Roll·Rite®

A Safe Fleet Brand

Roll Rite, LLC and its entire staff would like to not only Thank You but congratulate you on your purchase of what we feel to be the finest line of tarping systems in the industry. In this booklet you will find:

DC Series Owners Manual
(#101629)

Questions/Concerns? Contact Customer Service @ 800-297-9905
Or
Parts Diagrams see "Parts and Diagrams" section on web at www.rollrite.com

Page 1 of 22

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Page 2 of 22

DC Series Operating Manual

Arm Style Systems

Roll Rite, LLC designs our tarping systems to be as simple as possible to operate. However there are some things that operators need to know.

Warning – always watch for overhead hazards, tower and arms can potentially come into contact with overhead wires.

To Cover Container:

- ➢ **Stationary pivot systems (DC 400 series):**

  1) On all systems with remote control operation you must turn on the control box. To activate (power up or down) the control box you must press and hold buttons one and two on the control box or the key fob for 3 seconds (see Fig. 1). Non remote control systems are always active.
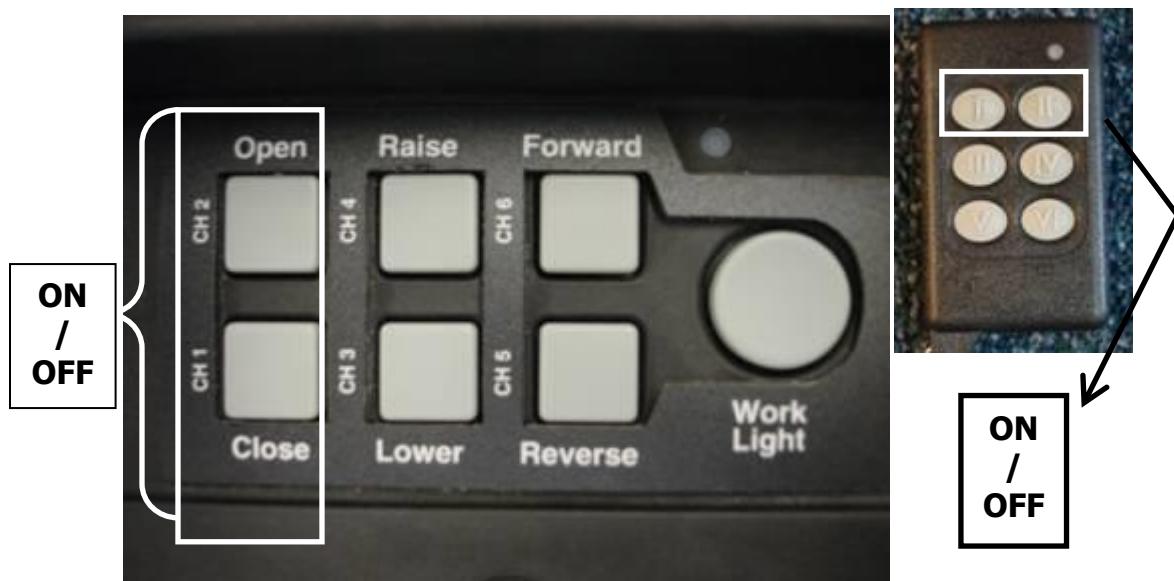
Figure 1

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Page 3 of 22

2) Always deploy 2-3 feet of tarp before moving the tower. To deploy tarp press & hold button 1 on the control box or the key fob (see Fig. 2), or on non remote systems there will be switch to wind and unwind your tarp. In rare cases with stationary pivot systems with a tall container, you may have to do this before pulling container all the way onto the truck/trailer (see step 4 below).
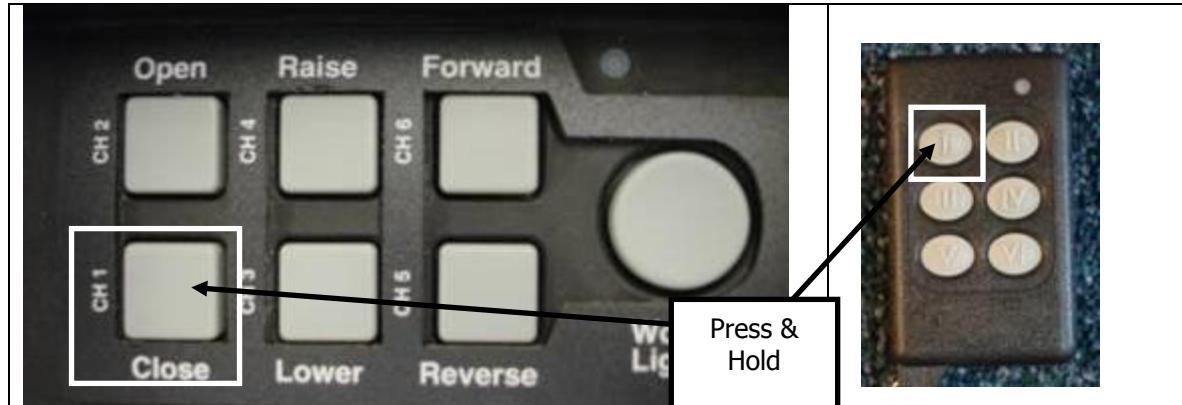

Figure 2

3) If you have an adjustable tower raise tower as high as possible to keep tarp from dragging on the load in the container. To raise tower press & hold button 4 on the control box or the key fob (see Fig. 3). On non remote control systems there will be a manual valve to operate you tower.
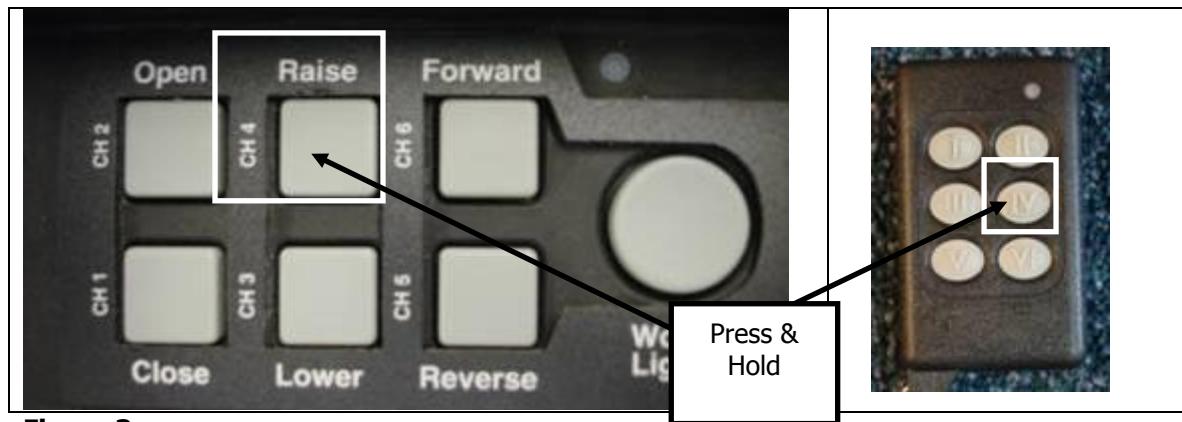

Figure 3

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Page 4 of 22

4) Deploy tarp over container. The tarp bar may not clear the top front edge of the container if the container is too tall. In this case the container will have to be slid back enough for the tarp bar to clear the container. After learning which container heights the tarp will not clear, it is best to not pull the container all of the way forward until after raising the tower and deploying at least 3' of tarp (per step 2 above).
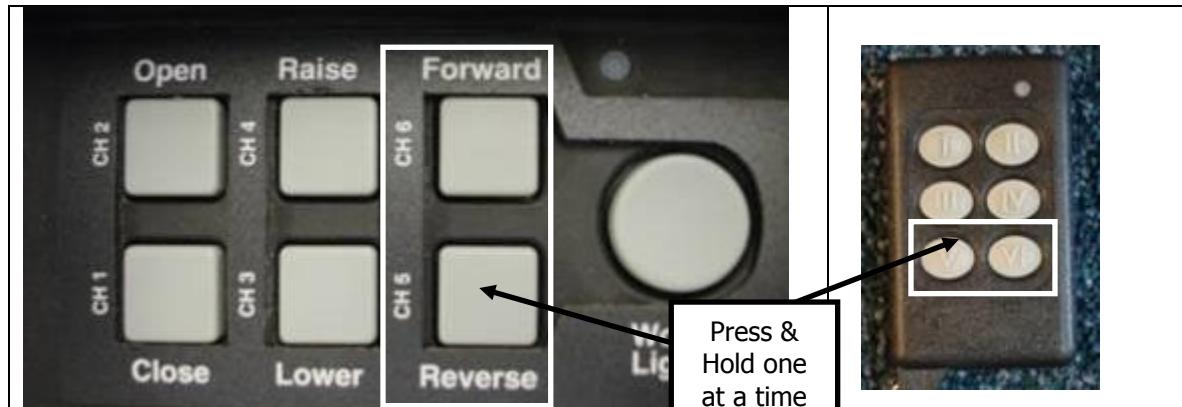

Figure 4

5) Lower tower so that tarp wraps neatly around front of container. To lower the tower press & hold button 3 on the control box or the key fob (see Fig. 5). On short cans you may have to pull tarp down to the top of the container and secure it with a cambuckle strap.
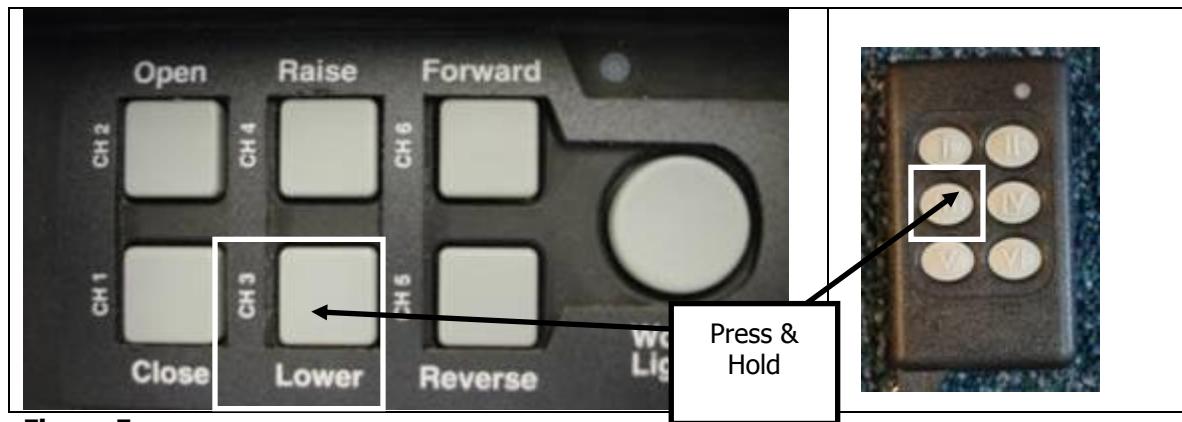

Figure 5

6) If the tarp is loose, wind it in until it is snug and tie tarp and arms down as needed. There are tie down slides mounted on the lower arms for this purpose. Use a cambuckle style strap to tie the arms down.

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Page 5 of 22

➤ **Sliding pivot systems (DC300/DC350 Systems):**

For sliding pivot systems, follow steps 1 – 3 above. The only difference is that the pivots can be slid forward before deploying the tarp so that the tarp bar will automatically clear the top front edge of tall containers (no need to reposition the container or not pull it completely forward). Buttons 5 & 6 on your control box or key fob are used to operate your sliding pivots fore and aft (see Fig. 4). On non-remote control systems there will be a manual valve to operate your sliding pivots.

With sliding pivot systems the arms and tarp can typically be locked into position with the PowerLock™ feature. To PowerLock™ the tarp, continue with the operation sequence is as follows:

4) Make sure the pivots are slid all the way back (button 6)
5) Deploy the tarp out until it is well below the top of the container (button 2)
6) Slide the pivots until they are all of the way forward or until the tarp bar touches the container (button 5). If the container is too short, you may be able to PowerLock™ under the back of hoist rails.
7) Lower tower so that tarp wraps neatly around front of container. To lower the tower press & hold button 3 on the control box or the key fob (see Fig. 5).
8) If the tarp is loose, wind it in until it is snug and tie tarp and arms down as needed.

If the container is too short and it is not possible to PowerLock™ under the hoist rails, use cambuckle straps to secure the tarp arms down before tensioning the tarp.

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Page 6 of 22

To Uncover Container:

1) Un-tie/un-bungee the arms and tarp or slide the pivots backward.
2) Let some tarp material out to take any tension off the tarp and if you have an adjustable tower, raise tower to maximum height to prevent the tarp from dragging on the load. To raise tower press & hold button 4 on your control box or key fob (see Fig. 6). For non remote control systems there will be a manual valve to operate your tower.
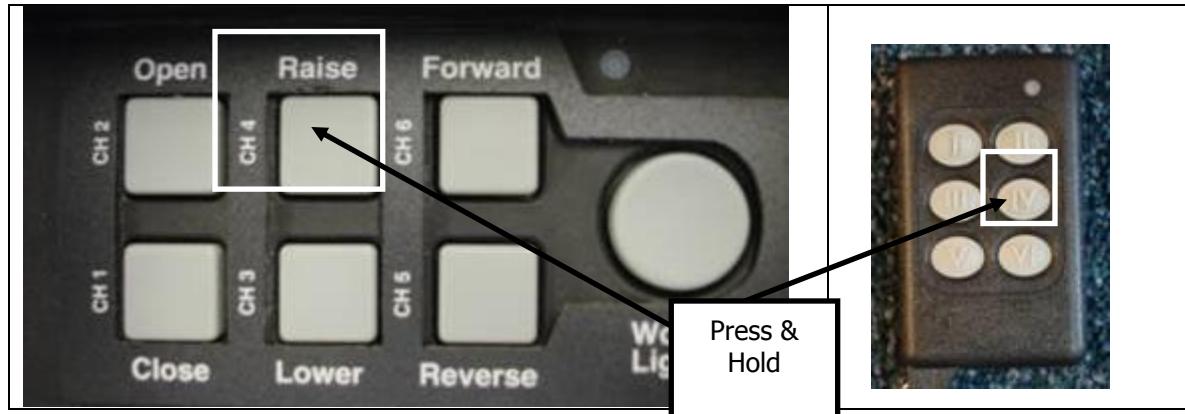
Figure 6

3) If you have sliding pivots and the arms are locked behind the container with the sliding pivots slide the pivots all the way to the back by pressing and holding button 5 on the control box or key fob (see Fig. 7).
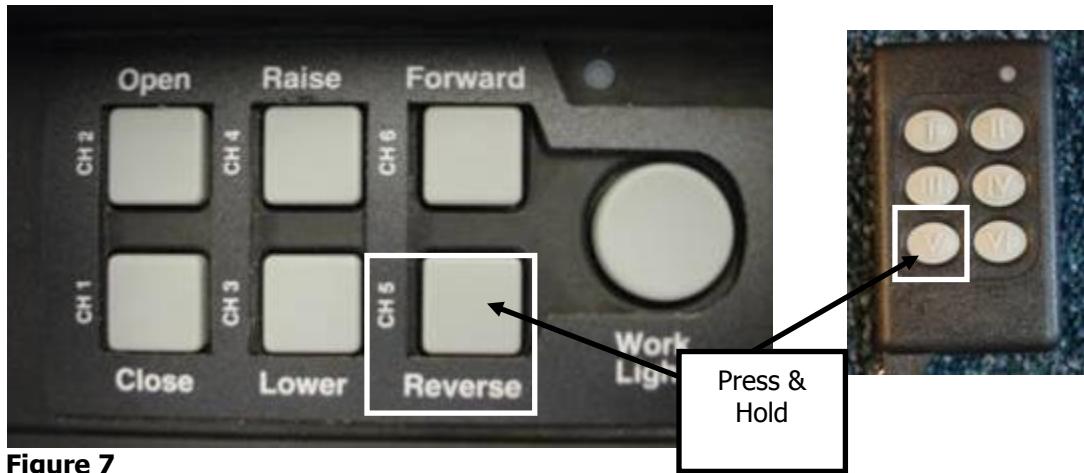

Figure 7

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Page 7 of 22

4) Wind the tarp in far enough to clear the container as it is dumped or unloaded. To wind the tarp press & hold button 2 on your control box or key fob (see Fig. 8). On non remote control systems there will be a switch to operate you tarp in and out. If you have sliding pivots you may wish to adjust these also to give more container clearance. Buttons 5 & 6 on your control box or key fob will operate your sliding pivots for and aft (see Fig. 9).

Press & Hold

Figure 8

Press & Hold one at a time
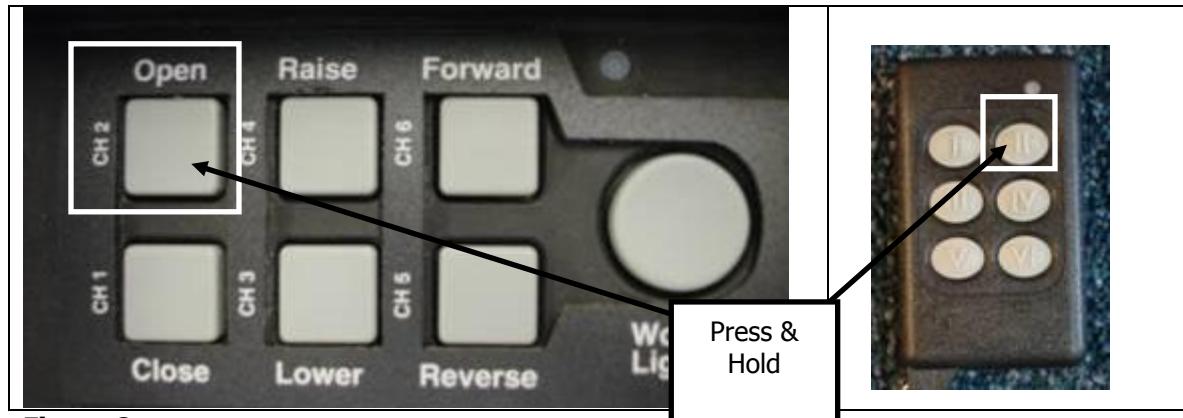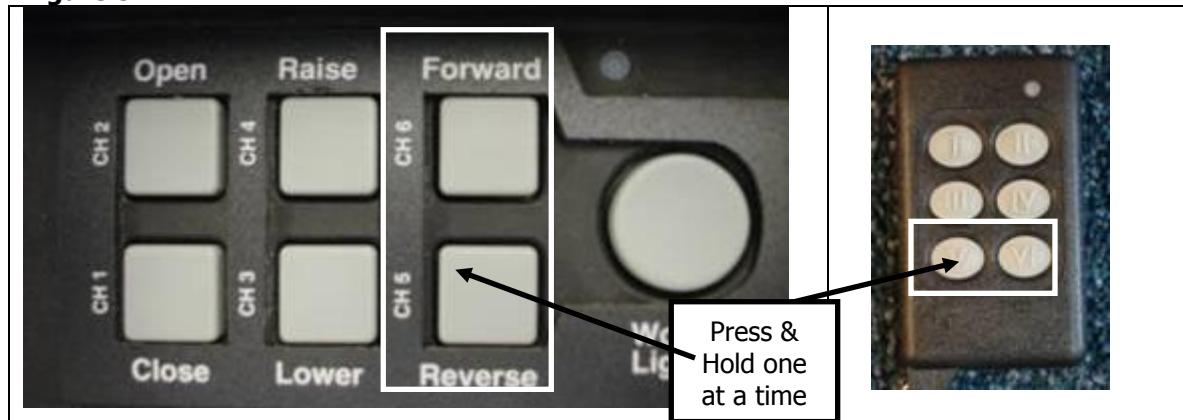
Figure 9

5) If you are dropping the can and traveling with no can or an empty can, return the tarp system to its home position. A standard home position is with the tower all the way down and the sliding pivots all the way to the back. On non remote control systems there will be a manual valve to operate your tower and another to operate your sliding pivots.

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Page 8 of 22

Armless Systems

To Cover Container:

1) On all systems with remote control operation you must turn on the control box. To activate (power up or down) the control box you must press and hold buttons one and two on the control box or the key fob (see Fig. 10). Non remote control systems are always active.
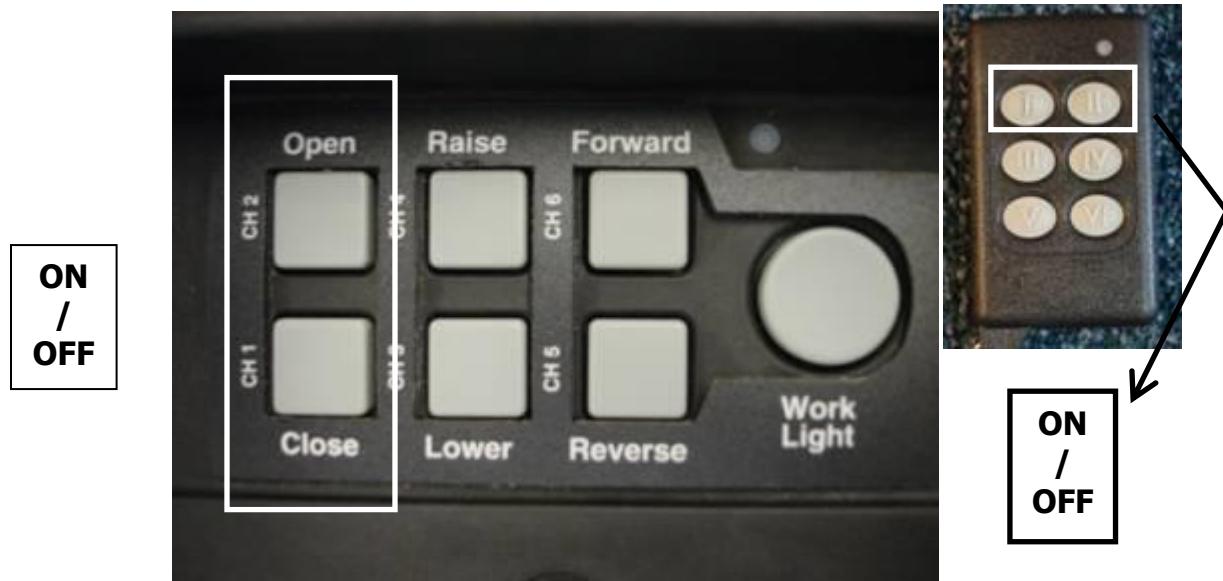
Figure 10

2) Raise tower as high as possible to keep tarp from dragging on the load in the container. To raise tower press & hold button 4 on the control box or the key fob (see Fig. 11).
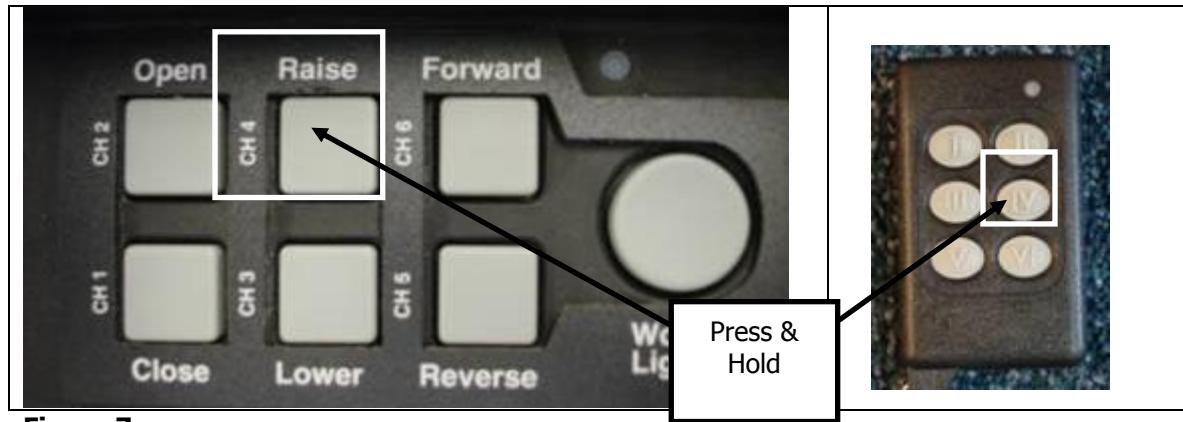

Figure 7

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Page 9 of 22

3) Deploy tarp and walk tarp to rear of container. To deploy tarp press & hold button 1 on the control box or the key fob (see Fig. 12), or on non remote systems there will be switch to wind and unwind your tarp. In rare cases with stationary pivot systems you may have to do this before pulling container all the way onto the truck/trailer.
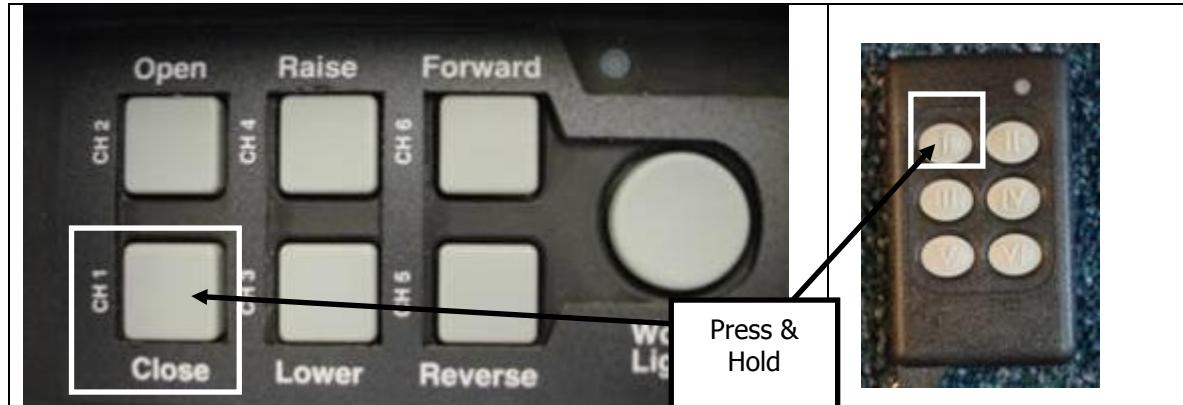

Figure 82

4) Secure tarp at rear of the container.

5) Lower tower by pressing & holding button 3 on the control box or the key fob (see Fig. 13).
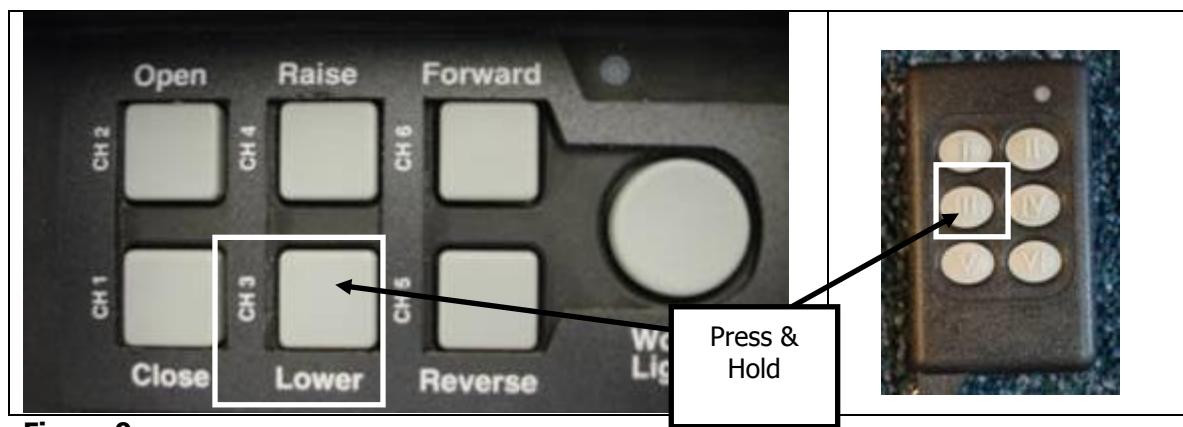
Figure 9

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Page 10 of 22

6) Tighten tarp by pressing and holding button 2 on the control box or on the key fob until the tarp is tight (see Fig. 14).
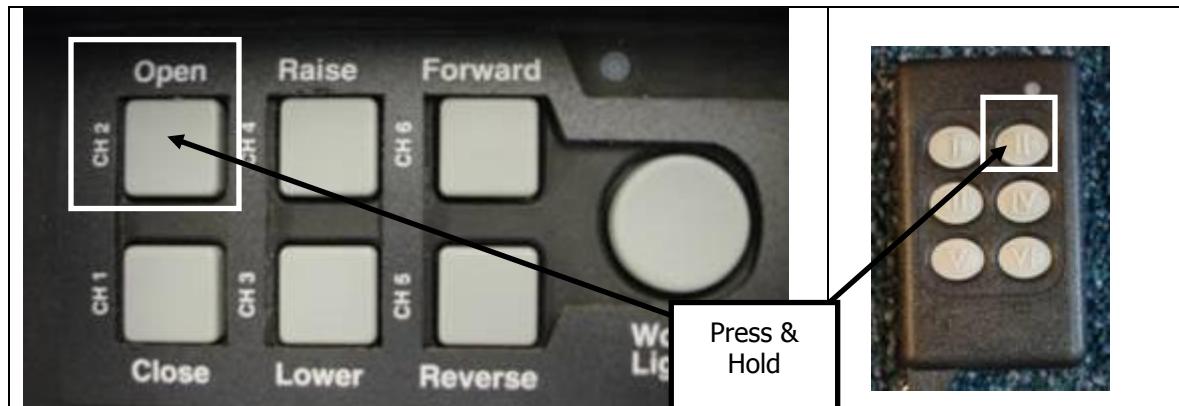
Figure 10

To Uncover Container:

1) Loosen the tarp, uncoil several feet of tarp. To loosen the tarp press & hold button 1 on the control box or the key fob (see Fig 15).
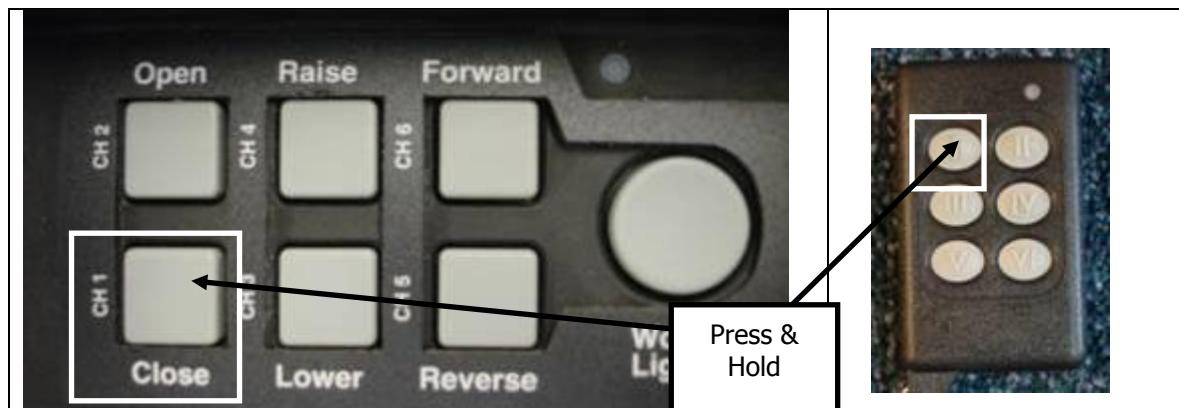
Figure 15

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Page 11 of 22

2) Raise tower as high as possible to keep tarp from dragging on the load in the container. To raise tower press & hold button 4 on the control box or the key fob (see Fig. 16).
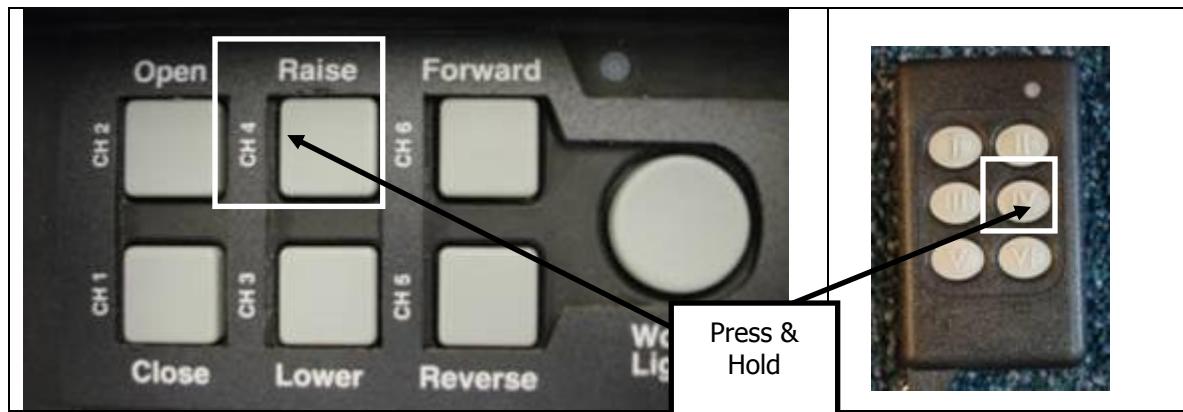
Figure 11

3) Walk tarp in as you wind it. To wind the tarp press & hold button 2 on the control box or on the key fob (see Fig. 17).
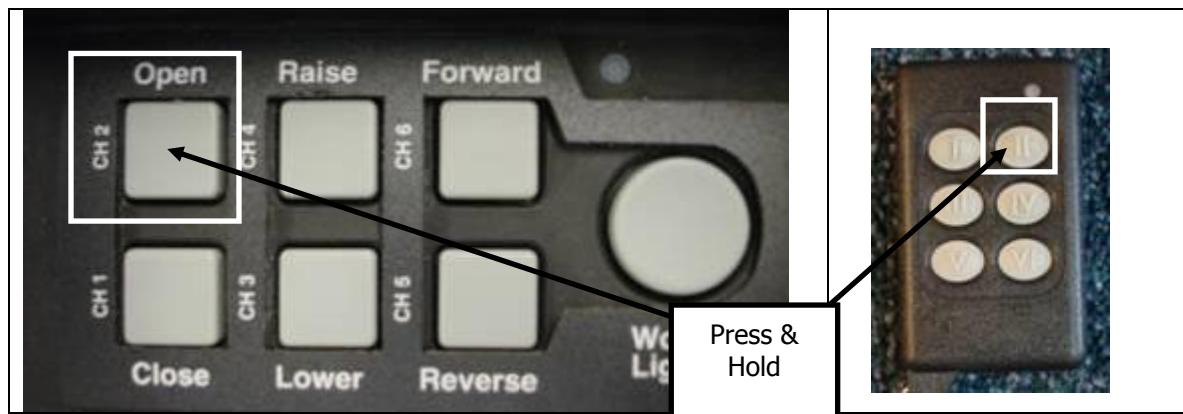
Figure 12

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Page 12 of 22

4) Unload or dump container. If you are traveling with an empty or no container return the system to its home position. Home position is typically with the tower in the lowered position. To lower the tower press & hold button 3 on the control box or the key fob (see Fig. 18).
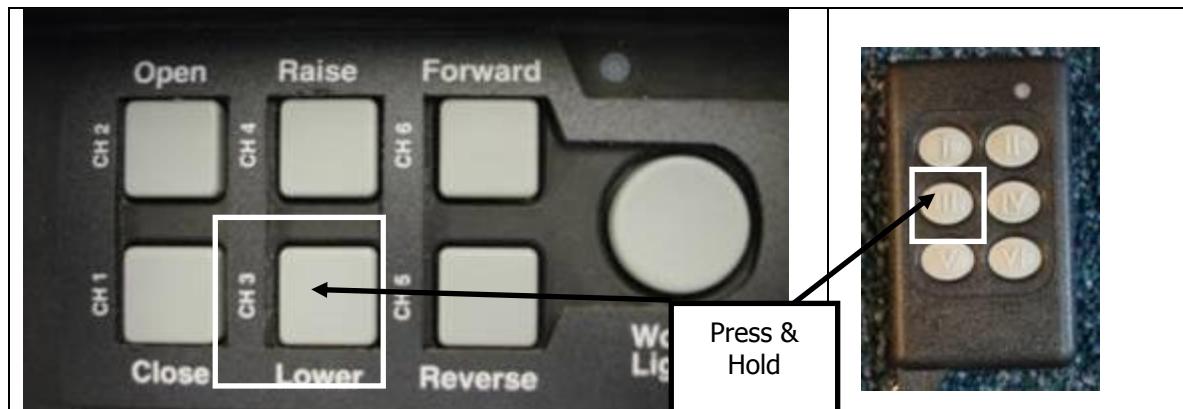
Figure 138

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Page 13 of 22

Maintenance Manual

Roll Rite, LLC designs its tarping systems and power kits to be as maintenance free as possible, contributing to the overall value of the product.

Maintenance intervals vary based on environmental conditions.

Roll Rite, LLC recommends that:

- All electrical connections should be checked monthly - clean and grease as needed to prevent corrosion (fill all electrical boots, limit switch boots, etc. with dielectric grease). Electrical connections can be found at all motors, switches, contactors, limit switches, control boxes and batteries.
- All bearings with grease fittings and tower legs must be greased regularly. Inner tower legs of adjustable towers should never be dry and bearings should be checked monthly and greased as needed.
- Check and tension all set screws. Set screws should be tightened until they touch and then torque them ¾ of a revolution beyond that.
- Check motor mounting bolts and torque to 70 in-lbs (5.8 ft-lbs).
- All mounting hardware should be checked to insure all system components are securely fastened.
- Visually inspect all moving parts for abnormal or excessive wear.
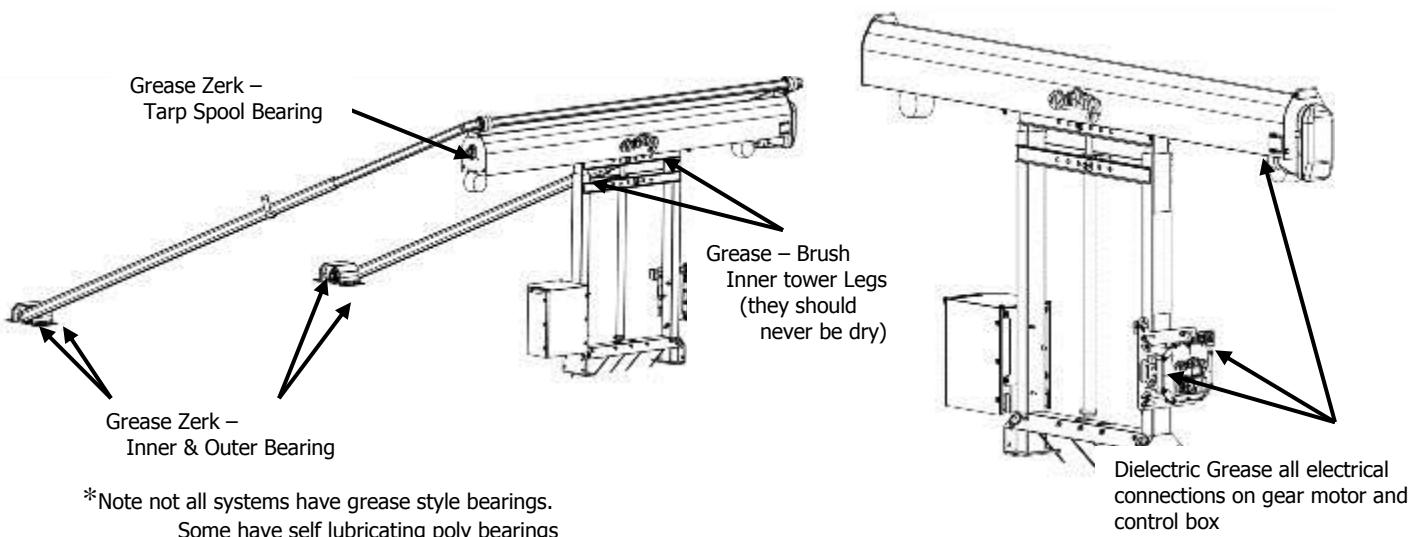
Grease Zerk –
Tarp Spool Bearing

Grease – Brush
Inner tower Legs
(they should
never be dry)

Grease Zerk –
Inner & Outer Bearing

*Note not all systems have grease style bearings.
Some have self lubricating poly bearings

Dielectric Grease all electrical connections on gear motor and control box

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Page 14 of 22

Roll-Rite "Black Box" Troubleshooting

LED Diagnostics, Unit @ Rest

|		
No Light	---------	No Power or box is shut down (see Auto Shut Down feature)
Green	Continuous	Everything is OK
Green	Single Blink	Low Battery Warning. Recharge your Battery soon
Green	Double Blink	Battery is nearly dead and must be recharged before unit will operation
Yellow	Continuous	Fuse 1 (5 Amp, Board Circuit – see fig. 10) is Blown
Yellow	Single Blink	Fuse 2 (10 Amp, Onboard Relay – see fig. 10) is Blown
Yellow	Double Blink	Fuse 3 (15 Amp, Pump Signal Wire – see fig. 10) is Blown
Yellow	Triple Blink	Fuse 4 (15 Amp, Work Light Circuit – see fig 10) is Blown
Red	Continuous	Unit is in Program Mode

LED Diagnostics, Unit in Operation

Red	Continuous	Confirms it is in operation
Green	Single Blink	Low Battery warning. Recharge soon
Green	Double Blink	Battery is nearly dead – unit will not operate until charged

Fuse Replacement:

1) Using the codes above to diagnose which fuse is blown
2) Remove the 10 bolts that hold the lid in place
3) Carefully lift lid and unplug switch leads
4) Do not touch circuit board any more than necessary
5) Carefully locate (see Fig. 10) & remove the blown fuse and replace it with a fuse that is the same size
6) Replace the lid
   a. Plug switch leads in
   b. Arrange so that they will not be pinched as lid is replaced
   c. Insure that gasket is in place in groove in lid
   d. Press lid back into place and replace 10 lid bolts
   e. Tighten lid bolts in a star pattern to insure lid tightens evenly

Figure 14 – Fuse Replacement
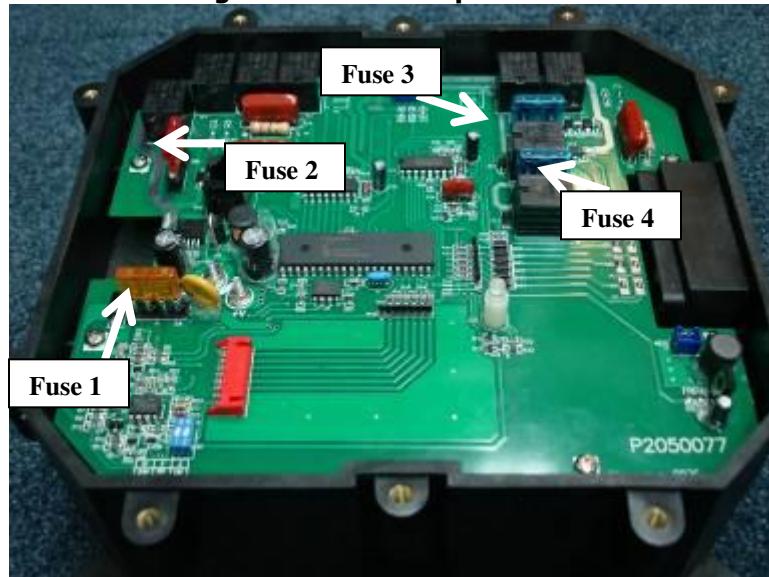
Figure 14 – Fuse Replacement

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Key fob Programming

The control box comes <u>preprogrammed</u> to the two supplied remote key fobs. If for any reason you should need to re-program them or additional key fobs follow the following procedure:

1) Confirm that the box is turned on (the status LED should be lit green).
2) Press and hold the round work light button for 6 seconds. <u>The LED will flash red 3 times to indicate program mode</u>.
3) Press and hold button I (see figure 9 below) on the first key fob for 2 seconds then release. Press button I for 2 seconds on the second key fob. Repeat for each additional key fob that is to be programmed.
4) Let box stand until Status LED returns to green. Programming is complete.

The control box will learn a maximum of 4 key fobs. All key fobs must be programmed at the same time. Programming an additional key fob at a later date will erase all previously stored key fobs.

Figure 15 – Programming Box to Key Fob
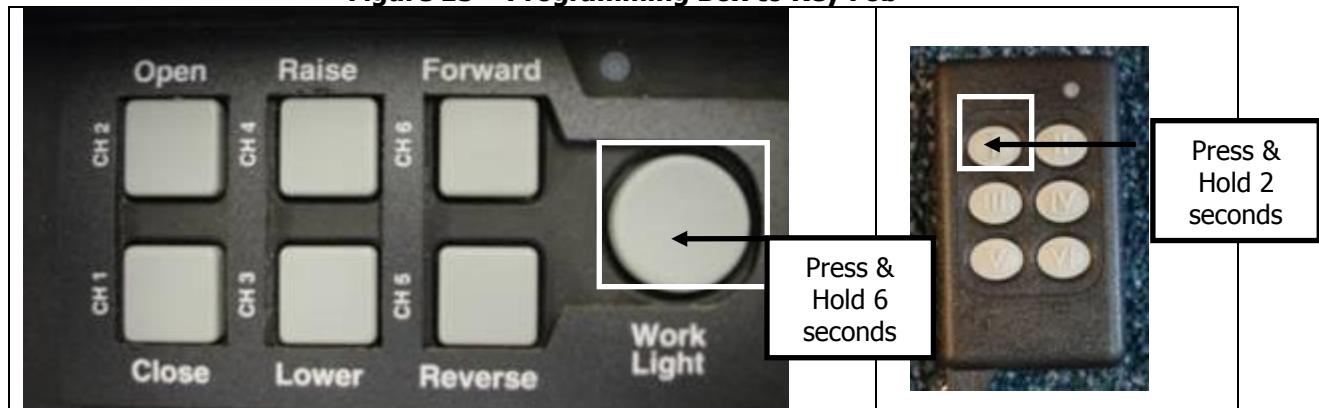
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Page 16 of 22

Automatic Shut Down Feature:

The control box incorporates a safety feature to shut off automatically after a period of inactivity*. Press buttons 1 & 2 simultaneously on the box or remote for two seconds (as described above) to power the unit back up.

To shut the box down manually (shut off), press 1 & 2 simultaneously on the box or remote for two seconds as described above.

*Boxes produced after 8-10-09 may have programmable time out feature.

*Boxes shipped after 12/14 (SN – 11,505 and up) have extended programmable time out. For earlier boxes call for assistance.

*NOTE: for boxes 14181 and up (as of 5/01/17) if buttons 3,4,5 or 6 are pushed and held on either the control box or the remote and causes the hydraulic power unit to run continuously for 2 minutes the black box will shut off as a safety feature.

 To adjust the time delay before automatic shut off:

1) Turn the box on

2) Press and release the work light button 6 times, wait until the light

   stops flashing press the CH6 Button, the LED will flash once, press the CH6 Button again, LED will flash once – you are now in the program mode you need to be in to adjust the automatic shut down time and work light on/off conditions.

3) Reference diagram below, # indicated on the button represents minutes until the box automatically shuts down. "∞" means it will not power down automatically.

4) After selecting shut down time wait for the LED to return to green. Programming complete.

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Page 17 of 22

Software Revision and automatic shutdown programming

Rev. #29	Implemented: 08/10/2009
Button	System idle time on before auto shutdown
1	On Indefinately
2	2 minute on time
3	4 minute on time
4	6 minute on time (default)
5	8 minute on time
6	10 minute on time

Rev. #31	Implemented: 11/12/2014
Serial #	11505 thru 14180
Button	System idle time on before auto shutdown
1	On Indefinately
2	20 minute on time
3	30 minute on time (default)
4	40 minute on time
5	50 minute on time
6	Work light stays on after box auto-shutdown (one blink)
	Work light shuts off after box auto-shutdown (default) (two blink)

Rev. #35	Implemented: 05/01/2017
Serial #	14181 and up
Button	System idle time on before auto shutdown
1	On Indefinately
2	2 minute on time
3	5 minute on time
4	10 minute on time
5	30 minute on time (default)
6	Work light stays on after box auto-shutdown (one blink)
	Work light shuts off after box auto-shutdown (default) (two blink)

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Page 18 of 22

Electric Gear Motor Trouble Shooting

If gear motor will not run:

1) Check and reset the circuit breaker. This is usually mounted in the mounting plate as the black control box.
2) If the circuit breaker is set and the gear motor still will not operate:
    a. Disconnect the 2 wires from the gear motor.
    b. Using a running vehicle (as if you were going to jump start a car) connect jumper cables from the vehicle battery to the studs on the gear motor. Hooking the cables to the studs on the gear motor one way will make the motor wind the tarp and hooking them up opposite will make the motor un wind the tarp. *Do not use a battery charger to perform this test - it will not give accurate results!*
3) If the gear motor does not operate via the method described in step 2:
    a. Write down the part # and Serial number indicated on the sticker on the gear case
    b. Call customer service @ 800-297-9905

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Page 19 of 22

System Wiring

System with Single Valve Pump:
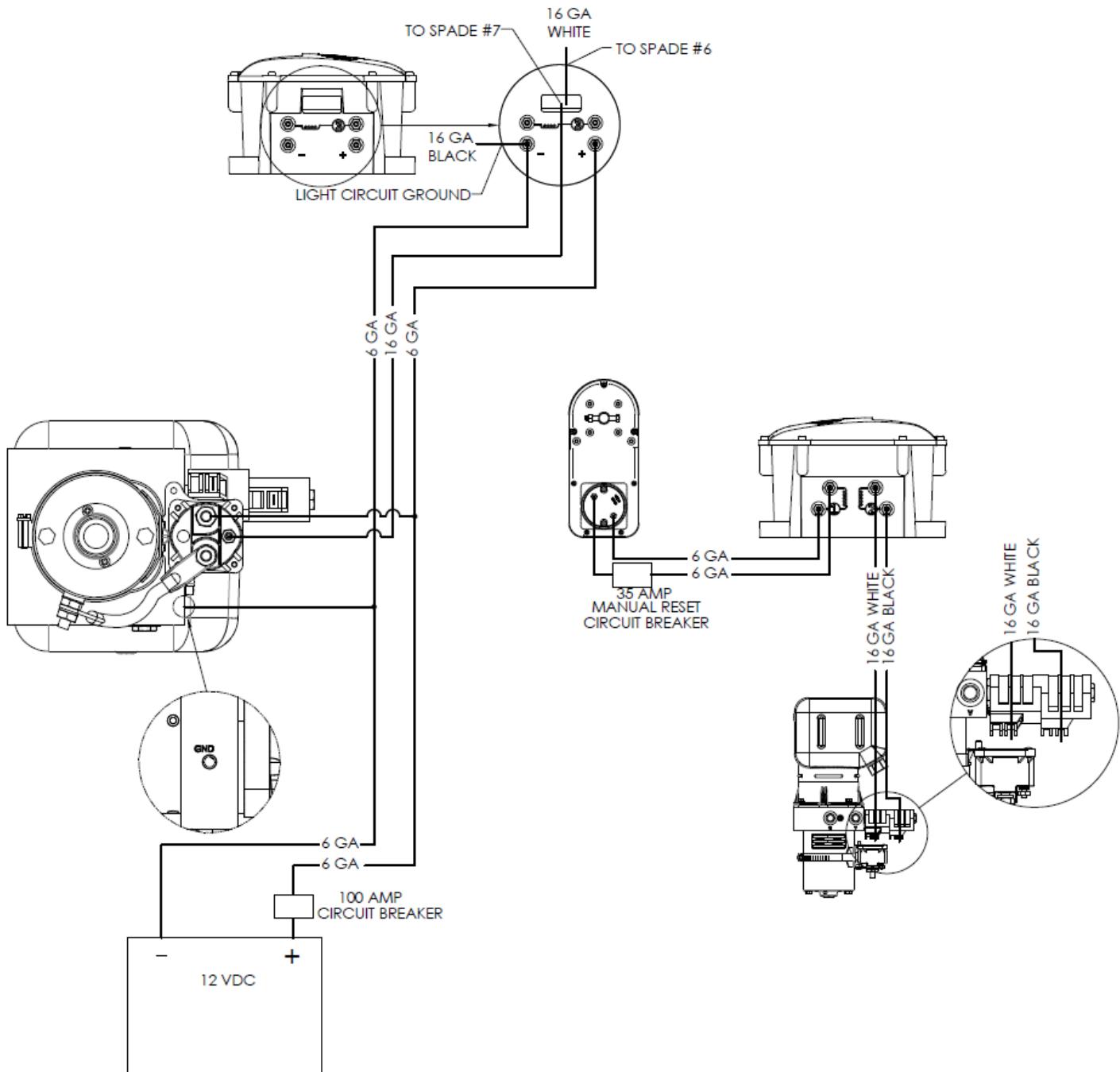
Questions/Concerns? Contact Customer Service @ 800-297-9905

Or

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Page 20 of 22

System with *Dual Valve Pump:*

SIDE 1

16 GA WHITE
POSITIVE FROM LIGHT TO SPADE #6

TO SPADE #7

LIGHT GROUND

16 GA BLACK

WHITE 16 GA
BLACK 16 GA

6 GA

16 GA BLACK
16 GA BLACK

6 GA

BLACK 16 GA

2 GA
GROUND SCREW LOCATED ON SIDE OF MANIFOLD (GREEN)

2 GA

200 AMP MANUAL REST BREAKER PART# 17912

SIDE 2

35 AMP OUTDOOR MANUAL RESET BREAKER PART# 17918

YELLOW/BLACK 8 GA

BLACK 8 GA

BLACK 16 GA

BLACK 16 GA

WHITE 16 GA

GROUND SCREW LOCATED ON SIDE OF MANIFOLD (GREEN)

PART# 10120 - SUPER DUTY GEAR MOTOR
PART# 19864 - BLACK BOX FOR WASTE APPLICATIONS
PART# 39616 - DUAL VALVE HYDRAULIC PUMP

(-) TO GROUND

(+) TO POSITIVE 12V DC

AT BATTERY OR THE STARTER
AT BASED ON MFG. SPECIFICATIONS

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Page 21 of 22

Quick Reference Guide - (Detach and Put in truck)

Black Box Operation:

❖ **ON/OFF** – To turn the control box on or off, press CH1 and CH2 simultaneously for 2 seconds. This can be done from the box itself (see figure 6) or from the key fob (see figure 7) by pressing buttons I & II simultaneously.

❖ **Work Light** – If your system is equipped with work lights, turn the control box on and then press the Work Light button to turn them on or off. THIS IS NOT THE ON/OFF BUTTON FOR THE CONTROL BOX!

❖ **CH1 and CH2** – control buttons for output #1 on the control box (typically connected to the tarp motor). These two buttons correspond to buttons I and II respectively on the remote key fob. Pressing these two buttons at the same time and holding for 2 seconds will turn the control box on and off.

❖ **CH3 and CH4** – control buttons for output #2 on the control box (typically connected to hopper door or tower up/down). These two buttons correspond to buttons III and IV respectively on the remote key fob. Press and release these two buttons at the same time on the key fob to operate the work light from the remote.

❖ **CH5 and CH6** – control buttons for output #3 on the control box (typically connected to hopper door or sliding pivots). These two buttons correspond to buttons V and VI respectively on the remote key fob.

Shut Down Feature:

The control box incorporates a programmable safety feature which shuts it off automatically after a given period of inactivity. This feature is programmable, see "Automatic Shut Down Feature" section in your operating instructions. Press buttons 1 & 2 simultaneously on the box or remote for two seconds (as described above) to power the unit back up.

To shut the box down manually (shut off), press 1 & 2 simultaneously on the box or remote for two seconds as described above.

If you have any issues please call Roll Rite – 800-297-9905

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Page 22 of 22