

Certification Exhibit

FCC ID: KJ8-0002386 IC: 3540A-0002386

FCC Rule Part: 15.231
IC Radio Standards Specification: RSS-210

ACS Report Number 08-0499 - 15C

Manufacturer: **Wayne-Dalton Corporation**Model(s): **4500-372**

Installation Guide

INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL

















Opener 45

for TORQUEMASTER®/ TORQUEMASTER® PLUS

Models: 4500-372, 4510-372, 4520-372, 4522-372, 4524-372

Installation Instructions and Owner's Manual

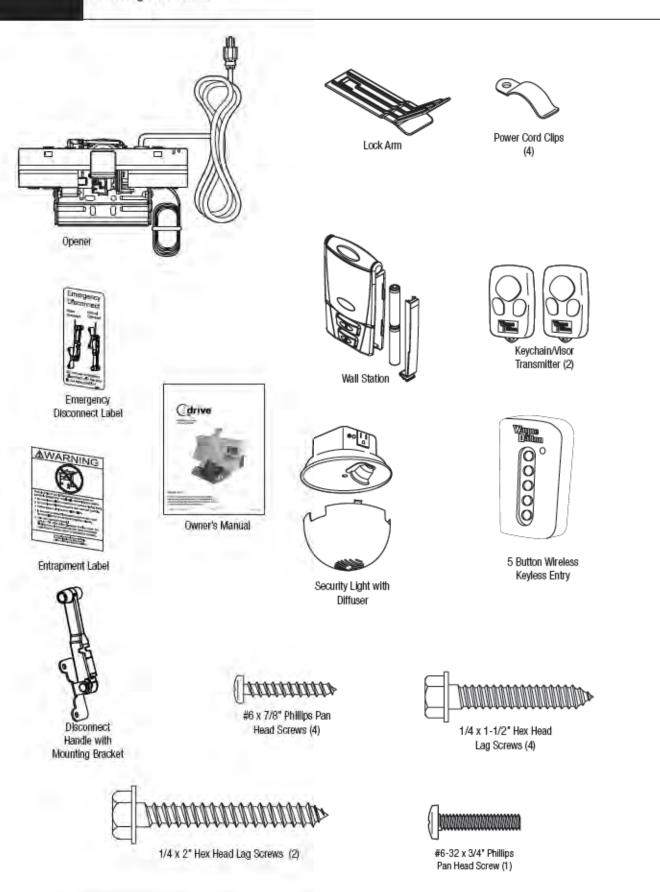


IMPORTANT NOTICE!

To avoid possible injury, read the enclosed instructions carefully before installing/operating this garage door opener. Pay close attention to all warnings and notes. This manual MUST be attached to the wall in close proximity to the garage door opener.

Wayne Dalton GARAGE DOORS & OPENERS

Package Contents



PRE-INSTALLATION INSPECTION OF YOUR GARAGE DOOR PRIOR TO TORQUEMASTER® OPENER 45 INSTALLATION

Congratulations, you have just purchased one of the world's safest garage door openers! By design, this opener will detect obstructions and reverse rather than force the door through obstructions.

WHEN INSTALLING A NEW DOOR WITH AN OPENER 45:

If you just finished installing a new garage door along with an opener 45, then proceed with these instructions beginning with Step 14 on page 19. If you were referred to these instructions as part of a new door installation, then proceed with these instructions beginning with Step 1 on page 7.

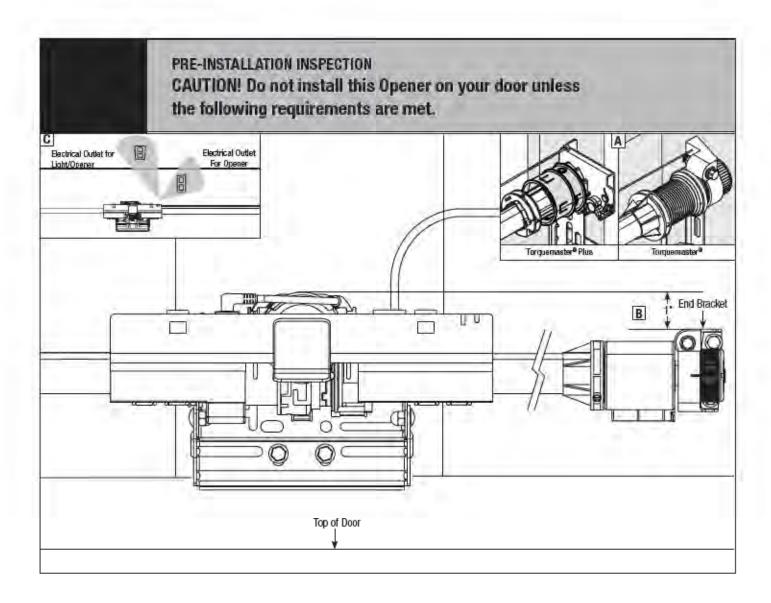
WHEN INSTALLING AN OPENER 45 ON AN EXISTING DOOR WITH TORQUEMASTER® OR TORQUEMASTER® PLUS:

Before installing the opener 45, open and close you door manually to ensure that it operates smoothly from top to bottom. A properly balanced door should not take a lot of effort to open or close by hand. The door should stay in the open and in the closed position without drifting down or creeping up. If a door opens fast going up, the door may need spring tension reduced. If the door drops fast going down, the door may need spring tension increased.

If the operation of the door does not meet these criteria, you need to adjust the spring balance per your door's Installation Instructions and Owner's Manual or call a professional installer to make adjustments before installing opener 45.

If the door operates properly, check and record your Torquemaster® counterbalance spring settings (for Torquemaster Plus spring settings, see warning tag(s) attached to the end brackets or refer to your door Installation Instructions and Owner's manual). Then proceed with unwinding of the spring(s) for installation of your opener 45, carefully following the instructions in the appropriate STEP R1 of your opener 45 Installation Instructions and Owner's Manual. After the opener 45 is installed on the Torquemaster® tube, rewind the Torquemaster® or Torquemaster® Plus to the previously recorded settings.

Instruction manuals are available for download on **www.wayne-dalton.com**. Use the web site to also find the location of your nearest professional dealer.



Pre-Installation Inspection

- CAUTION: DO NOT INSTALL THIS OPENER ON YOUR DOOR UNLESS THE FOLLOWING REQUIREMENTS ARE MET.
 USE THE ILLUSTRATION ABOVE AS A VISUAL AID.
- A You must have a Wayne-Dalton Torquemaster counterbalance system to install this operator (see A above).
- B. The Motor requires 1" of clearance above the top of the End Bracket.
- Two electrical outlets are recommended for the opener 45 installation. One of these outlets needs to be located less than 6' from the operator. The second outlet, for the light, can be located at a position of your choice.
- D. Your door must not exceed 8' in height.
- E. The Torque Master opener 45 will only work on sectional doors. Do not install on one-piece doors.
- F. Your garage door must be properly balanced (door must not be heavy to lift, nor lift by itself).
- G. Horizontal Tracks should be pitched 1" above level at rear of Track.

System Requirements

A CAUTION: TO REDUCE THE RISK OF INJURY, USE THIS OPENER ONLY WITH THE FOLLOWING DOOR SYSTEMS:

WAYNE-DALTON DOOR MODEL	WAYNE-DALTON SPRING SYSTEM	TRACK (RADIUS)	PHOTOELECTRIC SAFETY SENSORS
9000 SERIES, 5120, 5140	Torque Master®	10",12",14",15"	Not Required
9000 SERIES, 5120, 5140	Torque Master®	6" Low Head Room	Not Required
8000 SERIES	Torque Master®	10",12",14",15"	P/N's 252118 or 301674 Required
8000 SERIES	Torque Master®	6" Low Head Room	P/N's 252118 or 301674 Required

Tools Needed

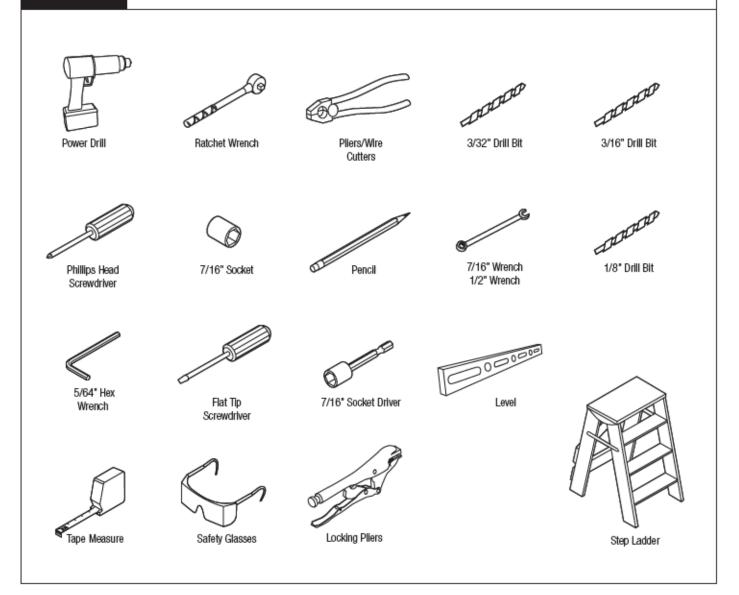


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∆WARNING

INCORRECT INSTALLATION CAN LEAD TO SEVERE OR FATAL INJURY. FOLLOW THESE INSTRUCTIONS CAREFULLY.

IMPORTANT INSTALLATION INSTRUCTIONS

WARNING - To reduce the risk of severe injury or death:

- 1. READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS.
- Do not connect the Opener to electrical power until instructed to do so.
- Install the Entrapment Warning Label next to the Wall Station in a prominent location. Install the Emergency Disconnect Label next to the Emergency Disconnect.
- Remove all ropes and remove, or make inoperative in the unlocked position, all locks connected to the garage door before installing the Opener.
- Do not wear rings, watches or loose clothing when installing or servicing a garage door system.
- It is important that you install all the components supplied with the opener 45, i.e., Wall Stations, Safety Sensors, etc. Use of parts not supplied by Wayne-Dalton Corp. may cause the Opener to malfunction and create unsafe conditions.
- Wear safety glasses for eye protection when installing or servicing the Opener or door.
- Install Opener on a properly balanced and operating garage door.
 Have a qualified service person make adjustments/repairs to cables, spring assemblies, and other hardware before installing the Opener. An improperly balanced door could cause severe injury.
- Where possible, install the Opener seven feet or more above the floor. Mount the Emergency Disconnect six feet above the floor.
- Locate the Wall Station: (a) within sight of door, (b) at a minimum height of five feet, so small children cannot reach it, and (c) away from all moving parts of the door.
- After installing the Opener, the door must reverse when it contacts a 1 1/2" high object (or 2 x 4 board laid flat) on the floor.
- Installation and wiring must comply with local building and electrical codes. Connect the Power Cord to a properly grounded outlet. Do not remove the ground pin from Power Cord.

AFTER INSTALLATION IS COMPLETE, FASTEN THIS MANUAL NEAR GARAGE DOOR. PERFORM MONTHLY OBSTRUCTION TEST AND MAINTENANCE AS RECOMMENDED. SEE PAGES 31 AND 38. INSTALLATION NOTICE: If installing the opener 45 on a door currently installed with Torquemaster® or Torquemaster® Plus counterbalance system, start the installation with Step: R1 below (for Torquemaster® Plus) or Step: R1 on page 3 (for Torquemaster®).

Retro-Fit TorqueMaster® Plus

R1

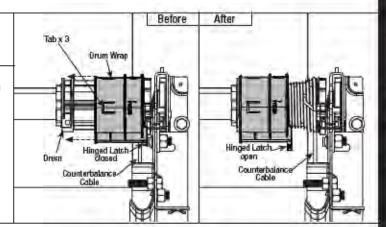
Retro-Fit Installation Drum Wrap & End Bracket Removal

Tools Needed: Step Ladder

Flat Blade Screwdriver IMPORTANT! RIGHT AND LEFT HAND IS ALWAYS DETERMINED FROM INSIDE THE BUILDING LOOKING OUT.

NOTE: Warning tag removed for illustration clarity.

Starting on the right hand side, unlock the drum wraps from the cable drums. Un-snap hinged latch. PULL COUNTERBALANCE CABLE SLIGHTLY OUTWARD FROM THE JAMB to allow hinged latch to pass to the left of the cable. Pry radially outward with a small screwdriver on the three tabs (one at a time) while maintaining pressure on drum wrap in direction shown to remove. Repeat drum wrap removal for left side.



R2

Tools Needed: Ratchet Wrench 5/8" Socket 3" Extension Gloves Step Ladder

Spring Tension Removal

Counterbalance spring tension must be relieved before removing any hardware.

△WARNING

A POWERFUL SPRING RELEASING ITS ENERGY SUDDENLY CAN CAUSE SEVERE INJURY.

Starting with the right hand side, ensure pawl knob is in upper position. Place a ratchet with a 5/8" socket on the winding shaft.

NOTE: A 3' extension is also recommended for added clearance from the horizontal angle.

To remove spring tension, ensure the ratchet and socket is set so that it will add tension (counter clockwise) on the right hand side and (clockwise) on the left hand side. Rotate ratchet to relieve pressure between the pawl and the ratchet wheel. Push in on the pawl to allow the ratchet wheel teeth to pass by.

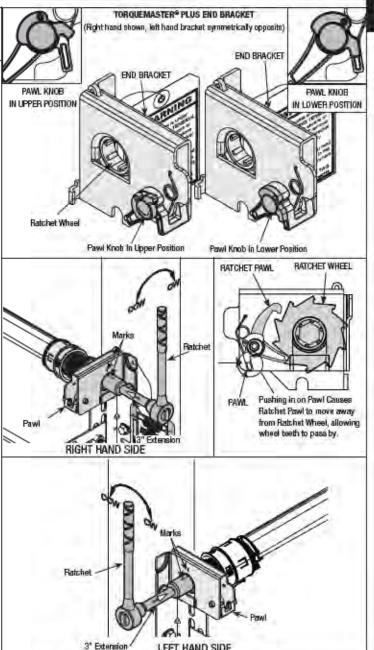
NOTE: In the event of a broken spring, it might not be necessary to unwind spring(s).

IMPORTANT! BE PREPARED TO HOLD THE FULL TENSION OF THE SPRING.

Gently let the ratchet rotate upward, while watching the number of teeth on the ratchet wheel pass by the pawl. Remove 3/10 of a turn (watch the 3 teeth of the ratchet wheel pass the pawl). Release the pawl to allow it to engage with the ratchet wheel. Repeat this process until all spring tension has been removed from spring(s). Cables should be loose and the torque tube should be free to rotate in either direction.

IMPORTANT! SPRING(S) ARE FULLY UNWOUND WHEN COUNTERBALANCE CABLES HAVE NO TENSION.

IMPORTANT! DO NOT USE AN IMPACT GUN TO UNWIND THE SPRINGS.



Tools Needed:

Power Drill 7/16" Socket Driver

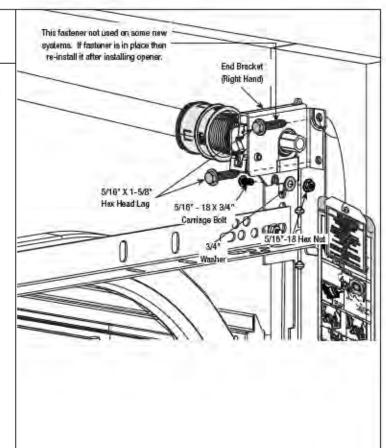
1/2" Wrench Step Ladder

End Bracket Removal

To remove end brackets, start with the right hand end bracket and remove the lower lag screw and carriage bolt.

Repeat for left hand end bracket.

CAUTION: THE WINDING SHAFT MAY ROTATE WHEN REMOVING THE END BRACKET AND GEAR.



R4

Tools Needed: Power Drill 7/16" Socket

Driver Step Ladder

Center Bracket & Cable Drum Removal

To remove the cable drum/center bracket, follow the steps below:

a. Remove the two 1/4" lag screws from the center bracket. slide center bracket to the right side of the torque tube.

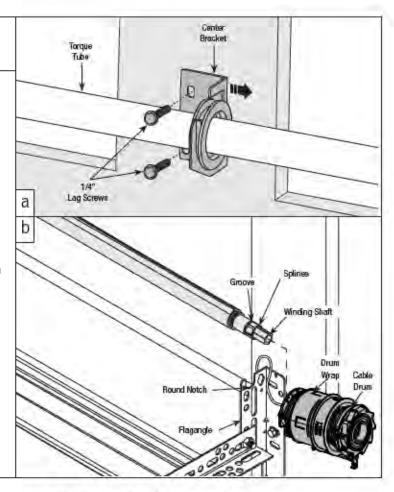
Lift the right side of the torque tube up and slide the cable drum and center bracket off the end of the torque tube. discard the center bracket.

b. Drape the cable drum over the flagangle by the counterbalance cable and re-align the groove in the winding shaft with the round notch in the flagangle.

Once aligned, lower the winding shaft and torque tube onto the flagangle.

Repeat cable drum removal for left side.

After completing this step, continue with Step R5 on page 5.



Tools Needed: 7/16" Wrench Power Drill 7/16" Socket Driver Step Ladder

Retro-Fit Installation Spring Tension Removal

Counterbalance spring tension must be relieved before removing any hardware.

△ WARNING

A POWERFUL SPRING RELEASING ITS ENERGY SUDDENLY CAN CAUSE SEVERE, EVEN FATAL INJURY.

NOTE: Warning tag removed for illustration clarity.

Place door in the fully closed position and remove drum wraps from cable drums (if installed).

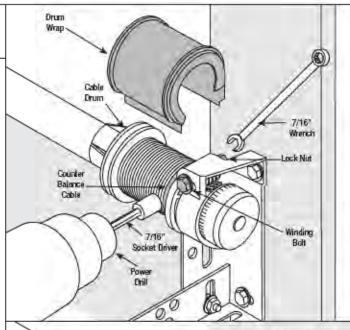
Using a 7/16" wrench, loosen lock nut on the back of the end bracket. Using a power drill (high torque/gear reduced to 1300 RPM preferred), with a 7/16" socket driver, unwind the right hand winding bolt counter clockwise until the counter cover shows "0" (zero). If the door has two springs, repeat this process for the left hand side.

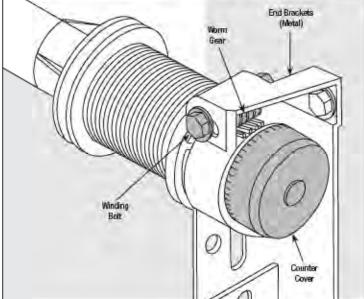
NOTE: A door with only one spring will not have a counter assembly on the left hand side.

NOTE: Spring(s) is/are fully unwound when counterbalance cables have no tension.

CAUTION: DO NOT USE AN IMPACT GUN TO UNWIND THE SPRINGS!

NOTE: It is recommended that cable drums and end bracket assemblies get updated to current designs for optimal performance. current end brackets are made of metal instead of plastic, and counter cover and worm gears are made of grey plastic, instead of black and white plastic. If new parts are required, contact Wayne-Dalton customer service.





R2

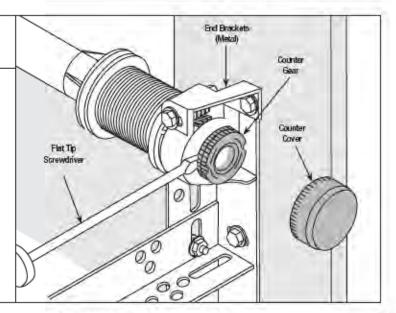
Tools Needed: Flat Tip Screwdriver Step Ladder

Right Hand Counter Removal

IMPORTANT! RIGHT AND LEFT HAND IS ALWAYS DETERMINED FROM INSIDE THE GARAGE LOOKING OUT.

Remove the counter cover. Slide a flat tip screwdriver between the end bracket and the counter gear.

Gently pull the counter gear away from the end bracket. If the door has two springs, repeat this process for the opposite side.



Tools Needledt:

Locking Pliers Phillips Head Screwdriver

Flat Tip Screwdriver Power Drill 7/16" Socket Driver Step Ladder

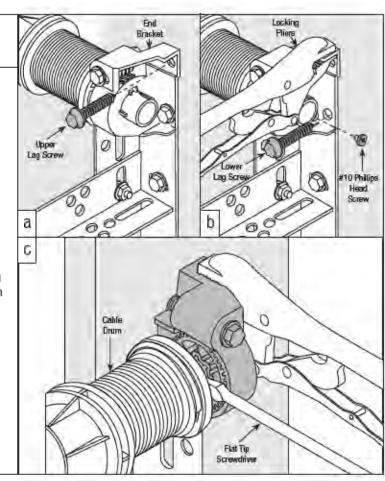
End Bracket Removal

To remove the end brackets, follow the steps below starting with the right hand end bracket first:

- Remove the upper lag screw from the end bracket.
- b. Attach a pair of locking pliers to the upper portion of the end bracket and hold the end bracket steady while removing the lower lag screw. If present, remove and save the #10 phillips head screw.
- c. Holding the end bracket with the locking pliers, carefully pry the end bracket from the cable drum with a flat tip screwdriver.

Repeat for left hand end bracket.

CAUTION: THE WINDING SHAFT MAY ROTATE WHEN REMOVING THE END BRACKET AND GEAR.



R4

Tools Needledt:

Power Drill 7/16" Socket Driver Step Ladder

Center Bracket & Cable Drum Removal

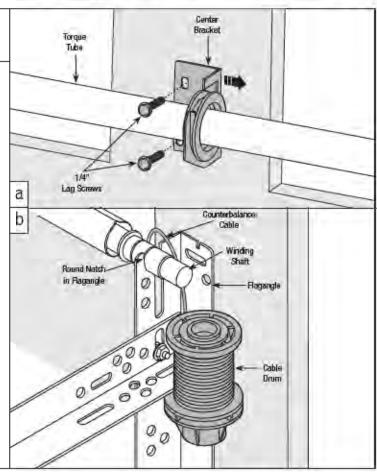
To remove the cable drum/center bracket, follow the steps below:

- a. Remove the two 1/4" lag screws from the center bracket. Slide center bracket to the right side of the torque tube.
 - Lift the right side of the torque tube up and slide the cable drum and center bracket off the end of the torque tube. Discard the center bracket.
- b. Drape the cable drum over the flagangle by the counterbalance cable and re-align the groove in the winding shaft with the round notch in the flagangle.

Once aligned, lower the winding shaft and torque tube onto the flagangle.

Repeat cable drum removal for left side.

After completing this step, continue with Step R5 on page 5.



Tools Needed:
Power Drill
7/16" Socket
Driver
Step Ladder

9100 Top Bracket Re-Install (If Necessary)

If installing an opener 45 on an installed 9100 door, the top bracket and roller location will have to be adjusted for the opener to work properly.

Loosen the (2) 1/4"-20 nuts from the top bracket slide.

Remove the (4) 1/4"-14 x 5/8" self-tapping screws from the top bracket.

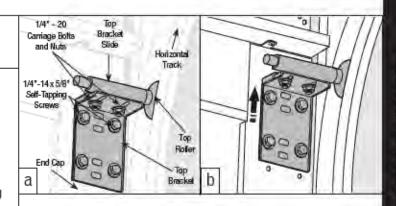
Raise the top bracket to align the bottom slots with the second set of holes in the end cap.

Re-attach top bracket to the end cap with the (4) 1/4"-14 x 5/8" self-tapping screws.

Re-align the top roller in the horizontal track by moving the top bracket slide out to force the door section against the weather seal.

Tighten (2) 1/4"-20 Nuts.

Repeat for the opposite side.



NOTE: The 9100 doors have a painted steel face, foam insulation and white paper backing. If your door does not match this description you may skip this step.

CAUTION: TO AVOID THE TOP PANEL FROM FALLING, COMPLETE RE-INSTALLATION ON ONE SIDE BEFORE BEGINNING THE OTHER.

R6

Tools Needed:
Power Drill
7/16" Socket
Drive
Pencil
Tape Measure
Step Ladder

8000/8100/8200 Track Vertical Track Height Adjustment (If Required)

NOTE: The door must be in the fully closed position.

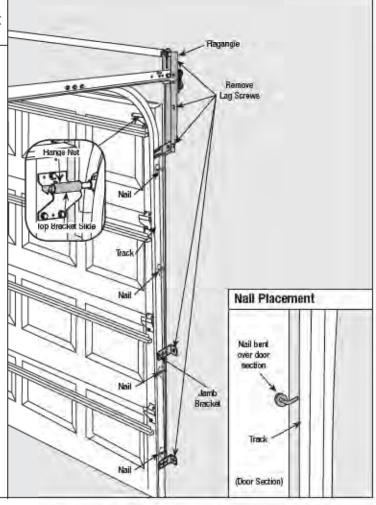
If installing an opener 45 on an 8000/8100/8200 door, the top roller location and track height will have to be modified for the opener to work properly. Perform the following steps:

NOTE: The bottom edge of the track needs to be spaced 1" above the floor. If the track is already spaced off the floor 1", skip this step.

Fasten a 16d or larger nail in the door jamb, between the door and the track at the ends of each section. Bend the nail over each section to hold them in place.

Remove the lag screws from the flagangle and each jamb bracket. Using a 7/16" socket driver, loosen the flange nut on the Top bracket slide. Place a mark 1" up from one of the tops of one of the jamb brackets. Raise the track up and align the jamb bracket with this line. With the track relocated, re-attach the flagangle, end bracket, and jamb brackets to the header and/or door jamb. Make certain to maintain spacing between edge of door and vertical track.

NOTE: Pilot drill all lag screw locations.



Tools Needed: Level 1/2" Wrench Step Ladder

8000/8100/8200 Track Horizontal Track Height Adjustment (If Required)

△WARNING

FAILURE TO RE-ATTACH HORIZONTAL TRACKS TO THE SUPPORT BEFORE OPENING DOOR CAN CAUSE DOOR TO FALL FROM OVERHEAD POSITION, POSSIBLY CAUSING SEVERE OR FATAL INJURY.

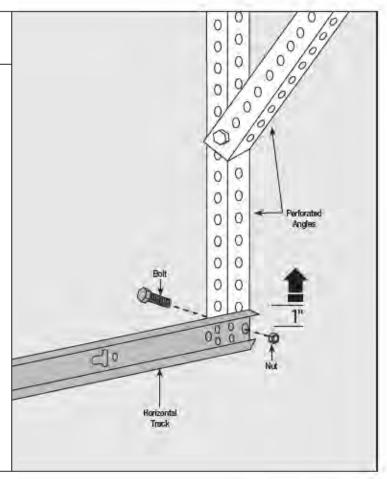
NOTE: Door must be in the fully closed position.

If the vertical track was raised then the horizontal track will need to be adjusted.

Remove bolt securing back of horizontal track to the perforated angle and reposition horizontal track UP 1" (25mm) from it's original position.

Re-attach the horizontal track to the perforated angle with the same bolt and nut.

Assemble bolt and nut from the direction shown so bolt will extend inside of track.



R8

Tools Needed:
Power Drill
7/16" Socket
Driver
Step Ladder

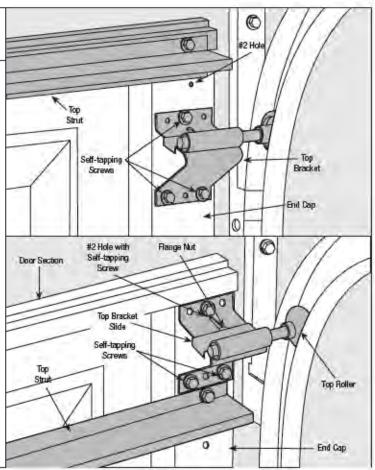
8000/8100/8200 Track Top Roller Adjustment (If Necessary)

Remove the (3) self-tapping screws from the top bracket.

Align the top hole of the top bracket with the #2 hole in the end cap and re-attach the top bracket to the end cap with the same three self-tapping screws. It may be necessary to relocate the top strut (if installed) to correctly place the top bracket in its new location.

Re-align the top roller in the track by moving top bracket slide out until door section is straight up and down. Tighten the flange nut.

Repeat for opposite side.



Installing Opener

Tools Needed: Flat Tip Screwdriver IMPORTANT! Right and left hand is always determined from inside the garage looking out

Lay the Torque Tube on the floor (inside garage) in front of the door with the Labeled end to the left.

Look into the Opener's left side to ensure the bearing cam peak is positioned at the 12:00 position.

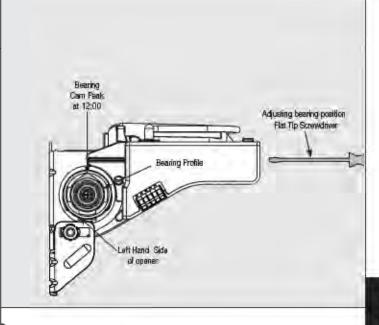
NOTE: The Bearing can be repositioned by turning the motor shaft from front of opener with a flat tip screwdriver (If necessary).

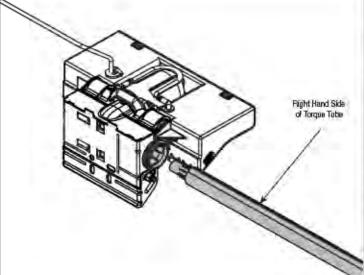
Slide the Opener onto the right hand end of the Torque Tube.

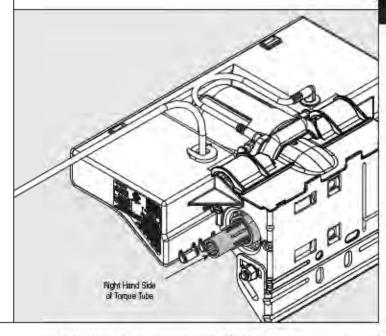
NOTE: Do not force the Opener onto the Torque Tube.

Dents or contamination on torque tube may have to be corrected.

Continue sliding the Opener to the center of the Torque Tube.







Cable Drums

Tools Needed: Tape Measure

Step Ladder

NOTE: If you have a Torquemaster® counterbalance, skip this step and continue with Step 2 on page 10. If you have a Torquemaster® Plus counterbalance system, complete Steps 2-3 on pages 8 and 9.

IMPORTANT! RIGHT AND LEFT HAND IS ALWAYS DETERMINED FROM INSIDE THE GARAGE LOOKING OUT.

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 the top of the flagangles.

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

Pre-wrap the Torquemaster® Plus cable drum with the counter balance cable 1-1/2 wraps (see illustrations).

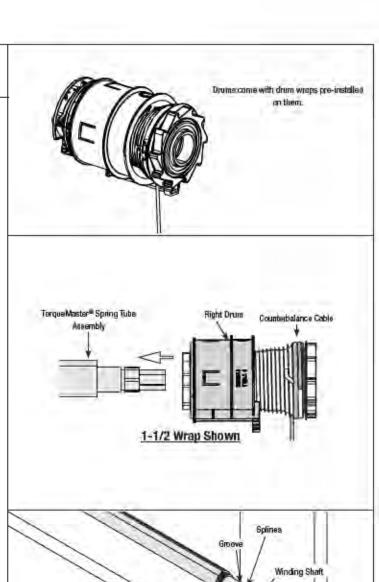
To install the cable drum, slide the correct cable drum over the winding shaft until the cable drum seats against the TorqueMaster® spring tube assembly.

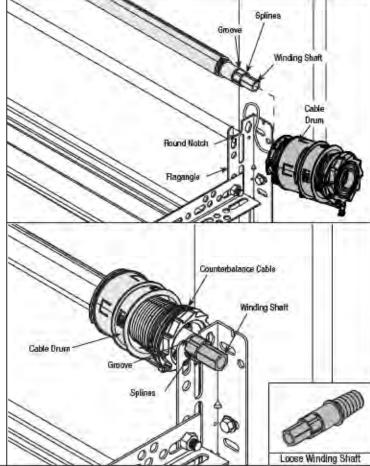
The winding shaft must extend past the cable drum far enough to expose the splines and the groove. Align the winding shaft groove with the round notch in the flagangle.

For double spring applications, repeat for opposite side.

For single spring applications, insert the loose winding shaft into the left hand cable drum prior to sliding the cable drum over the TorqueMaster® spring tube assembly.

NOTE: On single spring applications, take care in handling the loose winding shaft (left side) so that it does not slide back into the TorqueMaster® spring tube assembly.





Tools Needed: Power Drill

7/16" Socket Driver

1/2" Wrench

Step Ladder

End Brackets

IMPORTANT! WARNING TAGS MUST BE SECURELY ATTACHED TO BOTH END BRACKETS. DO NOT REMOVE TAGS.

End brackets are right and left hand. You can identify the right hand end bracket by the disconnect cable guide hole in the top of the bracket.

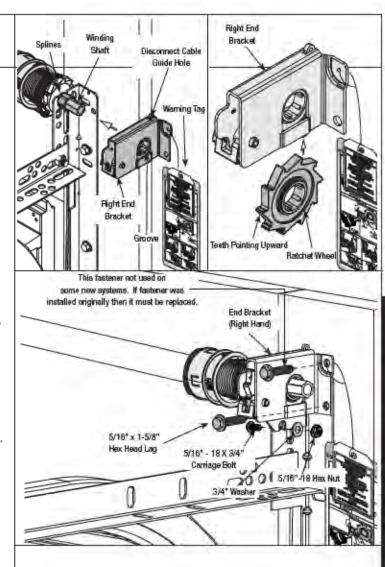
Beginning with either side, slide the end bracket onto the winding shaft so that the grooves in the ratchet wheel fit onto the winding shaft splines.

Secure end bracket to the flag with (1) 5/16*-18 x 3/4* carriage bolt, 3/4" washer and hex nut; then secure to the jamb with 5/16* x 1-5/8" hex head lag screw.

Repeat for other end bracket.

NOTE: No ratchet wheel is required on the left hand side for single spring applications. Only an end bracket is needed.

After completing this step, continue with Step 4 on page 12.



Tools Needed: Step Ladder

Cable Drum/ Drive Gear Installation

NOTE: If you just installed the Torquemaster® Plus counterbalance, continue with Step 4 on page 12. If you have the Torquemaster® counterbalance system, complete Steps 2-3 on pages 10 and 11.

Shake the torque tube 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 torque tube.

Lift the torque tube and rest it on the top of the flagangles. Orient torque tube so that back of opener is flat against header/ mounting surface.

NOTE: Cable drums and torque tube are cam shaped to fit together only one way.

Pre-wrap the Torquemaster® cable drum with the counter balance cable 1/2 wrap (see illustrations).

To install the cable drum, slide the cable drum over the winding shaft until the cable drum seats against the torque tube. The winding shaft must extend past the cable drum far enough to expose the splines and the groove.

Align the winding shaft groove with the round notch in the flagangle. Repeat for opposite side for double spring applications.

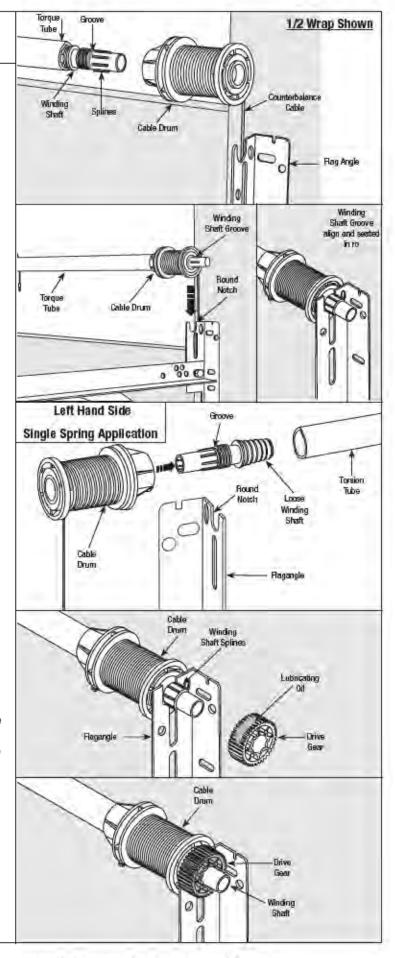
For single spring applications, insert the loose winding shaft into the left hand cable drum prior to sliding the cable drum over the torque tube.

NOTE: On single spring applications, take care in handling the loose winding shaft (left side) so that it does not slide back into the torque tube.

Beginning with the right hand side, lubricate entire circumference of the drive gear with lubricating oil. Slide the drive gear onto the winding shaft splines until it touches the flagangle.

NOTE: On single spring applications, no drive gear is required on the left side.

NOTE: If additional lubricating oil is required "Dura-Lube Engine Oil Treatment" is recommended.



Tools Needed:
Power Drill
3/32" Drill Bit
7/16"
Socket Driver
Phillips Head
Screwdriver
Step Ladder

End Bracket Installation

IMPORTANT! WARNING TAGS MUST BE SECURELY ATTACHED TO BOTH END BRACKETS.

Slide the right hand end bracket over the drive gear. Replace #10 phillips head screw that was removed in Step R3. Secure end bracket and the flagangle to the jamb using (2) 5/16" x 1-5/8" lag screws.

NOTE: Older end brackets may not have a hole needed for the opener's emergency disconnect cable. If the right hand end bracket does not have a hole for the disconnect cable, drill a 3/32" (3mm) hole as shown prior to installing the end bracket.

Install the right side counter gear, with the missing tooth toward the outside and away from the end bracket. Press the counter gear onto the end bracket until snaps engage.

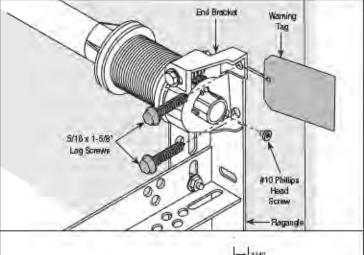
Select the right hand counter cover and align the hex of the counter cam with the end of the winding shaft. Also, align the "0" on the counter cover with the raised rib on the end bracket. Press the counter cover against the counter gear until it locks into place.

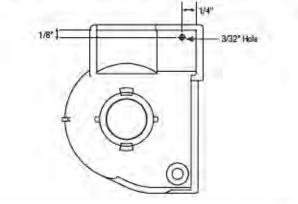
Repeat for left hand side for double spring applications.

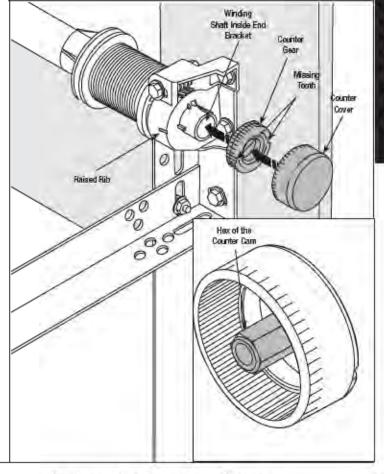
NOTE: No drive gear, counter gear or counter cover is required on left hand side for single spring applications. Only an end bracket is needed.

IMPORTANT! AT THIS TIME DO NOT WIND COUNTERBALANCE SPRINGS!

After completing this step, continue with Step 4 on page 12.







Positioning Support Bracket

Tools Needed:
Power Drill
1/8" Drill Bit
5/32" Drill Bit
7/16" Socket Driver
1/2" Wrench

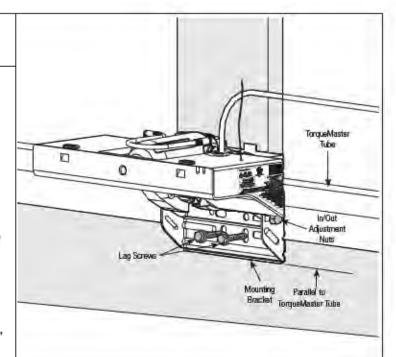
NOTE: opener 45 must be installed on a solid wood mounting surface.

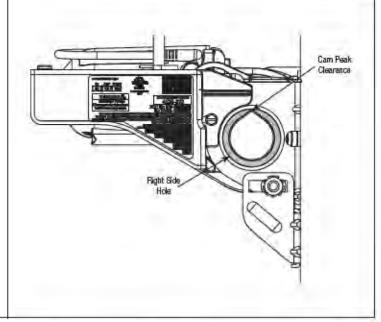
Locate a suitable Mounting Surface. The Mounting Surface is a vertical running board directly above the center of the door or the horizontal header if it is made from a wide enough piece of wood. (If no suitable mounting surface, one must be added.)

Level the TorqueMaster Tube to the top of the door section. In/out adjustments can be made if necessary by loosening the bracket nut on each side of opener 45, adjusting and re-tightening. Make sure opener mounting bracket is parallel to TorqueMaster Tube and drill 1/8" or 5/32" pilot holes for the Lag Screws in the center of the slots so fine adjustments can be made if needed. Secure mounting bracket to the Mounting Surface with (2) 1/4 x 1-1/2" Lag Screws. Use 2" Lag Screws if framing is behind drywall.

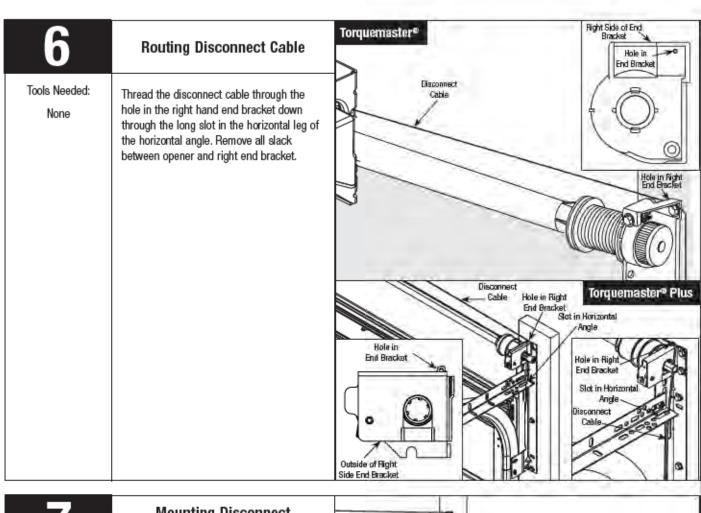
Check right side of opener and make sure the TorqueMaster Tube cam peak has clearance with the right side hole in the chassis. If necessary loosen lags, adjust for clearance and re-tighten.

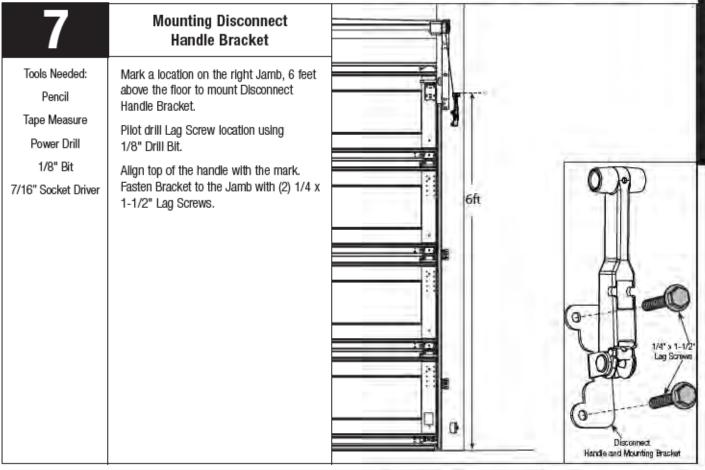
NOTE: TorqueMaster Tube must be straight for optimum opener performance.





Positioning A	ntenna
Tools Needed: Position antennna vertical headroom allows.	l as much as
NOTE: Do not coll Antenn	na.
	_





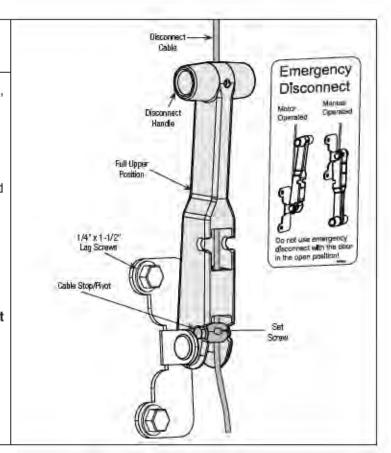
Attaching Disconnect Cable

Tools Needed: 5/64" Hex Wrench Wire Cutters With the Handle in the up position as shown, rotate the Cable Stop/Pivot so the set screw is facing you. Route the Disconnect Cable behind the Handle and through the hole in the Cable Stop/Pivot (with the Set Screw facing you).

Position Handle in the full upper position and remove all cable slack between the Opener and the Handle Bracket. Pull the Disconnect Cable only enough to remove the Cable slack. Too much tension could disconnect opener and cause failure to reconnect.

Tighten the set screw using 5/64" hex wrench to securely clamp the disconnect cable. Trim off excess cable, as close as you can, beyond bottom of the Cable Stop/Pivot.

Apply Emergency Disconnect Label next to the Disconnect Handle Bracket. Use mechanical fasteners if adhesive will not adhere.



Tools Needed: None Using the Emergency Disconnect, pull Disconnect Handle downwards and place it in the manual door operated position (disconnects door opener from door). Manual aperated position (disconnects door opener from door).

Tools Needed:

Pliers/Wire Cutter

Flat Tip Screwdriver

Step Ladder

Cable Adjustments

Starting on the right hand side, rotate the cable drum until the set screw faces directly away from the header. Torque tube cam peak should be pointing straight up.

NOTE: Illustrations show the right hand cable drum, left hand cable drum is symmetrically opposite.

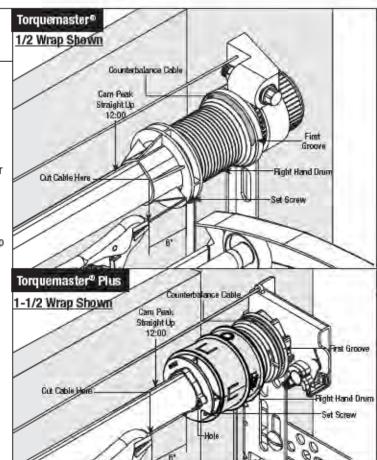
NOTE: Cable tension is set during the initial door installation. If there is slack between the counterbalance cable and the cable drum or unequal tension between the right and left hand counterbalance cables, the counterbalance cables will have to be readjusted. If there is no slack and cable tension is equal, proceed to Step 11

Loosen the set screw no more than 1/2 turn. Using locking pliers, pull on the end of the cable to remove all cable slack.

Check to ensure the cable is aligned and seated in the first groove of the cable drum. Snug the set screw, and then tighten an additional 1-1/2 turns. Left side will be adjusted in Step 12.

IMPORTANT! ENSURE THE CABLE IS ALIGNED AND SEATED IN THE FIRST GROOVE OF THE CABLE DRUM PRIOR TO WINDING SPRINGS.

Measure approximately 6* of cable, cut off excess cable, tuck end into cable drum (Torquemaster®) or insert end in hole of cable drum (Torquemaster® Plus).



11

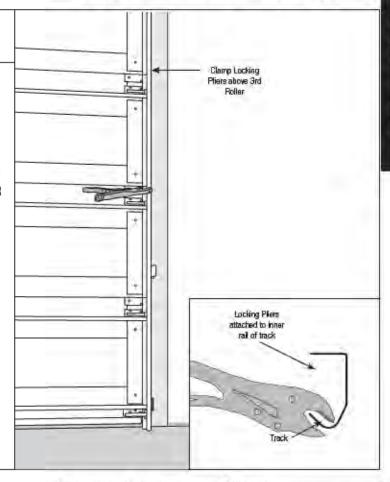
Securing Door for Spring Winding

Tools Needed: Locking Pliers Clamp Locking Pliers onto both Vertical Tracks just above the third Roller. This is to prevent the garage door from rising while winding Counterbalance Springs.

⚠ WARNING

FAILURE TO CLAMP TRACK CAN ALLOW DOOR TO RAISE AND CAUSE SEVERE OR FATAL INJURY.

IMPORTANT! DO NOT USE IMPACT GUN TO WIND SPRING(S)



Tools Needed: 5/8" Socket Ratchet Wrench 3" Extension Step Ladder

Winding Spring(s)

NOTE: If you have a Torquemaster® counterbalance, skip this step and continue with Step 12 on page 18.

NOTE: It is recommended that leather gloves be worn while winding the TorqueMaster® Plus springs.

△ WARNING

FAILURE TO WEAR GLOVES MAY CAUSE INJURY TO HANDS.

See chart on page 17 for recommended spring tension setting.

Double check to ensure the counterbalance cable is aligned in the first groove of the cable drum, as shown in Step 10.

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 manor.

IMPORTANT! PAWL KNOB MUST BE IN UPPER POSITION TO ADD/ REMOVE SPRING TURNS. AFTER ADDING / REMOVING SPRING TURNS, PAWL KNOB MUST BE PLACED BACK IN LOWER POSITION.

Beginning with the right side, place a mark on winding shaft (or socket) and end bracket. Turn pawl knob on the end bracket to the upper position. Using a ratchet with a 5/8" socket, wind the spring by rotating the winding shaft counter clockwise, while watching the mark on the winding shaft.

NOTE: A 3" extension is also recommended for added clearance from the horizontal angle.

After 2-3 turns, remove the ratchet and adjust the cable on the left side. Ensure the cable is in the first groove of the cable drums as shown in Step 10 and clear of any obstructions.

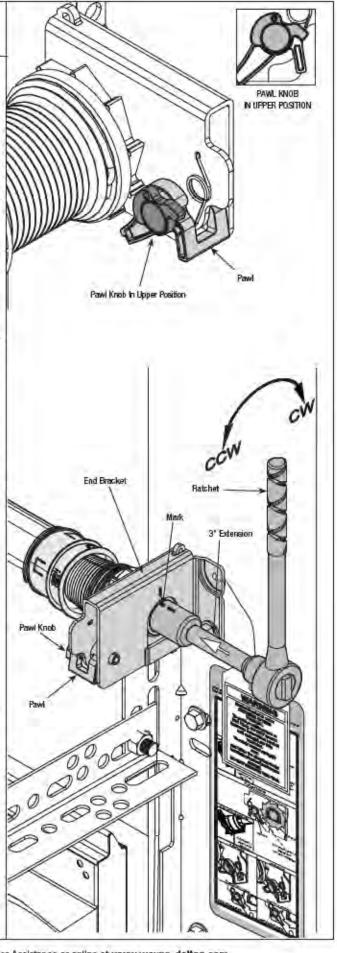
NOTE: Single spring applications require no spring winding on left hand side, but need cable tension adjusted.

IMPORTANT! ENSURE COUNTERBALANCE CABLE TENSION IS EQUAL FOR BOTH SIDES PRIOR TO FULLY WINDING SPRING(S) TO APPROPRIATE NUMBER OF TURNS. IF CABLE TENSION IS UNEQUAL, REFER TO STEP 10.

See the Spring Turn chart.

For **SINGLE SPRING** applications, return to the right hand side and continue winding the spring to the required number of turns for your door or the number recorded during the Pre-Installation Inspection on page II. Place pawl knob in lower position.

For **DOUBLE SPRING** applications, place a mark on the left hand winding shaft and end bracket. Place the ratchet with 5/8" socket onto the left hand winding shaft end.



Winding Spring(s) (Continued)

Tools Needed:

To wind the spring, rotate the winding shaft clockwise, while watching the mark on the winding shaft (or socket). Rotate the winding shaft to the required number of turns for your door or the number recorded during the Pre-Installation Inspection on page II. Place ratchet pawl in lower position. Then return to the right hand side and wind the right hand spring to the recommended number of turns or the number recorded during the Pre-Installation Inspection on page II. Place ratchet pawl in lower position.

IMPORTANT! DO NOT OVERWIND SPRINGS.

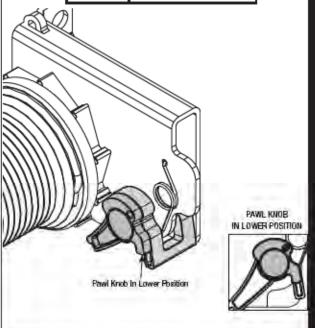
NOTE: Since total turns to balance door can deviate from spring turn chart values by \pm 1/2 turns, adjustments to the recommended number of spring turns may be required AFTER rear hangers assembly is completed.

IMPORTANT! HOLD THE DOOR DOWN TO PREVENT IT FROM RAISING UNEXPECTEDLY IN THE EVENT THE SPRING WAS OVERWOUND AND CAUTIOUSLY REMOVE VICE CLAMPS FROM VERTICAL TRACKS.

IMPORTANT! ADJUSTMENTS TO THE RECOMMENDED NUMBER OF TURNS MAY BE REQUIRED. IF DOOR RAISES OFF THE FLOOR UNDER SPRING TENSION ALONE, THEN REDUCE SPRING TENSION UNTIL DOOR RESTS ON THE FLOOR. IF THE DOOR IS HARD TO RAISE OR DRIFTS DOWN ON ITS OWN, THEN ADD SPRING TENSION. AN UNBALANCED DOOR CAN CAUSE OPENER 45 OPERATION PROBLEMS.

IMPORTANT! IF YOU ARE INSTALLING THE OPENER 45 ON A NEW GARAGE DOOR, REAR SUPPORTS WILL NEED TO BE FABRICATED/ INSTALLED TO SUPPORT THE HORIZONTAL TRACKS. REAR SUPPORTS ARE CONSTRUCTED USING PERFORATED ANGLES, HEX HEAD BOLTS/NUTS AND THEN THE MUST BE SECURELY ATTACHED TO SOUND FRAMING MEMBERS WITH LAG SCREWS. FOR DETAILED INFORMATION ON CONSTRUCTING/ SUPPORTING THE REAR SUPPORTS, REFER TO YOUR DOORS INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL.

RECOMMENDED SPRING TURNS		
Door Height	Spring Turns	
6'-0"	14	
6'-3"	14-1/2	
6'-5"	15	
6'-6"	15	
6'-8"	15-1/2	
6'-9"	15-1/2	
7'-0"	16	
7'-3"	16-1/2	
7'-6"	17	
7'-9"	17-1/2	
8'-0"	18	



13

Drum Wrap Installation

Tools Needed: Step Ladder Un-snap the drum wrap hinged latch and rotate down.

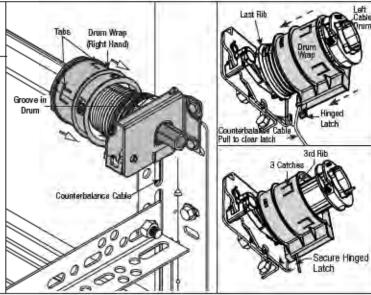
IMPORTANT: Pull the counterbalance cable away from the header to clear the latch. Simultaneously slide the drum wrap against the last rib of the drum until the 3 tabs engage the third rib

Re-engage the hinged latch by rotating upward until a distinct snap is felt.

Confirm the catch is fully engaged by lightly tugging on it.

Repeat for the left hand side.

After completing this Step, continue with Step 14 on page 19.



Tools Needed:
Power Drill
7/16" Socket
Driver
7/16" Wrench

Step Ladder

Setting Spring Tension

See chart below for proper spring tension setting.
Beginning with the right hand side, ensure the
counterbalance cable is in the first groove of the cable drum.

NOTE: Apply light pressure to the canoe clip on counter
while winding springs.

Using a power drill (high torque/gear reduced to 1300 RPM preferred) with a 7/16" socket driver, carefully rotate right hand winding bolt clockwise, until counter shows 2-3 turns. This will keep the counterbalance cable taut while adjusting the left hand side counterbalance cable.

Adjust left hand counterbalance cable tension (Refer to step 10).

NOTE: Single spring applications require no spring winding on left hand side, but need cable tension adjusted.

IMPORTANT! Ensure counterbalance cable tension is equal for both sides prior to fully winding spring(s) to appropriate number of turns. If cable tension is unequal, refer to Step 10.

See the Spring Turn chart.

For SINGLE SPRING applications, return to the right hand side and carefully rotate the winding bolt head clockwise until the counter shows the correct number of turns for your door or the number record during the Pre-Installation Inspection on page II.

For DOUBLE SPRING applications, remain on the left hand side and carefully rotate the winding bolt head clockwise until the counter shows the correct number of turns for your door or the number record during the Pre-Installation Inspection on page II. Then return to the right hand side and wind the right hand spring to the required number of turns for your door or the number recorded during the Pre-Installation inspection on page II.

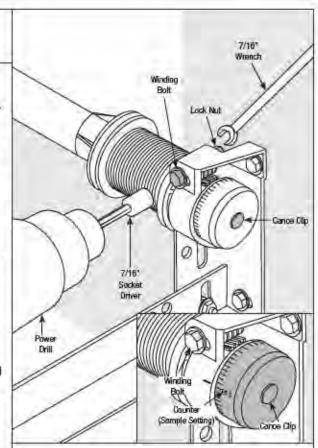
IMPORTANT! DO NOT OVERWIND.

NOTE: Since total turns to balance door can deviate from spring turn chart values by ± 1/2 turns, adjustments to the recommended number of spring turns may be required AFTER rear hangers assembly is completed.

After spring is wound, hold the lock nut (in back of end bracket) stationary with a 7/16" wrench while rotating the winding bolt clockwise until snug. Tightening of the lock nut prevents spring from unwinding. Repeat for opposite side on double spring Torquemaster® systems.

IMPORTANT! CAUTIOUSLY REMOVE VICE CLAMPS FROM VERTICAL TRACKS, ADJUSTMENTS TO THE RECOMMENDED NUMBER OF TURNS MAY BE REQUIRED. IF DOOR RAISES OFF FLOOR UNDER SPRING TENSION ALONE, THEN REDUCE UNTIL RESTS ON FLOOR. IF IS HARD RAISE OR DRIFTS DOWN ITS OWN, ADD TENSION. AN UNBALANCED CAN CAUSE OPENER 45 OPERATION PROBLEMS.

IMPORTANT! IF YOU ARE INSTALLING THE OPENER 45 ON A NEW GARAGE DOOR, REAR SUPPORTS WILL NEED TO BE FABRICATED/ INSTALLED TO SUPPORT THE HORIZONTAL TRACKS. REAR SUPPORTS ARE CONSTRUCTED USING PERFORATED ANGLES, HEXHEAD BOLTS/NUTS AND THEN THE MUST BE SECURELY ATTACHED TO SOUND FRAMING MEMBERS WITH LAG SCREWS. FOR DETAILED INFORMATION ON CONSTRUCTING/ SUPPORTING THE REAR SUPPORTS, REFER TO YOUR DOORS INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL.



RECOMMENDED SPRING TURNS		
Door Height	Doors 12' Wide or Greater	
6'-0"	14	
6'-3"	14-1/2	
6'-5"	15	
6'-6"	15	
6'-8"	15-1/2	
6'-9"	15-1/2	
7'-0"	16	
7'-3"	16-1/2	
7'-6"	17	
7'-9"	17-1/2	
8'-0"	18	

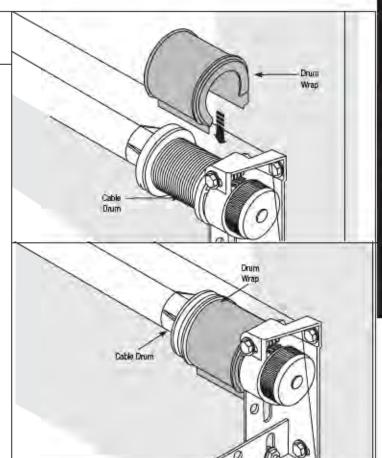
Drum Wrap Installation

Tools Needed: None Drum Wraps (supplied with Torque Master® counterbalance systems) are identified as right and left.

To install, place the Drum Wrap over the Cable Drum and under the opener 45 Disconnect Cable. Align the outside flange over the outside edge of the Cable Drum and push the Drum Wrap down onto the Cable Drum.

NOTE: Drum Wraps must be installed to prevent Cable from becoming tangled.

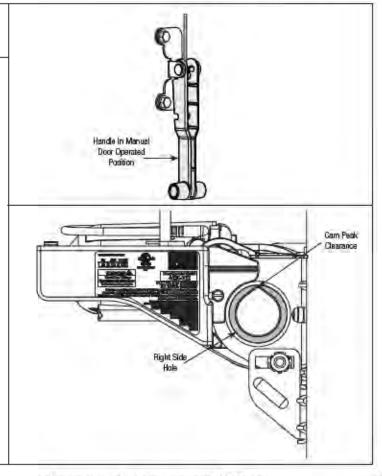
IMPORTANT! Cables can become tangled if Drum Wraps are not properly installed.



14

Adjusting Tube/Hole Clearance (If Necessary)

Tools Needed: 7/16" Socket Driver With door closed and disconnect handle in manual operated position, examine right side clearance of TorqueMaster Tube cam peak with hole in opener chassis for a full tube revolution. If necessary loosen two lags and twist opener to best center tube in hole and re-tighten lags.



Installing Cable Keepers

Tools Needed: None Carefully inspect the cables on your door. If they are worn, frayed or broken, contact a qualified door service company to replace the cables before installing the cable keepers.

△WARNING

OPERATING A DOOR WITH FRAYED OR BROKEN COUNTERBALANCE CABLES CAN RESULT IN SEVERE OR FATAL INJURY.

CONTACT A QUALIFIED DOOR SERVICE COMPANY TO REPLACE FRAYED OR BROKEN CABLES BEFORE INSTALLING CABLE KEEPERS.

△WARNING

DO NOT ATTEMPT TO LOOSEN OR REMOVE BOTTOM BRACKETS. THEY ARE UNDER EXTREME SPRING TENSION AND CAN CAUSE SEVERE OR FATAL INJURY

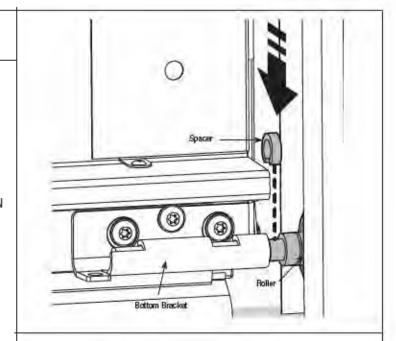
Push spacer on to the roller shaft between the bottom bracket and roller. Use an additional spacer if needed to achieve min. 1/2" clearance.

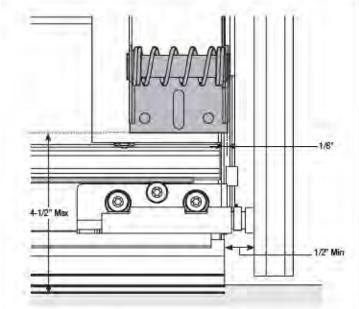
If there is less than 1/2" clearance, loosen the lag screws attaching the track to the wall and adjust the track for the 1/2" clearance. Re-tighten the lag screws.

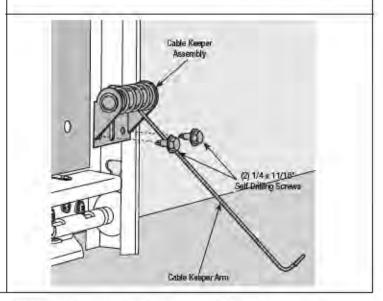
Position the right hand (black) cable keeper assembly directly above the garage door bottom bracket. The cable keeper assembly must extend 1/8" past the end of the door section. Ensure there is no more than 4-1/2" from the bottom edge of the door to bottom of cable keeper.

IMPORTANT! Right and left hand is always determined from inside the building looking out.

Fasten the cable keeper assemblies with (2) 1/4 x 11/16" self drilling screws (wood doors will use (2) 1/4 x 1* lag screws).





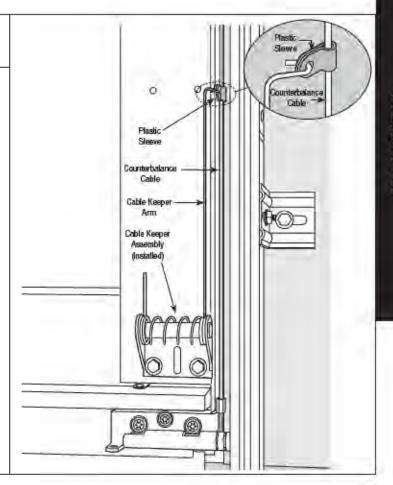


Installing Cable Keepers (Continued)

Tools Needed: Drill with 1/8" bit 7/16" Socket Driver Once the cable keeper assemblies are secured to the section, place the plastic sleeve over the counterbalance cable and then rotate the cable keeper arm upward and attach it to the plastic sleeve.

Repeat for the left hand (Red) cable keeper assembly.

NOTE: It is recommended that wood doors be pre-drilled with 1/8" pilot holes prior to fastening.



16

Positioning Wall Station

Tools Needed: Tape Measure

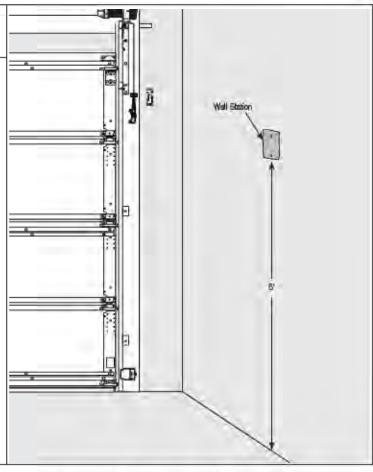
△ WARNING

TO PREVENT POSSIBLE INJURY, INSTALL ALL WALL CONTROLS OUT OF THE REACH OF CHILDREN AND IN A LOCATION WHERE THE DOOR CAN BE SEEN WHEN THE OPENER IS ACTIVATED. DO NOT MOUNT PUSH BUTTONS NEAR OR NEXT TO GARAGE DOOR.

NOTE: For proper operation, mount the Wall Station on a flat surface.

The Wall Station can be mounted to a NEMA standard electrical device box or directly to any wall surface. No wiring is required.

Select appropriate place to mount Wall Station. To keep Wall Station out of the reach of children, locate it at least five feet up from the floor.



Mounting Wall Station (Continued)

Tools Needed: Power Drill 3/16" or 3/32" Drill Bit

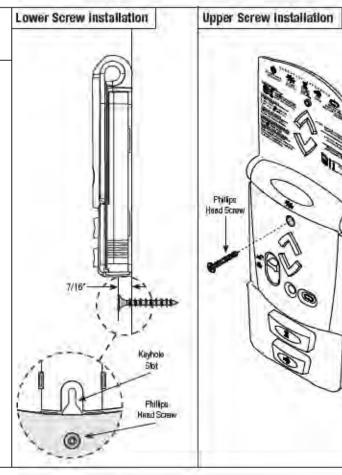
Phillips Head Screwdriver If mounting to a NEMA electrical device box, use machine thread screws provided in place of the wood screws. No drilling is required. If high voltage wiring is contained in the box, a standard NEMA solid faceplate must be installed between the box and the wall station. If fastening into drywall or concrete, use anchors provided. When mounting to wood use a 3/32" drill bit and the drilling template located on page 43.

Drill the two 3/32" mounting holes using the drill template. Drill 3/16" holes if using anchors.

Install lower screw leaving 7/16" of the screw exposed. Slide wall station keyhole slot onto the lower phillips head screw. Wall station should slide onto screw, providing a snug fit. If necessary remove wall station and loosen or tighten lower phillips head screw until a snug fit is achieved.

Once wall station is fitted on lower screw, install upper screw. Do not over-tighten.

CAUTION: OVER-TIGHTENING THE UPPER SCREW COULD DEFORM PLASTIC CASE.



17

Installing Battery

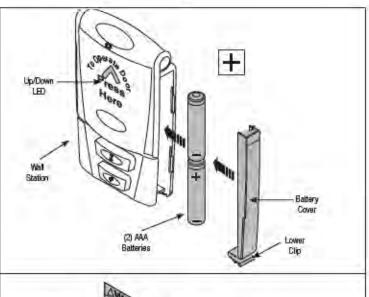
Tools Needed: None Remove the Battery Cover (right-hand side of Wall Station) by disengaging the Battery Cover's lower clip.

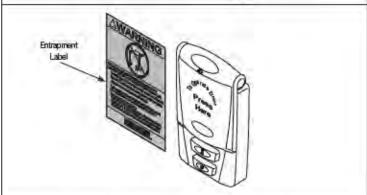
Install two AAA batteries into the Wall Station observing the polarity, (+) and (-), of both batteries. After about three seconds, the Up/Down red LED will begin to blink momentarily every three seconds.

Re-install the Battery Cover by first inserting its top into the Wall Station then inserting and securing its bottom.

Apply entrapment label in a convenient location next to the Wall Station. Use mechanical fasteners if adhesive will not adhere.

NOTE: To change blink rate, refer to Wallstation operation page 34 (back lit Led lights).





Positioning the Light Fixture

Tools Needed:

Phillips Head Screwdriver

Flat Tip Screwdriver

∧WARNING

TO AVOID ELECTRICAL SHOCK
DISCONNECT POWER TO THE
RECEPTACLE AT THE FUSE/BREAKER
BOX, BEFORE PROCEEDING WITH THE
INSTALLATION OF THE LIGHT FIXTURE.

IMPORTANT! THIS LIGHT FIXTURE HAS A GROUNDING TYPE PLUG WITH A THIRD (GROUNDING) PIN. THIS PLUG WILL ONLY FIT INTO A GROUNDING-TYPE OUTLET. IF THE PLUG DOES NOT FIT INTO YOUR OUTLET, CONTACT A QUALIFIED ELECTRICIAN TO INSTALL THE PROPER OUTLET. DO NOT ALTER THE PLUG IN ANY WAY.

△WARNING

TO AVOID ELECTRICAL SHOCK/FIRE, DO NOT INSTALL THE LIGHT FIXTURE INTO A RECEPTACLE WITH A METAL FACE PLATE.

IMPORTANT! DOOR MUST CLEAR LIGHT FIXTURE WHEN THE DOOR IS IN THE OPEN POSITION.

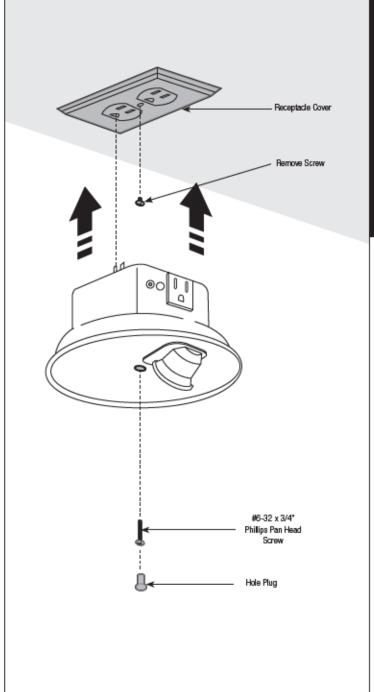
The Light Fixture is designed to mount directly to a standard 120V Duplex Receptacle.

Remove the Center Screw in the Receptacle Cover. Holding Receptacle Cover in place, insert Light Fixture into the Receptacle that has the ground hole farthest from Center Screw hole.

Secure Light Fixture to Receptacle with a #6-32 x 3/4" Phillips Pan Head Screw.

Insert Hole Plug completely into the Screw Hole in the Light Fixture.

NOTE: For temperature protection, the Hole Plug must be in place prior to using the Light Fixture.



Attaching Diffuser

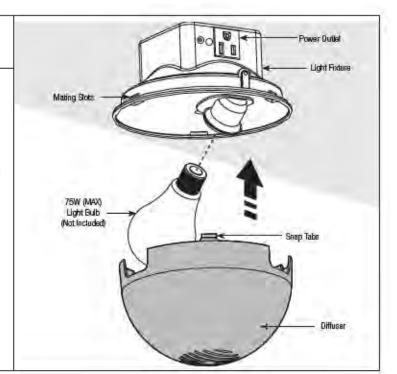
Tools Needed: None

Screw a 75W (maximum) light bulb into Light Socket and snap Diffuser into Light Fixture.

When assembling Diffuser, make sure all three Snap Tabs are aligned and fully snapped into the three Mating Slots of the Light Fixture.

Turn Receptacle power back on at fuse/ breaker box. The light should blink one time when the power is turned back on.

NOTE: An accessory power outlet receptacle (600 Watt Maximum) is provided as part of the light fixture.



20

Connecting Opener Power Cord

Tools Needed:

Phillips Head Screwdriver Plug the Opener Power Cord into the nearest grounding power receptacle. (If the Power Cord is not long enough to reach the closest receptacle, contact a service person for further options). Excess Power Cord length must be routed and contained safely away from any moving parts.

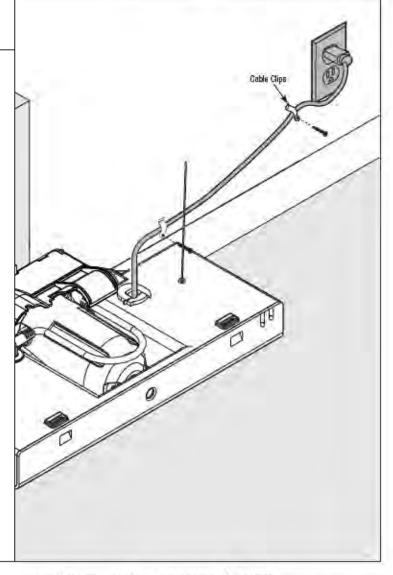
As soon as power is applied to the Opener, the LED will turn on continuously, if the motor is in the up position and there is no install profile in opener memory.

NOTE: Do not permanently attach Power Cord to building!

NOTE: Use only the flexible Cable Clips supplied with the Opener

△ WARNING

TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT CHANGE THE PLUG IN ANY WAY.



Tools Needed:
Tape Measure
Power Drill
3/16" Bit
7/16" Socket Driver
7/16" Wrench
Pencil

Accessory Safety Sensors Installation 8000 Series Doors (Required) (Not Required On 9000 Series, 5120 & 5140 Doors)

NOTE (Per UL): Safety sensors are required if opener is installed on a non-pinch resistant door. If your door is a Wayne-Dalton 9000 series, 5120, or 5140 pinch resistant door, skip this step and proceed with Step 24.

a. Select and mark with a pencil, a mounting position no more than 5 Inches above the floor to center line of Wall Mounting Bracket. The Safety Sensors should be mounted as close to the door track or inside edge of the door as possible to offer maximum entrapment protection.

NOTE: Use Steps a-c for installing sensors on both sides of the garage door.

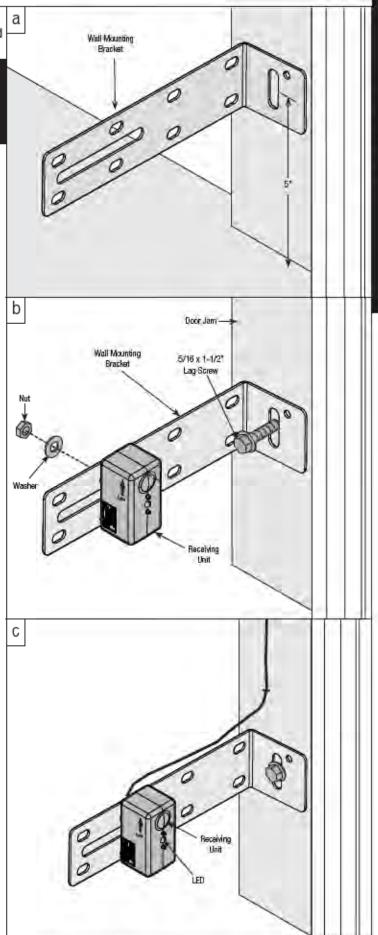
IMPORTANT! BOTH WALL BRACKETS
MUST BE MOUNTED AT THE SAME HEIGHT
FOR PROPER ALIGNMENT.

b. Drill pilot holes, using a 3/16" drill bit. Using 5/16 x 1-1/2" Lag Screws, permanently mount the Wall Mounting Brackets to both door jambs. In some installations it may be necessary to attach a wooden spacer to the wall to achieve the required alignment.

Attach the Sending and Receiving Safety Sensor to the Wall Mounting Brackets with Washers and Nuts. Insert the Safety Sensors from the inside of the Wall Mounting Brackets and hand-tighten.

c. Align the Safety Sensors with the Wall Mounting Brackets. Fasten the Safety Sensor wires from the back of the sensor, up along the jambs and ceiling, to your operator.

IMPORTANT! Identify which side of the garage door is exposed to the most sunlight. Mount the Sending Unit (Unit without LED) on the side which is exposed to the most sun. Sunlight may affect the Safety Sensors, and this orientation will help reduce the effect.



Tools Needed: 3/32" (2.5mm) wide Flat Tip Screwdriver

Pliers/Wire Cutters

Needle Nose Pliers

Sensor Wire Installation (Required on all 8000 Series and other Non Pinch Resistant Doors)

Separate wire ends and strip about 3/8" of the insulation off each of the wire ends.

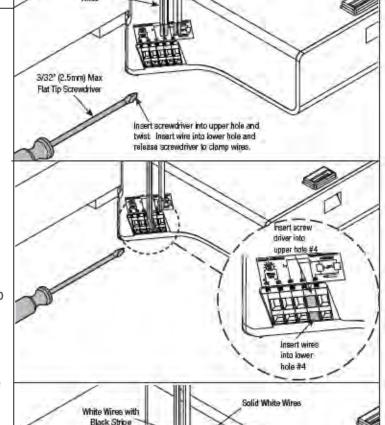
Insert 3/32 (2.5mm) max. screwdriver into the upper hole #4 of the terminal block. Twist screwdriver to open wire clamp in lower hole #4. Insert both sender and receiver white with black stripe wires into the lower hole #4 until they bottom out. Release screwdriver to clamp wires.

Repeat process to connect both sender and receiver solid white wires to terminal block hole #5.

IMPORTANT! Do not allow uninsulated length of position #4 wire to touch uninsulated length of position #5 wire. Keep Safety Sensor Wires away from moving parts.

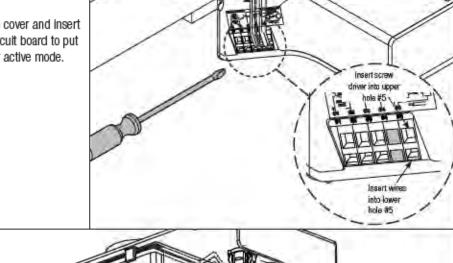
Keep the Safety Sensor Wires straight and organized. If using staples to hold wire routing between opener and sensors, make sure staples do not puncture insulation which can cause an electrical short failure of sensor function.

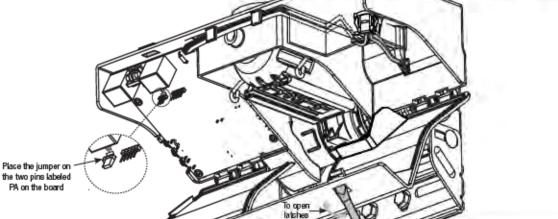
NOTE: Open the opener 45 cover and insert Safety Sensor jumper to circuit board to put opener 45 in Safety Sensor active mode.



with Black Strips

Solid White Wires



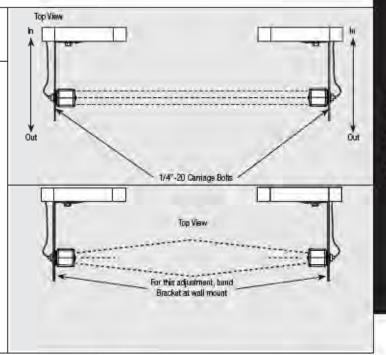


Safety Sensor Alignment

(Not Required On 9000 Series, 5120 & 5140 Doors)

Tools Needed: Pliers Align the Safety Sensors by moving the Sending and Receiving Units in or out until the Alignment Light on the Receiving Unit comes on. The 1/4"-20 Carriage Bolt can be loosened to move the Safety Sensor in or out, as required. If you have difficulty aligning the beams, check that both Mounting Brackets are mounted at the same height and remount if necessary. Additional minor adjustments can be made by slightly bending the Mounting Brackets.

Once the Alignment Light comes on, tighten all boits and mounting screws. Finish securing all Wires making sure not to break or open any of the conductors. Loop and secure any excess Wire.



24

Programming Wall Station

Tools Needed: None

△ WARNING

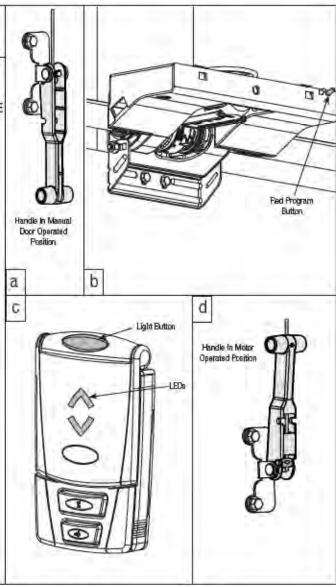
TO AVOID POSSIBLE SEVERE OR FATAL INJURY, MANUALLY DISCONNECT THE OPENER, USING THE EMERGENCY DISCONNECT HANDLE PRIOR TO PROGRAMMING REMOTE CONTROLS.

- a. Pull the emergency Disconnect Handle to the manual door operated position (lower position), if not already there.
- b. On the front right side of the Opener, press and release the Red Program Button; the Opener will sound one beep, indicating activation of the program mode. The Opener will remain in Program Mode for 30 seconds. If at the end of 30 seconds the Opener has not learned an RF device, the Opener will sound one beep, indicating the learn mode is no longer active. The LED will blink Red until the remote control is learned, then the LED turns Green.
- c. Press and hold the Wall Station light button until the Opener beeps once. The Wall Station is now programmed.

No LED response from the Opener during the Wall Station programming indicates a programming failure. Repeat programming Steps a-c.

 Return the Emergency Disconnect Handle to the Motor Operated position (upper position).

NOTE: The opener can be activated by up to 12 remote control devices (including Wall Station, Transmitter, and Keyless Entry Devices). If a 13th control is programmed, the first of the program controls will be overridden and will no longer activate the opener.



Programming Light Fixture

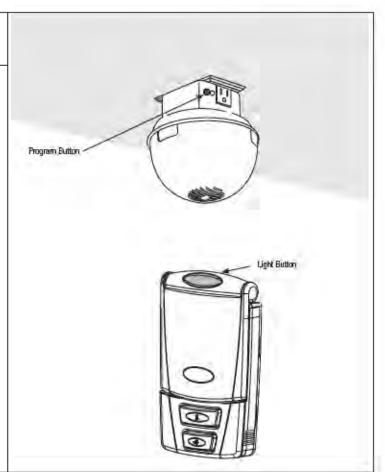
Tools Needed:

None

Press the red Program Button on the Light Fixture. The LED on the Light Fixture will turn on and remain on for 30 seconds or until a Wall Station is learned. The incandescent lamp will also turn on when Program Button is pushed.

Press the Light Button on the Wall Station. This must be done within 30 seconds of pressing the Program Button on the Light Fixture. The Light Fixture Lamp and LED will blink three times to indicate successful programming. The Light Fixture can now be turned on and off from this Wall Station.

NOTE: In order to program the Light to the Opener, the installer must have the Wall Station already installed and programmed to the Opener.



26

Profile Routine Standard Upper Limit

Tools Needed:

△ WARNING

TO AVOID INJURY, NO ONE SHOULD CROSS THE PATH OF A MOVING DOOR!

NOTE: The door must be in its fully closed position and the disconnect handle must be in the motor operated position (upper position) to initiate the profile routine.

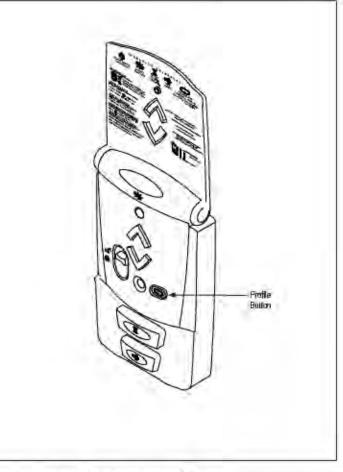
NOTE: if Safety Sensors are installed, profile routine will not run if Safety Sensors are not aligned.

Press and hold the profile button for 5 seconds. The Opener will beep two times, indicating the activation of the profile routine. The door will now move to the fully open position and stop, the opener will beep two times and then the door will close completely.

When the door closes under motor power, the motor will rotate down into the door locking position. Once this is complete, the door limits are set and the installation is complete.

NOTE: Using the wall station or remote control to stop the door during a Profile door move will stop the door, but it will also invalidate the profile so you must start over.

NOTE: Upon successful completion proceed to Step 28 unless you want to set a custom upper limit. If so, proceed to step 27.



Tools Needed:

Profile Routine Custom Upper Limit

△ WARNING

TO AVOID INJURY, NO ONE SHOULD CROSS THE PATH OF A MOVING DOOR.

NOTE: A custom upper limit can only be set after the standard profile routine has been run (a door profile is already stored in the operator memory). Refer to step 26 for instruction on setting the standard profile routine.

NOTE: If no obstruction interferes with a standard upper limit, skip this step, if you desire to set the door open position to a lower height proceed as follows.

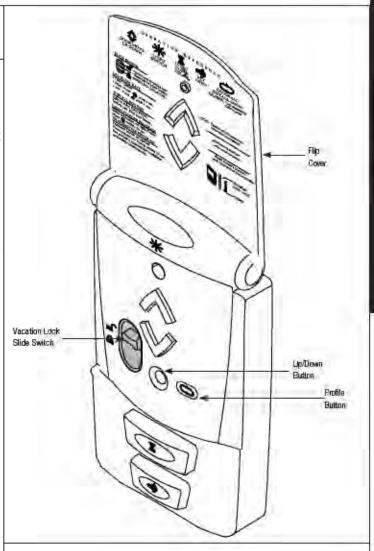
NOTE: Profile routine will not run if Safety Sensors are not aligned (Only applies if safety sensors are installed).

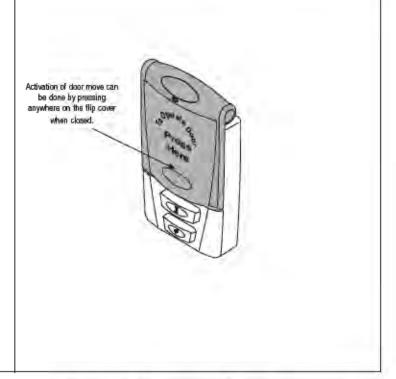
Disconnect opener by moving the disconnect handle to the lower position. Move the door to the desired open limit and reconnect opener by moving disconnect handle to upper position.

Alternately, the door can be moved to the desired open limit by stopping it with the remote control during a door open cycle.

Move the Vacation Lock slide switch from Unlocked to Locked and back to Unlocked within a 3 second span.

The custom upper limit is now set. The next door move command will close the door. Subsequent door open commands will open the door to the custom up limit.





28

Lock Arm Installation

Tools Needed: Tape Measure Flat Head Screwdriver

If motor is rotated down in the door lock position, pull the emergency (manual) disconnect. The motor will rotate up.

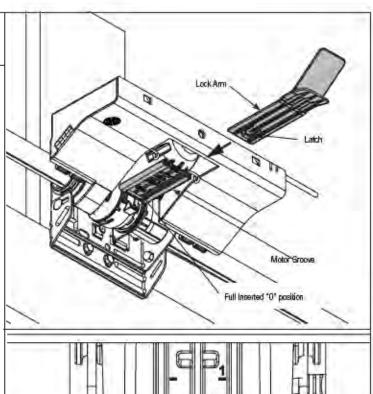
To slide lock arm in, insert screw driver into adjustment latch and lift latch to clear detent latch in motor. To adjust out, pull lock arm out (no tool required) to reach desired location.

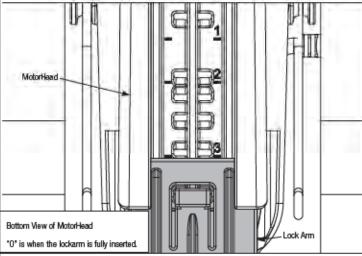
Insert the Lock Arm into the Motor Groove and align end of lock arm with number hash mark corresponding to the chart proper hole depending on your Track radius. To recognize the Wayne-Dalton Track radius being used, measure the length of the Flagangle and Torque Master® End Bracket and compare to the diagram (some Tracks are stamped with radius on the side of the Track).

If unsure of track type radius began with lock arm inserted all the way the in. The "0" position is when lock arm is fully inserted.

After assembly of the lock arm, manually raise and lower the door and verify that the lock arm does not interfere with the door. If there is interference between the door and the lock arm, proceed to Page 42 for lock arm troubleshooting.

NOTE: Do not operate the door if there is interference between the lock arm and the door. Reconnect the door to the motor operated position. Activate a motor operated up/down cycle to confirm clearance.





Lock Arm Position	WD-Wayne Daiton P0-Wayne Daiton Portland Track Type*	Track Radius	Door Model
0 Fully Inserted	WD WD PO PO	15'(380mm) 12'(305mm) 12' 10'	5500, 9700 8000, 9000 5500, 9000 Series 8000, 9000
1	PO	12"	8000 Series
2	WD PO	15"(308mm) 14"	8000, 9000 9000 Series
3	PO	14"	8000 Series

29

Testing the Safety Sensors (If Installed)

Tools Needed:

6" Height Object

△ WARNING

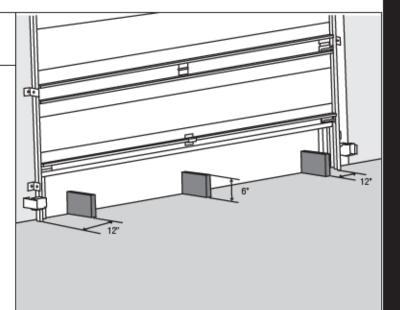
WHEN PERFORMING THIS PART OF THE TEST, DO NOT PLACE YOURSELF UNDER DESCENDING DOOR, OR SEVERE OR FATAL INJURY MAY RESULT.

Starting with the door fully open, place a 6" high object on the floor, in line with sensors, one foot from the left side of the door.

Activation of the Opener with the Wall Station Up/Down Button should cause the door to move no more than one foot, stop and then reverse to fully open position.

Repeat this test with the 6" high object placed at the center of the door and then one foot from the right side of the door.

The 6" high object, when placed on the floor in line with sensors, while door is closing, should also cause the door to reverse.



△WARNING

IF OPENER DOES NOT RESPOND PROPERLY TO THESE TESTS (STEPS 29 AND 30), HAVE A QUALIFIED SERVICE PERSON MAKE NECESSARY ADJUSTMENTS/REPAIRS, OR SEVERE OR FATAL INJURY COULD RESULT FROM OPERATING THE DOOR/OPENER.

30

Contact Obstruction Test

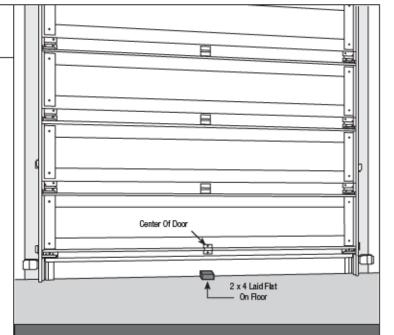
Tools Needed: 2 x 4 Board After installing the Opener, the door must reverse when it contacts a 1-1/2" high object (or a 2 x 4 board laid flat) on the garage floor.

Using the Wall Station, activate the door to the fully open position.

Place a 2 x 4 board flat on the garage floor, under the door path.

Activate the door to the closed position with the Wall Station. Upon contacting the 2 x 4 board, the door should stop, then reverse direction within two seconds and travel to the full open position.

If the door does not respond to the required tests, repeat profile routine Step 26 or 27, making sure the door is in the fully closed position prior to activation.



△WARNING

IF OPENER DOES NOT RESPOND PROPERLY TO THESE TESTS (STEPS 29 AND 30), HAVE A QUALIFIED SERVICE PERSON MAKE NECESSARY ADJUSTMENTS/REPAIRS, OR SEVERE OR FATAL INJURY COULD RESULT FROM OPERATING THE DOOR/OPENER.

Programming Transmitter

∴WARNING

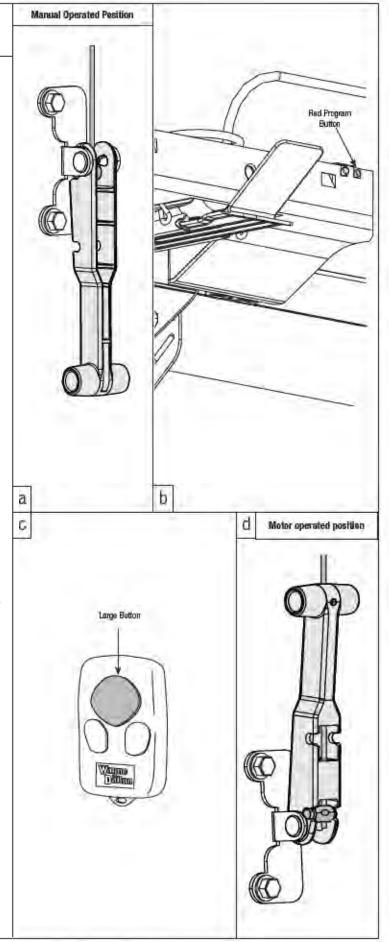
TO AVOID POSSIBLE SEVERE OR FATAL INJURY, MANUALLY DISCONNECT THE OPENER, USING THE EMERGENCY HANDLE PRIOR TO PROGRAMMING REMOTE CONTROLS.

- a. Pull the Emergency Disconnect Handle to the Manual Door Operated Position (lower position).
- b. On the front right side of the Opener, press and release the red program button: The Opener will sound one beep, indicating activation of the program mode. The Opener will remain in program mode for 30 seconds. If at the end of 30 seconds the Opener has not learned an RF device, the Opener will sound one beep, indicating the learn mode is no longer active.
- c. Press and hold the desired Transmitter button until; the Opener will sound one beep. The Transmitter is now programmed.

No response of the Opener during the Transmitter programming indicates a programming failure. Repeat programming a-C

d. Return the Emergency Disconnect Handle to the Motor Operated Position (upper position).

NOTE: The first transmitter command after programming will only move the door through a six inch up/down cycle. Normal door operations will occur on the second use of the transmitter.





IMPORTANT SAFETY INSTRUCTIONS

△WARNING

TO REDUCE THE RISK OF SEVERE INJURY OR DEATH:

- 1. READ AND FOLLOW ALL INSTRUCTIONS.
- Never let children operate or play with the door controls. Keep remote controls away from children.
- Always keep a moving door in sight and keep people and objects away until it is completely closed. NO ONE SHOULD CROSS THE PATH OF A MOVING DOOR.
- NEVER GO UNDER A STOPPED, PARTIALLY OPEN DOOR.
- 5. Test the door/Opener monthly. The garage door MUST reverse on contact with a 1-1/2 inch high object (or a 2 x 4 board laid flat) on the floor. If door/Opener falls test, have adjustments/repairs made immediately. Failure to make adjustments/repairs may cause severe or fatal injury.
- 6. When possible, use the Emergency Disconnect only when the door is in the closed position. Use caution when using the Emergency Disconnect when the door is open. Weak or broken spring(s) may allow the door to fall rapidly, causing a severe or fatal injury.
- 7. KEEP THE GARAGE DOOR PROPERLY BALANCED. See the owner's manual included with the door. An improperly balanced door could cause a severe or fatal injury. Have a qualified service person make repairs to the cables, spring assemblies, and other hardware.

8. SAVE THESE INSTRUCTIONS.

Door activation:

Upon activation by either the Wall Station Up/Down Button or Transmitter, the door will move in the following manner:

- If closed, the door will open. If open completely, the door will close. If partially open, the door will open.
- If closing, the door will stop, reverse, and return to the open position. Next activation will close the door.
- 3. If opening, the door will stop. Next activation will open the door.
- 4. If an obstruction is encountered or an out-of-balance condition is detected while the door is closing, the door will reverse, return to the open position, and the Opener will beep either 3 or 4 times. The next activation will close the door.
- If an obstruction is encountered or an out-of-balance condition is detected while opening the door, the door will stop. The next activation will open the door.
- When door is in motion any button on the Wall Station functions the same as the Up/Down Button.

△WARNING

ALWAYS KEEP MOVING DOOR IN SIGHT AND KEEP PEOPLE AND OBJECTS AWAY UNTIL IT IS COMPLETELY CLOSED. TO PREVENT A SEVERE OR FATAL INJURY, AVOID STANDING IN A OPEN DOOR WAY OR WALKING THROUGH THE DOORWAY WHILE THE DOOR IS MOVING.

△WARNING

NEVER LET CHILDREN OPERATE DOOR OR PLAY WITH THE DOOR CONTROLS. KEEP REMOTE CONTROLS AWAY FROM CHILDREN. FATAL INJURY COULD RESULT SHOULD A CHILD BECOME TRAPPED BETWEEN THE DOOR AND FLOOR.

∕WARNING

KEEP THE GARAGE DOOR PROPERLY BALANCED. AN IMPROPERLY BALANCED DOOR COULD CAUSE SEVERE OR FATAL INJURY. HAVE A QUALIFIED SERVICE PERSON MAKE ADJUSTMENTS/REPAIRS TO CABLES, SPRING ASSEMBLIES, AND OTHER HARDWARE.

Emergency Disconnect:

△WARNING

THE EMERGENCY DISCONNECT SHOULD ONLY BE USED WHEN DOOR IS CLOSED. USE EXTREME CAUTION IF OPERATING THE EMERGENCY DISCONNECT ON AN OPEN DOOR. WEAK OR BROKEN SPRING(S) MAY ALLOW THE DOOR TO FALL RAPIDLY, CAUSING SEVERE OR FATAL INJURY.

The Opener is equipped with an Emergency Disconnect that allows the door to be moved manually and independently from the Opener.

With the door closed, pull down on the Disconnect Handle and place the Handle under the lower section of the Handle Bracket. This motion causes the motor on the Opener to pivot upwards and the Opener to disconnect from the Torque Tube.

Releasing the Disconnect Handle from the lower section on the Handle Bracket and returning the Handle to its original position will reconnect the Opener to the Torque Tube.

NOTE: The Motor will not pivot down completely when the Handle is released. After one motorized up/down door cycle, the motor will once again pivot down, and all cable slack will be taken up. The garage door is not secured from forced entry until the Motor is back in the down position.

Disconnect Label: The Label is located next to the Disconnect Handle. The Label shows the Handle in both the Motor Operated and Manual Operated Positions. View on the left side of the Label shows the Handle position when the Opener is engaged to the Torque Tube. The view on the right side of the Label shows the Handle when the Opener is disconnected from the Torque Tube.



Operating the Wireless Wall Station

Up-Down Button:

Momentarily pressing the Up/Down Button activates the door. If an out-ofbalance condition causes the door to stop while opening or reverses the door while closing, apply constant pressure to the Up/Down Button until the door is fully open or closed. This will allow the Opener to move the door in an out of balance condition, until the problem is corrected (see Troubleshooting). The Up/Down Button (when unit is closed) can be activated by pressing flipcover.

△WARNING

THE SEVERE OUT-OF-BALANCE CONDITION MUST BE CORRECTED IMMEDIATELY. FAILURE TO MAKE ADJUSTMENTS/REPAIRS, COULD RESULT IN SEVERE OR FATAL INJURY.

Light Button:

Momentarily pressing the Light Button turns on the Light Fixture. The Light Fixture will remain on until either the Light Button is pressed again or the door is activated. The Light Fixture automatically turns on with a door activation and remains on for five minutes. Pressing the Light Fixture Button before the five minutes has elapsed will turn off the light fixture. While the door is in motion, the Light Button functions identically as the Up/Down Button, stopping or reversing the door immediately.

Timer Button:

Momentarily pressing the Timer Button causes a delayed activation of a stationary fully open door. The Opener will signal seven audible beeps (approx. 8 seconds) followed by one longer (2 second) beep prior to closing the door, allowing time to exit the garage when the Opener is in the timer mode. Pressing any button, except for the Profile Button or the Light Button while the Opener is beeping cancels the timer mode.

NOTE: The Timer feature will only function with the door in the full open position. Pressing the Timer Button with a stationary door in any other position will cause the Opener to sound four beeps and the door will not be activated.

While the door is in motion, the Timer Button functions identically as the Up/Down Button, stopping or reversing the door immediately.

Slide Switch:

The Slide Switch has two positions: Normal, and Door lock.

Normal position:

Move the Slide Switch to Normal position for all normal functions of the Opener. The Normal position will cancel the Door Lock feature.

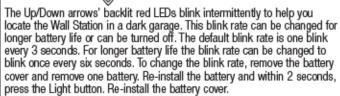
NOTE: When the Slide Switch is moved to the unlocked position the Opener will sound one beep.

Door Lock position:

If the door is stopped (fully open, fully closed or partially open) move the Slide Switch to the Door Lock position to suspend all normal functions of the Opener. The Opener will remain completely disabled and non-operational in this mode. All Wall Stations, Transmitters and Keyless Entry Units are ignored until the Slide Switch is moved to the Normal position. If the door is moving when the Slide Switch is moved to the Door Lock position, the Door Lock mode is not activated and all functions of the Opener remain active.

NOTE: When the Slide Switch is moved to the locked position the Opener will sound two beeps. Activation of a door move command while the opener is in Door Lock condition will cause the opener to beep 4 times.

Backlit LED Lights:



For longest battery life, the blink can be turned off. To turn off the blink, remove the battery cover and remove one battery.

Re-install the battery and within 2 seconds, press the Pet button. Re-install the battery cover.

NOTE: The Wall Station's arrow LEDs will light while any Wall Station button remains pressed.

Pet Position:

Pressing the Pet Button opens a closed door to a preset position between six and thirty inches above the floor, allowing pets to enter and exit the garage without the door being fully open. The door must be fully closed to activate the pet open feature. Pressing the Pet Button with a stationary door in the pet open position will cause the door to close. Pressing the Up/Down Button while the door is in the pet position will cause the door to open. While the door is in motion, the pet button functions identically to the Up/Down Button, stopping or reversing the door immediately. The pet feature allows for custom setting of the pet position door height. See Customizing the Settings on page 37.

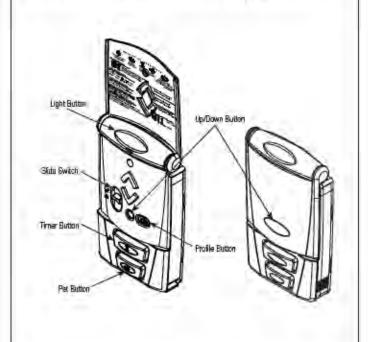
NOTE: A door in the "pet position" (open 6-30 inches) is not locked and should not be used as a secured door position.

Profile Routine:

Press and hold the Profile Button for 5 seconds to initiate the "Profile Routine". See Customizing the Settings on page 37.

NOTE: Refer to Step 24 for Wall Station programming instructions:

NOTE: The Wall Station arrows' LED will light while any Wall Station button remains pressed. See Maintenance section for battery replacement.





Programming HomeLink® System to the Torque Master opener 45 (Primary)

NOTE: This step can only be done on automobiles equipped with the HomeLink® System.

NOTE: Programming HomeLink® requires a

Wayne-Dalton Transmitter that is programmed to the Torque Master opener 45 see page 40.

IMPORTANT: Use the programming instructions provided with your vehicle first. Follow these instructions if the HomeLink® unit does not learn the Transmitter, by using the vehicle's instructions.

NOTE: If Primary Programming does not work then use the Alternate Procedure on next page.

NOTE: Vehicle may need to be in accessory position when programming. Check car owner's manual.

NOTE: HomeLink® is a registered trademark of Johnson Controls.

Programming/Training HomeLink® Unit

△WARNING

GARAGE DOOR MAY OPERATE DURING PROGRAMMING. TO AVOID POSSIBLE SEVERE OR FATAL INJURY, PLACE THE EMERGENCY DISCONNECT HANDLE IN THE MANUAL OPERATED POSITION.

- Pull the Manual Disconnect to put the Opener in the manually operated position.
- 2. Verify the HomeLink® unit has an empty channel. Press the desired HomeLink® button and observe the LED. If it flashes slowly, the channel is empty and ready for programming. If pressing the desired channel/button causes the LED to blink rapidly, or come on without blinking, then this channel is already programmed. You either need to choose a different channel/button on the HomeLink®, or perform Step 3 below.
- 3. OPTIONAL To completely clear all channels on the HomeLink® unit, press and hold the two outside buttons on the HomeLink® unit until the HomeLink® LED light begins to flash rapidly (approx. 20 seconds), then release both buttons. (Do not perform this Step to train additional hand-held Transmitters.) NOTE: This operation erases all previously learned Transmitters and you will need to reteach any other Transmitters to your HomeLink® unit.
- 4. Hold the end of the Wayne-Dalton hand-held Transmitter approximately 1 to 3 inches away from the HomeLink® surface, keeping the HomeLink® LED light in view.
- 5. Press and hold the desired HomeLink® channel/button. The LED should flash slowly (indicating empty channel). Continue holding the HomeLink® button and press and hold the large button on the Wayne-Dalton Transmitter for approximately 3-5 seconds. The HomeLink® LED should now blink rapidly, indicating a successful learn operation. Release both buttons, and proceed to Step 6 below.

NOTE: If this procedure is unsuccessful, perform Alternate procedure on next page.

Teaching HomeLink® to the Opener 45 Motorhead Unit

Press the red program button on the opener 45. The opener 45 LED will turn solid, indicating that it is ready to learn.

NOTE: The opener 45 will remain in the learn mode for 30 seconds.

- Press the HomeLink® button used in Step 5 above for 1 to 3 seconds. The opener 45 LED will blink rapidly then return to slow indicating a successful learn.
- 8. Return the Manual Disconnect to the motor operated position.
- Press the HomeLink® button once more to operate the door.

NOTE: The first transmitter command after programming will only move the door through a six inch up/down cycle. Normal door operations will occur on the second use of the transmitter.



Programming HomeLink® System to the Torque Master opener 45(Alternate)

NOTE: This Step can only be done on automobiles equipped with the HomeLink® System.

NOTE: Programming HomeLink® requires a Wayne-Dalton Transmitter that is programmed to the Torque Master opener 45 see page 40.

IMPORTANT: USE THE PROGRAMMING INSTRUCTIONS
PROVIDED WITH YOUR VEHICLE FIRST. FOLLOW THESE
INSTRUCTIONS IF THE HOMELINK® UNIT DOES NOT LEARN THE
TRANSMITTER. BY USING THE VEHICLE'S INSTRUCTIONS.

NOTE: Vehicle may need to be in accessory position when programming. Check car owner's manual.

NOTE: HomeLink® is a registered trademark of Johnson Controls.

Programming/Training HomeLink® Unit

∆WARNING

GARAGE DOOR MAY OPERATE DURING PROGRAMMING. TO AVOID POSSIBLE SEVERE OR FATAL INJURY, PLACE THE EMERGENCY DISCONNECT HANDLE IN THE MANUAL OPERATED POSITION.

- Pull the Manual Disconnect to put the Opener in the manual operated position.
- 2. Verify the HomeLink® unit has an empty channel. Press the desired HomeLink® button and observe the LED. If it flashes slowly, the channel is empty and ready for programming. If pressing the desired channel/button causes the LED to blink rapidly, or come on without blinking then this channel is already programmed. You either need to choose a different channel/button on the HomeLink®, or perform Step 3 below.
- 3. OPTIONAL To completely clear all channels on the HomeLink® unit, press and hold the two outside buttons on the HomeLink® unit until the HomeLink® LED light begins to flash rapidly (approx. 20 seconds), then release both buttons. (Do not perform this Step to train additional hand-held Transmitters.) NOTE: This operation erases all previously learned Transmitters and you will need to reteach any other Transmitters to your HomeLink® unit.
- 4. Press and hold the Wayne-Dalton hand-held Transmitter's large center button. The Transmitter's red Light Emitting Diode (LED) will turn on. After 10 seconds the red LED will blink rapidly. Do not release the button and proceed to the next Step.
- Press the desired HomeLink® button. Do not release either button until Step 6 has been completed.

NOTE: It is important to immediately press the desired HomeLink button as soon as the Transmitter's red LED blinks. If the red LED subsequently turns on or off, ignore it, this is normal.

- 6. The HomeLink® indicator light will be blinking during the training operation. When the HomeLink® indicator light flashes rapidly or turns off (approx. 5 to 60 seconds), both buttons may be released. The HomeLink® indicator light flashing rapidly or turning off indicates successful programming of the new frequency signal.
- Press the red program button on the opener 45. The opener 45 unit will beep once, indicating that it is ready to learn.

NOTE: The opener 45 will remain in the learn mode for 30 seconds.

- Press the HomeLink® button used in Step 5 above for 1 to 3 seconds. The opener 45 will beep indicating a successful learn.
- Return the Manual Disconnect to the motor open position.
- 10. Press the HomeLink® button once more to operate the door.



Customizing the Settings

Custom pet position:

Normal profile routine sets the pet position to approximately 6 inches above the ground. The pet opening height may be changed to open anywhere between 6" and 30" above the ground. To change the automatic pet opening height refer to the following procedure:

- a. Begin with the door in the closed position.
- b. Disconnect door, using emergency disconnect, and manually move door to the desired pet opening height (between 6" and 30" above the ground). Reconnect door.
 - Alternately you can move the door with the opener up/down command and stop where you want the pet open height (6" to 30" above the ground).
- c. Move the slide switch on the wall station from UNLOCK to LOCK. Opener will sound two beeps. Move the slide switch back to UNLOCK. The opener will sound one beep. The UNLOCK-to-LOCK-to UNLOCK sequence must be done within a 3 second time span. The pet button is now programmed to automatically open the door to this custom height. Pressing the Pet button should return the door to the closed position.

NOTE: The Opener will NOT accept programmed pet lock position if door is below 6" or higher than 30".

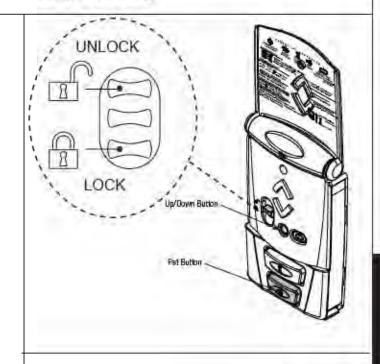
NOTE: Activation of the normal profile routine will reset the pet position to the default 6" height. For use of the Pet Button see Operation section.

Multi-Door Programming:

Momentarily pressing the button programmed in the Transmitter Programming Step activates the door. Other buttons can also be programmed to activate different doors, for multi-door installations. Each button or a combination of two buttons pressed simultaneously can be programmed to activate a different door. Only one button at a time can be programmed to activate a specific Opener.

Custom Upper Limits

Refer to Step 27 in the Installation section to set a custom upper limit.







Customizing the Settings (Continued)

Erasing Remote Controls:

Caution: Manually disconnect the door from Opener using the Emergency Disconnect Handle prior to erasing remote controls.

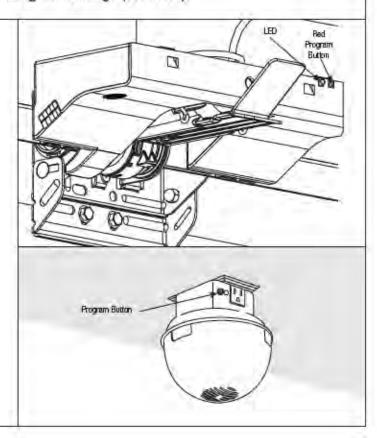
To clear programming of all remote control devices, press and hold the Opener's Red Program Button for 10 seconds. The LED will light with a solid red color. After 10 seconds the LED will turn off and the opener will beep once. All remote controls are now deleted from memory.

Multi Opener Light Control:

A single Light Fixture can be controlled by up to 6 Openers. Follow the procedure outlined on Step 25 to program additional Openers.

Erasing Light Fixtures:

To clear programming of all Openers from a Light Fixture, press and hold the Light Fixture Program Button for approximately 10 seconds. When the Light Fixture lamp and LED flash 6 times, all Openers are erased.





Monthly Maintenance:

- With door fully closed, move the Emergency Disconnect to the manual door operated position and manually operate door. If the door feels unbalanced or binds, have a qualified service person make necessary adjustments or repairs to the door.
- Perform the contact/obstruction tests. See Steps 29 and 30 for the contact/obstruction test instructions. If Door/Opener fails Contact/Obstruction Test, have a qualified service person make adjustments/repairs or this could result in severe or fatal injury.
- Failure of Door/Opener to respond to Transmitter or Wall station may be due to a weak or dead battery. Press and hold the Activation Button on the Wall Station.
 - If the LED does not light, this is an indication that the battery is weak or dead. Replace the battery.

Maintenance

Battery Replacement for Wall Station:

Remove the Battery Cover completely (right-hand side of Wall Station) by disengaging the Battery Cover's lower clip. Install two AAA batteries into the Wall Station observing the polarity, (+) and (-), of both batteries. After a few seconds, the Up/Down red LEDs will begin to blink every one second. If it is desired to slow the LED blink rate refer to the operation section HOW TO OPERATE THE WIRELESS WALL STATION. Re-install the Battery Cover by first inserting its top into the Wall Station then inserting and securing its bottom.

NOTE: Use only 2 AAA batteries.

NOTE: Dispose of dead batteries properly.

Battery Replacement for Transmitter:

Insert a coin in the coin slot of the Transmitter and twist coin to access the dead battery. Replace the battery, being careful to match the positive (+) symbols on the circuit boards with the battery.

NOTE: Some transmitters use 2 CR2016 or equivalent batteries.



Power Connection — Permanent Wiring Option

If required by local codes, the Opener can be permanently wired. Services of a licensed electrician should be obtained.

To permanently wire the Unit, disconnect electrical power at fuse/ breaker box.

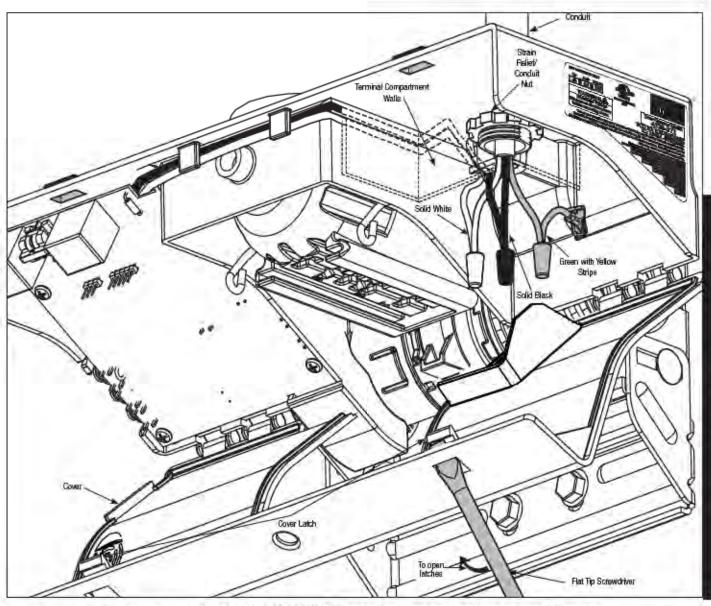
△ WARNING

DISCONNECT POWER AT FUSE/BREAKER BOX BEFORE PROCEEDING.

- a. Remove Lock Arm. Using a Flat Tip Head Screwdriver, remove the Cover by disconnecting two latches as shown.
- Remove the plastic power cord Strain Relief form the opener housing.
- c. Using a pair of wire cutters, cut the power cord leaving 6" of wire inside opener.
- d. Strip off 3/4" of insulation from each wire.

NOTE: Do not disconnect the ground Wires from the opener.

- e. Route Wires into conduit in top hole of the Opener, and leave 6" for wiring.
- Using wire nuts, splice each Conduit Wire with the corresponding Wire inside the Opener as follows: Opener Black (line), Opener White (neutral), and Opener Yellow and Green (ground).
- g. All wire and wire nuts for this connection must lay within the termination compartment walls.
- h. Re-install cover and Lock Arm.





Tools Needed: None Programming Wireless Wall Station(s) or Transmitter(s) to Opener

△ WARNING

TO AVOID POSSIBLE SEVERE OR FATAL INJURY, MANUALLY DISCONNECT THE OPENER, USING THE EMERGENCY DISCONNECT HANDLE PRIOR TO PROGRAMMING REMOTE CONTROLS.

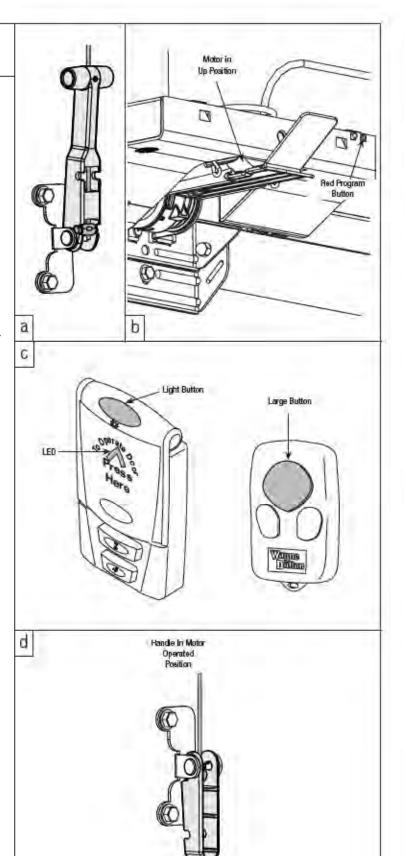
NOTE: The opener can be activated by up to six remote control devices (including Wall Station, Transmitter, and Keyless Entry Devices). If a seventh control is programmed, the first of the program controls will be overwritten and will no longer activate the opener.

- a. Pull the emergency disconnect handle to the manual door operated position (lower position).
- b. On the front cover of the opener, press and release the red program button; the opener will beep once, indicating activation of the program mode. The opener will remain in program mode for 30 seconds. If at the end of 30 seconds the opener has not learned an RF device, the opener will beep once, indicating the learn mode is no longer active.
- c. Press and hold the desired transmitter button or wall station light button until the opener beeps once. The transmitter of wall station is now programmed.

No beeping response from the opener during the transmitter or wall station programming indicates a programming failure. Repeat programming Steps a-c.

 Return the emergency disconnect handle to the motor operated position (upper position).

NOTE: The first transmitter command after programming will only move the door through a six inch up/down cycle. Normal door operations will occur on the second use of the transmitter or wall station.





Troubleshooting

Symptom	Probable Cause	Corrective Action		
Opener does not respond to the Wall Station or Transmitter.	No power to the Opener. Controls are not programmed.	Check the Opener Power Cord to outlet connection.		
	controls are not programmed.	See Programming section.		
Opener works from the Wall Station but not from the Transmitter.	Transmitter is not programmed.	See Programming section.		
Transmitter.	Weak or dead Transmitter battery.	See Maintenance section for battery replacement.		
Opener works from the Transmitter but not from the Wall Station.	Wall Station is not programmed.	See Code Change/Activation and Programming section.		
wan station.	Weak or dead Wall Station battery.	See Maintenance section for battery replacement.		
Door does not move and the Opener sounds 1 long beep and 1 short beep.	The install routine has not been performed.	Perform the profile routine Steps 26 or 27.		
Door does not move with a Wall Station or Transmitter command and no audible beep response from the	Blown fuse or tripped circuit breaker.	Reset the circuit breaker or contact a qualified service person for fuse information.		
Opener.	No power to the Opener. Possible damaged Motor wiring.	Check Power Cord connection.		
	ressible damaged Motor Willing.	Unplug opener for 5 seconds and plug back in.		
Door stops or reverses, and the Opener sounds 2,3	Obstruction encountered.	Clear the door path.		
or 4 beeps.	Infrared Sensor misalignment (if applicable).	Re-align Infrared Sensors Step 23.		
	Out-of-balance condition detected.	Repeat the Profile Routine. See Step 26 or 27.		
Door does not close properly.	Counterbalance Cables are not on the Cable Drums properly.	Apply constant pressure to the Wall Station's Up/Down Button to close the door.		
Motor pivots down too hard and slacks door lift cables	Could occur on smaller (lighter weight) garage doors.	Add 1/2 spring turn to door counterbalance springs. Retry operator door close. Adjust more or less as required.		
Door will not close.	Thermal delay: The door has cycled eight times in a	Door will operate after a one-minute waiting period.		
	five-minute period.	Re-align Infrared Sensors Step 23.		
	Infrared Sensor mis-alignment (f applicable). Contact obstruction test failure.	Apply constant pressure to Wall Station Up/Down Button until door is closed		
		Repeat the profile routine Step 26 or 27 or contact a qualified service person.		
Door does not travel to the full open or full close	Door is out of balance.	Call a qualified service person.		
position.	Door limits are set improperly.	Repeat the profile routine Step 26 or 27.		
Door is not sealing to the floor.	Bottom door limit is set too high.	Disconnect the Opener and force the door to the		
	Outside door seal is set too tightly against the face of the door.	floor. Reconnect the Opener and activate the profile routine Step 26 or 27.		
		Adjust weather seal position.		
Door is reversing at or near the floor.	Outside door seal is too tight against the face of the door.	Reinstall the door seal so as to be not so tight against the face of the door.		
	Counterbalance springs have too much tension (torsion).	Contact a qualified service person.		
	Vertical Track is spaced too close to the bottom door section, causing the door to bind.	Adjust Track away from the door until binding is removed.		
	•	-		



Troubleshooting (Continued)

Symptom	Probable Cause	Corrective Action
Light fixture will not light during the door operation or by pressing the Wall Station light button.	Faulty light bulb. No power to receptacle. Wall Station not programmed to light.	Install new bulb (75W Max). Check circuit breakers. Program per Step 25.
Motor starts but the door will not move.	Opener is disconnected from the Torque Tube.	Ensure Disconnect Handle is in the Motor Operated Position. Re-install Handle per instructions in Step 8.
Motor pivots down prematurely (before the door closes completely).	Door too hard to close	Adjust door balance or track level.
Opener will work the light, but will not move the door when Up/Down Button is pressed. The operator will beep 4 times.	Opener is in the vacation Lock mode.	Move slide switch to "Normal (Unlock) Position". Opener will sound one beep. Opener will now move the door. If not, repeat the LOCK then UNLOCK sequence again, but more slowly. If Opener sounds one long & one short beep when commanded, then Opener needs to be profiled. See Profile Routine Step 26 or 27.
Wall Station not operational.	Wall Station mounted incorrectly.	Ensure Wall Station is mounted on a flat surface, Ensure not mounted directly to metal. Ensure screws not overtightened. Check batteries.

Lock Troubleshooting

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Symptom	Probable Cause	Corrective Action			
The door interferes with the Lock Arm when manually verifying clearance.	Lock Arm is set incorrectly. The Torque Tube is not level. The door top brackets and/or track configuration are not set correctly.	Ensure the Lock Arm is mounted using the correct location in Step 28. Remount the Opener per Step 4, ensuring the Opener and Torque Tube are level prior to fastening. For new door and Opener installations, refer back to the instructions included with the door for top bracket and/or track configurations. For retro-fit installations on current doors, refer back to the section of this manual titled: Retro fit installation for opener 45, for top bracket and/or track configurations.			

LIFETIME LIMITED WARRANTY Opener 45

Subject to the terms and conditions contained in this Lifetime Limited Warranty, Wayne-Dalton Corp. ("Manufacturer") warrants the opener, including electronic components (Batteries are not warranted), which is described at the top of this page, for a period of <u>FIVE (5) YEARS</u> from the date of installation against:

(i) Any defects in material or workmanship.

The Manufacturer provides a Lifetime Limited Warranty on the motor only, against defects in material and workmanship.

After a period of <u>TWENTY(20) YEARS</u>, from time of installation, replacement of Lifetime Limited Warranty materials will be pro-rated at 50 per cent of Manufacturer's published list pricing at time of claim, and you must pay this amount.

This Limited Warranty is extended only to the person who purchased the product and continues to own the premises (where the opener is installed) as his/her primary residence ("Buyer"). This Limited Warranty does not apply to residences other than primary, or to commercial or industrial installations, or to installations on rental property (even when used by a tenant as a residence). This Limited Warranty is not transferable to any other person (even when the premises, is sold), nor does it extend benefits to any other person. As a result this Limited Warranty does NOT apply to any person who purchases the product from someone other than an authorized Wayne-Dalton dealer or distributor.

The Manufacturer will not be responsible for any damage attributable to improper storage, improper installation, or any alteration of the opener or its components, abuse, damage from corrosive fumes or substances, salt spray or saltwater air, fire, Acts of God, failure to properly maintain the opener, or attempt to use the opener, its components or related products for other than its intended purpose and its customary usage. This Limited Warranty does not cover ordinary wear.

THIS LIMITED WARRANTY COVERS A CONSUMER PRODUCT AS DEFINED BY THE MAGNUSON-MOSS ACT. NO WARRANTIES, EXPRESS OR IMPLIED (INCLUDING BUT NOT LIMITED TO THE WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE) WILL EXTEND BEYOND THE TIME PERIOD SET FORTH IN UNDERSCORED BOLD FACE TYPE IN THIS LIMITED WARRANTY, ABOVE.

 Some States do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

Any claim under this Limited Warranty must be made in writing, within the applicable warranty period, to the dealer from which the product was purchased. Unless the dealer is no longer in business, a written claim to the Manufacturer will be the same as if no claim had been made at all.

At the Manufacturer's option, a service representative may inspect the product on site, or Buyer may be required to return the product to the Manufacturer at Buyer's expense. Buyer agrees to cooperate with any representative of the Manufacturer and to give such representative full access to the product with the claimed defect and full access to the location of its installation.

If the Manufacturer determines that the claim is valid under the terms of this Limited Warranty, the Manufacturer will repair or replace the defective product. The decision about the manner in which the defect will be remedied will be at the discretion of the Manufacturer, subject to applicable law. THE REMEDY WILL COVER ONLY MATERIAL. THIS LIMITED WARRANTY DOES NOT COVER OTHER CHARGES, SUCH AS FIELD SERVICE LABOR FOR REMOVAL, INSTALLATION, SHIPPING, ETC.

Any repairs or replacements arranged by Manufacturer will be covered by (and subject to) the terms, conditions, limitations and exceptions of this Limited Warranty; provided, however, that the installation date for the repaired or replaced product will be deemed to be the date the original product was installed, and this Limited Warranty will expire at the same time as if there had been no defect. If a claim under this Limited Warranty is resolved in a manner other than described in the immediately preceding paragraph, then neither this Limited Warranty nor any other warranty from the Manufacturer will cover the repaired or replaced portion of the product.

THE REMEDIES FOR THE BUYER DESCRIBED IN THIS LIMITED WARRANTY ARE EXCLUSIVE and take the place of any other remedy. The liability of the Manufacturer, whether in contract or tort, under warranty, product liability, or otherwise, will not go beyond the Manufacturer's obligation to repair or replace, at its option, as described above. THE MANUFACTURER WILL NOT UNDER ANY CIRCUMSTANCES BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, including (but not limited to) damage or loss of other property or equipment, personal injury, loss of profits or revenues, business or service interruptions, cost of capital, cost of purchase or replacement of other goods, or claims of third parties for any of the foregoing.

 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.

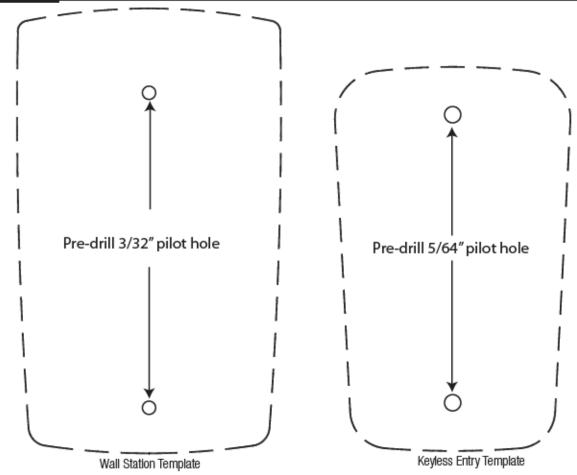
No employee, distributor, dealer, representative, or other person has the authority to modify any term or condition contained in this Limited Warranty or to grant any other warranty on behalf of or binding on the Manufacturer, and anyone's attempt to do so will be null and void.

Buyer should be prepared to verify the date of installation to the satisfaction of the Manufacturer.

The rights and obligations of the Manufacturer and Buyer under this Limited Warranty will be governed by the laws of the State of Ohio, USA, to the extent permitted by law.

 This Limited Warranty gives you specific legal rights and you may also have other rights, which may vary from State to State.





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Thank you for your purchase

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Patent Information

"Made under the following US patents and methods D413,579; D466,141; D472,568; D472,910; D473,573; D473,574; D474,215; D505,393; D517,580; CA 2,348,784; 5,929,580; 6,078,249; 6,145,570; 6,164,014; 6,253,824; 6,263,947; 6,325,134; 6,326,751; 6,326,754; 6,401,792; 6,561,255; 6,561,256; 6,568,454; 6,588,156; 6,605,910; 6,667,591; 6,739,372; 6,845,804; 6,851,465; 6,873,127; 6,880,609; 6,903,650; 7,053,571; 7,061,197; 7,075,256; 7,109,677; 7,123,128; 7,143,804; 7,173,389; 7,173,514; 7,173,516; 7,183,732; 7,190,266; 7,193,502; 7,207,142; 7,211,975; 7,246,647; 7,280,031; 7,327,107; 7,327,108; 7,327,249; 7,358,480; 7,367,160; 7,375,484; 7,375,612; 7,376,401; 7,397,342. Other US and Foreign Patents pending."

FCC and IC Statement

FCC Regulatory Information:

This device compiles with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IC Regulatory Information:

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

NOTE: This equipment has been tested and found to comply with limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with these instructions, may cause harmful interference to radio communication; however, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning equipment off and on, user is encouraged to try to correct interference by one or more of the following measures: Reorient or relocate receiving antenna. Increase separation between equipment and receiver. Connect equipment into an outlet on a circuit different from that which receiver is connected. Consult your dealer or/and experienced radio/television technician for help.

WARNING: Changes or modifications to this unit not expressly approved by party responsible for compliance could void user's authority to operate this equipment.