FOR TRACE REPORT OF CONTRACT OF CONTRACT

WARNING

Read manual prior to installing door. Overhead doors are large, heavy objects that move with the help of springs under extreme tension. Since moving objects and springs under tension can cause injuries, your safety and the safety of others depends on you reading and following the information in this manual. Re-check your work prior to operating door.

POTENTIAL HAZARD	EFFECT	PREVENTION
MOVING DOOR	Can Cause Serious Injury or Death	Keep people clear of opening while door is moving. Get help or use support when lifting new door into place.
EXTREME SPRING TENSION	Can Cause Serious Injury or Death	Installation, repairs, and adjustments must be made by a qualified door mechanic using proper tools, methods and instructions. Before winding torsion spring, make sure door is fully open and curtain is wrapped on barrel.

NOTE!

DO NOT CUT BANDS which hold door in a roll. You will be told at a later time exactly when to cut bands. No guarantee will be given or responsibility accepted by Trac-Rite Door if door is not installed as instructed. For proper operation, follow instructions given.

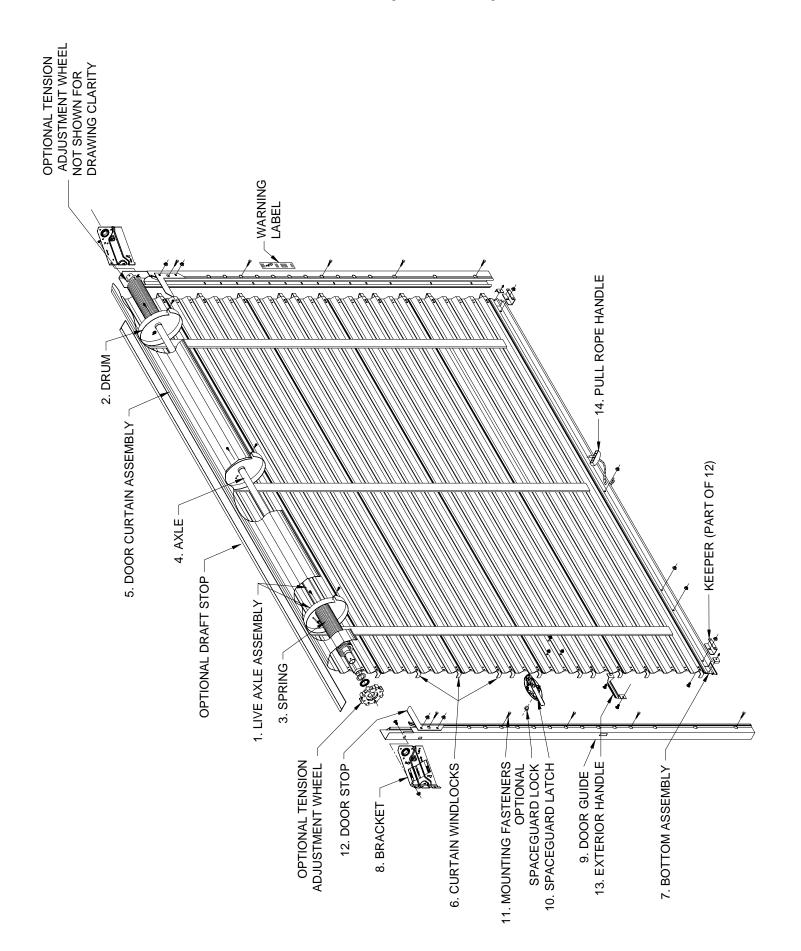
A CAUTION

Use proper lifting equipment and correct lifting procedures to avoid injury.

216 Wilburn Road, Sun Prairie, WI 53590 Phone: 800-448-8979; Fax: 800-236-8722 Technical Help Line: 888-700-TRAC (8722) Web Site: www.tracrite.com E-mail: tr@tracrite.com

This Manual MUST Be Left with the Owner.

#527401 Rev A 01/05



Improper installation of anchoring devices or installation into aged or unsound concrete block, or other wall material may result in premature product wear, product failure, property damage or serious personal injury.

WARNING

Prior to beginning door installation, thoroughly read the instruction manual in its entirety. Please contact Trac-Rite with any questions at 888-700-8722. Answering questions up front will greatly reduce installation miscues.

1. GENERAL:

In this document, the following terms are defined as:

- Warning serious personal injury or death can result from failure to follow instructions.
- Caution minor injury or property damage can result from failure to follow instructions.
- Note special attention should be given to the instructions.

NOTE!

Do not install this rolling steel curtain door unless you read and understand the installation instructions!

- Do not cut the bands which hold the door curtain in

<u>a roll!</u> This is performed once the door has been hung in the opening.

- Once the door has been installed, on the inside of the door curtain, you will find full door height strips of white felt tape. **Do not remove!** It is not packaging material.

2. INSPECTION:

2.1 Door and Hardware: Upon receiving the door shipment, immediately inspect the door and hardware for damage. Verify the product received with the packing list. Damages and/or shortages should be reported immediately to Trac-Rite Customer Service at 800-448-8979. Please have your bill of lading and packing list with you when reporting shortages or

damage. Do not install damaged material without authorization from Trac-Rite.

- 2.2 Door Opening Inspection:
 - Are the framed opening width and height the same dimensions as the door ordered? (See Figure 1.)
 - Are the opening jambs plumb and square?
 - Is the floor level and square with the opening jambs?
 - Is there adequate jamb side clearance?
 - Is there adequate clearance above the door head?

- Is there adequate clearance from the face of the wall horizontally?

- Are the jambs structurally and/or dimensionally adequate to accept door brackets and guides? <u>Trac-Rite</u> is not responsible for the structural integrity of the jamb itself!

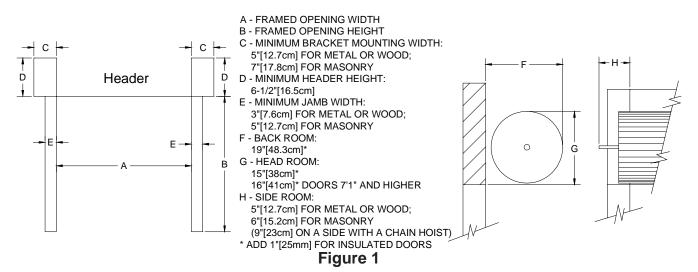
3. PREPARATION:

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3.1 Clean the work area. Remove all debris and sharp objects from the area where the door will be placed on the floor. Sweep the area clean. It is also recommended that the door curtain assembly be placed on a piece of cloth or cardboard. This will help ensure that finished door surfaces will not be damaged while the door is being prepared for installation.

3.2 Assemble recommended tools.

- Wrenches or sockets 7/16 and ½ sizes.
 - Drill or screw gun and - 3/8 and 7/16 Driver (Wood Mounting) - 5/16 Driver and 3/8 Drill Bit (Steel Mounting)- 5/16 and 7/16 Driver and 5/16 Masonry Bit (Concrete or Masonry Mounting)
- C-Clamps or vise grips, and pliers
- Safety glasses

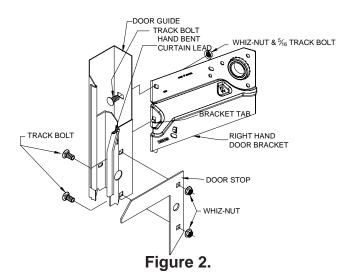


NOTE!

Steps for the optional Tension Adjustment System are noted with a "T" following the step number.

4. BRACKET AND GUIDE ASSEMBLY:

4.1 Position the bracket tab on each bracket into the slot in the side guides and slide upward into place. Bolt the left and right door brackets to the door guides with one (1) 5/16" track bolt and whiz nut in each guide. See Figure 2. MAKE CERTAIN BACK OF DOOR BRACKET AND DOOR GUIDES ARE FLUSH!!! Loosely install door stops with (2) 5/16" track bolts and whiz nuts in each guide. Do not tighten at this time.



4.2 Bend the curtain lead at the top of both guides up slightly (about 1/4"). Place the guide/bracket assembly on the floor in the opening, leaving enough room for the door between the assemblies.

4.3 Position the door in the opening as shown in Figure 3. Be sure to place the door on a protective material to prevent damage to the curtain.

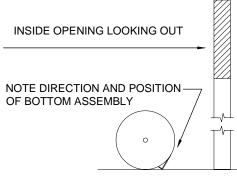


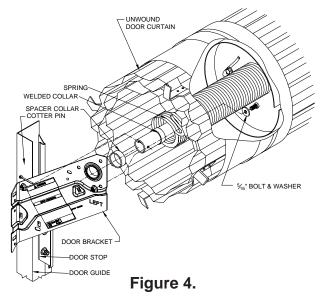
Figure 3.

SKIP 4.4T IF TENSION ADJUSTMENT SYSTEM WAS NOT PURCHASED. PROCEED TO STEP 4.5.

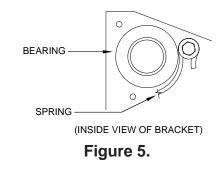
4.4T Slip the axle end through the bearing in the door bracket. Rotate the tension release pawl to allow the tension adjustment wheel to slide pass. Install the second steel washer onto the axle and secure with a cotter pin through the hole punched in the axle end to keep the door bracket in place (omit washer if it blocks cotter pin hole). Repeat on other end if installing dual tension adjustment systems.

4.5 The next two steps are for doors without the optional tension adjustment system and for the opposite side on doors with a single tension system.

4.6 Slide the spacer collar onto the axle then slip the axle ends through the bearings in the door brackets. Install a cotter pin through the hole punched in each axle end to keep the door brackets in place. See Figure 4.



4.7 Ensure that the door spring is in a relaxed position. Pass a 5/16" bolt with a flat washer through the loop in the end of the door spring and through the nearest of three holes in the door bracket. Secure with a 5/16" whiz nut. Repeat on the other end if the door comes with two springs. <u>ENSURE THAT THE SPRING FITS AROUND THE BEARING IN THE BRACKET BEFORE FINAL TIGHTENING.</u> See Figure 5.



5. DOOR MOUNTING:



Use proper lifting equipment and correct lifting procedures to avoid injury.

5.1 With one person on each end of the door, lift the curtain roll and position the door and guides in the approximate correct

final position. <u>DO NOT LIFT THE DOOR BY THE GUIDES;</u> they will bend and become unusable!

Temporarily secure the door assembly to the door jamb with C-clamps, vise grips, or bar clamps.

A third person or lifting equipment may be required to help position larger doors.

5.2 Center the door in the opening with the door brackets perpendicular to the mounting surface and guides setback 1/ 4" from edge of opening (1 1/4" for masonry). For steel jambs, drill a 3/8" diameter hole through the top slot in the door bracket, into the door jamb. For masonry jambs, drill 5/16" holes through both slots. For wood jambs, drill 1/8" holes through both slots. Verify the fastener size before drilling. See Figure 6.

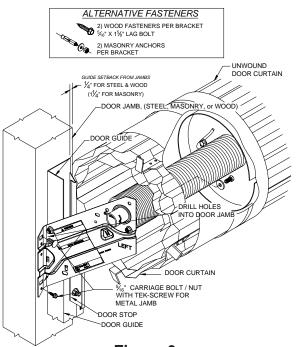


Figure 6.

5.3 Bolt both door brackets in place with one 5/16" carriage bolt and nut through the top slot and one Tek screw into the bottom 1/4 inch hole of each bracket (for steel jambs) or two of the proper fasteners for masonry or wood construction. After both door brackets are secured to the jambs, remove temporary clamping devices.

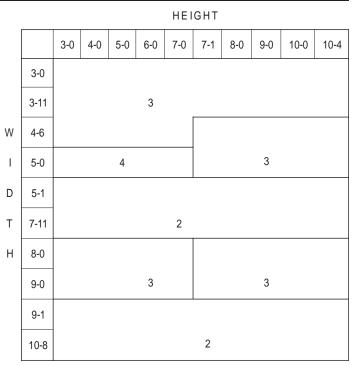
6. DOOR TENSIONING:



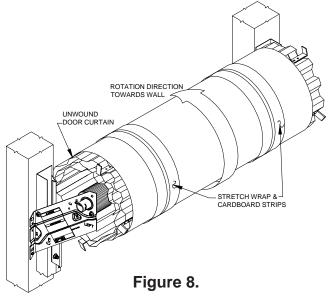
Care must be taken that the door does not spin around free, as this may cause personal injuries and damage to door curtain. Door is free to spin until Step 8 is completed. 6.1 The door spring(s) will have 1/4 turn of tension from Step 5. Rotate the number of turns shown in Figure 7, in the direction shown in Figure 8. Door balancing may require fine tuning.

NOTE!

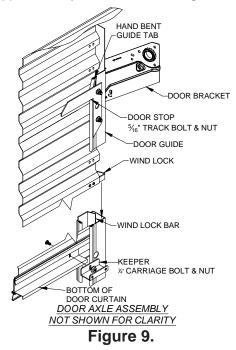
Check the balance of the first door installed after Step 11, before installing all the doors this size. This will reduce a great deal of rework later.



Spring Tension (Number of Turns) Figure 7.



6.2 Hold the bottom edge of the door tightly to prevent unwinding; remove the stretch wrap and cardboard strips wrapped around the door curtain and discard. 6.3 Guide the door curtain carefully into the door guides, moving doorstops aside, to allow bottom to pass, and pull it down to approximately waist level. See Figure 9.



7. TOP STOP ASSEMBLY:

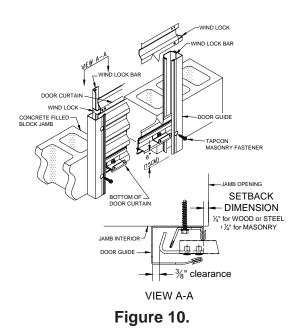
7.1 Attach the two keepers to the bottom interior edge of the door with one (1) 1/4" carriage bolt and whiz nut in each keeper. See Figure 9.

7.2 Tighten door stops installed in step 5.2, making certain track bolts are seated in guides. See Figure 9.

7.3 Test the door to ensure that it will travel up and down smoothly without any excessive force or binding. See Step 10 to adjust spring tension.

8. SECURING GUIDES:

8.1 Pull the door down to within 6" of the floor. Adjust door guides so there is 3/8" clearance between the windlock on the door curtain assembly (shown in Figure 10) and the inside of

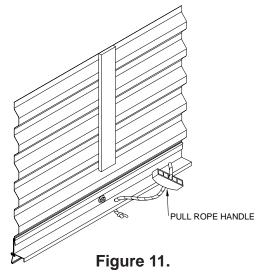


the door guides.

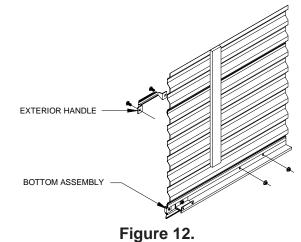
8.2 Attach the guides to the jambs with the fasteners provided (self-drilling sheet metal screws, lag bolts, or Tapcon masonry screws.) For Tapcons, drill a 3/16" hole in the masonry with bit provided, and fasten.

9. FINAL ASSEMBLY:

9.1 Pull Rope Handle: Tie a knot in one end of the rope. Slide the plastic handle onto the rope and pull the knot up into the handle. Pass the other end of the rope through the hole in the center of the bottom edge of the door and tie another knot in the end to keep the rope from pulling through. See Figure 11.



9.2 Exterior Handle/Step Bar: Attach the handle to the bottom exterior edge of the door with two (2) 1/4" carriage bolts and whiz nuts provided. See Figure 12.



9.3 Attach guide warning label (shown in Figure 13) to wall next to the guide at eye level. If mounting to an unfinished surface (bare masonry or wood) attach label to a nonporous surface and use mechanical fasteners to mount on wall.

9.4 Once door assembly is complete, close the door and pull the flap seal to the outside of the door. This assures a proper seal.



Figure 13.

Components under extreme spring tension can cause SERIOUS INJURY or DEATH. Adjustments and repairs must be made by a qualified door mechanic using proper tools and instructions. Remove all tension from door before unbolting spring(s). Care must be taken that the door does not spin around free, as this may cause personal injuries and damage to the door curtain.

10. ADJUSTING DOOR SPRING TENSION: SEE STEP 11.T IF DOOR HAS OPTIONAL TENSION ADJUSTMENT SYSTEM:

10.1 To adjust door spring tension, first remove the door stops, keepers, and exterior handle.

10.2 Open the door but <u>DO NOT</u> allow it to come out of the guides. Strap two ropes TIGHTLY around the door curtain and tie the curtain SECURELY as it comes out of the guides.

10.3 Carefully rotate the door towards the wall to increase tension, or away from the wall to reduce tension. Usually, only one turn either way is sufficient. If finer adjustment is needed, remove all turns so that **NO** tension is on spring(s). Unbolt spring(s) from bracket(s) and bolt the spring to one of the two remaining mounting holes.

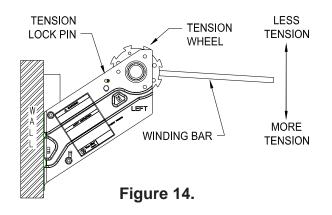
10.4 Reassemble, beginning with Step 7.3. Make note of this adjustment so that any other doors of the same size can be tensioned the same as they are installed.

Components under extreme spring tension can cause SERIOUS INJURY or DEATH. Adjustments and repairs must be made by a qualified door mechanic using proper tools and instructions. Do NOT attempt to adjust door tension unless the door is in the "UP" position and "LOCKED" in place. Winding bar should be solid steel 1/2" dia. rod or 3/8" X 1/2" flat

11.T OPTIONAL TENSION ADJUSTMENT SYSTEM USE:

11.1T To remove tension, insert winding bar into tension wheel and move down 1" to unlock ratchet. Push tension lock pin toward wall and raise winding bar 2". Release tension lock pin. Move up 1/8 turn until ratchet locks in place.

11.2T To add tension, insert winding bar and move down until ratchet clicks after 1/8 turn. Move up slightly until ratchet locks in place. See Figure 14.



11.3T If dual tension adjustment systems are in use, apply equal amount of tension to each spring. This will balance the door properly.

12. OPTIONAL FIELD INSTALLED DRAFT STOP OR BRUSH SEAL:

12.1 Place the door in the closed position before installing the draft stop. Note that with the door down, the curtain may bow slightly near the top towards the inside; this bowing is normal. For the draft stop to be effective, it should follow the "bow" in the door curtain so that it stays in contact across the entire width of the door curtain. Starting at one end attach to header every 9 inches with appropriate fasteners, trim excess at other end if necessary.

12.2 Place the door in the closed position before installing the brush seal. Position brush seal so that it just touches the flat portion of the curtain. See Figure 15. Fasten brush seals to jamb every 12 inches with appropriate fasteners.

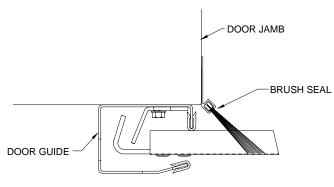
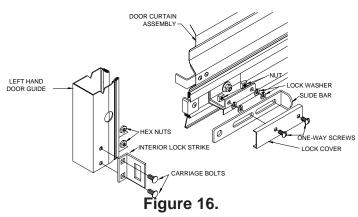


Figure 15.

13. OPTIONAL INTERIOR LOCK INSTALLATION:

13.1 Position door at waist level.



13.2 Assemble components as shown in Figure 16, noting that two (2) high collar lock washers are placed over each 1/4" one-way screw to allow the lockbar to slide freely.

13.3 As the 1/4" screws are being tightened, move the lockbar to assure that the high collar lock washers are inside the slots in the lockbar.

13.4 Mount the lock strike to the bottom of each guide as shown with two (2) 1/4" carriage bolts and jam nuts through the pre-punched holes.



Excessive force in operation may cause damage to the door.

14. MAINTENANCE:

14.1 INSPECTION: Visually inspect the entire door monthly for general cleanliness and ease of operation.

14.1.1 Inspect the guides and curtain for wear and/or accidental damage.

14.1.2 Inspect all fasteners and anchor bolts for loose, damaged or missing parts.

14.1.3 If door is equipped with a chain hoist mechanism, inspect it for missing parts.

14.2 CLEANING: No specific cleaning procedures are required for your Trac-Rite Rolling Door. Clean as needed following good housekeeping practices.

14.2.1 Periodically clean any accumulated dirt from guides; remove any debris from the guide channels at the floor.

14.3 LUBRICATION: Lubricate the following every six months, or more often in dusty and/or wet operating environments.

14.3.1 Spring(s): Close the roll-up door so that the door springs are visible. With an oil pump can, pump a bead of oil across the length of each spring. Operate the door several times. The oil will work its way around the spring to help reduce friction and corrosion.

14.3.2 Guides: Open the door. Spray silicone spray, Pledge[™], or Zep 45[™] onto the door guide runners and inside the guide.

14.3.3 Lock: Spray the slide lock with silicone spray or Pledge, to promote smooth lock operation.

14.3.4 Chain Hoist Parts: Apply a small amount of oil to roller chain.

15. SPRING REPLACEMENT:

NOTE!

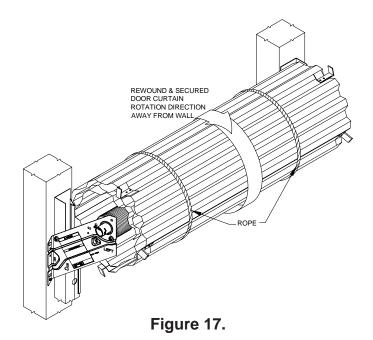
Before you start: Read both this section and the complete Installation Manual to familiarize yourself with all of the components.

15.1 On doors with two springs, both should be replaced, even if only one spring is broken.

15.2 To replace a broken door spring, first remove the door stops, keepers, and exterior handle.

15.3 Open the door but <u>DO NOT</u> allow it to come out of the guides. Strap two ropes TIGHTLY around the door curtain and tie the curtain SECURELY as it comes out of the guides. See Figure 17.

Components under extreme spring tension can cause SERIOUS INJURY or DEATH. Adjustments and repairs must be made by a qualified door mechanic using proper tools and instructions. Remove all tension from door before unbolting spring(s). Care must be taken that the door does not spin around free, as this may cause personal injuries and damage to the door curtain.



15.4 Carefully rotate the door away from the wall until NO tension is on the spring(s). Unbolt spring(s) from bracket(s). On doors with optional tension adjustment system, reference Step 11.1T and Figure 14 to remove all tension on that side of the door.



Use proper lifting equipment and correct lifting procedures to avoid injury.

15.5 Unfasten the guides from the jambs. Save the fasteners for reinstallation later. Temporarily secure the door assembly in place with C-clamps or vise grips placed at the door brackets.

15.6 Unbolt both brackets, referencing Figure 6.

15.7 With one person holding up on each end of the door, or lifting equipment, remove the temporary clamping devices. Move the bottom of the guides out from the wall and carefully lower the curtain roll to the floor. DO NOT LOWER THE DOOR BY THE GUIDES; they will bend and become unusable!!

15.8 On the side of doors with the optional tension adjustment system, the spring is unbolted in Step 15.14.

15.9 This step is for the opposite side of doors with a tension adjustment system and both sides of doors with none. Remove the 5/16" bolt and flat washer from the loop in the end of the door spring(s). Reference Figure 4.

15.10 Place some cardboard or other material on the floor where there is room to unroll the curtain.

15.11 Remove the cotter pin from the hole in each axle end that keeps the brackets in place. Remove bracket/guide assemblies and set aside. Reference Figures 18 and 4.

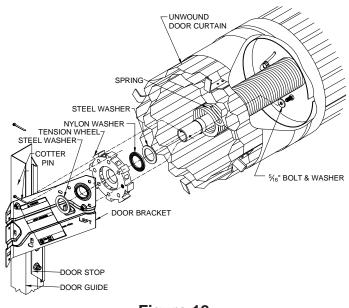


Figure 18.

15.12 Place door roll at bottom edge of cardboard. While holding the door roll SECURELY, untie the ropes from around the door curtain. Slowly, unroll the curtain onto the cardboard.

15.13 Remove the 5/16" bolt and flat washer from the loop in the end of the door spring. Remove the old spring and replace with new spring. Reattach with the 5/16" bolt and flat washer through the loop in the spring and the door drum with 5/16" whiz nut. Repeat on the other end if the door comes with two springs. NOTE: Springs are color coded, red goes on the right, and blue goes on the left (viewing door from inside).

15.14 On doors with the optional tension adjustment system, remove the 5/16" bolt and flat washer from the tension wheel. Check that the black nylon and steel washers are installed correctly as shown in Figure 18. Replace tension wheel onto axle and bolt spring in place referencing Figure 19.

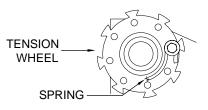


Figure 19.

15.15 Slowly roll the curtain back up, then wrap two ropes TIGHTLY around the door curtain and tie the curtain SECURELY. Reinstall the door, following these Installation Instructions.

16. REPLACEMENT PARTS:

Part No.	Description	
Locks:	Space Cuard Latab Dackage Digid Dib Ext	
601811 502705	SpaceGuard Latch Package, Rigid Rib, Ext SpaceGuard Cam Lock	
502721	Lock Out Key	
521226	Interior Lock Package	
Hardware:		
502460	Bracket, Right Hand	
502461	Bracket, Left Hand	
502462	Bracket, Right Hand w/Pawl	
502463 502510	Bracket, Left Hand w/Pawl 18" Rope (< 8' tall)	
502680	42" Rope (8' - 10' tall)	
508840	72" Rope (10' tall)	
502595	Handle Package	
501974	Steel Jamb Package	
501973 501972	Wood Jamb Package Concrete Jamb Package	
506607	Tension Wheel	
506582	Winding Bar	
Springs:		
502483	RH, 3" ID, 0.218 wire, 46 coils, 10.25"	
502493	LH, 3" ID, 0.218 wire, 46 coils, 10.25"	
502485	RH, 3.25" ID, 0.250 wire, 62 coils, 15.75"	
502495 502502	LH, 3.25" ID, 0.250 wire, 62 coils, 15.75" RH, 3.375" ID, 0.263 wire, 60 coils, 16"	
502502	LH, 3.375" ID, 0.263 wire, 60 coils, 16"	
Miscellaneous:		
502295 521261	Blade Astragal Felt Tape, 2"	
502061	Guide Runner	
502520	Draft Stop	
504300	Touch-up Paint, Evergreen	
504301	Touch-up Paint, Sunset Orange	
504302 504303	Touch-up Paint, Polar Blue Touch-up Paint, Royal Blue	
504305	Touch-up Paint, Desert Tan	
504306	Touch-up Paint, Continental Brown	
504307	Touch-up Paint, Garnet	
504308	Touch-up Paint, Iced White	
50430A	Touch-up Paint, Cedar Red	
504325	Touch-up Paint, Shale	