

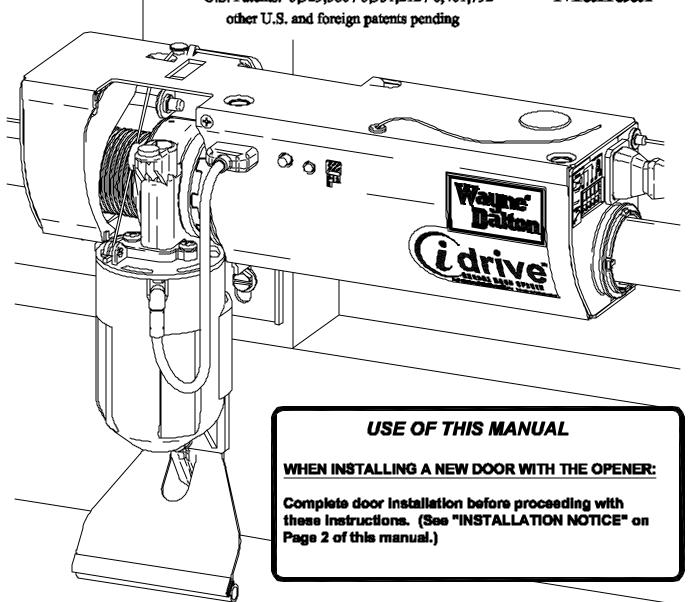
Wayne-Dalton Corp.
P.O. Box 67 Mt. Hope, OH 44660 (800) 676-7734
www.wayne-dalton.com



Models: 3660-372 / 3760-372 / 3760N-372

U.S. Patents: 5,929,580 / 5,931,212 / 6,401,792

Installation
Instructions
& Owner's
Manual



## **Important Notice!**

Read the enclosed instructions carefully before installing/operating this garage door opener. Pay close attention to all warning labels and notes. This manual should be attached to the wall in close proximity to the garage door opener.

Updated: 7/22/02

## **INSTALLATION NOTICE:**

If installing this idrive<sup>TM</sup> opener on a door currently installed with a TorqueMaster<sup>TM</sup> counterbalance system, start installation on page 3. If installing this idrive<sup>TM</sup> opener as part of a new door installation, complete the door installation first (using instructions supplied with the door), then proceed to Step: 15 on page 12, of this manual, for the remaining opener installation procedures.

# IMPORTANT SAFETY INSTRUCTIONS FOR INSTALLATION AND USE

WARNING - INCORRECT INSTALLATION CAN LEAD TO SEVERE OR FATAL INJURY. FOLLOW INSTALLATION



READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS.



Do not connect the opener power head to a power souce until instructed to do so.



Install the entrapment warning label next to the wall station in a prominent location. For products requiring an emergency disconnect, install the emergency release marking on or next to the emergency disconnect.



Remove all ropes and remove or make inoperative 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.

WARNING - IT IS VITAL FOR THE SAFETY OF PERSONS TO FOLLOW ALL INSTRUCTIONS. SAVE THESE INSTRUCTIONS.



Install only on a properly installed garage door. An improperly balanced door could cause severe injury. Have a qualified service person make repairs to cables, spring assemblies, and other hardware before installing the opener.



Where possible, install the opener power head seven feet or more above the floor. For products requiring an emergency release, mount emergency release 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 opener, the door must reverse when it contacts a 1-1/2 inch high object (or a 2 x 4 board laid flat) on the floor.



Installation and wiring must comply with local building and electrical codes.

Connect 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 PERIODIC SAFETY CHECKS, MAINTENANCE, AND ADJUSTMENTS, AS RECOMMENDED.

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 communications; 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.

#### FCC/INDUSTRY CANADA REGULATORY INFORMATION

This device complies 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 underired operation.

## **System Requirements**

### **WARNING**

To reduce the risk of injury, use this opener only with the following doors:

- ¿drive Model 3660-372, 3760-372 & 3760N-372 can ONLY be installed on a Wayne-Dalton® 9000 series door system utilizing a TorqueMaster™ Counterbalance System with a standard lift track system.
- ◆ (¿drìve Model 3660-372, 3760-372 & 3760N-372 can be installed on a Wayne-Dalton® 8000 series door utilizing a TorqueMaster™ Counterbalance System with standard lift track, ONLY when installed with the Photo Eye External Safety System Accessory; Model ML2, not included.
- ◆ ¿drìve Model 3660-372, 3760-372 & 3760N-372 can be installed on a Wayne-Dalton® 8000 or 9000 series door utilizing a TorqueMaster™ Counterbalance System with standard 6" low headroom track, ONLY installed with the Low Headroom Kit, not included.

# IMPORTANT SAFETY INSTRUCTIONS FOR INSTALLATION AND USE

WARNING - INCORRECT INSTALLATION CAN LEAD TO SEVERE OR FATAL INJURY. FOLLOW INSTRUCTIONS. WARNING - IT IS VITAL FOR THE SAFETY OF PERSONS TO FOLLOW ALL INSTRUCTIONS. SAVE THESE INSTRUCTIONS.



READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS.



Do not connect the opener to a power source 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.



Where possible, install the opener seven feet or more above the floor. Mount emergency disconnect six feet above the floor.



Remove all ropes and remove or make inoperative all locks connected to the garage door before installing the opener.



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.



Do not wear rings, watches, or loose clothing when installing or servicing a garage door system.



Installation and wiring must comply with local building and electrical codes.

Connect power cord to a properly grounded outlet. Do not remove the ground pin from power cord.

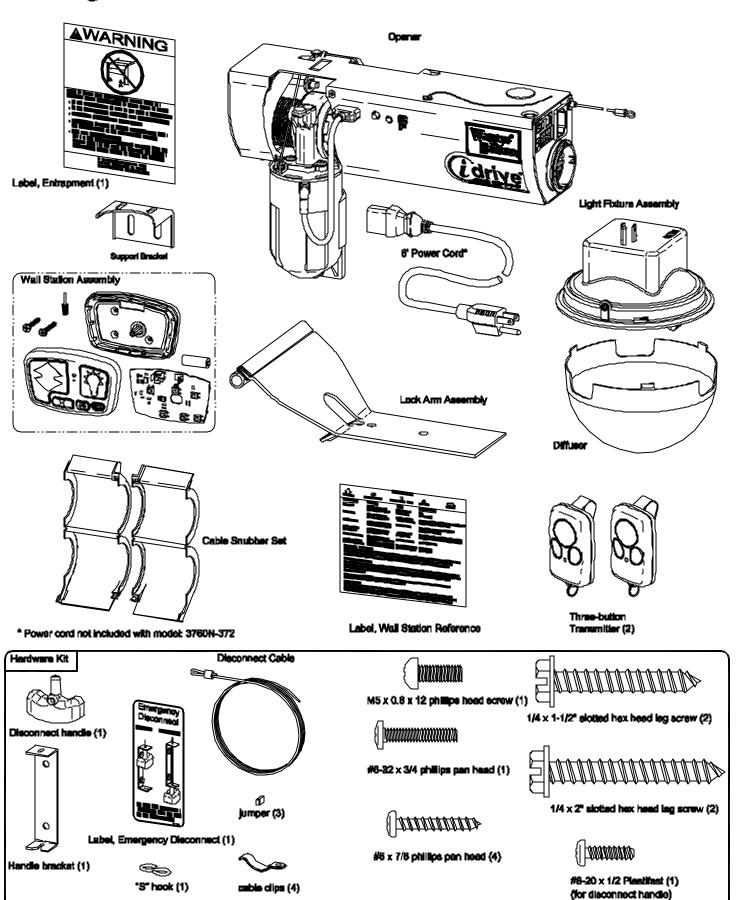


install only on a properly installed garage door. An improperly balanced door could cause severe injury. Have a qualified service person make repairs to cables, spring assemblies, and other hardware before installing the opener.

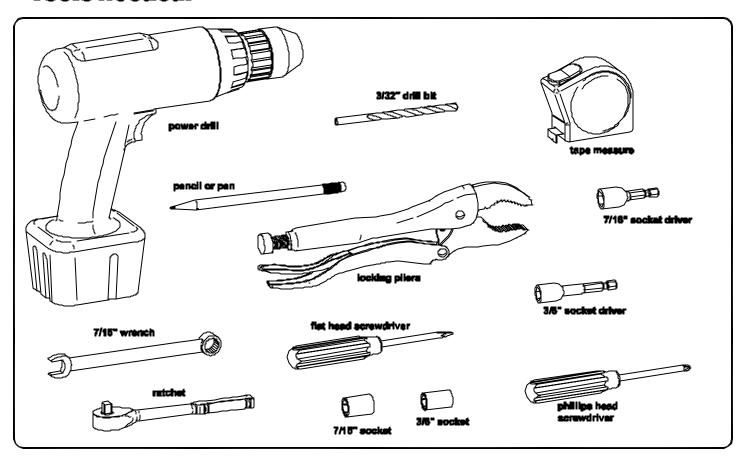


After installing opener, the door must reverse when it contacts a 1-1/2 inch high object (or a 2 x 4 board laid flat) on the floor.

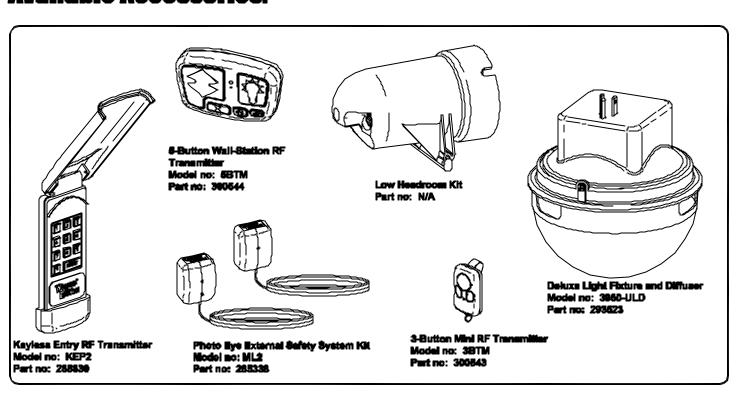
## **Package Contents:**

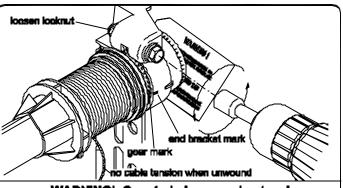


## **Tools Needed:**



## **Available Accessories:**





WARNINGI Counterbalance spring tension must be relieved before removing any hardware. A powerful spring releasing it's energy suddenly can cause serious, even fatal injury.

Place a mark on a drive gear tooth and an adjacent mark on the right hand end bracket. Using a 7/16" wrench, loosen lock nut on the back of the end bracket. Using an electric drill (high torque/gear reduced to 1300 RPM preferred), with a 7/16" hex head driver, unwind the right hand winding bolt counter clockwise and count the number of turns the mark on the drive gear passes the adjacent mark on the end bracket. Referencing the chart below, by door height, stop unwinding the spring once the counted turns have been reached. If the door has two springs\*. Repeat this process for the left hand side. NOTE: Do not use the counter assembly as a means of counting the winds during the unwinding process.

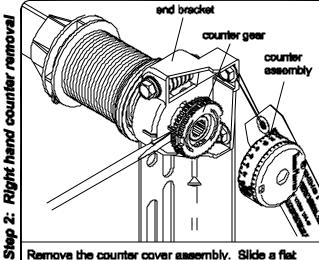
Door Height = Spring Winds 6'-0" height = 14-1/2 6"-8" height = 16

6'-3" height = 15 6'-9" height = 16

6'-5" height = 15-1/2 7'-0" height = 16-1/2

6'-6" height = 15-1/2 7'-3" height = 17

lower lag screw



Remove the counter cover assembly. Slide a flat head screwdriver between the end bracket and the counter gear. Gently pry the counter gear away from the end bracket. If the door has two springs, repeat this process for the opposite side.

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

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

7'-6" height = 17-1/2

7'-9" height = 18 8'-0" height = 15-1/2 turns DO NOT USE AN IMPACT GUN TO UNWIND THE SPRINGS!

To remove Holding the right hand end bracket with the the right hand locking pilers, carefully pry the end bracket and end bracket: drive gear away from the drum with a flat head screwdriver. 1. Remove the upper lag NOTE: The winding shaft may rotate when screw from removing the end bracket and gear form the the right hand winding shaft.. end bracket. 2. Attach a pair of locking upper lag screw end bracket pliers to the upper portion of the end locking pliers end bracket bracket and drum hold the end bracket steady while removing the lower lag screw and the phillips head screw. Discard

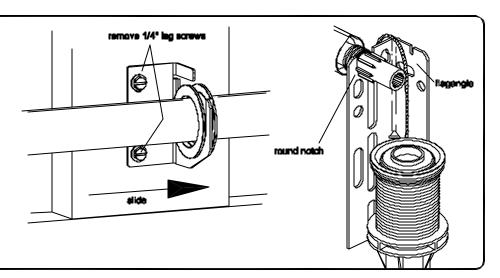
remove and discard phillips head tap screw

Right hand end bracket remova

phillips head

screw.

Remove the two 1/4" lag screws from the center bracket. Slide 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. Drape the drum over the flag angle by the counterbalance cable and realign the groove in the winding shaft with the round notch in the flag angle. Once aligned, lower the winding shaft and torque tube onto the flag angle. Repeat for the opposite side.



Lay the torque tube on the floor in front of the door with the labeled end to the left. **NOTE: Opener will not slide over a torque tube label.** Attempting to slide opener over the left end of the torque tube can damage the internal electronics.

IMPORTANT! Right and left hand are always determined from Inside the garage looking out.

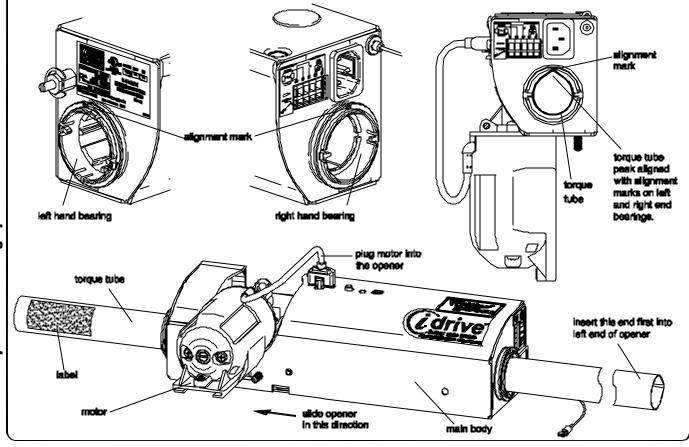
NOTE: Handle opener by the main body (not the motor) while sliding onto the torque tube.

Prior to sliding the opener onto the torque tube, ensure the left hand bearing alignment marks are aligned with the peak of the torque tube profile. Once aligned, slide the opener onto the right hand end of the torque tube. As the right end of the torque tube enters the internal (black) sleeve, rotate the opener back and forth slightly to help find alignment. NOTE: Do not force the opener onto the torque tube if misalignment occurs. Slide the opener completely onto the torque tube until the torque tube exits the opener's right hand bearing. Continue sliding the opener to the center of the torque tube and plug the motor into the opener.

NOTE: IF YOUR TORQUE TUBE HAS THE LABEL LOCATED ON THE RIGHT SIDE, THE FOLLOWING WILL HAVE TO BE DONE IN ORDER TO SLIDE THE OPENER OVER THE TORQUE TUBE:

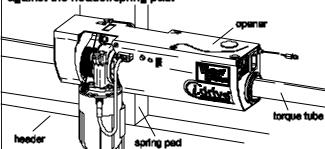
Option 1: Remove the label completely using and adhesive remover or mineral spirits.

**Option 2:** Lay the torque tube on the ficor, in front of the door, with the label to the left side. Remove the springs from torque tube. Reverse the right hand and left hand springs. Reinstall the springs into the torque tube.

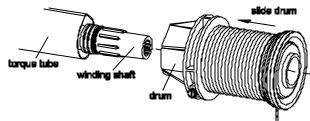


Shake the torque tube gently to extend the winding shafts out about 5" on each side. For single spring applications, there will be no left hand winding shaft...

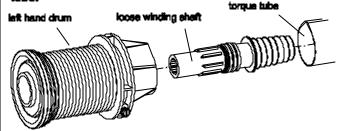
Lift the torque tube up and rest on top of the flagangles. Orient the torque tube so that back of the opener is flat against the header/spring pad.

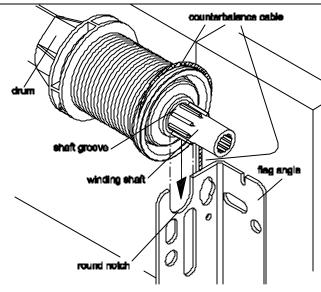


Cable drums and torque tube are cam shaped to fit together only one way. To install the cable drum, slide the drum over the winding shaft until the drum seats against the torque tube. The winding shaft must extend past the drum far enough to expose the aplines and the groove. Repeat for the opposite side."



\*Single Spring Application: Insert the left hand winding shaft into the left hand drum prior to sliding the drum over the torque tube.





Beginning on the right hand side, align the splines of the

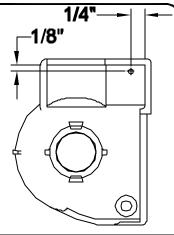
winding shaft with the drive gear. Slide the drive gear onto

Align and seat the winding shaft groove with the round notch in the flagangle, ensuring the counterbalance cable is routed over the top of the drum as shown. Repeat for opposite side.

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



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



bracket installation the winding shaft until it touches the flagangle. Note: No drive gear is required for the left hand side on single spring applications. winding shaft

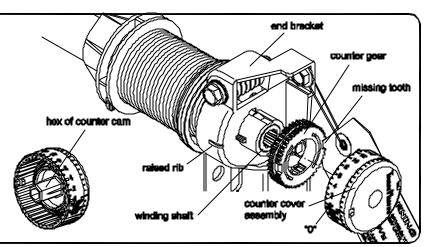
end bracket Continuing on the right hand side, slide the right hand end bracket over the drive gear. Attach end bracket and the flag angle to he jamb with 5/16 x 1-5/8 lag (2) 5/16 x bolts 1-5/8" lag bolts.

Step 7: Drive gear installation

Step 6: Drum Installation

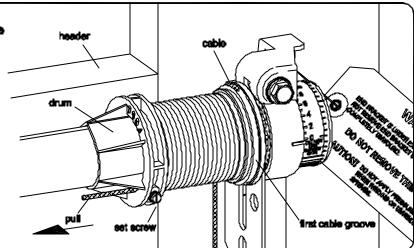
Continuing on the right hand side, install the counter gear with the missing tooth toward the outside, away from the end bracket. Press the counter gear onto the end bracket until snaps engage. Select the appropriate counter cover assembly and align the hex of the counter cam with the winding shaft. Also, align the "O" on the counter cover with the raised rib on the end bracket. Press the counter cover assembly against the counter gear until it locks into place.

NOTE: No counter gear and counter cover assembly is required on the left hand side for single spring applications.

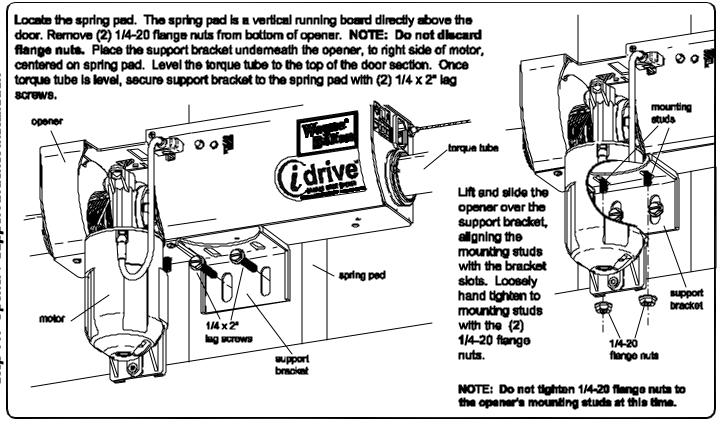


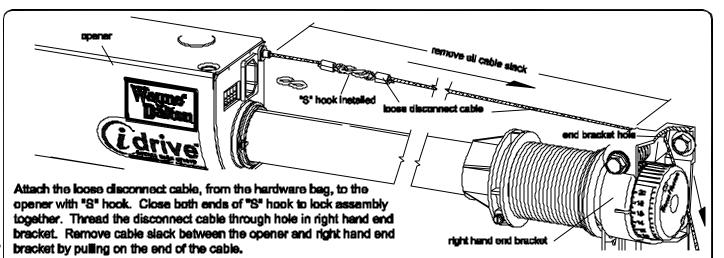
#### Repeat steps 7-9 for the left hand side. (NOTE: Repeat Step 8 ONLY for single spring applications.)

Rotate the drum until the set screw faces directly away from the header. (NOTE: Cable tension is set during the initial door installation. If there is slack between the counterbalance cable and the drum or unequal tension between the right and left hand cables, the cables will have to be readjusted. If there is no slack and equal tension proceed to Step 11.) Beginning with the right side, Loosen the set screw enough to adjust cable, approximately 2 turns. 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, then tighten an additional 1-1/2 turns.



#### IMPORTANT! At this time do not wind counterbalance springs!





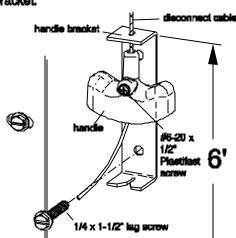
Mark location on right door jamb, six feet above the ground to mount disconnect handle. Thread disconnect cable through handle bracket and handle. Align top of handle bracket with mark on wall. Remove all cable stack between the opener and top of handle bracket.

Insert and tighten #6-20 x 1/2" screw until snug, and then tighten screw 1 to 1-1/2 additional turns to secure cable in handle. Trim off excess cable from bottom of handle.

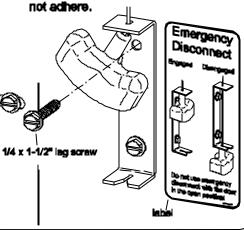
Holding handle bracket, remove all remaining stack between the opener. With stack removed, secure bottom

of handle bracket with (1)

1/4 x 1-1/2" lag screw.



Move disconnect handle to side exposing upper mounting hole in handle bracket. Secure handle bracket with a second 1/4 x 1-1/2" lag screw. Place emergency disconnect label next to mounted bracket. Use mechanical fasteners if adhesive will not achere.



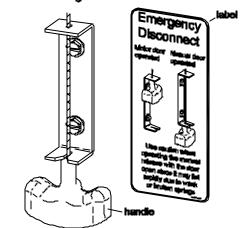
CAUTION: Pull handle just enough to remove the cable slack. Pulling the cable more could cause the opener to disconnect from the torque tube.

Clamp locking pilers onto both vertical tracks above third roller. This is to prevent garage door from rising while winding springs. 

• WARNING! Failure to clamp track can allow door to raise and cause severe injury or death.

Using the emergency disconnect, pull disconnect handle downwards and place it in the manual door operated position. Use disconnect label for reference. Motor will be rotated 90° from its packaged position.

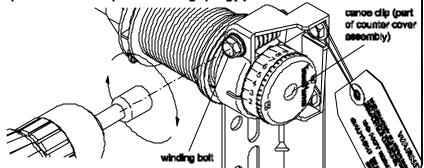
NOTE: If motor does not pivot 90°, see troubleshooting section.



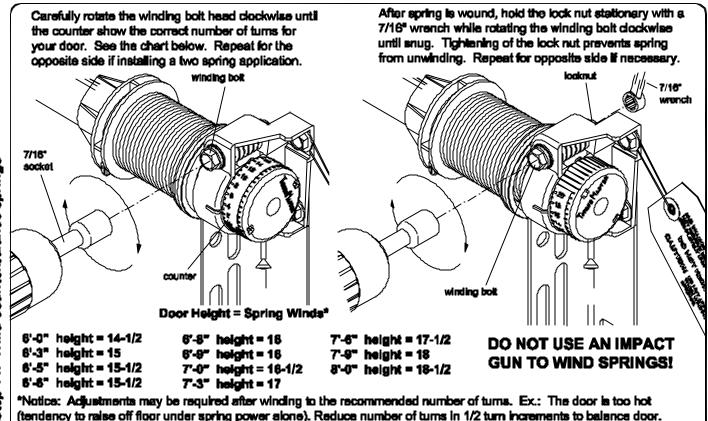
#### DO NOT USE IMPACT GUN TO WIND SPRING(S)!

Press and hole in on the cance clip. Ensure the cable is in the first groove of the drum. Using an electric drill (high torque gear reduced to 1300 RPM preferred) with a 7/18" socket, 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.

Repeat for the left side counterbalance cable. Single spring applications will require no spring prewinding. Ensure counterbalance cable tension is equal for both sides prior to winding spring(s).

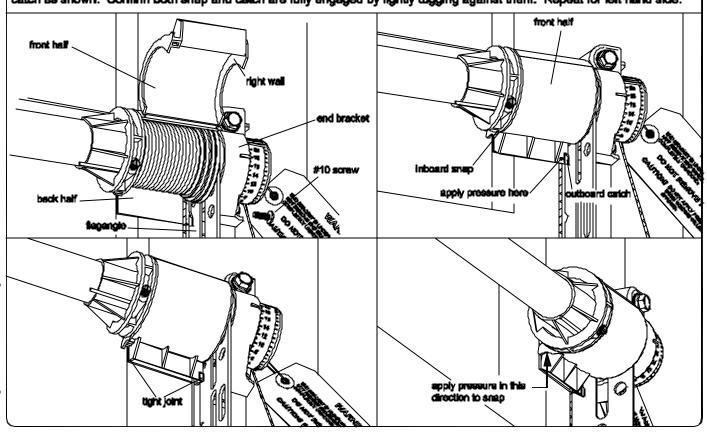


## IMPORTANTI Make sure counterbalance cables are aligned in first groove of cable drum and that cable tension is equal on both sides.



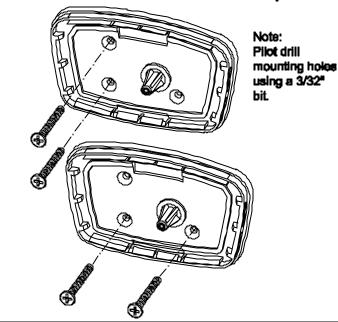
Locate right hand drum wrap. If installed, remove the #10 self-tapping screw, with a #1 phillips head screwdriver, from the end bracket. Slide back half of the drum wrap behind drum locating the right end wall between the drum and flag angle. Close front half of the drum wrap around drum, engage inboard snap and press firmly until a distinct snap is felt. Engage outboard catch as shown. Confirm both snap and catch are fully engaged by lightly tugging against them. Repeat for left hand side.

If the door is not off the floor, it can cause nuisance reversals of the opener.

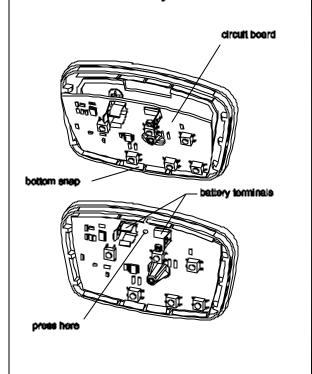


## **Pre-eperation installation**

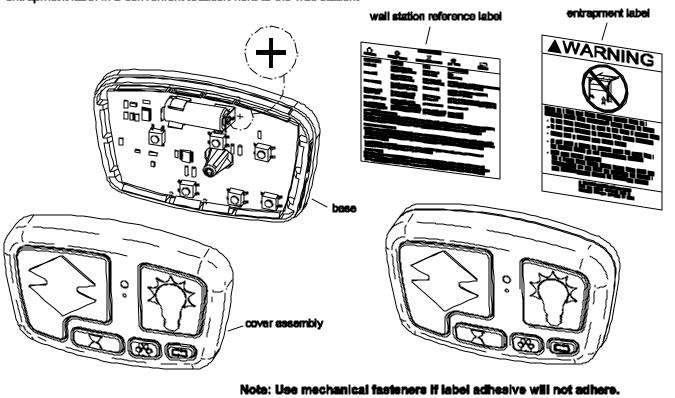
Locate a convenient place to mount wall station. To keep wall station out of the reach of children, measure at least five feet up from the floor and secure wall station base into wood wall framing using (2) phillips head screws. Use 2 of the 3 holes that best align with wood framing. If fastening into drywall or concrete, proper anchors (not provided) will need to be used. CAUTION: Over tightening screws into wood could deform plastic base and interfere with circuit board snaps.



Insert bottom of circuit board behind bottom snap of wall station base. Pivot circuit board up until board snaps into piece. For best results, press on circuit board between both battery terminals.



Insert battery onto circuit board being careful to match (+) positive battery marking with (+) positive circuit board marking. Align wall station cover/button assembly with base. Press cover assembly over base until cover snaps into place. A uniform seam between the cover and base indicates a proper installation. Apply wall station reference label and entrapment label in a convenient location next to the wall station.

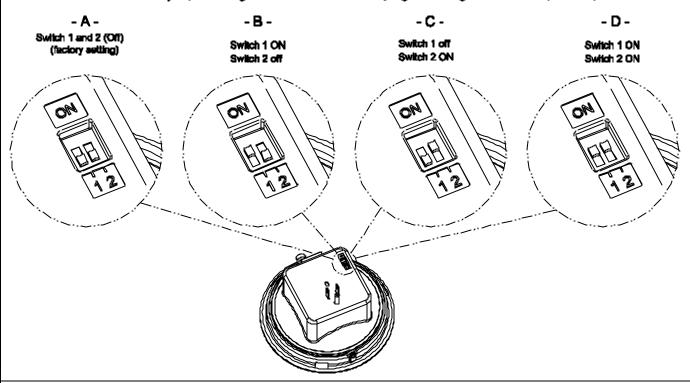


#### If installing only one opener and light fixture, proceed to Step 18: Light fixture installation.

If installing more than one opener in the same garage, the light fixtures can be programmed to only function with a desired opener. Leaving the light fixture as is from the factory specifications may cause all light fixtures to light when either opener is activated. The opener jumpers and light fixture switches need to be matched to allow for the opener to activate a specific light fixture. To adjust jumper location on light fixture, locate jumper switch inside of light fixture housing.

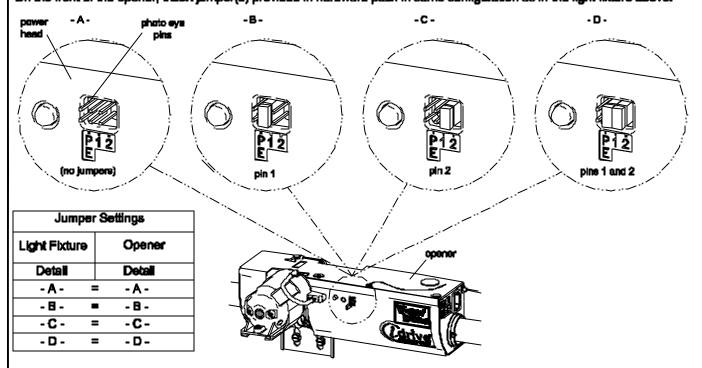
#### Switch Settings: Light Fixture

Four combinations of switch / jumper settings can be used to custom program the light fixture to a specific opener.



#### Jumper Settings: opener

On the front of the opener, insert jumper(s) provided in hardware pack in same configuration as in the light fixture above.



When both the light fixture and the opener jumpers are matched, the light fixture custom setting is set and the light fixture will only work with its matched opener.

IMPORTANT! The light is turned on and off by an infrared (IR) signal sent from the opener to the light. Therefore the light must be mounted in a location where it can "see" the front face of the opener.

Locate a duplex receptacle within line of sight of opener.

. Disconnect power to the receptacle at the fuse/breaker box before proceeding.



To reduce the risk of electrical shock, this equipment has a grounding type plug, that has a third (grounding) pin. This plug will only fit into a grounding type outlet. If the plug does not fit into the outlet, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

### **⚠** WARNING

Do not install the light fixture into a receptacle with a metal faceplate.

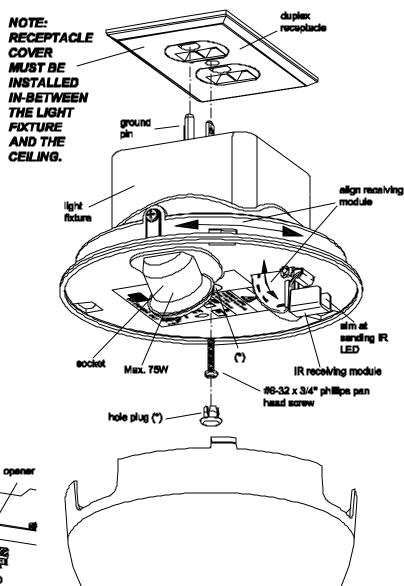
NOTE: Door must clear light fixture when the door is in the up position. There must be no obstruction between the light fixture and the opener for light fixture to work properly.

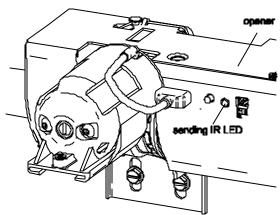
#### **Ceiling mounting**

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. Remove center hole plug from light fixture to expose the screw hole. Secure light fixture to receptacle with a #6-32 x 3/4" phillips pan head screw. Replace hole plug into the screw hole in the light fixture. NOTE: For temperature protection, the hole pluge must be in place prior to using the light fixture. Rotate light fixture's bottom section to align the receiving module, side to side, with the sending LED on the opener. Rotate receiving module to align, up and down, with the sending LED.

Screw a 75W maximum light bulb into light socket and snap diffuser into light fixture. Turn receptable power back on at fuse/breaker box.

NOTE: An accessory power outlet receptacle is provided on the light fixture.





difficer