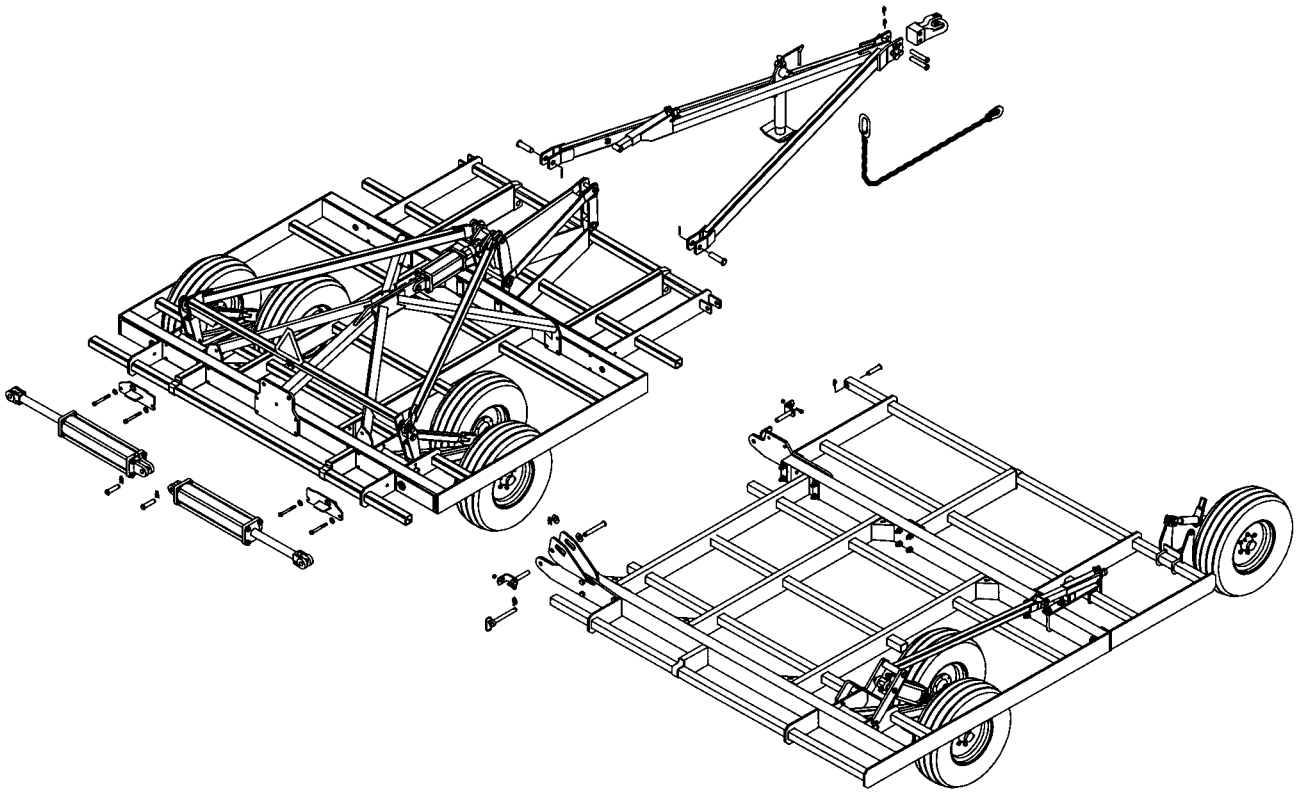
KONGSKILDE

2800 VIBRO-TILL
FIELD CULTIVATOR

Kongskilde
2800 Series

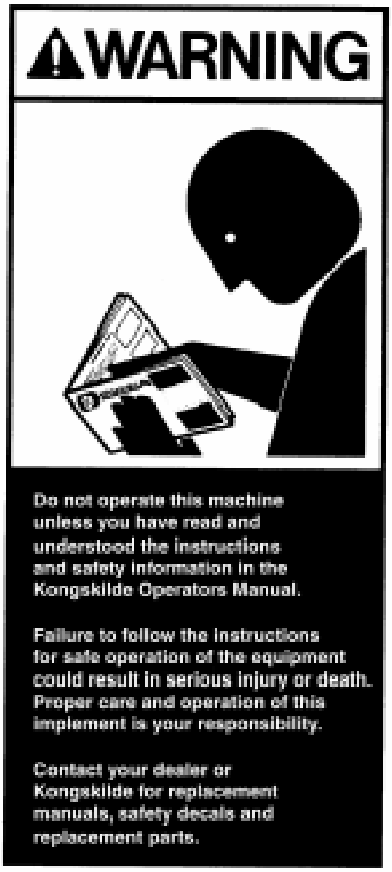


***Model may not be exactly as shown.**
Kongskilde reserves the right to make changes to product designs and specifications without notice or obligation to rework. See your local Kongskilde representative for current product specifications, instructions and options.

ASSEMBLY INSTRUCTIONS

Introduction:

Please take the time to carefully read and review all instruction booklets provided with your new Kongskilde product.



These instruction booklets have been developed to assist you in assembling, adjusting and maintaining your new Kongskilde Product to obtain optimal performance over the lifetime of the product.

A copy of the Spare Parts List has also been provided in order to identify the components and hardware needed for each step of the assembly and to help you identify and obtain replacement parts in the future.

When the assembly of the unit is completed, please refer to the Owners Manual before attempting to adjust or use the product. The Owners Manual will provide you with further instructions on the proper Field Settings, Adjustments and Maintenance Procedures for Safe Operation of the unit.

If optional equipment or attachments have been ordered for your unit, please refer to the instruction booklets provided for proper installation and adjustment of these accessories.

Please take the time to fill out and return the Owners Registration and Warranty Form provided in the Owners Manual in order to activate the warranty coverage.

Pre Assembly Instructions:

Assembly of Kongskilde products should only be undertaken by authorized Kongskilde Dealers or an approved service provider who has the necessary tools, equipment and training for safe handling and proper assembly of the unit.
Proper handling and assembly of the components is critical in order to validate the warranty policy.

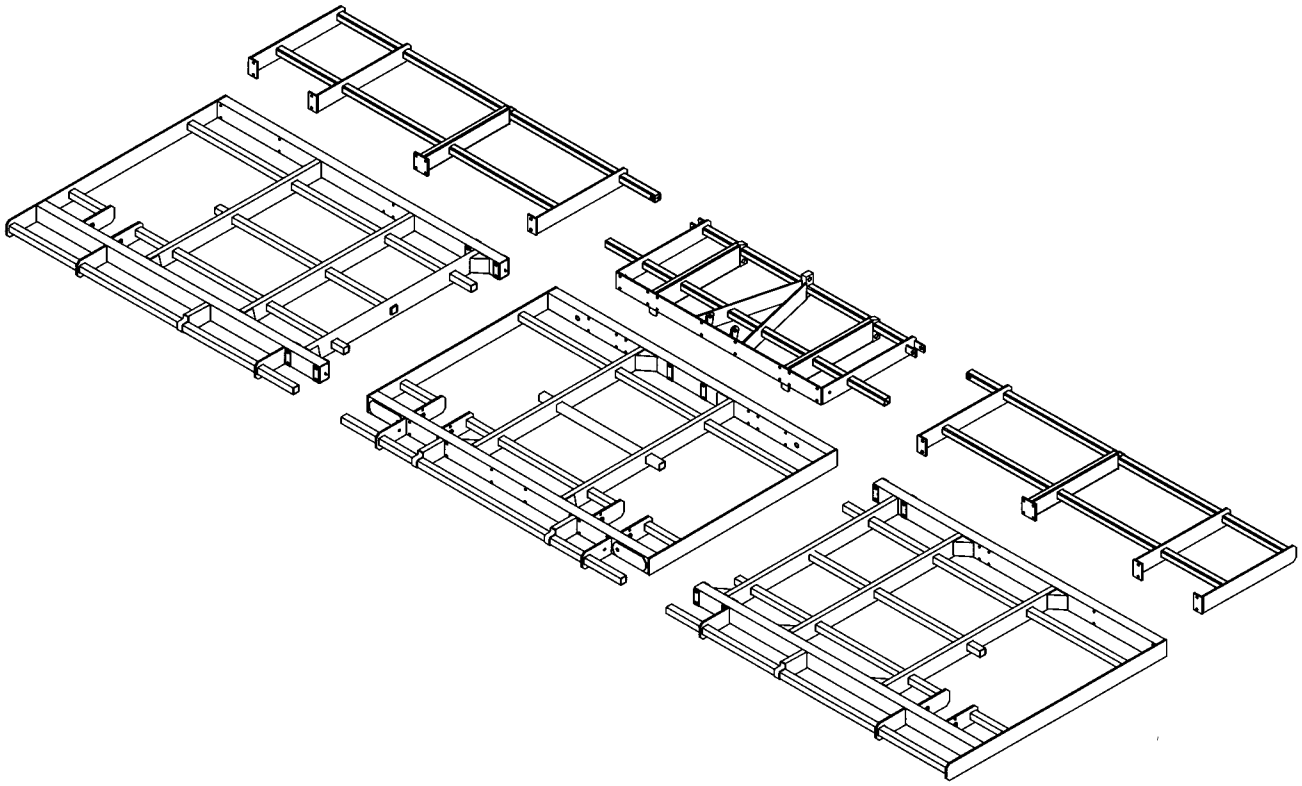
It is important to note that the frame components are heavy and somewhat awkward to handle. Proper lifting devices such as overhead cranes, boom lifts or mobile lift trucks should be used at all times when moving or handling the large frame components and must only be operated by individuals who have had the proper safety training for using such devices. Proper steel assembly stands or support jacks should also be used to support the frame components and prevent them from falling during assembly.

Recommended assembly tools include:
A full set of standard open or box end wrenches and sockets; assorted sizes of pin punches; a heavy hammer and/or sledge hammer; a pry bar; a large adjustable wrench; and pair of visegrip or similar type pliers.
Optional tools could include an all purpose jack and a good quality air or electric drive impact tool with heavy drive sockets.

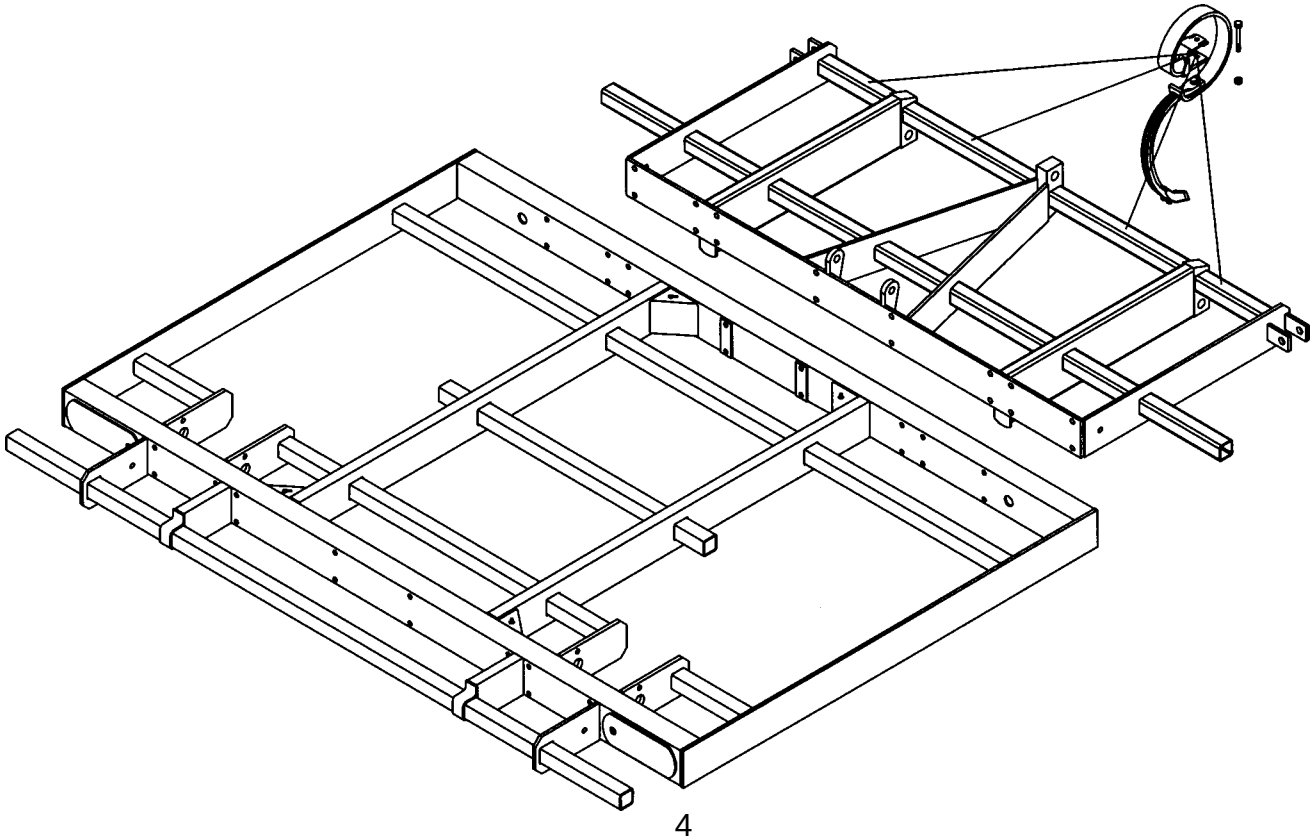
The assembly area should be should be large enough to allow workers and equipment to move around freely during assembly of the unit.
For example; to fully assemble a 2800-90 (29' working width), a minimum area of 30' x 40' with 16' overhead clearance is required to assemble and fold the machine.
If the unit is to be assembled and folded indoors, additional clearance may be needed in the assembly area.
The ceiling height and the size of the building exit door must also be considered in order to safely fold and move the cultivator outdoor after assembly.
The floor area should be relatively clean and level. Proper lighting and ventilation should also be provided to allow the work to be carried out in a safe and efficient manner.

FRAME ASSMEBLY

Sort out the frame sections for the size of cultivator you are assembling.



Locate the tine patterns in the back of the booklet for the model of cultivator you ordered and begin marking the tine locations on the toolbar tubes as shown in the photographs.
Place the frame sections on support stands if available for easier mounting of the tines.



ASSEMBLY INFORMATION
& DETAIL PHOTOS

Cultivator frame.

Steel support stands.

Place cultivator frames on support stands for tine assembly.

Mark tine location on frames and mount tines with tine clamps and bolts according to the tine pattern diagrams in the back of the book for the cultivator frame section you are assembling.
Note that there are 4 different tine patterns: 3" (80mm), 4" (100mm), 5.5" (140mm) and 6.25" (160mm). Tine quantities delivered with the unit are based on the model size of cultivator and the tine spacing chosen at time of order. Therefore, if you decide to change the tine spacing after delivery of the unit you may need to order extra tines depending on the pattern you choose.

Tines mounted in the wheel area or near the hinge points should be left loose until after the wheel arm assemblies and wing fold hinge plates are installed.

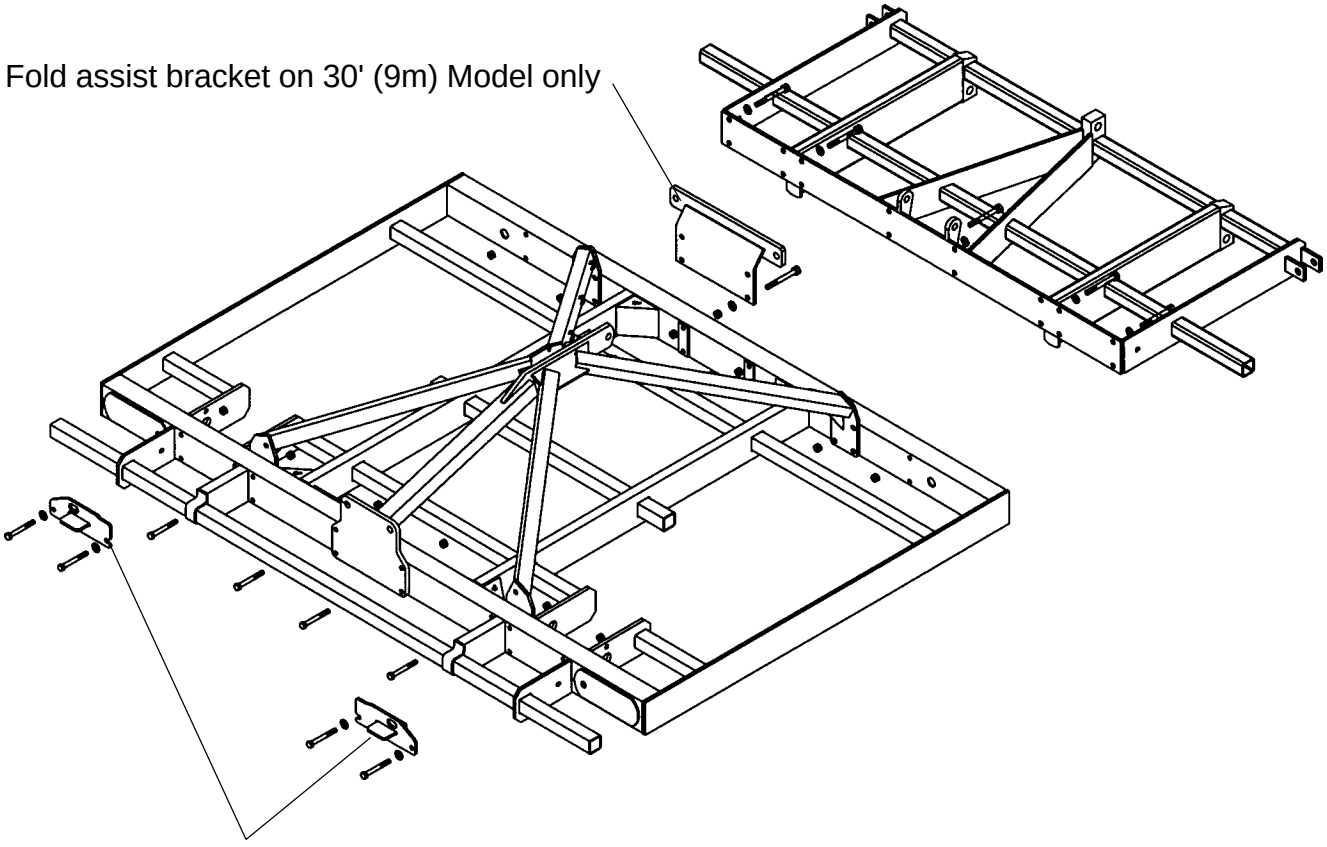
Carefully unpack and lay out all of the assembly hardware on a table near the assembly area. Taking the time to organize the hardware by type and size will make the assembly of the cultivator more efficient. Place the assembly instructions and parts list on the table for quick reference to help identify the parts for each step of the assembly.

When the tines are mounted to the main frame and front extension, move the 2 frame sections together and assemble the centre section with the bolts, nuts, washers and pins shown in the parts list.

Take care to insert the front frame bolts from the front and insert the back frame bolts from the back so that the locknuts are all facing inside the machine. This will keep the frame assembly looking neat and tidy and make the assembly more efficient.

(Note: The assembly diagrams do not show tines installed for easier viewing.)

Fold assist bracket on 30' (9m) Model only

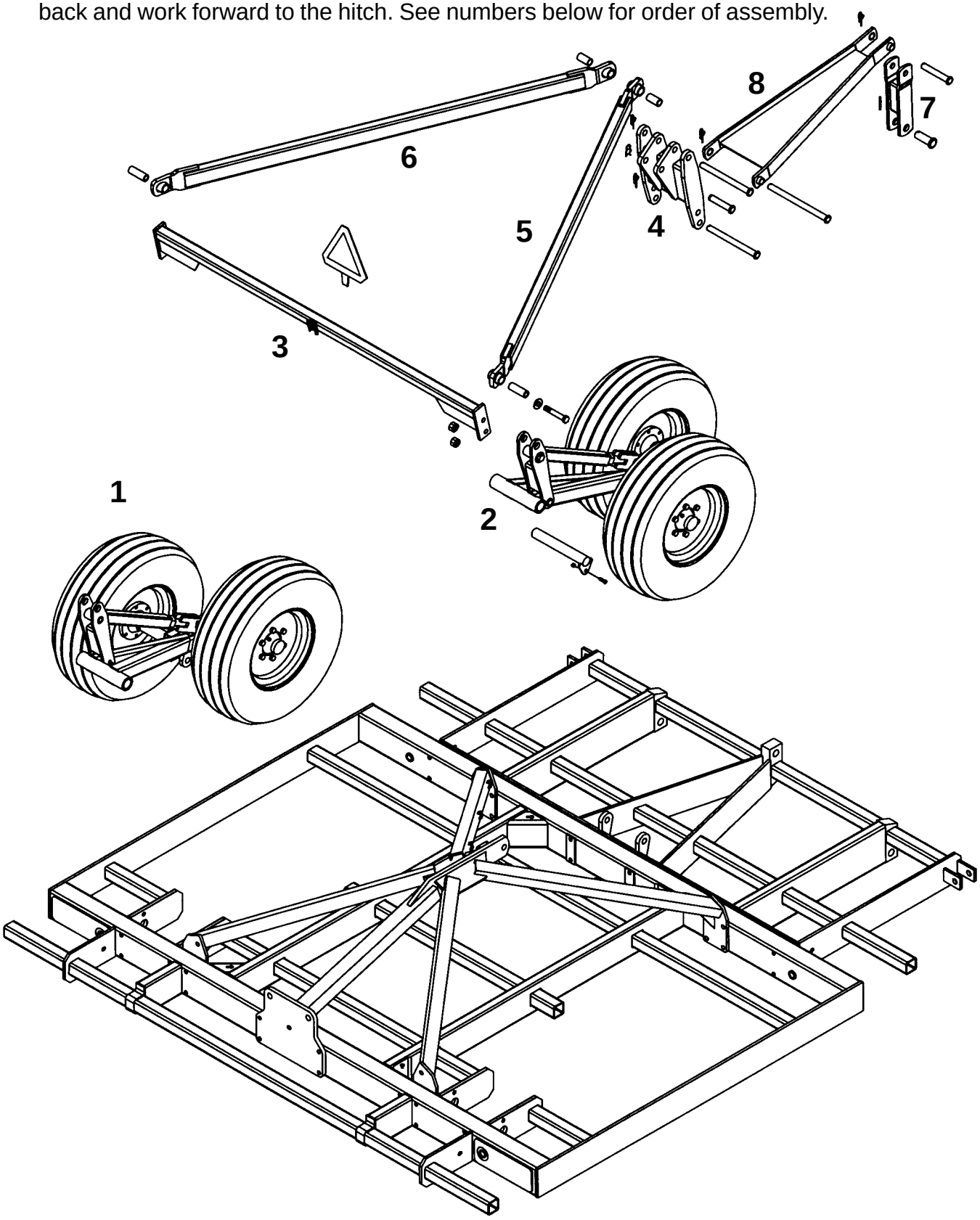


Fold Lock Brackets on folding models only

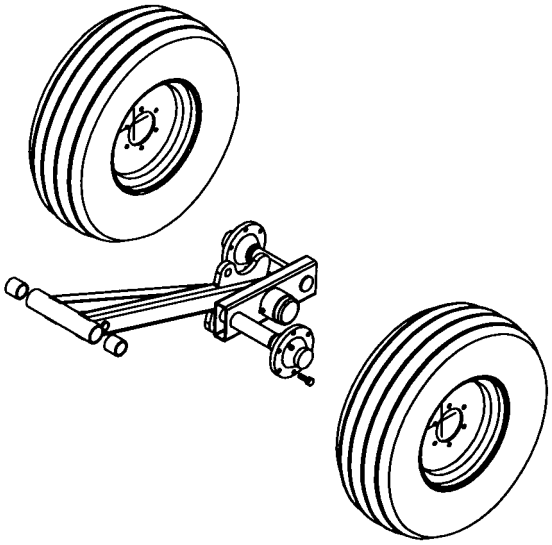
Frame assembly can be done while the frames are sitting on the assembly stands, or the stands may be removed once the tines are mounted. Use a fork lift or overhead hoist to move the heavy frame components into position for assembly.

Carefully lift the top frame into position for bolting to the centre section after the front frame is attached.

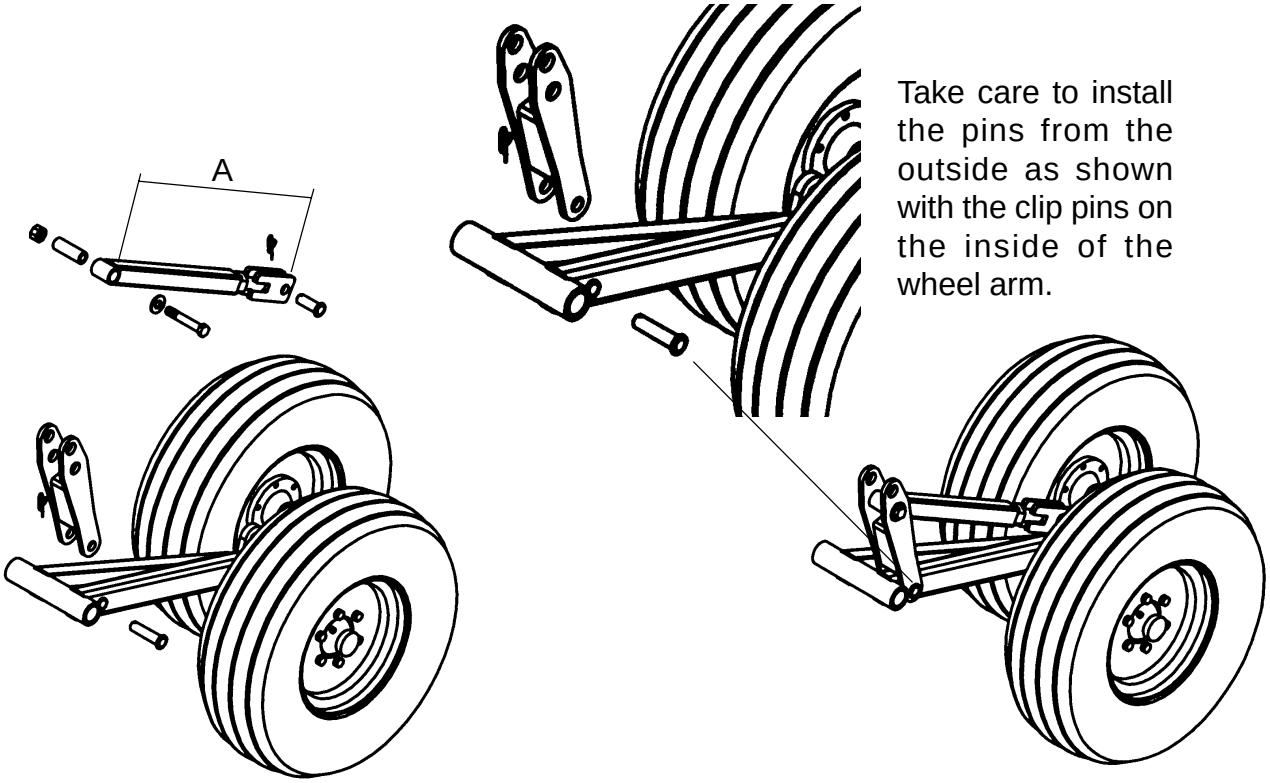
Sort out the pieces for the centre section self levelling linkages and wheel arm linkages. Begin by pre-assembling the right and left wheel arms. The entire wheel assembly can then be lifted into the frame and secured with the wheel axle.
The self levelling linkages should be installed starting with the wheel connection link at the back and work forward to the hitch. See numbers below for order of assembly.



Carefully insert the wheel axle pivot bushings into the ends of the wheel arm tubes. Tap the bushings into the ends of the tubes with a block of wood, **never use a hammer directly on the bushings.**

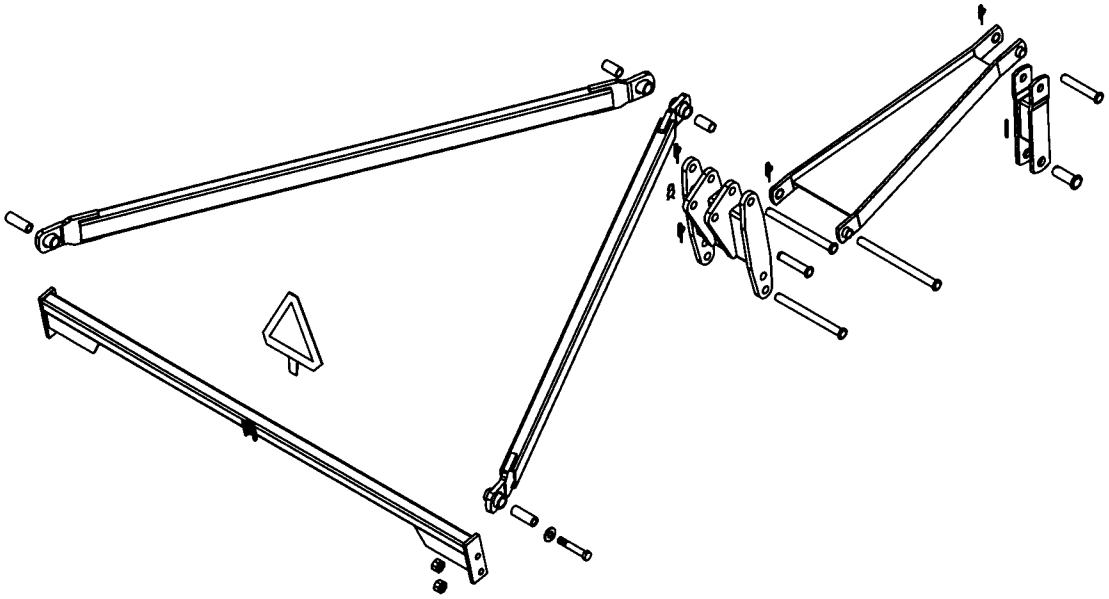


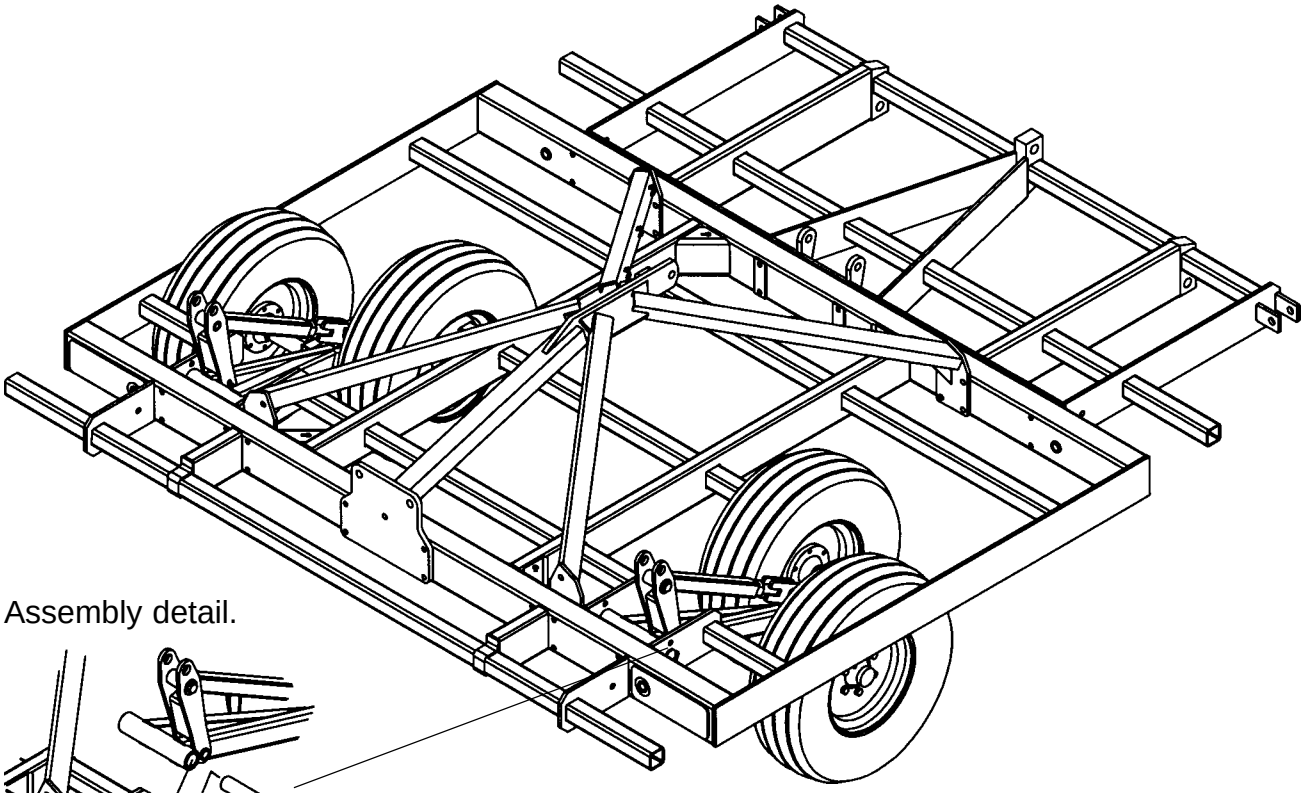
Assemble the wheel linkage as shown below with the pivot pins and bushings provided. Note that the wheel pivot link shown below is a 2 piece adjustable linkage. This linkage can be lengthened or shortened as necessary to provide proper under frame clearance for 20" or 24" tine options. The new adjustable wheel link also provides side to side levelling for the centre section.
The linkage length from centre to centre "Dimension A" should be set at:
A = 27.5" (70cm) for 20" clearance tines. A = 28.25" (72cm) for 24" clearance tines.



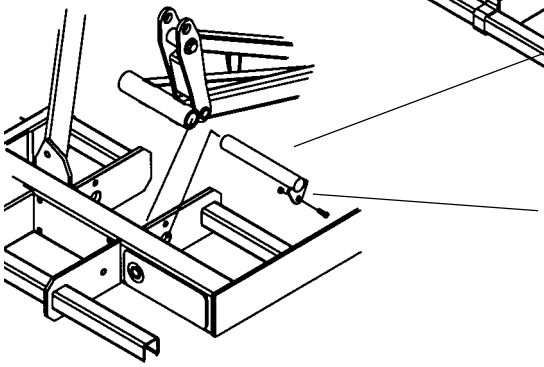
Take care to install the pins from the outside as shown with the clip pins on the inside of the wheel arm.

Lift both wheel arm assemblies into the centre frame as shown below before installing the Self Levelling Wheel Arm Pivot Linkages.
The wheel arm pivots must be aligned with the holes in the frame and then secured with the axle pin as shown in the detail below.
The pin can be coated with a light machine oil or grease to ease assembly but otherwise needs no lubrication as the pivot bushings in the wheel arms are oil impregnated.



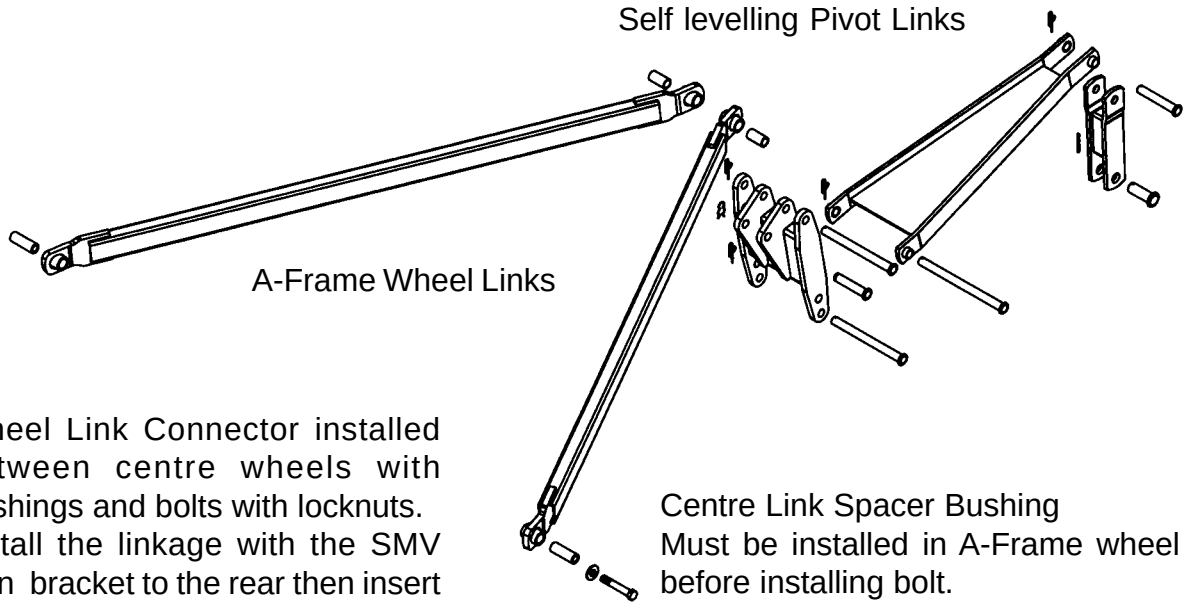


Assembly detail.



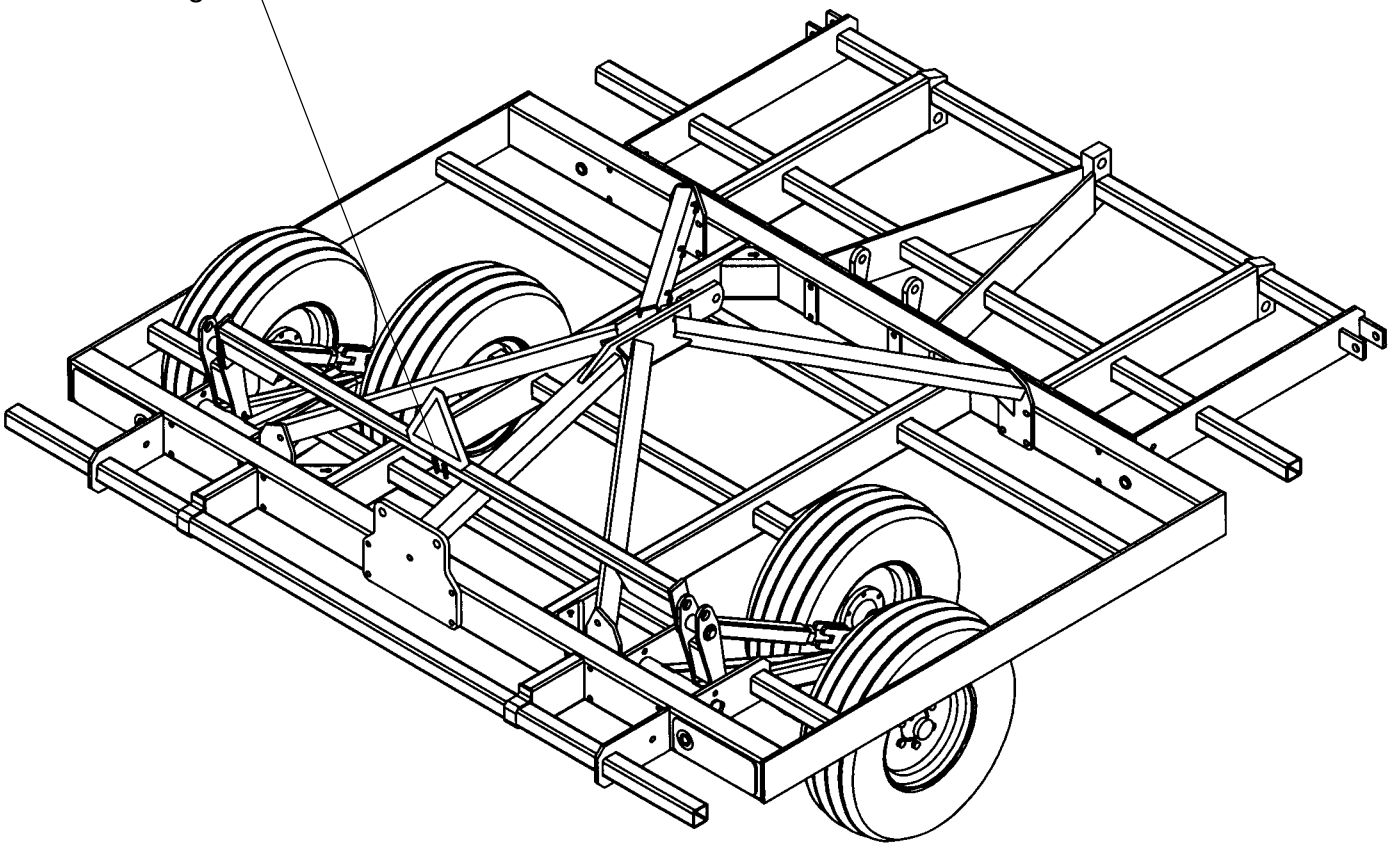
Install the axle pin with lock tab pointing down and secure with the bolt and locknut. Considerable force is required to install the axle as the tolerance is very close.

Attach the Wheel Link Connector to the Wheel Arm Pivot Links and A-Frame Wheel Links with the bolts provided. Remember to install the spacer bushings so the upper pivot point will not bind when the bolts are tightened.

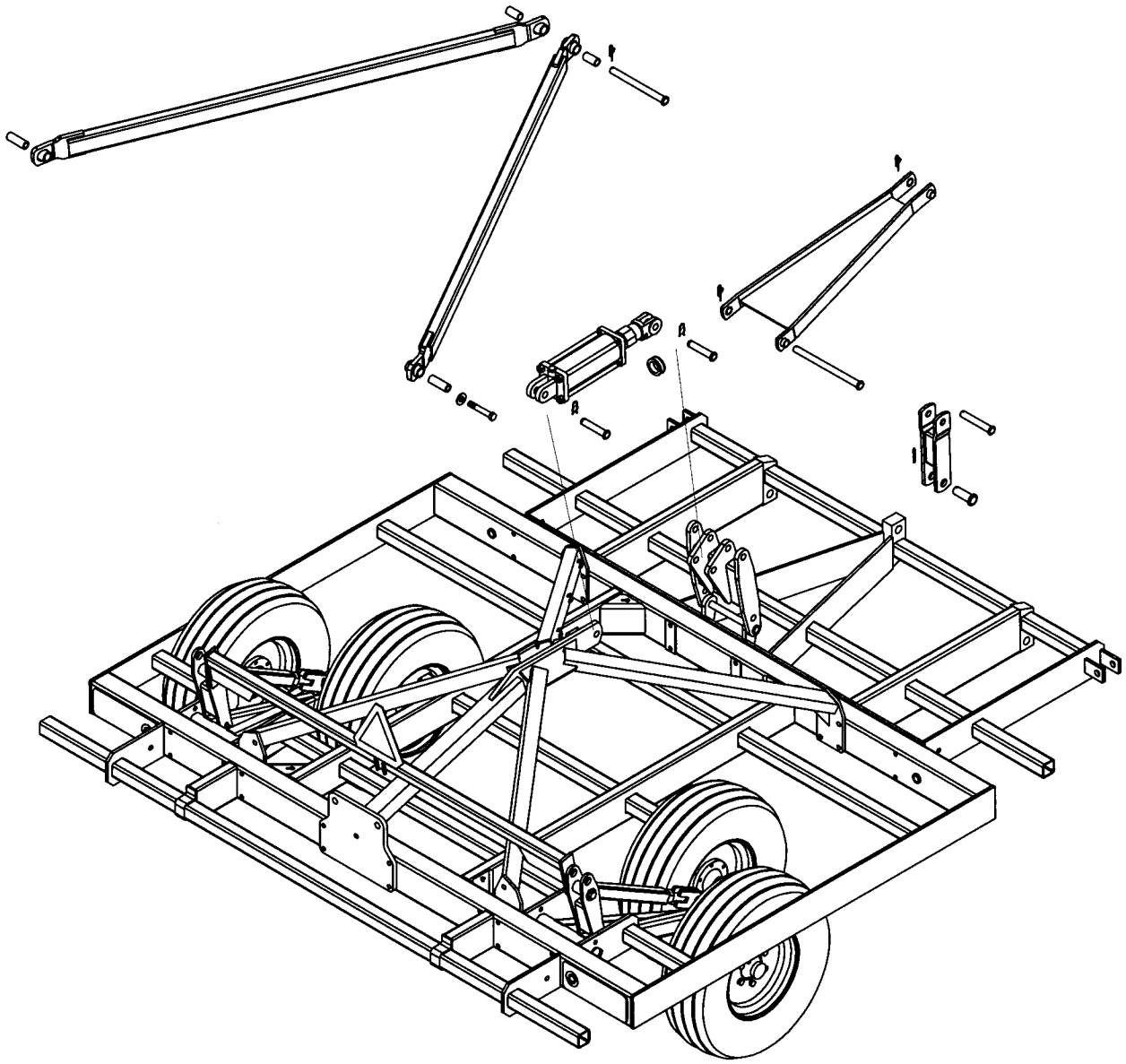


Wheel Link Connector installed between centre wheels with bushings and bolts with locknuts. Install the linkage with the SMV sign bracket to the rear then insert the SMV sign.

Centre Link Spacer Bushing
Must be installed in A-Frame wheel Link before installing bolt.



Install the main pivot link with the long pin provided. When the link is in place the 4.5" x 8" master cylinder can be installed as shown in the detail below. Do not install the other linkages until both the main pivot link and cylinder are in place.

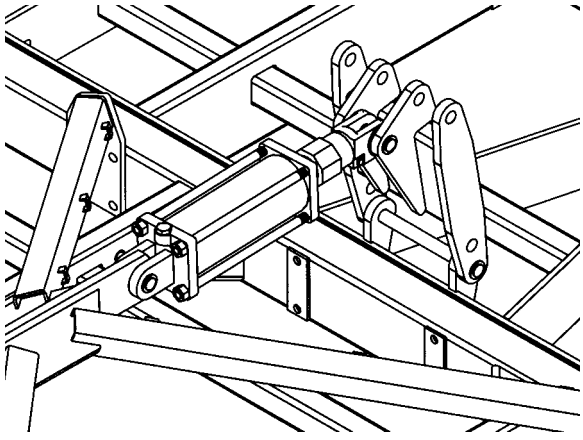


Attach the master cylinder with the pins provided. The butt end of the cylinder attaches to the lug on the top cross frame.

The rod clevis attaches to the lugs on the main pivot link.

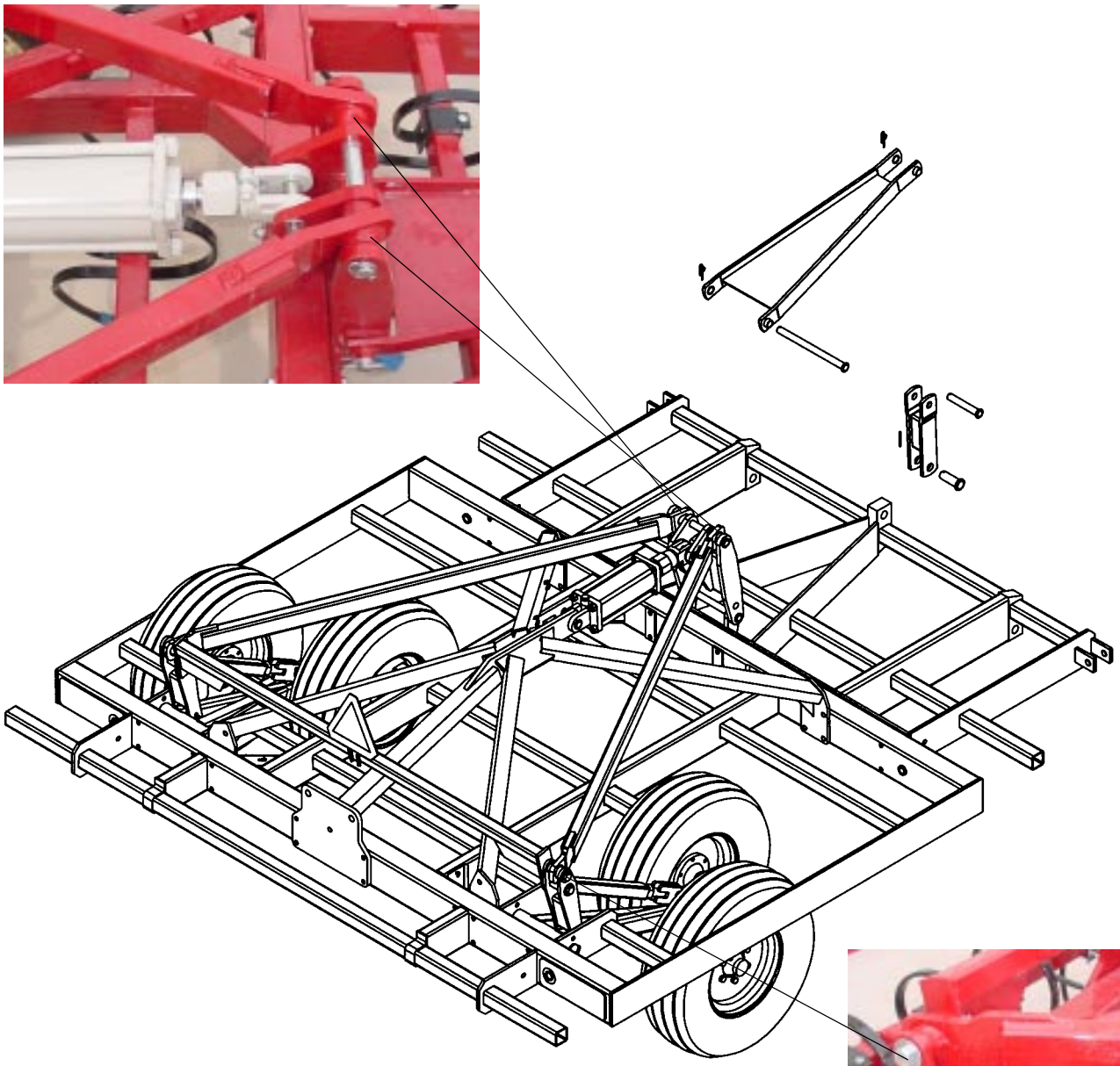
Take care to turn the cylinder so the front or rod end port is pointing down and the rear port is facing to the left side.

Remove the protective port plugs so the cylinder can be moved in or out during the assembly of the remaining self levelling linkages.



Install the A-frame wheel links as shown below. The wheel links are identical so it does not matter which way you turn them.

Attach the front of the wheel linkages to the main pivot with the 1" (25mm) ID bushings and insert the long pin to secure both linkages to the main pivot link. It may be necessary to extend or retract the cylinder rod by hand in order to line up the holes and install the long pin.
Take care to insert and lock the clip pin when finished.

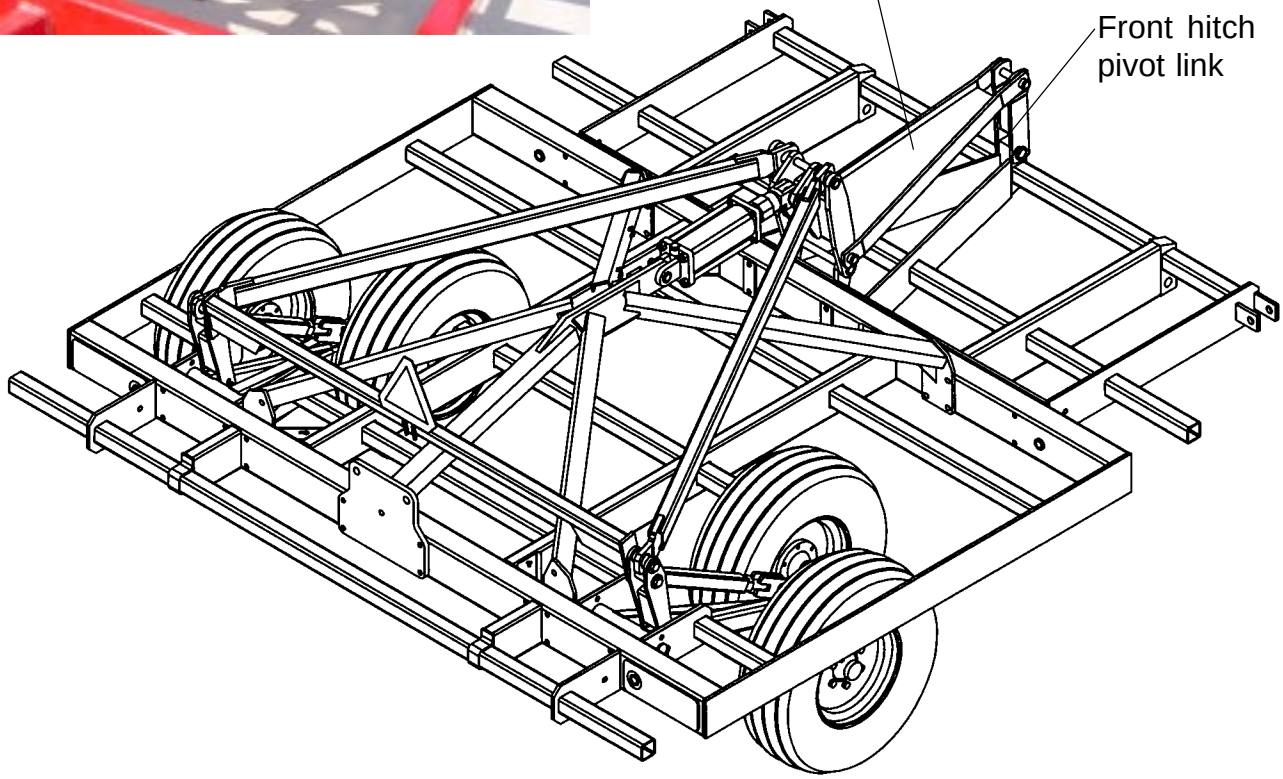


Attach the rear of the wheel linkage to the upper hole of the wheel pivot link with the 3/4" (20mm) ID bushing and secure with the bolt, washer and locknut provided.

To complete the assembly of the self levelling wheel link system, install the front pivot link to the lug in the centre of the front frame. Attach the wide end of the large triangular self levelling link to the main pivot with the long pin provided and attach the narrow end to the front pivot link with the shorter pin provided.

Check the assembly of the self levelling linkages and make sure all of the clip pins are installed and locked if they are the locking type.

Detail view of front linkages



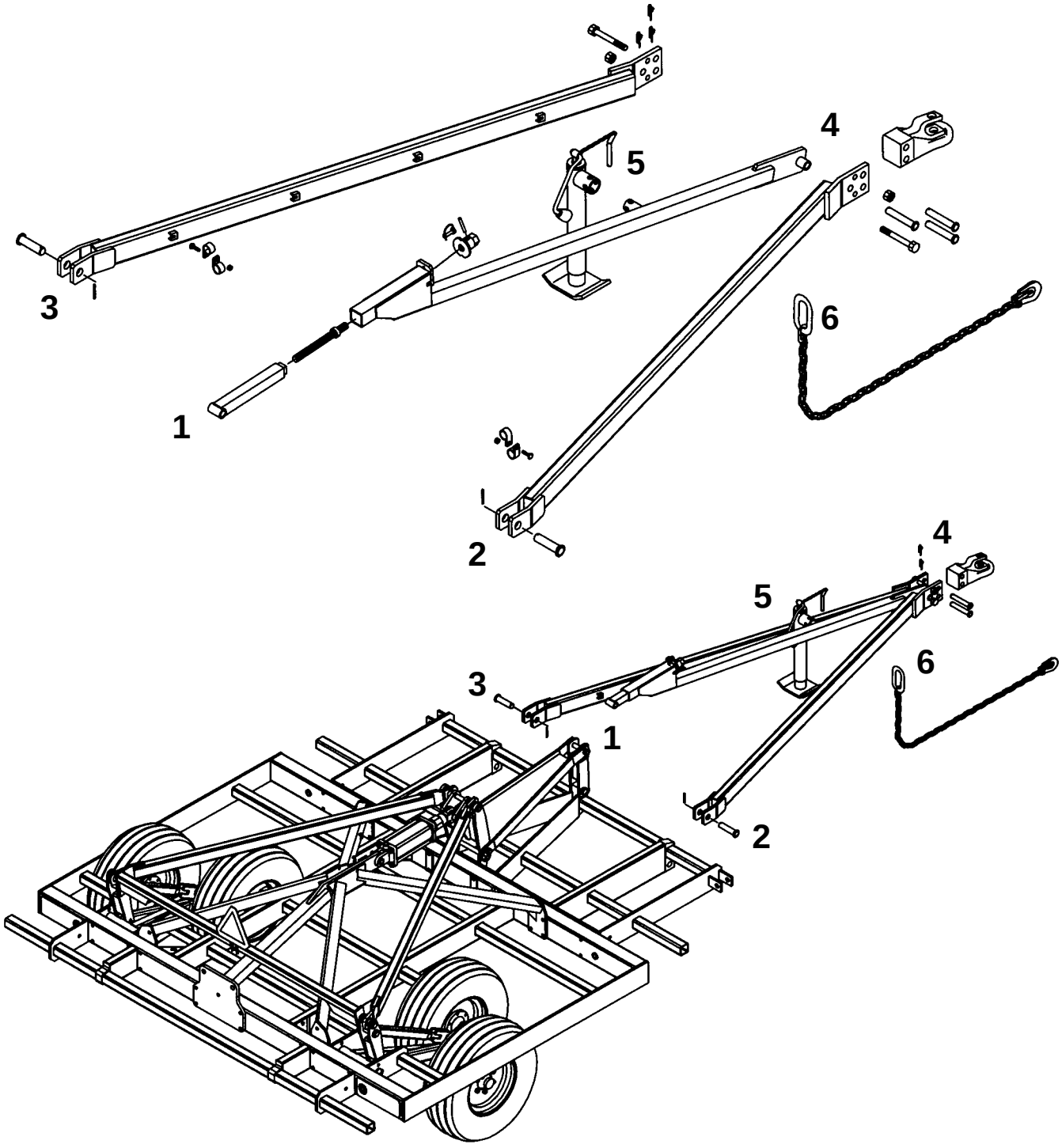
Overview of completed self levelling linkage system.

HITCH ASSEMBLY

Gather the components and begin assembling the hitch with the hardware described in the spare parts list. If there is lots of room in the assembly area the hitch can be assembled to the centre section now. However if space is limited it can be set aside until after the wings are assembled and attached.

Follow the numbers for the order of assembly on the diagram below and make the connections with the pins and bolts provided.

The hitch adjuster (1) below can be lengthened or shortened as necessary to position the hitch at the tractor drawbar height for easier assembly.

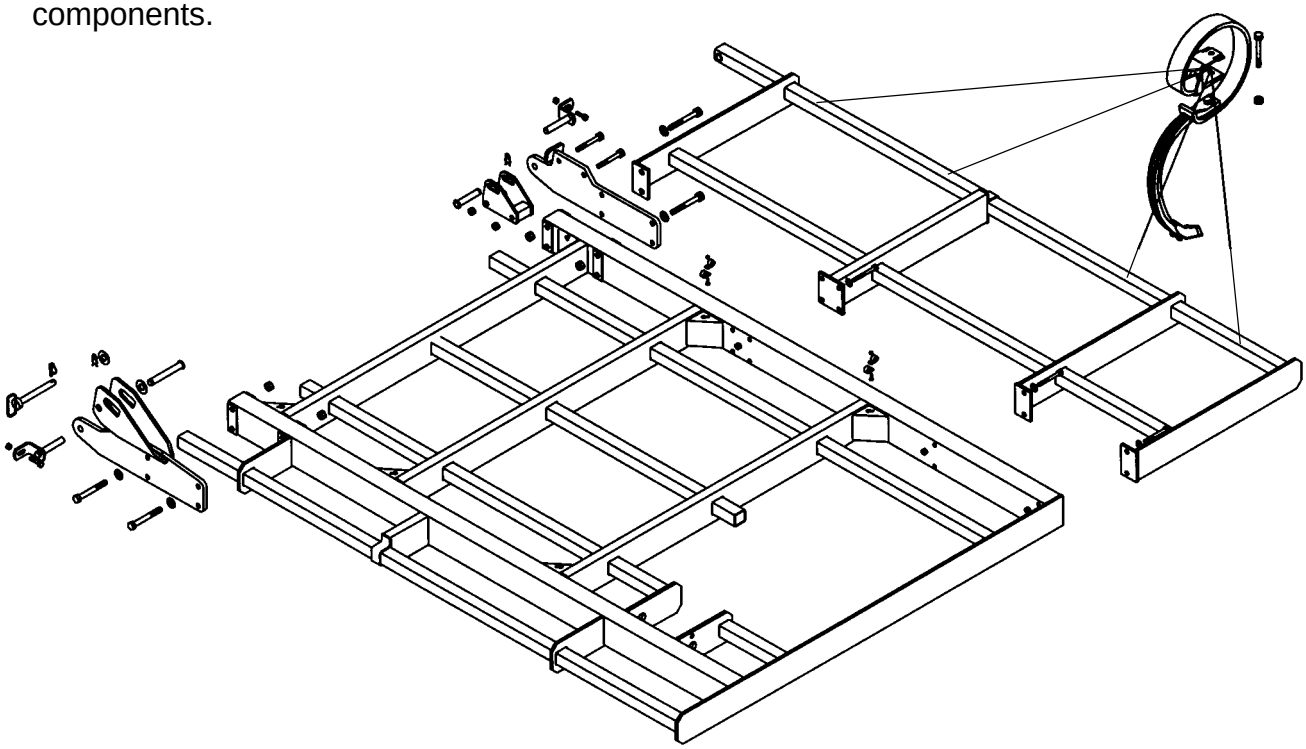


WING ASSEMBLY

Gather the components for the wing frames and assemble using the hardware described in the parts list booklet. The wing frame sections are identical in that there are no right or left wing frames. Therefore if you assemble the right wing first as shown below, you will need to flip the frames over opposite to the diagram below to assemble the left wing.

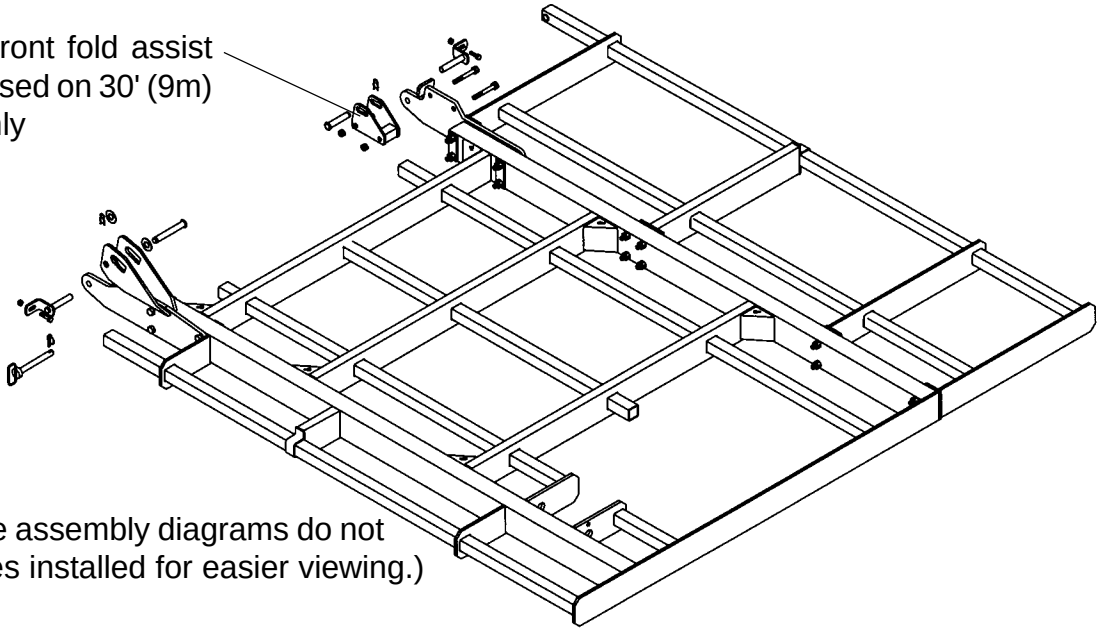
Mark the tine pattern on the wing frame tubes according to the locations given for each wing frame section in the back of the book.

The frames should be placed on steel support stands during assembly and mounting of the tines, then carefully lowered to the ground to rest on the tines for assembly of the wheel components.



Install the front and rear folding hinges to the frames at the same time as you assemble the wing frames. The hinge pins and fold cylinder pins are installed later when connecting the wings to the centre section.

NOTE: Front fold assist bracket used on 30' (9m) model only



(Note: the assembly diagrams do not show tines installed for easier viewing.)

Take care to leave the nuts and bolts loose at the hinges as it makes it easier to align the holes when attaching the wings to the centre section.

Close-up detail of front frame assembly and front wing hinge.

Wing main frame.

Front folding hinge weldment.

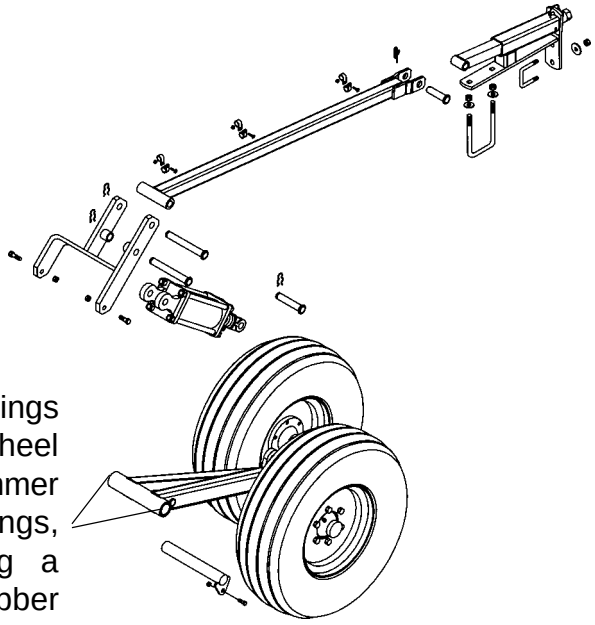
Front extension frame.

Close-up detail of rear frame assembly and rear wing hinge.

Rear folding hinge weldment.

Wing main frame.

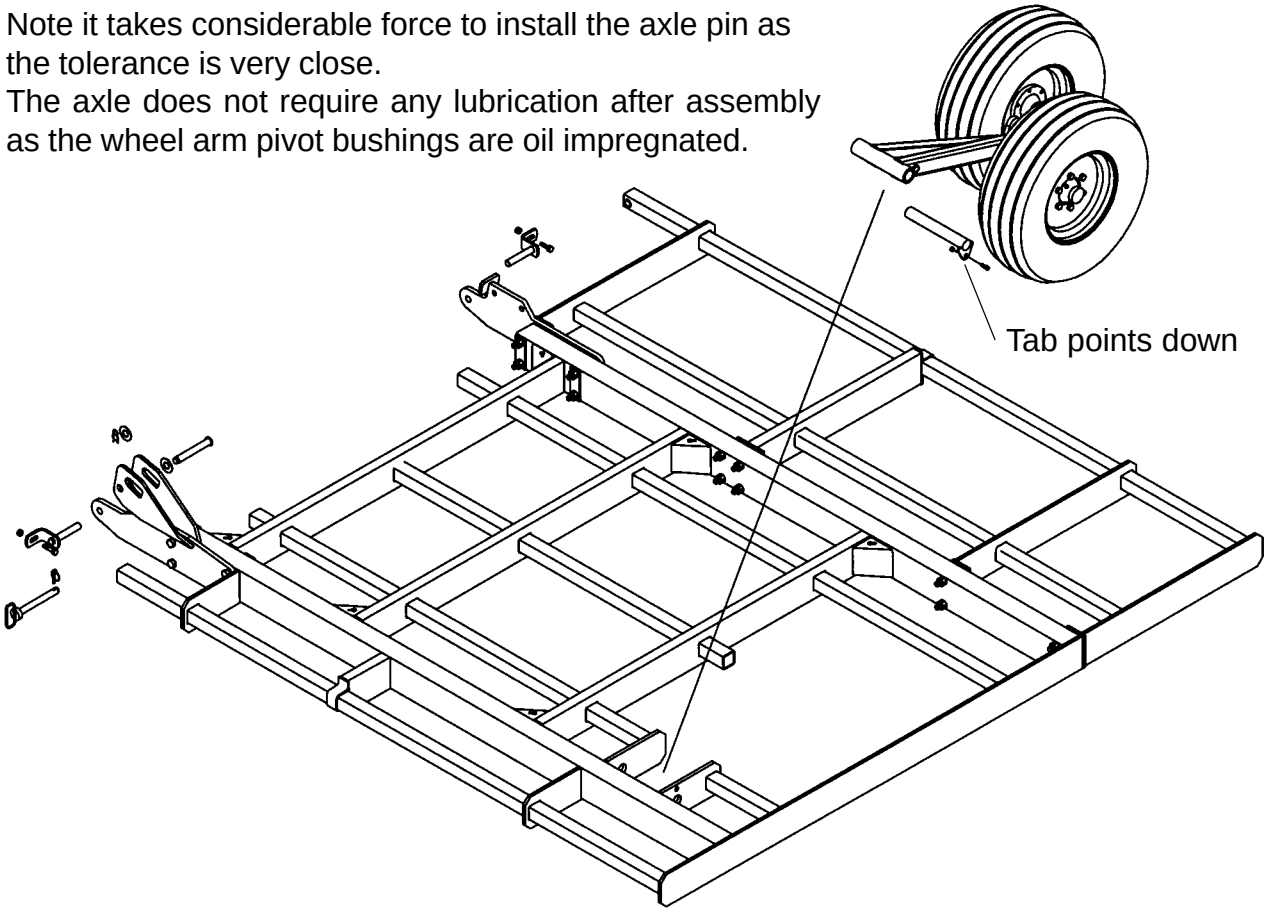
When the wing frame is fully assembled and lowered to the ground resting on the tines, gather the components for the wing tandem wheel and wheel adjustment linkages.



Install the pivot bushings into the ends of the wheel arm tubes. Do not hammer directly on the bushings, tap them in using a wooden block or rubber mallet.

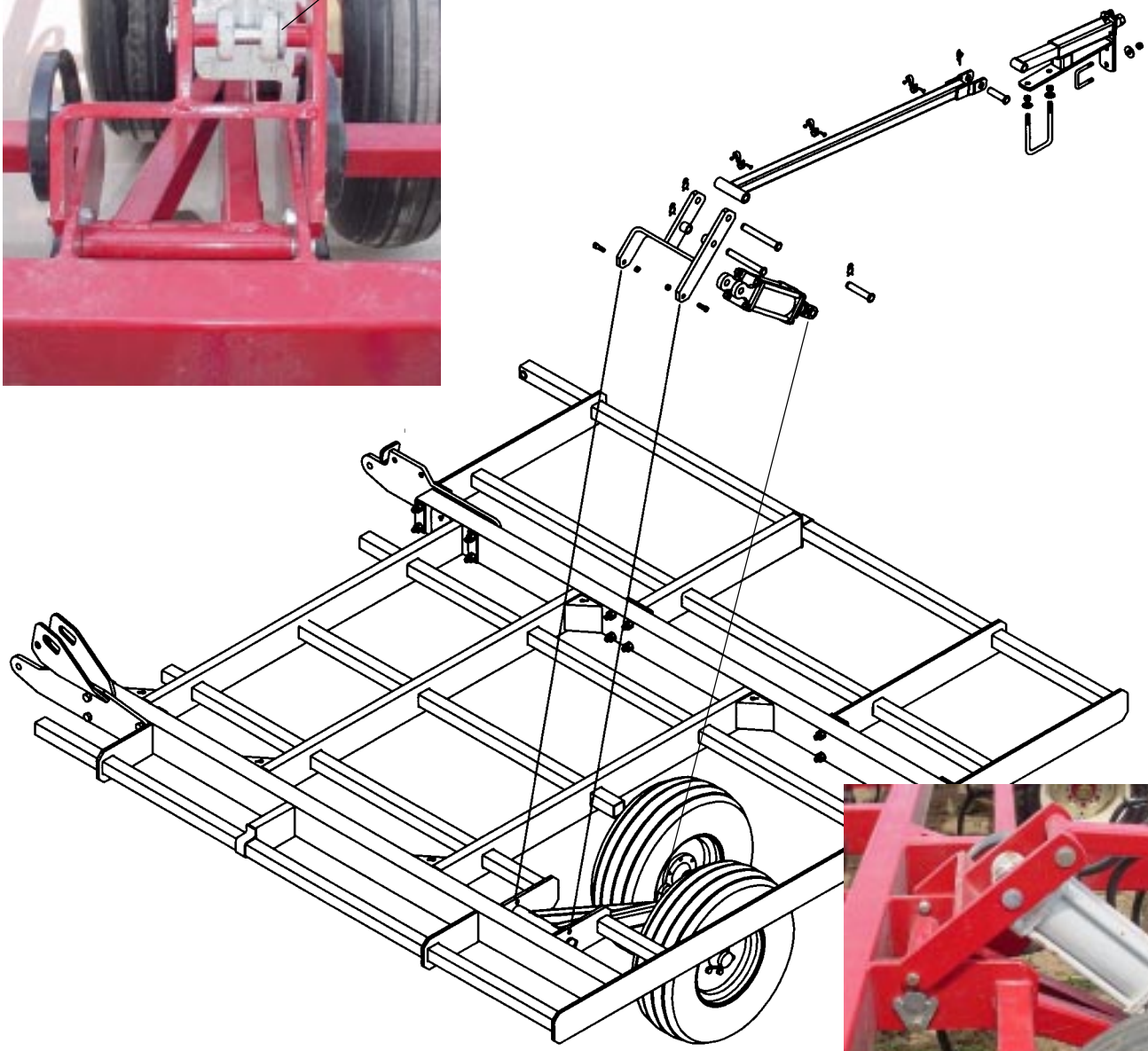
Mount the wheels on the hubs and then lift the complete tandem wheel assembly into the wing frame. Apply a little grease or machine oil to the axle pin to ease assembly and then insert the pin through the holes in the wing frame and wheel arm.
Make sure the pin lock tab is pointing down before installing the lock nut and bolt.

Note it takes considerable force to install the axle pin as the tolerance is very close.
The axle does not require any lubrication after assembly as the wheel arm pivot bushings are oil impregnated.

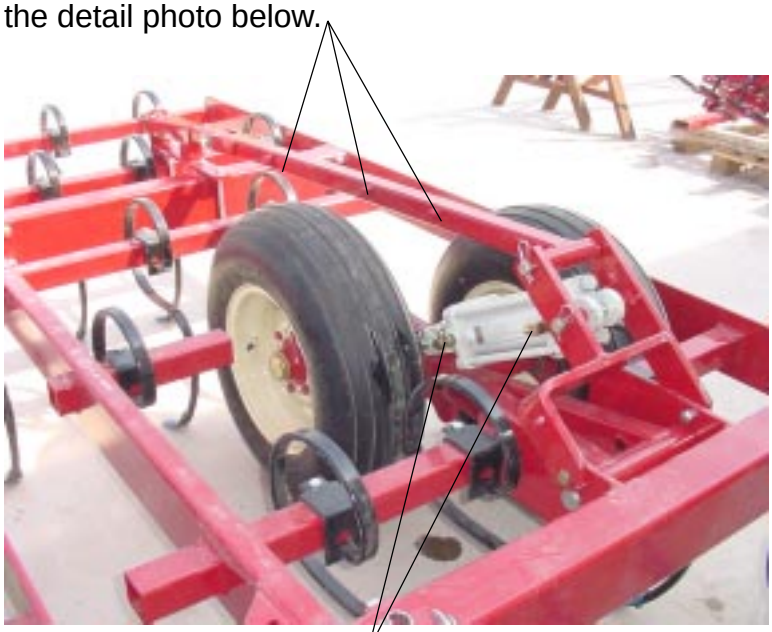


Mount the wing wheel tower and wheel lift cylinder with the pins, bolts and nuts described in the parts list. The wheel tower attaches to the upper holes in the frame crossmembers.
Note that the wing wheel lift cylinders are different sizes one is a 4.25 x 8 the other is a 4 x 8. Check the hydraulic layout in order to make sure you install the cylinders on the correct side of the machine. The 4.25 x 8 cylinder is installed on the left wing and the 4 x 8 cylinder is installed on the right wing as shown below. The butt end or top of the cylinder is connected to the wheel tower with one of the long pins supplied. The rod end clevis connects to the lug on the wheel arm so the cylinder extends and retracts with the rod pointing down. The ports on both cylinders should face into the centre of the machine.

NOTE: Place 2 - 1" (25mm) Spacer Washers between the cylinder clevis and tower bushing in order to take up the space and prevent the cylinder from contacting the wheel frame corssmember.

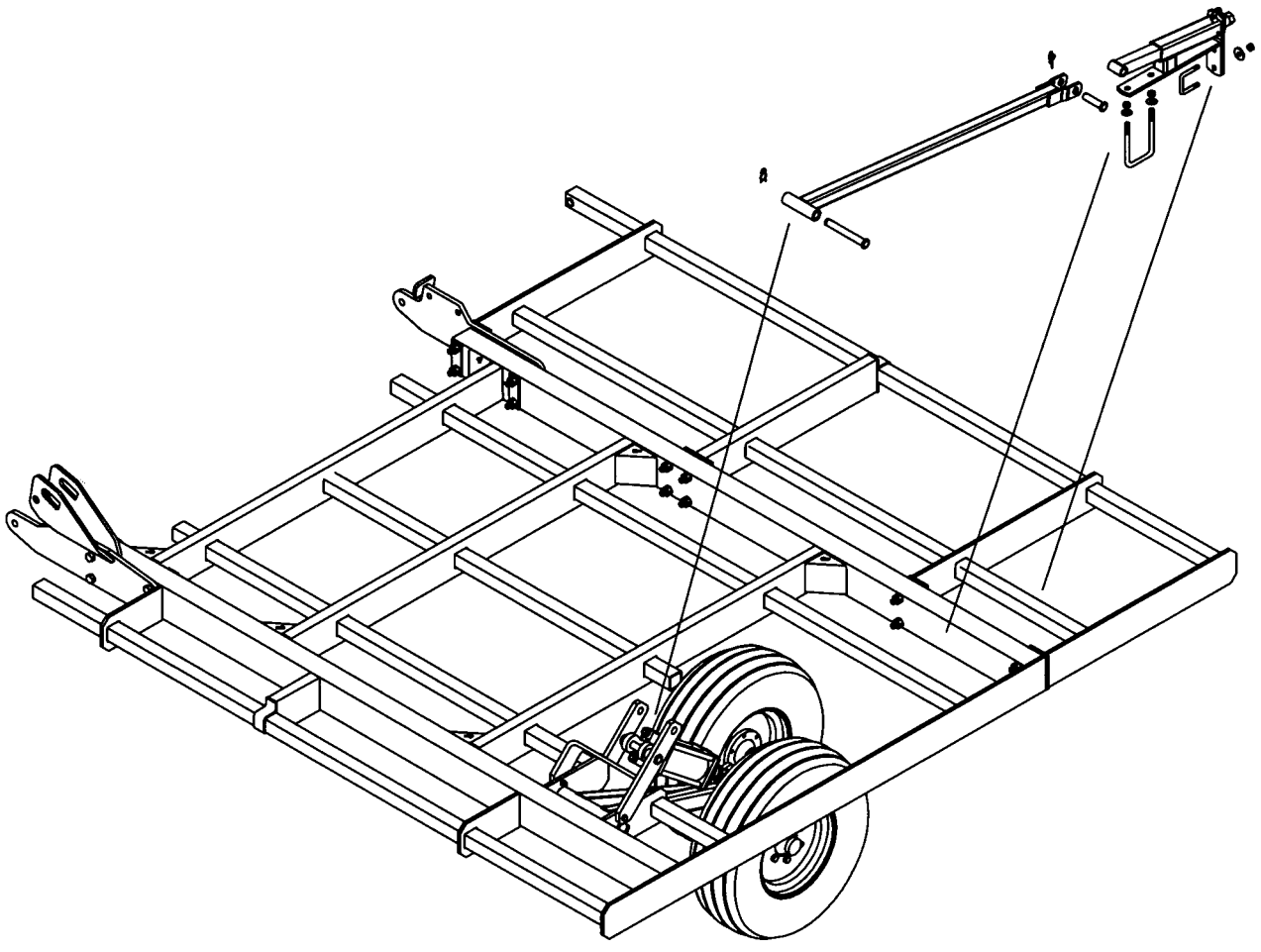


Install the wing wheel adjustment linkage with the pins and U-bolts supplied.
The wheel linkage tube should be mounted with the hose brackets on the inside as shown in the detail photo below.

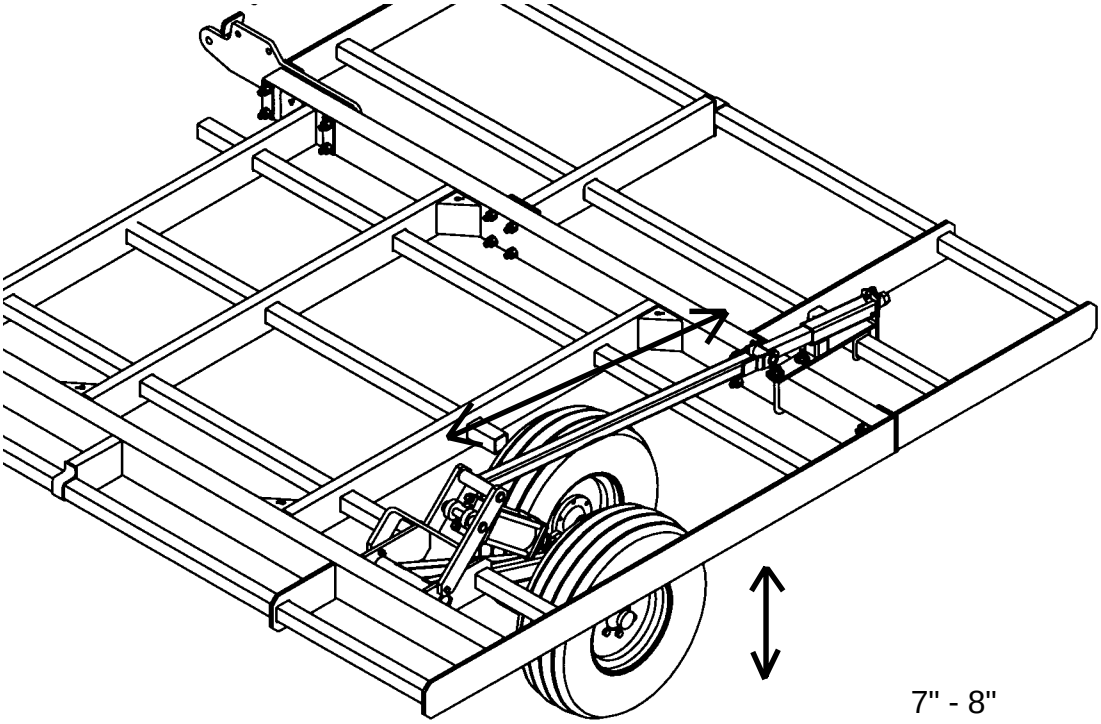


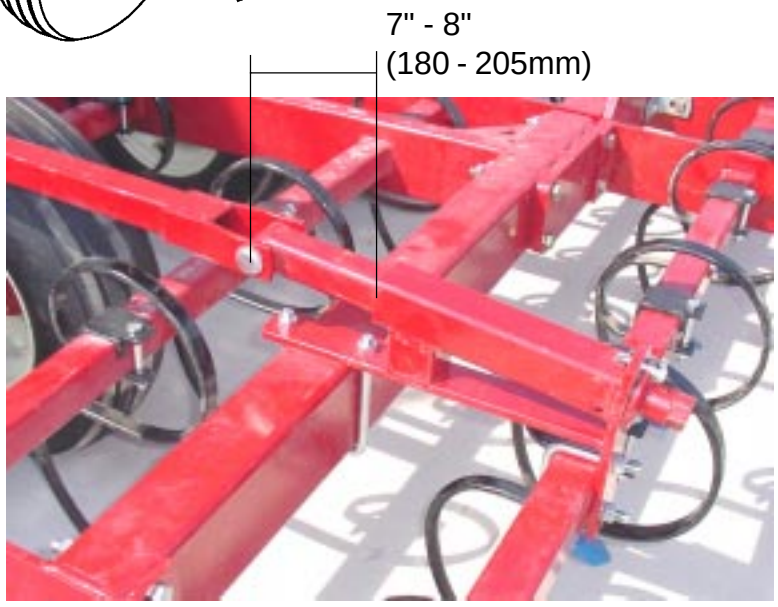
Note that cylinder ports face in to centre.

Try to keep the linkage straight when tightening the U-Bolts.



The adjustment linkage is used to adjust the wings so they are level with the centre section when working in the field.
To adjust the linkage, remove the clip pin and turn the adjustment casting clockwise or counter clockwise to lengthen or shorten the linkage. This in turn will raise or lower the wing wheel arm position so the wings will run level at the same depth as the centre section. The adjustment can be made with either a large adjustable wrench, or 1-1/2" socket, or a 3/4" drive socket wrench handle only.
More information on the proper adjustment of these linkages is covered in the Owners Manual under Field Settings and Adjustments.
Initially the adjustment slider can be set at 7' - 8" or (180 to 205mm). The distance is measured from the edge of the outer housing tube to the centre of the pin.
Take care to replace the clip lock pin so the slider adjustment does not move from the set position.



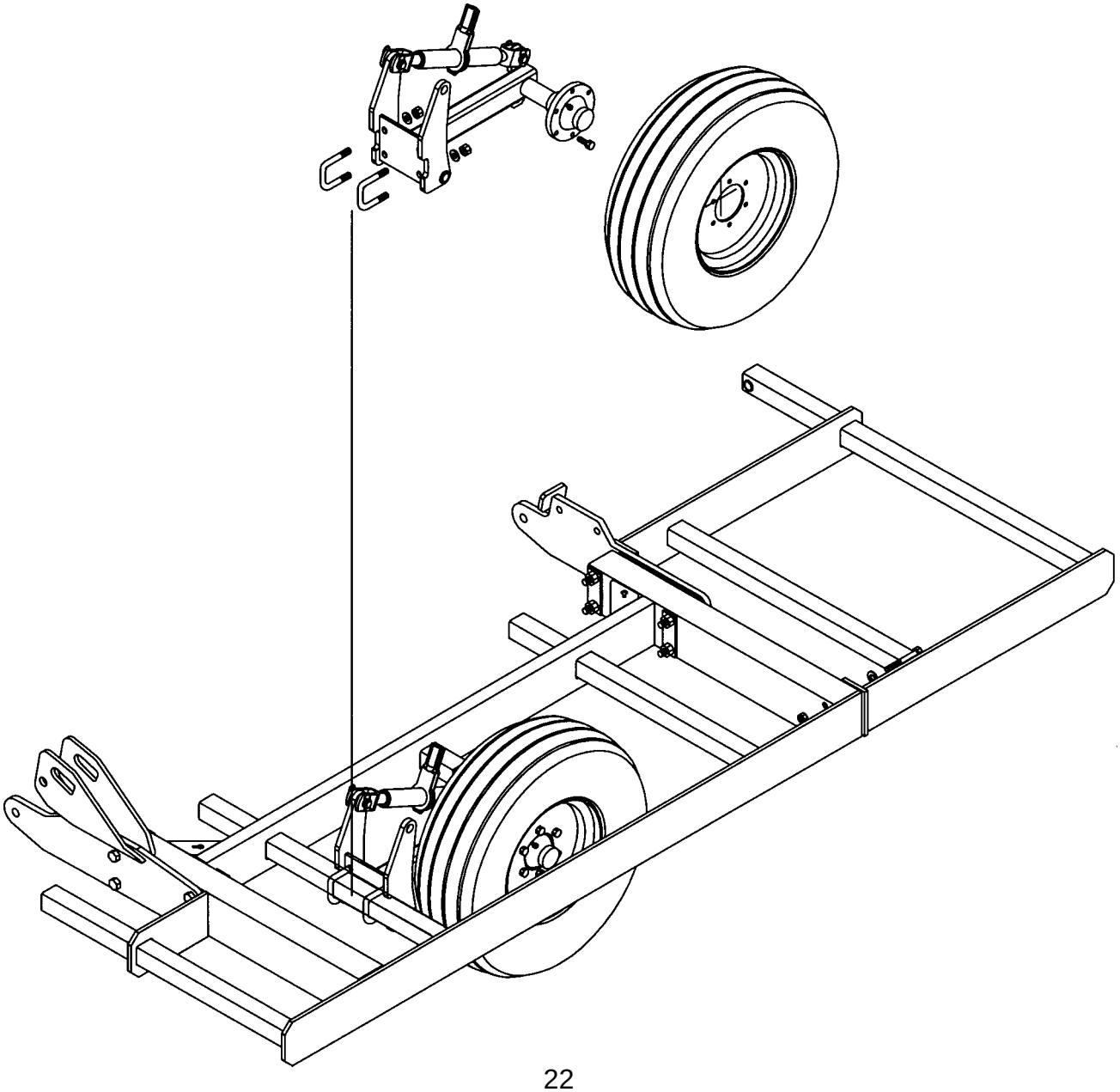


Mechanical Adjust Wheels on 3'3" (1.0m) Wings:

The mechanical adjusting wheel is used as the wing depth wheel on the 16' (5m) model cultivator with 1m wings.
It is also provided as a wing gauge wheel (standard equipment) on all 30' (9m) models only.
On all other models the gauge wheels are not supplied and must be ordered as optional equipment.

On the small 3'3" (1.0m) wing the wheel is mounted inside the wing frame to the toolbar as shown below. It should be assembled with the wheel mounted to the outside and positioned to run about 1-1/2 to 2" away from the outside of the wing. The mounting bracket and wheel arm are designed to allow the wheel to be mounted the opposite way to make a right or left wheel assembly as required for mounting on opposite sides of the machine.

Adjustment of the working depth of the wing is accomplished using the mechanical ratchet on the turnbuckle. An extension handle is provided for easier adjustment of the mechanical ratchet.

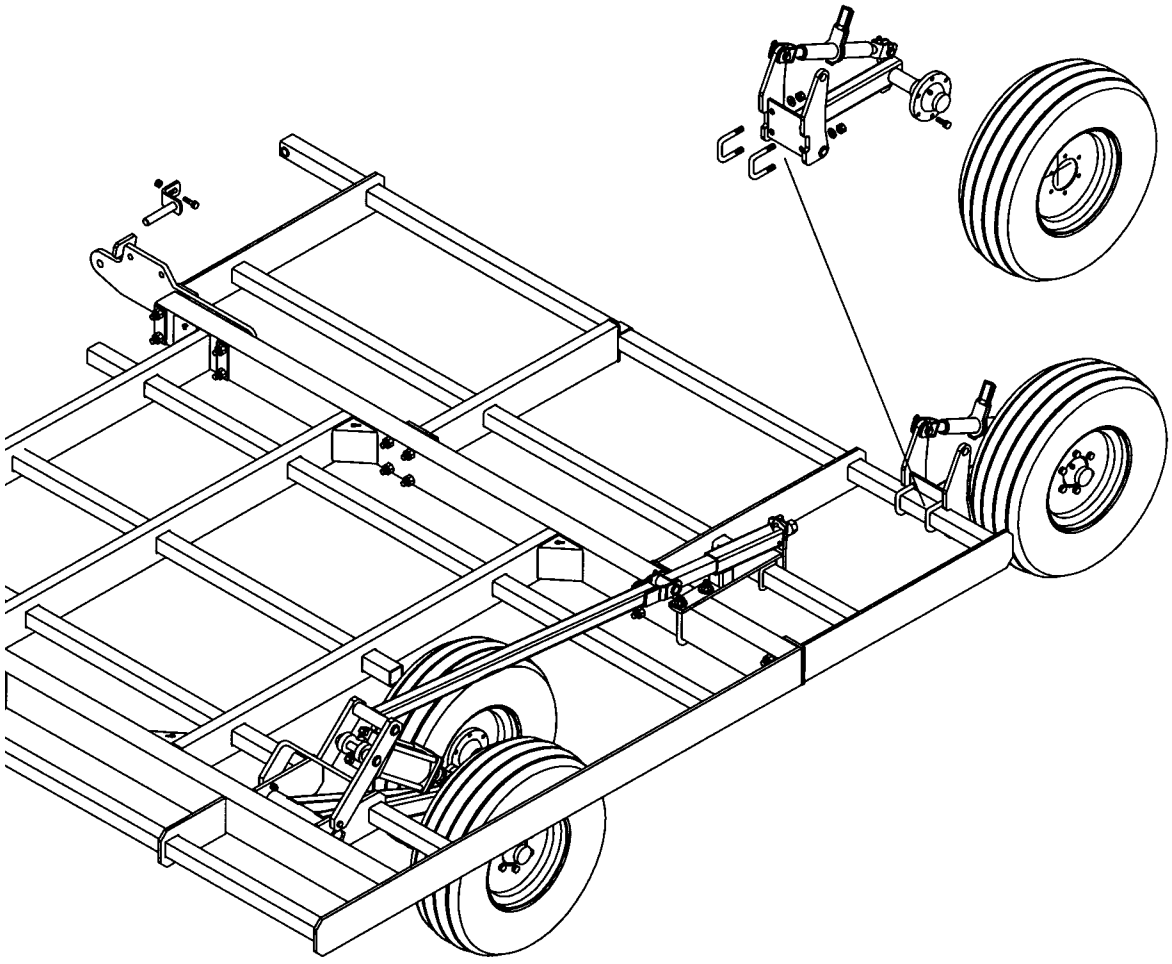


Mechanical Adjust Wheel used as Front Gauge Wheel:

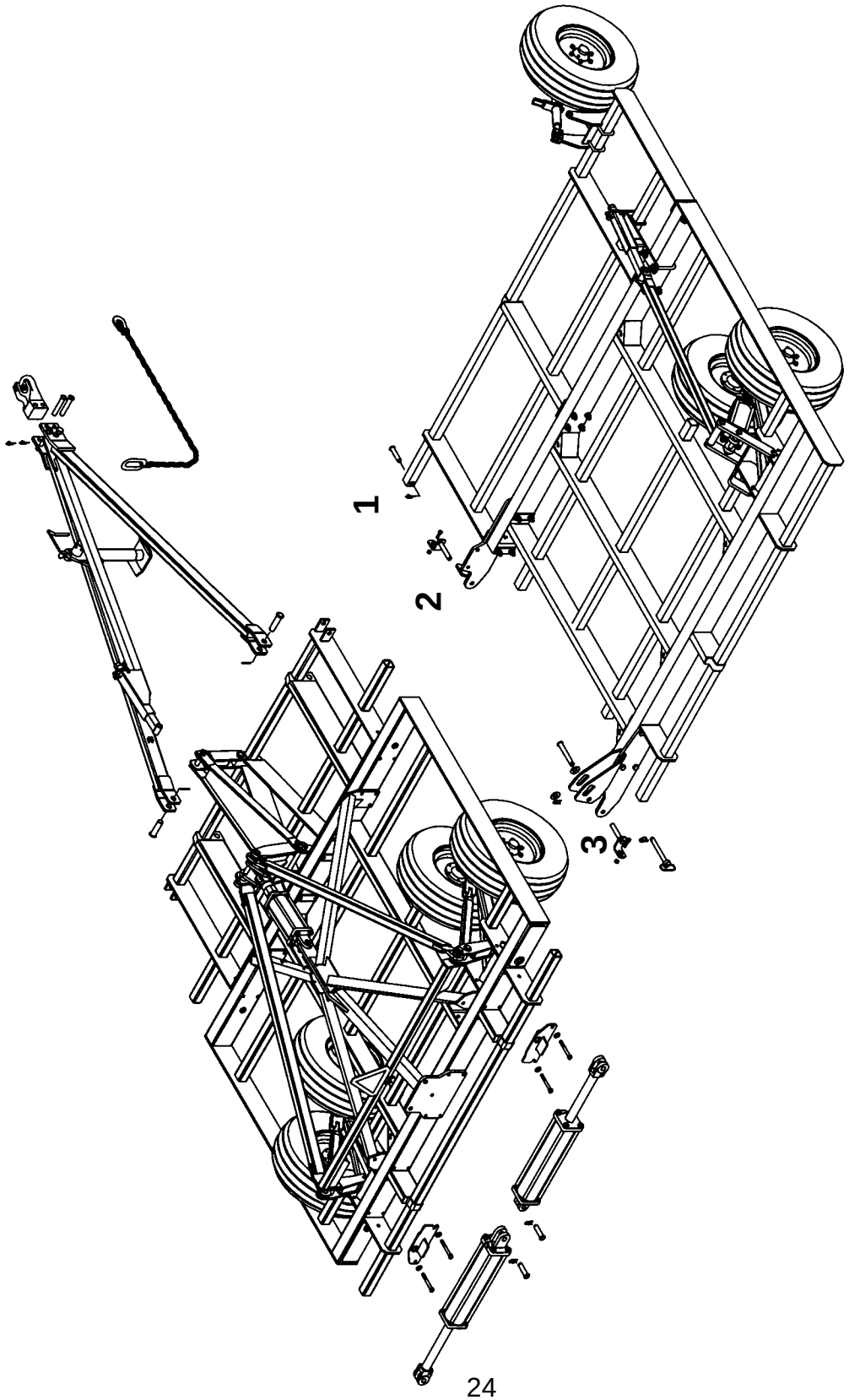
When used as a front gauge wheel the mounting bracket is attached to the front toolbar with the U-bolts provided. Again, the tire is usually mounted to the outside and positioned near the front corner of the machine. The exact position will vary depending on the tine pattern but the wheel should not stick out past the outside of the wing. The mounting bracket and wheel arm are designed to allow the wheel to be mounted the opposite way to make a right or left wheel assembly as required for mounting on opposite sides of the machine.

Adjustment of the gauge wheel is accomplished using the mechanical ratchet on the turnbuckle. An extension handle is provided for easier adjustment of the mechanical ratchet.

Instructions for adjusting wheels and setting the working depth is explained in detail in the Cultivator Owners Manual. When working in the field, the gauge wheels should only have light contact with the ground in order to hold the depth accuracy of the wing and prevent it from bouncing.
As a preliminary setting the wheels can be adjusted about 2" from the ground when the cultivator is resting on the tines.

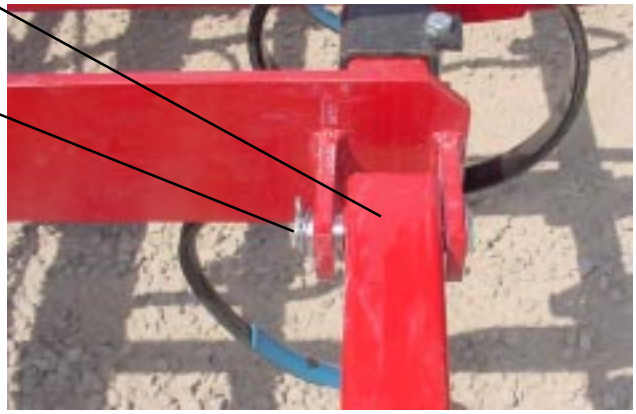


Final assembly of the centre section and wing frames:
Move the wing assemblies into position beside the centre section.
Install the wing hinge pins according to step 1, 2 & 3 in the diagram below. The hinge plate bolts should be loose to allow easier alignment and insertion of the hinge pins. Secure the front extension hinge pins in place with the locking clip pin. Secure the main hinge pins with the bolt and locknut provided. When the pins are installed re-tighten the hinge plate bolts

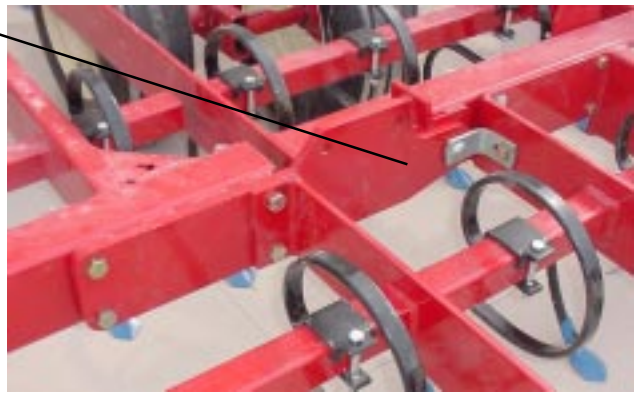


Detail view of front frame hinge with pivot pin installed.

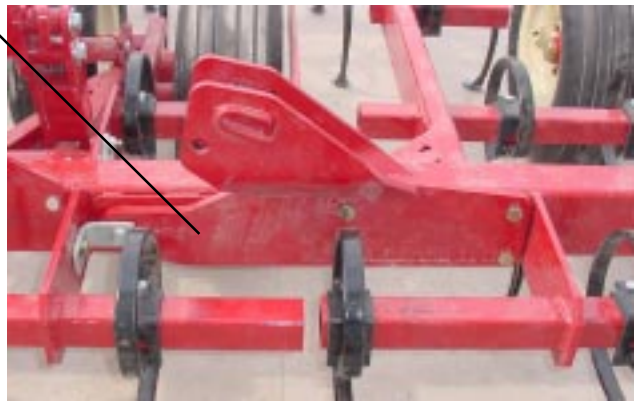
Front frame Hinge Pin with locking clip pin.



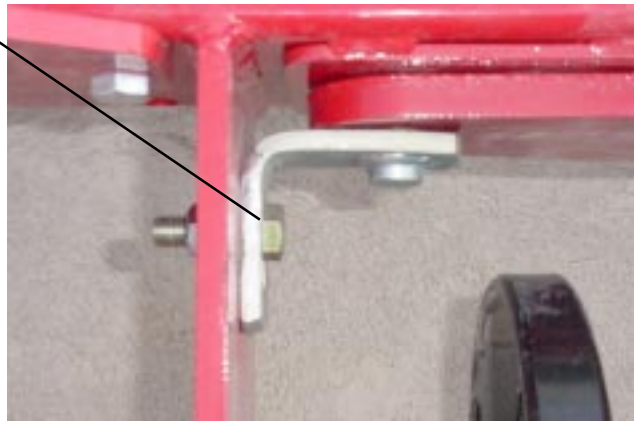
Detail view of front hinge with main hinge pin installed.



Detail view of rear hinge with main hinge pin installed.



Detail view of hinge pin installed with bolt and locknut.

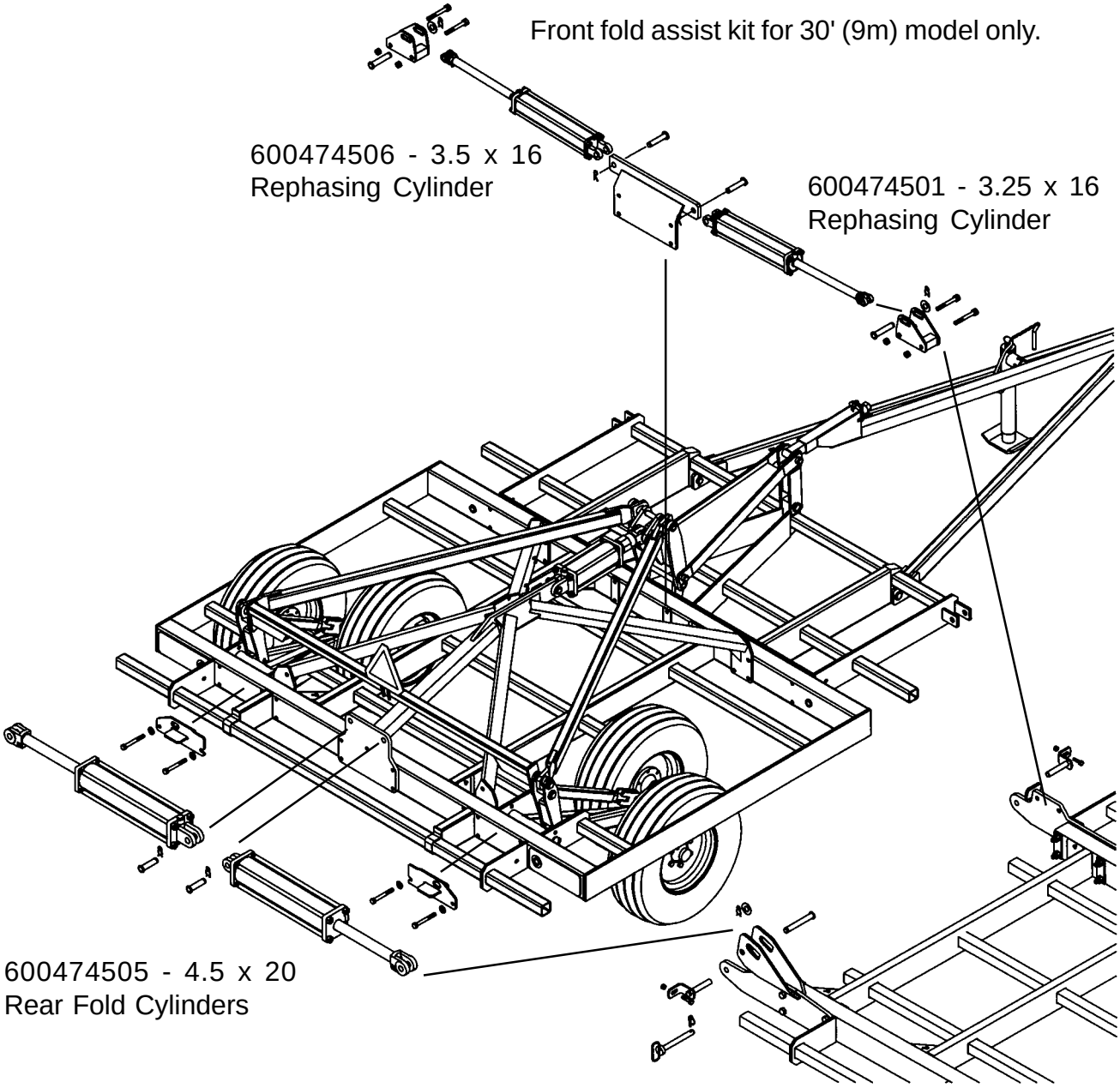


Folding Cylinders and Hydraulics:
When the wings are attached to the centre section the wing fold cylinders can be installed.

If you have not installed the rear wing fold lock brackets they can be installed now with the bolts and locknuts shown in the parts list.

The 30" (9m) model folding hydraulics includes a second set of front fold assist cylinders and cylinder mounting brackets. Assemble the front fold assist with the mounting brackets and hardware provided. Note: There are two different front fold assist cylinders as show. The cylinders attach to the centre fold assist bracket with the pins provided with the cylinders.

Install the rear folding brackets and cylinders as shown below.
Hydraulic layouts for the hoses and fittings are shown later in this booklet.

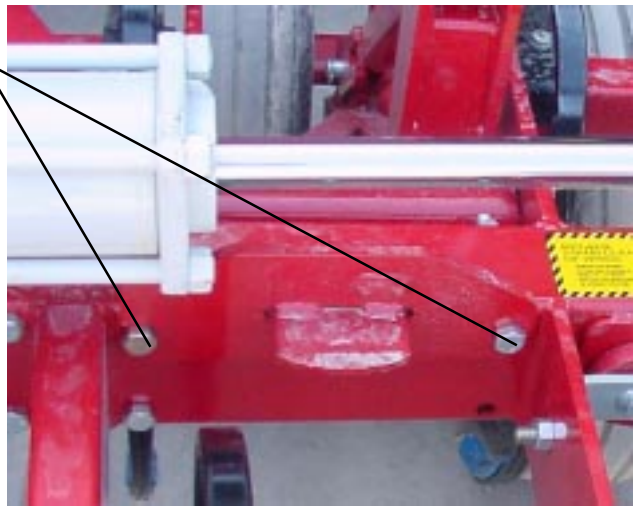


Centre Fold Assist Bracket

Install the centre fold assist bracket on the back side of the centre frame tube on the30' (9m) models. The bracket is used as the anchor mount for the front fold assist cylinders. There are 4 long bolts supplied with locknuts that are inserted thru the front frame, main frame tube and cylinder fold bracket.

After mounting the centre fold bracket, mount the fold assist cylinder brackets on the backside of the hinge plate as shown.

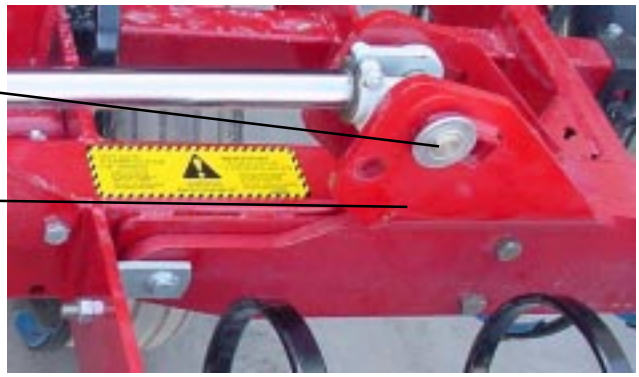
Detail view of rear folding lock plate assembly. Wing Lock Bracket mounts with 2 bolts as shown.



Detail view of rear folding hinge assembly.

Install the rear folding cylinder clevis pins with washers provided.

Rear Hinge weldment



For proper installation of the hose lines and fittings refer to the hose layout diagram provided later in the booklet. The hydraulic hose lines and fittings are provided in the hose kit. Secure the hoses to the frames with the hose clamps, carriage bolts and locknuts provided.

Take care to keep the hose lines, that run across the cultivator, behind the front frame so they will not get pinched by the hinges when the cultivator is folded. Additional tie straps may be used to keep the hoses tidy.

The wing fold cylinders must be charged with oil before attempting to fold the cultivator. Disconnect the cylinder rod clevis from the fold bracket and place a block under the cylinders as shown.

Connect the hoses to the tractor or portable hydraulic unit and stroke the wing fold cylinders in and out several times holding the lever at the end of the stroke to remove the air from the system and ensure the cylinders and hoses are full of oil. Remove the block and reconnect the cylinder to the fold bracket with the cylinder pin, washer and clip pin.

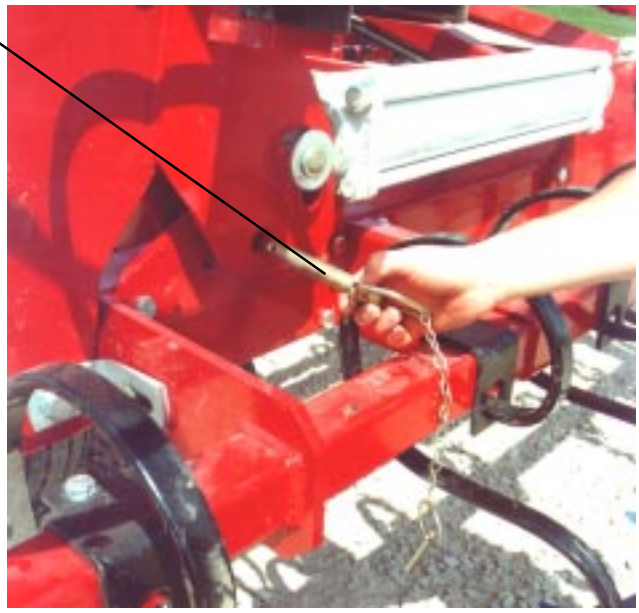
Charge the wheel lift hydraulics by fully extending and retracting the wheel lift hydraulic cylinders several times. Hold the hydraulic lever open at the end of the stroke to purge the air from the system.

The wheel lift cylinders are rephasing type cylinders and must be fully extended at the end of the field when turning to equalize the oil pressure across the system.

This will ensure that the cultivator raises and lowers evenly and stays at a uniform working depth when working in the field.

Always insert the transport lock on the master cylinder when ever the cultivator is placed in the raised position for transport, maintenance or stroage.
Secure with the lock pin and clip provided.

Always insert the wing fold lock pins and secure the lynch pin when ever the wings are raised in the folded position. Be sure to remove the pins and store them in a safe place before unfolding the cultivator.



Never transport the cultivator on public road ways without installing the transport safety chain and SMV sign.

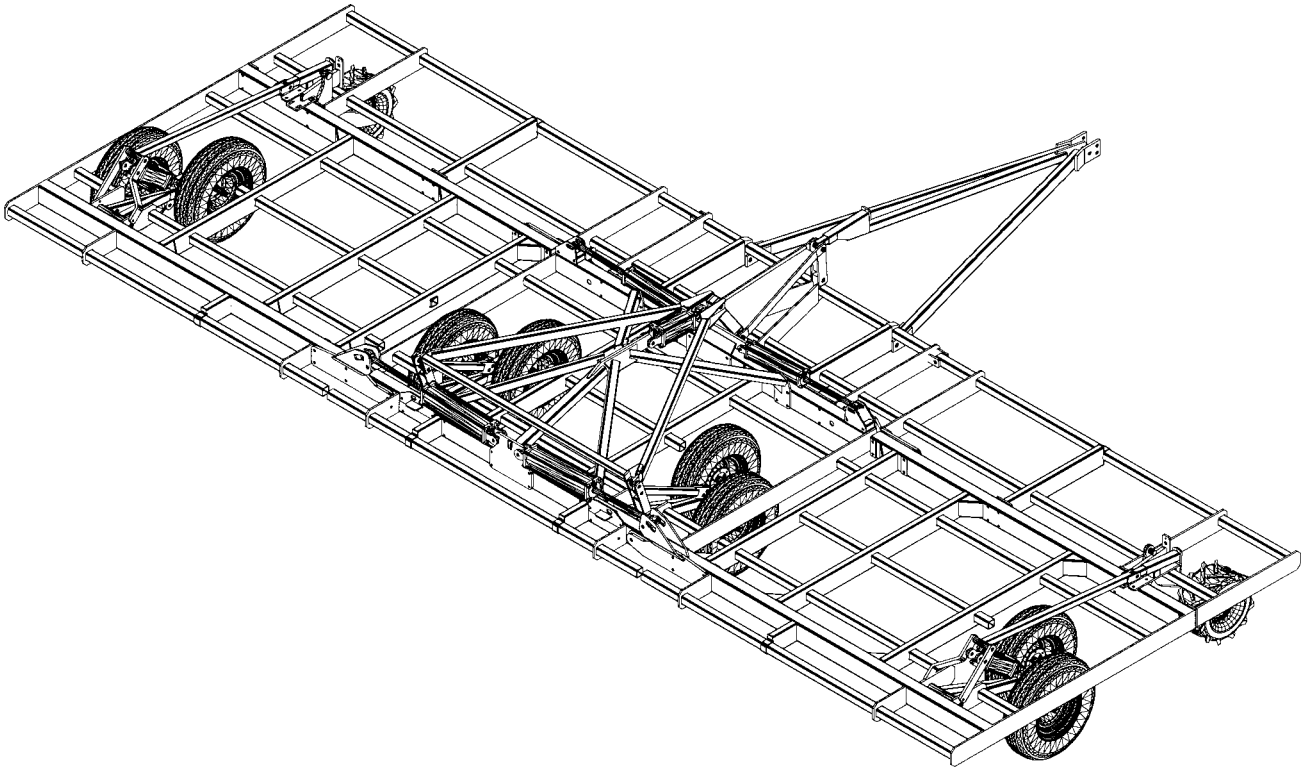
See the special instruction sheet for proper placement of the cultivator identification decals and safety warning decals

Refer to the Owners Manual for further safety information before attempting to operate or service the unit

When the cultivator frame is fully assembled check all nuts and bolts and secure if loose.

Double check the hose layout and hydraulic connections according to the hydraulic diagram.

Be sure to read the Owners Manual before attempting to fold or operate the cultivator. The Owners Manual provides important instructions and safety precautions that must be followed before attempting to hook up and move the cultivator after assembly.



If you have purchased optional levelling attachments such as the combi harrows shown on the cultivator below, refer to the Manual provided with the Harrow Assembly for proper installation and adjustment of the attachments.

Installing the Product Identification and Safety Decals:

1) Install the Kongskilde Logo decals #600475113 and 2800 Vibro-Till decals #600475168 on both sides of the draw tongue and wing frames as shown.

KONGSKILDE 2800 Series
on both sides of hitch

KONGSKILDE 2800 Series
on both side of wing frames

2) Install Yellow Safety Reflectors #600475131 on both front corners and sides of the 2800 centre section.

YELLOW REFLECTORS on both front corners and side bars of front frame.

YELLOW REFLECTOR front view

YELLOW REFLECTORS side view

3) Install Red Safety Reflectors #600475132 on bothrear fold brackets and sides of the 2800 centre section.

RED REFLECTORS on
Rear Hinges and side bar

If the rear reflector position could be blocked from view by harrow mounting brackets then the reflector can be place in an alternate position on the rear corner of the toolbar to provide better visibility.

RED REFLECTORS on
Rear Toolbar Tube and Side Bar

4) The 3 safety decals #600475170, 600475169 & 600475160 are located on the front frame side bar beside the serial number plate and the CE label as shown.

5) Install a Kongskilde Decal #600475113 on both sides of the centre frame side bar as shown below.

6) Install the TRIPLE K decals #600475119 on the wheel linkages on both sides above the centre tandems

7) Install the WING FOLD SAFETY DECALS #600475039 on the front and rear main frame tubes on the 2800 wing frames. The decals should be centred on the tube at about eye level so they can be read clearly when the wings are folded as shown below.

WING SAFETY on front wing frame tube

WING SAFETY on rear wing frame tube

8) Install the Wing Fold Lock Warning decals # 600475176 on the top of the centre section frame tubes near the wing fold lock plates so it can be viewed with the wings in the folded or unfolded position as shown below.

Wing Fold Lock Warning Decal

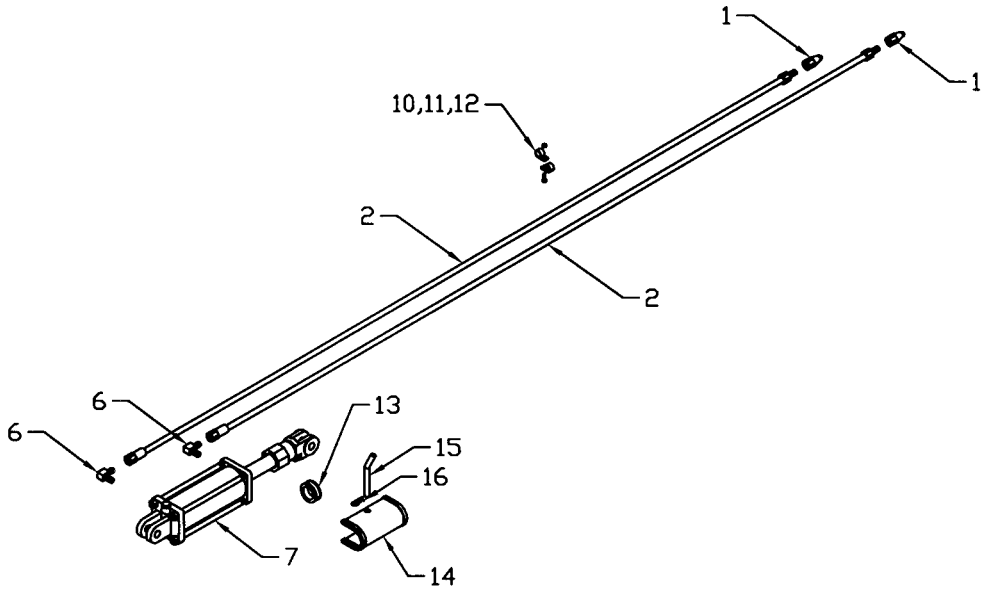
Wing Fold Lock Warning Decal

Hydraulic Diagrams and Tine Pattern Reference Section:

IMPORTANT NOTE:
DO NOT PLACE HOSE LINES ALONG FRAME IN FRONT OF TOP FRAME MOUNTING PLATES AS SHOWN BELOW.
HOSE LINES CAN BECOME PINCHED BY THE FRONT WING FOLD STOP PLATE WHEN FOLDING IF HOSES ARE LAYING ON TOP OF THE FRAME TUBE.

Hoses should be behind the top frame mount and neatly clamped so they do not interfere with the hinges when folding.

KEEP HOSES LINES RUNNING ACROSS THE CULTIVATOR BEHIND THE FRONT FRAME TUBE AND NEATLY CLAMPED TO THE FRAMES WITH THE HOSE CLAMPS PROVIDED.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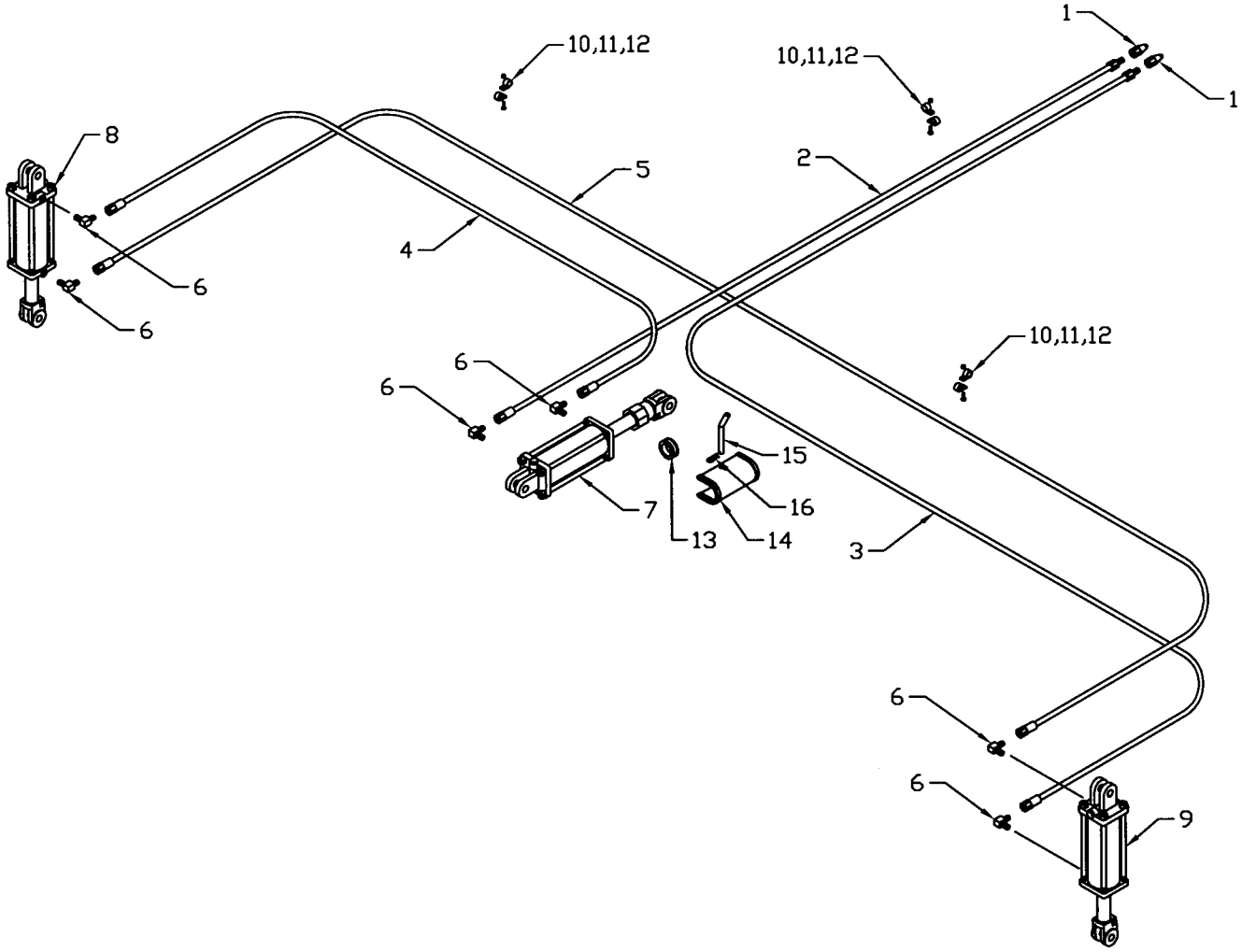
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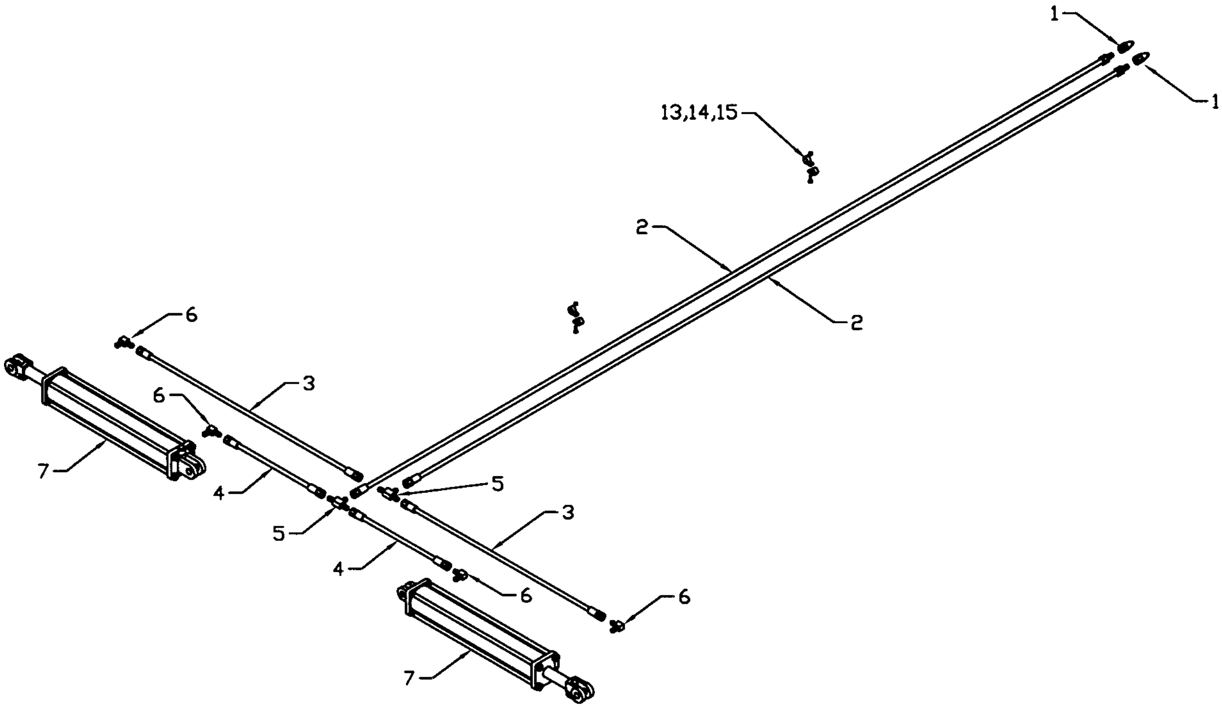
6
9

Fig.	Part no.	Description
1	600470110	Quick Coupler (Optional-not part of hose kit)
2	600470233	1/2" Hose 1/2" Pipe x 1/2" JIC - 230" (all models)
3	600470244	1/2" Hose 1/2" Pipe x 1/2" JIC - 375" (2800-60-20')
	600470235	1/2" Hose 1/2" Pipe x 1/2" JIC - 395" (2800-70-23')
	600470245	1/2" Hose 1/2" Pipe x 1/2" JIC - 415" (2800-80-26')
	600470234	1/2" Hose 1/2" Pipe x 1/2" JIC - 435" (2800-90-30')
4	600470182	1/2" Hose 1/2" JIC x 1/2" JIC - 175" (2800-60-20')
	600470239	1/2" Hose 1/2" JIC x 1/2" JIC - 195" (2800-70-23')
	600470177	1/2" Hose 1/2" JIC x 1/2" JIC - 215" (2800-80-26')
	600470137	1/2" Hose 1/2" JIC x 1/2" JIC - 235" (2800-90-30')
5	600470147	1/2" Hose 1/2" JIC x 1/2" JIC - 310" (2800-60-20')
	600470149	1/2" Hose 1/2" JIC x 1/2" JIC - 350" (2800-70-23')
	600470151	1/2" Hose 1/2" JIC x 1/2" JIC - 390" (2800-80-26')
	600470153	1/2" Hose 1/2" JIC x 1/2" JIC - 430" (2800-90-30')
6	600470049	Elbow 1/2" O-ring x 1/2" JIC - 90 Degree
7	600474502	Cylinder 4.5 x 8 Rephasing with Mechanical Stroke Control - Midway
8	600474503	Cylinder 4.25 x 8 Rephasing - Midway
9	600474504	Cylinder 4 x 8 Rephasing - Midway
10	600361039	Carriage Bolt 1/4" x 1"
11	600366026	Locknut 1/4"
12	600470047	Hose Clamp 1/2"
13	600474513	Stop Collar 1"
14	606001331	Cylinder Transport Lock
15	601140780	Pin
16	600333011	Hair Pin Clip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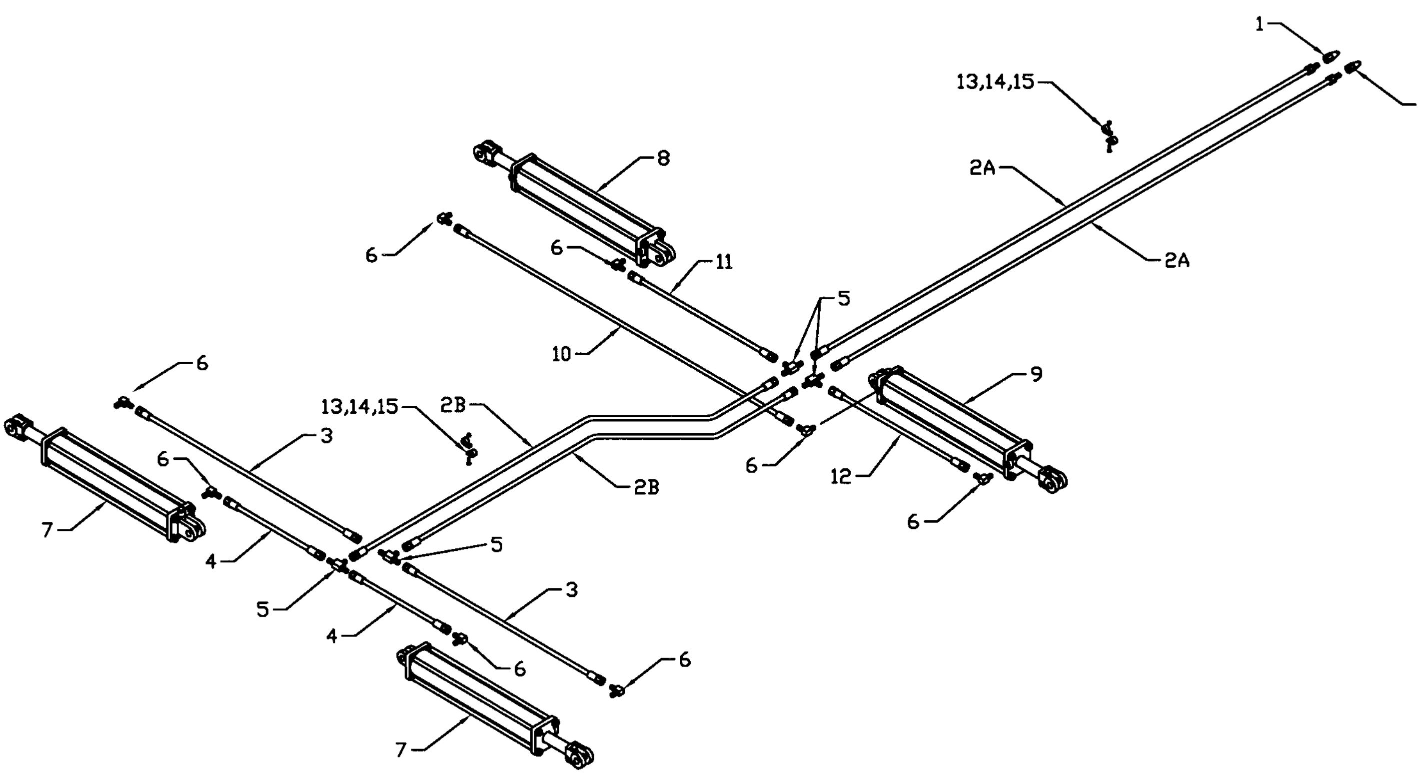
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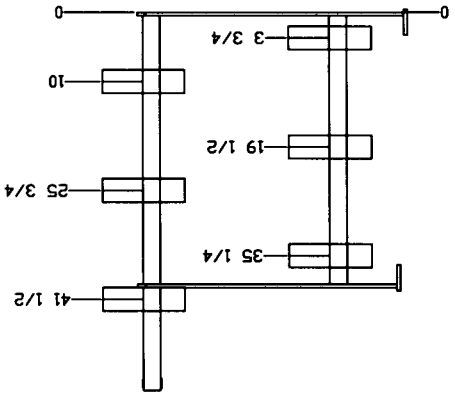
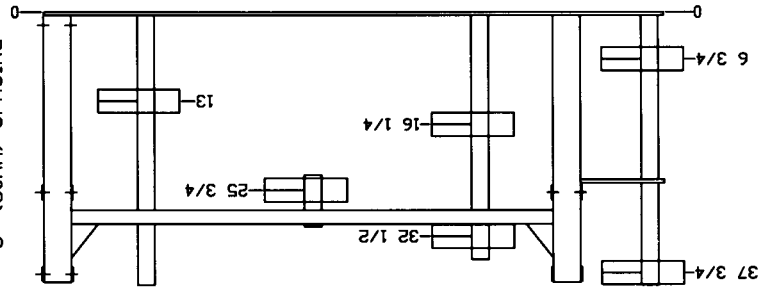
Fig.	Part no.	Description
1	600470110	Quick Coupler (Optional-not part of hose kit)
2	600470232	3/8" Hose 1/2" Pipe x 3/8" JIC - 280" (2800-50-60-70-80)
2A	600470157	3/8" Hose 1/2" Pipe x 3/8" JIC - 215" (2800-90-30')
2B	600470194	3/8" Hose 3/8" JIC x 3/8" JIC - 80" (2800-90-30')
3	600470102	3/8" Hose 3/8" JIC x 3/8" JIC - 32" (2800-all models)
4	601140316	3/8" Hose 3/8" JIC x 3/8" JIC - 20" (2800-all models)
5	600470003	Tee 3/8" JIC
6	600470124	Elbow 1/2" O-ring x 3/8 JIC
7	600474505	Cylinder 4.5 x 20 - Midway
8	600474506	Cylinder 3.5 x 16 Rephasing - Midway
9	600474501	Cylinder 3.25 x 16 Rephasing - Midway
10	600470408	3/8" Hose 3/8" JIC x 3/8" JIC - 50" (2800-90-30')
11	600470242	3/8" Hose 3/8" JIC x 3/8" JIC - 36" (2800-90-30')
12	600470243	3/8" Hose 3/8" JIC x 3/8" JIC - 16" (2800-90-30')
13	00 361 039	Carriage Bolt 1/4" x 1"
14	00 366 026	Locknut 1/4"
15	00 470 007	Hose Clamp 3/8"

CULTIVATOR SIZE
5 METER / 16'-5"

1.0M FRONT FRAME
601232075
3" (80MM) SPACING

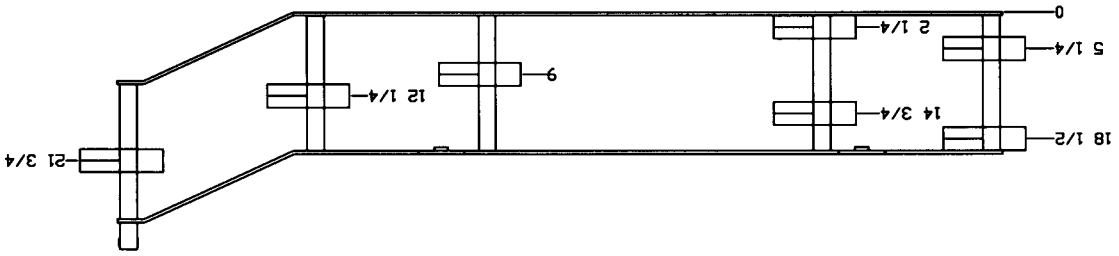


1.0M WING FRAME
601232005
3" (80MM) SPACING



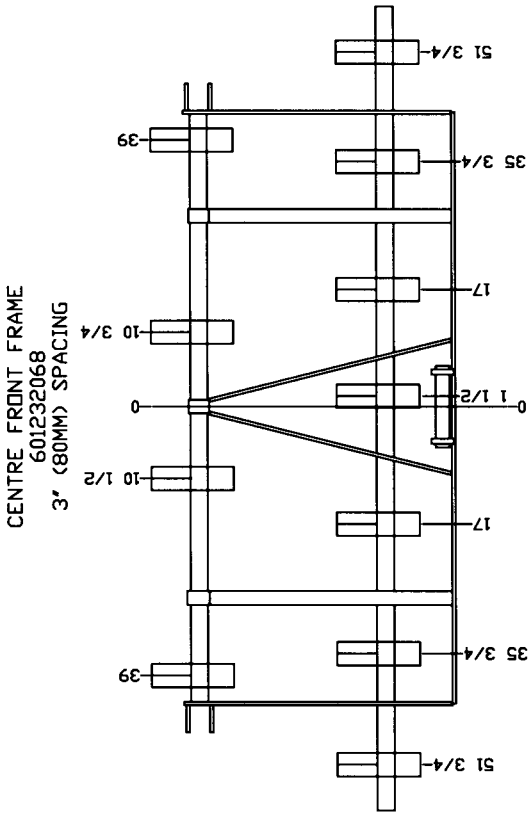
CULTIVATOR SIZE
4 METER / 13'-2"

0.5M EXTENSION FRAME
601232006
3" (80MM) SPACING

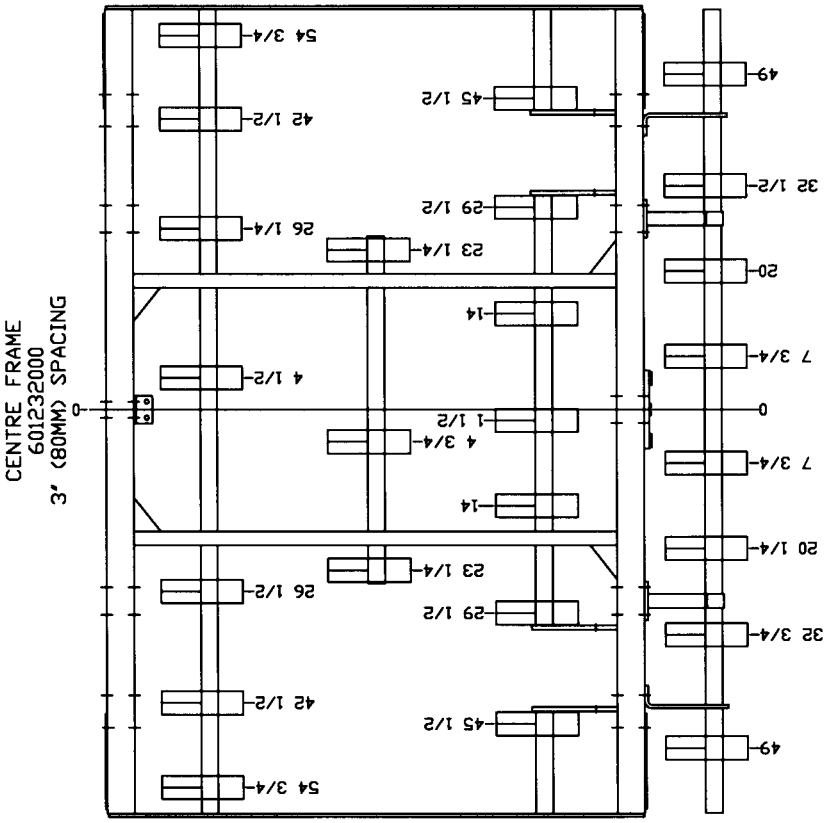


CULTIVATOR SIZE
3 METER / 10'-0"

CENTRE FRONT FRAME
601232068
3" (80MM) SPACING

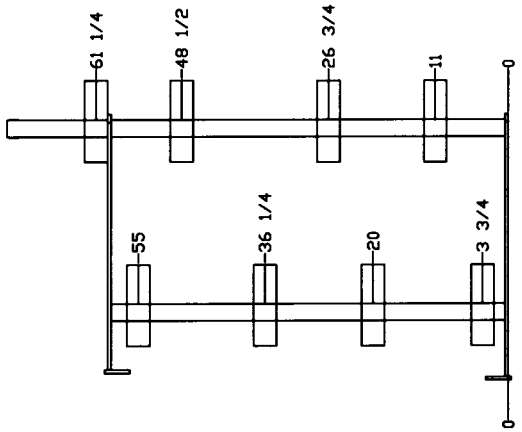


CENTRE FRAME
601232000
3" (80MM) SPACING

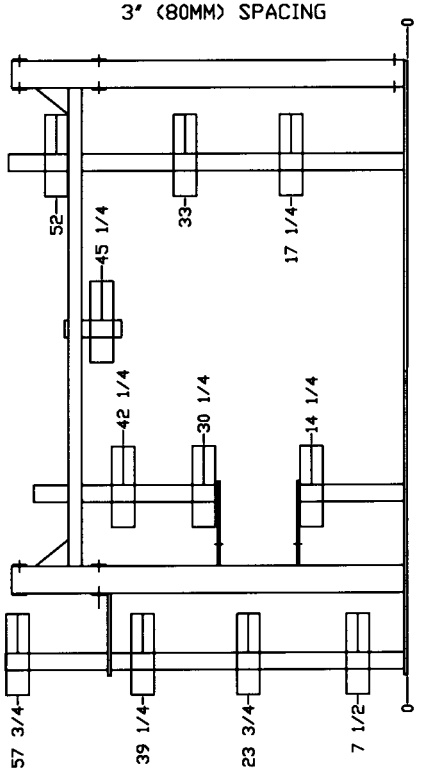


CULTIVATOR SIZE
6 METER / 19'-8"

1.5M FRONT FRAME
601232074
3" (80MM) SPACING

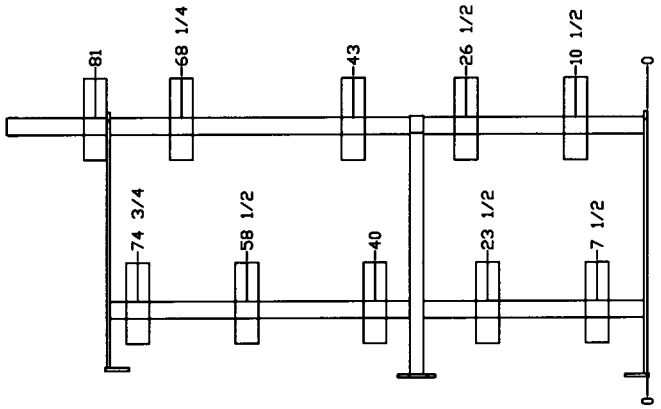


1.5M WING FRAME
601232004
3" (80MM) SPACING

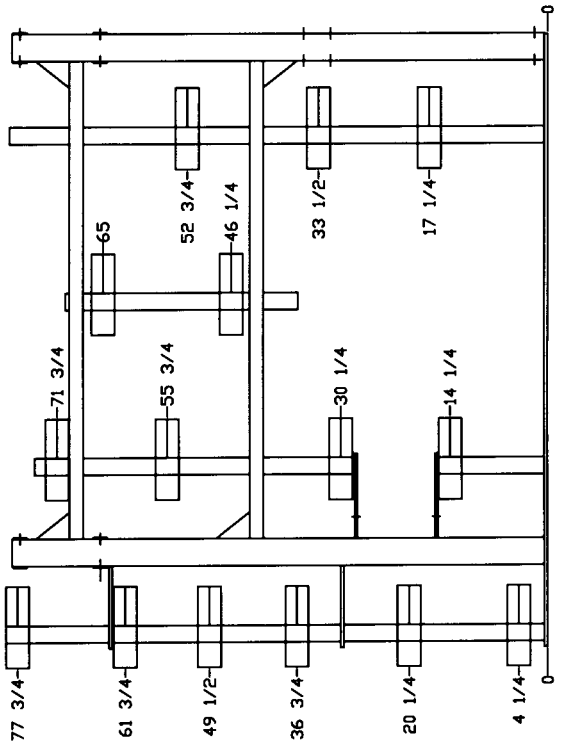


CULTIVATOR SIZE
7 METER / 23'-0"

2.0M FRONT FRAME
601232073
3" (80MM) SPACING

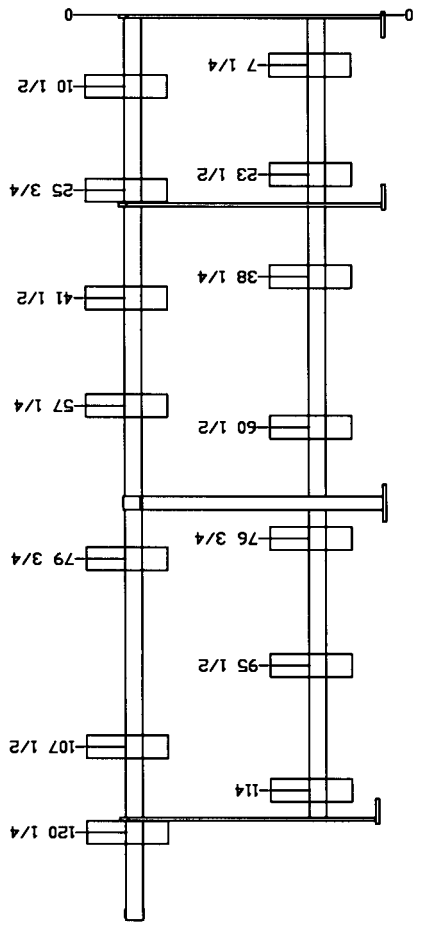


2.0M WING FRAME
601232003
3" (80MM) SPACING

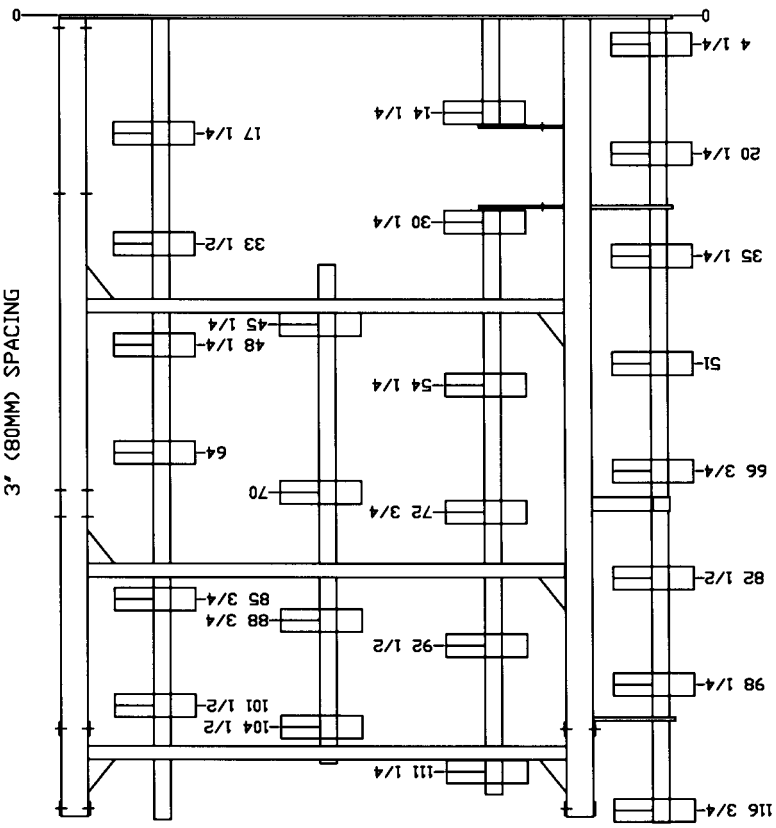


CULTIVATOR SIZE
9 METER / 29'-6"

3.0M FRONT FRAME
601232071
3" (80MM) SPACING

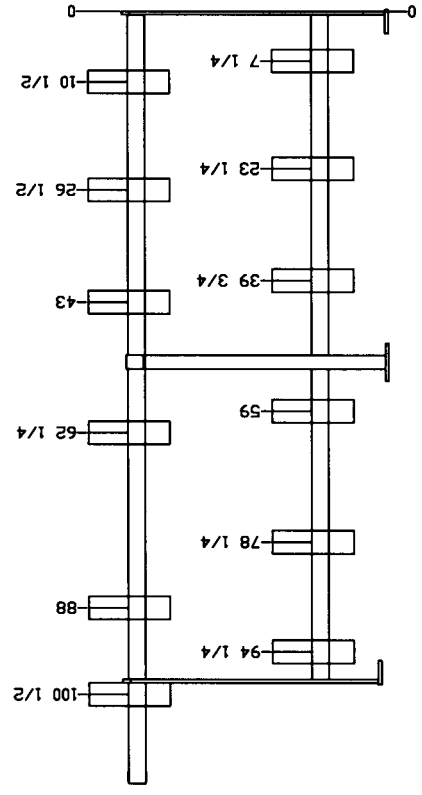


3.0M WING FRAME
601232001
3" (80MM) SPACING

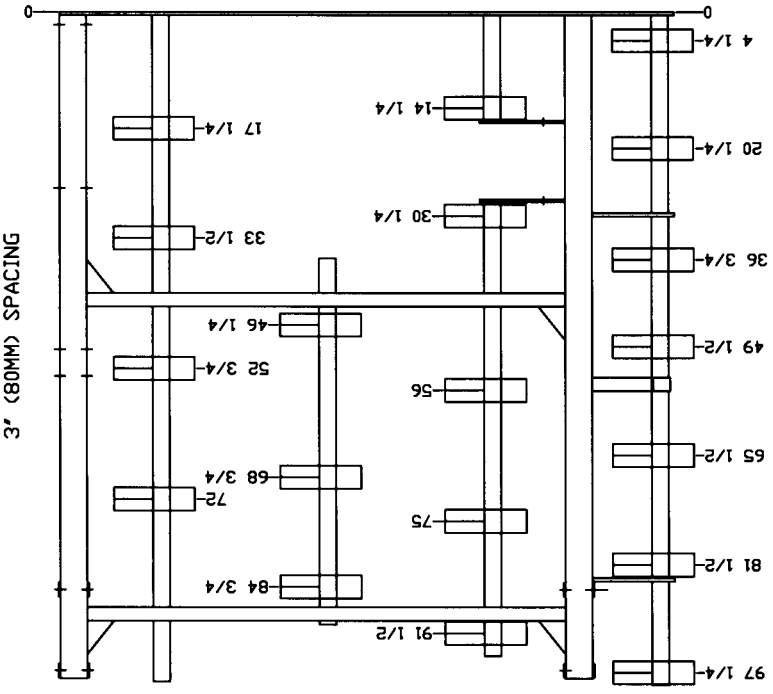


CULTIVATOR SIZE
8 METER / 26'-3"

2.5M FRONT FRAME
601232072
3" (80MM) SPACING

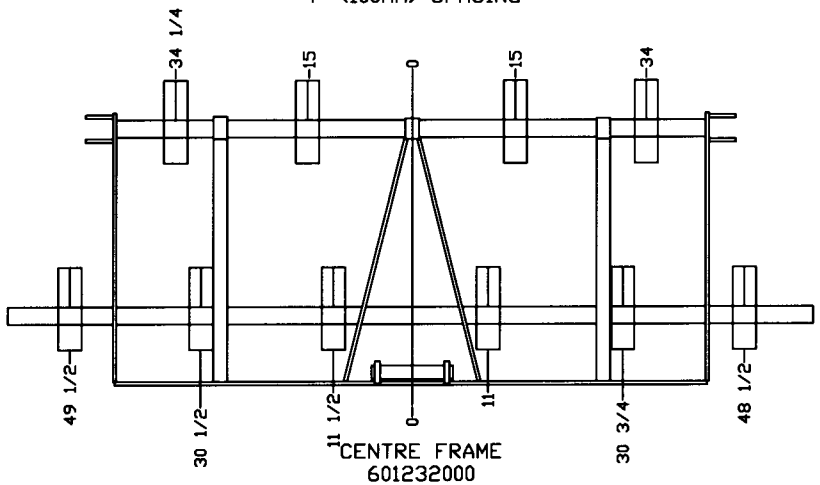


2.5M WING FRAME
601232002
3" (80MM) SPACING

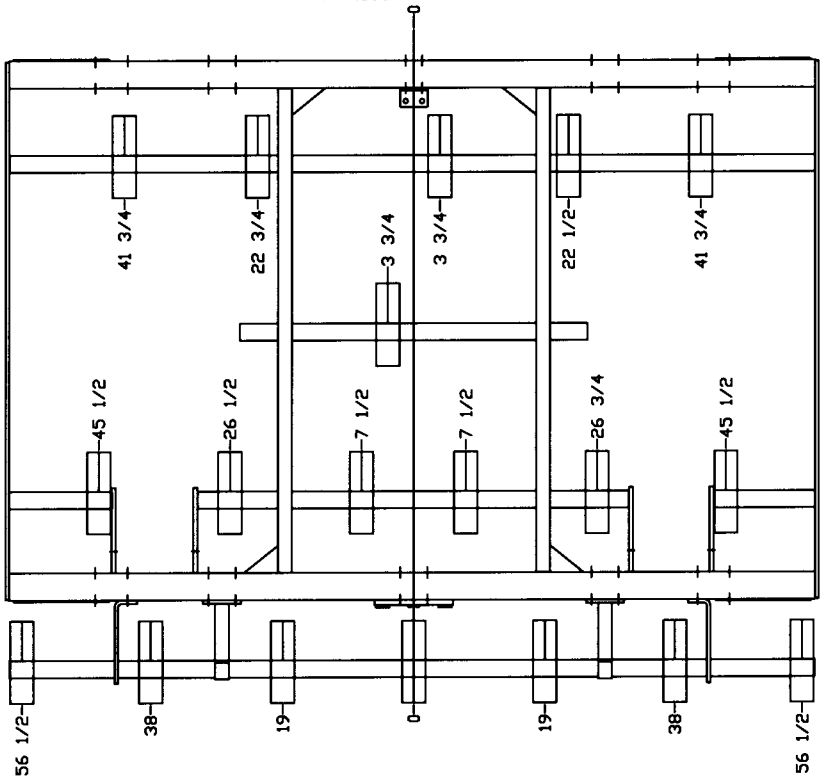


CULTIVATOR SIZE
3 METER / 10'-0"

CENTRE FRONT FRAME
601232068
4" (100MM) SPACING

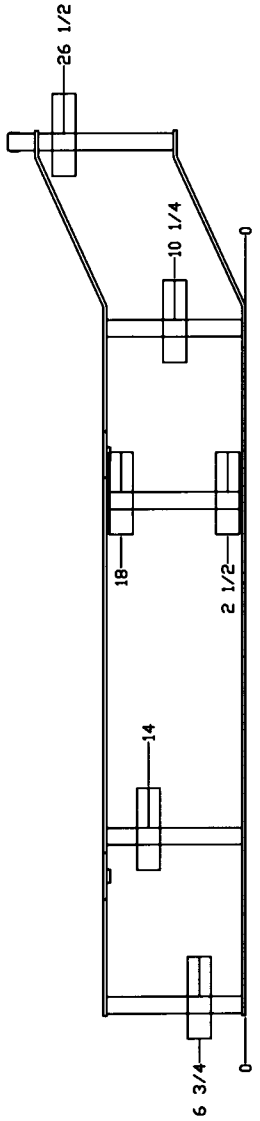


CENTRE FRAME
601232000
4" (100MM) SPACING



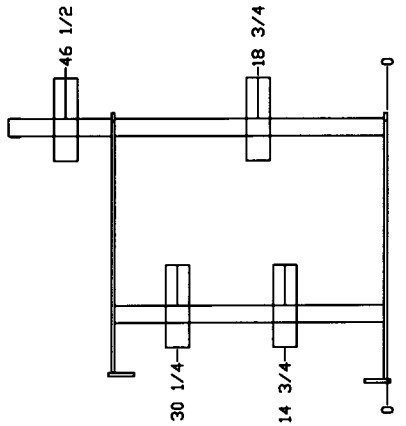
CULTIVATOR SIZE
4 METER / 13'-2"

0.5M EXTENSION FRAME
601232006
4" (100MM) SPACING



CULTIVATOR SIZE
5 METER / 16'-5"

1.0M FRONT FRAME
601232075
4" (100MM) SPACING



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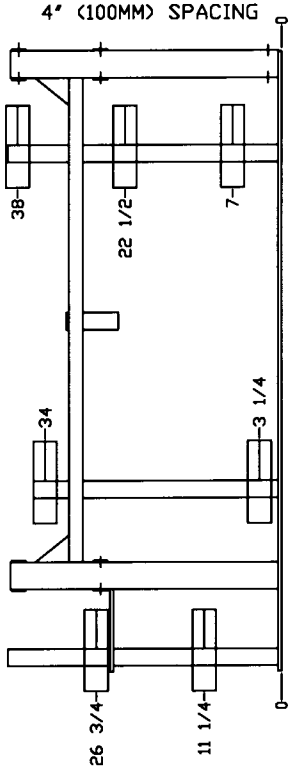
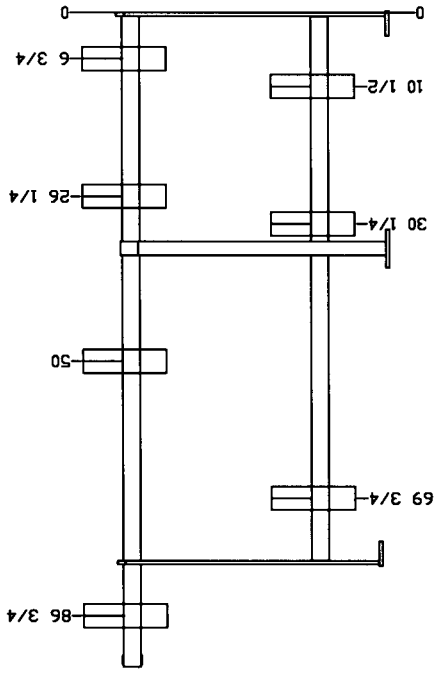
601232005
4" (100MM) SPACING



CULTIVATOR SIZE
7 METER / 23'-0"

2.0M FRONT FRAME
601232073
4" (100MM) SPACING



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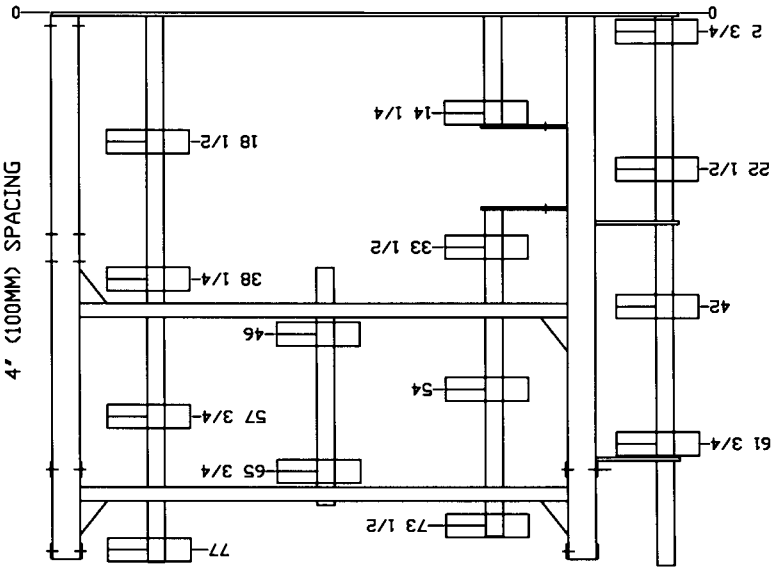
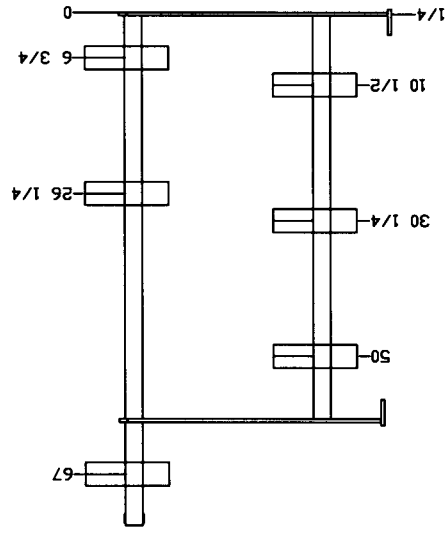
601232003
4" (100MM) SPACING

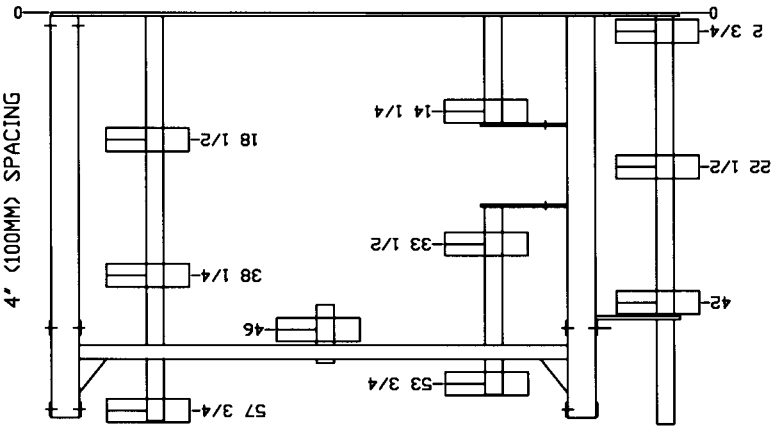


CULTIVATOR SIZE
6 METER / 19'-8"

1.5M FRONT FRAME
601232074
4" (100MM) SPACING

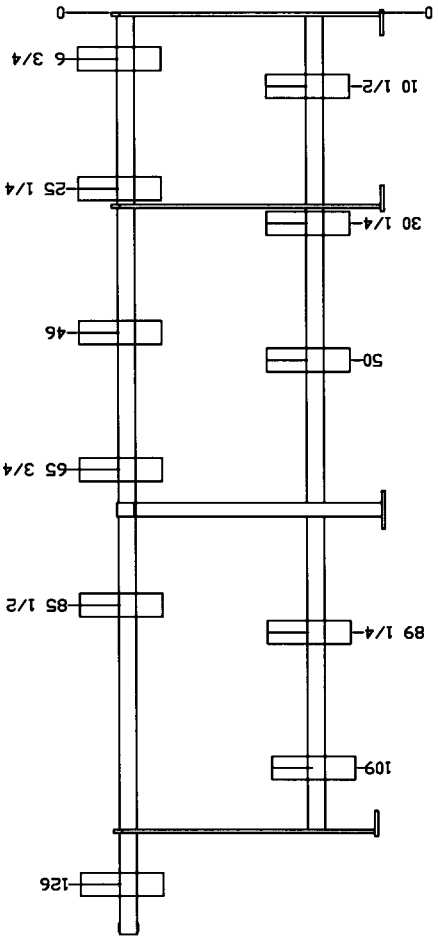


1.5M WING FRAME
601232004
4" (100MM) SPACING

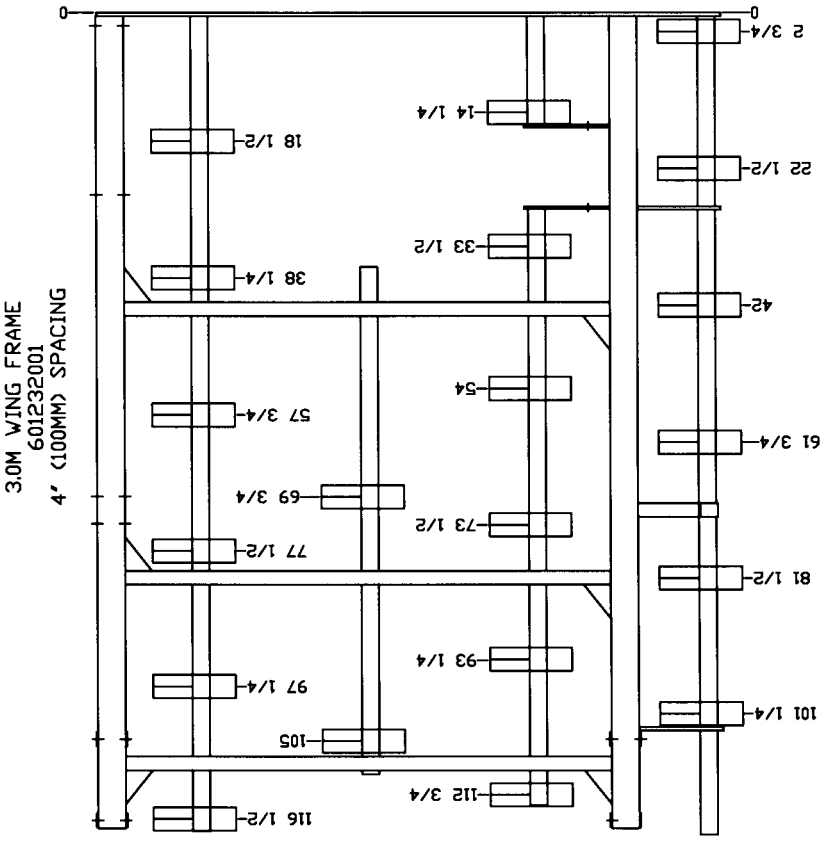


CULTIVATOR SIZE
9 METER / 29'-6"

3.0M FRONT FRAME
601232071
4" (100MM) SPACING

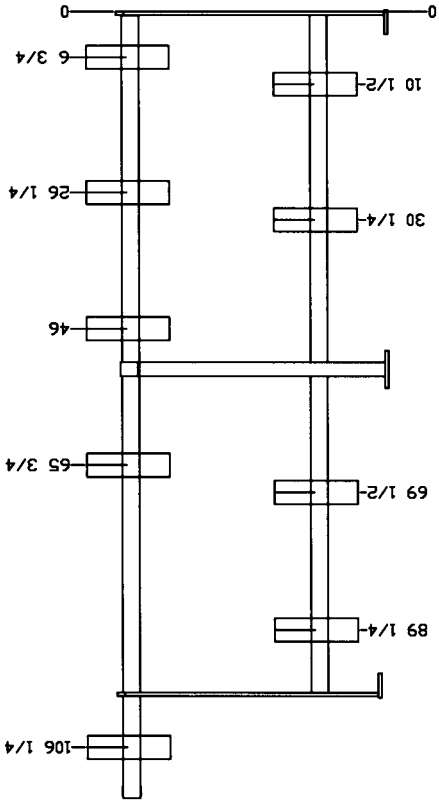


3.0M WING FRAME
601232001
4" (100MM) SPACING

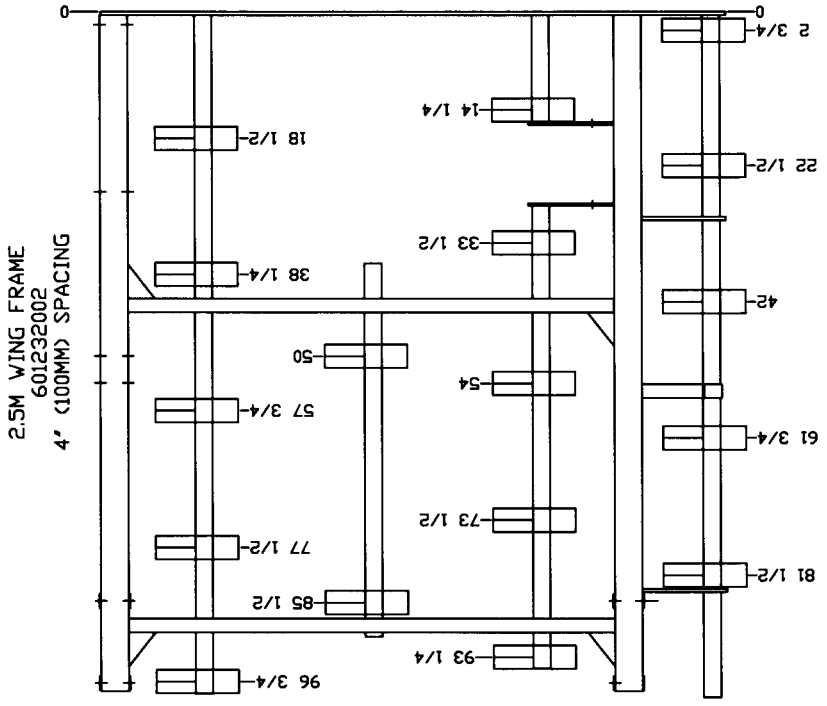


CULTIVATOR SIZE
8 METER / 26'-3"

2.5M FRONT FRAME
601232072
4" (100MM) SPACING

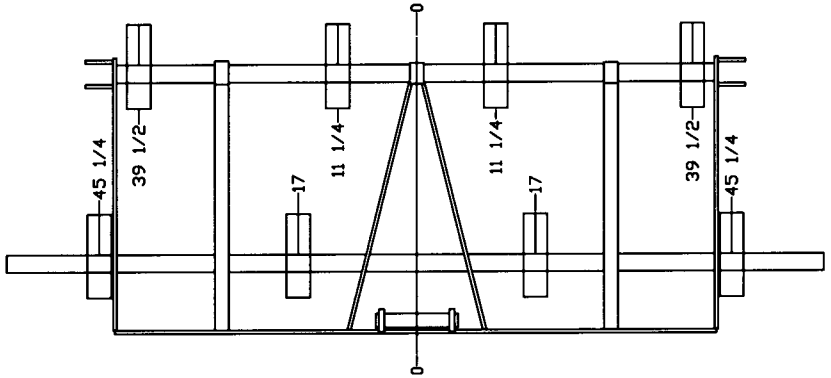


2.5M WING FRAME
601232002
4" (100MM) SPACING

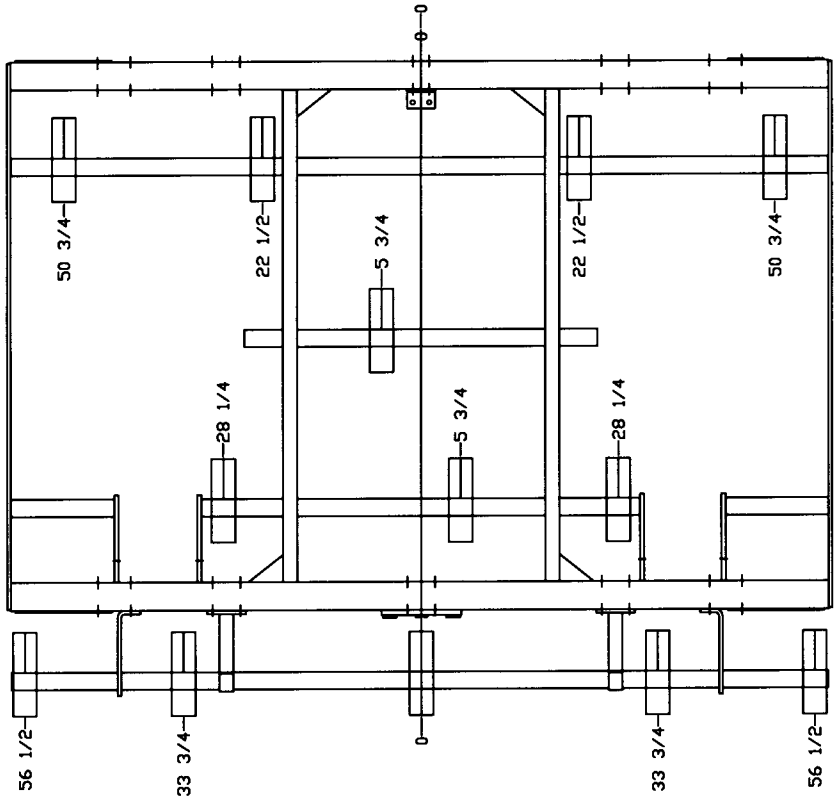


CULTIVATOR SIZE 3 METER / 10′-0″

CENTRE FRONT FRAME
601232068
5.5″ (140MM) SPACING

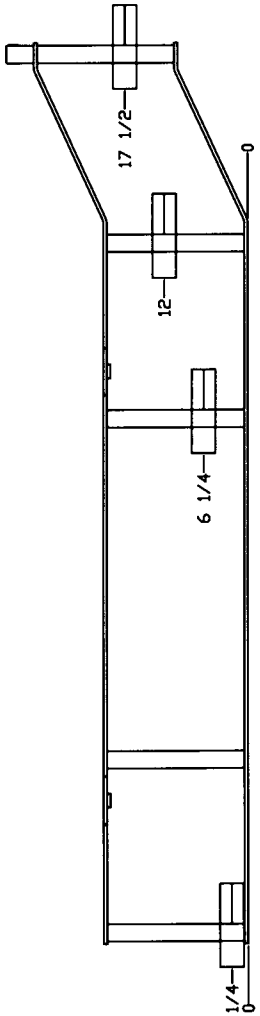


CENTRE FRAME
601232000
5.5″ (140MM) SPACING



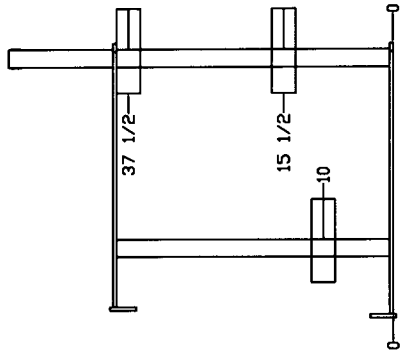
CULTIVATOR SIZE 4 METER / 13′-2″

0.5M EXTENSION FRAME
601232006
5.5″ (140MM) SPACING

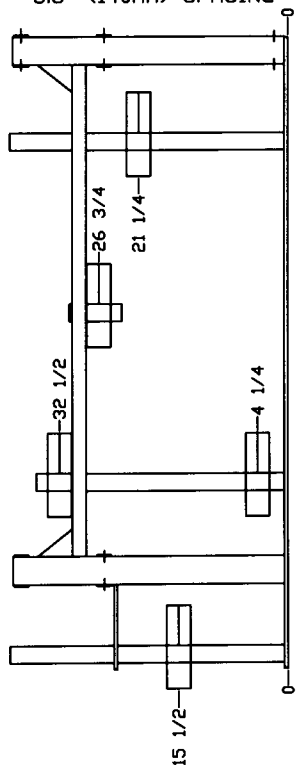


CULTIVATOR SIZE 5 METER / 16′-5″

1.0M FRONT FRAME
601232075
5.5″ (140MM) SPACING

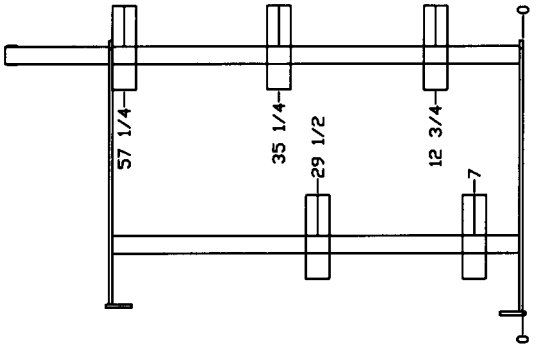


1.0M WING FRAME
601232005
5.5″ (140MM) SPACING

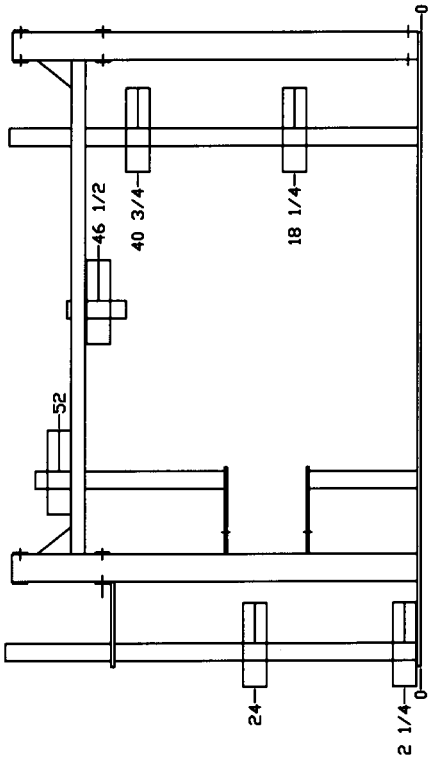


CULTIVATOR SIZE
6 METER / 19′-8″

1.5M FRONT FRAME
601232074
5.5″ (140MM) SPACING

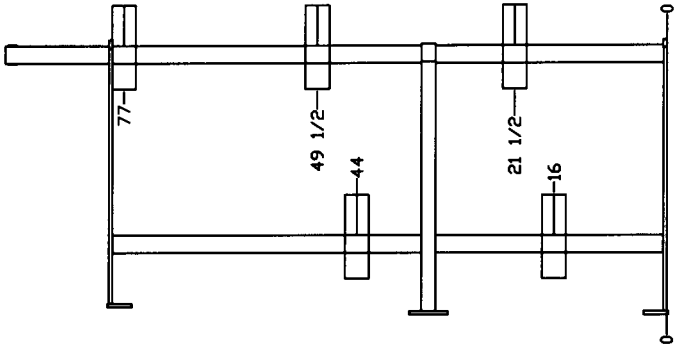


1.5M WING FRAME
601232004
5.5″ (140MM) SPACING

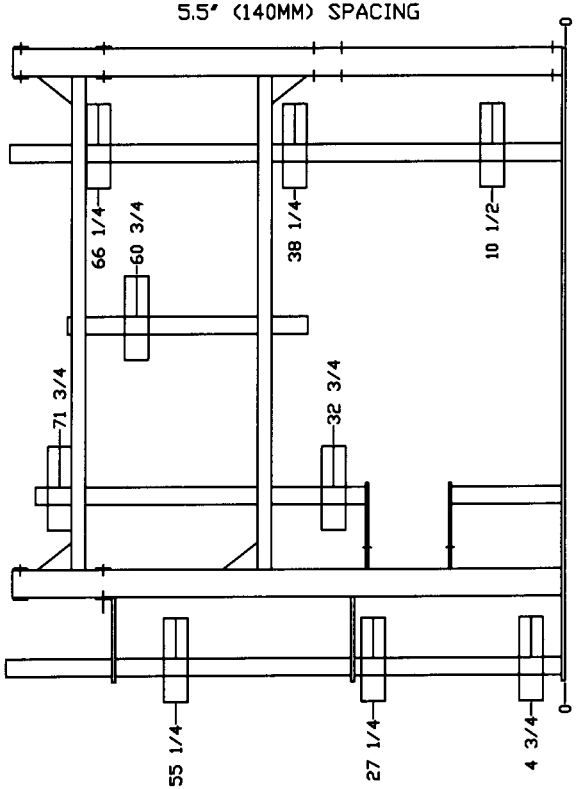


CULTIVATOR SIZE
7 METER / 23′-0″

2.0M FRONT FRAME
601232073
5.5″ (140MM) SPACING

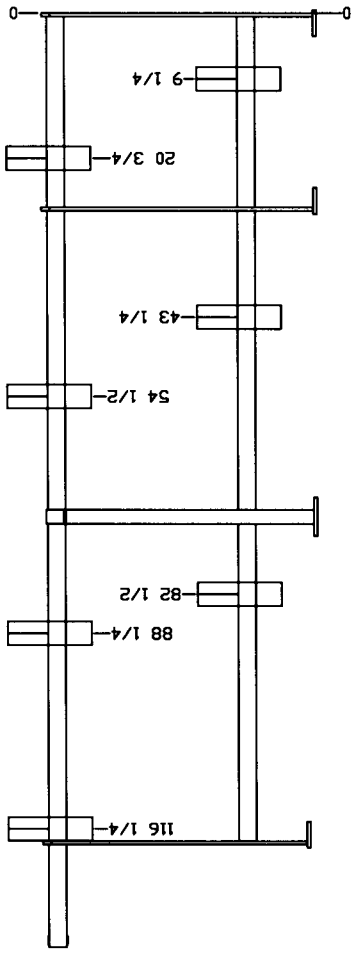


2.0M WING FRAME
601232003
5.5″ (140MM) SPACING

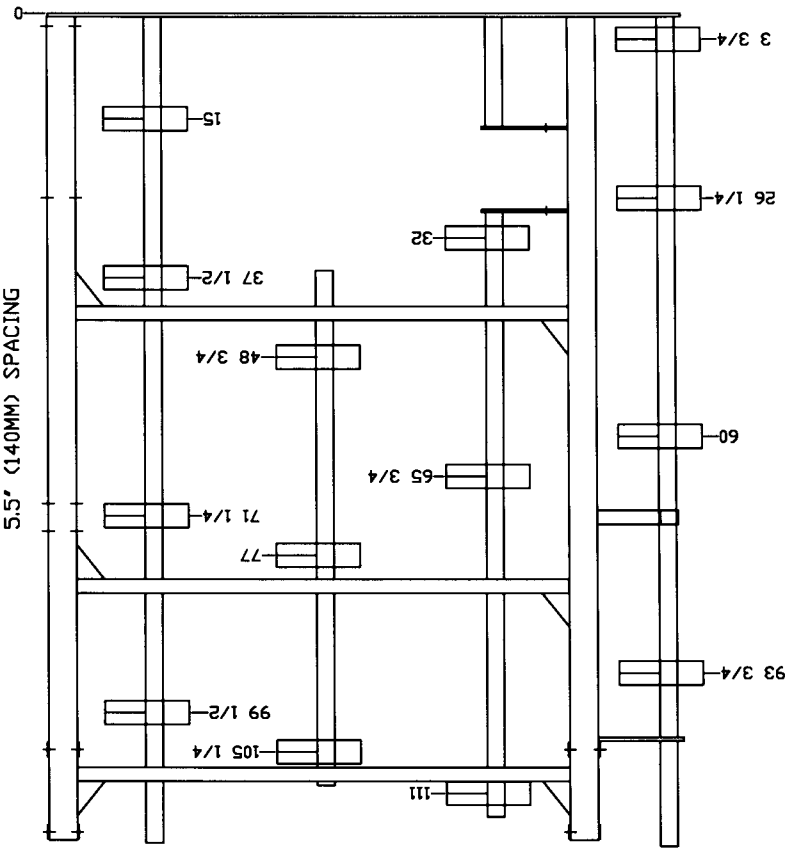


CULTIVATOR SIZE
9 METER / 29'-6"

3.0M FRONT FRAME
601232071
5.5' (140MM) SPACING

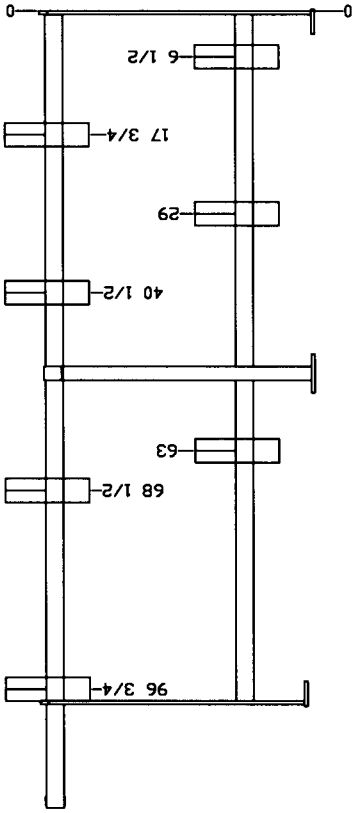


3.0M WING FRAME
601232001
5.5' (140MM) SPACING

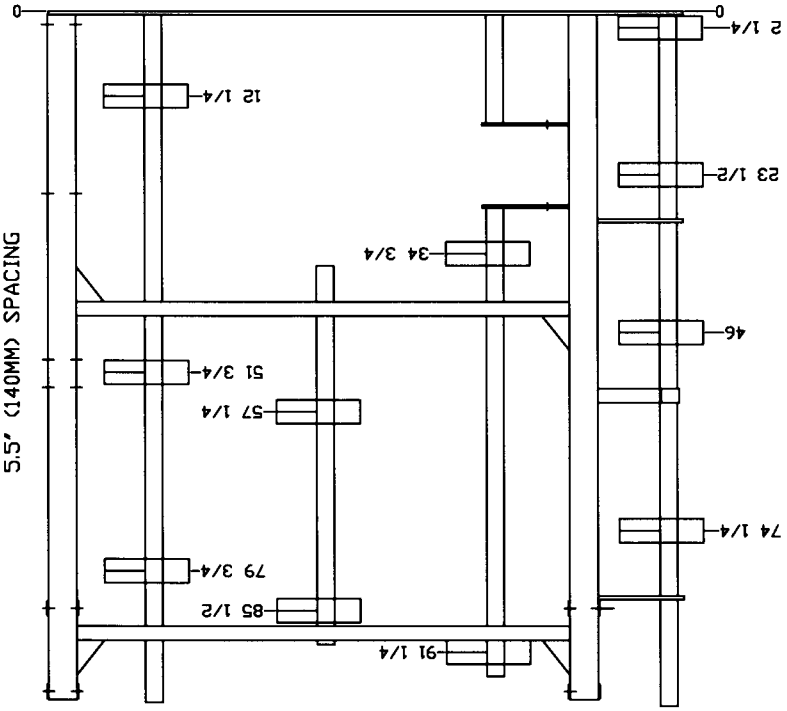


CULTIVATOR SIZE
8 METER / 26'-3"

2.5M FRONT FRAME
601232072
5.5' (140MM) SPACING

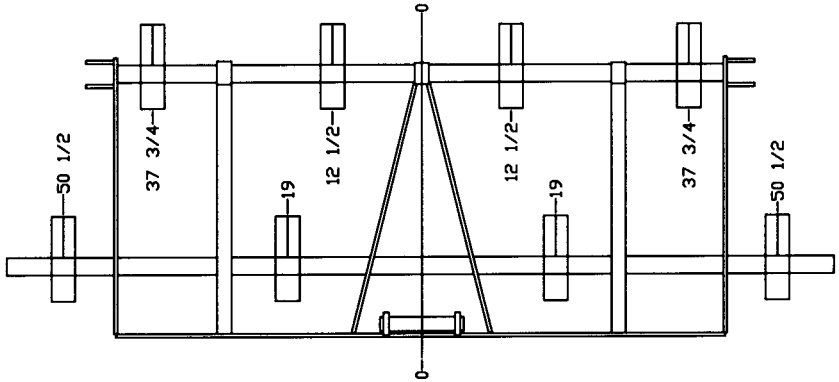


2.5M WING FRAME
601232002
5.5' (140MM) SPACING

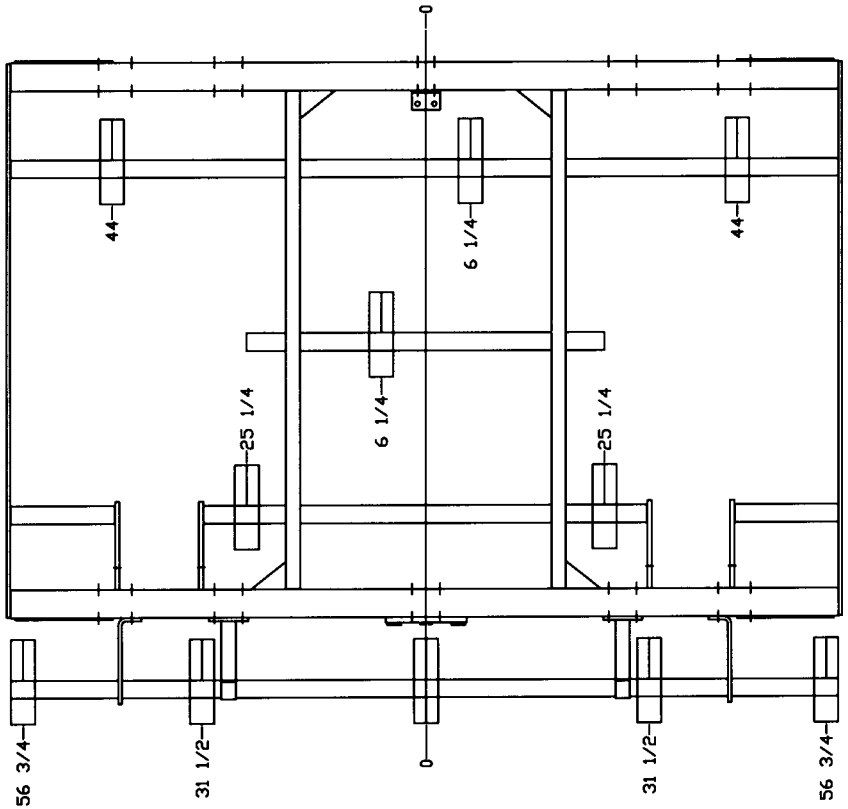


CULTIVATOR SIZE
3 METER / 10'-0"

CENTRE FRONT FRAME
601232068
6.25" (160MM) SPACING

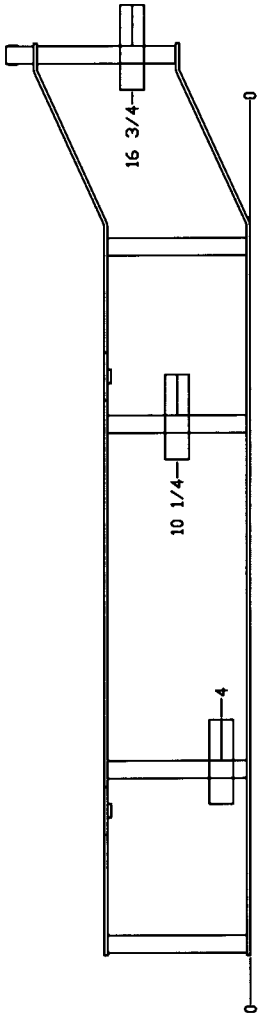


CENTRE FRAME
601232000
6.25" (160MM) SPACING



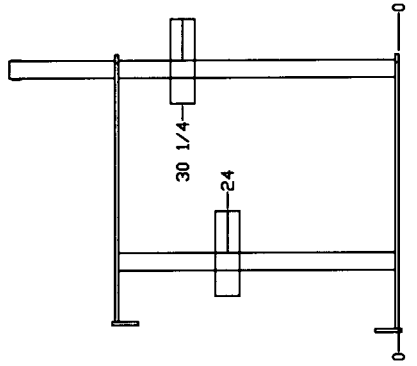
CULTIVATOR SIZE
4 METER / 13'-2"

0.5M EXTENSION FRAME
601232006
6.25" (160MM) SPACING

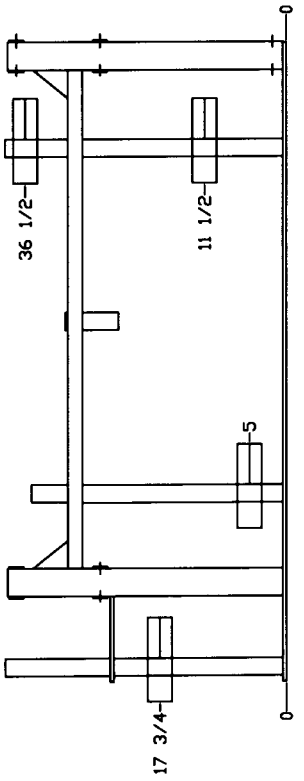


CULTIVATOR SIZE
5 METER / 16'-5"

1.0M FRONT FRAME
601232075
6.25" (160MM) SPACING

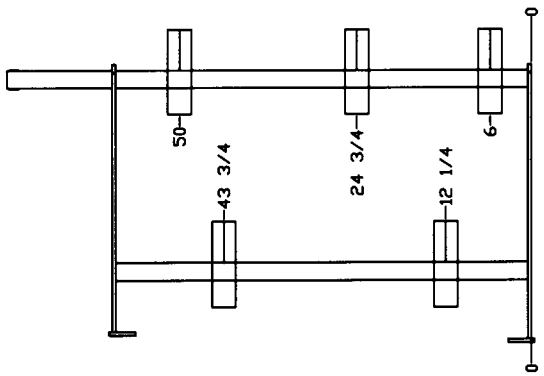


1.0M WING FRAME
601232005
6.25" (160MM) SPACING

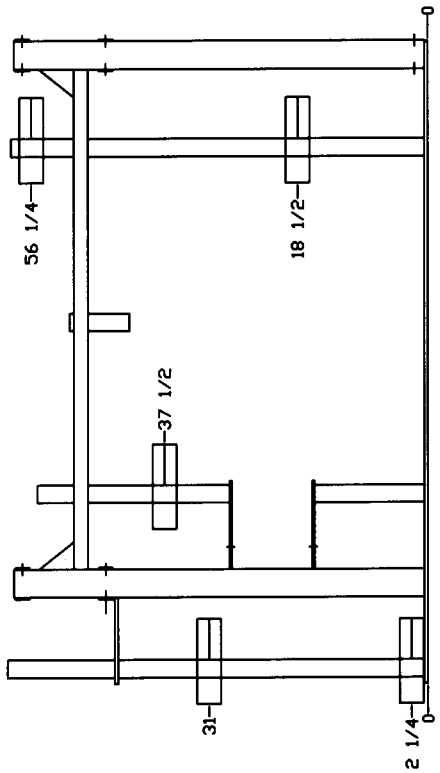


CULTIVATOR SIZE
6 METER / 19'-8"

1.5M FRONT FRAME
601232074
6.25" (160MM) SPACING

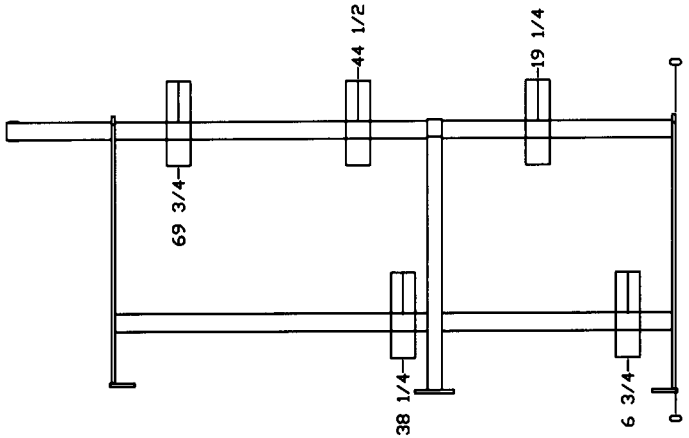


1.5M WING FRAME
601232004
6.25" (160MM) SPACING

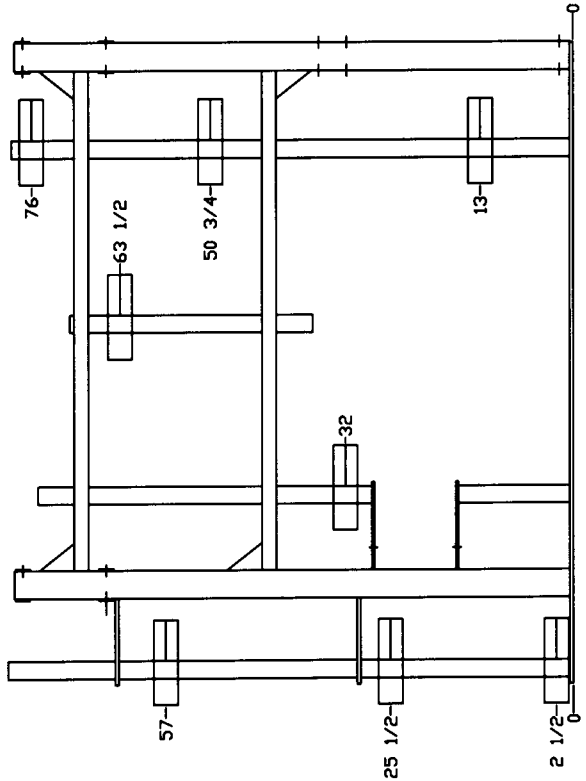


CULTIVATOR SIZE
7 METER / 23'-0"

2.0M FRONT FRAME
601232073
6.25" (160MM) SPACING

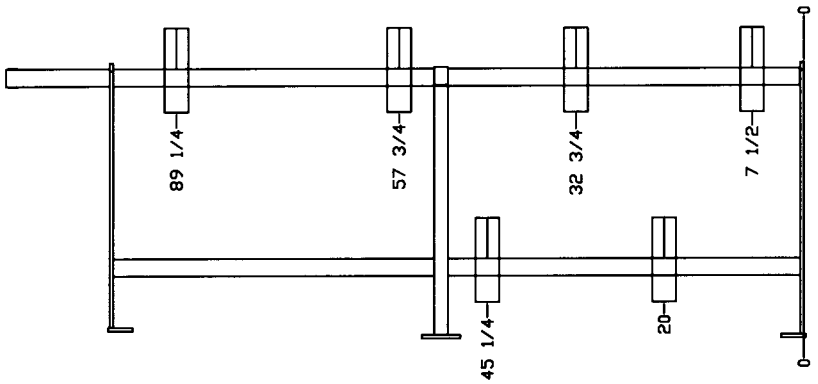


2.0M WING FRAME
601232003
6.25" (160MM) SPACING

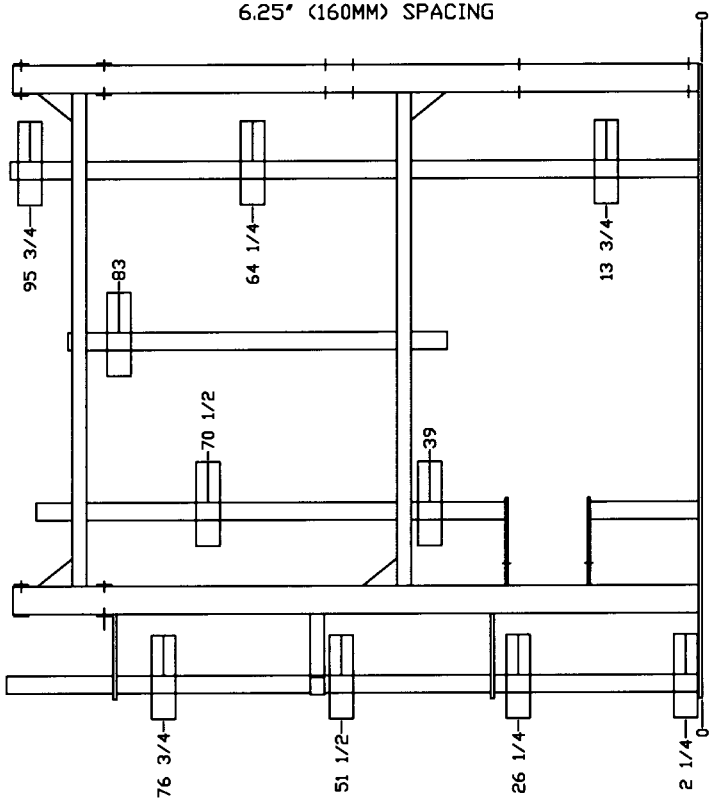


CULTIVATOR SIZE
8 METER / 26'-3"

2.5M FRONT FRAME
601232072
6.25" (160MM) SPACING

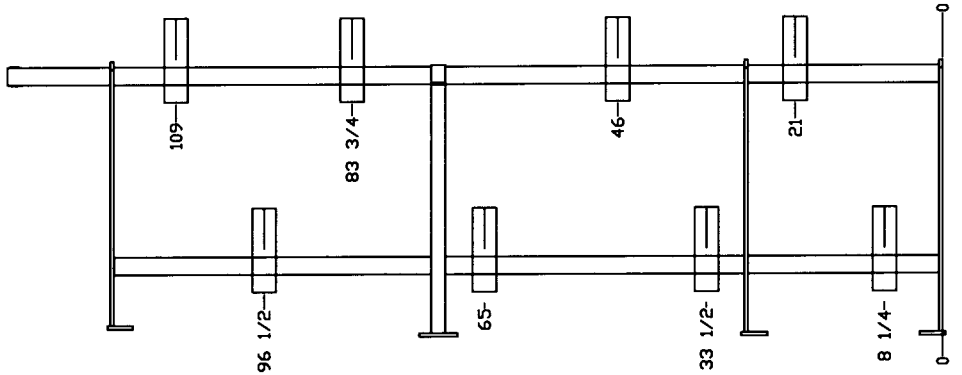


2.5M WING FRAME
601232002
6.25" (160MM) SPACING

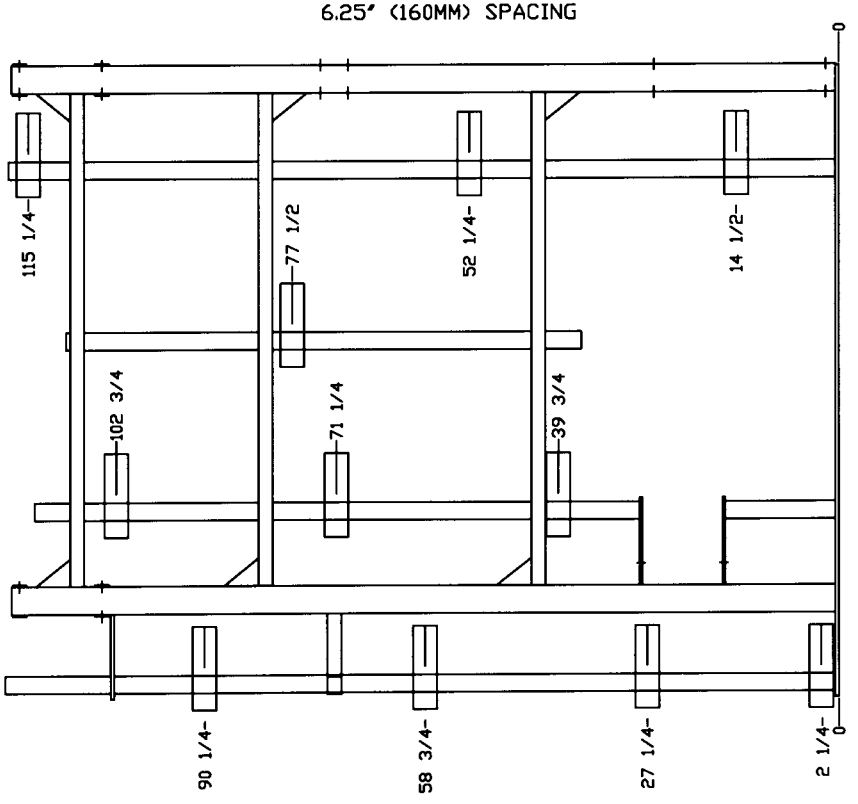


CULTIVATOR SIZE
9 METER / 29'-6"

3.0M FRONT FRAME
601232071
6.25" (160MM) SPACING



3.0M WING FRAME
601232001
6.25" (160MM) SPACING



601230008

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