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

Sectional 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

Preventative maintenance frequency is a variable of the many conditions within which a sectional door is required to operate. How often a cycle of maintenance is required will be dependent on the geographic location, ambient environmental conditions and the general parameters under which the door must operate. The following recommendations should be established as routine until experience dictates a different time period for your installation.

Track – (Monthly)

- The track surface should be maintained free of all oil or grease. Check tightness of track bolts to angles and fasteners attaching angle to jambs or snugness. Check for track damage.

Door Surface and Hardware – (Every six months or as required)

- Top fixture – with door in the down position, adjust roller assembly holder so that the wheel is tight against the track surface on the door side. Lightly oil the roller stem and races of the roller assembly wheel. Wipe off excess oil.

  NOTE: The above procedure for oiling should be followed for all roller assemblies in the end hinges and bottom fixture.
- Oil the hinge points on all center hinges.
- Check all door hardware fasteners for tightness and freedom from corrosive activity.
- Bottom seal – inspect for damage and replace if necessary.

Counterbalance – (Every six months or as required)

- Drum – check set screw for tightness.
- Cable – Examine for frayed or broken strands. All cables should be tight when the door is closed.
- Torsion spring – lightly oil across the top of the coils.
- Shaft bearing – oil each bearing located on the counterbalance shaft.
- Set screws – visually inspect all set screws for corrosion or slippage.
- Collars – check tightness of set screws.

WARNING: Bottom fixtures, cables, drums, pulleys, shafts, and brackets are under high spring tension. Repairs on these items must be made by a trained service person.

Winding, repairs and adjustments of the springs must be made by trained service personnel.

RECOMMENDED PREVENTATIVE MAINTENANCE (Cont'd.)

After lubrication, inspection is complete, operate door by hand several times, taking note of any binding, erratic shifting in tracks, rollers not turning, unusual noises, etc. The door should also be level and sealed against the jambs. The correct fit of the door is critical to proper operation and long life of rollers, cable, etc.

SOME THINGS NOT TO DO:

DO NOT continue to operate a door which has damage to the door and/or track and requires any degree of "additional effort" to completely open or close. Have the unit repaired as quickly as possible and operate it by hand until the repairs are made.

DO NOT use an electric operator to "power open or close" a poorly operating or damaged door.

DO NOT attempt to wind, unwind or otherwise tamper with a torsion spring counterbalance. Contact a qualified service person.

TROUBLESHOOTING GUIDE FOR SECTIONAL DOORS

SYMPTOM	POSSIBLE CAUSE
Door is harder to raise when halfway open than at any other position.	Springs require more turns. Lower door to fully closed and locked position. Add 1/8 turn at a time until the same resistance is felt pulling the door down form the fully opened position as is felt pulling the door up at the half opened position.
Door is harder to start down from the fully opened position than at any other position.	Springs require less turns. Lower door to fully closed and locked position and remove 1/8 turn until the same resistance is felt pulling the door down from the fully opened position as is felt pulling the door up at the half opened position.
Electric operator stops too soon or not soon enough at the open or close position.	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. Tighten the drive chain between operator and door sprockets to avoid the chain jumping and a repeat of this situation.
Operator does not run and circuits to it are okay.	▪ Limit switch jammed at an out of phase position. Loosen and reset per operator installation instructions. ▪ Faulty limit switch. ▪ Interlock switch faulty or mechanism is in position for manual operator. Make sure mechanism is in position for electric operation. ▪ If none of the above solves the problem, contact an Overhead Door Technical Representative.

WARNING: Repairs and adjustments to springs must be made by a trained service person using proper tools and instructions.

Operators are powered by electrical current. Unplug operator or throw circuit breaker before making any adjustments to limit switch.

NOTE: All of the above instructions are covered more extensively in the individual installation instructions within this manual.

TROUBLESHOOTING GUIDE FOR SECTIONAL DOORS (Cont'd.)

Emergency Release Mechanisms

All electrically operated overhead doors are equipped with emergency release mechanisms of some kind to permit operation of the door by hand in case of a power failure or other times.

Trolley (Drawbar Type)

1. Obtain good step ladder or other solid surface on which to stand.

2. The "L" shaped connecting arm which is attached to a carriage (trolley) assembly of the operator and to a bracket on the top section of the door has a pull chain, cable or strap-activated catch at the operator trolley end. No tools should be required to disengage it.

3. Hold the connecting arm with one hand to keep the arm under control. Give the strap or chain a quick jerk. More than one attempt may be necessary.

4. If the release catch is bent or otherwise damaged and will not disengage, remove the bolt or clevis holding the arm to the door bracket.

Sidemount/Jackshaft

1. These operators are equipped with a pull chain, rope or cable which is generally accessible from the floor.

2. Pull down on the lanyard and tie or otherwise fasten it to hold it in that position. There may be a wall bracket to which it may be secured.

3. The door can now be operated manually.

4. When the power is restored, release the lanyard. It should return to its original position and the operator dentil should re-engage.

SCOPE OF WORK FOR SECTIONAL 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 sectional door(s) and operator(s):

SECTIONAL DOORS:

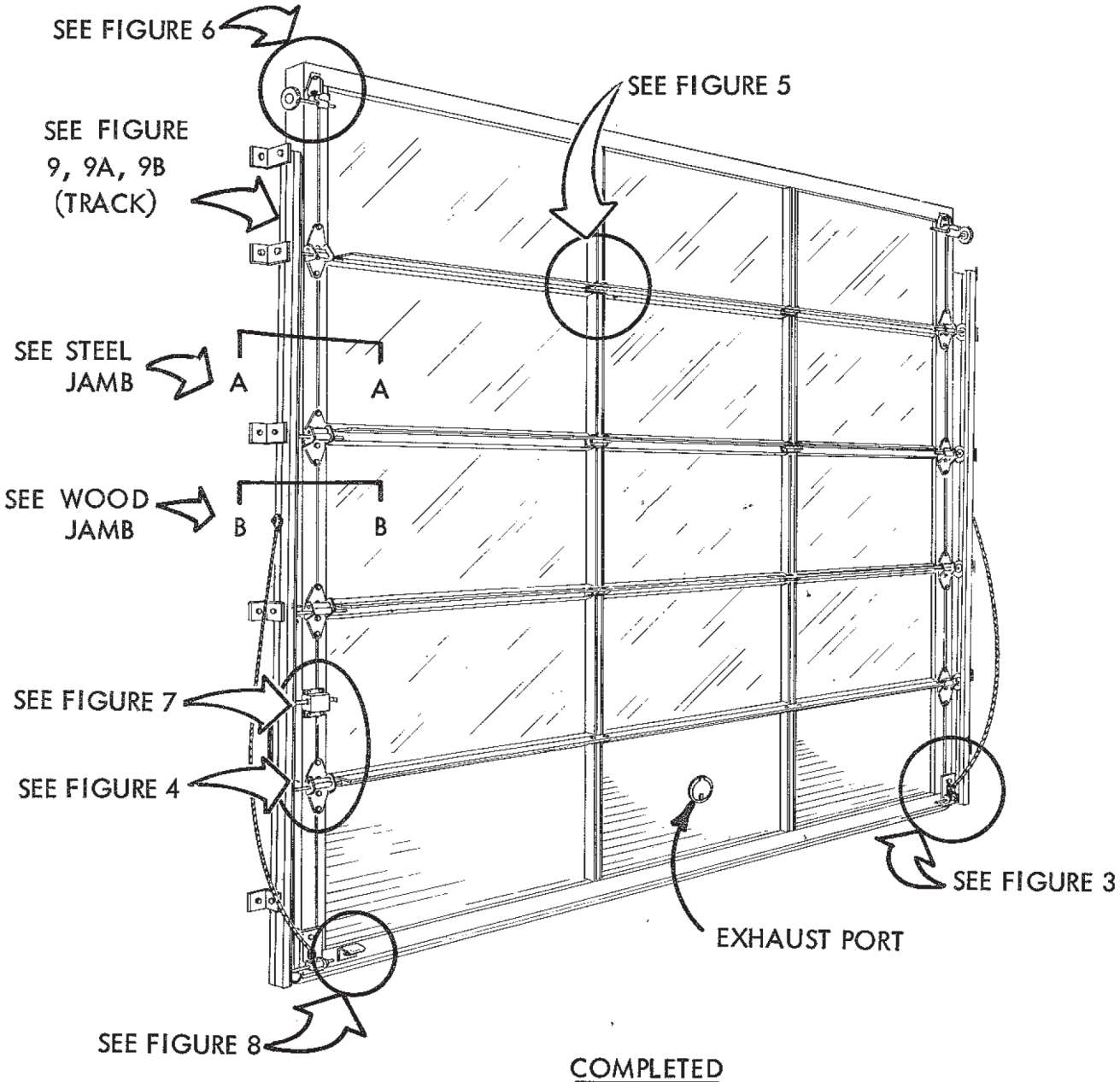
1) Inspect section condition.
2) Inspect alignment of door to ensure proper operation.
3) Disconnect operator and operate door manually to check for smooth operation.
4) Lubricate and inspect rollers and bearings.
5) Lubricate springs.
6) Inspect spring fasteners for secure mounting.
7) Inspect and tighten hinges and hardware.
8) Inspect cables for wear or damage.
9) Inspect drums for wear or damage.
10) Inspect locks for proper operation.
11) Inspect weather-strip for wear or damage
12) Inspect track fasteners and hangers for secure mounting.
13) Inspect and lubricate chain hoist.
14) Inspect track for damage.
15) Inspect safety labels, placement and condition.

ELECTRIC OPERATORS:

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

INSTALLATION INSTRUCTIONS

INSTALLATION INSTRUCTIONS
PANORAMIC ALUMINUM DOOR
MODEL 511



COMPLETED INSTALLATION

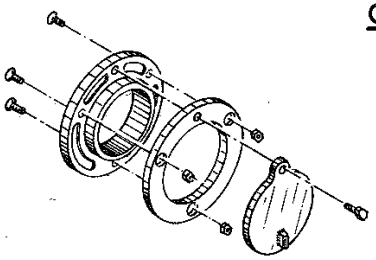
FIGURE 1

The Genuine. The Original.

OVERHEAD DOOR®

411339 REV - 12/13/13

COUNTERBALANCE AND TRACK
Installed as Shown



EXHAUST PORT
(Optional)

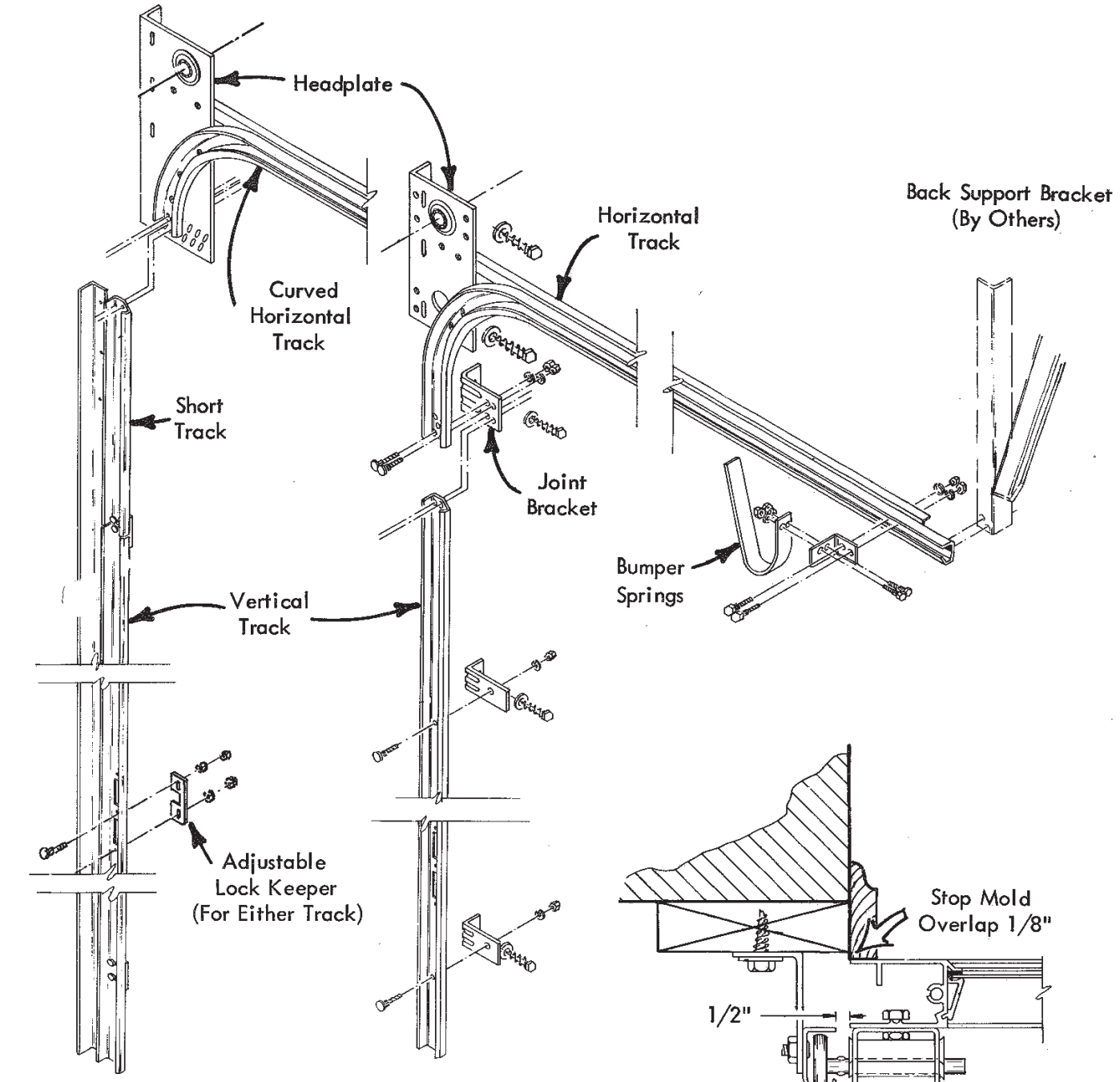
COUNTERBALANCE ASSEMBLY

FIGURE 9B

NOTE: Cable attached to drum as shown.

STEEL JAMB
DETAIL A-A

COUNTERBALANCE AND TRACK
Installed as Shown



STEEL-PORCELAIN JAMB

FIGURE 9A

WOOD JAMB

FIGURE 9

WOOD JAMB DETAIL B-B

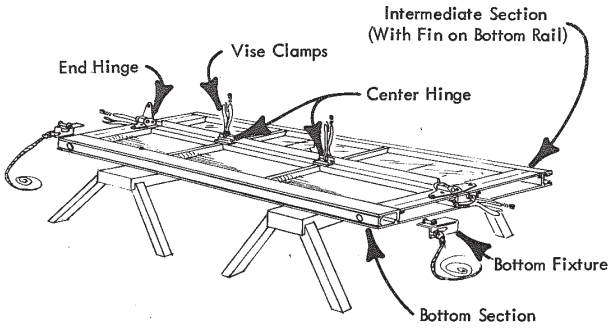


FIGURE 2

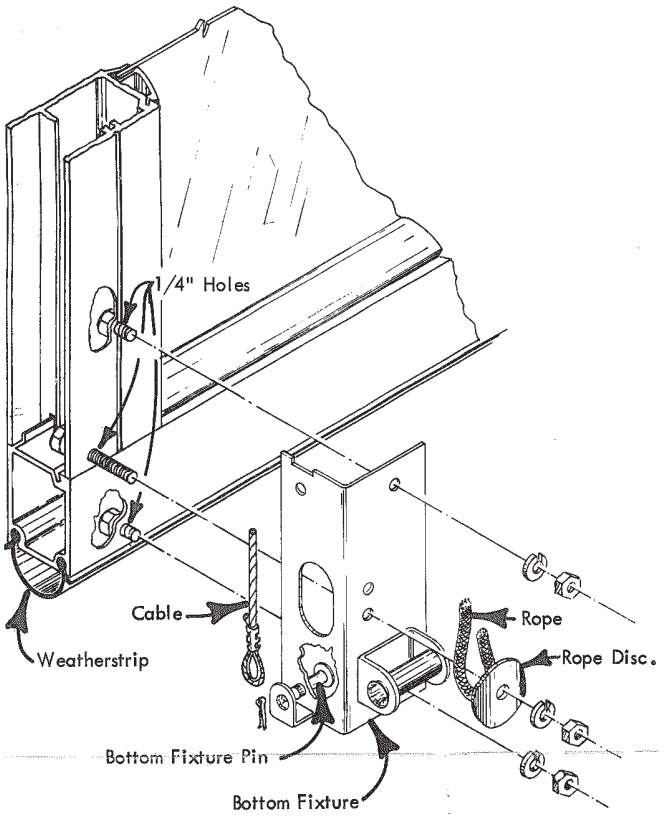


FIGURE 3

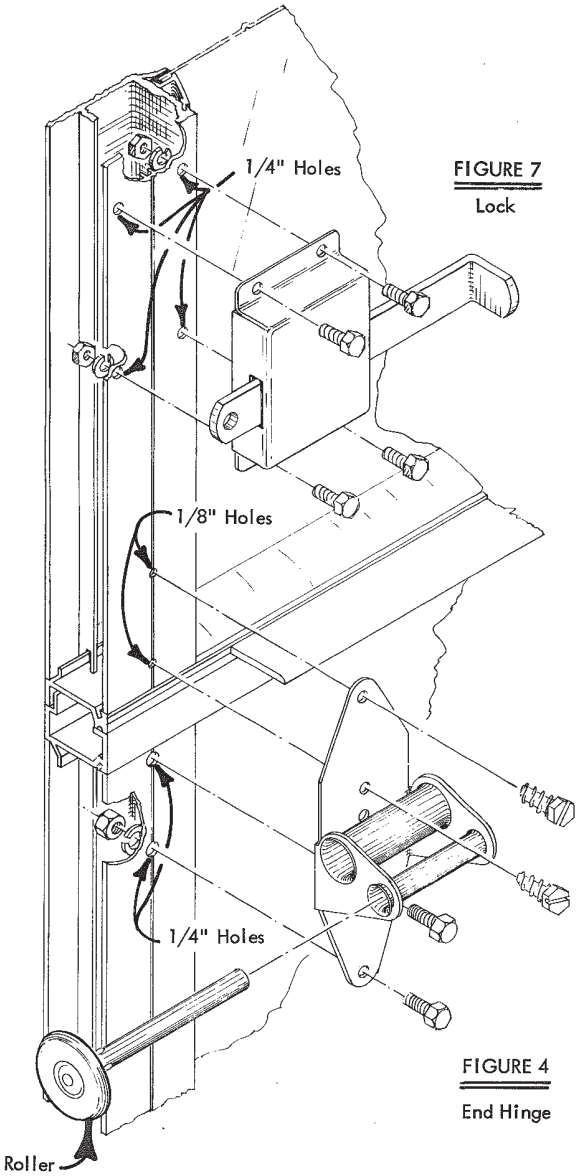


FIGURE 7
Lock

FIGURE 4
End Hinge

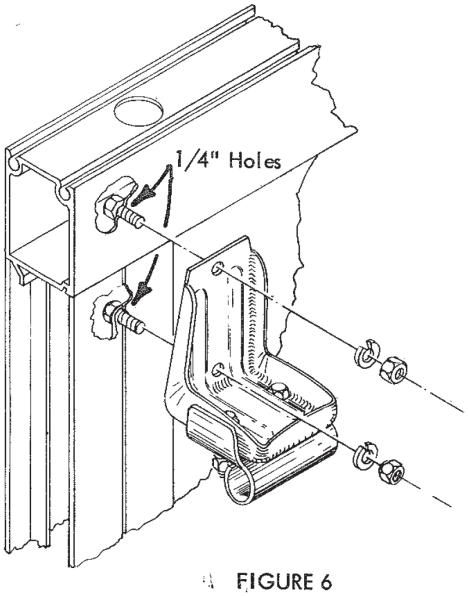


FIGURE 6

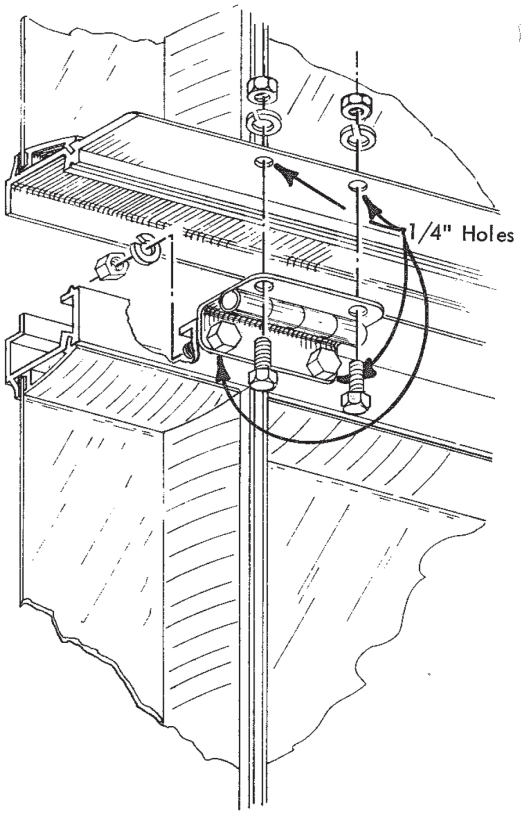
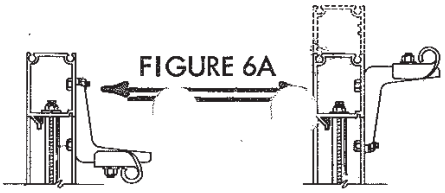
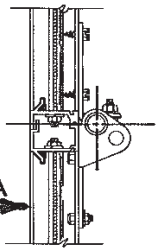


FIGURE 5

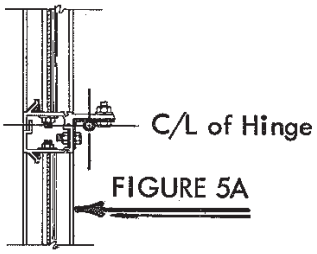
TOP FIXTURE



END HINGE



CENTER HINGE



BOTTOM FIXTURE

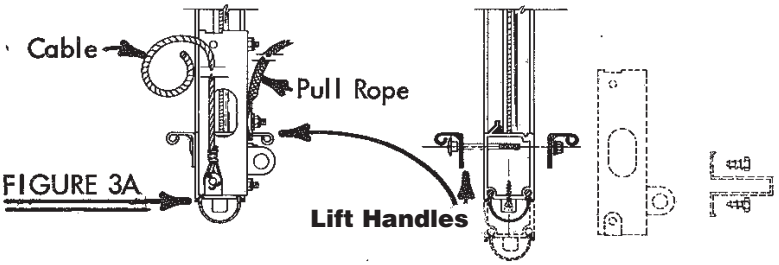


FIGURE 8

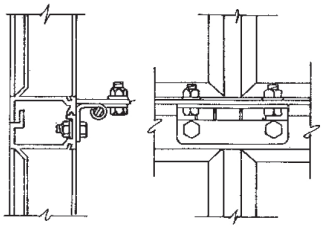


FIGURE 5B

STEP 1: Glaze all open sections as shown in glazing instructions.

STEP 2: After installing bottom fixture and weatherstrip (Figure 3 and 3A) and lift handles (Figure 8), clamp first intermediate section bottom rail to top rail of bottom section, and center hinges to bottom rail intermediate section as shown in Figure 2.

NOTE: Use lowest numbered end hinge on top rail of bottom section and increasing larger number each higher section: 2-3-4-5
or 3-5-7-9
or 2-4-6-8

Be very careful to align center line of end hinges as shown in Figure 4A and 5A. Very carefully drill 1/4" holes through bottom half of end hinges and all four holes in all center hinges (Figure 5, 5A, 5B). (Care must be given to align center hinges in center of center stiles.) Drill 1/8" holes in top half of end hinges. Release vise grips and attach bottom half of all hinges to top rail of bottom section. Repeat sequence for other sections. Drill 1/4" holes in top section as shown in Figure 6 and 6A for top fixtures. Door is now ready to install.

ERECTING THE DOOR SECTIONS

WOOD JAMBS:

STEP 3: Cut and fit the stop mold around the opening and tack temporarily in place with the inside edge extending 1/8" inside the jambs.

STEP 4: Set the bottom section in the opening with an equal overlap at each end. LEVEL THE SECTION. It may be necessary to block one or both ends of the section to hold it level. THIS IS IMPORTANT. Fasten the section temporarily against the jambs with nails driven part way into the wood and then bent slightly over the end stiles.

STEP 5: Stack the second section on top of the bottom section. Line up the end stiles and tack the section to the jambs. Stack all the remaining sections in the opening, being careful to follow the sequence of end hinges as noted in Step 2. Attach top half of all hinges to bottom of next section.

STEP 6: Place rollers as shown in Figure 4.

STEP 7: Place the cables up the ends of the door and tie off to the topmost hinge (Figure 1).

STEP 8: Fasten the adjustable jamb brackets to each vertical track with 1/4" x 5/8" spline shoulder bolts using a large lock washer under each nut (Figure 9). The shortest brackets start approximately 9" up from the bottom ends of the tracks.

Fasten the joint brackets to the tops of the vertical tracks with 1/4" x 5/8" spline shoulder bolts with small lock washers under the nuts.

If lift clearance tracks are to be used, the short tracks are now fastened to the top joint brackets with 1/4" x 5/8" spline shoulder bolts with small lock washers under the nuts. These short tracks are set at an angle to the verticals.

STEP 9: Install the vertical track as shown in Detail B-B. Raise the vertical tracks off the floor the exact amount you raised the end of the bottom section in Step 4. The top of both horizontal tracks must be level.

STEP 10: Attach the horizontal tracks to the joint bracket as shown in Figure 9. Align the headplate so tracks will be straight.

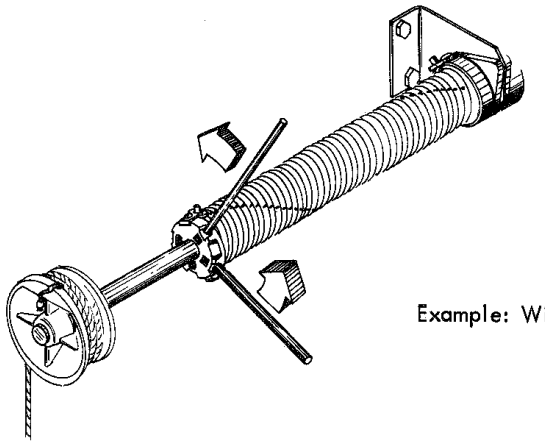
STEP 11: Support the rear of the horizontals temporarily with props from the floor or with rope or wire from above. The horizontals should have an elevation toward the rear of approximately 1/4" per foot.

STEP 12: Attach the adjustable top fixtures to the top corners of the door with 1/4" x 5/8" hex head bolts. See Figure 6 and 6A. Loosen up the bolts holding the roller carrier to the bracket so the fixture can be shortened or lengthened. Seat the roller in the track. Remove the nails holding the door to the casing.

STEEL JAMBS:

With steel jambs, the door will lap the opening 1" on each side. There will be 1/2" between edge of door and track channel. This dimension is important.

Set the vertical track on one side and weld or drill for 1/4" P.K. bolts. Set the bottom section in the opening and set the opposite track. Clamp or tack weld in place temporarily. Put the rollers in the hinges and lower sections down into vertical tracks. Set 1/2" track spacing and fasten top of verticals securely before inserting top section. After door and counterbalance are installed, raise the door and finish fastening the vertical track.



Example: Winding of Spring

ASSEMBLY SPRING AND COUNTERBALANCE

STEP 13: Assemble the counterbalance springs as shown in Figure 9B. If 3 1/2" I.D. springs are used, separate anchor brackets are included with each spring. Be very careful that the direction of coil af spring is as shown in Figure 9B.

STEP 14: Raise the counterbalancing assembly and insert the ends of the shaft through the bearings in the head brackets with an equal amount of shaft extending beyond each headplate. Line the shaft and attach the bracket or brackets to the front wall with the 5/16" x 1 3/4" lag screws or suitable fasteners.

STEP 15: Insert the end of the cable in the slot of the drum (see cable detail Figure 9B). Slide the drum tightly against the hub of the head bracket bearing and tighten the two set screws. Revolve the drum until the excess cable has been wrapped upon it. Hold the drum in this position with vise grips or a pipe wrench on the shaft to keep the cable tight. Do the same with the drum and cable on the opposite end of the shaft, equalizing the cable tension.

STEP 16: Draw a horizontal chalk mark the full length of each spring (see Figure 9B). Wind the springs using two steel bars. The chalk mark will indicate the number of turns on each spring. Wind from bottom to top. Approximately the same number of turns are to be on each spring. Use the set screws in the winding plugs to fasten the plugs tightly to the shaft. Do not use larger than a 6" wrench. When the springs are properly wound the door should lift easily. The door should clear the header when opened. It should close with little effort and stay on the floor.

COMPLETING THE INSTALLATION

STEP 17: Raise the door slowly watching the horizontal tracks. Line the horizontals the same as the verticals. Anchor the ends of the horizontals permanently with angle iron hangers (not furnished), Figure 9. Shift the rear of tracks so bottom rail of door is level and parallel with header of opening. Cables should both be tight.

STEP 18: Install bumper springs.

STEP 19: Install lock with door fully closed. Install adjustable keeper to hold door on floor.

STEP 20: Attach the closing rope to the bottom fixture as shown in Figure 3, 3A. The other end of the rope is fastened to the vertical track with a rope washer and bolt. The rope is fastened at a point one-half door height plus 2" above the floor.

STEP 21: Attach the stop molding to fit against door.

STEP 22: Oil all moving parts.

WARRANTY

The Genuine. The Original.

OVERHEAD DOOR®

One Year Limited Warranty

The authorized distributor of Overhead Door Corporation products whose name appears below ("Seller") warrants the products sold under this warranty to be free from defects in material and workmanship under normal use and service for a period of **ONE YEAR**. Labor to repair or replace is included during this warranty period. This warranty extends only to the original purchaser ("buyer"), and expires one year after the date of installation.

Seller's sold obligation under this warranty is limited to repairing or replacing any part, which shall be determined by Seller to be defective, and is conditioned upon buyer giving written notice of any such defect to Seller within the warranty period. If Seller concludes that repair or replacement is necessary, Seller will commence work within a reasonable time after the decision to repair or replace is made.

This warranty does not apply to any product which has been altered, modified, damaged or deteriorated due to abuse, neglect, misuse or by accident. Warranty will be **VOID** if any repairs are made or attempted to be made by any person not authorized by the Seller, or if proper maintenance and painting practices are not followed.

THERE IS NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER IMPLIED WARRANTY BEYOND THE ONE-YEAR PERIOD DESCRIBED ABOVE. SELLER WILL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OR FOR ANY FURTHER LOSS WHICH MAY ARISE IN CONNECTION WITH ANY CLAIM.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

Seller has not established any informal dispute settlement procedure of the type described in the Magnuson-Moss Warranty Act. Claims under this warranty must be made in writing to the Selling Distributor whose name and address appears below within the applicable warranty period. (Proof of purchase and identification as the original purchaser may be required).

DOOR TYPE: _____

OPERATOR TYPE: _____

CUSTOMER NAME (ORIGINAL PURCHASER): _____

CUSTOMER INSTALLATION LOCATION: _____

ORDER # _____

DATE OF INSTALLATION: _____

NAME OF DISTRIBUTOR/INSTALLER: _____

SIGNATURE OF DISTRIBUTOR/INSTALLER: _____

R900-972

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