



Operational & Maintenance Manual

Products:

Installation Site

Contractor

Architect

Distributor



Dear Customer:

Thank you for choosing [^ Á [{] æ ^ Á as your custom door installation specialist.

The Operation and Maintenance Manual, which is enclosed, has been supplied by Overhead Door Corporation to meet your needs as our customer. Appropriate information for the products installed has been compiled in this manual for your use. We recommend compliance with all of the safety information provided within the manual.

We strongly recommend implementing a preventative maintenance program. Benefits of properly maintaining your door system include:

- Increased operational efficiency and reliability.
- Extended useful life of your equipment.
- Increased probability of dependable equipment performance.
- Elimination of non-budgeted maintenance cost for door service.

As an Overhead Door distributor, we offer you complete product support for your service and maintenance needs. Do not hesitate to call us for assistance.

We hope that you will also continue to consider [^ Á [{] æ ^ Á for your future product and installation needs. We are firmly committed to providing the finest in Overhead Door products, accessories, and a level of customer support unmatched in the industry.

Sincerely,



Operation & Maintenance Manual

Rolling Doors

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GENERAL INFORMATION

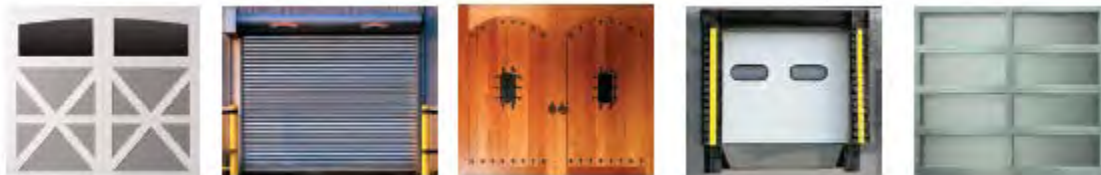


OVERHEAD DOOR CORPORATION

Overhead Door Corporation, based in Dallas, Texas, is a leading single-source manufacturer of integrated door and operator systems for commercial and residential applications.

Overhead Door is the door solutions provider that delivers expert service and the highest level of performance and reliability. Our comprehensive product line encompasses a wide variety of commercial door solutions including: commercial operators, commercial sectional and rolling service doors, advanced performance rolling doors, and security grilles.

With our nationwide network of more than 400 authorized distributors, we are a leading provider of overhead and garage door systems, and we continue to lead the way with reliable solutions and unmatched professional installation, service and support that keeps customers coming back. The brand trusted for over 90 years, Overhead Door gives home and business owners confidence and peace of mind.



To locate a distributor:

From the United States, call 1-800-929-3667 (DOOR)

International: 1-717-248-0131

<http://www.overheaddoor.com/Pages/distributor-locator.aspx>

Contact Information:

Overhead Door Corporation
2501 S. State Hwy. 121, Suite 200
Lewisville, TX 75067

Telephone: 1-800-275-3290

www.overheaddoor.com



PREVENTATIVE MAINTENANCE



BENEFITS OF PREVENTATIVE MAINTENANCE PROGRAM

- **Increase operational efficiency, safety and reliability**
- **Extend useful life of your equipment**
- **Reduce probability of equipment malfunctioning**
- **Decrease costly downtime**
- **Decrease long-term repair expense**
- **Priority scheduling for service**
- **Establish relationship with experienced, service-oriented professionals**



TROUBLESHOOTING GUIDE FOR ROLLING SERVICE DOORS

1. DOOR IS HARD TO RAISE BUT EASY TO LOWER.

SOLUTION: Springs require more turns. Raise door to fully opened position and add spring tension (1/8 turn at a time) until the same resistance is felt lowering the door as is felt raising the door. Adjust tension wheel with steel winding bards 3' long and diameter 1/2" or 3/4".

2. DOOR IS HARD TO LOWER BUT EASY TO RAISE.

SOLUTION: Springs require fewer turns. Raise door to fully opened position and remove spring tension (1/8 turn at a time) until results listed in example 1 are achieved.

3. DOOR HANGS UP AT ENTRANCE INTO GUIDES.

SOLUTION:

- Bellmouths might be out of position away from the headplate allowing endlocks to wedge. Loosen attachment nut and locate edge of bellmouth snug against headplate and tighten.
- Endlocks might have become loose and tilted out of position. Drill out loose fasteners and reattach with suitable fastener.
- Curtain might have been bent and damaged enough to wedge in guides. In some cases the bellmouths can be removed from the guide entrance and the curtain lowered outside of the guides and straightened. Be careful not to allow curtain to rapidly unwind off the counterbalance.

4. ELECTRIC OPERATOR STOPS TOO SOON; DOES NOT REACH THE OPEN OR CLOSED POSITION.

SOLUTION: Operator limit switch setting has become out of phase with the door. Reset the limit switches. See operator installation instructions for method of resetting limits.

5. OPERATOR DOES NOT RUN.

SOLUTION:

- Verify that electric power is available to the operator.
- Verify 24 VAC control voltage from operator transformer.
- Verify condition of hoist interlock switch.
- Verify condition of slidebolt interlock switch.



RECOMMENDED PREVENTATIVE MAINTENANCE

To keep door in good working condition:

Every three months¹

- Oil all moving parts except the clutch mechanism on fire doors and the wool pile in the guides on rolling grilles or counter doors. The guides should be lubricated with a paste wax or silicone spray.
- If electrically operated, check the operator gear reducer for oil leakage. If it is necessary to add oil, use Mobile Synthetic Oil (AGMA 7 #SHC 75W90).
- Check the tension of the roller chain between the operator and the door sprocket (see Figure A). If too loose, loosen the operator mounting bolts and slide the operator to tighten the chain (see Figure B). Retighten the operator mounting bolts.
- Oil the interior roller chain on operators without gear reducer.

Every six months¹

- Oil all exposed roller chains, and on electric operators, dry lube the limit switch shaft threads.
- All bearings provided with grease fittings should be lubricated. If so equipped, find bearings located in the drive bracket and tension end of the counterbalance.
- Fire doors should be drop tested unless more frequent testing is required by other codes. Always use the Drop Test Instructions located inside the tension headplate cover.
- On crank operated doors and grilles, the crank assemblies are sealed with grease and should not require lubrication.

¹ The above frequency of maintenance is for normal operation. Severe duty or unusual operating conditions may require modification of the times between maintenance.

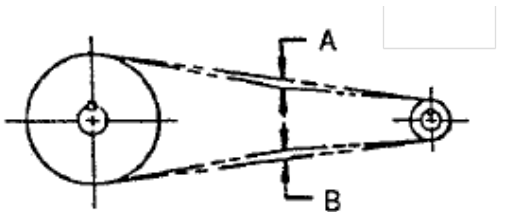


Figure A

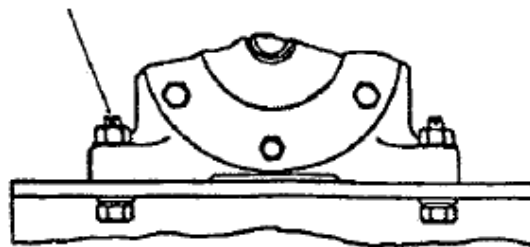


Figure B



SCOPE OF WORK FOR ROLLING DOORS AND ELECTRIC OPERATORS

ROLLING DOORS:

- 1) Inspect door alignment and level.
- 2) Inspect slats and endlocks for damage.
- 3) Inspect guides, bottom bar and hood for damage.
- 4) Inspect all weather-stripping for wear or damage.
- 5) Adjust spring and lubricate bearings.
- 6) Inspect and tighten fasteners.
- 7) Inspect and lubricate chain hoist.
- 8) Inspect locks for proper operation.
- 9) Inspect and tighten all sprockets and shaft collars.
- 10) Inspect safety labels, placement and condition.

ELECTRIC OPERATORS:

- 11) Inspect and adjust limit switches.
- 12) Inspect and adjust belts.
- 13) Inspect and adjust brake.
- 14) Inspect gear reducer.
- 15) Inspect operator mounting.
- 16) Inspect and test disconnect.
- 17) Inspect and lubricate roller chain.
- 18) Inspect and tighten all sprockets.
- 19) Inspect safety labels, placement and condition.

ROLLING FIRE DOORS:

- 20) Inspect fuse links and replace painted fuse links.
- 21) Drop test door for proper operation.
- 22) Check that door is properly reset.
- 23) Test electric fusible links for continuity (where applicable).
- 24) Test smoke detector (where applicable).
- 25) Test hold-open devices and time delays (where applicable).
- 26) Inspect safety labels, placement and condition.



INSTALLATION INSTRUCTIONS

INSTALLATION INSTRUCTIONS

Series 770 SS



SELF STORAGE INSTALLATIONS

Before You Start

DO NOT CUT OR REMOVE RETAINING BANDS UNTIL INSTRUCTED TO DO SO.

CHECK - warning labels on door for proper installation procedure.

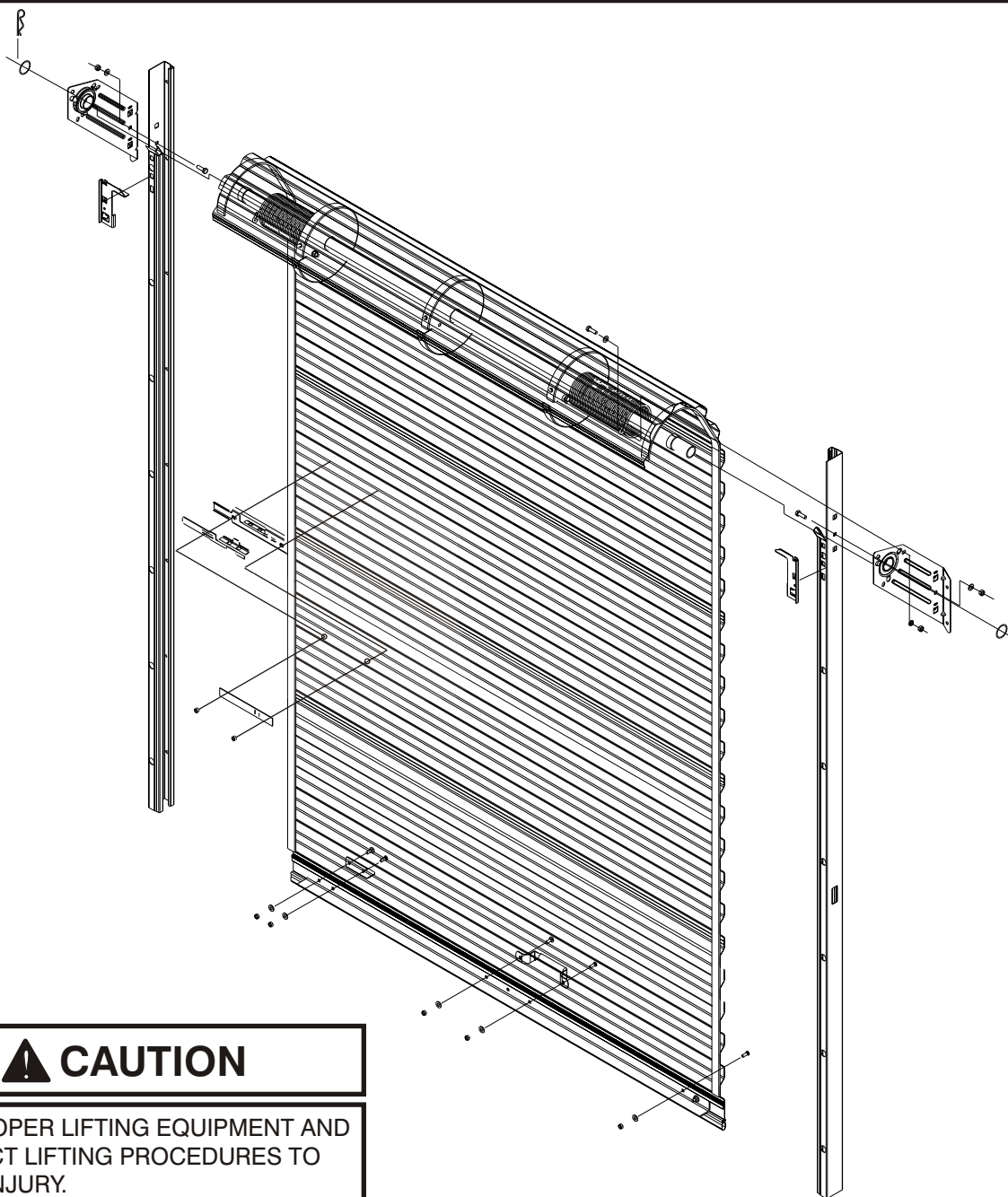
CHECK - width and height of door opening.

CHECK - for adequate headroom - OPENING HEIGHT + 13"
and sideroom - OPENING WIDTH + 3 1/2" EACH SIDE

READ - these INSTRUCTIONS COMPLETELY before attempting to install door - WARRANTY VOID IF DOOR IS NOT INSTALLED ACCORDING TO THESE INSTRUCTIONS.

NOTE - Bracing may be required to prevent light weight building jambs from twisting.

NOTE - Bottom bar and weatherseal will remain exposed in opening (approx 4") below header when door is fully raised.





CAUTION

USE PROPER LIFTING EQUIPMENT AND
CORRECT LIFTING PROCEDURES TO
AVOID INJURY.

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⚠ WARNING		
Overhead doors are large, heavy objects that move with the help of springs under high tension. Since moving objects and springs under tension can cause injuries, your safety and the safety of others depend on you reading the information in this manual.		
POTENTIAL HAZARD	EFFECT	PREVENTION
 MOVING DOOR	WARNING: 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.
 HIGH SPRING TENSION	WARNING: Can Cause Serious Injury or Death	Installation, repairs and adjustments must be made by a trained service person using proper tools and instructions. Before winding torsion spring make sure door is open and curtain is wrapped on barrel and tied securely.

In the following text, the word:

WARNING means that severe injury or death can result from failure to follow instructions.

CAUTION means that minor injury or property damage can result from failure to follow instructions.

NOTE means that special attention should be given to the instruction.

GUIDE LOCATION

Locate guide assemblies such that the edge of the guide is flush with the edge of the jamb as shown in Figure 1.

GUIDES MUST BE PLUMB. If the guide is still not level, locate the higher side guide first. Door shaft **MUST** be level.

MASONRY JAMBS (Concrete, Wood)

While holding guide assembly in place drill mounting holes in jamb thru guide slots using the drill size shown in Figure 2.



STEEL BUILDING JAMB

Hold guide and headplate against steel jamb and mark the spot to be drilled, or hold guide and headplate against steel jamb and drill holes thru the slots using drill size shown in Figure 2.

Figure 1

GUIDE & HEADPLATE ASSEMBLY

Insert tabs on headplates into corresponding holes on the guides. Seat the tabs with a hammer and secure headplates to guides with 5/16" x 5/8" carriage bolts. See Figure 3.

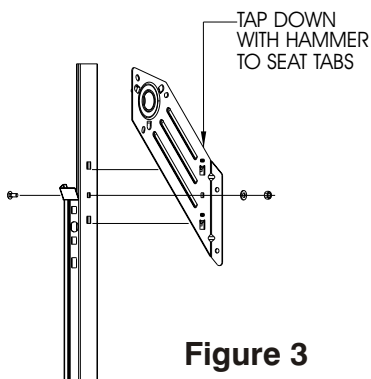


Figure 3

Figure 2			
Jamb	Fastener	Drill Size	Jamb Fastener Specifications
Steel	1/4" Self-Drilling Screw	N/A	
Concrete	1/4" Masonry Screw Anchor	*3/16" Dia.	Use ANSI 1395.12 carbide tipped drill bit. Drill hole 2 1/4" deep.
Filled Block			
Wood	1/4" Lag Screw	1/8" Dia.	Drill Hole 3" Deep.
Hollow Jamb	1/4" Thru Bolt	5/16" Dia.	Install 3" O.D. Steel Washer on Opposite Side of Wall.

*Drill size for supplied fasteners. For others, refer to manufacturer's specified installation method.

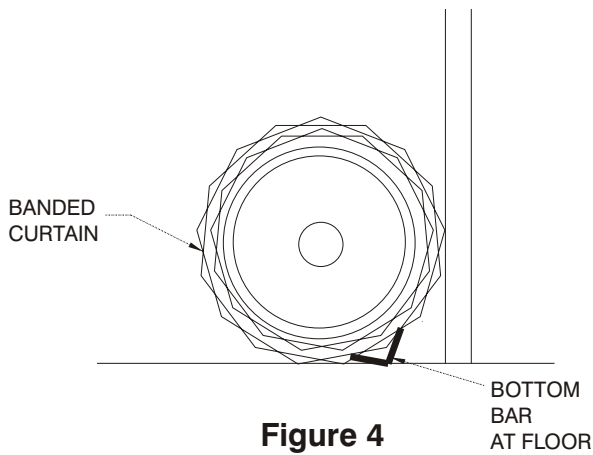


Figure 4

GUIDE & CURTAIN ASSEMBLY

1. Clean the floor at inside of opening and lay the coiled door in position shown. See Figure 4.
2. Position the guide assemblies at each end of the banded curtain with the headplate near the opening. See Figure 5.
3. Slip the guide and headplate assemblies onto each end of the shaft and secure with cotter pin and flat washer. See Figure 6.
4. Make sure the spring bolt ears are aligned with each other to assure spring is in neutral position. See Figure 7.
5. Rotate the curtain so the bottom bar is located above the guide entry line (see Figure 6.) Once this is done, rotate the curtain slightly as needed to line up the spring bolt ear with the nearest spring bolt hole in the headplate (Counterclockwise for a right hand spring and clockwise for a left hand spring when looking from the spring end). **IF THE DOOR HAS A SINGLE SPRING:** Rotate the curtain 1/3 of a turn clockwise to line up the spring bolt ear with the next available spring bolt hole in the headplate. Bolt the spring to the headplate per Figure 6. **IF THE DOOR HAS DOUBLE SPRINGS:** Bolt the springs to the headplate per Figure 6. (NOTE: Bolt both springs to same headplate location)

GUIDE INSTALLATION

1. Lift the banded curtain and guides up with a lift, hoist, or two people and place the guide assemblies against the jambs while supporting the curtain weight. See Figure 8.

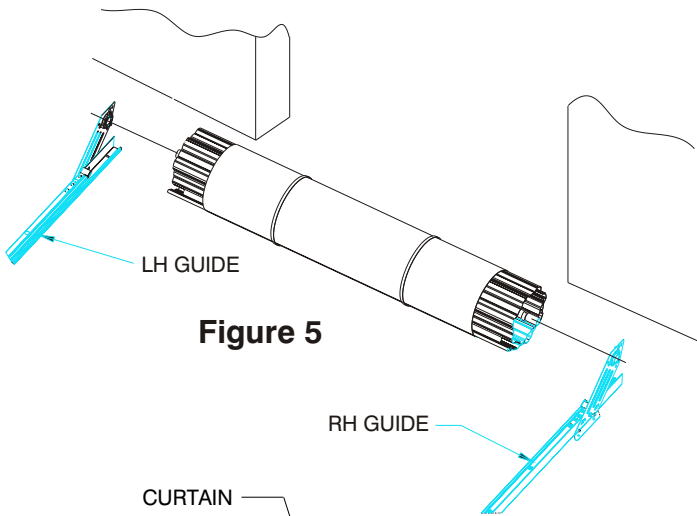


Figure 5

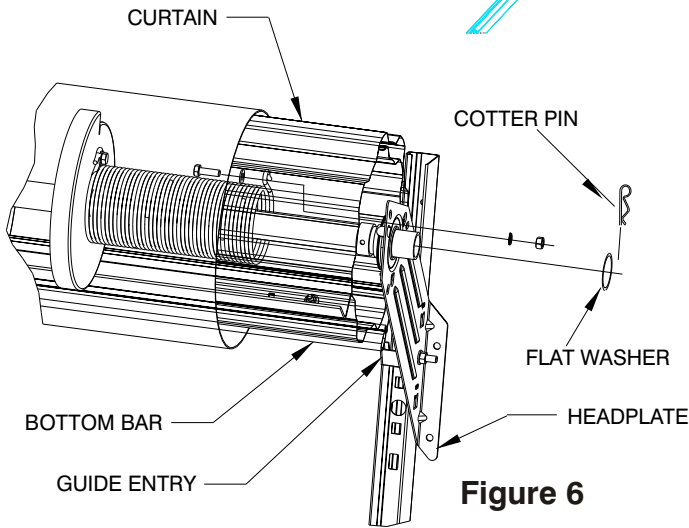


Figure 6

⚠ WARNING

Attempting a one-man installation can result in serious bodily injury and/or damage to door. See Figure 8 for recommended method.

2. Check to see that the headplates are level and that the door is centered in the opening. Install one fastener (see Figure 2 for proper fastener) in the top hole of each guide. Plumb guide assembly on one side and fasten guide to jamb per Figure 1.
3. Plumb remaining guide assembly and fasten guide to jamb. Reference distance between jamb and properly installed guides, Figure 1.
4. Optional: Fasten headplate to jamb if desired.

Figure 7

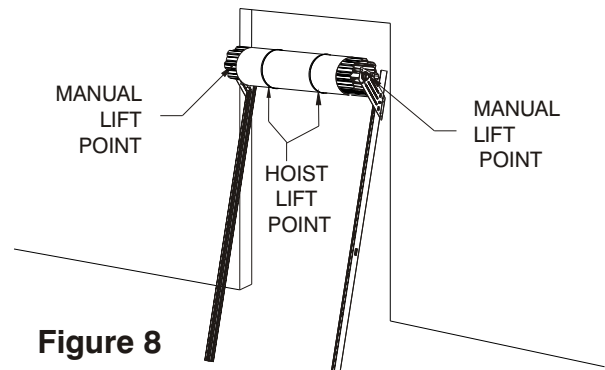
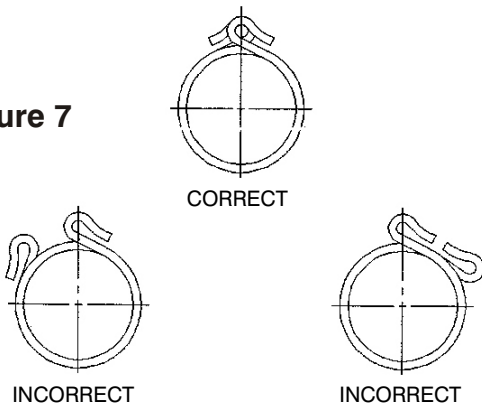


Figure 8

DOORS UP THRU SIZE 8' X 7' MAY BE LIFTED MANUALLY BY ENDS; LARGER DOORS MUST USE HOIST.

TENSION ADJUSTMENT (FOR SPRING TENSION MECHANISM, SEE PAGE 6)

WARNING: High Tension Spring, Installation, repairs and adjustments must be made by a trained service person using proper tools and instructions.

1. Rotate banded curtain as shown in Figure 9 and wind on 4 initial turns. Use the bottom bar as the reference point in measuring the initial turns.
2. Hold the curtain securely and cut the retaining bands. Then feed the bottom bar and curtain into the guides, pulling curtain down to floor.

Note: **DO NOT** lubricate the guides.

WARNING: Excessive Spring Tension can result in damage to the bottom bar and door stop and if used while in such a damaged state can cause serious injury.

3. Raise and lower the door to test the spring balance, being careful not to let the bottom bar out of the guides. If the door will not stay closed or will not stay open the spring balance needs to be adjusted. To adjust spring balance, follow steps below.
 - A. Roll curtain up until curtain and bottom bar are out of the guides.
 - B. Tie a rope tightly around the curtain.
 - C. Rotate curtain to remove the initial turns put on in Step 1. Rotate curtain opposite to Figure 9.
 - D. Carefully unbolt spring from the headplate. Rotate curtain in order to line spring hook up with next available hole in headplate. See Figure 10 to determine direction of rotation.
 - E. Attach spring to headplate. Tighten nut securely.
 - F. Rotate curtain and feed bottom bar into guides. See Figure 9.Repeat steps as necessary.

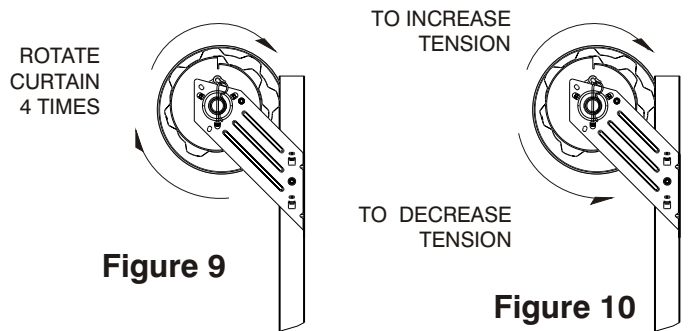


Figure 9

Figure 10

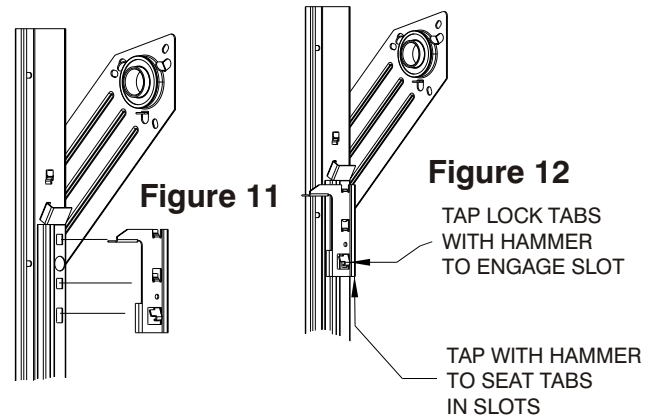


Figure 11

Figure 12

BOTTOM BAR STOPS

1. Insert tabs on bottom bar stops into corresponding holes on the guides. See Figure 11.
2. Seat the tabs with a hammer and secure bottom bar stops by tapping the lock tabs into place with a hammer. Lock tabs should be in full contact with the guides to insure proper operation. See Figure 12.

LIFT HANDLE & STEP PLATE

1. Install lift handle to the outside center of bottom bar using 1/4" bolts already installed in the bottom bar and in the hardware box. See Figure 13.
2. Install step plate to the outside of bottom bar on the side curtain(lock is installed), using 1/4" bolts already installed in the bottom bar and in the hardware box. See Figure 13.
3. Use remaining 1/4" bolts to fill unused holes on the opposite side of the bottom bar. See Figure 13.

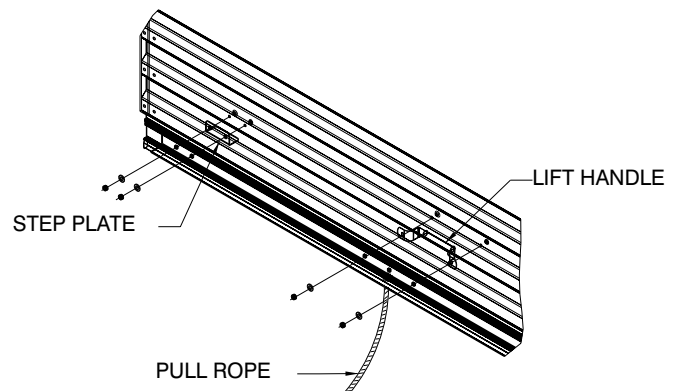


Figure 13

PULL ROPE

1. Attach pull rope to inside of bottom bar. See Figure 13.

DECALS

1. Install Warning label and "Do Not Lubricate" labels on guides as shown in Figure 14. Install at eye level. See Warning label on Page 7 for text.

CURTAIN LOCK

1. Install curtain lock in pre-punched holes using hardware provided. See Figure 15. Apply felt strips over nuts on back side of curtain. Failure to apply felt strips can cause damage to curtain.

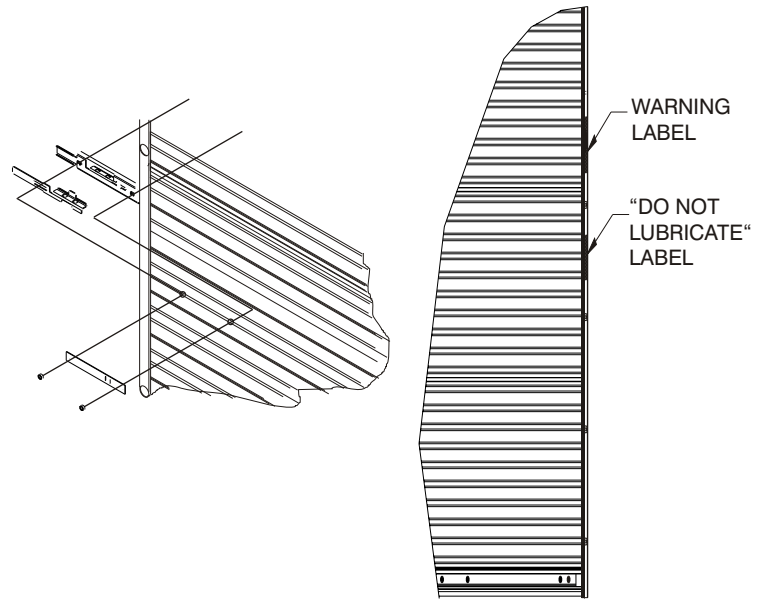


Figure 15

Figure 14

TROUBLE SHOOTING

SYMPTOM

POSSIBLE CAUSE

- | | |
|--|---|
| 1. Door is easy to close, but hard to open... | - Insufficient spring tension. See Figure 10, on Page 4. |
| 2. Door is easy to open, but hard to close... | - Excessive spring tension. See Figure 10, on Page 4. |
| 3. Door is hard to operate... | - Mounting brackets are not level.
- Curtain assembly is not parallel to opening.
- Guides are not plumb.
- Guide leads are improperly adjusted. (Adjustment must be made with door fully closed).
- Guides may be damaged.
- Insufficient clearance between curtain and inside of guide. 1/4"-5/16" clearance on each side from inside of guides. |
| 4. Bottom weatherseal does not contact floor evenly... | - Floor is not level.
- Mounting brackets are not level.
- Guides are not plumb. |
| 5. Door telescopes or rolls up unevenly... | - Mounting brackets are not level.
- Spring mounted to headplate in different locations. |
-

OPTIONAL HEADER SEAL

1. With door closed, mark attachment point for header seal on curtain (Figure 16).
2. Raise curtain until attachment point is accessible.
3. Hold header seal along attachment point and drill holes for rivets on 12" centers using a number 29 drill.
4. Secure header seal to curtain using 1/8" diameter, large flange rivets.

DOOR MOUNTED RUBBER SEAL

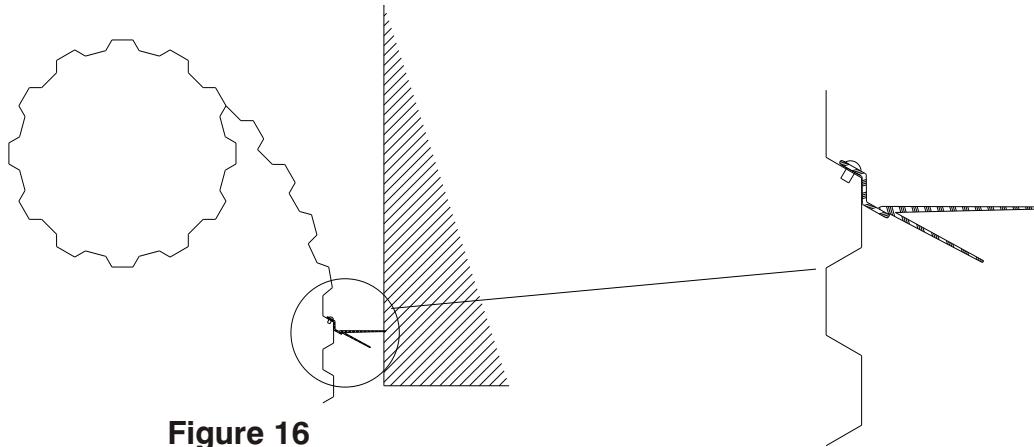
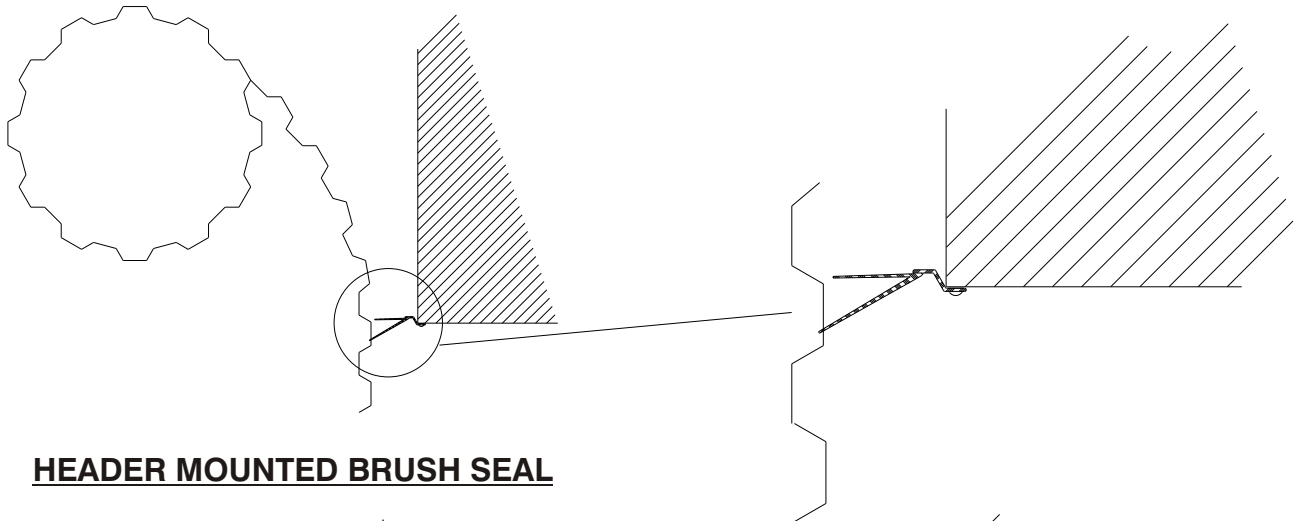
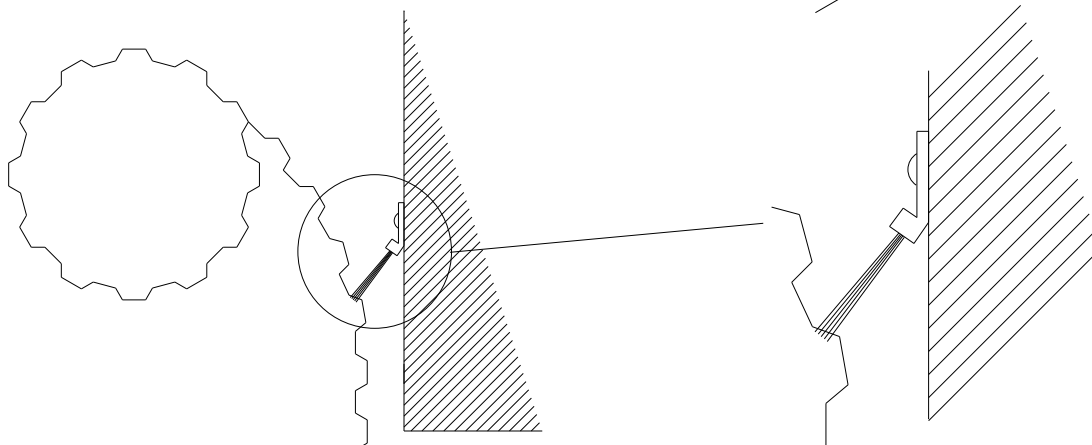





Figure 16

HEADER MOUNTED RUBBER SEAL



HEADER MOUNTED BRUSH SEAL



 WARNING

MOVING door could result in death or serious injury Do NOT close door until doorway is clear.
SAFETY INSTRUCTIONS
<ol style="list-style-type: none">1. Control the closing speed of crank, hand chain or push-up operated doors.2. Do NOT stand or walk under door while door is moving.3. Keep doorway clear and in full view while operating door.4. Do NOT allow children to operate door.5. Unlock door before opening door.6. Motor operated doors with sensing edge should be tested frequently.7. Doors that do not open or close must be repaired by a trained door system technician.
Place label at a readable height on door drive side guide or jamb. Do NOT remove, cover, or paint over label. Product user should inspect this label periodically for legibility, and should order a replacement label from the door manufacturer as needed.

11/14/03 301603-0002

DO NOT LUBRICATE GUIDES
604729-0001 10/22/92



WARRANTY

The Genuine. The Original.



Overhead Door Corporation
For Series 790CW, 780CD, and 770SS
Rolling Sheet Doors

Overhead Door Corporation ("Seller") warrants to the original purchaser of the Series 790CW, 780CD or 770SS Rolling Sheet door identified below (the "Product"), subject to all of the terms and conditions hereof, that the Product and all components thereof will be free from defects in materials and workmanship under normal use for the following period(s), measured from the date of installation:

- **ONE (1) YEAR ON ALL PARTS AND COMPONENTS**

Seller's obligation under this warranty is specifically limited to repairing or replacing, at its option, any part which is determined by Seller to be defective during the applicable warranty period.

This warranty is made to the original purchaser of the Product only, and is not transferable or assignable. This warranty does not apply to any unauthorized alteration or repair of the Product, or to any Product or component which has been damaged or deteriorated due to misuse, neglect, accident, failure to provide necessary maintenance, normal wear and tear, or acts of God or any other cause beyond the reasonable control of Seller.

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL SELLER BE RESPONSIBLE FOR, OR LIABLE TO ANYONE FOR, SPECIAL, INDIRECT, COLLATERAL, PUNITIVE, INCIDENTAL OR CONSEQUENTIAL DAMAGES, even if Seller has been advised of the possibility of such damages. Such excluded damages include, but are not limited to, loss of goodwill, loss of profits, loss of use, cost of any substitute product, interruption of business, or other similar indirect financial loss.

Claims under this warranty must be made promptly after discovery, within the applicable warranty period, and in writing to the Seller or to the authorized distributor or installer whose name and address appear below. The purchaser must allow Seller a reasonable opportunity to inspect any Product claimed to be defective prior to removal or any alteration of its condition. Proof of the purchase and/or installation date, and identification as the original purchaser, may be required.

Product Type: _____

Customer Name (Original Purchaser): _____

Customer Installation Location: _____

Date of Installation: _____

Name of Distributor/Installer: _____

Signature of Distributor/Installer: _____



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