

INSTALLATION MANUAL

# INSUL-LITE SERIES

Tool Requirements					
Item	Tool Description	Qty.	Item	Tool Description	Qty.
1	Welding Machine	1	6	Power drill	1
2	C Clamps	4	7	10mm Socket	1
3	3/8" Wrench	1	8	Rivet gun	1
4	7/16" Wrench	1	9	1/2" x 10" Lg rods	2
5	1/2" Wrench	2	10	Locking pliers with pipe grip	4

**Check the trailer/ body measurements and components to the door specification sheet in the box.**

**CRITICAL: TRACKS MUST BE PARALLEL AND THE PROPER DISTANCE APART.**

Insul-Lite models - Proper outside track distance = **Panel length + 3.125"**.

Track Installation tolerance +/-1/8"

## TRACK INSTALLATION:

- Using the locking pliers, clamp the horizontal track (J track) onto the vertical track (See figure 2). The horizontal track must be at 90 Degree (See figure 1).
- Weld the horizontal track to the vertical track. This step is easier to do outside of the truck. (figure 1)
- Take the tracks inside the truck and position the tracks as stated in the MCLAREN DOORS specification sheet.
- C Clamp the tracks in place using 2 C clamps per side. Clamps should be position with 1 clamp at the top and 1 clamp at the bottom of the door opening (Shown in figure 3)

**Note:** Test the tracks before welding/riveting the tracks in place by Inserting rollers into both ends of the panel and run the panel up and down in the vertical track. The panel should be able have 1/16" to 1/8" side to side movement. Adjust track location to ensure the panel has the recommended room.

- When tracks are properly located, weld or rivet the tracks in place and remove C clamps.



Figure 1

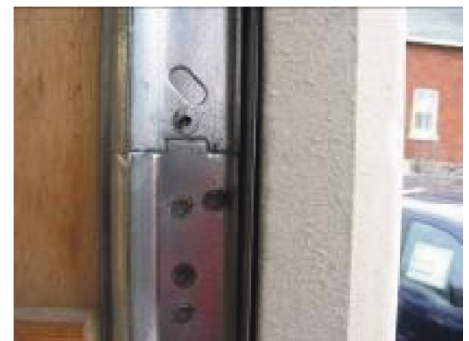


Figure 2

## PANEL ASSEMBLY / DOOR INSTALLATION:

(2 people required)

**NOTE:** Do NOT remove any fasteners from the door.

- Clamp locking plyers firmly in place 18" from the header on both sides.
- (If bottom panel is not connected to a second panel) rivet the bottom panel to the next 2 panel section using the rivets provided.(Shown in figure 5).
- Insert the rollers into the roller brackets on both ends of the panels.
- Roll the assembled bottom panels in to the end of the horizontal tracks and roll the section forward until it contacts the clamps.
- Install the rollers into the next panel assemblies and roll the assembled section into the horizontal track and connect the panel section to the lower section already installed.
- Repeat process until all panels are installed and all rollers are in.



Figure 3

- Install the end/track stops into the horizontal track to prevent door from rolling out of the tracks.

## COUNTERBALANCE/SPRING ASSEMBLY INSTALLATION

- Remove the driver side vertical track bearing from the driver side vertical track. Do NOT remove
- the spacer nuts between the shaft bearings and the end shaft brackets, (Shown in figure 9)
- Slide the bearing on to the end of the shaft. NOTE: The driver side of the shaft has the black painted cable drum.
- Slide the counterbalance shaft into the passenger side vertical track bearing.
- Lift the driver side of the counterbalance up and slide the bearing back on to the vertical track bracket and secure the bearing.
- Ensure the shaft is straight and in line with the end shaft brackets then weld, rivet, or bolt the center shaft bracket securely in place.  
NOTE: For single spring applications, make sure there is 12" of shaft between the end of the spring and the vertical track bearing to allow for expansion. (Figure 10).
- Ensure all bracket fasteners are tight when done.



Figure 4



Figure 5

## WINDING CABLES

- Secure the shaft in place by applying 2 locking pliers to the shaft between the center shaft bracket and driver side cable drum. Apply 1 locking pipe plier onto the shaft (underneath the shaft and against header/ door opening) and the other locking plier should be pressed against the roof above the shaft to prevent the shaft from rotating.
- Ensure the shaft rotates easily with no more than 1/8" sideways movement.
- Wind the cables onto the drums until the cable is tight. (When winding, the cables should in the opposite direction of figure 11.)
- Slide the cable drum against the vertical track bearing.
- Secure the cable drums using a 3/8" wrench. (When winding, the cables should be winding upward between

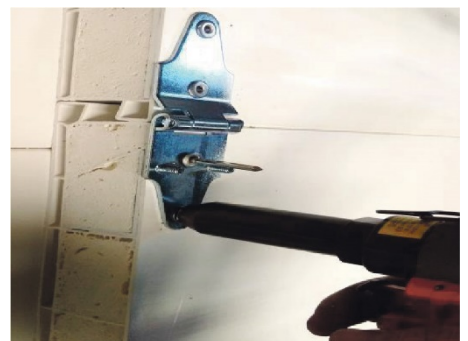


Figure 6

the spring and header) Slide the cable drums against the bearing brackets, (As shown in figure 9.)

## SETTING SPRING TENSION – IN THE DOOR OPEN POSITION

**WARNING:** When wound or when winding, the spring is under high tension and is dangerous. It should only be wound or serviced by a qualified technician. For information on counterbalance installation, contact MCLAREN DOORS at 877-263-9153 or for afterhours assistance contact 416-316-6036.

- Wind the spring for 4-5 complete turns (Direction shown in figure 11).
- Stretch the spring out approximately 4-5" (May require adjustment after testing)
- Secure the spring using a 7/16" wrench.
- Ensure all counterbalance fasteners are tight.
- Removing the locking pliers from the shaft.
- Remove the locking pliers the horizontal tracks. NOTE: Keep hands clear of the horizontal tracks and your head below the door. The door will roll forward 15" when removing the locking pliers from the tracks.
- Roll the door up and down slowly to test the operation. NOTE: If during operation the spring does not remain straight (starts to zig zag), contact MCLAREN DOORS at 877-263-9153.

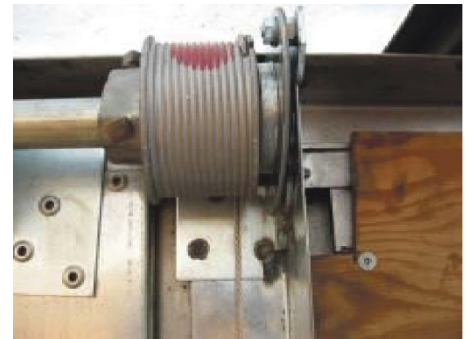


Figure 9



Figure 10

\*This image represents the inside view of the door.

## TOP ROLLER BRACKETS:

(2 people and interior light required)

- Close and latch the door.
- Place the rollers in the top bracket and angle the rollers into the track.
- Roll the bracket to the door and onto the stud plate on the top panel.
- Move the brackets up or down until the top seal makes soft contact across the entire header; (move down to tighten the seal, up to loosen).
- Note: Hard seal contact will not allow the door to open/close properly.

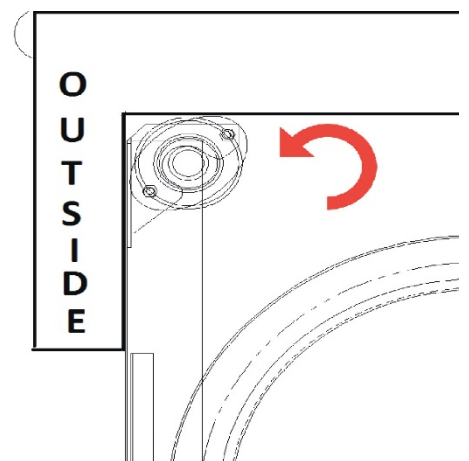


Figure 11

- TIP: For most doors the top of the galvanized portion of the bracket will be +/- ¼” from the top of the door, (Shown in figure 12).

## SIDE SEALS

- Starting from the bottom of the track, hammer the side seals into the slot between the vertical angle and the track using a rubber mallet.
- Secure the seal using the self-taping screws provided. (Shown in figure 13)



Figure 12

## LATCH CUT OUT

- The cut out should be ¾” wide x 3 ½” long, starting under the center point which is the rivet marked by the arrow in the picture. The inside edge of the cut out should be along the edge of the bottom seal, (i.e. ¼” from the face of the panel).
- A piece of rod or half-moon round approximately 7/16”, should be welded under the left edge of the cut out to properly engage the latch hook. The latch should be easy to close, yet tight enough to ensure the door is well sealed and does not bounce or vibrate when the truck is in motion.

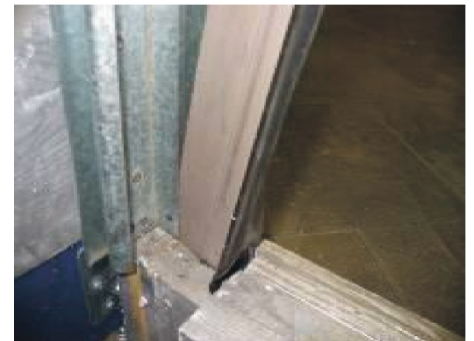


Figure 13

## Final Checks:

- Ensure the door is level across the sill.
- Ensure the door seals well on all surfaces
- The door should move easily and with equal force in both directions – easy one hand operation.

Applying Paints and Decals: Some paints and decals can cause excessive heat buildup which can lead to surface damage. To avoid potential damage please contact MCLAREN DOORS before applying any paints or decals. Failure to do so may invalidate the warranty. MCLAREN DOORS offers a wide range of low heat paint colors to match your color requirements. Before applying decals, ensure that the panel shift screws are installed to prevent any misalignment



Figure 14