Operational & Maintenance Manual

Products: Enter Product Category / Model Number

Installation Site

Enter Project Name/Site info

Contractor

Enter Contractor Firm Name here

Architect

Enter Architect Firm Info Here

Distributor

Overhead Door Company of ABC
123 Eagle Street
Eagle Town, TX 75067

Enter Company Name Ex: Overhead Door Company of
Enter Street Address
Enter City, ST zip code

Dear Customer:

Thank you for choosing our company 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 our company 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,

Enter Company Name Ex: Overhead Door Company of

Operation & Maintenance Manual

Rolling Counter Fire Doors

Table of Contents

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**

RECOMMENDED PREVENTATIVE MAINTENANCE

To keep door in good working condition:

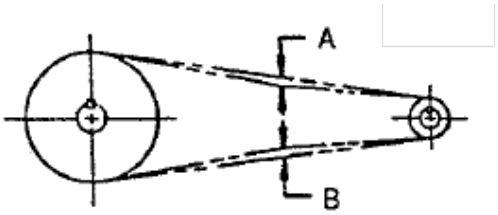
Every three months[1]

- 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 months[1]

- 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.



A+B must equal more than ¼”

Figure A

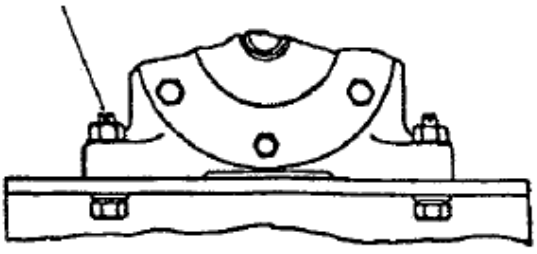


Figure B

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 ½" or ¾".

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:
   a. 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.
   b. Endlocks might have become loose and tilted out of position. Drill out loose fasteners and reattach with suitable fastener.
   c. 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 REACHT 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:
   a. Verify that electric power is available to the operator.
   b. Verify 24 VAC control voltage form operator transformer.
   c. Verify condition of hoist interlock switch.
   d. Verify condition of slidebolt interlock switch.

Overhead Door Corporation
ROLLING FIRE DOOR DROP TEST FORM
AND ANNUAL INSPECTION

NOTE TO OWNER: NFPA-80 requires the annual testing of rolling fire doors to demonstrate proper and full closure. Resetting of the release mechanism must be done in accordance with the manufacturer's instructions. A written record must be maintained and made available to the authority having jurisdiction. NFPA-80 also requires that when damage impairs the door's proper emergency function, that it be repaired with parts obtained from the original door's manufacturer and upon completion of repairs that the door be tested to assure emergency operation and closing.

WARNING: SEVERE INJURY OR DEATH MAY RESULT THROUGH IMPROPER ATTEMPTS AT DROP TESTING, REPAIR AND/OR MAINTENANCE.

Drop testing, repair and/or maintenance should be performed by qualified personnel with a complete knowledge and understanding of this type of door. Before drop testing, conduct a visual inspection for damaged or missing parts that may create a hazard during testing or affect proper operation or resetting. Verify proper installation. Open and close the door to check for correct spring tension. ADDITIONAL INFORMATION ON DROP TESTING IS PROVIDED ON THE REVERSE SIDE OF THIS FORM, IN THE MANUFACTURER'S INSTALLATION/RESET INSTRUCTIONS, AND IN NFPA-80.

PROJECT _____ **CONTACT PERSON** _____

ADDRESS _____ **PHONE** _____

_____ **DATE** _____

Door # Location	Door Size	Door Serial No.	U.L. Tag No.	Visual Check		Operation Check		Reset Check	
				Pass	Fail	Pass	Fail	Pass	Fail
1.									
2.									
3.									
4.									

New Installation _____ **Annual Check** _____

COMMENTS AND RECOMMENDED WORK (new form needed when work is completed)

Door #1 _____

Door #2 _____

Door #3 _____

Door #4 _____

The doors listed above (noted as "passed" for the drop test) have been installed in accordance with the manufacturer's installation instructions. The automatic release device has been tested to demonstrate proper operation and full closure. They have been reset in accordance with the manufacturer's reset instructions and left in proper working condition, unless otherwise noted above.

TESTED BY _____ WITNESSED BY _____

COMPANY _____ REPRESENTING _____

ADDRESS _____ SIGNATURE _____

_____ RECOMMENDED WORK IS: Authorized_____ Declined_____

SIGNATURE _____ DATE _____

BY_____

SUGGESTED INSPECTION AND DROP TEST GUIDELINE ON REVERSE SIDE

INSPECTION AND DROP TEST GUIDELINES

Refer to the manufacturer's installation/reset instructions and NFPA-80

VISUAL INSPECTION

CAUTION: EVERY COMPONENT OF A DOOR AND ITS INSTALLATION MUST BE CHECKED FOR DETERMINATION OF FACTORS THAT MAY AFFECT A DOOR'S INTENDED OPERATION AND PERFORMANCE. THE LIST BELOW MAY BE INCOMPLETE AND IS PROVIDED AS A GUIDELINE ONLY.

A. Proper installation requirements

1. Curtain, barrel and guides must be aligned level, plumb, and true
2. Attachment to jambs must be with proper bolts, expansion anchors, or as otherwise required by the listing
3. Maintain expansion clearance (top of guides for FireKing™ Fire Door)
4. Fusible links must be located at top of door and within 1 foot of ceiling on both sides of wall

B. Check and repair damaged, incorrect or missing parts, such as:

1. Slats -bent slats, cracked beads, torn ends
2. Endlocks - missing, broken, bent, loose
3. Bottom bar - bent angles, loose bolts, missing washers on bolts (when required)
4. Guide assembly - bent angles, loose bolts, missing galvanized washers or bolts (when required), curtain entry or debris in guide
5. Hood and flame baffle (when baffle required) - bent, rubbing curtain in open position, holes, tears. Attachment to brackets and wall (when required), intermediate supports (when required)
6. Brackets and operating mechanisms - worn, misaligned or badly meshed gears, sprockets or chains, broken parts, and bent shafts
7. Automatic closing and governor mechanisms - missing or broken parts, drop or release arms tied, blocked, or wedged
8. Fusible links, sash chain, S-hooks, eyes, pulleys, etc. - links painted or coated with dust or grease, kinked or pinched cable, twisted or not flexible, obstructed eyes or raceways
9. Mounting and assembly bolts - missing or loose
10. Guide mounting bolts must all be in top of slot for upward expanding FireKing Fire Doors
11. Past replacement of parts not from the original door manufacturer - "homemade" or mismatched parts are not approved and must be replaced
12. Check balance and spring tension of door
13. If chain operated, check hand chain for damaged links. Replace or repair if necessary
14. If motor operated, check door operating jamb sprocket and chain, adjust and lubricate as necessary; readjust limits as necessary

C. Ancillary equipment

1. Smoke detectors/release devices - check continuity (all release devices must be tested)
2. Control panels - check function
3. Miscellaneous other equipment should be checked for proper function and operation

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WARNING: SERVICING OF MOTOR OPERATOR SHOULD BE DONE BY A QUALIFIED ELECTRICIAN WITH THE NECESSARY SCHEMATICS AND PROPER KNOWLEDGE OF THE OPERATOR.

OPERATIONAL INSPECTION

Roll door up and down in normal operation to check for spring tension and free movement of curtain in guides.

DROP TEST

If the door does not roll up and down properly in normal operation, or if there are damaged or missing parts that will create a hazard or prevent proper operation or reset, THESE CONDITIONS MUST BE CORRECTED BEFORE CONDUCTING A DROP TEST.

Drop test per manufacturer's instructions. Drop test should provide for automatic closing of the curtain at an average speed not less than 6 inches per second, nor more than 24 inches per second, and full closure of the curtain with the bottom bar closing evenly across the floor.

Reset per manufacturer's instruction. Drop test the door a second time to verify that the reset was properly done, this is a requirement of NFPA 80. Complete drop test forms and forward copies to Overhead Door dealer and customers.

ULTIMATE ACCEPTABILITY OF A FIRE DOOR IS THE DECISION OF THE AUTHORITY HAVING JURISDICTION, AS DEFINED BY NFPA-80.

SCOPE OF WORK FOR ROLLING DOORS AND ELECTRIC OPERATORS

For the period _____, 20__, through _____, 20__, the following services and inspections will be provided as part of the Preventative Maintenance Program for the rolling door(s) and operator(s):

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.

ROLLING FIRE DOORS:

1) Inspect fuse links and replace painted fuse links.
2) Drop test door for proper operation.
3) Check that door is properly reset.
4) Test electric fusible links for continuity (where applicable).
5) Test smoke detector (where applicable).
6) Test hold-open devices and time delays (where applicable).
7) Inspect safety labels, placement and condition.

ELECTRIC OPERATORS:

1) Inspect and adjust limit switches.
2) Inspect and adjust belts.
3) Inspect and adjust brake.
4) Inspect gear reducer.
5) Inspect operator mounting.
6) Inspect and test disconnect.
7) Inspect and lubricate roller chain.
8) Inspect and tighten all sprockets.
9) Inspect safety labels, placement and condition.

INSTALLATION INSTRUCTIONS

The Genuine. The Original.

Installation Instructions for FACE MOUNTED AND BETWEEN JAMBS MOUNTED COUNTER FIRE DOORS with TENSION RELEASE AUTOMATIC CLOSURE GOVERNOR CONTROLLED Series 640/641

Rolling Fire Doors may be mounted on openings in fire walls of masonry construction and non-masonry construction.

READ COMPLETE INSTRUCTIONS BEFORE INSTALLING DOORS

SAFETY INFORMATION

OVERVIEW OF POTENTIAL HAZARDS

Overhead doors are large, heavy objects that move with the help of springs under high tension and electric motors. Since moving objects, springs under tension, and electric motors can cause injuries, your safety and the safety of others depend on you reading the information in this manual. If you have questions or do not understand the information presented, call your nearest service representative**.**

In this section, and those that follow, the words **Danger**, **Warning**, and **Caution** are used to emphasize important safety information. The word:

⚠ **DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in injury or property damage.

The word **NOTE** is used to indicate important steps to be followed or important considerations.

POTENTIAL HAZARD	EFFECT	PREVENTION
 **MOVING DOOR**	⚠ **WARNING** Could result in death or serious injury.	Keep people clear of opening while Door is moving. **Do NOT** allow children to play with the Door Operator. **Do NOT** operate a Door that jams or one that has a broken spring.
 **ELECTRICAL SHOCK**	⚠ **WARNING** Could result in death or serious injury.	Turn **OFF** power before removing operator cover. When replacing cover, make sure wires are not pinching or near moving parts. Operator must be properly grounded.
 **HIGH SPRING TENSION**	⚠ **WARNING** Could result in death or serious injury.	**Do NOT** try to remove, repair or adjust springs or anything to which Door spring parts are fastened, such as wood blocks, steel brackets, cables or other like items. Repairs and adjustments must be made by a trained door system technician using proper tools and instructions.

A sample of the “INSTALLATION DATA” sheet is shown below and is located inside the door hardware box. You will need to refer to the data on the “INSTALLATION DATA” sheet.

Factory order number on door components must match with factory order number on the “INSTALLATION DATA” sheet. Each door has individual “INSTALLATION DATA” sheet.

```
                                     **      W O R K   O R D E R      **          Page        Date
W.O./Parent.            WO           ****************************************     Plant. . .       17
                          Related SO .                                             Lot #. . .
Item Number.              HARDWARE                              Qty. .             Start Dt .       Req D.
Customer . .                                                    Job. .             Drawing #. CONFIGURED
Status . . .    FAX:                                  Pty.      Type .             P.O. # . .

  WALL OPENING   :          WIDE X           HIGH  PRDCT:     SLAT TYPE :      GAUGE :       WINDLOAD : 20
  GUIDE TYPE     :          GUIDE ENTRY TYPE :                          :   DRIVE SIDE :     DRIVE NO. :
  BOTTOM BAR TYPE:                BBAR MATL.:                BBAR FINISH :
  DOOR MOUNT     :                WALL MOUNT :                 OPERATION :                 BBAR WEATHERSTRIP :
  *** DOOR SERIES :        ***                                                             ABBV/COLOR  :
  ***************************************************** HARDWARE DETAILS *****************************************

                                     S A M P L E

                                         DOOR INSTALLATION DATA:
```

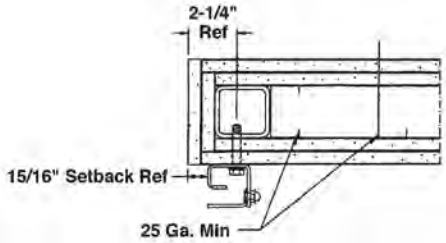
DOOR SERIES :						
WALL OPENING WIDTH	WALL OPENING HEIGHT	GUIDE TYPE	S REFERENCE	HAND DRIVE	OPERATION TYPE	

INITIAL TURNS	TOTAL TURNS	RELEASE TURN	DRIVE NO.	CURTAIN/BOTTOM BAR WT.	COUNTERBALANCE WEIGHT
GUIDE GAP	GUIDE CONFIG	MOUNTING			

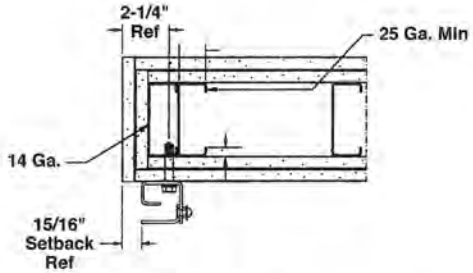
. . . . Messages . . . .

VERIFY THAT THE DOOR INSTALLATION can be accomplished before proceeding:

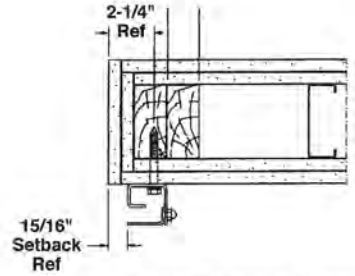
- Does the wall opening match the Opening Width and Height shown on the “Installation Data” sheet above? Contact factory if you determine that the wall opening width for between-jamb mounted door is different from the “wall opening width” on the Door Installation Data by more than 1/4".
- Can the guides be installed plumb?
- Check the counter/sill for level. If not level, mark the high counter/sill location on the low side jamb.
- Guides are designed to rest on counter/sill.
- Attach guides to wall with fastener and washers in top of each wall slot.
- DO NOT WELD GUIDES TO JAMB.



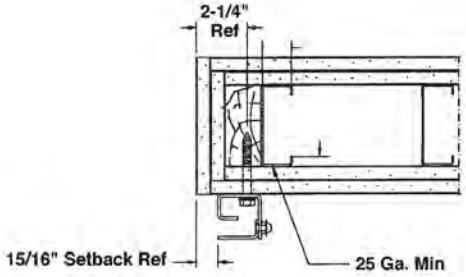
FACE OF JAMBS MOUNTED GUIDES
ON NON-MASONRY FIRE WALL WITH
2-1/2" X 2-1/2" X 3/16" STEEL TUBE JAMBS



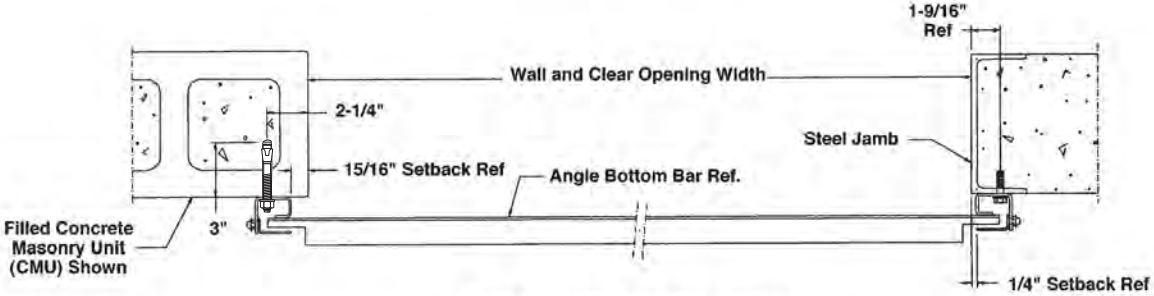
FACE OF JAMBS MOUNTED GUIDES
ON NON-MASONRY FIRE WALL
WITH 3-5/8" X 14 GA. STEEL STUDS



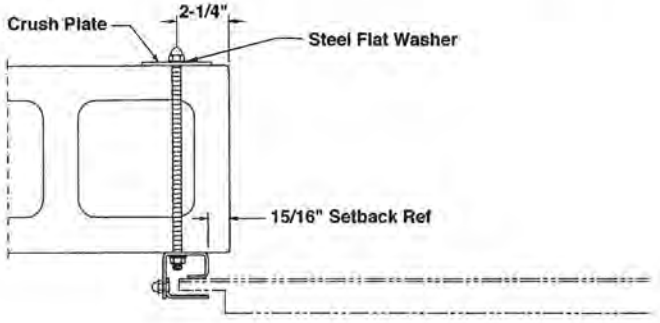
FACE OF JAMBS MOUNTED GUIDES
ON NON-MASONRY FIRE WALL
WITH 2" X 4"WOOD STUD JAMBS



FACE OF JAMBS MOUNTED GUIDES
ON NON-MASONRY FIRE WALL
WITH 2" X 4"WOOD AND STEEL STUD JAMBS



FACE OF JAMBS MOUNTED GUIDES
ON MASONRY TYPE FIRE WALL
i.e., CONCRETE, HARD FIRED BRICK OR CONCRETE FILLED
FIRE RATED CONCRETET MASONRY UNITS (CMU)



FACE OF JAMBS MOUNTED GUIDES ON SOFT BRICK
OR UNFILLED CONCRETE MASONRY UNIT (CMU),
REQUIRES THRU BOLTS WITH CRUSH PLATE

FIGURE 1

FACE OF JAMB MOUNT GUIDE INSTALLATION

- Hold one guide against jamb with setback as shown in Figure 1.
- Drill fastener hole thru top slot and install fastener. Additional installation instruction 308577 available on odcexchange.com. See Jamb Fastener Chart.
- Hold second guide against jamb so the “S” dimension exists between guides as shown in Figure 2.
- Make sure that top of guides are level and drill hole thru top slot in guide.

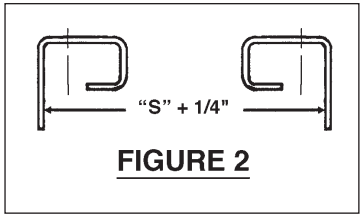


FIGURE 2

NOTE: All mounted holes must be drilled at top of slots.

- Guides must be plumb and “S” dimension must be held within 1/8" over the entire height of the guides.
- Install fastener in top of each guide slot.
- When steel jamb does not extend above the opening, use two thru bolts to fasten guide above opening.
- Attach outside angle to guide as shown in Figure 3.
- Install opposite guide in similar manner as in Figure 3.
- Install expansion anchors in masonry jambs per Overhead Door Instructions 307390.

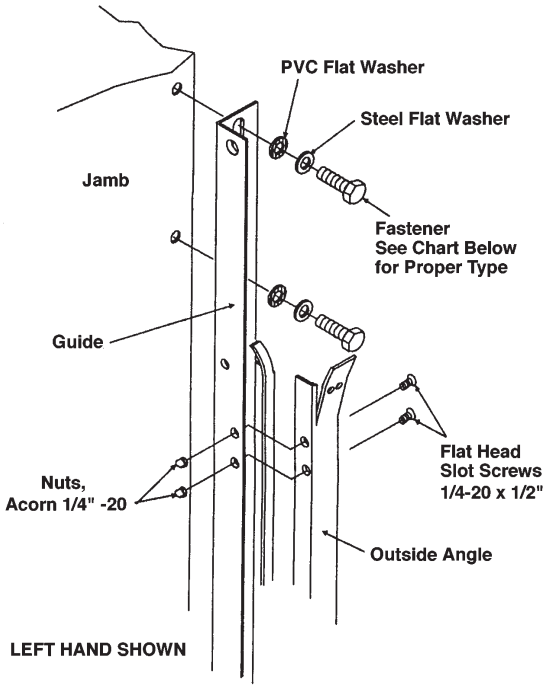
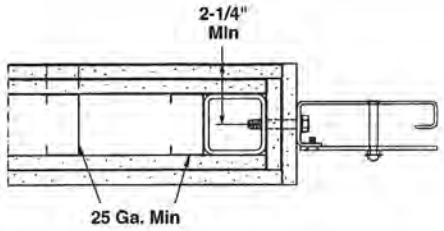


FIGURE 3

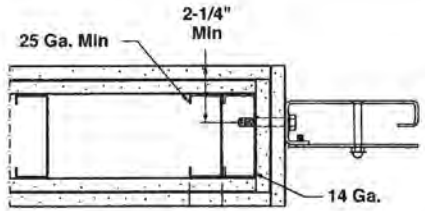
JAMB FASTENER CHART

JAMB TYPE	FASTENER	DRILL SIZE
Steel	Screw, Hex, Tap, Type “B”, 3/8"-12 X 1"	11/32"
Concrete, Filled Masonry Block or Hard Fired Brick	Anchor, Wedge, 3/8" X 3"	3/8"
Steel Tube or Steel Stud	Screw, Hex, Tap, Type “B”, 3/8"-12 X 2"	11/32"
Wood Stud	Screw, Wood, Lag, 3/8" -7 X 3"	1/4"
Unfilled Masonry Block or Soft Brick	Thru Bolt, All Thread, 3/8" -16 (see note below)	7/16"

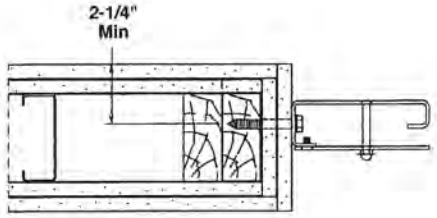
NOTE: On unfilled masonry block or soft brick jambs where all-thread thru bolts are required, a crush plate, flat washer, and acorn nut are needed on opposite side of wall from guides.



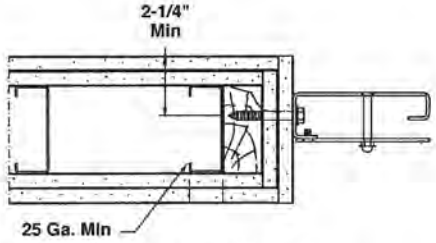
BETWEEN JAMBS MOUNTED GUIDES
ON NON-MASONRY FIRE WALL
WITH 2-1/2 X 2-1/2 X 3/16" STEEL TUBE JAMBS



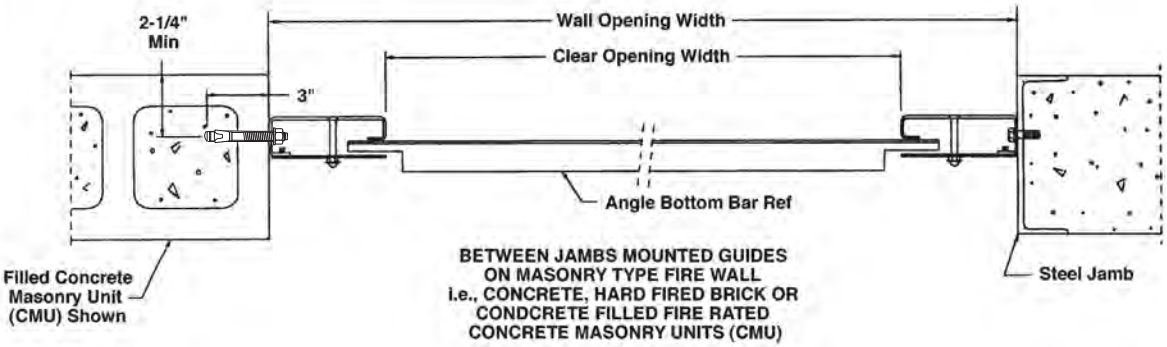
BETWEEN JAMBS MOUNTED GUIDES
ON NON-MASONRY FIRE WALL
WITH 3-5/8" X 14 GA. STEEL STUDS



BETWEEN JAMBS MOUNTED GUIDES
ON NON-MASONRY FIRE WALL
WITH 2 X 4 WOOD STUD JAMBS

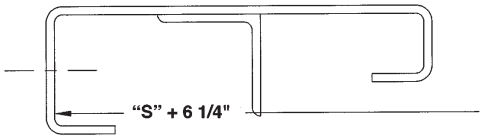


BETWEEN JAMBS MOUNTED GUIDES
ON NON-MASONRY FIRE WALL
WITH 2 X 4 WOOD & STEEL STUD JAMBS



BETWEEN JAMBS MOUNTED GUIDES
ON MASONRY TYPE FIRE WALL
i.e., CONCRETE, HARD FIRED BRICK OR
CONDCRETE FILLED FIRE RATED
CONCRETE MASONRY UNITS (CMU)

FIGURE 4



BETWEEN JAMBS GUIDE
LH SHOWN

FIGURE 5

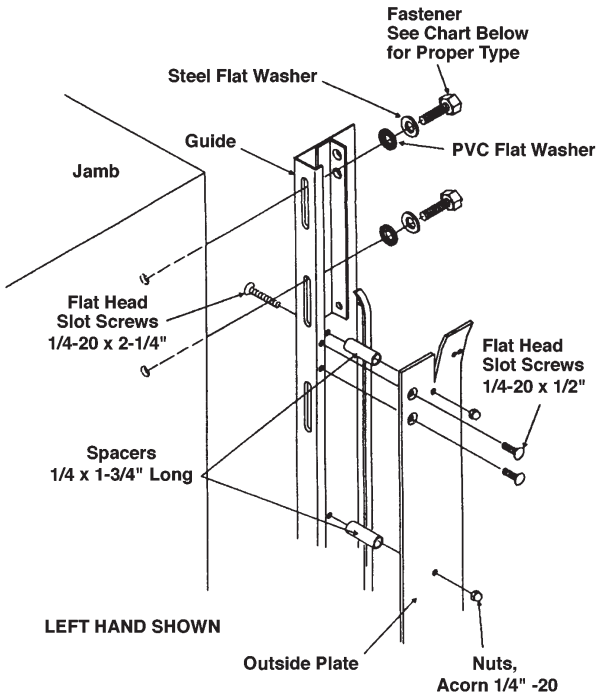


FIGURE 6

BETWEEN JAMBS GUIDE INSTALLATION

- Hold one guide against jamb with the centerline of the mounting slots at least 2-1/4" from the corner as shown in Figure 4. Guides must be fastened to the jamb as shown in Figure 4, guides must not be mounted to tubes set between jambs.
- Drill fastener hole thru top slot and install fastener. Installation instruction 308577 can be found at odcexchange.com. See Jamb Fastener Chart.
- Hold second guide against jamb so the “S” dimension exists between guides as shown in Figure 5.
- Make sure that top of guides are level and drill hole thru top slot in guide.

NOTE: All mounted holes must be drilled at top of slots.

- Guides must be plumb and “S” dimension must be held within 1/8" over the entire height of the guides.
- Install fastener in top of each guide slot.
- Attach outside plate to guide as shown in Figure 6.
  – First, loosely install 1/2" long flat head screws.
  – Second, loosely install 1-3/4" long spacers with 2-1/4" long flat head screws and nuts.
  – Third, tighten 1/2" long flat head screws and then tighten the 2-1/4" long flat head screws.
- Install opposite guide in a similar manner.

FASCIA PLATE INSTALLATION

BETWEEN JAMB MOUNTED ONLY

Fascia plate installation is UL and FM Global required on between jamb mount fire doors. The fascia is designed to close the fire wall opening behind the barrel and the upper part of curtain.

- Position top of fascia against underneath side of header and against guides. If fascia is not coped on bottom to fit between guides, cope back bottom lip of fascia to dimensions shown in Figure 7.
- Drill 15/64" dia. holes, two at each end, outside of headplate mounting angle. Using 1/4-20 X 3/8" hex head thread cut type “F” screws, fasten fascia to guides as shown in Figure 7.
- Attach 1/2" hook straps to underneath side of header and against top lip of fascia as shown in Figure 7 and 8 using fasteners appropriate for header. Space hooks evenly.

JAMB FASTENER CHART		
JAMB TYPE	**FASTENER**	**DRILL SIZE**
Steel	Screw, Hex, Tap, Type “B”, 3/8"-12 X 1"	11/32"
Concrete, Filled Masonry Block or Hard Fired Brick	Anchor, Wedge, 3/8" X 3"	3/8"
Steel Tube or Steel Stud	Screw, Hex, Tap, Type “B”, 3/8"-12 X 2"	11/32"
Wood Stud	Screw, Wood, Lag, 3/8"-7 X 3"	1/4"

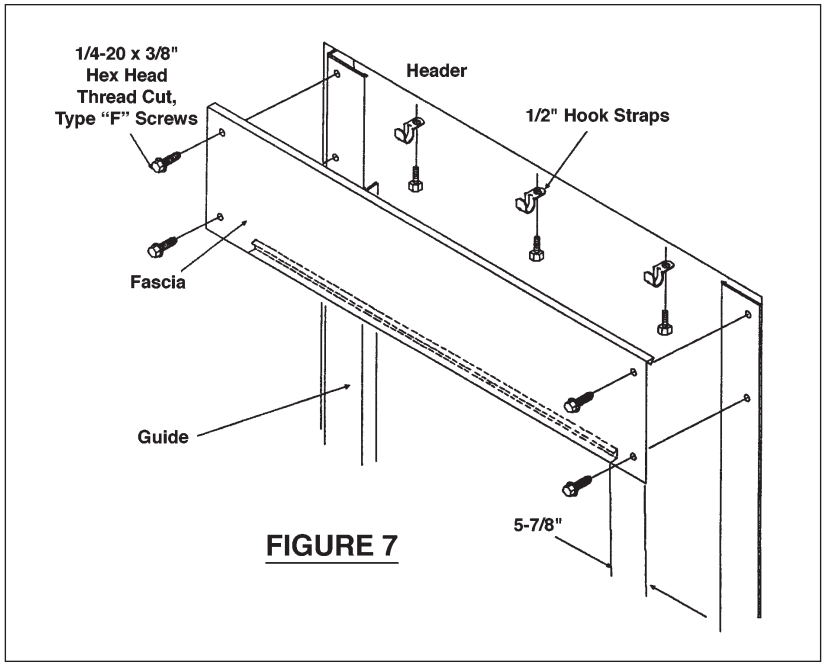


FIGURE 7

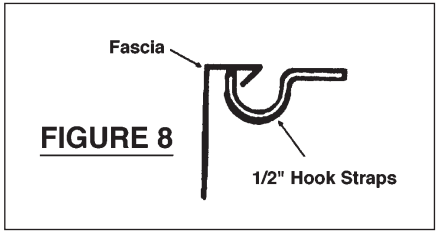


FIGURE 8

CURTAIN PREPARATION

- Place protective material in area where curtain will be unrolled to prevent marring of curtain surface.
- Position curtain in front of and parallel to door opening.
- Unroll curtain. Top slat should be nearest door opening.
- Position curtain barrel assembly on floor at top slat end of curtain. Drive shaft end is stamped “R” for right hand and “L” for left hand drive.
- Doors are equipped with an impact device assembly on the tension end of the barrel. The impact device has a pawl which points in direction of barrel rotation when door is closing. Check to see that pawl is pointing in correct direction. See Figures 9 and 10.
- Lay barrel assembly on curtain and center to where there is 1" curtain overlap on each end.
- Wrap curtain over barrel until slotted holes in top slat align with weld nuts and install fasteners as shown in Figure 10.
- Check curtain overlap and re-adjust if necessary, then secure top slat to barrel.
- Roll curtain tightly and squarely onto barrel and secure with ropes.

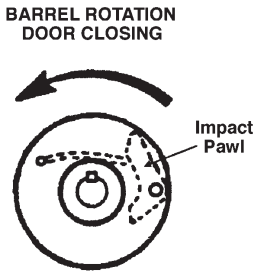


FIGURE 9

RIGHT HAND DRIVE
(LEFT HAND OPPOSITE)

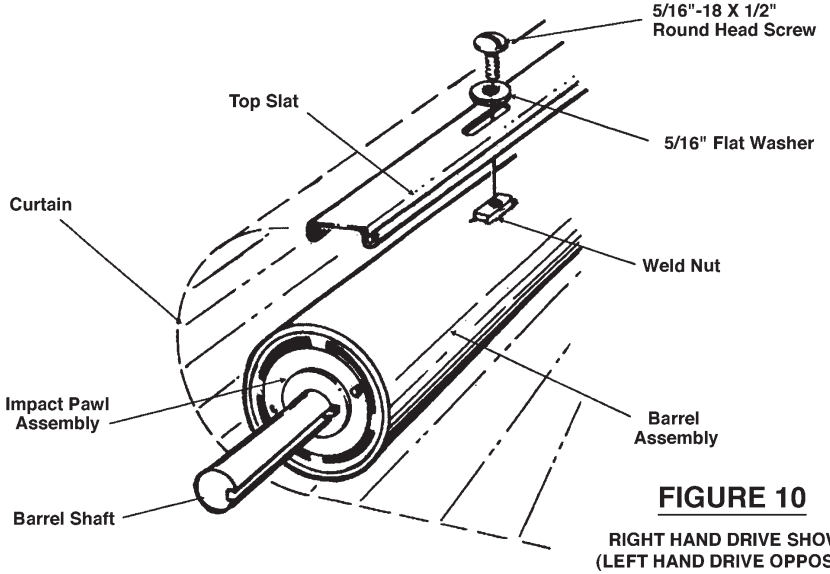


FIGURE 10

RIGHT HAND DRIVE SHOWN
(LEFT HAND DRIVE OPPOSITE)

TENSION END PREPARATION

- Install tension shaft assembly, AN960 flat washer, rotation limiting set collar and tension drop arm assembly on tension headplate as shown in Figure 11. Allow 1/32" clearance between rotation limiting set collar and face of tension shaft mount assembly. Position rotation limiting set collar to allow tension drop arm assembly to rotate to a vertical down position.
- Position tension end headplate on door shaft.
- Slide 1/4" long shaft spacer and tension adjustment 36T sprocket (hub toward headplate) onto door shaft and install key.
- Install impact arm assembly onto door shaft in a preliminary position as shown in Figure 11.
- Slide set collar flush with impact arm and tighten set screw.

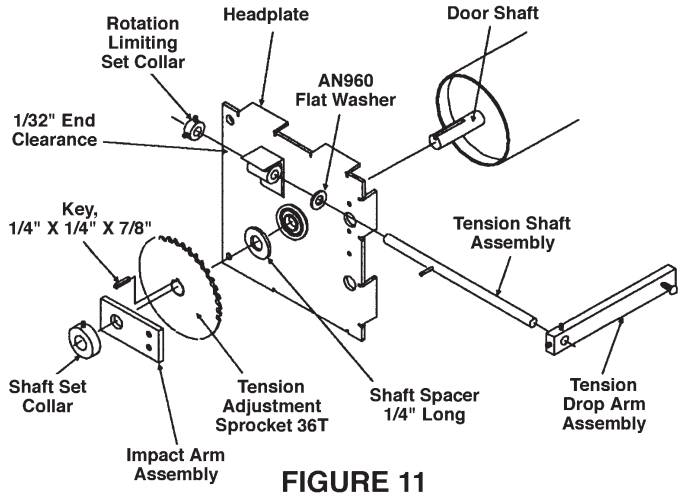


FIGURE 11

TENSION HEADPLATE FOR RIGHT HAND DRIVE
(LEFT HAND DRIVE OPPOSITE)

DRIVE END PREPARATION

PUSH-UP OPERATION WITH GOVERNOR — 9-1/2" HEADPLATE

- Position headplate assembly on door shaft.
- Slide 1/2" long spacer and 54T sprocket (hub away from headplate) onto door shaft and install key. Do not tighten set screws.
- Install #25 roller chain on sprockets as shown in Figure 12. Some items shown are factory assembled.

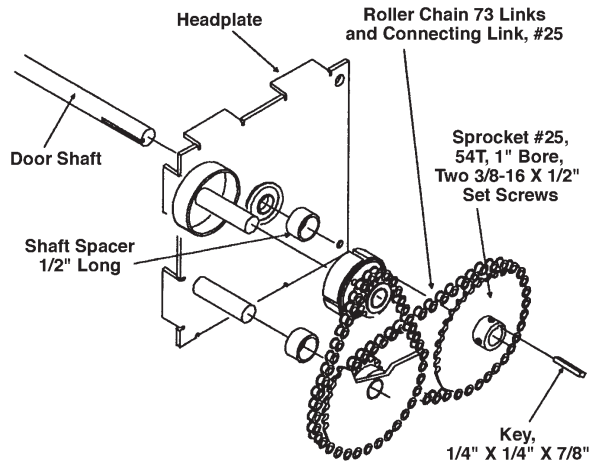


FIGURE 12

RIGHT HAND DRIVE SHOWN
(LEFT HAND DRIVE OPPOSITE)

DRIVE END PREPARATION

PUSH-UP OPERATION WITH GOVERNOR — 11-1/2" HEADPLATE

- Position headplate assembly on door shaft.
- Slide 3/4" long spacer and 38T sprocket (hub away from headplate) onto door shaft and install key. Do not tighten set screws.
- Install chain on sprockets as shown in Figure 13. Some items shown are assembled at plant. Shown disassembled for clarity.

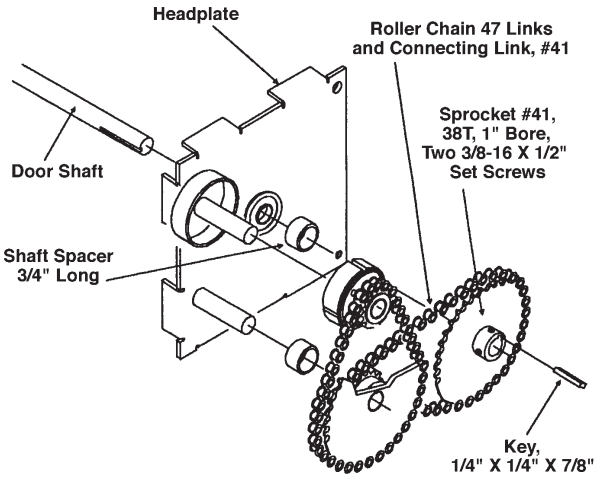


FIGURE 13

RIGHT HAND DRIVE SHOWN
(LEFT HAND DRIVE OPPOSITE)

DRIVE END PREPARATION

CRANK-UP OPERATION — 9-1/2" HEADPLATE WITH GOVERNOR AND 11-1/2" HEADPLATE WITH GOVERNOR

- Bolt crank gearbox mounting bracket to headplate using fasteners provided. Then bolt crank gearbox to bracket with fasteners as shown in Figure 14.
- Position headplate assembly on door shaft.
- Slide 1/2" long shaft spacer onto door shaft as shown.
- Slide 38T door shaft sprocket (hub towards headplate) onto door shaft, and install key. Do not tighten set screws.
- Install chain on sprockets. After headplate is installed on guide, check drive chain tension and re-adjust if necessary. (Some items are assembled at plant but are shown disassembled for clarity.)

CURTAIN INSTALLATION

NOTE: For Face of Jamb Mount with Optional Brush Seals only, see installation instructions accompanying Figure 28 on page 15. This must be done before installing curtain assembly.

- Using a forklift, raise curtain assembly with headplates into mounting position.
- Secure headplate to guides. See Figure 15.
- Remove forklift.
- Clamp locking pliers 4" below top of each guide.
- Loosen rope. Unroll and lead curtain bottom bar into guides. The bottom bar should rest on the locking pliers.
- Install curtain stops. See Figure 16.

NOTE: Curtain MUST be centered between headplates and in fully raised position before making any adjustments.

CURTAIN ADJUSTMENT

After centering curtain, verify that shaft spacers and sprockets on drive end are positioned against the headplate bearing and all set screws are tightened and that sprockets and chains are aligned.

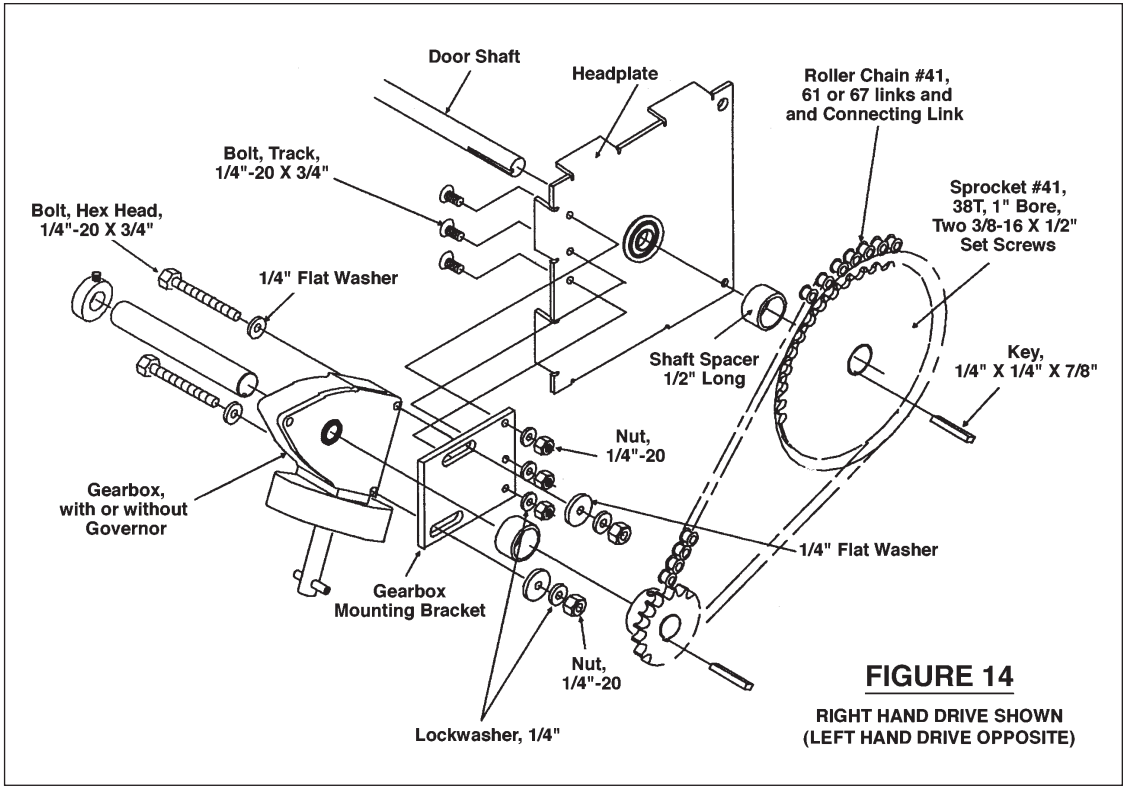


FIGURE 14

RIGHT HAND DRIVE SHOWN (LEFT HAND DRIVE OPPOSITE)

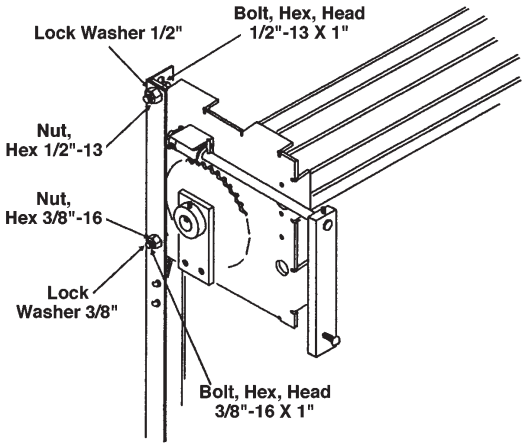


FIGURE 15

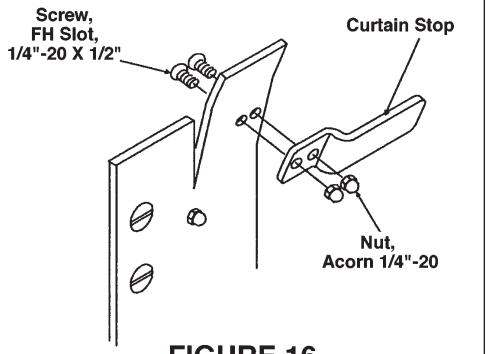


FIGURE 16

DOOR RELEASE ASSEMBLY

Figures shown are right hand drive; left hand drive opposite.

- Ream both ends of thru-wall tube for smooth movement of sash chain thru the tube.
- Drill hole thru wall, insert tube and put washer and set collar on each end of tube.
- Install fire door release assembly as shown in Figures 17 or 18 as required.
- Install sash chain so rounded end of links enter the thru-wall tube from the side opposite the fire door.
- Use turnbuckle to remove all slack in sash chain.

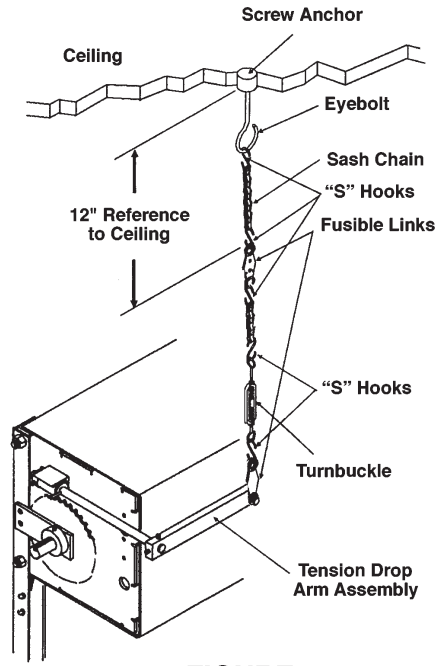


FIGURE 17

Exterior Wall

NOTE: Close all "S" hooks completely.

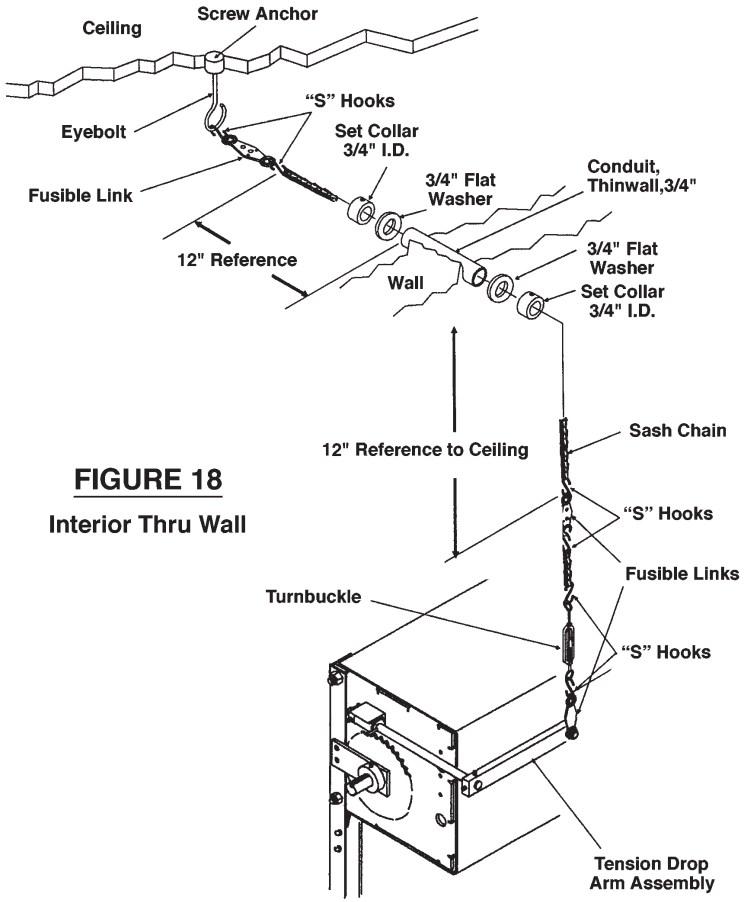


FIGURE 18

Interior Thru Wall

NOTE: Close all "S" hooks completely.

COUNTERBALANCE ADJUSTMENT

Read completely before you set initial turns to the value shown on Door Installation Data sheet and Tension Headplate decal. Figures shown are right hand drive; left hand drive opposite.

⚠ WARNING

Tension wheel is under high spring tension and could spin rapidly which could result in death or serious injury. Door must be open when adjusting spring tension.

- See Door Installation Data sheet to determine amount of “initial turns” to put on tension sprocket.
- Remove set collar and impact arm assembly from tension end shaft.
- Make a “zero point” chalk mark on tension sprocket as shown in Figure 19.
- Loosen turnbuckle and allow tension drop arm to fall.
- Position tension drop arm in the DOWN position.
- Insert 3/8" diameter winding bar into the top hole in the hub of the tension sprocket and turn sprocket in the direction shown in Figure 19. Insert second winding bar in top hole and continue applying tension until the initial turns are applied using the “zero point” mark on the sprocket as reference.
- After initial turns are applied, secure the “tension drop arm” in the UP position as shown in Figure 17 or 18.
- Find the “release turn” value on the Door Installation Data sheet. Install the “impact arm” as shown in Figure 20 with the required release turn setting.
- Install set collar against the impact arm and tighten set screws. See Figure 20.
- Remove locking pliers from guides and remove rope from around the curtain.

CHECK DOOR OPERATION

- Clear area in path of door.
- Lower and raise the curtain at least twice to test for proper operation. The bottom bar must rest against the floor/sill.
- If door is difficult to open, raise the door to the open position and increase spring tension. If the bottom bar does not rest on the floor, raise the door to the open position and decrease spring tension.

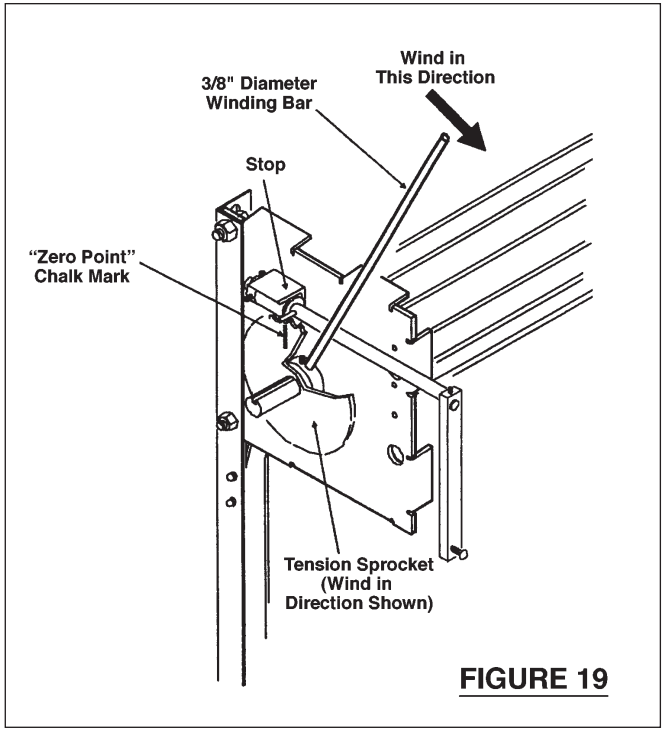


FIGURE 19

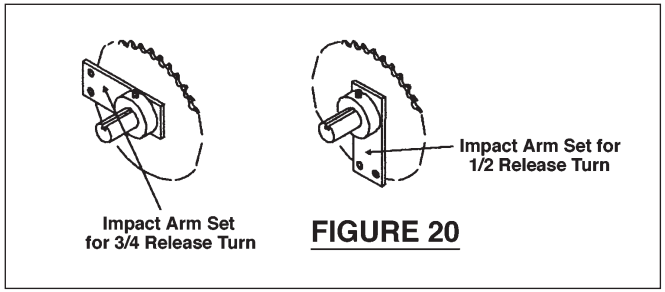


FIGURE 20

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS

DROP TEST REQUIREMENTS

Fire door assemblies shall be inspected and tested not less than annually by a trained door system technician. NFPA 80-2007 requires two successful tests per inspection. New installations must pass the drop tests to ensure the installation has been completed properly.

⚠ WARNING

Door will close rapidly during drop test which could result in death or serious injury. Clear area in the path of the door before performing drop test.

Tension wheel will spin rapidly during a drop test which could result in death or serious injury. Keep hands, tools and other objects away from tension wheel during drop test.

DROP TEST INSTRUCTIONS:

1. Raise fire door to OPEN position and clear the area in the path of the closing door! Place barricades on each side of the wall opening.
2. See Figure 21 and REMEMBER the orientation of Impact Arm so it can be reset to the pre-test position after drop test is complete. Figures shown are right hand drive; left hand drive opposite.
3. Hold DROP ARM in horizontal position and loosen TURNBUCKLE.
4. Disconnect FUSIBLE LINK from pin on DROP ARM. See Figure 21.
5. KEEP HANDS AWAY from Tension Sprocket and Impact Arm. Ensure door area is clear.
6. Release DROP ARM and the fire door will CLOSE AUTOMATICALLY. Door must close at a speed between 2 feet/sec and 6 inches/sec and bottom bar must rest on floor/sill. Adjust initial tension to allow door to close to floor when released in fire mode.

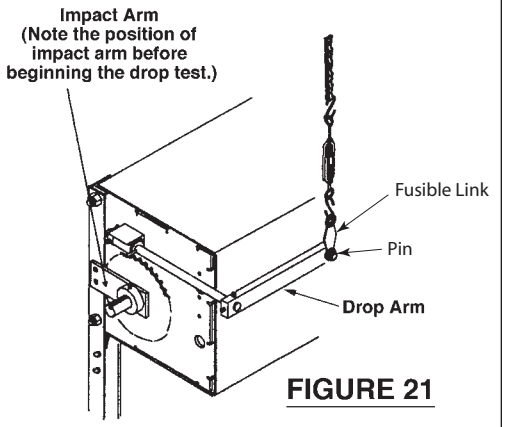


FIGURE 21

RESET INSTRUCTIONS:

1. Raise fire door to OPEN position and clear the area in the path of the closing door.
2. Place Locking Pliers on one door guide to hold the Bottom Bar up.
3. Use a 3/8" x 18" Winding Rod to return the Impact Arm to its PRE-TEST POSITION. See Figures 21 & 22.
   a. Insert Winding Rod into one of the holes in the sprocket hub. See Figure 22.
   b. With DROP ARM in down position, rotate sprocket 90° in direction shown. See Figure 22.
   c. Raise DROP ARM to hold sprocket in place and retain spring tension.
   d. Re-insert winding rod in sprocket and hold rod securely as you lower the drop arm then rotate sprocket toward pre-test position.
   e. Repeat turning the sprocket until Impact Arm is returned to its pre-test position.
4. Hold DROP ARM in horizontal position and re-attach the FUSIBLE LINK over PIN and tighten TURNBUCKLE.
5. Remove locking pliers from guide.

REPEAT DROP TEST: **(second test as required by NFPA 80-2007)**

1. Perform DROP TEST INSTRUCTIONS steps 1-6.
2. Perform RESET INSTRUCTIONS steps 1-5.
3. Test is complete, replace Tension End Cover.

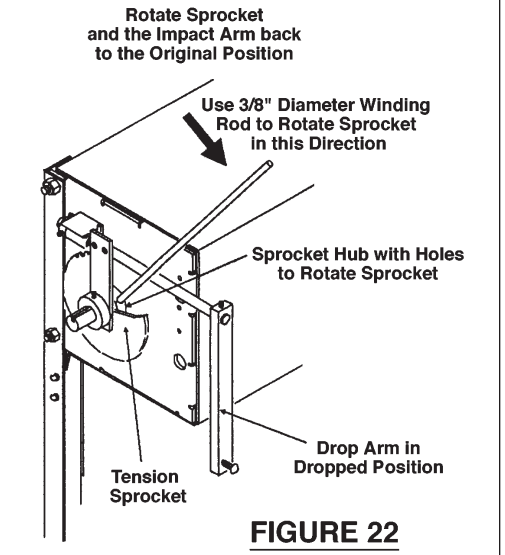


FIGURE 22

HOOD INSTALLATION

FACE OF WALL

- Position hood on headplates.
- Position hood flange against header and mark holes to be drilled in header for fastener locations. See Figure 23.
- Drill holes in header per fastener requirements shown in chart below.
- Secure hood flange to header using fasteners per chart below.

BETWEEN JAMBS

- Position hood on headplates.
- Position hood angle on top of hood until hood angle is flush with header and centered. Clamp hood angle to hood.
- Disconnect flame baffle sash chain assembly.
- Using holes in hood angle, mark holes on header to be drilled. Drill holes in header per fastener requirements shown in chart below.
- Using holes on bottom of hood angle, match drill 13/64" diameter holes in hood. See Figure 24.
- Using 3/16" diameter steel rivets, secure hood angle to hood and remove clamps. See Figure 24.
- Reconnect flame baffle sash chain assembly.
- Attach hood angle to header using fasteners per chart below.

HEADER FASTENER CHART		
HEADER TYPE	**FASTENER**	**DRILL SIZE**
Steel	Screw, Hex, Tap, Type “B”, 3/8"-12 X 1"	11/32"
Concrete, Filled CMU Block or Hard-Fired Brick	Anchor, Expansion, 3/8" X 3"	3/8"
Steel Tube or Steel Stud in Non-Masonry Wall	Screw, Hex, Tap, Type “B”, 3/8"-12 X 2"	11/32"
Wood Stud in Non-Masonry Wall	Screw, Wood, Lag, 3/8"-7 X 3"	1/4"

hood end cover installation

- Place tension and drive end covers on headplates.
- Drill 15/64" diameter holes, two on each surface, through end cover/hood/ headplate. Use 1/4"-20 X 3/8" hex head thread cut, type “F” screws to attach end covers to headplates. See Figure 25.
- For between jamb only, attach hood angle at both ends to end cover with a 1/4"-20 X 3/8" hex head thread cut, type “F” screw.
- For crank drive, cope and install drive end cover bottom.

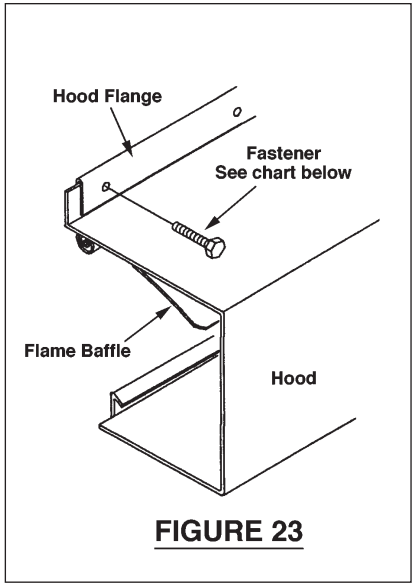


FIGURE 23

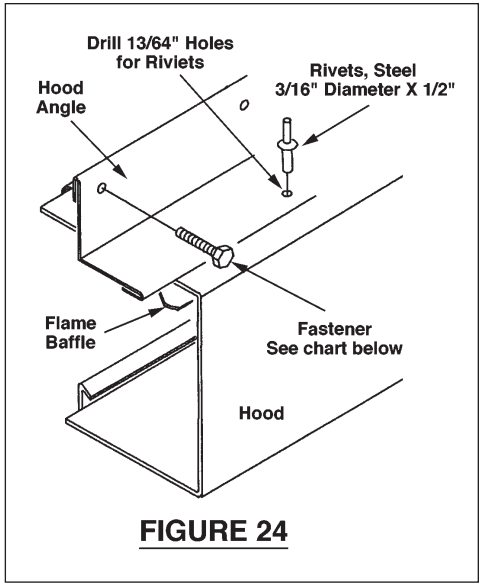


FIGURE 24

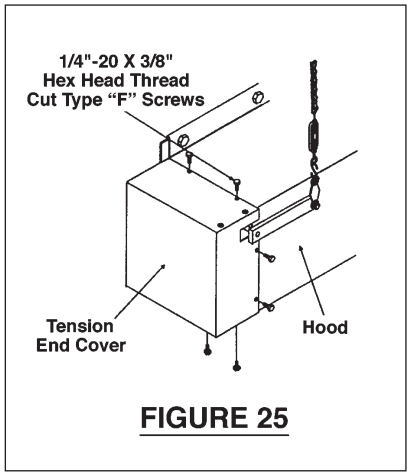


FIGURE 25

OPTIONAL BRUSH SEAL INSTALLATION

- Install guides per Figures 26 or 27.
- Face mounted door: Install lintel seal angle with horizontal leg flush with bottom of header. See Figure 28.
- Install door per applicable instructions.
- Brush seals must be mounted to lightly contact the face of the curtain and not affect door operation of door dropping.
- Attach brush seal with 1/8" diameter pop rivets (furnished). See Figure 28 or 29.
- Attach brush seal to lintel angle per Figure 28 or to fascia per Figure 29.

For 640/641 Smoke Door installation instructions, see Overhead Door Corporation instruction 307969.

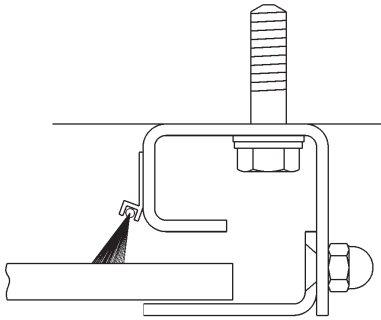


FIGURE 26

Face of Wall Guide Assembly

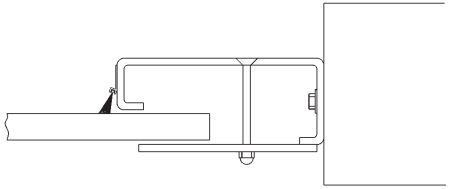


FIGURE 27

Between Jamb Guide Assembly

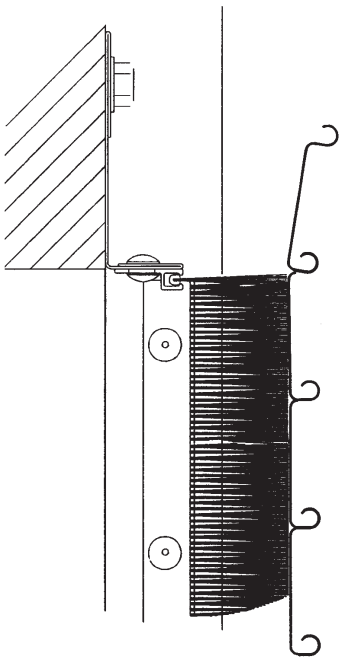


FIGURE 28

Face of Wall Lintel Brush Mounting

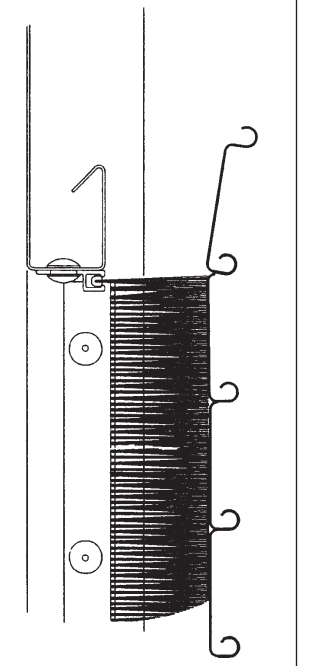


FIGURE 29

Between Jamb Fascia Brush Mounting

OPTIONAL BOTTOM BAR SEAL INSTALLATION

- After complete door installation, clean bottom surface of bottom bar.
- Apply adhesive side of foam tape to underside of bottom bar. (Leave silicone paper attached to non-adhesive side of foam tape until after installation is complete to prevent stretching.)
- Cope ends of foam tape where bottom bar extends into guides and make sure tape doesn't interfere with door operation or door dropping.
- Press foam tape firmly against bottom bar to assure good adhesion. Remove silicone paper.

PRODUCT SAFETY INSTRUCTIONS

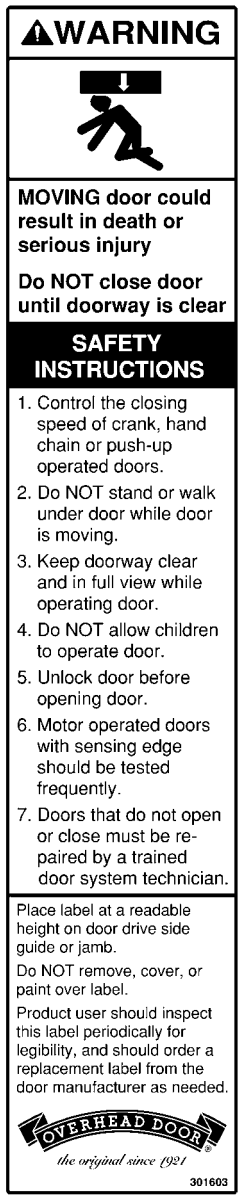
The door installer has the following responsibilities:

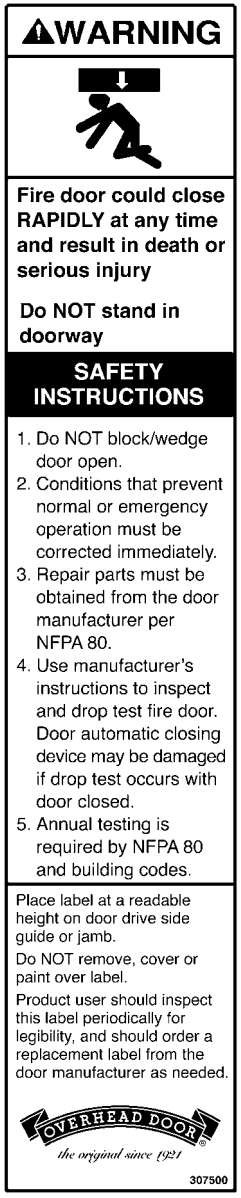
- Find labels in hardware box.
- Attach Product Safety Label 301603 and 307500 as directed on label.
- Demonstrate to the door user the correct way to control the closing speed of the rolling door with crank or push-up operation.
- Inform the door user about the following requirements from ANSI Z535.4: "Product safety labels should be periodically inspected and cleaned by the product user as necessary to maintain good legibility." The product user should order replacement safety labels from the door manufacturer as required to maintain legibility.

REPLACEMENT BOTTOM BAR

This procedure is for replacing a bottom bar and slats or adding additional slats. Verify that the replacement bottom bar and slats are suitable for the fire door mounted on the wall opening.

- Obtain permission to block traffic thru the opening in the fire wall.
- Set up barricades or warning cones to prevent traffic thru the opening from both directions and provide a safe work area.
- Open the fire door.
- Remove the stops from the top of the guides.
- Remove the bottom bar and curtain from between the guide angles. Lower the curtain and bottom bar outside the guides to a working position above the floor.
- Remove one endlock so the damaged bottom bar (and damaged slats) can be removed from the curtain.
- Insert the replacement bottom bar and slats onto the bottom of the curtain and reattach the endlock.
- Carefully raise bottom bar back to the top of guide angles. BEWARE OF RAPID MOVEMENT OF BOTTOM BAR PAST TOP OF THE GUIDES.
- Insert the bottom bar and curtain back into the guide angles and lower the bottom bar 6" into the guides.
- Install locking pliers below bottom bar.
- Attach the stops to the top of the guide angles.
- Remove locking pliers.
- Open and close the door to verify proper operation.
- Open the door and perform a drop test. See page 13.
- Remove barricades or warning cones and notify customer that the repair is complete.





WARRANTY

The Genuine. The Original.

OVERHEAD DOOR®

Rolling Counter Door Series 640, 641, 650, 651, 652 Limited Warranty

Overhead Door Corporation ("Seller") warrants to the original purchaser of the Series 640, 641, 650, 651, 652, Rolling Counter Doors ("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:

- **TWENTY FOUR (24) MONTHS 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. Any labor charges are excluded and will be the responsibility of the purchaser.

This warranty is made to the original purchaser of the Product only, and is not transferable or assignable. This warranty applies only to Products, which are installed in commercial or industrial building applications. 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.

ORIGINAL PURCHASER _____

INSTALLATION ADDRESS _____

SELLER: _____

SELLER'S ADDRESS: _____

FACTORY ORDER #: _____

DATE OF INSTALLATION: _____

SIGNATURE OF SELLER: _____ C900-862

Overhead Door Corporation
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