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.

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.

This Installation document is available at no charge from:
- Your local Wayne Dalton Sales Center, or
- Online at www.Wayne-Dalton.com, or
- By mailing to: Wayne Dalton, a division of Overhead Door Corporation, P.O. Box 67, Mt. Hope, OH, 44660

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Part Number 346450  REV12_04/25/2017
**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.

**NOTE:** Information assuring proper installation of the door.

**IMPORTANT:** Required step for safe and proper door operation.

**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. **IMPORTANT:** 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, improper 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 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. **WARNING** Ropes/straps, cables must be removed or made inoperative in the open (unlocked) position.
17. NEVER hang tools, bicycles, hoses, clothing or anything else from horizontal tracks. Track systems are not intended or designed to support extra weight.
18. This door may not meet the building code wind load requirements in your area. For your safety, you will need to check with your local building official for wind load code requirements and building permit information.
19. For windloaded doors, the wind performance is achieved via the entire door system and component substitution is not authorized without express permission by Wayne Dalton.
20. **NOTE:** It is recommended that 5/16" lag screws are pilot drilled using a 3/16" drill bit, prior to fastening.

**CAUTION**
If any part of the door is to be installed onto preservative-treated wood, PTFE-coated or stainless steel fasteners must be obtained and used. Replacement fasteners must be of at least equal strength and size as original fasteners. If the original fastener was red-head, the replacement fastener must be red-head also. Contact Wayne Dalton for fastener strength values if needed.

**WARNING**
Impact guns are not recommended. 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.

<table>
<thead>
<tr>
<th>Potential Hazard</th>
<th>Effect</th>
<th>Prevention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moving door</td>
<td><strong>WARNING</strong> Could result in Death or Serious Injury</td>
<td>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.</td>
</tr>
<tr>
<td>High tension spring</td>
<td><strong>WARNING</strong> Could result in Death or Serious Injury</td>
<td>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.</td>
</tr>
</tbody>
</table>

**Removing an Existing Door and Preparing the Opening**

**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.

To avoid possible injury and to insure proper installation, it’s highly recommended that you read and fully understand the complete instructions on removing an Existing Door & Preparing the Opening. These are available for download at [www.Wayne-Dalton.com](http://www.Wayne-Dalton.com) or at your local Wayne Dalton Sales Center.

**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 jams and header must be securely fastened to sound framing members. It is recommended that 2" x 6" lumber be used. The jams must be plumb and the header level, The jams should extend a minimum of 12" (305 mm) above the top of the opening for TorqueMaster® counterbalance systems. For low headroom applications, the jams 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 jams, header and mounting surface. Any wood found not to be sound, must be replaced.

For TorqueMaster® 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 it into the header and jams.

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

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

**FOR QUICK INSTALL TRACK:** For the header, align the weatherstrip with the inside edge of the header and temporarily secure it to the header with equally spaced nails. Starting at either side of the jam, fit the weatherstrip up tight against the temporarily attached weatherstrip in the header and flush with the inside edge of the jam. 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.

**FOR FULLY ADJUSTABLE TRACK:** 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:** 6” low headroom conversion kit is available for 12” radius only. Contact your local Wayne Dalton dealer.

**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

<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>102” (2591 mm)</td>
<td>125” (3175 mm)</td>
</tr>
<tr>
<td>7’1” to 8’0”</td>
<td>12”,15” Radius</td>
<td>114” (2896 mm)</td>
<td>137” (3480 mm)</td>
</tr>
</tbody>
</table>

### HEADROOM REQUIREMENTS

<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>11” (279 mm)</td>
</tr>
<tr>
<td>6” Low Headroom</td>
<td>6” (152 mm)</td>
</tr>
</tbody>
</table>

---

**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

<table>
<thead>
<tr>
<th>Door Height</th>
<th>Type Of Section</th>
<th>Bottom</th>
<th>Lock (sec- ond)</th>
<th>Intermediate I (third)</th>
<th>Intermediate II (fourth)</th>
<th>Top</th>
</tr>
</thead>
<tbody>
<tr>
<td>6'0&quot;</td>
<td></td>
<td>18&quot;</td>
<td>18&quot;</td>
<td>18&quot;</td>
<td>NA</td>
<td>18&quot;</td>
</tr>
<tr>
<td>6'3&quot;</td>
<td></td>
<td>18&quot;</td>
<td>18&quot;</td>
<td>18&quot;</td>
<td>NA</td>
<td>18&quot;</td>
</tr>
<tr>
<td>6'6&quot;</td>
<td></td>
<td>21&quot;</td>
<td>18&quot;</td>
<td>18&quot;</td>
<td>NA</td>
<td>21&quot;</td>
</tr>
<tr>
<td>6'9&quot;</td>
<td></td>
<td>21&quot;</td>
<td>21&quot;</td>
<td>21&quot;</td>
<td>NA</td>
<td>21&quot;</td>
</tr>
<tr>
<td>7'0&quot;</td>
<td></td>
<td>21&quot;</td>
<td>21&quot;</td>
<td>21&quot;</td>
<td>NA</td>
<td>18&quot;</td>
</tr>
<tr>
<td>7'6&quot;</td>
<td></td>
<td>18&quot;</td>
<td>18&quot;</td>
<td>18&quot;</td>
<td>18&quot;</td>
<td>18&quot;</td>
</tr>
<tr>
<td>7'9&quot;</td>
<td></td>
<td>21&quot;</td>
<td>18&quot;</td>
<td>18&quot;</td>
<td>18&quot;</td>
<td>18&quot;</td>
</tr>
<tr>
<td>8'0&quot;</td>
<td></td>
<td>21&quot;</td>
<td>18&quot;</td>
<td>18&quot;</td>
<td>18&quot;</td>
<td>21&quot;</td>
</tr>
</tbody>
</table>

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

Unless your door is five sections in height, you will not receive an Intermediate II section.

The BOTTOM SECTION can be identified by the factory attached bottom astragal, the factory attached bottom corner brackets, and by the bottom corner 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.

Tools Required

- Power drill
- Socket driver: 7/16" . 3/16", 9/32", 7/16", 1/2"
- Level
NOTE: The illustrations shown on this page are general representations of the door parts. Each specific door model may have unique variations.

A. FLAG ANGLES (AS REQUIRED):
   A1. Quick Install (Q.I.) Flag Angles
   A2. Fully Adjustable (F.A.) Flag Angles

B. JAMB BRACKETS (AS REQUIRED):
   B1. Quick Install (Q.I.) Jamb Brackets
   B2. Fully Adjustable (F.A.) Jamb Brackets

C. TRACK ROLLERS (AS REQUIRED):
   C1. Short Stem Track Rollers
   C2. Long Stem Track Rollers

D. GRADUATED END HINGES:
   D1. Single Graduated End Hinges (S.E.H.), Industry Standard
   D2. Double Graduated End Hinges (D.E.H.), Industry Standard

E. STACKED SECTIONS:
   E1. Top Section
   E2. Intermediate(s) Section
   E3. Lock Section
   E4. Bottom Section

F. TOP FIXTURES (AS REQUIRED):
   F1. Top Fixture Assemblies

G. STRUT(S) (AS REQUIRED):
   G1. Strut (U-shaped)

H. DRAWBAR OPERATOR BRACKET (FOR TROLLEY OPERATED DOORS):
   H1. Drawbar Operator Bracket (Supplied By Others)

I. TRACKS (AS REQUIRED):
   I1. Left Hand Horizontal Track Assembly
   I2. Right Hand Horizontal Track Assembly
   I3. Left Hand Vertical Track
   I4. Right Hand Vertical Track
   I5. Left Hand Riveted Vertical Track Assembly
   I6. Right Hand Riveted Vertical Track Assembly

J. TORQUEMASTER PLUS® SPRING ASSEMBLY:
   J1. Center Bracket Bushing Assembly
   J2. TorqueMaster® Spring Tube (Single Or Double Springs)
   J3. Left Hand End Bracket (Double Springs Only)
   J4. Right Hand End Bracket (Disconnect Cable Guide)
   J5. Left Hand And Right Hand Cable Drum Assemblies
   J6. Idler bracket (Single Spring Only)
   J7. Left Hand And Right Hand Drum Wraps (Optional)

K. REAR BACK HANGS:
   K1. Left Hand And Right Hand Rear Back Hang Assemblies

L. BOTTOM CORNER BRACKETS:
   L1. Left Hand Bottom Corner Bracket
   L2. Right Hand Bottom Corner Bracket
Attaching Flag Angles and Jamb Brackets To Vertical Tracks

NOTE: If you have Riveted Track or Angle Mount Track, skip this step.

FOR DOORS WITH QUICK INSTALL TRACK: Place the lower Quick Install tab of the left hand flag angle in the Quick Install feature of the left hand vertical track. Give the flag angle 1/4 turn to lock in place. Measure the length of the vertical tracks. Using the jamb bracket schedule, determine the placement of the jamb brackets for your door height and track length. To install the jamb brackets, align the Quick Install tab on the Quick Install jamb bracket with the Quick Install feature in the vertical track and turn the bracket perpendicular to the track so the mounting flange is toward the back (flat) leg of the track. Repeat the same process for right hand side.

# Jamb Bracket Schedule

<table>
<thead>
<tr>
<th>Door Height</th>
<th>Track Length</th>
<th>1st Set</th>
<th>2nd Set</th>
<th>3rd Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>6'0&quot; - 6'3&quot;</td>
<td>64.00&quot;</td>
<td>9</td>
<td>M</td>
<td>11</td>
</tr>
<tr>
<td>6'6&quot; - 7'0&quot;</td>
<td>70.00&quot;</td>
<td>9</td>
<td>M</td>
<td>10</td>
</tr>
<tr>
<td>7'6&quot; - 8'0&quot;</td>
<td>82&quot; (2083 mm)</td>
<td>9</td>
<td>T</td>
<td>10</td>
</tr>
</tbody>
</table>

B= Bottom Hole, M= Middle Hole, T= Top Hole

Attaching Bottom Corner Brackets

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, as shown. Place the Quick Install tabs of the horizontal track angle in the key slot of the left hand horizontal track. Using a hammer, tap the horizontal track angle towards the curved end of the track until the alignment hole in the track and angle are aligned. Repeat for other side. Set tracks aside.

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 from the cable drum assemblies. Locate the left hand bottom corner bracket. Slide the left hand cable loop of the counterbalance lift cable onto milford pin. Position the left hand bottom corner bracket onto the bottom section. Attach the bottom corner bracket to the bottom section with (3) 1/4" - 20 x 11/16" RED HEAD self drilling screws. Repeat same process for the right hand side.

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 roller spacer into the bottom corner bracket. Repeat for other side.

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, located in the pre-installation section of this manual.

3. Attaching Hinges and Strut(s) To Sections

NOTE: The graduated hinges can be identified by the number stamped on the lower hinge leaf.

NOTE: The #1 graduated end hinges serves as end hinges on the bottom section. The #1 graduated end hinges also serves as center hinges on all sections, except for the top section.

NOTE: The #2 graduated end hinges serves as end hinges on the Lock section.

NOTE: The #3 graduated end hinges serves as end hinges on the Intermediate I section.

NOTE: The #4 graduated end hinges serves as end hinges on the Intermediate II section.

ATTACHING HINGES TO SECTIONS:

Starting on the left hand side of the bottom section, align the lower hinge leaf of the #1 graduated end hinge over the holes, located at the top of the end cap. Attach lower leaf to the end cap with (2) 1/4" - 14 x 5/8" self tapping screws. Repeat for other side. Next, align the lower hinge leaf of the #1 center hinges with the pre-punched holes at each center stile location(s), located at the top of the bottom section. Attach lower hinge leaf to the center stile with (2) 1/4" - 14 x 5/8" self tapping screws.

IMPORTANT: Once the 1/4" - 14 x 5/8" self tapping screws are snug against the lower hinge leaves, tighten an additional 1/2 to 1/2 turn to receive maximum design holding power.

ATTACHING STRUT(S) TO SECTIONS: Using the strut schedule, determine the placement of the struts for your door width and door height.

INSTALLATION ON THE TOP SECTION: Locate and center the strut at the top of the top section surface. Secure strut to top section using (2) 1/4" - 20 x 7/8" self drilling screws at each end and at each center stile locations.

INSTALLATION ON ALL OTHER SECTIONS: Locate and center the strut onto the section surface and up against the bottom of the hinges. Center the strut side to side. Secure strut to the section using (2) 1/4" - 20 x 7/8" self drilling screws at each end and center stile locations.

NOTE: All struts are placed at the top of the sections and up against the bottom of the graduated hinges, for the intermediate, lock and bottom sections.

Insert a short stem track roller into the hinge tube of the #1 graduated end hinges. Repeat graduated hinge attachment using the appropriate graduated end hinges for all remaining sections except the top section.

IMPORTANT: When placing short stem track rollers into the #2 graduated end hinges and higher, the short stem track roller goes into hinge tube furthest away from section.

NOTE: Depending on your door some sections may or may not require a strut to be installed onto the section.

Strutting Schedule Key:

<table>
<thead>
<tr>
<th>TS = Top Section</th>
<th>I1 = Intermediate Section #1</th>
<th>BS = Bottom Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS = Lock Section</td>
<td>ES = Every Section gets a strut.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strutting Schedule For Models 8000 and 8100</th>
<th>Strutting Schedule Key:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door Heights</td>
<td>Section Qty</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------</td>
</tr>
<tr>
<td>6’0” - 7’0”</td>
<td>4</td>
</tr>
<tr>
<td>7’6” - 8’0”</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strutting Schedule For Model 8200</th>
<th>Strutting Schedule Key:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door Heights</td>
<td>Section Qty</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------</td>
</tr>
<tr>
<td>6’0” - 7’0”</td>
<td>4</td>
</tr>
<tr>
<td>7’6” - 8’0”</td>
<td>5</td>
</tr>
</tbody>
</table>
Attaching Step Plate To Bottom Section

Locate the center most center stile of the bottom section of the door. On the inside of the door, center the step plate on the center most stile no higher than 6" from the bottom of the door. Using the step plate holes as a template, drill a 5/16" dia. hole along each side of the center stile, through the face of the door. Drill through insulation and door's face on an insulated door.

IMPORTANT: BE EXTREMELY CAREFUL TO KEEP DRILL STRAIGHT.

Mount the inside step plate and the outside step plate back to back, straddling the center stile. Secure with (2) 1/4" - 20 x 2-3/4" carriage bolts and 1/4" - 20 hex nuts.

IMPORTANT: DO NOT MOUNT THE STEP PLATE HIGHER THAN 6" FROM THE BOTTOM OF THE SECTION.

Lift Handle

Tools Required: Power drill, 9/32"/1/2" Drill bits, 1/4" Wrench, Tape measure, Safety glasses, Leather gloves

NOTE: Doors with a Keyed lock do not require this lift handle.

Locate the inside center stile or the desired lift handle location on the lock (2nd) section of the door. Position the lower hole in the lift handle 4" from the bottom of the lock (2nd) section.

IMPORTANT: THE DISTANCE BETWEEN THE STEP PLATE AND THE MIDDLE OF THE LIFT HANDLE MUST BE 20" MINIMUM TO 30" MAXIMUM. IF NECESSARY REPOSITION THE UPPER LIFT HANDLE TO STAY WITHIN THE REQUIRED DIMENSION.

Using the lift handle holes as a template, drill (2) 9/32" dia. holes through the lock section. Enlarge the holes from the outside the door to 1/2" dia.

NOTE: Do not drill through or enlarge holes on the inside of the door.

Assemble the outside and inside lift handles to the lock section using (2) spacers, (2) 1/4" - 20 x 2-1/2" carriage bolts and (2) 1/4" - 20 hex nuts.

Attaching Vertical Tracks To Jambs

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.

NOTE: Make sure the counterbalance lift cable is located between the track rollers and the door jamb.

Starting on the left hand side of the bottom section, remove the nail. Position the left hand vertical track assembly over the track rollers of the bottom section and install, as shown. 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, between the bottom section and vertical track. Hang counterbalance lift cable over flag angle. Repeat same process for other side.
**Attaching Top Fixtures To Top Section**

Starting on the left hand side, align the upper-center hole of top fixture base with the hole in the end stile of the top section or below strut (if applicable) and even with the edge of the top section, as shown. The slotted half of the top fixture base should be facing upwards. Fasten to section using (4) 1/4” - 20 x 11/16” self drilling screws. The top fixture slide will be tightened and adjusted later, in step, Adjusting Top Fixture. Insert short stem track roller into top fixture slide. Repeat same process for other right hand side.

**NOTE:** The top fixture slide will be tightened and adjusted later, in step, Adjusting Top Fixture.

**NOTE:** Ensure the top fixture slide is able to slide along the top fixture base. If needed, loosen the 1/4” - 20 flange hex nuts.

**Stacking Sections**

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

**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 section until it is seated against bottom section. Flip hinges up. Fasten center hinge(s) first; then end hinges last using 1/4” - 20 x 7/8” self-drilling screws.

**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. Repeat same process for other sections, except top section.

**IMPORTANT:** PUSH & HOLD THE HINGE LEAVES SECURELY AGAINST THE SECTIONS WHILE SECURING WITH FASTENERS TO IT. THERE SHOULD BE NO GAP BETWEEN THE HINGE LEAVES AND THE SECTIONS.

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

**Stacking Top Section**

Place the top section in the opening. Install a nail to prevent the top section from falling backwards. Now, flip up the 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 or wall angles 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 for other side.

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

**FOR QUICK INSTALL TRACK:** Complete the vertical track installation by securing the jamb bracket(s) and tightening the other lag screws. Repeat for other side.

**FOR FULLY ADJUSTABLE TRACK OR RIVETED TRACK:** 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.
**Attaching Horizontal Tracks**

*NOTE:* Depending on your door, you may have Quick Install Flag Angles, Fully Adjustable Flag Angles or you may have Riveted Vertical Track Assemblies. Refer to Package Contents / Breakdown of Parts, to determine which Flag Angles / Vertical Track Assemblies you have.

**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 QUICK INSTALL FLAG ANGLES:** To install horizontal track, place the curved end over the top track roller of the top section. Align key slot of the horizontal track with the Quick Install tab of the flag angle. Push curved portion of horizontal track down to lock in place.

**FOR OTHER FLAG ANGLES:** 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.

Next level the horizontal track assembly and bolt the horizontal track angle to the first encountered slot in the flag angle / angle mount using (1) 3/8" - 16 x 3/4" truss head bolt and (1) 3/8" - 16 hex nut. Repeat for other side. Remove nail that was temporarily holding the top section in position.

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

**Adjusting Top Fixtures**

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.

**Preparing The TorqueMaster® Spring Tube Assembly**

*NOTE:* TorqueMaster® springs come lubricated and pre-assembled inside the TorqueMaster® spring tube.

To prepare for install, lay the spring tube assembly on the floor, inside garage, in front of the door, and with the labeled end to the left. Next, remove the shipping boots from the ends of the TorqueMaster® spring tube.

Being cam shaped, the center bushing only fits one way. Slide the center bracket bushing assembly towards the center of the TorqueMaster® spring tube, from the right side, as shown.

*NOTE:* Refer to Package Contents / Breakdown of Parts, to determine if you have drum wraps (optional).

Drum wraps (optional) are marked right and left hand. Beginning with the left hand side, slide the left hand drum wrap onto the TorqueMaster® spring tube. Repeat for the right hand side. The drum wrap will be secured later, in Step, Securing Drum Wraps.

**Installing Cable Drum Assemblies**

*NOTE:* Cable drum assemblies are marked right and left hand. Cable drums and TorqueMaster® spring tube assembly are cam shaped to fit together only one way.
Shake the TorqueMaster® spring tube assembly gently to extend the winding shafts out about 5" on each side. For single spring applications, there will be no left hand spring in the TorqueMaster® spring tube assembly. Lift the TorqueMaster® spring tube assembly and rest it on top of the flag angles.

**NOTE:** Temporarily support the center of the TorqueMaster® spring tube assembly until the center bracket is installed in Step Attaching Center Bracket to Wall.

**NOTE:** For single spring applications, there will be no left hand spring in the TorqueMaster® spring tube assembly. If both winding shafts are not visible out of the right hand side, gently shake the TorqueMaster® spring tube until both winding shafts stick out 5".

**NOTE:** If winding shaft is not visible out of the right hand side, gently shake the TorqueMaster® spring tube until both winding shaft sticks out 5".

**NOTE:** Working with a partner as needed, lift the TorqueMaster® spring tube assembly up and rest it on top of the flag angles.

**NOTE:** Cable drum assemblies are marked right and left hand. Cable drums and TorqueMaster® spring tube assembly are cam shaped to fit together only one way.

Starting on the right hand side, pre-wrap the cable drum with the counterbalance lift cable 1-1/2 wraps, as shown. Position the TorqueMaster® spring tube assembly so the cam peak is pointing straight up. Slide the cable drum over the winding shaft until the cable drum seats against the TorqueMaster® spring tube assembly. The winding shaft must extend past the cable drum far enough to expose the grooves and the splines. Align the winding shaft grooves with the round notch in the flag angle.

**NOTICE:** For double spring applications: Repeat the same process for left hand side. For single spring applications: Insert the idler bracket into the left hand cable drum. Lightly press the idler bracket into the cable drum until two distinct clicks are heard, or the bracket is inserted all the way.

**IMPORTANT:** Ensure the snaps on the idler bracket (left hand side) are engaged into the left hand cable drum. So that it does not come back out.

**NOTE:** The idler bracket is designed for permanent assembly. Do not attempt to remove idler bracket once inserted into the cable drum.

**NOTE:** The idler bracket must extend past the cable drum far enough to expose the groove. Align the idler bracket groove with the round notch in the flag angle.

**ATTACHING END BRACKETS TO FLAG ANGLES**

**IMPORTANT:** WARNING TAGS MUST BE SECURELY ATTACHED TO END BRACKET(S).

**IMPORTANT:** FOR SINGLE SPRING DOORS, ENSURE THE LEFT HAND CABLE DRUM BEARING IS ALL THE WAY TO THE LEFT AND UP AGAINST THE FLAG ANGLE. IF THE CABLE DRUM IS PULLED AWAY FROM THE FLAG ANGLE, THEN THE IDLER BRACKET CAN RUB AGAINST THE CABLE DRUM CAUSING NOISE.

**NOTE:** Drill 3/16" pilot holes into header for the lag screws.

Beginning with the right hand side, slide the end bracket onto the winding shaft so that the splines in the ratchet wheel fit onto the winding shaft grooves. Attach the end bracket to the flag angle using (1) 5/16" - 18 x 3/4" carriage bolt, (1) 5/16" washer and (1) 5/16" - 18 hex nut. Then secure the end bracket to the jambs using (1) 5/8" x 1-5/8" lag screw.

**NOTE:** If ratchet wheel falls out of end bracket, refer to illustration for proper insertion orientation.

**FOR DOUBLE SPRING APPLICATIONS:** Repeat same process for left hand end bracket.
Attaching Center Bracket to Wall

**IMPORTANT:** TORQUEMASTER® SPRING TUBE MUST BE LEVEL BEFORE SECURING CENTER BRACKET BUSHING ASSEMBLY TO HEADER.

**NOTE:** Drill 3/16” pilot holes into header for the lag screws.

To locate the center bracket bushing assembly, mark the header halfway between the flag angles and level the TorqueMaster® spring tube. Fasten the center bracket bushing assembly to the header using (2) 5/16” x 1-5/8” lag screws.

Securing Door For Winding Spring(s)

With the door in the fully closed position, place locking pliers onto both vertical tracks just above the third track roller. This is to prevent the garage door from rising while winding spring(s).

**NOTE:** Check the following before attempting to wind spring(s):
- Counterbalance lift cables are secured at bottom corner brackets.
- Counterbalance lift cables are routed unobstructed to cable drums.
- Counterbalance lift cables are correctly installed and wound onto cable lift drums.
- TorqueMaster® spring tube is installed correctly.
- Review the label attached to the spring warning tag, to determine number of spring turns required.

**NOTE:** Door MUST be closed and locked when winding or making any adjustments to the spring(s).

**WARNING**

FAILURE TO PLACE LockING PLIERS ONTO VERTICAL TRACK CAN ALLOW DOOR TO RAISE AND CAUSE SEVERE OR FATAL INJURY.

Winding Spring(s)

**IMPORTANT:** VERIFY THAT THERE ARE NO OBSTRUCTIONS IN THE TRAVEL PATH OF THE DOOR SECTIONS OR COUNTERBALANCE LIFT CABLES.

**IMPORTANT:** INSPECT EACH COUNTERBALANCE LIFT CABLE MAKING SURE IT IS SEATED PROPERLY ONTO THE CABLE DRUM AND THAT BOTH COUNTERBALANCE LIFT CABLES HAVE EQUAL TENSION.

**PRIOR TO WINDING SPRING(S), CHECK COUNTERBALANCE LIFT CABLES FOR EQUAL TENSION:**
1. Attach locking pliers to track above top roller.
2. Grasp cable at approximate mid-door height location.
3. Draw cable toward you about 1/2” to 1” and release, noting the response of the cable.
4. Repeat steps for other cable.
5. Adjust cable tension as needed until right and left cables both respond the same.

**WARNING**

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

IT IS RECOMMENDED THAT LEATHER GLOVES BE WORN WHILE WINDING SPRINGS. FAILURE TO WEAR GLOVES MAY CAUSE INJURY TO HANDS.

**NOTE:** A 3” ratchet extension is recommended for added clearance from the horizontal track angle.

**IMPORTANT:** PAWL KNOB MUST BE IN UPPER POSITION TO ADD / REMOVE REQUIRED NUMBER OF SPRING TURNS.

There are two methods for counting the spring turns as you wind. One method is to identify the black tooth on the ratchet wheel inside of the end bracket. When the wheel makes one revolution and the tooth returns to its starting point, one turn has been made. The other method is to make a mark on the winding shaft (or socket) and end bracket, and count your turns in this manner.

Check the label attached to the spring warning tag or the Winding Spring Turn Chart (below) for the required number of complete turns to balance your door.

Starting on the right hand side, turn the pawl knob on the end bracket to the upper position.

Using a ratchet wrench with a 5/8” socket and a 3” ratchet extension, wind the spring by rotating the winding shaft clock wise, while watching the black tooth on the ratchet wheel or the mark on the winding shaft. After 2 to 3 turns, remove the ratchet wrench and adjust the counterbalance lift cable on the left side. Ensure counterbalance lift cables are in the first groove of the cable drums, as shown in Step Adjusting Counterbalance Lift Cable.

**NOTE:** Single spring applications require no spring winding on the left hand side, but lift cable tension needs to be adjusted.

**FOR SINGLE SPRING APPLICATIONS:** Return to the right hand end bracket and continue winding the spring to the required number of turns for your door following the double spring instructions below. Place pawl knob in lower position.

**FOR DOUBLE SPRING APPLICATIONS:** Either use the black tooth on the ratchet wheel for winding reference or place a mark on the winding shaft and end bracket. Place the ratchet wrench with 5/8” socket and a 3” ratchet extension onto the left hand winding shaft end. To wind the spring, rotate the winding shaft clockwise, while watching the black tooth on the ratchet wheel or the mark on the winding shaft. After 2 to 3 turns, remove the ratchet wrench and adjust the counterbalance lift cable on the left side.

**NOTE:** Single spring applications require no spring winding on the left hand side, but lift cable tension needs to be adjusted.

To wind the spring, rotate the winding shaft clockwise, while watching the black tooth on the ratchet wheel or the mark on the winding shaft. Rotate the winding shaft to the required number of turns for your door. Then return to the right hand side and wind the right hand spring to the required number of turns. Place pawl knob in lower position on both sides.

**IMPORTANT:** MARK THE NUMBER OF SPRING TURNS ONTO THE END BRACKET WARNING TAG.

<table>
<thead>
<tr>
<th>WINDING SPRING TURN CHART</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOOR HEIGHT</td>
</tr>
<tr>
<td>6'-0&quot;</td>
</tr>
<tr>
<td>6'-3&quot;</td>
</tr>
<tr>
<td>6'-5&quot; - 6'-6&quot;</td>
</tr>
<tr>
<td>6'-8&quot; - 6'-9&quot;</td>
</tr>
<tr>
<td>7'-0&quot;</td>
</tr>
<tr>
<td>7'-3&quot;</td>
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<tr>
<td>7'-6&quot;</td>
</tr>
<tr>
<td>7'-9&quot;</td>
</tr>
<tr>
<td>8'-0&quot;</td>
</tr>
</tbody>
</table>

**WARNING**

RAISING DOOR INTO THE LOOSE HORIZONTAL TRACKS CAN RESULT IN DOOR FALLING AND CAUSE SEVERE OR FATAL INJURY.

Clamp a pair of locking pliers 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 the chart below, select the appropriate perforated angle (may not be supplied). Fabricate and install rear back hangs, as shown.

<table>
<thead>
<tr>
<th>Perforated Angle Gauge Weight Limitations:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perforated Angle Gauge</td>
</tr>
<tr>
<td>2&quot; x 2&quot; x 12 Gauge</td>
</tr>
<tr>
<td>1-1/4&quot; x 1-1/4&quot; x 13 Gauge</td>
</tr>
<tr>
<td>1-1/4&quot; x 1-1/4&quot; x 15 Gauge</td>
</tr>
<tr>
<td>1-1/4&quot; x 1-1/4&quot; x 16 Gauge</td>
</tr>
</tbody>
</table>

**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.
**WARNING**

MAKE SURE BACK HANGS ARE BRACED SUFFICIENTLY TO RESIST ANY MOTION DURING SPRING APPLICATION AND DOOR TRAVEL. IF BACK HANGS PIVOT OR DEFLECT, ADD REINFORCEMENT UNTIL THEY REMAIN FIRM AND STATIONARY. ANY BACK HANG THAT HAS BENT MUST BE REPLACED.

**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.

**WARNING**

FAILURE TO ASSEMBLE AND ATTACH REAR BACK HANGS PROPERLY ACCORDING TO THE ABOVE INSTRUCTIONS MAY RESULT IN DOOR FALLING WHEN RAISED, CAUSING SEVERE OR FATAL INJURY.

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

**ATTACHING WEATHER SEAL**

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.

**NOTE:** Door not shown for clarity.

**23 Balancing Door**

**NOTE:** Windows may cause the top section to be significantly heavier than the remaining sections. Wayne Dalton attempts to balance the door at the top and bottom. To prevent any sudden door acceleration between the top and bottom, we recommend motor operating all doors with windows.

Remove any locking pliers. Lift the door and check its balance. Adjust spring(s) if door lifts by itself (hard to pull down) or if door is difficult to lift (drifts down). Anytime spring adjustments are made, ratchet pawl knob must be in the upper position. An unbalanced door can cause TorqueMaster® Plus operation problems.

Close the door and place locking pliers onto both vertical tracks just above the third track roller. This is to prevent the garage door from rising while adjusting the spring(s).

**IMPORTANT:** TO ADJUST SPRINGS, ONLY ADD OR REMOVE A MAXIMUM OF 3/10 OF A TURN (THREE TEETH ON THE RATCHET WHEEL) AT A TIME. BOTH SIDES NEED TO BE ADJUSTED EQUALLY ON DOUBLE SPRING DOORS.

**WARNING**

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

**ADD SPRING TENSION:** The ratchet wheel is made of 10 teeth. To add spring tension, tighten counter clockwise on the right hand side and clockwise on the left hand side. Place pawl knob in upper position. Place the ratchet with 5/8" socket and 3" ratchet extension onto the winding shaft, to add 3/10 of a turn. Watch as three teeth of the ratchet wheel pass over the pawl, creating three “clicks”. Place pawl knob in lower position. For double spring applications, repeat the same process for the other side.

**REMOVE SPRING TENSION:** To remove spring tension, place a regular 5/8" wrench onto the winding shaft. Place pawl knob in upper position.

**IMPORTANT:** BE PREPARED TO HOLD THE FULL TENSION OF THE SPRING. Pull down on the wrench to relieve pressure between the pawl and the ratchet wheel. Push in on the pawl to allow the three ratchet wheel teeth to pass by the pawl, as you carefully allow the wrench to be rotated upward by the spring tension, release the pawl to allow it to engage with the ratchet wheel. Place pawl knob in lower position. For double spring applications, repeat the same process for the other side.

**IMPORTANT:** DO NOT ADD OR REMOVE MORE THAN 1 SPRING TURN (1 SPRING TURN EQUALS 10 TEETH ON RATCHET WHEEL) FROM THE RECOMMENDED NUMBER OF TURNS SHOWN ON THE WINDING SPRING TURN CHART.

If the door still does not operate easily, lower the door into the closed position, unwind spring(s) completely, and recheck the following items:

1.) Is the door level?
2.) Are the TorqueMaster® spring tube and flag angles level and plumb?
3.) Does the distance between the flag angles equal door width plus 3-3/8" to 3-1/2"?
4.) Do the counterbalance lift cables have equal tension? Adjust if necessary.
5.) Rewind the spring(s).
6.) Make sure door is not rubbing on jambs.
**TorqueMaster® Plus Reset Instructions**

**IMPORTANT:** THE DRAWBAR OPERATOR FORCE SETTINGS MUST BE ADJUSTED ACCORDING TO THE MANUFACTURER’S INSTRUCTIONS. SOME LIGHTER WEIGHT DOORS ARE DESIGNED TO OPERATE WITH A SINGLE COUNTERBALANCE SPRING. IF THAT COUNTERBALANCE SPRING BREAKS AND THE DRAWBAR OPERATOR’S FORCE SETTINGS ARE NOT ADJUSTED ACCORDING TO THE MANUFACTURER’S SPECIFICATIONS, THE DRAWBAR OPERATOR MAY THEN HAVE THE CAPABILITY OF LIFTING THE DOOR TO THE OPEN POSITION, DESPITE THE BROKEN COUNTERBALANCE SPRING. THIS SCENARIO WILL CAUSE THE COUNTERBALANCE LIFT CABLES TO GO SLACK AND ENGAGE THE TORQUEMASTER® PLUS SAFETY SYSTEM. IF A PERSON IS UNAWARE OF THE SLACK COUNTERBALANCE LIFT CABLES AND THE ENGAGED TORQUEMASTER® PLUS SAFETY SYSTEM AND ACTIVATES THE MISADJUSTED DRAWBAR OPERATOR, DAMAGE WILL LIKELY OCCUR TO THE DOOR AND DRAWBAR OPERATOR. THE POTENTIAL ALSO EXISTS THAT THE PERSON ACTIVATING THE DRAWBAR OPERATOR UNDER THIS SCENARIO COULD BE SEVERELY INJURED.

**WARNING**

**WARNING**

TO AVOID SEVERE OR FATAL INJURY, DO NOT STAND OR WALK UNDER A MOVING DOOR, OR PERMIT ANYONE TO STAND OR WALK UNDER AN ELECTRICALLY OPERATED DOOR.

This door is equipped with a TorqueMaster® plus system, a safety feature which prevents the door from rapidly descending in case of spring failure or forceful manual operation. If the system engages with the door in the open position, personal items that are left unattended in the garage or home are at risk to theft. To ensure the safekeeping of these items, close the garage door.

**Typical signs of an engaged system.**

**Single spring system:** Visually inspect the TorqueMaster® Plus right hand end bracket to confirm that the system has engaged (see illustration). If the system is engaged, then the door will not close. If the drawbar operator force settings were properly set during the initial installation, the door will not open. If the drawbar operator can physically overcome the weight of the door and lift it to the open position, then the counterbalance lift cables will be slack. If the system is engaged, DO NOT attempt to make the repairs. Instead, have a trained door system technician make the necessary repairs to counterbalance lift cables, spring assemblies and other hardware.

**Double spring system:** Visually inspect the TorqueMaster® Plus end brackets to confirm that the system has engaged (see illustration). Door makes a distinct “clicking” noise upon being opened. If the system is engaged, carefully follow the reset instructions below or refer to the reset instructions tag (attached to right hand end bracket) to reset the TorqueMaster® Plus system.

**Resetting an engaged TorqueMaster® Plus double spring system only:**

1. First, locate and visually inspect the TorqueMaster® Plus end bracket(s) to confirm that the system has engaged (see illustration).
2. With the door in the fully closed position, place locking pliers onto both vertical tracks just above the third track roller. Disengage the drawbar operator (if installed) by pulling or placing the emergency disconnect in the manually operated position.
3. With assistance, carefully remove locking pliers and raise the door to the fully open position.
4. Place locking pliers onto both vertical tracks just below the bottom track roller on both sides.
5. Now is a good time to remove vehicles or personal items from garage to provide clear access to end brackets.
6. For single spring applications: Flip the ratchet pawl knob on the right hand end bracket to the upper position. For double spring applications: Flip the ratchet pawl knob on both end brackets to the upper position (see illustration).
7. Raise door 2”-3” and then lower door. Repeat this process until the system resets (see disengaged system illustrations).

**IMPORTANT:** TO AVOID POSSIBLE INJURY, HAVE A TRAINED DOOR SYSTEMS TECHNICIAN MAKE ADJUSTMENTS/ REPAIRS TO COUNTERBALANCE LIFT CABLES, SPRING ASSEMBLIES AND OTHER HARDWARE.

**WARNING**

READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO RESET THE TORQUEMASTER® PLUS SYSTEM. IF IN QUESTION ABOUT ANY OF THE PROCEDURES, DO NOT PERFORM THE WORK. INSTEAD, HAVE A QUALIFIED DOOR SYSTEMS TECHNICIAN RESET THE SYSTEM.

**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**

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.
Typical bottom corner bracket

No. 6 Screw eye

Pull down rope

48” to 50” From floor

Pull down rope

Pull down rope
Maintenance

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.

Never Mix Cleaners or Detergents with Bleach.

To clean polycarbonate windows, see www.Wayne-Dalton.com.

Painting Your Garage Door

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

Painting 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”.

Maintaining The Finish On Your Garage Door

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.

WARNING
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. If you are unable to reach the lift handles/ suitable gripping points only, 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, a drawbar operator bracket must be securely attached to the top section of the door, along with any struts provided. Always use the drawbar operator bracket supplied with the door. To avoid possible damage to your door, Wayne Dalton 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 Wayne Dalton, a division of Overhead Door Corporation, P.O. Box 67, Mt. Hope, OH., 44660, or at www.Wayne-Dalton.com. For additional information on garage door/operator maintenance go to www.dasma.com and reference TDS 151, 167 and 179.

Monthly Inspections:
1. Visual Inspection: Closely inspect jamb, header and mounting surface. Any material found not to be structurally sound must be replaced. It may be necessary to un installment or all of the door assembly in order to replace defective material. Refer to the supplemental instructions “Removing an Existing Door / Preparing the Opening” at www.Wayne-Dalton.com. Inspect the spring(s), 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, except on bottom corner brackets or on the counterbalance assembly. 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, contact a trained door system technician.

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 BEARING BRACKETS, DRUMS OR SPRING 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.

Torquemaster® Plus Springs: Pawl knob(s) (located on the Torquemaster® end brackets above the door) should be engaged to prevent the door from rapidly descending in case of spring failure or forceful manual operation.

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.

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. Using handles or suitable gripping points, lift the door to check its balance. Adjust TorqueMaster® or 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 TorqueMaster® or 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.

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, center hinges, steel track rollers, bearings and torsion springs (torsion spring coil surfaces). 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 lubricant.

Check for Presence of Safety Labels:
Limited Warranty
Models 8000, 8100, 8200

Wayne Dalton, a division of Overhead Door Corporation ("Seller") warrants to the original purchaser of the Models 8000, 8100, 8200 ("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 period(s) of time, measured from the date of installation:

**TEN (10) YEARS** from the date of installation 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.

**TEN (10) YEARS** on Product hardware and tracks (except springs).

**ONE (1) YEAR** on all other component and parts.

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 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, acts of God, or any other cause beyond the reasonable control of Seller or as a result of having been exposed to toxic or abrasive environments, including blowing sand, salt water, salt spray and toxic chemicals and fumes.

**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, leave this Installation Instructions And Owner’s Manual with the homeowner, or fasten it near garage door for easy reference.