



"The LOOK[®]" Sliding Tarpaulin Systems.

By LCS Ltd. Burlington Ontario, Canada.

Installation Instructions:

Introduction:

- Congratulations on purchasing **The LOOK[®]**, the finest Sliding Tarpaulin System on the market. You will discover through the assembly and installation of **The LOOK[®]** system, every component part is engineered for long-lasting performance and durability.
- To ensure continuous and easy operation of **The LOOK[®]** it is important the installation team understands the design of the system and why each component is significant to each other.

Track and Rollers:

The The Look's performance is supported by the oldest tracking system in existence, "*The Railroad*".

- The Heavy-Duty aluminum extruded profile allows for **The LOOK[®]** to ride securely while travelling over the toughest of modern day

roads. The lower portion of the extrusion provides a built in bump rail to provide protection against potential damage from side loading of tow-motors.



- The Stainless Steel removable V-shaped insert is key to The Look's performance as it provides a tough rolling surface for the V-shaped steel rollers to glide on.

- **The LOOK[®]** rollers are manufactured in steel to eliminate the need for replacement. A unique relationship between the rollers inner surface and the stainless steel insert, minimizes contact between the two, and provides the greatest performance in a sliding system.

- The optional rubber extrusion, designed to seal out the road elements, slides into the back of the aluminum extrusion when **The LOOK[®]** system is bolted to exterior stake pockets and rub rail.

Installation:

Step 1:

- First refer to **The LOOK[®]** order to determine what return of bulkhead has been ordered. For the most common 12" rounded bulkhead, measure from the flush front of the trailer sill back 12 ". This will be the starting point for the first aluminum track rail. All rails are supplied in either 12ft or 24ft lengths and **are mounted ** **below** the top of the trailer channel side rail.


- The track should finish flush with the rear sill of the trailer if the system calls for a rear flap. If the system calls for rear swing out doors, the track must extend past the rear trailer sill by a minimum of 2".

Step 2:

- For **The LOOK®** systems being bolted to exterior pocket and rub rails, a 3" rubber extrusion must be inserted prior to installing the aluminum track rail. Locate the four tracks that have aluminum angle tabs welded or riveted to the backside to secure the rubber extrusion at both ends of the trailer. Position the aluminum tracks face down the floor. With a pair of scissors take the first section of rubber extrusion and cut the leading end into an arrow shape to allow for easy insert into the track. Apply a light lubricant to the inside extruded groove to allow for easy sliding of the rubber into the aluminum track. The first section slides flush to the front edge of the track and secured to the aluminum angle tab with a rivet. The rubber extrusion should over hang the rear end of each track section by 6"-8" providing for a future overlap seal. Cut the "t" section out for those 6"-8" of rubber that overhangs the track. Install each rubber extrusion section flush with each section of track and overhang each rear end as described.

Step 3:

- If mounting the aluminum tracks to steel trailer side rails, install a thin mylar tape to the side rail prior to installing the track to prevent electrolysis.

- With large C-clamps position the first section of aluminum track into place starting at the desired location as determined by the return of the bulkhead and clamp to the side rail of the trailer. Remember to position the top of the aluminum track  down from the trailer channel side rail and not the stake pocket or rub rail.

Step 4:

- Using a 5/16" pilot drill bit, followed by drilling a $\frac{1}{4}$ " hole locate the first and last mounting hole approx. 2" inboard of each edge of the aluminum track. It is recommended that each mounting hole be located on a stake pocket at 48" centers, and staggering the holes with one being high and the other being low. It will be noticed on the interior flat face of the aluminum extrusion two scored drill lines that ideally set up for staggering of track bolts. Prior to installing the track bolt, use a 7/8" taper bit to countersink the $\frac{1}{4}$ " hole to allow the top of the track bolt to sit flush with the surface of the aluminum track. *Warning: Ensure the countersink is not too deep, allowing the track bolt to sit deeper than necessary.* It is recommended prior to installing the bolt, a dab of silicone or an alike material be spread around the underside of the countersink bolt head to prevent against electrolysis or corrosion.

Step 5:

- Before installing the next aluminum track on the trailer, insert the first and second 8ft length of stainless steel V-shaped insert into the provided grooves in the aluminum track.
- With the installation of the next track slide the over-hanging edge of the stainless into the front edge of the next aluminum extrusion. It is key too not having the track and stainless butt joints lining up in the same place along the length of the entire track.
- Based on the layout of the track and stainless insert in relationship to the trailer, it will be necessary to cut short the stainless insert as to not fall on a track butt joint.

- Ensure all Stainless steel joints are tight to each other, as the rolling performance of **The LOOK[®]** system is vital to its installation.

- I may be required to tap the stainless steel insert into position using a piece of hardwood and a hammer, as not to damage the ends.

Step 6:

- In the middle of each **The LOOK[®]** system, preferably closest to a track joint, a 12" long upper cutout in the aluminum track is required to be installed. This will allow for **The LOOK[®]** frames to be removed in the case of repair without sliding the entire system off the back of the trailer.

Step 7:

- Final installation of the rubber extrusion is required. Where the rubber overhangs the next section by 6"-8" use a contact cement adhesive, and apply it to both areas of the rubber that come in contact with each other. Allowing the adhesive to set-up, join both surfaces together allowing for a permanent bond.

- This operation is important and prevents the open end of the rubber extrusion from being pulled out during the life of the system.

- If a section of rubber requires replacement in the future, the aluminum track section will need to be removed.

Bulkhead and Front Ratchet Locks (If equipped):

The Look's Bulkhead is aerodynamically designed to assist in the free flow of air turbulence. It provides a front covering wall for TM system and is where the front car locks into place.

- The Bulkhead is complete with the front exterior ratchet locks (if equipped) in place along with a grab handle and fold down step to assist in the safe operation of the exterior ratchets. (If Equipped)

Installation:

Step 1:

- The bulkhead should be hoisted into place by overhead crane or by means of a front-end towmotor.
- Line the bulkhead up flush with the front of the trailer sill. The bulkhead must sit tight to the top of the trailer.
- Utilizing $\frac{1}{2}$ " Grade 8 bolts permanently secure vertically through the $\frac{3}{8}$ " bottom aluminum securement plate of the bulkhead into the trailer top sill. The bulkhead should be secured with a minimum of eight bolts across the front sill. With the shape of the radius bulkhead, it will be necessary to secure both on the exterior and interior area.

Step 2:

- The bulkhead is framed with a 2" steel tubular "Bumpbar" which is required to be permanently secured to the trailer side rail where the 6" leg drops below the top of the trailer deck.
- This area is custom fitted to suit each trailer configuration. Generally a structural angle 6" high x 3" x 3" is inserted into the front side of the bumpbar with one leg flush to the front side of the bumpbar and other flush to the trailer side rail, making a 90 degree corner.

- Attach the angle to the bumpbar by welding and then through bolt the opposite side of the angle permanently to the side rail of the trailer.
- Repeat this for the opposite side . Now the bulkhead is permanently fastened to the trailer and will be able to support the tensioning load being applied when **The LOOK®** system is tightened to the rear of the trailer.

Car Frames:

The Look's all aluminum Super-structure is identified by three specific car frame names. "The Front Car", "The Intermediate Cars" and "The Rear Car".

Front and Rear Car Frames:

- These frames are the drive engines behind the operation of **The LOOK®** System. The 2" 6061-T5 aluminum tubing is engineered into a 30" wide car frame to provide the everlasting strength required to push or pull the system along **The LOOK®** track.
- As systems begin to age, the 30" car frame maintains its structural integrity keeping the system responding each time the operator puts the system into motion.
- The lower steel car plates, which are removable, if damaged, create a necessary weight distribution to the lower section of the car frame and ensure the frames remain on the stainless steel rolling insert.
- The 10" rolled formed corner radius provides a rounded surface for the tarpaulin to wrap around and guarantee's structural integrity against cracking.

Intermediate Car Frames:

- These frames are engineered in a heavy-duty aluminum extrusion to ensure as a stand-alone support, they will accept the structural task of completing The Look's super-structure.

- The lower section is gusseted each side and bolted to an aluminum extruded car plate for easy removal.

Installation:

Step 1:

- Installation of all the car frames is self-explanatory. All car frames are marked by their appropriate halves.

- Simply identify the corresponding half and slide the half with the outer connector tube into the half without.

- The car frames must be spaced $\frac{1}{4}$ " apart from each other.

Step 2:

- The car frame halves should be placed on a sturdy work table and clamped together to prevent movement and distortion while being permanently welded.

- Review the method in which the frames are welded on the vertical leg, and copy the same process to join the frames in the middle. The frame is heavily plug welded and then joint welded around the joining seam.

- Prior to installing the car frames onto the trailer, ensure all frames are straight from one side to the other. It is common for aluminum extrusions, which are extruded and then roll formed to experience slight deflection. In this

case simply clamp the car frame to the table in an upside down position and twist the car legs in the opposite direction to ensure they are true to each other.

Step 3:

- Installation of **The LOOK**[®] rollers if not already installed is made quick and easy.

- Each roller attaches to the lower car plate with a 2" x 1/2" # 10 coarse thread carriage bolt, a custom machined 5/8" spacer and a low profile jam-nut.

- To install the roller, place the carriage bolt through the exterior lower car plate, ensuring the square shank fits tightly into the square punched hole of the car plate.

- Working from the inside slip over the carriage bolt the metal spacer, followed by the roller itself.

- The roller is positioned with the snap ring facing the installer or towards **The LOOK**[®] track once the cars are in place.

- Tighten the roller into place by threading on the low-profile jam nut and then apply torque by means of an impact wrench.

Tarpaulin Covering:

The Look's unique design utilizes a 26oz vinyl coated polyester tension fabric.

- With a high gloss exterior top coating to preserve from the elements **The LOOK**[®] tarpaulin covering has provided operators with an expected life of up to five years.

- Graphics from the simplest of hand painted vinyl inks to more complex digital graphics are all options available with **The LOOK[®]** tension fabric.

Installation:

Step 1:

- Easy installation of **The LOOK[®]** tarpaulin starts with folding it up correctly from the tarp shop floor. When you receive **The LOOK[®]** tarpaulin it will already be folded and ready to install.

- "If the tarpaulin requires folding follow these instructions:"

- The tarpaulin should be laid flat on the floor with the velcro pockets facing down.

- Fold both exterior edges to the middle of the tarpaulin.

- Fold again to the middle and if required once again so the entire tarp will fit on a 48" wide skid. The tarpaulin should be 48" wide by the length on the floor.

- Now with two people place the front portion of the tarpaulin on the skid.

- Accordion the tarpaulin from the front to the rear until the entire tarpaulin is sitting on the skid.

Step 2:

- With a tow-motor lift the entire skid up the full height of the bulkhead and rest it on the top of the bulkhead.

- The front car should be clamped in place to the bulkhead so it doesn't move backwards.
- The entire **The LOOK**[®] super-structure should be slide to the front of the trailer.

Step 3:

- Take the rear portion of the tarpaulin on top of the skid and pull it towards the rear end tube of the rear car.
- With a small slat of wood clamp the rear edge of the tarp to the rear tube on the rear car frame.

Step 4:

- Next, two people will slide the first intermediate frame along with the remaining cars towards the rear of the trailer.
- The center to center of the intermediate cars is approx. 84" on a 48ft trailer. Once the first intermediate is 84" away from the front car frame, clamp the car in place with a c-clamp so it can't move.

Step 5:

- Repeat this for all car frames, moving the system from the front of the trailer towards the rear.
- Clamp the front edge of the tarpaulin to the front tube of the front car.
- Once the tarpaulin is fully extended to the rear drape the sides of the tarpaulin over the entire system.

Step 6:

- Starting at the front of the system square up the tarpaulin long the entire length and width of the trailer.
- The intermediate cars should now be released from their clamped position and moved along the length of the track to meet up with their correct location on the trailer.
- This is determined by the location of the vertical and horizontal Velcro pockets already welded to the interior of the tarpaulin.
- Wrap the Velcro pockets tightly around the intermediate car frame.

Step 7:

- On the front and rear car the Velcro pockets will require custom cutting to fit correctly around the horizontal cross tubes.

Step 8:

- Start the final stages of installing the tarpaulin to **The LOOK[®]** super-structure.
- The Front and Rear car frames already comes standard with a 1" x 3/16" aluminum flat bar temporarily installed onto the exterior of the aluminum tube.
- Remove the camtainer nuts and bolt assembly securing the flatbar to the car frame.
- Starting from the middle of the front car up on top, square up the front edge of the tarpaulin flush with the front edge of the front car. Locating the pre-drilled holes in the aluminum tube, drill through the top layer of the tarpaulin.

- Place the 1" aluminum flatbar over the tarpaulin and insert the camtainers as they were originally installed.
- Repeat this all around the entire surface of the front car permanently securing the tarpaulin to the front cars.
- Starting from the middle of the rear car up on top, square up the front edge of the tarpaulin flush with the front edge of the front car. Locating the pre-drilled holes in the aluminum tube, drill through the top layer of the tarpaulin.
- Place the 1" aluminum flatbar over the tarpaulin with the rear flap locking wings between the flatbar and the tarpaulin, and insert the cam-tainers as they were originally installed.
- Repeat this all around the entire surface of the rear car permanently securing the tarpaulin to the rear cars.

Step 9:

- Once the tarpaulin is permanently secured, tension **The LOOK**[®] system to the rear of the trailer by temporarily installing two short ratchet straps with hooks.
- The easiest method of doing this is to hook one end of the ratchet strap to the front edge of the lower steel car plate and anchor the other end to the rear bumper. Do this on each side of the rear car frame. Tension the ratchet so **The LOOK**[®] is totally taunt.
- Next, check the entire tarpaulin now under tension and ensure the tarpaulin is even from front to rear and across the width from one side of the intermediate car to the other.

Step 10:

- Insert the two 3/8" OD plastic tubes provided in the lower tarpaulin cable pockets.
- Leave 6" overhang at front and back to be trimmed off at completion of install

Step 11:

- The next step is the most important step in finishing off the proper fit of the tarpaulin installation.
- The tarpaulin is designed in width, to finish with the top of the plastic tube exactly parallel to the point on the car plate that tapers down and into the aluminum track.
- The method in which the installer stretches the tarpaulin into place will be by utilizing a C-clamp vise grip.
- The installer will wrap the lower tarpaulin where the plastic tube is located center of the intermediate car plate with a small thin vinyl scrap material as not to pinch or cut the tarpaulin.
- Clamp one edge of the vise grip to the top of the plastic tube and the other end to the underside of the aluminum track.

Step 12:

- Utilizing the 1" aluminum flat bars with vinyl wear pads attached, mount the slightly tapered end just above the top of the plastic tube in a vertical position utilizing 1/4" x 1" self drilling hex head metal screws.

- This will permanently secure the tarpaulin to each car plate.
- Repeat this procedure for each intermediate car plate and the four corners of the front and rear car plates.
- The front and rear cars have the flatbar installed not at the end of the car plate closest to the next intermediate, but inboard of **The LOOK®** roller bolt approx. 5" in from the interior edge.

Step 13:

- It is important the tarpaulin is checked prior to moving onto the next operation to ensure the overall fit and appearance is correct.

Quad Up-Lifting Bows:

The Look's all aluminum Super-structure is tied together with the unique Quad Up-lifting bow assembly.

- Designed to tie the super-structure as one assembly, the quad uplifting bows provide the structural support necessary to maintain the integrity of the entire system.
- The scissors action of the bows when **The LOOK®** is collapsing together, allows for the tarpaulin roof member to lift up and away from the loading zone, providing maximum clearance for various cargo.
- The quad up-lifting bow will decrease the interior height of the system by approx. 1" when in the collapsed position.

Installation:

Step 1:

- The Horseshoe shaped Quad Up-lifting bow assembly manufactured from aluminum round tube is separated into Upper Quads and Lower Quads.
- The Upper Quad arms are identified with shorter length legs as the lower quads have longer legs.
- Each car frame has two aluminum u-shaped brackets welded or bolted to it at a specific calculated height.

Step 2:

- Start at the front of the trailer by installing all the upper quad arms first, followed by installing all the lower arms.
- Insert the plastic ends already attached in the aluminum tubing to

the u-shaped quad clip brackets, in the lower hole, provided on each car frame.
- The plastic inserts are held in place by inserting from the exterior side a 3/8" x 1-3/4" clevis pin. To lock the pin in place insert the circle lock ring.

Step 3:

- The cross arm of each quad is securely held into place with a full width Velcro pocket heat welded to the underside of the tarpaulin roof.

Rear Locking Mechanism (If equipped with Automatic Locks):

The LOOK[®] is equipped with a unique automatic over-center locking mechanism which will lock **The LOOK[®]** into place and provide the

tension adjustment for the system. It provides operators with the flexibility of locking and unlocking from the exterior, at ground level, or from the interior at trailer deck level.

- The Automatic locks will come already installed on the rear interior car frame.
- The Lock Bracket is securely bolted to the rear car and warehouses the entire locking components.
- An exterior washer is provided which is riveted to the exterior of **The LOOK**[®] system now that the tarpaulin is installed. It has arrow indicators pointing to the locked and unlocked positions.
- Likewise the interior lock bracket comes complete with the same indicators.

Installation:

Step 1:

- Prior to setting the rear locking mechanism and tension, first release the tensioning straps previously being used to assist in the tarpaulin installation.
- Slide the rear car frame 2ft forward from the rear of the trailer and clamp in place to prevent from rolling back.
- A stainless steel "Pinched Angle" is bolted one per side and is installed upside down and at the extreme rear end of **The LOOK**[®] track.
- These are designed to lock the upper portion of the rear most roller into place so the pressure exerted by the locking mechanism at the rear only doesn't allow the rear car frame to tilt forward and create slack in the tarpaulin.

- Next re-install the ratchet straps to temporarily re-set the tension on **The LOOK®** system and to allow for the installation of the Automatic Locks.

Step 2:

- To set the correct tension on the rear locking mechanism, locate the long adjustable "Push Rod" which has a threaded eye bolt attached through the slotted "Guide Tube" of the lower rear car frame.

- Locate the aluminum wedged shaped casting and place it on the top of the aluminum track.

- The wedge should be facing forward so the rounded cup of the casting is able to accommodate the end of the push rod.

- Align it so the push rod fits into the first cup of the casting closest to the tapered wedge end.

- Ensure the threaded eyebolt has approx. 1" of threads exposed.

- By hand position the swivel "Locking Arm" attached to the end of the threaded eye bolt in the upward most position, which will be the Locked Position.

- Weld the aluminum casting to the top of **The LOOK®** Track.

Step 3:

- With the Locking handle provided, insert the end socket over the exterior / interior square "Lock Pin". In the direction of the arrows, unlock the system.

- The tension of the Locking Mechanism is obtained by increasing or decreasing the

exposed threads on the eyebolt at the end of the push rod.

- The tension should be set to the operators desired preference.

- *Warning: Never add a longer pipe sleeve over the existing locking handle to increase the tension on **The LOOK**® Tarpaulin. Failing to comply will damage the Rear Locking Mechanism Components.*

Rear Pull Up Flap:

Installation:

Step 1:

- Attached to the upper exterior tube of the rear car frame is a 1" flatbar pre-drilled and ready for permanent mounting of the rear flap.

- Remove the flatbar and install the rear flap tight up under the top drip lip of the rear car.

- Install the flatbar back over the rear flap and bolt the entire assembly into place.

Step 2:

- There are three marine pulleys that will support the nylon rope used to raise and lower the rear flap.

- The top two pulleys are located 24" from each side of center across the width of the rear car frame dividing the opening into three spaces.

- These pulleys are supported by an S-Hook, which bolts through the top car frame tube.

- The third pulley is located on the left side if standing at the rear of the system in the middle of the radius.

Step 3:

- With the rear flap in the down position the pull rope is installed starting from the interior side.

- Tie one end of the 50ft-pull rope to the interior bolt, which secures the right most exterior pulley.

- The rope is dropped vertically down the inside of the rear flap and wraps under the lower edge of the flap.

- It then comes vertically up the exterior flap wall and through the

right hand side of the pulley.

- Feed the rope horizontally through the next pulley and again through the third pulley located in the left-hand corner radius of the rear car frame.

- With the rope now hanging down on the ground, take the open end and feed it back through the pulley in the left hand corner radius, and then through the next or middle pulley.

- Next the rope will drop vertically straight down the exterior side of the rear flap and then wrap around underneath the flap to the interior side.

- The rope then travels up vertically the interior side of the rear flap and permanently ties to the bolt, which secures the middle pulley in place.

- With the rope now hanging in a loop outside the left side of the rear car frame, pull down on

the rope and watch the rear flap roll up and out of the way of the loading area.

Finishing Touches:

Installation:

Step 1:

- Four handles are supplied and are to be bolted in the lower four corners of the front and rear car frame, which the operator will use to slide **The LOOK®** system.

Step 2:

- The plastic tubes as mentioned in step 10 of the tarpaulin installation, can now be trimmed. The plastic tube is what ensures the tarpaulin is held tight under **The LOOK®** track and to keep out the weather.

Step 3:

- Open up **The LOOK®** system and slide it front to back.
- Using WD40 or a light machine oil, apply a thin coating to the entire length of the stainless steel track insert.
- With a clean rag, lightly wipe off the excess lubricant, keeping only a light film of oil on the stainless steel insert.
- The operator should repeat the cleaning and lubrication of **The LOOK®** track every 2-3 weeks to ensure maximum sliding performance.

Step 4:

- Prior to claiming **The LOOK®** installation complete, the system must be test rolled from all eight positions on the trailer.

- Slide **The LOOK®** system from the front to the rear from ground level and then deck level, both on the driver and passenger side.

- Repeat the same process, sliding the system from the rear to the front.

Congratulations: The LOOK® Sliding Tarpaulin system should be completely installed and operating smoothly. Please reference the operating and maintenance guide to ensure the system is always in good working order and properly maintained.