

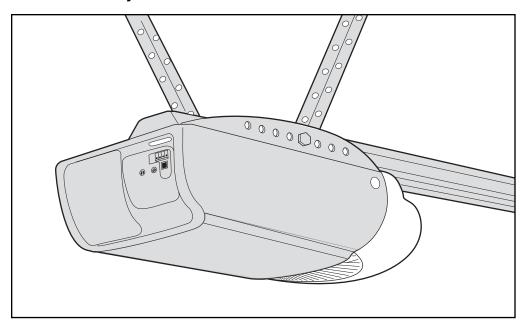
The Chamberlain Group, Inc. 845 Larch Avenue Elmhurst, Illinois 60126-1196 www.liftmaster.com



# SECURITY + GARAGE DOOR OPENER

Models 3110 1/3 HP 3220 1/2 HP 3220-267 1/2 HP

For Residential Use Only



## Owner's Manual

- Please read this manual and the enclosed safety materials carefully!
- Fasten the manual near the garage door after installation.
- The door WILL NOT CLOSE unless the Protector System® is connected and properly aligned.
- Periodic checks of the opener are required to ensure safe operation.
- The model number label is located on the front panel of your opener.

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# INTRODUCTION Safety Symbol and Signal Word Review

This garage door opener has been designed and tested to offer safe service provided it is installed, operated, maintained and tested in strict accordance with the instructions and warnings contained in this manual.



Mechanical

# **WARNING**

**Electrical** 

# **CAUTION**

When you see these Safety Symbols and Signal Words on the following pages, they will alert you to the possibility of *serious injury or death* if you do not comply with the warnings that accompany them. The hazard may come from something mechanical or from electric shock. Read the warnings carefully.

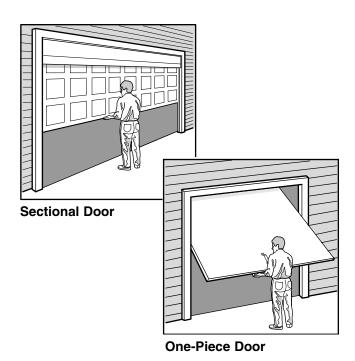
When you see this Signal Word on the following pages, it will alert you to the possibility of damage to your garage door and/or the garage door opener if you do not comply with the cautionary statements that accompany it. Read them carefully.

#### Preparing your garage door

Before you begin:

- · Disable locks.
- Remove any ropes connected to garage door.
- Complete the following test to make sure your garage door is balanced and is not sticking or binding:
  - 1. Lift the door about halfway as shown. Release the door. If balanced, it should stay in place, supported entirely by its springs.
  - 2. Raise and lower the door to see if there is any binding or sticking.

If your door binds, sticks, or is out of balance, call a trained door systems technician.



### **A WARNING**

To prevent possible SERIOUS INJURY OR DEATH:

- ALWAYS call a trained door systems technician if garage door binds, sticks, or is out of balance. An unbalanced garage door may not reverse when required.
- NEVER try to loosen, move or adjust garage door, door springs, cables, pulleys, brackets or their hardware, all of which are under EXTREME tension.
- Disable ALL locks and remove ALL ropes connected to garage door BEFORE installing and operating garage door opener to avoid entanglement.

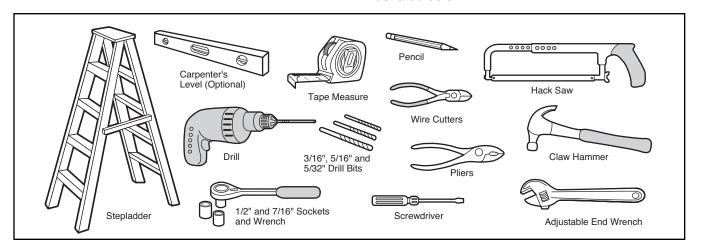
# **CAUTION**

To prevent damage to garage door and opener:

- ALWAYS disable locks BEFORE installing and operating the opener.
- ONLY operate garage door opener at 120V, 60 Hz to avoid malfunction and damage.

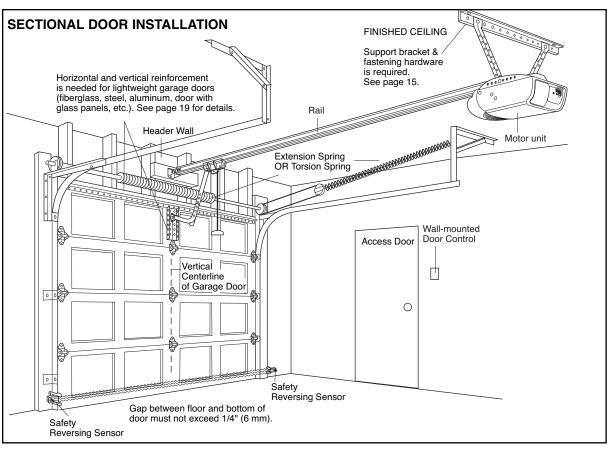
#### **Tools needed**

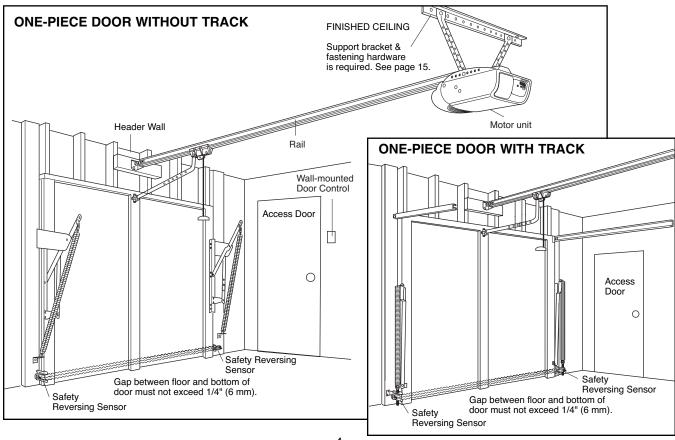
During assembly, installation and adjustment of the opener, instructions will call for hand tools as illustrated below.



#### **Planning**

Identify the type and height of your garage door. Survey your garage area to see if any of the conditions below apply to your installation. Additional materials may be required. You may find it helpful to refer back to this page and the accompanying illustrations as you proceed with the installation of your opener.

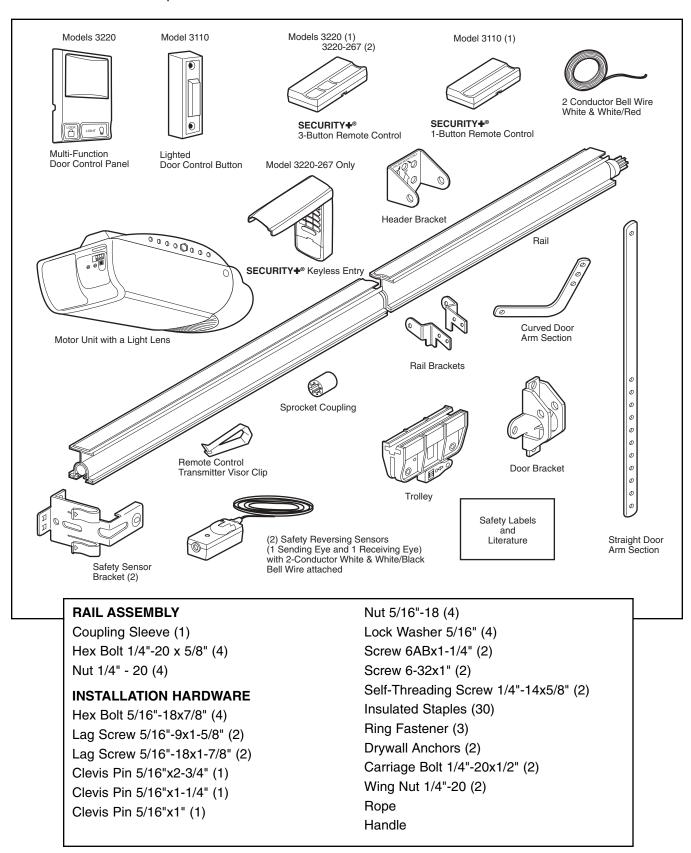




#### **Carton Inventory**

Your garage door opener is packaged in two cartons which contain the motor unit and all parts illustrated below. Accessories will depend on the model

purchased. If anything is missing, carefully check the packing material. Parts may be stuck in the foam. Hardware for installation is also listed below.



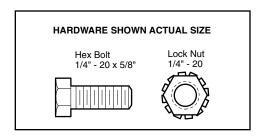
#### **ASSEMBLY STEP 1**

#### Fasten the Rail to the Motor Unit

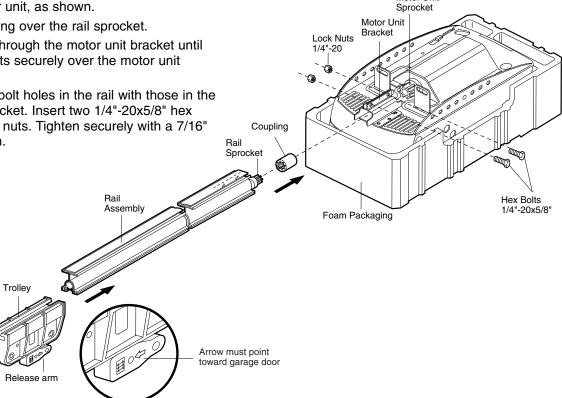
To avoid installation difficulties, do not run the garage door opener until instructed to do so.

To aid in assembly and installation, replace the foam packing around the motor unit. Remove it after Installation Step 4.

- · Working on a level surface, align the rail assembly with the motor unit, as shown.
- Slip the coupling over the rail sprocket.
- Slide the rail through the motor unit bracket until the coupling fits securely over the motor unit sprocket.
- Align the two bolt holes in the rail with those in the motor unit bracket. Insert two 1/4"-20x5/8" hex bolts and lock nuts. Tighten securely with a 7/16" socket wrench.



Motor Unit



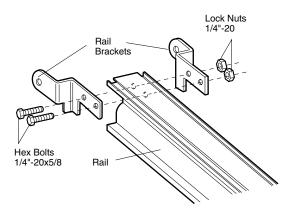
### **ASSEMBLY STEP 2** Install the Trolley

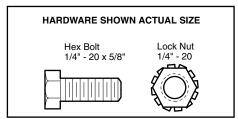
• Slide the trolley onto and along the bottom of the rail until it snaps firmly in place. Be certain to install it facing correctly: the trolley release arm must be horizontal (lock position), with its arrow pointed away from the motor unit.

# ASSEMBLY STEP 3 Attach the Rail Brackets

- Align rail brackets to end of rail assembly, as shown.
- Insert two 1/4"-20 x 5/8" hex bolts and lock nuts.
   Tighten securely with a 7/16" socket.

You have now finished assembling your garage door opener. Please read the following warnings before proceeding to the installation section.





#### **INSTALLATION**

# IMPORTANT INSTALLATION INSTRUCTIONS

# **A WARNING**

# To reduce the risk of SEVERE INJURY or DEATH:

- 1. READ AND FOLLOW ALL INSTALLATION WARNINGS AND INSTRUCTIONS.
- 2. Install garage door opener only on properly balanced and lubricated garage door. An improperly balanced door may not reverse when required and could result in SEVERE INJURY or DEATH.
- 3. All repairs to cables, spring assemblies and other hardware MUST be made by a trained door systems technician BEFORE installing opener.
- 4. Disable all locks and remove all ropes connected to garage door BEFORE installing opener to avoid entanglement.
- 5. Install garage door opener 7 feet (2.13 m) or more above floor.
- 6. Mount emergency release handle 6 feet (1.83 m) above floor.
- NEVER connect garage door opener to power source until instructed to do so.

- 8. NEVER wear watches, rings or loose clothing while installing or servicing opener. They could be caught in garage door or opener mechanisms.
- 9. Install wall-mounted garage door control:
  - within sight of the garage door
  - out of reach of children at minimum height of 5 feet (1.5 m)
  - away from all moving parts of the door.
- Place entrapment warning label on wall next to garage door control.
- 11. Place manual release/safety reverse test label in plain view on inside of garage door.
- 12. Upon completion of installation, test safety reversal system. Door MUST reverse on contact with a 1-1/2" (3.8 cm) high object (or a 2x4 laid flat) on the floor.

## **INSTALLATION STEP 1**

# **Determine the Header Bracket Location**

### **A WARNING**

To prevent possible SERIOUS INJURY or DEATH:

- Header bracket MUST be RIGIDLY fastened to structural support on header wall or ceiling, otherwise garage door might not reverse when required. DO NOT install header bracket over drywall.
- Concrete anchors MUST be used if mounting header bracket or 2x4 into masonry.
- NEVER try to loosen, move or adjust garage door, springs, cables, pulleys, brackets, or their hardware, all of which are under EXTREME tension.
- ALWAYS call a trained door systems technician if garage door binds, sticks, or is out of balance. An unbalanced garage door might not reverse when required.

Installation procedures vary according to garage door types. Follow the instructions which apply to your door

- 1. Close the door and mark the inside vertical centerline of the garage door.
- Extend the line onto the header wall above the door.

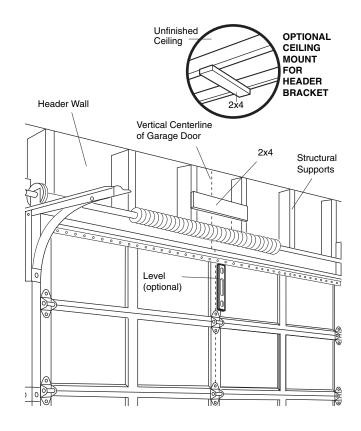
You can fasten the header bracket within 4 feet (1.22 m) of the left or right of the door center only if a torsion spring or center bearing plate is in the way; or you can attach it to the ceiling (see page 9) when clearance is minimal. (It may be mounted on the wall upside down if necessary, to gain approximately 1/2" (1 cm).

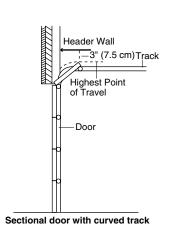
If you need to install the header bracket on a 2x4 (on wall or ceiling), use lag screws (not provided) to securely fasten the 2x4 to structural supports as shown here and on page 8.

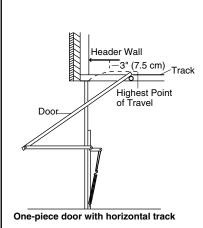
- 3. Open your door to the highest point of travel as shown. Draw an intersecting horizontal line on the header wall above the high point:
  - 3" (7.5 cm) above the high point for sectional door and one-piece door with track.
  - 8" (20 cm) above the high point for one-piece door without track.

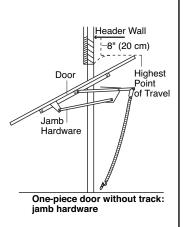
This height will provide travel clearance for the top edge of the door.

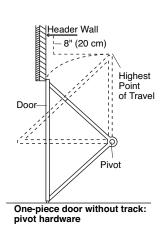
**NOTE:** If the total number of inches exceeds the height available in your garage, use the maximum height possible, or refer to page 12 for ceiling installation.









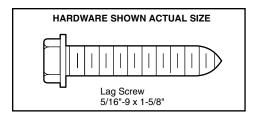


# INSTALLATION STEP 2 Install the Header Bracket

You can attach the header bracket either to the wall above the garage door, or to the ceiling. Follow the instructions which will work best for your particular requirements. Do not install the header bracket over drywall. If installing into masonry, use concrete anchors (not provided).

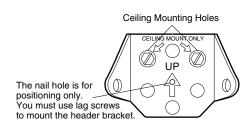
#### WALL HEADER BRACKET INSTALLATION

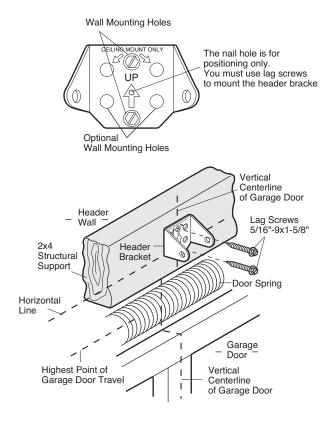
- Center the bracket on the vertical centerline with the bottom edge of the bracket on the horizontal line as shown (with the arrow pointing toward the ceiling).
- Mark the vertical set of bracket holes (do not use the holes designated for ceiling mount). Drill 3/16" pilot holes and fasten the bracket securely to a structural support with the hardware provided.

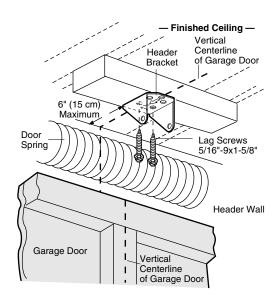


#### **CEILING HEADER BRACKET INSTALLATION**

- Extend the vertical centerline onto the ceiling as shown.
- Center the bracket on the vertical mark, no more than 6" (15 cm) from the wall. Make sure the arrow is pointing toward the wall. The bracket can be mounted flush against the ceiling when clearance is minimal.
- Mark the side holes. Drill 3/16" pilot holes and fasten bracket securely to a structural support with the hardware provided.







#### **INSTALLATION STEP 3** Attach the Rail to the Header **Bracket**

- Position the opener on the garage floor below the header bracket. Use packing material as a protective base. NOTE: If the door spring is in the way you'll need help. Have someone hold the opener securely on a temporary support to allow the rail to clear the spring.
- Position the rail bracket against the header bracket.
- · Align the bracket holes and join with a clevis pin

