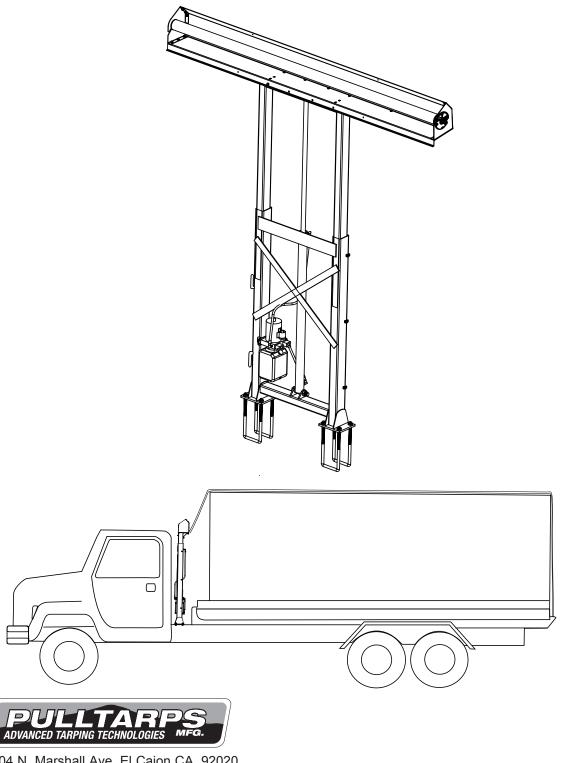
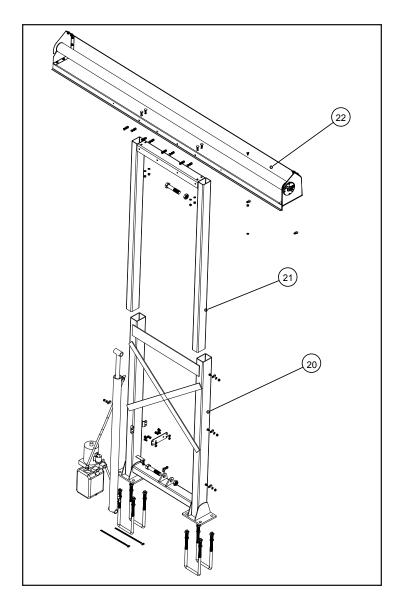
Pulltarps Tower with Pull out Tarp 513-0074 / 513-0076

With Tray 513-0068







Pulltarps Tower Installation Instructions

1. Use an overhead crane to position the tower

assembly on the chassis.

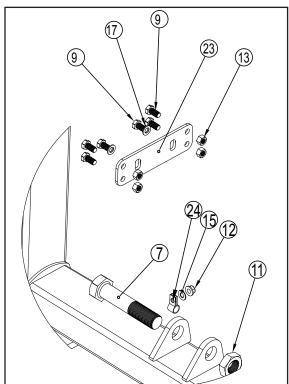
Note: The base assembly (#20) can be separated from the stage 1 extension (#21), to reduce the weight if an overhead crane is not available. Slide the stage 1 extension (#21) upward out of the base assembly (#20)

Position the base assembly (#20) on top of the frame rails and at least 3" behind the cab. Vehicles with tilt frames require a minimum of 6" clearance between the cab and the tilt frame.

Secure the base assembly in place. Generic "U" bolts, nuts, and washers are provided in the kit. Some fabrication may be required for your vehicle.

Reassemble base assembly (#20), stage 1 extension (#21).

2. Install the hydraulic cylinder into the tower assembly using the two 1" diameter bolts.(#7, #11)



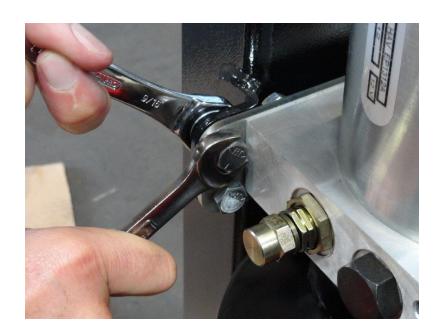
3. Attach the pump mount plate to the hydraulic power unit.

4. Attach the hydraulic power unit assembly to the single stage base assembly by bolting the pump mount plate to the base assembly.



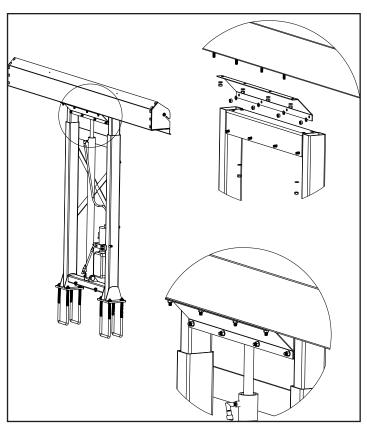


6. Attach the hoses to the pump unit and then the cylinder as pictured. The short (lower hose) connects to port "A". The long (upper hose connects to port "B".





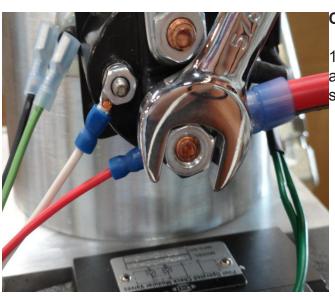
7. Fill pump reservoir with Dextron ATF or 32 Grade Hydraulic oil(not supplied) to the base of the filler cap.



Mounting the housing

8. Bolt the tower housing brace, (#4) to the stage 1 extension using the 3/8" x 1" bolts, flat washer & 3/8" nyloc nuts.

9. Bolt tower housing to top of tower per the attached drawing using the 3/8" x 1" bolts, flat washers & 3/8" nyloc nuts.

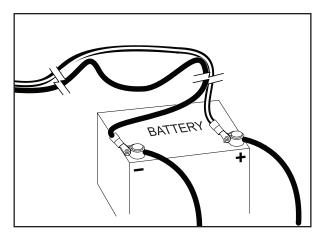


Connecting the power and switch

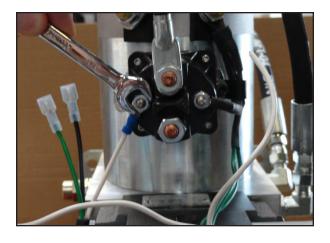
10. Connect the red/black or orange/black 6 gauge wire and the 10 gauge red wire from the switch box to the solenoid terminal as shown.



11. Connect the Black 6 gauge wire to the ground terminal on the motor.



- 12. Connect the 3/8 loop on the 6 gauge Red/Black or Orange/Black to the positive (+) battery post.
- 13. Connect large terminal end to the negative (-) battery post. See illustration.



14. Connect the white wire with the small loop connector from the switch box to the solenoid as shown.



15. Crimp one spade connector to each of the wires on the control valves as shown. Connect to the green and black wire from the switch box.



16. Attach wires to the tower base unit using the clamp and nut provided. See photo.

Locate switch box in a convenient area near the tower.

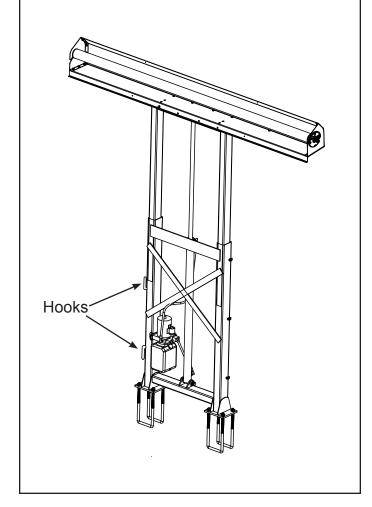
Note: Make sure that all hoses and wires are secured and away from moving parts and pinch points. Use the clamps and wire ties provided.



17. Cycle the tower up and down completely a few times to purge all the air out of the system.

Note: Make sure the fluid level in the pump reservoir

Note: Make sure the fluid level in the pump reservoir does not go below half way when the towers is fully extended.

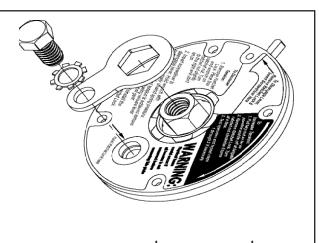


18. Weld the rope storage hooks to the side of the single stage assembly as shown. The pull rope will be wrapped around theses hooks and secured with the bungee that is attached when it is not in use.

Step 19. Install Tarp

roller from the opposite side of the locking bolt. Before you install your tarp on the roller, make sure the roller has NO spring tension. Slide the front end of tarp (with beaded rod) into the slot of the

will ensure the tarp rolling up straight. If the tarp rolls up consistently off to one side or the other, you can offset the tarp to the opposite side on the pullrope. Add 50 turns to the Ratchet Roller Assembly using a 3/4" wrench. Release pullrope from tailgate and cycle the tarp 2 or 3 times. This on the roller with an equal amount of space on each end, and that the bead tubing is also equally spaced. Secure tarp and pullrod to tailgate with the If needed, lubricate the edge of the tarp with soapy water so it will slide into the roller slot easy. After the tarp is in place, make sure that it is centered roller to start with, this way the tarp will roll up as centered as possible. If you have side flaps or tie downs proceed to page 9 or 10.



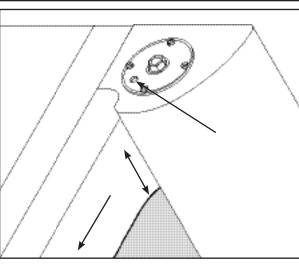
SPRING TENSION

To Increase Tension

- Pull Tarp out as far as possible and tie off at tailgate.
- 2. Remove Ratchet Lock. Turn ratchet nut clockwise 5 turns at a time
- Test operation and repeat steps 1 through 3 if necessary.
- 4. Reinstall the Ratchet Lock

To Decrease Tension

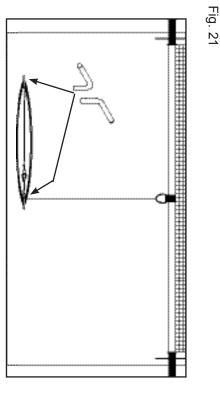
- Remove Ratchet Lock. Place box and wrench on ratchet nut. Turn ratchet nut slightly to the right and don't let go
- 2. Insert screwdriver to disengage lever. Hold wrench with both hands slowly unwind spring pressure.
- 3. When desired tension is achieved remove screw driver allowing release lever to reengage ratchet gear.

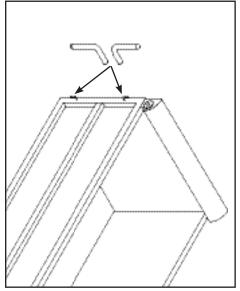


Step 20.Rope Storage Hook Installation

Mount the rope as low as possible. The rope should come straight down and wrap around the center hook and then coil off to the side (Fig.21). When tarp is not in use, space the hooks far enough apart to store the full length of rope (Fig.22).

Note: Tarp must be retracted when dumping.





Step 21. Optional Flap Tarp, Rope and Hook Installation

Parts: Tie Down Hooks (Steel or Alum.)

Pull Down Hook

The Location Of The Tie Down Hooks Is Critical!

each side of the box. The number of tie down hooks vary depending on the length of Flip the braided rope over the corner so that the flaps and tie down ropes hang over the hook to pull the braided rope and flap over the side of the box. your tarp. One pull down hook is included with your Pulltarp system. If needed. Use

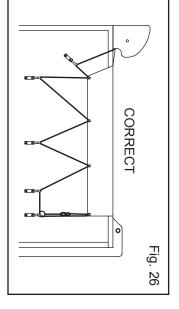
The tie down hooks must be positioned so that:

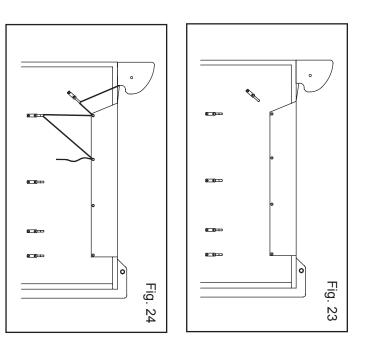
- The tie down rope can be reached from the ground.
- ပြင် မှာ The bungee cord has to be stretched to reach the last hook (see step 9).
 - The rope has no slack.
- The tie down hooks are level with one another.

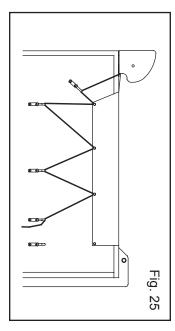
To ensure proper hook placement, first duct tape the rope to the box in place of the tie down hooks. Start with hook closest to the cab.

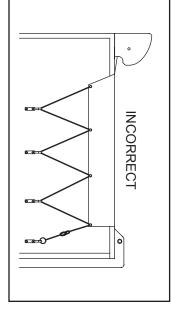
- Position the first hook 6" (15.24cm) down and 12" (30.48cm) forward (toward the cab) from the first grommet (Fig.23).
- $\dot{\wp}$ grommet. This hook should be reached from ground (Fig.24). Position 2nd hook straight down from 1st
- ယ grommet (Fig.25). These hooks should be placed at the same height Place middle hooks equal distances from
- 4 at the same height as the others (Fig.26). Position last hook (closest to the tailgate) below the last grommet as the second hook.
- Weld hooks in place.

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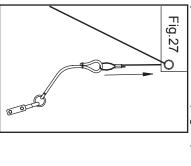
Step 22. Bungee Cord Installation

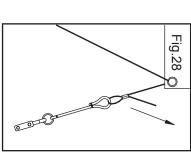
After side hooks are installed, the tie down rope must be installed and cut to proper length. It is important to get all of the slack out of the rope to prevent blowing and rubbing of flaps in windy conditions.

arts

Tarps with Tie Downs

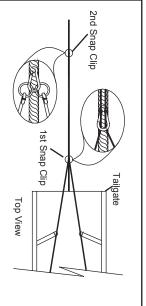
To tighten, pull loose end of rope through the Oval Compression Sleeve (Fig.27). Stretch the bungee cord making sure all slack is taken out of the rope, crimp compression sleeve (Fig.28).





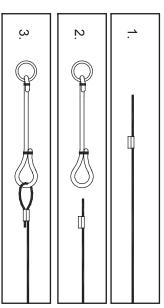
Snap Clip installation

Flip the rope back on top of the tarp, making sure to hold the bungee at all times. The first snap clip is factory installed 5'-6" from the pullrod. Open the clip and enclose the rope. Weave the second clip through the main pullrope where the ends of the bungee cords meet the main pullrope. Make sure the rope is taught when clipped. NOTE: First snap clip should not be used on long wheel base belly dumps.



Connect Bungee Cord to Rope

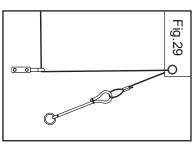
- Thread braided rope through Oval Compression Sleeve.
- Feed rope through the eye of the bungee cord.
- Thread the rope back through the oval compression sleeve. Adjust for proper length. Crimp compression sleeve.

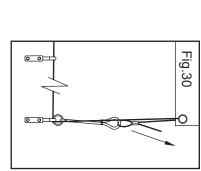


Tarps with Side Flaps

To tighten, pull loose end of rope through the Oval Compression Sleeve (Fig.29). Stretch the bungee cord making sure all slack is taken out of the rope, crimp compression sleeve (Fig.30).

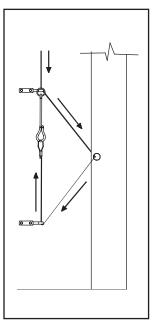
Note: Check for proper placement of rope through the last two hooks.

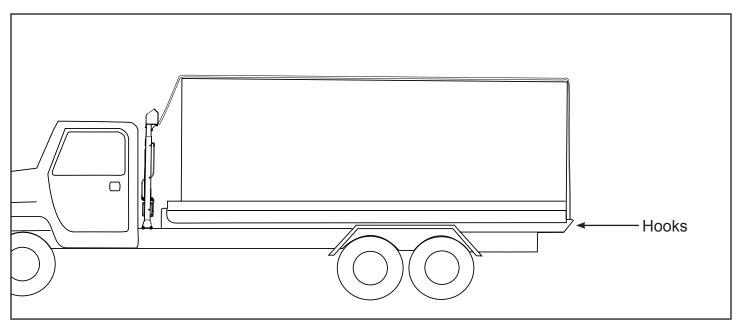




Excess Rope

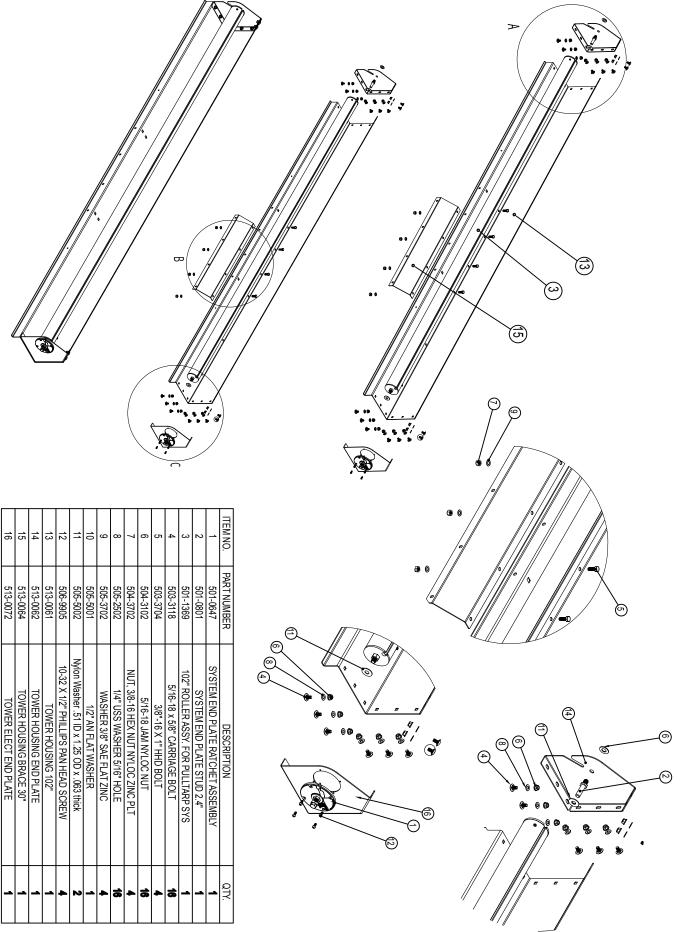
You may need extra rope to keep the side flap system ground operated. If your application requires extra rope, the slack needs to be taken up by attaching the end of the bungee cord to an alternate hook. (pictured below)



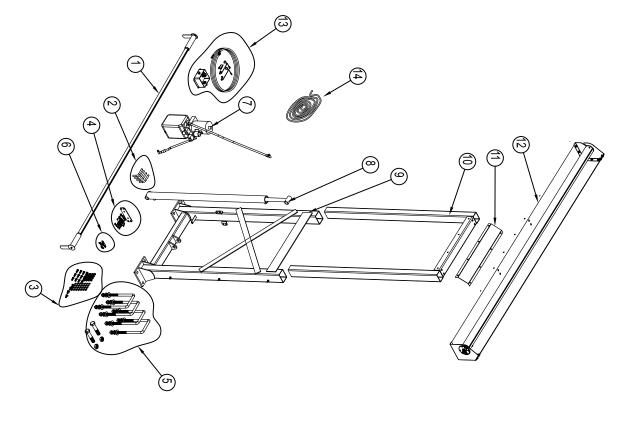


23. Weld a pair of rope storage hooks to the rear of the tilt frame. One hook should be in the center and one off to one side. The pull rope will be wrapped around these hooks for storage and secured with the bungee that is attached when the tarp is pulled out.

513-0073 Tower Housing



513-0074 Tower Assembly



ITEM NO. PART NUMBER DESCRIPTION QTY. 1 501-0419 PULL ROD 105" W/HARDWARE 1 2 501-0621 STEEL ROPE HOOK KIT 1 3 501-0662 TOWER HOUSING HARDWARE KIT 1 4 501-0663 PUMP HARDWARE KIT 1 5 501-0664 U BOLT / CYLINDER HARDWARE KIT 1 6 501-0665 SWITCH BOX HARDWARE BAG 1 7 501-2312 SINGLE VALVE POWER PACK 1 8 501-2311 2" BORE X 48" LONG HYDRAULIC CYLINDER 1 9 513-0015 SINGLE STAGE BASE ASSY 1 10 513-0064 TOWER HOUSING BRACE 30" 1 11 513-0064 TOWER HOUSING BRACE 30" 1 13 514-9988 TOWER PULLTARPS HOUSING 1	_	PULL ROPE 50'	517-1009	14
PART NUMBER DESCRIPTION 501-0419 PULL ROD 105" W/HARDWARE 501-0621 STEEL ROPE HOOK KIT 501-0662 TOWER HOUSING HARDWARE KIT 501-0663 PUMP HARDWARE KIT 501-0664 U BOLT / CYLINDER HARDWARE KIT 501-0665 SWITCH BOX HARDWARE BAG 501-2312 SINGLE VALVE POWER PACK 501-2311 2" BORE X 48" LONG HYDRAULIC CYLINDER 513-0015 SINGLE STAGE BASE ASSY 513-0064 STAGE 1 EXTENSION 513-0073 102" TOWER HOUSING BRACE 30"	_	TOWER SWITCH BOX	514-9988	13
PART NUMBER DESCRIPTION 501-0419 PULL ROD 105" W/HARDWARE 501-0621 STEEL ROPE HOOK KIT 501-0662 TOWER HOUSING HARDWARE KIT 501-0663 PUMP HARDWARE KIT 501-0664 U BOLT / CYLINDER HARDWARE KIT 501-0665 SWITCH BOX HARDWARE BAG 501-2312 SINGLE VALVE POWER PACK 501-2311 2" BORE X 48" LONG HYDRAULIC CYLINDER 513-0016 STAGE 1 EXTENSION 513-0064 TOWER HOUSING BRACE 30"	1	102" TOWER PULLTARPS HOUSING	513-0073	12
PART NUMBER DESCRIPTION 501-0419 PULL ROD 105" WIHARDWARE 501-0621 STEEL ROPE HOOK KIT 501-0662 TOWER HOUSING HARDWARE KIT 501-0663 PUMP HARDWARE KIT 501-0664 U BOLT / CYLINDER HARDWARE KIT 501-0665 SWITCH BOX HARDWARE BAG 501-2312 SINGLE VALVE POWER PACK 501-2311 2" BORE X 48" LONG HYDRAULIC CYLINDER 513-0016 SINGLE STAGE BASE ASSY 513-0016 STAGE 1 EXTENSION	_	TOWER HOUSING BRACE 30"	513-0064	1
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PART NUMBER DESCRIPTION 501-0419 PULL ROD 105" WIHARDWARE 501-0621 STEEL ROPE HOOK KIT 501-0662 TOWER HOUSING HARDWARE KIT 501-0663 PUMP HARDWARE KIT 501-0664 U BOLT / CYLINDER HARDWARE KIT 501-0665 SWITCH BOX HARDWARE KIT 501-2312 SINGLE VALVE POWER PACK 501-2311 2" BORE X 48" LONG HYDRAULIC CYLINDER	1	SINGLE STAGE BASE ASSY	513-0015	9
PART NUMBER DESCRIPTION 501-0419 PULL ROD 105" WIHARDWARE 501-0621 STEEL ROPE HOOK KIT 501-0662 TOWER HOUSING HARDWARE KIT 501-0663 PUMP HARDWARE KIT 501-0664 U BOLT / CYLINDER HARDWARE KIT 501-0665 SWITCH BOX HARDWARE BAG 501-2312 SINGLE VALVE POWER PACK	_	2" BORE X 48" LONG HYDRAULIC CYLINDER	501-2311	8
PART NUMBER DESCRIPTION 501-0419 PULL ROD 105" WHARDWARE 501-0621 STEEL ROPE HOOK KIT 501-0662 TOWER HOUSING HARDWARE KIT 501-0663 PUMP HARDWARE KIT 501-0664 U BOLT / CYLINDER HARDWARE KIT 501-0665 SWITCH BOX HARDWARE BAG	_	SINGLE VALVE POWER PACK	501-2312	7
PART NUMBER DESCRIPTION 501-0419 PULL ROD 105" WIHARDWARE 501-0621 STEEL ROPE HOOK KIT 501-0662 TOWER HOUSING HARDWARE KIT 501-0663 PUMP HARDWARE KIT 501-0664 U BOLT / CYLINDER HARDWARE KIT	1	SWITCH BOX HARDWARE BAG	501-0665	6
PART NUMBER DESCRIPTION 501-0419 PULL ROD 105" W/HARDWARE 501-0621 STEEL ROPE HOOK KIT 501-0662 TOWER HOUSING HARDWARE KIT 501-0663 PUMP HARDWARE KIT	_	U BOLT / CYLINDER HARDWARE KIT	501-0664	5
PART NUMBER DESCRIPTION 501-0419 PULL ROD 105" W/HARDWARE 501-0621 STEEL ROPE HOOK KIT 501-0662 TOWER HOUSING HARDWARE KIT	1	PUMP HARDWARE KIT	501-0663	4
PART NUMBER DESCRIPTION 501-0419 PULL ROD 105" W/HARDWARE 501-0621 STEEL ROPE HOOK KIT	1	TOWER HOUSING HARDWARE KIT	501-0662	3
PART NUMBER DESCRIPTION 501-0419 PULL ROD 105" W/HARDWARE	1	STEEL ROPE HOOK KIT	501-0621	2
PART NUMBER DESCRIPTION	_	PULL ROD 105" W/HARDWARE	501-0419	_
	QTY.	DESCRIPTION	PART NUMBER	ITEM NO.

Note: For 24V application Only 513-0076 Item #7 uses Part# 501-2314 Item #13 uses Part# 514-9997

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