

# Safety and Assembly instructions



Thank you for having purchased a Fliptop MAXI, here are the instructions for installation of our product. it occurring variants depending on the length, number of cylinders, and arches.

If you are unclear or have questions we or the bodybuilder who sold the stand are happy to support you.

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### **Important**

Shipping damage must be reported to the carrier.  
It is important to check the packaging when the goods arrives, if it is damaged an report to the driver at the delivery point. It is the deliverer that is responsible for the damages that arise on the cargo during the transport.  
The montage must be done according to our Assembly instructions for the material warranty.

### **Warranty**

it's 1 year material and workmanship warranty from us.  
For warranty to be valid, the system must follow our assembly instructions.

### **Safety**

Operating instructions must be read carefully before using the system, when the movable arms move with the help of hydraulics and without knowledge can result in serious personal injury and damage to the system to occur.



## Handling instructions Fliptop Maxi 621-002

### General information

Fliptop Maxi is a roof system for covering essentially tippers and containers. Semiautomatic equipment consisting of 2 side panels with control arms, the ends are connected by steel tubes and covered with PVC fabric. The structure is opened and closed with one or two hydraulic cylinders that run together. The design is intended to cover tippers, containers. This does not exclude other areas of use.

### Operating instructions

Please read this documentation and familiarize yourself with the equipment before using it. Fliptop Maxi systems operated by hydraulic power, usually from a vehicle and can only work if the vehicle is started, at such an installation, the system can be operated from the cab in some cases. Other options are to operate with a manual valve adjacent to the platform. Another way to drive Fliptop Maxi system is to install a powerpack. This is powered by a 24V DC electric motor and normally has a manual component and a radio control. The equipment can then either run with radio or push buttons on the electricity box. This means that the equipment can be operated without the vehicle is started, however, a switch is mounted between the batteries and hydraulic unit, this in order to shut down the system completely under the service and other work where you can get hurt if the system moves.

**When you open and close Fliptop Maxi you need to oversee and make sure that no one can get damaged.** The hydraulic pressure-driven movements are very strong and can cause very serious damage if something or someone becomes pinched or hit. If your Fliptop Maxi has radio control be extra careful, make sure to keep an eye on the transmitter so that no one inadvertently turned on and maneuvers when someone is near moving parts. It is also important not to open or close during driving. If you must perform service or other work on the system, it is imperative to break the power supply to the hydraulic unit, if the system is powered by the vehicle's hydraulics hydraulic pump must be turned off or the vehicle engine stopped. If the system is locked with straps, do not forget to loosen these before operating.

### Important information !

In strong winds, it is necessary to clamp the opening page of Fliptop Maxi with straps, there is anchor rings in the front and back, use both to avoid the system being sucked up because of the negative pressure that occurs when the wind passes the dorsal ridge. The wind can bend the connecting rods and seriously damage the system. During loading and unloading, it is important to keep an eye on the load so it won't end up in the front or rear end's link mechanism, if this happens, a cleaning must be done before using the system. If the load fills the cargo space and tends to crumble into a coherent mass there's a risk that it will become a negative pressure in the truck bed, this can bend the tubes in the bed and severely damage your system, if this risk exists then open the roof to let in air before unloading. During loading and unloading of tons of heavy stone, roots, or other things that can smash the ends it must be done with care. Fliptop Maxi does not tolerate plenty of hits at the rear end of the unloading, if there is a middle support mounted in the center it can also be damaged during loading and unloading. If injuries occur, they shall be repaired immediately in order not to worsen.

## **Control every week**

We recommend that Fliptop Maxi system is reviewed 1 time per week when using the system continuously, for this check, it is advisable to first check that the fabric is not damaged. Fliptop Maxi system is secured in all the corners and at the two long sides, make sure the fixings are secure and that no bolts missing. Open and close the system to control the movements are smooth and quiet, if not adjust the throttles for speed. Open the system and check that the ends are clean of debris and lumps that may have ended up there during loading or unloading, it is necessary to clean these. The gables linkage should also be checked for damage and looseness. Fliptop Maxi has one or two hydraulic cylinders, check for leaks at the cylinders and hoses. If you find damage, it is important to repair as quickly as possible, contact your local dealer or repair shop.

## **Maintenance every month**

We recommend that Fliptop Maxi greased up once per month with a grease gun and oilcan, it is important that all the system links go easy. If the system is lubricated and goes easily, it will have a long life and low maintenance cost. Normally there is no more maintenance other on a Fliptop Maxi system.

If the system contains batteries for powering the hydraulic unit (powerpack), then those shall be maintained in the same manner as the vehicle's batteries, ie. water levels and cleaning the terminals.

## **Safety instructions**

The equipment may only be operated by personnel with adequate knowledge of the equipment and understanding of the risks arising from the operation of the hydraulically driven movements.

The minimum requirement shall be review of this documentation, and a review of the equipment before the using of it. At service and maintenance the hydraulics must be switched off and disconnected so that the equipment can not be operated when there is a high risk of crushing when the equipment is operated.

Note that when maneuvering, always keep an eye not to cause damage to equipment or people.

## Installation Instructions

Purchasing Fliptop Maxi system can be supplied as a kit or as assembled.

When buying a kit, a complete installation instructions of the system is included in this documentation. When buying the assembled system, remains only installation.

Upon receiving the shipment, it is important to verify that no visible damage or other damage occurred on the equipment, notify in this case carrier immediately, alternatively equipment supplier.

When installing Fliptop Maxi, it is important to put it at least 2x M8 bolt in both of the two loose corners, and that you put at least 3pc clamp on the tube on the firm side, one at each end and at least one in the middle, depending on length several might be needed. Carefully follow the instructions in the installation instructions.

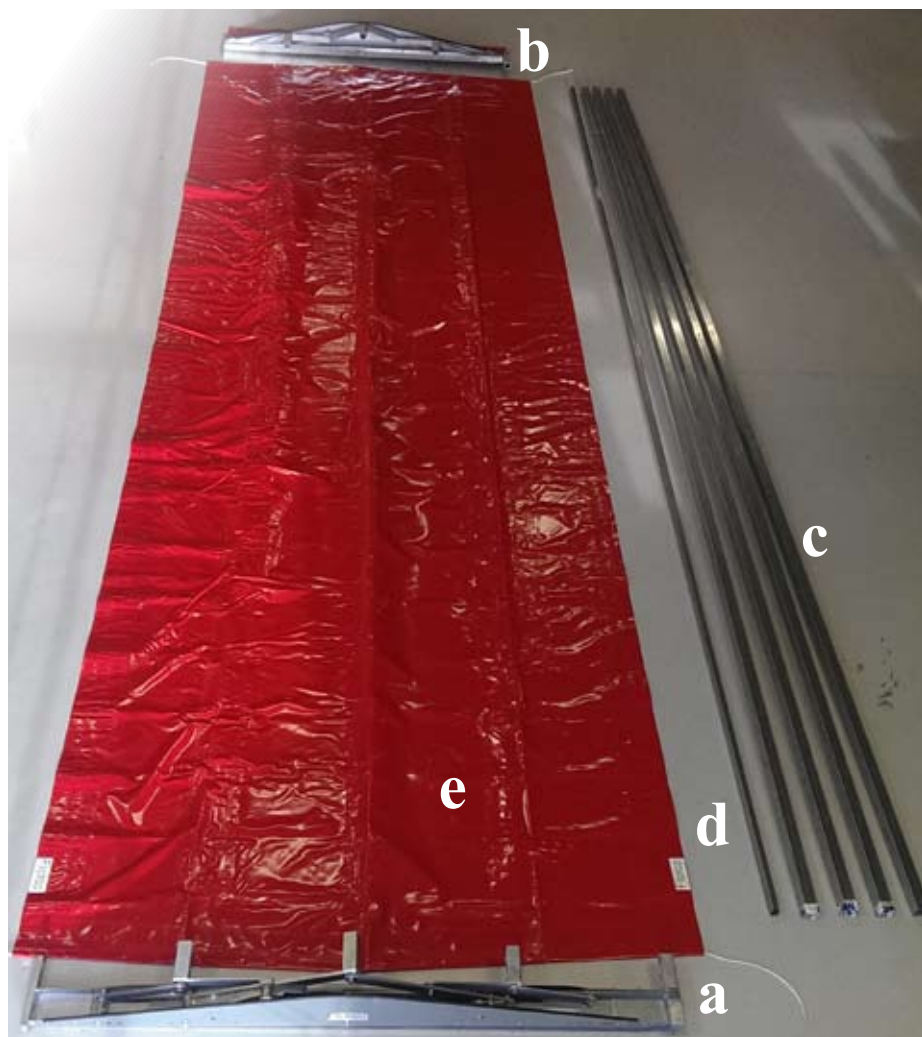
It is also important to go through all hydraulic fittings and see that they do not have any leaks. You should also check that the hydraulic movements do not go too fast, normally the throttles are included with the delivery of Fliptop Maxi, with these the rate is adjusted to a peaceful movement, if the system runs smooth, it will have a long life and low maintenance cost.



**Never use the system without good overview to avoid injuries on equipment and people.**



## Article list Fliptop MAXI



- a Gable with cylinder  
1-2pc  
if 2pc: *Then the gable without cylinder is not included, however, a dividing valve is included*
- b Gable without Cylinder  
1pc
- c Steel tube 60x60x2  
4pc
- d Steel tube 50x30x2  
1pc
- e Tarpoulin and montage screw  
1pc

*Which set of screws that are included is determined by the configuration being built. At simple arch support **621-314** is used, at connected arch support **621-315** is used, and at montage without arch support **621-301** is being used.*

### Screw kit MAXI 621-301

**Ingår:**

M8x20	x4
M8x75	x2
M8 BRB	x2
M8 Nylock	x2
M10x50	x2
M10x75	x12
M10 BRB	x28
M10 Nylock	x14
Tie down ring	x2
Rope clamps	x4
Throttle valve	x2

### Screw kit MAXI 621-314

**Ingår:**

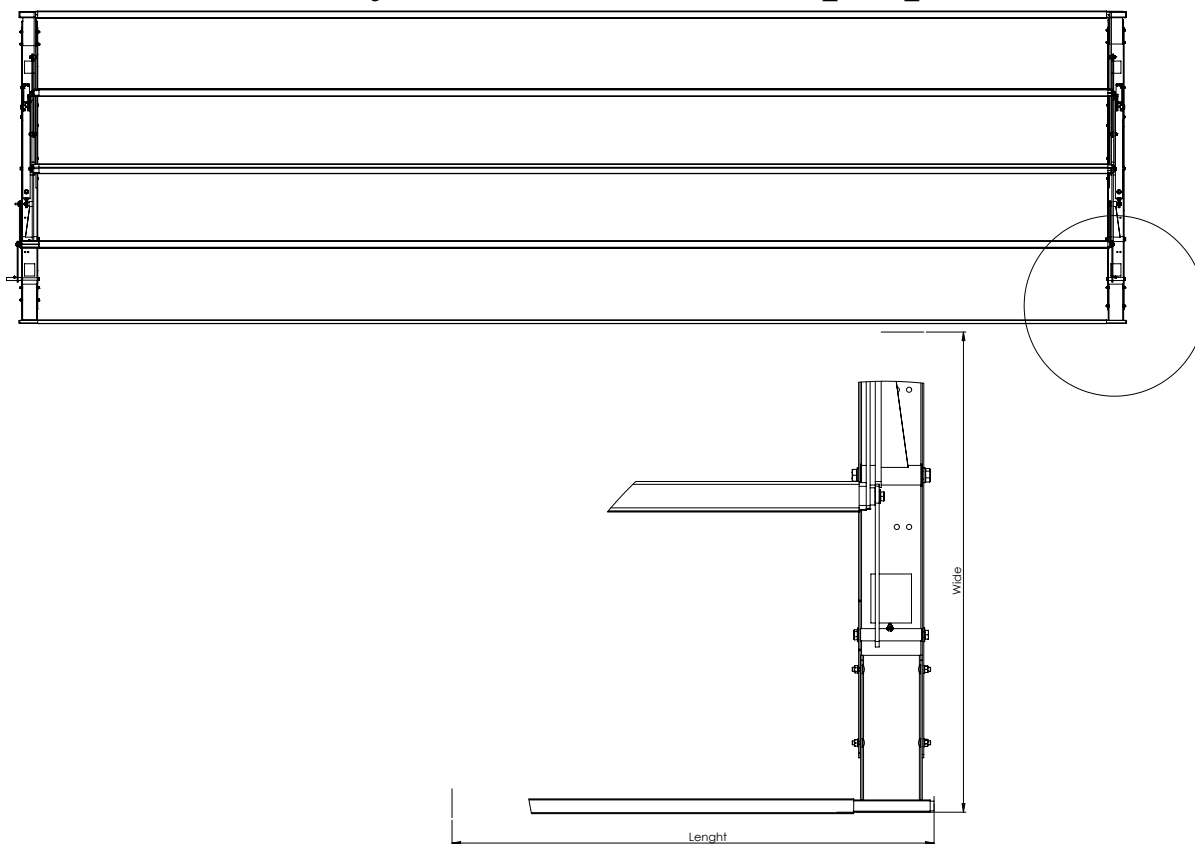
M8x20	x4
M8x75	x2
M8 BRB	x2
M8 Nylock	x2
M10x50	x4
M10x75	x12
M10 BRB	x36
M10 Nylock	x18
Tie down ring	x2
Rope clamps	x4
Throttle valve	x2

### Screw kit MAXI 621-315

**Ingår:**

M8x20	x4
M8x75	x2
M8 BRB	x2
M8 Nylock	x2
M10x50	x4
M10x75	x24
M10 BRB	x56
M10 Nylock	x28
Tie down ring	x2
Rope clamps	x4
Throttle valve	x2

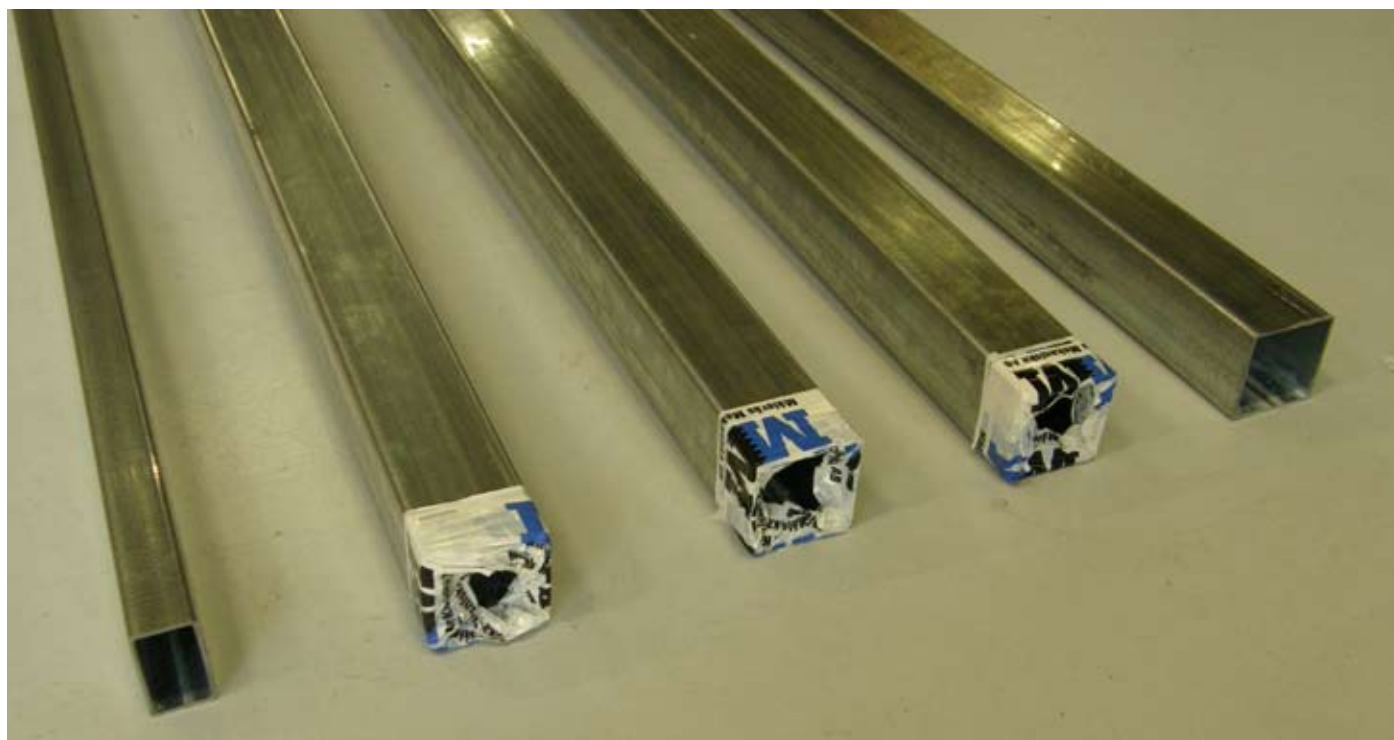
## Assembly instructions Fliptop MAXI



Adjust the width of the end pieces by first adjusting the fixed side.

Then cut the tubes (60x60x2 4pc and 50x30x2 1pc) Length =  $L - 270\text{mm}$  at one cylinder.

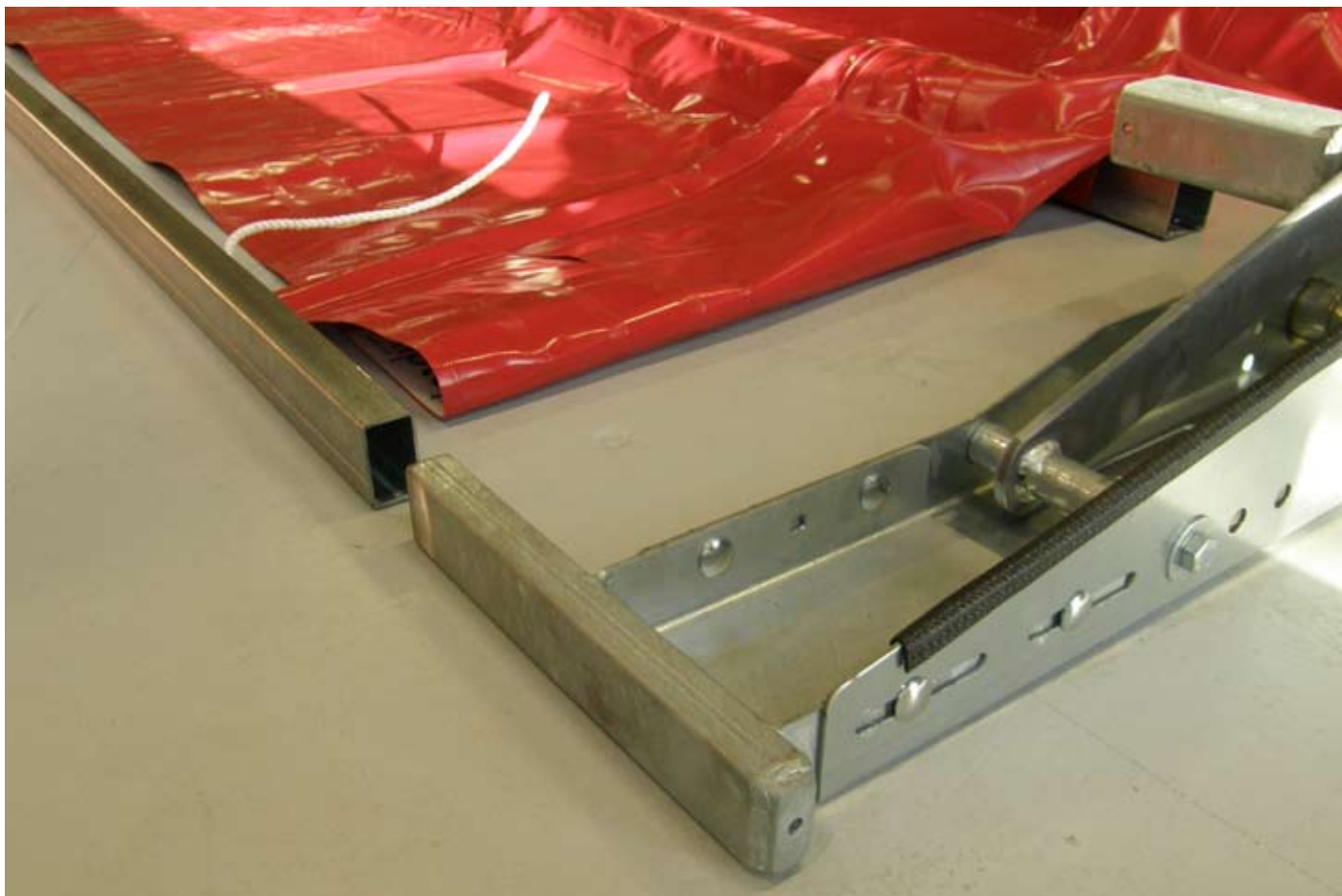
When two cylinders is the deduction Length =  $L - 305\text{mm}$ .



Remove burrs from the pipes inside and outside, and tape 3 of 60x60x2 tubes like the picture above



Place the tarpoulin with the outside up and push in the three 60x60x2 tubes with tape ends first.  
(not to damage the fabric)  
( if your Fliptop Includes Arch support you should carefully read the instructions provided)



Thereafter bring one of the gables, start to shoot in the fixed tube (50x30x2)





Then push the other tubes in the first gable.



Bring the other gable and push in the tubes into it.  
if you must have a flap on the end should be installed before this step.



When pushing the pipes into the gable, it is good to have a hammer to knock in the last bit.



**Be very careful when measure the distance before drilling holes and mounting it together.**

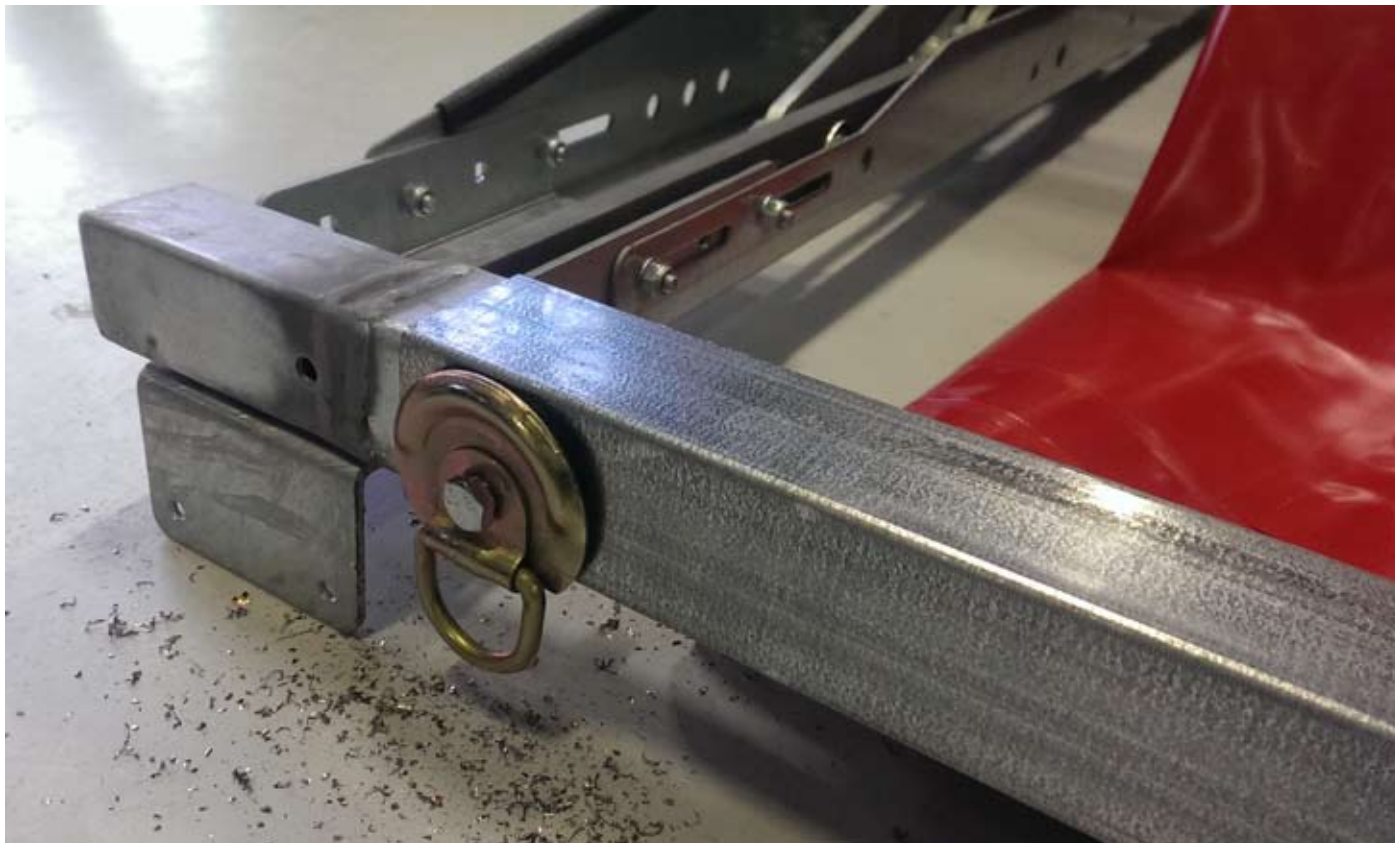
The side with 50x30x2 steel tube shall be mounted with M10x45 (1pc) and a M10 locknut (1pc).

*NOTE! Dont screw the bolts to tight, cause they will be taken out and back again when the tarpoulin will be mounted.*



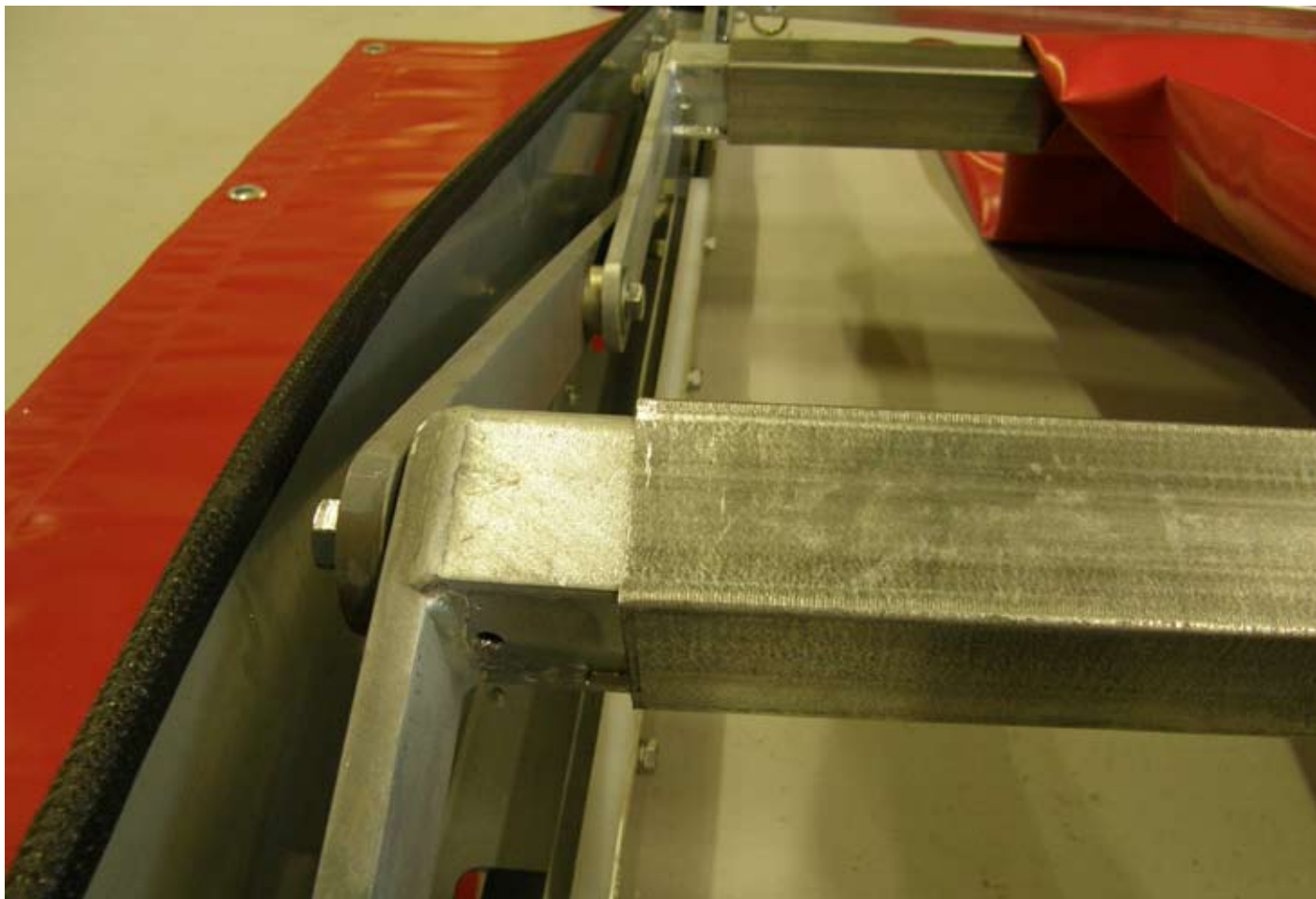


**Be sure to measure both sides thoroughly.**



The side with 60x60x2 shall be mounted with M10x75 (1pc), Tie down clamps (1pc) and M10 locknut (1pc).

*NOTE! Dont screw the bolts to tight, cause they will be taken out and back again when the tarpoulin will be mounted.*



When the outer tubes are mounted, so can the inner tubes be in need to be adjusted.  
when the outer tubes is fixed, the outer tubes shall be drilled holes in and screwed, first check that all the arms are parallel, if not this should be corrected.



Each tube (the three inner 60x60x2) must now be drilled like the picture, and stuck together with M10x75 (1p), 11x28x2 (2p) M10 lock nut (1p) per tube.  
*Be screwed from the side, the tarpoulin will not screwed to the tubes.*





Center the tarpoulin, equal overhang front and rear, and an equal measure of the sides.

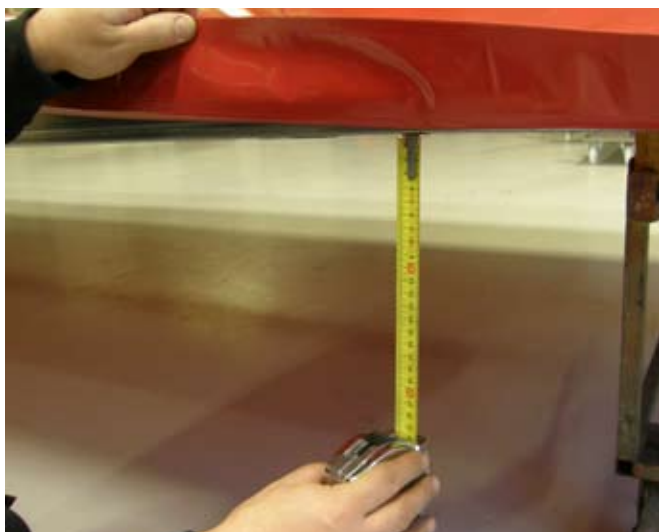


Drill holes in the tarpoulin and mount the rope clamps on both sides of the gable. Cut the tarpoulin accordingly to the pictures.

Do this on both sides.

Screwed with M8x20





Screw the tarpoulin along with the long sides with montage screws (5,5x20 + washer) that came with the tarpoulin.

**CC measurement is recommended to not more than 350mm.**

Take away the screws that hold the outer tubes and fit through the tarpoulin.

*The tarpoulin shall be smooth on the top side, **NB !** At the center of the long side, it is easy to bend the tubes into the tarpoulin and get a waist measurement, measure the protrusion of the chapel during the tube to the fitting on the platform to get even tension on the chapel.*



The easiest way to stretch the rope is to open the gable about 100 cm , fasten the rope with the rope clamps. Then cut the rope to fitting lenght







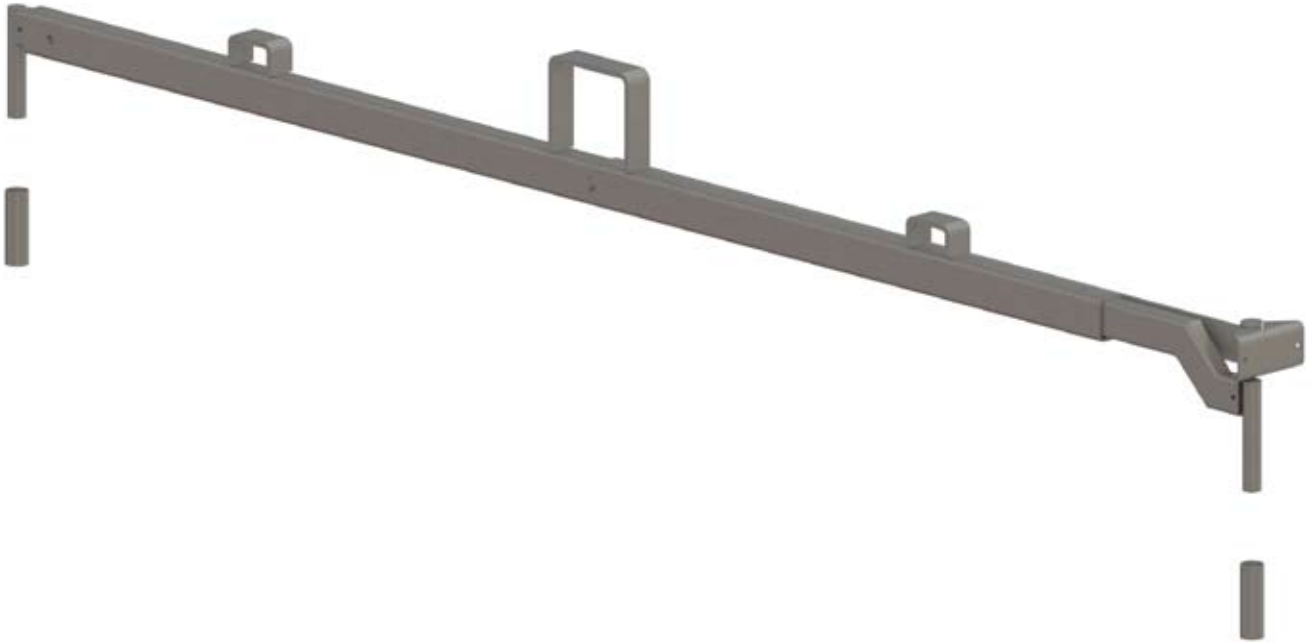


Fliptop MAXI is now fully assembled, the system should now be lifted up and mounted on the top of the truck.

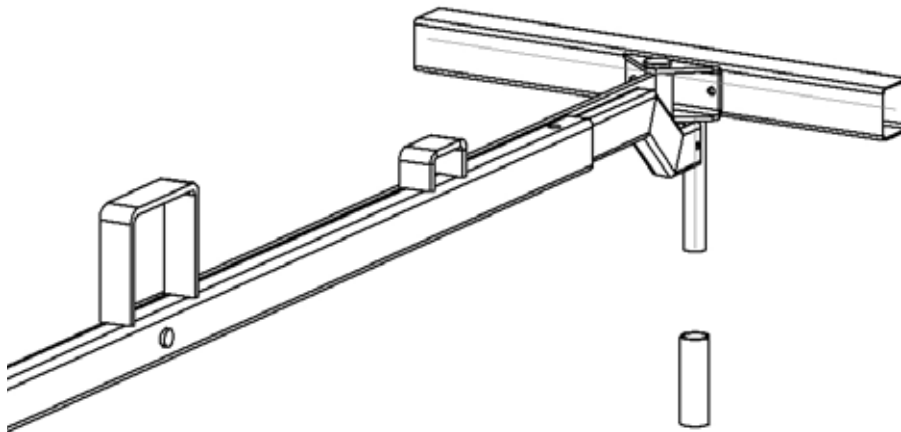
ensure that it is placed at the right place and screw it in all the corners. On the fixed side, 188-569-2 and 188-570-2 is used to fasten the fixed with 50x30x2. On the mobile side screwed the mounting plate, front and rear fixed with two screws / end (at least M8).

*Possibly, it is good to screw through the bottom of the gables by platform edge, and at least two bolts per corner.*

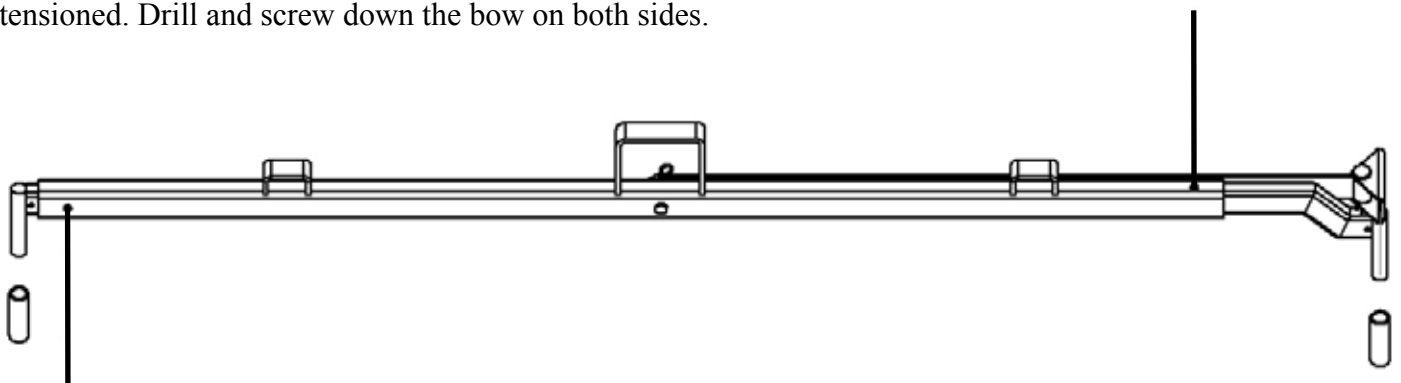
The simple arch support is mounted where the length of the tubes make them bend.  
The arch support also have an articulated, removable arm that is attached to the movable side tube.



Suitably mounted support in the middle of the platform. Screw or weld the mounting sleeves first, after that the arm is attached to of the side tube.



Therafter adjust the arc support so that the side tube is in line with the platform's outer surface and tarpoulin tensioned. Drill and screw down the bow on both sides.



When you install the arch support, follow these instructions

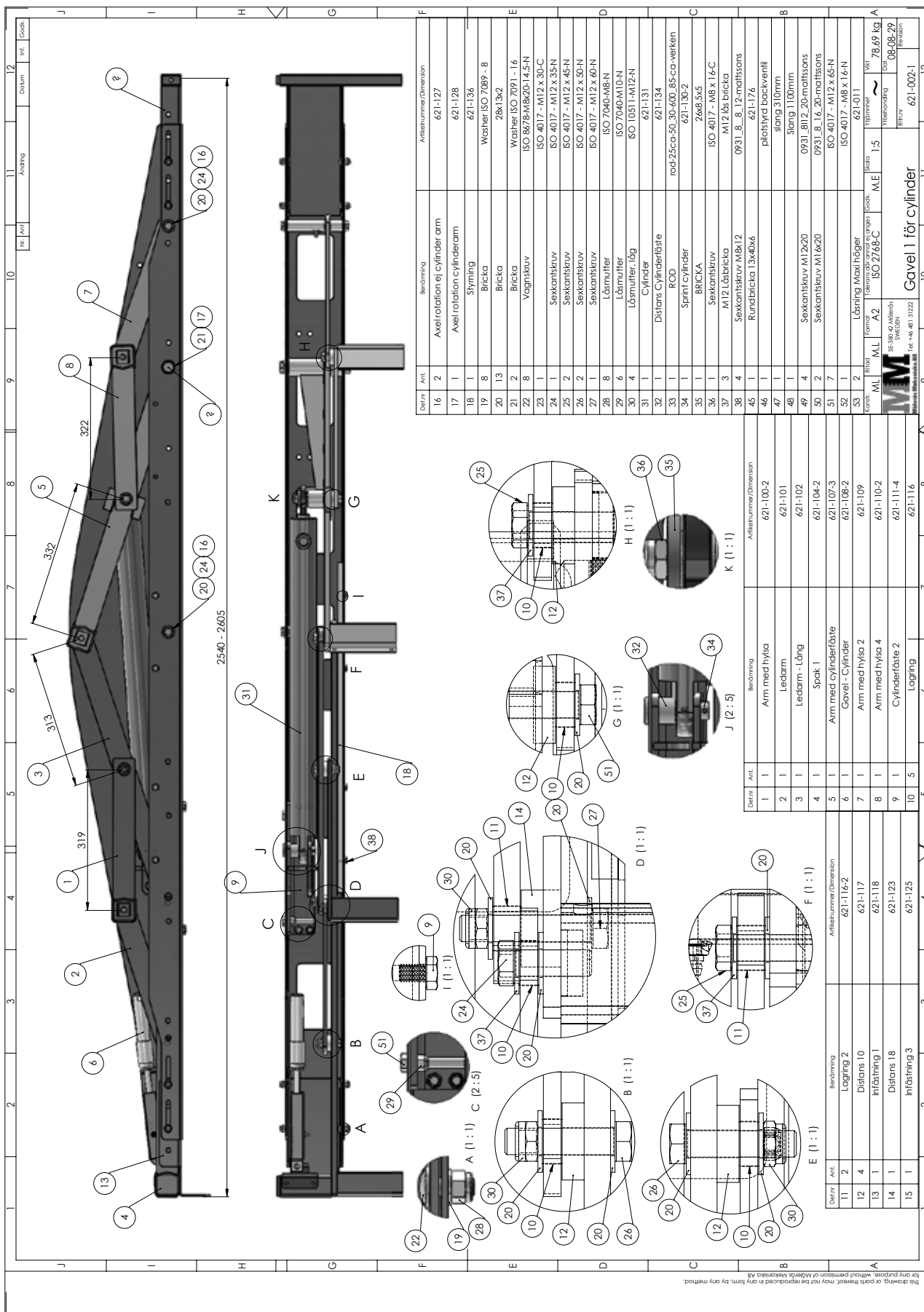


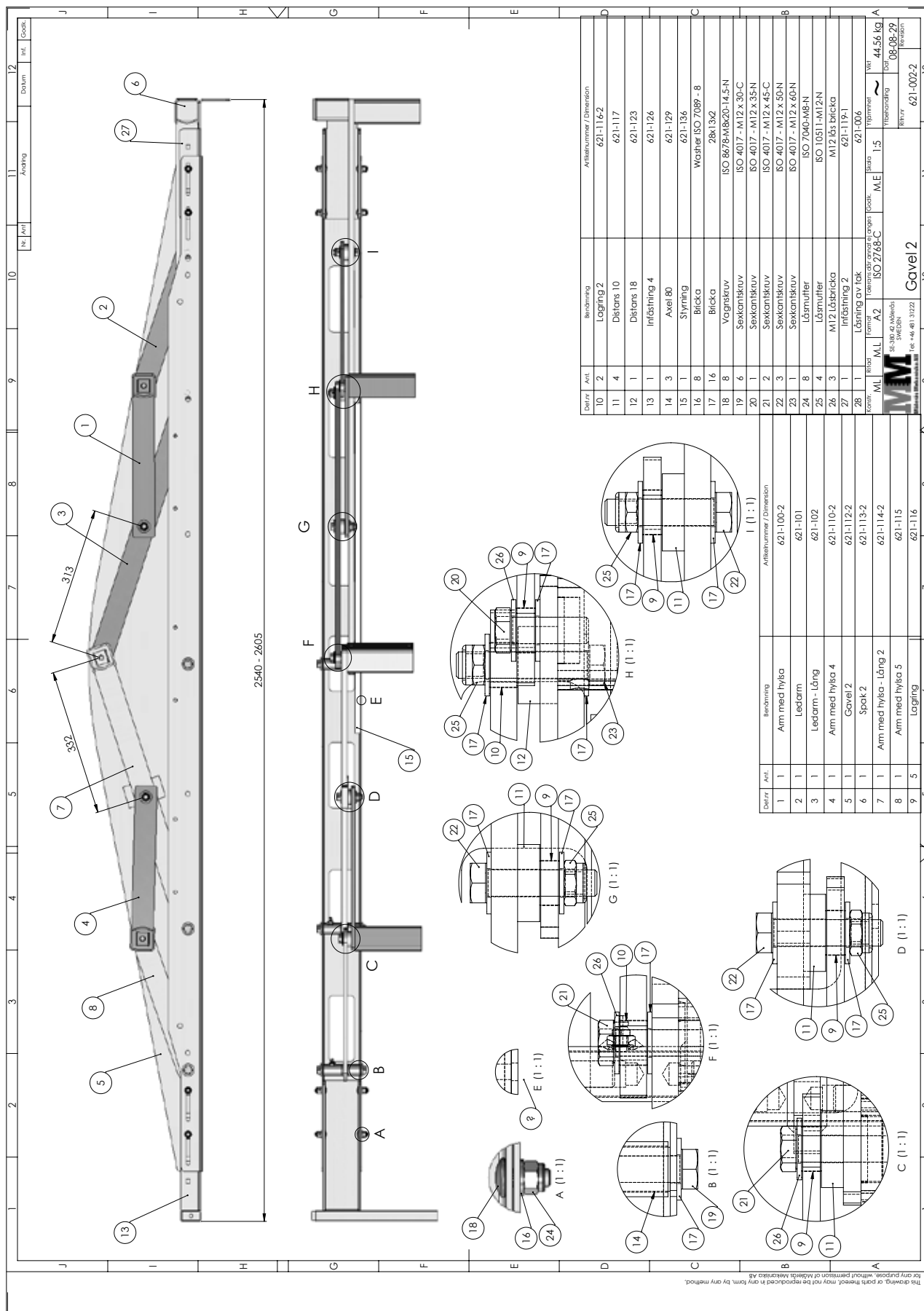
When ordering Fliptop MAXI with arch support with all tubes connected the center of the tarpoulin fabric without thimbles, here will the arch support be placed. The tarpoulin should be folded lengthwise until the outermost tube pockets is uncovered from one direction

(**Note** that the thimbles must still be faced towards the ground), insert 2 tubes through the tarpoulin into the arch support (one front and one rear). Pull the tarpoulin further and insert 2 more through the thimbles and into the arch support, repeat until the arch support is fully connected.

Screwing together the arch support is difficult in this position and is not recommended, wait until the Fliptop system is mounted before screwing together the tubes and the arch support.







10 9 8 7 6 5 4 3 2 1

A B C D E F G H

A B C D E F G H

10 9 8 7 6 5 4 3 2 1

A B C D E F G H

**Godkänd för produktion**  
Namn: \_\_\_\_\_ Datum: \_\_\_\_\_

Del nr	Ant	Benämning	Material	Skala	Ytbehandling	Vikt
8	1	Sextantskruv M12x90				19,59 kg
7	1	Mässings bussning	S235JR (SS-1311)			
6	1	Karossbricka M12	S235JR (SS-1311)			
5	2	Karossbricka M12	S235JR (SS-1311)			
4	1	Distans 18mm	S235JR (SS-1311)			
3	1	Motfällsarm	621-004-108			
2	1	Stöd arm	S235JR (SS-1311)			
1	1	Stöd arms infästning med 60x40 rör	S235JR (SS-1311)			

Form	Form nr	Form nr	Form nr	Form nr	Form nr	Form nr
R.D	A3	ISO 2768-C	M.E	1:7		

**Enkelt mitt stöd med 60x40 rör 621-003-1**

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16	1	Mitt stag	S235JR (SS-1311)	621-205	10	1	MF6S M12x35			9	14	Karoserbricka M12			
15	1	M6S M12x50	Stål 8.8		8	2	Distans Ø80x20	S235JR (SS-1311)	Ø80	621-192	7	6	Lagring	Tin Bearing Bronze	621-116
14	2	M6S M12x70	Stål 8.8		6	1	Mothälsarm			621-211	5	1	Överslags arm	S235JR (SS-1311)	621-210
13	2	M6S M12x60	Stål 8.8		4	1	Långt stag med stöd	S235JR (SS-1311)		621-209	3	1	Kort arm med stöd	S235JR (SS-1311)	621-208
12	1	Rörstyning för skruv montage	Material <not specified>	621-194	2	1	Lång arm utan stöd	S235JR (SS-1311)		621-207	1	1	Kort arm med stöd	S235JR (SS-1311)	621-206
11	6	Nylock M12			1	1	Kort arm med stöd	S235JR (SS-1311)		621-206					

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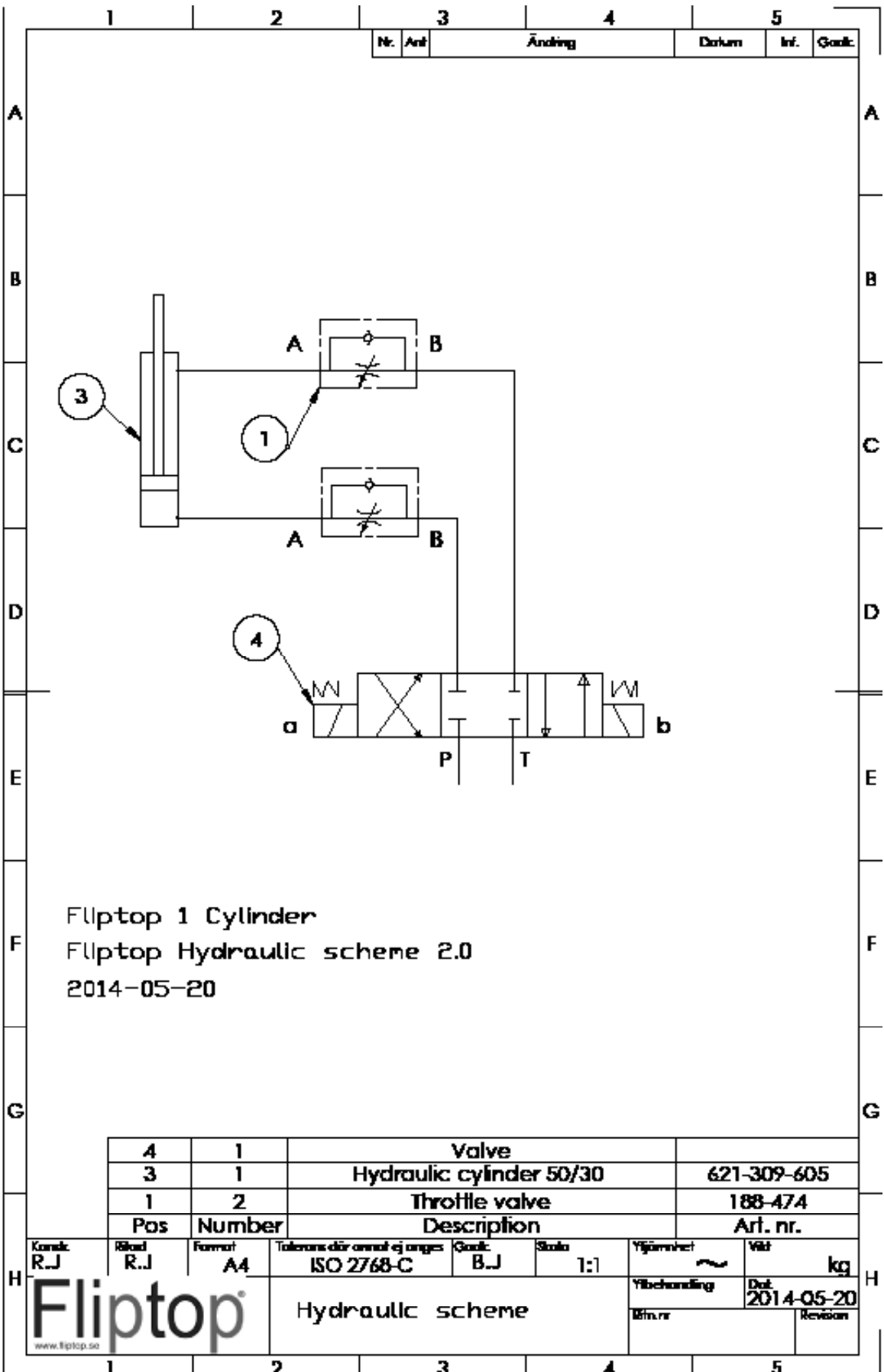
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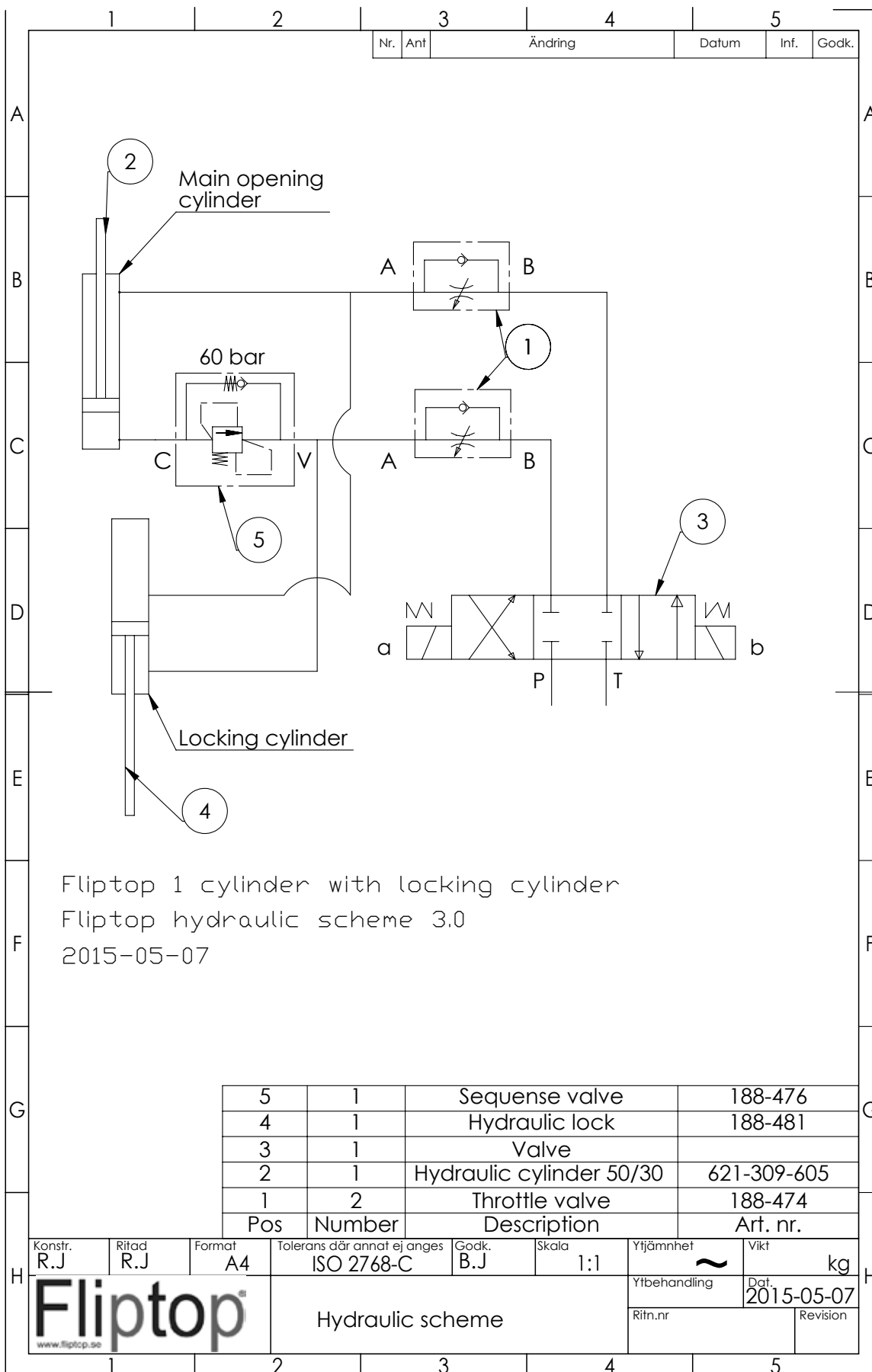
1. Inr. Ant. Andring Datum Inf. Godk.



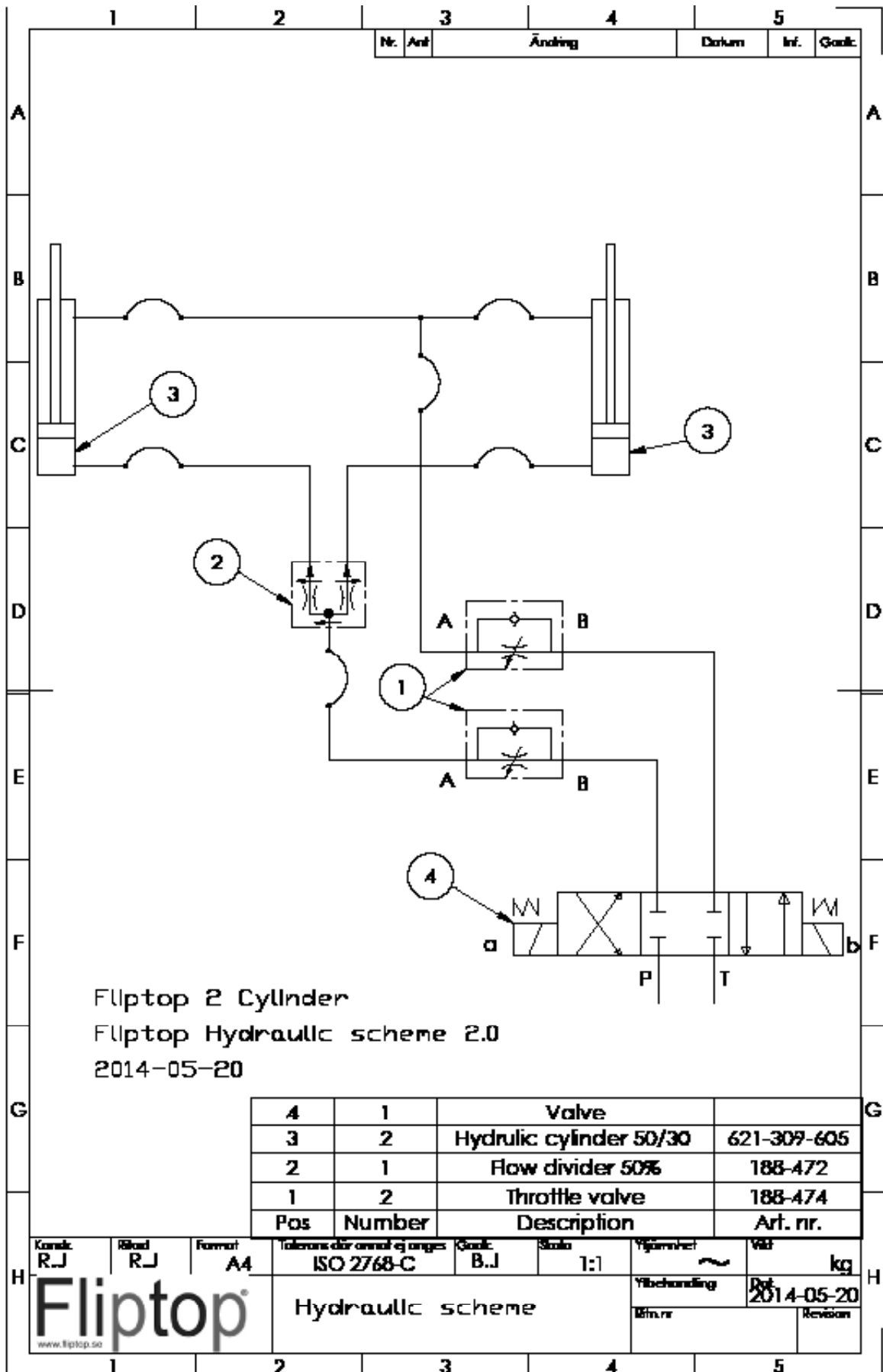
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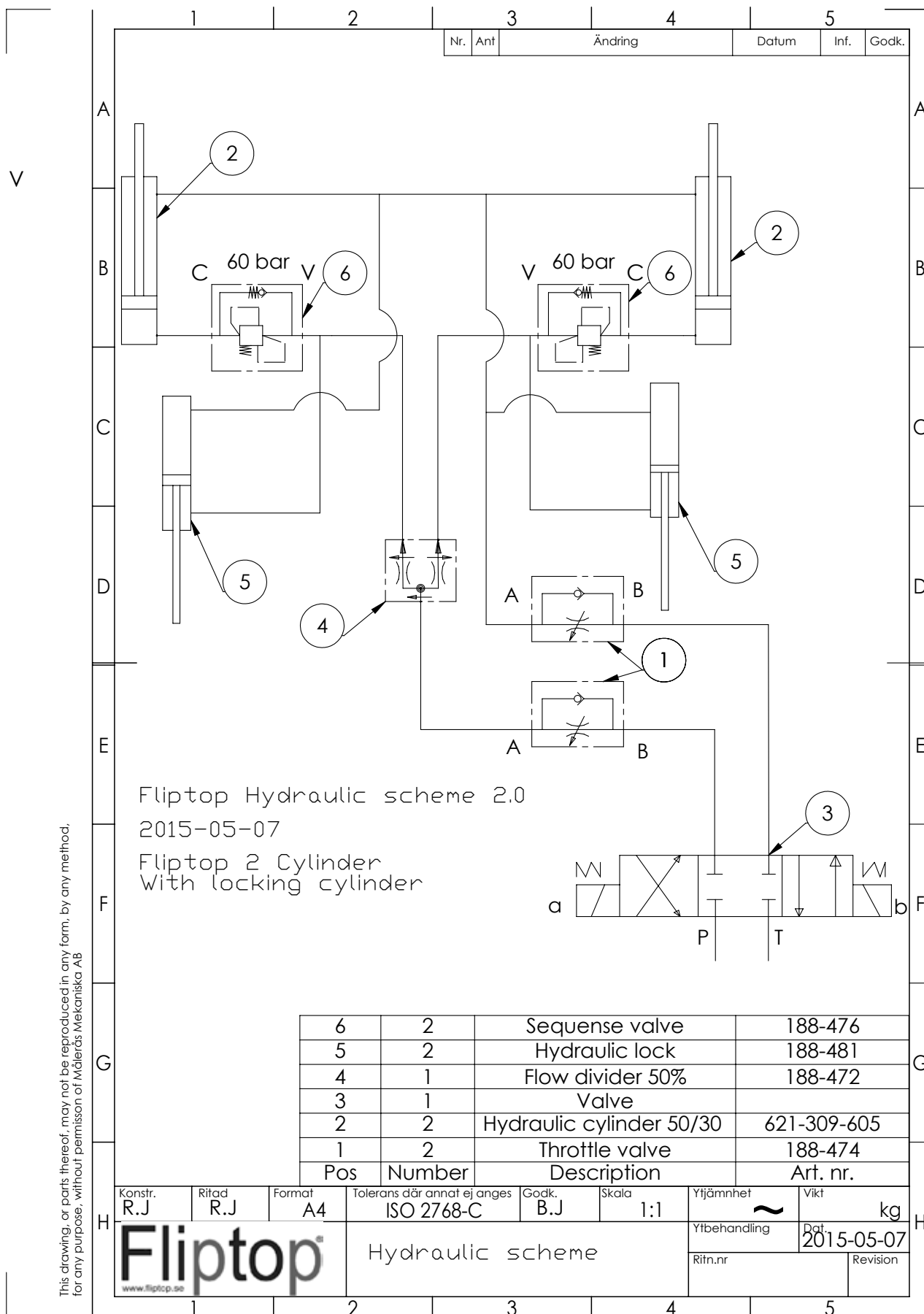
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# CE-DECLARATION

manufacturer :

MÅLERÅS MEKANISKA AB  
INDUSTRIGATAN 1  
380 42 MÅLERÅS  
SWEDEN

Hereby declare that the following equipment:

Fliptop Maxi  
Nr: 621-002

Is made in accordance with regulations of the European Machinery Directive 2006/42/EG

MÅLERÅS MEKANISKA AB  
INDUSTRIGATAN 1  
380 42 MÅLERÅS  
SWEDEN  
Tel. 0481-31444

2015-05-07

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Björn Johansson / VD