Model 8300

Torsion Cut Down

Residential and Light Commercial

Installation Instructions and Owner’s Manual

Definition of Light Commercial:
1. Door heights less than or equal to 8’0” (<= 8’0”) are considered Residential applications.
2. Door heights greater than 8’0” (> 8’0”) are considered Light Commercial applications.

Please Do Not Return This Product To The Store

If you need assistance, please call 1-866-569-3799 (press Option 1) and follow the prompts to contact a customer service representative. They will be happy to handle any questions that you may have.

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Important Notices!

To avoid possible injury, read and fully understand the enclosed instructions carefully 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.
PRE-INSTALLATION

Important Safety Instructions

Definition of Key Words Used in this Manual:

**Warning**
Indicates a potentially hazardous situation which, if not avoided, could result in severe or fatal injury.

**Caution**
Property damage or injury can result from failure to follow instructions.

Important: Required step for safe and proper door operation.

Note: Information assuring proper installation of the door.

Read these instructions carefully before attempting installation. If in question about any of the procedures, do not perform the work. Instead, have a trained door systems technician do the installation or repairs.

1. Read and follow all installation instructions.

2. Wear protective gloves during installation to avoid possible cuts from sharp metal edges.

3. It is always recommended to wear eye protection when using tools, otherwise eye injury could result.

4. Avoid installing your new door on windy days. Door could fail during the installation causing severe or fatal injury.

5. Doors 12'-0" wide and over should be installed by two persons, to avoid possible injury.

6. Operate door only when it is properly adjusted and free from obstructions.

7. If a door becomes hard to operate, inoperative or is damaged, immediately have necessary adjustments and/or repairs made by a trained door system technician using proper tools and instructions.

8. Do not stand or walk under a moving door, or permit anybody to stand or walk under an electrically operated door.

9. Do not place fingers or hands into open section joints when closing a door. Use lift handles/gripping points when operating door manually.

10. Do not permit children to operate garage door or door controls. Severe or fatal injury could result should the child become entrapped between the door and the floor.

11. Due to constant extreme spring tension, do not attempt any adjustment, repair or alteration to any part of the door, especially to springs, spring brackets, bottom corner brackets, fasteners, counterbalance lift cables or supports. To avoid possible severe or fatal injury, have any such work performed by a trained door systems technician using proper tools and instructions.

12. On electrically operated doors, pull down ropes must be removed and locks must be removed or made inoperative in the open (unlocked) position.

13. Top section of door may need to be reinforced when attaching an electric opener. Check door and/or opener manufacturer’s instructions.

14. Visually inspect door and hardware monthly for worn and/or broken parts. Check to ensure door operates freely.

15. Test electric opener’s safety features monthly, following opener manufacturer’s instructions.

16. Never hang tools, bicycles, hoses, clothing or anything else from horizontal tracks. Track systems are not intended or designed to support extra weight.

17. This door may not meet the building code wind load requirements in your area. For the safety of you and your family, you need to check with your local building official for wind load code requirements and building permit information.

After installation is complete, fasten this manual near the garage door.

Important: Stainless steel lag screws must be used when installing center bearing brackets, end brackets, jamb brackets, drawbar operator mounting/support brackets and disconnect brackets on treated lumber (preservative-treated). Stainless steel lag screws are not necessary when installing products on un-treated lumber.

Note: It is recommended that 5/16" lag screws are pilot drilled using a 3/16" drill bit, prior to fastening.

Important: When installing 5/16" lag screws using an electric drill/driver, the drill/driver clutch must be set to deliver no more than 200 in-lbs of torque. Fastener failure could occur at higher settings.
Graduated hinges (as required)
Top fixture slides (as required)
Top fixture bases (as required)
(2) Top fixtures (as required)
Pull down rope (if included)
Inside / outside step plates (as required)
Lift handles (as required)
Bottom Weather Seal
Torsion springs RH/LH
End bearing brackets RH/LH (as required)
Center bracket (as required)
Cable drums RH/LH
Center bracket bushing (as required)
Center bracket bearing (as required)
Clevis pin (as required)
5/16" x 1-1/4" Hex head lag screws
(RED HEAD) (as required)
Cotter pin (as required)
5/16" - 18 Hex nuts (as required)
Roller spacers (as required)
1/4" - 20 Hex nuts (as required)
3/8" Washers (as required)
1/4" - 20 x 3/4" Self drilling screws (as required)
3/8" - 16 Flanged hex nuts (as required)
1/4" - 20 x 7/8" Self drilling screws (as required)
(2) 3/8" - 16 x 3/4" Truss head bolts
Strut clips (as required)
5/16" x 1-5/8" Hex head lag screws (as required)
5/16" x 2-1/2" Hex head lag screws (RED HEAD) (as required)
3/8"-16 x 1-1/2" Hex bolts (as required)
5/16" x 2-1/2" Pan head screws (as required)
1/4" - 20 x 2-1/2" Carriage bolts (as required)

Door Section Identification

<table>
<thead>
<tr>
<th>Door Height</th>
<th># Of Sections</th>
<th>Bottom Lock (Second)</th>
<th>Intermediate I</th>
<th>Intermediate II</th>
<th>Intermediate III</th>
<th>Top</th>
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<tbody>
<tr>
<td>6’6”</td>
<td>4</td>
<td>21” 18” 18”</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>21”</td>
</tr>
<tr>
<td>7’0”</td>
<td>21” 21” 21” 21” 21”</td>
<td>18” 18” 18”</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>21”</td>
</tr>
<tr>
<td>7’6”</td>
<td>5</td>
<td>18” 18” 18” 18”</td>
<td>18” 18”</td>
<td>-</td>
<td>-</td>
<td>18”</td>
</tr>
<tr>
<td>8’0”</td>
<td>21” 18” 18” 18” 18” 18”</td>
<td>21” 18” 18” 18” 18” 18”</td>
<td>18” 18” 18” 18” 18” 18”</td>
<td>-</td>
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<tr>
<td>8’3”</td>
<td>21” 21” 18” 18” 18” 18”</td>
<td>18” 18” 18” 18” 18” 18”</td>
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<td>21”</td>
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<tr>
<td>9’0”</td>
<td>6</td>
<td>18” 18” 18” 18”</td>
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<td>10’0”</td>
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<td>18” 18” 18” 18” 18” 18” 18”</td>
<td>-</td>
<td>21”</td>
<td></td>
</tr>
</tbody>
</table>

When installing your door you must use sections of the appropriate height in the right stacking order. What sections heights you need to use in what order depends on the height of your door.

The **BOTTOM SECTION** can be identified by the factory attached bottom bracket warning labels on each end stile.

The **INTERMEDIATE I SECTION** may have a warning label attached to either right or left hand end stile of the section. This section is always the 3rd section from the bottom of the door.

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### 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 systems technician, using proper tools and instructions, release the spring tension.

For detailed information see supplemental instructions “Removing an Existing Door / Preparing the Opening”. These instructions are not supplied with the door, but are available at no charge from Wayne Dalton, a division of Overhead Door Corporation, P.O. Box 67, Mt. Hope, OH., 44660, or at www.Wayne-Dalton.com.
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. The jambs should extend a minimum of 12” (305 mm) above the top of the opening for torsion counterbalance systems. 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.

**WEATHERSTRIPS (MAY NOT BE INCLUDED):**

Depending on the size of your door, you may have to cut or trim the weatherstrips (if necessary) to properly fit into the header and jambs.

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

**NOTE:** Do not permanently attach weatherstrips to the header and jambs at this time.

For the header, align the weatherstrip 1/8” to 1/4” inside the header edge, and temporarily secure it to the header with equally spaced nails. Starting at either side of the jamb, fit the weatherstrip up tight against the temporarily attached weatherstrip in the header and 1/8” to 1/4” inside the jamb edge. Temporarily secure the weatherstrip with equally spaced nails. Repeat for other side. This will keep the bottom section from falling out of the opening during installation. Equally space nails approximately 12” to 18” apart.

**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.

**NOTE:** For doors with 32” Radius Horizontal Track, the headroom requirements needed would be door height + 30”.

**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 FOR STANDARD LIFT APPLICATIONS:**

<table>
<thead>
<tr>
<th>DOOR HEIGHT</th>
<th>TRACK</th>
<th>MANUAL LIFT</th>
<th>MOTOR OPERATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>6’0” to 7’0”</td>
<td>12”, 15” Radius</td>
<td>98” (2489 mm)</td>
<td>125” (3175 mm)</td>
</tr>
<tr>
<td>7’3” to 8’0”</td>
<td>110” (2794 mm)</td>
<td>137” (3480 mm)</td>
<td></td>
</tr>
<tr>
<td>8’3” to 9’0”</td>
<td>126” (3200 mm)</td>
<td>168” (4267 mm)</td>
<td></td>
</tr>
<tr>
<td>9’3” to 10’0”</td>
<td>138” (3505 mm)</td>
<td>168” (4267 mm)</td>
<td></td>
</tr>
</tbody>
</table>

**BACKROOM REQUIREMENTS FOR LOW HEADROOM APPLICATIONS:**

<table>
<thead>
<tr>
<th>DOOR HEIGHT</th>
<th>TRACK</th>
<th>MANUAL LIFT</th>
<th>MOTOR OPERATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>6’0” to 7’0”</td>
<td>6” Front Mount Low header</td>
<td>102” (2591 mm)</td>
<td>125” (3175 mm)</td>
</tr>
<tr>
<td>7’1” to 8’0”</td>
<td>114” (2794 mm)</td>
<td>137” (3480 mm)</td>
<td></td>
</tr>
<tr>
<td>8’1” to 9’0”</td>
<td>126” (3200 mm)</td>
<td>168” (4267 mm)</td>
<td></td>
</tr>
<tr>
<td>9’1” to 10’0”</td>
<td>138” (3505 mm)</td>
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<td></td>
</tr>
</tbody>
</table>

**HEADROOM REQUIREMENTS FOR STANDARD LIFT APPLICATIONS:**

<table>
<thead>
<tr>
<th>TRACK TYPE</th>
<th>SPACE NEEDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>15” Radius track</td>
<td>14-1/2” (368 mm)</td>
</tr>
<tr>
<td>12” Radius track</td>
<td>12-1/2” (318 mm)</td>
</tr>
<tr>
<td>32” Radius Track</td>
<td>32-1/2” (826 mm)</td>
</tr>
</tbody>
</table>

**HEADROOM REQUIREMENTS FOR LOW HEADROOM APPLICATIONS:**

<table>
<thead>
<tr>
<th>TRACK TYPE</th>
<th>SPACE NEEDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>6” Front Mount Low Headroom</td>
<td>8-1/2” (216)</td>
</tr>
</tbody>
</table>
NOTE: The illustrations shown on this page are general representations of the door parts. Each specific door model may have unique variations.
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.

## Section Sizing

**Tools Required:** Power drill, Phillips head screwdriver, Saw Horses, Tape measure, Pencil, Saw, Safety glasses, Leather gloves

**NOTE:** Refer to door section identification, located in the pre-installation section of this manual. Refer to Package Contents / Parts Breakdown, to determine which sections you’ve received.

**NOTE:** Not all doors will need to be cut down. If your door sections are the appropriate width for your opening, skip this step.

**NOTE:** End caps are marked right and left hand.

### WARNING

IT IS RECOMMENDED THAT A BREATHING APPARATUS BE WORN WHILE CUTTING DOWN THE FOAMED SECTIONS. FAILURE TO WEAR A BREATHING APPARATUS COULD RESULT IN A SEVERE INJURY.

### WARNING

IT IS RECOMMENDED THAT GLOVES BE WORN WHILE HANDLING THE SECTIONS AND WORKING AROUND EXPOSED SHARP METAL EDGES. FAILURE TO WEAR GLOVES COULD RESULT IN A SEVERE INJURY.

**NOTE:** A metal cutting finishing circular saw blade should be used when cutting the section width down to the appropriate width.

**NOTE:** When re-installing the endcaps back onto the section, you should use a metal, acrylic or epoxy adhesive, so the endcaps will adhere to the section surface.

Lay the section face down onto saw horses.

**IMPORTANT:** IT IS HIGHLY RECOMMENDED TO PROTECT THE OUTSIDE FINISH WHEN LAYING THE SECTION ONTO THE SAW HORSES WITH CARPET OR EQUIVALENT MATERIAL TO PREVENT THE SECTION FROM BEING SCRATCHED OR DAMAGED.

Using a phillips head screwdriver, remove but retain all screws from both the left hand and right hand end caps. Gently slide the end caps off of the section and set them aside.

Now, locate the center of the section.

Next, attach the center jamb bracket(s) in the same manner as the others remembering to use a metal, acrylic or epoxy adhesive, so the endcaps will adhere to the section surface.

Position the bottom weather seal up against the bottom of the bottom section with the long lip on the inside surface of the bottom section. From inside the door, attach the bottom weather seal to the bottom section with 1/4" - 20 x 7/8" self drilling screws, placing one 6" in from each end of the bottom section and one every 18" (maximum) in between, as shown.

Position the top jamb bracket on the vertical track so the slot in the jamb bracket is aligned with the lower hole of the hole/ slot pattern of the top hole set on the vertical track. Secure the jamb bracket using (1) 1/4" - 20 x 9/16" track bolt and (1) 1/4" - 20 flange hex nut. Repeat for other side.

To attach the top jamb bracket, locate lower hole of the hole/ slot pattern of the top 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.

To attach the bottom jamb bracket, locate lower hole of the hole/ slot pattern of the bottom 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.

Next, attach the center jamb bracket(s) in the same manner as the others remembering to ensure the shortest jamb bracket is always below the next tallest jamb bracket. Repeat for other center jamb brackets, then repeat for other side.

## Jamb Brackets

**Tools Required:** Safety glasses, Leather gloves

**NOTE:** If you have riveted tracks, skip this step.

**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.

## Bottom Weather Seal

**Tools Required:** Power drill, 7/16" Socket driver, Tape measure, Safety glasses, Leather gloves

**NOTE:** Refer to door section identification, located in the pre-installation section of this manual. Refer to Package Contents / Parts Breakdown, to determine your bottom section.

**NOTE:** Verify that the bottom weather seal is aligned with bottom section. If needed, trim the bottom weather seal even with bottom section length.

Position the bottom weather seal up against the bottom of the bottom section with the long lip on the inside surface of the bottom section. From inside the door, attach the bottom weather seal to the bottom section with 1/4" - 20 x 7/8" self drilling screws, placing one 6" in from each end of the bottom section and one every 18" (maximum) in between, as shown.

## Flag Angles

**Tools Required:** Safety glasses, Leather gloves

### Warning

**WARNING**

BEFORE CUTTING THE SECTION DOWN TO THE DESIRED WIDTH, ENSURE YOU ARE CUTTING BOTH SIDES EQUALLY. FAILURE TO DO SO COULD RESULT IN SECTION PANELING NOT LINING UP VERTICALLY.

Using a circular saw carefully cut section to the desired width. Starting on left hand side, apply some adhesive to the inside section surface and position the left hand end cap onto the left hand side of the section, as shown. While holding the end cap in position, re-use the screws to secure the end cap to the section. Repeat for the right hand side and then repeat the same process for the other sections.

## Bottom Hole Set

**Center hole set(s)**

**Top of vertical track**

**Lower hole of hole/ slot pattern**

**1/4"-20 Flange hex nut**

**Jamb bracket in place**

**1/4" - 20 x 9/16" Track bolt**

**Bottom Hole Set Center hole set(s)**

**Top hole set**

**Bottom hole set**

**Jamb bracket**

**1/4" - 20 x 9/16" Track bolts**

**WARNING**

BEFORE CUTTING THE SECTION DOWN TO THE DESIRED WIDTH, ENSURE YOU ARE CUTTING BOTH SIDES EQUALLY. FAILURE TO DO SO COULD RESULT IN SECTION PANELING NOT LINING UP VERTICALLY.
NOTE: Refer to door section identification, located in the pre-installation section of this manual. Refer to Package Contents / Parts Breakdown, to determine which bottom corner brackets you received.

NOTE: Cable drums are marked right and left hand.

**WARNING**

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

Using the illustrations below, determine which bottom corner bracket came with your door.

**FOR DOORS WITH BOTTOM CORNER BRACKETS SHOWN IN TOP AND MIDDLE ILLUSTRATIONS:** Attach left hand bottom corner bracket to the left corner of the bottom section, making sure it is seated to the edges of the end cap. Using the illustrations below, secure the bottom corner bracket to the bottom section using the appropriate fasteners. Uncoil the counterbalance lift cables. Place the cable loop in position between the two holes on the side of the left hand bottom corner bracket. Slide a clevis pin through the innermost hole, cable loop, and outermost hole, of the bottom corner bracket. Slide a washer onto the clevis pin and secure in place by inserting a cotter pin into the hole of the clevis pin. Send the ends of the cotter pin outwards to secure it in place. Attach left hand bottom corner bracket to the left corner of the bottom section, making sure it is seated to the edges of the end cap. Using the illustrations below, secure the bottom corner bracket to the bottom section using the appropriate fasteners.

**FOR DOORS WITH BOTTOM CORNER BRACKETS SHOWN IN BOTTOM ILLUSTRATIONS:** Uncoil the counterbalance lift cables. Place the cable loop into position between the two holes on the side of the left hand bottom corner bracket. Slide a clevis pin through the innermost hole, cable loop, and outermost hole, of the bottom corner bracket. Slide a washer onto the clevis pin and secure in place by inserting a cotter pin into the hole of the clevis pin. Send the ends of the cotter pin outwards to secure it in place. Attatch left hand bottom corner bracket to the left corner of the bottom section, making sure it is seated to the edges of the end cap. Using the illustrations below, secure the bottom corner bracket to the bottom section using the appropriate fasteners.

**IMPORTANT:** THE 1/4" - 20 X 11/16" RED HEAD SELF DRILLING SCREWS MUST BE MUST BE INSTALLED THROUGH THE HOLES OF THE BOTTOM CORNER BRACKETS, AS SHOWN.

Insert a short stem track roller with a roller spacer into each of the bottom corner brackets.

**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.

**NOTE:** Refer to door section identification.

**NOTE:** Graduated hinges can be identified by the number stamped onto their lower leaf.

Align the lower leaves of the #1 graduated end hinges over the holes at the top of the end caps of the bottom section, and align the lower leaves of the #1 center hinges with the dimples at the center location(s) at the top of the section. Attach lower leaves to section using (2) 1/4" - 20 X 7/8" self drilling screws.

**IMPORTANT:** PUSH & HOLD THE HINGE LEAF SECURELY AGAINST THE SECTION WHILE SECURING WITH 1/4" - 20 X 7/8" SELF DRILLING SCREWS. THERE SHOULD BE NO GAP BETWEEN THE HINGE LEAF AND THE SECTION.

**NOTE:** For smaller door widths, single end hinges and short shaft rollers are required on each end of the bottom, lock and intermediate(s) sections.

**NOTE:** For larger door widths, double end hinges and long shaft rollers are required on each end of the bottom, lock and intermediate(s) sections.

Place the appropriate short or long shaft roller into each graduated end hinge.

Repeat graduated end hinge and center hinge attachment for all remaining sections except the top section, using #2 graduated end hinge for the lock section, #3 graduated end hinge for the intermediate I section, and #4 graduated end hinge for the intermediate II section and #5 graduated end hinge for the intermediate III section, if such section(s) were provided.
Strutting
Tools Required: Power drill, 7/16" Socket driver, Tape measure, Safety glasses, Leather gloves.

NOTE: If you completed Step 1, then the struts will have to be cut down the same amount as the sections or Door Section Width - 1" for the strut length.

NOTE: Refer to the strutting schedules below to determine the placement of strut(s) on your door. Be sure to use the schedules for Aluminum doors or Steel doors depending on the material your door is made of. Also use the schedules for the proper color of your door.

NOTE: If you paint your door, follow the Strutting Schedule For Brown, Black and Woodgrain Colored Doors.

Schedule Key:
- All struts are mounted and to be positioned at the top of the section.
- GI = Glazed Intermediate Section
- SC = The strut needs to be over the lower hinge leafs and attached to the section with strut clips
- BS = Bottom Section
- I2S = Intermediate Section #2
- LS = Lock Section
- I3S = Intermediate Section #3
- I1S = Intermediate Section #1
- TS = Top Section

**To Attach a Strut Along the Top of a Section:** Place a strut against top of section and align it horizontally with the section. Attach to section using (2) 1/4" - 20 x 7/8" self drilling screws at each end and center stile location.

**To Attach a Strut Across the Lower Leaf of Hinges with Strut Clips:** Remove 1/4" - 20 x 7/8" self drilling screws from lower leaf of hinges along sections which a strut will be attached to. Place strut above across hinges and attach to section with strut clips and the 1/4" - 20 x 7/8" self drilling screws which were removed.

### 8300 Steel Face and Steel Backer (Door Colors: White, Almond and Taupe)

<table>
<thead>
<tr>
<th>Door Height</th>
<th>Section Qty.</th>
<th>Configuration</th>
<th>Door Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;= 8'0&quot;</td>
<td>4 Solid</td>
<td>TS</td>
<td>TS</td>
</tr>
<tr>
<td></td>
<td>Glazed Top</td>
<td>TS</td>
<td>LS</td>
</tr>
<tr>
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<td>*Glazed Interm.</td>
<td>TS</td>
<td>GI SC</td>
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<td>8'1&quot; - 10'0&quot;</td>
<td>5 Solid</td>
<td>TS</td>
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<td></td>
<td>Glazed Top</td>
<td>TS</td>
<td>I1S</td>
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<td>*Glazed Interm.</td>
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### 8300 Steel Face and Steel Backer (Door Colors: Brown, Black and Woodgrain Doors)

<table>
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<td></td>
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<tr>
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<td>*Glazed Interm.</td>
<td>TS</td>
<td>GI SC</td>
</tr>
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<tr>
<td>8'1&quot; - 10'0&quot;</td>
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<td>Glazed Top</td>
<td>TS</td>
<td>I1S</td>
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<td>*Glazed Interm.</td>
<td>TS</td>
<td>GI SC</td>
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<td></td>
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<td>Bot S</td>
<td>BS</td>
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### 8300 Steel Face and Steel Backer (Door Colors: Brown, Black and Woodgrain Doors)

<table>
<thead>
<tr>
<th>Door Height</th>
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<th>Configuration</th>
<th>Qty.</th>
<th>Door Width</th>
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<tbody>
<tr>
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<td>TS</td>
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### 8300 Aluminum Face and Aluminum Backer (Door Colors: White, Almond and Taupe)

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<th>Configuration</th>
<th>Qty.</th>
<th>Door Width</th>
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<td></td>
<td>&quot;Glazed Intermediate&quot;</td>
<td>Bot S</td>
<td>Bot S</td>
</tr>
</tbody>
</table>

### Lift Handles

**Tools Required:** Tape measure, Power drill, 9/32", 1/2" Drill bit, 7/16" Wrench, Safety glasses, Leather gloves

**NOTE:** Refer to door section identification, located in the pre-installation section of this manual.

Locate the vertical center of the lock (second) section of the door and position the lift handle’s bottom hole 4” from the bottom of the lock section along the vertical center on the outside of the door. Use the holes in the lift handle as a template to mark the hole locations.

**IMPORTANT:** THE LIFT HANDLE AND THE STEP PLATE NEED TO BE VERTICALLY ALIGNED.

Drill 9/32” diameter holes through the section at each marked location. Enlarge the holes from outside the door to 1/2” diameter through the section. Assemble the outside and inside lift handles to the section using (2) 1/4” - 20 x 2-1/2” carriage bolts and (2) 1/4” - 20 hex nuts and spacers.

**WARNING**

TO AVOID POSSIBLE INJURY, LIFT HANDLES THAT ARE INSTALLED WITHIN 4 INCHES (102MM) OF A SECTION INTERFACE SHALL PROMOTE VERTICAL ORIENTATION OF THE HAND.

### Step Plate

**Tools Required:** Tape measure, Power drill, Drill bits, 7/16” Wrench, Phillips head screwdriver, Saw horses, Safety glasses, Leather gloves

On the bottom door section, locate the vertical center of the door.

On the inside of the door, center the inside step plate’s second top most hole and bottom hole vertically over the pre-punched holes in the bottom section no higher than 8” from the bottom of the door to the top of the step plate. Drill 7/16” diameter holes through the entire section at these hole locations. Be careful to keep drill straight.

**IMPORTANT:** DO NOT MOUNT THE STEP PLATE HIGHER THAN 8” FROM BOTTOM OF SECTION.

Insert the outside step plate into the holes through the front of the door, and mount the two step plates back to back with two No. 8 x 1-1/2” screws through the inside step plate and into the outside step plate.
10 Bottom Section
Tools Required: Level, Wooden shims (if necessary), Safety glasses, Leather gloves

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

11 Vertical Tracks
Tools Required: Power drill, 3/16" Drill bit, 7/16" Socket driver, Tape measure, Level, Step ladder, Safety glasses, Leather gloves

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 TRACK ASSEMBLIES MUST BE LEVEL FROM SIDE TO SIDE. IF THE BOTTOM SECTION WAS SHIMMED TO LEVEL IT, THE VERTICAL TRACK ASSEMBLY ON THE SHIMMED SIDE MUST BE RAISED THE HEIGHT OF THE SHIM.

Position the left hand vertical track assembly over the track rollers of the bottom section. Make sure the counterbalance lift cable is located between the track rollers and the door jamb.

NOTE: Pilot drill all 5/16" x 1-5/8" lag screws using a 3/16" drill bit, prior to fastening.

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 lift cables over the top of the vertical track assemblies. Repeat same process for other side.

12 Stacking Sections
Tools Required: Power drill, 7/16" Socket driver, Tape measure, Level, Step ladder, Safety glasses, Leather gloves

NOTE: Refer to door section identification.

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 rollers into the vertical tracks. Lower section until it is seated against bottom section. Flip hinges up. Fasten center hinge(s) first, then graduated end hinges, using 1/4" - 20 x 7/8" self-drilling screws. Repeat for other sections, except top section.

NOTE: Larger doors with double graduated end hinges fasten both hinges to connect the sections using 1/4" - 20 x 7/8" self-drilling screws.

IMPORTANT: PUSH & HOLD THE HINGE LEAFS SECURELY AGAINST THE SECTIONS WHILE SECURING WITH 1/4" - 20 X 7/8" SELF-TAPPING SCREWS. THERE SHOULD BE NO GAP BETWEEN THE HINGE LEAFS AND THE SECTIONS.

NOTE: Install lock at this time (sold separately). See optional installation step, Side Lock.

13 Top fixtures
Tools Required: Power drill, 7/16" Socket driver, Safety glasses, Leather gloves

NOTE: Refer to Illustrations shown below or Package Contents to determine which Top
Fixure was supplied with your door.

Align the top fixture base 3" down from the top section or below strut and even with the edge of the top section. The slotted half of the top fixture base should be facing upwards. Fasten to section through end cap using (4) 1/4"-20 x 7/8" self-drilling screws. Insert short stem track roller into top fixture slide. Repeat for other side.

Align the top fixture base at the top the corner of the top section and even with the edge of the section. Fasten to section through end cap using (4) 1/4"-20 x 7/8" self-drilling screws. Secure the top fixture slide to the fixture base loosely using (1) 5/16" - 18 x 3/4" carriage bolt and (1) 5/16" - 18 hex nut. The top fixture slide will be tightened and adjusted later, in step, Adjusting Top Fixtures. Insert a short shaft roller into the top fixture slide. Repeat for other side.

Remove, but retain (2 - 4) 1/4" - 20 x 7/8" self-drilling screws from the right side of the strut, allowing enough room to slide the top fixture between the section and the strut. Slide the top fixture assembly between the strut and section. Align the edge of the top fixture parallel to the top section edge. Secure the top fixture and strut to the top section with (3) 1/4" - 20 x 7/8" self-drilling screws through the upper and lower slots of the top fixture. Finish re-attaching the strut using the 1/4" - 20 x 7/8" self-drilling screws removed previously. Insert track roller into top fixture. Repeat for left hand side.

NOTE: If needed, ensure the top fixture slides are able to slide back and forth along the top fixture bases. If needed, loosen the hex nuts. The top fixture slides will be tightened and adjusted later, in step, Adjusting Top Fixtures.

**Top Sections**

Tools Required: Power drill, 7/16" Socket driver, 1/2" Wrench, Step ladder, Tape measure, Safety glasses, Leather gloves

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 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.

**Drawbar Operator Bracket**

Tools Required: Power drill, 7/16" Socket driver, 1/2" Wrench, Step ladder, Tape measure, Safety glasses, Leather gloves

IMPORTANT: WHEN CONNECTING A TROLLEY TYPE GARAGE DOOR OPENER TO THIS DOOR, A MANUFACTURER OPERATOR/ TROLLEY BRACKET MUST BE SECURELY ATTACHED TO THE TOP SECTION OF THE DOOR IF ONE HAS BEEN PROVIDED, ALONG WITH ANY STRUTS PROVIDED WITH THE DOOR (IF A MANUFACTURER OPERATOR/ TROLLEY BRACKET WAS NOT PROVIDED WITH YOUR DOOR, THAN USE THE ONE PROVIDED BY YOUR OPERATOR MANUFACTURER). THE INSTALLATION OF THE OPERATOR MUST BE ACCORDING TO MANUFACTURER'S INSTRUCTIONS AND FORCE SETTINGS MUST BE ADJUSTED PROPERLY.

NOTE: For retrofit applications, the drawbar operator bracket must be aligned with an existing operator.

NOTE: Refer to illustrations to determine which top fixtures were supplied with your door.

FOLLOW THE CORRESPONDING STEP BELOW:

A: Place the bottom half of drawbar operator bracket inside the top half of drawbar operator bracket and flush against the inside surface of the top section. Adjust both the top and bottom halves out as far apart as possible on the section surface. Secure the bottom half drawbar operator bracket and the top half drawbar operator bracket together using (4) 5/16" - 18 x 1/2" carriage bolts and (4) 5/16" - 18 flange hex nuts.

NOTE: Install the 5/16" - 18 x 1/2" carriage bolts and the 5/16" - 18 flange hex nuts as far apart as possible, prior to securing both top and bottom halves together.

Now, locate the center of the top section and align the center of the holes in the drawbar operator bracket assembly with the top section center line. Align the drawbar operator bracket assembly vertically.

Slide the top half of the drawbar operator bracket under the strut, keeping the drawbar operator bracket aligned with the center line. Remove the strut’s screws, if necessary and attach to the top section (through strut if necessary) using (3) 1/4" - 20 x 7/8" self-drilling screws.

NOTE: If your door lacks a strut on the top section, ignore the previous paragraph.

Attach the bottom half of the drawbar operator bracket to the section surface using (3) 1/4" - 20 x 7/8" self-drilling screws.

NOTE: When attaching drawbar operator bracket to top section with strut, apply additional pressure to thread into the strut.

B: Locate the center of the top section. Position the drawbar operator bracket under the strut (if applicable) or align the drawbar operator bracket top edge with the top edge of the top section, as shown.

Attach the drawbar operator bracket using (3) 1/4" - 20 x 7/8" self-drilling screws (as shown).
**Attaching Horizontal Tracks**

**Tools Required:** Ratchet wrench, 9/16" / 7/16" Socket, 9/16" Wrench, Step ladder, Tape measure, Safety glasses, Leather gloves

**NOTE:** Refer to illustrations shown below or Package Content to determine which horizontal track was supplied with your door.

**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.

**IF YOU HAVE A 12" OR 15" 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. 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.

**IF YOU HAVE A 32" HORIZONTAL TRACK:** Loosely attach the horizontal reinforcing angle to the second hole of the wall clip using (1) 3/8" - 16 x 3/4" truss head bolt and nut. Attach the horizontal curve to the upper slots in the flag angle using (2) 1/4" - 20 flange hex nuts. Rotate the horizontal track assembly upward until the track assembly is approximately level with the floor. Attach the wall clip to the jamb using (2) 5/16" x 1-5/8" lag screws.

**NOTE:** Pilot drill all 5/16" x 1-5/8" lag screws using a 3/16" drill bit, prior to fastening. Level the horizontal track assembly and tighten the 3/8" - 16 x 3/4" truss head bolt and the 3/8" - 16 hex nut. Repeat for other side.

**TO INSTALL LOW HEADROOM HORIZONTAL TRACK:** Place the top rail end over the top track roller of the top section. Align the bottom rail end of the horizontal track with the top of the vertical track. Tighten the bottom rail of 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. Level the horizontal track assembly and bolt the top rail of the horizontal track to the encountered slot in the flag angle using (1) 1/4" - 20 x 9/16" track bolt, (1) 1/4" - 20 flange hex nut and (1) 5/16" washer. Repeat for other side.

**End Bearing Brackets**

**Tools Required:** Step ladder, Power drill, 3/16" Drill bit, Ratchet wrench, 7/16" / 9/16" Socket, 9/16" Wrench, Tape measure, Safety glasses, Leather gloves

**NOTE:** Refer to illustrations shown below or Package Contents to determine which End Bearing brackets were supplied with your door. If your door came with one of these end bearing brackets, complete this step. If your door didn’t come with one of these end bearing brackets, then complete the next step 18b.

**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 (if needed). Attach the left hand end bearing bracket through either the end bearing bracket’s upper or lower 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 END BEARING BRACKET’S LOWER SLOTS ARE USED ON DOORS WITH 12" RADIUS TRACK, THE UPPER SLOTS ARE USED ON DOORS WITH 15" RADIUS TRACK.

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

**NOTE:** Pilot drill all 5/16" x 1-5/8" lag screws using a 3/16" drill bit, prior to fastening.
**End Bearing Brackets**

*Tools Required:* Step ladder, Power drill, 3/16" Drill bit, Ratchet wrench, 7/16" Socket driver, 9/16" Socket, 9/16" Wrench, Tape measure, Safety glasses, Leather gloves

**NOTE:** Right and left hand is always determined from inside the garage looking out.

First, using a tape measure, determine if the bottom curve of the horizontal track is either 12" or 15" radius. End bearing brackets are right hand and left hand. Starting with the left hand side, position the left hand end bearing bracket above the left hand flag angle, as shown. Loosely attach the end bearing bracket to the flag angle using (1) 3/8" - 16 x 3/4" truss head bolt and (1) 3/8" - 16 hex nut.

**NOTE:** Ensure the 3/8" - 16 x 3/4" truss head bolt is going through the inside portion of flag angle first and the 3/8" - 16 hex nut is on the outside of the flag angle, as shown.

**IMPORTANT:** SPACING SPECIFIED BELOW MUST BE MAINTAINED BETWEEN THE END BEARING BRACKET AND THE FLAG ANGLE, PRIOR TO SECURING THE END BEARING BRACKET TO FLAG ANGLE AND JAMB. THIS IS TO ENSURE PROPER CLEARANCE OF THE COUNTERBALANCE LIFT CABLE.

The spacing between the end bearing bracket and the flag angle is critical. Position the end bearing bracket between 1" (12" Radius) or 1/2" (15" Radius) from the top edge of flag angle. Once the end bearing bracket is properly positioned, tighten the 3/8" - 16 nut to secure the end bearing bracket to the flag angle. Next, secure the end bearing bracket to the jamb using (2) 5/16" x 1-5/8" lag screws, as shown. Repeat same process for the other side.

**NOTE:** Pilot drill all 5/16" x 1-5/8" lag screws using a 3/16" drill bit, prior to fastening.

**Center Bracket Bushing Assembly**

*Tools Required:* Step ladder, Power drill, 7/16" Socket driver, 3/16" Drill bit, Level, Tape measure, Pencil, Safety glasses, Leather gloves

**NOTE:** Pilot drill all 5/16" x 1-5/8" lag screws using a 3/16" drill bit, prior to fastening.

**IMPORTANT:** THE 5/16" RED HEAD LAG SCREWS MUST BE ATTACHED TO THE CENTER BRACKET(S).

**IMPORTANT:** USE A 5/16" X 2-1/2" RED HEAD LAG SCREW INSTEAD OF THE 5/16" X 1-5/8" RED HEAD LAG SCREW IF MOUNTING SURFACE IS COVERED BY DRYWALL. THE LAG SCREW MUST BE ATTACHED THROUGH THE BOTTOM HOLE OF THE CENTER BRACKET(S).
**Torsion Spring Assembly**

**Tools Required:** 3/8" Wrench, 9/16" Wrench, Step ladder, Tape measure, Safety glasses, Leather gloves

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

**NOTE:** 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.

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**Counterbalance Lift Cables**

**Tools Required:** Step ladder, Locking pliers, 3/8" Wrench, Tape measure, Safety glasses, Leather gloves

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.

**NOTE:** If you have 32" radius horizontal track, then additional pre-wrapped counterbalance lift cable than shown in the illustration is required.

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.

**NOTE:** If you have low headroom horizontal track, then you’ll need to check the clearance between the upper curve and the jamb. The clearance must be a minimum of 3/4". If it is less than 3/4”, trim the top curve with a hacksaw to ensure counterbalance lift cable clearance.
Securing Door for Spring Winding(s)

**Tools Required:** Vice clamps, Safety glasses, Leather gloves

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.

Rear Back Hangs

**Tools Required:** Ratchet wrench, Socket: 1/2" 5/8", Wrench: 1/2" 5/8", (2) Vice clamps, Tape measure, Level, Step ladder, Safety glasses, Leather gloves

**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 of the bottom section. This will prevent the door from raising or drifting down on its own.

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).

**NOTE:** Pilot drill all 5/16" x 1-5/8" lag screws using a 3/16" drill bit, prior to fastening. Horizontal tracks must be level and parallel with door within 3/4" to 7/8" maximum of door edge.

Winding Springs

**Tools Required:** Step ladder, Approved winding bars, 3/8" Wrench, Tape measure, Safety glasses, Leather gloves

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.

**IMPORTANT:** CHECK THE LABEL ATTACHED TO THE SPRING WARNING TAG FOR THE REQUIRED NUMBER OF COMPLETE TURNS TO BALANCE YOUR 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.

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 rising 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 shifts down on its own, add spring tension.

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

**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 rising 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).

**NOTE:** Pilot drill all 5/16" x 1-5/8" lag screws using a 3/16" drill bit, prior to fastening. 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.

New, 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 rise 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.
Perforated angle bolted using (2) 5/16" x 1-5/8" hex head lag screws to ceiling member and parallel to door.

5/16" - 18 x 1-1/4" Hex bolts must extend into the track to serve as a roller stop.

Perforated angle bolted using (2) 5/16" x 1-5/8" hex head lag screws to ceiling member and parallel to door.

5/16" - 18 x 1-1/4" Hex bolts must extend into the track to serve as a roller stop.
**Trolley Arm Hookup**

**NOTE:** If Wayne Dalton operator/trolley bracket was installed, follow these directions.

Align hole in the door arm with holes in operator bracket tabs, as shown. Attach with 5/16" x 1-3/4" cotter pin and cotter ring.

**Inside Lock**

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**

**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:** 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 weather stripping 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

Refer to Instruction Insert “Field Painting and Finishing Fiberglass or Steel Door Sections”.

Maintaining The Finish On Your Garage Door

If the factory finish is beginning to fade, the door may require a field applied top clear coat. Depending on environment and usage, this may be necessary after 1 to 3 years of use. Refer to Instruction Insert “Field Painting and Finishing Fiberglass or Steel Door Sections”.

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 Wayne Dalton 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 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 rope affixed to the side of door. Door should close completely with little resistance.

Using an electric opener:

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

When connecting a trolley type garage door opener to this door, an opener and/or trolley bracket must be securely attached to the top section of the door, along with any u-bars pro-
Limited Warranty
Model 8300

Wayne Dalton, a division of Overhead Door Corporation ("Seller") warrants to the original purchaser of the Model 8300, 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 period(s) of time, measured from the date of installation:

**Limited Lifetime Warranty** on the Product sections against:
- The Product becoming inoperable due to rust-through of the steel skin from the core of the Product section, due to cracking, splitting, or other deterioration of the steel skin, or due to structural failure caused by separation or degradation of the foam insulation.
- Peeling of the original paint as a result of a defect in the original paint or in the application of the original paint coating.
- The Product hardware and tracks (except springs).

**ONE (1) YEAR** on those component parts of the Product not covered by the preceding provisions of this Warranty.

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 gives you specific legal rights, and you may also have other rights which vary under applicable law. 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 covered and fully-enclosed residential or other non-commercial application. It does not cover any Product installed in commercial or industrial building applications or any Product installed in a manner in which components (other than the external face of the door panels) are not contained within a fully enclosed and covered structure. 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 excludes 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, salt spray, sand, dirt or grease.

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 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 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 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. There are no established informal dispute resolution procedures of the type described in the Magnuson-Moss Warranty Act.

- **SELLER:**

- **SELLER’S ADDRESS:**
Thank you for your purchase.

**PLEASE DO NOT RETURN THIS PRODUCT TO THE STORE**

If you need assistance, please call 1-866-569-3799 (press Option 1) and follow the prompts to contact a customer service representative. They will be happy to handle any questions that you may have.

After installation is complete, fasten this manual near garage door for easy reference.