

MetaFlex 50-65
with comm.vessels



Introduction

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

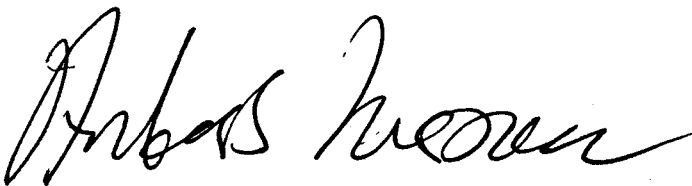
Manufacture Ivarssons i Mestjö AB 58592 Linköping 013-59310

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: 180 Hp

A loaded trailer should always be connected to the tractor.

Connect always:

- The brake hose 3/8 hose
- The tipping/shifting hose 1/2-1/2 blue hose
- The shifting arm hose 1/2-1/2 red hose
- The steering lock hose/Height and lateral control/hydr.supporting bar 1/4 yellow hose (norm.float pos).
- Free return 3/4 hose
- The lightning system
- Power for control of the trailers hydraulic and electrical functions

Inductive sensor: Green light = power is on; Yellow light = active sensor

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 driver can adjust the weight transferred to the tractor by moving the adjustable shifting arm front and backwards. The arm can be adjusted 900mm.

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

In order to tip the trailer, the shifting arm must be moved at least 150mm, so that the mechanical lock of the frame is deactivated. When a container is on the trailer, the shifting arm has to be moved to its shortest position first and then move it forward (towards the tractor) at least 150mm to unlock the tipping frame. In transport position without container the shifting arm should be in tipping position

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 (While parked the tip should be in normal position)
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
11. Check if the hydraulic rear ground support bar is raised
12. Check if the suspension has the right amount of hydr.oil according to the terrain
13. Check if while driving the axle lock is disconnected

Shifting containers

In order to shift containers, the shifting arm must be moved to the rearmost position, so that the mechanical lock of the hook-lift container is released (lamp on the control box)

- Adjust the rear support bar until it reaches the ground
- In order to adjust the trailer under the hook-lift container, the bar must be slightly lifted in order to release the brakes
- The hydraulic rear ground support bar has a hydraulic lock
- The biggest pressure on the trailer is usually when the hook-lift container reaches the rear rollers of the trailer. It is not common to adjust the trailer's position during this process and that is when the bar comes in use and is handy against the negative load which occurs on the tractor
- Now can the shifting process begin
- The shifting and the moving of the shifting arm must be done parallel in order to achieve the best shifting angle
- The tractor can be unbraked
- The frame of the hook-lift container must rest over the rollers of the trailer
- When the container is on the trailer, the shifting arm must be moved at least 150mm so that the frame is in tipping position.
- The rear ground support bar can now be lifted

Attention:

Do not shift and tip containers, if:

- Reassure that the lamp is switched off
- 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 off the body during the shifting process
- The hydraulic and electrical hoses are incorrectly connected
- The ball valve/security handle should NOT be closed when shifting containers

ATTENTION: While working under a container, the ball valve/security handle that is on the tipping cylinder must ALWAYS be closed. Alternativ tipping support

- Hydraulic system for 230 bars
- Maximum load on the rear coupler: Vertical 1 ton, Horizontal 23 000 kg

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

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

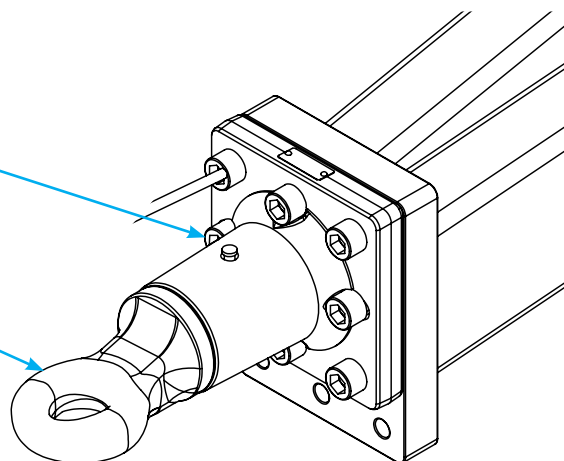
Maintenance and care

- 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.



Mounting and dismounting a forage harvester unit

The mounting is done on even ground and the trailer has to be emptied before the process. Secure work area -15 meters in radius. The chassis and the drawbar must be connect. Do not stand under the chassis during this coupling process. The usage of wheel wedges is highly recommended. Move away/secure all cables and hydr. hoses to the outer side of the forage harvester in order to avoid damage to them during the process.

1. Attach the forage harvester to the tractor and connect all the hoses and cables
2. Drive backwards because the coupling points are under the chassis. Aim to the rear ball couplers.
3. Mount the hydraulic hoses for the height and lateral control
4. Open the ball valve on the hydraulic block und adjust the chassis to the highest position
5. Mount the supporting legs on the container. Attention: ONLY the front legs
6. Then sink the axles so that the rear couplers are in line with the connection balls
7. Mount the sprints which hold together the connection balls with the coupler.
8. Sink the chassis so that the front couplers can be connected and secured with sprints
9. Raise the trailer again to the highest position
10. Secure that the transport tires of the harvester are not in the way
11. Dismount the supporting legs on the container
12. Adjust the axles to working position (80-120mm between axles and frame)
13. Close the ball valve on the hydraulic block.
14. Connect all the hoses and cables between the chassis and forage harvester.

In order to dismount the harvester do the steps backwards



Risk evaluation during docking - IMPORTANT!

Mounting and dismounting a standard drawbar (optional equipment)

The mounting is done on even ground and the trailer has to be emptied before the process. Secure work area -15 meters in radius. The chassis and the drawbar must be connect. Do not stand under the chassis during this coupling process. The usage of wheel wedges is highly recommended. Move away/secure all cables and hydr. hoses to the outer side of the forage harvester in order to avoid damage to them during the process.



1. Open the ball valve on the hydraulic block and adjust the chassis to the highest position
2. Use a front loader or something similar to lift the drawbar.
3. Dismount the sprockets
4. Free the ball connections by lowering the drawbar.
5. Drive forwards , so that the drawbar freed

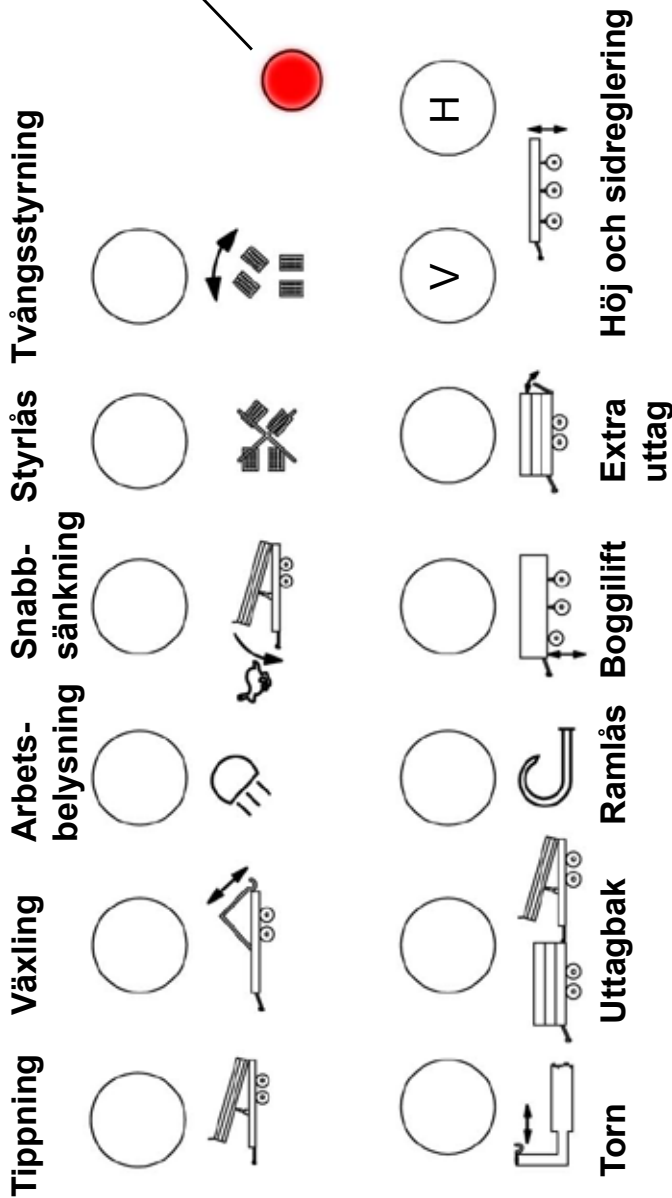
In order to mount the drawbar do the steps backwards



Risk evaluation during docking - IMPORTANT!



Höj och sidindikering
 På - Av: När växling av tyngre laster sker används hjulfjädring för att få gynsammare växlingsgeometri. Lyfthöjden blir lägre då man lägger ned chassi på hjulaxel. För att komma i rätt arbetsläge så används lysdiod som indikering. Det vill säga att när dioden är tänd är = rätt köriläge.
 Rätt köriläge är normalt ca 100 mm mellan axelkropp och chassi.
 Diodindikeringen är grundinställd till 100 mm. Lysdioder indikerar vänster respektive högersida.
 Viktigt är att man under växlingsmanövern är observant på att rullflak kan skrapa mot stänkskärm eller hjul med större diameter.
 Detta kan pareras med att man fyller på hjulfjädring med lite olja.



Automatic forced steering B-3177.06

There are 3 different axle positions: forced steered, locked, and self-steering. All these positions can be controlled from the driver's seat from the control panel. It is also possible to manually force steer the trailer

Forced steering

In this position, the axles are automatically steered according to how much the drawbar is steered. The steering is speed related. The faster the speed is the less sensitive the steering is.

If the axle does steer with the drawbar, it reprogrammed automatically to a self-steering axle after 10 seconds (for example if a hose is discounted or bent and etc). In order to adjust the auto steering after that, it is needed only to change to some of the other position and then back to forced steering

When the maximum steering angle is reached, is the axle programmed to a self-steering axle. When the angle is back to normal again , the forced steering is automatically switched on again.

Locked position

The axle is not steerable

Self-steering axle

The axles follows the movement of the tractor. This is also the standard position, if the power is disconnected (or if there is a problem with the forced steering)

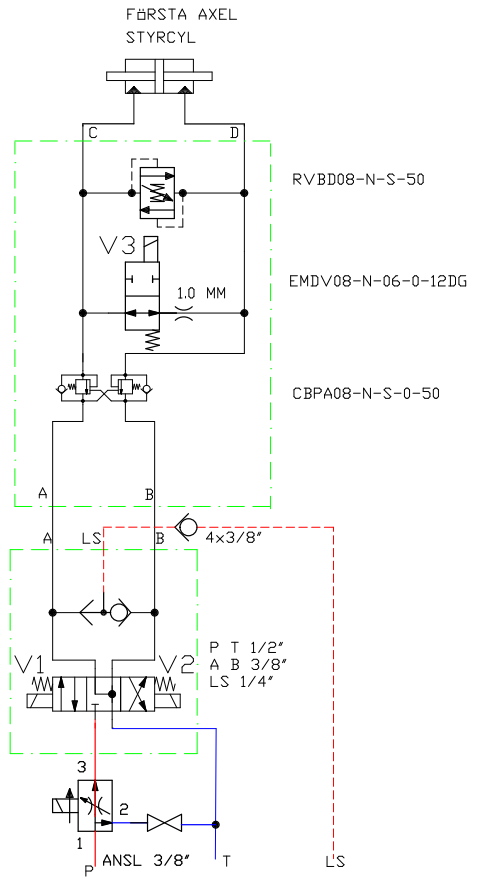
2 or 3 axles

Each axle has its own oil supply (proportional valve)
Each axle can be set that it has its own steering angle

Troubleshooting:

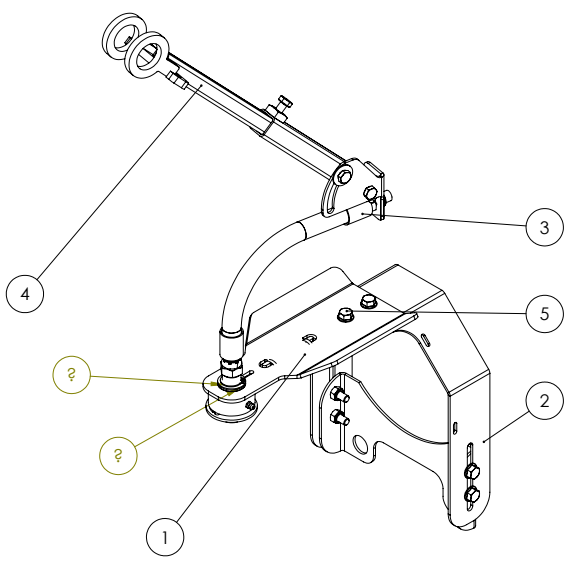
Connection between the tractor and trailer
LS connection
Steering arm mounted according drawing
Power supply 12/24 V

Nr	Ant	Ändring	Datum	Inf	Godk
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Pos. nr.	Antal	Modellbeteckning	Beskrivning	Referens
Kontr	Ritad	Kop	Stand	Godk
LH	LH		LH	
IVARSSON I METSJÖ			STYRNING BAKAXEL	
			Ersätter 5057.01	
			Ersöts av	
			Datum 12-08-20	
			Ritning nr B-5057.03	

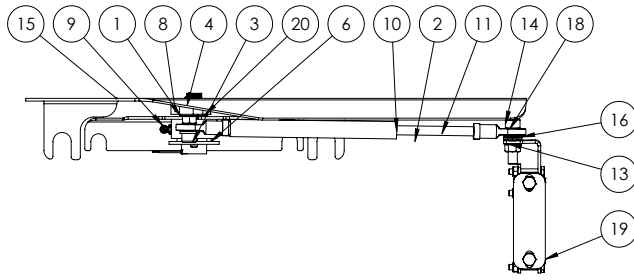
Nr	Ändring	Datum	Ändrad av
B		2019-11-27	



Pos.	Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	1	138817		Drag givare autostyrning	1
2	1	138813		Fästkonsoll draggivare autostyrning	1
3	1	138824		Slang draggivare autostyrning	0
4	1	138818		Toppstångsfäste autostyrning	1
5	2	109821		Bult tensi M8x25 FZB	
6	2	109790		Mutter M8 FZB nylock	

Konstruerad Av LH	Ritad Av LH	Skapad Datum 2017-12-06	Godkänd Av	Generell Tolerans	Skala 1:4	
Status Godkänd	Vikt (kg) 4	Titel / Benämning Draggivare autostyrning		Original ark storlek A3		
Agens		Artikel nr 138657		Rev B	Bsd 1 (1)	

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Nr	Ändring		Datum	Ändrad av
D			2019-11-27	

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	138968		Axel Givarhus med fäste	0
2	1	137652		Fästplåt givare autostyrning	
3	2	109869	84050161	Spårskruv M5x16 FZB	
4	1	138687		Givar axel Autostyrning	
5	1	100446	10400122,1	Buskning Wb 702 30, 30/34x15	0.03
6	1	138710	114930	Vinkelgivar (3Kohm 100'), IP65 Rostfriaxel	
7	3	138795	Inköp	O-ring 10x2,4	
8	1	138906		styrarm axelgivare	
9	1	113517		Smörjnippel M6 90°	
10	1	142358		Styrstag autostyrning	
11	1	142359		Gängstång styrstag autostyrning	
12	1	ISO 4017 - M10 x 30-C			
13	3	109798	10400060,01	Mutter M10 FZB Tensi	
14	2	118212	9121210040	Bult M10x40 Insex 12,9 fzb	
15	1	142091		Skydds plåt axel givare	
16	3	109899	1251051	Bricka 10,5x20x2 FZB	
17	1	120183	120183	Stoppskruv M5x6Inse	
18	2	142417	148215	Länkhuvud M10	
19	1	142418		Komplett fästbygel styrstag autostyrning	0
20	1	147633		O-ring 18x3	

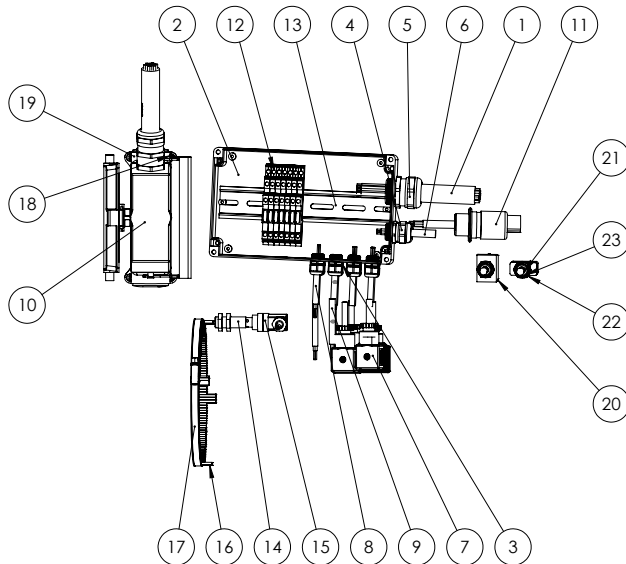
Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala
LH	LH	2017-12-14			1:4

Status	Vikt (kg)	Färd / Beskrivning	Original ark storlek
Godkänd	100		A3

Agens	Titel / Beskrivning	Revidering	Blad
METSJÖ Invarssone i Metsjö AB	Komplett axel givare autostyrning	Rev	1 (4)

Artikel nr	Rev	Blad
138852	D	1 (4)

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Art NR	Längd	Antal
115126	1000mm	1
116004	1000MM	1
117380	500MM	3
117380	5000MM	1
117824	5000MM	1
117824	2500MM	1

Nr	Ändring		Datum	Godk av
C			2017-01-24	
D			2018-03-13	

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	115126	5573274	Kabel 25G1,5 grå pris/meter	0
2	1	113930	113930	Kopplingslåda, mellan 200x120x100mm	0
3	8	113983	5501945	kabel genomföring PG7	
4	2	113985	5501960	Kabelgenomföring PG 11	
5	1	113988	5501754	Kabelgenomföring PG 21	
6	1	116004	10250055,2	Kabel 5 ledare x 1,5 svart	0
7	4	103217	10250057	Hirsmankontakt (kontakt för elstyrning hydraulvent)	0.03
8	5	117380	10250056,3	Kabel 2 ledare x 1,5 svart	0
9	3	117824	10250055,4	Kabel 3x1,5 svart	0
10	1	114856		kabelkit Multimodul 24 Pol PG29	0
11	1	111527	10250063	Erokontakt 3 pol (vagnsdel Hane), "Gristryne"	
12	7	112894	112894	Väningsplint	
13	1	112893	112893	Dinskena	
14	1	105865	3757523	Lilla magnetögat	
15	1	111408	4457313	Hylsa lilla ögat, vinklad 90° M12	
16	1	119108	119108	Puls krans autostyrning	
17	1	119132			
18	4	109869	84050161	Spårskruv M5x16 FZB	
19	1	130613	80-70800	Can Com Multimodul Servo	1
20	1	140380	3523958	Vippströmställare till/från/till 2 pol 2-polar (Metsjö)	
21	1	114124	3523858	Vippströmställare (till) - Från- (till) (Metsjö)	
22	2	115974	3519865	Tätningbricka 12 mm	
23	2	111516	3519840	Hätta av neoprengummi	

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala
LH	LH	2013-05-08			1:4

Status	Vikt (kg)	Färd / Beskrivning	Original ark storlek
Godkänd	2		A3

Agens	Titel / Beskrivning	Revidering	Blad
METSJÖ Invarssone i Metsjö AB	Multimodul Tvångstyrning	Rev	1 (2)

Artikel nr	Rev	Blad
115216	D	1 (2)

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

Radio hydraulics

Connection to tractor

1. Attach the pressure hose male connection and the return hose female connection. Attach also the electrical cable for the radio sender (3 pol. cable)
2. Put pressure in the hydraulic system.
3. The hydraulic system is built with LS functions

Radio sender

Starting the radio control box:

The radio control box has a locked position, so that it would not work if the joystick is not centered or if a button is pressed. This is indicated with a green and red blinking light. The joystick should be center in order to start the control box. If this does not happen, you can center the joystick by hand and try again.

New: From. version 003: The control box is started when you hold button 1 and 2 together for a couple of seconds and then release them. The transmitter has 100-300 meters range depending on terrain and one should be near the trailer to control it. NEVER stay under a container or arm that has been lifted.

The transmitter is control with 2 pcs. AA batteries which can be loaded through a cable. Sändaren drivs med 2st uppladdningsbara AA batterier som kan laddas via en inbyggd laddare. The transmitter can also be run without batteries via 10-30V charging voltage. The radio transmitter also has a CAN BUS, which means that it can be connected and run via cable control. Continuous running time without charge is 10-15 hours

Troubleshooting

Transmitter:

- Check that there is power in the batteries if not charge them with the supplied charging cable.
- Check if the batteries as probably mounted.
- Replace batteries

Receiver:

- Make sure that power is present in the tractor and that all cables are connected.
- Check if any cables are damaged between the towing vehicle and the trailer.

Information about the buttons and their functions

Button 1: Tipping joystick Y-led Rear hydr.outlet joystick X-led

Button 2: Tipping joystick Y-led Hydraulic arm shifting X-led

Button 3: Chassis control X-led left side Y-led right side Auto adjustment

Button 4: Axle lift joystick Y-led

Button 5: Hydraulic lock of the steering axle joystick Y-led

Button 6: Hydraulic supporting bar joystick Y-led

Button 7: Working lights

Button 8:

Button 9: Hydraulic container locking

Button 10: -----

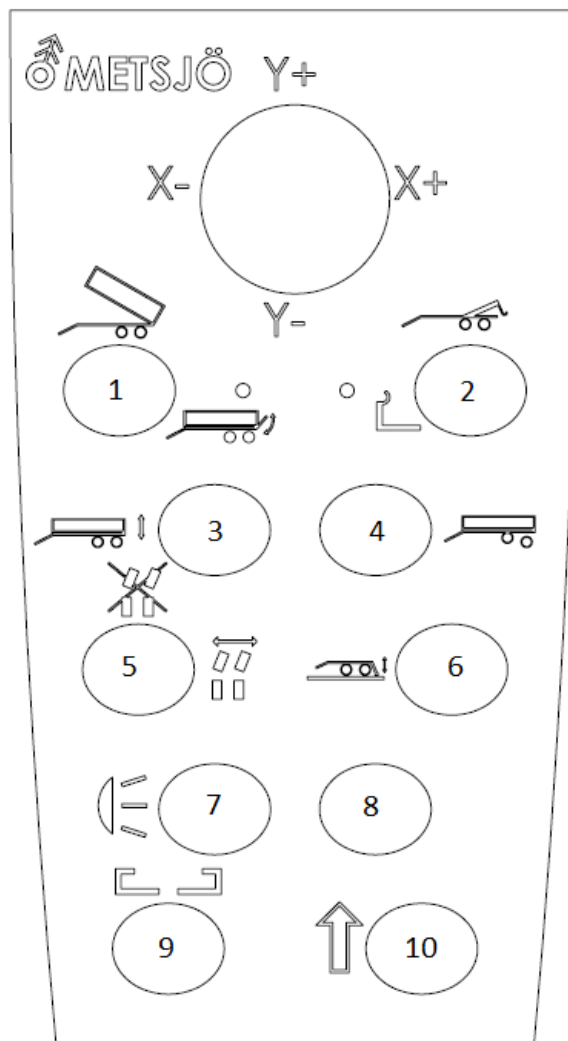
You choose a function with the button and then control this function via the joystick up/down (X), right/left (Y). If you chose another function (button) the former function stops working. It is always the last pressed button that is active.

Button 3: Chassis control. A quick activation of the button makes this function active. If you hold button 3 for a while, the chassis will come up automatically to the preset height. This height is set with sensors on each side of the middle axle (this is an optional equipment).

Button 5: Hydraulic lock of the steering axle - if you press the button up the steering of the axle will be locked until you press the joystick down.

OBS: Some of the buttons may be optional equipment.

Joystick layout



Dekal och slangmärkning

	Broms		Chassi		Styrårs		Ivängsstyrning
	Tipp		Växling		Torn		Uttag bak
	Boggi lift		Tryck		LS signal		Mooring
	Hyd tak		Ramlås		Adjust		
	Hydstödben		Teleskopering				
	Markstöd						

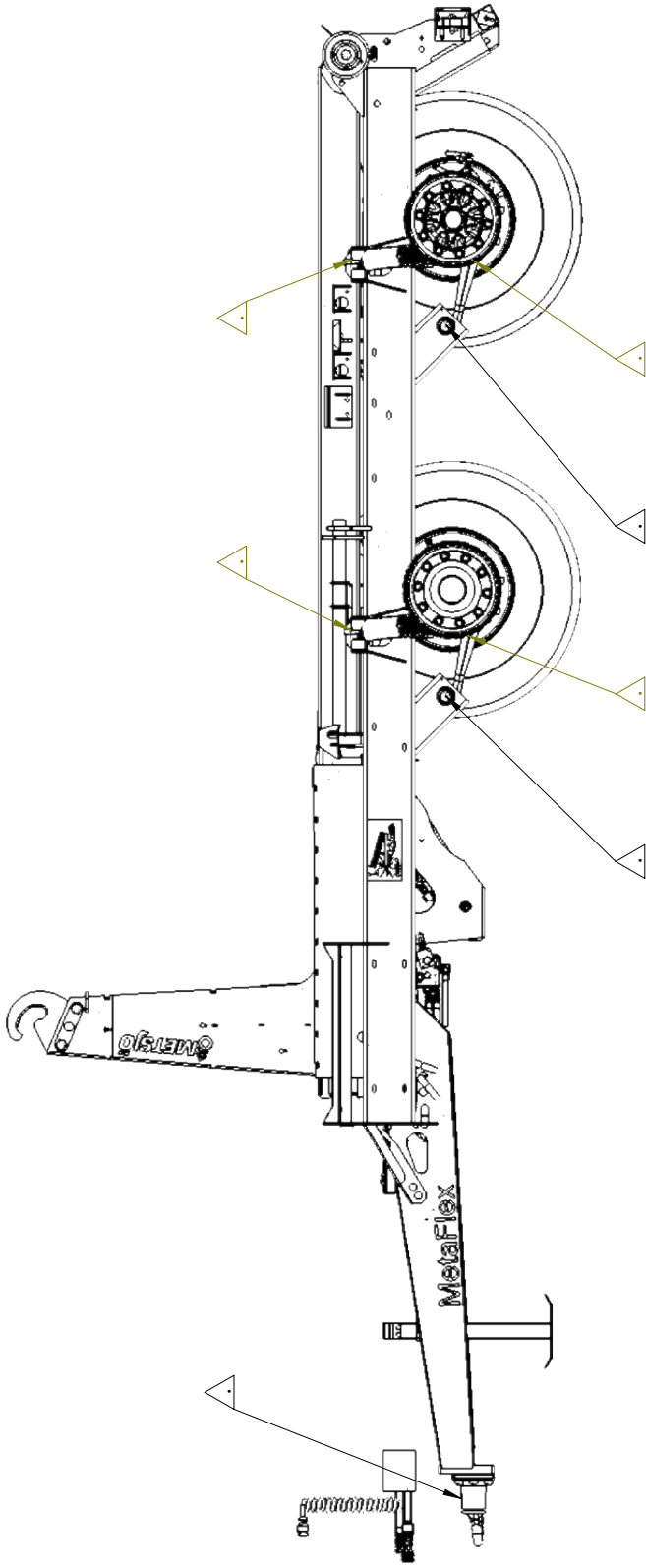
"+" side marked with 2 colours
 "- " side marked with 1 colour

Godkännande dekal
 Sätts på samtliga vagnar



Symbol description

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Greasing points

Konstruktör Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolernans	Skala	
	MI	2013-11-06	AI	SS-ISO 2768-1 m	1:25	
Status		Wikt (kg)	Titel / Benämning		Häll	
Godkänd		4437	MF 50-65 fast drag cc1810		Plas	
Agare			Artikelnr		Rev	
			137323		4 (7)	

A

B

C

D

E

F

8

7

6

5

4

3

2

1

8

7

6

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4

3

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1

A

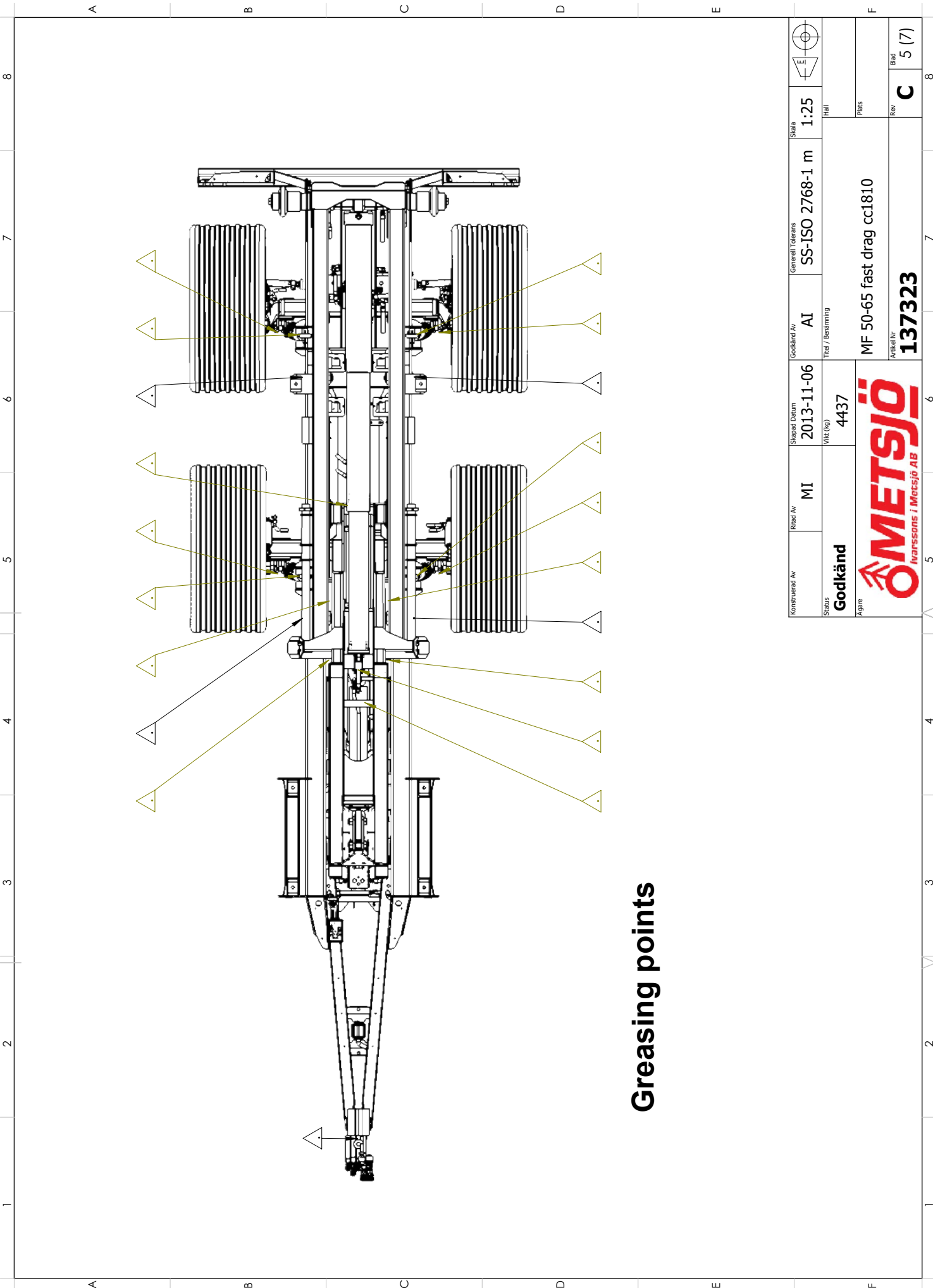
B

C

D

E

F



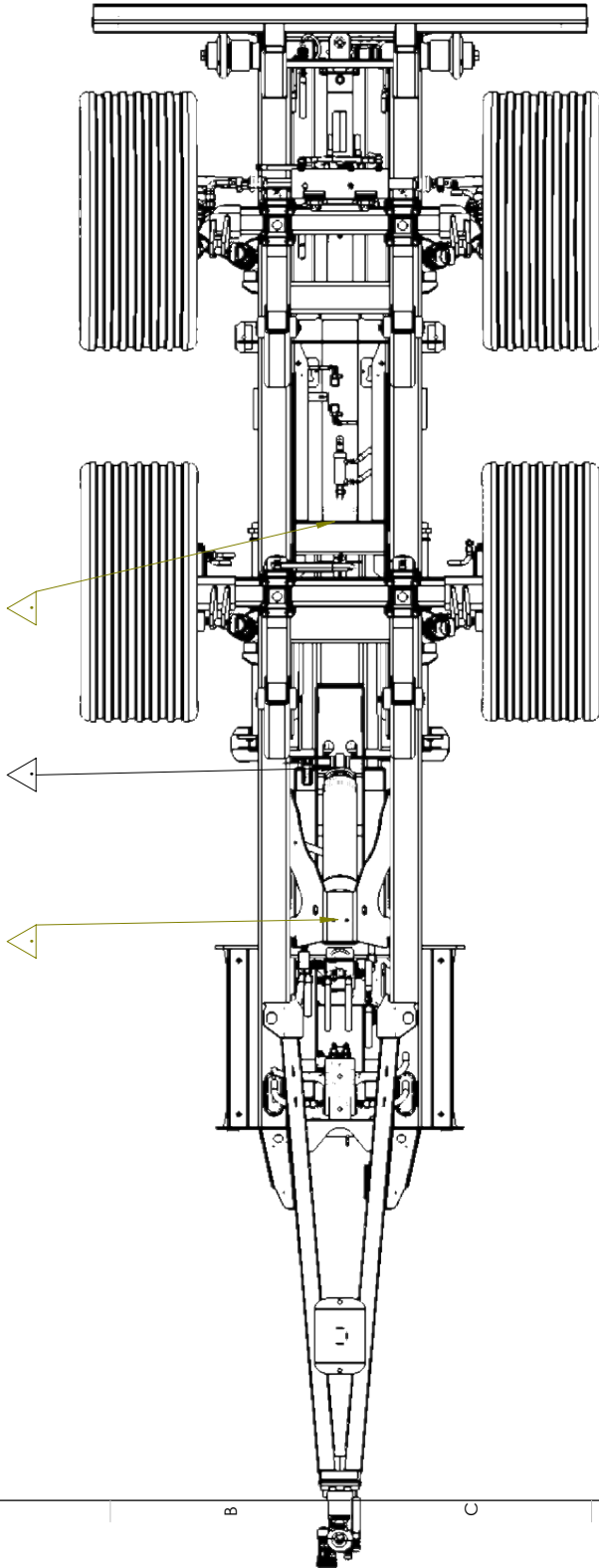
Greasing points

Konstruktör Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Ställa	Skala	Proj
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Status		Wikt (kg)	Titel / Benämning				
Godkänd		4437	MF 50-65 fast drag cci810				
Ägare			Artikel Nr		Rev	Blad	
			137323		C	5 (7)	



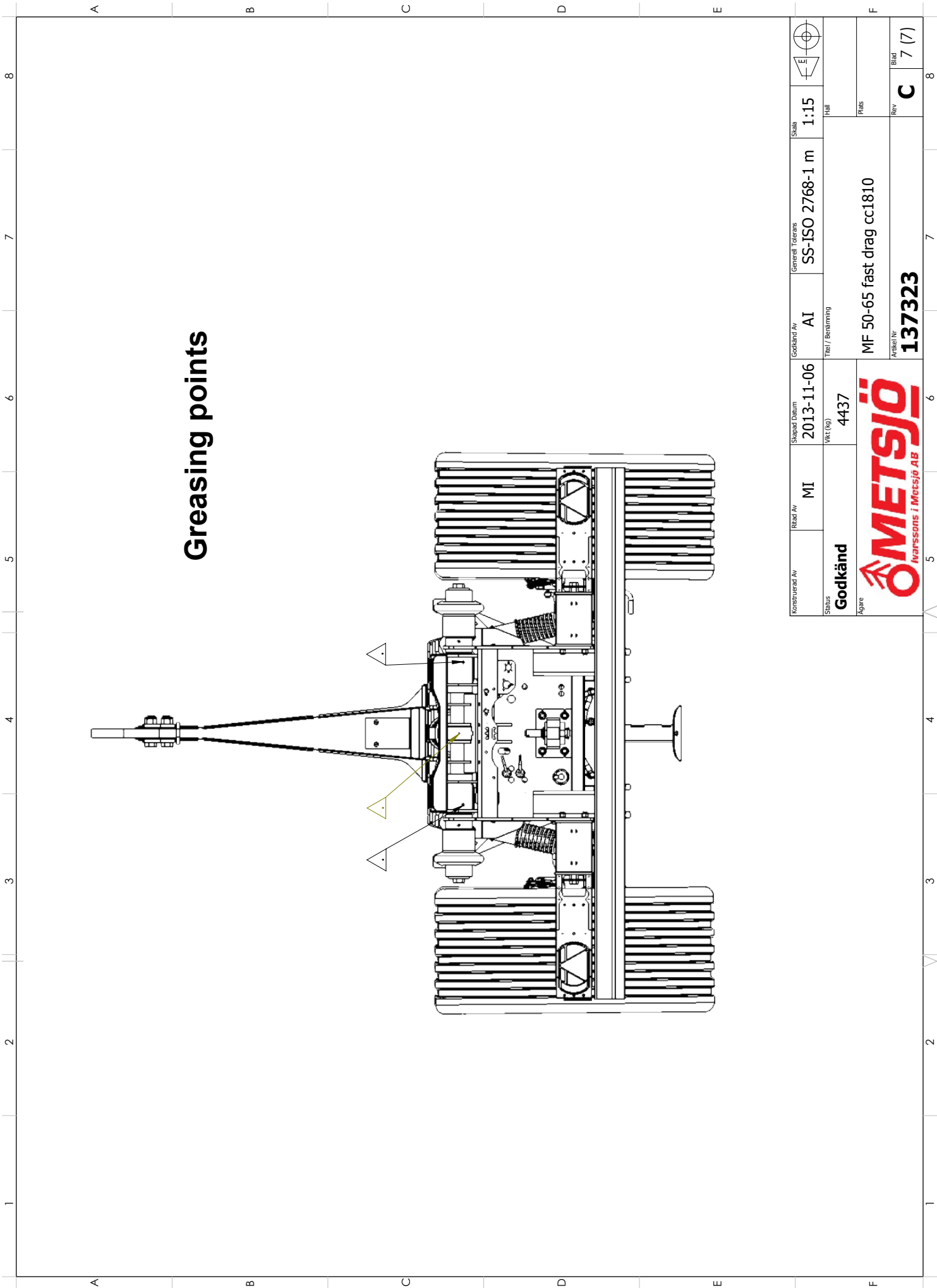
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Greasing points



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Konstruktör Av	Ritad Av	Skapad Datum	Godkänd Av	Skala	Generell Tolerans	Blå
	MI	2013-11-06	AI	1:25	SS-ISO 2768-1 m	1:25
Status		VRK (kg)	Titel / Benämning			
Godkänd		4437	MF 50-65 fast drag cc1810			
Ägare	METSJÖ Ivarssons / Metsjö AB		Artikelnr		Rev	Blå
			137323		C	6 (7)

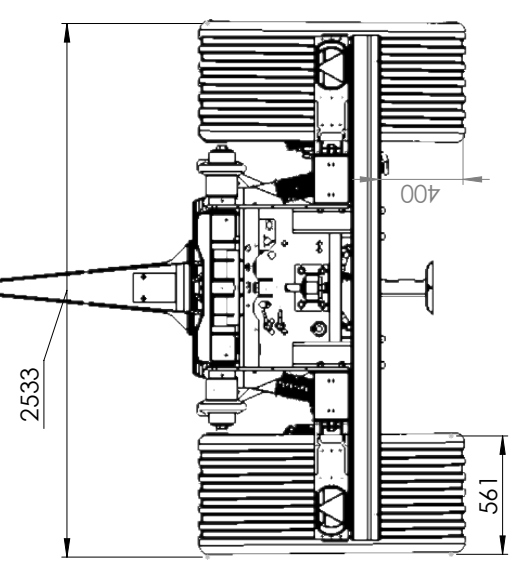
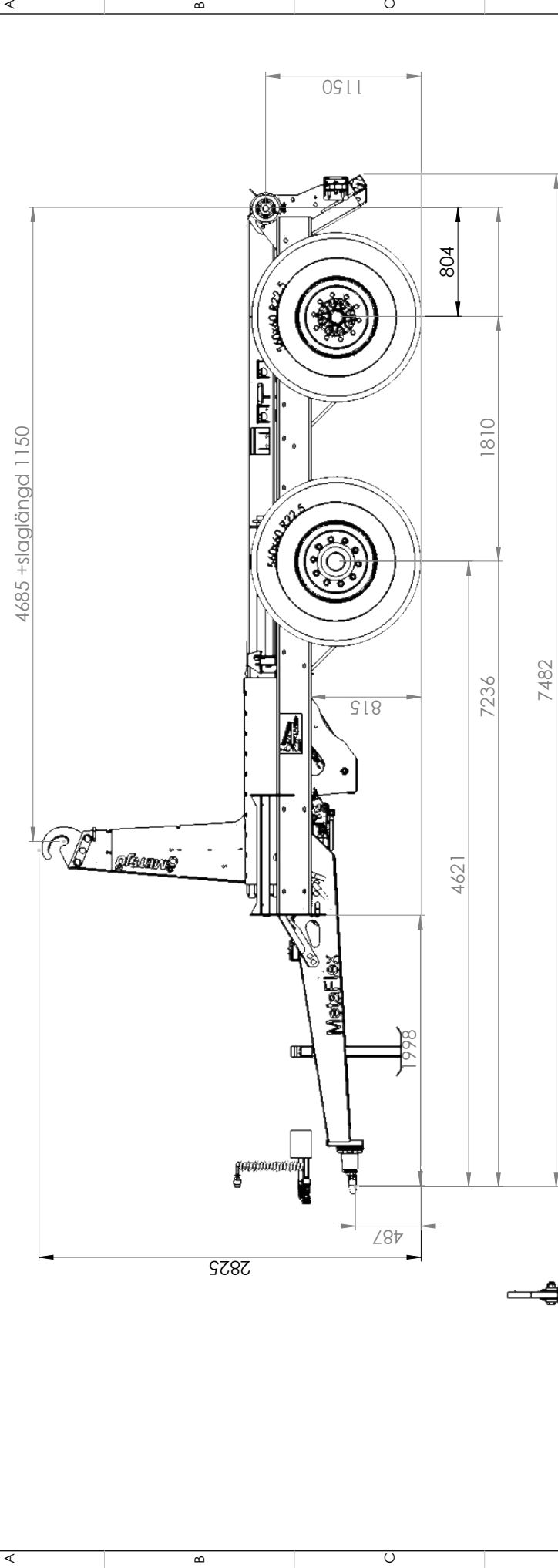


Greasing points

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	
MI	2013-11-06	AI	SS-ISO 2768-1 m	1:15		
Status	Wikt (kg)	Titel / Beskrivning		Häll		
Godkänd	4437	MF 50-65 fast drag cc1810		Färs		
Agare			Artikel Nr	Rev	Blad	
			137323	C	7 (7)	

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8	Godkav	
7	Ändring	
6		
5		
4		
3		
2		
1		
	Nr	
	Datum	
		2014-03-13
		2014-05-14
		2016-03-04

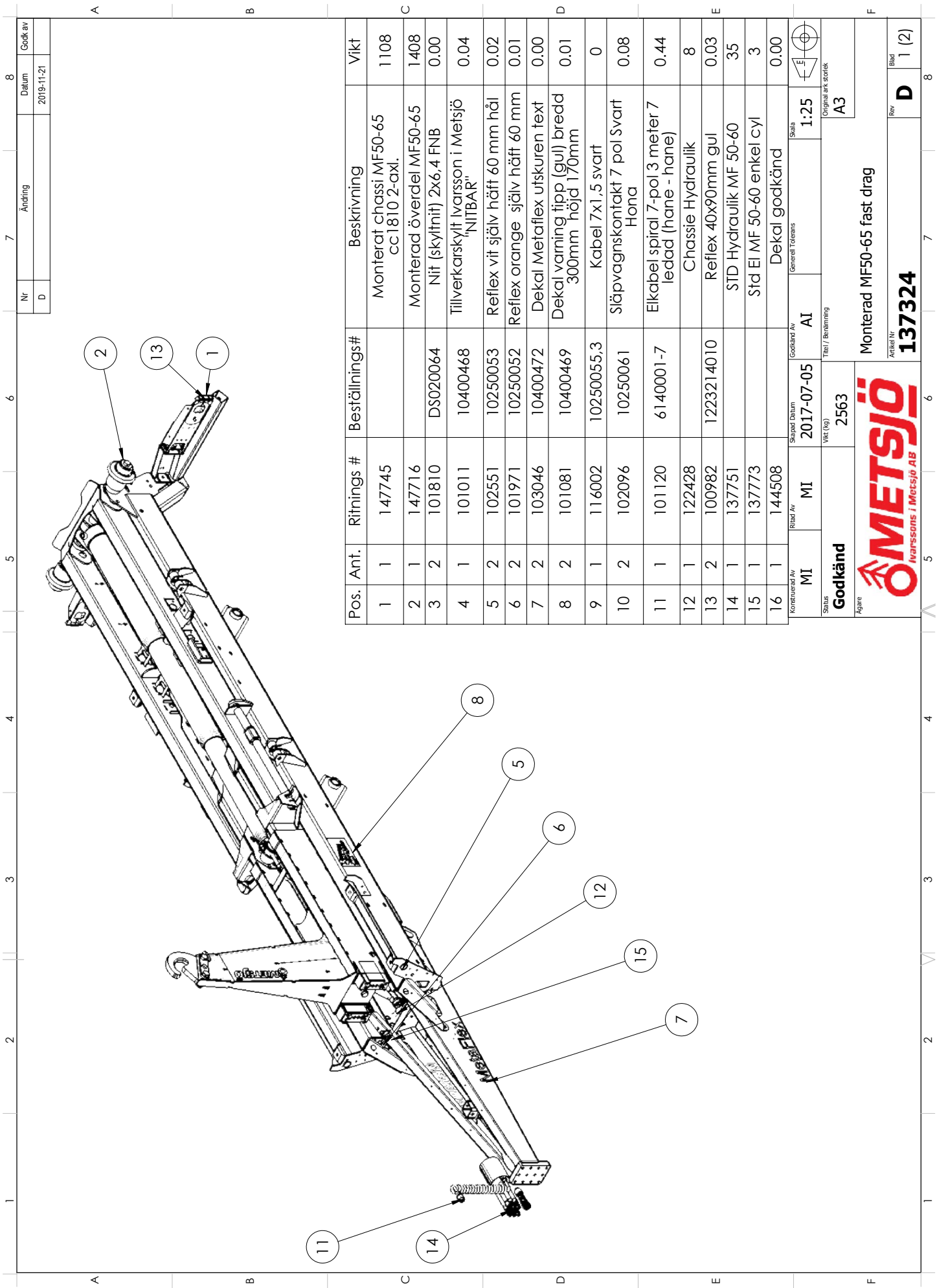


Pos. Ant.	Rifnings #	Beställnings#	Beskrivning	Vikt
1	105366		Bakdrag kit .. Käffradrag	9
2	107880	107880	Dragögla 50 Scharm.	25
3	117152		Axel MQ styr. Nya fjäderblad	610
4	103275		Hjul 10 bult	178.52
5	116931		Axel MQ stel. Nya fjäderblad	496
6	106634	106634	Sföbden Stå komp	13
7	137324		Monterad MF50-65 fast drag	2567
8	117381		Höjd och stäreglering av chassi via elbrytare	2
9	122448		Hyd broms MF 50-60	1

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Skala
	MI	2013-11-06	AI	1:25
Status	Titel / Benämning			
Godkänd	MF 50-65 fast drag cc1810			
Agare	Arkad Nr			
	137323			
	Rev			
	C			
	Blad			
	2 (7)			



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Nr	Ändring	Datum	Godk av
D		2019-11-21	

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	147745		Montrat chassi MF50-65 cc.1810 2-axl.	1108
2	1	147716		Montrad överdel MF50-65	1408
3	2	101810	DS020064	Nit (skylfnit) 2x6,4 FNB	0.00
4	1	101011	10400468	Tillverkskylt Ivarsson i Metsjö "NITBAR"	0.04
5	2	102551	10250053	Reflex vit själv häff 60 mm hål	0.02
6	2	101971	10250052	Reflex orange själv häff 60 mm	0.01
7	2	103046	10400472	Dekal Metaflex utskuren text	0.00
8	2	101081	10400469	Dekal varning tipp (gul) bredd 300mm höjd 170mm	0.01
9	1	116002	10250055,3	Kabel 7x1,5 svart	0
10	2	102096	10250061	Släpvnagskontakt 7 pol Svart Hona	0.08
11	1	101120	6140001-7	Elkabel spiral 7-pol 3 meter 7 ledad (hane - hane)	0.44
12	1	122428		Chassie Hydraulik	8
13	2	100982	1223214010	Reflex 40x90mm gul	0.03
14	1	137751		STD Hydraulik MF 50-60	35
15	1	137773		Std EI MF 50-60 enkel cyl	3
16	1	144508		Dekal godkänd	0.00

Konstruerad Av	Ritad Av	MI	MI	Skapad Datum	2017-07-05	Godkänd Av	AI	Skala	1:25
Status	Godkänd	Vikt (kg)	2563	Titel / Benämning	Original ark stöck				
Ägare	Montrad MF50-65 fast drag								
						Artikel Nr	137324		
						Rev	D	1 (2)	

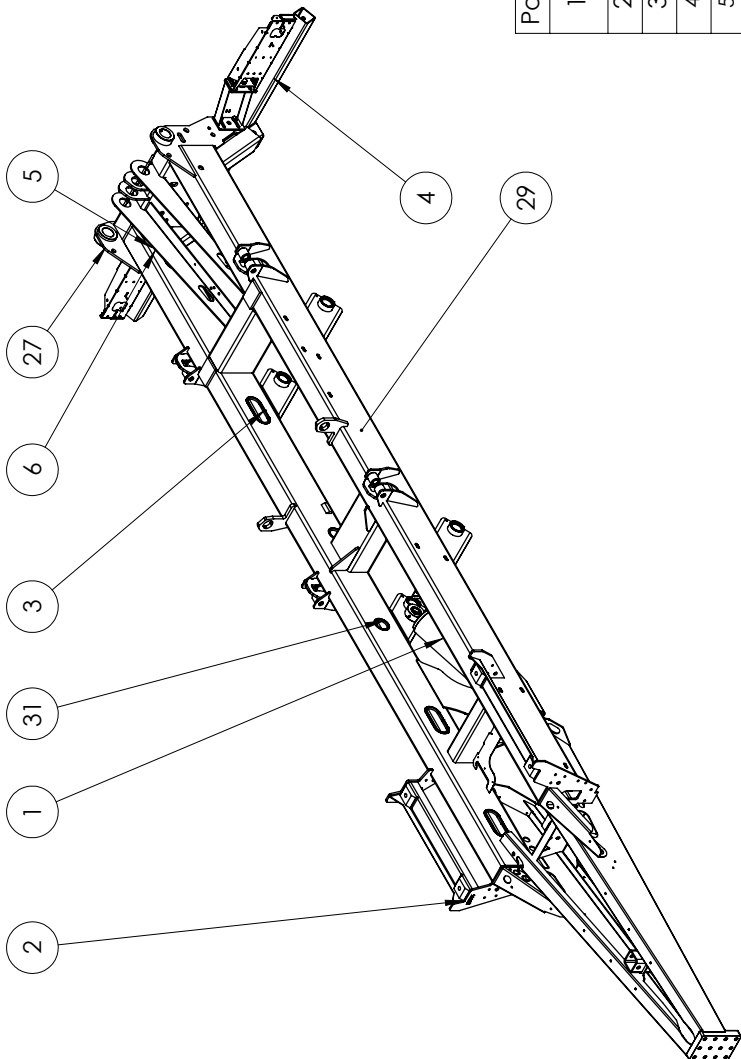
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Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
18	1	134282		Plåt draglås kontakt kopplings låda	
19	2	109821	M6S7080251	Bult tensi M8x25 FZB	
20	2	109797	10400060.03	Mutter M8 FZB Tensi	
21	4	ISO 4017 - M16 x 50-N	9338160501	Bult M16x50 FZB	
22	4	109793	9851601	Mutter M16 FZB nylock	
23	2	124836		Fäste lykthällare MF 50-60	4
24	8	109904	69161701	Bricka 17x30x3 FZB	
25	2	130226		Plåt infästning lykthällare	
26	2	109852	9338240251	Bult M24x25 FZB Helgånga	
27	2	133720		Schirms $\emptyset 112 \times \emptyset 70,3 \times 1,5$	
28	2	142426		Hydraulslang stöbalksindikering	0
29	1	144650	-Grå	svefsat MF50-65 cc1810	935
30	1	146535		Expanderbult	1
31	4	102742	416007	Kantskydd 15x12 6-8 PVC Svart	0.01

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	121200		Tippcylinder MF50-60 160/75-2830s LL40	
2	4	101918	45499BN06	Grön amid slitplatta 120x80x30	0.24
3	10	102742	416007	Kantskydd 15x12 6-8 PVC Svart	0.03
4	1	121731		UK-skydd bak MF50-60	56
5	2	122263		Sprint 30L128 ändborradx1	
6	2	109897	SRKB09035301	Bricka 9x35x3 FZB	
7	4	109875	7000107544.2	Vagnsbult M8x25 FZB	
8	4	109896	NB08251	Bricka 8x25x1,5 FZB	
9	4	109790	M8NylockNiklad	Mutter M8 FZB nylock	
10	2	Hex Screw GradeAB_ISO			
11	2	131019		Cyl. 60/32-400 Hylsa-L30 Inb.61.5	11
12	2	101108		Sprint No-Mid-Metax tippkalv nedre	0.47
13	4	109911	472031	Låsring SGH 31	
14	2	130222		Lykthällare	
15	2	100982	1223214010	Reflex 40x90mm gul	0.03
16	2	109868	91412025	Stoppskruv M12x25 Insex	
17	1	109601	109601	Bakljus diod	1.72

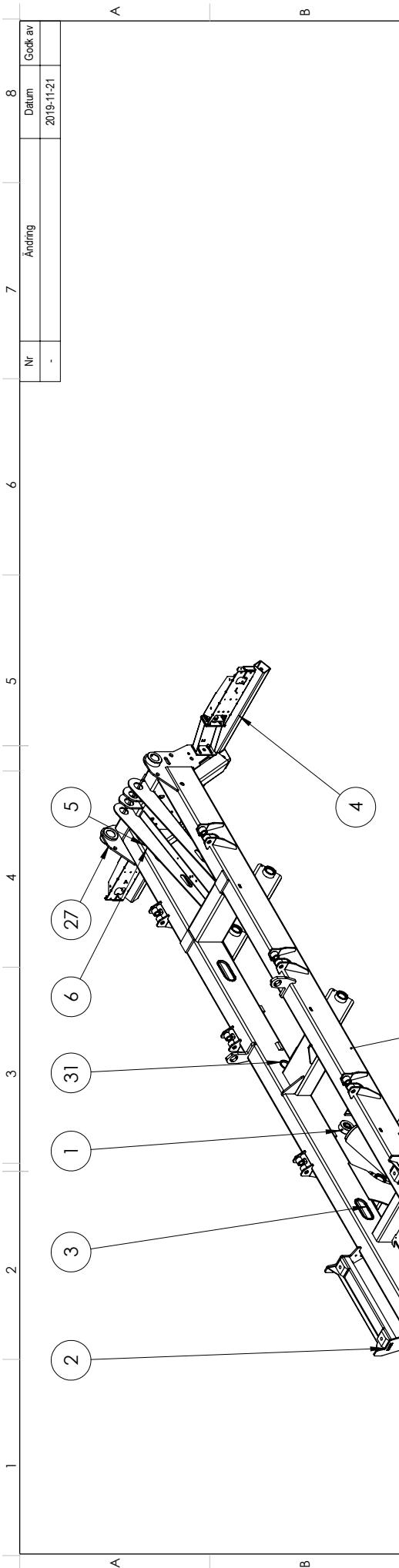
Konstruktör Av	Ritad Av	Skapad Datum	Godkänd Av	Skala
HN	HN	2019-11-12	AI	1:20
Titel / Benämning			Generell Tolerans	Original art. storlek
Godkänd			SS-ISO 2768-1 m	A3
Vikt (kg)			1108	

Status	Titel / Benämning	Artikel nr	Rev
Godkänd	Monterat chassi MF50-65 cc1810 2-axl.	147745	-
Aggre			1 (5)



Nr	Ändring	Datum	Godk av
-		2019-11-20	

Nr	Ändring	Datum	Godk av
-		2019-11-21	



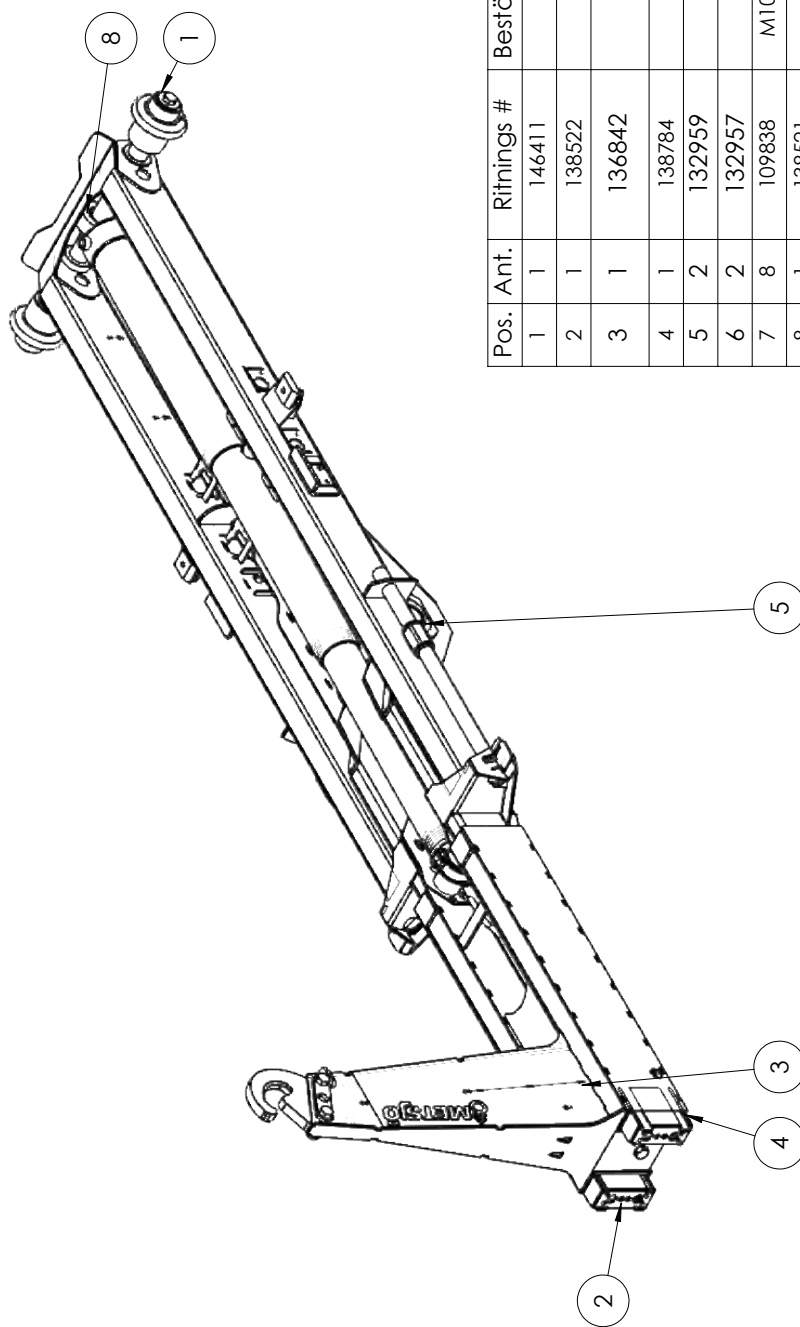
Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	121200		Tippcylindrar MF50-60 1 60/75-2830s LL40	
2	4	101918	45499BN06	Grön amid slitplatta 120x80x30	0.24
3	10	102742	416007	Kantskydd 15x12 6-8 PVC Svart	0.03
4	1	121731		UK-skydd bak MF50-60	56
5	2	122263		Sprint 30L128 ändborradx1	
6	2	109897	SRKB09035301	Bricka 9x35x3 FZB	
7	4	109875	7000107544,2	Vagnsbult M8x25 FZB	
8	4	109896	NB08251	Bricka 8x25x1,5 FZB	
9	4	109790	M8Nylockniklad	Mutter M8 FZB nylock	
10	2	Hex Screw GradeAB_ISO			
11	2	131019		Cyl. 60/32-400 Hylsa-L30 Inb.61.5	11
12	2	101108		Sprint No-Mid-Metax tippkolv nedre	0.47
13	4	109911	472031	Låsring SGH 31	
14	2	130222		Lykthållare	
15	2	100982	1223214010	Reflex 40x90mm gul	0.03
16	2	109868	91412025	Stoppsskruv M12x25 Insex	
17	1	109601	109601	Bakljus diod	1.72
18	1	134282		Plåt dragljus kontakt kopplings låda	

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
19	2	109821	M6S7080251	Bult tensi M8x25 FZB	
20	2	109797	10400060.03	Mutter M8 FZB Tensi	
21	4	ISO 4017 - M16 x 50-N	9338160501	Bult M16x50 FZB	
22	4	109793	9851601	Mutter M16 FZB nylock	
23	2	124836		Fäste lykthållare MF 50-60	4
24	8	109904	69161701	Bricka 17x30x3 FZB	
25	2	130226		Plåt infästning lykthållare	
26	2	109852	9338240251	Bult M24x25 FZB Helgånga	
27	2	133720		Schims ø112xø70,3x1,5	
28	2	142426		Hydraulslang stödbalksindikering	0
29	1	144063	-Grå	Setsat chassi MF50-65 cc1305 3-axl.	970
30	1	146535		Expanderbult D 40 L 90	1
31	2	102742	416007	Kantskydd 15x12 6-8 PVC Svart	0.01

Kontrollerad Av	HN	Ritad Av	HN	Skapad Datum	2019-11-21	Godkänd Av	AI	Skala	1:20	Original art. storlek
Status	Godkänd		Vikt (kg)	1143	Titel / Benämning		A3			
Monterat chassi MF50-65 cc1305 3-axl.										
Artikel nr 147724										
Rev - 1 (5)										



8	Ändring		
7	Nr	A	
6	Datum	2019-11-18	
5	Ändrad av		

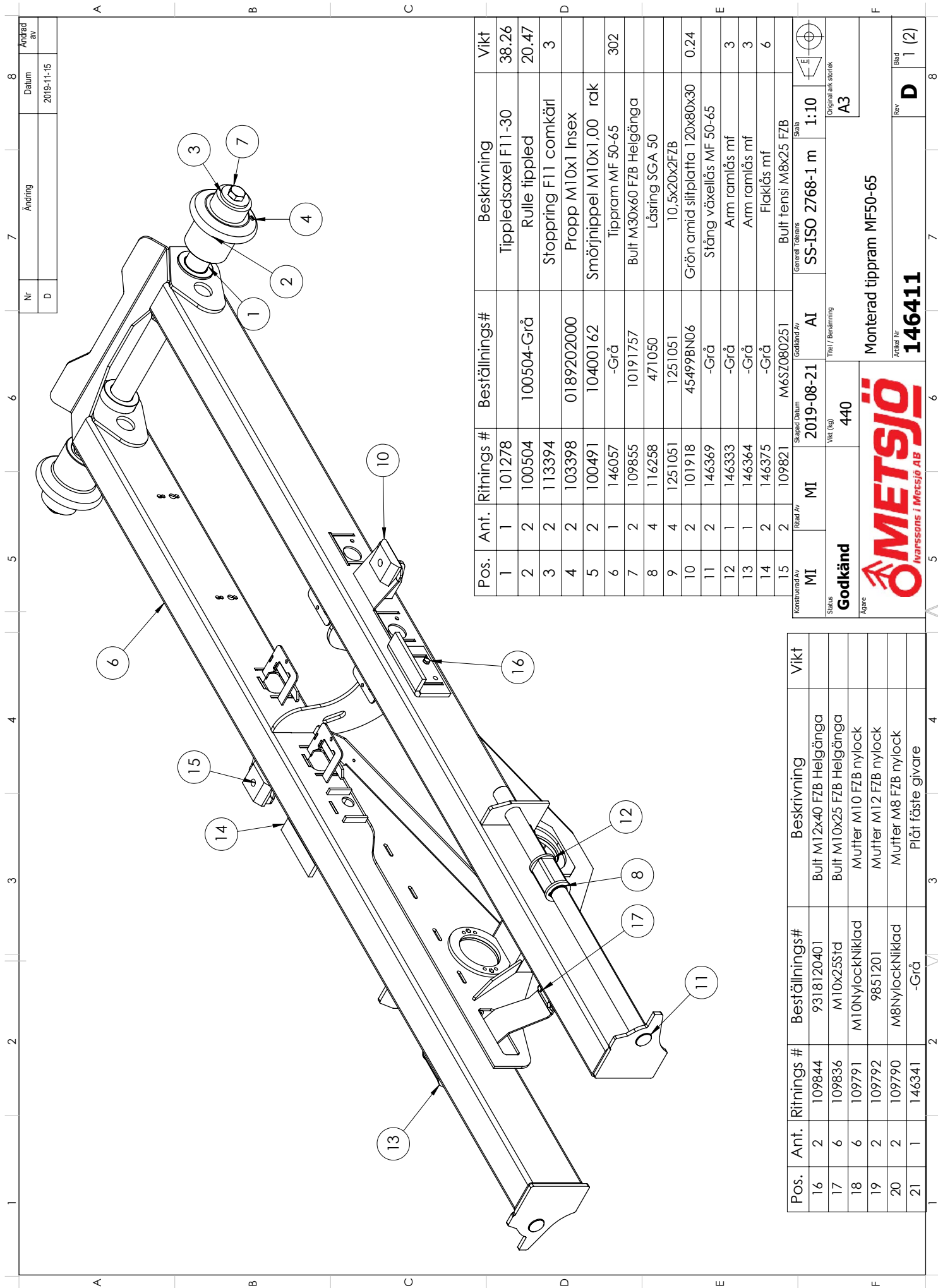


Vid montering av växelarm, använd shims 145115 så att axiella spelet blir max 4 mm

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	146411		Monterad tippram MF50-65	440
2	1	138522		Växelarm MF 50-65	462
3	1	136842		Cyl 110-63 inb. 1365 sl. 1150 L50 inv. M30	68,90
4	1	138784		Torn mont. MF 50-65	292
5	2	132959		Insatshylsa tornled MF50-60	5
6	2	132957		Distans Tornled MF50-60	0,38
7	8	109838	M10x40Std	Bult M10x40 FZB Helgöngå	
8	1	138521		Växelcyl MF50-60	134
9	8	109798	10400060,01	Mutter M10 FZB Tensi	
10	2	145115		Distans Tornled MF Shims 133x100x1,5	0,07

Konstruktör Av	HN	Read Av	HN	Skapad Datum	2019-11-15	Godkänd Av	AI	General Tolerans	SS-ISO 2768-1 m	Skala	1:20	Original ark.storlek	A3
Status	Godkänd	Vikt (kg)	1408	Titel / Benämning		Monterad överdel MF50-65							
Aggre		Artikel Nr		147716		Rev		A					





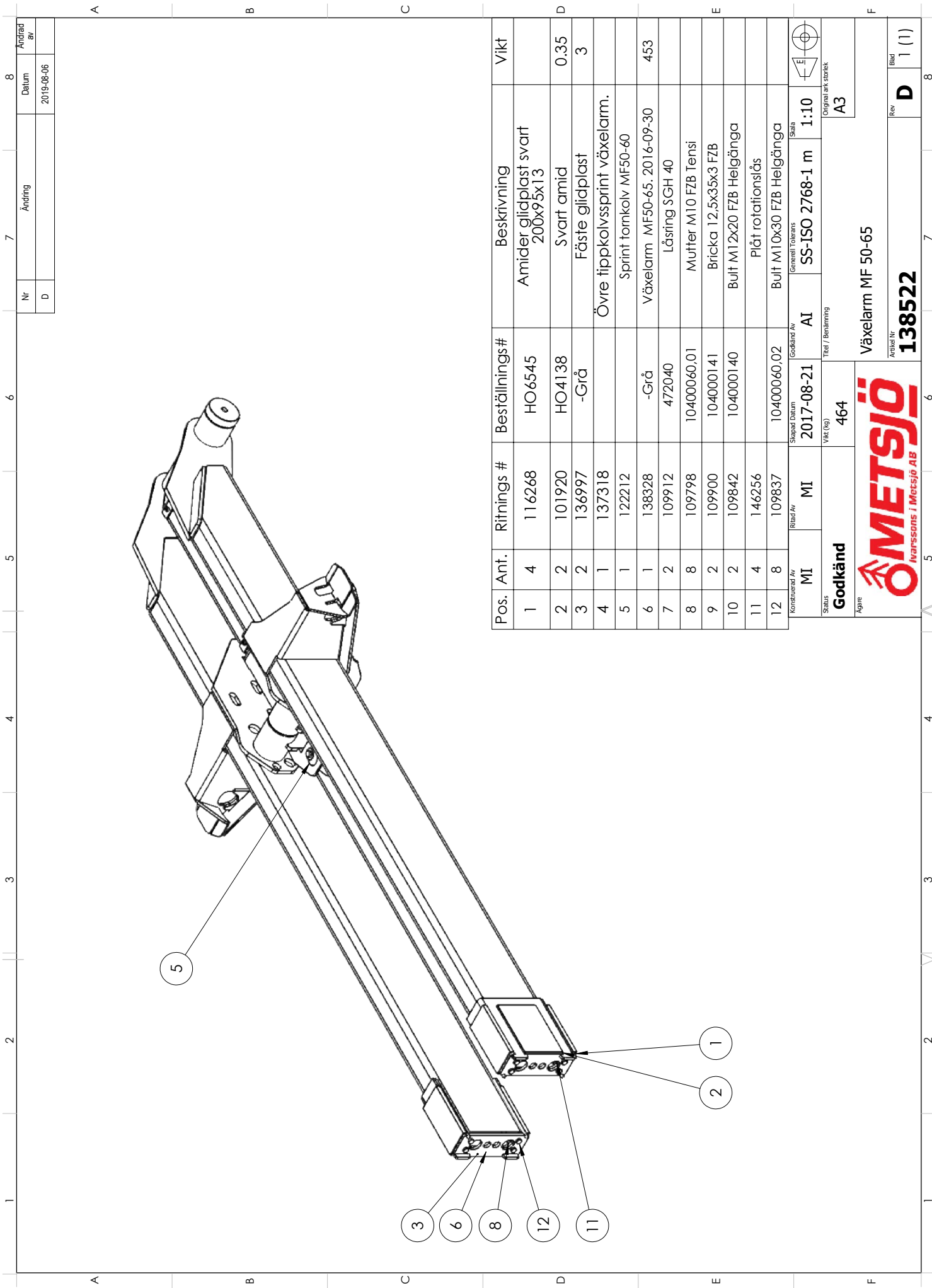
Nr	Ändring	Datum	Andrad av
D		2019-11-15	

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	101278		Tippledsaxel F11-30	38.26
2	2	100504	100504-Grå	Rulle tipped	20.47
3	2	113394		Stoppring F11 comkärl	3
4	2	103398	0189202000	Propp M10x1 Insex	
5	2	100491	10400162	Smörjnippei M10x1,00 rak	
6	1	146057	-Grå	Tippram MF 50-65	302
7	2	109855	10191757	Bult M30x60 FZB Heigänga	
8	4	116258	471050	Låsring SGA 50	
9	4	1251051	1251051	10.5x20x2FZB	
10	2	101918	45499BN06	Grön amid slitplatta 120x80x30	0.24
11	2	146369	-Grå	Stång växelås MF 50-65	
12	1	146333	-Grå	Arm ramiås mf	3
13	1	146364	-Grå	Arm ramiås mf	3
14	2	146375	-Grå	Flaklås mf	6
15	2	109821	M6S7080251	Bult tensi M8x25 FZB	

Konstruktör Av	MI	Skapad Datum	2019-08-21	Godkänd Av	AI	Skala	1:10
Status	Godkänd	Vikt (kg)	440	Titel/ Benämning		Original sk. storlek	A3
Agare		Monterad tippram MF50-65					
Zitella Nr		146411					
Rev	D	1 (2)					

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
16	2	109844	9318120401	Bult M12x40 FZB Heigänga	
17	6	109836	M10x25Std	Bult M10x25 FZB Heigänga	
18	6	109791	M10NylöckNiklad	Mutter M10 FZB nylöck	
19	2	109792	9851201	Mutter M12 FZB nylöck	
20	2	109790	M8NylöckNiklad	Mutter M8 FZB nylöck	
21	1	146341	-Grå	Plåt fäste gjvare	

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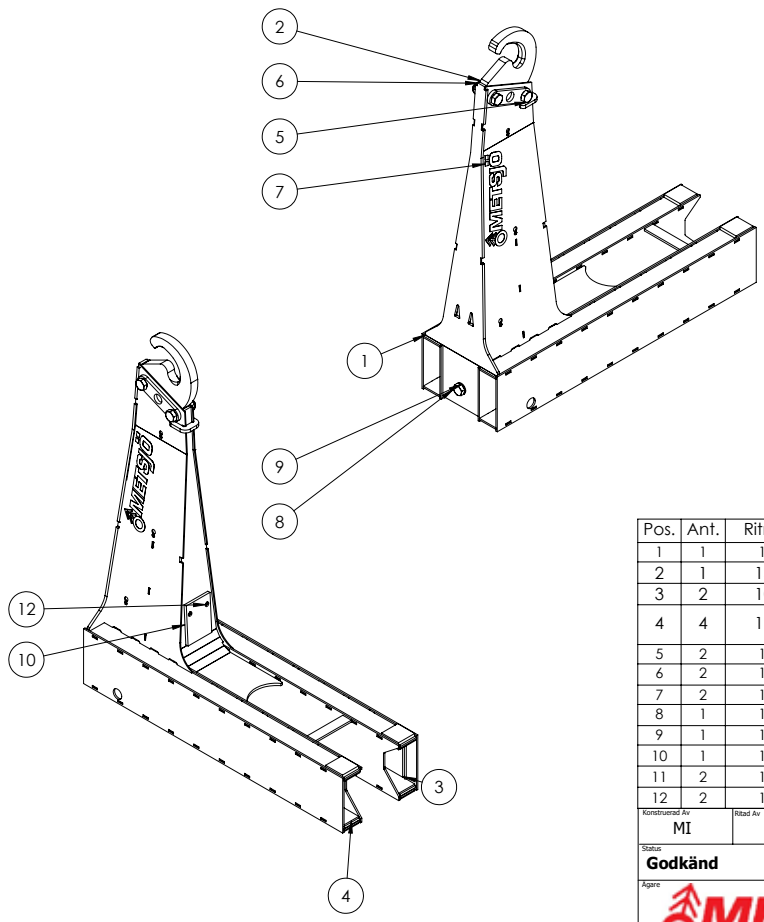


Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	4	116268	HO6545	Amider glidplast svart 200x95x13	
2	2	101920	HO4138	Svart amid	0.35
3	2	136997	-Grå	Fäste glidplast	3
4	1	137318		Övre tippkolvssprint växelarm.	
5	1	122212		Sprint tornkolv MF50-60	
6	1	138328	-Grå	Växelarm MF50-65. 2016-09-30	453
7	2	109912	472040	Lösring SGH 40	
8	8	109798	10400060,01	Mutter M10 FZB Tensi	
9	2	109900	104000141	Bricka 12.5x35x3 FZB	
10	2	109842	104000140	Bult M12x20 FZB Helgänga	
11	4	146256		Plåt rotationslås	
12	8	109837	10400060,02	Bult M10x30 FZB Helgänga	

Konstruktör Av	MI	Ritad Av	MI	Skapad Datum	2017-08-21	Godkänd Av	AI	Skala	1:10
Status	Godkänd	Vikt (kg)	464	Titel / Benämning	SS-ISO 2768-1 m	Original ark storlek	A3		
<p>METSJÖ Ivarssonssons i Metsjö AB</p> <p>Växelarm MF 50-65</p> <p>Artikel Nr 138522</p> <p>Rev D Blad 1 (1)</p>									

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Nr	Ändring	Datum	Ändrad av
-		2017-07-05	
A		2017-09-12	

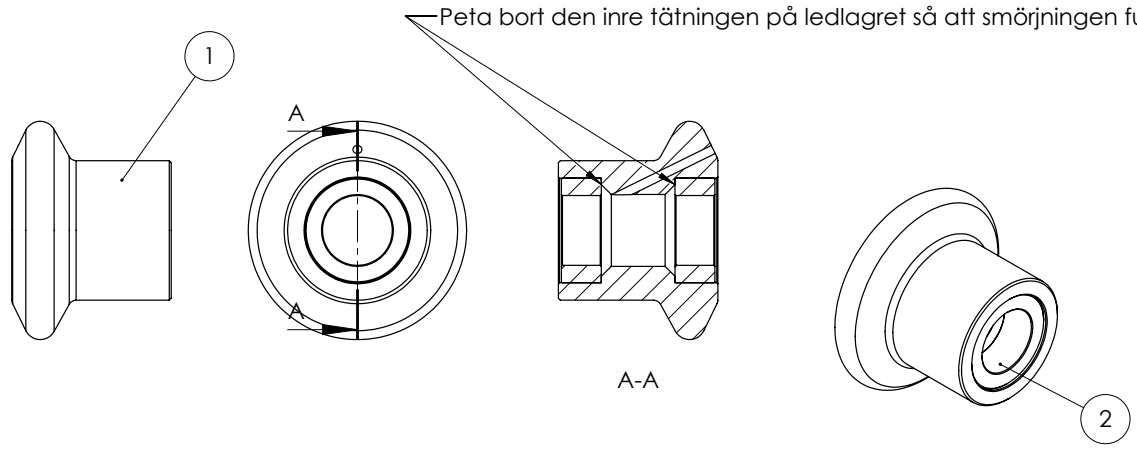


Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	138771	138771-Grå	Torn MF50-65	259
2	1	135641	135641-Vit	Växelkrok Bultad MF50-60-75	
3	2	101920	HO4138	Plast borråd	0.35
4	4	116268	HO6545	Amider glidplast svart 200x95x13	
5	2	129985	10191754	Bult M30x120 FZB	
6	2	109796	9853001	Mutter M30 FZB nylock	
7	2	105447	10400476	Dekal METSJÖ	
8	1	109855	10191757	Bult M30x60 FZB Helgång	
9	1	109907	SRB310521	Bricka 31x52x4 FZB	
10	1	141741		Plast borråd	0.34
11	2	109798	10400060.01	Mutter M10 FZB Tensi	
12	2	121592	121592	Bult M10x20 FZB FörsänktInsex	

Kontrollerad av: MI	Ritad av: MI	Skapad Datum: 2017-12-05	Godkänd av: AI	Generell Tolerans: SS-ISO 2768-1 m	Skala: 1:15	Original ark storlek: A3
Status: Godkänd	Vikt (kg): 290	Titel / Benämning: Torn mont. MF 50-65		Artikel Nr: 138784		
Agare: METSJÖ Ivarssons i Metsjö AB			Rev: A	Blad: 1 (1)		

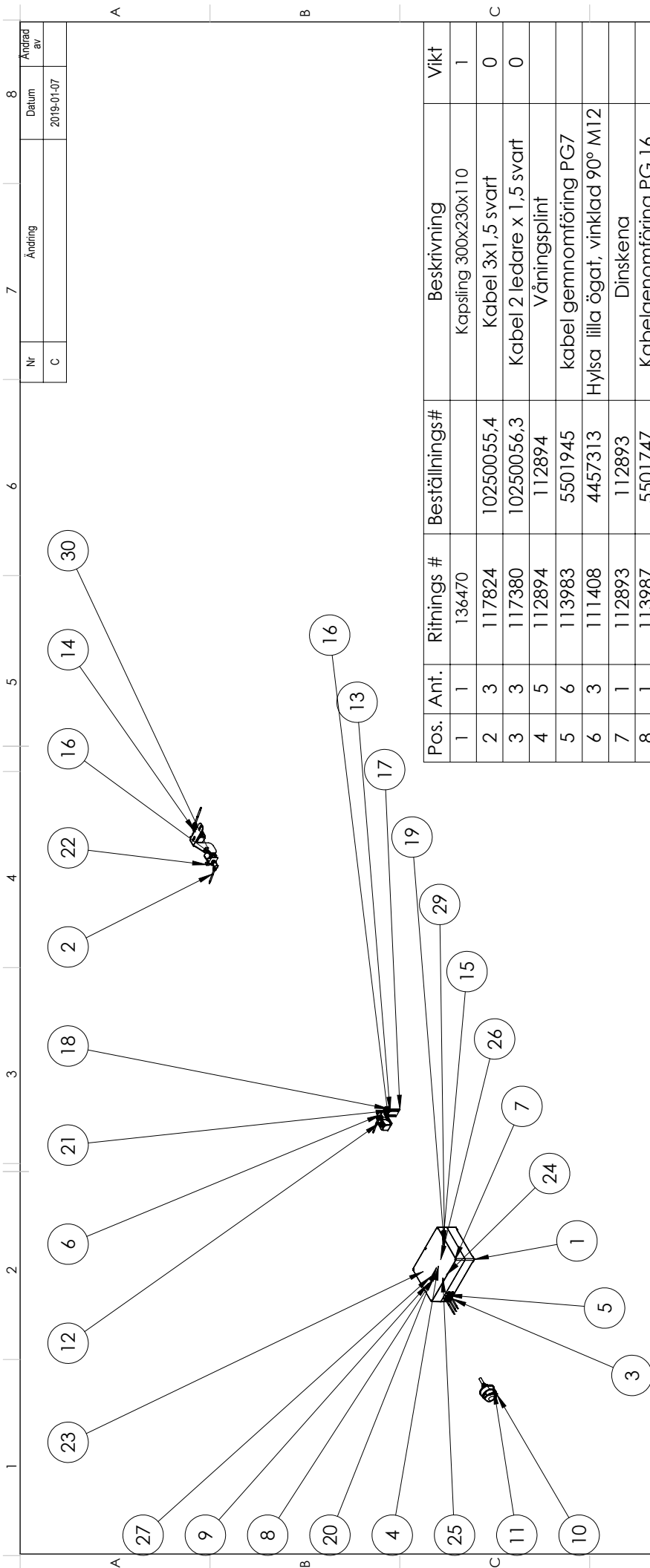
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Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	100502		Flakväxelrulle	17.46
2	2	100503	10180055	Leدلager 70x105 L43	1.51

Konstruerad Av: OK	Ritad Av: OK	Skapad Datum: 2011-03-15	Godkänd Av: AI	Generell Tolerans: SS-ISO 2768-1 f	Skala: 1:5	Original ark storlek: A4
Status: Godkänd	Vikt (kg): 20.47	Titel / Benämning: Rulle tippad		Artikel Nr: 100504		
Agare: METSJÖ Ivarssons i Metsjö AB			Rev: D	Blad: 1 (1)		



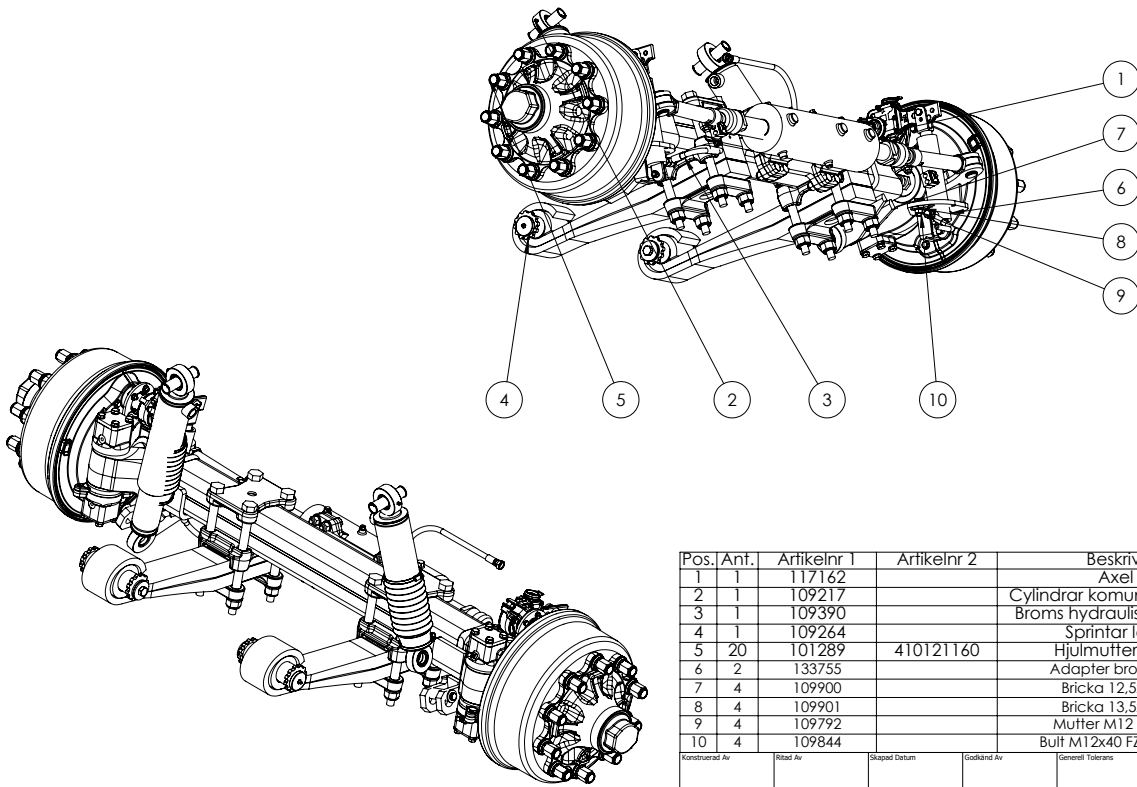
Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
19	2	110155	TENSIFLO51	Mutter M5 FZB Tensi	
20	3	126042		Microrelä 12V med sockel	0
21	2	109885	BRB0641	Bricka 6,4x12x1,5 FZB	
22	4	117901	NB06221	Bricka 6x22x1,5 FZB	
23	1	108427		Lysdiod röd 12V metallhållare Ø8mm	
24	2	110493	7018005	By 255 Diod 3A 1300V	
25	1	133806		Bottnplåt kapsling 300x230	
26	1	133808		Relä fäste kapsling	
27	1	118086	118086	Kontramutter för kabelförskruv. i plast PG16	
28	6	118087	5502018	Kontramutter för kabelförskruv. i plast PG 7	
29	3	134910	24185625	Kabelskor A2585 R blå	
30	1	138538		Tinn växlingsindikerings plåt	

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	136470		Kapsling 300x230x110	1
2	3	117824	10250055,4	Kabel 3x1,5 svart	0
3	3	117380	10250056,3	Kabel 2 ledare x 1,5 svart	0
4	5	112894	112894	Våningsplint	
5	6	113983	5501945	kabel gemnomföring PG7	
6	3	111408	4457313	Hylsa lilla ögat, vinklad 90° M12	
7	1	112893	112893	Dinskena	
8	1	113987	5501747	Kabelgenomföring PG 16	
9	1	116875	5573241	Kabel 12G1,5 gr	0
10	1	116773	20501301	Släpavagnskontakt 13-polig plast, hona	0
11	3	117885	84050301	Spårskruv M5x30 FZB	
12	2	117889	84050401	Spårskruv M5x40 FZB	
13	2	117884	84050201	Spårskruv M5x20 FZB	
14	4	109871		Spårskruv M5x50 FZB, Kapad 100 (109873)	
15	1	109869	84050161	Spårskruv M5x16 FZB	
16	3	126292	IM5135	Rektangulär magnetöga	0
17	1	127053		Givar plåt	
18	8	110155	TENSIFLO51	Mutter M5 FZB Tensi	

Status: **Godkänd**
 Skapad Datum: 2017-09-25
 Vikt (kg): 3
 Titel / Benämning: Std EI MF 50-60 enkel cyl
 Artikel Nr: 137773
 Rev: C
 Skala: 1:20
 Original ark storlek: A3
 Generell Tolokans:

Nr	Ändring	8
C		Andrad av
		Datum
		2019-01-07

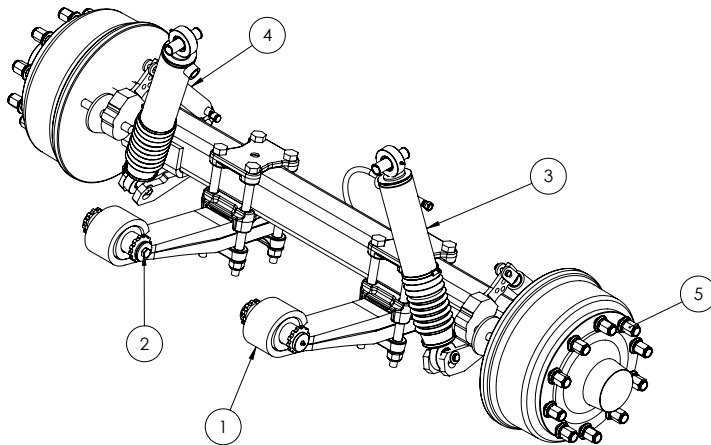
Nr	Ändring	Datum	Godk av
B		2014-12-04	
C		2016-06-07	
D		2017-01-17	



Pos.	Anf.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	1	117162		Axel styr	555
2	1	109217		Cylindrar komunicerande kärll	42
3	1	109390		Broms hydraulisk styrbar axel	7
4	1	109264		Sprintar led axel	7
5	20	101289	410121160	Hjulmutter M22x1,5	0.28
6	2	133755		Adapter bromscylinder	
7	4	109900		Bricka 12,5x35x3 FZB	
8	4	109901		Bricka 13,5x24x2 FZB	
9	4	109792		Mutter M12 FZB nylock	
10	4	109844		Bult M12x40 FZB Helgänga	

Konstruerad Av	Read Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	1:10	
Status	Godkänd	Vikt (kg)	618	Titel / Benämning	Plats		
Agare			Axel MQ styr. Nya fjäderblad		Rev	D	Blad 1 (1)
				Artikel nr			117152

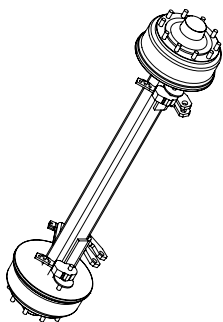
Nr	Ändring	Datum	Godk av
A		2013-02-26	
B		2013-02-27	
C		2016-06-07	



Pos.	QTY.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	117159	117159	Axel stel.	442
2	1	109264		Sprintar led axel	7
3	1	109217		Cylindrar komunicerande kärll	42
4	1	109192		Broms hydraulisk stel axel	7
5	20	101289	410121160	Hjulmutter M22x1,5	0.28

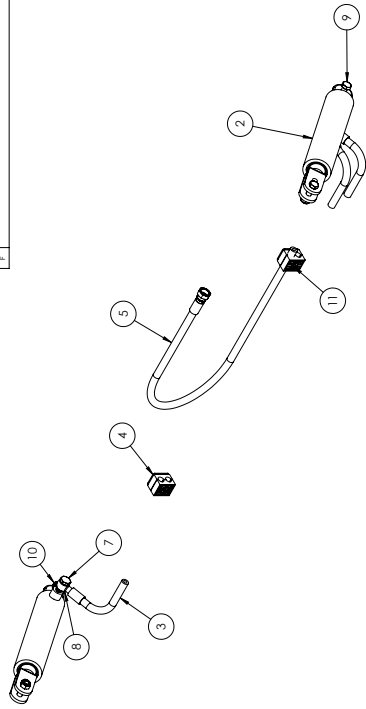
Konstruerad Av	Read Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	1:10	
Status	Godkänd	Vikt (kg)	504	Titel / Benämning	Plats		
Agare			Axel MQ stel. Nya fjäderblad		Rev	D	Blad 1 (2)
				Artikel nr			116931

Nr	Ändring	Datum	Godk av
-		2011-05-10	
A		2011-05-20	
B		2013-02-12	



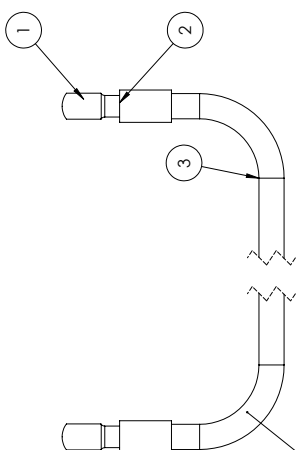
Pos./Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	105064	410121090	Axel 120x120, 10 Buft	320
2	MI	2011-05-20	AI SS-ISO 2768-1 m	1:20
Godkänd		320	Axel stel	B
METSJÖ			109191	1 (1)

Nr	Ändring	Datum	Godk av
-		2013-13	
E		2013-08	
F		2014-01	



Pos./Ant.	Artikelnr	Beställings#	Beskrivning	Vikt
2	101301	101301	Bromsfläder 45/92 mts. 200 ± 90	3,13
3	109522	109522	Slang Exoms 3/8" axel	0
4	109524	109524	Komplet bromsfl 12 kommer	0,05
5	101519	101519	Komplet bromsflang ram axel	0,21
6	104392	688110	Banjo 1/4" dubbel	
7	101088	881100	Banjo 1/4" enkel	
8	101087	450100	Bufl M10x4x78 Högslängd	
9	109538		Muller M10 78 nyvack	
10	109791		Bufl M6x35 F8 Högslängd	
11	109925		AI SS-ISO 2768-1 m	1:15
Godkänd		MI	2011-05-10	B
METSJÖ			109192	1 (1)

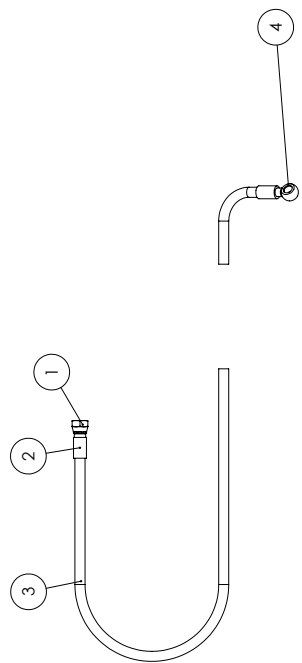
Nr	Ändring	Datum	Godk av
-		2011-05-10	
A		2012-12-03	
B		2014-08-11	



Slanglängd 1400mm

Pos./Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	101088	A502910404	Banjo 1/4" - stolpe 1/4"	0,02
2	101037	1100000404	Hylsa 1/4" 1W	0,02
3	101566	241804	Hydraulslang 1/4"	
LH	MI	2011-05-10	AI SS-ISO 2768-1 m	1:2
Godkänd		0	109522	B
METSJÖ			109522	1 (1)

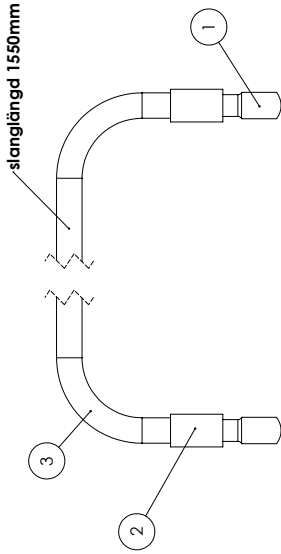
Nr	Ändring	Datum	Godk av
B		2012-12-03	
C		2013-08-09	
D		2014-08-11	



Pos./Ant.	Artikelnr	Beställingsnr	Beskrivning	Vikt
1	101789	A500010604	Stolpe 1/4" - INV R 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
LH	MI	2011-04-15	AI	1:5
Godkänd		0,21	101519	B
METSJÖ			101519	1 (1)

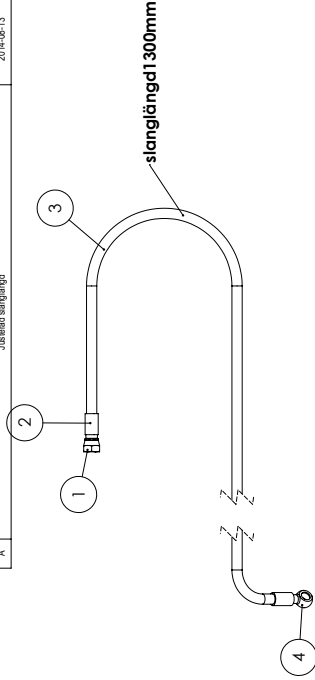
Model/pos	Slanglängd
stel axel	1100mm
styrbar axel	1300mm

Nr	Ändring	Datum	Code av
-		2011-05-10	
A	Jämförd slanglängd	2014-06-13	



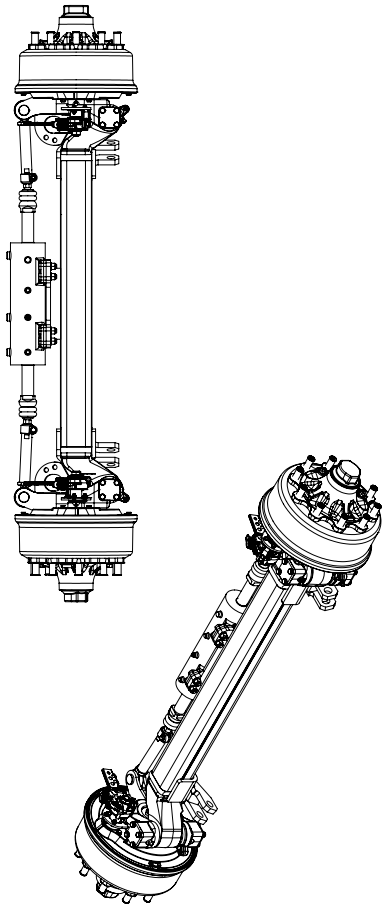
Pos./Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	101088	A502910404	Banjo 1/4" - stolpe 1/4"	0.02
2	101037	1100000404	Hylsa 1/4" LW	0.02
3	101566	241804	Hydraulslang 1/4"	
Godkänd METSJÖ 109531 bromsslängd styraxel mellan cyl				1 (1)

Nr	Ändring	Datum	Code av
-		2011-05-10	
A	Jämförd slanglängd	2014-06-13	



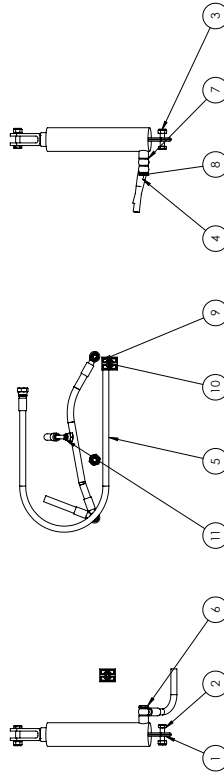
Pos./Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	101789	A500010404	Stolpe 1/4" - INV R 3/8"	0.02
2	101037	1100000404	Hylsa 1/4" LW	0.02
3	101518	241804	Hydraulslang 1/4"	
4	101088	A502910404	Banjo 1/4" - stolpe 1/4"	
Godkänd METSJÖ 109534 Bromsslängd styraxel ram-axel				1 (1)

Nr	Ändring	Code av
-		2011-05-10
A		2014-06-13



Pos./Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	1092887	A1121100000	Åxelskydd nr 120	
2	MI	2011-05-20	AI SS-ISO 2768-1 m 1:10	
Godkänd METSJÖ 109400 Åxel #120 styr				1 (1)

Nr	Ändring	Code av
-		2014-06-13
B		2014-06-13
C		2014-06-13
D		2014-06-13



Pos./Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
2	101301	101301	Broms cylinder #103	31.3
3	4	109288	M 10x40x16	
4	1	109291	M 10x40x16	
5	1	109292	M 10x40x16	
6	1	101557	2681100	
7	1	101392	2681110	
8	1	109294	2681120	
9	2	109295	2681130	
10	2	109296	2681140	
11	2	109297	2681150	
Godkänd METSJÖ 109390 Hydraulisk styrbår axel broms och medspårare				1 (1)

Nr	Ändring	Datum	Godk av
0		2019-07-01	

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	8	109795	9852401	Mutter M24 FZB nylock	
2	8	109915	100254012507	Bricka 31x45x4 Hård	
3	2	114448	114448	Bladfjädrar	20
4	2	112583	112583	Lenkerblatt 2 Nr:629992402	
5	3	116995	116995	Mellanlägg	
6	2	113514	113514	BPW axelinfästning underdel	
7	2	114418	114418	Mellandel fjäderfäste	
8	8	144794	93110243201	Bult M24X320 10.9 fzb M6S	
9	2	114450	114450	Styrtapp	
10	2	117338	117338	Svetsring bladfjäderfästet	
11	2	144112		Undere slang fäste axel	
12	2	144113		Övere slang fäste axel	
13	2	109885	BRB0641	Bricka 6.4x12x1.5 FZB	
14	2	109789	9850601	Mutter M6 FZB nylock	
15	2	ISO 8677-M6x50-18-N		Vagnsbult M6x50 FZB	
16	2	131381	08.03.032.22.2 5.0	BPW övre fjäderbädd 120-axel Fjädrar modell 2012 -16	

Konstruerad Av	Risad Av	Skapad datum	Godkänd Av	Generell Toleras	Skala
MI	MI	2013-04-22	AI	SS-ISO 2768-1 m	1:6

Stat	Vikt (kg)	Titel / Bestämning	Plåt
Godkänd	114	117144	
Ägare	METSJÖ		Plåt
	Axel fjädrar		
Artikel Nr	117144		Blad
			M
			Blad 1 (4)

Nr	Ändring	Datum	Godk av
-		201105-10	
A		201105-16	
B		201105-26	

Pos. Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	100142	1-1 A	Sprint bakaxel	1.94
2	100143	1-31	Hylsa justerbar bakaxel	0.70
3	100491	10400162	Smörjpinne M10x1 Inok	
4	109903		Bricka 17.5x56x5 FZB	
5	109849		Bult M16x40 FZB Helgöngga	

Konstruerad Av	Risad Av	Skapad datum	Godkänd Av	Generell Toleras	Skala
MI	MI	2011-04-20	AI	SS-ISO 2768-1 m	1:5

Stat	Vikt (kg)	Titel / Bestämning	Plåt
Godkänd	7	109264	
Ägare	METSJÖ		Plåt
	Sprintar led axel		
Artikel Nr	109264		Blad
			B
			Blad 1 (1)

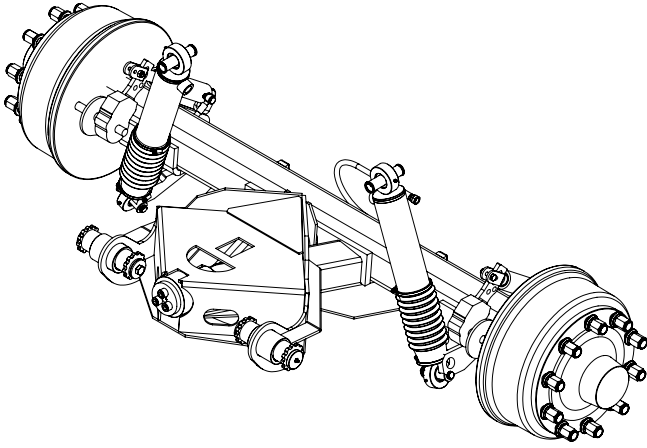
Pos. Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	117457		Sprint kompart över L=112	
2	101294	NORVA70900	Slangkommer 70-90/P W1S	
3	101299	10400188	Därradsk kommer 300x250	0.09
4	101273	NORVA80100	Slangkommer B07/007/2W13	
5	109911	472031	Lösning SGH 31	
6	100133	10180043.1	Komkört 80/75-250 LL30	19.93
7	128143		Exponeringskommer rebara	1

Konstruerad Av	Risad Av	Skapad datum	Godkänd Av	Generell Toleras	Skala
MI	MI	2011-04-20	AI	SS-ISO 2768-1 m	1:5

Stat	Vikt (kg)	Titel / Bestämning	Plåt
Godkänd	42	109217	
Ägare	METSJÖ		Plåt
	Cylindrar komuterande klart		
Artikel Nr	109217		Blad
			K
			Blad 1 (1)

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Nr	Ändring	Datum	Godk av
-		2013-04-05	



Pos.	Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	1	118654			65
2	1	109191		Axel stel	320
3	1	109264		Sprinter led axel	7
4	1	109217		Cylindrar komunicerande kär	32
5	1	109192		Broms hydraulisk stel axel	7
6	20	101289	410121160	Hjulmutter M22x1,5	0.28
7	6	117900		Bult M16x50 Insex 12.9 fzb	
8	2	100491	10400162	Smörjnippl M10x1 rak	
9	2	117701		Låsbricka	

Konstruerad Av	Risad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	1:10	
Sektor		Vikt (kg)	Fäst / Benämning		Fäst		
Godkänd		438	Axel #120 stel hyd.b terängboggi 2013				
Ågare				Artikel Nr		118659	
				Rev	Blad 1 (1)		

POS.	ANT.	ARTIKELNR 1	ARTIKELNR 2	BESKRIVNING	VIKT
1	1	117630		PIÖT terängboggi chassidél	
2	2	117642		HYSSÖ terängboggi	
3	1	117642		PIÖT	
4	1	117739		HYSSÖ	
5	2	117645		HYSSÖ	
6	2	100306		Bussning huvudbjälkläder	1,03
7	1	117739		PIÖT	
8	1	117756		PIÖT	
9	1	117756		PIÖT	
10	1	118084		PIÖT	
11	1	118089		PIÖT	
12	2	118106		WB 700 Homsbussning 73x/ÖX35	

Godkänd	36	Terängboggi chassidél	117633	Blad	1 (2)

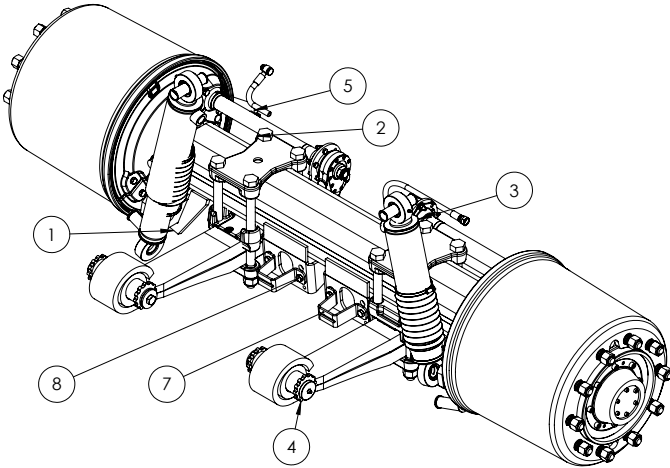
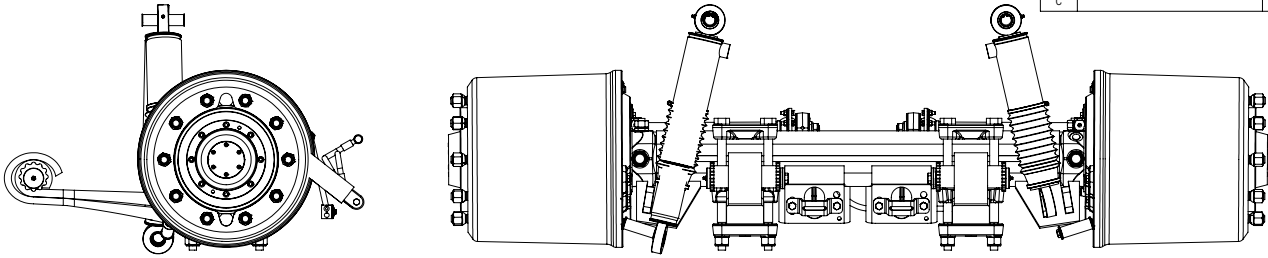
Nr	Ändring	Datum	Godk av
-		2013-03-21	

POS.	ANT.	ARTIKELNR 1	ARTIKELNR 2	BESKRIVNING	VIKT
1	1	117628		Ledaxel bak terängboggi	
2	1	117712		Ledaxel fram terängboggi	
3	2	117715		PIÖT	
4	1	117727		PIÖT terräng axel	
5	1	117727		PIÖT	
6	1	117749		PIÖT teräng boggi	
7	1	121012		Låsterning	
8	2	123764		PIÖT boggi	


Godkänd	30	Terängboggi Axeltel	117732	Blad	1 (2)

Nr	Ändring	Datum	Godk av
-		2013-12-02	
-		2014-04-01	

Nr	Ändring	Datum	Ändrad av
B		2018-03-01	
C		2018-04-23	

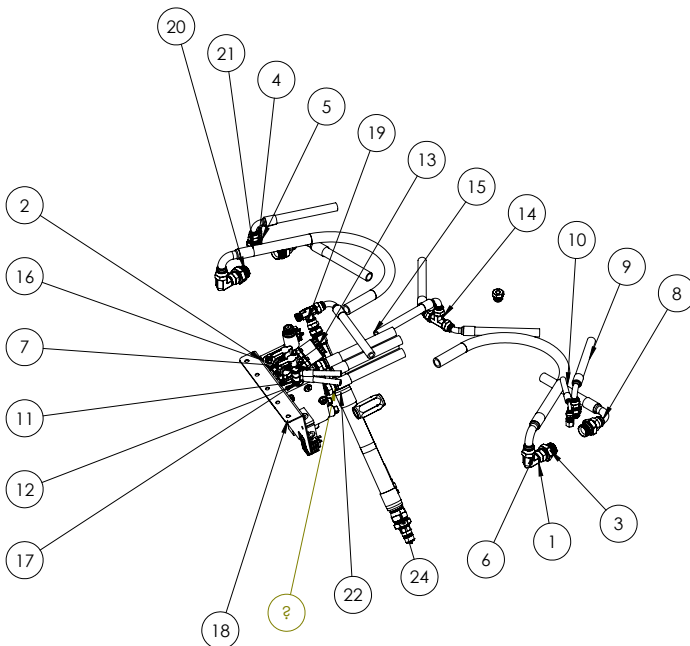


Pos.	Anf.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	139118		Axel #150 stel Drift	171
2	1	123484		Fjäderblad för axel #150	128
3	1	109217		Cylindrar komunicerande körl	42
4	1	109264		Sprintar led axel	7
5	1	109192		Broms hydraulisk stel axel	7
6	4	109792	9851201	Mutter M12 FZB nylock	
7	2	133755		Adapter bromscylinder	
8	4	109843	9338120301	Bult M12x30 FZB Helgänga	

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	Original ark storlek
MI	MI	2018-01-25	AI	SS-ISO 2768-1 m	1:10	A3
Status	Vikt (kg)	Titel / Benämning		Original ark storlek		
Godkänd	355	Axel #150 Driv 75mm cyl. hyd b cc2100		A3		
Ägare			Artikel nr	Rev	Blad	
			139138	D	1 (1)	

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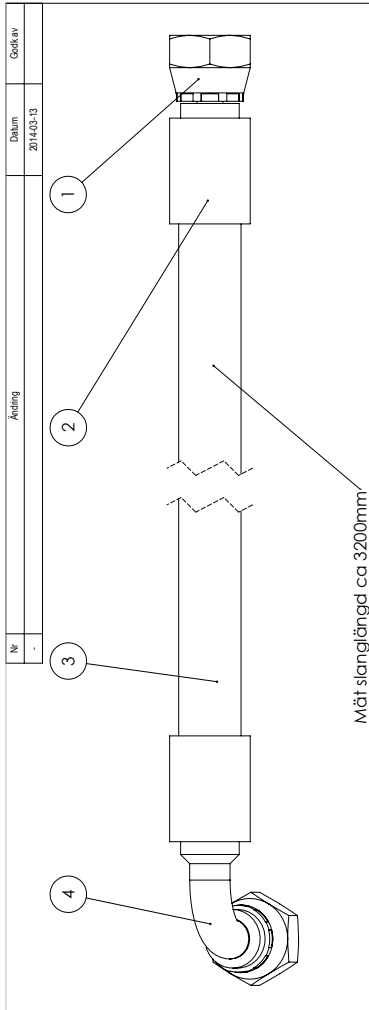
Nr	Ändring	Datum	Ändrad av
A		2018-02-05	
B		2018-03-05	



Pos.	QTY.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	2	122216	7213-12-121	3/4"INV-3/4"UTV 90° Tvär	
2	1	139600	B-5768.00	Black Bruin driftsystem	1
3	6	103265	40101216	Adapter UTV R 1" - UTV 3/4"	
4	4	103340	60001208	Adapter 3/4"UTV-1/2"UTV	
5	2	111898	0177822007	Adapter 10L- UTV 1/4"	
6	2	139647		Slang drivning främre	0
7	6	103333	60001212	Adapter 3/4"UTV-3/4"UTV	
8	2	139661		Slang drivning bakre	0
9	2	139663		Slang Drivning läckledning	0
10	2	139664		Slang Displacement control	0
11	4	101007	450103	Tredo-bricka 1/2"	
12	2	104243	40600804	Adapter 1/2 UTV-1/4 INV	
13	1	103067	48701212	T-koppling 3/4"/in/in/in	
14	1	123035	48500808	T-koppling 1/2" ut/ut/ut	
15	1	139665		Slang drivning läckledning	0
16	1	104392	688110	Banjobult 1/4" dubbel	
17	3	101087	450100	Tredo-bricka 1/4"	
18	1	139666		Plåt fäste ventiler Drivning	
19	1	107069.SLDAS M	48800808	T-koppling 1/2" ut/in/ut	
20	2	103266	450106	Tredo-bricka 1"	
21	8	101477	450105	Tredo-bricka 3/4"	
22	1	139671		Tryck slang Drivning	0
23	1	139672		Retur slang Drivning	1
24	2	101016	5C105956205	Snabbkoppling Hane 1/2"	

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	Original ark storlek
LH	LH	2018-01-31			1:10	A3
Status	Vikt (kg)	Titel / Benämning		Original ark storlek		
Godkänd	10	hydraulik Agro drivning		A3		
Ägare			Artikel nr	Rev	Blad	
			139608	B	1 (1)	

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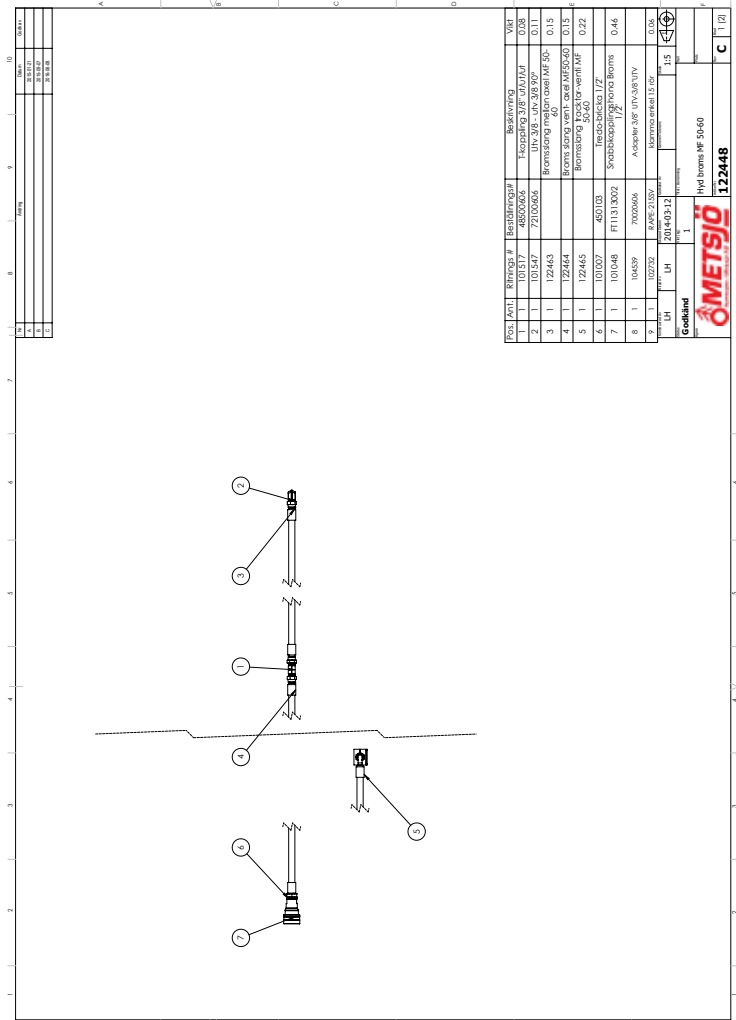
Mät slanglängd ca 3200mm

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	101516	A500010606	Stolpe 3/8"- INV R 3/8"	0.03
2	2	102555	1100000606	Hylsa 3/8" 1W	0.04
3	1	101535	241B06	Hydraulslang 3/8"	
4	1	103339	A500510606	Stolpe 3/8"- 90°	

Skapad Datum: 2014-03-12
 Ritad Av: LH
 Godkänd Av: LH
 Skala: 1:1
 Mät (m): 0.15
 Färit:

Godkänd
METSJÖ
 PROFESSIONAL METSEJÄ AB

Namn: Broms slang vent- axel MF50-60
 Artikel #: 122464
 Datum: 2014-03-13
 Godk. av:

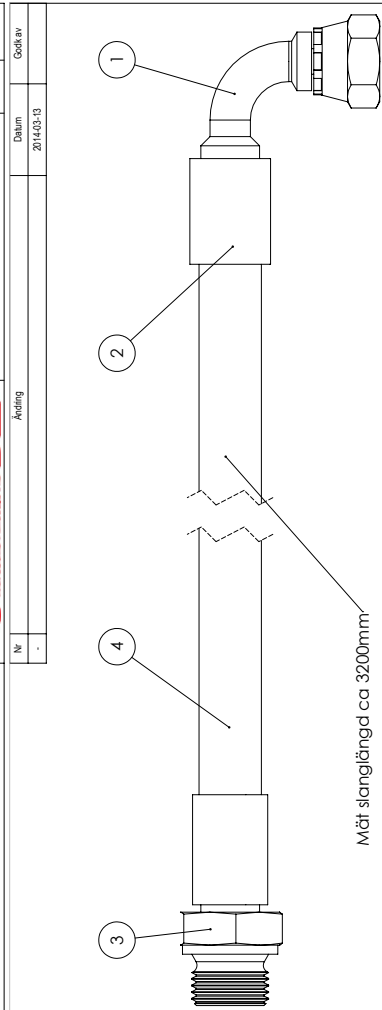


Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	101516	A500010606	Stolpe 3/8"- INV R 3/8"	0.03
2	1	103342	2103606	Hylsa 3/8" 1W 90°	0.11
3	1	129463		Broms slang mellan axel MF 50-	0.15
4	1	129464		Broms slang vent- axel MF50-60	0.15
5	1	129465		Broms slang vent- axel MF50-60	0.15
6	1	101072	450103	Broms slang 1/2"	0.22
7	1	101048	FT1133002	Snabbkopplingshögtrycks Broms	0.46
8	1	104539	7000606	Axelnippel 3/8" UTV 3/8" UTV	0.50

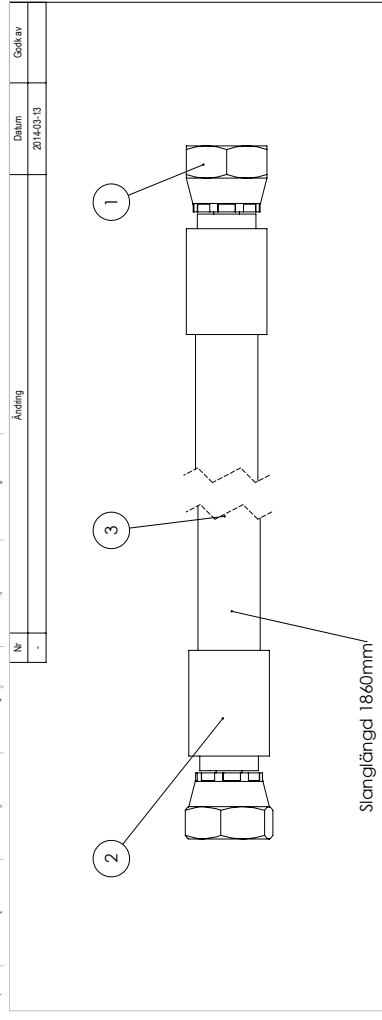
Skapad Datum: 2014-03-12
 Ritad Av: LH
 Godkänd Av: LH
 Skala: 1:1
 Mät (m): 0.15
 Färit:

Godkänd
METSJÖ
 PROFESSIONAL METSEJÄ AB

Namn: Hyd broms MF 50-60
 Artikel #: 122448
 Datum: 2014-03-13
 Godk. av:



Mät slanglängd ca 3200mm



Slanglängd 1840mm

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	103339	A500510606	Stolpe 3/8"- 90°	0.03
2	2	102555	1100000606	Hylsa 3/8" 1W	0.04
3	1	102553	5001200806	Stolpe 3/8"- UTV 1/2"	0.04
4	1	101535	241B06	Hydraulslang 3/8"	

Skapad Datum: 2014-03-12
 Ritad Av: LH
 Godkänd Av: LH
 Skala: 1:1
 Mät (m): 0.22
 Färit:

Godkänd
METSJÖ
 PROFESSIONAL METSEJÄ AB

Namn: Broms slang tractor-venti MF 50-60
 Artikel #: 122465
 Datum: 2014-03-13
 Godk. av:

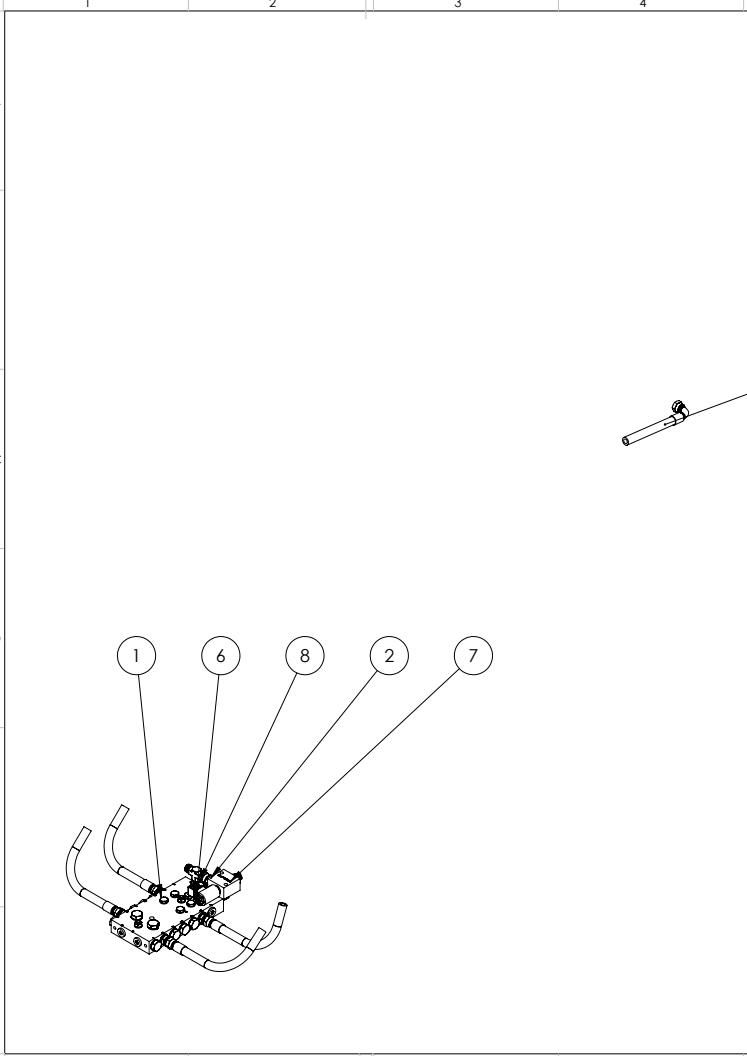
Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	2	101516	A500010606	Stolpe 3/8"- INV R 3/8"	0.03
2	2	102555	1100000606	Hylsa 3/8" 1W	0.04
3	1	101535	241B06	Hydraulslang 3/8"	

Skapad Datum: 2014-03-12
 Ritad Av: LH
 Godkänd Av: LH
 Skala: 1:1
 Mät (m): 0.15
 Färit:

Godkänd
METSJÖ
 PROFESSIONAL METSEJÄ AB

Namn: Broms slang mellan axel MF 50-60
 Artikel #: 122463
 Datum: 2014-03-13
 Godk. av:

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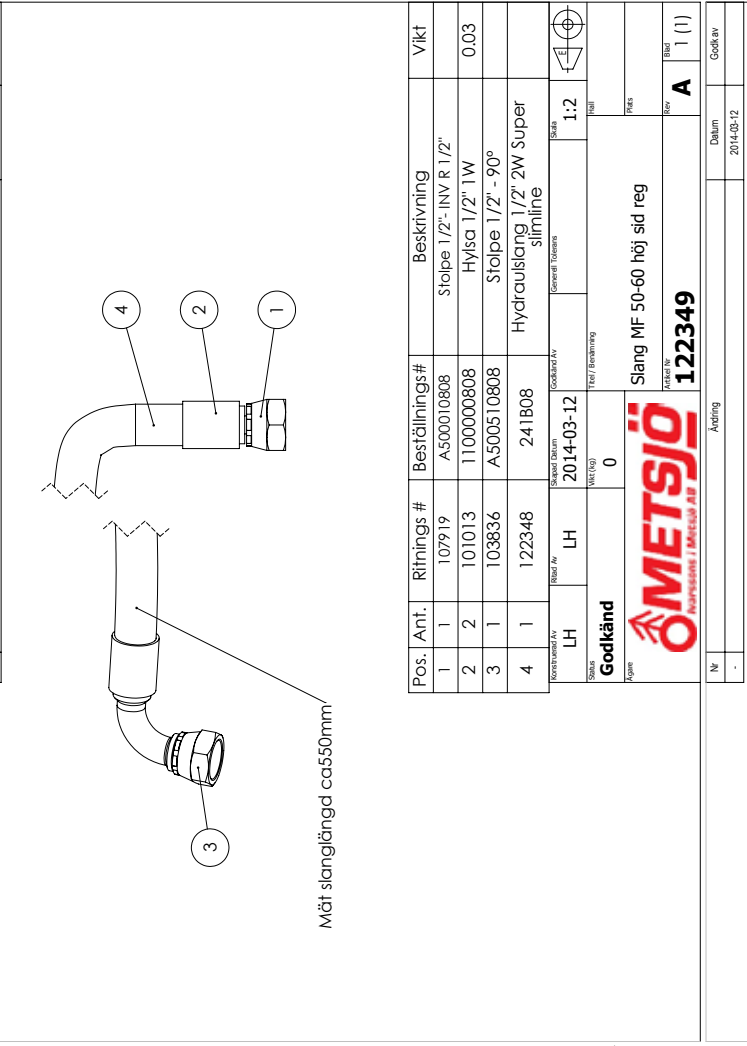


Nr	Ändring	Datum	Godk av
B		2017-03-14	
C		2018-03-23	

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	103900		samlingsblock 2-axlar	6
2	2	101007	450103	Tredo-bricka 1/2"	
3	1	103441	40100808	Adapter INV R 1/2" - UTV 1/2"	
4	1	102982	60000408	Adapter 1/4"UTV-1/2"UTV	
5	4	122369		Slang Komkärl MF 50-60	0
6	1	111830	10400044	Ventil Norm Öppen 12c25s 17W	0.60
7	1	103216	9999-158	Ventilblock TUBE REV011113	0.29
8	1	107069.SLDASM	48800808	T-koppling 1/2" ut/in/ut	

Konstruerad Av	LH	Risad Av	LH	Skapad Datum	2014-03-12	Godkänd Av		Generell Tolerans		Skala	1:10	
Status	Godkänd			Vikt (kg)	8	Titel / benämning		Chassie Hydraulik		Original ark storlek		
Ägare				Artikel Nr		122428		Rev	D	Blad 1 (2)		

Nr	Ändring	Datum	Godk av
-		2014-02-12	
A		2015-09-07	

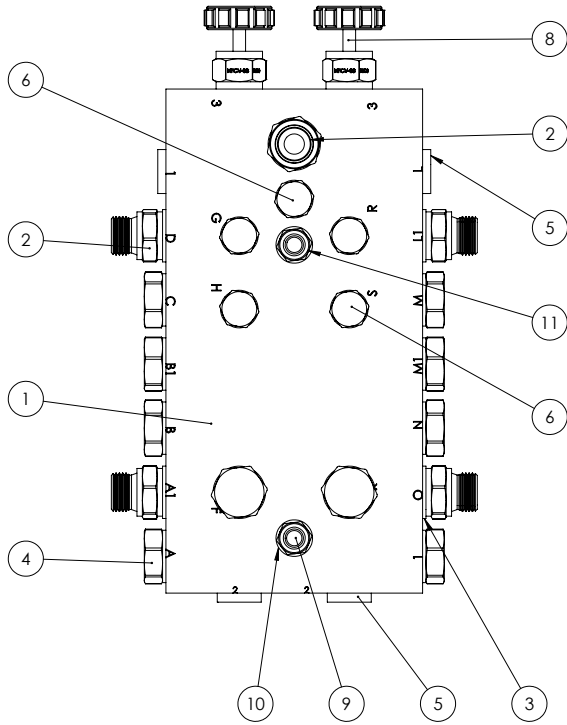


Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	107919	A500010808	Stolpe 1/2" - INV R 1/2"	
2	2	101013	110000808	Hylsa 1/2" 1W	0.03
3	1	103836	A500510808	Stolpe 1/2" - 90°	
4	1	101012	241B08	Hydraulslang 1/2"	0.05

Konstruerad Av	LH	Risad Av	LH	Skapad Datum	2014-03-12	Godkänd Av		Generell Tolerans		Skala	1:1	
Status	Godkänd			Vikt (kg)	0	Titel / benämning		Slang MF 50-60 höj sid reg		Original ark storlek		
Ägare				Artikel Nr		122349		Rev	A	Blad 1 (1)		

Konstruerad Av	LH	Risad Av	LH	Skapad Datum	2014-03-12	Godkänd Av		Generell Tolerans		Skala	1:1	
Status	Godkänd			Vikt (kg)	0	Titel / benämning		Slang Komkärl MF 50-60		Original ark storlek		
Ägare				Artikel Nr		122369		Rev	-	Blad 1 (1)		

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

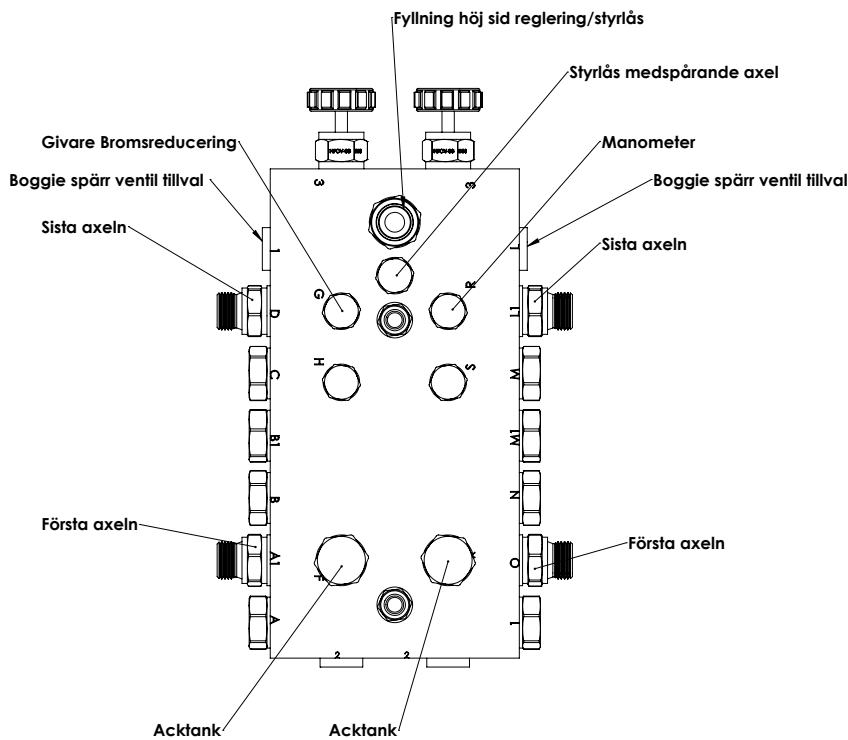


Height and lateral control:

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

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	103190	103190	Samlingsblock 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 samlingsblock	
6	5	103078	Propp04	Propp 04-1/4"	
7	5	101087	450100	Tredo-bricka 1/4"	
8	2	108021	108021	Avstängnings kran Hög sid regNFCV-08	0
9	2	ISO 4017 - M10 x 70-N	M10x25Std		
10	4	109899	1251051	Bricka 10,5x20x2 FZB	
11	2	109791	MT0NylockNiklad	Mutter M10 FZB nylock	

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



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

Nr	C	Ändring	Datum	Godk av
			2019-01-07	

Mät slanglängd ca 1500mm

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	2	102555	110000606	Hylsa 3/8" 1W	0.03
2	1	101036	1105630630	Hydraulslang 3/8" Rock	0.03
3	2	101516	A500010606	Stolpe 3/8"- INV R 3/8"	

Skapa	LH	2014-03-12	1:1	Titel	
Godkänd	LH			Rev	1 (1)
METSJÖ TIPSSTÄLLNING METSJÖ AIR					
Slang Växlings stöd MF 50-60					
Artikel Nr: 122351 Rev: C					

Nr	A	Ändring	Datum	Godk av
			2019-01-07	

Slanglängd 2650 mm

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	101962	A500010404	Stolpe 1/4"- INV R 1/4"	
2	2	101037	1100000404	Hylsa 1/4" 1W	0.02
3	1	107187	A500610404	Stolpe 1/4" - 45°	
4	1	107197	1105630430	Hydraulslang 1/4" Rock	0.01

Skapa	LH	2017-09-08	1:1	Titel	
Godkänd	LH			Rev	1 (1)
METSJÖ TIPSSTÄLLNING METSJÖ AIR					
Slang skifte tipp växling					
Artikel Nr: 137748 Rev: -					

Nr	A	Ändring	Datum	Godk av
			2019-09-04	

Slanglängd 1200mm

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	101153	A500511212	Stolpe 3/4" - 90°	
2	2	101487	1100001212	Hylsa 3/4" 1W	0.05
3	1	101572	11056312	Hydraulslang 3/4" Rock	0.04
4	1	101714	A500011212	Stolpe 3/4"- INV R 3/4"	

Skapa	LH	2015-09-04	1:1	Titel	
Godkänd	LH			Rev	1 (1)
METSJÖ TIPSSTÄLLNING METSJÖ AIR					
Tipp slang MF50-60					
Artikel Nr: 128082 Rev: B					

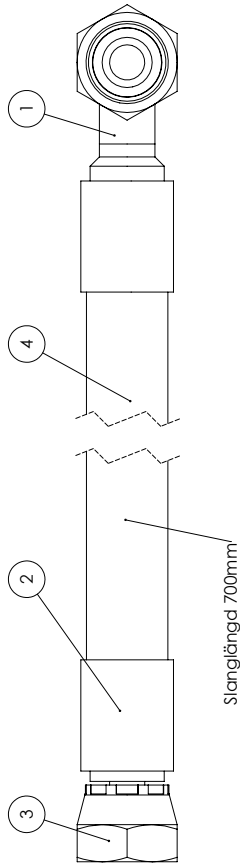
Nr	A	Ändring	Datum	Godk av
			2019-01-07	

Slanglängd 4800mm

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	103339	A500510606	Stolpe 3/8" - 90°	
2	2	102555	1100000606	Hylsa 3/8" 1W	0.03
3	1	104327	42800606	Banjo 3/8"- stolpe 3/8"	
4	1	101036	1105630630	Hydraulslang 3/8" Rock	0.03

Skapa	LH	2015-09-04	1:1	Titel	
Godkänd	LH			Rev	1 (1)
METSJÖ TIPSSTÄLLNING METSJÖ AIR					
Torn slang MF 50-60					
Artikel Nr: 128085 Rev: A					

Nr	Andring	Datum	Godk av
B		2019-01-07	



Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	103836	A500510808	Stolpe 1/2" - 90°	
2	2	101013	1100000808	Hylsa 1/2" 1W	0.03
3	1	107919	A500010808	Stolpe 1/2" - INV R 1/2"	
4	1	101012	1105630830	Hydraulslang 1/2" Rock	0.05

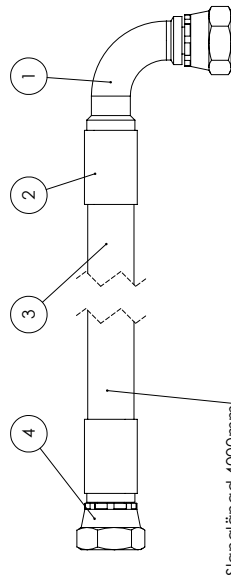
Godkänd	2014-03-10	0	1:1
Godkänd	2014-03-10	0	1:1

MF50-60 6-2 ventill uttag bak

Artikel Nr. **122417**

Godk av B 1 (1)

Nr	Andring	Datum	Godk av
B		2019-01-07	



Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	101153	A500511212	Stolpe 3/4" - 90°	
2	2	101487	1100001212	Hylsa 3/4" 1W	0.05
3	1	101572	11056312	Hydraulslang 3/4" Rock	0.04
4	1	101714	A500011212	Stolpe 3/4" - INV R 3/4"	

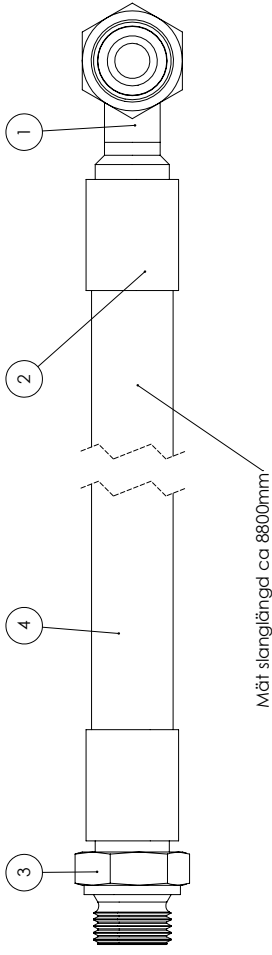
Godkänd	2014-03-10	0	1:2
Godkänd	2014-03-10	0	1:2

Tryck / retur tipp växling MF 50-60

Artikel Nr. **122421**

Godk av B 1 (1)

Nr	Andring	Datum	Godk av
C		2019-01-07	



Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	103836	A500510808	Stolpe 1/2" - 90°	
2	2	101013	1100000808	Hylsa 1/2" 1W	0.03
3	1	101014	5001200808	Stolpe 1/2" - UJV 1/2"	
4	1	101012	1105630830	Hydraulslang 1/2" Rock	0.05

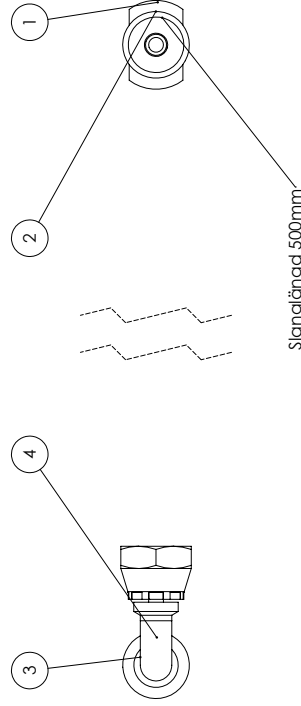
Godkänd	2014-03-12	0	1:1
Godkänd	2014-03-12	0	1:1

Slang uttag bak stöfot bak MF50-60

Artikel Nr. **122409**

Godk av C 1 (1)

Nr	Andring	Datum	Godk av
A		2019-01-07	



Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	101088	A502910404	Banjo 1/4" - stolpe 1/4"	
2	2	101037	1100000404	Hylsa 1/4" 1W	0.02
3	1	104252	A500510404	Stolpe 1/4" - 90°	
4	1	107197	1105630430	Hydraulslang 1/4" Rock	0.01

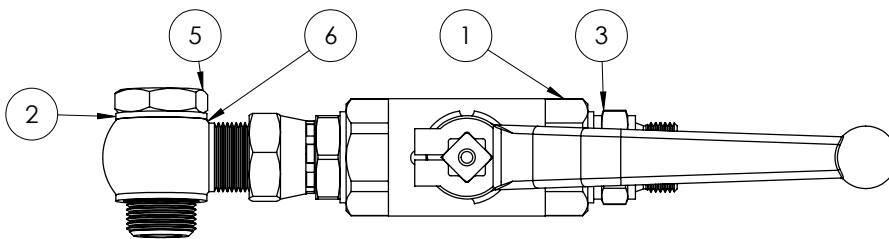
Godkänd	2014-03-12	0	1:1
Godkänd	2014-03-12	0	1:1

Slang stöfot bak

Artikel Nr. **122415**

Godk av B 1 (1)

Nr	Ändring	Datum	Godk av
-		2014-03-10	
A		2014-03-12	



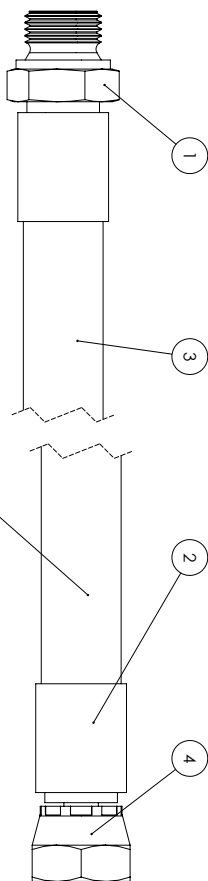
Pos.	QTY.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	101470	471605	Kulventil 3/4"	0.19
2	4	101477	450105	Tredo-bricka 3/4"	
3	1	103333	60001212	Adapter 3/4"UTV-3/4"UTV	
4	1	101475	40101212	Adapter INV R 3/4"- UTV 3/4"	
5	1	115580	688105	Banjobult 3/4"Enkel	
6	1	115581	461355	Banjo 3/4" - 3/4" UTV	0.19

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	
LH	LH	2014-03-10			1:2	
Status	Vikt (kg)	Titel / Benämning		Hall		
Godkänd	1					
Agare			3/4" kran 3/4 anslutning		Plats	
	Artikel Nr	Rev		Blad		
	122422	A		1 (1)		

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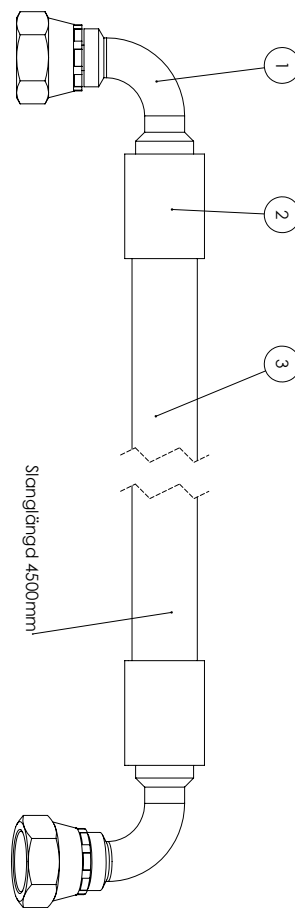


Slanglängd 3800mm

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	101014	5001200808	Stöpe 1/2" - UTV 1/2"	0.03
2	2	101013	1100000808	Hyfsa 1/2" 1W	0.05
3	1	101012	1105630830	Hydrulslang 1/2" Rock	
4	1	107919	A500010808	Stöpe 1/2"-INV R 1/2"	

Skala	Titel / Benämning	Blad
Godkänd	Slang matning stödt bak MF50-60	B 1 (1)
0		

Nr	Ändring	Datum	Ändrad av
A		2015-01-07	



Slanglängd 4500mm

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	2	103339	A500510606	Stöpe 3/8"- 90°	0.03
2	2	102555	1100000606	Hyfsa 3/8" 1W	0.03
3	1	101036	1105630630	Hydrulslang 3/8" Rock	

Skala	Titel / Benämning	Blad
Godkänd	Torn slang MF 50-60	B 1 (1)
0		

Nr	Ändring	Datum	Ändrad av
A		2015-01-07	

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				Ändring	Datum	Godk av	
				-	2011-04-28	A	
				A	2014-08-13		

Pos.	Ant.	Artikelnr	Beställningsnr	Beskrivning	Vikt
1	1	103068	10180050	6-2 ventil 1/2 /6/2-10-12dc Volt tub	5.96
2	1	109226		Tornslang (när 6-2 ventil används)	0
3	1	109167		Tornslang (när 6-2 ventil används)	0
4	2	103438	40100608	Adapter INV R 1/2"- UTV 3/8"	
5	8	101007	450103	Tredo-bricka 1/2"	
6	4	102987	60000808	Adapter 1/2"UTV-1/2"UTV	
7	2	109168		Tryck slang Torn - uttag bak	0
8	2	109171		uttag bak Flex18-30	0
9	2	103285	40800808	Skottgenomgång 1/2"	
10	2	103270	471005	Snabbkoppling Hona 1/2"	
11	2	103358	471015	Dammskydd Hona	0.0
12	1	109227	552450032	Skyddsspiral 32-26 Gul	0.04
13	2	hex screw gradeab_is o -metsjo curved spring lock washer fjäderbricka M8 FZB	Bult M8x20 FZB Helgänga	ISO 4017 - M8 x 20-N	
14	2	spring lock washer fjäderbricka M8 FZB	Fjäderbricka M8 FZB	Spring washer DIN 128 - A8	

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	
LH	LH	2011-04-18	AI		1:6	
Status	Vikt (kg)	Titel / Benämning		Häll		
Godkänd	8	Uttagbak MF18-24				
Ägare			Artikel Nr	Rev	Blad	
			109160	A	1 (1)	

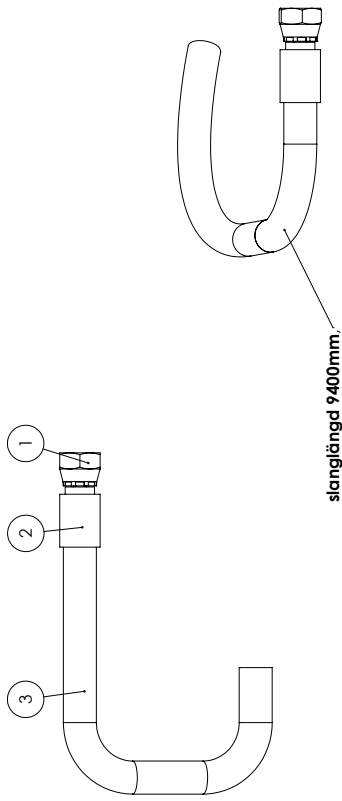
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				Ändring	Datum	Godk av	
				-	2011-04-18	A	
				A	2013-11-29		

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	108917		block 6-2ventil	4.45
2	1	108918		Alu mutter 6-2 ventil	0.08
3	1	108916	10180050.1	Spole till 6-2 ventil KVH6/2-10-12VDC (10180050)	1.37
4	1	103217	10250057	Hirsmankontakt (kontakt för elstyrning hydraulvent)	frompar ent+0.03
5	1	102985		Insex Plugg1/4"	

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	
LH	LH	2011-04-13	AI		1:2	
Status	Vikt (kg)	Titel / Benämning		Häll		
Godkänd	5.96	10180050				
Ägare			Artikel Nr	Rev	Blad	
			6-2 ventil 1/2 /6/2-10-12dc Volt tub	A	1 (1)	
			103068			

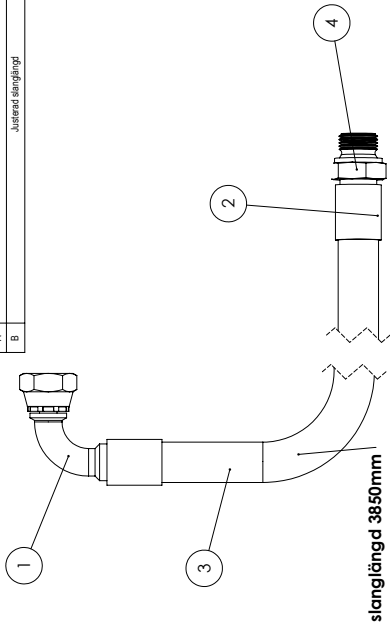
Nr	Ändring	Datum	Godk av
A		2012-11-16	
B		2012-12-03	
C	Justerad slanglängd	2014-08-13	



Pos./Ant.	Artikelnr	Beställningsnr	Beskrivning	Vikt
1	2	A500010606	Stolpe 3/8" - INV R 3/8"	0.03
2	2	102555	Hydrulslang 3/8" TW	
3	1	109181	Hydrulslang 3/8"	

Skapa	2011-04-18	AI	1:2
Skapat av	LH		
Godkänd			
Typ	Tornslang (när 6-2 ventill används)		
Artikelnr	109226		
Nr	Ändring	Datum	Godk av
A		2011-04-28	
B		2012-11-16	
C		2012-12-03	

Nr	Ändring	Datum	Godk av
A		2011-04-28	
B		2012-12-03	
C	Justerad slanglängd	2014-08-13	

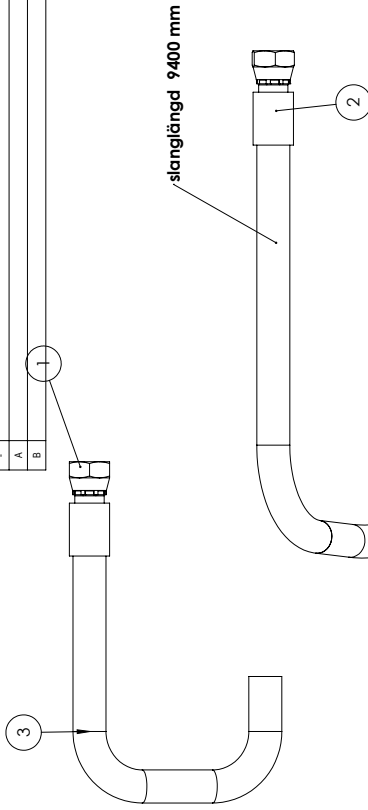


Pos./Ant.	Artikelnr	Beställningsnr	Beskrivning	Vikt
1	1	A500510808	Stolpe 1/2" - 90°	0.03
2	2	101013	Hydrulslang 1/2" TW	
3	1	109173	Hydrulslang 1/2"	
4	1	101014	Stolpe 1/2" - UTV 1/2"	

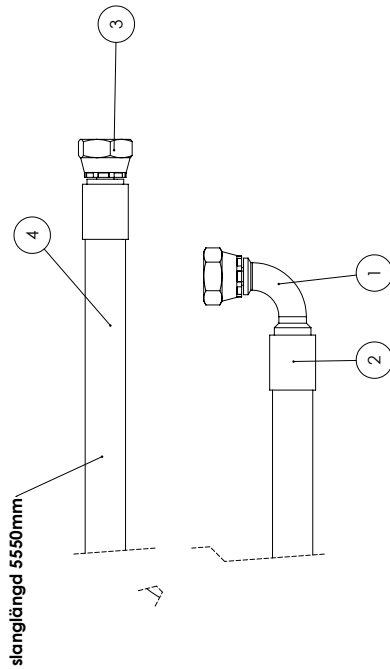
Skapa	2011-04-14	AI	1:2
Skapat av	LH		
Godkänd			
Typ	Tryck slang Torn - uttag bak		
Artikelnr	109168		
Nr	Ändring	Datum	Godk av
A		2011-05-30	
B		2012-12-03	
C		2014-08-13	

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Nr	Ändring	Datum	Godk av
A		2011-04-28	
B		2012-11-16	
C		2012-12-03	



Nr	Ändring	Datum	Godk av
A		2011-05-30	
B		2012-12-03	
C		2014-08-13	

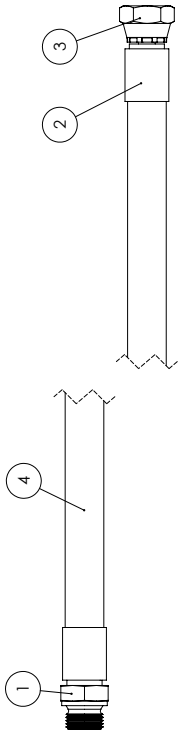


Pos./Ant.	Artikelnr	Beställningsnr	Beskrivning	Vikt
1	1	103836	Stolpe 1/2" - 90°	0.03
2	2	101013	Hydrulslang 1/2" TW	
3	1	107919	Stolpe 1/2" - INV R 1/2"	0.05
4	1	101012	Hydrulslang 1/2"	

Skapa	2011-04-19	AI	1:2
Skapat av	LH		
Godkänd			
Typ	uttag bak Flex18-30		
Artikelnr	109171		
Nr	Ändring	Datum	Godk av
A		2011-05-30	
B		2012-12-03	
C		2014-08-13	

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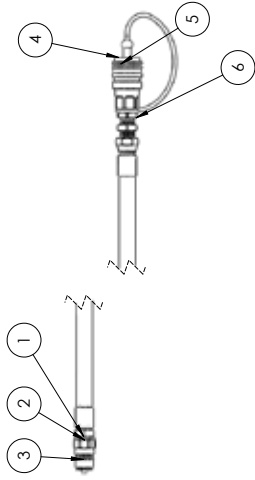
Nr	Ändring	Datum	Godk.av
C	Justerad slanglängd	2013-03-18	
D		2013-11-08	
E		2014-09-03	



Vagns model	Slanglängd	Pos. Ant.	Artikelnr	Beställningsnr	Beskrivning	Vikt
NO	6250mm	1	101014	5007200808	Stolpe 1/2" - UVV 1/2"	
Mid	6250mm	2	101013	1100000808	Hydra 1/2" 1W	0.03
MX	7350mm	3	107919	A500010808	Stolpe 1/2" - INV R 1/2"	
MQ 60	8400mm	4	101012	241B08	Hydraulslang 1/2"	0.05
MQ 75	10000mm					
MQ 95	11111					

Godkänd
 METSJO
 Hydrauliska i Metsjö AB
 106930
 Slang uttag bak
 106930
 Vikt 0
 Skala 1:2
 Godk. Nr. 106930
 1 (1)

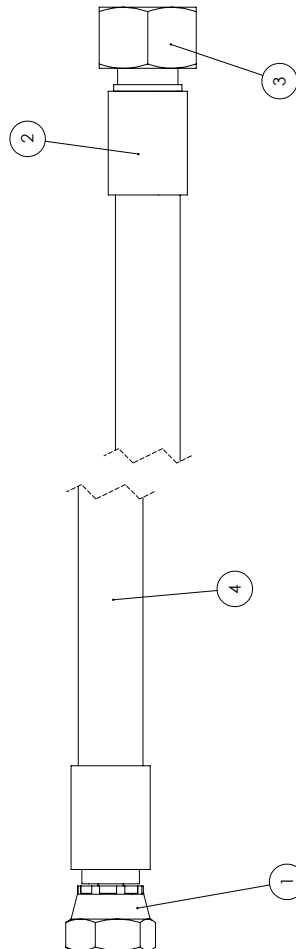
Nr	Ändring	Datum	Godk.av
-		2010-02-14	
A		2011-01-14	



Pos. Ant.	Artikelnr	Beställningsnr	Beskrivning	Vikt
1	106930		slang bakuttag MQ MF	0
2	101007	450103	Tredo-bricka 1/2"	
3	101016	471004	Snabbkoppling Hane 1/2"	
4	103358	471015	Dammskydd Hona	0.0
5	103270	471005	Snabbkoppling Hona 1/2"	
6	103285	40800808	Skoffgenomgång 1/2"	

Godkänd
 METSJO
 Hydrauliska i Metsjö AB
 106643
 Hydrauluttag bakNo, Mid, Mx, MQ 60/75-95
 Vikt 0
 Skala 1:5
 Godk. Nr. 106643
 1 (1)

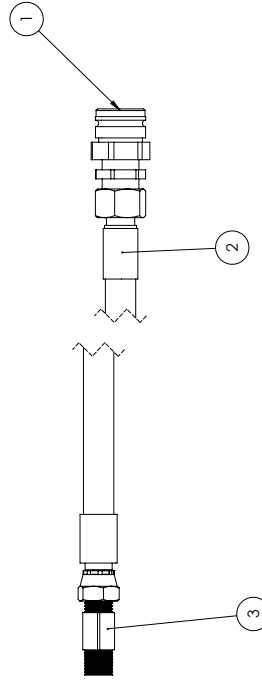
Nr	Ändring	Datum	Godk.av
C	Justerad Slanglängd	2014-09-03	
D		2017-04-20	



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	102555	1100000606	Hydra 3/8" 1W	0.03
MF 11		3	117027	A501440806	Stolpe 3/8" - SL R M22	
MF 18	850mm	4	101036	241B08	Hydraulslang 3/8"	0.03

Godkänd
 METSJO
 Hydrauliska i Metsjö AB
 111824
 Broms slang uttag bak
 Vikt 0
 Skala 1:1
 Godk. Nr. 111824
 1 (1)

Nr	Ändring	Datum	Godk.av
-		2011-09-06	
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	T-koppling 3/8" ut/ut/ut	0.06

Godkänd
 METSJO
 Hydrauliska i Metsjö AB
 106642
 Bromsuttag bak
 Vikt 0
 Skala 1:2
 Godk. Nr. 106642
 1 (1)

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Nr	Ändring	Datum	Godk. av
C		2016-11-02	
D	Lag till ins	2017-10-09	

OBS! galvade produkter får inte ha grund färg eller svetspray

Pos. Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	128147	grå	svetsat stödben-15	13
2	100323	100323	Sprint stödben	0.54
3	100333	10400060.2	Ringsprint 10m-40 nick parm	0.04

Godkänd	MI	2013-02-18	AI	1:5	
13	106634	Stödben Std komp	A4	H	1 (1)

METSJÖ
METSJÖ AB

Nr	Ändring	Datum	Godk. av
-		2011-05-30	
A		2011-08-01	

Pos. Ant.	ArtikeInr 1	ArtikeInr 2	Beskrivning	Vikt
1	101059	654430	Dragögla 50 Scharmuller	
2	109859		M20x65 Insex 12.9	

Godkänd	MI	2011-05-27	AI	1:5	
25	107880	Dragögla 50 Scharm.	A	1 (1)	

METSJÖ
METSJÖ AB

Nr	Ändring	Datum	Godk. av
-		2010-10-26	
A		2010-06-11	

Pos. Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	100203	100203-GRÄ	Bultbart bakdrag	7.25
2	102198	102198	Dragsprint	1.72
3	100333	10400060.2	Ringsprint 10m-40 nick parm	0.04
4	109858	9121220060	Bult M20x60 Insex 12.9	
5	109905	BR82101	Bricka 21x36x3 F2B	
6	109794	982001	Muller M20 F2B rylock	

Godkänd	MI	2013-02-14	AI	1:3	
9	105366	Bakdrag kit.. Käfftradrag	B	1 (1)	

METSJÖ
METSJÖ AB

Nr	Ändring	Datum	Godk. av
H		2017-02-15	
J		2017-12-22	

Pos. Ant.	ArtikeInr 1	ArtikeInr 2	Beskrivning	Vikt
1	122871		Kopplingsbox 8-pol	0
2	109869		Spårskruv Mx16 F2B	
3	15	24186225	Kabelskar A 2507 FLS hono blå	
4	139119	12-26017LH	LED-baklampa VA med reflex komplett med 2m kabel	
5	139120	12-26017RH	LED-baklampa VA med reflex komplett med 2m kabel	

Godkänd	LH	2012-01-19	AI	1:10	
1.72	109601	Bakljus diod	Mont	U	1 (1)

METSJÖ
METSJÖ AB

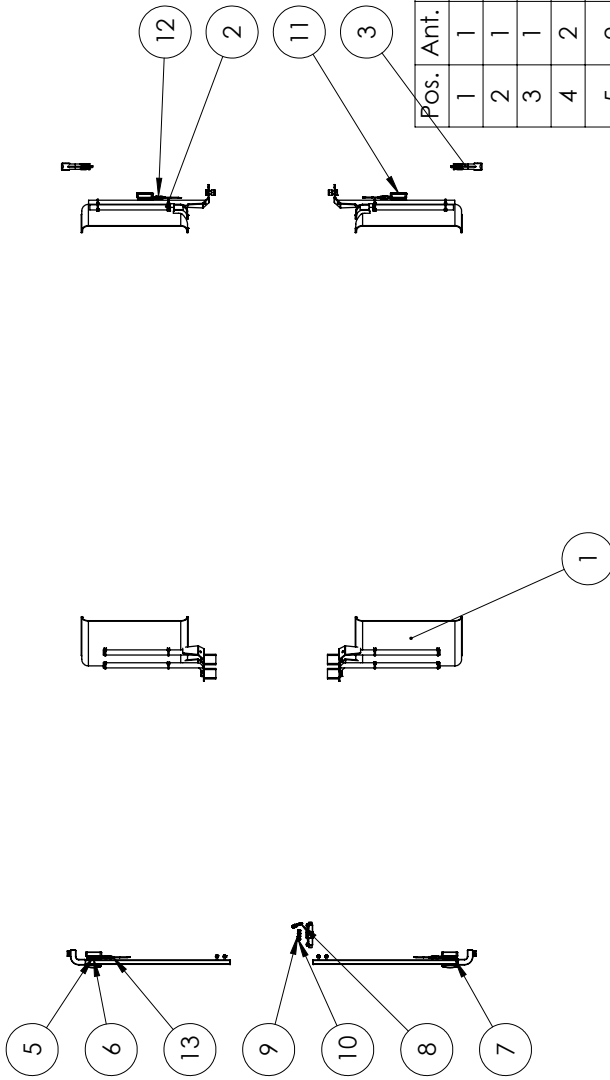
Nr	Ändring	Datum	Godk. av
H		2010-03-02	
J		2011-03-28	

Pos. Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	130722		Upphållare	
2	109982	1223214010	8-polig kabel	0.03
3	100961	3810201.6	Relflex 40x90mm gul	
4	102745	133650-10	Gummiklammer 16 mm	
5	102745	133650-10	Bakskruv 5,5x24x39	
6	102966	10250061	Släpvagnskrydd 7 pol svart	0.08
7	101082	20500003	Gummiskydd till 7. 13-pol	0.01
8	101127	10250055.3	Gummiskydd 7 led kabel	0.02
9	101112	10250060	Bult VAx45 F2B medparngå	0.06
10	109853	9338240451	Bult VAx45 F2B medparngå	
11	17885	64050301	Spårskruv Mx50 F2B	
12	17885	64050301	Spårskruv Mx50 F2B	


Godkänd	LH	2011-05-18	AI	1:10	
5.08	106638	Bakljus konsol	Mont	M	1 (4)

METSJÖ
METSJÖ AB

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Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	103037		Skärm Fram	18.62
2	1	117216		Skärm Bak MF24	18.62
3	1	103041	103041	Sidmarkering fram o bak	5.75
4	2	106487	591086	Klämbricka L50	
5	2	Hex Screw GradeAB_ISO			
6	2	109791	M10Nylocknikel ad	Mutter M10 FZB nylock	
7	2	108790		Fäste belysning	
8	1	112894	112894	Våningsplint	
9	4	113983	5501945	kabelgenomföring PG7	
10	4	118087	5502018	Kontramutter för kabelförkruv. i plast PG 7	
11	2	137406		LED arbetsbelysning 12/24V 3040lm DT-kontakt IP69K	
12	2	137406		LED arbetsbelysning 12/24V 3040lm DT-kontakt IP69K	
13	4	137407		DT-ADR-kabel 7,5m gjuten kontakt	0

Konfigurerad Av	LH	Skapad Datum	2013-01-08	Godkänd Av	Generell Tillstånd	Skala	1:35
Ritad Av	LH	Vik (kg)	45	Titel / Benämning	Original ark storlek	A3	
Status	Godkänd	Paket 1 h-skärm F o B. diod. belys MF					
Agare							
Artikel #	117217						
Rev	D						
Bild	1 (1)						

Nr	Ändring	Datum	Godk av
C		2018-11-12	
D		2018-03-16	

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Nr	Ändring	Datum	Godk av
E		2018-11-16	
F		2017-08-29	

POS	Art nr	Längd
	117380	1200mm
	116875	600mm

Pos.	MF 60-75/QTY.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	2	103218	10400045	Ventil Norm STÄNGD båda rikt 12 V 27W	0.25
2	1	112894	112894	Väningsplint	
3	2	113983	5501945	kabel genomföring PG7	
4	2	117380	10250056.3	Kabel 2 ledare x 1,5 svart	0
6	2	118087	5502018	Kontramutter för kabelförskruv. i plast PG 7	

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	
LH	LH	2013-01-22			1:5	
Status	Vikt (kg)		Titel / Benämning		Original ark storlek	
Godkänd	1		Höjd och sidreglering chassi el		A3	
Ägare			Artikel Nr		Rev	Blad
			117377		H	1 (4)

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Nr	Ändring	Datum	Godk av
E		2018-11-26	
F		2018-12-10	

POS	Art nr	Längd
16	136680	5100mm
15	116002	1600mm

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	111505	50-80916	Lådprofil aluminiumhus	
2	1	111506	50813-10	front till 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	136680	5573241	Kabel 14G1,5 gr	0
17	2	118085	5502034	Kontramutter för kabelförskruv. i plast PG11	
18	1	108427		Lysdiod röd 12V metallhållare Ø8mm	
19	1	143082		Pluskrets manöverlåda MQ MF	
20	1	143274		Jordpunkt manöverlåda MQ MF	

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	
LH	LH	2012-10-15	AI		1:5	
Status	Vikt (kg)		Titel / Benämning		Häll	
Godkänd	1		Manöverbox MF MQ		Plats	
Ägare			Artikel Nr		Rev	Blad
			115973		F	1 (4)

Bilderna är avsedda som hjälpmedel och ska inte användas som grund för konstruktion eller för att bestämma dimensioner.

Nr	Ändring	Datum	Godk av
-		2013-02-05	
A		2013-06-11	

Pos.	Ant.	Rifnings #	Beställnings#	Beskrivning	Vikt
1	1	104775	11301-2	Fästhylsa hyd. Stödben	6
2	1	117478		Kolvfäste, Hyd. Stödben.	7
3	1	117475		Fot. Hyd. Stödben	
4	1	117453		Ben hyd. stödfot	
5	1	100365		Cyl-fäste hyd.stödben. övre.	1,93
6	1	108042	10180142	Cyl 70/40-300 LL25	10
7	4	109900	104000141	Bricka 12,5x35x3 FZB	
8	4	109914	104000142	Fjäderbricka M12 FZB	
9	4	109842	104000140	Bult M12x20 FZB Helgänga	
10	2	109897	SRKB09035301	Bricka 9x35x3 FZB	
11	2	109827		Bult M8x16 FZB Helgänga	
12	16	1251051	1251051	10,5x20x2FZB	
13	4	109838	M10x40Stid	Bult M10x40 FZB Helgänga	
14	8	109791	M10NylockNiklad	Mutter M10 FZB nylock	
15	4	109837	10400060,02	Bult M10x30 FZB Helgänga	
16	1	101268		Sprint Komkärl övre	0,78
17	1	106640		Sprint Hyd.Stödfot MQ60-95	
18	1	117501		Sprint 25L120	
19	1	117502		Sprint 30L175 borråd M12 svart	
20	1	100323	100323	Sprint stödben	0,54
21	1	100333	10400060,2	Ringsprint 10m-40 nick parm	0,04
22	1	111896		pilotbackventil hyd stödfot	1
23	4	101087	450100	Tredo-bricka 1/4"	
24	2	101559	688100	Banjobult 1/4" Enkel	
25	2	111918		slang hyd stödfot fraktor	0
26	2	101007	450103	Tredo-bricka 1/2"	
27	2	101016	471004	Snabbkoppling Hane 1/2"	

Konstruktör Av	Skapat Datum	Godkänd Av	Generellt Tolerans	Skala	1:5
Ola					
Status	Vikt (kg)	Titel / Beskrivning			
Godkänd	54				
Agens			Hydrauliskt stödben. Slangar mot traktor. Ej MF11-16.	Pos	
			117545	Rev	-
				Blad	1 (2)

Bilderna är avsedda som hjälpmedel och ska inte användas som grund för konstruktion eller för att bestämma dimensioner.

Nr	Ändring	Datum	Godk av
E		2013-04-01	
F		2013-03-02	

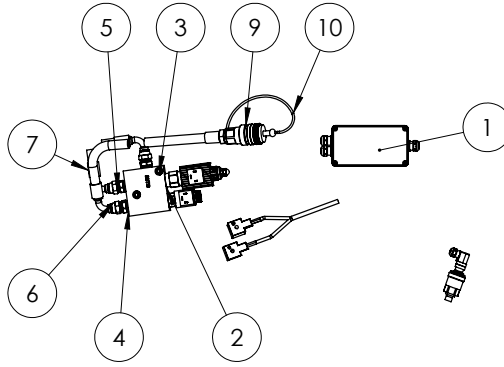
NOT: Fot 117475 kan ersättas med 126149 om större kontaktyta med backen är önskvärd 550x165

För montering av dessa finns det information på S:\OLA\Bilder montering\Chassityp"

Pos.	Ant.	Rifnings #	Beställnings#	Beskrivning	Vikt
1	2	104775	11301-2	Fästhylsa hyd. Stödben	6
2	1	117478		Kolvfäste, Hyd. Stödben.	7
3	1	117475		Fot. Hyd. Stödben	
4	1	117453		Ben hyd. stödfot	
5	1	100365		Cyl-fäste hyd.stödben. övre.	1,93
6	1	108042	10180142	Cyl 70/40-300 LL25	10
7	1	101268		Sprint Komkärl övre	0,78
8	1	106640		Sprint Hyd.Stödfot MQ60-95	
9	1	117501		Sprint 25L120	
10	1	117502		Sprint 30L175 borråd M12 svart	
11	1	100323	100323	Sprint stödben	0,54
12	1	100333	10400060,2	Ringsprint 10m-40 nick parm	0,04
13	1	111896		pilotbackventil hyd stödfot	1
14	1	111903		Handpump 3vägskran bromsuthög	7
15	2	112542		Slang Hyd.stödfot Handpump	0
16	4	101087	450100	Tredo-bricka 1/4"	
17	2	101559	688100	Banjobult 1/4" Enkel	
18	1	118094	118094-Grå	Handpump fäste i stödbenshylsa	
19	1	103882	20L120	Sprint till 3vägstipp	
20	4	109790	M8NylockNiklad	Mutter M8 FZB nylock	
21	4	109900	104000141	Bricka 12,5x35x3 FZB	
22	4	109914	104000142	Fjäderbricka M12 FZB	
23	2	109897	SRKB09035301	Bricka 9x35x3 FZB	
24	16	1251051	1251051	10,5x20x2FZB	
25	8	109791	M10NylockNiklad	Mutter M10 FZB nylock	
26	1	109879	148106040	Spännstift 6x40	
27	4			Hex Screw GradeA8, ISO	
28	4			Hex Screw GradeA8, ISO	
29	4	109842	104000140	Bult M12x20 FZB Helgänga	
30	2			Hex Screw GradeA8, ISO	
31	4	109831	9338080451	Bult M8x5 FZB Helgänga	
32	1	123246		Fäste pumphandtag	

Konstruktör Av	Skapat Datum	Godkänd Av	Generellt Tolerans	Skala	1:5
Ola	OK				
Status	Vikt (kg)	Titel / Beskrivning			
Godkänd	70				
Agens			Hydrauliskt stödben. Handpump. Ej MF11-16.	Pos	
			117500	Rev	-
				Blad	F 1 (2)

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

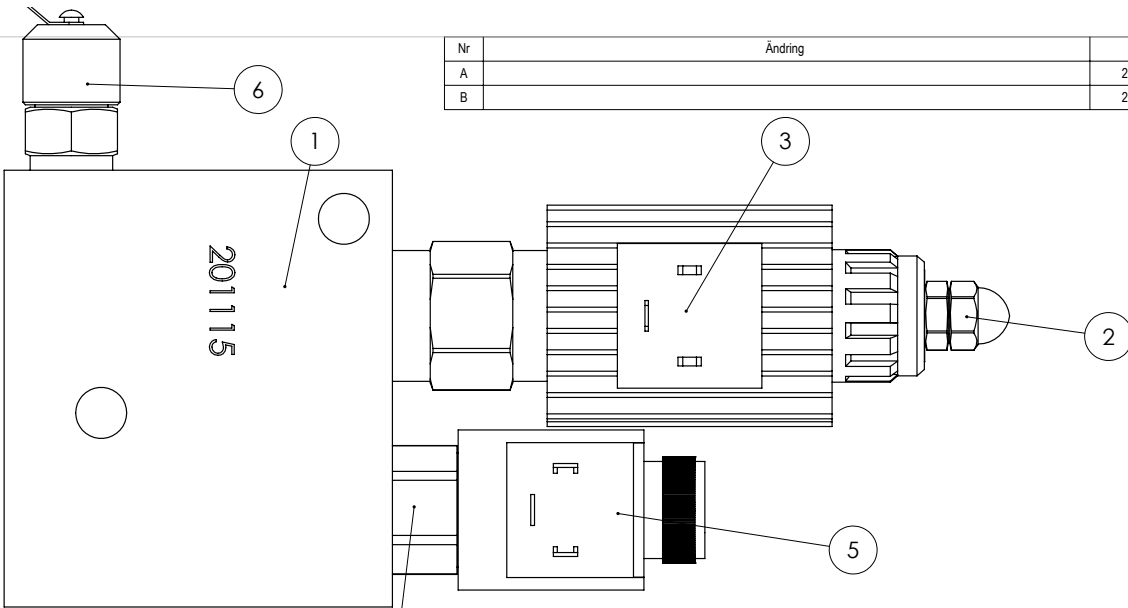


Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	111392	ELSATS-B-512901-E01	Bromsreducering till kommuniserande kärl (givare)	
2	1	111360	VBESH-B-5129.00	Ventilblock kpl. för prop. broms system 12V	2
3	2	101056	I33650-5	Borrskruv 5,5X66	
4	3	101087	450100	Tredo-bricka 1/4"	
5	3	105498	70020406	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 LH	Ritad Av LH	Skapad Datum 2011-10-07	Godkänd Av AI	Generell Tolerans	Skala 1:10	
Status Godkänd	Vikt (kg) 3502.38	Titel / Benämning Bromsreducering komkärl lastavkännande Elstyrd			Hall	
Agare 		Artikel Nr 111339			Rev D	Blad 1 (2)

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Nr	Ändring	Datum	Godk av
A		2013-02-04	
B		2017-04-26	



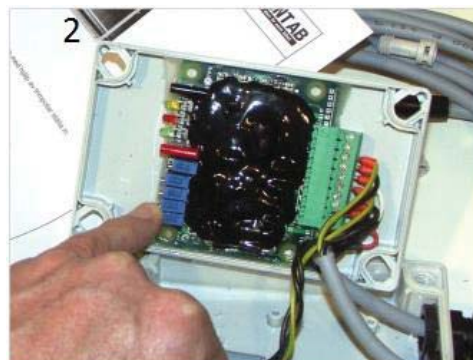
Pos.	Ant.	Artikelnr 1	Artikelnr 2	Beskrivning	Vikt
1	1	108692		block el bromsreducering	
2	1	105475	EPRS-10 N-30-0	Prop tryckreducerings ventil	
3	1	105476	60191-12DG	Magnet 12V/36W serie 10/12/16	
4	1	111341	CT512NC-12V	2-vägs ventil CT 05621 NC	
5	1	111348	0940010000	magnet spole NEM	
6	1	132903	83018004	Mätuttag NPT 1/4" M	

Konstruerad Av LH	Ritad Av LH	Skapad Datum 2011-10-05	Godkänd Av AI	Generell Tolerans	Skala 1:1	
Status Godkänd	Vikt (kg) 3	Titel / Benämning VBESH-B-5129.00			Hall	
Agare 		Artikel Nr 111360			Rev C	Blad 1 (1)

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PROPSTYRNING B-5094.00

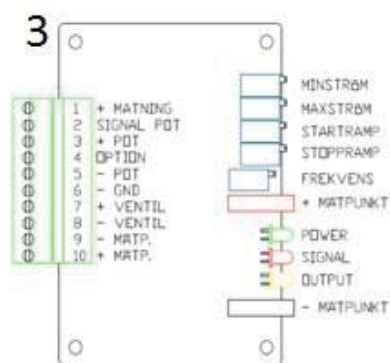
Styrning av 1 propventil + 1 el flera on/off ventiler.
12-24V, 50-250Hz, 0-5s ramp, max 2.5



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



justera bromsreducering för pendel boggie potentiometer i hytten bild1

För att justera minströmmen gör följande: Vrid ned ratten på lådan till ca 5% av utstyrningen (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 utstyrningen (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 mätpunkt + & - 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 styrning.

Mätvärden

minström 0,25volt

maxström 1,7 volt

Nr				Ändring		Datum	
F						2019-02-06	

Pos.	MQ 60 75 95/QTY.	Ritnings #	Beställnings#	Beskrivning	Vikt
2	1	106725	10180037.1VÄ	Komkärn DV 80/40-250 LL30 VÄ	14
3	1	111952	10250020	Överströmningsventil & block	1
4	1	111959		Boggie lift slang MF 18-24	1
5	1	111959		Boggie lift slang MF 18-24	1
6	1	111957		Fyllslang boggie lift	0
7	1	111956		Retur slang boggie lift	0
8	4	102987	60000808	Adapter 1/2"UTV-1/2"UTV	
9	6	101007	450103	Tredo-bricka 1/2"	
10	1	103438	60000608	Adapter 3/8" UTV-1/2" UTV	
11	1	107069	48800808	T-koppling 1/2" ut/in/ut	
12	1	101016	5C105956205	Snabbkoppling Hane 1/2"	
13	1	104237	48900606	†-koppling 3/8 ut/ut/in	
14	2	117457		Sprint komkärn övre. L=112	
15	2	101290	10400138	Dammask komkärn slag 250	0.09
16	2	101293	NORMA80100	Slangklammer 80-100/12W1S	
17	4	109911	472031	Låsring SGH 31	
18	1	102089	10180037.1HÖ	Komkärn DV 80/40-250 LL30 HÖ	13.64
19	2	128143		Expanderbult komkärn nedre	1

Boggilift med kommunicerande kärn enkelverkande.
Uttag med funktion flytläge, valfri axel. Lyftkraft 25 % av vikten som vilar på axlarna.
 Systemet har överströmningsventil inställd på 300 bar, den är dränerad via fri retur (bromssystemets).
 Det är **Viktigt** att den är ansluten.
 Det är av stor vikt att man kör med hydraulfunktion ska flyttläge när hjulen är i marken för att motverka diesilverkan i cylindern. Det är möjligt att ha flera axlar lyftbarabara på vagnen, "man kör med en axel lyft i taget".

Konstruerad av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala
LH	LH	2013-01-31			1:10
Status	Vikt (kg)	Titel / Benämning		Original och storlek	
Godkänd	33	Boggie lift MF18 MQ		A3	
Ägare	METSJÖ		Artikel Nr	Rev	Blad
	Ivarssons i Metsjö AB		107137	G	1 (2)

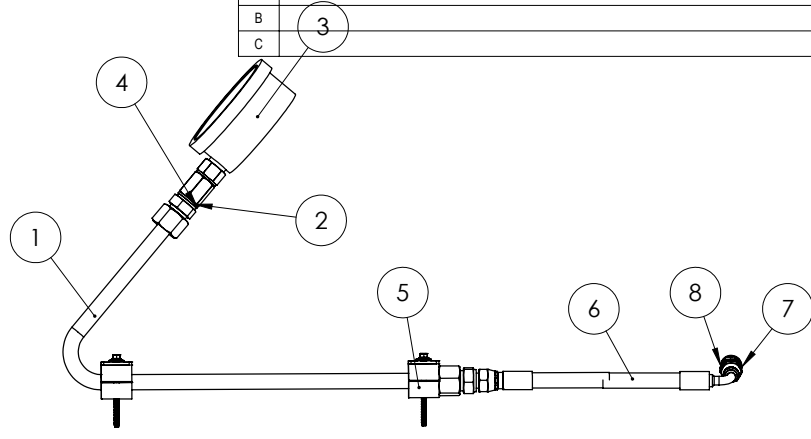
Nr				Ändring		Datum	
A						2013-01-31	
B						2016-11-21	

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	2	103193	122050001	Membran ackumulatortank dia 107	0.68
2	2	111943		Slang acktank aktivfjädring	0
3	2	101005	688103	Banjobult 1/2" Enkel	
4	4	101007	450103	Tredo-bricka 1/2"	

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		Aktiv fjädring ack tank (boggi kommunicerande kärn)	
Ägare	METSJÖ		Artikel Nr	Rev	Blad
	Ivarssons i Metsjö AB		107136	B	1 (1)

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

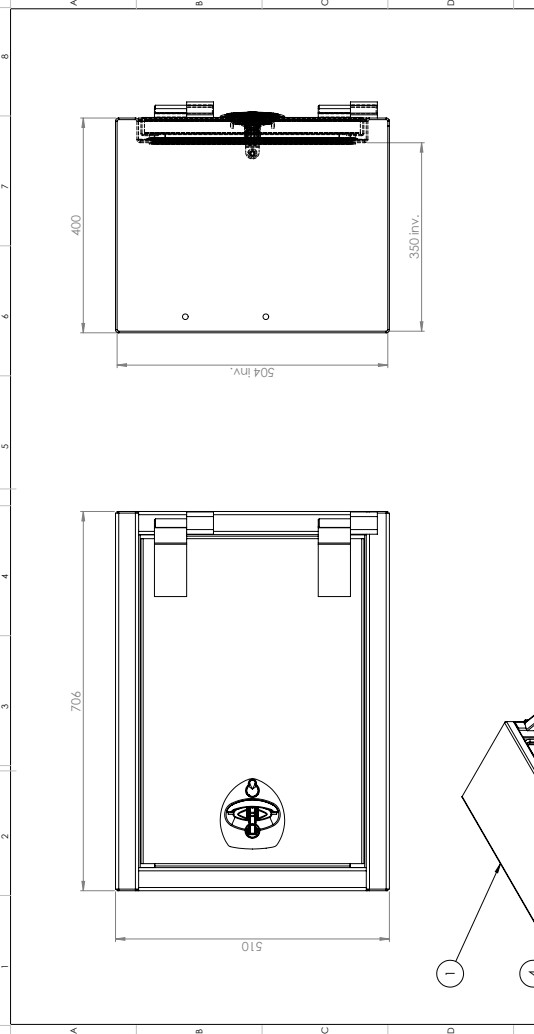


Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	111966		komplett rör manometer	1
2	1	111932	70110606	Muff R3/8"IF R 3/8"IF	
3	1	111934	AG100-250	Manometer dia 100 0-250bar	
4	2	103440	450102	Tredo-bricka 3/8"	
5	2	102732	RAPE-215SV	klamma enkel 15 rör	0.09
6	1	111940		Slang till manometer-samlingsblock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

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala	
LH	LH	2011-11-04	AI		1:5	

Status	Vikt (kg)	Titel / Benämning	Hall
Godkänd	3	107138	

Agare	Artikel Nr	Rev	Blad
Ivarssons i Metsjö AB	107138	E	1 (1)

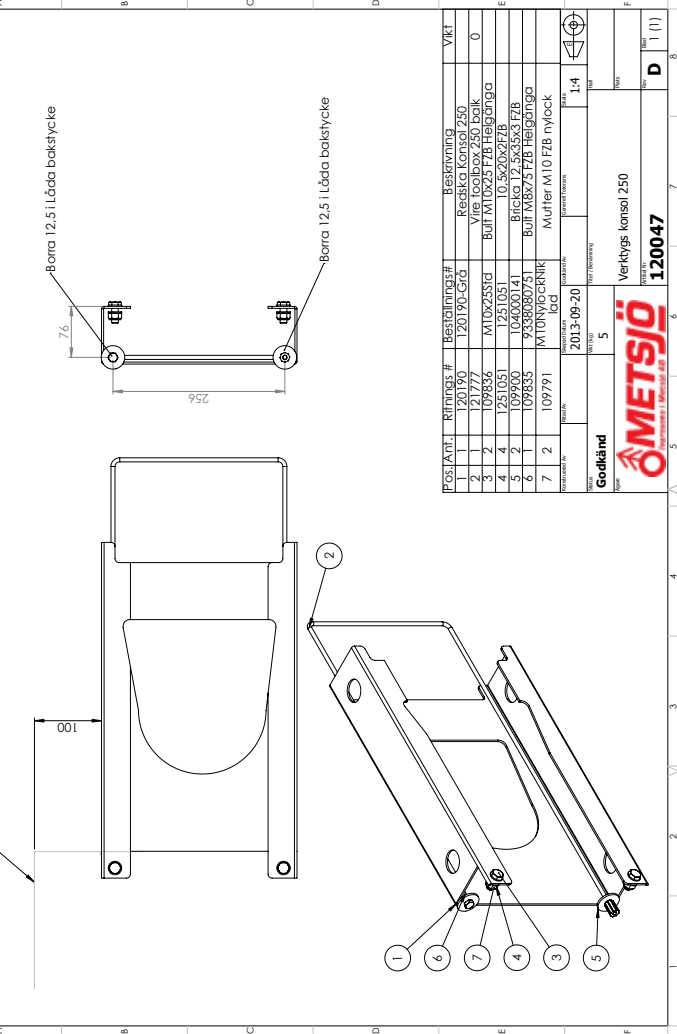
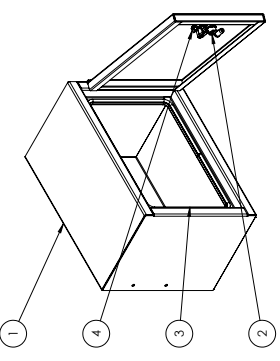


Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	100631		Redskapslåda B700xH400xD510	44.55
2	1	102487		Inifrån lösbart handtag till redskapslåda	
3	1	128740		Låningslist 1-4 PVC/Cellogummi	
4	4	Hex-Flange Nut Grade A, ISO			

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala
LH	AI	2010-09-21	AI		1:5

Status	Vikt (kg)	Titel / Benämning	Hall
Godkänd	45	102489	A

Agare	Artikel Nr	Rev	Blad
Ivarssons i Metsjö AB	102489		1 (1)



Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	120170-Grö		Redskapslåda B700xH400xD510	
2	1	211777		Virtuellt verktygs konsol 250	0
3	1	098836		Muff M10x25 F2B Helgöngö	
4	4	1251051		Bricka 12,5x35x3 F2B	
5	2	109900		Bricka 12,5x35x3 F2B	
6	1	109835		Muff M8x25 F2B Helgöngö	
7	2	109791		Muff M10 F2B nyöck	

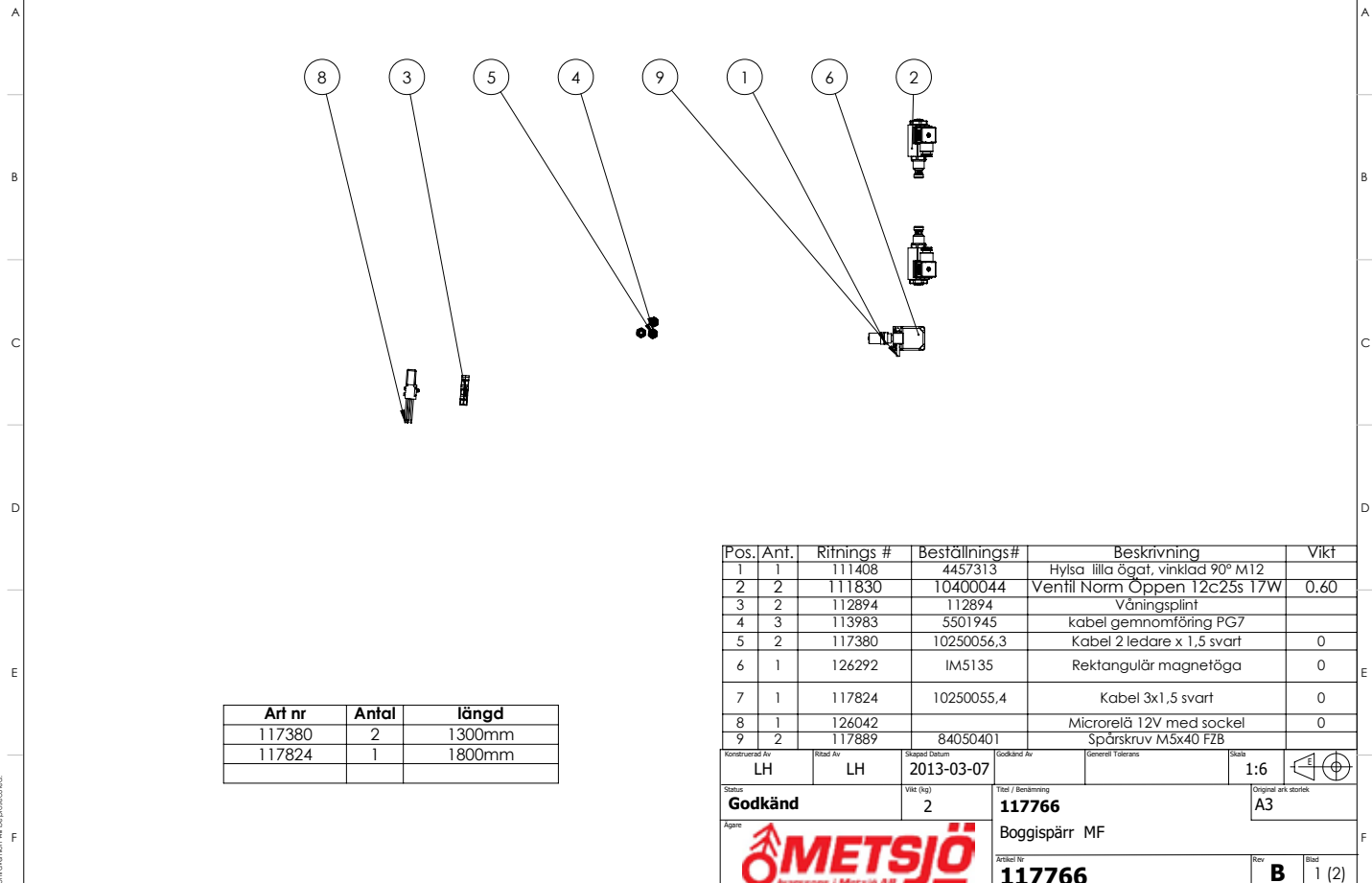
Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala
LH	AI	2013-09-20	AI		1:4

Status	Vikt (kg)	Titel / Benämning	Hall
Godkänd	5	Verktögs konsol 250	D

Agare	Artikel Nr	Rev	Blad
Ivarssons i Metsjö AB	120047		1 (1)

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Nr	Ändring	Datum	Godk av
A		2013-03-19	
B		2017-08-23	

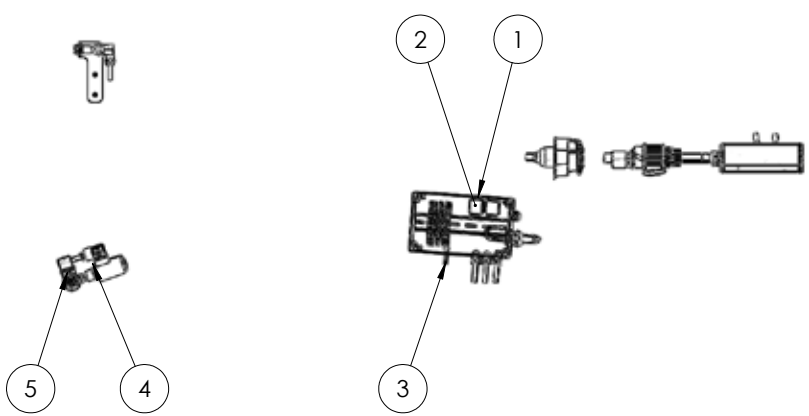


Art nr	Antal	längd
117380	2	1300mm
117824	1	1800mm

Pos.	Anf.	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	2	112894	112894	Värningsplint	
4	3	113983	5501945	kabel genomföring PG7	
5	2	117380	10250056,3	Kabel 2 ledare x 1,5 svart	0
6	1	126292	IMS135	Rektangulär magnetöga	0
7	1	117824	10250055,4	Kabel 3x1,5 svart	0
8	1	126042		Microrelä 12V med sockel	0
9	2	117889	84050401	Spårskruv M5x40 FZB	

Konstruerad Av LH	Ritad Av LH	Skapad Datum 2013-03-07	Godkänd Av	Generell Tolerans	Skala 1:6	Original ark storlek A3
Status Godkänd	Vikt (kg) 2	Titel / Benämning 117766		Boggispärr MF		
			Artikel Nr 117766	Rev B	Blad 1 (2)	

Nr	Ändring	Datum	Godk av
-		2013-02-18	
A		2013-03-19	

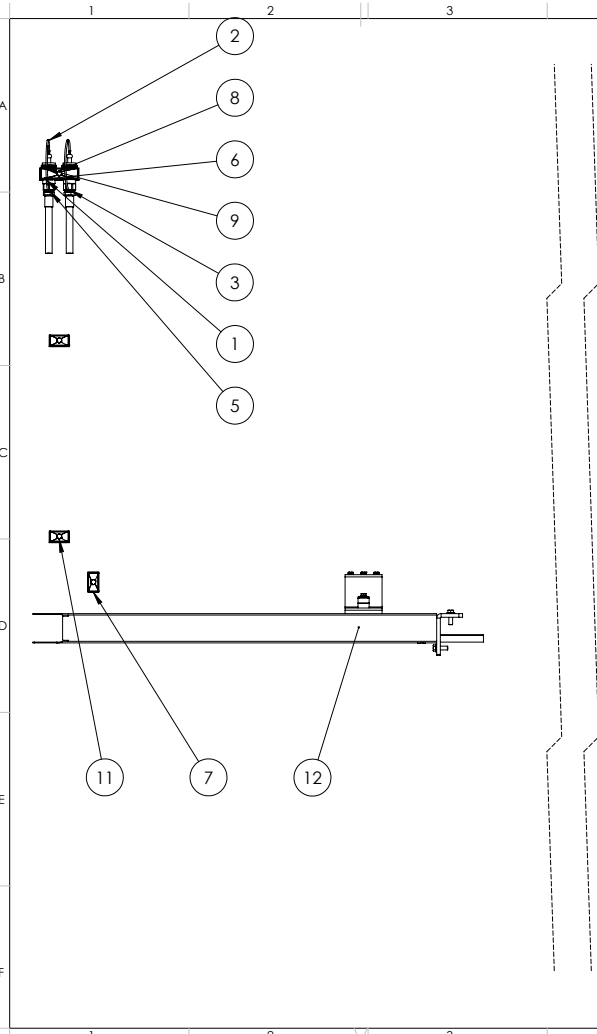


Pos.	Flex 18-24/QTY.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	112916	42-315	Reläsockel	
2	1	112355	3700754	Relä (vagnar) TR93F-12VDC-SC-C	
3	2	110493	7018005	By 255 Diod 3A 1300V	
4	1	117381		Höjd och sidreglering av chassi via elbrytare	2
5	1	117766	117766	Boggispärr MF 18-24	1

Konstruerad Av LH	Ritad Av LH	Skapad Datum 2013-02-18	Godkänd Av	Generell Tolerans	Skala 1:10	Original ark storlek A3
Status Godkänd	Vikt (kg) 4	Titel / Benämning Boggispärr med höjd sidreglering. MF18-24		Boggispärr MF18-24		
			Artikel Nr 117229	Rev B	Blad 1 (2)	

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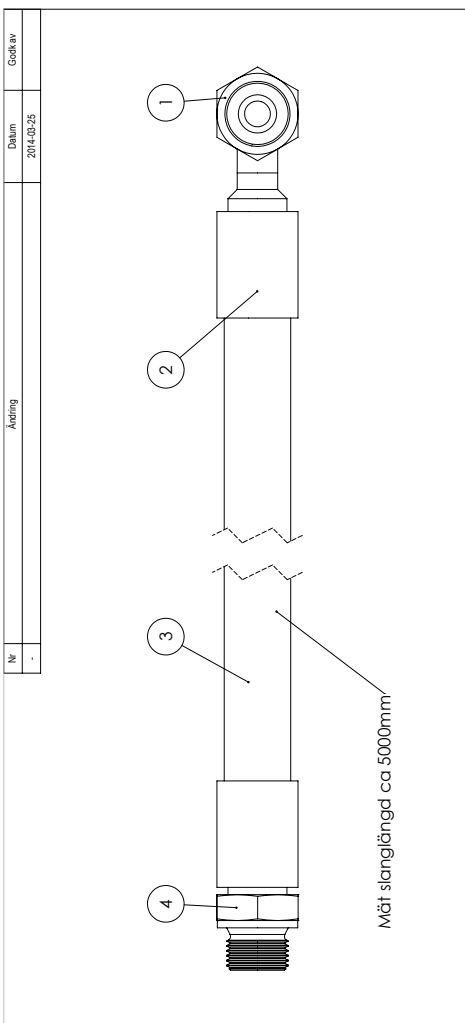
Nr	Andring	Datum	Godk av
C		2016-09-12	
D		2017-08-14	

Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	2	105453	TIA5010P	Snabbkopplings hona 1/2" IF (Push & Pull)	
2	2	103358	471015	Dammskydd Hona	0.0
3	4	101007	450103	Tredo-bricka 1/2"	
4	2	101016	5C105956205	Snabbkoppling Hane 1/2"	
5	2	122611		Slang Hyd uttag torn MF 50-60	0
6	1	122607	5390-45-38	Dubbel klammer 38	
7	9	108740	RBP-215SV	Dubbel 15 rör klammer	0
8	1	Hex Screw GradeAB_ISO			
9	1	122610	5394-15-01	Täckplatta HUV-Dubbel 38	0.08
10	2	103438	60000608	Adapter 3/8" UTV-1/2" UTV	
11	9	109831	9338080451	Bult M8x45 FZB Helgänga	
12	1	132674		slangskena växlare50-60 -16	10
13	2	122612		Slang Hyd uttag torn MF 50-60	0

Konstruerad Av	Risad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala
LH	LH	2014-03-25			1:10

Status	Vikt (kg)	Färd / Benämning	Hall
Godkänd	11.91	Uttag torn MF 50-60	

Agens	Artikel nr	Rev	Blad
METSJÖ Invarersons i Metsjö AB	122602	C	1 (3)

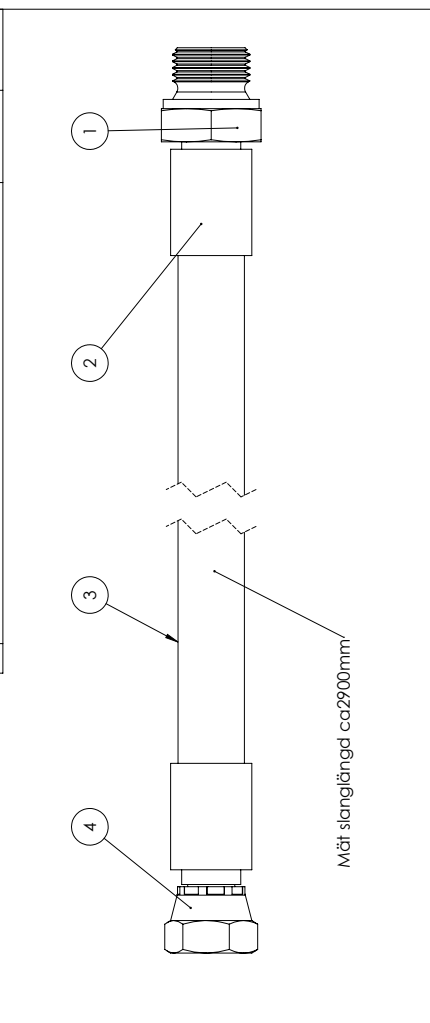


Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	103339	A500510606	Stolpe 3/8"- 90°	0.03
2	2	102555	1100000606	Hylsa 3/8" 1W	0.03
3	1	101036	241B06	Hydraulslang 3/8"	0.03
4	1	108354	5001200606	Stolpe 3/8"- UTV 3/8"	

Konstruerad Av	Risad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala
LH	LH	2014-03-25			1:1

Status	Vikt (kg)	Färd / Benämning	Hall
Godkänd	0	Slang Hyd uttag torn MF 50-60	

Agens	Artikel nr	Rev	Blad
METSJÖ Invarersons i Metsjö AB	122612	-	1 (1)

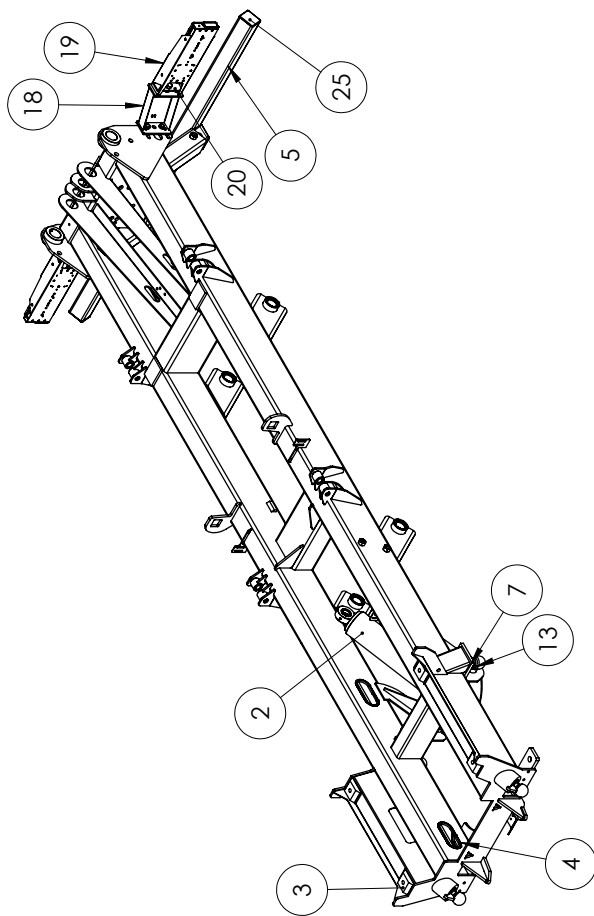


Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	102553	5001200806	Stolpe 3/8"- UTV 1/2"	0.03
2	2	102555	1100000606	Hylsa 3/8" 1W	0.03
3	1	101036	241B06	Hydraulslang 3/8"	0.03
4	1	104330	A500010606	Stolpe 3/8"- INV R 3/8"	

Konstruerad Av	Risad Av	Skapad Datum	Godkänd Av	Generell Tolerans	Skala
LH	LH	2014-03-25			1:1

Status	Vikt (kg)	Färd / Benämning	Hall
Godkänd	0	Slang Hyd uttag torn MF 50-60	

Agens	Artikel nr	Rev	Blad
METSJÖ Invarersons i Metsjö AB	122611	-	1 (1)

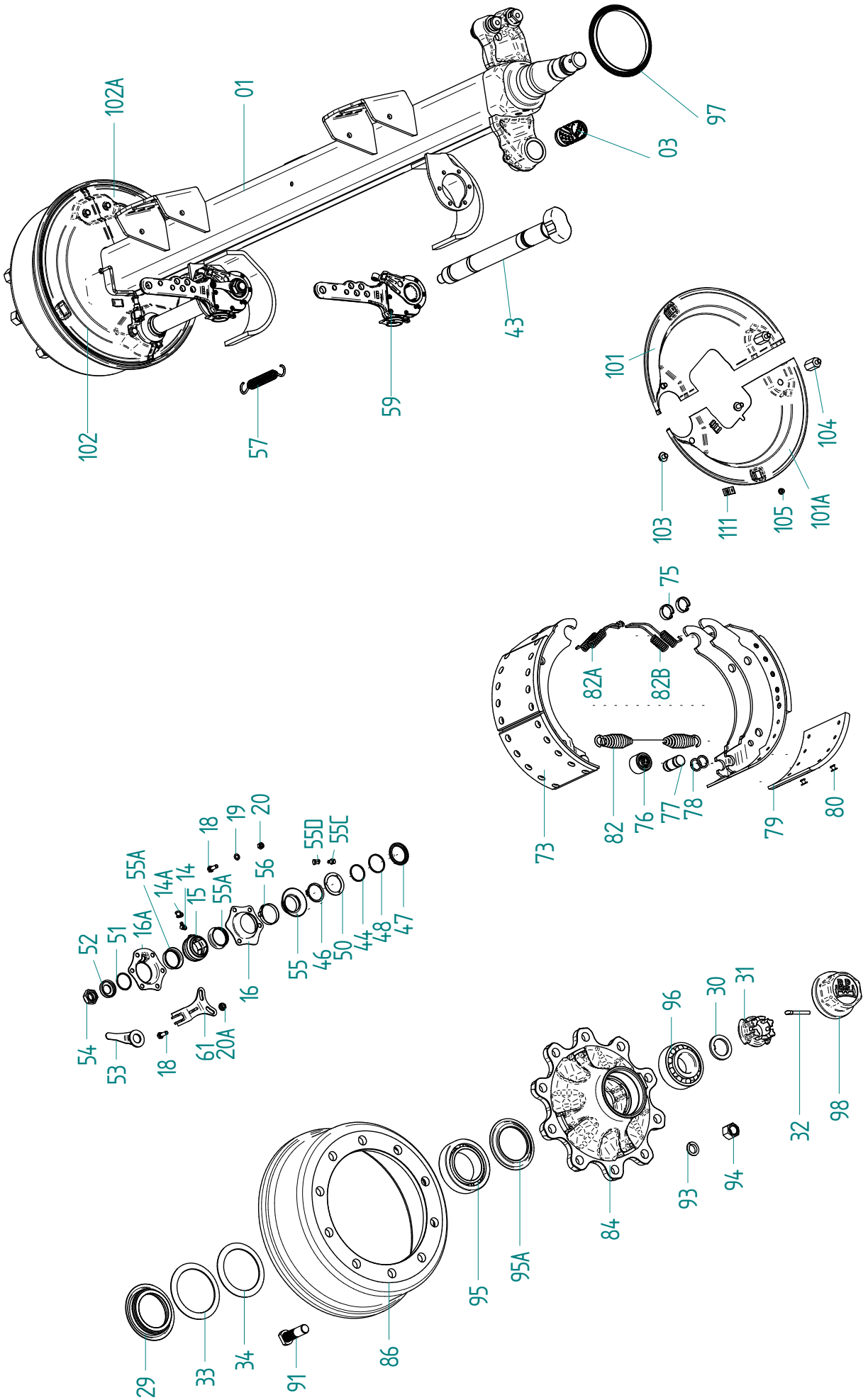


Pos.	Ant.	Ritnings #	Beställnings#	Beskrivning	Vikt
1	1	122493		Underram MF50-60	905
2	1	121200		Tippcylinder MF50-60 160/75-2830s LL40	
3	4	101918	45499BN06	Grön amid slitplatta 120x80x30	0.24
4	6	102742	41 6007	Kantskydd 15x12 6-8 PVC Svart	0.03
5	1	121731		UK-skydd bak MF50-60	56
6	2	122263		Sprint 30L128 ändborradx1	
7	1	122264		Sprint 40L520	
8	1	109601	109601	Bakljus diod	3.21
9	2	109897	SRKB09035301	Bricka 9x35x3 FZB	
10	4	109875	7000107544.2	Vagnsbult M8x25 FZB	
11	4	109896	NB08251	Bricka 8x25x1,5 FZB	
12	4	109790	M8Nyllockniklad	Mutter M8 FZB nylock	
13	2	109912	472040	Låsring SGH 40	
14	2	Hex Screw GradeAB_ISO			
15	2	131019		Cyl. 60/32-400 Hylsa-L30 Inb.615	11
16	2	101108		Sprint No-Mid-Metax fippkolv nedre	0.47
17	4	109911	472031	Låsring SGH 31	
18	2	124836		Fäste lyktållare MF 50-60	4
19	2	130222		Lyktållare	
20	2	130226		Plåt infästning lyktållare	
21	2	109852	9338240251	Bult M24x25 FZB Helgänga	
22	4	ISO 4017 - M16 x 50-N	9338160501	Bult M16x50 FZB	3.21
23	8	109904	69161701	Bricka 17x30x3 FZB	
24	4	109793	9851601	Mutter M16 FZB nylock	
25	2	115594	LQ 100. 100. x 3-6	skyddspropp 100x100	
26	2	100982	1223214010	Reflex 40x90mm gul	0.03
27	2	109868	91412025	Stoppskruv M1 2x25 Insex	

Konstruerad Av	Ritad Av	Skapad Datum	Godkänd Av	Skala	1:20
			Generell Tolerans		Häll
Status	Vikt (kg)		Plats		
Godkänd	1085		Monterat chassi MF50-60 multidrag		
Agare			Artikel Nr. 122492		
			Rev C		
			Blad 1 (1)		

METSJÖ
Ivarsson's i Metsjö AB

Nr	Ändring	Datum	Godk av
A		2014-03-13	
B		2015-01-07	
C		2016-04-18	



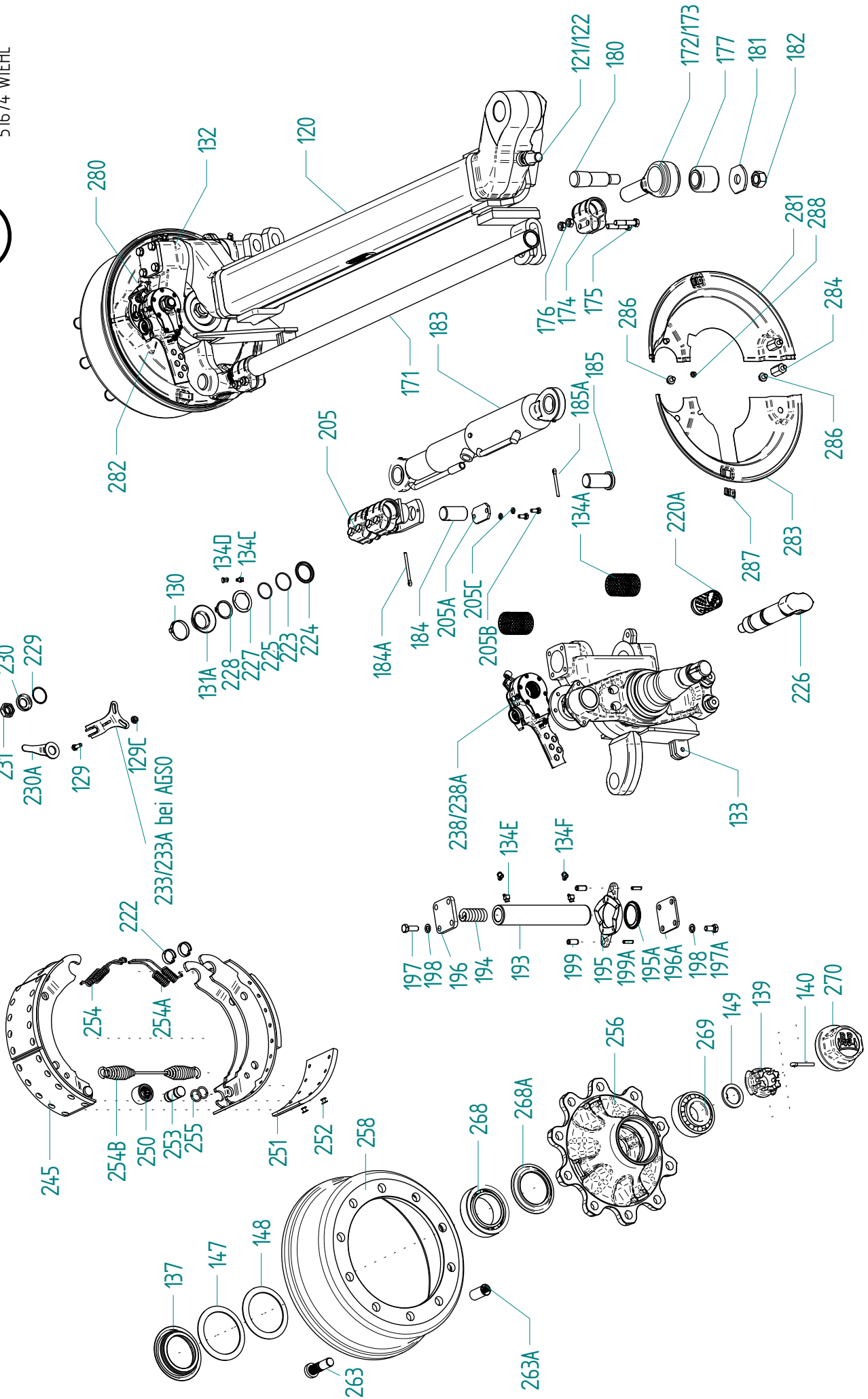
SPARE PARTS LIST

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	GNP 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



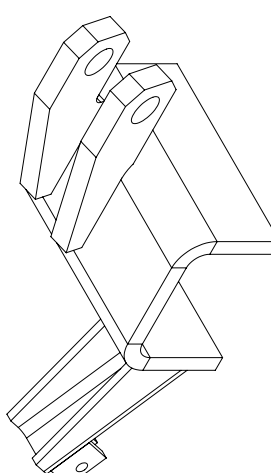
Pos. 120, 132 und 133 sind schematische Darstellungen, können bei den einzelnen Artikeln unterschiedlich sein!



ITEM	PART	MEASUREMENT	SERIAL-NO	PER UNIT'
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

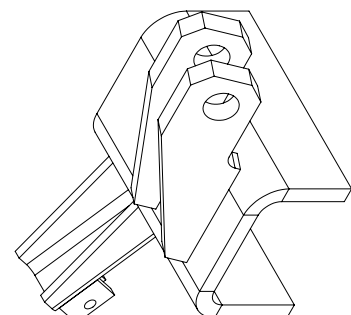
Nr	-	Datum	2016-01-15	Ändrad av	
A			2016-02-12		



Konstruktör Av	KES	Skapad Datum	2016-01-15	Godkänd Av	AI	Skala	SS-ISO 2768-1 m	Storlek	1:3	Öppna rit av	ISO 6082
Status	Godkänd	Rev (0)	12	Rev / Dimensionering	AI				A4		
Ämne	Inköp 09.189.74.90.0 Hydraulensfäste vänster										
	METSJÖ Pneumatisk Metall AB										
	Parti nr 129966										
Nr	-	Datum	2016-01-15	Ändrad av							
A			2016-02-12								

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



Konstruktör Av	KES	Skapad Datum	2016-01-15	Godkänd Av	AI	Skala	SS-ISO 2768-1 m	Storlek	1:3	Öppna rit av	ISO 6082
Status	Godkänd	Rev (0)	12	Rev / Dimensionering	AI				A4		
Ämne	Inköp 09.189.74.91.0 Hydraulensfäste höger										
	METSJÖ Pneumatisk Metall AB										
	Parti nr 129967										
Nr	-	Datum	2016-01-15	Ändrad av							
A			2016-02-12								

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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.

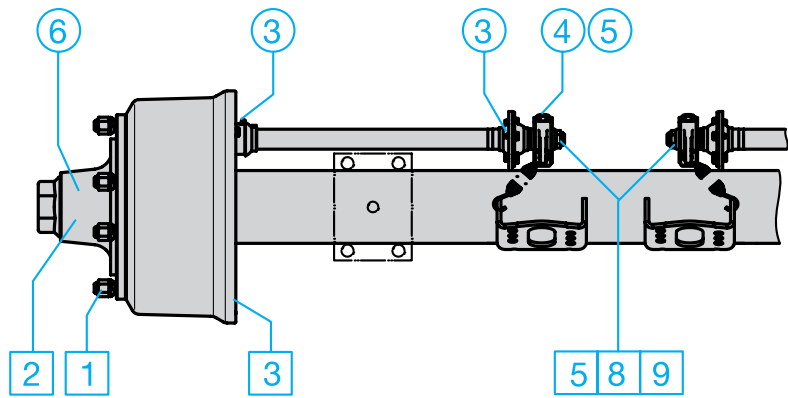
When fitting replacement parts you are strongly recommended to use only genuine BPW parts. BPW subjects all its components to regular testing to ensure they comply with safety and quality standards and in so doing guarantees their performance.

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

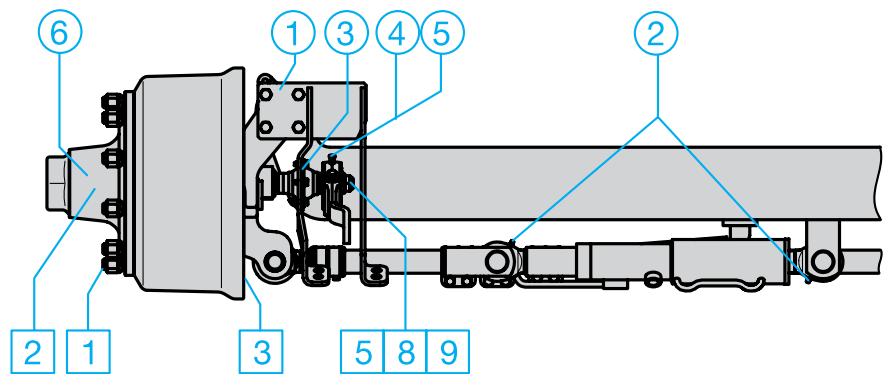
Our guarantee becomes invalid if spare parts other than genuine BPW parts are used.

<p>Lubrication and maintenance works</p> <p>Summary</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>Lubrication</p> <p>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>Maintenance work</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> <p>○</p>	<p>○</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

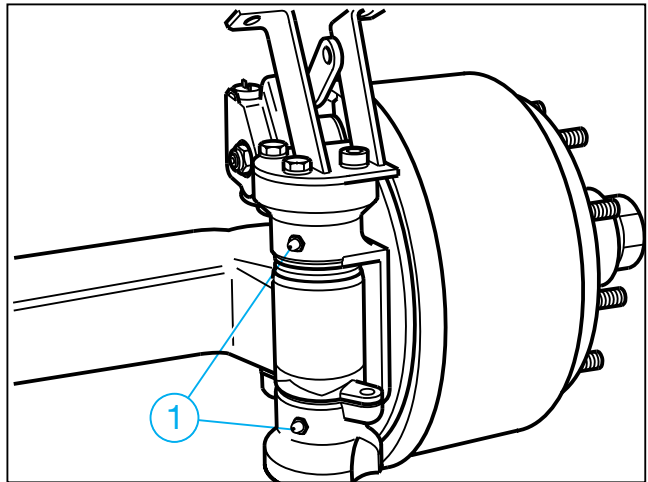


Note: All the lubrication points should be re-lubricated with grease after the vehicle has been cleaned with a high-pressure washer.

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.

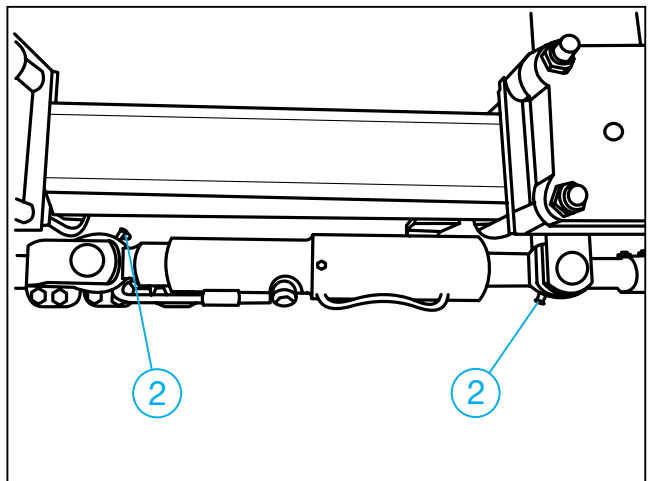


② Locking cylinder ends on steering axles

– 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.



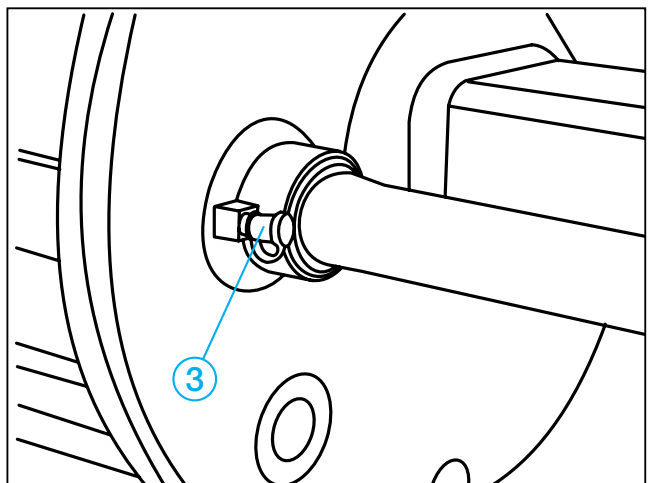
③ Outer and inner brake camshaft bearings

– 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.

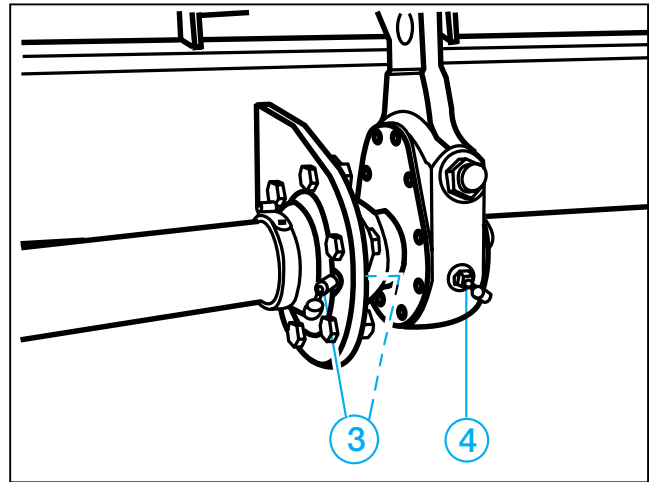
Use only lithium-based grease with a drop point above 190 °C.



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.

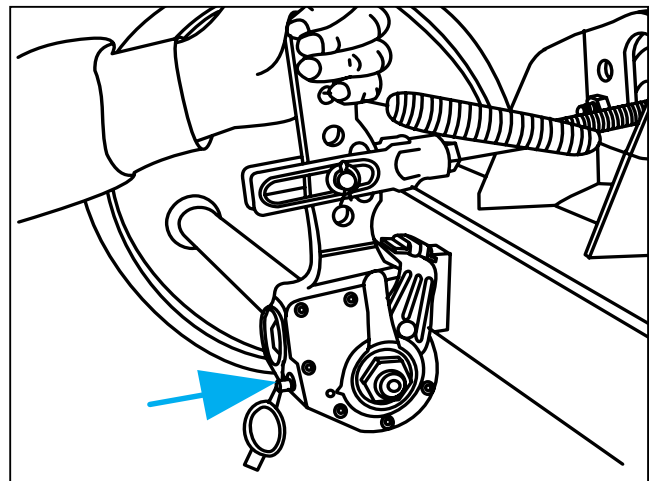
Undo the adjusting bolt by approximately one turn with a ring spanner. Operate the brake lever by hand several times.

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.

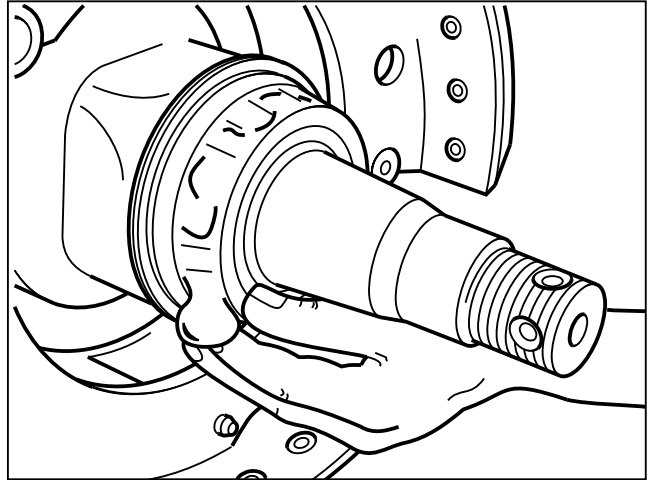
Lightly grease the bearing seats before fitting the bearings, and then assemble all the parts in the reverse order.

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

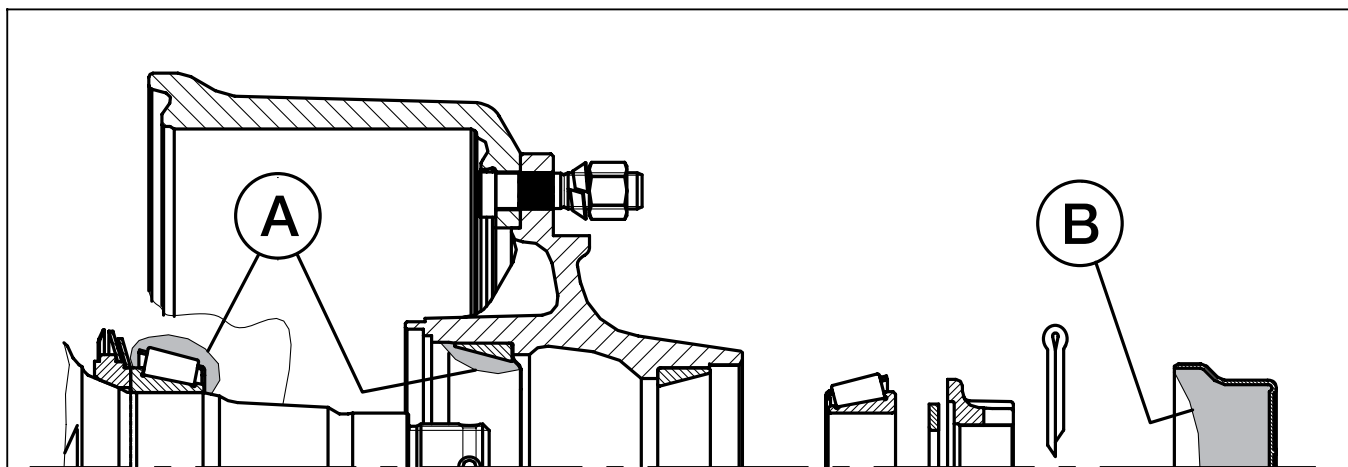


and the brake.

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.

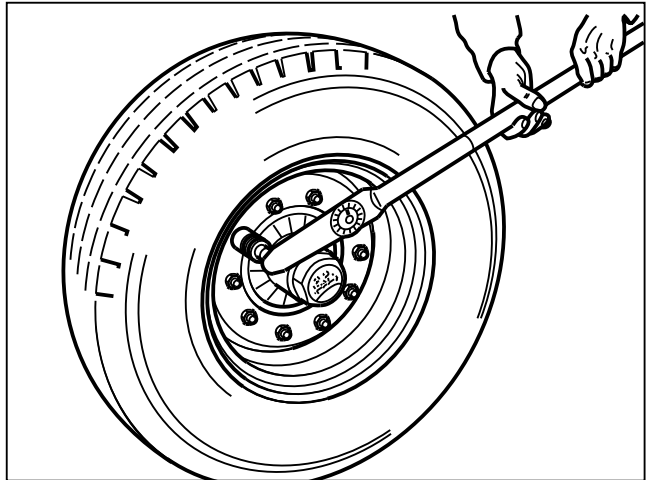


Wheel hub	BPW special longlife grease (ECO-Li 91), quantity per tapered roller bearing	
	Inner A	Outer B
GS 5506	40 g	80 g
GS 7006 GS 7008	50 g	210 g
GS 8008-1 GS 8010-1	90 g	230 g
GS 11008-1 GS 11010-1	170 g	290 g
GS 12008 GS 12010	180 g	320 g
	Work grease into the space between the tapered rollers 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	95 Nm (90 - 100 Nm)	--	95 Nm (90 - 100 Nm)
M 14 x 1.5	22	5	125 Nm (120 - 130 Nm)	--	125 Nm (120 - 130 Nm)
M 18 x 1.5	24	6	290 Nm (275 - 305 Nm)	270 Nm (250 - 290 Nm)	320 Nm (300 - 340 Nm)
M 20 x 1.5	27	8	380 Nm (360 - 400 Nm)	380 Nm (360 - 400 Nm)	420 Nm (400 - 440 Nm)
M 22 x 1.5	32	8/10	510 Nm (485 - 535 Nm)	510 Nm (485 - 535 Nm)	560 Nm (535 - 585 Nm)
M 22 x 2	32	10	460 Nm (435 - 485 Nm)	--	505 Nm (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.

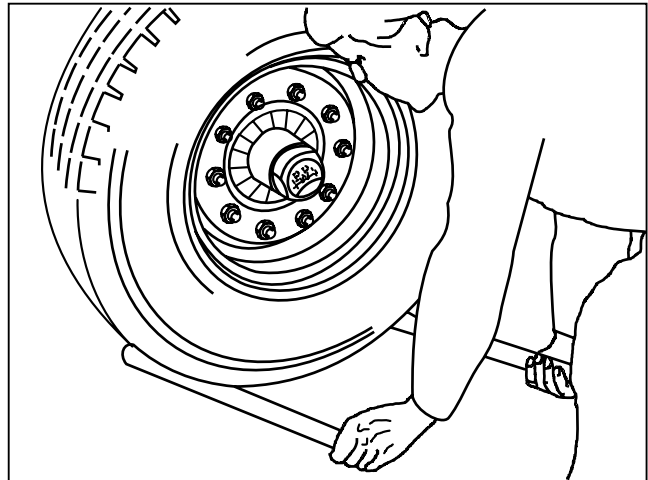
Release the brake, place a lever between the tyre and the ground, and check for play.

If you can feel play in the bearing:

Adjusting the bearing play

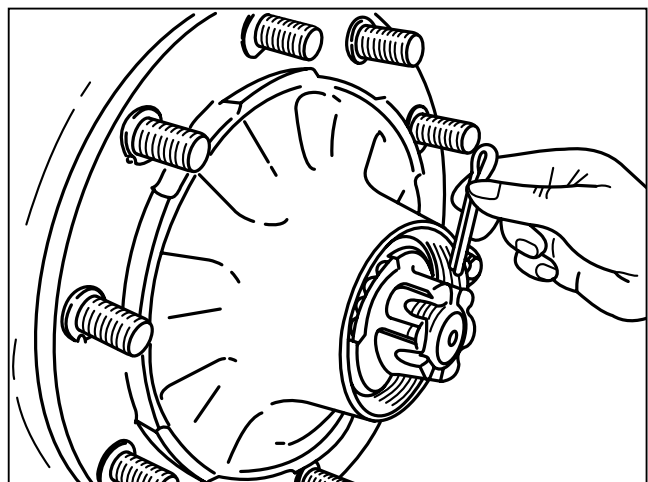
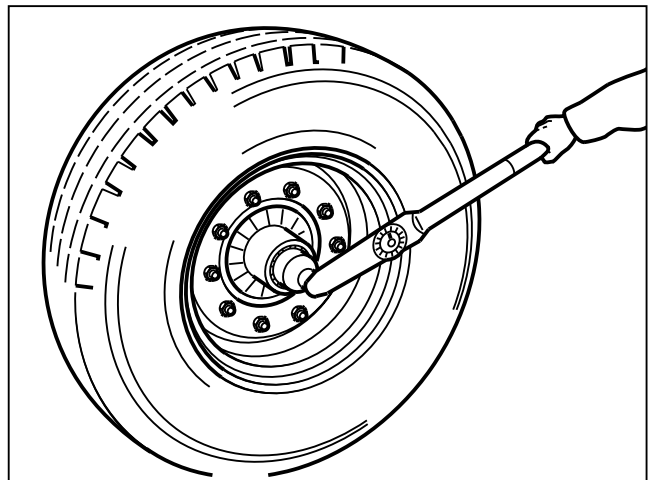
Standard hub bearing

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 –

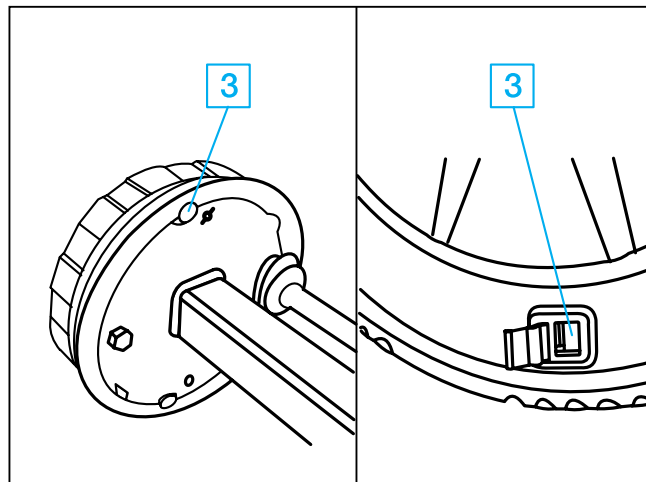
Open the inspection hole by removing the rubber bung (if present).

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

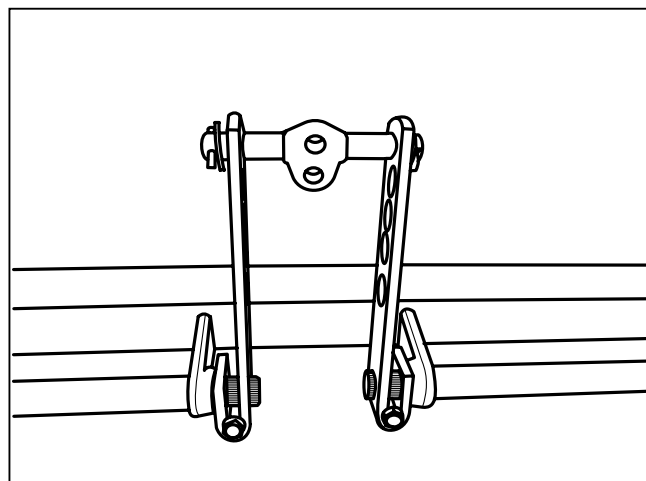
Depending on the nature and extent of operation, the brakes should be checked regularly and adjusted, if necessary. Adjustment is necessary when approx. 2/3 of the maximum cylinder stroke is used under heavy braking. For this purpose, jack up the axle and secure the vehicle against accidental movement.

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.



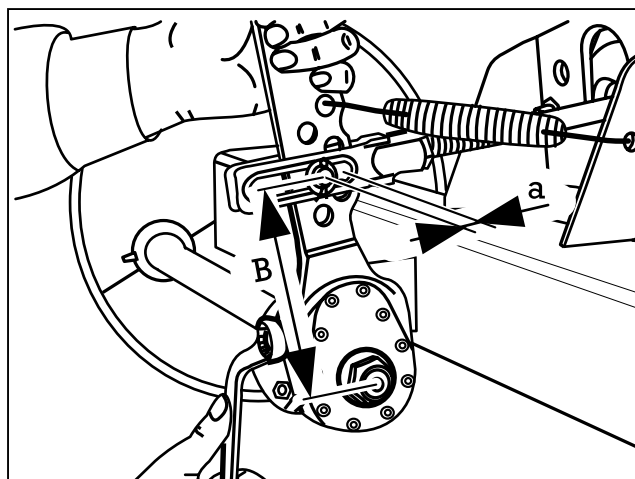
5 Adjustment of the slack adjuster

– 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.

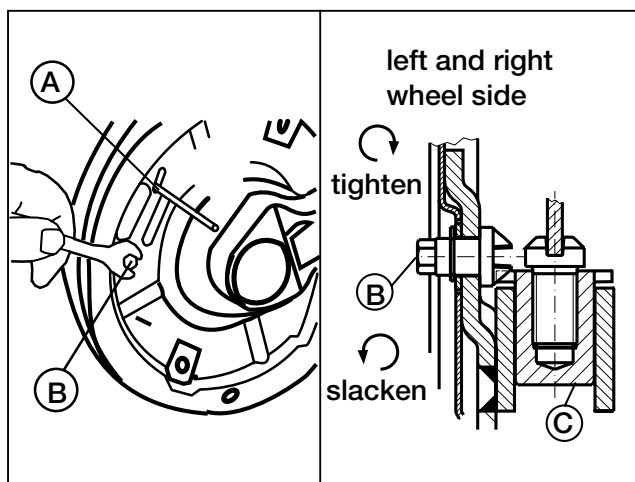
Caution:

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.

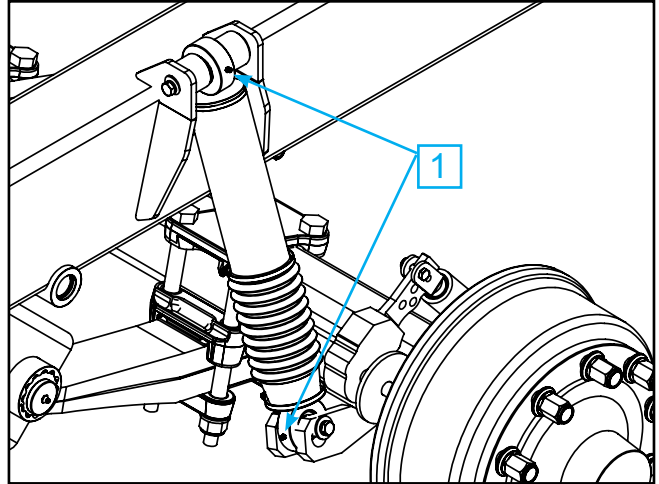
Hydraulic Suspension

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.



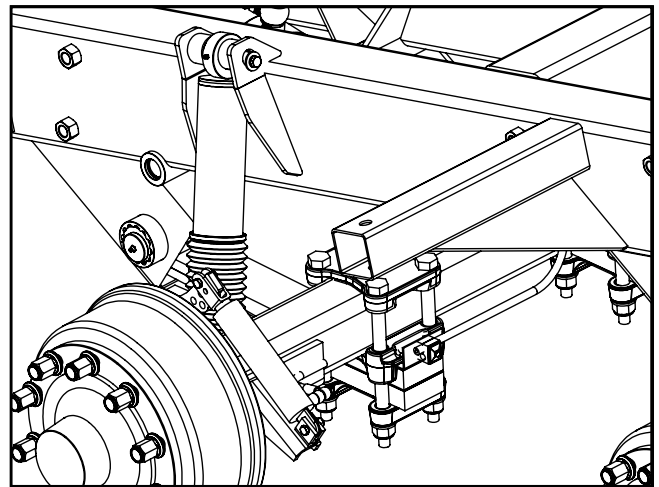
- Visual inspection

– 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

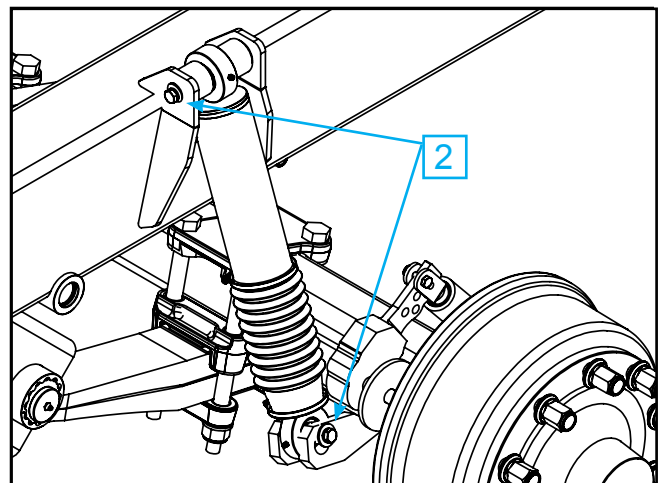
– every 500 hours in operation,
latest annually –



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.

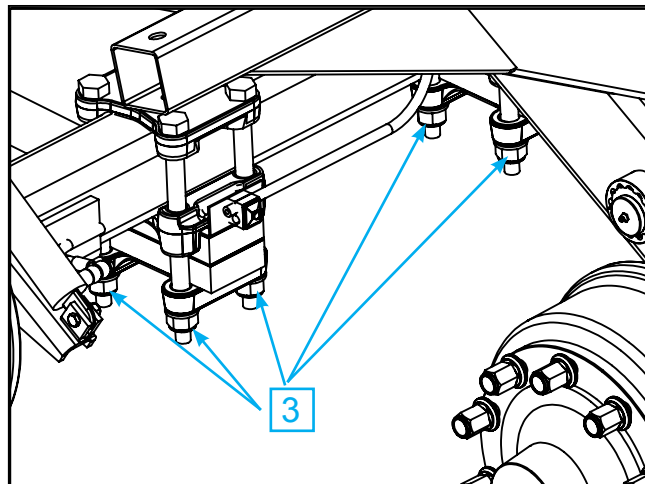


3 Spring mounting kit

– 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

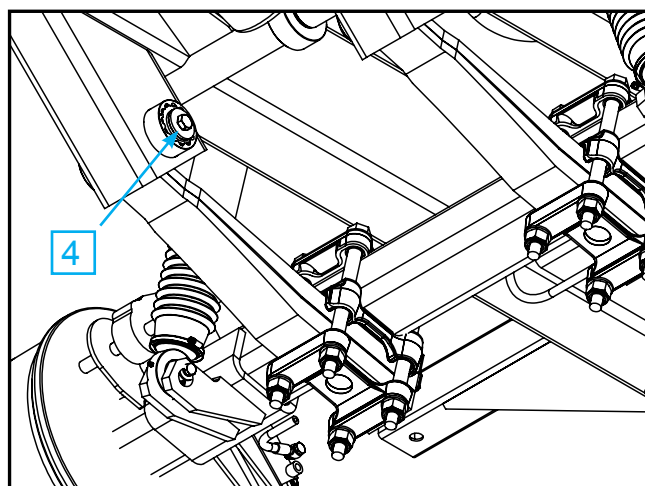
– every 500 hours in operation, latest annually, initially after the first laden journey –

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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