



# Service Guide

## Rear Roll-up Door T-Series

### **⚠ WARNING**

The counterbalance spring is wound under high tension. This high-tension spring can cause severe injury or death. Only qualified technicians should adjust this spring.

Use two winding bars that are 1/2" in diameter and 18" long. DO NOT USE bent winding bars, screwdrivers, or punches for spring winding.

### **⚠ CAUTION**

Read all instructions before starting repair. Always maintain firm footing and control of tools.

Installation, repairs, and adjustments must be made by trained service personnel using proper tools and instructions.

Read the safety and warning decals provided by the manufacturer. Never paint over the decals, and replace them if they are faded.

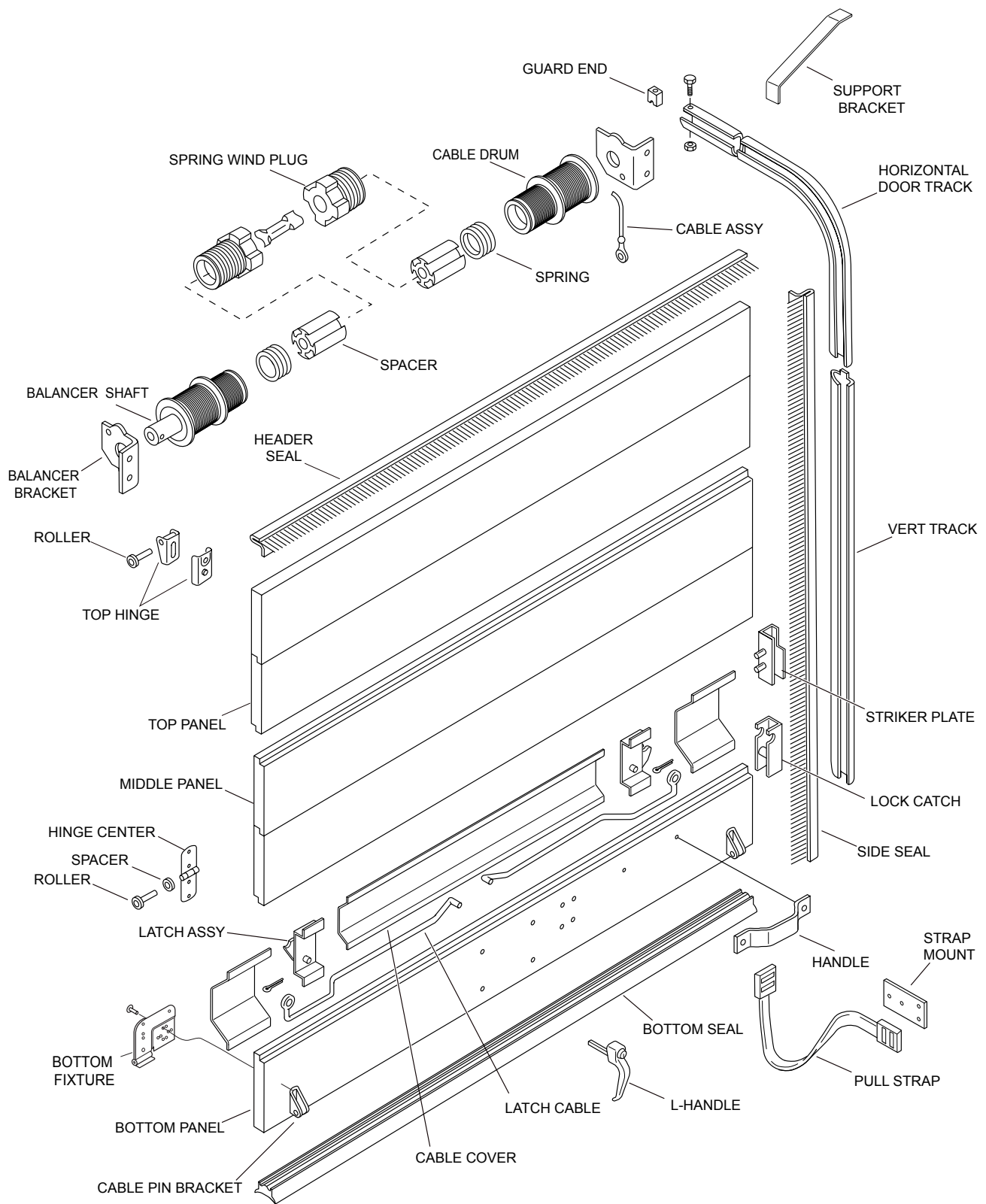
Do NOT use the rear door pull strap to support yourself when entering or exiting the rear. The strap can break or pull the door down on you. Use the grab handles for aid getting in and out of the back.

Stand clear of the opening while the door is moving.

### **NOTICE**

To prevent damage to the cargo or vehicle, be sure that the rear door is closed and latched before driving the vehicle.

The information in this document applies to our most common roll-up door option. If your vehicle is equipped with a different roll-up door, refer to the door manufacturer's service guide for operation, adjustment, and maintenance instructions.



*Overview of T-series roll-up door*

## Inspection

Check the condition of the door and strap:

- ☐ Check that the door opens easily and closes tightly.
- ☐ Check the operation and condition of latch.
- ☐ Check for loose fasteners or other components.
- ☐ Check the condition of the pull-down strap for fraying or wear.
- ☐ Check that the rear door is centered in the opening.

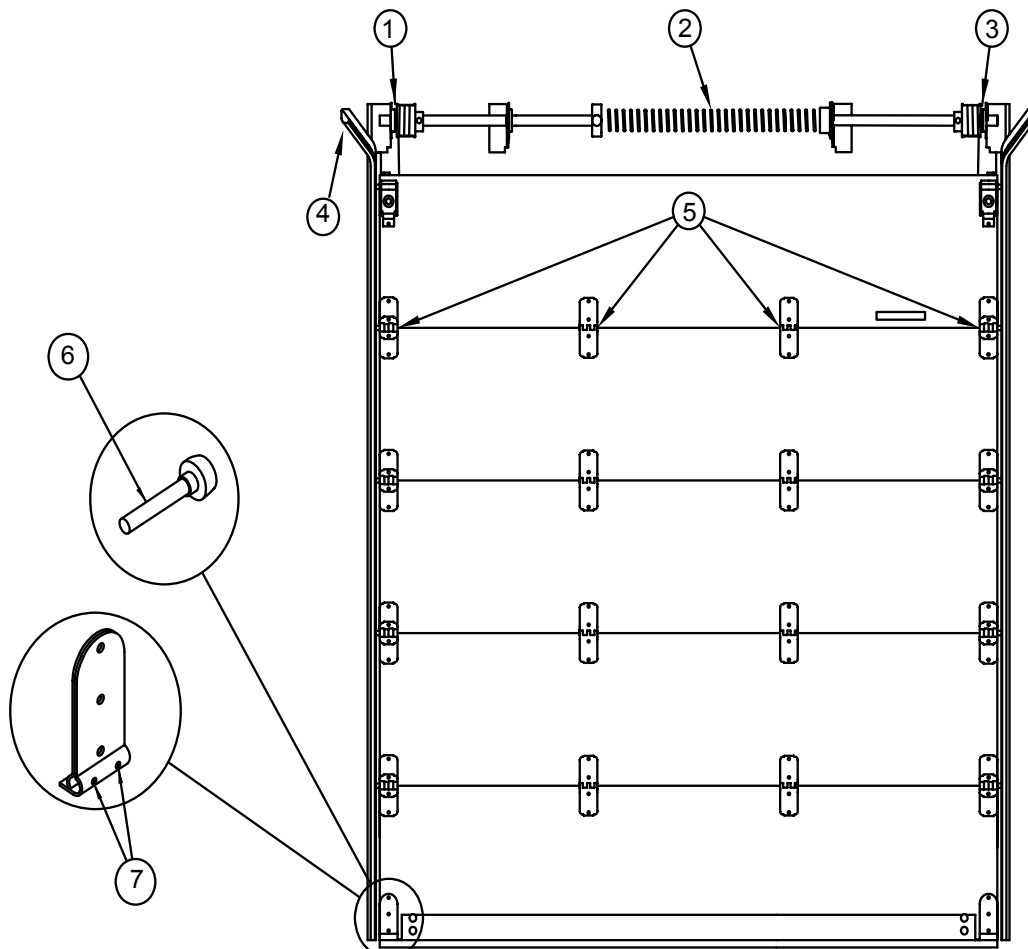
## Lubrication

### NOTICE

**Do NOT use grease on doors. Do NOT get oil on rubber seals. Wipe up any drips immediately**

Lubricate the following rear roll-up door parts with a (P/N 04202540 or equivalent) light oil:

- ☐ Roller drums and shafts—wipe off excess oil (#1, #3).
- ☐ Springs—lubricate spring(s) along their entire length to prevent rusting (#2).
- ☐ Clean and lubricate track (#4).
- ☐ Hinges (center and end)—wipe off excess oil (#5).
- ☐ Rollers (#6, #7).
- ☐ Latches (NS).



*Lubrication points on roll-up door*

## NOTICE

When ordering parts for a rear door, specify the serial number of the door. The serial number can be found on the metal tag attached to the inside upper driver's side corner of the door.

After replacement of any part, check relevant adjustments and proper operation of the door.

### Two-Point Slam Lock

To **unlock** the door from the **outside**, insert the key in the lock and turn clockwise 1/4 turn until thumb lock pops out. Rotate key counter-clockwise 1/4 turn, and remove the key from the lock.

To **open** the door from the **outside**, push down on the lower door lift handle to relieve tension on the latches and rotate the release handle clockwise until the latches release.

To **open** the door from the **inside**, push down on the door to relieve tension on latches, and push the lever toward the passenger's side of vehicle until the side latches release.

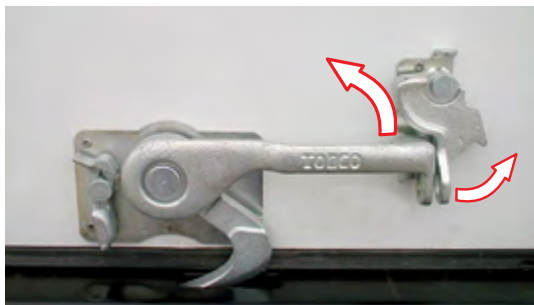
To **lock** the door from the **outside**, insert the key and turn clockwise and push in on thumb lock.

### Master Security (Banana) Lock

To unlatch the door, rotate the catch and then rotate the "banana" lock lever counterclockwise until it catches in the open position.

To latch the door, rotate the catch and then rotate the "banana" lock lever clockwise until it catches in the closed position.

If equipped with interior release lever, rotate the catch release knob 90° and rotate the lock lever about 180° clockwise to unlatch the door.



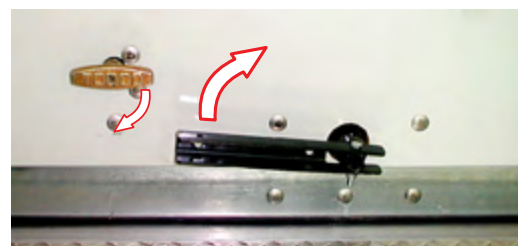
*Opening a banana lock*



*Roll-up door latch and grab handle*



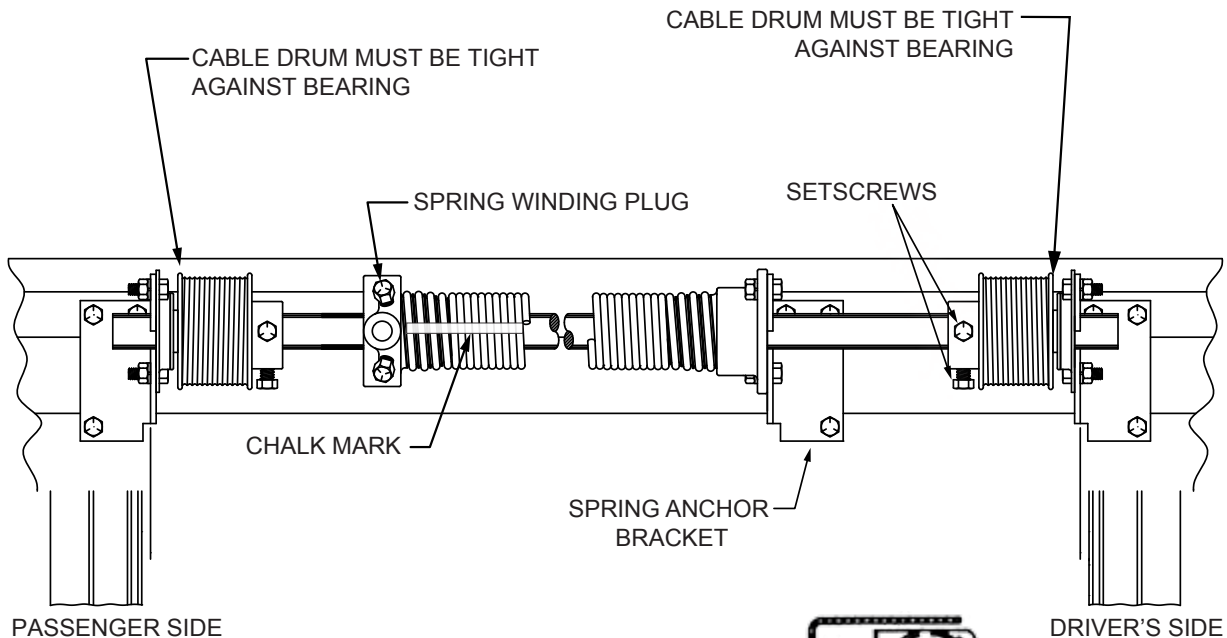
*Roll-up door inside latch and serial number*



*Optional interior banana lock release*

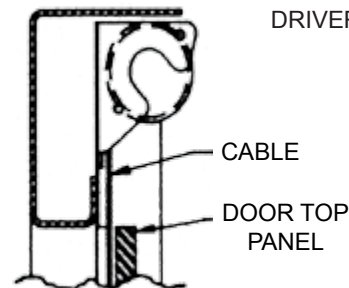
# Cable Replacement Procedure

## Removal

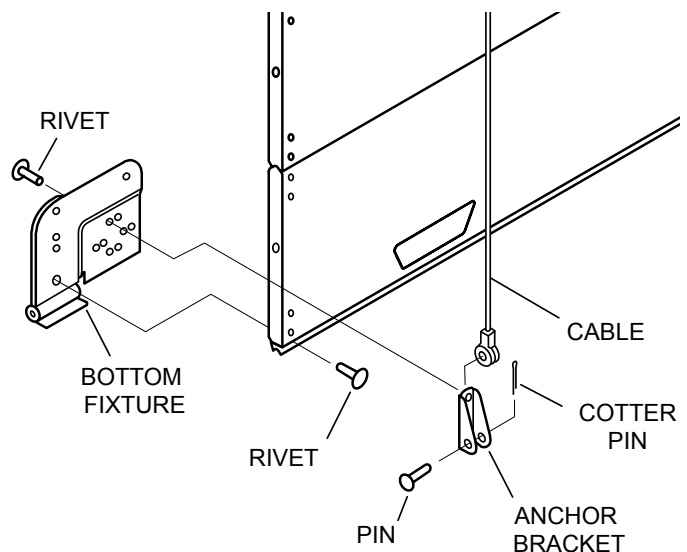


## NOTICE

Even if only one cable is frayed or damaged, Utilmaster recommends replacement of the other cable at the same time.



1. Close the door from the inside. Release the spring tension from the cables by fully inserting a winding bar that is 1/2" in diameter and 18" long into one of the spring-winding-plug holes.
2. Raise the bar enough to allow insertion of a second winding bar into the lower hole, and release the tension enough to let the second bar rest against the top panel.
3. Loosen the two setscrews on the cable drum, releasing the cable drum from the shaft, and remove the cable from the cable drum.
4. Remove the cable from the door bottom panel by removing the anchor and cotter pins.



## Installation

1. Mount the new cable at the base of the bottom panel by slipping the cable anchor pin through the cable anchor bracket and the eye at the end of the cable.
2. Insert the cotter pin in the cable anchor pin to secure the cable.
3. Bring the other cable end to the top of the door and thread it over the top of the door to the inside.
4. Temporarily tape the cable to the outside top panel of the door.
5. From inside the cargo area, insert the cable end into the cable drum slot. Thread the cable into the groove nearest the slot, and turn the cable drum toward you until all slack is taken out, making sure the cable is following in its proper groove.

### NOTICE

**The cable must be wound from the outermost groove toward the inside of the drum.**

6. Maintaining tension on the cable, slide the cable drum on the counterbalance shaft against the bearing, and tighten the two setscrews on the drum.

### NOTICE

**Make sure the drums are against the counterbalance shaft bearings, the set screws are properly tightened, and the cables have equal tension.**

7. Clamp the counterbalance shaft with a locking pliers, handle against the ceiling to keep the cables tight.
8. Release the spring tension by rotating the spring winding plug just far enough to allow removal of the winding bar against the top of the door.

### NOTICE

**Rotating the counterbalance assembly too far may cause cables to jump off the cable drum.**

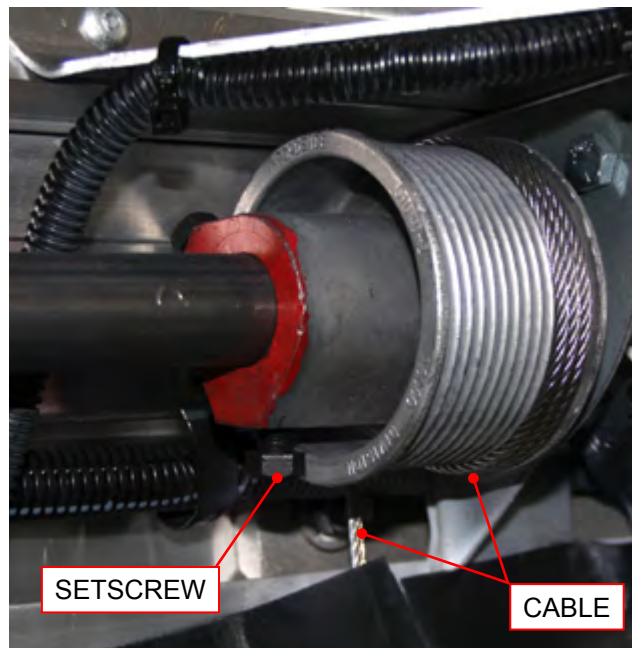
9. Remove the clamp, tape, and check the operation of the door.

### NOTICE

**A properly adjusted door should open easily and when stopped, it should remain at any given location.**



*Cotter and anchor pins*

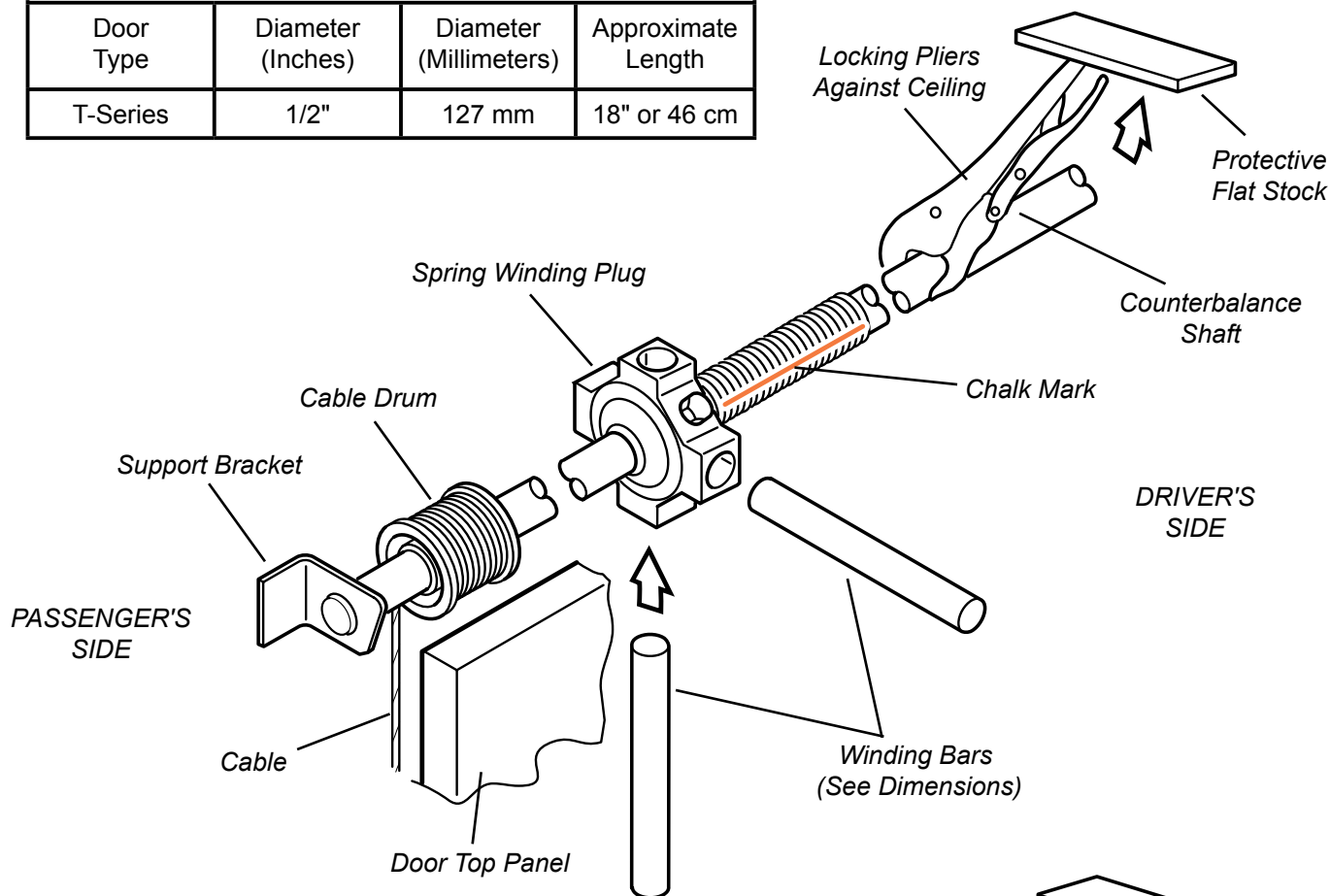


*Cable drum*



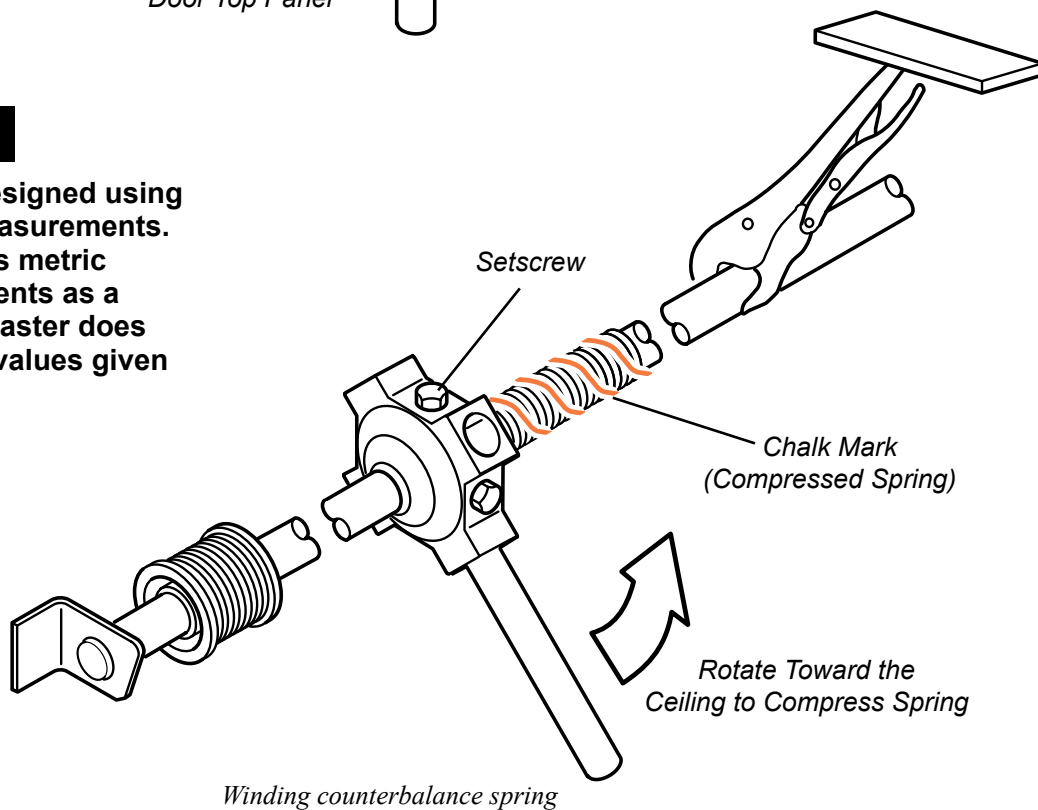
# Spring Winding Adjustment

Winding Bar Dimensions			
Door Type	Diameter (Inches)	Diameter (Millimeters)	Approximate Length
T-Series	1/2"	127 mm	18" or 46 cm



## NOTICE

This vehicle was designed using English (S.A.E.) measurements. Utilimaster provides metric conversion equivalents as a courtesy, but Utilimaster does not warrant metric values given in this manual.

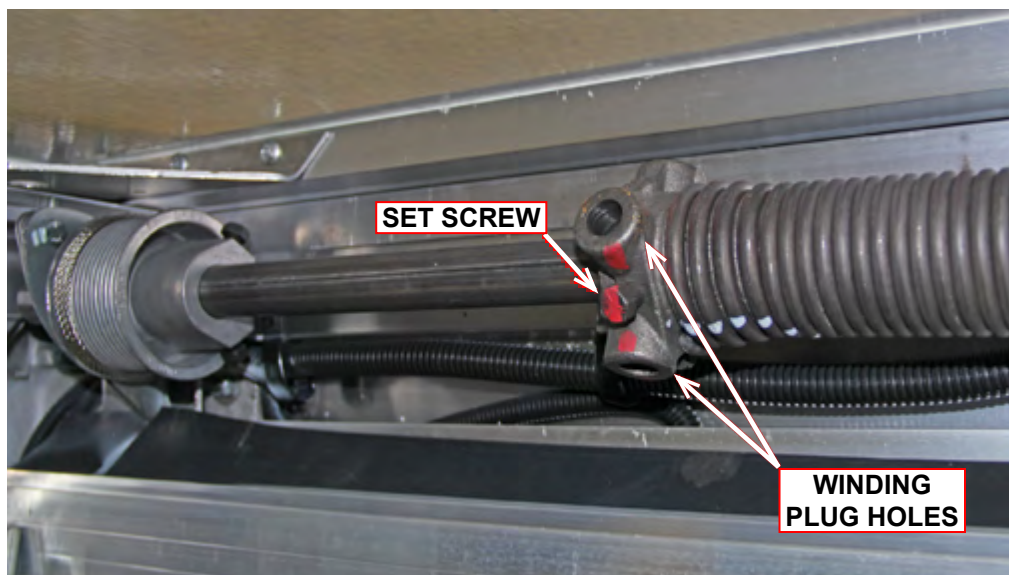


## NOTICE

To determine the amount of turns on a newly installed spring, measure from the bottom of the door to the header. Divide that measurement by ten and then add three. This number is the approximate number of turns needed to wind the spring. Turns are counted by using the chalk marks, which show up as stripes as the spring is wound.

A properly counterbalanced door should, when stopped, remain at any given location. If the door leaves the floor by itself, the spring is wound too tightly, and a few quarter turns should be released. If the door has a tendency to drop when stopped, a few more quarter turns should be added.

1. Close door and clamp counterbalance shaft from the inside with handle of locking pliers against the ceiling to keep cables tight. Protect the roof from the pliers with a piece of plywood or sheet metal.
2. Insert a winding bar that is 1/2" in diameter and 18" long into one of the spring-winding plug holes.
3. Loosen setscrews on spring-winding plug.
4. Insert a second winding bar into one of the spring-winding plug holes.
5. Raise the bar to allow insertion of second winding bar into next spring-winding plug.
6. Continue to raise bar to wind spring.
7. Tighten setscrews.
8. Remove locking pliers and winding bars.
9. Cycle door to check operation.
10. Adjust again if necessary.
11. Lubricate with a light oil (Utilimaster P/N 04022540).



*Spring winding plug*



# Top Panel Replacement

## Removal

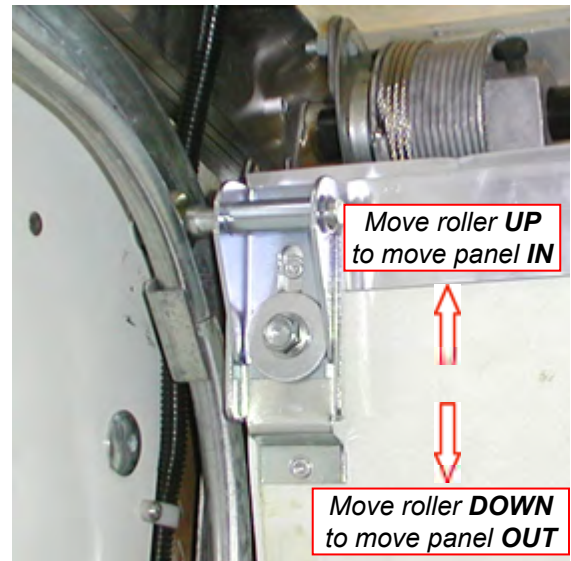
1. With the door closed, clamp the track below the top panel to prevent the door from raising.
2. Drill out the rivet heads in the center hinges on the top panel and the rivet heads on the joint roller bracket in the lower half of the top panel.
3. Punch out the rivets and, in at least one of the hinges, insert a punch in one of the rivet holes to stabilize the door panel while detaching the remaining rivets and bolts.
4. Using a wrench and socket, remove the roller brackets and rollers at the top of the panel.
5. Remove the punch and lift out the old panel.

## Installation

### NOTICE

**If you are unable to secure the hinges with the original type of rivets that extend completely through the door, use carriage bolts or rib-neck carriage bolts to attach them. The bolt head must be on the exterior side of the door, and the nut must be on the interior.**

1. Using a wrench and socket, attach the roller brackets and rollers to the top of the new panel while putting the rollers in the tracks.
2. Line up the new top panel with the panel below it (making sure they align for a close fit at the joint) and (using the hinge holes as a guide) drill all of the hinge holes on the **bottom** of the new panel:

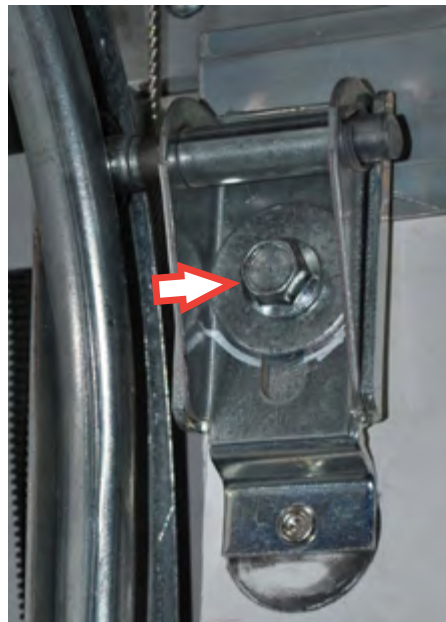


*Top roller brackets and adjustments*

- a. For a **solid-core** door, drill through the entire panel with an F (or 1/4") bit. Tip the panel toward you to insert carriage bolts through the outside of the panel. Install the hinges over the bolts and tighten the nuts.
  - b. For a **hollow-core** door, **drill through the interior panel only** with an F (or 1/4") bit and install Magna-Lok fasteners through the hinges.
3. Check the door operation by opening and closing the door.
  4. Check the seal gap on the outside top of the roll-up door and adjust as necessary.
  5. Tighten the nuts with a wrench.
  6. Check the operation of the door and adjust as necessary.

## Adjustment

1. Check that the door has no more than 1/4" maximum play, does NOT bind in the track, and is centered in opening.
2. Add or subtract washers on roller shafts to achieve proper door operation. A maximum of four spacer washers should be at the second from top joint roller and the second from bottom joint roller on each side.
3. Loosen both bolts on slides located at top of door to adjust top panel in and out.
4. Loosen both locknuts on catches located at bottom of door so that it sits flush on threshold.



*Upper slide bolt adjustment*



*Door roller*



*Catch locknuts*

## Intermediate Panel

### Removal

1. With the door closed, clamp the track below the panel to be replaced to prevent the door from raising.
2. Using a F-bit, drill off the rivets in the center hinges on the panel to be removed.

### **NOTICE**

**Take care not to drill through the outside panel. Punch out the rivet and in at least one of the hinges, insert a punch into one of the rivet holes to stabilize the door panel while detaching the remaining rivets and bolts.**

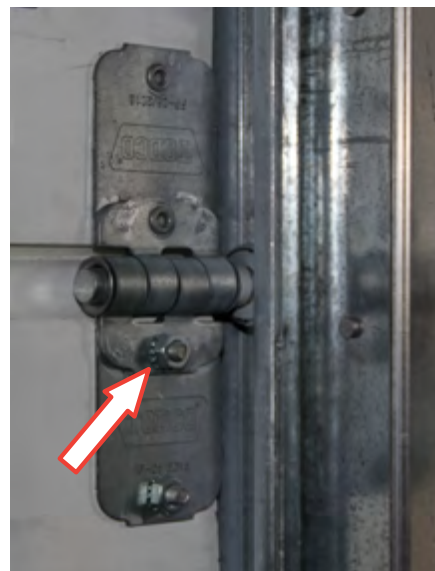
3. Use a wrench, remove both roller brackets and rollers at both joints or top of the panel.
4. Drill off the end hinge rivets attached to the bottom of the panel with a F-bit.
5. Lift the door panels above the panel to be replaced into the horizontal track, and secure them with a locking pliers clamped on the horizontal track.
6. Remove the punch and lift out the old panel.

### Installation

1. Transfer drill all of the hinge holes on the bottom of the new panel.
2. With the upper door section clamped so that it will not fall, tip the panel toward you to insert the bolts.
3. Install the hinges over the bolts, and tighten the nuts.
4. Swing the new panel upright and clamp into position.
5. Lower the door from the horizontal tracks, and drill all the holes in the top of the new panel.
6. Insert the bolts and install the hinges over the bolts. Tighten the nuts.



*Center hinge*



*Middle roller*

7. Remove the clamps and check the door operation by opening and closing the door.
8. Also check the seal on the outside top of the roll-up door.

### **NOTICE**

**The top panel can be adjusted by loosening the top roller bracket bolt and moving the top roller up or down to adjust the top panel in or out.**

## Bottom Panel

### Removal

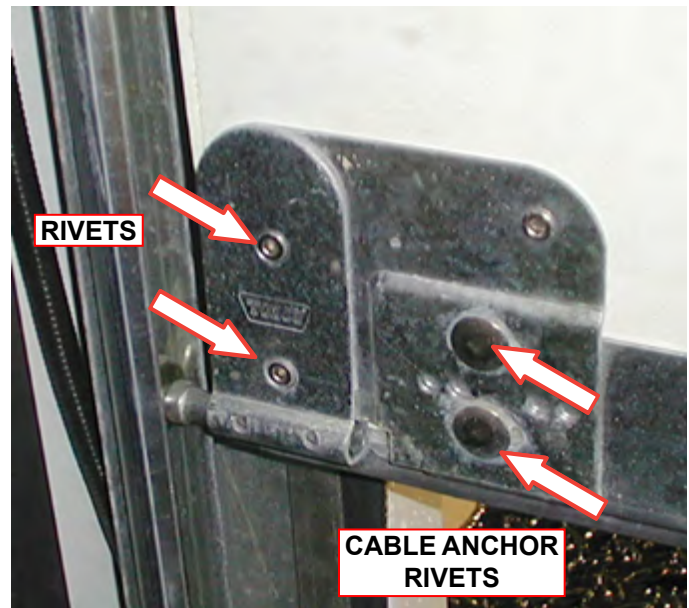
#### **NOTICE**

Take care not to drill through the outside panel. Punch out the rivet and in at least one of the hinges, insert a punch in one of the rivet holes to stabilize the door panel while detaching the remaining rivets and bolts.

1. Open the door and push back until the bottom of the door is about 16" or so from the header at the top of the door opening.
2. Place a clamp in the horizontal tracks, on each side, below the bottom rollers.
3. Place a clamp on one of the cables, near the eye of the cable.
4. Hold clamp and release the cable from the bottom of door.
5. Allow the spring to wind the cable onto the drum until the clamp stops it by contacting the drum.
6. Repeat with the opposite cable.
7. Remove rivets from cable anchors and pull strap.
8. Drill out the center and end hinge rivets attached to the bottom panel.
9. Remove the panel from the tracks and push the remainder of the door slightly towards the front of the truck.
10. Place a clamp in the track to prevent the door from rolling back down.

### Installation

1. Remove bottom roller bracket and cable anchors from the old panel.
2. Insert the roller in the bottom bracket of the new panel.
3. Position the new panel and roller in the track.
4. Install the other bottom roller in the track, and align with the bottom roller bracket.



*Bottom roller bracket and fasteners*

5. Use the hinges as a template to transfer drill rivet holes in the new panel.

#### **NOTICE**

**Make sure the panels align for a close fit at the joint.**

6. Rivet the hinges into place.
7. Replace the rollers at the joints, as well as any spacer washers on the roller shafts.

#### **NOTICE**

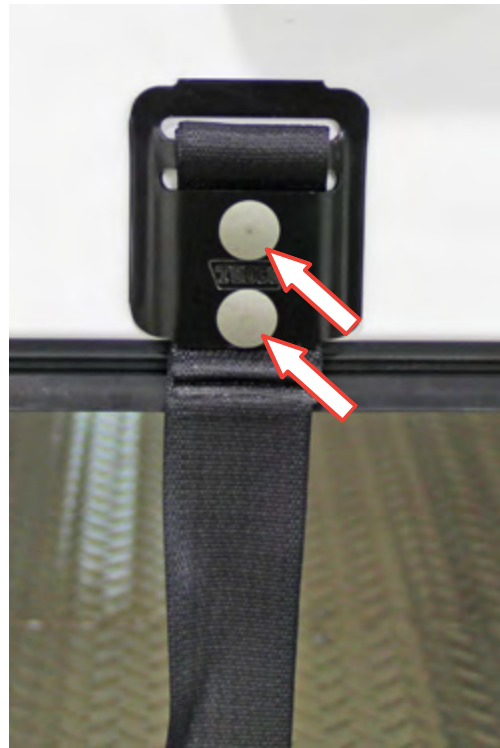
**The roller brackets on the top of the bottom panel and on the bottom of the top panel play an important part in maintaining proper door alignment within the track. The rollers on these brackets must have 3 to 4 spacer washers (depending on the alignment) to maintain the correct distance in the track.**

8. Reattach the pull strap.
9. Rivet cable anchors.
10. Reconnect each cable by drawing it to the outside of the bottom door panel.
11. Insert pin through the cable eye and anchor bracket. Secure with the cotter pin.
12. Check the operation of the door and adjust as necessary.



## Pull Strap Replacement

1. Raise the roll-up door part way and place a clamp in the track below the bottom panel.
2. Remove rivets.
3. Slip the new strap through the pull strap loop.
4. Attach to roll-up door using rivets.
5. Remove the clamp and test the strap while opening and closing the door.



*Pull strap and fasteners*

# Door Seal Replacement

## Side Seal

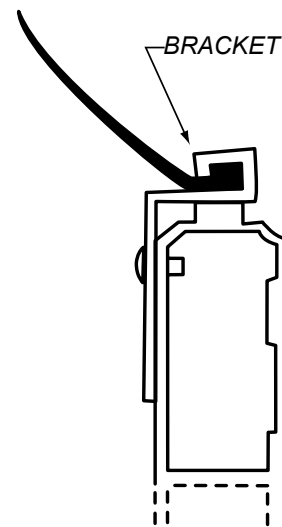
1. Raise the roll-up door to the full open position and clamp the track below the bottom panel.
2. Drill out the rivets from door frame
3. Uncrimp both ends of the seal extrusion.
4. Remove the seal from the extrusion.
5. Cut the new seal to length with bolt cutters.
6. Insert the new seal into the extrusion and crimp the ends.
7. Reattach the extrusion using aluminum rivets or stainless-steel sheet-metal screws.
8. Close the door and check the seals.

## Top Seal

1. Raise the roll-up door to the full open position and clamp the track below the bottom panel.
2. Uncrimp both ends of the bracket and extract the old seal.
3. Slide the new seal into the bracket, and crimp the ends of the bracket to secure the seal.
4. Remove the clamp, close the door, and check the seal.

## Bottom Seal

1. Raise the roll-up door part way and place a clamp in the track below the bottom panel.
2. Remove fasteners holding the seal to the bottom door panel and remove seal.
3. Install the new seal, angle edge first, and rotate it into position.
4. Secure with new fasteners.
5. Remove the clamp, close the door and check the seal.



*Top seal on roll-up door*



*Brush seal on roll-up door*



*Bottom vinyl seal fasteners*

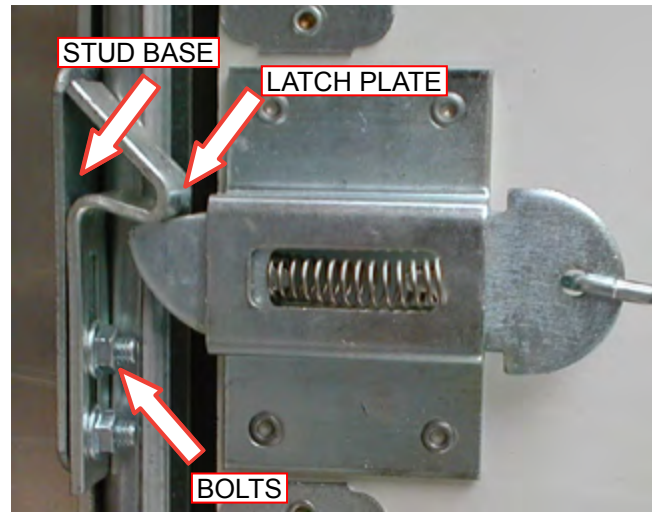


## Slam Lock Latch Adjustment

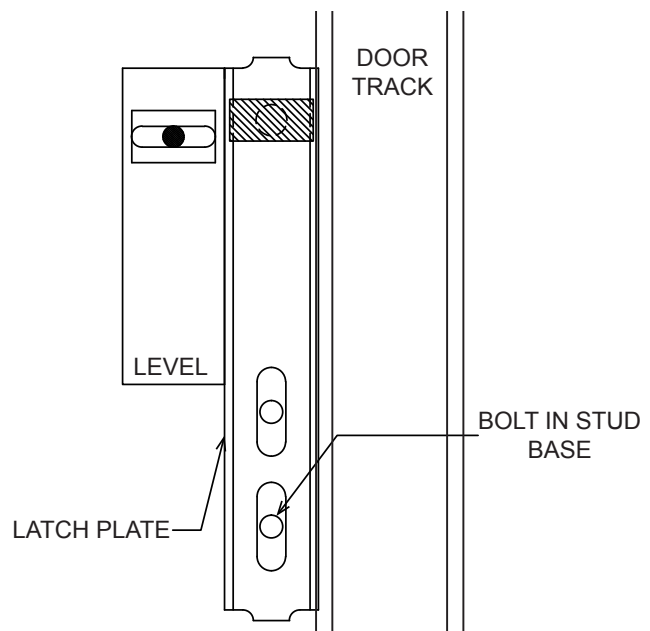
### **NOTICE**

On rear roll-up doors with slam locks, adjust the latch if problems occur with the door latching or sealing. Also, roller/door side play is critical for slam locks.

1. From inside the truck, close the door tightly, so it is sealed on the bottom.
2. A fan-type latch should consistently latch in the primary position, with the latch plate rod resting on the top of the fan of the latch assembly. If the latch is not properly adjusted, it might latch in the secondary position.
3. If necessary, loosen the two nuts on the stud base bolts.
4. Reposition the latch plate so that the latch plate fits snugly against the latch primary position for a fan type.
5. Ensure that the latch plate is level and square with the latch and tighten the nuts.
6. After latches on both sides of the door are properly adjusted, cycle the door several times to check proper engagement (primary position). Check that the latching and unlatching is smooth and that the door seals at the bottom.



*Slam lock latch*



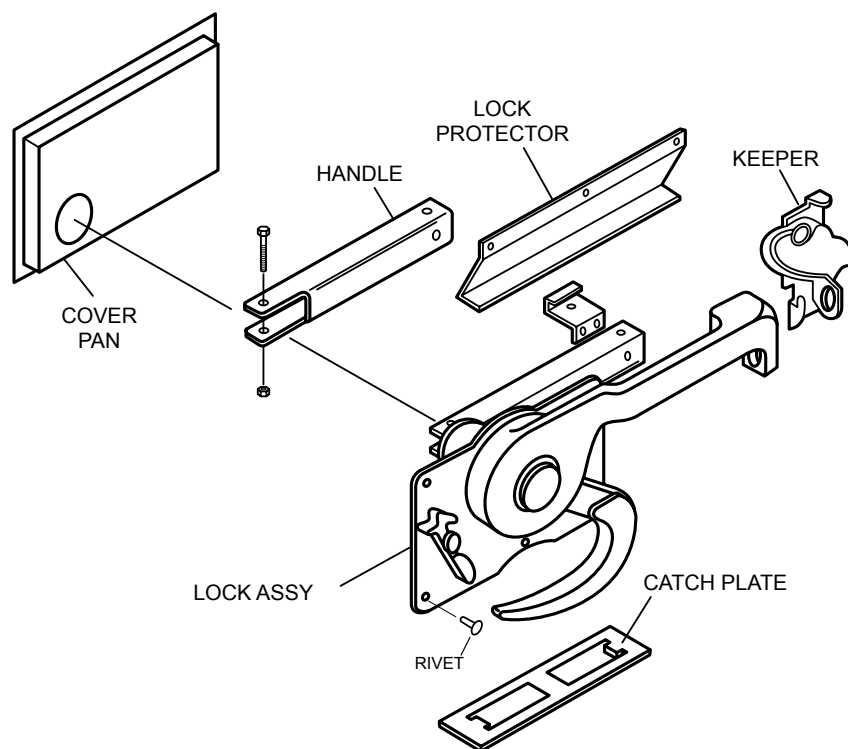
*Square latch plate with latch  
(Side view)*

## MSL (Banana Lock)

### **NOTICE**

There is no adjustment on a Master Security Lock. If the handle becomes worn to the point that the door no longer closes tightly as it should, replace the handle.

If original rivets are unavailable, use carriage bolts or rib-neck carriage bolts to attach the handle. The bolt head must be on the exterior side of the door.



*Master security (banana) lock*

**Utilimaster Customer Service**

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**T-Series Rear Roll-Up Door Service Guide**

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