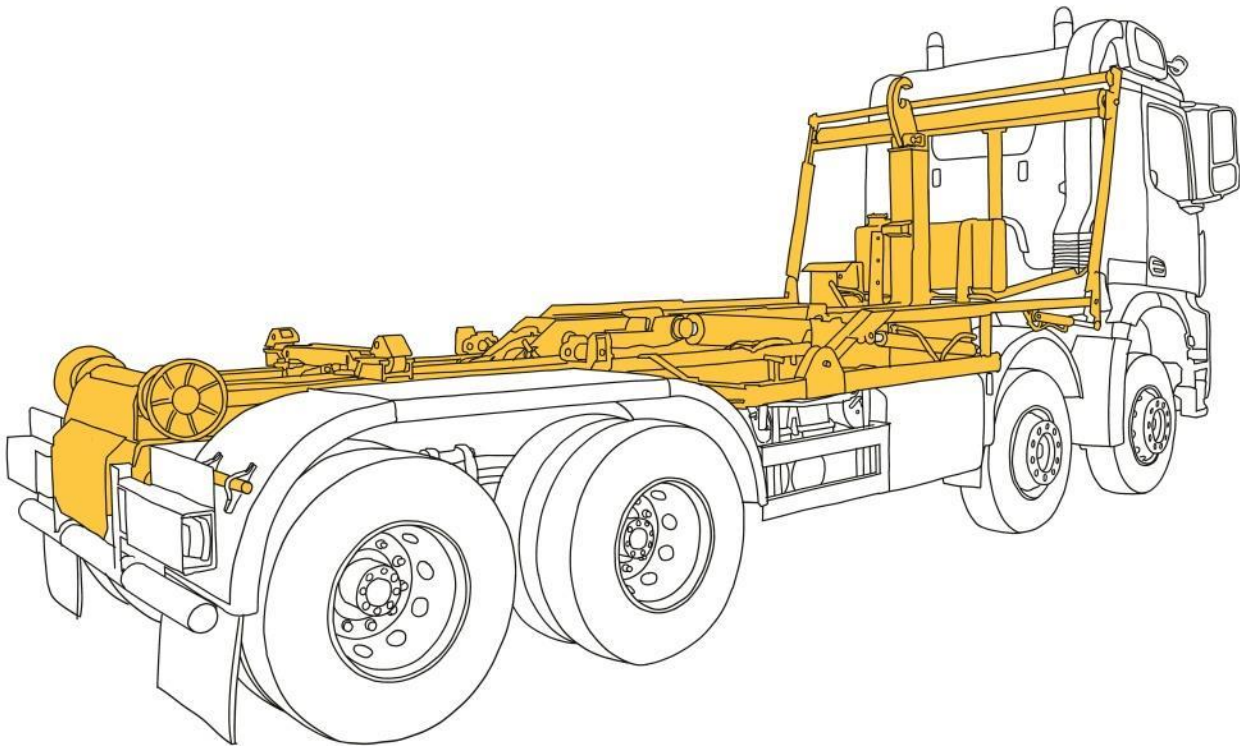


VARI WIDTH

INSTALLATION & OPERATORS MANUAL



Hooklift Autocover Adjustable Width Sheeting System & Manual Width Sheeting System

Sheeting Systems

It is common for most Hooklift equipment to have an automated sheeting system fitted as standard. The sheeting system is designed to help contain the bulk waste being carried from coming out of the container whilst in transit. The automative nature of sheeting systems also prevents the operator from having to climb and manually sheet the container load. Thus it is health and safety friendly, whilst an extremely quick and effective way of covering the load. There are many different types of sheeting system on offer each with its own unique style and benefits to the user.

Harsh Vari Width Autocover System

As standard we fit the Vari Width Autocover system which fully complies to the latest ECWVTA legislation on vehicle width restrictions.

It is a robust sheeting system designed to suit 8x4 rigid chassis fitted with Hooklift equipment for normal operations with containers built with CHEM – TS8 type 20 subframes. It covers CHEM 20 containers up to 50 cubic yards and 22 foot in length.

Full hydraulic operation is integrated into the Hooklift equipment hydraulics and uses a diverter valve to direct the flow of hydraulic oil from Hooklift equipment to the sheeting system. Meaning you cannot operate the sheeting system whilst the Hooklift is being used and vice-versa.

The nature of the Vari Width system enables the arms to come out each side by 150mm prior to operation and extension of the arms from the resting cradle. Allowing the arms to freely pass beside the container to cover the load.



Vari Width Automated Autocover Operational Procedures

The sheeting system can be partially operated inside the vehicle cab and safely outside the cab on the passenger side of the vehicle at the front.

It is important to ensure the Hooklift equipment isn't active and the container is securely clamped onto the Hooklift equipment prior to climbing outside the cab.

Prior to operation it is important the operator carries out Environment Checks, User Checks and Operational Checks as per listed in the Hooklift section of this manual. Special attention must be displayed to the environment checks to ensure operation of the sheeting system does not occur when overhead power lines or obstacles are present.

It is also important to ensure all persons are away from moving arms prior to operation of the sheeting system.

It is assumed a loaded container is present on the Hooklift equipment at this point prior to sheeting system operation

Covering the Load

1. Ensure the PTO Unit is engaged (same procedure as the Hooklift equipment instructions)
2. Ensure the Diverter Valve option is selected on Sheeting System and not Hooklift equipment. This will send the hydraulic oil to the sheeting system controls.
3. Operate the pull/push lever in the vehicle cab to send the sheeting arms to the maximum width position – 150mm extension each side. This will enable the arms to pass freely down the container sides.
4. Climb outside the cab to the passenger side front passing across the front of the vehicle when doing so. Position yourself next to the sheeting system controls in full view of your working area. Now operate the two levers for arms extension and arm coverage to send the sheeting arms across the container from the front of the vehicle to the rear of the vehicle. Adjust the extension and retraction levers appropriately to suit the different sizes of container being used.
5. Rest the roller assembly on top corner of the rear of the container when covered. The sheet should remain tight and under tension, covering the load inside the container.
6. Climb back into the cab passing back across the front of the vehicle before operating the pull/push lever to retract the arms back into the standard arm position in step 3.
7. It is now safe for the vehicle to travel.

If necessary you can use the adjustable manual hook to deploy the pleated sheet flaps down the side of the container before carrying out Step 6.

Uncovering the Load

Follow the steps in covering the load but in reverse, ensuring the diverter valve is set to sheeting system prior to operation. The roller must be fully rested in the tower cradle position before travel when not covering a load.

Vari Width Manual Autocover Operational Procedures

The sheeting system can be operated safely outside the cab on the passenger side of the vehicle at the front.

It is important to ensure the Hooklift equipment isn't active and the container is securely clamped onto the Hooklift equipment prior to climbing outside the cab.

Prior to operation it is important the operator carries out Environment Checks, User Checks and Operational Checks as per listed in the Hooklift section of this manual. Special attention must be displayed to the environment checks to ensure operation of the sheeting system does not occur when overhead power lines or obstacles are present.

It is also important to ensure all persons are away from moving arms prior to operation of the sheeting system.

It is assumed a loaded container is present on the Hooklift equipment at this point prior to sheeting system operation

Covering the Load

1. Ensure the PTO Unit is engaged (same procedure as the Hooklift equipment instructions)
2. Climb outside the cab to the passenger side front passing across the front of the vehicle when doing so. Position yourself next to the sheeting system controls in full view of your working area.
3. Ensure the diverter valve option is selected on Sheeting System and not Hooklift equipment. This will send the hydraulic oil to the sheeting system controls.
4. Now operate the two lever for arms extension and arm coverage to send the sheeting arms across the container from front of the vehicle to the rear of the vehicle. Adjust the extension and retraction levers appropriately to suit the different sizes of container being used.
5. Rest the roller assembly on top corner of the rear of the container when covered. The sheet should remain tight and under tension, covering the load inside the container.
6. Climb back into the cab passing back across the front of the vehicle.
7. It is now safe for the vehicle to travel.

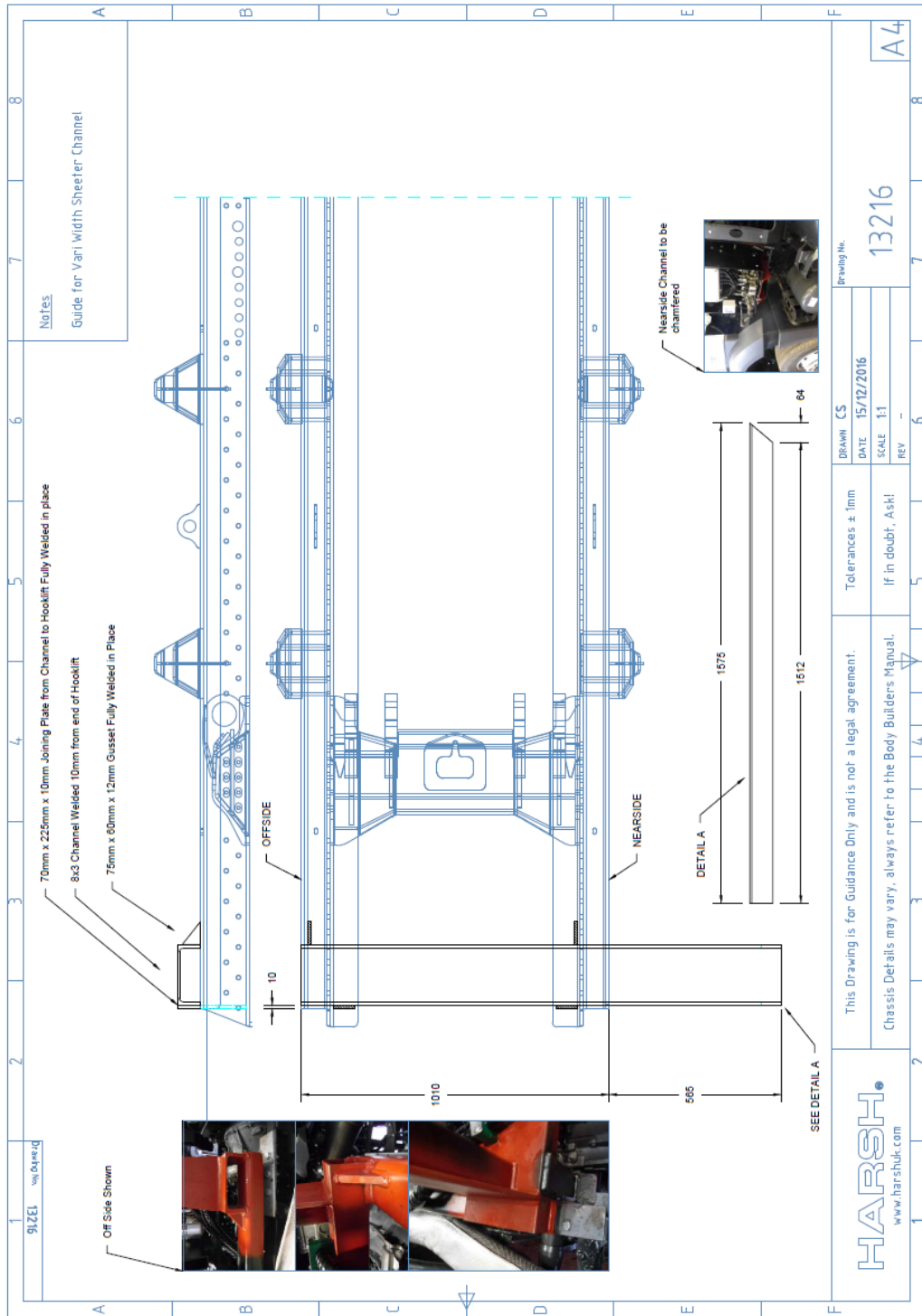
If necessary you can use the adjustable manual hook to deploy the pleated sheet flaps down the side of the container before carrying out Step 6.

Uncovering the Load

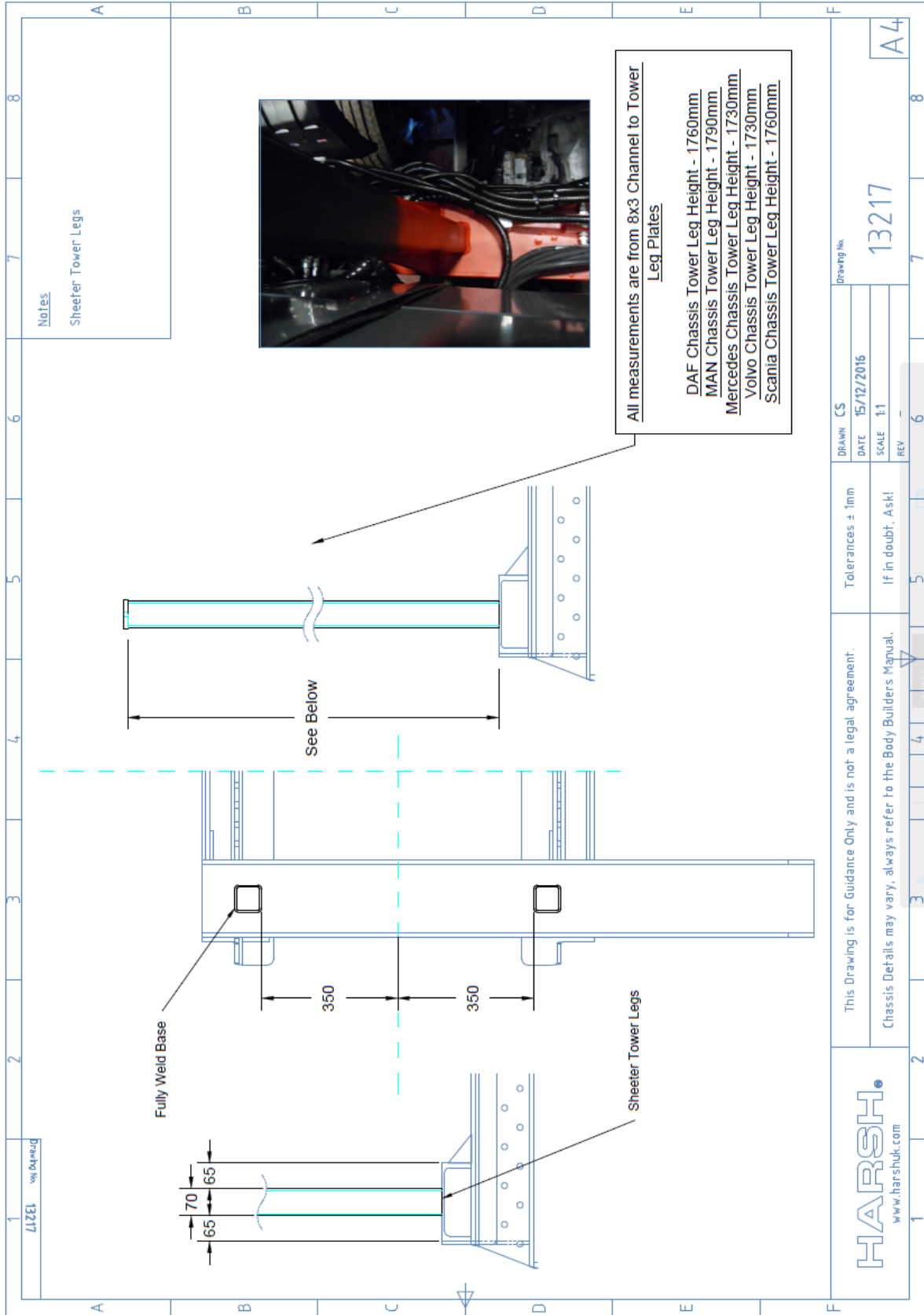
Follow the steps in covering the load but in reverse, ensuring the diverter valve is set to sheeting system prior to operation. The roller must be fully rested in the tower cradle position before travel when not covering a load.

Installation Guide for Harsh Adjustable Width & Manual Width

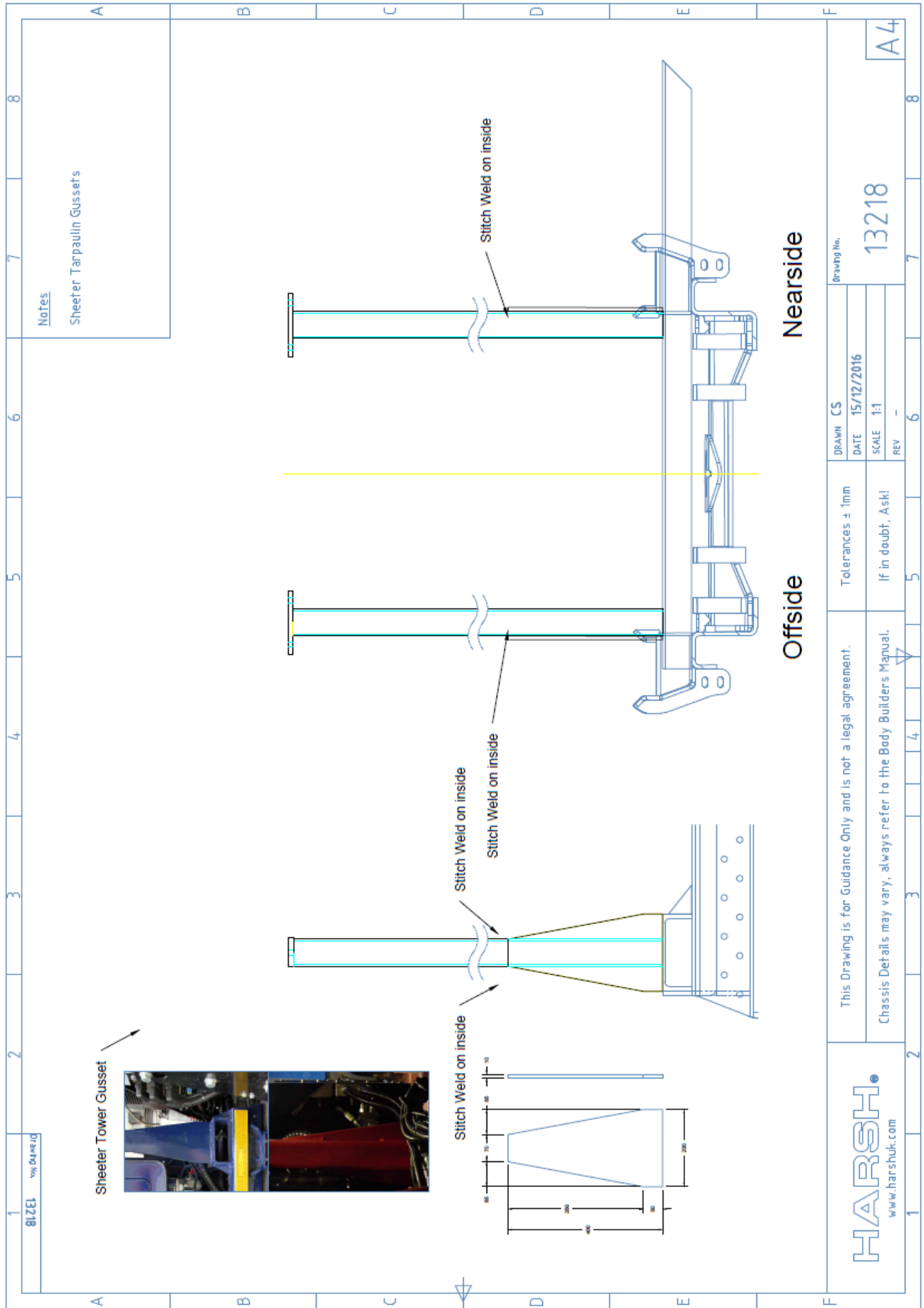
Channel Installation for Adjustable & Manual Width Sheeting System



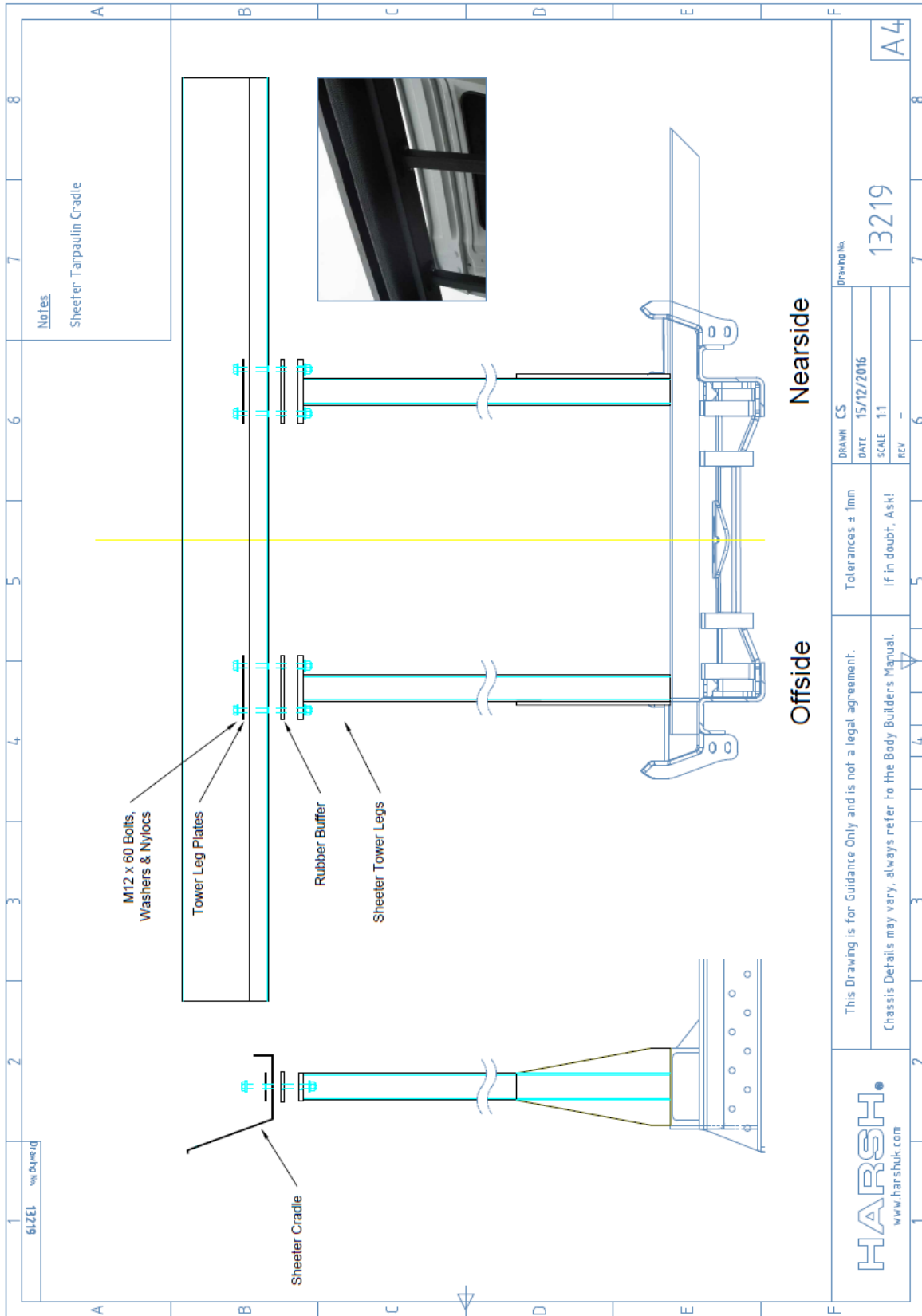
Tower Leg Heights for Adjustable & Manual Width Sheeting System



Tower Leg Gussets for Adjustable & Manual Width Sheeting System



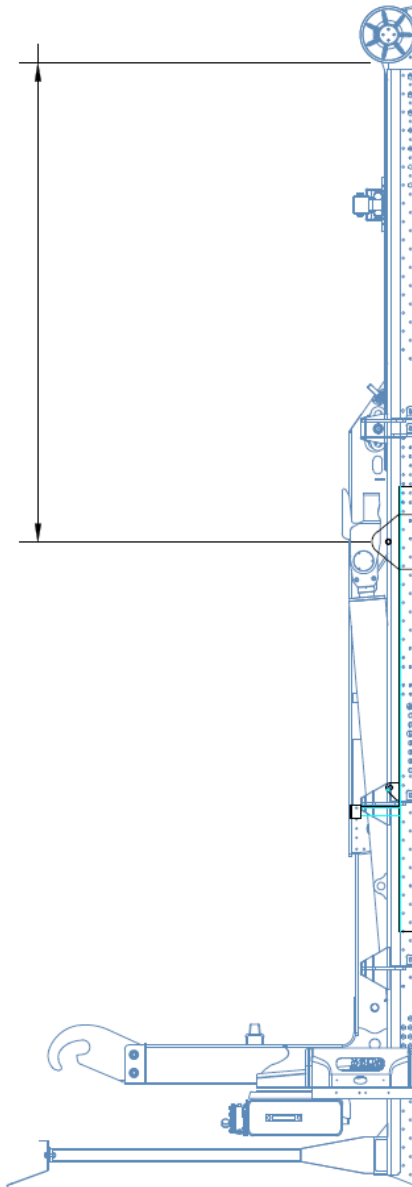
Cradle Build Up for Adjustable & Manual Width Sheeting System



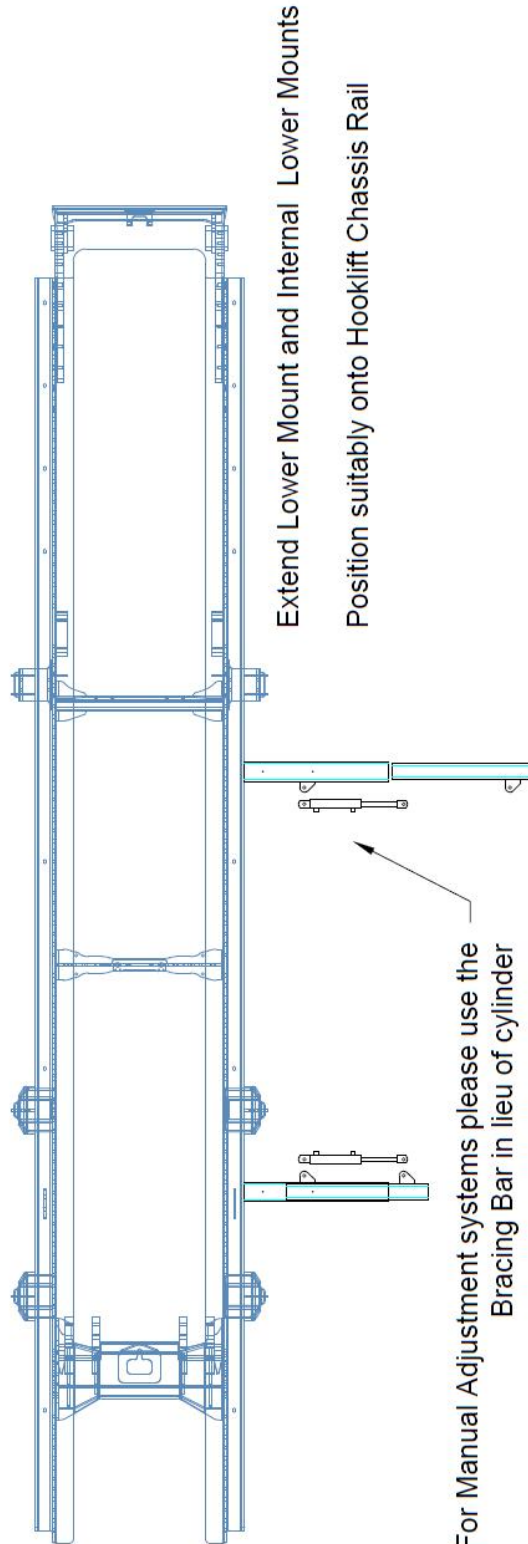
Basemount Position for Adjustable & Manual Width Sheeting System

All Measurements are from Front of Roller
to Pivot Point on Basemount

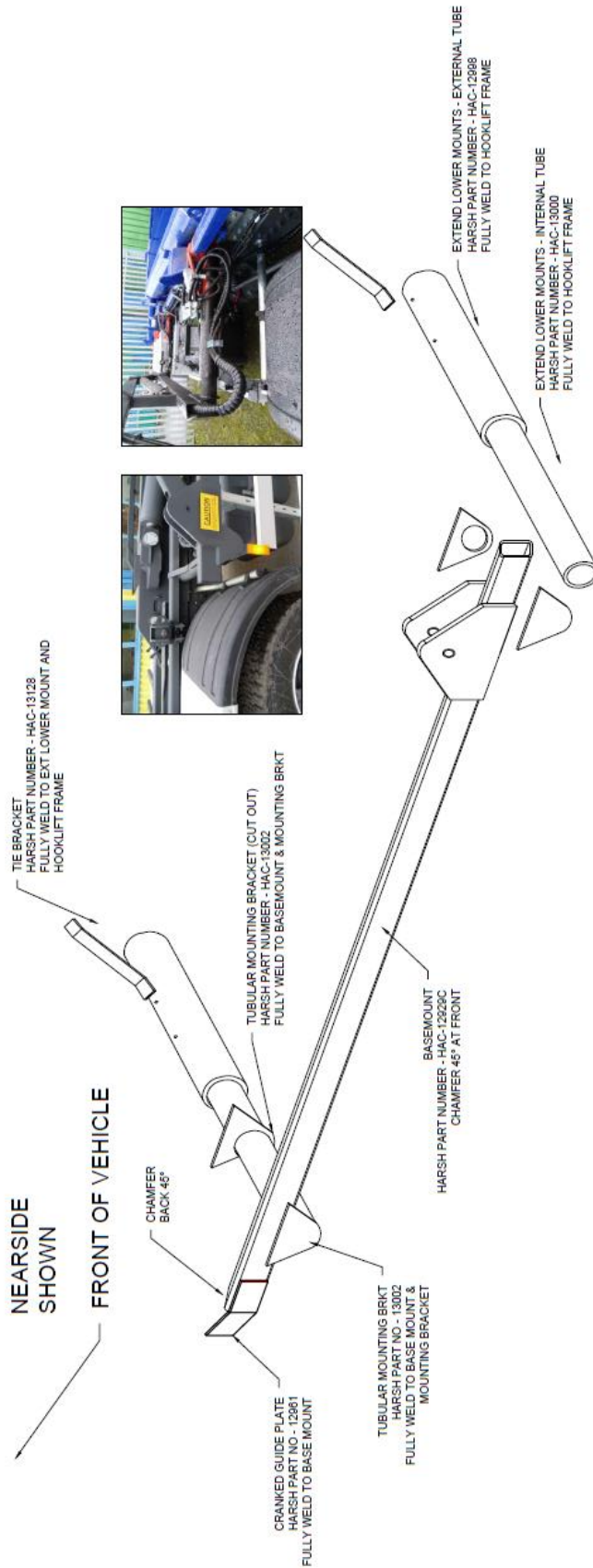
- DAF Chassis - 2620mm
- MAN Chassis - 2690mm
- Mercedes Chassis - 2570mm
- Volvo Chassis - 2550mm
- Scania Chassis - 2620mm



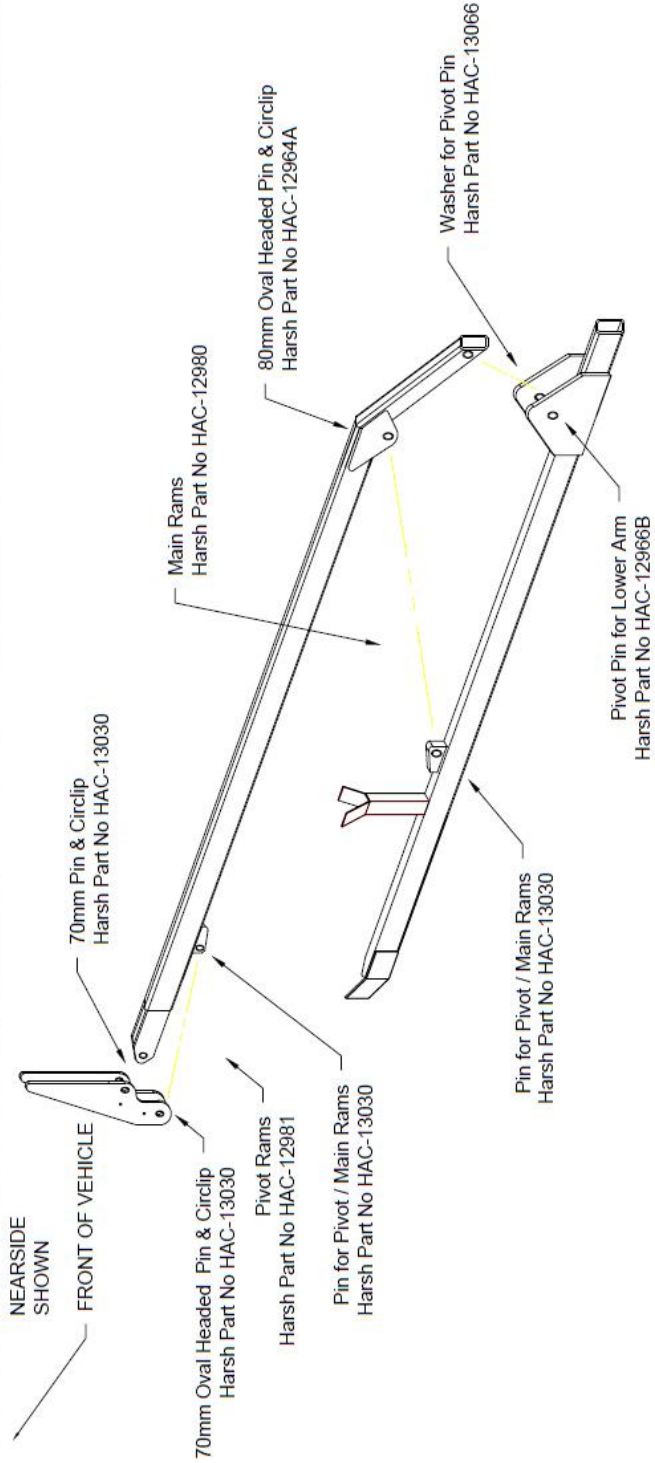
Lower Mounts Positioning for Adjustable & Manual Width Sheeting System



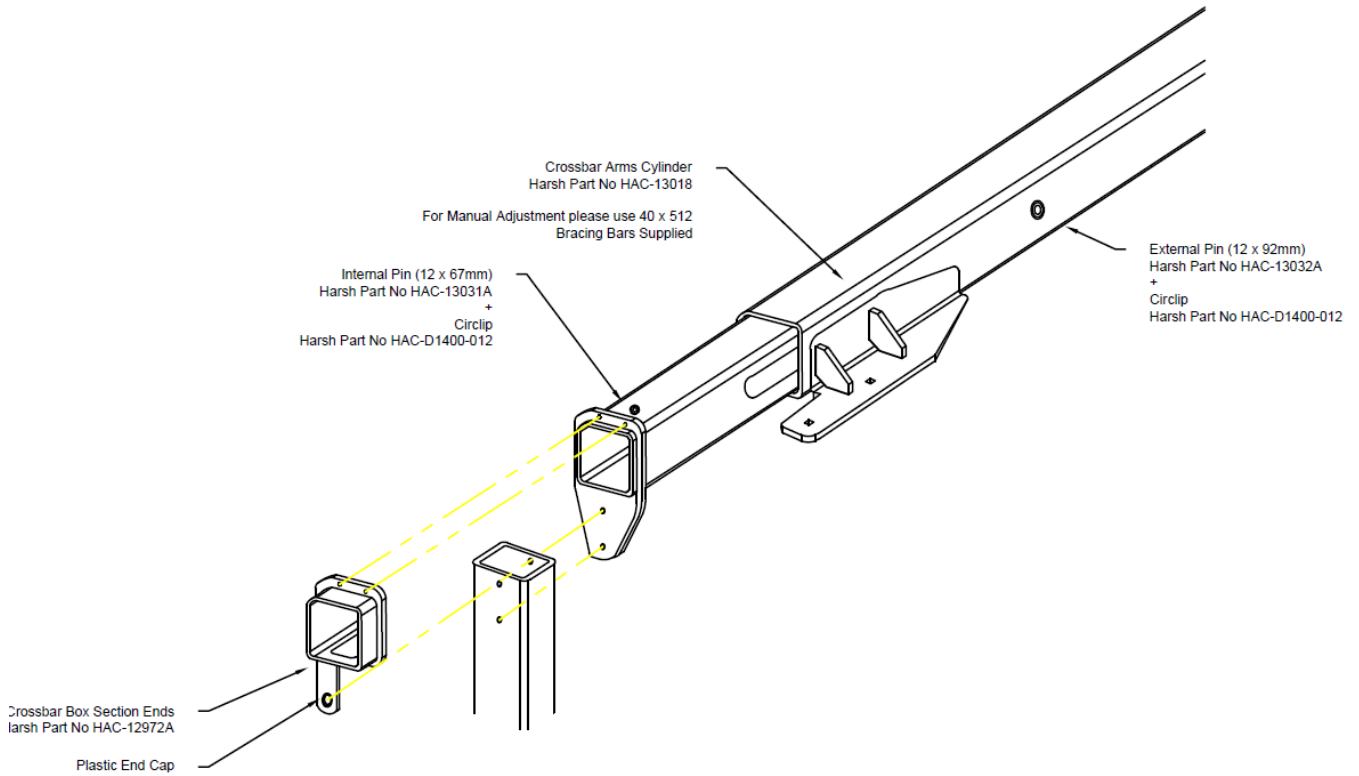
Basemount Build Up for Adjustable & Manual Width Sheeting System



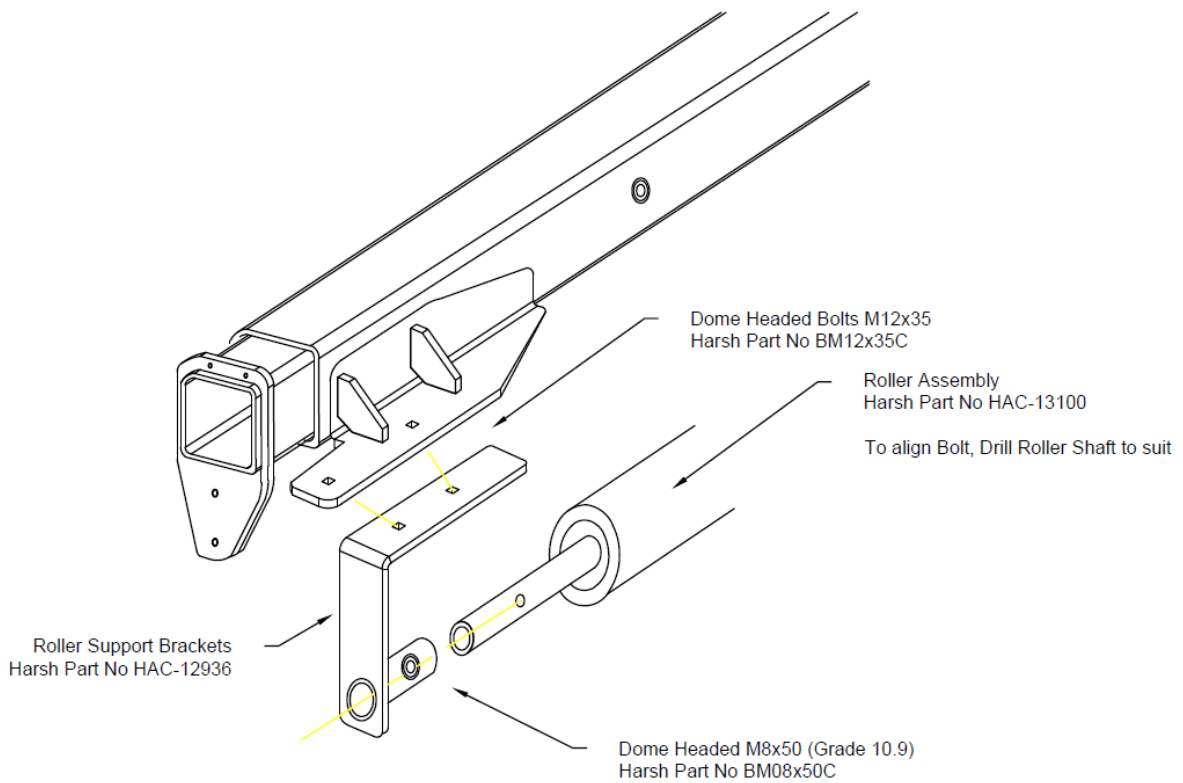
Arm Assembly for Adjustable & Manual Width Sheeting System



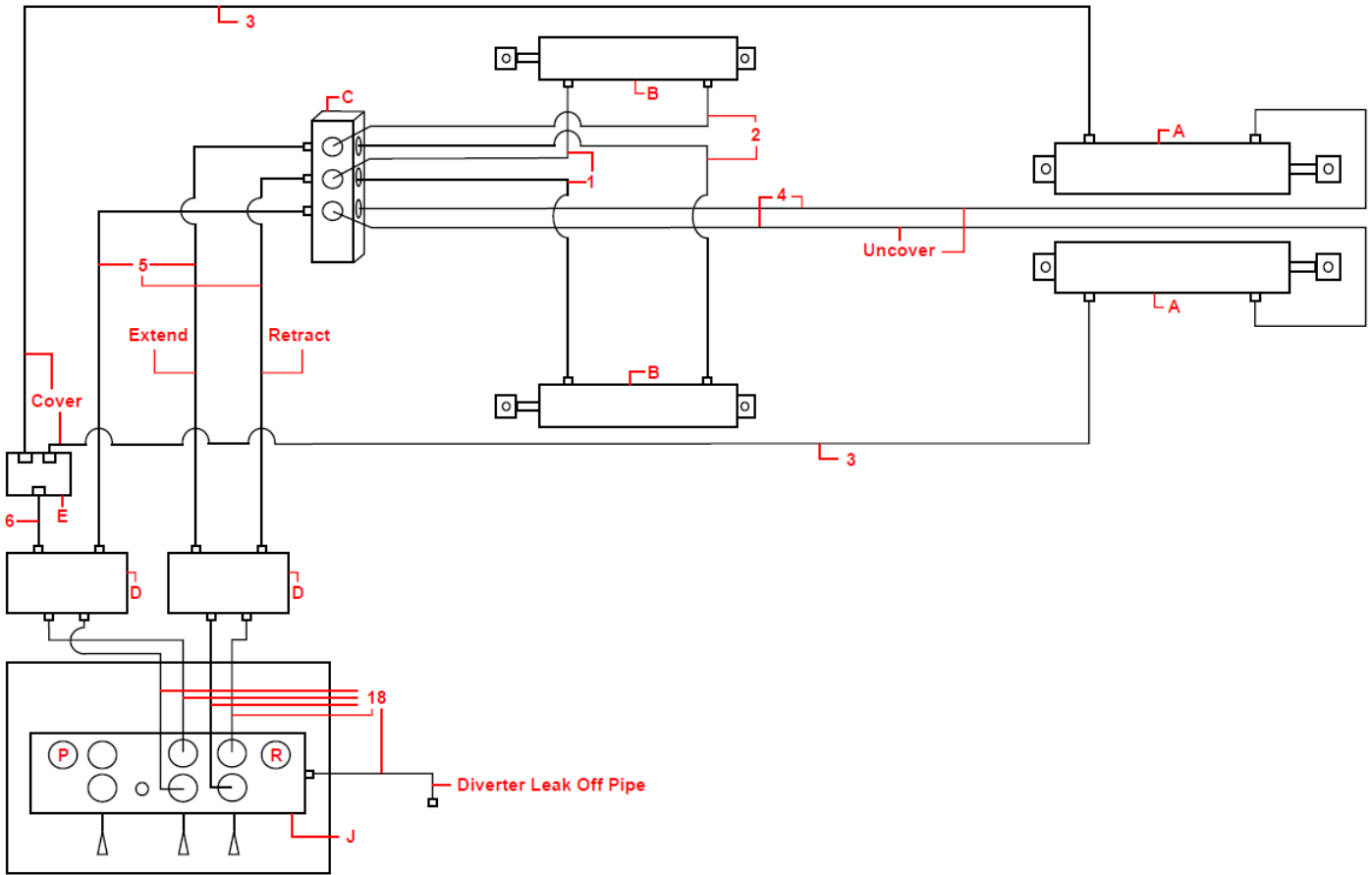
Cross Bar Assembly for Adjustable & Manual Width Sheeting System



Roller Assembly for Adjustable & Manual Width Sheeting System



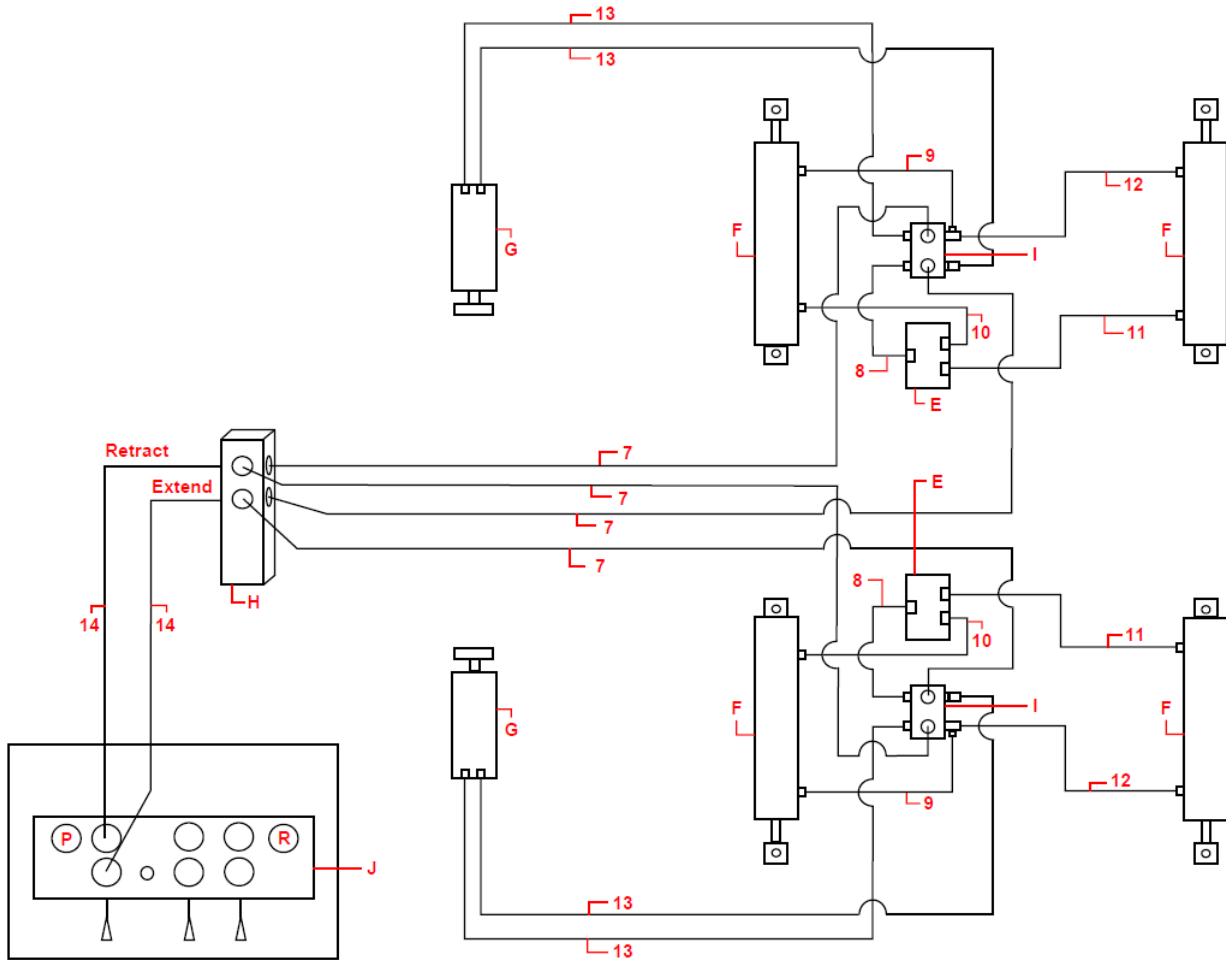
Vari Width Hydraulic Schematics – Cover / Uncover & Extend / Retract (Adjustable & Manual Width Sheeting System)



Hydraulic Components			
Item	Part No	Description	Qty
A	HAC-CYLINDER12980	Hydraulic Cylinder (Main Arms)	2
B	HAC-CYLINDER12981	Hydraulic Cylinder (Pivot Arms)	2
C	HAC-TBLOCK	Hydraulic 'T' Block 5 Bank	1
D	HAC-V0422	Overcentre Valve 3/8	2
E	HAC-1650021107	Valve Splitter 3/8 - 12	1
<i>Adjustable Width Valve</i>			
J	HAC-ZZ006847	Valve HDS15/3 3 Spool Electric/Manual	1
<i>Manual Width Valve</i>			
J	HAC-HDS15/2/STD	Valve To suit Harsh Manual Vari - Width	1

Hydraulic Hoses			
Item	Part No	Description	Qty
1	HAC-HOSE1	Hose 1/4T2	1
2	HAC-HOSE2	Hose 1/4T2	2
3	HAC-HOSE3	Hose 1/4T2	2
4	HAC-HOSE4	Hose 1/4T2	2
5	HAC-HOSE5	Hose 1/4T2	3
6	HAC-HOSE6	Hose 1/4T2	1
18	HAC-HOSE18	Hose 1/4T2	4

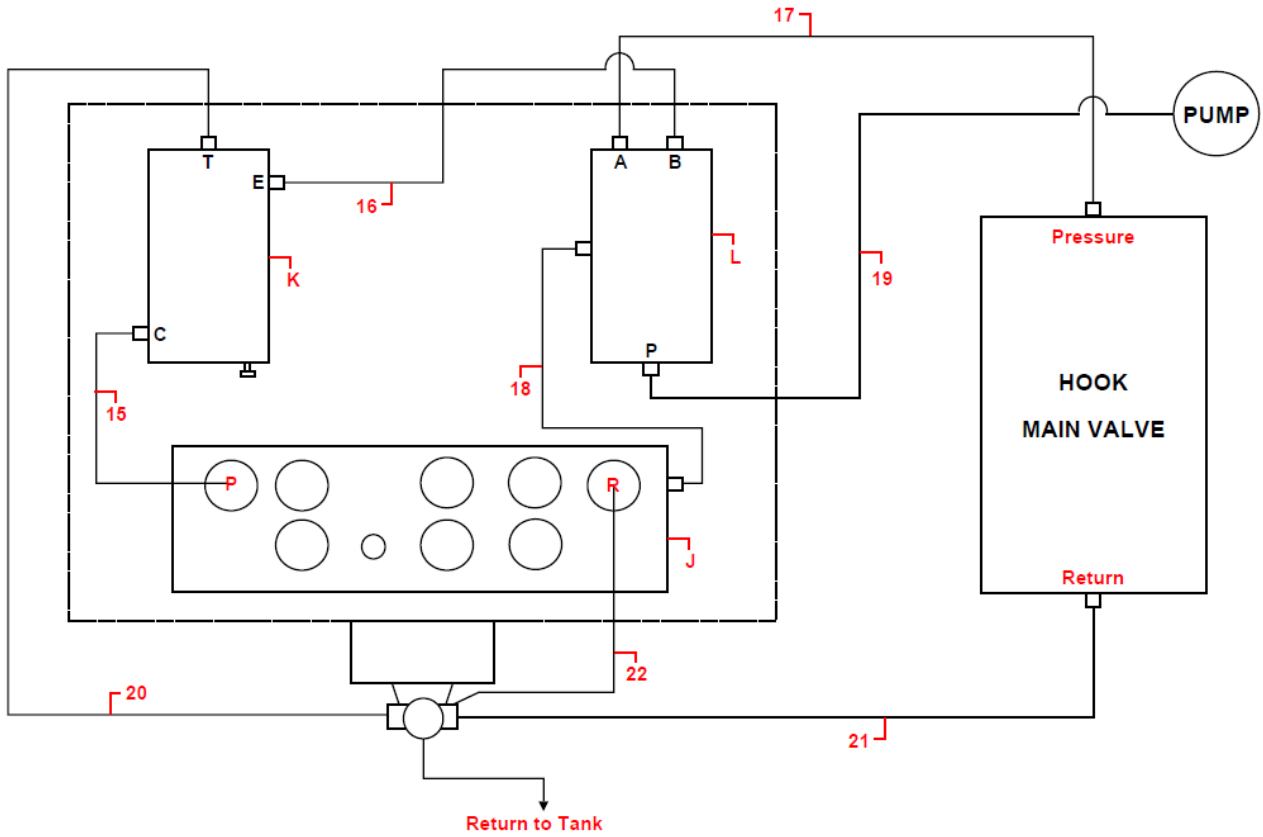
Vari Width Hydraulic Schematics – Width Adjustment (Adjustable Width Only)



Hydraulic Components			
Item	Part No	Description	Qty
E	HAC-1650021107	Valve Splitter 3/8 - 12	2
F	HAC-CYLINDER12979	Hydraulic Cylinder (Lower Extension)	4
G	HAC-CYLINDER13018	Hydraulic Cylinder (Top Extension)	2
H	HAC-TBLOCK	Hydraulic 'T' Block 5 Bank	1
I	HAC-13068	Bulkhead Plate Harsh Vari-Width 13068	2
<i>Adjustable Width Valve</i>			
J	HAC-ZZ006847	Valve HDS15/3 3 Spool Electric/Manual	1

Hydraulic Hoses			
Item	Part No	Description	Qty
7	HAC-HOSE7	Hose 1/4T2	4
8	HAC-HOSE8	Hose 1/4T2	2
9	HAC-HOSE9	Hose 1/4T2	2
10	HAC-HOSE10	Hose 1/4T2	2
11	HAC-HOSE11	Hose 1/4T2	2
12	HAC-HOSE12	Hose 1/4T2	2
13	HAC-HOSE13	Hose 1/4T2	4
14	HAC-HOSE14	Hose 1/4T2	2

Vari Width Hydraulic Schematics – Sheeting Box / Hook Valve (Adjustable & Manual Width Sheeting System)



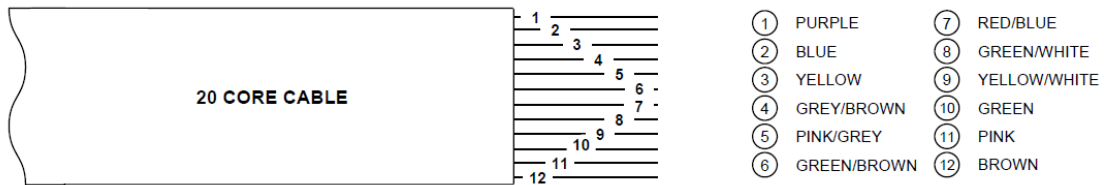
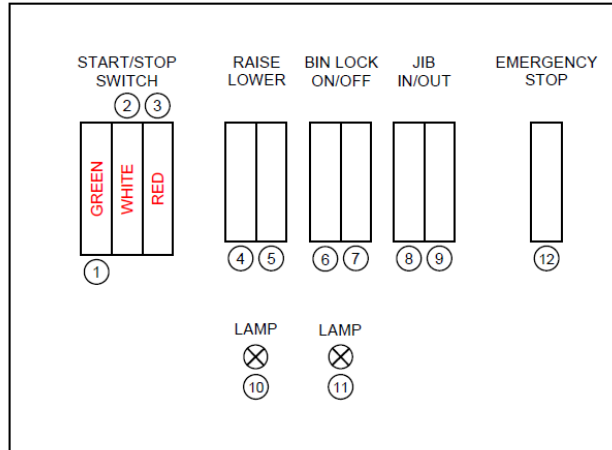
Hydraulic Components

Item	Part No	Description	Qty
K	HAC-12A640038	Diverter Valve Electric 3/4" with Case Drain	1
L	HAC-1623042102	Flow Divider Valve VPR/3/ETVMP3/4/V03TS	1
<i>Adjustable Width Valve</i>			
J	HAC-ZZ006847	Valve HDS15/3 3 Spool Electric/Manual	1

Hydraulic Hoses

Item	Part No	Description	Qty
15	HAC-HOSE15	Hose 3/8T2	1
16	HAC-HOSE16	Hose 3/42AST	1
17	HAC-HOSE17	Hose 3/42AST	1
18	HAC-HOSE18	Hose 1/4T2	1

Vari Width –Electrical Schematics – In Cab Control (Adjustable Width Only)



Maintenance

Vari Width Autocover Tarp Replacement

You will require the wheel drive to carry out this procedure.

It is recommended the procedure is carried out using protective gloves and a risk assessment is done on the surrounding work area before the procedure goes ahead.

It is also important the operative has had the relevant training and information on best practice with regards to the procedure before carrying out any works.

Replacing Tarp

1. Checking Ratchet Mechanism
 - a. Use appropriate safe working at height methods as per your training
 - b. Visually ensure the roller is drilled and bolted at the ratchet mechanism end.
 - c. Ensure the ratchet mechanism is working by applying the 'Wheel Drive' to the 25mm (1") roller shaft and apply a turn. The ratchet will click as the spring loaded pawl moves around the sprocket and adds tension. This has ensured the ratchet is working properly and the wheel drive doesn't spin freely.
2. Removing the Old Tarp
 - a. Power the roller up vertically out of the cradle by 50mm-100mm (2-4").
 - b. Add the 'Wheel Drive' to the 25mm (1") roller shaft securing with the locking screw.
 - c. Take the securing bolt out to allow the roller to spin freely
 - d. Unlatch the ratchet pawl whilst holding the 'Wheel Drive' taking care to release the tension slowly.

- e. Warning – spring pressure is present and it is important to hold firmly the 'Wheel Drive' allowing it to turn slowly to let the tension off the spring. The spring tension is far less at the front of the truck than the rear.
 - f. Power the system across the Hooklift equipment to the rear of the truck. Positioning the roller approximately 1220mm (4ft) off the ground.
 - g. Unroll the remaining tarp off the roller. Remove the screws and tarp clamp from the roller.
 - h. Remove the old tarp from the cradle by removing the bolts holding the tarp bar inside the front sleeve of the tarp. Discard the tarp safely.
3. Installing the New Tarp
- a. Re-insert the tarp bar into the sleeve of the tarp. Centre the tarp on the tarp bar and re-attach the tarp bar to the cradle.
 - b. Attach the rear end of the tarp to the roller with tarp clamp and screws. Making sure the tarp is centred.
 - c. Power the sheeting system from the rear of the truck back across the Hooklift equipment and into the cradle, manually rolling the tarp onto the roller
4. Adding Tension to the Roller
- a. Ensure the 'Wheel Drive' is secured and locked on
 - b. Ensure the ratchet pawl is in position on the sprocket
 - c. Apply turns 9-11 complete in a clockwise direction on the 'Wheel Drive' ensuring you are wearing protective gloves at all times. With each turn you should hear a clicking sound as the ratchet pawl passes over the sprocket. Tension is being added to the spring. The ratchet mechanism should not allow the spring to lose tension and unravel.
 - d. Add back in the securing bolt between the upper arm and the roller shaft
 - e. Operate the sheeting system to check tension.
 - f. Does it have enough spring tension to roll up the tarp? If not, repeat the process adding additional turns.
 - g. Does it roll the tarp straight in or does it roll to one side? If the tarp rolls to one side with the arms moving together, then you need to remove the slack in the tarp, so the tarp will roll up evenly on the roller. If the tarp rolls to one side you will need to repeat the process.

If you have any questions or require any further assistance please do not hesitate to contact the Harsh Service team on 01759 372100.