

Installation & Operations for Zacklift Underlifts



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Introduction to Zacklift

Thank you for purchasing your Zacklift Wheel and Frame Lift. We appreciate your business and would like you to be assured we will continually strive to earn your confidence in the years of Zacklift service that are ahead of you.

Feel free to call on us whenever we can be of further assistance. We will look forward to serving you in the future.

All ratings are structural ratings only and will vary based on chassis weight, wheel base and location of the Zacklift tilt cylinder.

Read this entire installation manual before beginning installation. Follow the step-by-step operating instructions and pay close attention to the following warnings:

1. Always lift load into mechanical safety latch. Latch is located on front of main upright tube. Failure to do so would result in severe damage to Zacklift.
2. Only use tilt cylinder for lifting, regardless of how high you must lift a load.
3. Never use fold-up feature for purpose of lifting load. Costly breakage of internal parts and possible personal injury could result.
4. Always use safety chains to secure load to towing vehicle. Follow chain-up procedures outlined by State and Federal guidelines.
5. To avoid possible injury stand clear of Zacklift while operating.
6. Always retract grid completely into lock position before folding to prevent pivoting of grid head.
7. Fifth Wheeler mounted Zacklift must always be supported on legs, stands, or other supportive hardware when not in use to avoid injury from collapse.
8. Stand clear of Zacklift and Fifth Wheel mounting frame when off truck, resting on stabilizing hardware. Stand clear of Zacklift and Fifth Wheel mounting frame while loading and unloading structure from chassis.

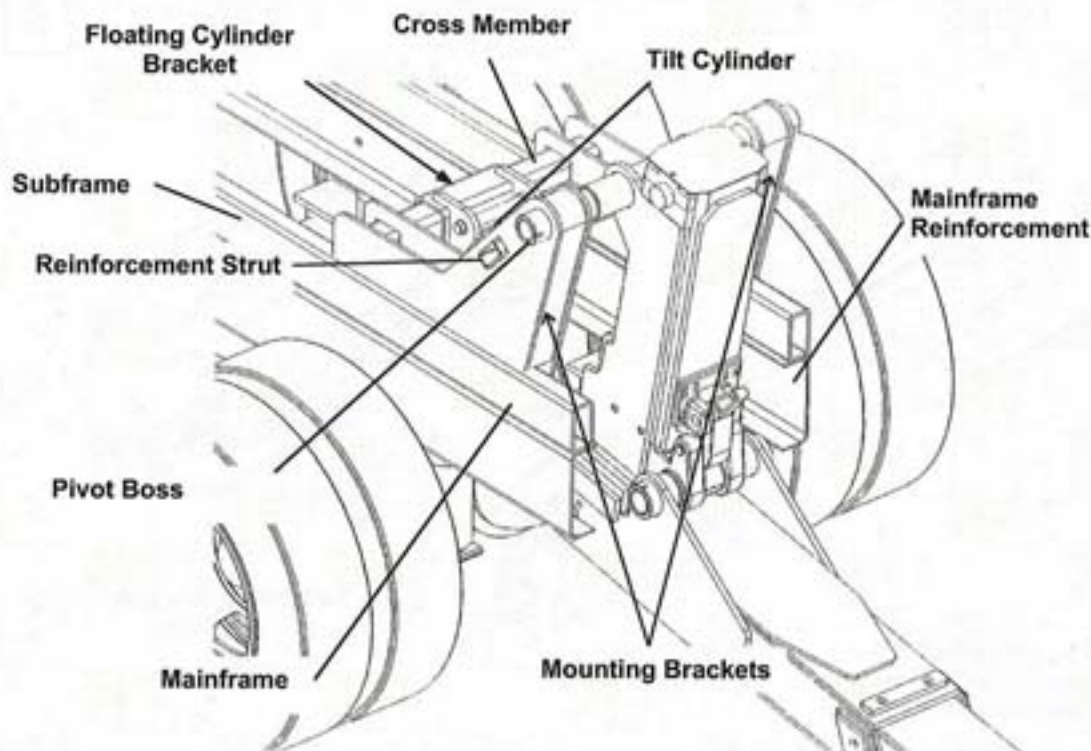
Notes:

- 1. Read all instructions carefully before beginning installation.**
- 2. Ideal installation of a Zacklift is as close to the rear axle of the truck as possible. Be sure to allow enough room for any movement of cylinder and truck springs.**
- 3. Tack or bolt all parts temporarily before welding completely.**
- 4. Make sure all work is done on level ground that is level to make accurate measurements.**
- 5. If frame is aluminum, plates must be bolted on.**
- 6. It is suggested that on a permanent mounting (not Fifth Wheel-Mounting) weak or rotted sub frame be removed and replaced with an adequate and suitable material.**

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Installation Overview

- Ideal installation of a Zacklift is as close to the rear axle as possible. Be sure to allow enough room for clearances.
- The factory advises that all chassis have a subframe in addition to a mainframe, an inadequate subframe should be replaced with at least 4" x 6" x 3/8" rectangular steel tubing.
- If your truck frame is aluminum all attachments must be bolted. Make sure all bolts are of adequate strength.
- Before installation of your Zacklift you will need to box the mainframe and subframe of your truck.
- Tack-weld or bolt all mounting parts temporarily (*to check for proper function and clearance*) before final welding or bolting.
- It is advised to work on solid level ground during the entire installation. Make sure the truck frame and or wrecker body is level before starting installation.



Preparing wrecker body

1. Before starting the installation remove or protect any air lines, hydraulic lines, or wiring.
2. To begin installation remove a section of the wrecker deck approximately 36" wide by 50" deep see fig. 1-A This allows access for reinforcement of the main frame, inspection and possible replacement or reinforcing of the subframe, and installation of the mounting ears and crossmember. In some applications you will need to relocate the winch control rods to fully recess the Zacklift. This will be covered in section "E"
3. Cut the tailboard to allow for recessing of the Zacklift. Remember the object is to mount the unit as close to the rear axle as possible for the best weight distribution. The cutout should be centered on the tailboard and have a minimum of 1/2" clearance on both sides of the Zacklift main body.
4. With the tailboard and deck cut out you now have access to reinforce or "box" the mainframe and subframe. Use at least 3/8" material (*not supplied*) This should be done in such a way to tie the mainframe and subframe together. The reinforcement should extend from the tailboard to well in front of the rear axle.

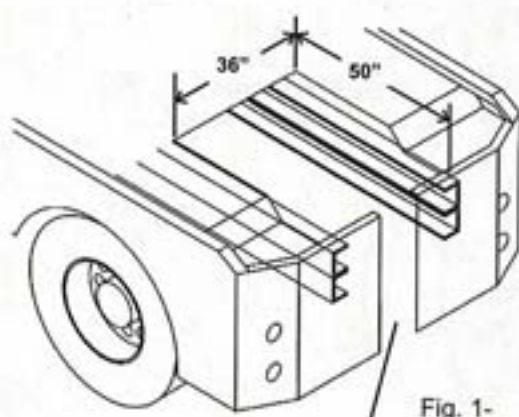
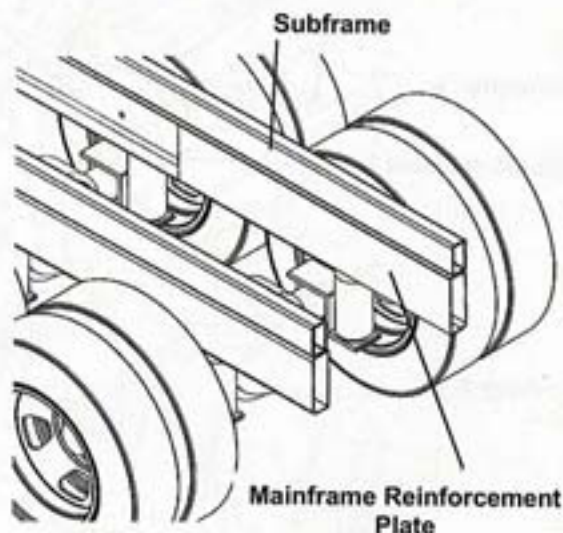


Fig. 1-

Tailboard cutout 1/2" clearance on both sides of Zacklift mainbody



Preparing the bare frame

1. In almost all cases the rear crossmember must be removed, so as to mount the Zacklift as close to the rear axle as possible for the best weight distribution.
2. A subframe must be installed prior to installation of the Zacklift. The subframe should be made of at least 4 x 6 x 3/8" rectangular tubing and should run from the rear end of the frame to at least in front of the rear axles. Ideally the subframe should run all the way to the cab. The subframe should be connected to the mainframe by using plates as in fig. 2-A Welding the subframe to the mainframe is not recommended
3. It is also recommended to reinforce or "box" the mainframe using at least 3/8" plate (*not supplied*) see fig. 2-A

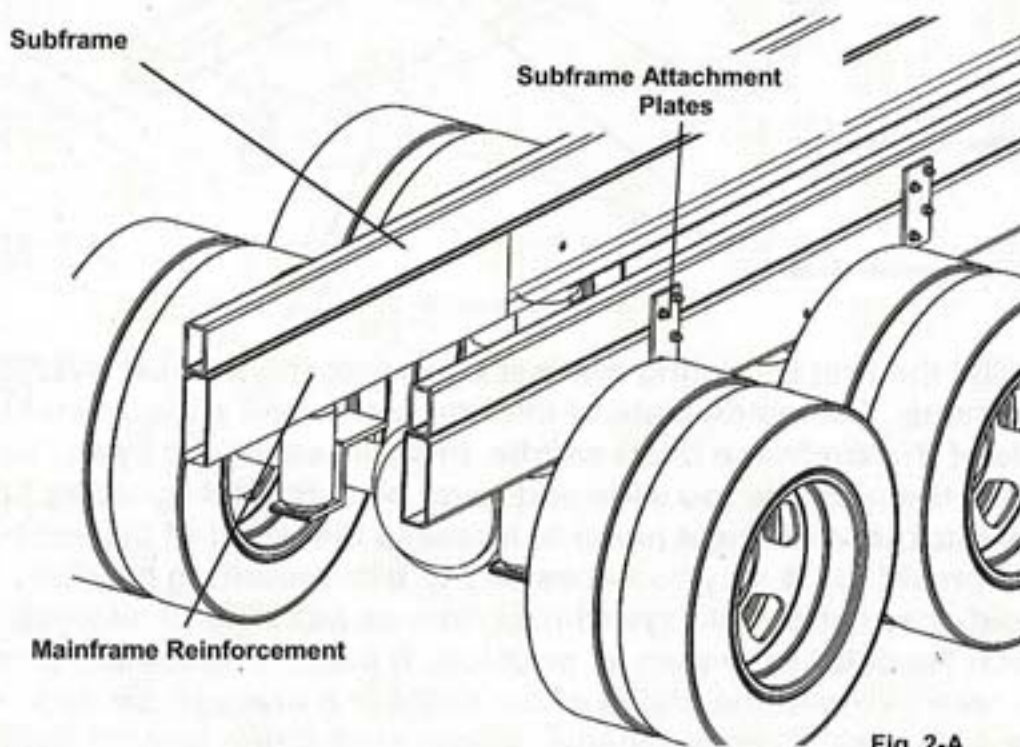
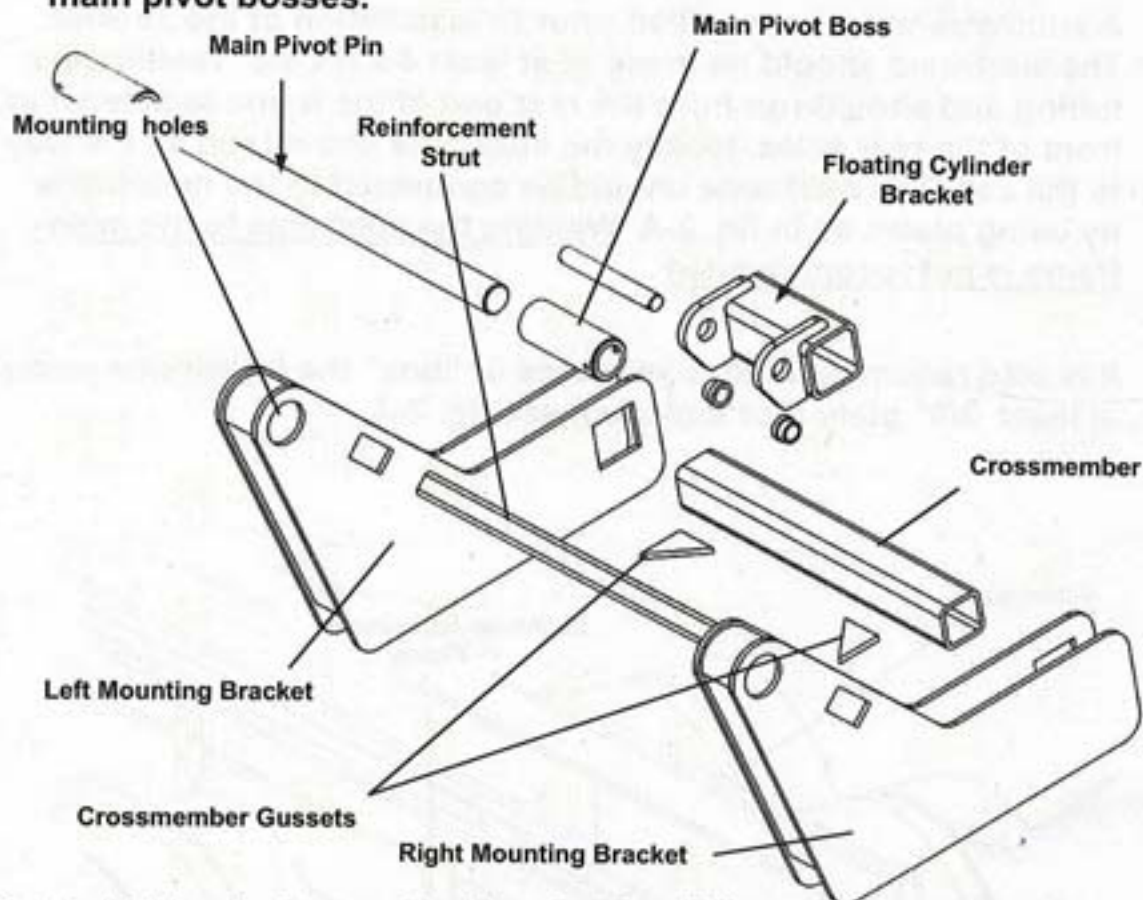


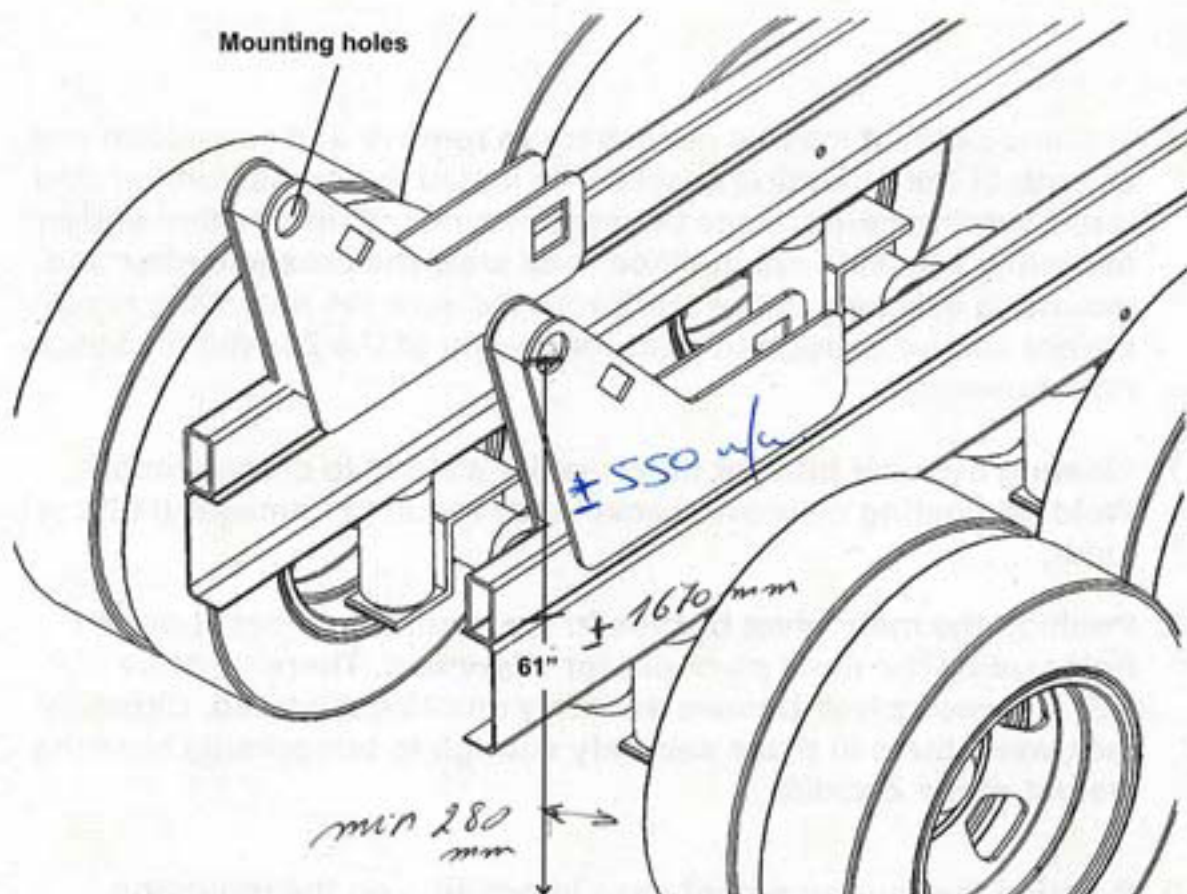
Fig. 2-A

Mounting System

1. The mounting system is made up of six main components, two mounting brackets one left one right, the reinforcement strut, the tilt cylinder crossmember, the crossmember gussets, and the main pivot bosses.



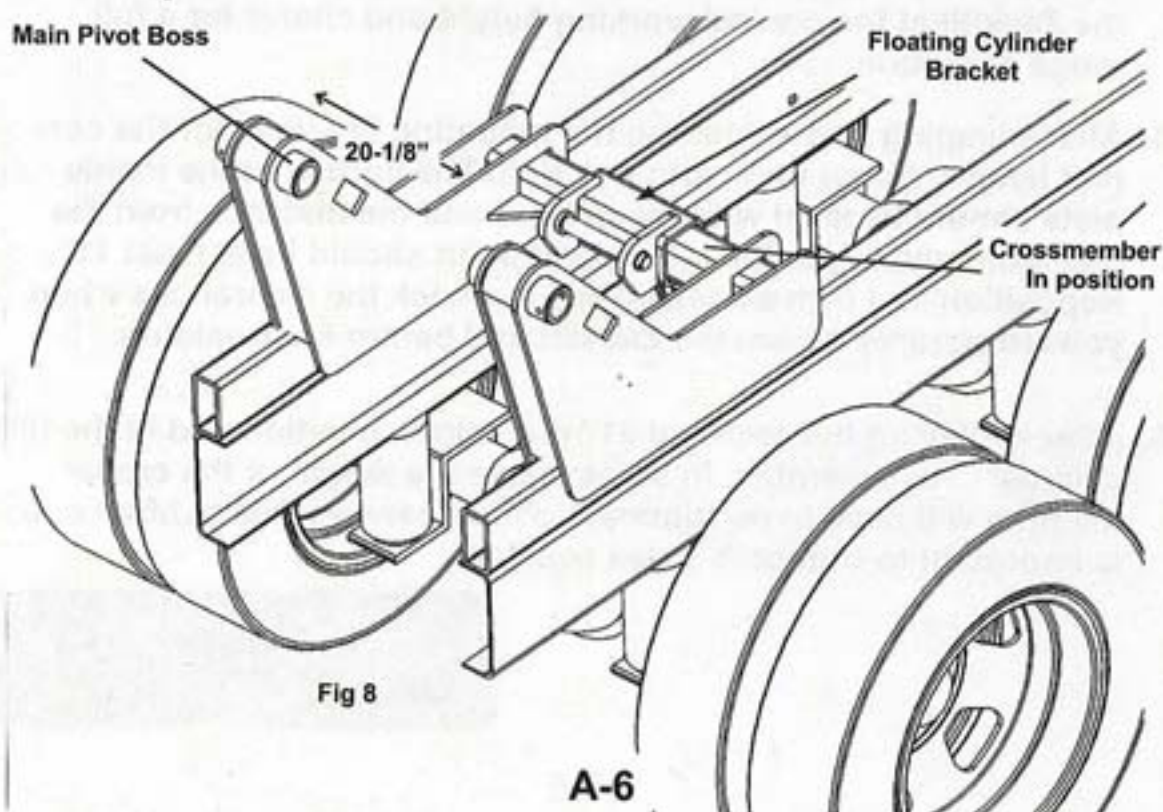
2. Install the first mounting bracket by sliding the bracket over the subframe. The inside plate of the bracket should slide down the inside of the subframe like a saddle. In some cases the space between the plates is too wide and must be shimmed by using various thickness of sheet metal to increase the width of the subframe (not provided). It may be necessary to trim mounting brackets to avoid obstruction. Always trim as little as possible to allow as much "saddle" to remain as possible. It may be necessary to trim the web between the plates of the mounting brackets so as to slip brackets over frame & achieve correct mounting height. Always trim as little as possible.



3. The object of trimming the mounting brackets is to put the center of the main pivot point exactly 61" from ground level. This puts the Zacklift at the correct working height and allows for a full range of motion.
4. After trimming and shimming the mounting brackets for the correct height, clamp them into position. The bottom of the inside plate should be level with the ground and the distance from the rear axle housing to the main pivot point should be at least 11". Reposition and trim as necessary. Recheck the clearances when you temporarily mount the Zacklift and before final welding.
5. After achieving the required 61" pin height, position and fit the tilt cylinder cross member. In some cases the length of the cross-member will have to be trimmed to fit in between the subframe. It is important to trim both sides equally.

IMPORTANT!!!
Check all clearances before final welding!!

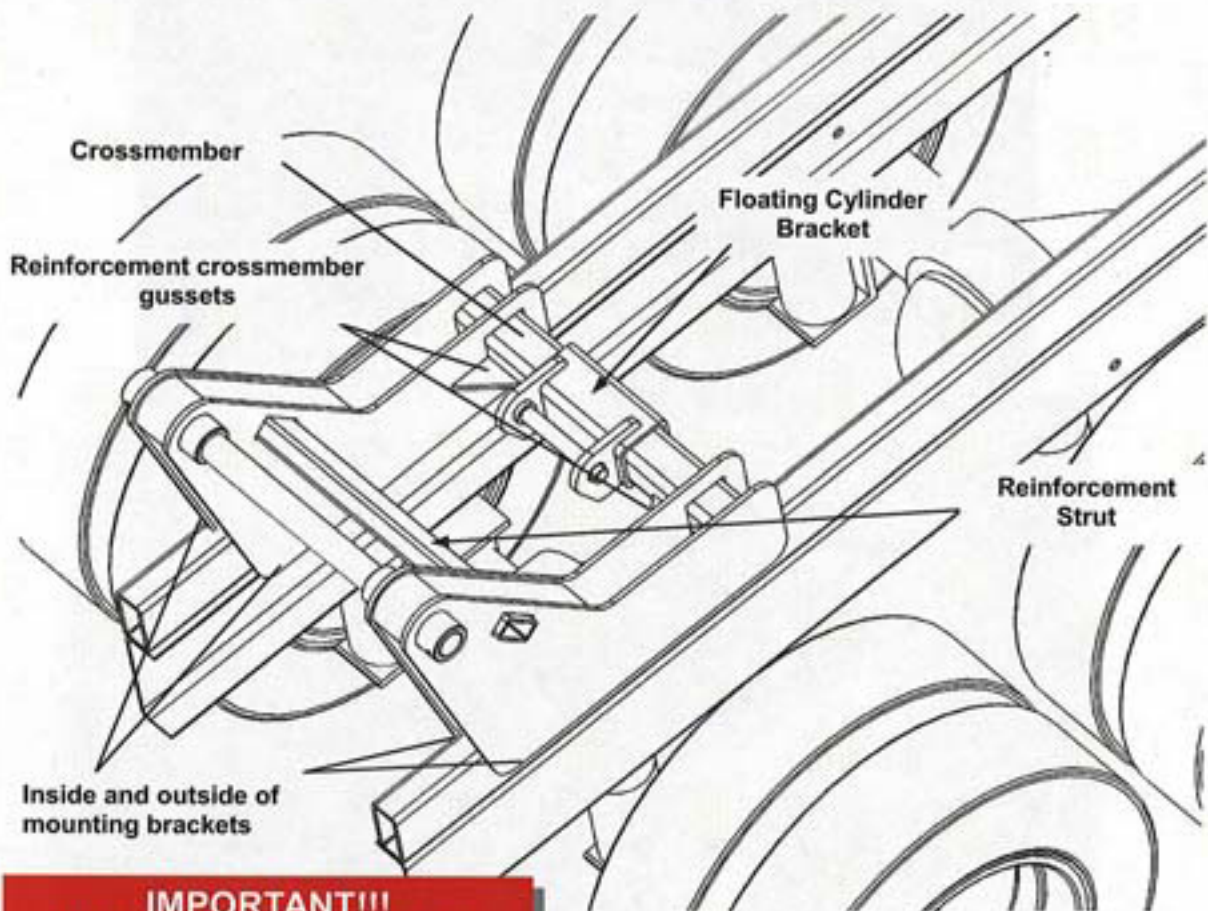
6. In some cases it may be necessary to remove and reposition one or both of the mounting brackets to install the crossmember into the mounting holes. Once the crossmember is in position and the mounting brackets are in place, tack weld the crossmember and mounting brackets to the subframe. Be sure the mounting brackets are secure enough to hold the weight of the Zacklift for temporary mounting.
7. Floating cylinder bracket must not be welded to crossmember. Welding floating cylinder bracket may result in damage to tilt cylinder.
8. Position the main pivot bosses in the mounting bracket pivot holes using the main pivot pin for alignment. There must be 20-1/8" between pivot bosses and they must be centered. Carefully tack weld them in place securely enough to temporarily hold the weight of the Zacklift.
9. Position the reinforcement strut in position on the mounting brackets. Trim to length and tack weld until final welding and assembly.



10. Temporarily mount the Zacklift and the tilt cylinder to the mounting brackets and crossmember. Check for proper clearances. Pay close attention to where the Zacklift is in relation to the rear axle housing, allowing for spring deflection, and where the hydraulic fittings will be located on the outer horizontal. You may want to do more trimming of the tailboard at this time.

11. Remove the Zacklift from the mountings and complete the final welding of the mounting brackets, crossmember, to frame (Not Floating Cylinder Bracket) reinforcement strut and all gussets. When welding in the main pivot bosses you must keep them aligned. It is helpful to keep the pivot pin in place during this process

12. The crossmember must be securely reinforced with gussets to the subframe. This bracing is critical to support the weight of the vehicle in tow on the crossmember.



IMPORTANT!!!
Do not weld floating cylinder
bracket to crossmember!!

Fifthwheeler Installation

Support Bar
Socket

Beam

Upper Tilt Cylinder
Mount

Zacklift Pivot Pin

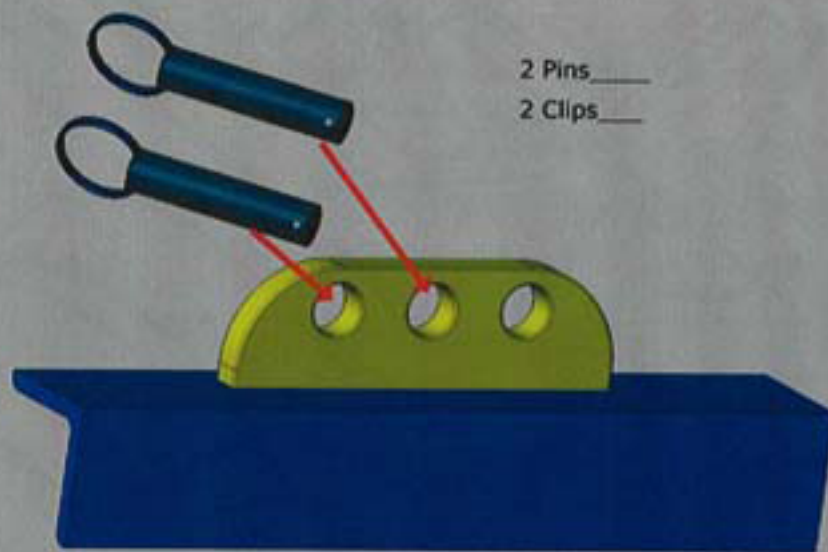
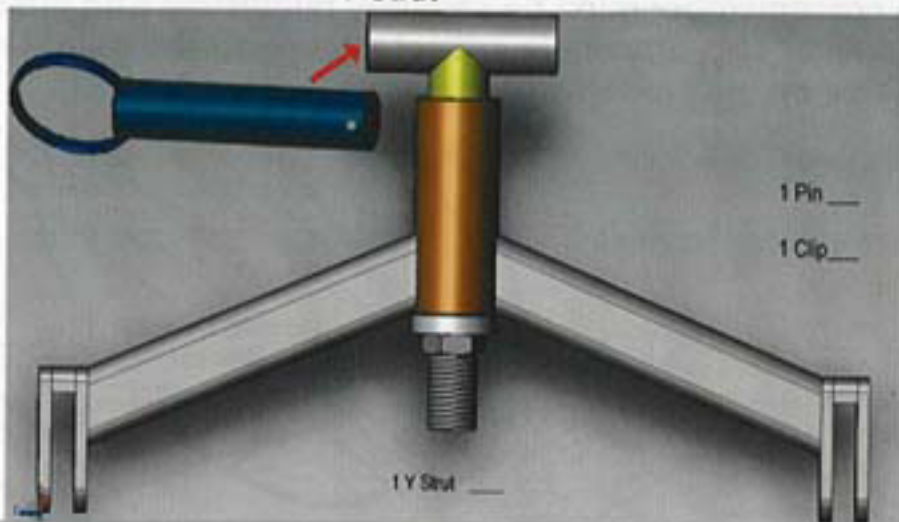
King
Pin

Frame
Clamps

Angle
Pad

Frame width
Adjustment
Bolts

Y-Strut





1. Remove rear crossmember only if needed. **(in rare cases)**
2. Set FIFTHWHEELER beam on truck frame in approximate location.
3. Adjust 5th wheel plate to approximate position.
4. Screw king pin up or down to level the rear angle pad on chassis frame.



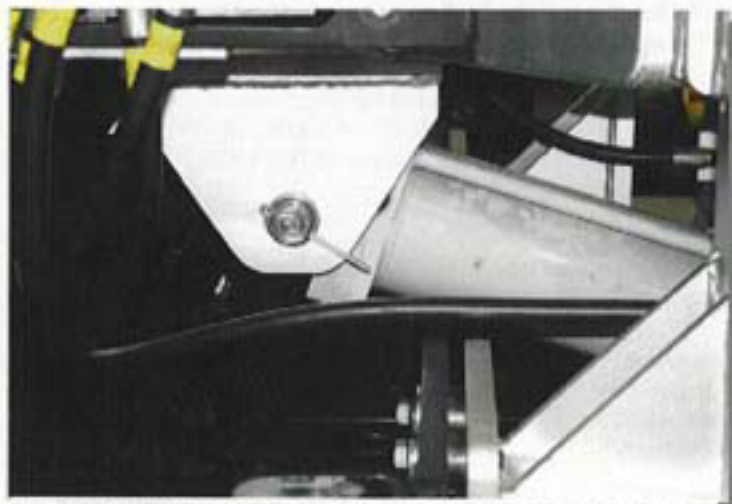
6. Install Y-Strut and frame tab. Frame tab will need to be drilled to match existing holes in frame or make new holes in frame.



5. Slide the entire beam and 5th wheel plate forward or back into approximate position so as the heel of the horizontal section of Zacklift underlift is 10 inches from differential for clearance.



7. Tighten bolts on rear angle pad to truck frame.
8. Fit slotted edge under truck frame. Tighten bolts securely.



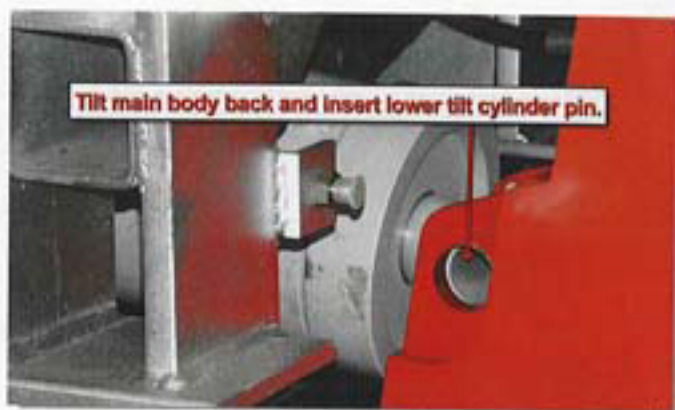
9. Put tilt cylinder into position by pinning at top of cylinder to beam.



10. Remove main pivot pin.



11. Be sure to use bushing (supplied) in Zacklift. Bolt securely.



Tilt main body back and insert lower tilt cylinder pin.

12. Put tilt cylinder into position by pinning.



Connect hoses to cylinders. All hoses are marked for correct connection.

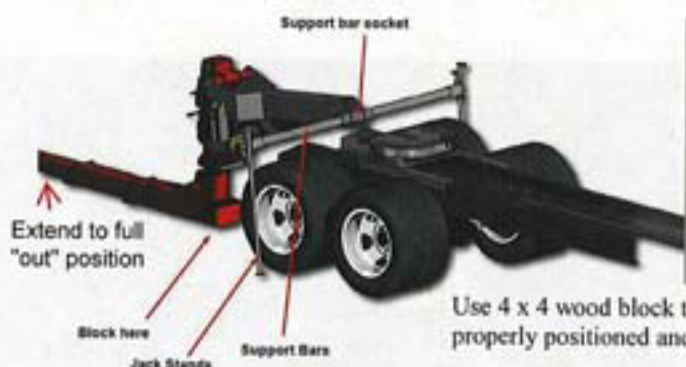
13. Connect all hoses. All are marked for proper installation.

Removal of FIFTHWHEELER



1. To remove FIFTHWHEELER loosen frame clamps.
 2. Extend horizontal section of Zacklift to full out position.
 3. Block unit under horizontal main. (see illustration)
 4. Use "down" function to lift FIFTHWHEELER beam slightly above truck frame.
 5. Pull king pin latch.
 6. Use "tilt" function to lift front of FIFTHWHEELER beam.
 7. Disconnect all hydraulics, air and electrical connections.
 8. Carefully stabilize FIFTHWHEELER with supplied supports (see page K-5 for view of supplied supports) to secure it in an upright position to prevent tipping when vehicle is re-moved.
- WARNING FAILURE TO STABILIZE FIFTHWHEELER COULD RESULT IN SERIOUS INJURY OR DEATH.**

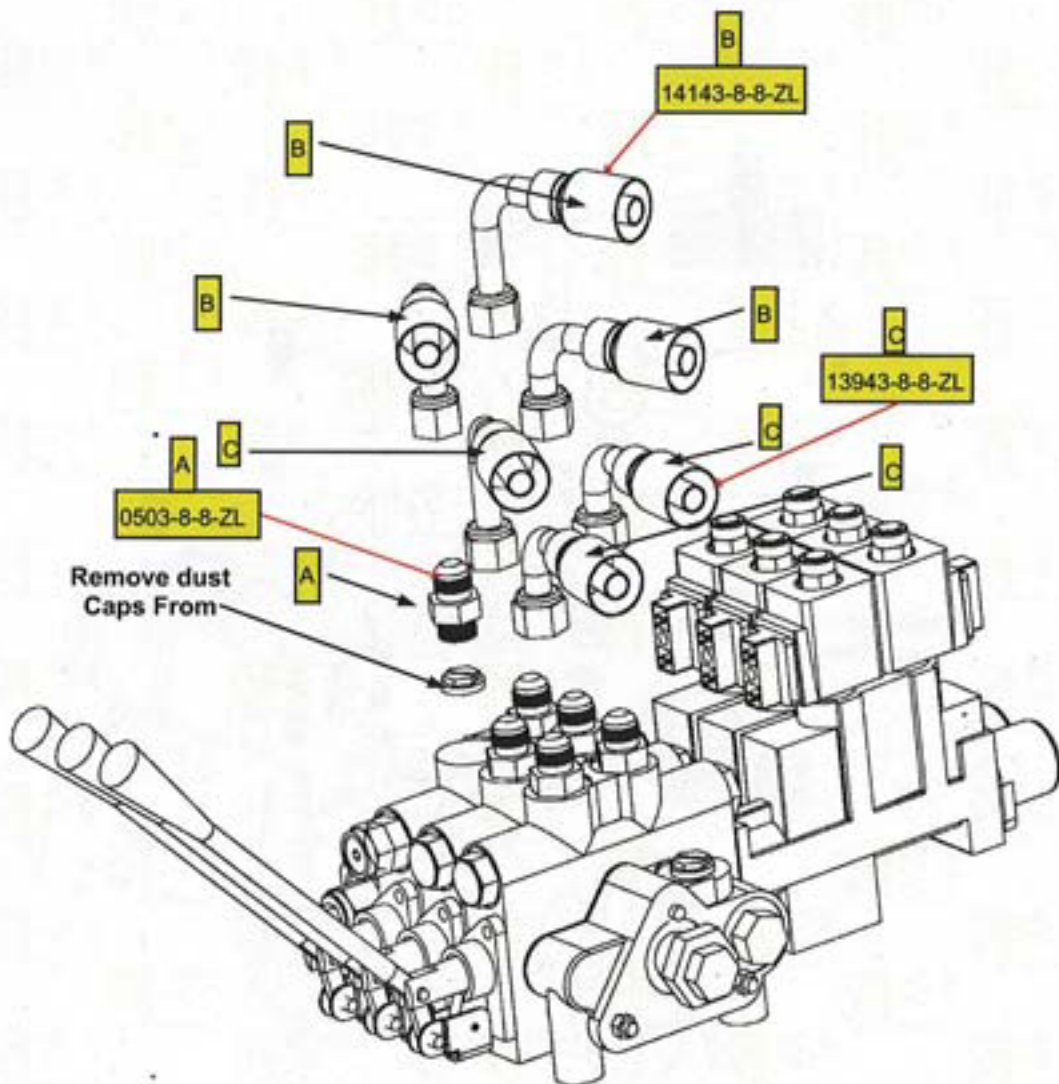
Jack Stands Installation



Use 4 x 4 wood block to support horizontal tube. CAUTION Jack Stands must be properly positioned and secured before driving out from under FIFTHWHEELER.

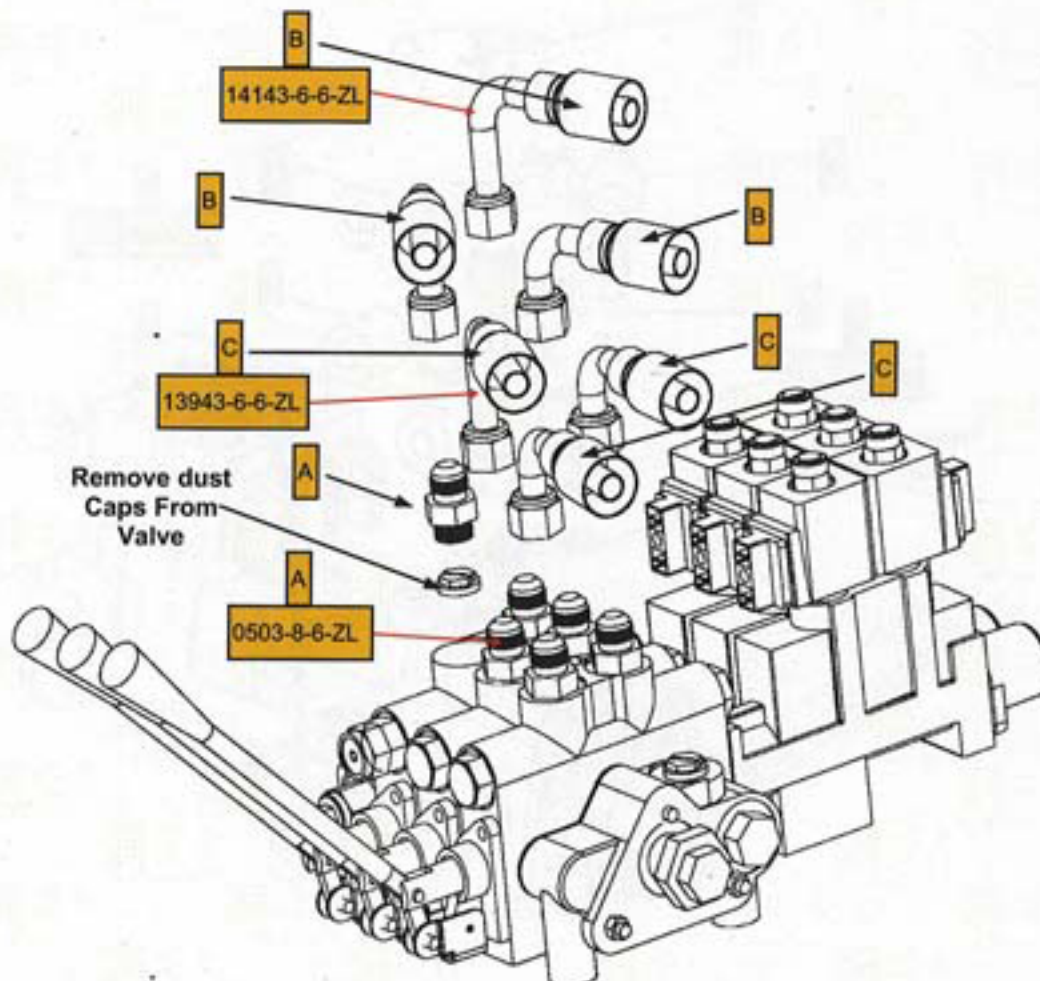
Insert support bars into support bar socket. Support bar socket is located on FIFTHWHEELER beam near the front ratchet binders. Slide Jack Stands over ends of support bars. Crank Jack Stands up as far as needed to clear truck frame. Release king pin and loosen clamp on angle pad. Remove chain from ratchet binders before driving out from under FIFTHWHEELER.

Hydraulic Fittings 403



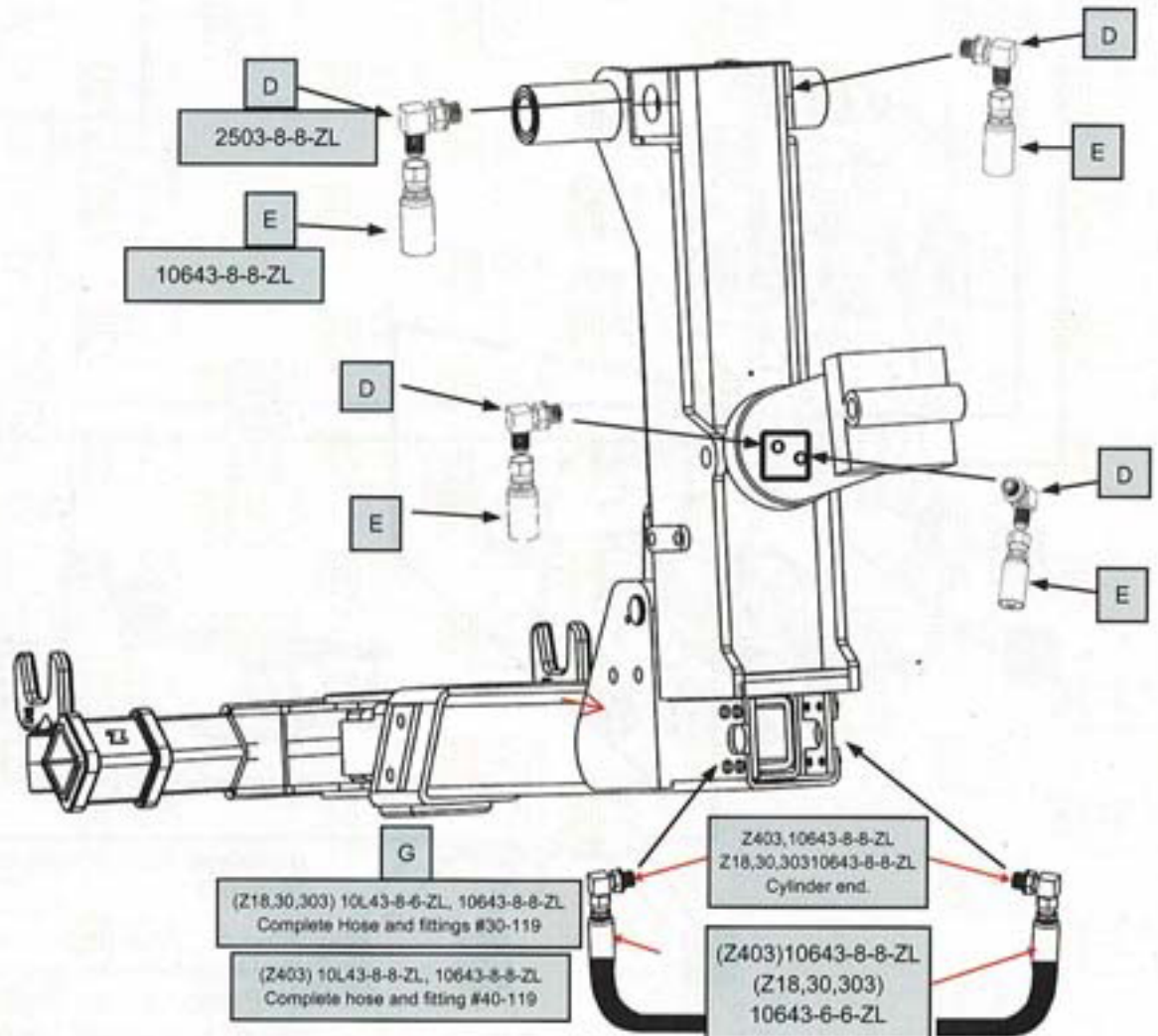
	Amount	Part #	Description
A	6	0503-8-8-ZL	Male Tube / O ring
B	3	14143-8-8-ZL	Swivel Female Bent Tube SAE Thread
C	3	13943-8-8-ZL	Swivel Female Bent Tube SAE Thread

Hydraulic Fittings 18/30/303



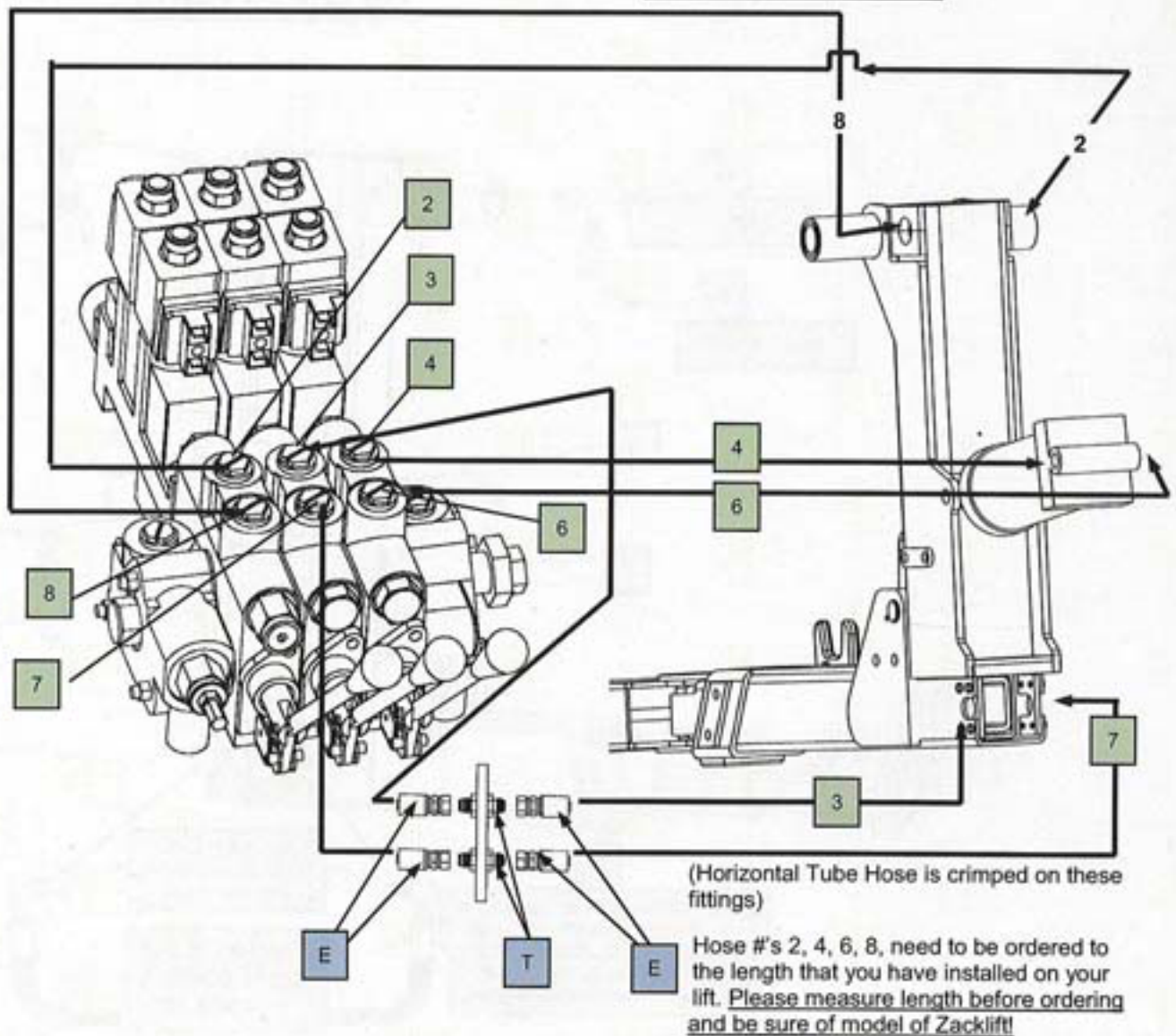
Amount		Part #	Description
A	6	0503-8-6-ZL	Male Tube / O ring
B	3	14143-6-6-ZL	Swivel Female Bent Tube SAE Thread
C	3	13943-6-6-ZL	Swivel Female Bent Tube SAE Thread

Hydraulic Fittings 18/30/303/403



403	Amount	Part #	Description
D	4	2503-8-8-ZL	Male Tube O-Ring
E	4	10643-8-8-ZL	Swivel Female SAE Thread
G	2	(#40-119) 10L43-8-8-ZL, 10643-8-8-ZL	Stinger Hose and Fittings Complete
18/30/303			
D	4	2503-6-6-ZL	Male Tube O-Ring
E	4	10643-6-6-ZL	Swivel Female SAE Thread
G	2	(#30-119) 10L43-8-6-ZL, 10643-8-8-ZL	Stinger Hose and Fittings Complete

Hydraulic Hose Connections 18/30/303/403



	Amount	Part#	Description
E	4	(Z403) 10643-6-6-ZL, (Z18,30,303) 10643-6-6-ZL	Swivel Female SAE Thread
T	2	(Z403) 0353-8-8-ZL, (Z18,30,303) 0353-6-6-ZL	Male Tube Bulkhead
8	Lower fold function		
2	Raise unfold function		
3	Extend In		
7	Extend out		
4	Tilt up function		
6	Tilt down function		

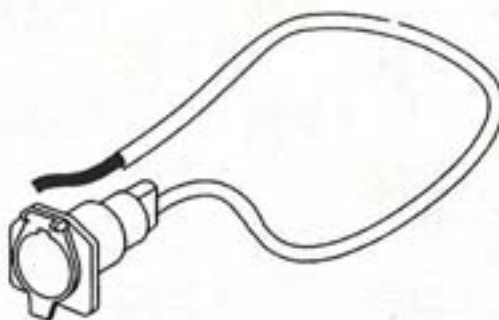
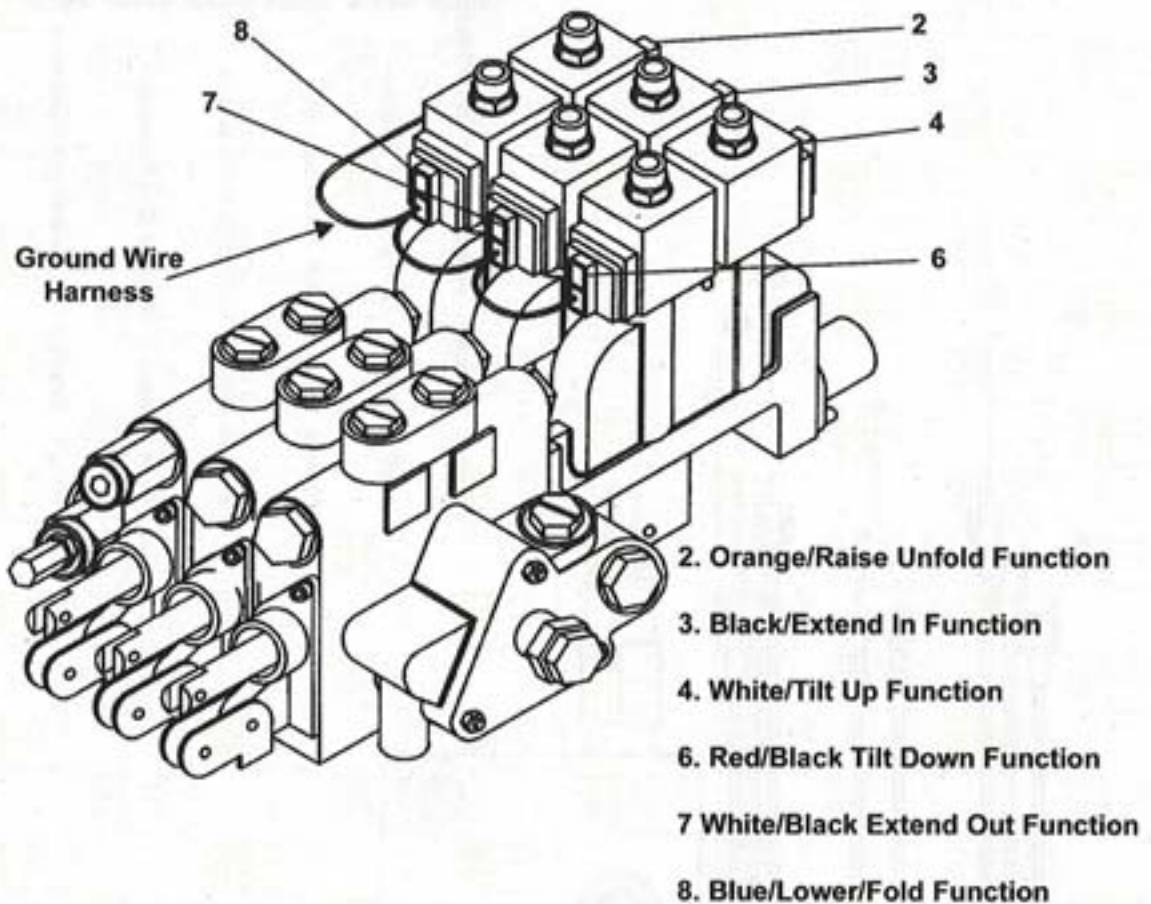
Hydraulic Parts

Item#	Description
Z403 Fifthwheeler E35/F75 Valve	
5503-8-8-ZL	Male Tube / O-ring
2503-8-8-ZL	Male Tube / O-ring
0103-8-8-ZL	Pipe to Tube
0103-8-6-ZL	Pipe to Tube
NS-501-8FP-ZL	Quick Coupler
NS-502-8FP-ZL	Quick Coupler
NS-371-6FP-ZL	Quick Coupler
NS-372-6FP-ZL	Quick Coupler
0153-8-8-ZL	Bulkhead Connector
0503-8-10-ZL	Bulkhead Fitting
0153-6-6-ZL	Bulkhead Connector
0503-8-8-ZL	Valve Fitting
8-8 WFTX-WLN-S-ZL	Bulkhead Fitting
6-6 WFTX-WLN-S-ZL	Bulkhead Fitting
13943-8-8-ZL	Crimped hose fitting
10643-8-8-ZL	Crimped hose fitting
14143-8-8-ZL	Crimped hose fitting
10643-8-8-ZL	Crimped hose fitting
301-8-ZL	1/2" R2 Hydraulic hose per ft.
301-6	3/8" R2 Hydraulic hose per ft.
Z18/30/303 Fifthwheeler E35/F75 Valve	
2503-8-6-ZL	Male Tube / O-ring
0353-6-6N-ZL	Bulkhead & Nut
0503-8-6-ZL	Male Tube / O-ring
0503-10-6-ZL	Male Tube / O-ring
0503-10-8-ZL	Male Tube / O-ring
NS-501-8FP-ZL	Quick Couplers
NS-502-8FP-ZL	Quick Couplers
NS-371-6FP-ZL	Quick Couplers
NS-372-6FP-ZL	Quick Couplers
8-8 WFTX-WLN-S-ZL	Bulkhead Connector
0103-6-6-ZL	Male Tube / O-ring
6-6 WFTX-WLN-S-ZL	Bulkhead Connector
0103-8-8-ZL	Male Tube / O-ring
13943-6-6-ZL	Crimped hose fitting
10643-6-6-ZL	Crimped hose fitting
14143-6-6-ZL	Crimped hose fitting
10L43-6-8-ZL	Crimped hose fitting
13943-8-8-ZL	Crimped hose fitting
10643-8-8-ZL	Crimped hose fitting
301-8-ZL	1/2" R2 Hydraulic hose per ft.
301-6	3/8" R2 Hydraulic hose per ft.

Hydraulic Parts

Item#	Description
Z18/30/303 Fifthwheeler 12 Volt	
2503-8-6-ZL	Male Tube / O-ring
0353-6-6-ZL	Male Tube / O-ring
5503-6-6-ZL	Male Tube / O-ring
0503-6-6-ZL	Straight
13943-6-6-ZL	Crimped hose fitting
10643-6-6-ZL	Crimped hose fitting
14143-6-6-ZL	Crimped hose fitting
10L43-8-6-ZL	Crimped hose fitting 90 deg. RC
301-8-ZL	1/2" R2 Hydraulic hose per ft.
301-6	3/8" R2 Hydraulic hose per ft.
Z18/30/303 E35/F75 Valve Stationary Mount	
0503-8-6-ZL	Male Tube / O-ring
2503-8-6-ZL	Male Tube / O-ring
0353-6-6-ZL	Male Tube / Bulkhead
53N-6-ZL	Lock Nut
13943-6-6-ZL	Crimped hose fitting
10643-6-6-ZL	Crimped hose fitting
14143-6-6-ZL	Crimped hose fitting
10L43-8-6-ZL	Crimped hose fitting 90 deg. RC
301-8-ZL	1/2" R2 Hydraulic hose per ft.
301-6	3/8" R2 Hydraulic hose per ft.
Z403 E35/F75 Valve Stationary Mount	
0503-8-8-ZL	Male Tube / O-ring
2503-8-8-ZL	Male Tube / O-ring
5503-8-8-ZL	Male Tube / O-ring
0353-8-8-ZL	Male Tube / O-ring
53N-8-ZL	Lock Nut
13943-8-8-ZL	Crimped hose fitting
10643-8-8-ZL	Crimped hose fitting
14143-8-8-ZL	Crimped hose fitting
10L43-8-8-ZL	Crimped hose fitting 90 deg. RC
301-8-ZL	1/2" R2 Hydraulic hose per ft.
301-6	3/8" R2 Hydraulic hose per ft.

Wires from Female Socket & Harness



**Female Socket & Harness
For Hand Held Control**

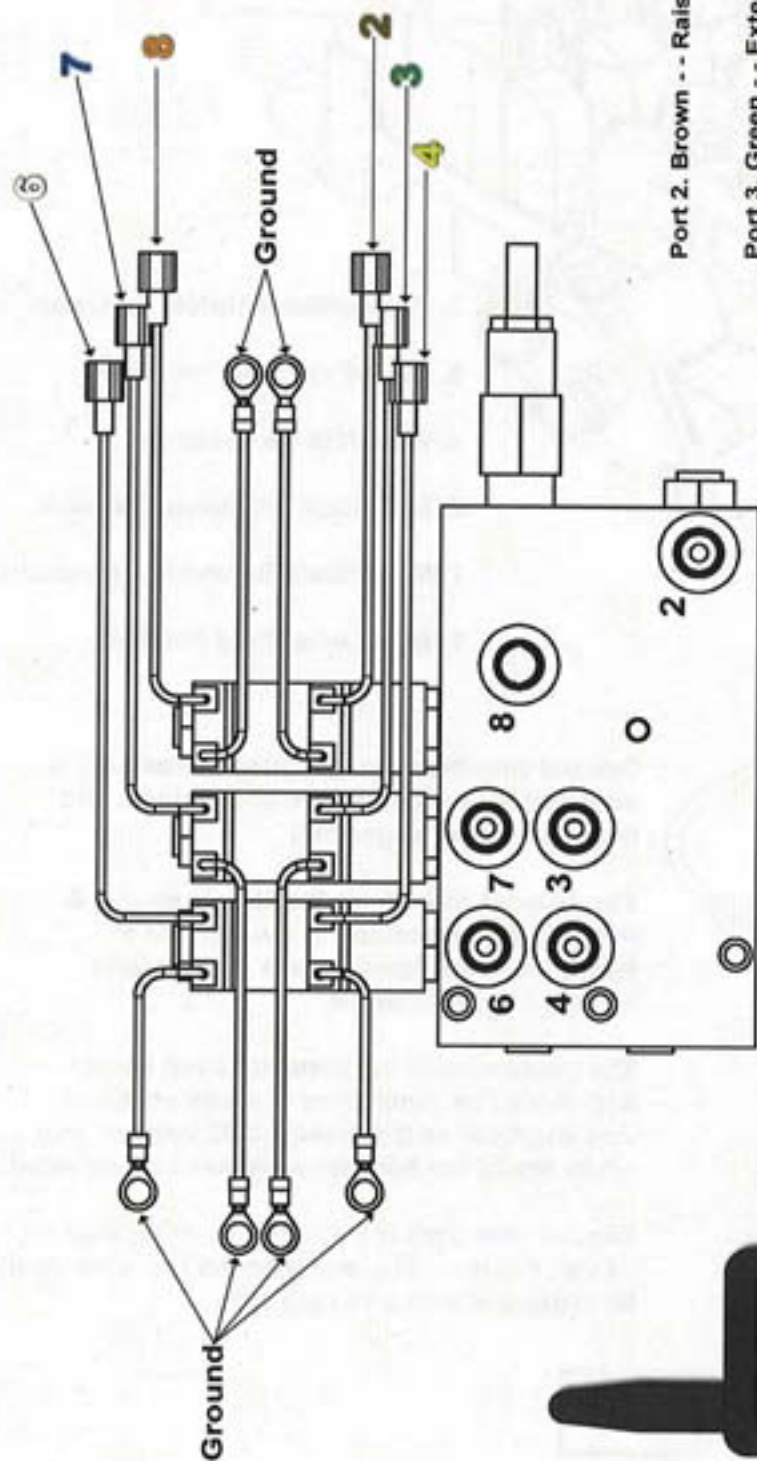
Ground wire harness (supplied in hose kit) is attached to the bottom row of terminals and then connected to ground.

The colored wires from the female socket & harness are connected to the top row of terminals using female quick disconnects included in the hose kit.

The green wire of the harness is not used, and should be terminated in a way so it will not short out as it becomes a 12 volt hot wire when any of the function switches are activated.

The red wire from the harness is connected to 12 volt Positive. The power to the red wire should be protected with a 10 amp fuse.

Wireless remote wiring to 12 Volt Power System



Port 2. Brown -- Raise/Unfold Function



Port 3. Green -- Extend In Function



Port 4. Yellow -- Tilt Up Function



Port 6. White -- Tilt Down Function



Port 7. Blue -- Extend Out Function

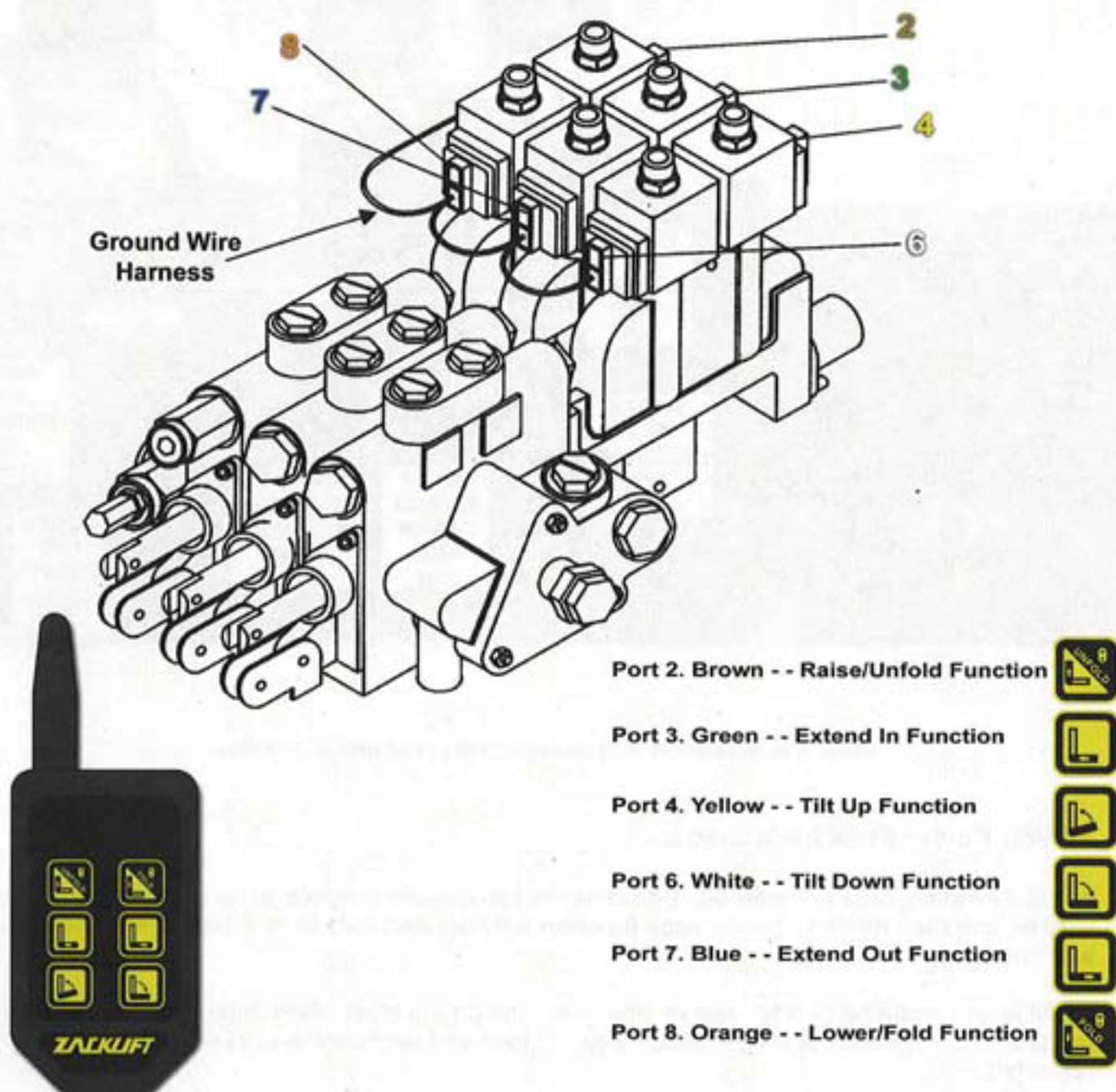


Port 8. Orange -- Lower/Fold Function

(Transmitter will be found inside receiver box.)

Gray wire to small stud on starter solenoid. **Red wire** to power side of starter solenoid mounted on motor with inline 10 amp fuse. Black wire to ground along with ground wires from coils.

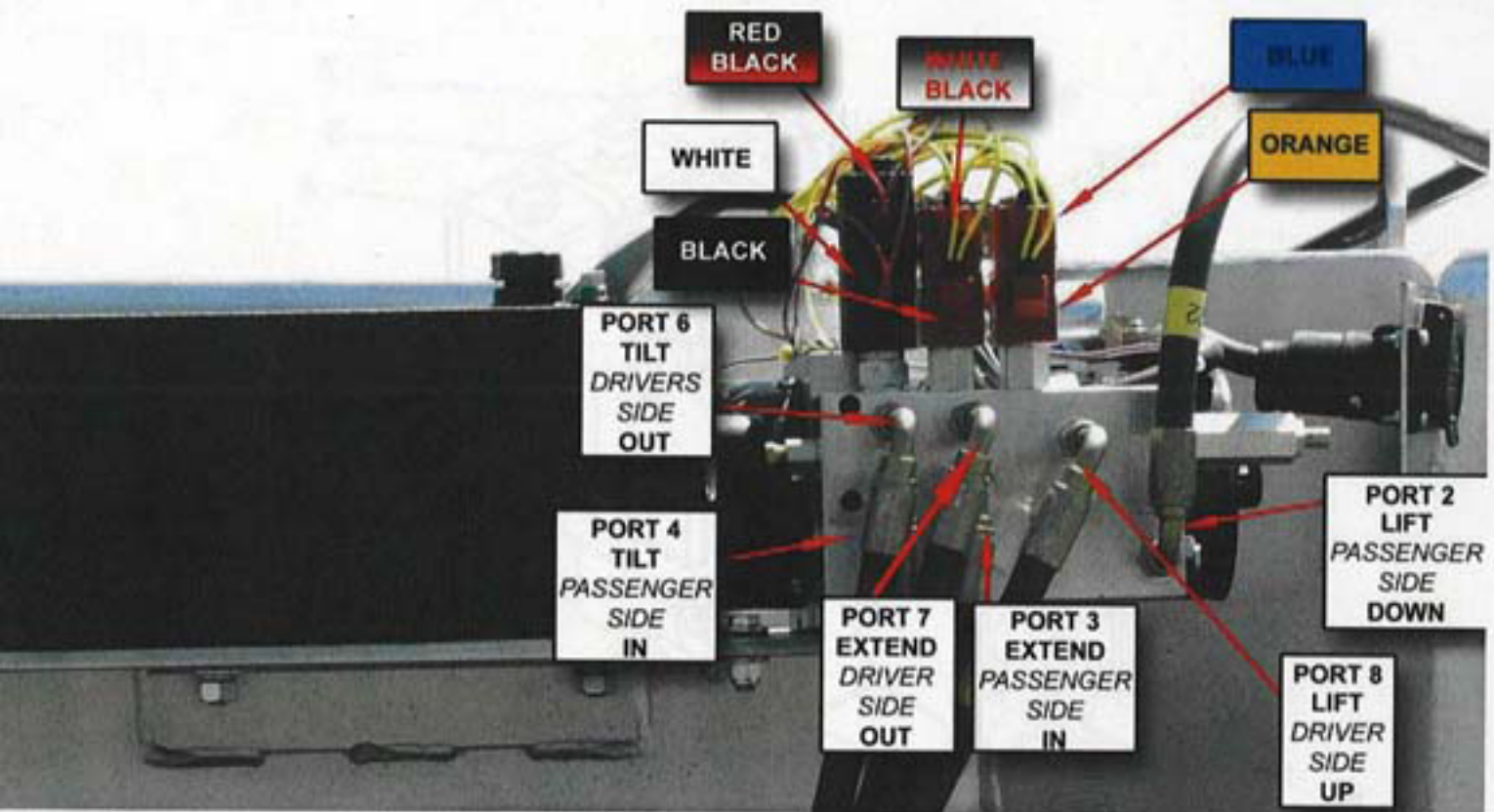
Wireless remote wiring to E35 Valve



(Transmitter will be found inside receiver box.)

Tape off Gray wire, it is not needed. **Red Wire** to 12 volt power with 10 amp fuse. Black wire to ground along with ground wires from valve coils.

12 Volt Valve Body Wiring & Porting

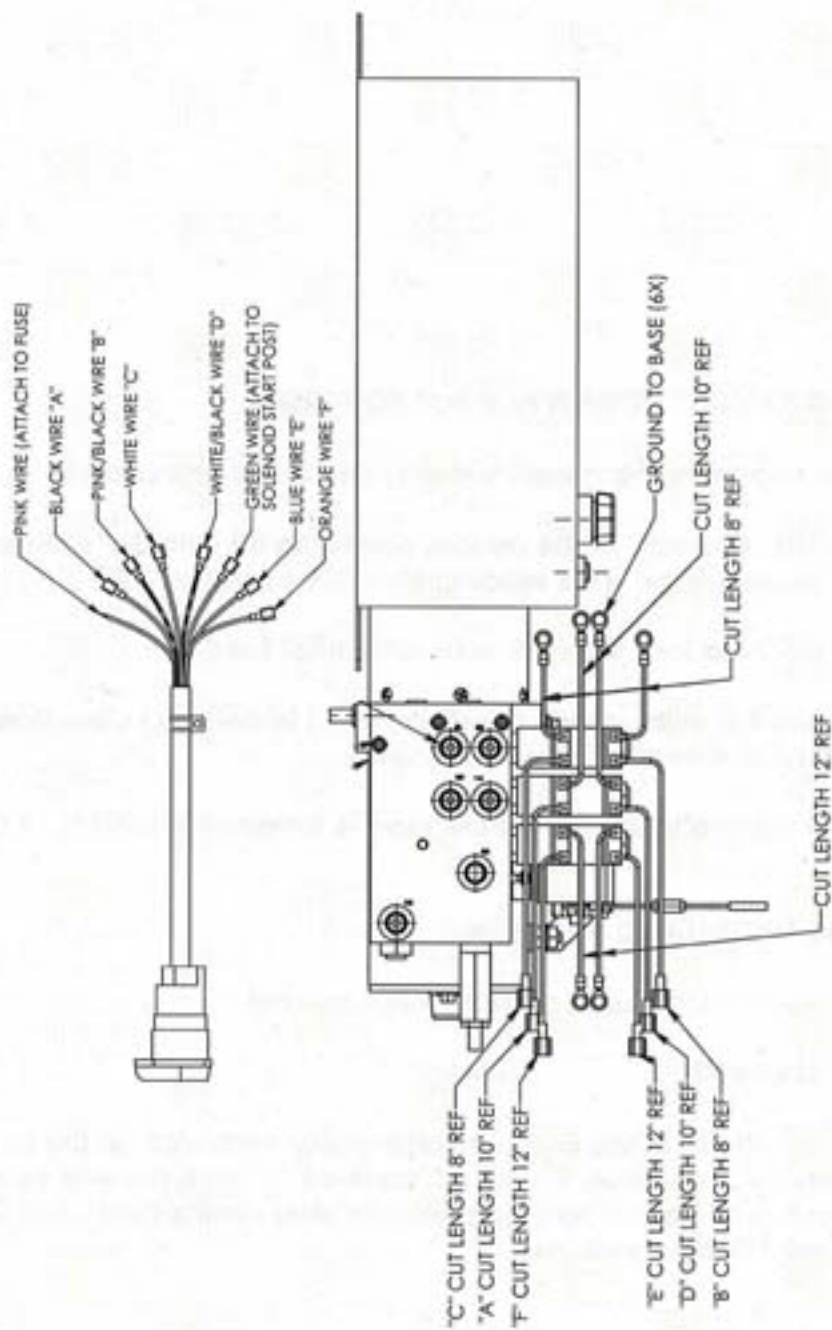


Green wire to solenoid. Red wire to 12 volt power with 10 amp fuse.

12 Volt Power Pack Installation

- A. Fill hydraulic reservoir with oil. Unit must be run in each function to fill cylinders and liners with oil and then refilled. Stroke each function fully out and fully in to expel air from cylinders and lines.
- B. Oil level should be $\pm 5/16$ " above maximum line on dip stick when 1) tilt cylinder is fully retracted, 2) Lift cylinder is fully lifted up into "J" lock and unfolded, and 3) extend cylinder is fully retracted.
- C. The 12 Volt Power Pack can draw up to 300 amps in extreme conditions and requires all cables, connectors, lugs, etc. to be capable of handling this current load. Only use 2 gauge cable.

MCH 12 Volt Power Pack Wiring Diagram



12 Volt Valve Body Wiring & Porting Troubleshooting

TROUBLESHOOTING 12 VOLT POWER SUPPLY TO PUMP:

1. Connect voltmeter to positive terminal (hotwire) on 12 volt power pack.
2. Operate the "lift – UP" function of the remote control to lift cylinder's "dead-end". Take reading on pressure gauge. This reading should be 2500 to 2600 psi.
3. Voltmeter should not read less than 9-6 volts under full load.
4. If voltage is less than 9-6 volts, check condition of a.) battery, b.) cleanliness and soundness of terminals, c) length and diameter of battery cables.
5. Perform above test with voltmeter connected to the terminal of battery (AT BATTERY).

TROUBLESHOOTING HYDRUALIC PRESSURE

1. Be sure all of the above installation requirements are met.
2. Run same test as above #2
3. If 2500 psi cannot be attained, the pressure relief valve cartridge on the underside of pump body will require MINIMAL adjusting. To adjust, back off ½" lock nut and screw 1/8" Allen screw in by ¼ turn increments at a time, checking pressure after each adjustment until pressure relief valve is set at 2500 psi. Tighten lock nut.

Troubleshooting 12 volt pump installation

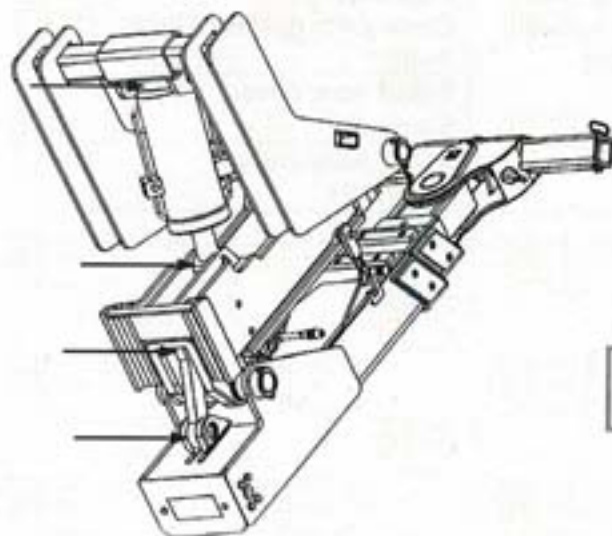
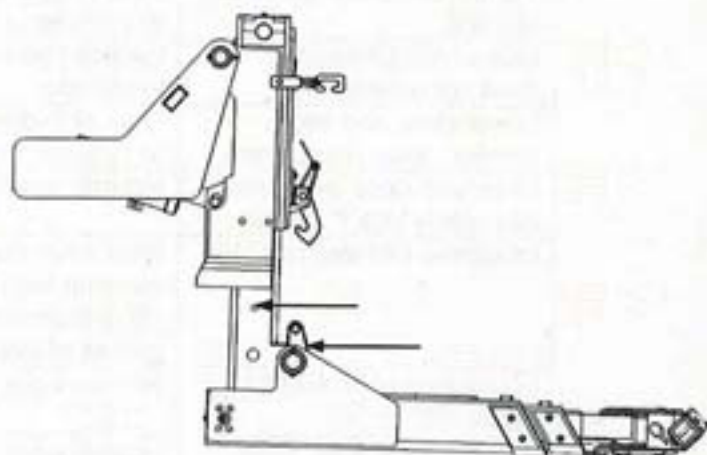
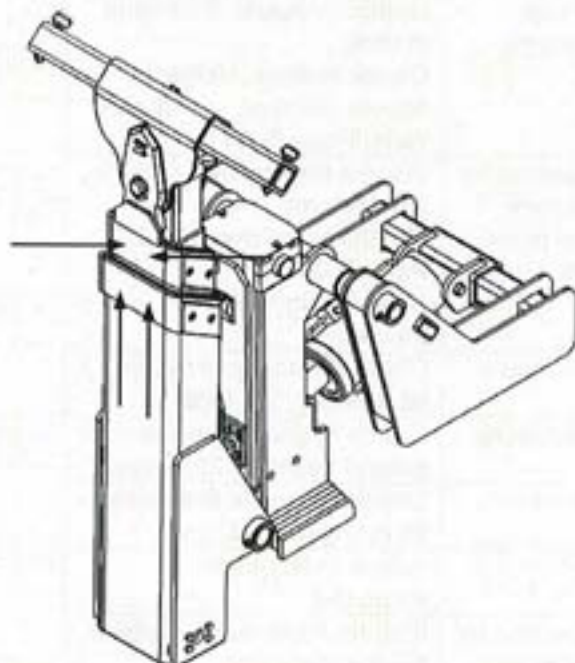
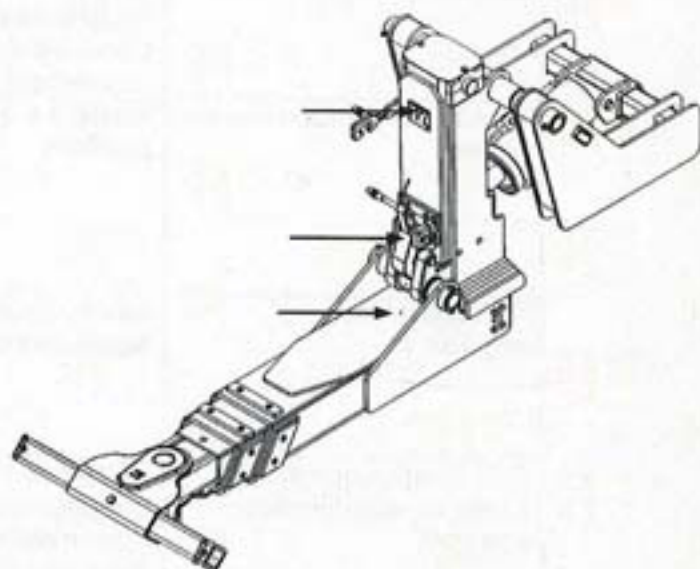
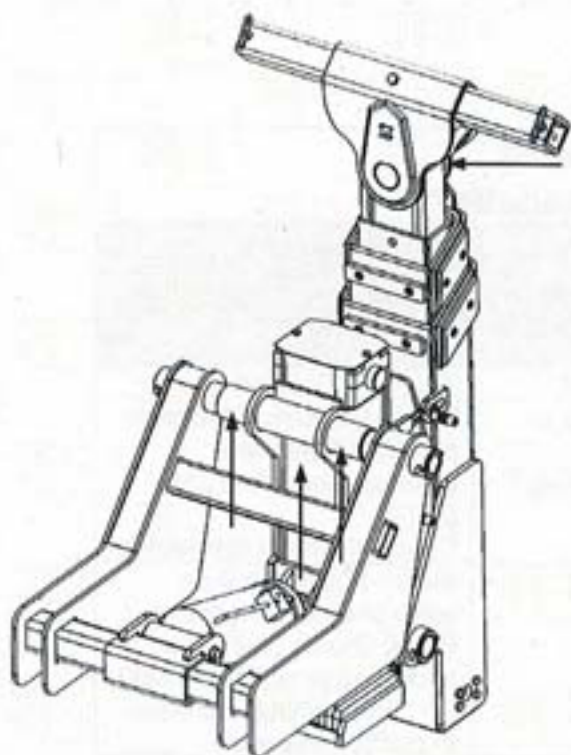
Nearly all problems are caused by incorrect hydraulic connections. Always double check your connections to the valve. Page E-2

Symptom	Possible Cause	Solution
No Zacklift functions operate	No hydraulic pressure to Zacklift. Insufficient power supply. Corroded electrical connections.	Check for correct hydraulic pressure from valve pressure should be 2500 psi Check electrical connection
Zacklift "lift" function has no power.	Hoses 8 & 2 in wrong positions	Switch hoses 8 & 2 on valve body of lift cylinder. Port 8 should only have maximum pressure of 1000 psi. Port 2 should be equal to pump pressure
All Zacklift functions sluggish	Low hydraulic flow rate. Insufficient power supply	Check hydraulic fluid level in tank. Check voltage. Voltage should not read less than 9 volts. Page B-11
Fold function operates. Lower or raise function does not.	Bent inner main. Caused by carrying load out of lock Inner main rusted in place. Wear pad adjustment to tight.	Inspect Inner main, replace if necessary. Maintain to prevent rust. Page E-2 Adjust wear pads. Section D
Tilt function does not operate.	Lack of hydraulic pressure to cylinder	Check hydraulic pressure to tilt cylinder. 2500 psi.
Extend retract function does not operate.	Lack of hydraulic pressure to cylinder	Check hydraulic pressure to extend cylinder. 2500 psi.
Lower raise and fold function does not operate.	Lack of hydraulic pressure to cylinder	Check hydraulic pressure to lift cylinder. 2500 psi.
Unable to raise inner main into safety lock ("J" lock)	Normal wear	Adjust safety lock Page D-4
Unable to fold into fold lock	Bent inner main. Caused by carrying load out of lock Dirt accumulation in roller guides of inner main	Inspect Inner main, replace if necessary. Clean roller guides of inner main.
Looseness of horizontal members	Normal wear	Adjust wear pads. Section D
Looseness of inner main	Normal wear	Adjust wear pads. Section D

Routine Maintenance



Arrows indicate location of zerk fittings. Grease all fittings frequently for safe operation and long life. In adverse weather conditions it is recommended that greasing be done more frequently.



F-1

Wear Pad Identification

Main body/Inner Main/Z18,30,303,403

Z18:

Part # Z1304-40b (7/8 x 5/8" round Nylatron, 6 per main tube)
 Z1-17a (5/8 x 4 x 5" flat Nylatron, 1 per main tube)
 Z1-24 (1/4 x 4 x 5-1/8" flat Nylatron, 1 per inner main)
 Z1-23 (1/4 x 2 x 5-1/8" flat UHMW, 3 per inner main)
 Z1304-38 Plug (6 per main body)

Z30:

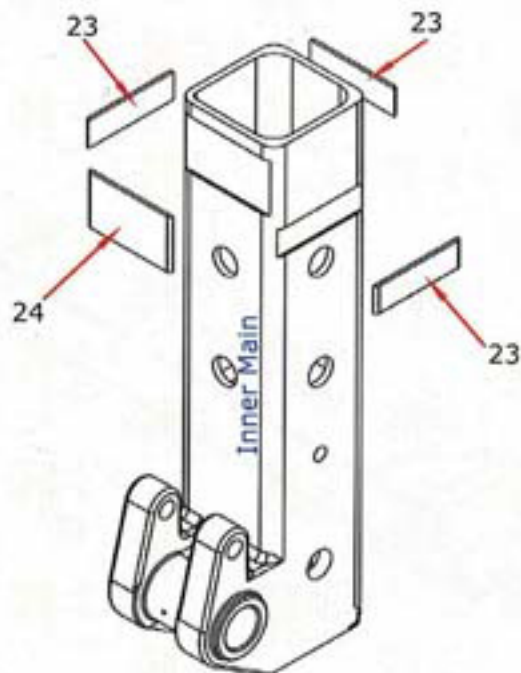
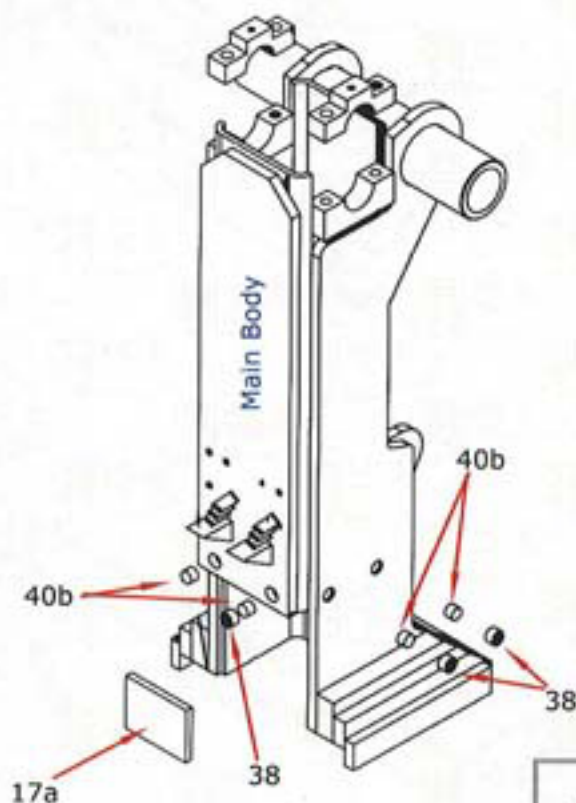
Part # Z1304-40b (7/8 x 5/8" round Nylatron, 6 per main tube)
 Z30-17a (5/8 x 4 x 6" flat Nylatron, 1 per main tube)
 Z30-24 (1/4 x 4 x 6-1/8" flat Nylatron, 1 per inner main)
 Z30-23 (1/4 x 2 x 6-1/8" flat UHMW, 3 per inner main)
 Z1304-38 Plug (6 per main body)

Z303:

Part # Z1304-40b (7/8 x 5/8" round Nylatron, 6 per main tube)
 Z30-17a (5/8 x 4 x 6" flat Nylatron, 1 per main tube)
 Z30-24 (1/4 x 4 x 6-1/8" flat Nylatron, 1 per inner main)
 Z30-23 (1/4 x 2 x 6-1/8" flat UHMW, 3 per inner main)
 Z1304-38 Plug (6 per main body)

Z403:

Part # Z1304-40b (7/8 x 5/8" round Nylatron, 6 per main tube)
 Z4-17a (5/8 x 4 x 7" flat Nylatron, 1 per main tube)
 Z4-24 (1/4 x 4 x 7-1/4" flat Nylatron, 1 per inner main)
 Z4-23 (1/4 x 2 x 7-1/4" flat UHMW, 3 per inner main)
 Z1304-38 Plug (6 per main body)



F-2

Wear Pad Identification

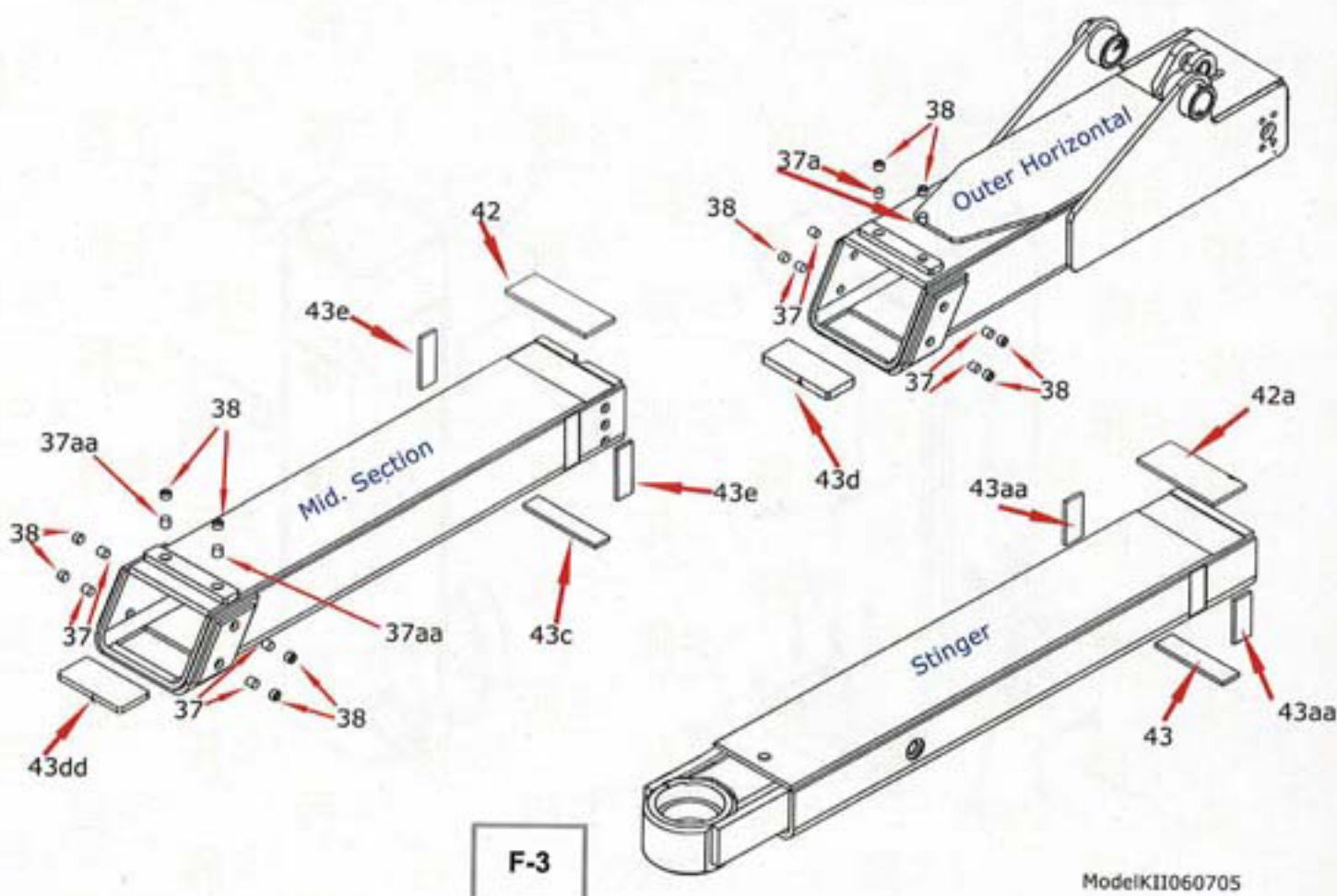
Outer Horizontal/Mid. Section/Stinger/Z303,403

Z303:

- Part #** Z0-37 (7/8 x 1" round Nylatron, 4 per mid section & 4 per outer horizontal)
 Z0-37a (7/8 x 3/4" round Nylatron, 2 per outer horizontal)
 Z0-37aa (7/8 x 5/8" round Nylatron, 2 per mid. section)
 Z1304-38 Plug (5 per outer horizontal & 6 per mid. section)
 Z04-42 (3/8 x 4 x 11-1/2" flat Nylatron, 1 per mid. section)
 Z04-42a (3/8 x 4 x 10" flat Nylatron, 1 per stinger)
 Z04-43 (3/8 x 1-7/8 x 8-1/2" flat Nylatron, 1 per stinger)
 Z04-43aa (3/8 x 1-7/8 x 5" flat UHMW, 2 per stinger)
 Z04-43c (3/8 x 1-7/8 x 9-1/2" flat Nylatron, 1 per mid. section)
 Z04-43d (1/2 x 4 x 10" flat Nylatron, 1 per outer horizontal)
 Z04-43dd (1/2 x 4 x 8-1/2" flat Nylatron, 1 per mid. section)
 Z04-43e (3/8 x 1-7/8 x 5" flat UHMW, 2 per mid. section)

Z403:

- Part #** Z4-37 (7/8 x 1-1/8" round Nylatron, 4 mid section & 4 per outer horizontal)
 Z4-37a (7/8 x 7/8" round Nylatron, 2 per outer horizontal)
 Z4-37aa (7/8 x 3/4" round Nylatron 2 per mid. section)
 Z1304-38 Plug (5 per outer horizontal & 6 per mid. section)
 Z04-42 (3/8 x 4 x 11-1/2" flat Nylatron, 1 per mid. section)
 Z04-42a (3/8 x 4 x 10" flat Nylatron, 1 per stinger)
 Z04-43 (3/8 x 1-7/8 x 8-1/2" flat Nylatron, 1 per stinger)
 Z04-43aa (3/8 x 1-7/8 x 5" flat UHMW, 2 per stinger)
 Z04-43c (3/8 x 1-7/8 x 9-1/2" flat Nylatron, 1 per mid. section)
 Z04-43d (1/2 x 4 x 10" flat Nylatron, 1 per outer horizontal)
 Z04-43dd (1/2 x 4 x 8-1/2" flat Nylatron, 1 per mid. section)
 Z4-43e (3/8 x 1-7/8 x 6" flat UHMW, 2 per mid. section)



Wear Pad Identification

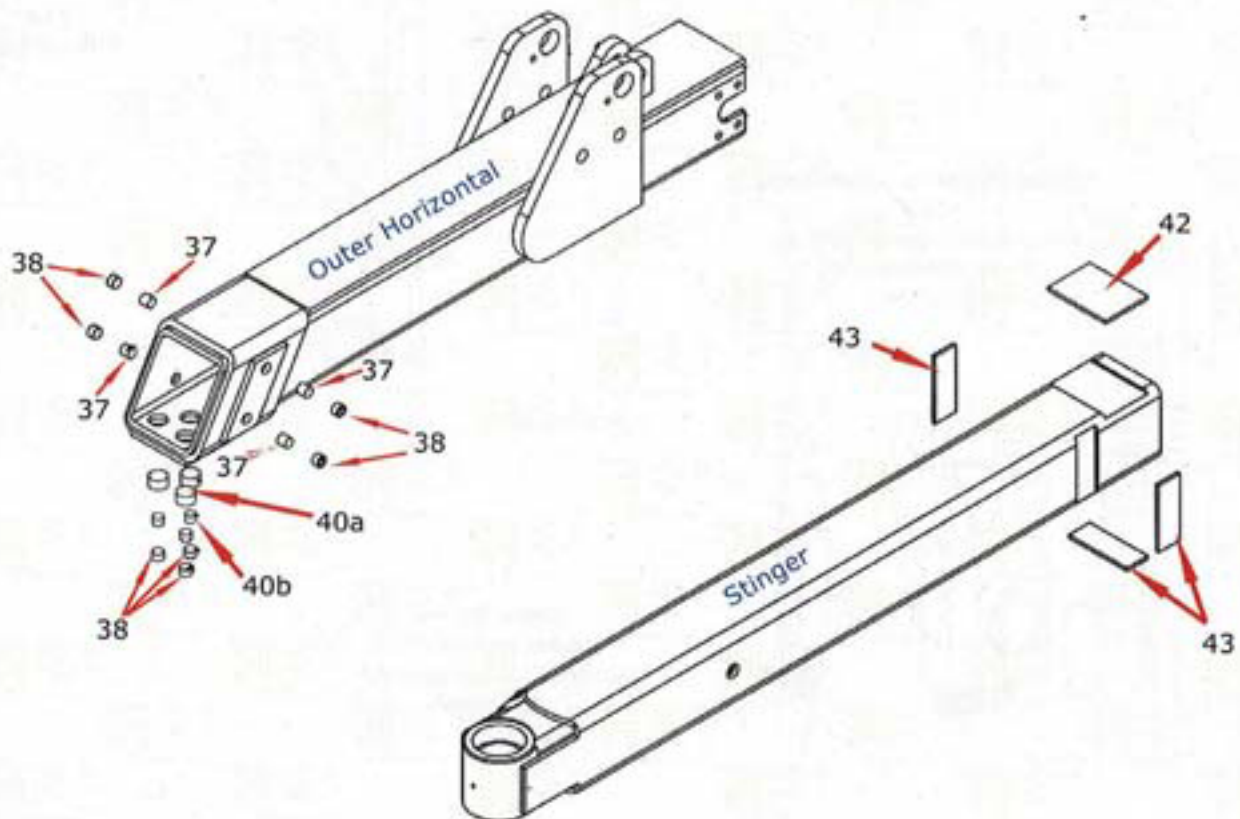
Outer Horizontal/Stinger/Z18/30

Z18:

- Part #** Z13-37 (7/8 x 7/8" round Nylatron, 4 per outer horizontal)
 Z1304-38 Plug (7 per outer horizontal)
 Z13-40a (7/8 x 1-1/2" round Nylatron, 3 per outer horizontal)
 Z1-40b (7/8 x 3/8" round Nylatron, 3 per outer horizontal)
 Z1-42 (1/4 x 4 x 4-1/4" flat Nylatron, 1 per stinger)
 Z1-43 (1/4 x 1-7/8 x 4-1/4" flat UHMW, 3 per stinger)

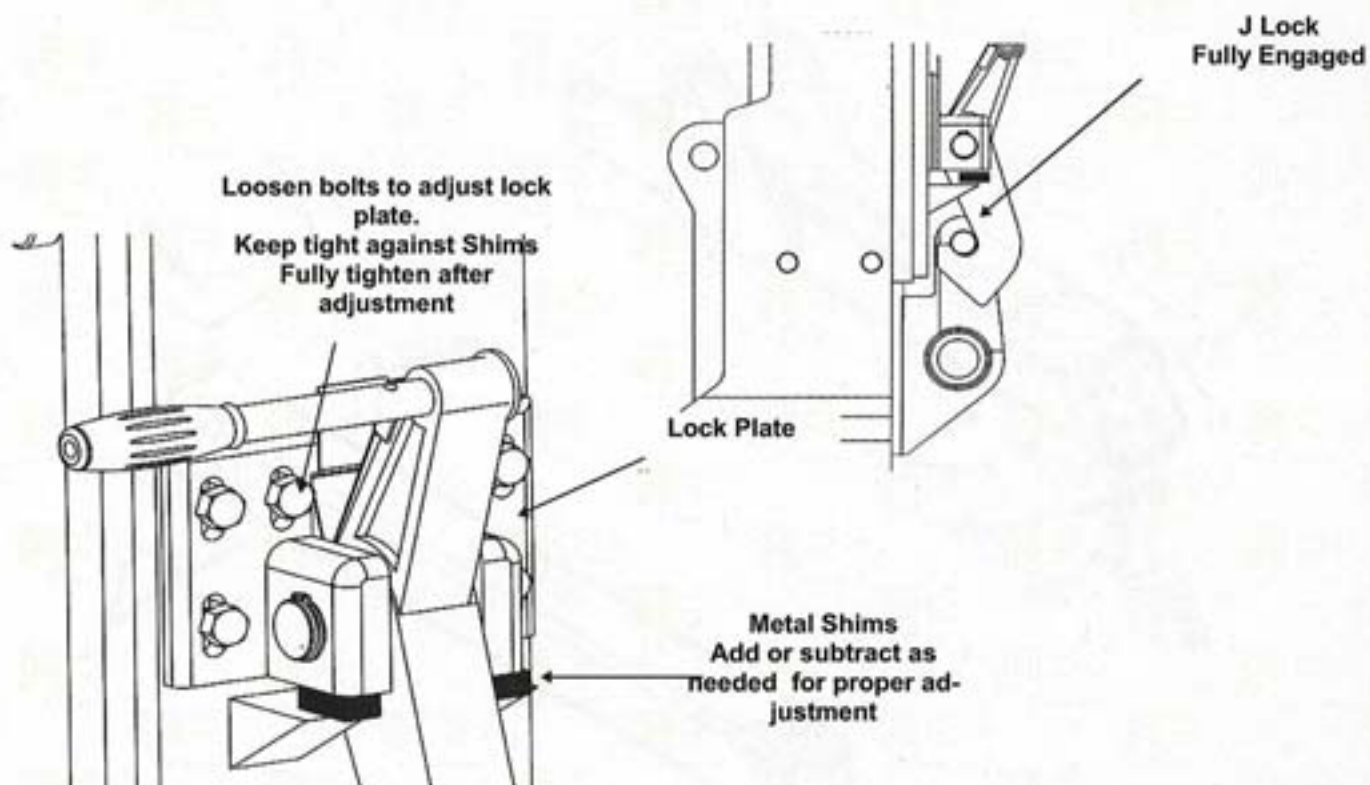
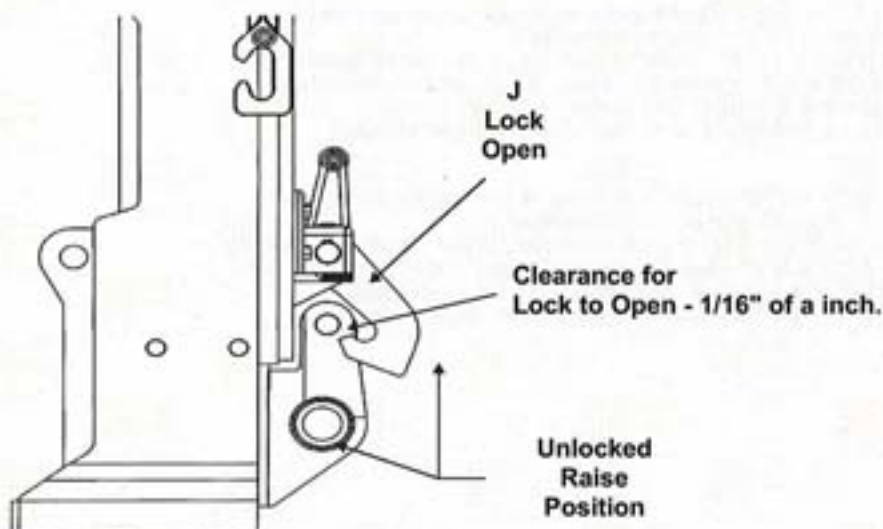
Z30:

- Part #** Z13-37 (7/8 x 7/8" round Nylatron, 4 per outer horizontal)
 Z1304-38 Plug (7 per outer horizontal)
 Z13-40a (7/8 x 1-1/2" round Nylatron, 3 per outer horizontal)
 Z3-40b (7/8 x 5/8" round Nylatron, 3 per outer horizontal)
 Z3-42 (1/4 x 4 x 5-1/4" flat Nylatron, 1 per stinger)
 Z3-43 (1/4 x 1-7/8 x 5-1/4" flat UHMW, 3 per stinger)



J Lock Adjustment

Adjusting the J Lock is important to the safe operation of the Zacklift.
When properly adjusted there should be just enough clearance to open the J Lock with the Zacklift loaded, and the Zacklift in the fully "Unlocked Raise" Position.



Tilt Cylinder (7 x 12")-- Placement of Pilot-to-Open Check Valves

Pilot-To-Open Check Valve

Suitable for load locking application

CKCD- XCN preset to 35psi

Installation Torque 30 to 35lb. ft.

Tilt Cylinder Z403

X Control

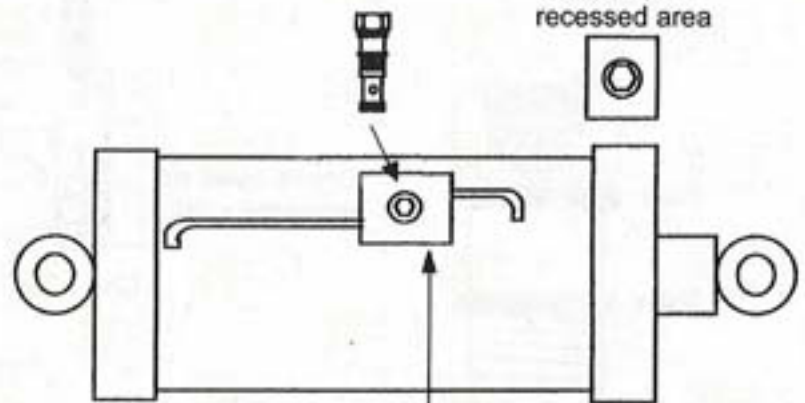
Pilot

Valve

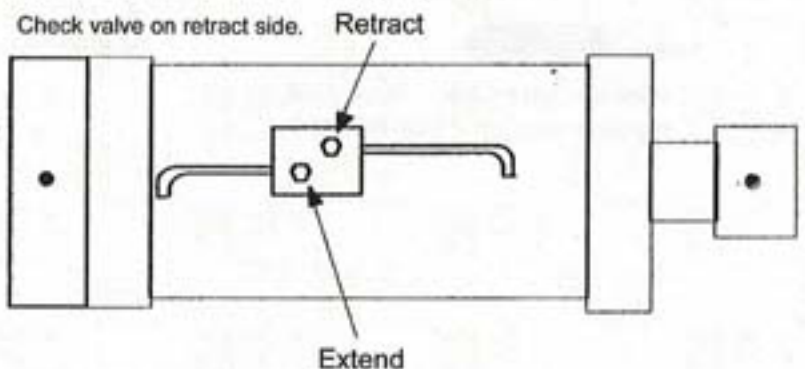
Load

Pilot-to-open Check Valve O-Ring replacement kit: #990-011-007

Close-up of recessed area



The check valve is torqued into the recessed area.



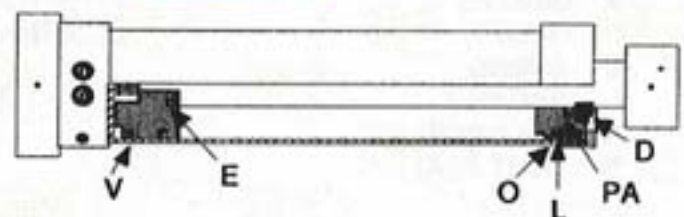
Tilt Cylinder--Repair Kit Parts and Location

Cylinder size 7 x 12

REPAIR KIT:
Part # RK-7.00-003

Cylinder part number: Z4-05

V UNIRING
O O-RING
E O-RING
L BACKUP
PA POLY-PAK
D DUST SEAL



G-1

Tilt Cylinder (6 x 11-3/4")-Placement of Pilot-to-Open Check Valves

Pilot-To-Open Check Valves

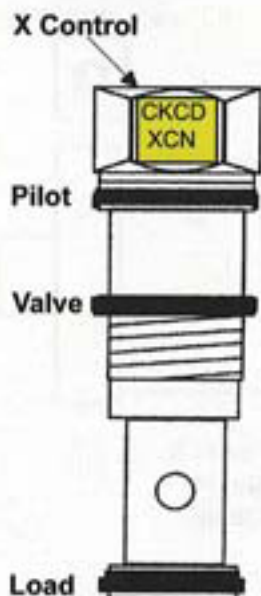
Suitable for Load Locking Application

CKCD- XCN preset to 35psi

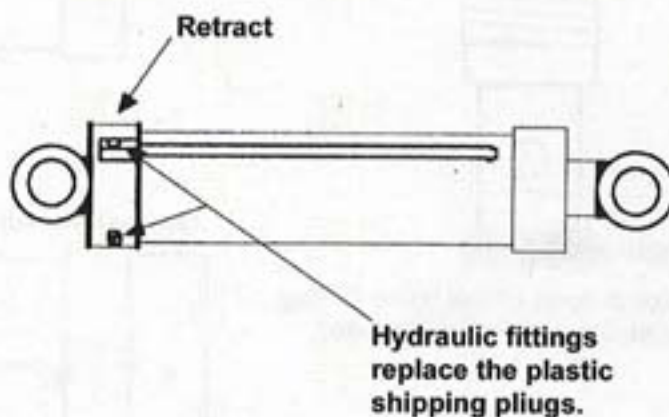
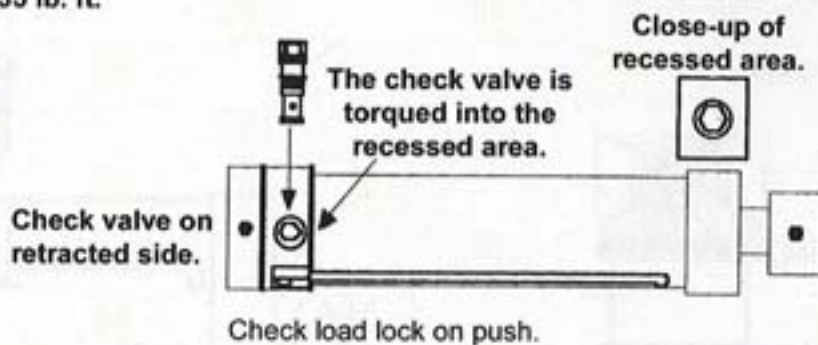
Installation Torque 30 to 35 lb. ft.

Tilt Cylinder

Z30/Z303



Pilot-to-Open Check Valve O-Ring replacement kit: # 990-011-007



Tilt Cylinder-Repair Kit Parts and Location

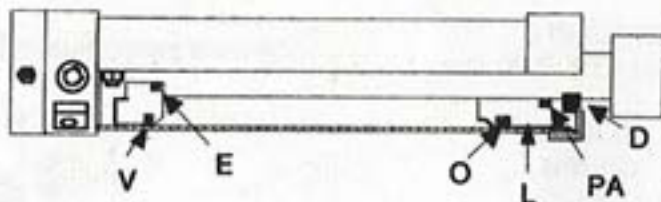
Cylinder size: 6 x 11-3/4"

Cylinder part number: Z30-05

Repair Kit:

Part # RK-6.00-017

- V UNIRING
- O O-RING
- E O-RING
- L BACKUP
- PA POLY-PAK
- D DUST SEAL



Z18 Tilt Cylinder (5 x 12")-Placement of Pilot-to-Open Check Valves

Pilot-To Open Check Valves
Suitable for load locking application

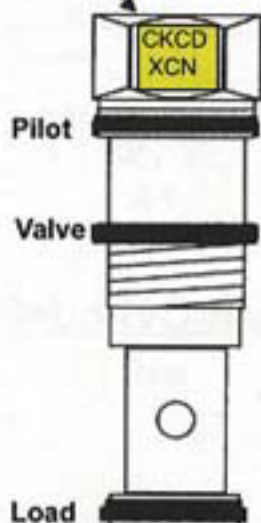
CKCD- XCN preset to 35psi

Installation Torque 30 to 35 lb. ft.

Tilt Cylinder

Z18

X Control

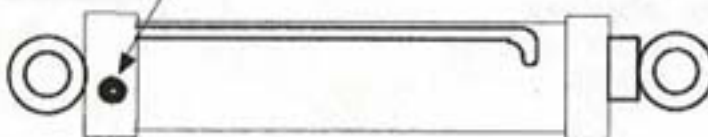


Pilot-to-Open Check Valve O-Ring
replacement kit: # 990-011-007

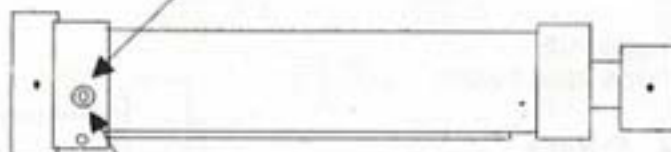
Close-up of
recessed area.



The check valve is
torqued into the
recessed area.



Hydraulic fittings
replace the
plastic plugs.



Retract
Check valve on
retract side.



Z18 Tilt Cylinder-Repair Kit Parts and Location

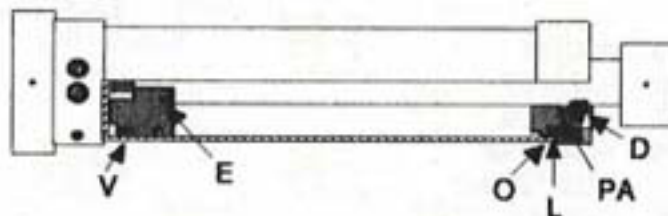
Cylinder size: 5 x 12

Cylinder part number: Z1-05

Repair Kit:

Part # RK-5.00-012

- V UNIRING
- O O-RING
- E O-RING
- L BACKUP
- PA POLY-PAK
- D DUST SEAL



Lift Cylinder-Repair Kit and Location

Cylinder size: 5 x 17"

Cylinder part number: Z30-15

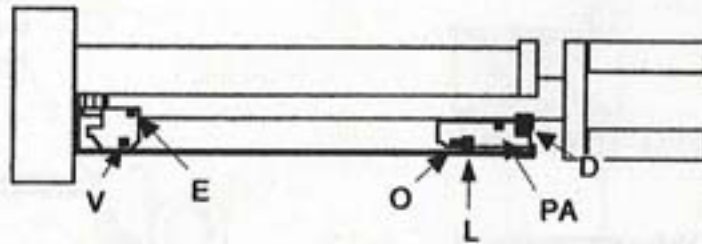
Lift Cylinder

Z30/Z303

Repair Kit:

Part # RK-5.00-012

- O O-RING
- L BACKUP
- V UNIRING
- PA POLY-PAK
- D DUST SEAL
- E O-RING



Cylinder size: 6 x 17"

Cylinder part number: Z4-15

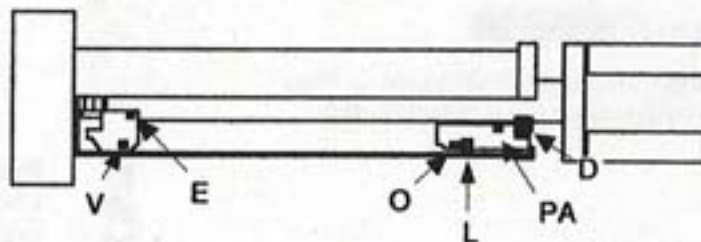
Lift Cylinder

Z403

Repair Kit:

Part # RK-6.00-018

- O O-RING
- L BACKUP
- V UNIRING
- PA POLY-PAK
- D DUST SEAL
- E O-RING



Lift Cylinder

Z18

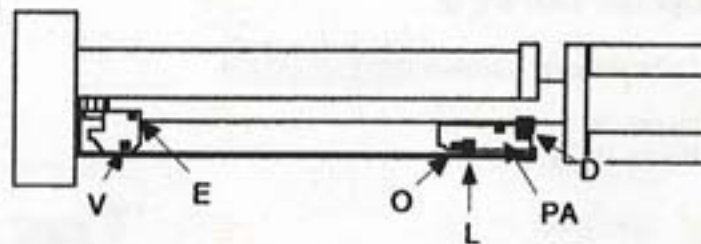
Cylinder size: 4 x 17"

Cylinder part number: Z1-15

Repair Kit:

Part # RK-4.00-014

- O O-RING
- L BACKUP
- V UNIRING
- PA POLY-PAK
- D DUST SEAL
- E O-RING



Extend Cylinder 3 x 30 x 46-1/8 x 2 Placement of Pilot-to-Open Check Valve

Extend Cylinder

Z303/Z403

Pilot-to-Open Check Valve
Suitable for loading application

CKCD- XCN

Installation Torque 30 to 35 lb. ft.

X Control

Pilot

Valve

Load

Pilot-to-open Check Valve O-Ring
Replacement kit: # 990-011-007

The check valve is
torqued into the
recessed area.

Close-up of
recessed area.

Check load lock on pull.

Check valve
on retract side

Check valve
on extend side

Extent

Hydraulic fittings
replace the
plastic plugs

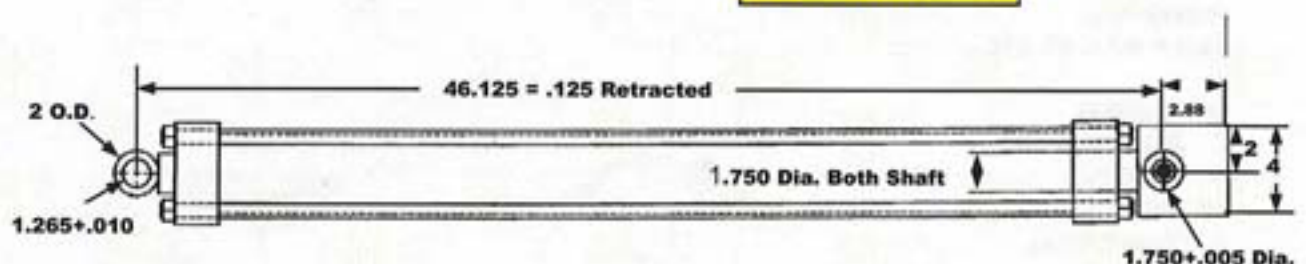
Repair Kit:
Part # RK-3.00-160

Extend Cylinder-Repair Kit Parts and Location

Cylinder size: 3 x 30 x 46-1/8 x 2

Cylinder part number: Z0-33c fits Z303

Z4-33c fits Z403



G-5

Extend Cylinder (3 x 30")-Placement of Pilot-to-Open Check Valves

Extend Cylinder

Pilot-to-Open Check Valves
Suitable for Load Locking Application

CKCD- XCN preset to 35psi

Installation Torque 30 to 35 lb. ft.

Z18/Z30

X Control

Pilot

Valve

Load

Pilot-to-Open Check Valve O-Ring
replacement kit: # 990-011-007

The check valve is
torqued into the
recessed area.

Close-up of
recessed area.

Check load lock on pull.

Check valve
on extend side.

Retract

Check valve
on extend side.

Extend

Hydraulic fittings
replace the
plastic plugs.

Check load lock on pull.

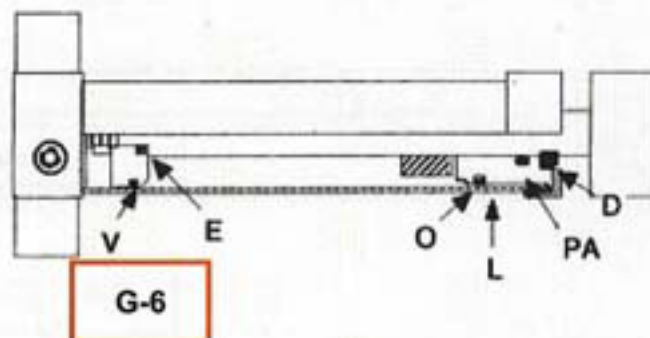
Extend Cylinder-Repair Kit Parts and Location

Cylinder size: 3 x 30"

Cylinder part number: Z13-33

Repair Kit:
Part # RK-3.00-016

O O-RING
L BACKUP
V UNIRING
PA POLY-PAK
D DUST SEAL
E O-RING



Extend Cylinder (3 x 24")-Placement of Pilot-to-Open Check Valve

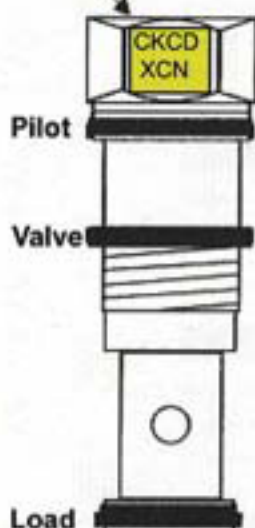
Extend Cylinder

Pilot-to-Open Check Valve
Suitable for loading application

CKCD- XCN

Installation Torque 30 to 35 lb. ft.

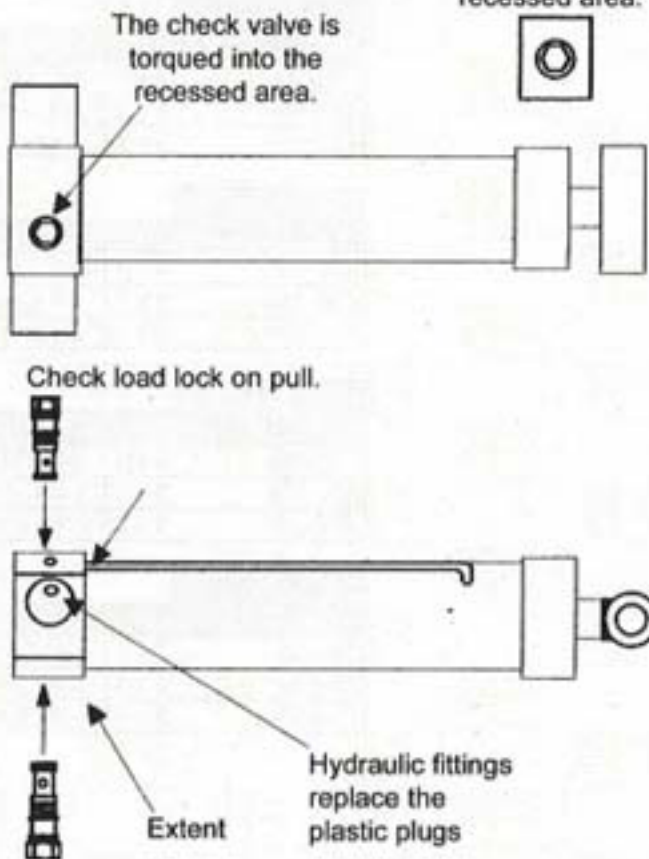
X Control



Pilot-to-open Check Valve O-Ring
Replacement kit: # 990-011-007

38,000lb Stiff Legs

Close-up of recessed area.

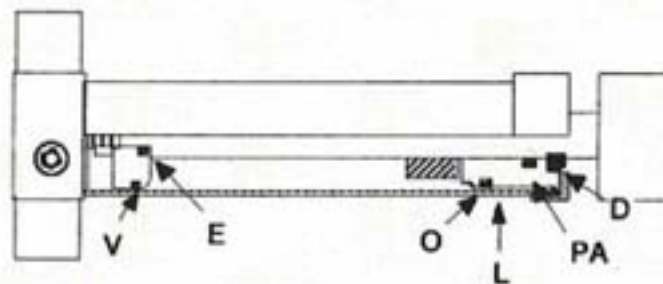


Extend Cylinder-Repair Kit Parts and Location

Repair Kit:
Part# RK-3.00-016

Cylinder size: 3 x 24
Cylinder part number: ZAC-0490-01

O O-RING
L BACK
V UNIRING
PA POLY-PAK
D DUST SEAL
E O-RING



G-7

Seal Kit Identification

Seal Kits, Extend, Lift, Tilt / Z18,30,303,403









Z18:	
Part #	Description
Z1-05b	5 x 11-3/4" Tilt Cylinder Repair Kit
Z1-15b	4 x 17" Lift Cylinder Repair Kit
Z13-33b	3 x 24" Extend Cylinder Repair Kit

Z30:	
Part #	Description
Z30-05b	6 x 11-3/4" Tilt Cylinder Repair Kit
Z30-15b	5 x 17" Lift Cylinder Repair Kit
Z13-33b	3 x 35" Extend Cylinder Repair Kit

Z303:	
Part #	Description
Z30-05b	6 x 11-3/4" Tilt Cylinder Repair Kit
Z30-15b	5 x 17" Lift Cylinder Repair Kit
Z04-33b	3 x 35 x 30" Extend Cylinder Kit

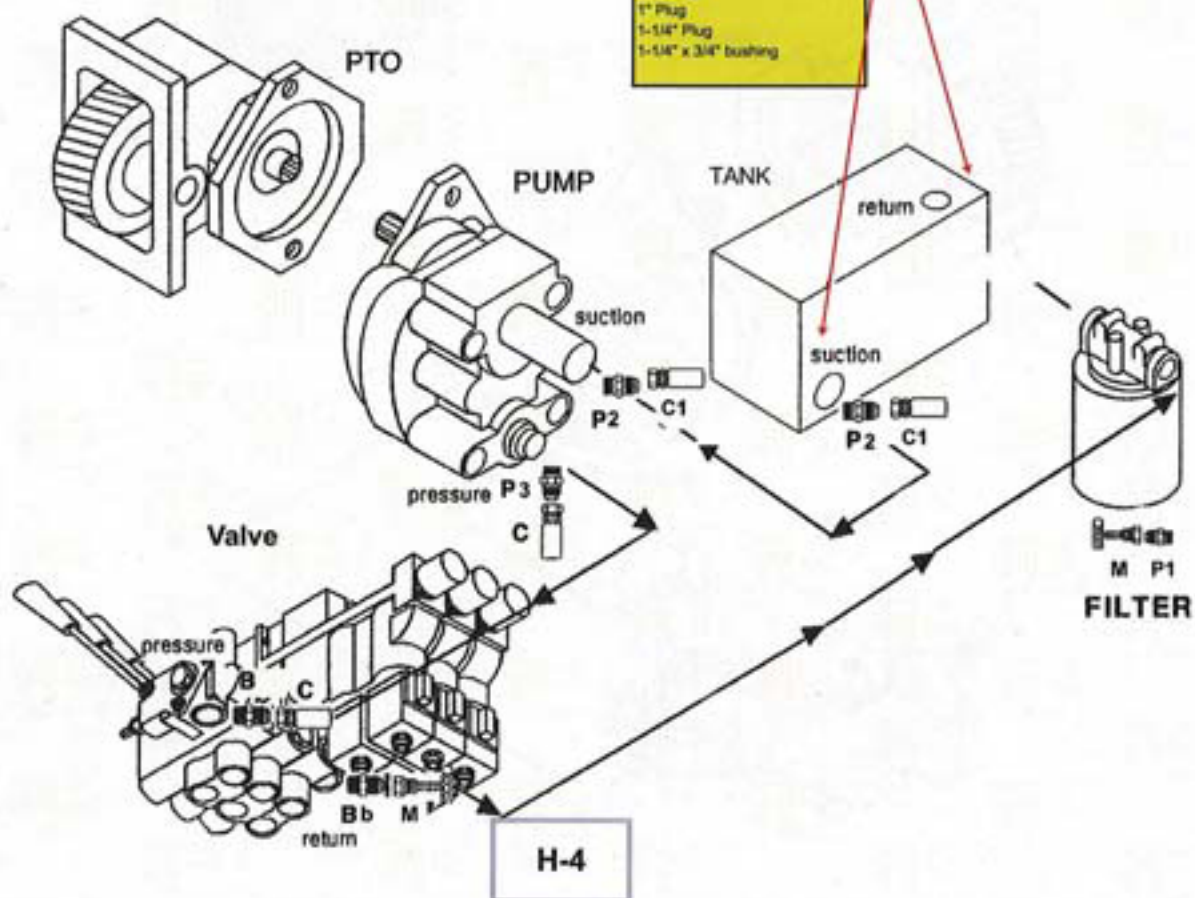
Z403:	
Part #	Description
Z4-05b	7 x 11-3/4" Tilt Cylinder Repair Kit
Z4-15b	6 x 17" Lift Cylinder Repair Kit
Z04-33b	3 x 35 x 30" Extend Cylinder Repair Kit

Z18/Z30/Z303 PTO/Pump Installation

	B 0503-8-10-ZL (0503-8-8-ZL, CB4 Valve only)
	Bb 0503-12-10-ZL
	C 10643-8-8-ZL
	C1 10643-16-16-ZL
	M 5503-12-18-ZL
	P1 2404-12-12-ZL (return)
	P2 2404-16-16-ZL (suction)
	P3 2404-8-12-ZL (pressure)
Bulk hose	
20' 1/2" pressure	
12' 3/4" return	
8' 1" suction	









Tank Connection Parts (Black Pipe)

1" x 2" Nip
1" x 3/4" Bell Reducer
3/4" x 2" Nip
3/4" St. Elbow
1/2" Plug
1" Plug
1-1/4" Plug
1-1/4" x 3/4" bushing



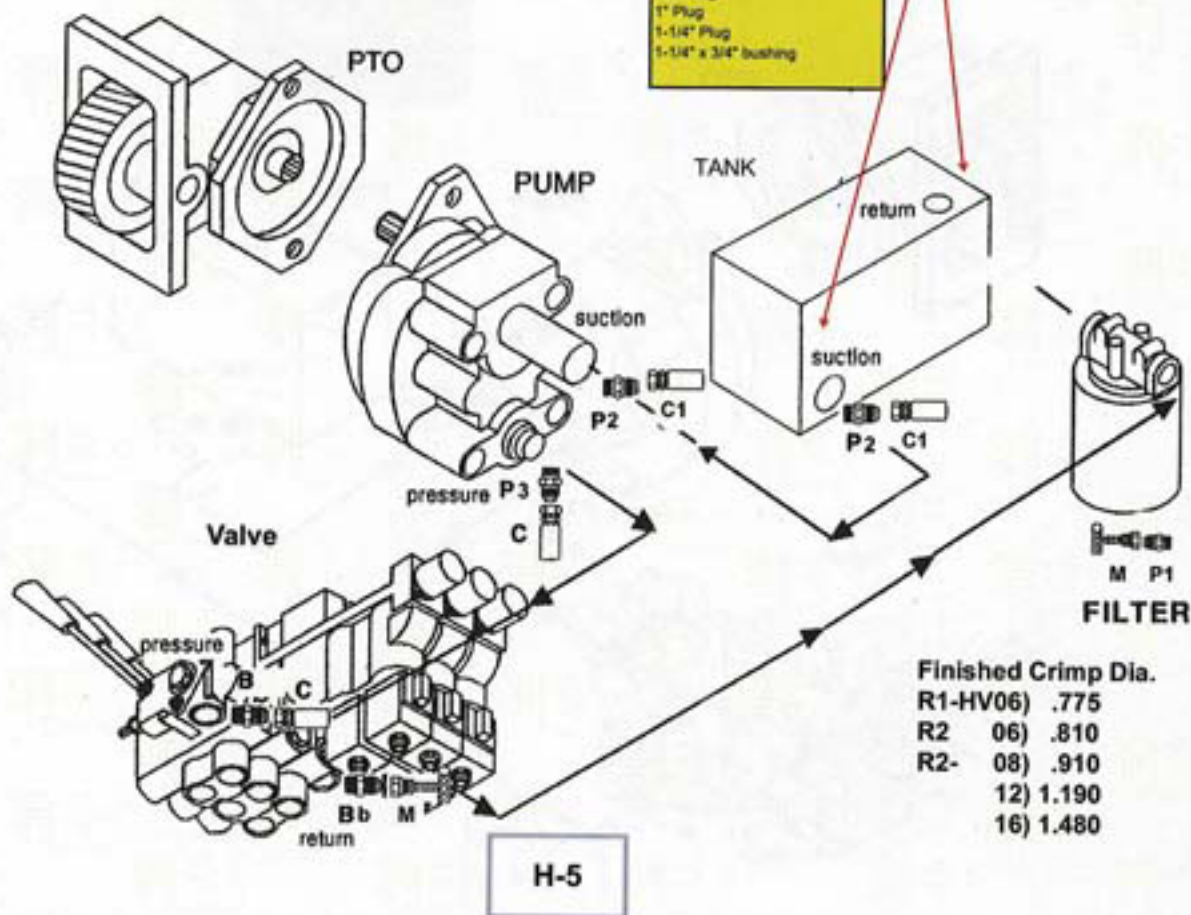
Z403

PTO/Pump Installation

	B 0503-8-10-ZL
	Bb 0503-12-10-ZL
	C 10643-6-6-ZL
	C1 10643-16-16-ZL
	M 5503-12-18-ZL
	P1 2404-12-12-ZL (return)
	P2 2404-16-16-ZL (suction)
	P3 2404-8-12-ZL (pressure)
Bulk hose	
20' 1/2" pressure	
12' 3/4" return	
8' 1" suction	

Tank Connection Parts (Black Pipe)

1" x 2" Nip
1" x 3/4" Bell Reducer
3/4" x 2" Nip
3/4" St. Elbow
1/2" Plug
1" Plug
1-1/4" Plug
1-1/4" x 3/4" bushing



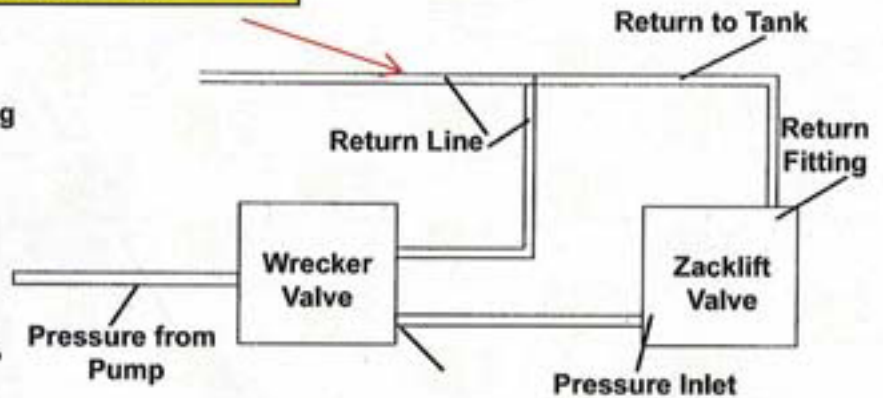
Existing Hydraulic Systems

Zacklift recommends a 25 Micron filter on return line. Recirculate fluid thru filter for 1 hour before using Zacklift valving.

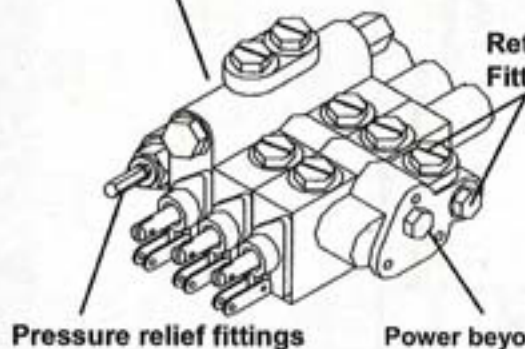
Use of a power beyond fitting or power beyond plate is recommended for tapping into an existing hydraulic system.

Other methods of entering the system may be possible, such as, the use of a flow divider.

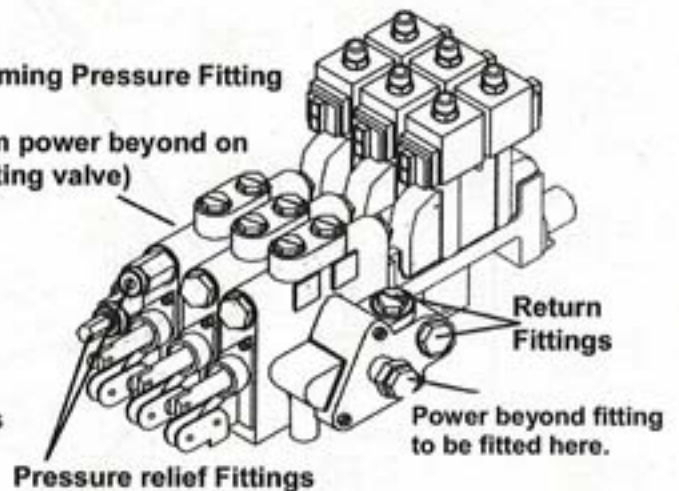
Consult the wrecker valve manufacturer for specific instructions.



Incoming pressure fitting (from power beyond on existing valve)

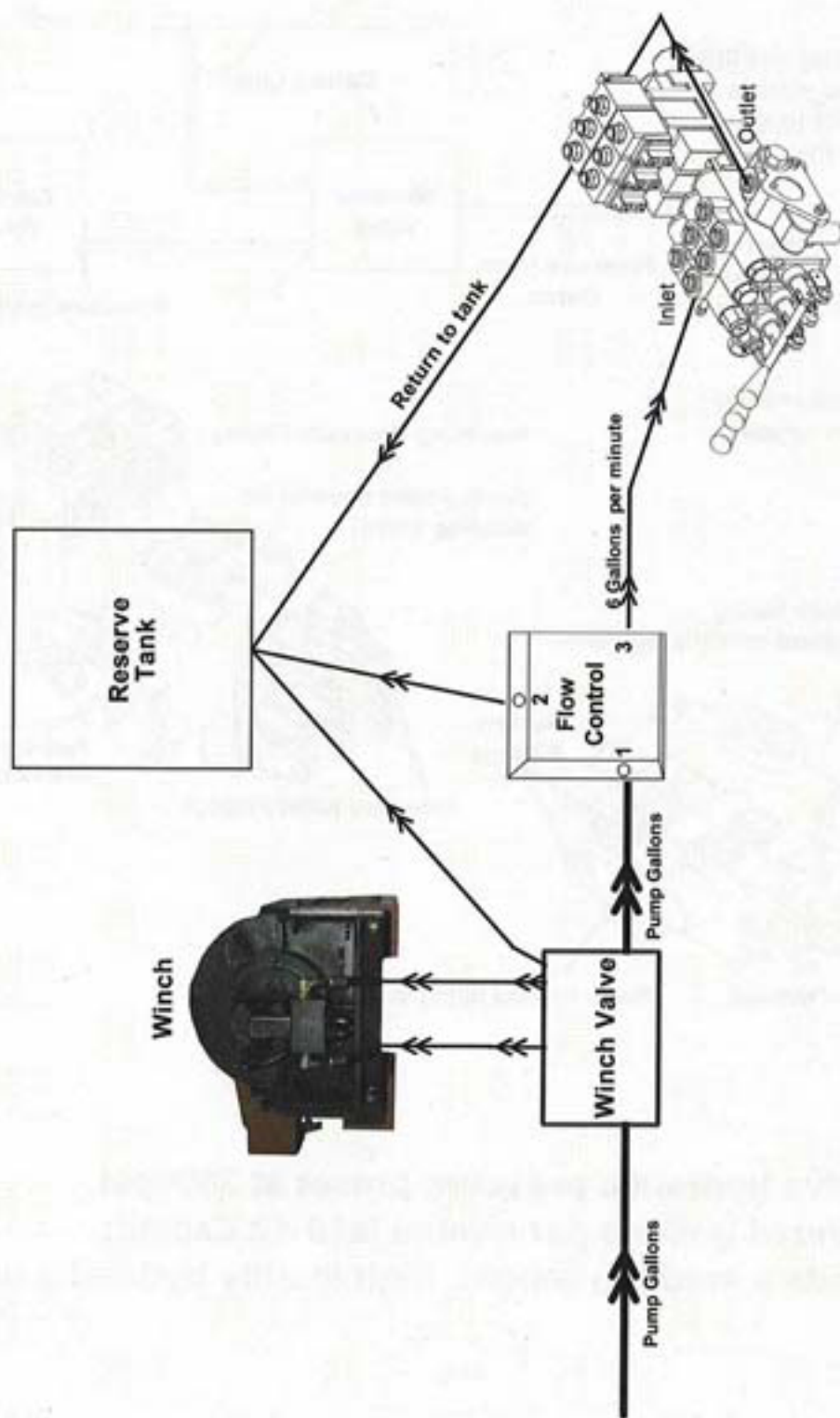


Incoming Pressure Fitting (from power beyond on existing valve)



NOTE:

Zacklift valve hydraulic pressure preset at 2600psi. Recommended gallons per minute is 10-12. Zacklift recommends a medium weight, high quality hydraulic oil.



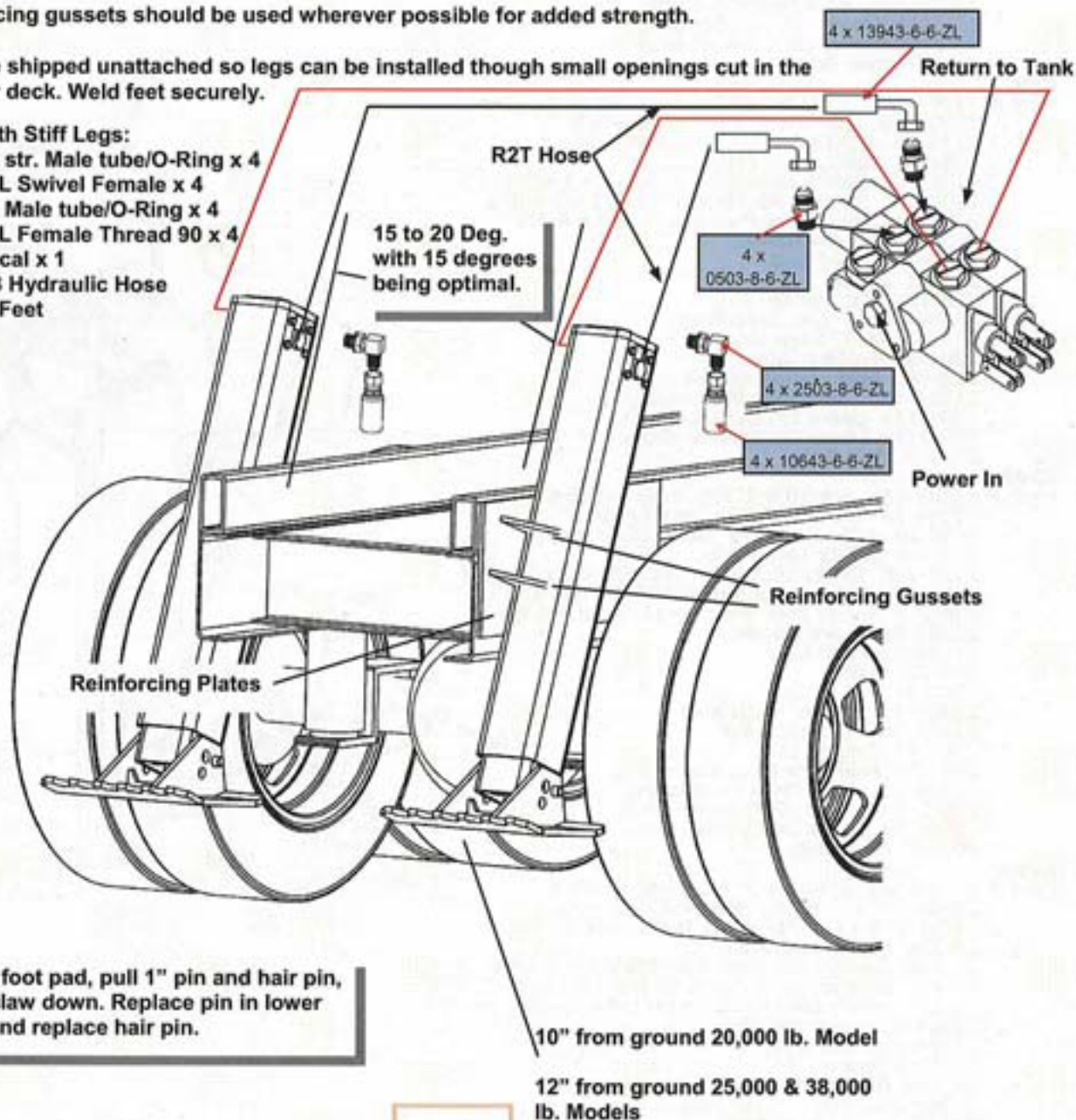
Flow Control to Winch & Valve

Stiffleg Installation

- Stifflegs should be mounted at an angle of approximately 15 to 20 degrees from vertical with 15 degrees being optimal.
- The 20,000 pound model stifflegs should be mounted at a height of 10" from ground level
- The 25,000 and 38,000 pound model stifflegs should be mounted at a height of approximately 12" from ground level.
- The subframe and mainframe should be tied together with reinforcement plates as shown. This provides a solid mount for the installation of the stifflegs
- Remember to "tack weld" everything in place and check for correct function before final welding.
- Reinforcing gussets should be used wherever possible for added strength.
- Feet are shipped unattached so legs can be installed through small openings cut in the wrecker deck. Weld feet securely.

Included with Stiff Legs:

0503-8-6-ZL str. Male tube/O-Ring x 4
 10643-6-6-ZL Swivel Female x 4
 2503-8-6-ZL Male tube/O-Ring x 4
 13943-6-6-ZL Female Thread 90 x 4
 Stiff Leg Decal x 1
 3/8" R2T 3/8 Hydraulic Hose
 24 Feet



Main Body Parts Identification

Main Body/Z18,30,303,403

Z18:

- Part #** Z1304-14b 3/4-10 x 3" Hex Bolts Grade 8
 Z1304-16 1/2-13 x 1" Hex Bolt Grade 8
 Z130-19 1/2-13 x 1-1/4" Hex Bolt Grade 8
 Z1-20a Safety Lock Plate
 Z130-20b Safety Lock Shim Set (1/8 x 1 x 2-1/2")
 Z130-20c Safety Lock Pyramid (1-1/2 x 2-1/2")
 Z1-21a Safety Lock Pivot Pin (1-1/4 x 4-1/4")
 Z1304-21b Lock Handle
 Z1304-21c Red Grip
 Z1-22 J Lock
 Z1-22a Flat Spring
 Z1304-26a 1-1/4" Snap Ring
 Z1304-36a 1" Snap Ring
 Z1-98 Folding Lock
 Z13-98b Fold Lock Pivot Bolt
 Z1304-106 Main Pivot Pin Bushing
 Z1-215a Upper Lift Cylinder Block
 Z1-215c Lower Lift Cylinder Block
 Z1-317 Main Body

Z30:

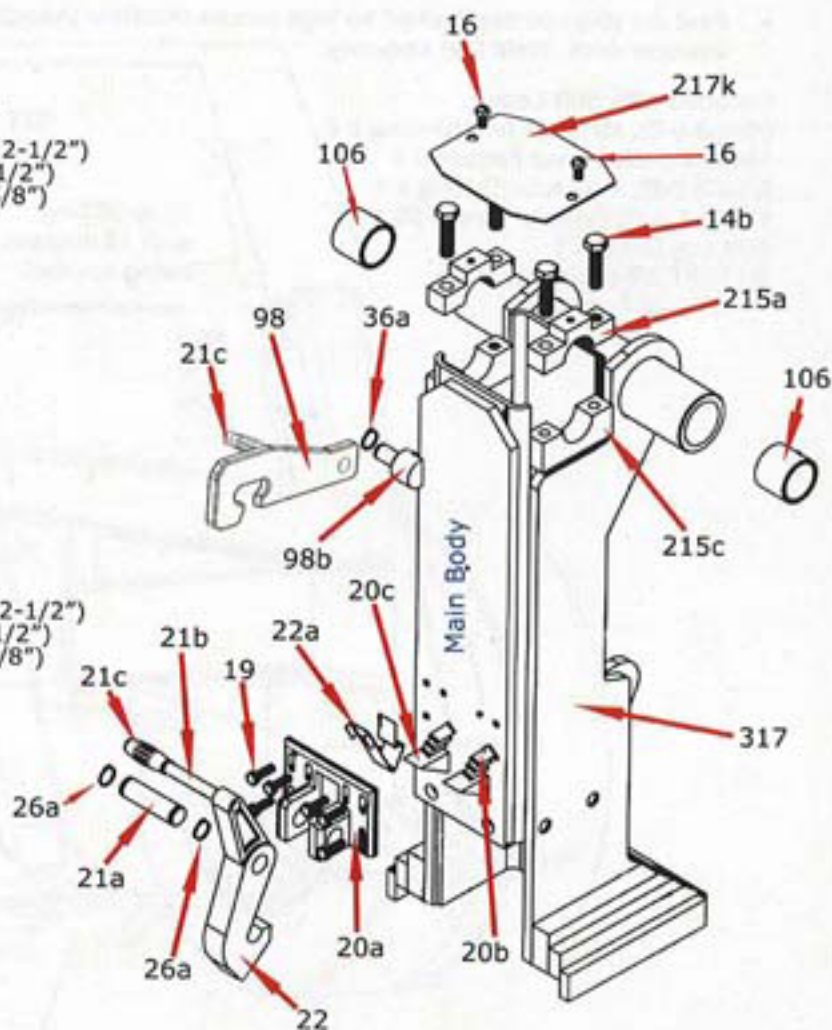
- Part #** Z1304-14b 3/4-10 x 3" Hex Bolts Grade 8
 Z1304-16 1/2-13 x 1" Hex Bolt Grade 8
 Z130-19 1/2-13 x 1-1/4" Hex Bolt Grade 8
 Z30-20a Safety Lock Plate
 Z130-20b Safety Lock Shim Set (1/8 x 1 x 2-1/2")
 Z130-20c Safety Lock Pyramid (1-1/2 x 2-1/2")
 Z30-21a Safety Lock Pivot Pin (1-1/4 x 4-5/8")
 Z1304-21b Lock Handle
 Z1304-21c Red Grip
 Z30-22 J Lock
 Z30-22a Flat Spring
 Z1304-26a 1-1/4" Snap Ring
 Z1304-36a 1" Snap Ring
 Z304-98 Folding Lock
 Z13-98b Fold Lock Pivot Bolt
 Z1304-106 Main Pivot Pin Bushing
 Z30-215a Upper Lift Cylinder Block
 Z30-215c Lower Lift Cylinder Block
 Z3-317 Main Body

Z303:

- Part #** Z1304-14b 3/4-10 x 3" Hex Bolts Grade 8
 Z1304-16 1/2-13 x 1" Hex Bolt Grade 8
 Z130-19 1/2-13 x 1-1/4" Hex Bolt Grade 8
 Z30-20a Safety Lock Plate
 Z130-20b Safety Lock Shim Set (1/8 x 1 x 2-1/2")
 Z130-20c Safety Lock Pyramid (1-1/2 x 2-1/2")
 Z30-21a Safety Lock Pivot Pin (1-1/4 x 4-5/8")
 Z1304-21b Lock Handle
 Z1304-21c Red Grip
 Z30-22 J Lock
 Z30-22a Flat Spring
 Z1304-26a 1-1/4" Snap Ring
 Z1304-36a 1" Snap Ring
 Z304-98 Folding Lock
 Z04-98b Fold Lock Pivot Bolt
 Z1304-106 Main Pivot Pin Bushing
 Z30-215a Upper Lift Cylinder Block
 Z30-215c Lower Lift Cylinder Block
 Z0-317 Main Body

Z403:

- Part #** Z1304-14b 3/4-10 x 3" Hex Bolts Grade 8
 Z1304-16 1/2-13 x 1" Hex Bolt Grade 5
 Z4-19 1/2-13 x 1-1/2" Hex Bolt Grade 8
 Z4-20a Safety Lock Plate
 Z4-20b Safety Lock Shim Set (1/8 x 1 x 3-1/4")
 Z4-20c Safety Lock Pyramid (1-1/2 x 3-1/2")
 Z4-21a Safety Lock Pivot Pin (1-1/4 x 6-5/8")
 Z1304-21b Lock Handle
 Z1304-21c Red Grip
 Z4-22 J Lock
 Z4-22a Flat Spring
 Z1304-26a 1-1/4" Snap Ring
 Z1304-36a 1" Snap Ring
 Z304-98 Folding Lock
 Z04-98b Fold Lock Pivot Bolt
 Z1304-106 Main Pivot Pin Bushing
 Z4-215a Upper Lift Cylinder Block
 Z4-215c Lower Lift Cylinder Block
 Z4-317 Main Body



Inner Main Parts Identification

Inner Main/Z18,30,303,403

Z18:

- Part #** Z1-15 4 x 17" Lift Cylinder
 Z1-25 Inner Main
 Z1-26 Safety Lock Pin (1-1/4 x 5-5/8")
 Z1304-26a 1-1/4" Snap Ring
 Z1-28 Roller Pin (1-3/8 x 3-7/8")
 Z1-29 Roller
 Z1-30 Dogbone
 Z1-41 Lower Done Bone Pin (1-3/8 x 2-3/4")
 Z1304-41a 1-3/8" Snap Ring

Z30:

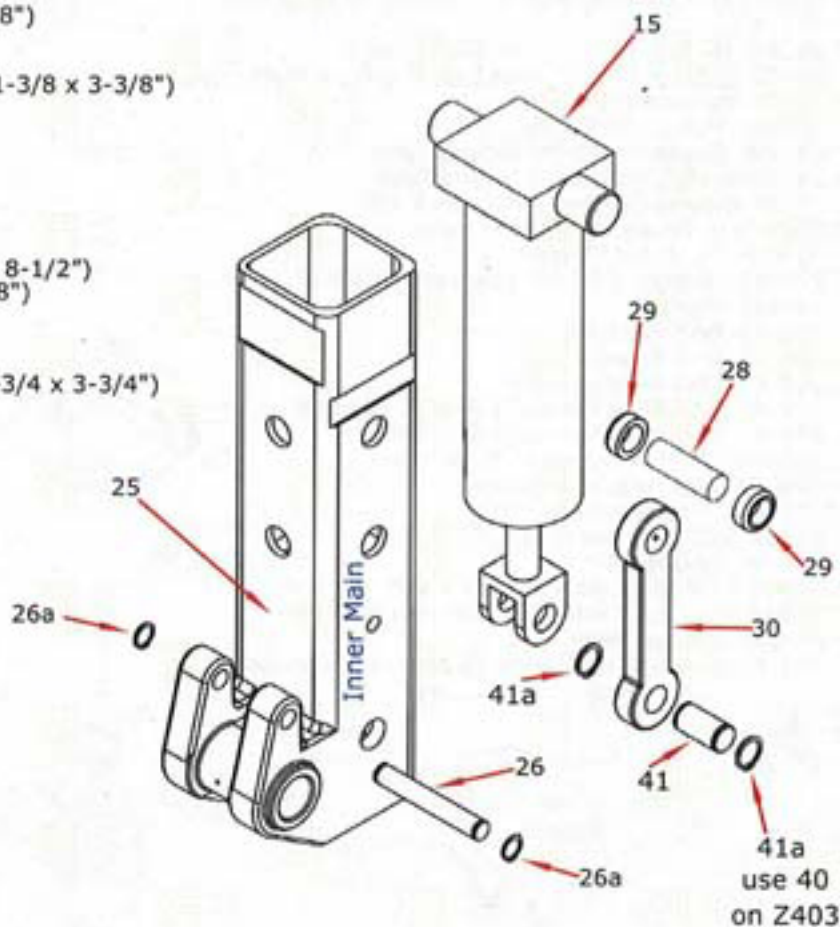
- Part #** Z30-15 5 x 17" Lift Cylinder
 Z30-25 Inner Main
 Z30-26 Safety Lock Pin (1-1/4 x 6-5/8")
 Z1304-26a 1-1/4" Snap Ring
 Z30-28 Roller Pin (1-3/8 x 5-7/8")
 Z30-29 Roller
 Z30-30 Dogbone
 Z30-41 Lower Done Bone Pin (1-3/8 x 3-3/8")
 Z1304-41a 1-3/8" Snap Ring

Z303:

- Part #** Z30-15 5 x 17" Lift Cylinder
 Z30-25 Inner Main
 Z30-26 Safety Lock Pin (1-1/4 x 6-5/8")
 Z1304-21d 1-1/4" Snap Ring
 Z30-28 Roller Pin (1-3/8 x 5-7/8")
 Z30-29 Roller
 Z30-30 Dogbone
 Z30-41 Lower Done Bone Pin (1-3/8 x 3-3/8")
 Z1304-41a 1-3/8" Snap Ring

Z403:

- Part #** Z4-15 6 x 17" Lift Cylinder
 Z1304-21d 1-1/4" Snap Ring
 Z4-25 Inner Main
 Z4-26 Safety Lock Pin (1-1/4 x 8-1/2")
 Z4-28 Roller Pin (1-3/4 x 5-7/8")
 Z4-29 Roller
 Z4-30 Dogbone
 Z1304-40 1-3/4" Snap Ring
 Z4-41 Lower Done Bone Pin (1-3/4 x 3-3/4")

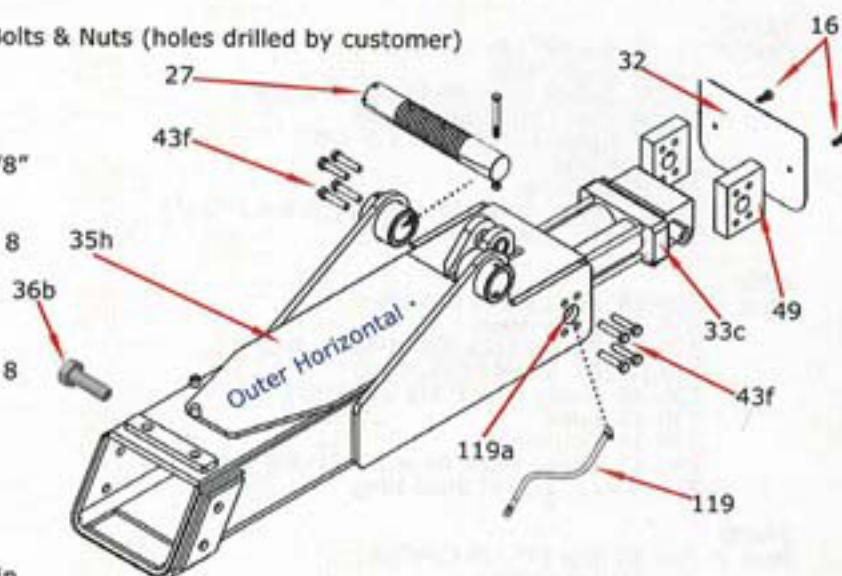


Horizontal Parts Identification

Outer Horizontal, Mid Section, Stinger/Z303,403

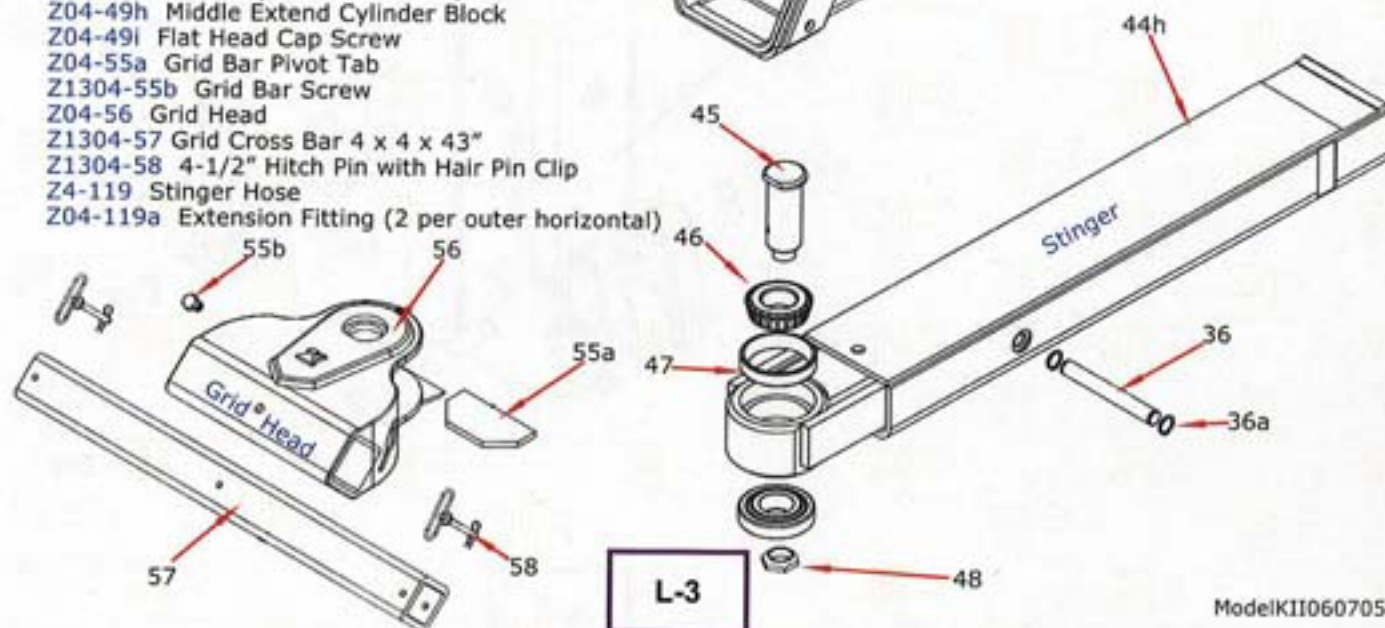
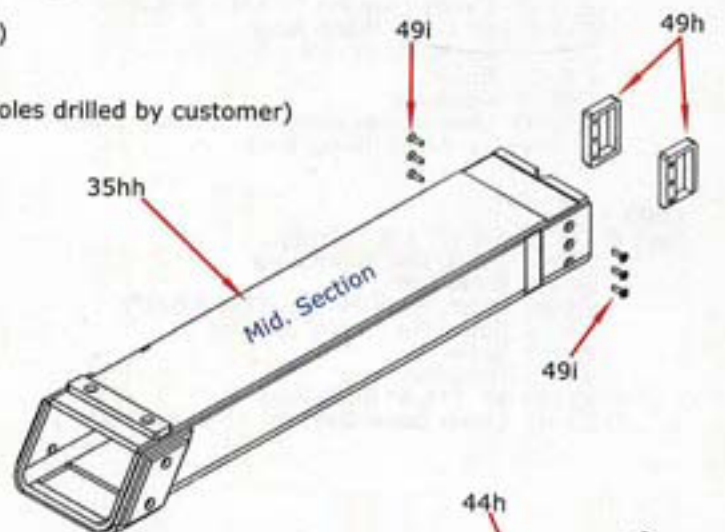
Z303:

- Part #** Z1304-16 1/2-13 x 1" Hex Bolt Grade 5
 Z0-27 2-1/2 x 17-1/8" with two 4-1/2" Bolts & Nuts (holes drilled by customer)
 Z0-32 Horizontal End Plate
 Z0-33c Horizontal Extend Cylinder
 Z0-35h Outer Horizontal Extend Tube
 Z0-35hh Mid. Horizontal Extend Tube
 Z30-36 Extend Cylinder Pin 1-1/4 x 10-1/8"
 Z304-36b Folding Lock Latch Bolt
 Z1304-36a 1-1/4" Snap Ring
 Z04-43f 5/8-11 x 2-1/2" Hex Bolts Grade 8
 Z0-44h Stinger
 Z04-45 Grid Pivot Pin
 Z04-46 Grid Bearing
 Z04-47 Grid Bearing Race
 Z04-48 Grid Pivot Pin Nut 1-3/4-12 Grade 8
 Z04-49 Extend Cylinder Block 1-3/4 x 6"
 Z04-49h Middle Extend Cylinder Block
 Z04-49i Flat Head Cap Screw
 Z04-55a Grid Bar Pivot Tab
 Z1304-55b Grid Bar Screw
 Z04-56 Grid Head
 Z1304-57 Grid Cross Bar 4 x 4 x 43"
 Z1304-58 4-1/2" Hitch Pin with Hair Pin Clip
 Z130-119 Stinger hose
 Z04-119a Extension Fitting (2 per outer horizontal)



Z403:

- Part #** Z1304-16 1/2-13 x 1" Hex Bolt Grade 5
 Z4-27 2-3/4 x 17-1/2" with two 5" Bolts & Nuts (holes drilled by customer)
 Z4-32 Horizontal End Plate
 Z4-33c Horizontal Extend Cylinder
 Z4-35h Outer Horizontal Extend Tube
 Z4-35hh Mid. Horizontal Extend Tube
 Z4-36 Extend Cylinder Pin 1-1/4 x 10"
 Z304-36b Folding Lock Latch Bolt
 Z1304-36a 1-1/4" Snap Ring
 Z04-43f 5/8-11 x 2-1/2" Hex Bolts Grade 8
 Z4-44h Stinger
 Z04-45 Grid Pivot Pin
 Z04-46 Grid Bearing
 Z04-47 Grid Bearing Race
 Z04-48 Grid Pivot Pin Nut 1-3/4-12 Grade 8
 Z04-49 Extend Cylinder Block 1-3/4 x 6"
 Z04-49h Middle Extend Cylinder Block
 Z04-49i Flat Head Cap Screw
 Z04-55a Grid Bar Pivot Tab
 Z1304-55b Grid Bar Screw
 Z04-56 Grid Head
 Z1304-57 Grid Cross Bar 4 x 4 x 43"
 Z1304-58 4-1/2" Hitch Pin with Hair Pin Clip
 Z4-119 Stinger Hose
 Z04-119a Extension Fitting (2 per outer horizontal)

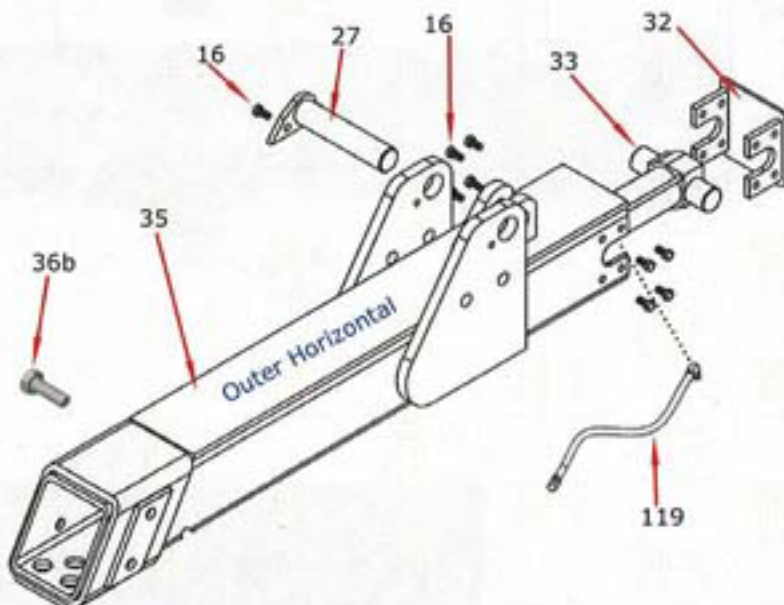


Horizontal Parts Identification

Outer Horizontal, Stinger/Z18,30

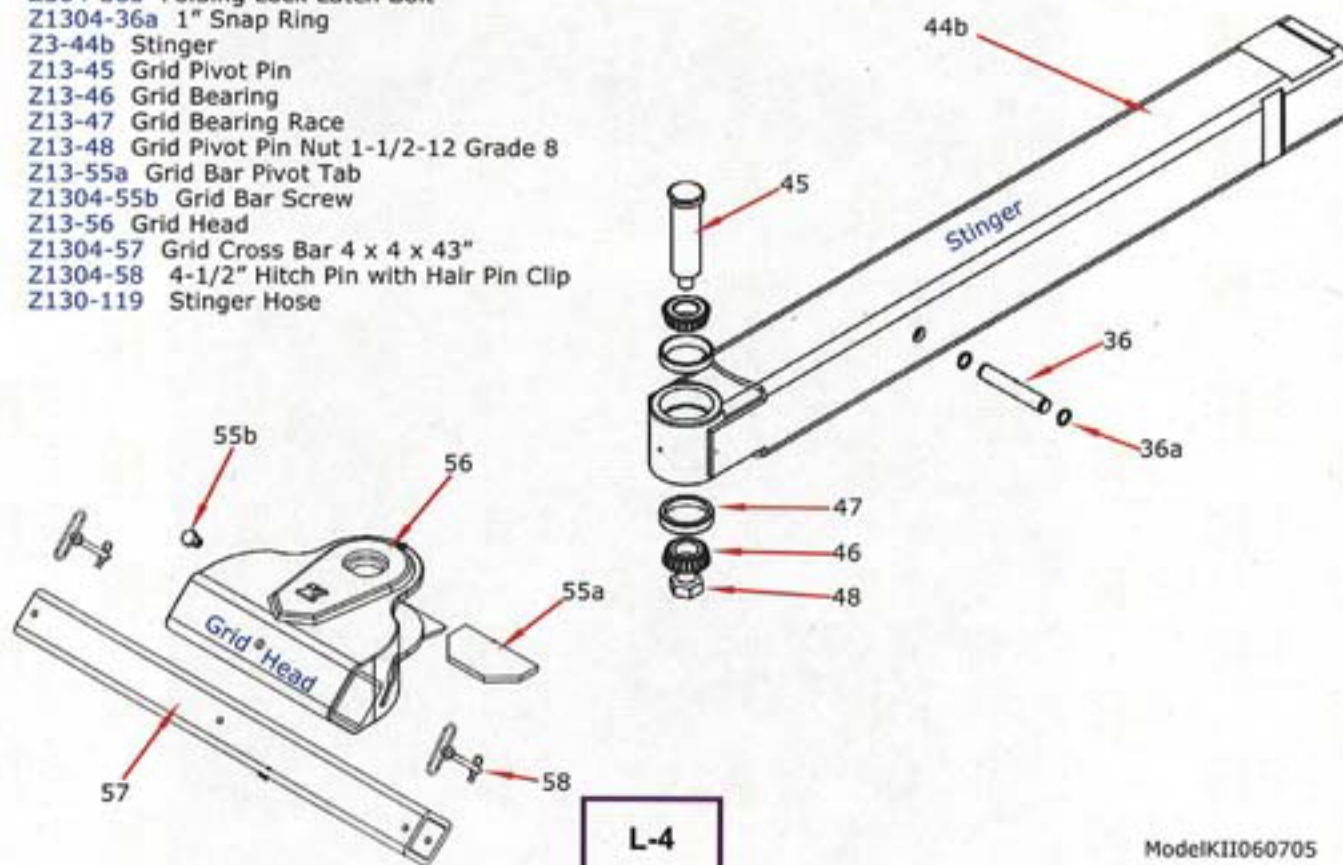
Z18:

- Part #** Z1304-16 1/2-13 x 1" Hex Bolt Grade 5
 Z1-27 Extend Arm Pivot Pin (2 x 8-3/8") with 1 bolts & Tear Drop Plate
 Z1-32 Horizontal End Plate
 Z13-33 Horizontal Extend Cylinder
 Z1-35 Outer Horizontal Extend Tube
 Z1-36 Extend Cylinder Pin 1 x 5"
 Z1-36b Folding Lock Latch Bolt
 Z1304-36a 1" Snap Ring
 Z1-44b Stinger
 Z13-45 Grid Pivot Pin
 Z13-46 Grid Bearing
 Z13-47 Grid Bearing Race
 Z13-48 Grid Pivot Pin Nut 1-1/2-12 Grade 8
 Z13-55a Grid Bar Pivot Tab
 Z1304-55b Grid Bar Screw
 Z13-56 Grid Head
 Z1304-57 Grid Cross Bar 4 x 4 x 43"
 Z1304-58 4-1/2" Hitch Pin with Hair Pin Clip
 Z130-119 Stinger hose



Z30:

- Part #** Z1304-16 1/2-13 x 1" Hex Bolt Grade 5
 Z3-27 Extend Arm Pivot Pin (2-1/2 x 12") with 1 - 4-1/2" Bolt & Nut.(no plate)
 Z3-32 Horizontal End Plate
 Z13-33 Horizontal Extend Cylinder
 Z3-35 Outer Horizontal Extend Tube
 Z30-36 Extend Cylinder Pin 1 x 6"
 Z304-36b Folding Lock Latch Bolt
 Z1304-36a 1" Snap Ring
 Z3-44b Stinger
 Z13-45 Grid Pivot Pin
 Z13-46 Grid Bearing
 Z13-47 Grid Bearing Race
 Z13-48 Grid Pivot Pin Nut 1-1/2-12 Grade 8
 Z13-55a Grid Bar Pivot Tab
 Z1304-55b Grid Bar Screw
 Z13-56 Grid Head
 Z1304-57 Grid Cross Bar 4 x 4 x 43"
 Z1304-58 4-1/2" Hitch Pin with Hair Pin Clip
 Z130-119 Stinger Hose



Fifthwheeler Parts

Support Bar
Socket

Beam

Upper Tilt Cylinder
Mount

Zacklift Pivot Pin

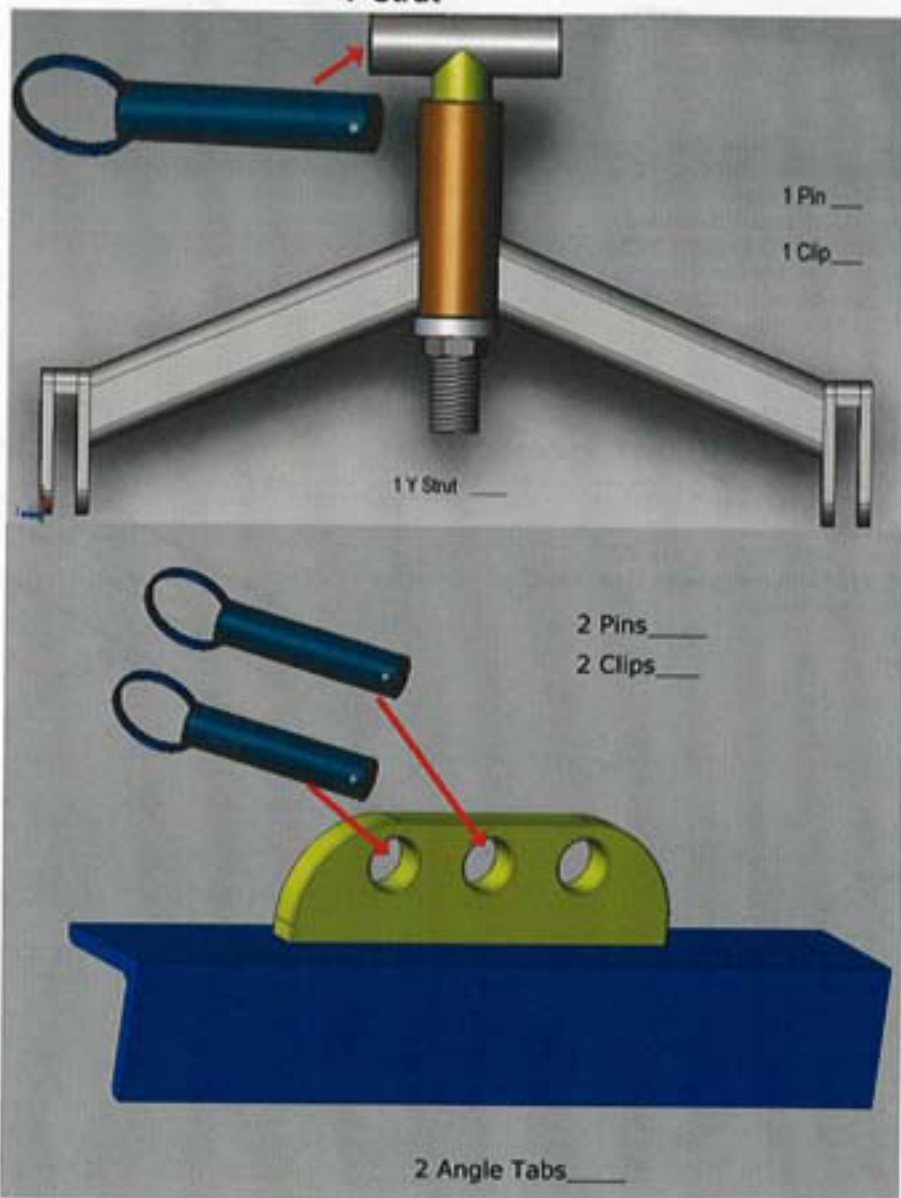
King
Pin

Frame
Clamps

Angle
Pad

Frame width
Adjustment
Bolts

Y-Strut



Stationary Mounting Parts Identification

Stationary Mounting/Z18,30,303,403

Z18:

- Part #** Z1-05 5 x 11-3/4" Tilt Cylinder
 Z1304-05a PO Check Valve
 Z1304-41a 1-3/8" Snap Ring
 Z1304-201 Mounting Ear
 Z1304-201e Collar 2-1/2 ID x 3-1/2 OD
 Z1304-201f Tilt Cylinder Shaft 2-1/2 x 38"
 Z1304-201g 4-1/2" Bolt and Nut
 Z1304-201h Reinforcement Crossmember
 Z1304-203 Floating Crossmember
 Z1304-203a Crossmember
 Z130-203b Upper Tilt Cylinder Bushings
 Z130-204 Upper Tilt Cylinder Pin 1-3/8 x 11-1/4" with 2 Cotter Pins
 Z130-206 Lower Tilt Cylinder Pin 1-3/8 x 6-1/4"

Z30:

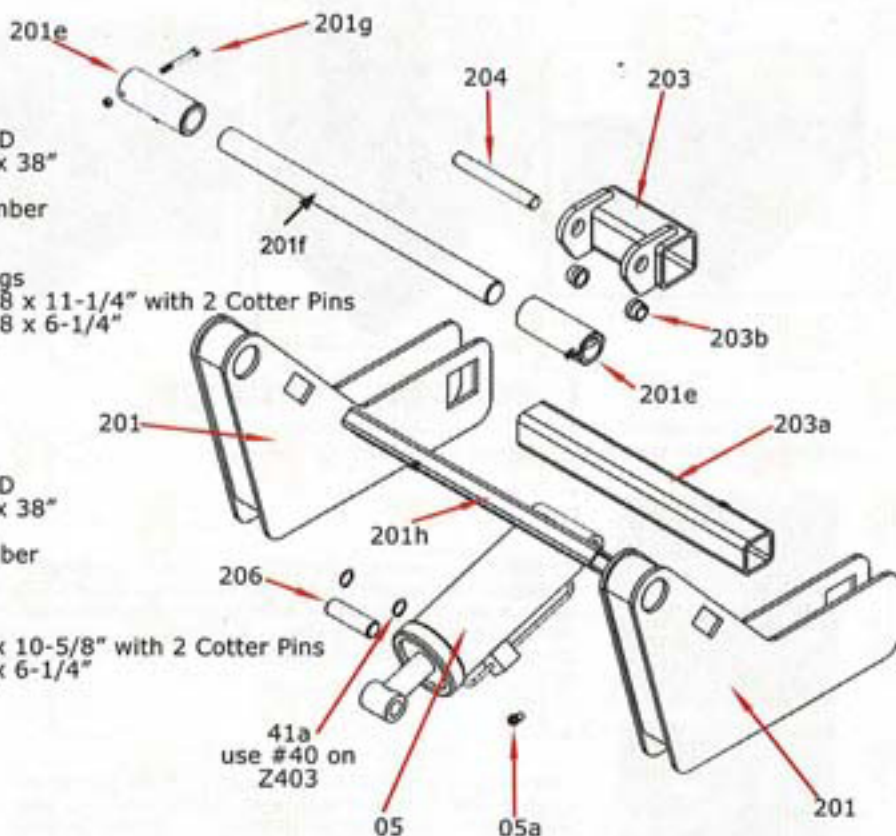
- Part #** Z30-05 6 x 11-3/4" Tilt Cylinder
 Z1304-05a PO Check Valve
 Z1304-41a 1-3/8" Snap Ring
 Z1304-201 Mounting Ear
 Z1304-201e Collar 2-1/2 ID x 3-1/2 OD
 Z1304-201f Tilt Cylinder Shaft 2-1/2 x 38"
 Z1304-201g 4-1/2" Bolt and Nut
 Z1304-201h Reinforcement Crossmember
 Z1304-203 Floating Crossmember
 Z1304-203a Crossmember
 Z130-203b Upper Tilt Cylinder Bushings
 Z130-204 Upper Tilt Cylinder Pin 1-3/8 x 11-1/4" with 2 Cotter Pins
 Z130-206 Lower Tilt Cylinder Pin 1-3/8 x 6-1/4"

Z303:

- Part #** Z30-05 6 x 11-3/4" Tilt Cylinder
 Z1304-05a PO Check Valve
 Z1304-41a 1-3/8" Snap Ring
 Z1304-201 Mounting Ear
 Z1304-201e Collar 2-1/2 ID x 3-1/2 OD
 Z1304-201f Tilt Cylinder Shaft 2-1/2 x 38"
 Z1304-201g Bolt and Nut
 Z1304-201h Reinforcement Crossmember
 Z1304-203 Floating Crossmember
 Z1304-203a Crossmember
 Z130-203b Upper Tilt Cylinder Bushings
 Z130-204 Upper Tilt Cylinder Pin 1-3/8 x 11-1/4" with 2 Cotter Pins
 Z130-206 Lower Tilt Cylinder Pin 1-3/8 x 6-1/4"

Z403:

- Part #** Z4-05 7 x 11-1/4" Tilt Cylinder
 Z1304-05a PO Check Valve
 Z1304-40 1-3/4" Snap Ring
 Z1304-201 Mounting Ear
 Z1304-201e Collar 2-1/2 ID x 3-1/2 OD
 Z1304-201f Tilt Cylinder Shaft 2-1/2 x 38"
 Z1304-201g Bolt and Nut
 Z1304-201h Reinforcement Crossmember
 Z1304-203 Floating Crossmember
 Z1304-203a Crossmember
 Z130-203b Not used on Z403
 Z4-204 Upper Tilt Cylinder Pin 1-3/4 x 10-5/8" with 2 Cotter Pins
 Z4-206 Lower Tilt Cylinder Pin 1-3/4 x 6-1/4"



STANDARD EQUIPMENT

Height x Width



FORKS All forks are high tensile steel.

Chain Fork pair Slotted for 3/8" chain, provide a Tow-Bar like hook-up.

1 x 2.5 Fork pair General low profile front axle fork. This specially engineered fork provides a snug fit around axle.

Torsion Bar Fork pair Rounded for secure fit on torsion bars and front axles. Eliminates load shift.

6 x 6.5 Fork pair Curved engineering allows for solid, no-slip positioning of frames, axles and cross members.

9 x 4 Forks pair Tall, wide surfaced fork for frames, cross members and axles or for turning sideways on front springs.



12" Reach Extenders increase the reach with any fork and move a large rear differential away from the underlift's crossbar.

1 receiver, 3 settings

Fork receivers, along with cross bar, feature Zacklift's trademark 'diamond' design, engineered for maximum strength. Fork receivers can be positioned on either side of the cross bar and at two height settings.



Zacklift's hydraulic components have been carefully selected for the highest quality, and most trouble-free, long-life service possible. The U.S. manufactured sectional valve features electric over hydraulic operation, not lower quality air operation. Additional sections may be conveniently added.

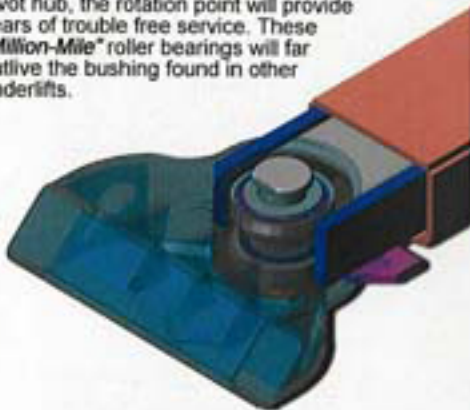


The valve includes both levers and a 15' corded remote control. The additional lever operation assures no down time if a remote control is ever left behind. A wireless remote control is always an option with either system.



If self contained power is required, Zacklift offers a NO-CHARGE OPTION of a 12 Volt Electro-Hydraulic Power System 15' corded remote also included. Both choices also include a custom, roto molded cover.

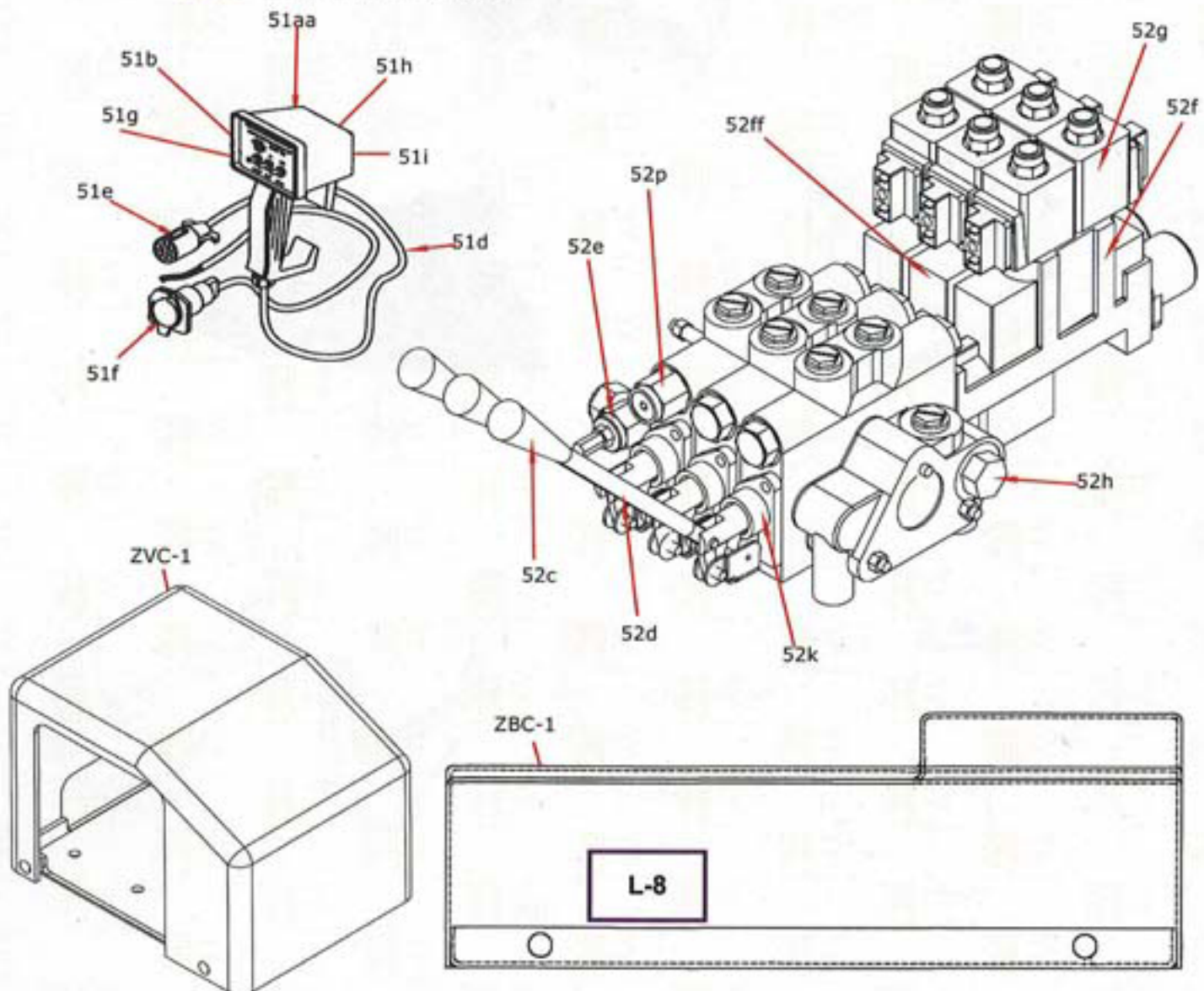
The exceptionally low profile of the Zacklift allows for more single picks under low bumpers and airfoils. Engineered with Timken Roller Bearings in the critical pivot hub, the rotation point will provide years of trouble free service. These "Million-Mile" roller bearings will far outlive the bushing found in other underlifts.



Standard Equipment Identification

Standard Equipment

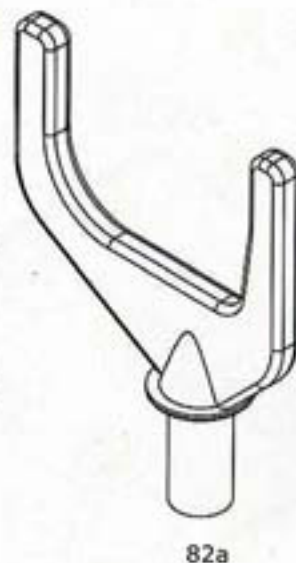
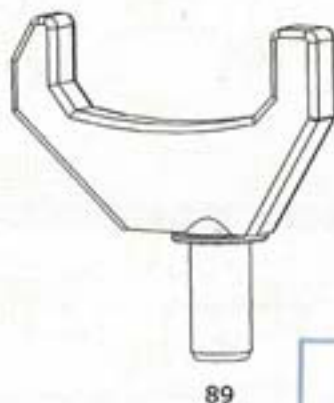
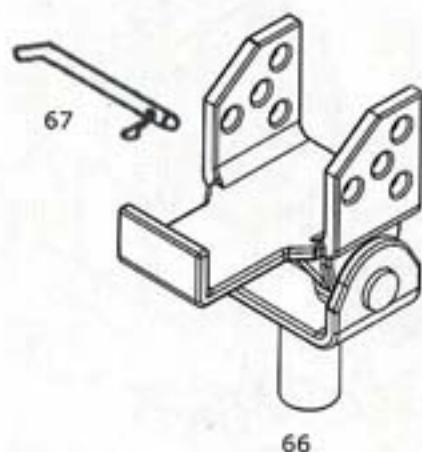
Part #	Z1304-51aa	Remote Control Complete
	Z1304-51b	Toggle Switch
	Z1304-51d	Remote Control Cord per foot
	Z1304-51e	9 Way Plug Male End
	Z1304-51f	9-Way Plug w/Cover No Wire Female End
	Z1304-51ff	9-Way Plug w/Cover 18" wire Lead Female End
	Z1304-51g	Silicon Boot for Switch
	Z1304-51h	3 Hole Plastic Enclosure Box
	Z1304-51i	Face Plate
	Z1304-52a	Manual/Electric Valve Complete
	Z1304-52c	Knob
	Z1304-52d	Lever with Knob
	Z1304-52e	Relief Cartage
	Z1304-52f	Solenoid Valve Section
	Z1304-52ff	Motor Spool Solenoid Valve Section
	Z1304-52g	12 Voil Coil
	Z1304-52h	Power Beyond
	Z1304-52k	Clevis Sub Assembly
	Z1304-52p	1000 pound Pressure Relief
	ZVC-1	Manual/Electric Valve Cover
	ZBC-1	12 Volt Power Pack Cover



Optional Equipment Identification

Optional Equipment

- Part #** Z1304-66 Spring Fork
 Z1304-67 Spring Fork Pin
 Z1304-81a 5" Height Extenders
 Z1304-82 Mack Fork 8-3/4 wide x 6" deep
 Z1304-82a Big Mack Fork 10-3/4 wide x 6-3/4" deep
 Z1304-88 Scoop-n-Go Fork
 Z1304-89 Steertek Fork 8-1/4 wide x 3" deep
 Z10-1019A Cable Guide fits Z403
 Z10-1019B Cable Guide fits Z30, Z303
 Z101019C Cable Guide fits Z18



M-1

Optional Equipment Identification

Optional Equipment

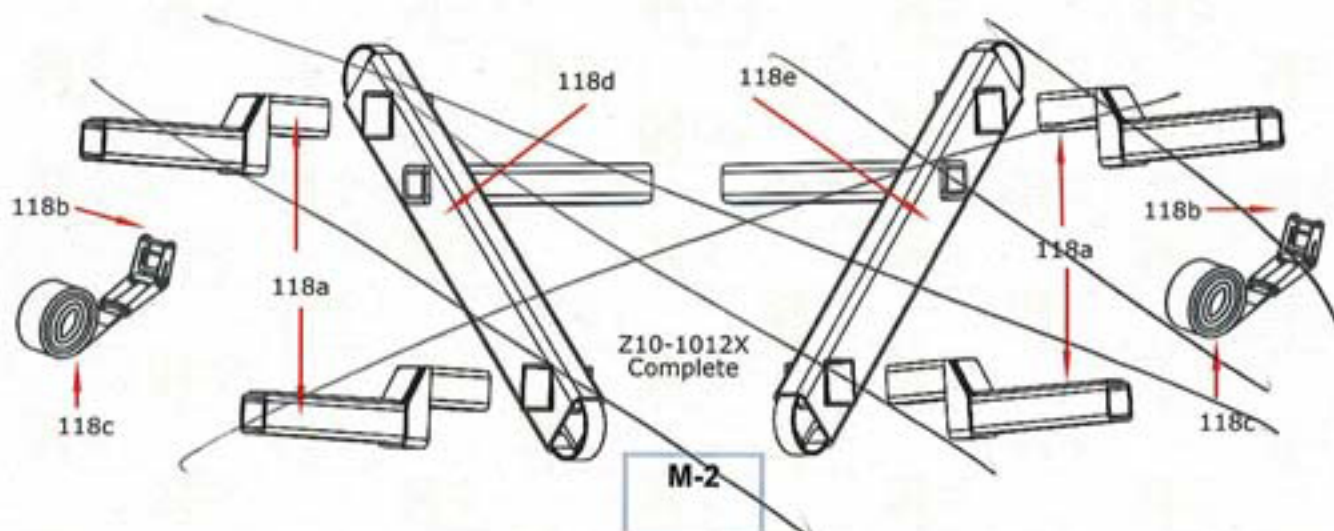
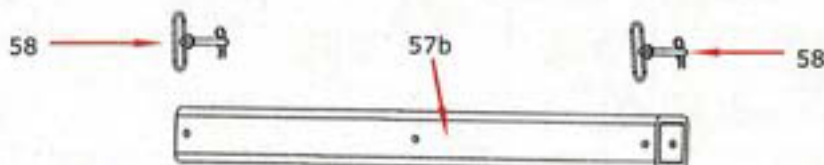
- Part # Z1304-57b 4 x 4 x 60" Grid Bar
 Z1304-58 4-1/2" Hitch Pin with Hair Pin Clip
 Z1304-118a HDMP Wheel Lift Arm (Single)
 Z1304-118b 3" Ratchet
 Z1304-118c 3" Strap
 Z1304-118d HDMP Drivers Side Main Section
 Z1304-118e HDMP Passengers Side Main Section
 Z10-1025X Trailer Fifthwheel Hitch Complete
 Z10-1012X Heavy Duty Multi Position Wheel Lift Complete
 Z10-1026X Safety Chain Attachment Blocks



#10-1026X
Safety Chain Attachment Blocks



#10-1025X
Trailer/Fifthwheel Hitch Complete

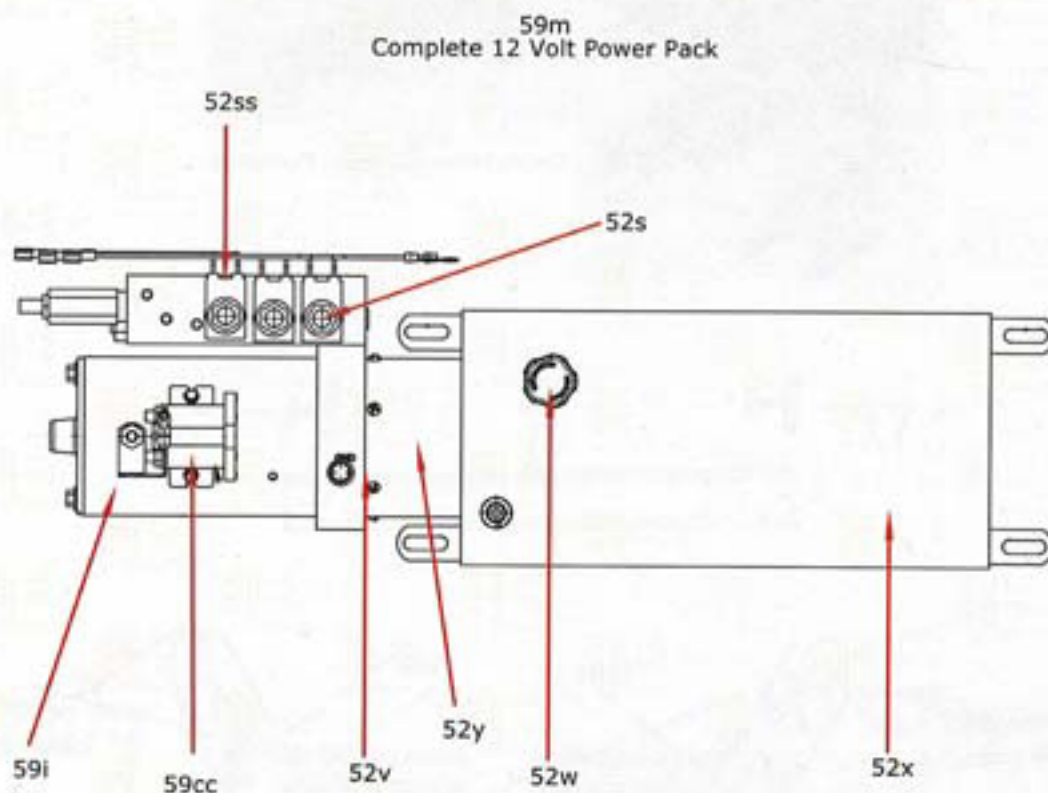


12 Volt Power Pack Parts Identification

12 Volt Power Pack (MCH)/Z18,30,303,403

12 Volt Power Pack (MCH):

- Part #** Z1304-52s 12 Volt Cartridge, 4W/3P, Valve (MCH 3 valves per unit)
 Z1304-52ss 12 Volt Coil, 10 VDC (MCH 6 coils per unit)
 Z1304-52t Exchange 12 Volt Coils for 24 Volt (not show)
 Z1304-52v O-Ring
 Z1304-52w Breather Cap
 Z1304-52x Steel Reservoir
 Z1304-52y Internal Pump Assembly (MCH)
 Z1304-59cc Internal Ground Starter Solenoid (MCH)
 Z1304-59i DC 12V Heavy Duty Motor (MCH)
 Z1304-59m 12 Volt Power System Complete (MCH)



CARROSSERIE VAN WIEMEERSCH N.V.

DEPANNAGESYSTEMEN - KIPPERS - WISSELSYSTEMEN - ALUVAN
HMF AUTOLAADKRANEN - TECHNAMICS HAAKARMSYSTEMEN

Industrieweg 152-154
9030 GENT-MARIAKERKE

Zacklift International

Tel. (09) 227 49 50
Fax (09) 227 93 38
H.R. Gent 148.802
B.T.W. BE 431.849.839
Fortis Bank 290-0357004-65

UW ZACKLIFT GEBRUIKEN

GEVAAR !!

Kans op knelling
Niet in de werkzone van de lift staan
Sta buiten het bereik van de Zacklift bij gebruik of opvouwen
Onnodig oponthoud in de werkzone van de lift kan verwondingen of dood veroorzaken

OPLADEN MET VORKENHOUDERS EN VORKEN

- 1 1) Controleer dat de dwarsbalk stevig in de dwarsbalkhouder is bevestigd bij middel van de dwarsbalk-bout.
- 1 2) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
Vouw de uitschuifarm naar binnen toe om de opvouwsluiting los te maken van de vastzettingspal.
- 1 3) Klap de opvouwsluiting weg van de uitschuifarm bij niet gebruik.
- 1 4) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
UITPLOOIEN : AANDACHT ! – De Papegaaibek veiligheidssluiting niet openen wanneer de Zacklift opgevouwen is. Dit kan leiden tot verwonding of dood.
- 1 5) **OPENEN** : Trekken en draaien
SLUITEN : Bij afslepen altijd in gesloten positie
OPENEN van de Papegaaibek veiligheidssluiting : a) trekken en draaien aan de hendel tot verticale positie
b) de veiligheidssluiting naar de cabine toe duwen
(eventueel heffen om de Papegaaibek sluitpin los te maken)
- 1 6) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
De uitschuifarm laten zakken tot 50 à 80 mm van de grond.
- 1 7) Pas de vorkhouders aan tot de gewenste hoogte en breedte. Zorg dat de verankeringspin wordt teruggeplaatst in de dwarsbalk. Er zijn 2 hoogte-posities mogelijk. De vorkhouders kunnen langs beide zijden van de dwarsbalk geplaatst worden.

- I 8) Grote verlaagde vorken – grote V vorken – kleine verlaagde vorken – Torsiestang vorken
Kies de kleine verlaagde vorken om onder lage bumpers te schuiven. De torsiestang vorken dienen voor het slepen op de torsiestang van een bus, de grote verlaagde vorken voor de achterzijde en de grote V vorken voor het vrachtwagenchassis.
- I 9) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
De Zacklift knikken om de dwarsbalk en dwarsbalkhouder onder de voorbumper van het af te slepen voertuig te schuiven.
- I 10) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
De uitschuifarm uitschuiven tot de vorken gepositioneerd zijn onder het ophefpunt.
- I 11) Vorken en houders moeten op zelfde afstand van de as geplaatst worden. Dit is belangrijk om verschuiven van het afgesleepte voertuig te vermijden.
- I 12) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
De uitschuifarm omhoog knikken voor grotere bodemvrijheid alvorens recht omhoog te heffen.
- I 13) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
Hef de uitschuifarm omhoog tot de Papegaaibek veiligheidssluiting inspringt. Bij elke afsleping moet de uitschuifarm in de Papegaaibek veiligheidssluiting vergrendeld zijn.
- I 14) **OPENEN** : Trekken en draaien
SLUITEN : Bij afslepen altijd in gesloten positie
Zorg dat de Papegaaibek veiligheidssluiting altijd in gesloten positie is alvorens af te slepen. De hendel moet tegen de verticale profiel geplaatst worden.
- I 15) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
BELANGRIJK : altijd 50 mm opening laten.
De binnenste uitschuifarm INTREKKEN tot de gewenste afsleeppositie
BELANGRIJK : minimum 50 mm opening laten om de dwarsbalkhouder tijdens het afslepen te laten draaien
- I 16) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
De maximale laadhoogte wordt bereikt als de Zacklift in de gesloten Papegaaibek veiligheidssluiting zit en de Zacklift dan zo veel mogelijk naar boven wordt geknikt.
- I 17) **AANDACHT !!!** Gebruik de opbouw functie niet om hoogte te winnen.
Dit kan de Zacklift beschadigen en ontnemt alle recht op waarborg.
Dit kan persoonlijke verwondingen veroorzaken.
De opvouwfunctie dient enkel om de Zacklift in transportpositie te brengen.
De knikfunctie dient gebruikt te worden om hoogte te winnen.
- I 18) Verzeker de lading aan het afsleepvoertuig met de veiligheidskettingen. Niet gebruiken van de veiligheidskettingen ontnemt alle recht op waarborg.

AFLADEN MET VORKHOUDERS EN VORKEN

- I 19) Verwijder de veiligheidskettingen.

- I 20) **OPENEN** : Trekken en draaien
SLUITEN : Bij afslepen altijd in gesloten positie
OPENEN van de Papegaaibek veiligheidssluiting : a) trekken en draaien aan de hendel tot verticale positie
b) de veiligheidssluiting naar de cabine toe duwen
(eventueel heffen om de Papegaaibek sluitpin los te maken)
- I 21) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
Laat de uitschuifcilinder zakken tot 50 à 80 mm van de grond
- I 22) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
Knik de uitschuifarm neerwaarts tot de banden de grond raken.
- I 23) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
Laat de uitschuifcilinder zakken om vrij te zijn van lage onderbouw en lage hinderingen.
- I 24) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
Trek de uitschuifarm in naar gesloten positie om kantelen van de dwarsbalkhouder in transportpositie te vermijden.
- I 25) Trek de binnenste uitschuifarm in transportpositie.
BELANGRIJK : Trek de dwarsbalkhouder tot tegen de buitenste uitschuifarm om kantelen bij niet gebruik tegen te gaan.
- I 26) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
Hef de uitschuifarm in de Papegaaibek veiligheidssluiting
- I 27) **OPENEN** : Trekken en draaien
SLUITEN : Bij afslepen altijd in gesloten positie
SLUITEN van de Papegaaibek veiligheidssluiting : a) trekken en draaien aan de hendel tot verticale positie
b) de veiligheidssluiting van de cabine wegduwen
(eventueel heffen om de Papegaaibek sluitpin los te maken)
- I 28) Verwijder de vorken en vorkhouders voor opberging. Plaats de verankeringspinnen terug.
- I 29) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
Vouw de uitschuifarm in de transportpositie
- I 30) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
Knik de uitschuifarm in de transportpositie
- I 31) Sluit de opvouwsluiting over de vastzettingspal met de uitschuifarm naar de cabine geknikt.

GEVAAR !!

Kans op knelling
Niet in de werkzone van de lift staan
Sta buiten het bereik van de Zacklift bij gebruik of opvouwen
Onnodig oponthoud in de werkzone van de lift kan verwondingen of dood veroorzaken

OPLADEN MET WIELLIFT

- J 1) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
UITPLOOIEN : AANDACHT ! – De Papegaaibek veiligheidssluiting niet openen wanneer de Zacklift opgevouwen is. Dit kan leiden tot verwonding of dood.
- J 2) **OPENEN** : Trekken en draaien
SLUITEN : Bij afslepen altijd in gesloten positie
OPENEN van de Papegaaibek veiligheidssluiting : a) trekken en draaien aan de hendel tot verticale positie
b) de veiligheidssluiting naar de cabine toe duwen
(eventueel heffen om de Papegaaibek sluitpin los te maken)
- J 3) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
De uitschuifarm laten zakken tot 50 à 80 mm van de grond.
- J 4) Verwijder de korte dwarsbalk van 1.100 mm. Plaats de lange dwarsbalk van 1.525 mm.
Controleer dat de dwarsbalk stevig in de dwarsbalkhouder is bevestigd bij middel van de dwarsbalk-bout.
- J 5) Schuif het hoofdsteen in de dwarsbalk. Pas het hoofdsteen aan tot de gewenste breedte en/of binnenpositie van de banden van het af te slepen voertuig.
- J 6) Plaats de eerste wiellift arm. 4 verschillende posities zijn mogelijk om verscheidene bandenmaten te kunnen opheffen. Zorg ervoor de de armen dezelfde positie hebben en dat ze stevig in de hoofdsteenen bevestigd zijn.
- J 7) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
De Zacklift knikken om de dwarsbalkhouder, dwarsbalk en 2-delige wiellift onder de voorbumper van het af te slepen voertuig te schuiven.
- J 8) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
De uitschuifarm uitschuiven tot de wielliftarmen de banden raken.
- J 9) Plaats de 2^{de} wielliftarm om elke band stevig te borgen.
- J 10) Binnenste hoge positie.
De wielliftarmen worden in binnenste hoge positie gedraaid voor kleine banden. Beide armen dienen geplaatst te worden.
- J 11) Buitenste positie.
Buitenste positie van de wielliftarmen is nodig voor grotere banden. Hoge of lage positie dient gekozen

als nodig voor het stevig borgen van de banden in de wielliftarmen.
Zorg ervoor dat de wielliftarmen in dezelfde positie staan.

- J 12) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
Hef de uitschuifarm omhoog tot de Papegaaibek veiligheidssluiting inspringt. Bij elke afsleping moet de uitschuifarm in de Papegaaibek veiligheidssluiting vergrendeld zijn.
- J 13) **OPENEN** : Trekken en draaien
SLUITEN : Bij afslepen altijd in gesloten positie
Zorg dat de Papegaaibek veiligheidssluiting altijd in gesloten positie is alvorens af te slepen. De hendel moet tegen de verticale profiel geplaatst worden.
- J 14) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
De maximale laadhoogte wordt bereikt als de Zacklift in de gesloten Papegaaibek veiligheidssluiting zit en de Zacklift dan zo veel mogelijk naar boven wordt geknikt.
- J 15) **AANDACHT !!!** Gebruik de opvouwfunctie niet om hoogte te winnen.
Dit kan de Zacklift beschadigen en ontnemt alle recht op waarborg.
Dit kan persoonlijke verwondingen veroorzaken.
De opvouwfunctie dient enkel om de Zacklift in transportpositie te brengen.
De knikfunctie dient gebruikt te worden om hoogte te winnen.
- J 16) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
BELANGRIJK : altijd 50 mm opening laten.
De binnenste uitschuifarm **INTREKKEN** tot de gewenste afsleeppositie
BELANGRIJK : minimum 50 mm opening laten om de dwarsbalkhouder tijdens het afslepen te laten draaien
- J 17) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
De opening van 50 mm wordt gemeten van het uiteinde van de buitenste uitschuifarm tot het uiteinde van de dwarsbalkhouder.
- J 18) **VEILIGHEIDSBINDRIEM**
Bind steeds een veiligheidsbindriem rond de banden tijdens het afslepen. Omring de band en wiellift en trek stevig aan.
- J 19) Verzeker de lading aan het afsleepvoertuig met de veiligheidskettingen. Niet gebruiken van de veiligheidskettingen ontnemt alle recht op waarborg.

AFLADEN MET WIELLIIFT

- J 20) Verwijder de veiligheidskettingen en veiligheidsbindriemen, .
- J 21) **OPENEN** : Trekken en draaien
SLUITEN : Bij afslepen altijd in gesloten positie
OPENEN van de Papegaaibek veiligheidssluiting : a) trekken en draaien aan de hendel tot verticale positie
b) de veiligheidssluiting naar de cabine toe duwen
- J 22) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
Laat de uitschuifcilinder zakken tot 50 à 80 mm van de grond

- J 23) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
Knik de uitschuifarm neerwaarts tot de banden de grond raken en de gewichtsdruk van wielliftarmen vrijkomt.
- J 24) Verwijder de wielliftarmen van het hoofdsteunbeen. Berg de armen en steunbenen op om verlies te vermijden.
Plaats de verankeringspinnen terug.
- J 25) Trek de binnenste uitschuifarm in transportpositie.
BELANGRIJK : Trek de dwarsbalkhouder tot tegen de buitenste uitschuifarm om kantelen bij niet gebruik tegen te gaan.
- J 26) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
Hef de uitschuifarm in de Papegaaibek veiligheidssluiting
- J 27) **OPENEN** : Trekken en draaien
SLUITEN : Bij afslepen altijd in gesloten positie
SLUITEN van de Papegaaibek veiligheidssluiting : a) trekken en draaien aan de hendel tot verticale positie
b) de veiligheidssluiting van de cabine wegduwen
- J 28) **WAARSCHUWING** : geen gebruik maken van de opvouwfunctie om de lading te dragen of verplaatsen.
Gebruik hiervoor de knik-beweging.
Vouw de uitschuifarm in de transportpositie.
Knik de uitschuifarm in de transportpositie.
- J 29) Sluit de opvouwsluiting over de vastzettingspal met de uitschuifarm naar de cabine geknikt..

GEVAAR !!

Kans op knelling

Niet in de werkzone van de lift staan

Sta buiten het bereik van de Zacklift bij gebruik of opvouwen

Onnodig oponthoud in de werkzone van de lift kan verwondingen of dood veroorzaken

Atomic Head	Dwarsbalk-houder	Axle	As
Grid Bar	Dwarsbalk	To shift / shifting	Verschuiven
Grid Bar Screw	Dwarsbalk-bout	To avoid	Vermijden
Extend Arm	Uitschuifarm	Important	belangrijk
Fold lock	Opvouwsluiting	Height	hoogte
Bolt	Vastzettingspal	Warrantie	waarborg
Warning	Waarschuwing	Damage	Beschadiging
To lock	Sluiten	Safety Chains	Veiligheidskettingen
To unlock	Openen	Danger	Gevaar
To extend	Uitschuiven	To load	Opladen
To retract	Intrekken	To unload	Afladen
To fold	Opvouwen	Ground	Grond
To unfold	Uitplooien	Tire(s)	Bande(n)
To tilt	Knikken	Storage position	Transportpositie
To raise	Heffen	To remove	verwijderen
To lower	Laten zakken / Dalen	HDWL	2-delige wiellift
To clear	Losmaken	Main rail	Hoofdsteunbeen

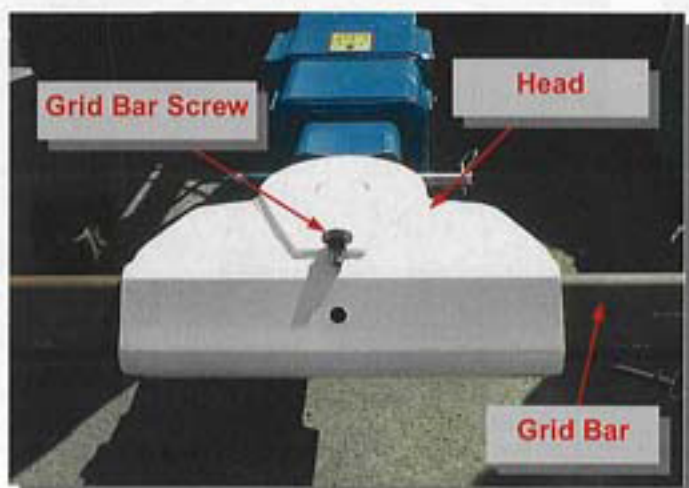
Jay Bird Safety Lock	Papegaaijbeek veiligheidssluiting	HDWL arms	Wiel lift armen
Caution	Aandacht !	Size of tires	Bandenmaat
Injury	Verwonding	To touch	Raken
Death	Dood	To cradle	Borgen
To pull	Trekken	Inward/upper positioning	Binnenste hoge positie
To twist	Draaien	Outward/upper positioning	Buitenste hoge positie
To tow / towing	Afslepen	Inward/lower positioning	Binnenste lage positie
Handle	Hendel	Outward/lower positioning	Buitenste lage positie
To push	Duwen	Safety tie down strap	Veiligheidsbindriem
Fork(s)	Vork(en)	To wrap	Binden
Fork Bracket(s)	Vorkhouder(s)	Pressure	Druk
Hitch Pin	Verankerpin		
Big Scoop Forks	Grote verlaagde vorken		
Big V Forks	Grote V vorken		
Low Scoop Forks	Kleine verlaagde vorken		
Torsion Bar Forks	Torsiestang vorken		
Vehicle	Voertuig		
Lift point	Ophefpunt		

OPERATING YOUR ZACKLIFT



Stand clear of this unit when in use or during storage. CRUSH HAZARD. Stand clear. Not standing clear of this equipment at all times could result in injury or death.

Frame Lifting Loading



1) Check that Grid Bar is firmly attached to Head by Grid Bar Screw.



2) Fold Extend Arm towards outer Vertical Tube to clear fold lock from bolt. Lift fold lock off bolt to unlock.



3) Tilt fold lock back out of operators way when not in use.



4) UNFOLD: CAUTION — do not unlock J Lock when unit is folded. Unlocking when unit is folded could result in injury or death.



5) Unlock J Lock by pushing in towards vertical tube. May have to raise to clear J lock pin.

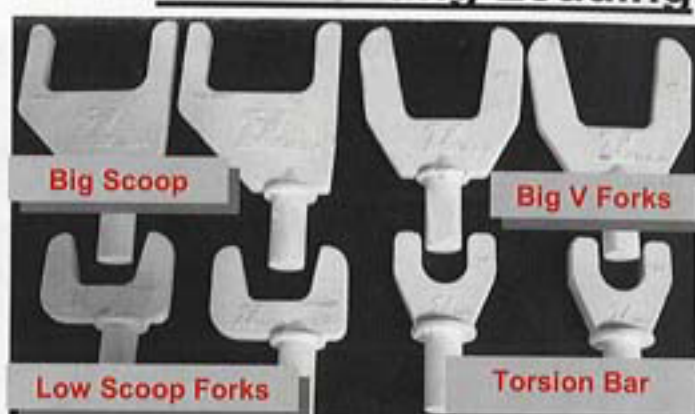


6) Lower Horizontal Tube until it is about 2" or 3" inches from the ground

Frame Lifting Loading



7) Adjust Fork Brackets to desired height and width. Be sure hitch pin is replaced in Grid Bar. Two height settings are possible and Brackets may be positioned to receive on either side of Grid Bar.



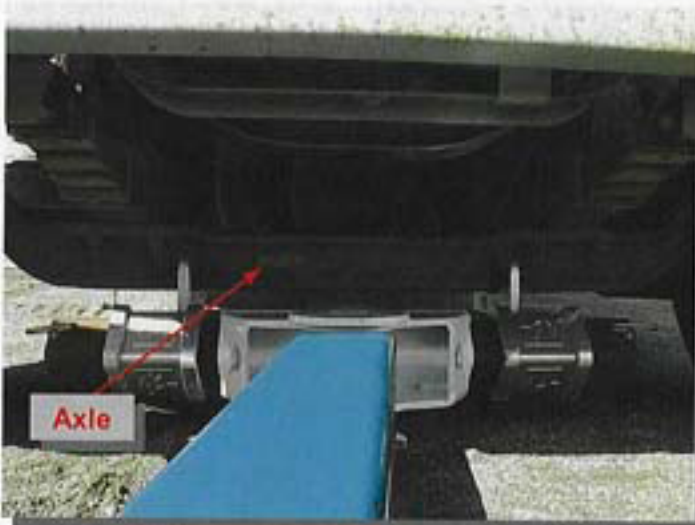
8) Select Low Scoop Forks for sliding under low bumpers, Torsion Bar Forks for bus torsion rod, Big Scoop Forks for rear ends and Big V Forks for the main frame.



9) Tilt Zacklift down to slide Head and Grid Bar under the front bumper of the towed vehicle.



10) EXTEND Horizontal Extend Tube out until Forks are positioned under lift point.



11) Forks and Brackets must be evenly spaced along the axle. This is important to avoid shifting of towed vehicle.



12) To clear low air foil TILT Horizontal Extend Tube upward before lifting straight up.

Frame Lifting Loading



Raise

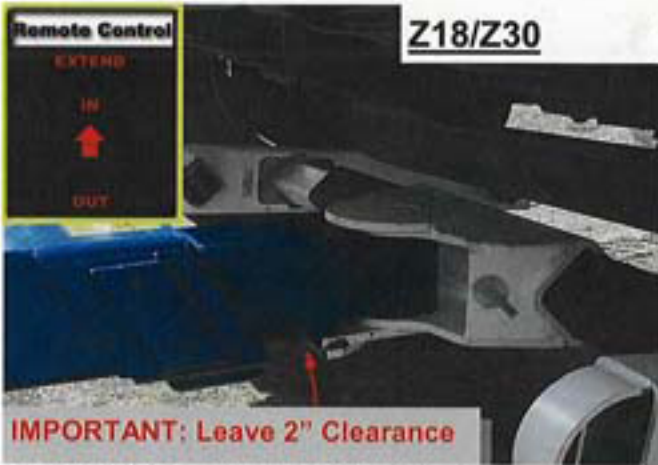
13) RAISE Horizontal Extend tube until J Lock is engaged. Zacklift Horizontal Extend tube Must be engaged into J Lock at all times when towing.

Caution!!!

Do Not use Fold-up feature to gain height. Using fold to gain height will damage Zacklift and void all warranties and could also cause personal injury. The fold feature is to be used exclusively for the purpose of folding the Zacklift into storage position. Use tilt function for gaining height.



14) Make sure J Lock is in "Locked" position before towing. J Lock is pulled out, away from vertical main tube and completely hooking around J lock pin.



Z18/Z30

IMPORTANT: Leave 2" Clearance

15) RETRACT Inner Horizontal Tube to the towing position. IMPORTANT: Leave at least 2 inches extended to allow the Head to properly pivot during towing.

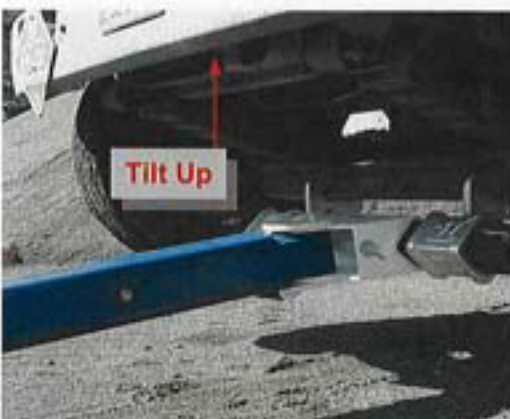
Z403 Z303

Extend either section 2" to allow head to pivot during towing.



15a

2" Minimum



Tilt Up

16) Maximum load lifting height is achieved by raising lift into the Locked position and functioning upward tilt.

17) Secure load to towing vehicle with Safety Chains. Failure to secure vehicle to tow voids warranty. Follow all State and Federal regulations.

Federal Regulation 49CFR393.1
Every motor carrier, and employees directly concerned with the installation and maintenance of equipment and accessories shall comply and be conversant with the requirements and specifications of this part, and no motor carrier shall operate any vehicle or cause or permit to be operated, unless it is equipped in accordance with said requirements and specifications.

Federal Regulation 49CFR.71 (10) Safety devices in case of tow bar failure or disconnection
(i) the towed vehicle shall be connected to the towing vehicle by a safety device to prevent the towed vehicle from breaking loose in the event the tow-bar fails or becomes disconnected. When safety chains or cables are used as the safety device for that vehicle, at least two safety chains or cables meeting the requirements of paragraph (h)(10)(ii) of this section shall be used... (ii) if chains or cables are used as the safety device, they shall be crossed and attached to the vehicle near the points of bumper attachments to the chassis of the vehicles. The length of chain used shall be no more than necessary to permit free turning of the vehicles. The chain shall be attached to the tow-bar at the point of cross or as close to that point as is practicable.

Frame Lifting Unloading



18) Remove Safety Chains.



19) UNLOCK J Lock by pushing in towards main body.



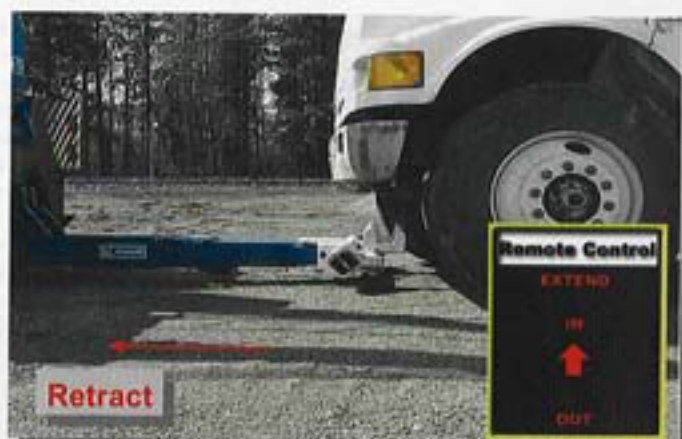
20) LOWER Horizontal Tube to within 2" - 3" from the ground.



21) TILT down until tires touch the ground.

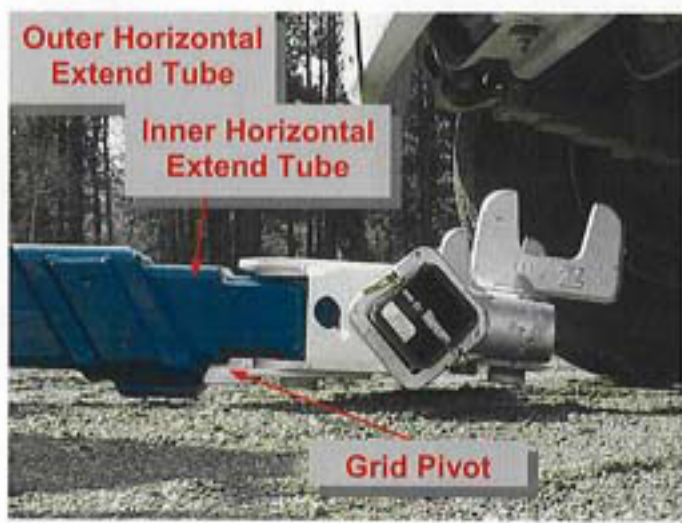


22) Lower Horizontal Extend Tube to clear undercarriage obstructions and low air foil before retracting.



23) RETRACT (Extend in) Horizontal Extend Tube to locking position to avoid pivoting when in storage position.

Frame Lifting Unloading



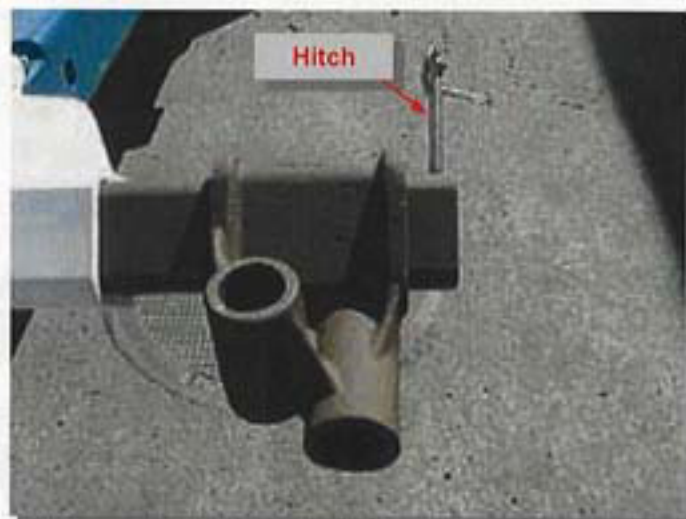
24) Retract Inner Horizontal Tube to the storage position. **IMPORTANT:** Retract the Head to butt against the Outer Horizontal to prevent tilting when not in use.



25) Raise Horizontal Extend Tube engaging J Lock.



26) LOCK J Lock by pulling out & completely hooking around J Lock pin.



27) Remove Forks & Fork Brackets for storage. Replace Hitch Pins in Grid Bar.

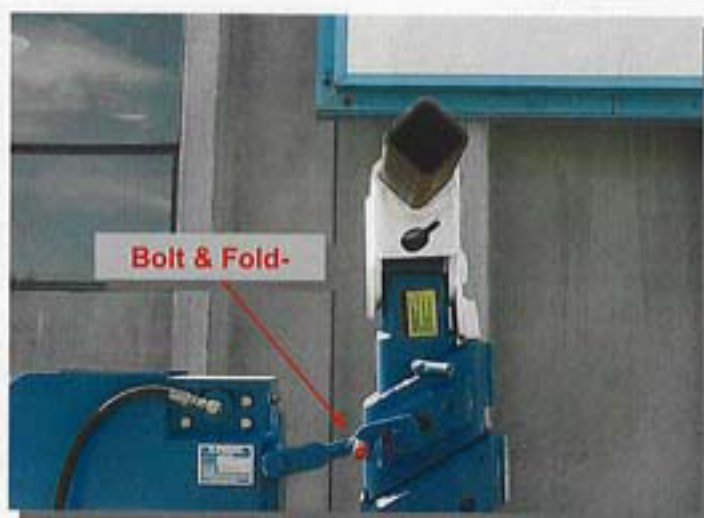


28) FOLD Horizontal Extend Tube for storage.



29) Tilt in towards cab for storage.

Frame Lifting Unloading



30) With Horizontal Extend Tube tilted back towards cab, Lock fold-lock securely on bolt.



Stand Clear of this unit when in use or during storage.
CRUSH HAZARD. Stand clear. Not standing clear of this
equipment at all times could result in injury or death.

J-1

Heavy Duty Wheel Lift



#1) UNFOLD CAUTION - Do not unlock J-Lock when Zacklift is folded. Unlocking when Zacklift is folded could result in injury or death.



#3) Lower Horizontal section until it is about 2" from the ground.



#2) After unfolding raise Zacklift to clear J-Lock pin. Push and hold lowering Zacklift until clear of J-Lock pin.



Heavy Duty Wheel Lift



#7) Slide wheel tray onto wheel rod and against tire. Make sure pull pins are both fully engaged

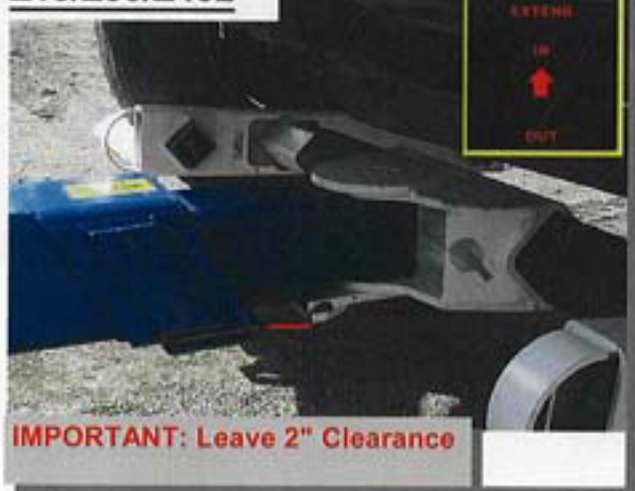


#8) Lift Zacklift fully into J-Lock. Pull strap over wheel and place hook into slot in rear of wheel tray.



#9) Tighten strap with bar provided

Z18/Z30/Z402



#11) Z403/Z303: Extend middle horizontal extend tube at least 2" from outer horizontal extend tube. This will create an equalization of pressure with inner tube, allowing head to pivot properly during towing. The head will appear to be locked against the inner extend tube but will disengage when turning.



#10) Tilt up to get proper towing height.

Caution!!!

Do Not use Fold-up feature to gain height. Using fold to gain height will damage Zacklift and void all warranties and could also cause personal injury. The fold feature is to be used exclusively for the purpose of folding the Zacklift into storage position. Use tilt function for gaining height.

Z403 Z303



J-3

Heavy Duty Wheel Lift

Federal Regulation 49CFR.71

(10) Safety devices in case of tow bar failure or disconnection

(i) the towed vehicle shall be connected to the towing vehicle by a safety device to prevent the towed vehicle from breaking loose in the event the tow-bar fails or becomes disconnected. When safety chains or cables are used as the safety device for that vehicle, at least two safety chains or cables meeting the requirements of paragraph (h)(10)(ii) of this section shall be used. . . (ii) if chains or cables are used as the safety device, they shall be crossed and attached to the vehicle near the points of bumper attachments to the chassis of the vehicles. The length of chain used shall be no more than necessary to permit free turning of the vehicles. The chain shall be attached to the tow-bar at the point of cross or as close to that point as is practicable.

Federal Regulation 49crf393.1

Every motor carrier..., and employees directly concerned with the installation and maintenance of equipment and accessories shall comply and be conversant with the requirements and specifications of this part, and no motor carrier shall operate any vehicle or cause or permit to be operated, unless it is equipped in accordance with said requirements and specifications.



- #12) Secure load to towing vehicle with Safety Chains. Failure to secure to vehicle in tow voids warranty.



OPERATING YOUR ZACKLIFT



Stand clear of this unit when in use or during storage. CRUSH HAZARD. Stand clear. Not standing clear of this equipment at all times could result in injury or death.

**COMPLETED WARRANTY CARD MUST BE RETURNED TO ZACKLIFT
WITHIN 30 DAYS OF PURCHASE FOR WARRANTY COVERAGE ELIGIBILITY.**

W A R R A N T Y

Zacklift International Inc. warrants each new ZACKLIFT wheel lift to be free from defects in material and workmanship for a period of one (1) year from date of original purchase from Zacklift International Inc.

The sole obligation of Zacklift International Inc. under this Warranty, statutory or otherwise, is limited, at its discretion, to the replacement or repair at its factory, or at a point designated by Zacklift International Inc., of such part or parts as shall appear to it upon inspection to be defective in material or workmanship.

This Warranty does not obligate Zacklift International Inc. to bear the cost of labor or transportation charges in connection with the replacement or repair of any part found to be defective. Further, all obligations of Zacklift International Inc. under this Warranty are null and void if (1) the product has been repaired or altered by any person not authorized by Zacklift International Inc., (2) the product has been subject to misuse, abuse, negligence, or accident, or all operating procedures have not been properly followed, (3) the specified lift and/or tow ratings have been exceeded, (4) the specified maintenance and lubrication requirements for the product have not been met, or (5) the product is used to lift individuals.

Zacklift International Inc. makes no warranty with respect to hydraulic power options, cylinders, valves, and related components, such being subject only to the 90 day warranties of their respective manufacturers.

ZACKLIFT INTERNATIONAL INC. SHALL IN NO EVENT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND OR CONTINGENT LIABILITIES ARISING OUT OF THE USE OF THE PRODUCT OR THE FAILURE OF ANY PARTS OR PRODUCTS TO OPERATE PROPERLY. THE WARRANTY DESCRIBED ABOVE IS THE ONLY WARRANTY MADE, AND IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Zacklift International Inc., whose policy is one of continuous improvement, reserves the right to improve its products through changes in design or materials as it may deem desirable without being obligated to incorporate such changes in products of prior manufacture.

This Warranty is not transferable and will become effective only upon completion and mailing of the attached Warranty Card to Zacklift International Inc. at the address shown.



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