



Carriage House Collection  
Models: 301, 302, 303,  
304, 307, 308, 309  
TORSION SPRING(S),  
STANDARD LIFT

INSTALLATION INSTRUCTIONS

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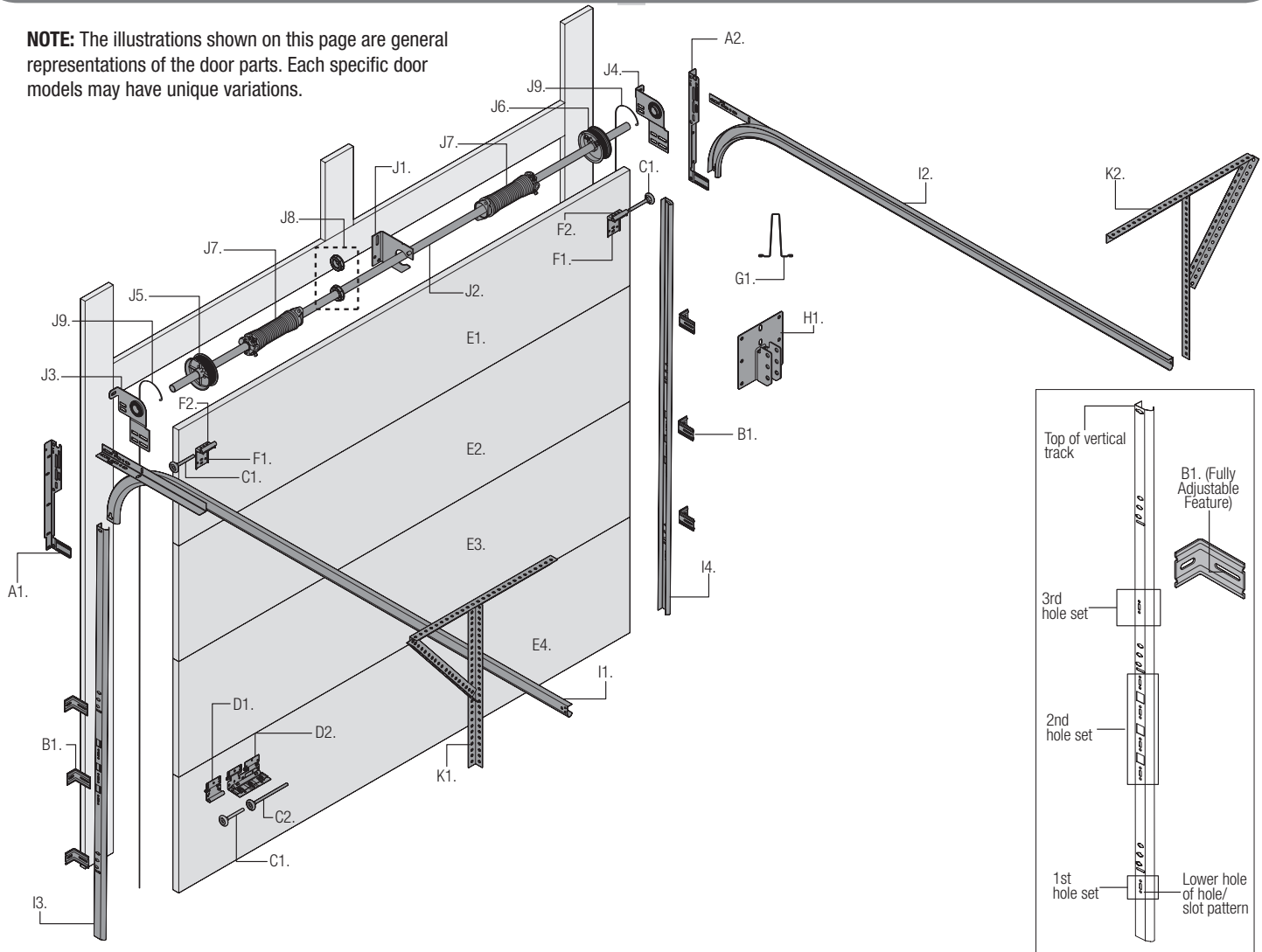
**IMPORTANT NOTICES!**

To avoid possible injury, carefully read and understand instructions completely before installing and operating the garage door. Pay close attention to all warnings and notes. After installation is complete, fasten this manual near garage door for easy reference.

Overhead Door Corporation  
2501 South State Highway 121, Suite 200, Lewisville, TX., 75067

# PARTS BREAKDOWN

**NOTE:** The illustrations shown on this page are general representations of the door parts. Each specific door models may have unique variations.



**A. FLAG ANGLES (AS REQUIRED):**

A1. Fully Adjustable (F.A.) Flag Angles

**B. JAMB BRACKETS (AS REQUIRED):**

B1. Fully Adjustable (F.A.) Jamb Brackets

**C. TRACK ROLLERS:**

C1. Short Stem Track Rollers

C2. Long Stem Track Rollers

**D. GRADUATED END HINGES:**

D1. Single Graduated End Hinges (S.E.H.), Anti-Pinch

D2. Single Graduated End Hinges (S.E.H.), Industry Standard

**E. STACKED SECTIONS:**

E1. Top Section

E2. Intermediate(s) Section

E3. Lock Section

E4. Bottom Section

**F. TOP FIXTURE (AS REQUIRED):**

F1. Top Fixture Bases - (L-Shaped)

F2. Top Fixture Slides - (L-Shaped)

**G. STRUT(S) (AS REQUIRED):**

G1. Strut (U-shaped)

**H. DRAWBAR OPERATOR BRACKET (FOR TROLLEY OPERATED DOORS):**

H2. Drawbar Operator Bracket

**I. TRACKS:**

I1. Left Hand Horizontal Track Assembly

I2. Right Hand Horizontal Track Assembly

I3. Left Hand Vertical Track

I4. Right Hand Vertical Track

**J. TORSION SPRING ASSEMBLY:**

J1. Center Bracket

J2. Torsion Shaft

J3. Left Hand End Bearing Bracket

J4. Right Hand End Bearing Bracket

J5. Left Hand Cable Drum

J6. Right Hand Cable Drum

J7. Right Hand and Left Hand Torsion Springs (As Required)

J8. Center Bracket Bushing

J9. Counterbalance Lift Cables

**K. REAR BACK HANGS:**

K1. Left Hand Rear Back Hang Assemblies

K2. Right Hand Rear Back Hang Assemblies

## Safety Information

**OVERVIEW OF POTENTIAL HAZARDS:** READ THIS SAFETY INFORMATION CONVENTIONS USED IN THESE INSTRUCTIONS:

Garage 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 trained door system technician or visit our website.

The following Safety Alert symbol and signal words are used throughout this manual to call attention to and identify different levels of hazard and special instructions.

### **WARNING**

**THIS IS THE SAFETY ALERT SYMBOL. THIS SYMBOL ALERTS YOU TO POTENTIAL HAZARDS THAT CAN KILL OR HURT YOU AND OTHERS. ALL SAFETY MESSAGES WILL FOLLOW THE SAFETY ALERT SYMBOL AND THE WORD “DANGER”, “WARNING”, OR “CAUTION”.**







**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.

**NOTE:** Indicates important steps to be followed or important considerations.

**IMPORTANT SAFETY INSTRUCTIONS: READ AND FOLLOW ALL INSTRUCTIONS SAVE THESE INSTRUCTIONS**

Potential Hazard	Effect	Prevention
	 <b>WARNING</b> 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 Opener. Do NOT operate a Door that jams or one that has a broken spring.
	 <b>WARNING</b> Could result in Death or Serious Injury	Turn OFF power before removing opener cover. When replacing cover, make sure wires are NOT pinched or near moving parts. Opener must be fully grounded.
	 <b>WARNING</b> Could result in Death or Serious Injury	Do NOT try to remove, install, repair or adjust springs or anything to which door spring parts are fastened, such as, wood blocks, steel brackets, cables or other like items. Installations, repairs and adjustments must be done by a trained door system technician using proper tools and instructions.

### READ THIS SAFETY INFORMATIONS:

Read this installation instruction booklet completely before starting installation of the door. If you have questions or do not understand the information presented in these instructions, call your nearest trained door system technician.

While not required for extension spring systems, consider having a trained door system technician install this door for the optimum installation and performance.

You can install your new garage door yourself, if...

- a) You have help (it may weigh up to 500 lbs.),
- b) You have the right tools and reasonable mechanical aptitude or experience, and
- c) You follow these instructions very carefully.

Garage doors use springs to balance them. There are two types of springs installed — extension or torsion. Each of these is available in either a standard or low ceiling assembly option. Please look at the drawings to see which spring type your old door has.

### **WARNING**

**IF YOUR OLD DOOR OR NEW DOOR USES TORSION SPRINGS, DO NOT ATTEMPT TO REMOVE, INSTALL, REPAIR OR ADJUST THE SPRINGS YOURSELF. HAVE A TRAINED DOOR SYSTEM TECHNICIAN REMOVE, INSTALL, REPAIR OR ADJUST THEM. ATTEMPTING TO REMOVE, INSTALL, REPAIR OR ADJUST A TORSION SPRING ASSEMBLY WITHOUT PROPER TRAINING OR TOOLS MAY RESULT IN AN UNCONTROLLED RELEASE OF SPRING FORCES WHICH CAN CAUSE SERIOUS INJURY.**

- In removing a garage door that has Extension springs, follow the instructions carefully, including the use of C-clamps or locking pliers on both sides of the door in order to keep the door from moving once the springs are removed.
- Low Headroom doors require special instructions. Check headroom requirements located in Preparing The Opening, before beginning.
- Be sure all hardware components for your new door are included before removing existing door. If your door is missing any parts, call the company from whom you purchased your unit.
- Allow enough time to do the work; removing an existing door will take approximately 1-3 hours.
- A typical installation takes between 9 and 12 hours to complete.
- Keep in mind when planning the installation that the garage will be open and unsecured when disassembling the old and assembling the new door.
- If the garage door is the only opening in the structure make sure everything you need is inside. You will have no way of leaving the garage until the track is assembled and installed. This will take approximately 5 hours.
- Never reuse old track or hardware. Only the track specified and supplied with the door should be used.
- To avoid damage to the door, you must reinforce the top section of the door in order to provide a strengthened mounting point for attachment of an automatic opener.
- Original replacement parts are recommended if repairs are ever required to your door.
- Be sure that your garage complies with all applicable state and or local ventilation requirements before you enclose any vehicles in the garage. Good ventilation avoids fire and health hazards caused by fumes accumulating within a well-sealed garage.
- Do NOT permit children to play beneath or with any garage door or electric operating controls.
- Keep hands and fingers clear of section joints, track, and other door parts when the door is opening and closing to avoid injury. If lift handles are provided, ensure that the lift handles are located for safe operation as well as easy use.
- Bolts must be installed at the rear end of horizontal tracks. These act to stop the rollers and keep the door from rolling off the back of the track.
- Track installations must use sway braces on the rear track hangers to prevent sideways movement. If the tracks are NOT firmly stabilized they might spread, allowing the door to fall and cause severe injury and damage.
- Springs, cables, and Bottom Corner Brackets are under strong spring tension. Do NOT attempt to remove, repair or adjust any fasteners on these components or anything to which these parts are attached, such as wood blocks, steel brackets, or other like items. You could suddenly release spring forces and risk severe injury.
- If the garage door and/or any of the supporting tracks are damaged, operating the door could be hazardous. Take the door out of service and call a trained door system technician to promptly service or repair the door.
- **KEEP DOORS PROPERLY BALANCED.** An improperly balanced door increases the risk of severe injury or death. Have a trained door system technician make repairs to cables, spring assemblies and other hardware as necessary.
- Doors equipped with automatic door operators can cause serious injury or death if NOT properly adjusted and operated. To ensure safety of these doors:
  - a) Never let children operate or play with the door controls. Keep the remote control away from children,
  - b) Always keep the moving door in sight and people and objects away from the door until the door is completely closed. NO ONE SHOULD CROSS THE PATH OF THE MOVING DOOR,
  - c) NEVER GO UNDER A STOPPED, PARTIALLY OPEN DOOR,
  - d) Test operator monthly. The door MUST reverse on contact with a 1-1/2" high object (or a 2" x 4" board laid flat) at the center of the doorway on the floor. If the door does NOT reverse, re-test the door operator after adjusting either the force or the limit of travel in accordance with the manufacturer's instructions. Failure to adjust the operator properly may result in severe injury or death,
  - e) When possible, use the emergency release only when the door is closed. Use caution when using this release with the door open. Weak or broken springs are capable of increasing the rate and force of door closure and increasing the risk of severe injury or death, and
  - f) If your door has a pull down rope or locking mechanism, you must remove the rope and either disable or remove any door locks.

## ⚠ WARNING

**PRIOR TO WINDING OR MAKING ADJUSTMENTS TO THE SPRINGS, ENSURE YOU'RE WINDING IN THE PROPER DIRECTION AS STATED IN THE INSTALLATION INSTRUCTIONS. OTHERWISE, THE SPRING FITTINGS MAY RELEASE FROM SPRING IF NOT WOUND IN THE PROPER DIRECTION AND COULD RESULT IN SEVERE OR FATAL INJURY.**

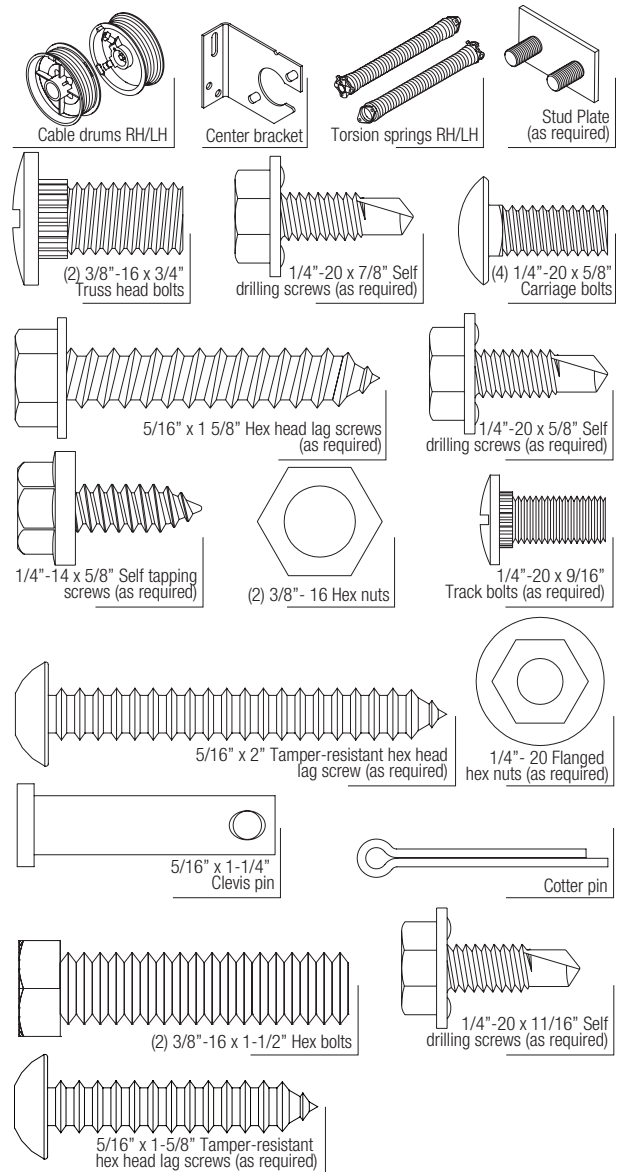
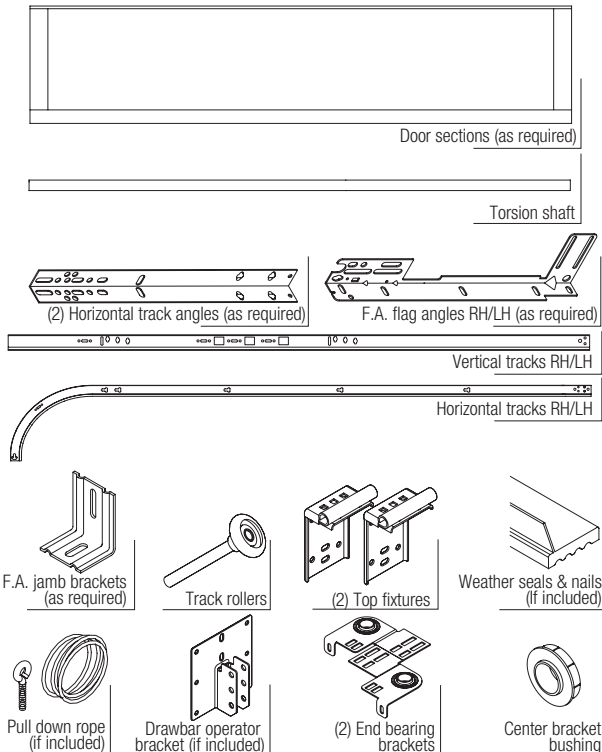
**IMPORTANT:** RIGHT AND LEFT HAND IS ALWAYS DETERMINED FROM INSIDE THE BUILDING LOOKING OUT.

## Tools Required

- Power drill
- Drill bits: 1/8", 3/16", 9/32", 7/16", 1/2"
- Ratchet wrench
- Socket driver: 7/16"
- Sockets: 7/16", 1/2", 9/16", 5/8"
- Phillips head screwdriver
- Locking Pliers
- (2) Vice clamps
- Wrenches: 3/8", 7/16", 1/2", 9/16", 5/8"
- 1/4" Torx bit
- Approved winding rods
- Hammer
- Tape measure
- Step Ladder
- Level
- Pencil
- Leather gloves
- Safety glasses

## Package Contents

**NOTE:** Depending on the door model, some parts listed will not be supplied if not required. Rear Back Hangs may not be included with your door.



## Door Section Identification

Graduated end and center hinges are always pre-attached at the top of each section (except top section) and the graduated end hinges are stamped for identification, #1, #2, #3, and #4 (#4 only on five section doors). The stamp identifies the stacking sequence of the section. The sequence is always determined by #1 being the bottom section to #3 or #4 being the highest intermediate section. If the stamp on the graduated end hinge is illegible, refer to the section side view illustration. The section side view illustration shows the graduated end hinge profile of all sections, and can also be used to identify each section.

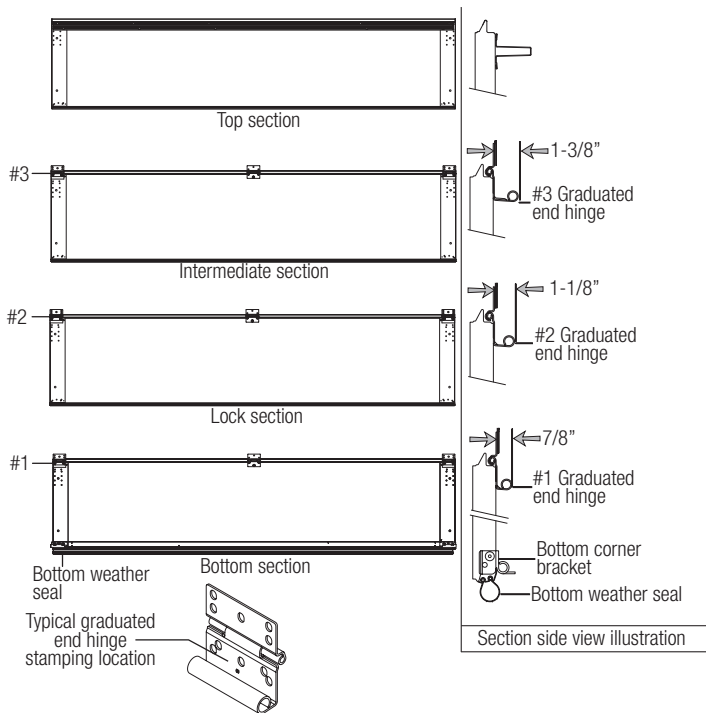
The **BOTTOM SECTION** can be identified by #1 graduated end hinges, the factory attached bottom astragal and by the factory attached bottom corner brackets.

The **LOCK SECTION** can be identified by #2 graduated end hinges on a 4 section high door and by #3 graduated end hinges on a 3 section high door.

The **INTERMEDIATE SECTION** can be identified by #3 graduated end hinges (Only on a 4 section high door).

**NOTE:** #4 graduated end hinges are used on the fourth section of five section doors.

The **TOP SECTION** can be identified with no pre-installed graduated end or center hinges.



## Removing an Existing Door

**IMPORTANT:** COUNTERBALANCE SPRING TENSION MUST ALWAYS BE RELEASED BEFORE ANY ATTEMPT IS MADE TO START REMOVING AN EXISTING DOOR.

### WARNING

**A POWERFUL SPRING RELEASING ITS ENERGY SUDDENLY CAN CAUSE SEVERE OR FATAL INJURY. TO AVOID INJURY, HAVE A TRAINED DOOR SYSTEM TECHNICIAN, USING PROPER TOOLS AND INSTRUCTIONS, RELEASE THE SPRING TENSION.**

## Preparing the Opening

**IMPORTANT:** IF YOU JUST REMOVED YOUR EXISTING DOOR OR YOU ARE INSTALLING A NEW DOOR, COMPLETE ALL STEPS IN PREPARING THE OPENING.

To ensure secure mounting of track brackets, side and center brackets, or steel angles to new or retro-fit construction, it is recommended to follow the procedures outlined in DASMA technical data sheets #156, #161 and #164 at [www.dasma.com](http://www.dasma.com).

The inside perimeter of your garage door opening should be framed with wood jamb and header material. The jambs and header must be securely fastened to sound framing members. It is recommended that 2" x 6" lumber be used. The jambs must be plumb and the header level. For low headroom applications, the jambs should extend to the ceiling height. Minimum side clearance required, from the opening to the wall, is 3-1/2" (89 mm).

**IMPORTANT:** CLOSELY INSPECT JAMBS, HEADER AND MOUNTING SURFACE. ANY WOOD FOUND NOT TO BE SOUND, MUST BE REPLACED.

For Torsion counterbalance systems, a suitable mounting surface (2" x 6") must be firmly attached to the wall, above the header at the center of the opening.

**NOTE:** Drill a 3/16" pilot hole in the mounting surface to avoid splitting the lumber. Do not attach the mounting surface with nails.

### Weather seal (may not be included):

Cut or trim the weather seal (if necessary) to the header and jambs.

**NOTE:** If nailing product at 40°F or below, pre-drilling is required.

Align the header seal 1/8" to 1/4" inside the header, and temporarily secure it to the header with equally spaced nails. Next, fit the jamb seals up tight against the header seal and 1/8" to 1/4" inside the jamb. Temporarily secure the jamb seals with equally spaced nails. This will keep the bottom section from falling out of the opening during installation. Equally space nails approximately 12" to 18" apart.

**NOTE:** Do not permanently attach weather seal to the jamb at this time.

**Headroom requirement:** Headroom is defined as the space needed above the top of the door for tracks, springs, etc. to allow the door to open properly. If the door is to be motor

operated, 2-1/2" (64 mm) of additional headroom is required.

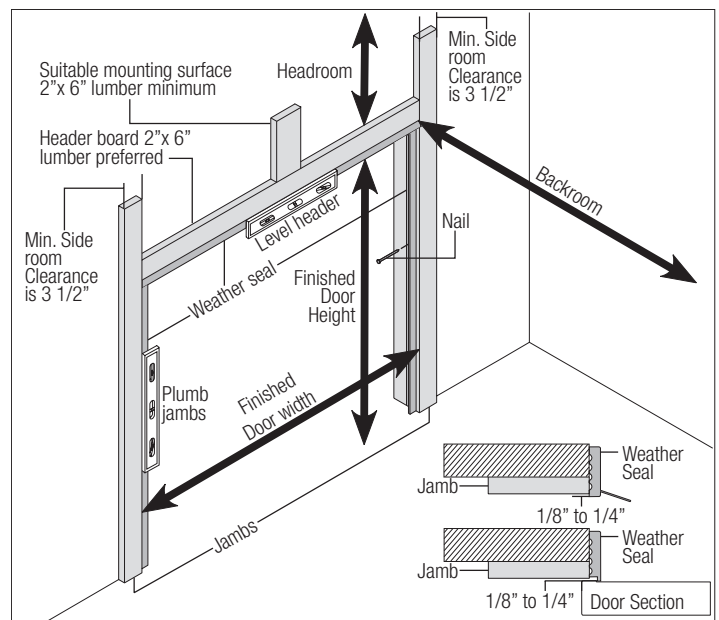
**Backroom requirement:** Backroom is defined as the distance needed from the opening back into the garage to allow the door to open fully.

### BACKROOM REQUIREMENTS

DOOR HEIGHT	TRACK	MANUAL LIFT	MOTOR OPERATED
6'0" - 7'0"	15" Radius	98" (2489 mm)	125" (3175 mm)
7'1" - 8'0"	15" Radius	110" (2794 mm)	137" (3480 mm)

### HEADROOM REQUIREMENTS

TRACK TYPE	SPACE NEEDED
15" Radius Track	14 1/2" (368 mm)



# INSTALLATION

Before installing your door, be certain that you have read and followed all of the instructions covered in the pre-installation section of this manual. Failure to do so may result in an improperly installed door.

**NOTE:** Reference TDS 160 for general garage door terminology at [www.dasma.com](http://www.dasma.com).

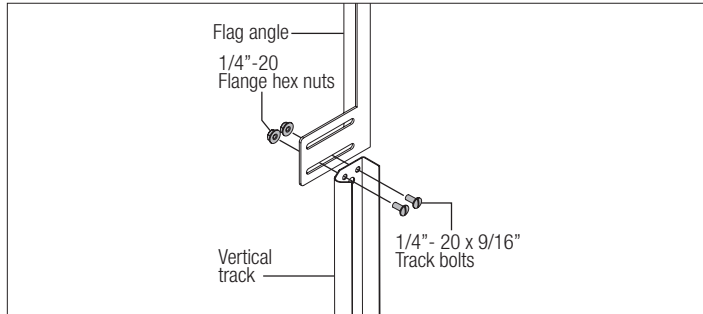
1

## Attaching Flag Angles to Vertical Tracks

Tools: None

**NOTE:** Flag angles are right and left handed.

Hand tighten the left hand flag angle to the left hand vertical track using (2) 1/4"-20 x 9/16" track bolts and (2) 1/4"-20 flange hex nuts. Repeat for other side. Flange nuts will be secured after flag angle spacing is completed in step, Top Section.



2

## Attaching F.A. Jamb Brackets

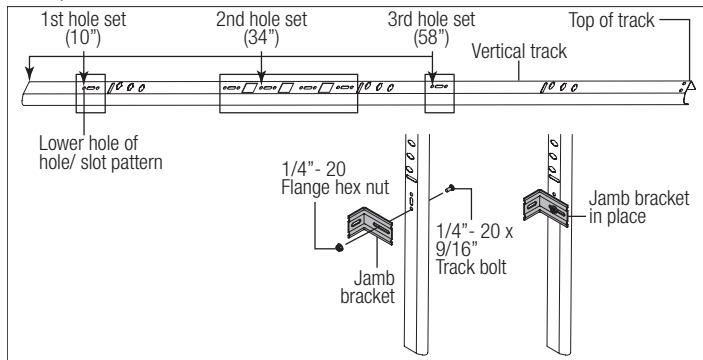
Tools: None

**NOTE:** The bottom jamb bracket is always the shortest bracket, while the center jamb bracket is the next tallest. If three jamb brackets per side are included with your door, you will have received a top jamb bracket, which is the tallest.

To attach the bottom jamb bracket, locate lower hole of the hole/ slot pattern of the 1st hole set on the vertical track. Align the slot in the jamb bracket with the lower hole of the hole/ slot pattern. Secure jamb bracket using (1) 1/4"-20 x 9/16" track bolt and (1) 1/4"-20 flange hex nut. Repeat for other side.

Place the center jamb bracket over the lower hole of the hole/ slot pattern that is centered between the bottom jamb bracket and flag angle of the 2nd hole set. Secure jamb bracket using (1) 1/4"-20 x 9/16" track bolt and (1) 1/4"-20 flange hex nut. Repeat for other side.

If a top jamb bracket was included, secure it to vertical track using the lower hole of the hole/ slot pattern in the 3rd hole set and (1) 1/4"-20 x 9/16" track bolt and (1) 1/4"-20 flange hex nut. Repeat for other side.



3

## Horizontal Track Angles

Tools: Hammer, 9/16" Wrench

**NOTE:** For larger doors, a full length horizontal track angle may not already be spot welded to the horizontal track. If the horizontal track angle is not welded, the horizontal track angle will be installed, as shown.

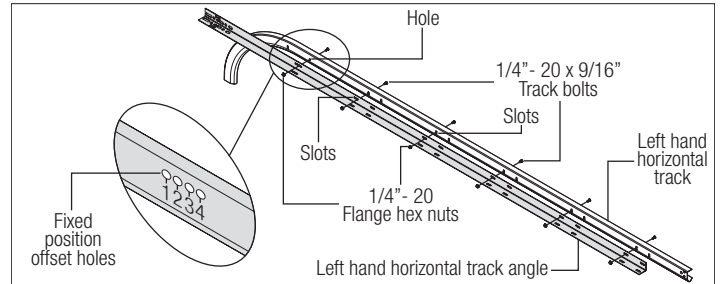
Position the left hand horizontal track angle up against the left hand horizontal track, as shown.

Referring to the horizontal track angle schedule, align one of the fixed position offset holes (1, 2, 3, 4) in the horizontal track angle with the hole in the horizontal track. Fasten using (1) 1/4"-20 x 9/16" track bolt and (1) 1/4"-20 flange hex nut. Align the rest of the slots in the horizontal track angle with the slots in the horizontal track. Secure the horizontal track angle to the horizontal track using 1/4"-20 x 9/16" track bolts and 1/4"-20 flange hex nuts, as shown.

Repeat same process for the right hand side. Set tracks aside.

Horizontal Track Angle Schedule

Door Height	How Many Sections High	Fixed Position Offset Holes			
		1	2	3	4
7'0" - 8'0"	3 Or 4	X	-	-	-



4

## Cable Drum Assemblies and Track Rollers

Tools: None

**NOTE:** The bottom section can be identified by the smallest graduated edge hinge of the factory installed graduated edge hinges, see Parts Breakdown on page 2.

### WARNING

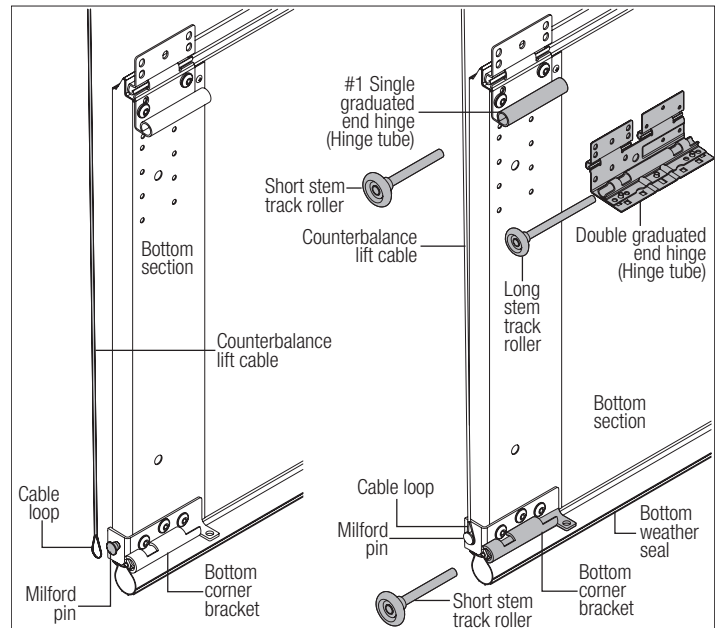
**FAILURE TO ENSURE TIGHT FIT OF CABLE LOOP OVER MILFORD PIN COULD RESULT IN COUNTERBALANCE LIFT CABLE COMING OFF THE PIN, ALLOWING THE DOOR TO FALL, POSSIBLY RESULTING IN SEVERE OR FATAL INJURY.**

Uncoil the counterbalance lift cables. Starting on the left hand side, place the cable loop on the milford pin of the bottom corner bracket. Insert a short stem track roller into the factory attached bottom corner bracket and another into the #1 graduated end hinge at the top of the bottom section. Repeat for other side.

**NOTE:** Check to ensure cable loops fits tightly over the milford pins.

**NOTE:** Larger doors will use long stem track rollers with double graduated end hinges.

**NOTE:** Verify bottom weather seal is aligned with bottom section. If there is more than 1/2" excess weather seal on either side, trim weather seal even with bottom section.

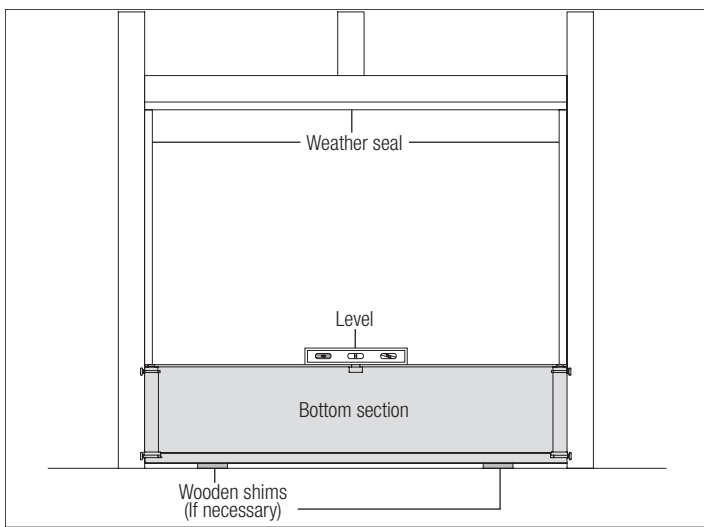


5

## Bottom Section

Tools: Level, Wooden shims (if necessary)

Center the bottom section in the door opening. Level the section using wooden shims (if necessary) under the bottom section.



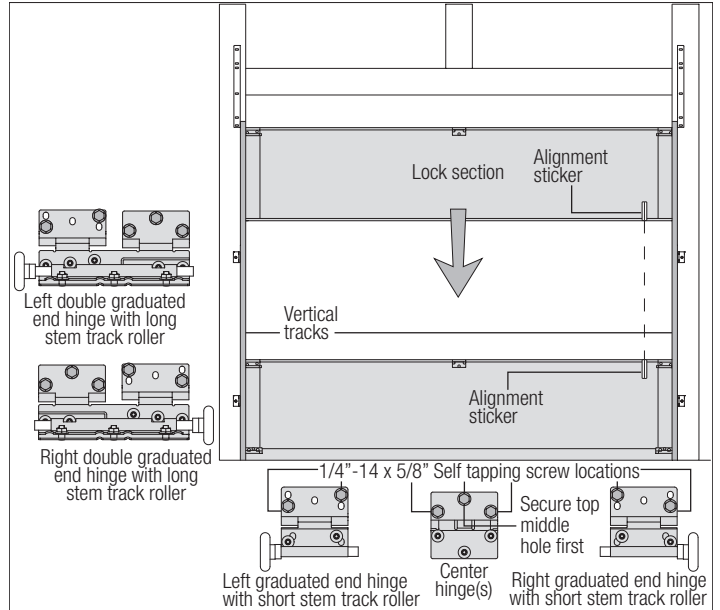
section until it is seated against bottom section. Align vertical marks in the upper alignment sticker, with the lower alignment sticker on right hand side, on the back of door. Keep sections aligned and fasten center hinge(s) first; then end hinges last using 1/4"-14 x 5/8" self tapping screws.

**NOTE:** To prevent center hinge leaf(s) from rotating, first secure the top middle hole of the center hinge leaf with one 1/4" - 14 x 5/8" self-tapping screw then secure the other two holes.

**NOTE:** Larger doors with double graduated end hinges, fasten both hinges to connect the sections using 1/4" - 14 x 5/8" self-tapping screws.

Repeat same process for other sections, except top section.

**IMPORTANT:** PUSH & HOLD THE HINGE LEAFS SECURELY AGAINST THE SECTIONS WHILE SECURING WITH 1/4"-14 X 5/8" SELF TAPPING SCREWS. THERE SHOULD BE NO GAP BETWEEN THE HINGE LEAFS AND THE SECTIONS.



## 6

### Vertical Tracks

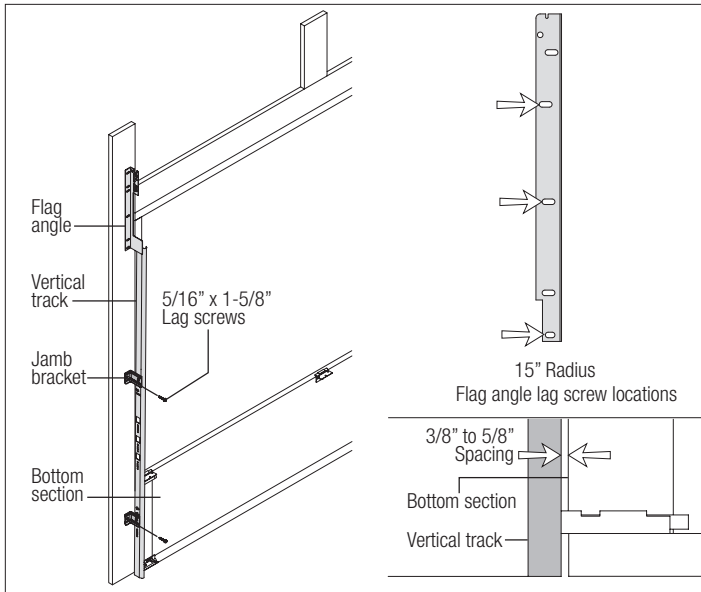
Tools: Power Drill, 3/16" Drill bit, 7/16" Socket driver, Tape measure, Level, Step ladder

**IMPORTANT:** IF YOUR DOOR IS TO BE INSTALLED PRIOR TO A FINISHING CONSTRUCTION OF THE BUILDING'S FLOOR, THE VERTICAL TRACKS AND THE DOOR BOTTOM SECTION ASSEMBLY SHOULD BE INSTALLED SUCH THAT WHEN THE FLOOR IS CONSTRUCTED, NO DOOR OR TRACK PARTS ARE TRAPPED IN THE FLOOR CONSTRUCTION.

**IMPORTANT:** THE TOPS OF THE VERTICAL TRACKS MUST BE LEVEL FROM SIDE TO SIDE. IF THE BOTTOM SECTION WAS SHIMMED TO LEVEL IT, THE VERTICAL TRACK ON THE SHIMMED SIDE MUST BE RAISED THE HEIGHT OF THE SHIM.

Position the left hand vertical track assembly over the rollers of the bottom section. Make sure the counterbalance cable is located between the rollers and the door jamb. Drill 3/16" pilot holes into the door jamb for the lag screws.

Loosely fasten jamb brackets and flag angle to the jamb using 5/16" x 1-5/8" lag screws. Tighten lag screws, securing the bottom jamb bracket to jamb, maintain 3/8" to 5/8" spacing as shown between the bottom section and vertical track. Hang counterbalance cable over flag angle. Repeat for other side.



## 7

### Stacking Sections

Tools: Power drill, 7/16" Socket driver

**NOTE:** The sections can be identified by the graduation of the factory installed end hinges. The smallest graduated end hinge on section should be stacked on top of the bottom section, with each graduated end hinge increasing as the sections are stacked, see Parts Breakdown on page 2.

**NOTE:** Make sure graduated end and center hinges are flipped down, when stacking another section on top.

**NOTE:** Larger doors will use long stem track rollers with double graduated end hinges.

Place track rollers into graduated end hinges of remaining sections.

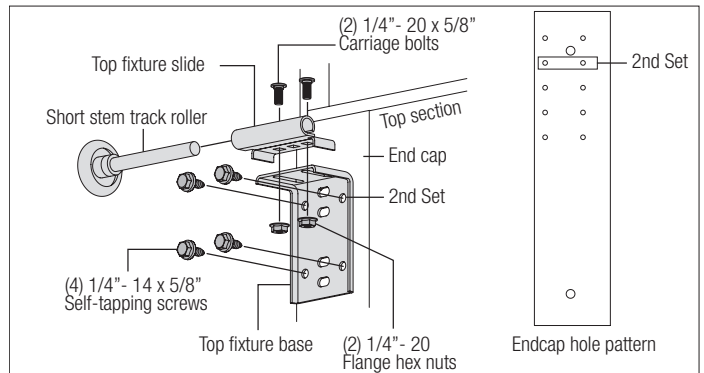
With assistance, lift second section and guide the track rollers into the vertical tracks. Lower

## 8

### Top Fixtures

Tools: Power drill, 7/16" Socket driver

To install the top fixtures, align the top holes in the top fixture base with the second set of holes in the end cap of the top section. Fasten to section using (4) 1/4"-14 x 5/8" self tapping screws. Secure the top fixture slide to the fixture base loosely using (2) 1/4"-20 x 5/8" carriage bolts and (2) 1/4"-20 flange hex nuts. The top fixture slide will be tightened and adjusted later, in step, Adjusting Top Fixture. Insert track roller into top fixture slide. Repeat for other side.



## 9

### Operator Bracket

Tools: Power drill, 7/16" Socket driver, Phillips head screwdriver, Vice clamps, Tape measure

**NOTE:** If installing a trolley type operator, complete this step. If not, skip this step and continue with next step.

**IMPORTANT:** WHEN INSTALLING A TROLLEY TYPE OPERATOR ON THIS DOOR, AN OVER-HEAD DOOR TROLLEY BRACKET MUST BE SECURELY ATTACHED TO THE TOP SECTION. IT IS THEN UNNECESSARY TO FURTHER REINFORCE THE TOP SECTION OF THIS DOOR, WHEN ATTACHING A TROLLEY TYPE OPERATOR, AS LONG AS THE INSTALLATION OF THE OPERATOR IS ACCORDING TO INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL AND FORCE SETTINGS ARE ADJUSTED PROPERLY.

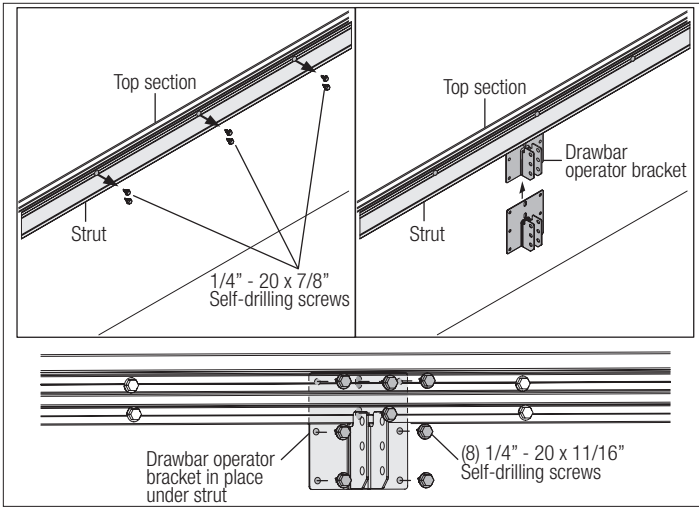
Remove, but retain (4-6) 1/4" - 20 x 7/8" self drilling screws from the center of the strut, allowing the operator bracket to slide between the section and the strut.

**NOTE:** For retro fit applications, the operator bracket must be aligned with an existing operator.

Locate the center of the top section and slide operator bracket under strut till the operator bracket is seated against the strut flanged.

**NOTE:** Prior to fastening operator bracket to top section, ensure the top edge of operator bracket is aligned with the top edge of the section as shown.

Attach the operator bracket using (8) 1/4" - 20 x 11/16" self drilling screws (as shown). Finish re-attaching the strut using the self tapping screws removed previously.



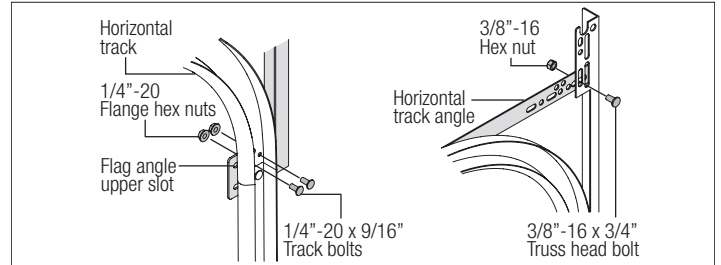
## ⚠ WARNING

**DO NOT RAISE DOOR UNTIL HORIZONTAL TRACKS ARE SECURED AT REAR, AS OUTLINED IN STEP, REAR BACK HANGS, OR DOOR COULD FALL FROM OVERHEAD POSITION CAUSING SEVERE OR FATAL INJURY.**

Level the horizontal track assembly and bolt the horizontal track angle to the first encountered slot in the flag angle using (1) 3/8"-16 x 3/4" truss head bolt and (1) 3/8"-16 hex nut. Repeat for other side.

Remove the nail that was temporarily holding the top section in place, installed in step, Top Section.

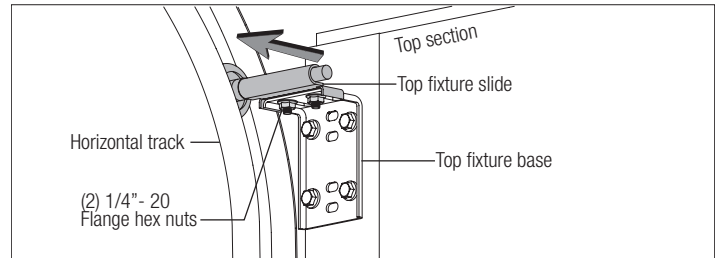
**IMPORTANT:** FAILURE TO REMOVE NAIL BEFORE ATTEMPTING TO RAISE DOOR COULD CAUSE PERMANENT DAMAGE TO TOP SECTION.



## 12 Adjusting Top Fixtures

Tools: 7/16" Wrench, Step ladder

With horizontal tracks installed, you can now adjust the top fixtures. Vertically align the top section of the door with the lower sections. Once aligned, position the top fixture slide, out against the horizontal track. Maintaining the slide's position, tighten the (2) 1/4"-20 flange hex nuts to secure the top fixture slide to the top fixture base. Repeat for other side.



## 13 End Bearing Brackets

Tools: Step ladder, Power drill, Ratchet wrench, 7/16" Socket driver, 9/16" Socket, 9/16" Wrench

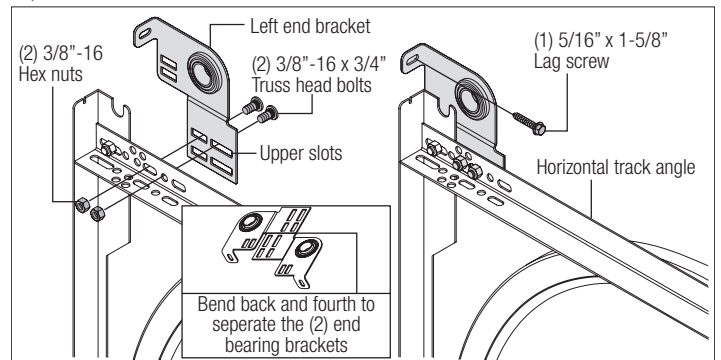
**IMPORTANT:** RIGHT AND LEFT HAND IS ALWAYS DETERMINED FROM INSIDE THE BUILDING LOOKING OUT.

**NOTE:** End brackets are right and left hand.

Break the end bearing brackets apart. Attach the left hand end bearing bracket through either the end bearing bracket's upper slots to the left hand horizontal track angle using (2) 3/8"-16 x 3/4" truss head bolts and (2) 3/8"-16 nuts.

**IMPORTANT:** THE UPPER SLOTS ARE USED ON DOORS WITH 15" RADIUS TRACK.

Secure the top of the end bearing bracket to the jamb with (1) 5/16" x 1-5/8" lag screw. Repeat for other side.



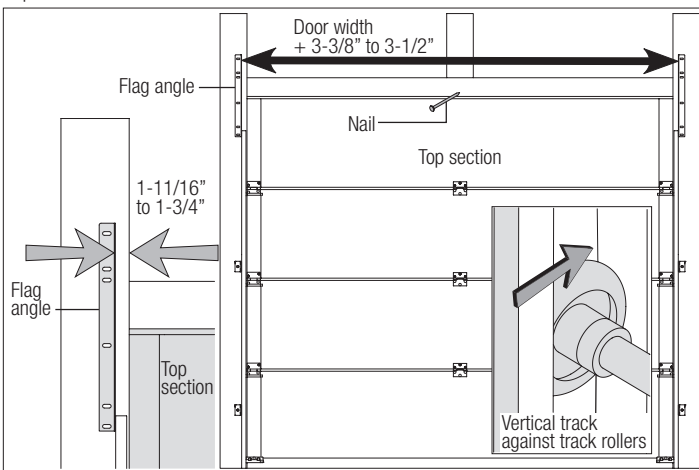
## 10 Top Section

Tools: Hammer, Step ladder, Tape measure

Place the top section in the opening. Temporarily secure the top section by driving a nail into the header near the center of the door and bending it over the top section. Now, flip up the graduated end hinge and center hinge leaves, hold tight against section, and fasten center hinges first and end hinges last (refer to step, Stacking Sections). Vertical track alignment is critical. Position flag angle between 1-11/16" (43 mm) to 1-3/4" (44 mm) from the edge of the door; tighten the bottom lag screw. Flag angles must be parallel to the door sections. Repeat same process for other side.

**IMPORTANT:** THE DIMENSION BETWEEN THE FLAG ANGLES MUST BE DOOR WIDTH PLUS 3-3/8" (86MM) TO 3-1/2" (89 MM) FOR SMOOTH, SAFE DOOR OPERATION.

Complete the vertical track installation by securing the jamb bracket(s) and tightening the other lag screws. Push the vertical track against the track rollers so that the track rollers are touching the deepest part of the curved side of the track; tighten all the track bolts and nuts. Repeat for other side.



## 11 Horizontal Tracks/F.A. Flag Angles

Tools: Ratchet wrench, 7/16" Socket, 9/16" Socket, 9/16" Wrench, level, Step ladder

To install horizontal track, place the curved end over the top track roller of the top section. Align the bottom of the horizontal track with the top of the vertical track. Tighten the horizontal track to the flag angle with (2) 1/4"-20 x 9/16" track bolts and (2) 1/4"-20 flange hex nuts.



# 14

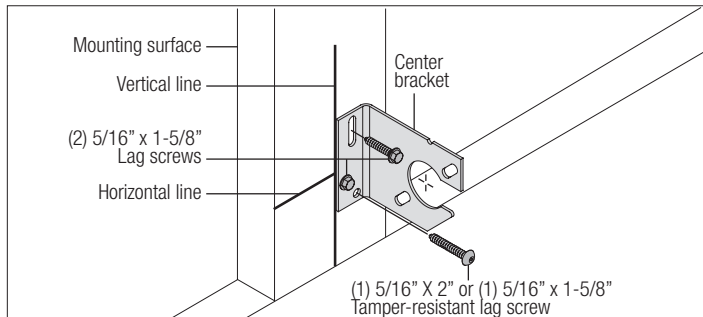
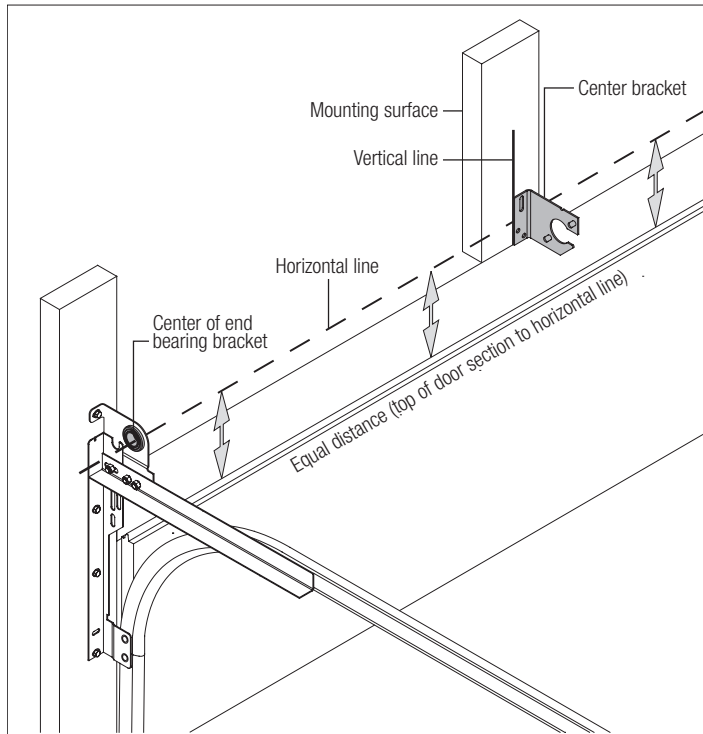
## Center Bracket Bushing Assembly

Tools: Step ladder, Power drill, 7/16" Socket driver, 1/4" Torx bit, Level, Tape measure, Pencil

Locate the center of the door. Mark a vertical pencil line on the mounting surface above the door, at the center. Measure from the center of the bearing, in one of the end bearing brackets, downwards, to the top of the door. Using that measurement, measure that distance upwards from the top of the door to the mounting surface and mark a horizontal pencil line which intersects the vertical pencil line. Align the edge of the center bracket with the vertical pencil line and the center of the center bracket with the horizontal pencil line; this is to ensure the torsion shaft is level between the center and end bearing brackets.

Attach the center bracket to the mounting surface, using (2) 5/16" x 1-5/8" lag screws and (1) 5/16" x 2" tamper-resistant lag screw.

**IMPORTANT:** USE A 5/16" X 1-5/8" TAMPER-RESISTANT LAG SCREW INSTEAD OF THE 5/16" X 2" TAMPER-RESISTANT LAG SCREW IF MOUNTING SURFACE IS MOUNTED OVER MASONRY. TAMPER-RESISTANT LAG SCREW MUST BE ATTACHED THROUGH THE BOTTOM HOLE OF THE CENTER BEARING BRACKET.



# 15

## Torsion Spring Assembly

Tools: Step Ladder

**IMPORTANT:** RIGHT AND LEFT HAND IS ALWAYS DETERMINED FROM INSIDE THE BUILDING LOOKING OUT.

**CAUTION:** IDENTIFY THE TORSION SPRINGS PROVIDED AS EITHER RIGHT HAND WOUND (RED WINDING CONE), WHICH GOES ON THE LEFT HAND SIDE OR LEFT HAND WOUND (BLACK WINDING CONE), WHICH GOES ON THE RIGHT HAND SIDE.

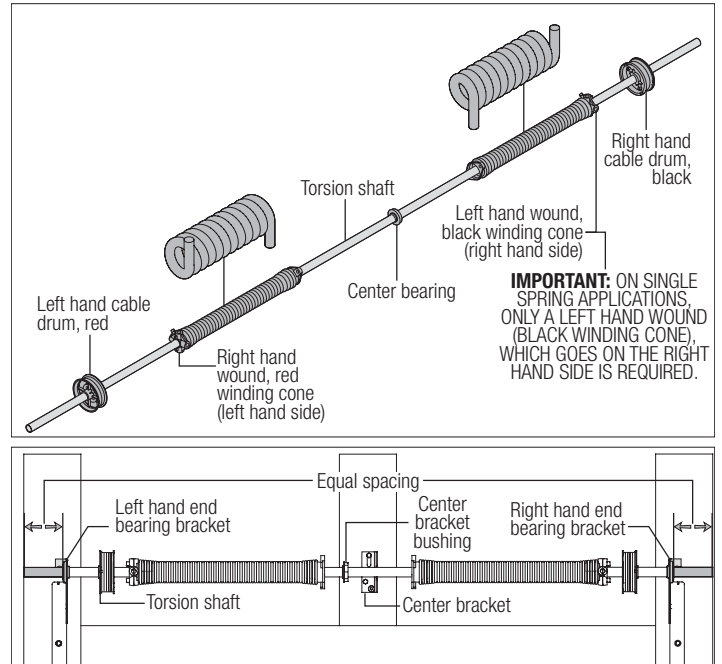
Facing the inside of the door, lay the torsion shaft on the floor. Lay the torsion spring with the black winding cone and the black cable drum at the right end of the torsion shaft. Lay the torsion spring with the red winding cone and the red cable drum at the left end of the torsion shaft.

**NOTE:** The set screws used on all torsion winding cones and cable drums are now colored red. DO NOT identify right and left hand by the set screw color.

Slide the center bracket bushing onto the torsion shaft followed by the torsion springs and cable drums.

**IMPORTANT:** THE CENTER BRACKET BUSHING, TORSION SPRINGS, AND CABLE DRUMS MUST BE POSITIONED, AS SHOWN.

With assistance, pick up the torsion spring assembly and slide one end of the torsion shaft through one end bearing bracket. Lay the middle of the torsion shaft into the center bracket. Slide the other end of the torsion shaft into the other end bearing bracket. Position the torsion shaft so that equal amounts of the shaft extend from each end bearing brackets.



**IMPORTANT:** ON SINGLE SPRING APPLICATIONS, ONLY A LEFT HAND WOUND (BLACK WINDING CONE), WHICH GOES ON THE RIGHT HAND SIDE IS REQUIRED.

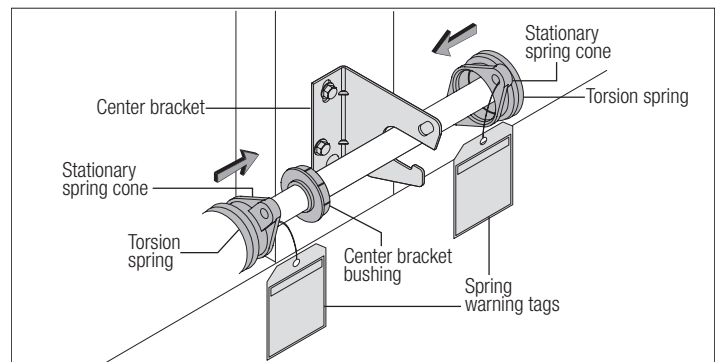
# 16

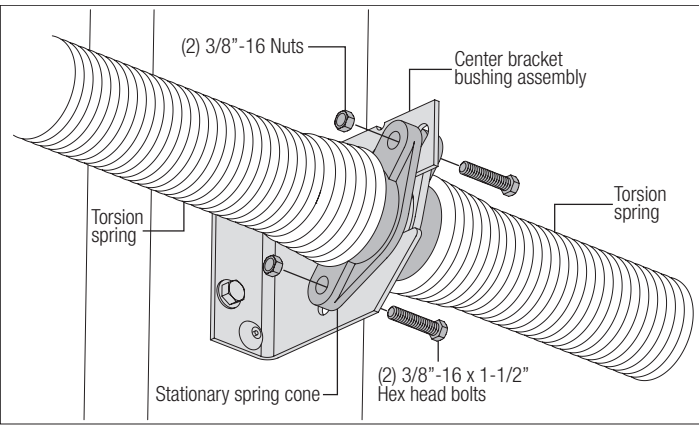
## Torsion Spring Attachment

Tools: Step Ladder, Ratchet Wrench, 9/16" Socket, 9/16" Wrench

Slide the center bracket bushing into the center bracket. Align the stationary spring cone(s) with the holes in the center bracket bushing assembly. Secure the torsion spring(s) to the center bracket bushing assembly with (2) 3/8"-16 x 1-1/2" hex head bolts and (2) 3/8"-16 nuts.

**IMPORTANT:** THE SPRING WARNING TAG(S) SUPPLIED MUST BE SECURELY ATTACHED TO THE STATIONARY SPRING CONE(S) IN PLAIN VIEW. SHOULD A REPLACEMENT SPRING WARNING TAG BE REQUIRED, CONTACT OVERHEAD DOOR CORPORATION FOR REPLACEMENT.





## 17 Counterbalance Lift Cables

Tools: Step Ladder, Locking Pliers, 3/8" Wrench

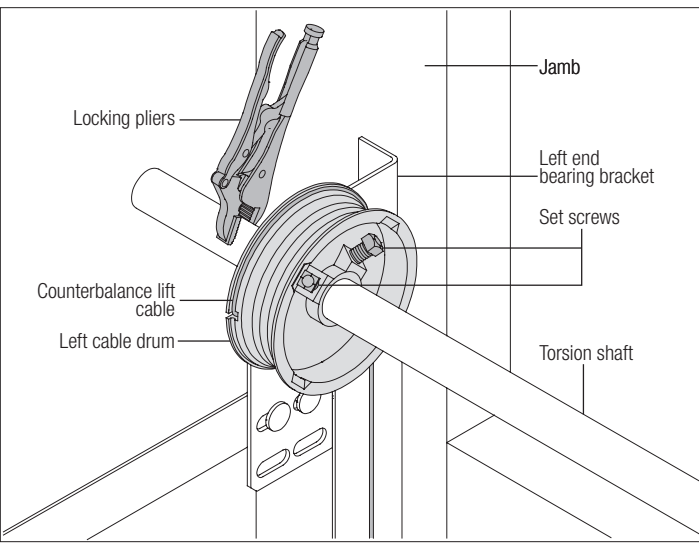
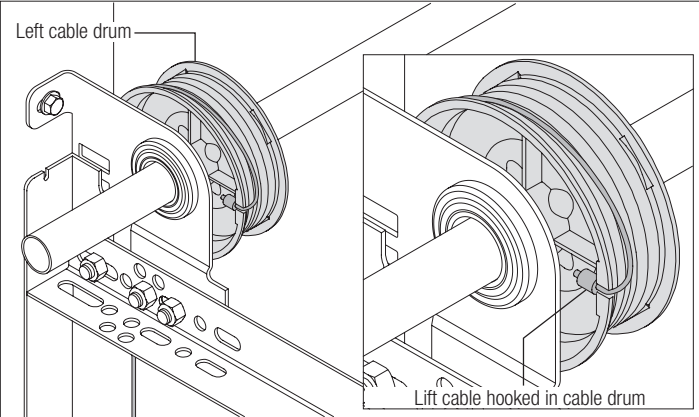
Starting on the left hand side, thread the counterbalance lift cable up and around the front side of the left hand cable drum.

**IMPORTANT:** VERIFY THAT THERE ARE NO COUNTERBALANCE LIFT CABLE OBSTRUCTIONS.

Hook the counterbalance lift cable into the left hand cable drum. Slide the left hand cable drum up against the left hand end bearing bracket. Counterbalance lift cable should terminate at the 3 o'clock position. Tighten the (2) set screws in the drum to 14-15 ft. lbs. of torque (once set screws contact the shaft, tighten screws one full turn). Rotate the left hand drum and torsion shaft until counterbalance lift cable is taut. Now attach locking pliers to the torsion shaft and brace locking pliers up against jamb to keep counterbalance lift cable taut.

Repeat for right hand side.

**IMPORTANT:** INSPECT EACH COUNTERBALANCE LIFT CABLES MAKING SURE THEY ARE SEATED PROPERLY ONTO THE CABLE DRUMS AND THAT BOTH COUNTERBALANCE LIFT CABLES HAVE EQUAL TENSION.

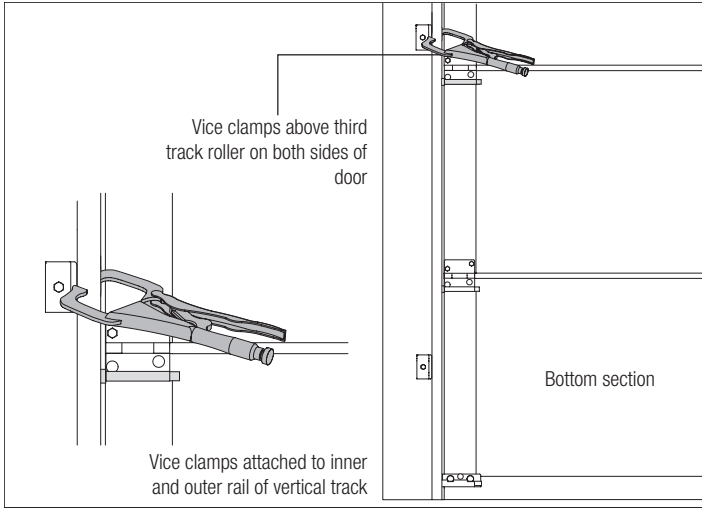


## 21 Securing Door for Spring Winding(s)

Tools: Vice Clamps

With the door in the fully closed position, place vice clamps onto both vertical tracks just above the third track roller. This is to prevent the garage door from rising while winding springs.

**WARNING**  
FAILURE TO PLACE VICE CLAMPS ONTO VERTICAL TRACK CAN ALLOW DOOR TO RAISE AND CAUSE SEVERE OR FATAL INJURY.



## 22 Winding Springs

Tools: Step Ladder, Approved winding bars, 3/8" Wrench

**WARNING**  
WINDING TORSION SPRINGS IS AN EXTREMELY DANGEROUS PROCEDURE AND SHOULD BE PERFORMED ONLY BY A TRAINED DOOR SYSTEM TECHNICIAN USING PROPER TOOLS AND INSTRUCTIONS.

**WARNING**  
USE ONLY SPECIFIED WINDING BARS. DO NOT SUBSTITUTE WITH SCREWDRIVERS, PIPE, ETC. OTHER TOOLS MAY FAIL AND CAUSE SERIOUS PERSONAL INJURY.

**WARNING**  
PRIOR TO WINDING OR MAKING ADJUSTMENTS TO THE SPRINGS, ENSURE YOU'RE WINDING IN THE PROPER DIRECTION AS STATED IN THE INSTALLATION INSTRUCTIONS. OTHERWISE THE SPRING FITTINGS MAY RELEASE FROM SPRING IF NOT WOUND IN THE PROPER DIRECTION AND COULD RESULT IN SEVERE OR FATAL INJURY.

Position a ladder slightly to the side of the spring so that the winding cone is easily accessible, and so your body is not directly in line with the winding bars.

Check the label attached to the spring warning tag for the required number of complete turns to balance your door.

Door Height	Approximate Spring Turns
6'0"	6-7/8 Turns
6'3"	7-1/8 Turns
6'5"	7-1/4
6'6"	7-3/8 Turns
6'8"	7-1/2
6'9"	7-5/8 Turns
7'0"	7-7/8 Turns
7'3"	8 Turns
7'6"	8-1/4 Turns

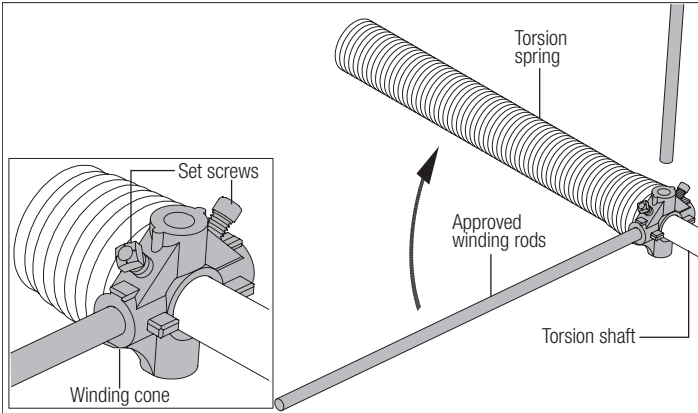
7'9"	8-1/2 Turns
8'0"	8-3/4 Turns

Alternately inserting the winding rods into the holes of the springs winding cone, rotate the winding cone upward toward the ceiling, 1/4 turn at a time, until the required number of complete turns for your door height is achieved. As the last 1/8 to 1/4 turn is achieved, securely hold the winding rod while tightening both set screws in the winding cone to 14-15 ft. lbs. of torque (once set screws contact the torsion shaft, tighten screws one full turn).

Carefully remove winding rod from winding cone. Repeat for the opposite spring. While holding the door down to prevent it from raising unexpectedly in the event the spring(s) were over-wound, carefully remove the locking pliers from the torsion shaft and vertical tracks.

Adjustments to the number of turns stated may be necessary. If door rises off floor under spring tension alone, reduce spring tension until door rests on the floor. If the door is hard to rise or drifts down on its own, add spring tension.

**NOTE:** An unbalanced door such as this can cause garage door opener operation problems.



## 23

### Rear Back Hangs

Tools: Ratchet wrench, Socket: 1/2" 5/8", Wrench: 1/2" 5/8", (2) Vice clamps, Tape measure, Level, Hammer, Step Ladder

**IMPORTANT:** HOLD THE DOOR DOWN TO PREVENT IT FROM RISING UNEXPECTEDLY IN THE EVENT THE SPRING(S) WAS OVER-WOUND AND CAUTIOUSLY REMOVE VICE CLAMPS FROM VERTICAL TRACKS.

Raise the door until the top section and half of the next section are in the horizontal track radius. Do not raise door any further since rear of horizontal tracks are not yet supported.

## WARNING

**RAISING DOOR FURTHER CAN RESULT IN DOOR FALLING AND CAUSE SEVERE OR FATAL INJURY.**

Clamp a pair of vice clamps onto the vertical tracks just above the second track roller on one side, and just below the second track roller on the other side. This will prevent the door from raising or lowering while installing the rear back hangs.

Using perforated angle (may not be supplied), (2) 5/16" x 1-5/8" hex head lag screws and (3) 5/16" bolts with nuts (may not be supplied), fabricate rear back hangs for the horizontal tracks. Attach the horizontal tracks to the rear back hangs with 5/16"-18 x 1" hex bolts and nuts (may not be supplied). Horizontal tracks must be level and parallel with door within 3/4" to 7/8" maximum of door edge.

## WARNING

**KEEP HORIZONTAL TRACKS PARALLEL AND WITHIN 3/4" TO 7/8" MAXIMUM OF DOOR EDGE, OTHERWISE DOOR COULD FALL, RESULTING IN SEVERE OR FATAL INJURY.**

**IMPORTANT:** DO NOT SUPPORT THE WEIGHT OF THE DOOR ON ANY PART OF THE REAR BACK HANGS THAT CANTILEVERS 4" OR MORE BEYOND A SOUND FRAMING MEMBER.

**NOTE:** If rear back hangs are to be installed over drywall, use (2) 5/16" x 2" hex head lag screws and make sure lag screws engage into solid structural lumber.

**NOTE:** 26" angle must be attached to sound framing members and **nails should not be used.**

Now, permanently attach the weatherstrips on both door jambs and header. The weatherstrips were temporarily attached in Preparing the Opening, in the pre-installation section of this manual.

**NOTE:** When permanently attaching the weatherstrips to the jambs, avoid pushing the weatherstrips too tightly against the face of door.

## WARNING

**PRIOR TO WINDING OR MAKING ADJUSTMENTS TO THE SPRINGS, ENSURE YOU'RE WINDING IN THE PROPER DIRECTION AS STATED IN THE INSTALLATION INSTRUCTIONS. OTHERWISE THE SPRING FITTINGS MAY RELEASE FROM SPRING IF NOT WOUND IN THE PROPER DIRECTION AND COULD RESULT IN SEVERE OR FATAL INJURY.**

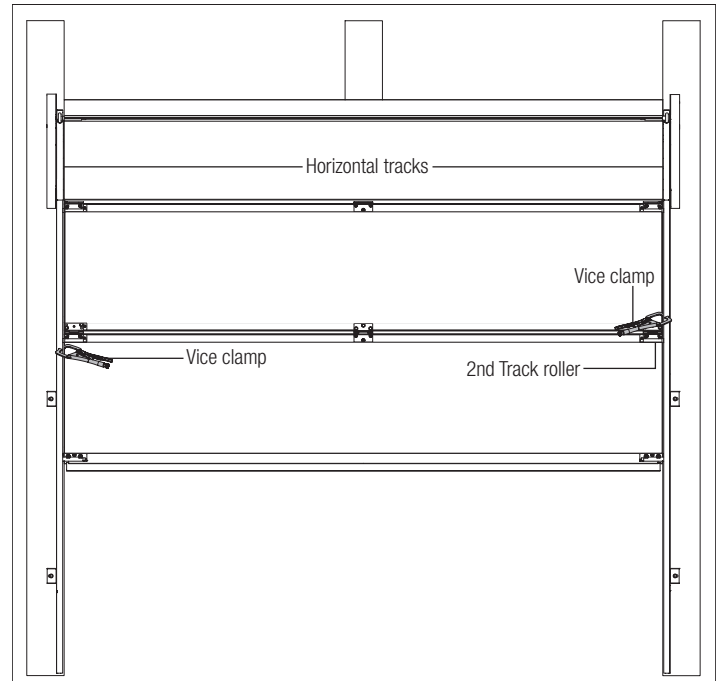
Now, lift door and check its balance. Adjustments to the required number of spring turns stated may be necessary. If door rises off floor under spring tension alone, reduce spring tension until door rests on the floor. If the door is hard to raise or drifts down on its own, add spring tension. A poorly balanced door can cause garage door operator operation problems.

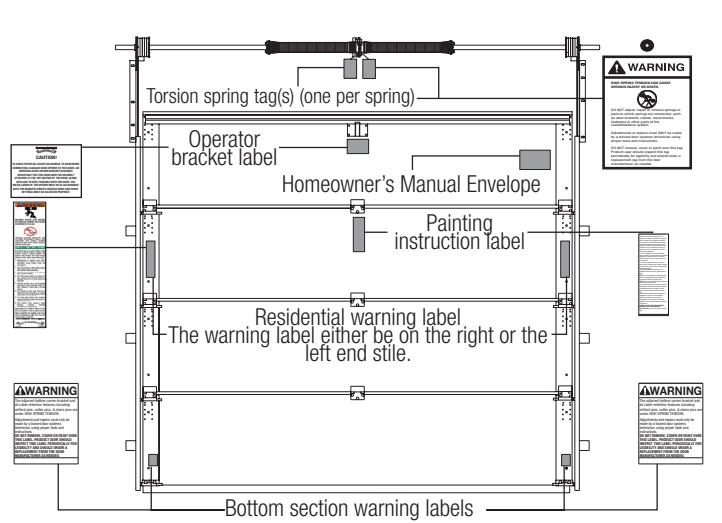
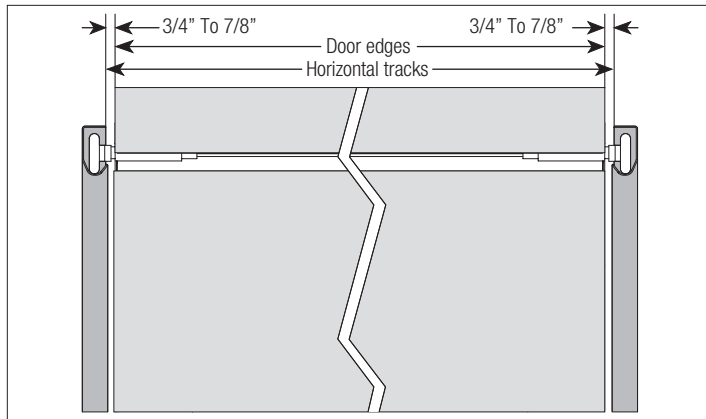
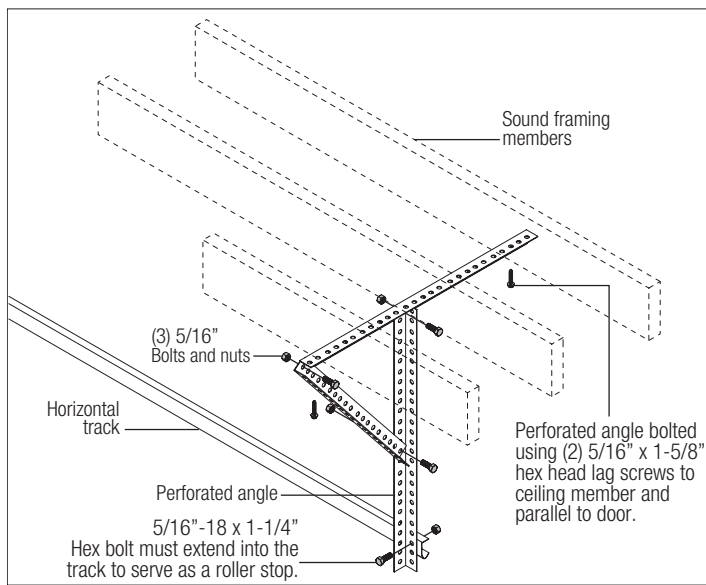
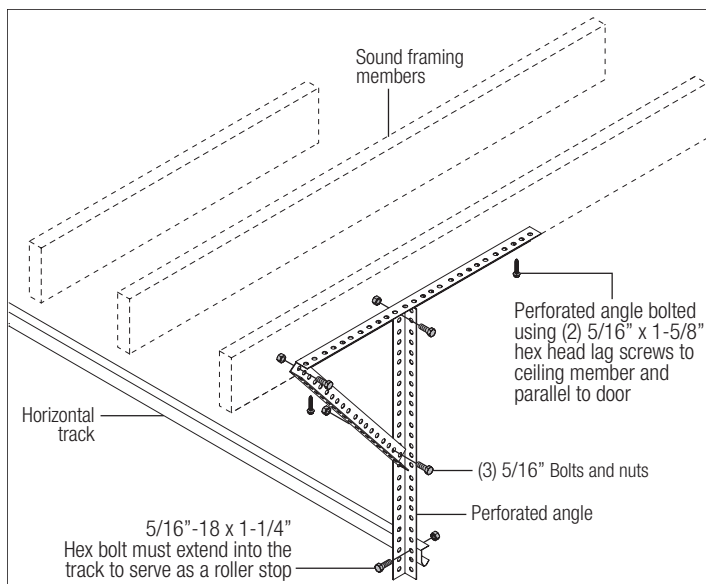
To adjust spring tension, fully close door. Apply vice grips to track above third track roller. Insert a winding rod into the winding cone. On single spring doors, counterbalance lift cable tension must be maintained by placing vice grips on torsion shaft before loosening set screws in the winding cone. Push upward on the winding rod while carefully loosening the set screws in the winding cone. BE PREPARED TO SUPPORT THE FULL FORCE OF THE TORSION SPRING ONCE THE SET SCREWS ARE LOOSE. Carefully adjust spring tension 1/4 turn. Retighten both set screws in the winding cone and repeat for the other side. Recheck door balance DO NOT ADJUST MORE THAN 1/2 TURN FROM THE RECOMMENDED NUMBER OF TURNS.

If door still does not balance correctly, contact a qualified door agency. If the door still does not operate easily, lower the door into the closed position, UNWIND THE SPRING(S) FULLY (Reference the insert "Removing The Old Door/Preparing The Opening" section on torsion spring removal), and recheck the following the items:

- 1.) Check the door for level.
- 2.) Check the torsion shaft for level.
- 3.) Check the track spacing.
- 4.) Check the counterbalance lift cables for equal tension.
- 5.) Check the track for potential obstruction of the track rollers.
- 6.) Clamp locking pliers onto track and rewind springs.

**IMPORTANT:** IF DOOR STILL DOES NOT OPERATE PROPERLY, THEN CONTACT A TRAINED DOOR SYSTEM TECHNICIAN.





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## Label Placement

Tools: Step Ladder

**IMPORTANT:** USING THE ILLUSTRATION, ATTACH THE APPROPRIATE LABELS TO THE APPROPRIATE LOCATION ON THE SECTION, AS SHOWN. IF ANY LABELS ARE MISSING, WORN OR DAMAGED, CALL YOUR OVERHEAD RIBBON DISTRIBUTOR FOR REPLACEMENT.

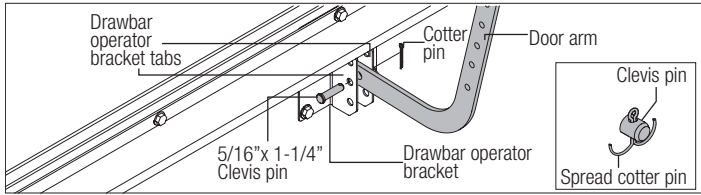
**NOTE:** The Spring Warning tag(s) are factory attached (one per spring).

**NOTE:** Because of different configurations, some labels may require minor relocations.

## Trolley Arm Hookup

Tools: Needle nose pliers

Align hole in the door arm with holes in drawbar operator bracket tabs, as shown. Insert 5/16" x 1-1/4" clevis pin, making sure hole in clevis pin is outside of second tab of drawbar operator bracket. Insert hairpin cotter into clevis pin hole and spread hairpin cotter to secure assembly, as shown.

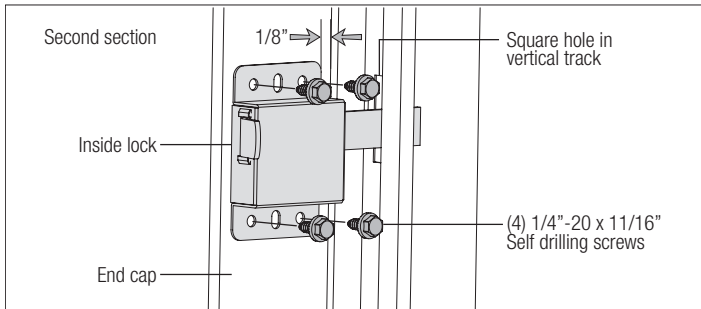


## Inside Lock

Tools: Power drill, 7/16" Socket driver, Tape measure

Install the inside lock on the second section of the door. Secure the lock to the section with (4) 1/4"-20 x 11/16" self drilling screws. Square the lock assembly with the door section, and align with the square hole in the vertical track. The inside lock should be spaced approximately 1/8" away from the section edge.

**IMPORTANT:** INSIDE LOCK(S) MUST BE REMOVED OR MADE INOPERATIVE IN THE UNLOCKED POSITION IF AN OPERATOR IS INSTALLED ON THIS DOOR.



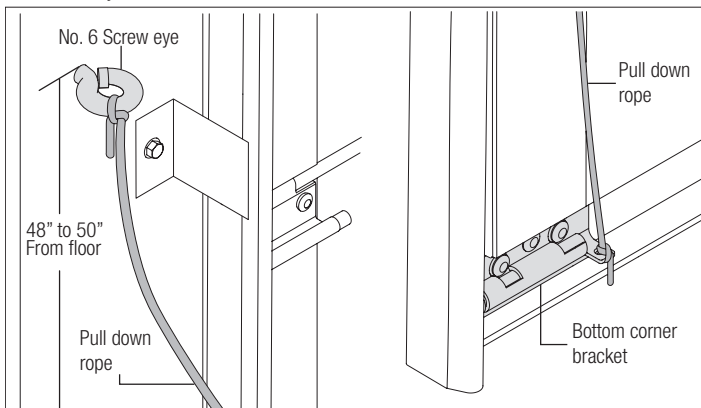
## Pull Down Rope

Tools: Power drill, 1/8" Drill bit, Tape measure

### **WARNING**

**DO NOT INSTALL PULL DOWN ROPE ON DOORS WITH OPERATORS. CHILDREN MAY BECOME ENTANGLED IN THE ROPE CAUSING SEVERE OR FATAL INJURY.**

Measure and mark the jamb approximately 48" to 50" (1220 to 1270 mm) from floor on the right or left side of jamb. Drill 1/8" pilot hole for no. 6 screw eye. Tie the pull down rope to the no. 6 screw eye and to the bottom corner bracket, as shown.



## Cleaning Your Garage Door

**IMPORTANT:** DO NOT USE A PRESSURE WASHER ON YOUR GARAGE DOOR!

While factory-applied finishes on garage doors are durable, it is desirable to clean them on a routine basis. Some discoloration of the finish may occur when a door has been exposed to dirt-laden atmosphere for a period of time. Slight chalking may also occur as a result of direct exposure to sunlight.

Cleaning the door will generally restore the appearance of the finish. To maintain an aesthetically pleasing finish of the garage door, a periodic washing of the garage door is recommended.

**THE FOLLOWING CLEANING SOLUTION IS RECOMMENDED:**

A mild detergent solution consisting of one cup detergent (with less than 0.5% phosphate) dissolved into five gallons of warm water will aid in the removal of most dirt.

**NOTE:** The use of detergents containing greater than 0.5% phosphate is not recommended for use in general cleaning of garage doors.

**NOTE:** Be sure to clean behind weatherstrips on both sides and top of door.

 **CAUTION:** NEVER MIX CLEANSERS OR DETERGENTS WITH BLEACH.

**GLASS CLEANING INSTRUCTIONS**

Clean with a mild detergent solution (same as above) and a soft cloth. After cleaning, rinse thoroughly.

**ACRYLIC CLEANING INSTRUCTIONS**

Clean acrylic glazing with nonabrasive soap or detergent and plenty of water. Use your bare hands to feel and dislodge any caked on particles. A soft, grit-free cloth, sponge or chamois may be used to wipe the surface. Do not use hard or rough cloths that will scratch the acrylic glazing. Dry glazing with a clean damp chamois.

**NOTE:** Do not use any window cleaning fluids, scouring compounds, gritty cloths or solvent-based cleaners of any kind.

## Painting Your Garage Door

**SURFACE PREPARATION FOR PAINTING:**

Wax on the surface must be removed or paint peeling/ flaking will result. To remove this wax, it will be necessary to lightly scuff the surface with a fine steel wool pad saturated with soapy water. A final wipe and rinse should be done with clean water only to remove any loose particles and any soapy film residue.

Surface scratches, which have not exposed the metal substrate, can be lightly buffed or sanded with 0000 steel wool or no. 400 sand paper to create a smoother surface. Care must be taken to not expose the substrate under the paint. Once the substrate is exposed, the likelihood for rusting is greatly increased.

If substrate is exposed, it must be treated to prevent rust from forming. Sand the exposed area lightly and paint with a high quality metal primer specifically intended for galvanized surfaces to protect the area from corrosion. Allow for drying time on primer can label before applying topcoat.

The surface of the factory-applied finish, that is being painted, must not be too smooth, or the paint will not adhere to it. It is advisable to test in an inconspicuous area, to evaluate adhesion. If poor adhesion is observed, surface preparation for painting the factory-applied finish must be repeated until desired results are achieved. Again, care must be taken to not expose the substrate under the paint.

**PAINTING:**

After surface has been properly prepared, it must be allowed to dry thoroughly, and then coated immediately with premium quality latex house paint. Follow paint label directions explicitly. Oil base or solvent base paints are not recommended. Please note that if substrate is exposed and not properly primed, painting with latex paint may cause accelerated rusting of the steel in the exposed area.

**NOTES:**

1. Re-painting of finish painted steel doors cannot be warranted, as this condition is totally beyond the door manufacturer's control.
2. Consult a professional coatings contractor if in doubt about any of the above directions.
3. Follow directions explicitly on the paint container labels for proper application of coatings and disposal of containers. Pay particular attention to acceptable weather and temperature conditions in which to paint.

## Operation and Maintenance

**OPERATING YOUR GARAGE DOOR:**

Before you begin, read all warning labels affixed to the door and the installation instructions and owner's manual. When correctly installed, your Overhead garage door will operate

smoothly. Always operate your door with controlled movements. Do not slam your door or throw your door into the open position, this may cause damage to the door or its components. If your door has an electric opener, refer to the owner's manual to disconnect the opener before performing manual door operation below.

**Manual door operation:**

For additional information on manual garage door operations go to [www.dasma.com](http://www.dasma.com) and reference TDS 165.

**IMPORTANT:** DO NOT PLACE FINGERS OR HANDS INTO SECTION JOINTS WHEN OPENING AND/OR CLOSING A DOOR. ALWAYS USE LIFT HANDLES / SUITABLE GRIPPING POINTS WHEN OPERATING THE DOOR MANUALLY.

Opening a Door: Make sure the lock(s) are in the unlocked position. Lift the door by using the lift handles / suitable gripping points only. Door should open with little resistance.

Closing a Door: From inside the garage, pull door downward using lift handles / gripping point only or a high friction area only. If you are unable to reach the lift handles/ suitable gripping points only, use pull down rope affixed to the side of door. Door should close completely with little resistance.

**Using an electric operator:**

**IMPORTANT:** PULL DOWN ROPES MUST BE REMOVED AND LOCKS MUST BE REMOVED OR MADE INOPERATIVE IN THE UNLOCKED POSITION.

When connecting a drawbar (trolley type) garage door operator to this door, an drawbar operator and or drawbar operator bracket must be securely attached to the top section of the door, along with any struts provided with the door. Always use the drawbar operator and or drawbar operator bracket supplied with the door. To avoid possible damage to your door, Overhead Door Corporation recommends reinforcing the top section with a strut (may or may not be supplied). The installation of the drawbar operator must be according to manufacturer's instructions and force settings must be adjusted properly. Refer to the owner's manual supplied with your drawbar operator for complete details on installation, operation, maintenance and testing of the operator.

**MAINTAINING YOUR GARAGE DOOR:**

Before you begin, read all warning labels affixed to the door and the installation instructions and owner's manual. Perform routine maintenance steps once a month, and have the door professionally inspected once a year. Review your Installation Instructions and Owner's Manual for the garage door. These instructions are available at no charge from Overhead Door Corporation, 2501 South State Highway 121, Suite 200, Lewisville, TX., 75067, or at [www.odcexchange.com](http://www.odcexchange.com). For additional information on garage door/operator maintenance go to [www.dasma.com](http://www.dasma.com) and reference TDS 151, 167 and 179.

**Monthly Inspections:**

**1. Visual Inspection:** Closely inspect jambs, header and mounting surface. Any wood found not to be structurally sound must be replaced. Inspect the springs, counterbalance lift cables, track rollers, pulleys, rear back hangs and other door hardware for signs of worn or broken parts. Tighten any loose screws and/or bolts. Check exterior surface of the door sections for any minor cracks. Verify door has not shifted right or left in the opening. If you suspect problems, have a trained door system technician make the repairs.

 **WARNING**

**GARAGE DOOR SPRINGS, COUNTERBALANCE LIFT CABLES, BRACKETS, AND OTHER HARDWARE ATTACHED TO THE SPRINGS ARE UNDER EXTREME TENSION, AND IF HANDLED IMPROPERLY, CAN CAUSE SEVERE OR FATAL INJURY. ONLY A TRAINED DOOR SYSTEMS TECHNICIAN SHOULD ADJUST THEM, BY CAREFULLY FOLLOWING THE MANUFACTURER'S INSTRUCTIONS.**

 **WARNING**

**NEVER REMOVE, ADJUST, OR LOOSEN THE BOLTS, SCREWS AND/OR LAG SCREWS ON THE COUNTERBALANCE (END OR CENTER BEARING BRACKETS) SYSTEM OR BOTTOM CORNER BRACKETS OF THE DOOR. THESE BRACKETS ARE CONNECTED TO THE SPRING(S) AND ARE UNDER EXTREME TENSION. TO AVOID POSSIBLE SEVERE OR FATAL INJURY, HAVE ANY SUCH WORK PERFORMED BY A TRAINED DOOR SYSTEMS TECHNICIAN USING PROPER TOOLS AND INSTRUCTIONS.**

Torsion Springs: The torsion springs (located above the door) should only be adjusted by a trained door systems technician. DO NOT attempt to repair or adjust torsion springs yourself.

Extension Springs: A restraining cable or other device should be installed on the extension spring (located above the horizontal tracks) to help contain the spring if it breaks.

**2. Door Balance:** Periodically test the balance of your door. If you have a garage door drawbar operator, use the release mechanism so you can operate the door by hand when doing this test. Start with the door in the fully closed position. Lift the door to check its balance. Adjust Extension spring(s), if door lifts by itself (hard to pull down) or if door is difficult to lift (easy to pull down). DO NOT attempt to repair or adjust Torsion Springs yourself. To adjust Extension spring(s), refer to your installation instructions and owner's manual. If in question about any of the procedures, do not perform the work. Instead, have it adjusted by a trained door systems technician.

**3. Lubrication:** The door should open and close smoothly. Ensure the door track rollers

are rotating freely when opening and closing the door. If track rollers do not rotate freely, clean the door tracks, removing dirt and any foreign substances. Clean and lubricate (use a non-silicon based lubricant) graduated end hinges, steel track rollers and bearings. DO NOT lubricate plastic idler bearings, nylon track rollers, door track. DO NOT oil a cylinder lock, if actuation is difficult use a graphite dust to lubricate.

### Carriage House Collection Garage Door Limited Lifetime Warranty

The Distributor of Overhead Door Corporation products whose name appears below ("Seller") warrants to the original purchaser of the Carriage House Collection 300 Series residential garage 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 for the following periods of time, measured from the date of installation:

- i) Seller warrants the door sections against splitting, cracking, or deterioration due to rusting through for the lifetime\* of the Product.
- ii) Seller warrants the Product sections against delamination of the polyurethane foam and the facial molding from the steel skins of the panel for a period of **FIVE (5) YEARS**.
- iii) Seller warrants all other components of the Product for a period of **ONE (1) YEAR**.

\* Lifetime shall mean as long as the original purchaser owns home in which the Product is originally installed.

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. Seller's repair or replacement labor is included for a period of **ONE (1) YEAR** from the date of purchase. After that, any labor charges are excluded and will be the responsibility of the purchaser.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. This warranty is made to the original purchaser of the Product only, and is not transferable or assignable. This warranty applies only to Product installed in a residential or other non-commercial application. It does not cover any Product 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, failure to comply with Product painting instructions, or acts of God or any other cause beyond the reasonable control of Seller. This warranty does not cover any damage or deterioration caused by exposure to salt water, chemical fumes or other corrosive or aggressive environments, whether naturally occurring or man-made, including, but not limited to, environments with a high degree of humidity, sand, dirt or grease. Product repaired or replaced under this warranty shall receive a factory original finish. This warranty does not cover the costs to repaint Product.

ALL EXPRESS AND IMPLIED WARRANTIES FOR THE PRODUCT, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN TIME TO THE APPLICABLE WARRANTY PERIOD REFLECTED ABOVE. NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THE LIMITED WARRANTY PERIOD HAS EXPIRED. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

IN NO EVENT SHALL OVERHEAD DOOR CORPORATION BE RESPONSIBLE FOR, OR LIABLE TO ANYONE FOR, SPECIAL, INDIRECT, COLLATERAL, PUNITIVE, INCIDENTAL OR CONSEQUENTIAL DAMAGES, even if Overhead Door Corporation has been advised of the possibility of such damages. Such excluded damages include, but are not limited to, loss of use, cost of any substitute product, or other similar indirect financial loss. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Claims under this warranty must be made promptly after discovery, within the applicable warranty period, and in writing to the Seller 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. There are no established informal dispute resolution procedures of the type described in the Magnuson-Moss Warranty Act.

- ORIGINAL PURCHASER \_\_\_\_\_
- INSTALLATION ADDRESS \_\_\_\_\_
  
- SELLER: \_\_\_\_\_
- SELLER'S ADDRESS: \_\_\_\_\_
  
- FACTORY ORDER #: \_\_\_\_\_
- DATE OF INSTALLATION: \_\_\_\_\_
- SIGNATURE OF SELLER: \_\_\_\_\_





**Please Do Not Return This Product To The Store**

Contact your local Overhead Door Ribbon Distributor. To find your local Overhead Door Ribbon Distributor, visit our online Distributor Locator at [www.OverheadDoor.com](http://www.OverheadDoor.com) or call **1-800-929-DOOR (3667)**.

Thank you for your purchase.