251	100251	Redskapsgåga B700XH400XD510	44,55
2	102487	273043	Inlägg till bordsbortkopplingsfält	
3	4		Hex Fästare Nyl Gropar A 150	
4	1	128740	Tönningsst 1-4 PVC/C-ellgummi	

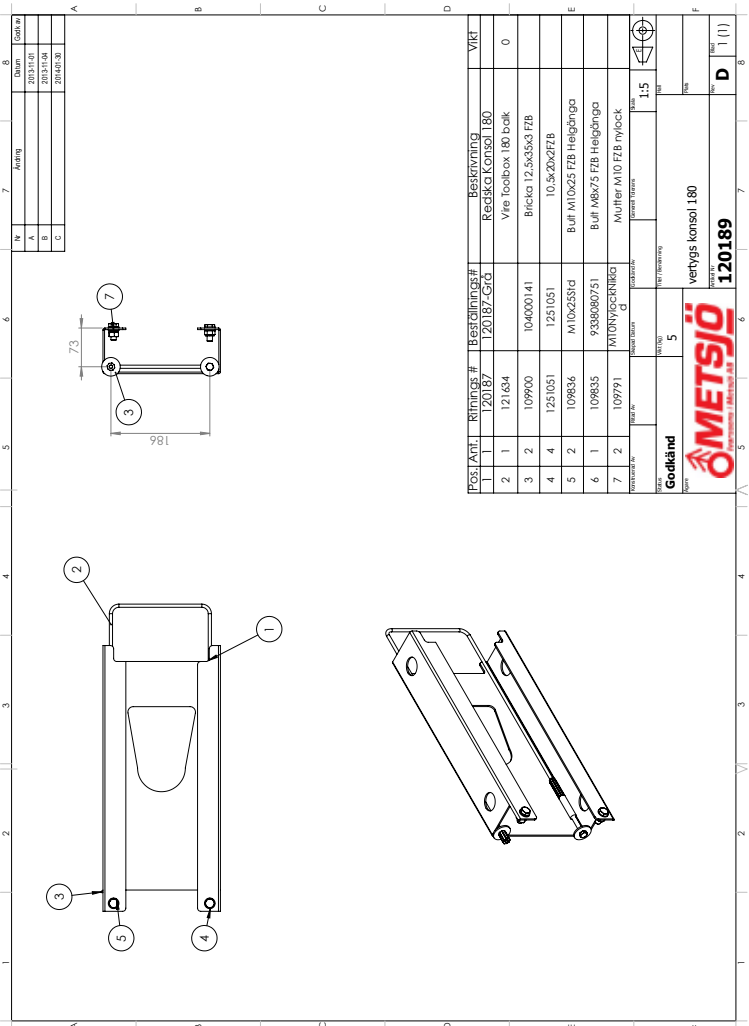
Varuslag	Varuslag	Varuslag	Varuslag	Varuslag
MH	2010-09-21	A1	SS-ISO 2768-1 m	1:10

Under Redigering	Antal	Varuslag	Varuslag	Varuslag
102489	45			

Varuslag	Varuslag	Varuslag	Varuslag	Varuslag
102489				



Pos. Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	121654	120187	Redskapsgåga 180	0
2	109900	104000141	Vire Toolbox 180 brak	
3	1251051	1251051	Bricka 12,5x35x3 F2B	
4	109835	M10x25 F2B	10,5x20x2F2B	
5	109835	M10x25 F2B	M10x25 F2B Högånga	
6	109835	M10x25 F2B	Bull M8x7,5 F2B Högånga	
7	109791	M10x25 F2B	Muffar M10 F2B nylock	

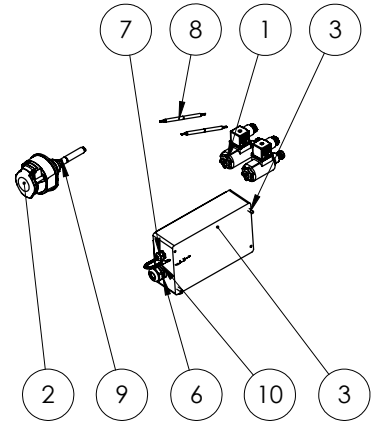
  

Varuslag	Varuslag	Varuslag	Varuslag	Varuslag
109791				

Godkänd	Antal	Varuslag	Varuslag	Varuslag
120189	5			

Nr	Ändring	Datum	Godk av
B		2013-02-18	
C		2014-05-06	
D		2016-01-19	



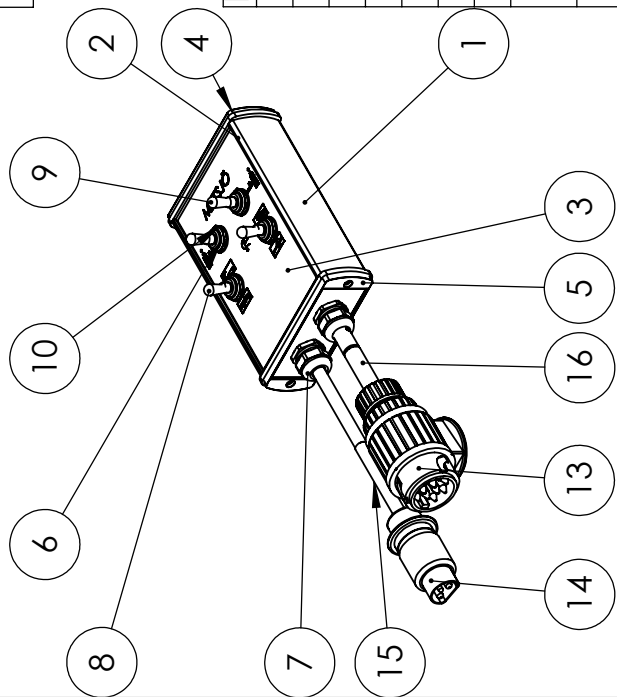
Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	2	103218	10400045	Ventil Norm STÄNGD båda rikt 12 V 27W	0.25
2	1	116773	20501301	Släpvnagskontakt 13-polig plast, hona	0
3	1	113930	113930	Kopplingslåda, mellan 200x120x100mm	0
4	1	112893	112893	Dinskena	
5	6	112894	112894	Våringsplint	
6	1	113987	5501747	Kabelgenomföring PG 16	
7	3	113983	5501945	kabel gemnomföring PG7	
8	2	117380	10250056,3	Kabel 2 ledare x 1,5 svart	0
9	1	116875	5573241	Kabel 12G1,5 gr	0
10	1	115121		Dummy 2-led Jord kabel	0
11	3	118087	5502018	Kontramutter för kabelförskruv. i plast PG 7	
12	1	118086	118086	Kontramutter för kabelförskruv. i plast PG16	

POS	Art nr	Längd
8	117380	1200mm
9	116875	600mm

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	
LH	LH	2013-01-22			1:10	
Status	Vikt (kg)		Titel / Benämning		Häll	
<b>Godkänd</b>						
Ägare					Plats	
					Höjd och sidreglering chassi el	
	Artikel Nr				G	1 (4)
	<b>117377</b>					

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POS	Art nr	Längd
16	116875	5100mm
15	116002	1600mm

Nr	Ändring	Datum	Godk av
-		2012-10-15	
A		2013-01-24	
B		2013-04-09	

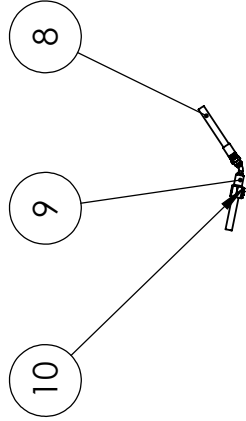
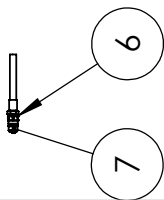
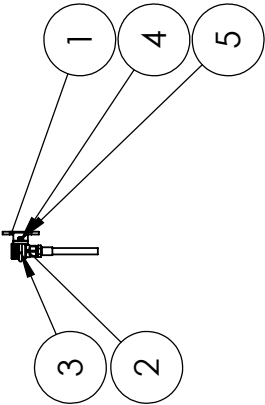
Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	111505	50-80916	Lådprofil aluminiumhus	
2	1	111506	50813-10	front fyll lådprofil	
3	1	114664	10400470,40	Dekal elbox, Flex 18 - 30	
4	1	111504	5081104	Gavel ABD1040	
5	1	111504	5081104	Gavel ABD1040	
6	4	111516	3519840	Hätta av neoprengummi	
7	2	113985	5501960	Kabelgenomföring PG 11	
8	2	112823	3523818	Vippströmställare Till - Från (Metsjö)	
9	2	114124	3523858	Vippströmställare (Till) - Från- (Till) (Metsjö)	
10	4	115974	3519865	Tätningbricka 12 mm	
11	1	115996	24185015	Kabelskor A 1507 FLS röd hona	
12	2	115997	24186225	Kabelskor A 2507 FLS hona blå	
13	1	116804	20511301	Släpvagnskontakt 13-polig plast, hane	0
14	1	111527	10250063	Erokontakt 3 pol (vagnsdel Hane), "Gristryne"	
15	1	116002	10250055,3	Kabel 7x1,5 svart	0
16	1	116875	5573241	Kabel 12G1,5 gr	0
17	1	115983	24187260	Kabelskor A 4652 SK gul skarv	
18	2	118085	5502034	Kontramutter för kabelförskruv. i plast PG11	

Konstruerad Av	Ritad Av	Skepad Datum	Godkänd Av	Generell Tolerans	Skala
LH	LH	2012-10-15	AI		1:5
Status			Titel / Benämning		
<b>Godkänd</b>			Manöverbox MF MQ		
Vikt (kg)			Rev		
1			A		
Ågare			Blad		
			1 (3)		



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Nr	Ändring	Datum	Godk av
C		2013-03-20	
D		2014-01-08	
E		2014-01-09	



Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	0315	0315	Hydraluttag torn	
2	2	105453	TIA5010P	Snabbkopplings hona 1/2" IF (Push & Pull)	
3	2	105629		Övre del avgasklammer 35	
4	4	NB08161		8x16x1,5FZB	
5	4	109790	M8NylockNiKlad	Mutter M8 FZB nylock	
6	4	101007	450103	Tredo-bricka 1/2"	
7	2	101016	5C105956205	Snabbkoppling Hane 1/2"	
8	2	112404		tryck slang uttag torn	0
9	2	118294		Uttag torn MF11-16	0
10	1	108740	RBP-215SV	Dubbel 15 rör klammer	0

Konstruerad Av	LH	Ritad Av	LH	Godkänd Av	AI	Skapad Datum	2011-12-02	Släta	1:20
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Status	Godkänd	Titel / Benämning	Uttag Torn MF 11
Agare		Vikt (kg)	2

Artikel Nr **110310**

Rev **E** 1 (1)

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Nr	Ändring	Datum	Godk av
		2011-10-24	
A		2011-11-02	
B		2013-08-07	

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	110771		Hydral. stödfot F16	19
2	1	111713		30L255	
3	1	111716		25L110 sprint	
4	1	105497	105497	25180 sprint till schaktkolv o tippstötta norge	
5	1	108042	10180142	Cyl 70/40-300 LL25	10
6	1	110784		Stödfot F16	5
7	2	109853	9338240451	Bult M24x45 FZB Helgänga	
8	2	109795	9852401	Mutter M24 FZB nylock	
9	2	109900	104000141	Bricka 12,5x35x3 FZB	
10	2	109842	104000140	Bult M12x20 FZB Helgänga	
11	4	109879	148106040	Spännstiff 6x40	
12	1	111896		pilotbackventil hyd stödfot	1
13	1	111921		Slang Hyd stödfot handpump	0
14	1	111913		Slang Hyd stödfot Handpump	0
15	1	111903		Handpump 3vägskran bromsuttag	6
16	2	101559	688100	Banjobult 1/4" Enkel	
17	4	101087	450100	Tredo-bricka 1/4"	

Konstruerad Av <b>Ola/ai</b>	Ritad Av <b>LH</b>	Skapad Datum <b>2011-11-02</b>	Godkänd Av <b>AI</b>	Generell Tolerans	Skala <b>1:10</b>	
Status <b>Godkänd</b>	Vikt (kg) <b>44</b>	Titel / Benämning <b>Hydrauliskt stödben Flex 16 3-vägs-handpump-bromsut</b>		Plats	Rev <b>A</b>	Blad <b>1 (2)</b>
Agare 		Artikel Nr <b>111812</b>				

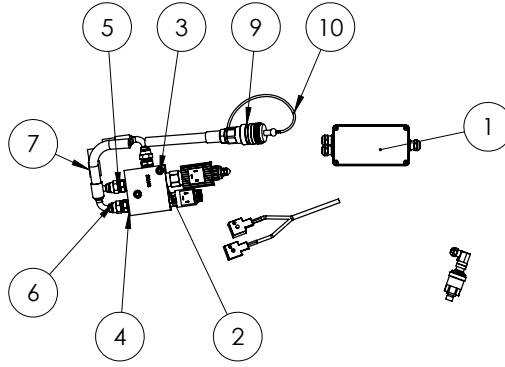
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Nr	Ändring	Datum	Godk av
		2011-11-02	
		2012-02-09	
		2013-08-07	

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	110771		Hydral. stödfot F16	19
2	1	111713		30L255	
3	1	111716		25L110 sprint	
4	1	105497	105497	25180 sprint till schaktkolv o tippstötta norge	
5	1	110784		Stödfot F16	5
6	2	109853	9338240451	Bult M24x45 FZB Helgänga	
7	2	109795	9852401	Mutter M24 FZB nylock	
8	2	109900	104000141	Bricka 12,5x35x3 FZB	
9	2	109842	104000140	Bult M12x20 FZB Helgänga	
10	4	109879	148106040	Spännstiff 6x40	
11	1	108042	10180142	Cyl 70/40-300 LL25	10
12	1	111896		pilotbackventil hyd stödfot	1
13	2	111918		slang hyd stödfot traktor	0
14	2	101559	688100	Banjobult 1/4" Enkel	
15	4	101087	450100	Tredo-bricka 1/4"	
16	2	101016	5C105956205	Snabbkoppling Hane 1/2"	
17	2	101007	450103	Tredo-bricka 1/2"	
18	1	108203_skl		skelett	

Konstruerad Av <b>Ola</b>	Ritad Av <b>Ola</b>	Skapad Datum <b>2011-10-18</b>	Godkänd Av	Generell Tolerans	Skala <b>1:8</b>	
Status <b>Godkänd</b>	Vikt (kg) <b>38</b>	Titel / Benämning <b>Monterad hydral. stödfot F16</b>		Plats	Rev <b>C</b>	Blad <b>1 (1)</b>
Agare 		Artikel Nr <b>111724</b>				

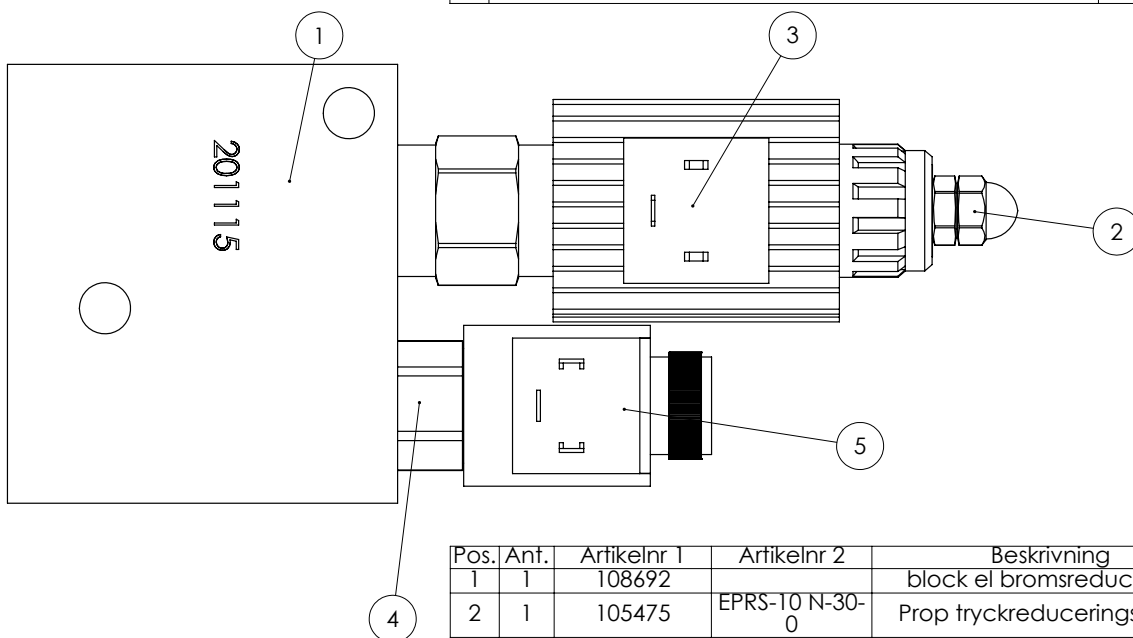
Nr	Ändring	Datum	Godk av
C		2013-01-31	
D		2013-08-09	
E		2013-09-13	



Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	111392	ELSATS-B-512901-E01	Bromsreducering fill kommunicerande kärll (givare)	
2	1	111360	VBESH-B-5129.00	Ventilblock kpl. för prop. broms system 12V	2
3	2	101056	133650-5	Borrskruv 5,5X66	
4	3	101087	450100	Tredo-bricka 1/4"	
5	3	105498	70020406	Adapter 3/8" UTV-1/4 "UTV	
6	1	111521		Retur slang broms reducering	0
7	2	111540		dammy standard broms slang	0
8	1	101007	450103	Tredo-bricka 1/2"	
9	1	103270	471005	Snabbkoppling Hona 1/2"	
10	1	103358	471015	Dammskydd Hona	0.0

Konstruerad Av <b>LH</b>	Ritad Av <b>LH</b>	Skapad Datum <b>2011-10-07</b>	Godkänd Av <b>AI</b>	Generell Tolerans	Skala <b>1:10</b>	
Status <b>Godkänd</b>	Vikt (kg) <b>3502.38</b>	Titel / Benämning <b>Bromsreducering komkärllastavkännande Elstyrd</b>		Hall		
Ägare 		Artikel Nr <b>111339</b>	Rev <b>D</b>	Blad <b>1 (2)</b>		

Nr	Ändring	Datum	Godk av
-		2011-10-06	
A		2013-02-04	



Pos.	Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	1	108692		block el bromsreducering	
2	1	105475	EPRS-10 N-30-0	Prop tryckreducerings ventil	
3	1	105476		Magnet Ccc	
4	1	111341		2-vägs ventil CT 05621	
5	1	111348	0940010000	magnet spole NEM	

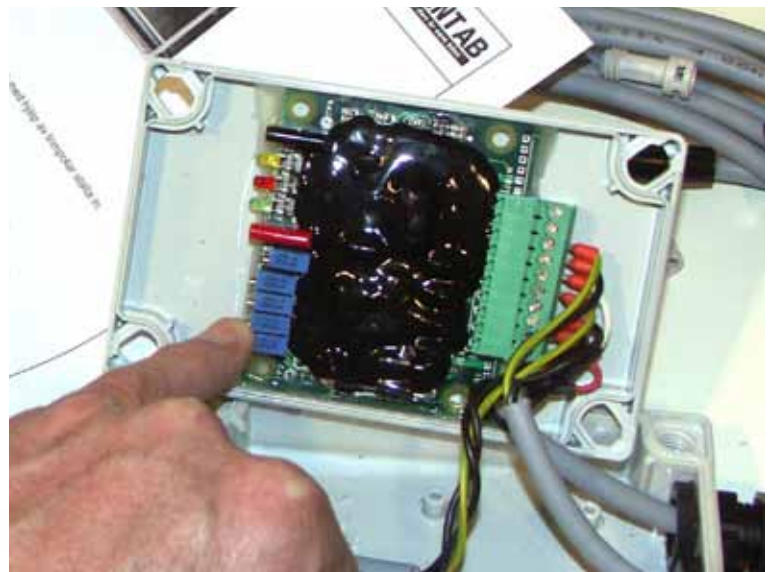
Konstruerad Av <b>LH</b>	Ritad Av <b>LH</b>	Skapad Datum <b>2011-10-05</b>	Godkänd Av <b>AI</b>	Generell Tolerans	Skala <b>1:1</b>	
Status <b>Godkänd</b>	Vikt (kg) <b>2</b>	Titel / Benämning <b>VBESH-B-5129.00</b>		Hall		
Ägare 		Artikel Nr <b>111360</b>	Rev <b>B</b>	Blad <b>1 (1)</b>		

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# PROPSTYRNING B-5094.00

Styrning av 1 propventil + 1 el flera on/off ventiler.  
12-24V, 50-250Hz, 0-5s ramp, max 2.5A



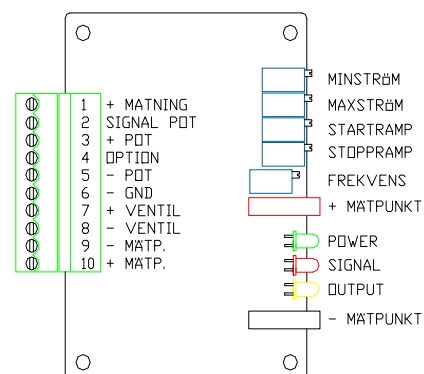
Mått: 120x85mm

Kablage och kontakter kan anpassas efter behov.

Med en liten skruvmejsel kan man öppna gaveln på lådan och med hjälp av trimpotar ställa in:

- minström
- maxström
- startramp
- stoppramp
- frekvens

Öppna gaveln



För att justera minströmmen gör följande:

Vrid ned ratten på lådan till ca 5% av utsyrningen (kl.20). Vrid på trimpoten för minström för att ändra strömmen. Medsols ökar strömmen, motsols minskar strömmen.

För att justera maxströmmen gör följande:

Vrid upp ratten på lådan till max av utsyrningen (kl. 5). Justera trimpoten för maxström för att ändra strömmen. Medsols ökar strömmen, motsols minskar strömmen.

Start och stoppramp är grundinställd på 0 sek och kan ökas upp till 5 sekunder.

Frekvensen är grundinställd till 120Hz.

I mät punkt + & - kan man ansluta en voltmeter och mäta strömmen som åtgår till proportionalventilen.

1V på mätinstrumentet motsvarar 1A till ventilen.

Lysdioden för power aktiveras när kretskortet är aktiverat.

Lysdioden för signal lyser steglöst och följer ratten.

Lysdioden för output lyser steglöst och följer ventilens utstyrning.

Nr	Ändring	Datum	Godk av
B		2013-08-09	
C		2014-01-16	
D		2014-01-16	

**Boggilift med kommunicerande kärl enkelverkande.**

Uttag med funktion flyttläge, valfri axel. Lyftkraft 25 % av vikten som vilar på axlarna.

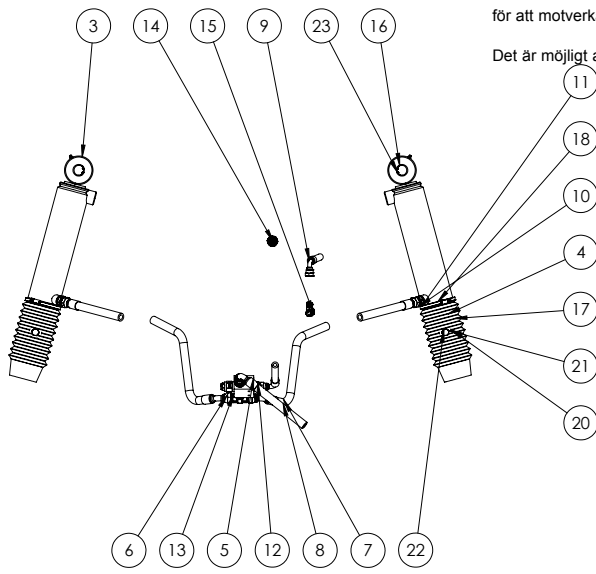
Systemet har överströmningsventil inställd på 300 bar, den är dränerad via

friretur (bromssystemets). Det är **Viktigt** att den är ansluten.

Det är av stor vikt att man kör med hydraulfunktion sk flyttläge när hjulen är i marken

för att motverka dieselvekan i cylindern.

Det är möjligt att ha flera axlar lyftbarabara på vagnen, "man kör med en axel lyft i taget".

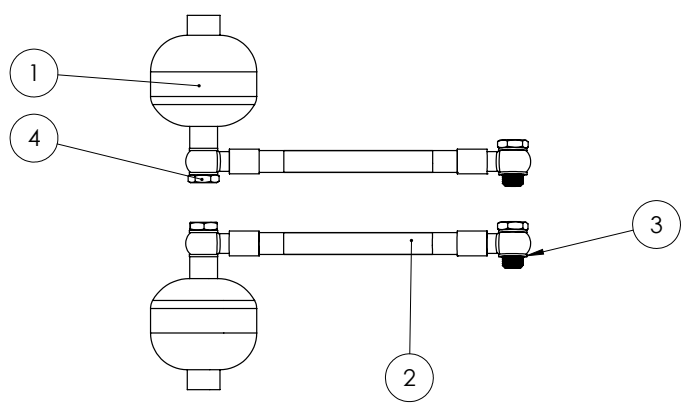


Pos.	Anf.	Ritnings #	Beställnings#	Beskrivning	Vikt
3	1	106722	10180037,1HÖ	Komkäril dubbelverkande Hö 80/40-250	12
4	1	106725	10180037,1VÄ	Komkäril dubbelverkande VÄ 80/40-250	12
5	1	111952	10250020	Överströmningsventil & block	1
6	1	111959		Boggie lift slang MF 18-24	1
7	1	111959		Boggie lift slang MF 18-24	1
8	1	111957		Fyllslang boggie lift	0
9	1	111956		Refur slang boggie lift	0
10	4	102987	60000808	Adapter 1/2" UTV-1/2" UTV	
11	6	101007	450103	Tredo-bricka 1/2"	
12	1	103438	40100608	Adapter INV R 1/2" - UTV 3/8"	
13	1	107069	48800808	T-koppling 1/2" ut/in/ut	
14	1	101016	5C105956205	Snabbkoppling Hane 1/2"	
15	1	104237	48900606	T-koppling 3/8 ut/ut/in	
16	2	117457		Sprint komkäril övre. L=112	
17	2	101290	10400138	Dammask komkäril slag 250	0.09
18	2	101293	NORMA80100	Slangklammer 80-100/12W1S	
19	2	100136	30L85	Sprint Komkäril nedre	0.43
20	4	109900	104000141	Bricka 12,5x35x3 FZB	
21	4	109914	104000142	Fjäderbricka M12 FZB	
22	4	109842	104000140	Bult M12x20 FZB Helgänga	
23	4	109911	472031	Lösning SGH 31	

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	
LH	LH	2013-01-31			1:10	
Status	Vikt (kg)	Titel / Benämning		Hall		
Godkänd	29	Boggie lift MF18 MQ				
Agare			Artikel Nr	Rev	Blad	
			107137	D	1 (2)	

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Nr	Ändring	Datum	Godk av
A		2013-01-31	



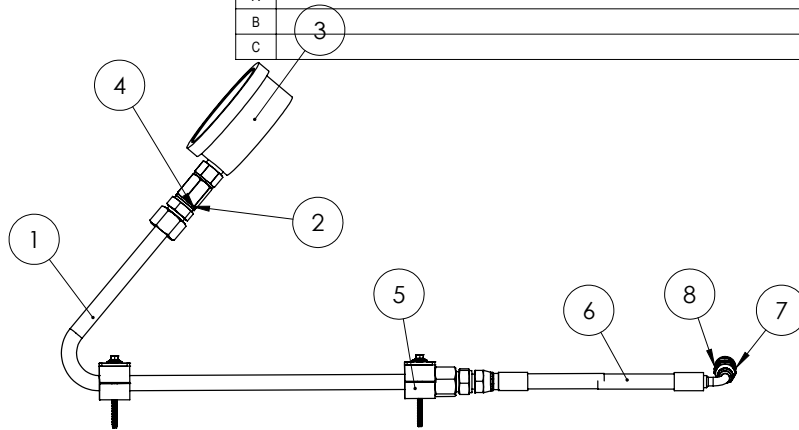
Pos.	Default/QTY.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	2	103193	122050001	Membran ackumulatortank dia 107	0.68
2	2	111943		Slang acktank aktivfjädring	0
3	8	101007	450103	Tredo-bricka 1/2"	
4	4	101005	688103	Banjobult 1/2" Enkel	

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	
LH	LH	2013-01-31			1:5	
Status	Vikt (kg)	Titel / Benämning		Hall		
Godkänd	2	10714				
Agare			Artikel Nr	Rev	Blad	
			107136	-	1 (1)	

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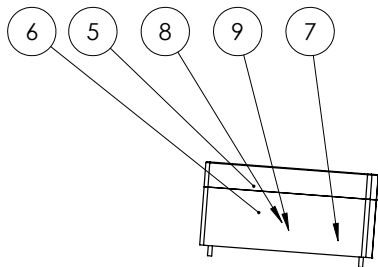
Nr	Ändring	Datum	Godk av
A		2013-01-31	
B		2013-08-09	
C		2014-04-23	



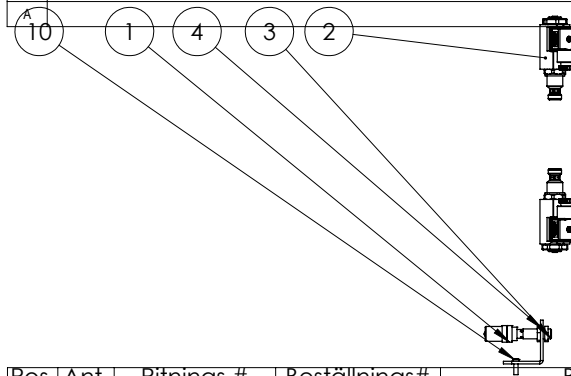
Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	111966		komplett rör manometer	1
2	1	111932	70110606	Muff R3/8"IF R 3/8"IF	
3	1	111934	AG100-250	Manometer dia 100 0-250bar	
4	2	103440	450102	Tredo-bricka 3/8"	
5	2	102732	RAPE-215SV	klamma enkel 15 rör	0.09
6	1	111940		Slang till manometer-samlingsblock	0
7	1	101406	60000404	Adapter 1/4"UTV-1/4"UTV	
8	1	101087	450100	Tredo-bricka 1/4"	

Konstruerad Av <b>LH</b>	Ritad Av <b>LH</b>	Skapad Datum <b>2011-11-04</b>	Godkänd Av <b>AI</b>	Generell Tolerans	Skala <b>1:5</b>	
Status <b>Godkänd</b>	Vikt (kg) <b>3</b>	Titel / Benämning <b>107138</b>		Hall		
Ägare 		Manometer synlig från förplats en/sida		Plats		
		Artikel Nr <b>107138</b>	Rev <b>E</b>	Blad <b>1 (1)</b>		

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Nr	Ändring	Datum	Godk av
-		2013-03-07	
A		2013-03-19	



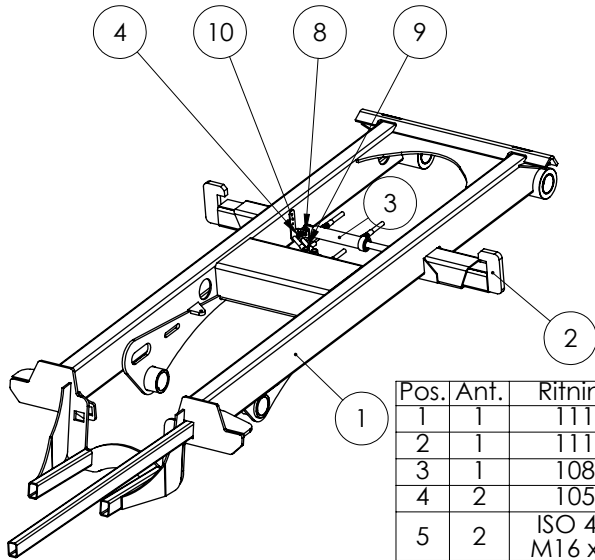
Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	111408	4457313	Hylsa lilla ögat, vinklad 90° M12	
2	2	111830	10400044	Ventil Norm Öppen 12c25s 17W	0.60
3	1	105865	3757523	Lilla magnetögat	
4	1	112172		Fäste öga flaklås	
5	1	112355	3700754	Relä (vagnar) TR93F-12VDC-SC-C	
6	1	112916	42-315	Reläsockel	
7	2	112894	112894	Väningsplint	
8	3	113983	5501945	kabel genomföring PG7	
9	2	117380	10250056,3	Kabel 2 ledare x 1,5 svart	0
10	2	109869	84050161	Spårskruv M5x16 FZB	
11	1	117824	10250055,4	Kabel 3x1,5 svart	0
12	1	113930	113930	Kopplingslåda, mellan 200x120x100mm	0

Konstruerad Av <b>LH</b>	Ritad Av <b>LH</b>	Skapad Datum <b>2013-03-07</b>	Godkänd Av	Generell Tolerans	Skala <b>1:6</b>	
Status <b>Godkänd</b>	Vikt (kg) <b>2</b>	Titel / Benämning <b>117766</b>		Hall		
Ägare 		Boggispärr MF 18-24		Plats		
		Artikel Nr <b>117766</b>	Rev <b>A</b>	Blad <b>1 (2)</b>		

Art nr	Antal	längd
117380	2	1300mm
117824	1	1800mm

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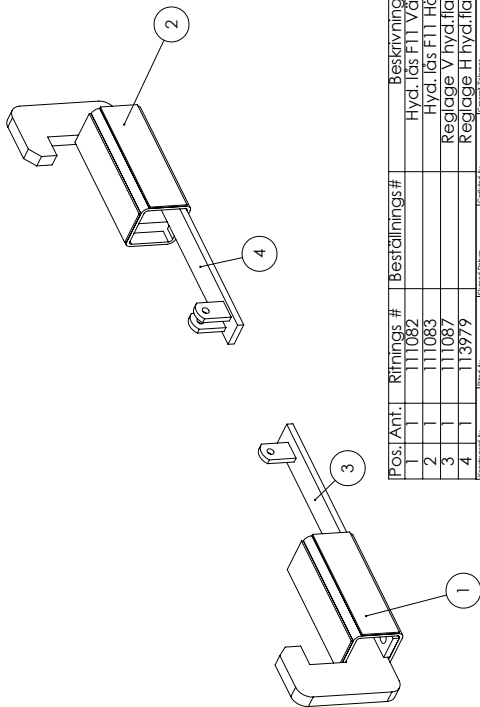
Nr	Ändring	Datum	Godk av
D		2012-05-29	
E		2013-08-07	
F		2013-10-29	



Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	111095		Tippram för Hyd. Flakläs F11	215.45
2	1	111084		Hyd. Flakläs F11	15
3	1	108031	10180129	Cyl 35/25-160 Gaffel-öra dv	2
4	2	105865	3757523	Lilla magnetögat	
5	2	ISO 4017 - M16 x 40-N	9338160401		
6	2	109793	9851601	Mutter M16 FZB nylock	
7	2	109838	M10x40Std	Bult M10x40 FZB Helgänga	
8	2	109791	M10NylockNiklad	Mutter M10 FZB nylock	
9	1	114018		Hydraulik hyd flakläs MF11	2
10	2	112172		Fäste öga flakläs	

Konstruerad Av <b>Ola</b>	Ritad Av <b>Ola</b>	Skapad Datum <b>2011-08-29</b>	Godkänd Av	Generell Tolerans	Skala <b>1:20</b>	
Status <b>Godkänd</b>	Vikt (kg) <b>235</b>	Titel / Benämning <b>Tippram med monterat Hyd. flakläs F11</b>		Hall		
Agare 		Artikel Nr <b>111097</b>		Rev <b>F</b>	Blad <b>1 (2)</b>	

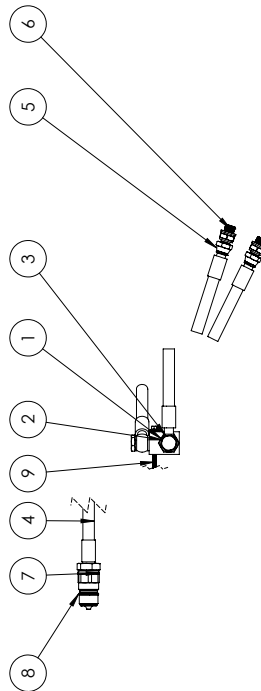
Nr	Ändring	Datum	Godk av
C		2012-04-06	
D		2012-09-11	
E		2013-08-07	



Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	111082		Hyd. Iås F11 Västanter	6
2	1	111083		Hyd. Iås F11 Höger	6
3	1	111087		Reglage V hyd. flakläs F11	
4	1	113979		Reglage H hyd. flakläs F11	

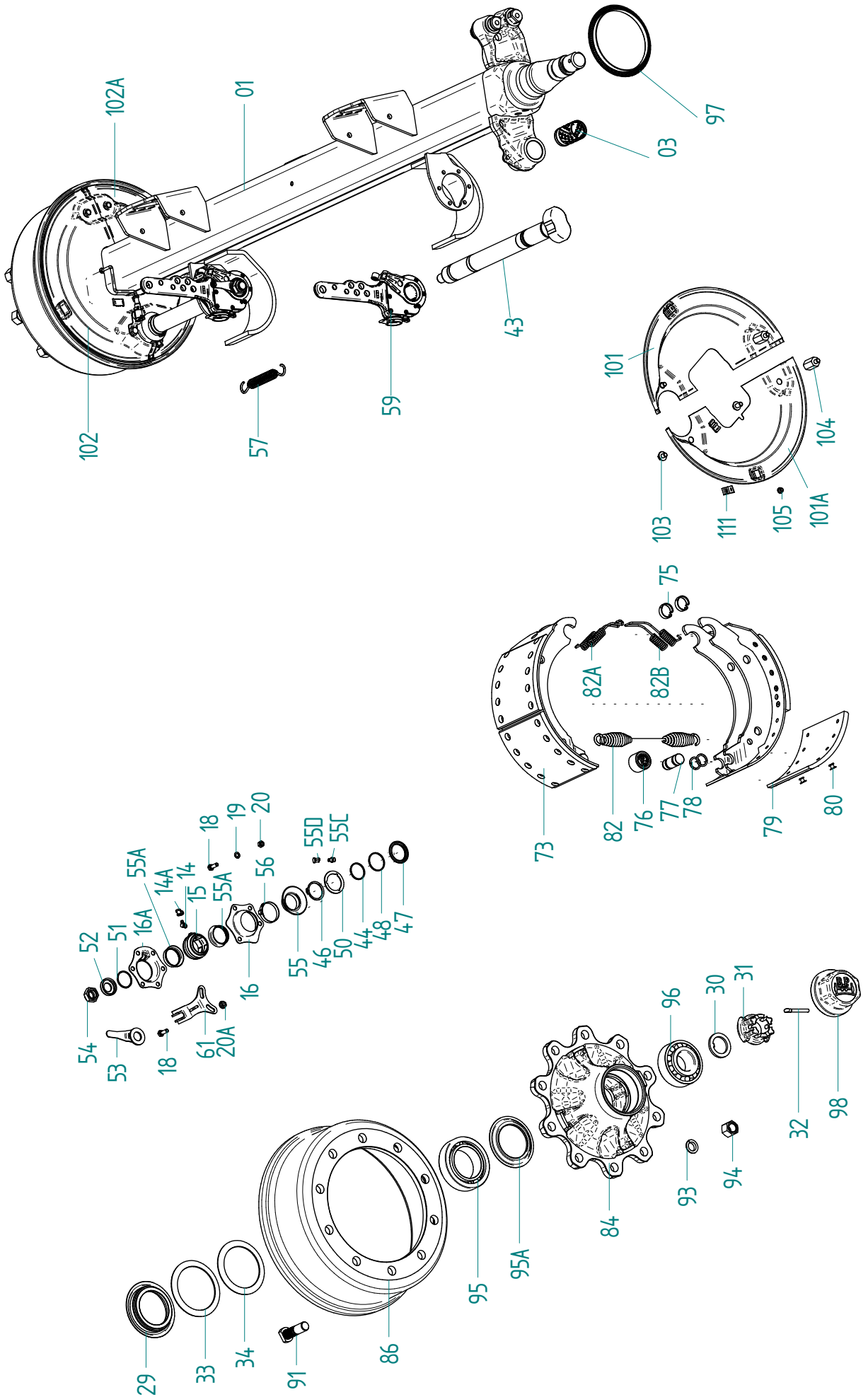
Konstruerad Av <b>Ola</b>	Ritad Av <b>Ola</b>	Skapad Datum <b>2011-08-26</b>	Godkänd Av	Generell Tolerans	Skala <b>1:5</b>	
Status <b>Godkänd</b>	Vikt (kg) <b>15</b>	Titel / Benämning <b>Hyd. Flakläs F11</b>		Hall		
Agare 		Artikel Nr <b>111084</b>		Rev <b>D</b>	Blad <b>1 (1)</b>	

Nr	Ändring	Datum	Godk av
-		2012-04-10	



Pos.	Ant.	ArtikeInr	ArtikeInr 2	Beskrivning	Vikt
1	1	103375	10250016	Hydraulisk 1/4"-1/4" (pilöbackventil) (VRDE-01F)	0.7
2	4	101559	888100	Banibult 1/4" Enkel	
3	10	101087	450100	Tredobricka 1/4"	
4	2	112159		Flakläs tryck slang	0
5	2	114019		Flakläs cyl slang	0
6	2	101406	60000404	Adapter 1/4"UTV-1/4"UTV	
7	2	101007	450103	Tredobricka 1/2"	
8	2	101016	471004	Snabbkoppling Hane 1/2"	
9	1	101056	133650-5	Bontskruv 5.5X66	

Konstruerad Av <b>LH</b>	Ritad Av <b>LH</b>	Skapad Datum <b>2012-04-10</b>	Godkänd Av	Generell Tolerans	Skala <b>1:5</b>	
Status <b>Godkänd</b>	Vikt (kg) <b>2</b>	Titel / Benämning <b>Hydraulik hyd flakläs MF11</b>		Hall		
Agare 		Artikel Nr <b>114018</b>		Rev <b>-</b>	Blad <b>1 (1)</b>	



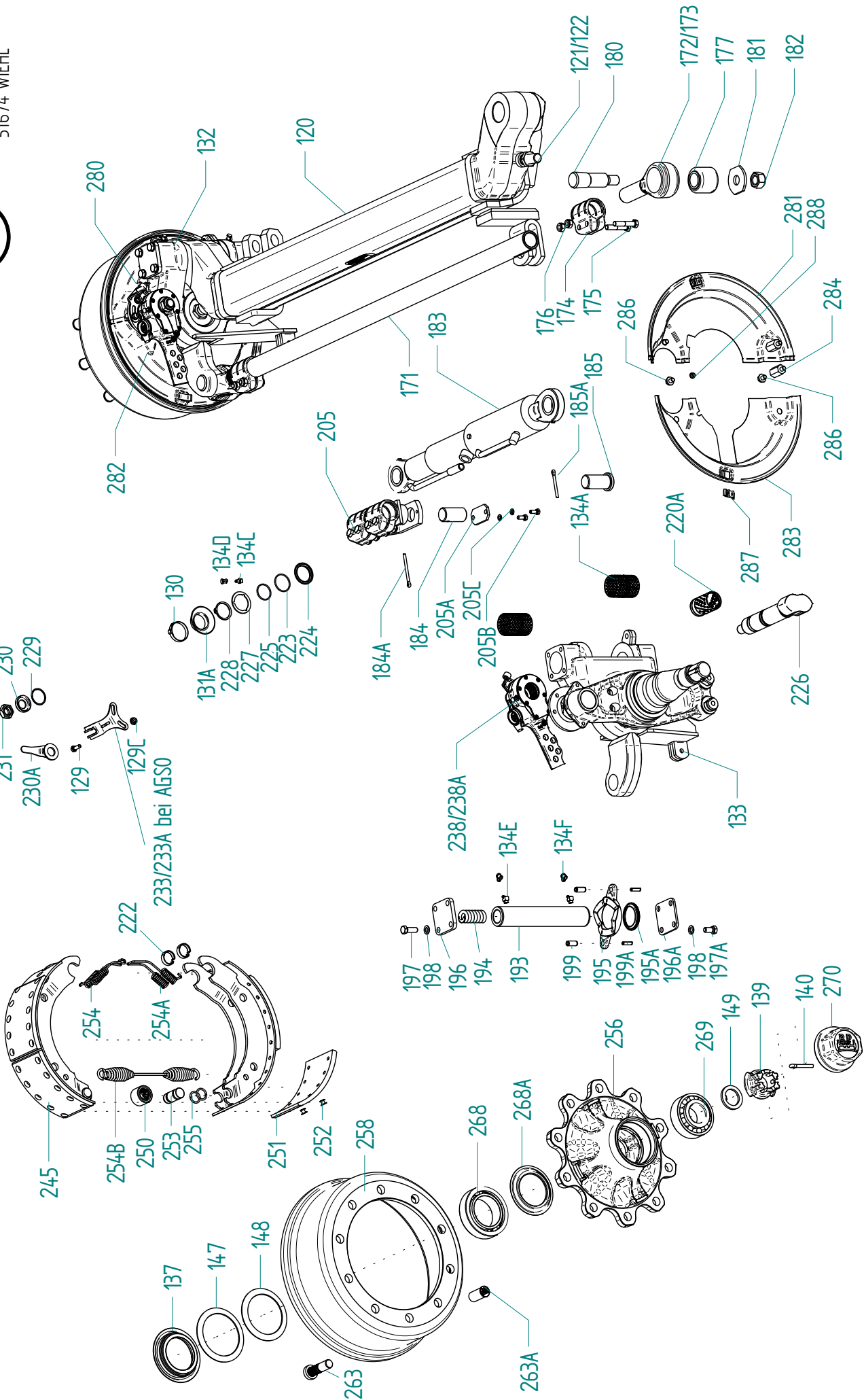


## SPARE PARTS LIST

55.88.460.441

ITEM	PART	MEASUREMENT	SERIAL-NO	PER UNIT
1	AXLE BEAM (EINSCHL.POS. 3,)		05.531.70.51.0	1
3	BUSH	42/46X72.6	03.112.44.34.0	2
14	GREASE NIPPLE	BS8X1	02.6850.02.02	2
14A	COVER		02.3505.20.00	2
15	BUSH		03.113.14.04.0	2
16	BEARING BOX		03.229.02.19.0	2
16A	BEARING BOX		03.229.02.18.0	2
18	HEXAGON SCREW	M8X25/933	02.5025.30.82	8
19	LOCK WASHER	B 8/137	02.5403.08.92	4
20	HEXAGON NUT	M8/934	02.5202.12.82	4
20A	HEXAGON NUT	M8	02.5273.32.82	4
28	ASSEMBLY KIT (POS.29-34,95-96)	KIT	09.803.67.25.0	1
29	THRUST WASHER	D 80/104/115/142x22	05.370.06.48.0	2
30	DISC	D 43 / 61 x 5,8	03.320.73.13.0	2
31	CASTLE NUT	M 42 x 2 / SW 65	03.262.16.15.0	2
32	SPLIT PIN	8X50/ISO 1234	02.6201.82.01	2
33	RING	D 104 / 136 x 2,5	03.310.97.32.0	2
34	RING	D 110 / 141 x 2,5	03.310.97.31.0	2
43	CAM SHAFT	L 270 / A 151,5	05.097.27.20.3	2
44	O-RING	37X2,6	02.5677.37.42	2
46	LOCK RING	42X2,5/471-FST	02.5676.01.00	4
47	RING	42/46/55x7	03.310.12.24.0	2
48	O-RING	40X2,5	02.5679.23.00	2
50	SEAL	42/586x2	03.120.42.02.0	2
51	CIRCLIP	SW 40	02.5659.40.71	2
52	DISC	22,5/42x10,5	03.320.11.16.1	2
54	HEXAGON NUT	M22X1.5X15	05.260.14.12.0	2
55A	SEAL	42x15	03.120.42.09.0	4
55C	GREASE NIPPLE	AM10X1/71412	02.6802.03.50	2
55D	COVER	GPN 985 / 0201	02.3505.20.00	2
59	AGS	120-180	05.174.83.15.3	2
61	FORMBLECH	LI	03.165.25.15.0	1
61A	FORMBLECH	RE	03.165.25.16.0	1
72	ASSEMBLY KIT (POS.73-75,82-82B)	KIT FL4112	09.803.62.09.0	1
73	BRAKE SHOE ASSEMBLY (EINSCHL.POS. 75-78,79,80)		05.091.30.04.0	4
75	LOCKING RING	33/32,5x10	03.188.02.02.0	8
76	ROLLER	26/45x33,5	05.331.44.02.0	4
77	PIN	26x58,5	03.084.75.24.0	4
78	RING	24/31x3,5	03.310.70.15.0	8
79	BRAKE LINING		03.092.29.61.0	8
80	RIVET	B8X15/7338	02.5805.80.35	80
82	RETURN SPRING	34,5/5,5x274	05.397.58.03.0	2
82A	RETURN SPRING	16,2/3,2x36	03.397.33.12.0	2
82B	RETURN SPRING	16,2/3,2x36	03.397.33.13.0	2
84	HUB		03.271.54.90.0	2
86	BRAKE DRUM		03.106.91.10.0	2
91	WHEEL STUD	M22X1,5X80	03.296.33.11.1	20
93	COVER		02.3515.36.00	20
95	SPRING WASHER	33116/720	02.6408.80.00	2
95A	COVER		03.010.93.33.0	2
96	ROLLER BEARING	32310/720	02.6406.50.00	2
98	HUB CAP	M 115x2/H62/SW95/BPW	03.212.23.09.0	2
101	DUST COVER		03.010.91.33.0	1
101A	DUST COVER		03.010.91.34.0	1
102	DUST COVER		03.115.50.54.0	1
102A	DUST COVER		03.010.91.32.0	1
103	SCREW	M 10 x 15 / SW 13	02.5071.22.00	4
103A	SCREW	M 10 x 12 / SW 15	02.5070.60.02	4
104	THREAD BOLT	M 10 / SW 22 x 47	03.177.61.01.0	4
105	PLUG	GPN300 F5	02.3704.33.00	2
111	PLUG		03.379.00.23.0	6

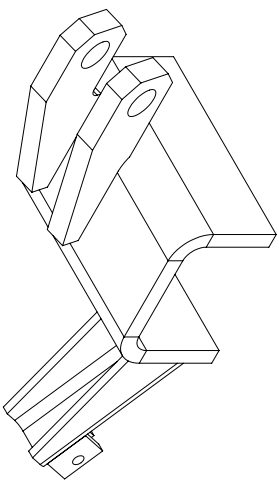
Pos. 120, 132 und 133 sind schematische Darstellungen, können bei den einzelnen Artikeln unterschiedlich sein!



ITEM PART	MEASUREMENT	SERIAL-NO	PER UNI'
120 STEERING AXLE BEAM		05.236.40.76.0	1
121 CYLINDER CAP SCREW	M24X60	03.340.50.12.0	2
122 HEXAGON NUT	M24/936	02.5205.31.24	2
129 Lock nut	M8X25/933	02.5025.30.82	4
129C Lock nut	M8/	02.5273.32.82	4
130 CirclIP		03.350.30.01.0	2
131A Sealing ring		03.120.43.14.0	2
132 STEERING PIVOT ASSEMBLY	LEFT	09.414.08.50.0	1
133 STEERING PIVOT ASSEMBLY	RIGHT	09.414.08.51.0	1
134A BEARING BUSH	55/50X70	03.113.60.28.0	4
134C GREASE NIPPLE	A M10X1/71412	02.6802.03.50	4
134D COVER		02.3505.20.00	4
134E GREASE NIPPLE	B M10X1/71412	02.6802.06.50	4
134F COVER	GPN 980 0201	02.3505.20.00	4
136 Repair kit bearing (EINSCHL.POS.137-149,268-269)	KIT	09.803.67.25.0	1
137 Thrust washer		05.370.06.48.0	2
139 CASTLE NUT	M45X2	03.262.16.15.0	2
140 SPLIT PIN	8X50/ISO 1234	02.6201.82.01	2
147 RING	AUSSEN	03.310.97.32.0	2
148 RING	INNEN	03.310.97.31.0	2
149 WASHER	43/61X5.8	03.320.73.13.0	2
170 DRAGLINK (EINSCHL.POS.170A,175,176,205)	KOMPLETT with support	05.363.52.56.0	1
170A DRAGLINK (EINSCHL.POS.:171-177)	KPL.	05.246.43.05.0	1
171 TUBE	L1320	03.179.06.05.0	1
172 DRAGLINK (EINSCHL.POS.177)		05.353.68.26.0	1
173 DRAGLINK (EINSCHL.POS.177)		05.353.68.27.0	1
174 CLAMP		02.3507.25.00	2
175 HEXAGON SCREW	M12X1,5X60/960	02.5029.35.80	8
176 LOCK NUT	VM12X1,5/980	02.5220.15.82	8
177 BUSH		05.113.92.04.0	2
180 BOLT		03.178.51.80.0	2
181 WASHER		03.320.24.05.0	2
182 LOCK NUT	VM24 /980	02.5220.74.12	2
183 Cylinder		02.4905.37.00	1
184 BOLT	D=35 L=68	03.086.50.38.0	1
184A SPLIT PIN	6.3X71/1234	02.6201.64.01	1
185 BOLT	D=35 L=73 SO	03.086.50.31.0	1
185A SPLIT PIN	6.3X56/1234	02.6201.65.01	1
193 STEERING PIVOT		03.240.60.05.0	2
194 PRESSURE SPRING		03.125.50.06.0	2
195 PRESS SWITCH	UNTEN	03.128.05.06.0	2
195A SEALING RING		02.5685.02.00	2
196 COVER PLATE	OBEN	03.115.50.05.0	2
196A COVER PLATE	UNTEN	03.115.50.10.0	1
197 HEXAGON SCREW	M12X35/933	02.5025.85.82	8
197A HEXAGON SCREW	M12X25/933	02.5025.79.82	8
198 LOCK WASHER	A12/128	02.5601.12.90	16
199 ADAPTER SLEEVE	12X28/ISO 8752	02.6006.95.90	4
199A ADAPTER SLEEVE	7X28/ISO 8752	02.6016.01.90	4
205 SUPPORT	UNTEN	05.189.52.32.0	1
205A PLATE		03.294.53.21.0	1
205B HEXAGON SCREW		02.5025.28.82	2
205C SPRING WASHER		02.5601.08.92	2
220A BUSH		03.112.44.34.0	2
222 Hooked spring ring		03.188.02.02.0	8
223 O-RING	40X2,5	02.5679.23.00	2
224 RING		03.310.12.24.0	2
225 O-RING	37X2.6	02.5677.37.42	2
226 Camshaft	L=260 A=141.5	05.097.27.64.3	2
227 Sealing ring		03.120.42.02.0	2
228 Locking ring	42X2,5/471-FST	02.5676.01.00	4
229 Circlip	SW 40	02.5659.40.71	2
230 WASHER		03.320.11.16.1	2
230A Lever		03.190.14.07.1	2

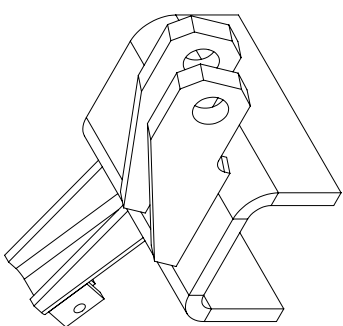
231	Lock nut	M22X1,5	05.260.14.12.0	2
233	Shaped plate	LI	03.165.25.15.0	1
233A	Shaped plate	RE	03.165.25.16.0	1
238	AGS	120-180	05.174.83.15.3	2
244	Brake shoe kit (EINSCHL.POS.222,245,254-255)	KIT	09.803.62.09.0	1
245	Brake shoe assembly (EINSCHL.POS. 251,252)	FL 4112	05.091.30.04.0	4
250	ROLL	WITH BOLT	05.331.44.02.0	4
251	Brake lining		03.092.29.65.0	4
252	RIVET	B8X15/7338-ST	02.5805.80.35	80
253	BOLT		03.084.75.24.0	4
254	Return spring		03.397.33.12.0	2
254A	Return spring		03.397.33.13.0	2
254B	Return spring		05.397.58.03.0	2
255	RING		03.310.70.15.0	8
256	HUB		03.271.54.90.0	2
258	Brake drum		03.106.91.10.0	2
263	Wheel stud	M22X1.5X80	03.296.33.11.1	20
263A	Cover		02.3515.36.00	20
268	Roller bearing	33116/720	02.6408.80.00	2
268A	Dust cover	D=129/84X8.5 ECO T	03.010.93.33.0	2
269	Roller bearing	32310/720	02.6406.50.00	2
270	Hub cap	BPW 115X2	03.212.23.09.0	2
280	Cover plate	LH	03.115.50.20.0	1
281	Cover plate	RH	03.115.50.21.0	1
282	Cover plate	LV	03.115.50.80.0	1
283	Cover plate	RV	03.115.50.81.0	1
284	Thread bolt		03.177.61.01.0	4
286	Lock wheel	M10X12	02.5070.60.02	8
287	Plug		03.379.00.23.0	4
288	Plug		02.3704.33.00	2

Nr	-	Datum	2016-01-15	Ändrad av	
A			2016-02-12		



Beställningsnr	KES	Skapad datum	2016-01-15	Godkänn nr	AI	Överensstämmande	SS-ISO 2768-1 m	Skala	1:3	Original sk tecken	
Storlek	Godkänd	Wkt. Rikt	12	Text / Beskrivning	Inköp 09.189.74.90.0				A4		
Typ					Hydraulbenstfäste vänster						
					<b>METSJÖ</b>						
					129966						

Nr	-	Datum	2016-01-15	Ändrad av	
A			2016-02-12		



Beställningsnr	KES	Skapad datum	2016-01-15	Godkänn nr	AI	Överensstämmande	SS-ISO 2768-1 m	Skala	1:3	Original sk tecken	
Storlek	Godkänd	Wkt. Rikt	12	Text / Beskrivning	Inköp 09.189.74.91.0				A4		
Typ					Hydraulbenstfäste höger						
					<b>METSJÖ</b>						
					129967						

Nr	-	Datum	2016-01-15	Ändrad av	
A			2016-02-12		



# Maintenance and care of the axles

## Technical data: Axles and brakes:

## Obtaining spare parts:

When spare parts are needed, the model numbers and codes for the axles and chassis parts will greatly assist your BPW parts dealer or BPW service facility in quickly and accurately determining the appropriate spare part.

You are therefore recommended to fill in the following technical data from the details on the manufacturer's name plates, so that they will be available should you need them.

The manufacturer's name plate can be found on the axle beam, the drawbar or the overrun mechanism.

### Enter the details below

---

Trailer Manufacturer	_____	
Type of trailer	_____	
Works number / chassis number	_____ / _____	
Maximum laden weight	_____	kg
Maximum speed	_____	km/h
Nose weight	_____	kg

---

Maximum axle load (for tandem axles, axle load front/rear)	front	_____	kg
	rear	_____	kg
Axle model numbers (for tandem axles, front/rear)	front	_____	
	rear	_____	
Axle codes (for tandem axles, front/rear)	front	_____	
	rear	_____	

---

Wheel brake type		
Internal diameter of brake drum	_____	mm
Brake shoe width	_____	mm
<input type="checkbox"/> Wedge-type brake	<input type="checkbox"/> Wedge-type brake with RAZG / RASK reverser	
<input type="checkbox"/> Butterfly cam brake	<input type="checkbox"/> Backmat cam brake	

---

Type or make of the drawbar / overrun hitch	_____
Model number / model code	_____
Maximum load (the difference between unladen weight and maximum laden weight)	_____ kg

## Fundamental rules

### **Never overload axles, brakes or chassis!**

Consequently:

- Do not overload the vehicle in contravention of regulations, by exceeding the maximum laden weight.
- Do not exceed the maximum permitted braking loads.
- Avoid one-sided overload resulting from incorrect loading or driving over kerbs etc.
- Do not fit unauthorised wheels or tyres. The maximum distance between the track and the spring centre must be adhered to.
- Avoid excessive strain resulting from the use of offset wheels or unauthorised wheel offsets.
- Do not exceed the maximum top speed.
- Each time before using the vehicle, check to ensure that the brakes and brake systems are correctly adjusted and in good working order.
- Wear and tear and any unauthorised alterations are not covered by guarantee.

Maintenance work should be carried out at the prescribed intervals in order to maintain the safe operation of the vehicle. The relevant operating and servicing instructions of the vehicle manufacturer and of the manufacturers of the other vehicle components must be observed.

All repair and maintenance work should only be carried out by a BPW approved Service Station unless the vehicle owner has staff fully trained to BPW standards and a workshop suitably equipped to undertake such work.

**When fitting replacement parts you are strongly recommended to use only genuine BPW parts. BPW subjects all its components to regular testing to ensure they comply with safety and quality standards and in so doing guarantees their performance.**

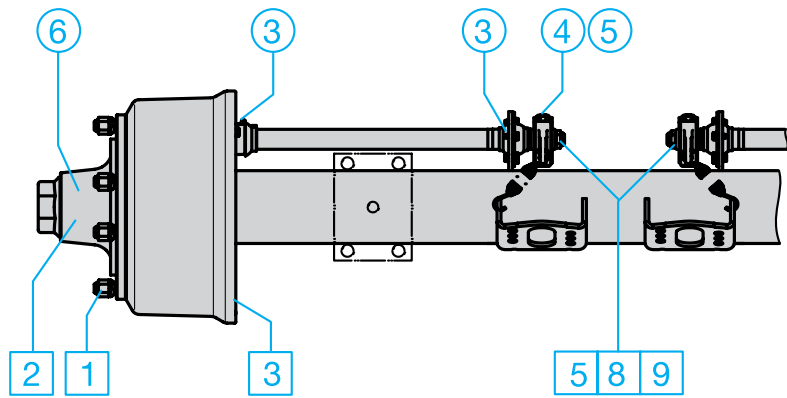
**BPW cannot offer any guarantee regarding products produced by other companies. This applies even if an official testing organisation has approved the product.**

**Our guarantee becomes invalid if spare parts other than genuine BPW parts are used.**

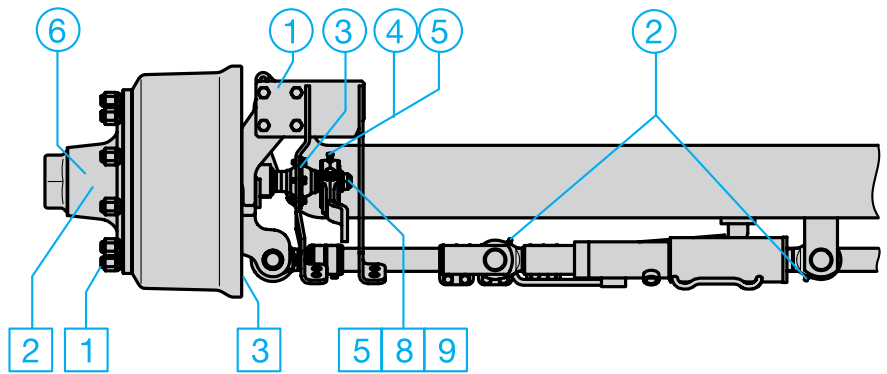
<p><b>Lubrication and maintenance works</b></p> <p><b>Summary</b></p> <p>Detailed description on pages 8 - 18</p> <p><input type="radio"/> Lubrication</p> <p><input type="checkbox"/> Maintenance works</p>	After the first laden journey	Every 40 hours in operation	Every 200 hours in operation	Every 500 hours in operation (annually)	Every 1000 hours in operation (annually)
<p><b>Lubrication</b> with BPW special longlife grease (ECO-Li 91)</p> <p>① Steering pivot bearings, top and bottom</p> <p>② Locking cylinder ends on steering axles</p> <p>③ Outer and inner brake camshaft bearings</p> <p>④ Slack adjuster</p> <p>⑤ ECO-Master automatic slack adjuster</p> <p>⑥ Change grease in wheel hub bearings, check taper roller bearings for wear</p> <p><b>Maintenance work</b></p> <p>① Check that wheel nuts are tight, retighten if necessary.</p> <p>② Check hubs for bearing play, adjust if necessary.</p> <p>③ Check brake linings.</p> <p>④ Check the brake adjustment on the brake lever, adjust if necessary.</p> <p>⑤ Check the brake adjustment on the slack adjuster, adjust if necessary.</p> <p>⑥ Check brake adjustment on wedge-type brakes, adjust if necessary.</p> <p>⑦ Check brake adjustment on Backmat cam brakes, adjust if necessary.</p> <p>⑧ Check brake adjustment on the automatic slack adjuster, adjust if necessary.</p> <p>⑨ Check the operation of the automatic slack adjuster.</p>		<p>○</p>	<p>○</p> <p>○</p> <p>○</p>	<p>○</p> <p>○</p> <p>○</p> <p>○</p>	<p>○</p>



BPW trailer axle  
with butterfly cam brakes



BPW trailing steering axle

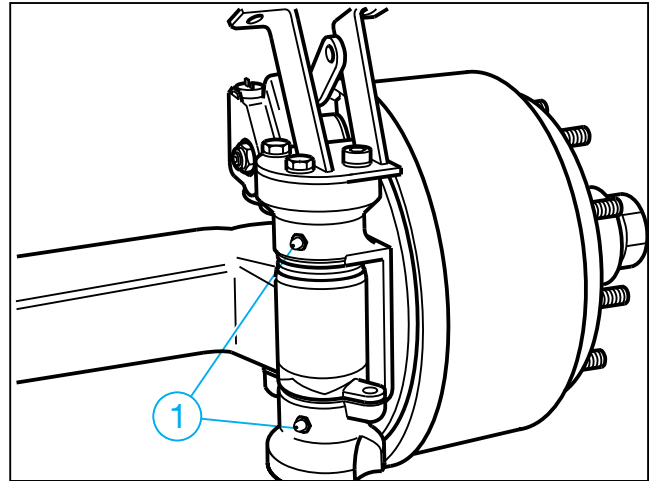


**Note: All the lubrication points should be re-lubricated with grease after the vehicle has been cleaned with a high-pressure washer.**

**① Top and bottom steering pivot bearings**

– every 40 hours in operation –

Lubricate via the grease nipples with BPW special longlife grease (ECO-Li 91), until clean grease emerges from the bearing/cam plate.

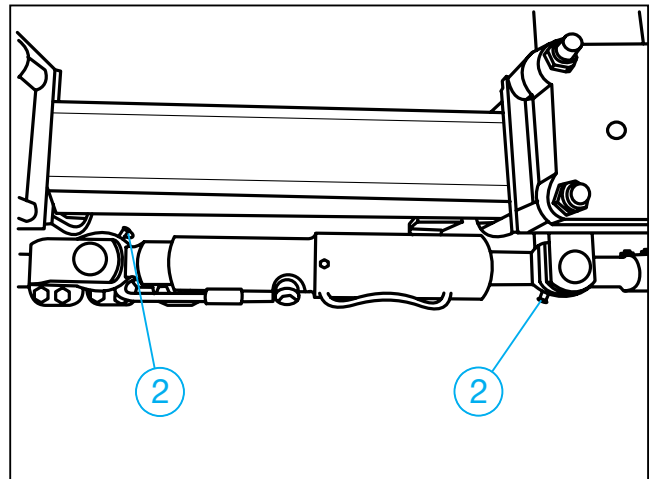


**② Locking cylinder ends on steering axles**

– every 200 hours in operation –

Lubricate via the grease nipples with BPW special longlife grease (ECO-Li 91), until clean grease emerges from the bearings.

While carrying out this lubrication, ensure that the locking cylinder and the pipe contain no air at any time.



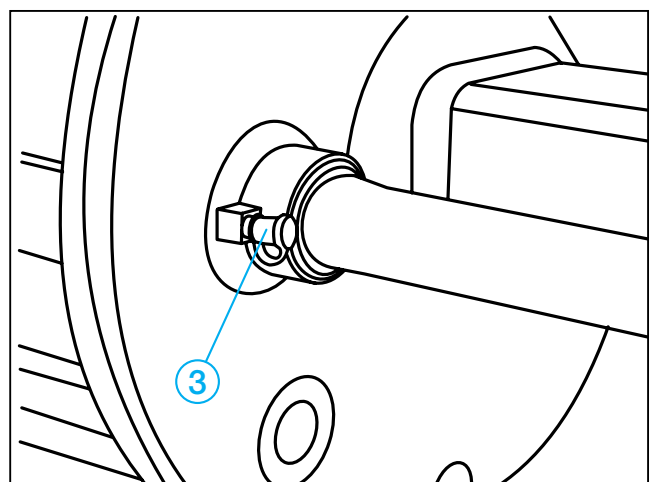
**③ Outer and inner brake camshaft bearings**

– every 200 hours in operation –  
(and before use after a long period of inactivity)

Lubricate via the grease nipples with BPW special longlife grease (BPW ECO-Li 91), until clean grease emerges from the bearings.

Caution. Do not allow grease or oil to get into the brake. Depending on the series, the cam bearings to the brake may not be sealed.

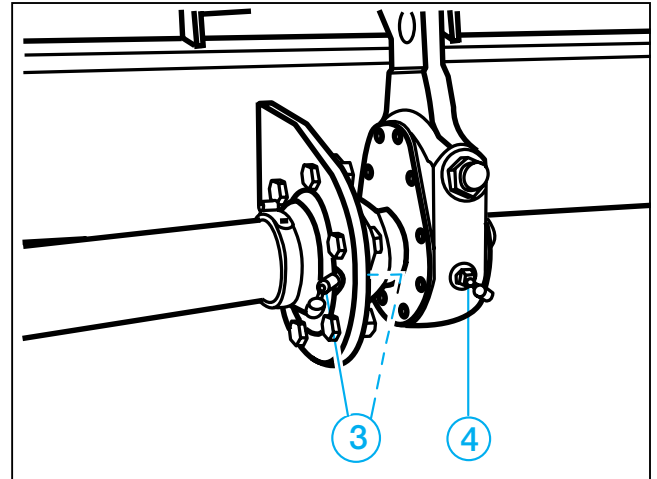
Use only lithium-based grease with a drop point above 190 °C.



#### ④ Slack adjusters

- every 500 hours in operation, at least once a year –

Lubricate the grease nipples with BPW special longlife grease (ECO-Li 91), until fresh grease emerges.



#### ⑤ Automatic slack adjuster ECO-Master

- each time the brake shoes are replaced –
- every 500 hours in operation, at least once a year –

Remove the rubber cap.

Lubricate with BPW special longlife grease (ECO-Li 91) (80 g) until sufficient clean grease emerges from the adjusting bolt.

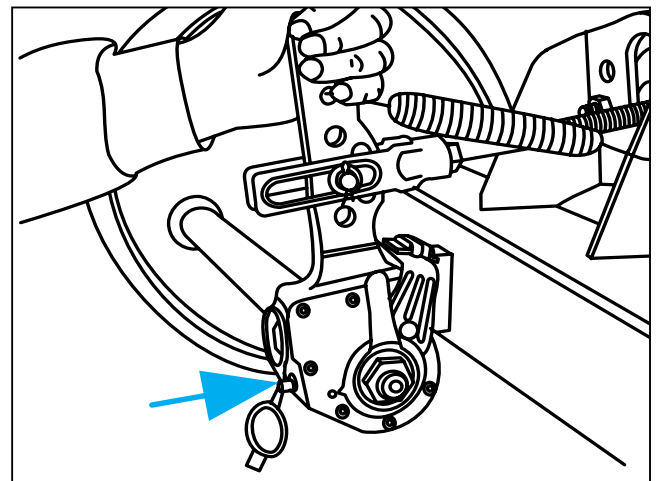
Undo the adjusting bolt by approximately one turn with a ring spanner. Operate the brake lever by hand several times.

In doing so, the automatic adjustment must operate smoothly.

Repeat several times, if necessary.

Refit the cap.

Regrease with BPW special longlife grease (ECO-Li 91).



## ⑥ Changing the grease in the wheel hub bearings

– every 1,000 hours in operation (latest annually) –

Jack up and secure the vehicle, and release the brakes.

Remove the wheels and bearing caps.

Remove the split pin and unscrew the axle nut.

Using a suitable retractor, withdraw the wheel hub with the brake drum, the roller bearings and the sealing elements from the axle stub.

Label or mark the wheel hubs and bearing cages so that they do not become mixed up during re-assembly.

Clean the brake, check for wear, make sure that it is intact and operates correctly, and replace any worn parts.

The inside of the brake must be kept free of grease and dirt.

Clean the wheel hubs thoroughly on the inside and the outside, removing every trace of old grease.

Clean the bearings and seals thoroughly (diesel oil) and check to ensure that they are suitable for re-use.

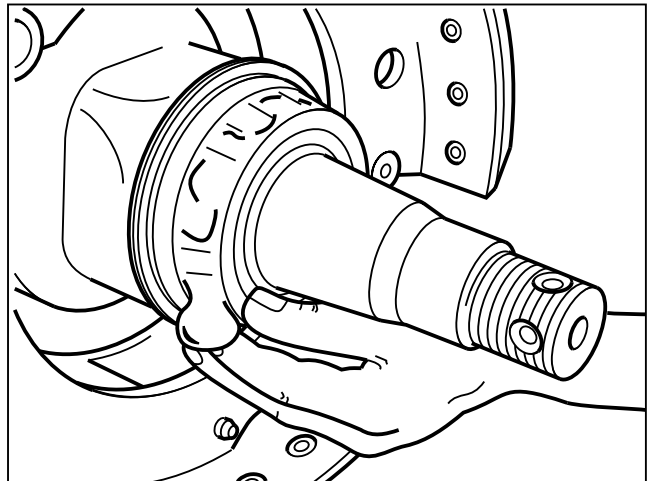
Lightly grease the bearing seats before fitting the bearings, and then assemble all the parts in the reverse order.

Carefully drive the parts into place on the bearing shells, without tilting or damaging them.

Coat the bearings, the wheel hub cavity between the bearings and the bearing cap with grease before re-assembly.

The quantity of grease should fill approximately a quarter to a third of the space in the assembled hub.

Fit the axle nut, and adjust the bearings

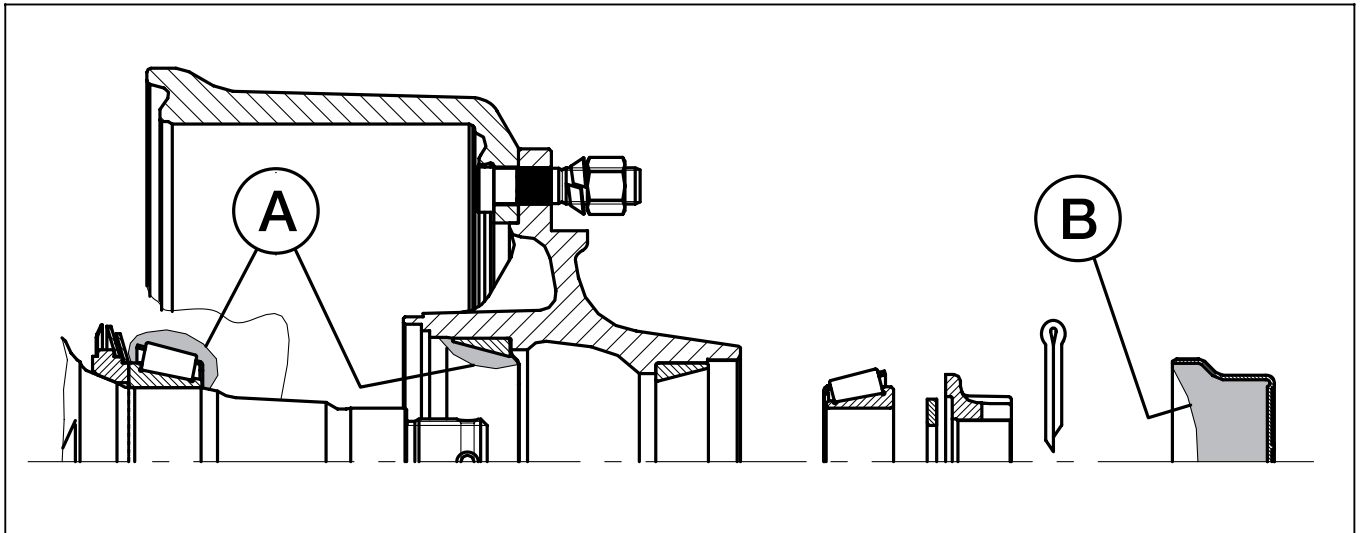


and the brake.

Finally, check that everything is in working order and carry out a suitable test drive, correcting any faults that you may discover.

The wheel hubs must only be lubricated with BPW special longlife grease (ECO Li 91) with a drop point above 190 °C.

Using the wrong grease or excessive quantities may lead to damage. Damage can be caused by the mixing of lithium-based grease with sodium-based grease, because of incompatibility.

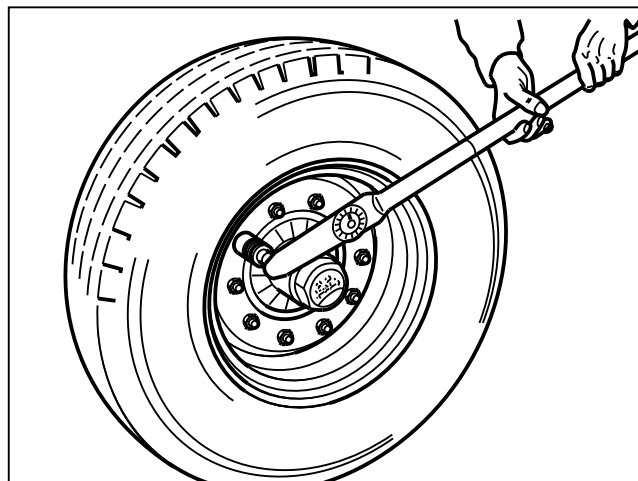


Wheel hub	BPW special longlife grease (ECO-Li 91), quantity per tapered roller bearing	
	Inner A	Outer B
GS 5506	40 g	80 g
GS 7006 GS 7008	50 g	210 g
GS 8008-1 GS 8010-1	90 g	230 g
GS 11008-1 GS 11010-1	170 g	290 g
GS 12008 GS 12010	180 g	320 g
	Work grease into the space between the tapered rollers and the races. Apply remainder to outer race of the hub.	The grease for the outer tapered roller bearing is pressed into the bearing as the hub cap filled with grease is screwed on.

## 1 Check that the wheel nuts are tight

– after the first laden journey, likewise after each wheel change and every 500 hours in operation or annually –

Use a torque wrench to tighten the wheel nuts to the correct torque setting, as shown in the table.



## Torque settings for wheel nuts

Thread	Spanner size mm	Number of bolts per hub piece	Maximum torque setting		
			black	Dacromet	galvanised
M 12 x 1.5	19	4/5	<b>95 Nm</b> (90 - 100 Nm)	--	<b>95 Nm</b> (90 - 100 Nm)
M 14 x 1.5	22	5	<b>125 Nm</b> (120 - 130 Nm)	--	<b>125 Nm</b> (120 - 130 Nm)
M 18 x 1.5	24	6	<b>290 Nm</b> (275 - 305 Nm)	<b>270 Nm</b> (250 - 290 Nm)	<b>320 Nm</b> (300 - 340 Nm)
M 20 x 1.5	27	8	<b>380 Nm</b> (360 - 400 Nm)	<b>380 Nm</b> (360 - 400 Nm)	<b>420 Nm</b> (400 - 440 Nm)
M 22 x 1.5	32	8/10	<b>510 Nm</b> (485 - 535 Nm)	<b>510 Nm</b> (485 - 535 Nm)	<b>560 Nm</b> (535 - 585 Nm)
M 22 x 2	32	10	<b>460 Nm</b> (435 - 485 Nm)	--	<b>505 Nm</b> (480 - 530 Nm)

## 2 Check the bearing play in the wheel hub

– every 200 hours in operation –

To check the bearing play in the wheel hub, raise the axle until the tyres are clear of the ground.

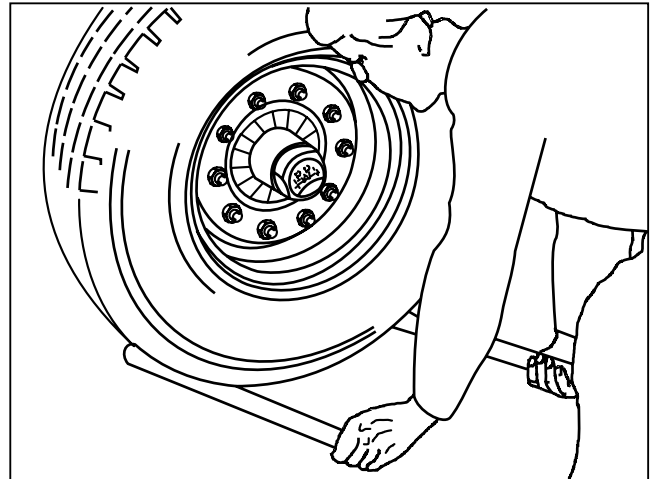
Release the brake, place a lever between the tyre and the ground, and check for play.

If you can feel play in the bearing:

## Adjusting the bearing play

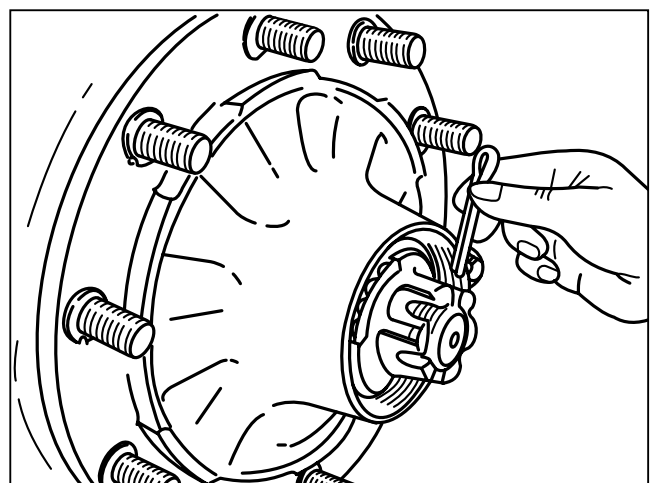
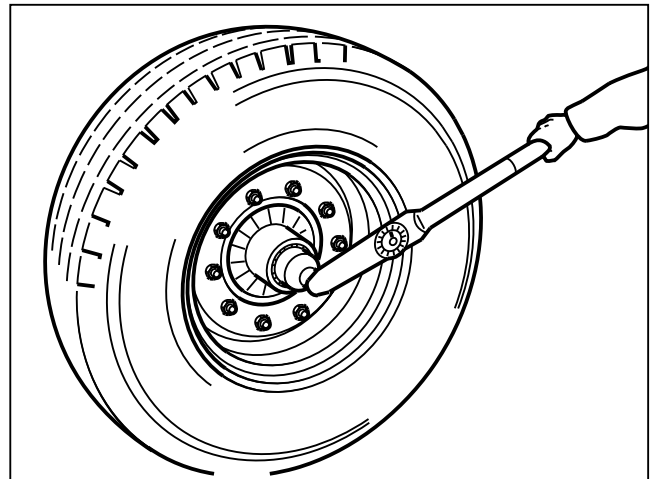
### Standard hub bearing

1. Remove the bearing cap, or hub end-cap.
2. Remove the split pin from the wheel nut.
3. Tighten the wheel nut while turning the wheel, until the turning of the hub is slightly impeded.
4. Turn back the axle nut to the nearest possible split pin hole. If already in line, turn back to the next hole (maximum of 30°).
5. Insert the split pin and gently bend it over.
6. Refill the bearing cap with a little BPW special longlife grease (ECO-Li 91) and tap or screw it back into the wheel hub.



### Wheel hub bearing on BPW axles type GS 11008-1, GS 11010-1, GS 12008, GS 12010

1. Unscrew the hub cap.
2. Remove the split pin from the castle nut.
3. Tighten the axle nut using a torque wrench to 150 Nm while simultaneously turning the wheel hub.  
- Using a normal castle nut spanner (vehicle tool kit), tighten the castle nut until the wheel hub race is slightly braked.
4. Turn back the castle nut to the next possible split pin hole. Should they be in line turn back to the next hole (30° at the maximum).
5. Insert the split pin and bend upwards slightly.
6. Refill the hub cap with BPW special longlife grease (ECO-Li 91).
7. Greased thread of hub cap all round with BPW special longlife grease (ECO-Li 91) and tighten to the specified torque of 500 Nm.



### 3 Brake lining check

– every 200 hours in operation –

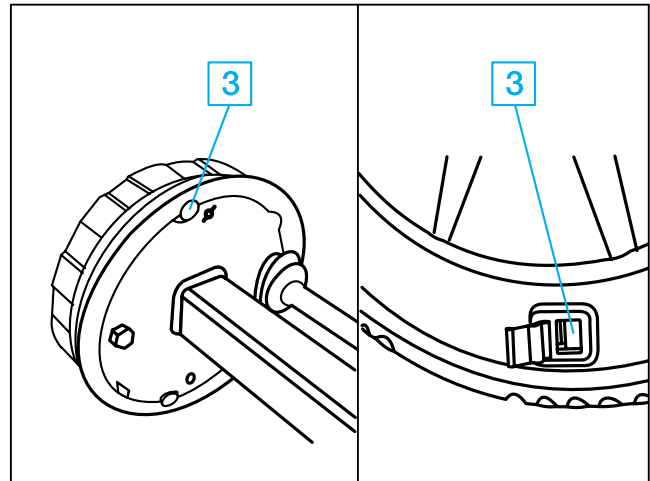
Open the inspection hole by removing the rubber bung (if present).

If the remaining thickness of the brake lining is

a: for riveted linings, 5 mm  
(N 2504) 3 mm

b: for bonded linings 2 mm  
the brake lining must be replaced.

Re-insert the rubber bung.



### Brake adjustment

Depending on the nature and extent of operation, the brakes should be checked regularly and adjusted, if necessary.

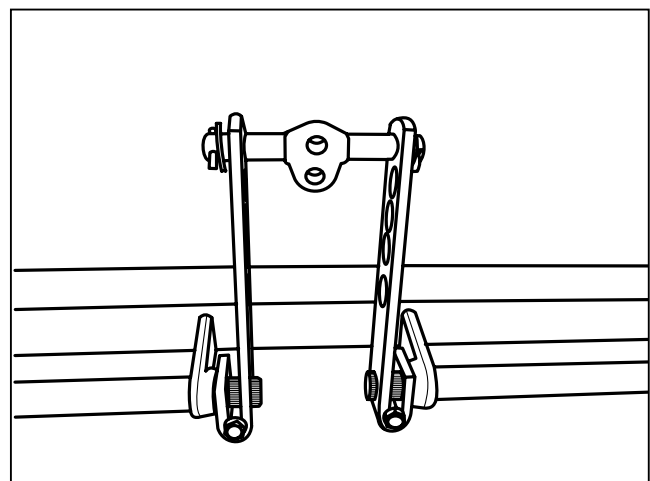
Adjustment is necessary when approx. 2/3 of the maximum cylinder stroke is used under heavy braking. For this purpose, jack up the axle and secure the vehicle against accidental movement.

### 4 Adjustment of the brake lever

– every 200 hours in operation –

Undo the hexagonal nuts, remove the bolts. Bend open the slot in the brake levers a little. The brake levers can now be withdrawn.

Turn the brake camshafts until the linings start to rub against the brake drums. Push the brake levers onto the brake camshafts in the correct position until they are fully home. Insert the bolts and fit the nuts.





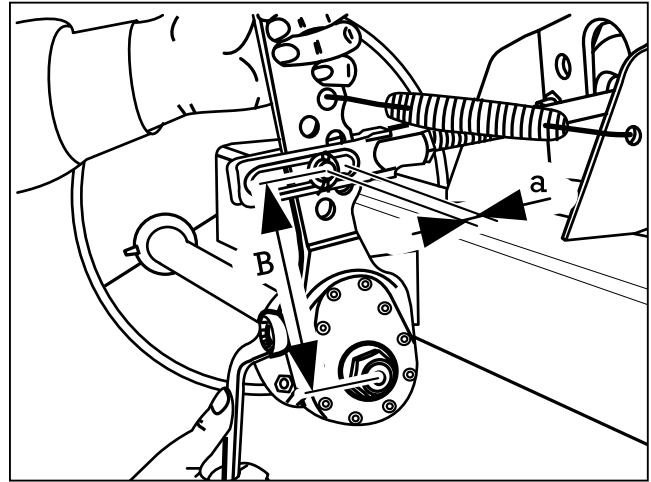
## 5 Adjustment of the slack adjuster

– every 200 hours in operation –

Move the slack adjuster by hand in the direction of brake application. If there is a maximum free play on the long-stroke diaphragm cylinder of 35 mm, the wheel brake must be adjusted.

Adjust the free play "a" to 10-12 % of the length (B) of the brake lever connected to it.

E.g. for a lever length of 150 mm, the free play is 15-18 mm.



## 6 Adjustment of wedge-type brakes

– every 200 hours in operation –

### S 3006-7 RAZG:

Secure the trailer to prevent it moving and jack it up. Disconnect the pull rods from the overrun hitch and the handbrake lever. Lock the swivel cam on the wheel brake with the help of special tool A (< 4 mm diameter pin) by inserting it through the positioning hole (at least 50 mm into the hole). Tighten the adjusting nuts (item C) on the wheel brakes with a spanner, with the help of the adjusting bolt (item B), until the wheel will not turn in the direction of travel. Turn back the adjusting bolt until no braking effect can be felt when the wheel is turned in a forward direction.

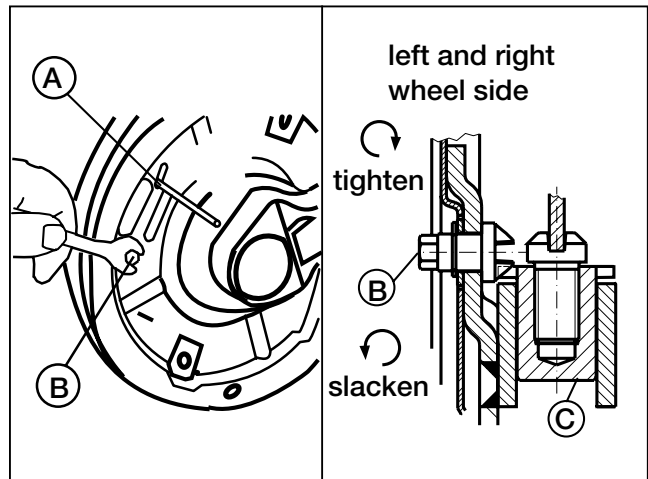
### Caution:

**The wheel brake must only be adjusted by means of the adjusting bolt.**

Reconnect the pull rods to the overrun hitch and adjust so that there is no free play.

For this purpose, the drawbar of the overrun mechanism must be completely extended and the reversing must lever rest on the drawbar.

As a test, apply the parking brake slightly



and check that the braking effect (in the direction of travel) on the wheels is the same on both sides. Check that the individual brakes take effect at the same time.

### Caution:

**Remove the locking device (< 4 mm diameter pin) from the swivel cams.**

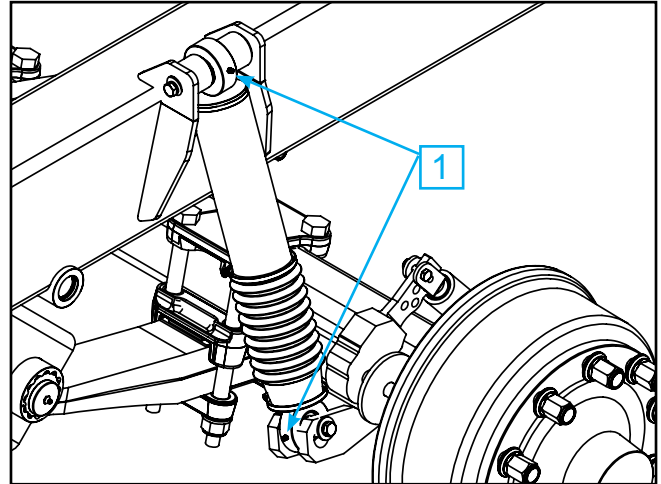
# Hydraulic Suspension

## ① Damping cylinders, top and bottom

– every 200 hours in operation –

Lubricate via the grease nipples with BPW special longlife grease (ECO-Li 91) until fresh grease emerges from the bearing points.

As well as performing these lubrication jobs, make sure that the cylinder and the supply line are always vented.



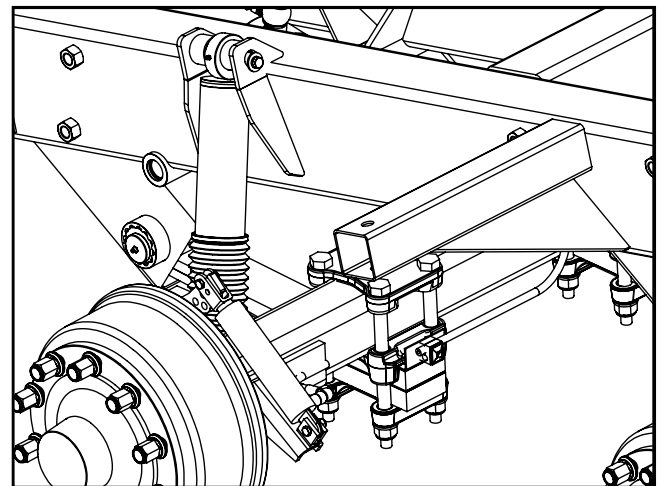
## - Visual inspection

– every 200 hours in operation –

Check all components for damage and wear.

## ① Check the condition of the damping cylinders and check them for leaks

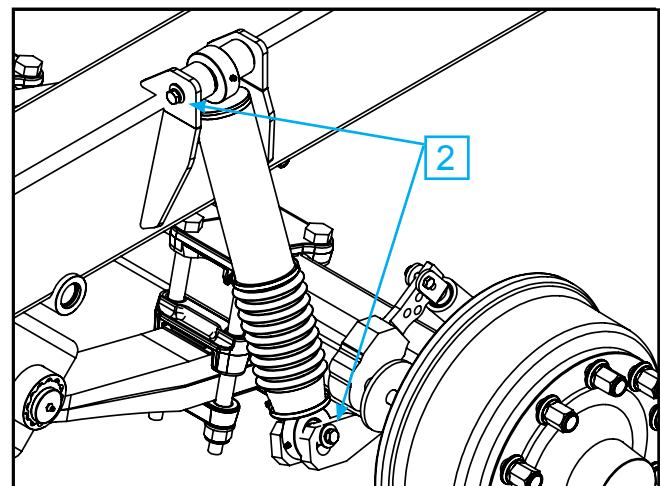
– every 500 hours in operation, latest annually –



## ② Check damping cylinders attachment

– every 500 hours in operation, at least once a year –

Check the damping cylinders are firmly attached and check for wear.

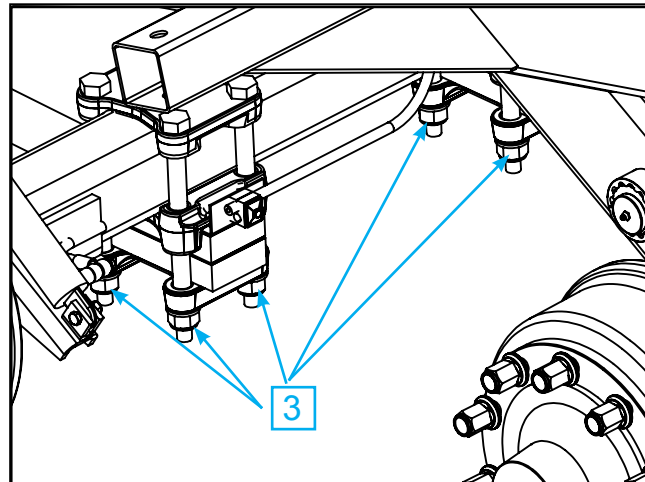


### 3 Spring mounting kit

- every 200 hours in operation, initially after the first laden journey -

Check that the lock nuts are tight on the U-bolts. If they are loose, tighten the nuts alternately in stages. Do not weld the trailing arm! Torque setting with a torque wrench:

M 24      M =750 Nm (700 - 800 Nm)



### 4 Spring bolts

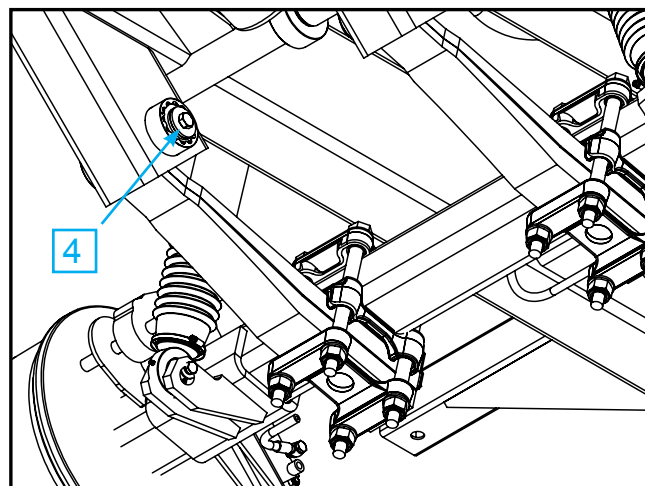
- every 500 hours in operation, latest annually, initially after the first laden journey -

Check the bushes, moving the vehicle slightly backwards and forwards with the brake applied, or moving the spring eyes with a lever. There must be no play in the spring eye. If not attached properly the spring bolt may be damaged.

- Check that the M16 lock nut on the spring bolts is tight.

Torque settings with a torque wrench:

M16                      220 Nm (200 - 250 Nm)





# **METSJÖ** *Ivarssons i Metsjö AB*

**Production takes place at Metsjö Norrgård which is located outside Linköping Sweden.  
Except trailers we also produce machinery halls and mobile storages.  
Ivarsson's i Metsjö AB reserve the right to change technical specifications.  
Data and illustrations are to be considered approximate and also include special accessories that are not part of the scope of standard supply.**

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