PIONEER™

INSTALLATION
OPERATION
MAINTENANCE
MANUAL
FOR
MODEL HR 1500 H
AUTOMATIC COVERING SYSTEM

ATTENTION DISTRIBUTOR: DO NOT DISCARD.

PLEASE GIVE THIS MANUAL TO THE CUSTOMER

WHEN THE UNIT IS DELIVERED.

REVISED 01/30/2018

HR1500H SYSTEM INSTALLATION

The Pioneer HR1500H Tuff-Tarper uses your truck's existing hydraulic system. This system is easy to install and requires little maintenance. This Pioneer pivot arm system is an economical tarping solution for multi-axle roll-off trucks and hook hoists transporting containers of the same height. The hydraulic drive right angle electric gear motor provides steady and quiet rotation of the roller assembly and a fixed gantry. To cover a load, the hydraulic motor unwinds the tarp and the torsion spring powered arms pull it toward the back. To uncover a load, the hydraulic motor winds the tarp onto the roller.

Applications: Single axle hook lift/cable hoist trucks
Container style: variable height containers from 8' to 16' long
Standard tarp: G2016

MAINTENANCE TIPS

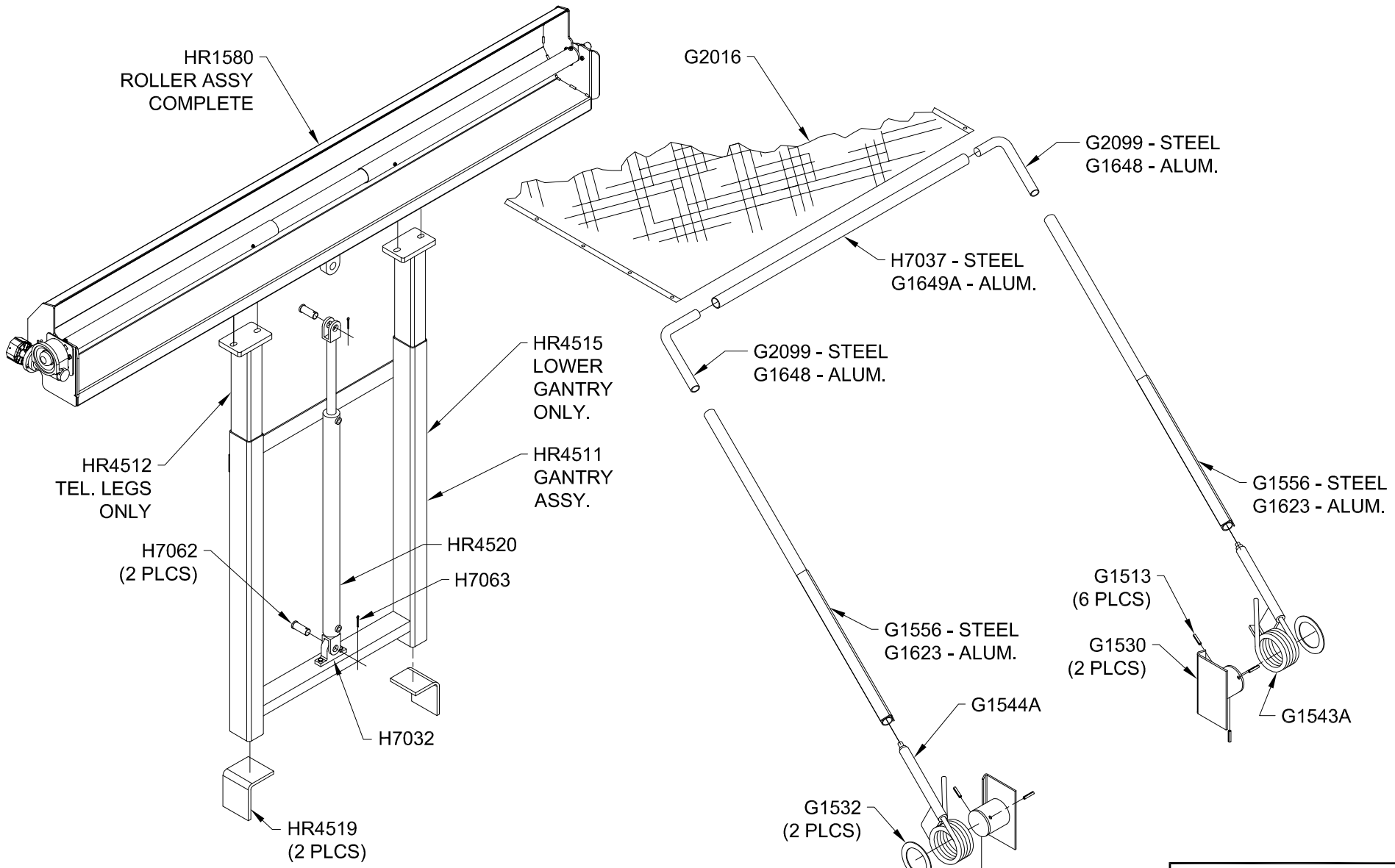
1. Keep the torsion spring at the base of the arms free from debris.
2. Periodically apply a spray lubricant such as WD-40 to the bearings.
3. Replace any worn or broken parts immediately.
4. Check all fittings and connections weekly. Correct as required.
5. Apply a dry film lubricant (Dry Moly) to the telescopic Gantry legs weekly.

TIPS FOR THE OPERATOR

1. Make sure the truck is clear of overhead obstructions before operating the unit.
2. Do not operate under any overhead wires.
3. Keep Hands clear of any moving parts.
4. Make sure nobody is inside the container, or in the path of the arms before operating the unit.
5. Pay attention to safety decals.
6. Release the valve as soon as the Rear Section contacts the rear of the container, or when the Arms are seated on the Bearing plates.
7. Release the valve when the Gantry has been fully extended or retracted.

INDEX

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	04/17/2007	P.DOAN
B	NEW ROLLER ASSY, WAS HR1515-1	01/30/2018	ARP



Pioneer, A Wastequip Co. North Oxford, MA 01537		
HR1500H SCHEMATIC		
PART NO. HR1500H SCHEMATIC		DATE
SCALE: NTS	DRW. BY: P.DOAN	4/17/07

HR 1500 H

AUTOMATIC COVERING SYSTEM

INSTALLATION INSTRUCTIONS

Prior to installing the flow diverter and cover control valve into your truck's hydraulic system, we recommend that you check with the hoist manufacturer for possible warranty implications.

Read and understand these instructions completely before beginning the installation. Use these instructions with the drawings included to unpack, identify and familiarize oneself with the various components of the system.

1. MOUNTING THE GANTRY AND ROLLER ASSEMBLY

Pick a suitable place on the chassis of the truck directly behind the cab to mount the Gantry and Roll Assembly. Clear away or re-route any hoses, cables etc. that may interfere with mounting the Gantry to the chassis. Locate and clamp two HR4519 Chassis Mounting Angles to the frame. You may turn these angles in over the chassis or out from the chassis depending on the chassis width of your truck.

Allow a minimum of 3-4" between the front of these mounting angles and the back of the cab. This will provide clearance for the Roller Assembly as it moves up and down vertically. The mounting angles must be in the exact same position on either side of the chassis. A good way to ensure this is to pick a bolt on either side of the rear suspension chassis mounts and use that as a reference point for locating the mounting angles.

The height of the mounting angles should be the same if placed directly on top of the chassis flanges. If not, the height can be checked by measuring each side or with a level (assuming the truck is level).

Once the mounting angles have been properly located and clamped, they must be bolted to the chassis with ½" grade 8 hardware (not supplied). Four bolts are recommended on each side.

NOTE: Do not drill into the chassis top and bottom flanges or any closer to the flanges than the truck manufacturer did.

Drill the holes thru the mounting angles and chassis, then fasten securely with the hardware specified above. Follow the manufacturer's recommendation for the proper amount of torque on the bolts.

HR1500H SYSTEM INSTALLATION

Mount the complete Roller Assembly (factory pre-assembled) on top of the Gantry Assembly by aligning the four ½" studs on the bottom of the roll base with the slots in the pads on the gantry legs.

NOTE: The hydraulic motor must be on the Left-Hand (Driver's) side.

Secure the roll base to the top of the gantry with four ½-13 nuts and lock washers provided. Assemble the Gantry Cylinder to the Clevis Eye Pads found on the Gantry and roll base using two H7062 clevis pins and cotters.

NOTE: The ports on the cylinder should face to the left or driver's side when viewed from the rear.

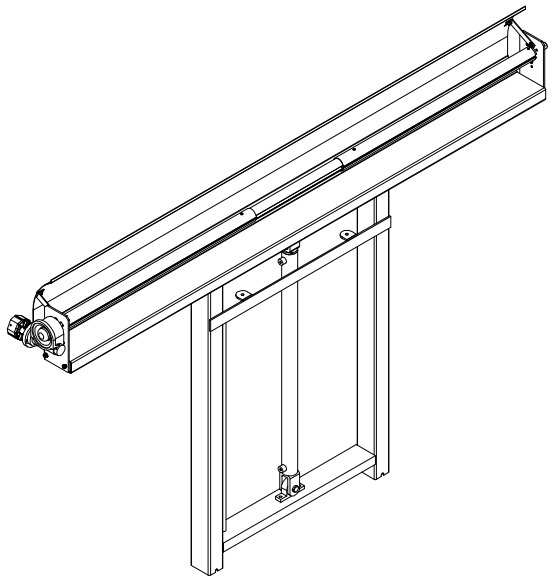


figure 1

Using an overhead crane, chain fall or forklift, lift the entire Gantry and Roller Assembly up on top of the mounting angles with a sling. Center the Gantry on the mounting angles making sure the center of the gantry is aligned with the center of the chassis. Check to make sure the gantry is plumb and square to the chassis. Weld all around the bottom of the gantry legs to the mounting angles adding gussets and or braces (not provided) where necessary. Be sure to not weld the water drain notch closed on the bottom of each leg. It is strongly recommended that triangular gussets be added to the gantry between the gantry legs and mounting angles to firmly anchor them to the chassis to minimize front to rear movement.

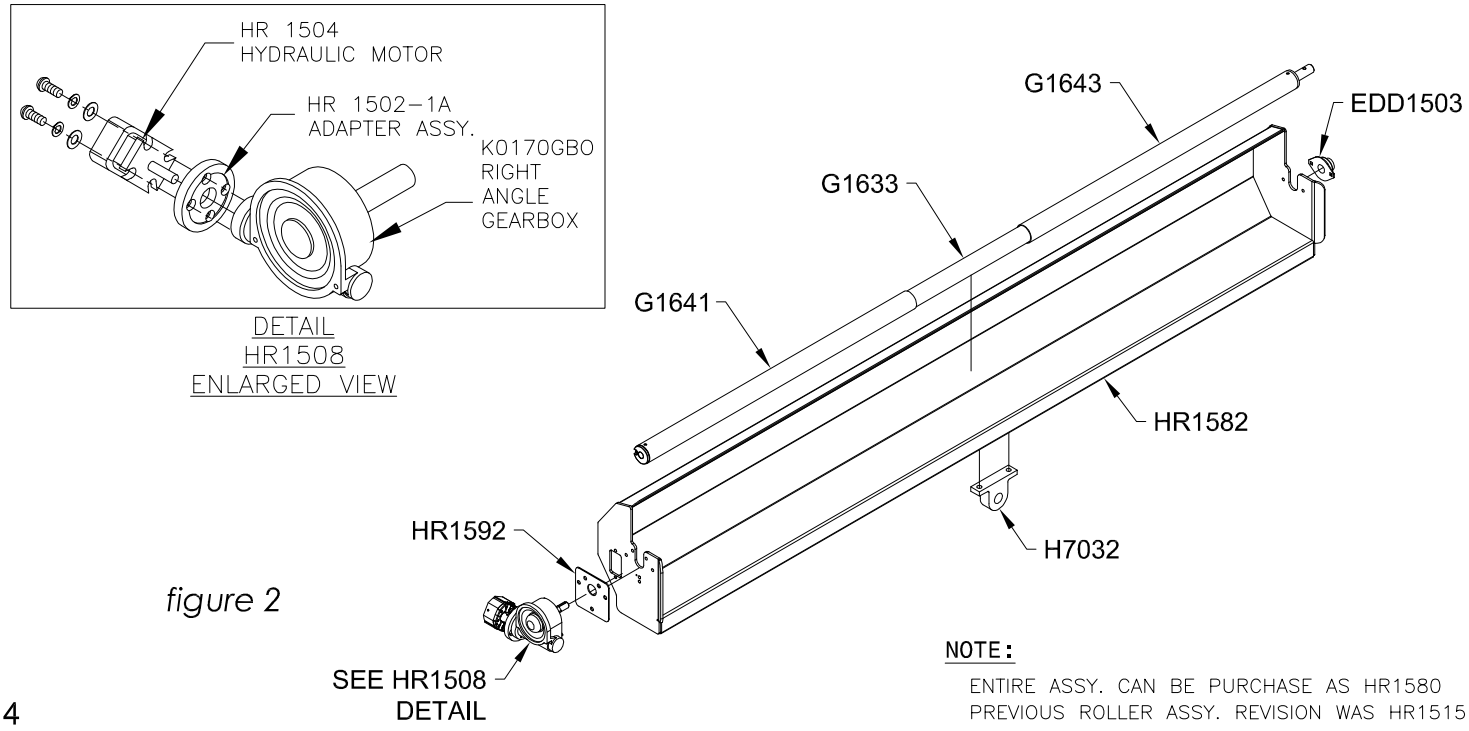


figure 2

2. INSTALLING THE FLOW DIVERTER AND COVER CONTROL VALVE

NOTE: See Hydraulic Schematics on Page 6.

NOTE: Filtration of 30 micron or better must be used with these components.

Select a suitable place for the Cover Control Valve that will allow for ease in operation while not interfering with the hoist, container or hoist controls. It is suggested that this valve be mounted on the driver's side of the truck directly behind the cab. This position will allow for safe and easy operation. In addition, if the hoist controls are located there, the operator can run both systems from the same location.
Fabricate a mounting plate for the Cover Control Valve that will bolt to the chassis or weld to an existing bracket. Bolt the valve to the bracket using 5/16 grade 5 hardware (not provided).

The HR2065 Flow Diverter should be installed between the pump and the hoist main control valve. The Pioneer covering system requires 5 GPM of hydraulic flow which may adversely affect the hoist speed of operation. Pick a suitable location to mount the Flow Diverter. The flow diverter valve may be bolted to a bracket (not supplied) by the mounting holes in the bottom of the flow diverter manifold block.

NOTE: For hoist operating pressures greater than 3,800 psig, you must install the flow diverter valve downstream of the hoist valve using power beyond, or use the *optional* HR2069 Flow Diverter with a ductile iron valve body that is rated to 5,000 psig.

Hoses and fittings for connecting the diverter to the pump, the diverter to the hoist controls, the diverter relief valve port to the tank return line and the cover control valve to tank, are not supplied because of the many places these parts can be mounted.

NOTE: Use only pipe thread sealant such as RectorSeal on pipe threads.
DO NOT USE TEFLON TAPE!!!

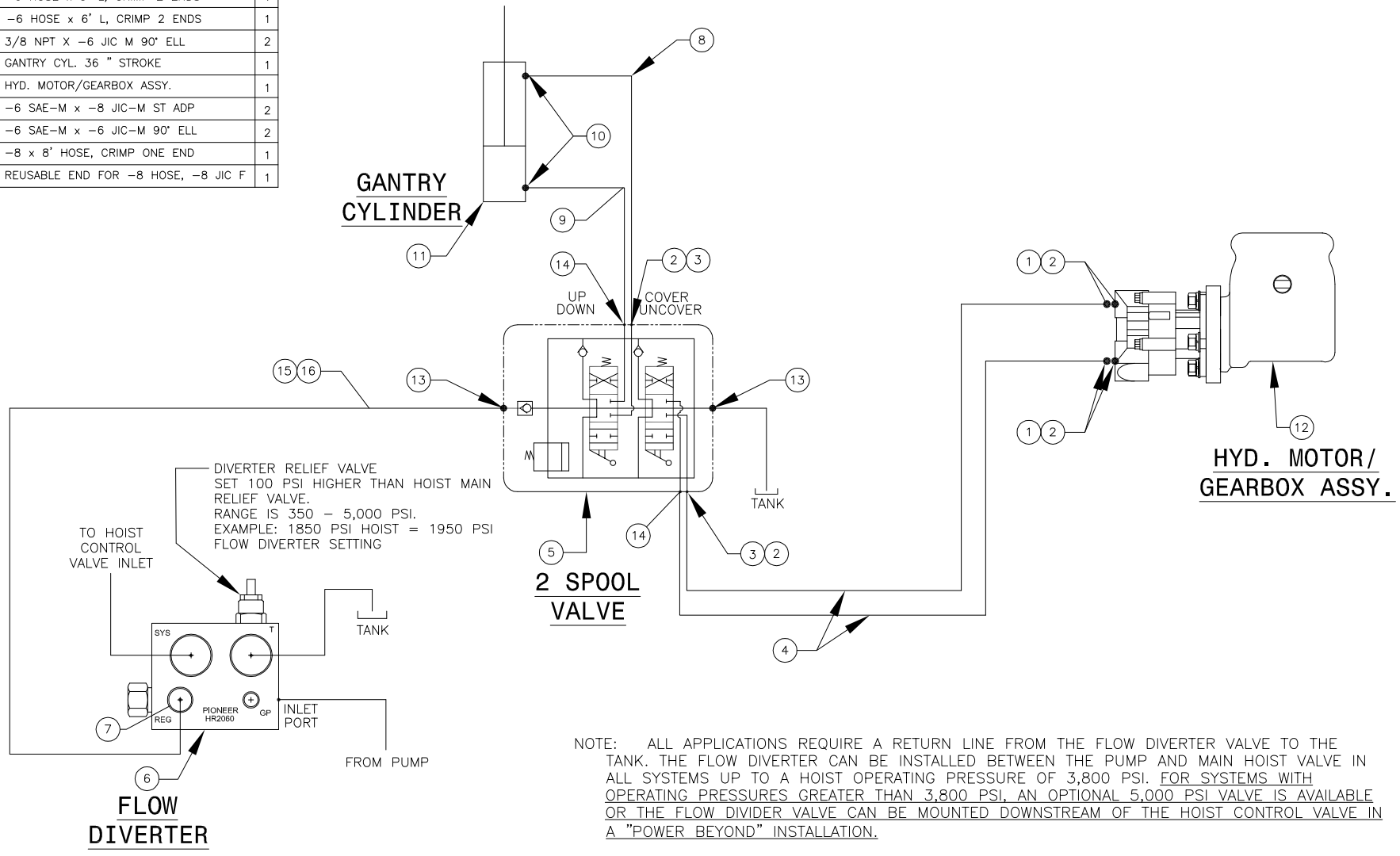
Follow the HR2071 hydraulic schematic (page 6) and make the proper connections between:

1) The pump to the flow diverter (IN port)
2) From the diverter SYS port to the **hoist** control valve inlet
3) From the diverter (REG- regulated flow port) to the **cover control valve** inlet
4) From the diverter valve (T-port) to the tank return line
5) From the **cover control valve** outlet to tank return line

Hoses that are used to make these connections must be equivalent to the original equipment provided by the hoist manufacturer. Set the flow diverter valve relief valve 100 PSI higher than the hoist main relief valve setting. There is a (GP) gauge port in the diverter valve body that is plugged with an SAE number 4 o-ring plug that must be used to set the relief valve pressure.

1	HR1505	ADAPTER, −8 SAE M x −6 JIC M	2
2	HR4683	−6 JIC M x −6 JIC F 90° ELL	4
3	HR4682	−6 SAE M x −6 JIC M	2
4	HR1506	HYDRAULIC HOSE, −6 X 144" L	2
5	HR4535	COVER CONTROL VALVE−2 SPOOL	1
6	HR2065	FLOW DIVERTER − 5 GPM	1
7	HR2021	−8 SAE M x −8 JIC 90° ELL	1
8	HR4551A	−6 HOSE x 9' L, CRIMP 2 ENDS	1
9	HR4552	−6 HOSE x 6' L, CRIMP 2 ENDS	1
10	H7048	3/8 NPT X −6 JIC M 90° ELL	2
11	HR4520	GANTRY CYL. 36 " STROKE	1
12	HR1508	HYD. MOTOR/GEARBOX ASSY.	1
13	HR4729	−6 SAE−M x −8 JIC−M ST ADP	2
14	HR4681	−6 SAE−M x −6 JIC−M 90° ELL	2
15	HR4720	−8 x 8' HOSE, CRIMP ONE END	1
16	HR4721	REUSABLE END FOR −8 HOSE, −8 JIC F	1

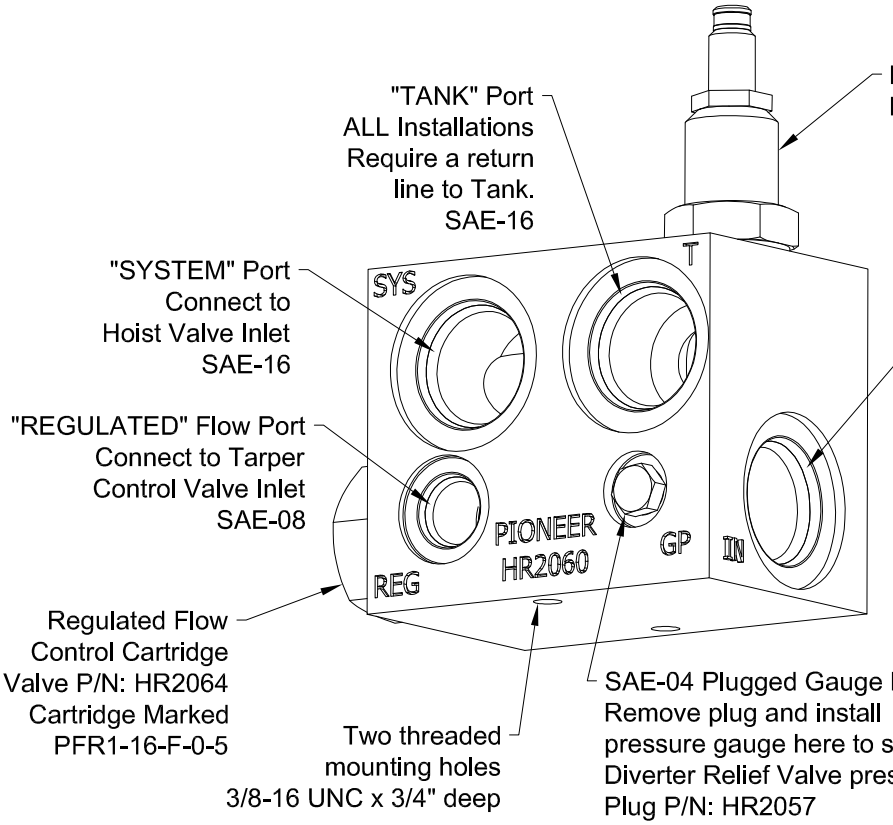
REV	ECO No.	DESCRIPTION	DATE	ENGINEER
A		REPLACED HR1500 PTO HYD. SCHEMATIC, HR2062 VALVE REPLACED HR2055-15 VALVE	04/25/2017	RDS



NOTE: ALL APPLICATIONS REQUIRE A RETURN LINE FROM THE FLOW DIVERTER VALVE TO THE TANK. THE FLOW DIVERTER CAN BE INSTALLED BETWEEN THE PUMP AND MAIN HOIST VALVE IN ALL SYSTEMS UP TO A HOIST OPERATING PRESSURE OF 3,800 PSI. FOR SYSTEMS WITH OPERATING PRESSURES GREATER THAN 3,800 PSI, AN OPTIONAL 5,000 PSI VALVE IS AVAILABLE OR THE FLOW DIVIDER VALVE CAN BE MOUNTED DOWNSTREAM OF THE HOIST CONTROL VALVE IN A "POWER BEYOND" INSTALLATION.

PROJECT	HR1500		SCALE:	DWG NO.	REV
MATERIAL	N/A		SIZE: B	HR2071	A
FINISH	N/A		TOLERANCES	HYDRAULIC SCHEMATIC	
WEIGHT			X.X ± 0.1	HR1500PTO HYD, HR1500H	
APPROVED			X.XX ± 0.02	AFTER 04/2017	
CHECKED			X.XXX ± 0.005		
DRAWN	RDS	04/25/2017	ANGLE ± 1°	SHEET 1 OF 1	
			ALL DIMENSIONS IN INCHES		

HR1500H SYSTEM INSTALLATION



NOTE: When *replacing* an old style HR2055 series Valve that was previously installed *without* a return line to Tank, you *must add the Tank return line for the relief valve to work properly*.

NOTE: An *optional* diverter valve with a ductile iron body is available for installing on hoists with hydraulic operating pressures up to 5,000 psi. Valve P/N is: HR2069

PIONEER TARP SYSTEMS WORKING PRESSURES

(Does not include High Pressure Hoist. For High Pressure Hoists, see ***page 8****)*

RP4500SAR = 1850psi to 1950psi

RP4500SARG = 1850psi to 1950psi

RP4500SATR = 1850psi to 1950psi

HR1500PTO = 900 psi TO 1000 psi (MAX)

HR1500H = 900 psi TO 1000 psi (MAX)

HR2000PTO = 900 psi TO 1000 psi (MAX)

HR1000PTO = 900 psi TO 1000 psi (MAX)

ALL above setting are for **low pressure hoists** that produce **less than 2200psi**.

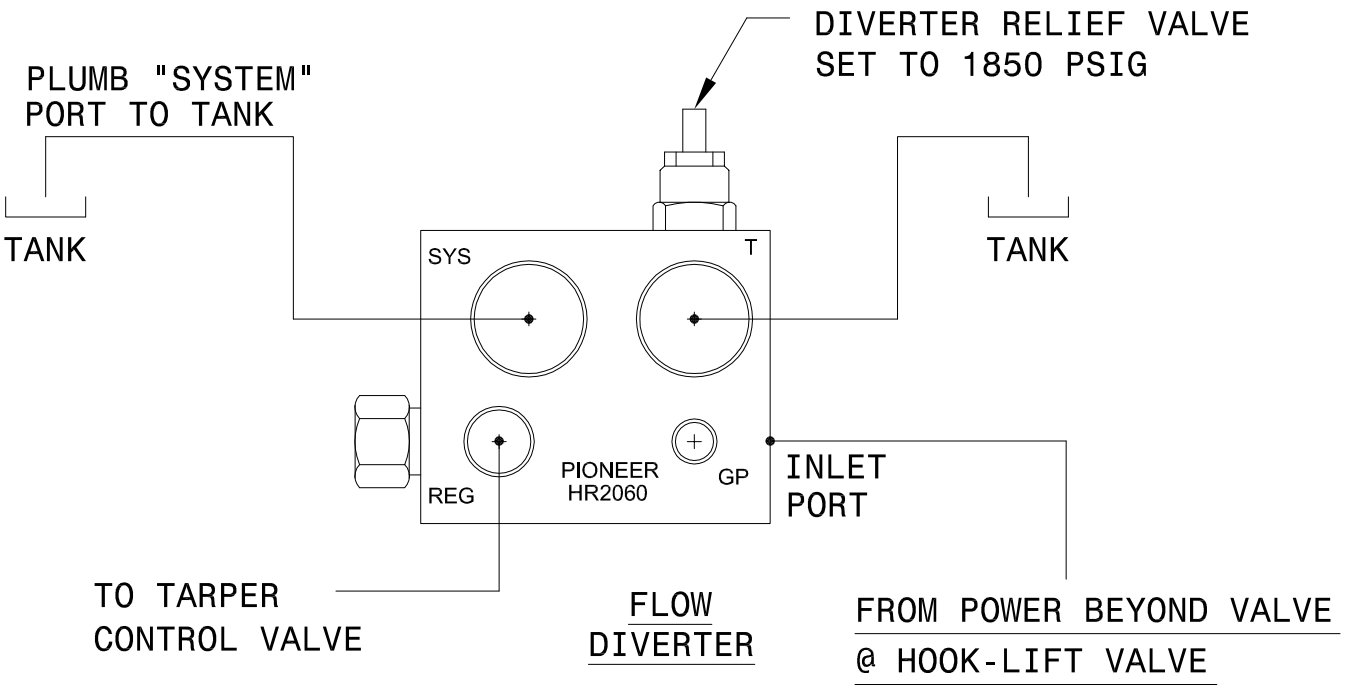
Diverter Valve needs to be set 100psi higher than hoist for proper operation.

Systems that use a Hydraulic Motor must be **under 1000psi** or seal damage may happen.

HR1500PTO, **HR1500H**, **HR1000PTO**, and **HR2000PTO** must be set to **less than 1000psi.**

Warranty will be void on Hydraulic motors with systems set higher than 1000psi.

HIGH PRESSURE POWER BEYOND DIVERTER INSTALLATION



NOTE: SCHEMATIC SHOWN FOR ALL HIGH PRESSURE POWER BEYOND INSTALLATIONS FOR THE HR2062 OR HR2065 FLOW DIVERTER VALVES.

THIS INSTALLATION REQUIRES ***BOTH*** THE "SYSTEM" PORT AND THE "TANK" PORTS TO BE PLUMBED TO THE TANK RETURN LINE.

THE "INLET " PORT IS SUPPLIED BY YOUR POWER BEYOND VALVE AT YOUR HOIST CONTROL VALVE.

THE "REG" REGULATED FLOW PORT IS CONNECTED TO YOUR TARP CONTROL VALVE INLET.

3. ACTIVATING THE GANTRY LIFT CYLINDER

Follow the hydraulic schematic and install the proper fittings into the gantry lift cylinder. Attach one 9' hose to the rod end fitting on the cylinder and attach one 6' hose to the base end fitting on the cylinder.

The valve section labeled “UP - DOWN” is used to control the vertical motion of the gantry. Install two HR4683 elbows onto the top of this section. Route the hoses from the gantry cylinder toward the cover control valve using nylon zip ties or clamps to secure the hoses along the way. Connect the hoses to the elbows on top of the valve. At this point it doesn't matter which hose goes to which side of the valve. They can be swapped later on.

To bleed the lines, start the truck and engage the PTO. Operate the “UP-DOWN” valve in the down (cylinder retract) position first to fill the top side of the cylinder with oil. Hold the control valve in the down position until you hear the hydraulic relief valve open for 5 seconds. Operate the valve so the cylinder moves upward to the end of its stroke and hold in the raise position until the valve has gone over relief for 5 seconds. Run the gantry up and down a few times and holding the lever open for a few seconds at the end of each stroke to force any air in the cylinder or lines back to tank. If the hoses are reversed, that is, if the gantry goes up when the handle is moved to the down position, exchange the hoses. Re-bleed if necessary.

Apply a dry film lubricant (Dry Moly) to the telescopic gantry legs to cut down on friction when moving up and down.

The relief valve on the left front of the cover control valve has been factory pre-set. If the gantry does not move smoothly or if the hydraulic motor does not wind the cover onto the roller smoothly or all the way to the end of the operation when the cover control valve has been engaged, the relief valve may need to be adjusted. This is done as follows:

- Remove the acorn cap that covers the adjusting screw.
- Loosen the Jam Nut.
- Turn the screw ¼ turn clockwise and try the system.
- Repeat until the motor winds the cover smoothly and fluid is not dumping over the relief valve.
- Tighten the Jam Nut and replace the acorn nut.

NOTE: The relief valve should only be turned to 900 psi to 1000 psi so motor roll the cover smoothly. Increasing the operating pressure beyond this point will not make the motor go faster. If the relief valve is set too high, damage to the unit or personal injury could result.

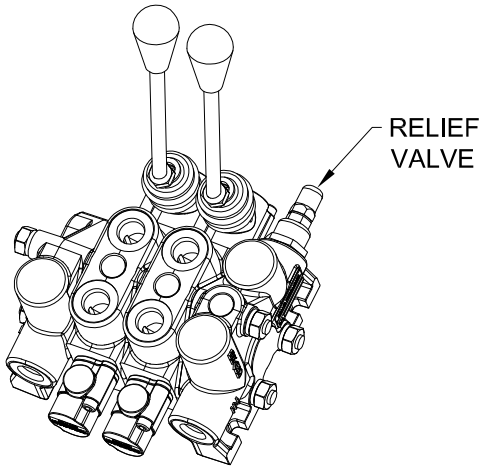


figure 3

4. ACTIVATING THE HYDRAULIC MOTOR

The valve labeled "COVER - UNCOVER: is used to control the Hydraulic Motor which winds and unwinds the cover from the roller. Follow the hydraulic schematic and install the proper fittings into the Cover Control Valve and the Hydraulic Motor. The hoses that connect to the motor and valve are already connected to the Gantry. The lower ends go to the Cover Control Valve and the upper ends connect to the motor. Make the proper connections and secure the hoses to keep them from catching on during gantry movement. Make sure that the hoses connected to the hydraulic motor have a nice loop in them and there are no kinks in the hoses. It is advisable to run the Gantry up and down to make sure the hoses track properly from the collapsed position of the gantry to the extended position of the gantry. The hoses should have enough slack in them to allow the gantry to extend and retract completely without kinking the hoses. If adjustments need to be made to the hoses, they can be slid thru the clamps securing them to the gantry. It is important that the hoses have enough slack in them to allow for full vertical movement of the gantry, but no so much slack that they flop around when the gantry is collapsed.

Operate the "COVER - UNCOVER" section of the control valve to make sure the roller is turning in the proper direction. With the valve in the UNCOVER position, the roller should turn in a counterclockwise direction as viewed from the driver's side. The tarp is always wound onto the roller in a clockwise direction as viewed from the driver's side. Swap the hoses if necessary to make the roller turn in the proper direction. Make sure the hoses are secured and no chafe points are evident.

5. DETERMINING THE PIVOT POINT AND MOUNTING THE ARMS

NOTE: The arms and brackets must be mounted to a fabricated structure that is bolted to the chassis. This structure must extend outward from the chassis so as to allow for the widest width container that will be carried on the truck, whether or not the container is to be covered. (ie: self-contained compactors) The overall outside width from arm mounting bracket to arm mounting bracket cannot be wider than 108" to be in compliance with Federal DOT regulations. Check with your State and local DOT to find out if this standard applies in your area. If it does not apply, then you must mount the unit in compliance with your local DOT Regulations.

NOTE: If the fenders on the truck are well constructed, that is heavily gusseted, braced and the material thick enough, it may be possible to utilize the fenders as part of the support structure for the arm mounting brackets.

A. Put the longest and highest container that is to be covered on the truck. This container is used to determine the pivot point for the arms and to determine the arm length. If your containers are not the same length, you may have to modify this guideline to comply with the majority of containers you have.

B. Measure the distance from the back side of the tarp roller to the front side of the rear door on the container (Dimension "A"). Dividing this measurement in half will give you a starting point for locating the Arm Mounting Brackets (G1531). See the *figure 4* on *page 11* for reference.

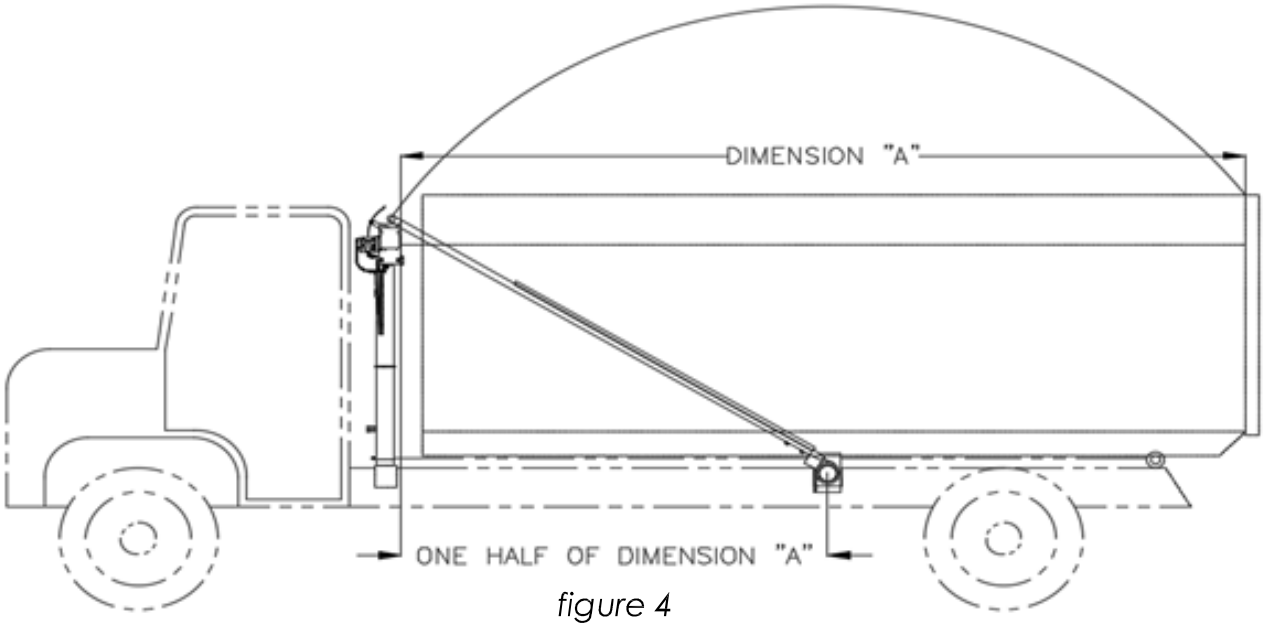


figure 4

If the center line measurement obtained above falls over a fender, it may be possible to utilize the fender in determining the exact pivot point. If the centerline measurement does not fall near a fender then you will have to construct some type of **TEMPORARY** support for the Arm Mounting Bracket, while the exact pivot point is found. Temporary support can take the form of tack welding the Arm Mounting Bracket (G1530) to the container itself or tack welding a plate to the container, to lower the bracket down to its proper position and the tacking the bracket to the plate.

In either case, proceed as follows: Tack weld one (G1530) Arm Mounting Bracket to the fender or to the temporary support, so that the front of the bracket (the front has the bend on it) lines up with the measurement determined above.
Mount the Arm Mounting Bracket as low as possible without interfering with the tires or the hoist cylinder(s).

C. Insert one Bow Corner (G2099) into an Upper Arm and slide the Arm onto the Arm Mounting Bracket pivot tube. Swing the Arm towards the gantry and adjust the bow in or out so that it is rests approximately above the center of the roller shaft on the end bearing plate of the roll assembly. Secure the bow to the arm with clamps and swing the arm thru its arc to the rear of the truck. The bow, which will hold the rear section cross tube, should line up with the front edge of the door on the container. If the bow goes past the rear of the container, the Arm Mounting Bracket will have to be moved forward and the arm length shortened accordingly. If the bow falls short of the rear of the container, move the Arm Mounting Bracket toward the rear of the truck and lengthen the arm. Re-position the bracket if necessary and re-check as outlined above in *figure 4*.

Once you are satisfied that the position of the Arm Mounting Bracket is correct, carefully mark the exact location of the bracket on either the fender or the temporary support. You are now ready to construct a support structure for the Arm Mounting Bracket.

Some points to remember are:

- **DO NOT WELD TO THE TRUCK CHASSIS, DRILL AND BOLT ONLY.**
- Follow the chassis manufacturer's recommendations.
- Utilize existing bolts if you can.
- Make sure that the structure is well supported and gusseted. There is apt to be considerable vibration at this point along the chassis which can lead to failed welds.

The structure must be:

- Plumb (vertical) and level (horizontal).
- Low enough so that it will not interfere with any container or its accessories.
- High enough to allow access to the tires and wheels.
- Wide enough apart so ANY container you may be hauling will fit between the arms of the covering system, even if the container is not to be covered.
- **KEEP IN MIND LOCAL AND STATE WIDTH REGULATIONS AS WELL AS FEDERAL DOT REGULATIONS.**
- Must be the same distance out from the chassis on both sides.

D. Install both Base Arms onto the Arm Mounting Brackets using two Retaining Rings (G1532) (one on each side) and six (G1513) Roll Pins (three per side). Place the Base Arm onto the Arm Mounting Bracket so that the short leg of the spring is on the inside of the Arm Mounting Bracket facing the front of the truck and pointed up. Install one retaining ring over the end of the center tube on the Arm Mounting Bracket. Drive one roll pin into each of the three holes in the bracket and tap down until they are flush with the outside of the retaining ring.

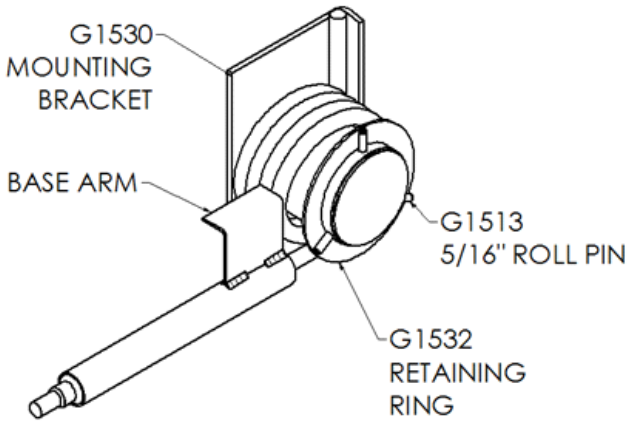


figure 5

E. Attach the Corner Bows (G2099) to the arms by drilling a ¼" hole thru the arm and bow approximately 8" down from the top of the arm. This measurement may vary depending on how much bow is left inside the arm (the long leg of the bow is 24" long). Fasten with a 1/4"-20 x 2" bolt and locknut (provided) on both arms.

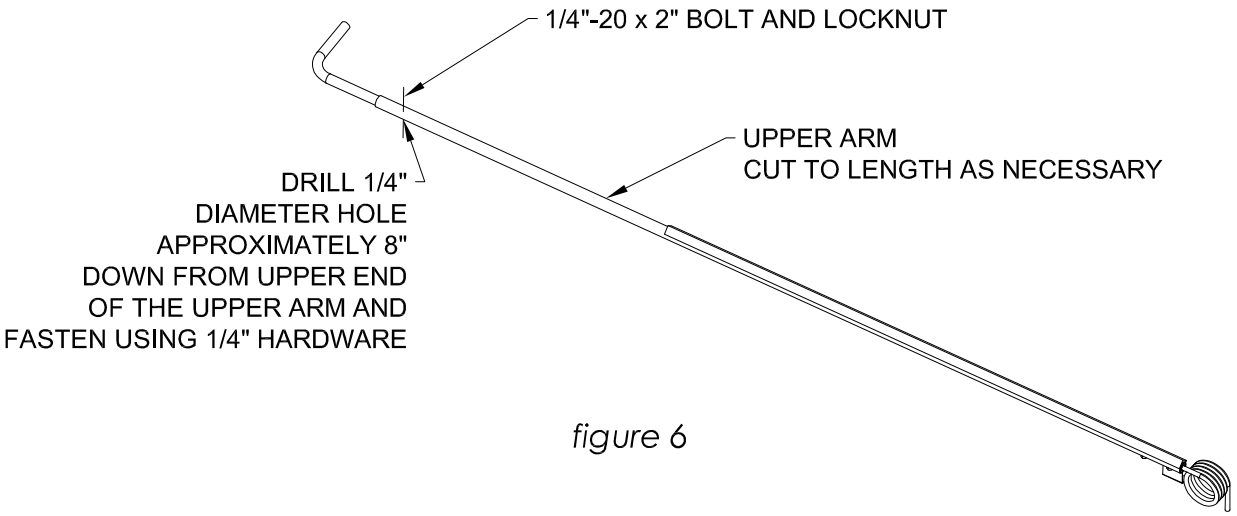


figure 6

F. With both side tarping arms (consisting of Base Arm with spring, Upper Arm and Corner Bow) sitting on the top rear of the container, measure the distance between the Upper Arms just above the Arm Mounting Brackets [***Step #1***]. You will have to raise the hoist to make this measurement so be careful that the arms don't slide off the container and fall to the ground, which may cause physical injury or damage to the unit. Lower the hoist and measure the distance between the top of the arms (where the bows go into the arms) and adjust the arms in or out so that the distance between the arms at the top is the same as the bottom.

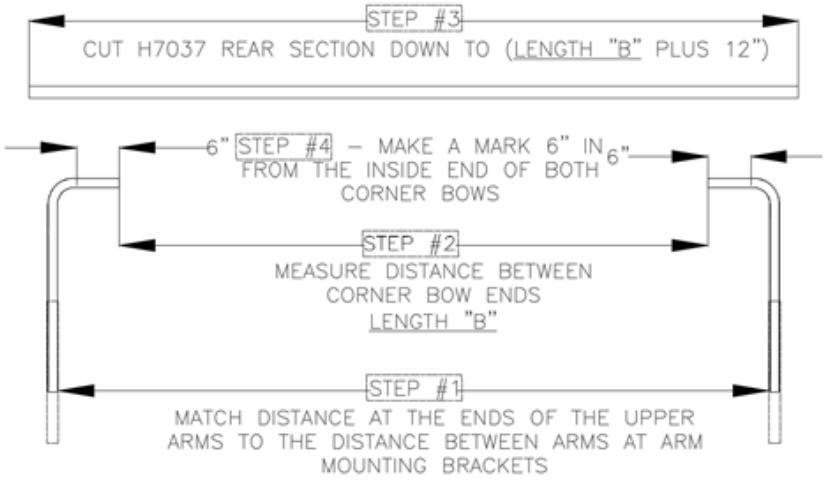


figure 7

[***Step #2***] Measure the distance between the ends of the bows (Length "B").

[***Step #3***]Taking this measurement and adding 12" to it will give you the proper length to cute the Rear Section (H 7037) cross tube down to.

For example, if you mounted the G1530 mounting brackets at the maximum width of 108" outside to outside of the arm pivot tube cap, the Upper Arms will be approximately 103 ¼" ID. This will put the ID of the corner bow ends at approximately 84 ½". Adding 12" to this gives us a measurement of 96 ½", and that will be the length to cut the H7037 Rear Section.

[***Step #4***] To ensure that maintain the proper width between the Upper Arms, measure in from the inner end of both corner bows six inches and make a mark with a marker. Take the rear section cross tube that you just cut to length and slide it over the corner bows, allowing it to overlap the bows by 6" to the mark you just made on both sides.

[***Step #5***] Drill a 1/4" hole from the rear to the front, making sure the bolt that goes into this hole will be out of the way of the tarp, thru the bow corner & cross tube and fasten with a 1/4 bolt and locknut provided on both sides. Make sure the bow corners are plumb vertically before drilling the holes. Correct as necessary.

6. **INSTALLING THE COVER**

A. Remove the Rear Section (H 7037) cross tube from one corner bow to allow the cover to be slid onto the rear section tube. Unfold the cover and find the rear boot (pocket). If you have an expandable width tarp, be sure to have the shock cord ties on the top side of the cover when installing. Slide the cover onto the Rear Section making sure that the bows go inside the Rear Section as previously described. Fasten the Rear Section to the Bows by drilling a ¼" hole thru the Rear Section and Bow approximately 3" in from the end of the Rear Section on each side. Insert one ¼" Cotter Pin (provided) thru each hole and open fully. Attach one end of a Cover Spring (G 2014) to the eye portion of the cotter pin and attach the other end of the cover spring to the grommet on the rear corner of the cover on each side.

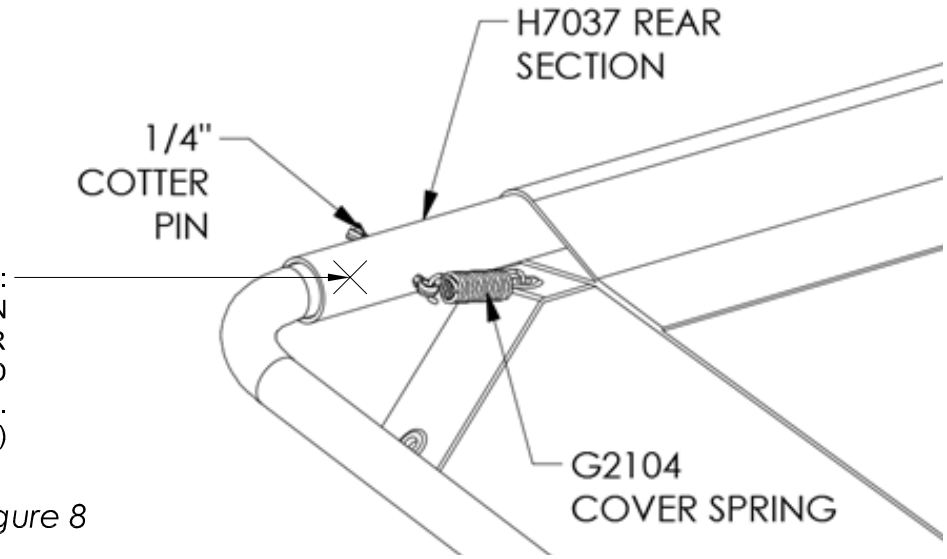


figure 8

B. Attach the cover to the roll using seven sheet metal screws and fender washers (provided) as follows:
Wrap the cover three quarters of the way around the roller in a clockwise manner as viewed from the driver's side. Center the cover on the roller and then attach the cover to the roller, starting in the middle and working out to the left and right. Make sure that the cover is straight on the roller and that the fender washers are firmly in place over the grommets. Note that the sheet metal screws should be screwed into the smooth portion of the roller, not into the roll extrusion alignment slot. The extrusion slot can be used as a guide to fasten the tarp straight to the roll.

7. TYING THE COVER SHOCK CORDS (EXPANDABLE TARP ONLY.)

The shock cords on the top of the cover are designed to fold the cover upward and inward so that the 9' wide cover will roll up between the bearing plates on the roll assembly. This is accomplished by firmly tying one end of the shock cord to the a loop on one side of the cover and then passing the other end of the shock cord thru the loop in the center of the cover towards the other side and stretching the shock cord so that pulls the cover up and in. It is only necessary to put enough tension on the shock cords so that the sides of the cover do not rub on the bearing plates when the cover is being wound onto the roller. Pass the shock cord thru the loop on the other side of the cover and tie a knot securely when adequate tension has been achieved. The best test for the proper amount of tension, is to check the cover while it is being wound on the roller. The cover should not "bunch up" and/or rub on the bearing plates nor should it pull in too far away from the edges of the container. Shock cords that are tight are as bad as those that are too loose. Be patient, they may have to be adjusted a couple times in order to get them right. Make sure that the first couple of winds that go onto the roller are smooth and square. If not, the cover will wind up faster on one side than the other, causing the arms to go out of synchronization because of the extra material, which makes a larger circumference to that side of the roller.

8. OPERATING THE UNIT

The controls used to operate this unit are a VALVE SECTION Labeled COVER-UNCOVER which controls the arms and cover, and a VALVE SECTION labeled UP-DOWN which controls the vertical motion of the Gantry.

TO COVER THE CONTAINER:

1. Make sure the truck is clear of overhead wires.
2. Make sure that there is nobody inside the container or in the path of the arms.
3. Move the arms upward from the roll approximately 2-3 feet by using the Cover-Uncover Valve.
4. Raise the Gantry to its maximum height using the Up-Down Valve.
5. Move the arms to the rear of the container to cover the load. Release the valve when the rear section is firmly seated on the rear of the container.
6. Lower the Gantry so that the top of the windscreen is even with the top of the container. This stretches the cover taut, preventing wind from getting under the cover and the bellowing and whipping that may occur.

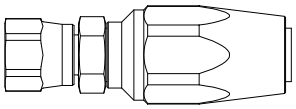
TO UNCOVER THE CONTAINER

1. Make sure that the truck is clear of overhead wires.
2. Make sure that nobody is in the container or in the path of the arms.
3. Raise the Gantry up to its maximum height.
4. Using the Uncover valve, move the arms to the front of the truck **stopping 4-6 feet from the roll.**
5. Lower the Gantry to its rest/travel position.
6. Wind the cover onto the roller and **release** the valve when the Arms and Bows contact the Bearing Plates. **DO NOT CONTINUE HOLDING THE VALVE after the Arms and Bows make contact with the bearing plate, doing so can cause damage to your system!**

HYDRAULIC FITTING CHART

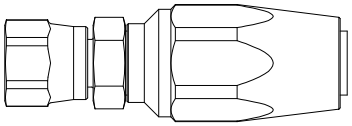
DRAWINGS NOT TO SCALE
FOR REFERENCE ONLY

Note: -4 Hose Fitting and Swivel are Separate Items

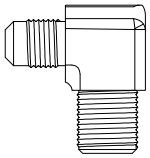


HR4685
Reusable Fitting for -4 Hose w/ -6 JIC Female Swivel

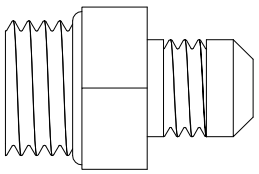
Note: -8 Hose Fitting and Swivel are Separate Items



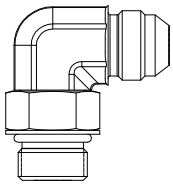
HR4721
Reusable Fitting for -8 Hose w/ -8 JIC Female Swivel



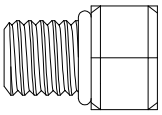
H7048
3/8 NPT M x -6 JIC M 90 DEG. ELL



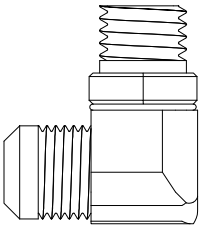
HR1505
-8 SAE M x -6 JIC M Adapter



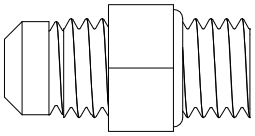
HR2021
-8 SAE M x -8 JIC M ELL



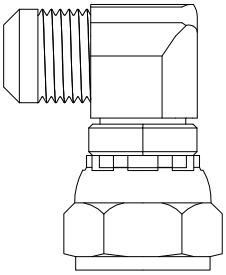
HR2057
-4 SAE Male Plug



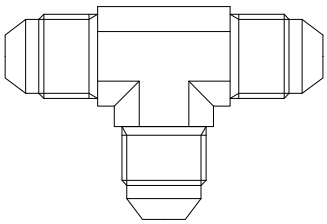
HR4681
-6 SAE M x-6 JIC M 90 Deg. ELL



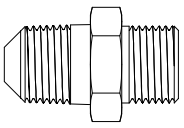
HR4682
-6 SAE M x -6 JIC M Straight Adapter



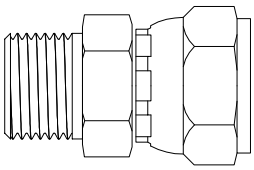
HR4683
-6 JICM x -6 JIC F 90 Deg. ELL



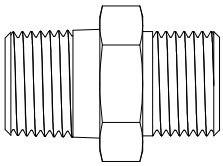
HR4684
-6 JIC M x -6 JIC M x -6 JIC M TEE



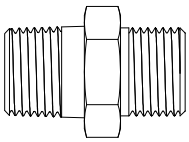
HR4716
1/4 NPT M x 6-JIC M Adapter



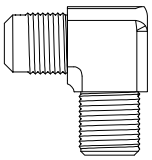
HR4717
1/4 NPT M x-6 JIC F Adapter



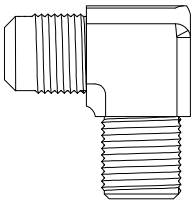
HR4722
1/2in. NPT M x-8 JIC M Adapter



HR4729
-6 SAE M x -8 JIC M ADAPTER



HR4553
1/4 NPTx-6 JIC 90 Deg. ELL



HR4693
1/2 NPT MALE x -8 JIC 90 Deg ELL

NOTES

SPECIAL NOTE

NOT MANUFACTURED OR INTENDED FOR USE WITH HAZARDOUS WASTE

Pioneer, A Wastequip Company will not be held responsible for damages to, or caused by their container covering systems when they have not been installed or used in the manner prescribed in this manual. Any modifications to the unit or deviations from the procedures outlined in this manual must be authorized in writing by Pioneer, A Wastequip Company.

WARRANTY

Pioneer, A Wastequip Company warrants this automatic container covering system for a period of twelve (12) months, against proven defective parts and workmanship. Excluded from this warranty is the fabric tarp. Our liability is limited to the replacement parts and does not include freight, labor or lost time due to or in connection with the failure of the parts. Any part will be replaced under the conditions of this warranty when Pioneer, A Wastequip Company has authorized a return and has received satisfactory evidence that the part(s) is(are) defective.