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INSTALLATION INSTRUCTIONS Roll·Rite® GTX550 Grain Tarp Power Kit



Powered Tarp Conversion Kit for Side to Side Manual Systems

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Installation Instructions

This conversion kit will power an existing hand crank style system that already has existing locking lips & tarp catches installed & at least 14" of clearance between the cab and box/trailer.

Preparation

- 1. Roll the tarp to the deployed position and remove the return mechanism(s) from the front and/or back of the axle.
- 2. Remove the hand crank attachment from the back of the axle.

Note: Keep the handle attachment. If the motor is damaged, or the system cannot be powered, you can remove the motor, slide the attachment on to the adapter and pin it in place. This will allow you to use your hand crank as a backup. (The motor adapter will be installed in later steps.)

ANSI Warning/Caution Label Installation Requirements and Instructions

AWARNING

- Failure to follow installation requirements may result in potentially hazardous condition
- Read all product information and instructions before proceeding with installation
- ANSI labelling shall be installed in compliance with the requirements



- During and after installation, spring energy will be stored in the front arm and rear arm of the tarp system
- ANSI compliant Warning/Caution labels have been created to communicate potential hazards of the system
- The Warning/Caution label shall be installed according to all direction and diagrams in this document

ASNI Label Installation Requirements

- 1. Install label under the front arm pivot bracket and rear arm pivot bracket as described here
- 2. Using appropriate cleaning agent, thoroughly clean and rinse the trailer surface below the Arm Pivot Bracket as shown in *Diagram of the Front and Rear of Trailer*
- 3. Peel the label backing from the ANSI Warning/Caution label
- 4. Align and affix the label on trailer surface such that the label is in the orientation shown in *Diagram of the Front and Rear of Trailer*
- 5. Complete Steps 2 through 5 for FRONT & REAR of Trailer



Roll Rite GTX550 Installation Instruction (P/N 101203)

Pivot Installation

- Locate the set of Universal External Pivot Mounting brackets and Fasteners.
- Mount as described below then continue on with arm assembly.
- The Components are shown in figure 1.

The Bracket Pair will include the following Fasteners:

- 1. 47271 Inner Bracket (x2)
- 2. 47272 Outer Bracket (x2)

Universal External Pivot Mount

Part Number 47270

- 3. 18296 Bolt, ¹/₂"-13 X 1 ¹/₂" Hex Head (x8) (Item L)
- 4. 18631 Nut, ¹/₂" 13 Nylock (x8) (Item G)
- 5. 18412 Washer, ¹/₂" Flat Washer (x16) (Item E)
- 6. 101026 Bolt, 3/8"-16 X 1 ½ Button Head (x8) (Item K)
- 7. 18628 Nut, 3/8" Nylock Jam Nut (x8) (Item J)
- 8. 18410 Washer, 3/8" USS Flat Zinc Plated (x8) (Item M)
- 9. 18418 Washer, 1" X .25" thick Nylon Flat Washer 0.375" ID (x8) (Item I)
- 10. 16418 Grommet, Rubber 1" ID .25" Groove (x2) (Item N)

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	47271	Bracket, Inner Bracket for 47270 Mount Set	1
2	47272	Bracket, Outer Bracket for 47270 Mount Set	1
3	18296	Bolt, 1/2" -13 x 1 1/2" Hex Head	4
4	18631	Nut, 1/2" - 13 Nylock	4
5	18412	Wahser, 1/2" Flat Washer	8
6	101026	Bolt, 3/8"-16 x 1 1/2" Button Head (Zinc)	4
7	18628	Nut, Nylock nut 3/8" Jamb Nut	4
8	18410	Washer, W 3/8 USS Flat Zinc Plated	4
9	18418	Washer, 1" x.25 thk Nylon Flat Washer .375ID	4
10	16418	Grommet, Rubber 1" ID .25 Groove	2



Figure 1

1. On the FRONT & REAR of the trailer measure from the top of the trailer, straight down approximately 23 1/2" and put a mark on the front and rear face of the trailer (If this interferes with the catwalk the arm can be mounted higher.) This line should be as close to center as possible. Refer to the figure 2 below.



- Line up the top of the inner bracket with the mark made in the previous step. Remove existing rivets that will be behind bracket (6 total). Align the holes in the inner bracket with holes on nose of trailer and bolt in place, using (4) 3/8" button head bolts (Item K), (4) 3/8" ID Nylon Washer (Item I) between trailer wall and bracket, (4) 3/8" washer (Item M) and (4) 3/8" Nylok nuts (Item J) provided.
- 3. On the rear of the trailer remove four rivets (leave middle rivets in place) bolt in place using (4) 3/8" bolt (**Item K**), (4) 3/8" ID Nylon Washer (**Item I**) between trailer wall and bracket, (4) 3/8" washer (**Item M**), and (4) 3/8" Nylock nuts (**Item J**) provided.
- 4. If you have a square nose trailer bolt the outer brackets to the inner bracket using (4) ¹/₂" Hex Head bolt (Item L), (8) ¹/₂" Flat washer (Item E) & (4) 1/2"-13 Nylock nuts (Item G). Align the outer bracket so that the top is parallel with top of trailer. Tighten bolts when top of outer bracket is parallel to top of trailer. It will appear as shown in figure 3 below.





5. If you have a slope nose trailer bolt the outer brackets on using (4) ¹/₂" Hex Head bolt (Item L), (8) ¹/₂" Flat washer (Item E), & (4) 1/2"-13 Nylock nut (Item G). Rotate the brackets down until the top of the outer bracket is parallel to the top of the trailer as noted in figure 4 below. Tighten bolts when top of outer bracket is parallel to top of trailer.



6. Mount the pivot pins that are in the arms to the Outer bracket through the provided holes in the face of the outer bracket as shown in figure 5 below. Note the groove in the pin should point down.

The fasteners for each pivot pin are bagged in the arm kits And will include the following Fasteners:

- 1. 18295 Bolt ¹/₂" X 1 ¹/₂" Button Head (Item H) (x2)
- 2. 18412 Washer ¹/₂" Flat Washer (**Item E**) (x2)
- 3. 18631 Nut ¹/₂"-13 Nylock (Item G) (x2)

- 7. Drill 7/8" hole in the nose of trailer using hole in Inner Bracket as a guide. This will be used for wire to pass safely through the Front wall. Install a 16419 Rubber 7/8" ID .125" groove grommet (**Item V**) into this hole. This grommet is in Electric Kit Bag.
- 8. At the trailer nose side, insert a 16418 Rubber 1" ID .25" groove grommet (**Item N**) into both the outer and inner 15/16" bracket holes. Refer to figure 5



Front Arm Assembly (101077)

- 1. Locate the following components:
 - (1) 101077 Assembled Passenger Stowing Front Pivot Arm
 - (1) 10200 Tarp Stretcher Gear Motor
 - (1) 18560 ¹/₂" X 4 1/8" Long Clevis Pin (**Item D**)
 - (1) 18510 ¹/₂" X 2 ³/₄" Short Clevis Pin (Item F)
 - (2) 104617 Ring Clip (Item C)
- 2. Locate front the knuckle arm assembly. Notice that there is a polymer bushing taped to it. Do not lose it. Refer to figure 6 for passenger side stowing tarp system.
- 3. Take short clevis pin 18510 (**Item F**) out of the upper knuckle section. Rotate the upper section until you can get the pin back thru under the springs. Refer to step 1 shown below.





- Rotate the upper arm against the spring pressure until you can get the long clevis pin 18560 (Item D) thru the holes under the upper pivot tube. Refer to step 2 in figure 6 shown above.
- 5. Connect the arm to the pivot pin and secure with set screws or snap ring depending on pivot type. Step 2 in figure 6 shows what the arm looks like if you are looking at the front of the trailer. The pivot arm for a Passenger Stowing Arm should mount on trailer as shown below in figure 7. Bolt gear motor on arm so that the motor tucks into the notch created by the mounting plate as shown in the figure below.
- 6. Connect the Yellow striped wire to the + motor terminal and the Black wire to the terminal. Add Dielectric grease to both terminals and pull the corresponding boots into position covering the Terminals.





Tarp Axle Extension (Install if Necessary)

1. Locate the 3' Axle Extension Pipe 36945. It will be swedged on one end. See Fig. 8.





- 2. If you're current manual tarp system has a front bungee return remove the entire bungee pack from the front of your axle pipe.
- 3. Remove tarp clips and slide axle back into tarp until the front end of the axle extension is 2"- 4" in front of the top lip of your front cap.
- 4. Insert the swedged end of the axle extension into the front of your tarp axle. If possible weld axle extension to tarp axle and let cool fully before proceeding to next step. If unable to weld, use the supplied self-drilling fasteners 103830 ¼" X 1-1/4" Pan Phillips Head (Item A) to attach the extension axle to the existing axle. Use a minimum of 8 fasteners 90 degrees apart from one another and equally spaced along the swedge zone to ensure a secure attachment. See Fig. 8.
- 5. (Make sure the weld has cooled before sliding back into the tarp!) Slide the axle back into the tarp, then go to the rear of the trailer. Slide the tarp axle back until the end of the spline on the back of the axle is $19^{\circ}-22^{\circ}$ away from the end of the tarp and for the front measure $15^{\circ}-17^{\circ}$ from the front of the tarp. If it is a slanted rear system, then the distance is $33^{\circ}-36^{\circ}$ from the rear and $19^{1/2}^{\circ}$ from the front of the tarp to the extension end. Mark at all measurements, then proceed to remove excess material as well as any burrs left from the end of the axle that was cut.
- 6. Replace the tarp clips securing the tarp back to the tarp axle.

Adapter Assembly

1. Locate the adapter extrusion 36940. Refer to figure 9.



- 2. Slide the long end of the adapter into the front of the existing tarp Axle or Axle Extension.
- 3. Slide the polymer bushing that was taped to the arm onto the adapter as shown in figure 10. Bushing should slide on the end of the adapter that is closest to the stops that are welded on the adapter.
- 4. Add a film of grease around the exterior mating surface of the Polymer Bushing.





5. Lift the front knuckle arm up to the axle. Pull the axle into the axle bushing and slide it over the motor shaft. Twist the axle to align the hole in the axle with the motor shaft hole. Bolt the axle to the motor using the $\frac{3}{8}$ " x $2\frac{3}{4}$ " bolt & Nylock nut supplied in the motor shaft end. Note: the motor may need to be powered to turn the axle to a position that both ends of the bolt are accessible. Refer to the Figure 11 below





6. Once in place, attach the adapter to the existing axle using the supplied self-drilling fasteners 103830 1/4" X 1-1/4" Pan head (**Item A**). Use a minimum of 10 fasteners 90 degrees apart from one another and equally spaced along the adapter zone to ensure a secure attachment (see Figure 12). Alternatively, you may Rivet the Aluminum Adapter to the existing steel axle using a minimum of 10 rivets.



Figure 12

Rear Arm Installation

- 1. Locate the Rear knuckle arm assembly. Notice that there is a polymer bushing **bolted** to it.
- 2. Take the short clevis pin 18510 (**Item F**) out of the upper knuckle section. Rotate the upper section until you can get the pin back thru under the springs. Refer to step 1 in figure 13.



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- 3. Rotate the upper arm against the spring pressure until you can get the long clevis pin thru the holes under the upper pivot tube. Refer to step 2 in figure 13 above.
- 4. Attach the lower arm to the pivot pin and secure with set screws or the supplied snap ring depending on pivot type.
- 5. Remove the polymer bushing from the rear arm. Before installing the rear polymer bushing onto the axle slide one of the Axle collars 104812 (**Item B**) onto the axle ahead of the bushing. The second Axle collar will be positioned behind the polymer bushing. These components may have to be tapped with a rubber mallet to get them past the weld of the spline. Rotate the Rear arm up to the axle then reinstall the Polymer Bushing to the rear arm using the 3/8" button head fasteners (**Item K**). This should allow the hand crank spline to protrude through the back arm allowing the use of the hand crank handle.
- 6. Position the rear collar 104812 (Item B) near the axle end ahead of the spline stub insert ensuring the fasteners will clear the inserted stub. Attach the rear PVC Axle Collar to the axle using three supplied 103830 1/4" X 1-1/4" Pan Head screws (Item A) equally spaced around the circumference of the PCV Collar. The Axle Collar located ahead of the Polymer Bushing should be fastened similarly to the axle but only AFTER observing Rear Arm "float / drift" on the axle during motion. This arm travel is expected while the system is running and proper collar placement is important to allow free travel of the rear arm. The forward Axle Collar should be secured to the axle 1/2" ahead of the maximum arm travel position observed during your test run. See figure 14.



Wiring the System

The Roll Rite Motor Reversing Relay & RF Receiver Switch shall be installed in accordance with the Installation Requirements and the Wiring Diagram references provided in the following documents.

- Roll Rite RF RECEIVER / RF TRANSMITTER Instruction (P/N 105563)
- Electrical Component Installation Guide, Instructions (P/N 105568)

Safety Requirements



 $Failure \ to \ comply \ with \ requirements \ outlined \ in \ this \ document \ may \ result \ in \ serious \ injury \ or \ property \ damage$

The following requirements shall be met when installing or servicing electrical components in Roll Rite Automated Tarp Systems:

- All connections to vehicle battery systems, vehicle battery chargers, and external power supplies shall be disconnected during all installation procedures
- Prior to installing wiring on positive terminals, check voltage on all wires and connection points using a voltmeter.
- The following personal protective equipment shall be worn at all times while installing components:
- Safety Glasses or Prescription Glasses with Side Shields
- Steel or Composite Toe Protective Shoes

Tools and Equipment Required for Wiring

The following tools are required for installation of electrical components

- Torque Wrench with range between 50 to 150 in.lb
- Nut Driver Set
- Wire Cutters up to 2AWG size wire
- Wire Insulation Stripping Tool for wire size range from 2 to 8 AWG
- Wire Insulation Stripping Tool for wire size range from 16 to 18 AWG
- Wire Terminal Crimping Tool for wire size range from 2 to 8 AWG
- Wire Terminal Tool for wire size range from 16 to 18 AWG
- Heat Gun for application of heat shrink insulation
- Multi-meter with DC voltage measurement capability
- Tie Straps
- Vehicle Chassis Wiring insulated c-clamps capable of carrying 2 to 8 AWG wiring

Locate the following components provided in the kit:

- (1) 12770 Plug, Socket Half of Sureflex Dual Conductor
- (5) 18700 Bolt, ¹/₄" X 1" Hex Head (Item S) (Mounting Relay, RF & Plug Socket)
- (5) 18620 Nut, ¹/₄" Wiz Nut (Item R) (Mounting Relay, RF & Plug Socket)
- (1) 104996 Relay, Gen1+ Solid State Motor Control 12V SWD6
- (1) 105605 RF Receiver / Switch, 902-928MHz, Gen1+ Motor Switch w/ Label
- (1) 105607 RF Transmitter / FOB, 902-928MHz, Gen1+ 8 Button Ag System w/ Boot
- (1) 16200 Boot, Rubber 8-2 AWG, 0.48" TOD, BLACK
- (1) 16201 Boot, Rubber 8-2 AWG, 0.48" TOD, RED
- (1) 16203 Boot, Rubber 8-2 AWG, 0.48" TOD, YELLOW
- (1) 16202 Boot, Rubber 8-2 AWG, 0.48" TOD, BLUE
- (1) 105568 Instructions, Electrical Component Installation Guide
- (1) 105563 Instructions, Roll Rite RF Receiver / RF Transmitter Owners Guide
- (8) 16340 Clamp, $\frac{3}{4}$ " Rubber Coated (**Item T**) (used to position wire)
- (2) 16419 Grommet, Rubber 7/8" ID .125" Groove (Item V) (Used at Trailer Wall Interface)
- (8) 18140 Bolt, $\frac{1}{4}$ " X $\frac{3}{4}$ " Pan Head (Item Q) (for Rubber Clamps)

Rite-Touch® Solid State Reversing Relay Requirements

Refer to the both the Roll Rite RF RECEIVER / RF TRANSMITTER Instruction (P/N 105563) & the Roll Rite Electrical Component Installation Guide, Instructions (P/N 105568)

- The Motor Reversing Relay shall be installed on a vertical plane with the wires from terminals (B+, B-, M2, M1) facing down. This is the only approved orientation of the motor reversing relay.
- Mount the relay in a location that it is protected from road debris, ice, snow, and road spray or bombardment
- Use the terminal boots supplied with the motor reversing relay, according to the following color codes:
- B+ is RED indicating the terminal is un-switched, fused, and hot at all times
- B- is Black
- M2 is Blue
- M1 is Yellow
- All terminals shall be coated with dielectric grease to prevent corrosion and long term connection from debris between electrical terminals
- Install the motor reversing relay such that the terminals are facing the vertical mounting surface on the vehicle body
- The motor reversing relay shall be attached to the surface using only threaded fasteners with torque specification consistent with the fastener size and type
- All terminal wires shall be strain relieved using insulated C-clamps attached to vehicle body to prevent wire vibration and torque loading from loosening electrical connections

- Route all electrical wires from the Motor Reversing Relay in a manner that will avoid wire insulation chafing, pinching, and wear from other items on the truck chassis or wear from the environment
- Rite Touch® Solid State Motor Reversing Relays shall be installed with the new high strength plastic cover provided with the assembly.
- Spade terminals for switch signals shall be coated with dielectric grease to prevent corrosion
- Spade terminals from switch harness shall be fully seated on terminals
- Torque all electrical connection fasteners to minimum 8-11 ft.lb

Radio Frequency (RF) Switch with Hand Held Transmitter

Refer to the both the Roll Rite RF RECEIVER / RF TRANSMITTER Instruction (P/N 105563) & the Roll Rite Electrical Component Installation Guide, Instructions (P/N 105568)

- RF switch shall be mounted with controller body connected to the Motor Reversing Relay, in the Motor Reversing Relay required orientation. No other orientation is permissible.
- Ring and spade terminals shall be fully seated with no conductive material exposed.
- Ring and spade terminals shall be coated with protective dielectric grease to prevent corrosion
- The RF Switch wires have insulated covers with the following colors corresponding to the connections;
 - Red Power from Positive Spade on the Rite Touch® Solid State Relay.
 - Black Ground from Negative Spade on the Rite Touch® Solid State Relay.
 - Blue REV Spade Terminal on the Rite Touch® Solid State Relay.
 - Yellow FWD Spade Terminal on the Rite Touch® Solid State Relay.

Tarp System Orientation for Side to Side Systems

The wiring diagrams are presented with the following two system orientations relative to driver facing forward in the vehicle



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Wiring Diagrams

NOTE: All Views in wiring diagrams are front view. looking through the relay as if it were transparent

Generation 1+ Rite Touch[®] Solid State Reversing Relay with RF Switch Tarp Uncovering to the Right of Driver



Generation 1+ Rite Touch® Solid State Reversing Relay with RF Switch Tarp Uncovering to the Left of Driver



Reference Pics for Wire Routing



Suggested Wire Routing using the Universal Bracket (White Reference Line)

Operating the System

- Factory Pairing is included in Gen1+ RF Receivers / RF Transmitters.
- Refer to the included Owners Guide for Installation Requirements, Power up / Power Down Functions, Pairing Procedure, Operating Modes & System Operations.

Roll Rite RF RECEIVER / RF TRANSMITTER Instruction (P/N 105563)

Optional Arm Spring Pressure Adjustments

Different types of loads and conditions may require your tarp to operate differently. That is why Roll Rite has designed your tarp system to be very versatile. Please see the steps below to adjust your arm if need be.

- To make arm carry higher over heaped loads: Increase the knuckle pressure or reduce the pressure in the base pivot box. Adjusting both will over even more noticeable results.
- To make the arm follow the profile of the end caps: Decrease the knuckle pressure or increase the pressure in the base pivot box. Adjusting both will offer even more noticeable results.

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 cleaned and greased regularly 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.
- Check and tension all set screws. Set screws should be tightened until they touch and then torque them ³/₄ 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.

Once Again Roll Rite, LLC would like to Thank You for your business and offer you not only the finest product in our industry, but the best customer service as well. We would like to invite you to visit our web site at <u>www.rollrite.com</u>, where you can find a complete set of parts diagrams.

Additionally we would love to hear from you if you have any questions or issues:

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Hardware Reference Table

	HARDWARE	PART NUMBER	QUANTITY	DESCRIPTION	
		103830	24	Bolt: 1/4" x 1-1/4" Pan Phillips Head	
ALL ITEMS CONTAINED IN Axle	101203	1	Instruction, side to side		
	Axie	103271	2	label, caution	
ONE BAG		104827	2	PVC Schedule 40 Stop Collar 2" long	
	HARDWARE	PART NUMBER	QUANTITY	DESCRIPTION	
		104617	6	Ring Clip	
		18560	4	Pin: 1/2 x 4 1/8 Special Clevis	
ALL ITEMS	Front Arm (46812)	18412	4	Washer: 1/2" Flat Washer	
CONTAINED IN	&	18510	2	Pin: 1/2" x 2-3/4" Clevis	
ONE BAG	Rear Arm (46813)	18631	4	Nut: 1/2" - 13 Nylock	
		18295	4	Bolt: 1/2" x 1 1/2" Button Head Bolt	
	HARDWARE	PART NUMBER	QUANTITY	DESCRIPTION	
		18631	8	Nut: 1/2" - 13 Nylock	
		18418	8	Washer: 1" x.25 thick Nylon Flat Washer .375ID	
		18412	16	Washer: 1/2" Flat Washer	
ALL ITEMS	Front & Rear	18628	8	Nut: Nylock nut 3/8" Jamb Nut	
CONTAINED IN	Universal Brackets	101026	8	Bolt: 3/8"-16 x 1 1/2" Button Head (Zinc)	
ONE BAG	(47270)	18296	8	Bolt: 1/2" -13 x 1 1/2" Hex Head	
		18410	8	Washer: W 3/8 USS Flat Zinc Plated	
		16418	2	Grommet, Rubber 1" ID .25" Groove	
	HARDWARE	PART NUMBER	QUANTITY	DESCRIPTION	
		104996	1	Relay, GEN1 + Solid State Motor Control 12V SWD6	
		105605	1	RF Receiver/Switch, 902-928MHz, Gen1 + Motor Relay W/ Label	
		105607	1	RF transmitter/FOB, 902-928MHz, Gen1 + 8 Button Ag System W/ Boo	
		12770	1	Plug, Socket Half of Sureflex Dual Conductor	
		105563	1	Instruction, GEN 1+ RF Remote Control Guide	
		105568		Instructions, Installation requirements and wiring diagrams for Rol	
		105508	1	Automated Tarp Systems	
ALL ITEMS	Electric Kit	104989	2	rubber terminal cover	
CONTAINED IN		18620	5	Nut: 1/4" Wiz Nut	
ONE BAG (101707)	18700	5	Bolt: 1/4" x 1" Hex Head Bolt		
		16340	8	Clamp: 3/4" Rubber Coated	
		18140	8	Bolt, 1/4" X 3/4" Pan Head	
		16201	1	Red Boot	
		16203	1	Yellow Boot	
		16202	1	Blue Boot	
		16200	1	Black Boot	
	16419	2	Grommet: Rubber 7/8" ID .125" Groove		

ltem Callout	Part Number	Description	Part
A	103830	Screw, ¼" x 1-1/4" Pan Head Phillips	X24
В	104827	Stop Collar for 2" Axle	X2
с	104617	Ring Clip	X6
D	18560	Pin: 1/2 x 4 1/8 Special Clevis	

PartNumber	Description	Part
18412	Wahser: 1/2" Flat Washer	
18510	Pin: 1/2" x 2-3/4" Clevis	()
18631	Nut: 1/2" - 13 Nylock)	x 12
18295	Bolt: 1/2" x 1 1/2" Button Head Bolt	
18418	Washer: 1" x.25 thk Nylon Flat Washer .3751D	
18628	Nut: Nylock nut 3/8" Jamb Nut	×8 []
	18412 18510 18631 18295 18418	18412 Wahser: 1/2" Flat Washer 18510 Pin: 1/2" x 2-3/4" Clevis 18510 Nut: 1/2" - 13 Nylock) 18631 Nut: 1/2" x 1 1/2" Button Head Bolt 18295 Bolt: 1/2" x 1 1/2" Button Head Bolt 18418 Washer: 1" x 25 thk Nylon Flat Washer .375ID

Part Number	Description	Part
101026	Bolt: 3/8"-16 x 1 1/2" Button Head (Zinc)	
18296	Bolt: 1/2" -13 x 1 1/2" Hex Head	×8
18410	Washer: W 3/8 USS Flat Zinc Plated	×8
16418	Grommet, Rubber 1" ID .25" G roove	
	101026 18296 18410	101026Bolt: 3/8"-16 x 1 1/2" Button Head (Zinc)18296Bolt: 1/2" -13 x 1 1/2" Hex Head18410Washer: W 3/8 USS Flat Zinc Plated

ltem Callout	Part Number	Description	Part
Q	18140	Bolt, ¼" x ¾" Pan Head Phillips	X8
R	18620	Nut: 1/4" Wiz Nut	O S
s	18700	Bolt: 1/4" x 1" Hex Head Bolt	x 5
т	16340	Clamp: 3/4" Rubber Coated	×8
U	16200 Black 16201 Red 16202 Blue 16203 Yellow	Colored Rubber Boots	One of each
v	16419	Grom met: Rubber 7/8" ID .125" Groove	

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