

Owner's Manual/Manual del Propietario

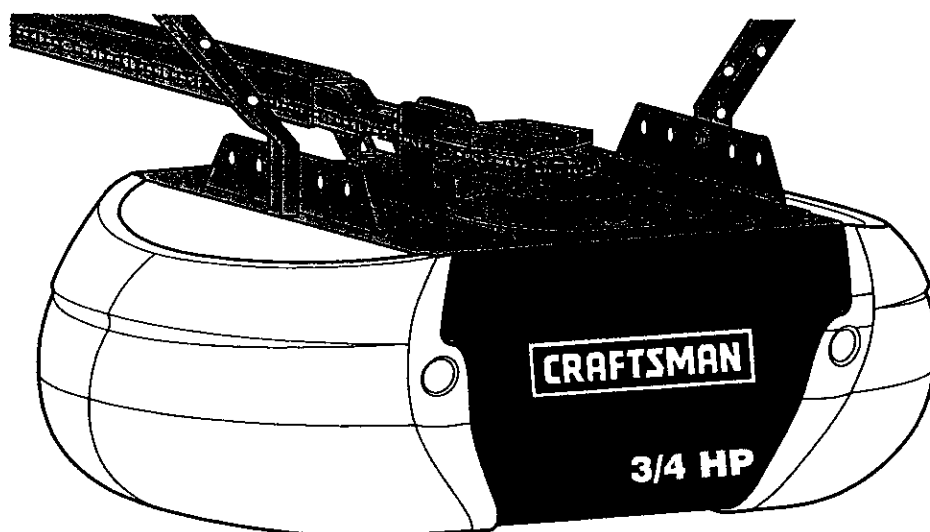


3/4 HP

GARAGE DOOR OPENER ABRIDOR DE PUERTA DE COCHERA

For Residential Use Only/Sólo para uso residencial

Model/Modelo 139.53990



ENGLISH ESPAÑOL

Read and follow all safety rules and operating instructions before first use of this product.

Lea y siga todas las reglas de seguridad y las instrucciones de operación antes de usar este producto por primera vez.

Fasten the manual near the garage door after installation.

Guarde este manual cerca de la puerta de la cochera.

Periodic checks of the opener are required to ensure safe operation.

Se deben realizar revisiones periódicas del abridor de puertas para asegurar su operación segura.



Sears, Roebuck and Co., Hoffman Estates, IL 60179 U.S.A
www.sears.com/craftsman

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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



Electrical



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

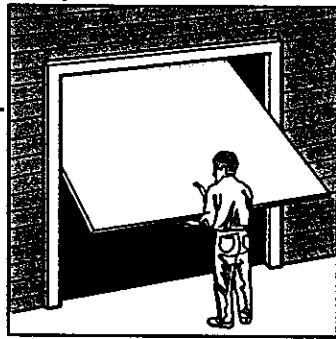
Before you begin:

- 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.



Sectional Door



One-Piece Door

! 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.

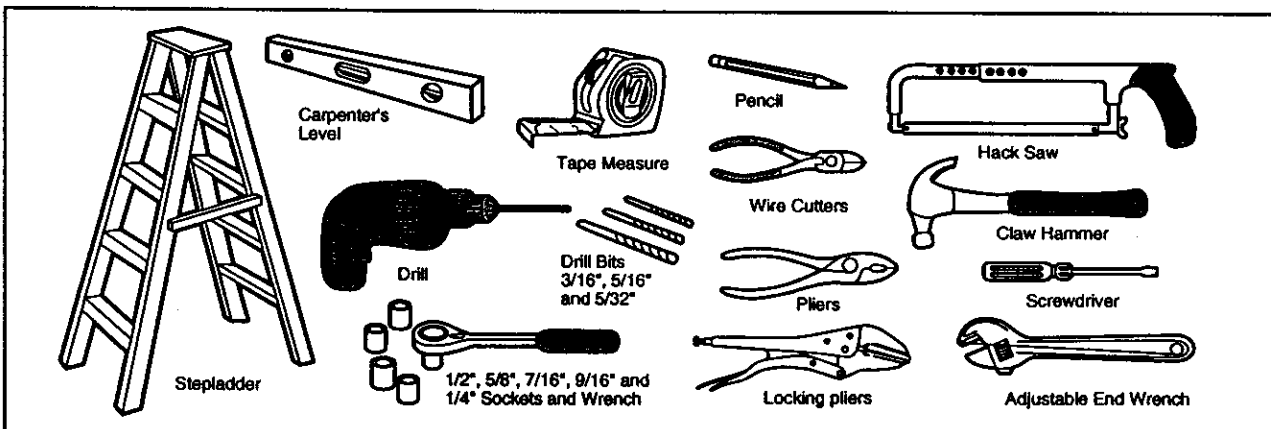
CAUTION

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.

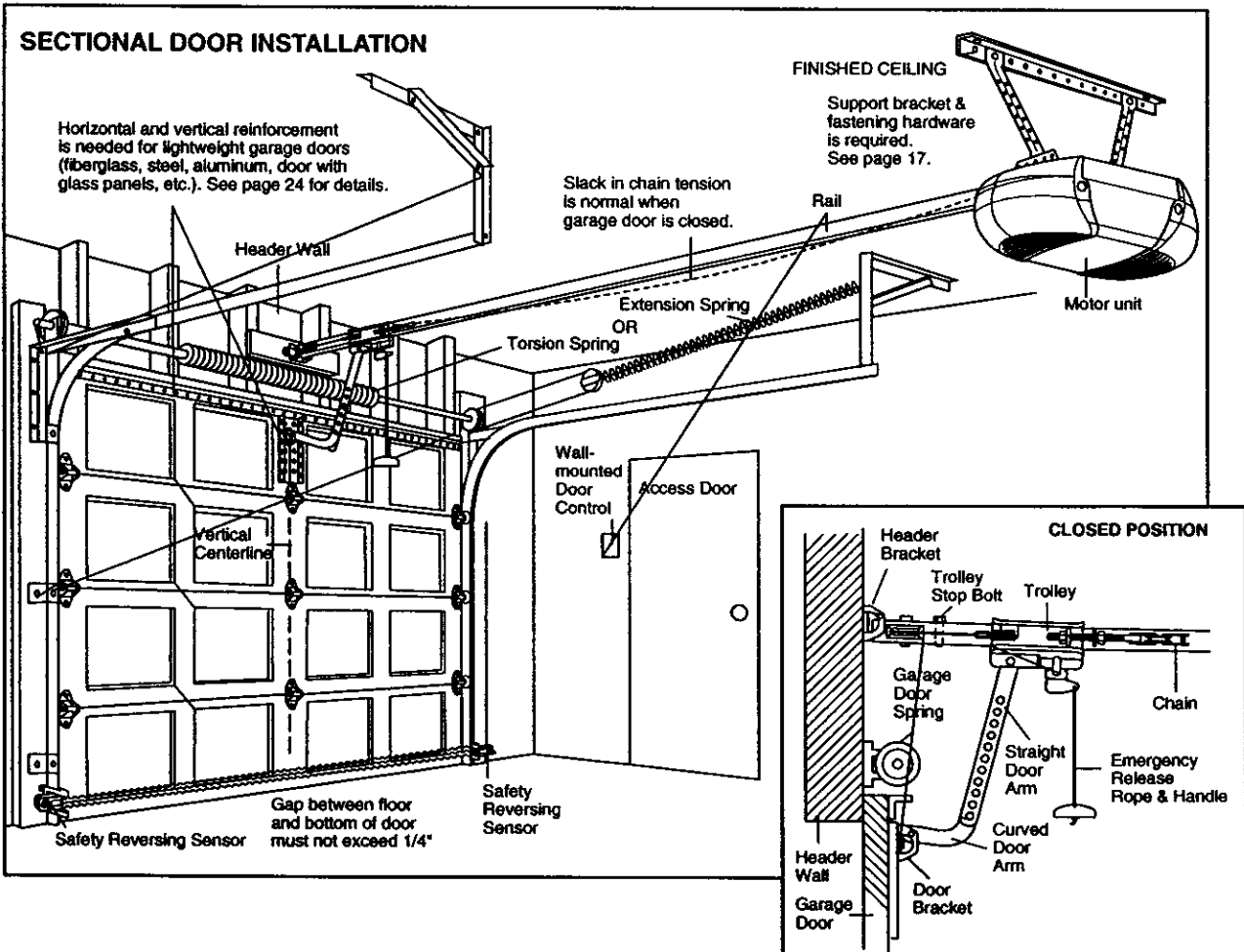
Depending on your requirements, there are several installation steps which may call for materials or hardware not included in the carton.

- Installation Step 1 – Look at the wall or ceiling above the garage door. The header bracket must be securely fastened to structural supports.
- Installation Step 5 – Do you have a finished ceiling in your garage? If so, a support bracket and additional fastening hardware may be required.
- Installation Step 10 – Depending upon garage construction, extension brackets or wood blocks may be needed to install sensors.
- Installation Step 10 – Alternate floor mounting of the safety reversing sensor will require hardware not provided.

- Do you have an access door in addition to the garage door? If not, Model 53702 Emergency Key Release is required. See Accessories page.
- Look at the garage door where it meets the floor. Any gap between the floor and the bottom of the door must not exceed 1/4". Otherwise, the safety reversal system may not work properly. See Adjustment Step 3. Floor or door should be repaired.

SECTIONAL DOOR INSTALLATIONS

- Do you have a steel, aluminum, fiberglass or glass panel door? If so, horizontal and vertical reinforcement is required (Installation Step 11).
- The opener should be installed above the center of the door. If there is a torsion spring or center bearing plate in the way of the header bracket, it may be installed within 4 feet to the left or right of the door center. See Installation Steps 1 and 11.
- If your door is more than 7 feet high, see rail extension kits listed on Accessories page.



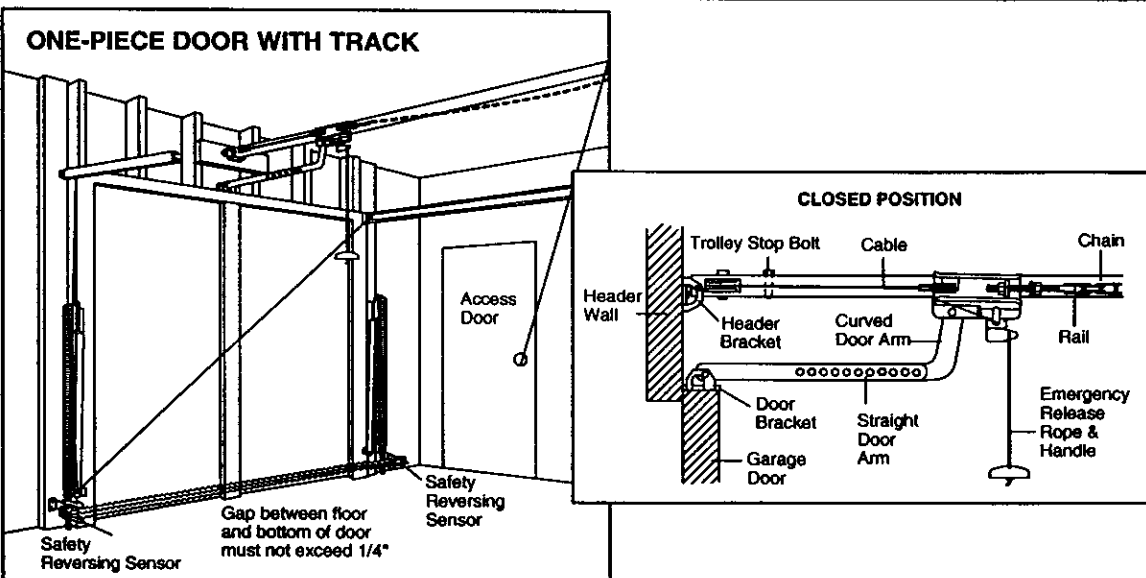
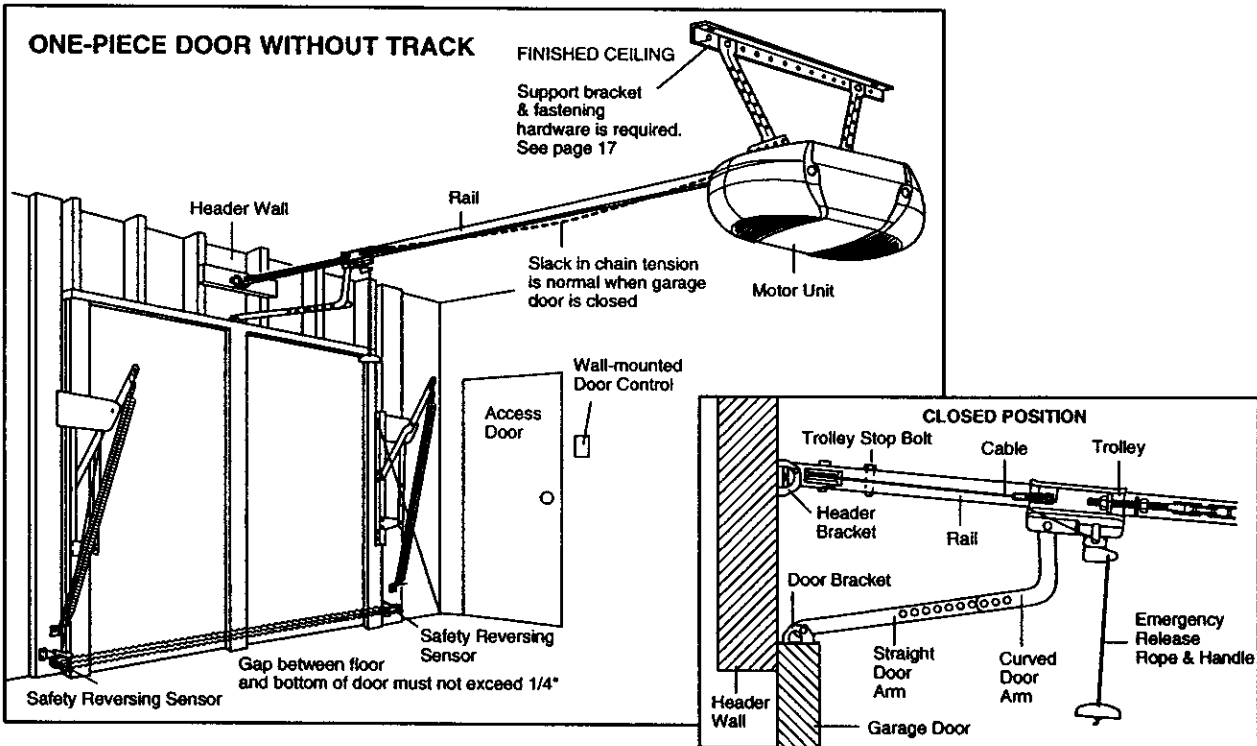
Planning (continued)

ONE-PIECE DOOR INSTALLATIONS

- Generally, a one-piece door does not require reinforcement. If your door is lightweight, refer to the information relating to sectional doors in Installation Step 11.
- Depending on your door's construction, you may need additional mounting hardware for the door bracket (Step 11).

Without a properly working safety reversal system, persons (particularly small children) could be **SERIOUSLY INJURED** or **KILLED** by a closing garage door.

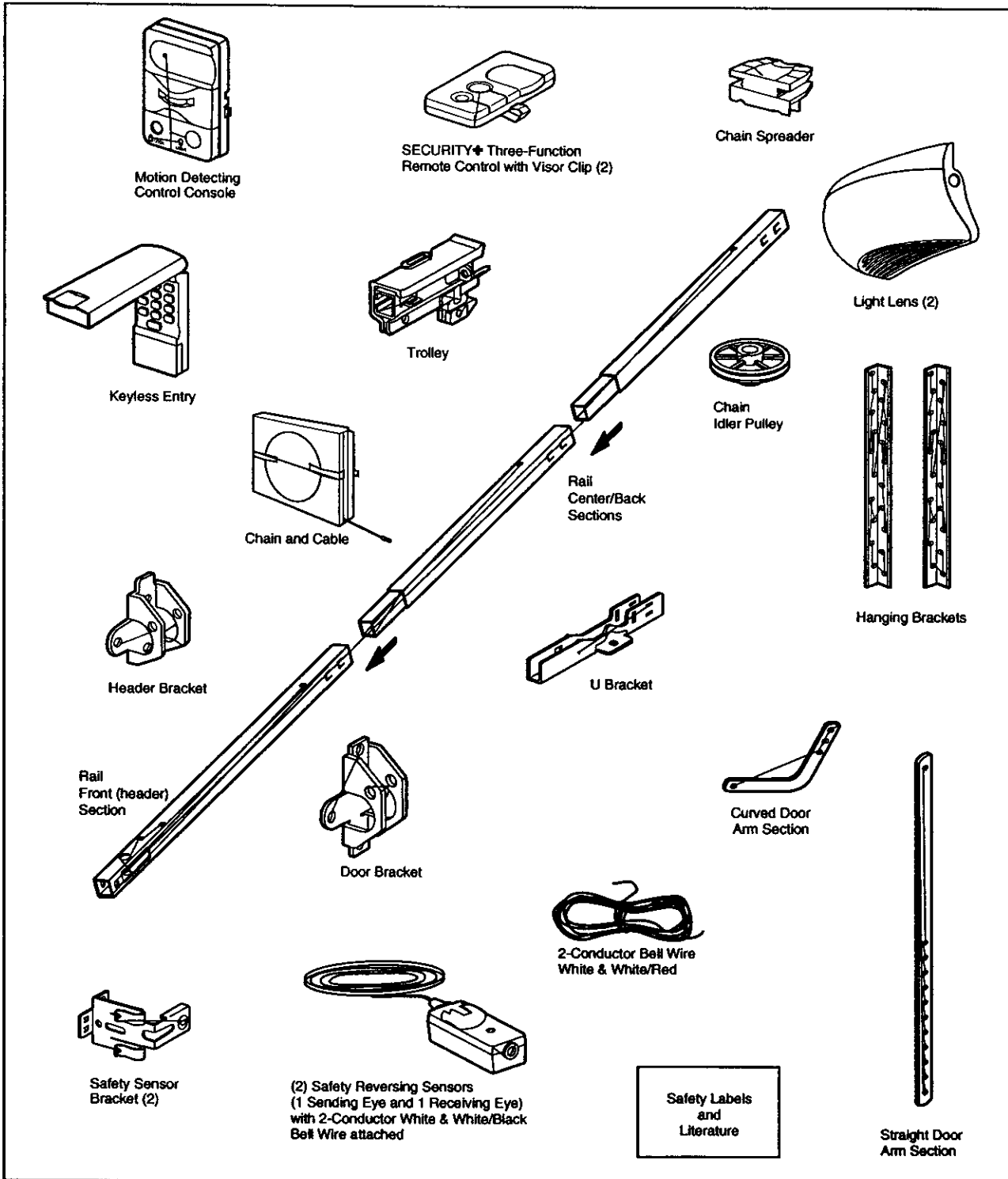
- The gap between the bottom of the garage door and the floor **MUST NOT** exceed 1/4". Otherwise, the safety reversal system may not work properly.
- The floor or the garage door **MUST** be repaired to eliminate the gap.



Carton Inventory

Your garage door opener is packaged in one carton which contains the motor unit and the parts illustrated below. Note that accessories will depend on the model purchased. If anything is missing, carefully check the packing material. Parts may be stuck in the

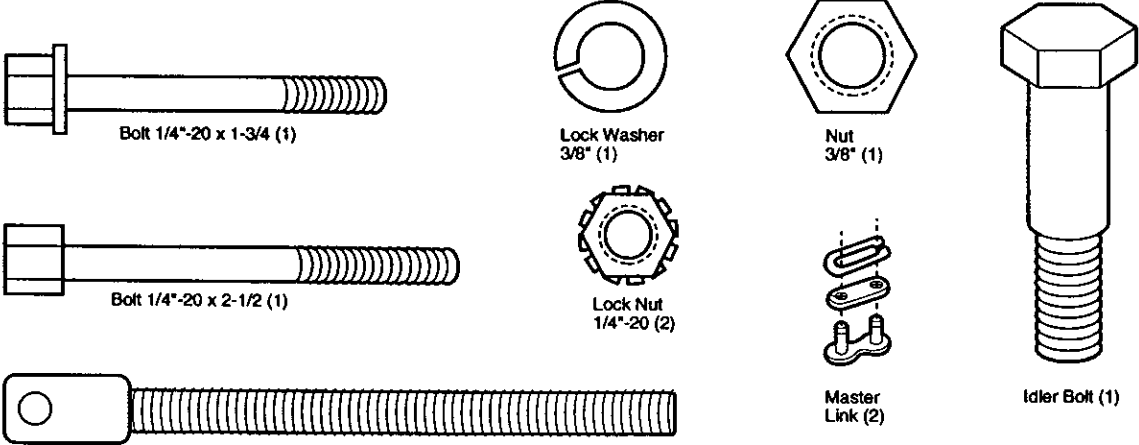
foam. Hardware for assembly and installation is shown on the next page. Save the carton and packing material until installation and adjustment is complete.



Hardware Inventory

Separate all hardware and group as shown below for the assembly and installation procedures.

ASSEMBLY HARDWARE



Bolt 1/4"-20 x 1-3/4 (1)

Bolt 1/4"-20 x 2-1/2 (1)

Trolley Threaded Shaft (1)

Lock Washer 3/8" (1)

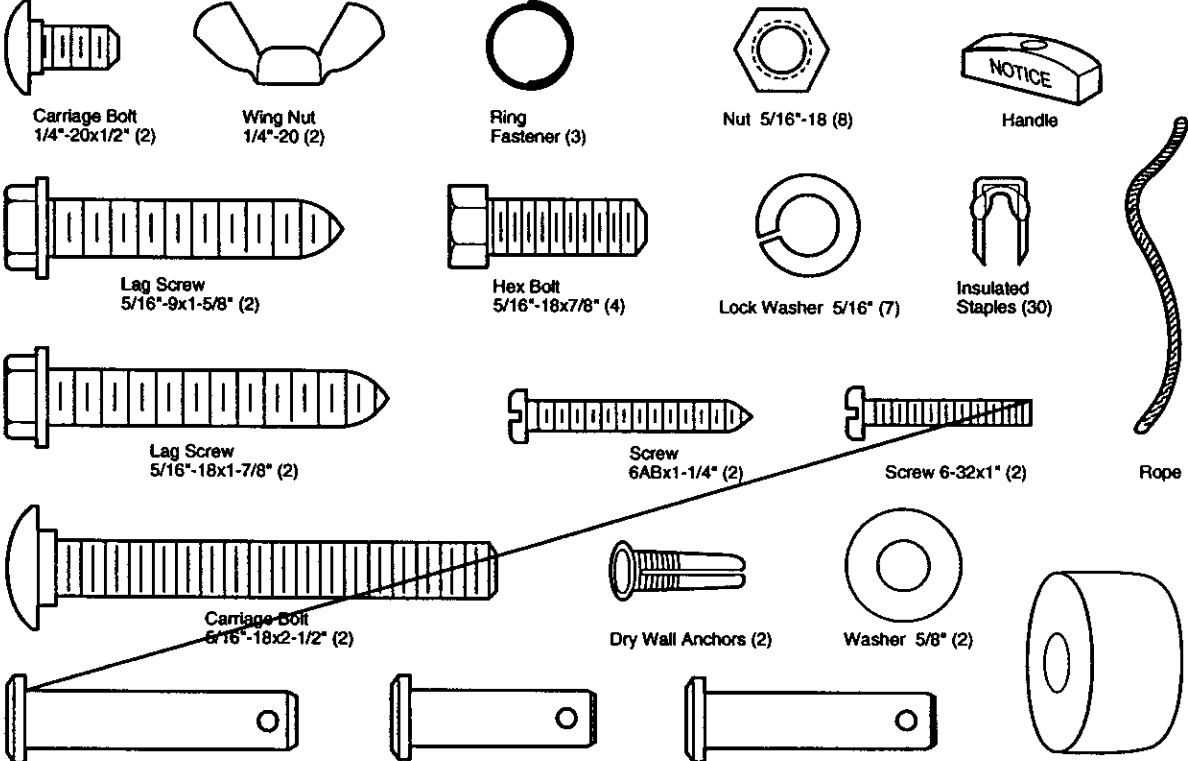
Lock Nut 1/4"-20 (2)

Master Link (2)

Nut 3/8" (1)

Idler Bolt (1)

INSTALLATION HARDWARE



Carriage Bolt 1/4"-20x1/2" (2)

Wing Nut 1/4"-20 (2)

Ring Fastener (3)

Nut 5/16"-18 (8)

Handle

Lag Screw 5/16"-9x1-5/8" (2)

Hex Bolt 5/16"-18x7/8" (4)

Lock Washer 5/16" (7)

Insulated Staples (30)

Rope

Lag Screw 5/16"-18x1-7/8" (2)

Screw 6ABx1-1/4" (2)

Screw 6-32x1" (2)

Carriage Bolt 5/16"-18x2-1/2" (2)

Dry Wall Anchors (2)

Washer 5/8" (2)

Clevis Pin 5/16"x1-1/2" (1)

Clevis Pin 5/16"x1" (1)

Clevis Pin 5/16"x1-1/4" (1)

Spacer (2)

ASSEMBLY STEP 1

Assemble the Rail & Install the Trolley

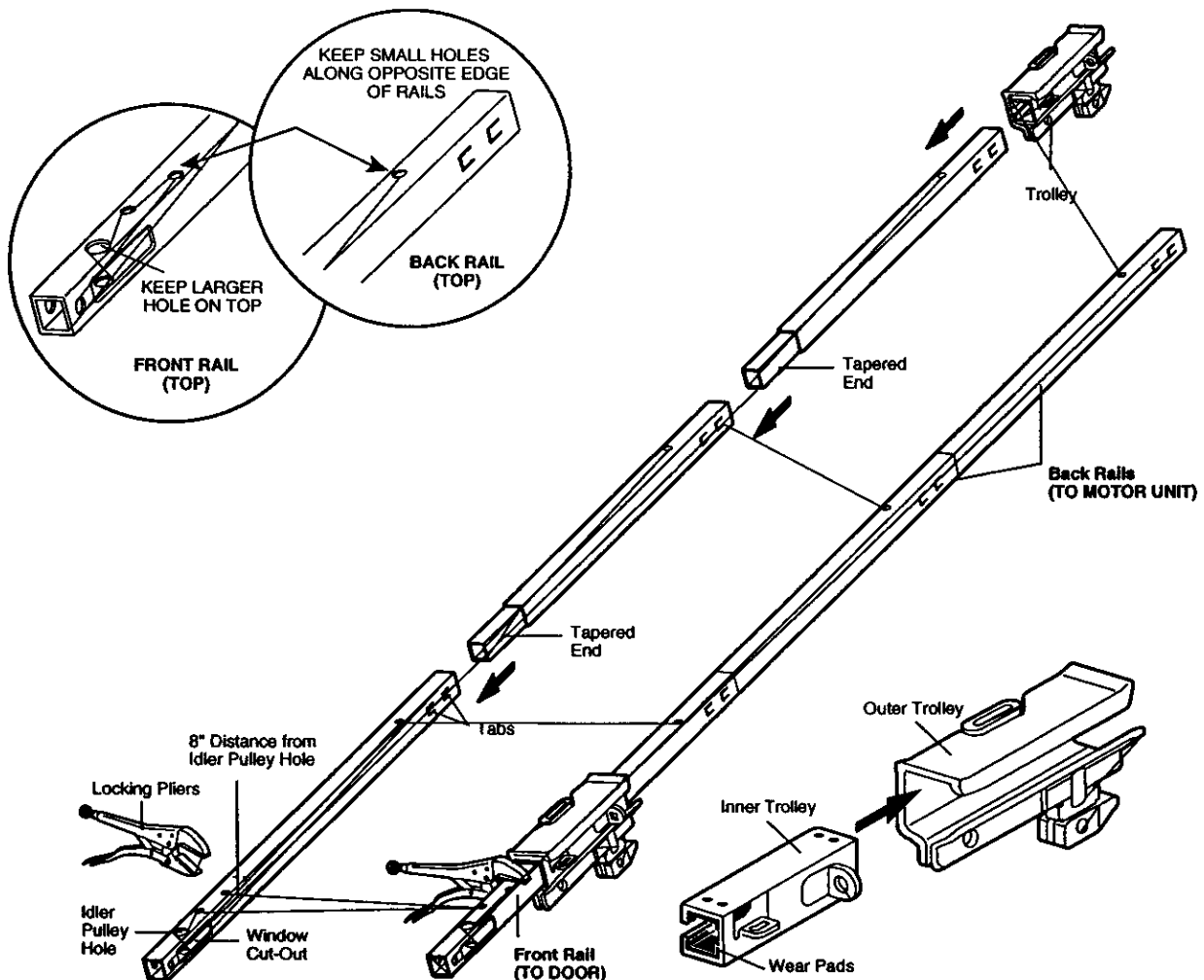
To avoid installation difficulties, do not run the garage door opener until instructed to do so.

The front rail has a cut out "window" at the door end (see illustration). The hole above this window is larger on the top of the rail than on the bottom. A smaller hole 3-1/2" away is close to the rail edge. Rotate the back rail so it has a similar hole close to the opposite edge, about 4-3/4" from the far end. A 3-piece rail uses two back rails.

1. Remove the straight door arm, hanging brackets and clevis pin packaged inside the front rail and set aside for Installation Step 5 and 12.
2. Align the rail sections on a flat surface exactly as shown and slide the tapered ends into the larger ones. Tabs along the side will lock into place.
3. Place the motor unit on packing material to protect the cover, and rest the back end of the rail on top. For convenience, put a support under the front end of the rail.

To prevent INJURY from pinching, keep hands and fingers away from the joints while assembling the rail.

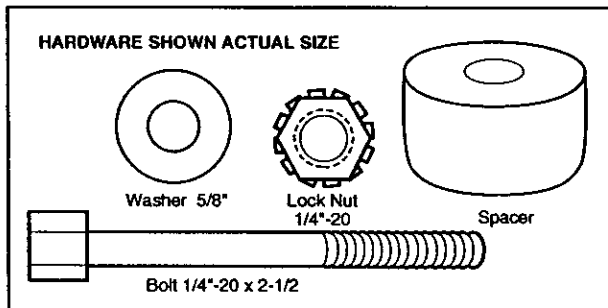
4. As a temporary trolley stop, clamp a locking pliers onto the rail, 8" from the center of the idler pulley hole, as shown.
5. Check to be sure there are 4 plastic wear pads inside the inner trolley. If they became loose during shipping, check all packing material. Snap them back into position as shown.
6. Connect the inner and outer trolleys as shown.
7. Slide the trolley assembly along the rail from the back end to the locked pliers.



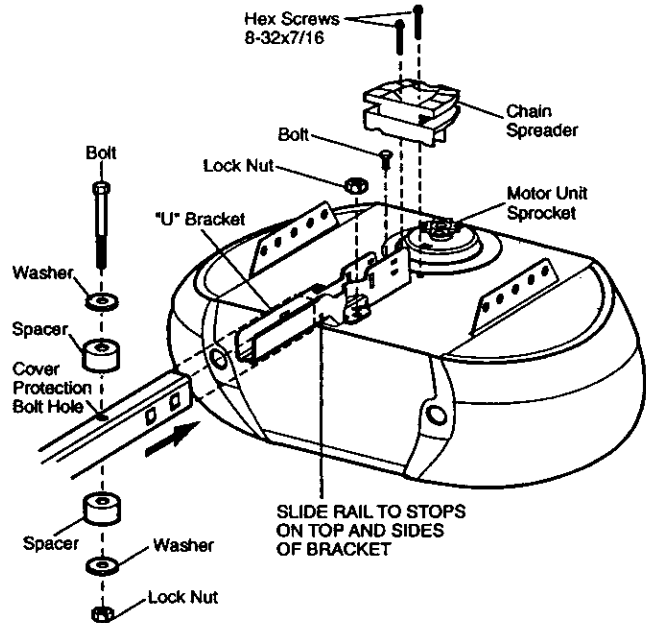
ASSEMBLY STEP 2

Fasten the Rail to the Motor Unit

- Insert a 1/4"-20x2-1/2 bolt, washer and spacer into the cover protection bolt hole on the back end of the rail as shown. Install lower spacer and washer then tighten securely with a 1/4"-20 lock nut. *Do NOT overtighten.*
- Remove the bolt and lock nut from the top of the motor unit.
- Attach spreader to the motor unit with two screws.
- Place the U bracket, flat side down onto the bolt, mounted on the motor unit and align the bracket hole with the screw hole. Fasten with the previously removed screw and lock nut.
- Align the rail assembly with the top of the motor unit. Slide the rail end onto the U-bracket, *all the way to the stops that protrude on the top and sides of the bracket.*



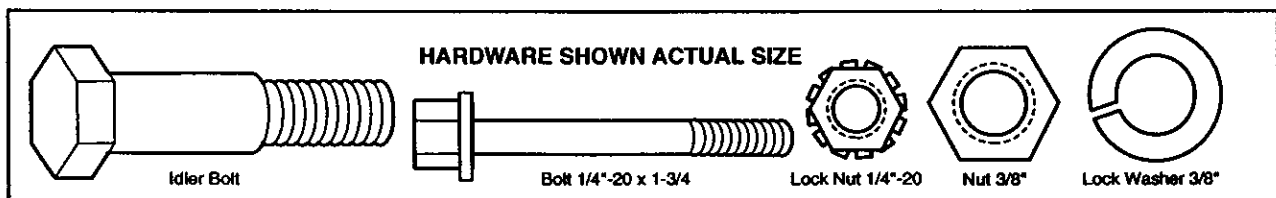
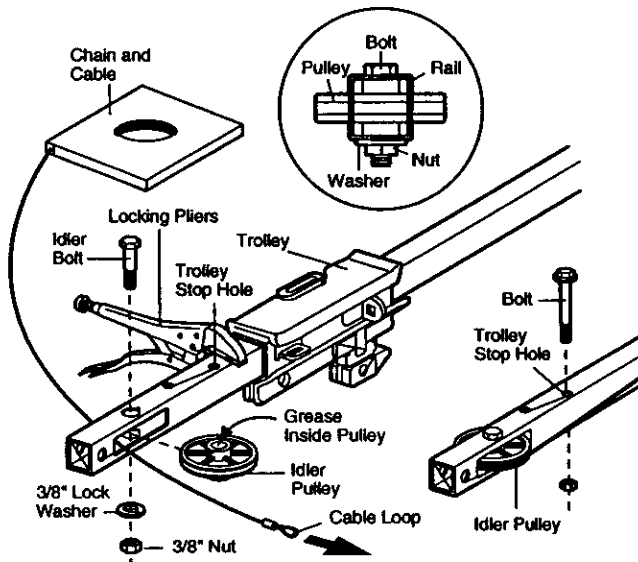
To avoid **SERIOUS** damage to garage door opener, use **ONLY** those bolts/fasteners mounted in the top of the opener.



ASSEMBLY STEP 3

Install the Idler Pulley

- Lay the chain/cable beside the rail, as shown. Grasp the end with the cable loop and pass approximately 12" of cable through the window. Allow it to hang until Assembly Step 5.
- Remove the tape from the idler pulley. The inside center should be pre-greased. If dry, regrease to ensure proper operation.
- Place the idler pulley into the window as shown.
- Insert the idler bolt from the top through the rail and pulley. Tighten with a 3/8" lock washer and nut underneath the rail until the lock washer is compressed.
- Rotate the pulley to be sure it spins freely.
- Insert a 1/4"-20x1-3/4 bolt into the trolley stop hole in the front of the rail as shown. Tighten securely with a 1/4"-20 lock nut.



ASSEMBLY STEP 4

Install the Chain/Cable

1. Pull the cable around the idler pulley and toward the trolley.
2. Connect the cable loop to the retaining slot on the trolley, as shown (Figure 1):
 - From below, push pins of master link bar up through cable loop and trolley slot.
 - Push master link cap over pins and past pin notches.
 - Slide clip-on spring over cap and onto pin notches until both pins are securely locked in place.
3. With the trolley against the pliers, dispense the remainder of the cable/chain along the rail toward the motor unit into the slot on the chain spreader, around the sprocket onto the chain spreader and continuing to the trolley assembly. The sprocket teeth must engage the chain (Figure 2).
4. Check to make sure the chain is not twisted, then connect it to the threaded shaft with the remaining master link.
5. Thread the inner nut and lock washer onto the trolley threaded shaft (Figure 3).
6. Insert the trolley threaded shaft through the hole in the trolley. *Be sure the chain is not twisted* (Figure 4).
7. Loosely thread the outer nut onto the trolley threaded shaft.
8. Remove the locking pliers.

Figure 2

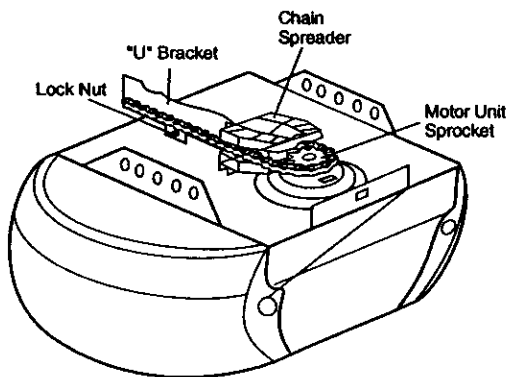
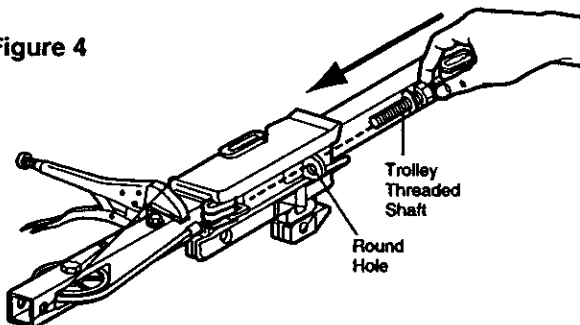


Figure 4



- !** To avoid possible **SERIOUS INJURY** to fingers from moving garage door opener:
- **ALWAYS** keep hand clear of sprocket while operating opener.
 - Securely attach chain spreader **BEFORE** operating.

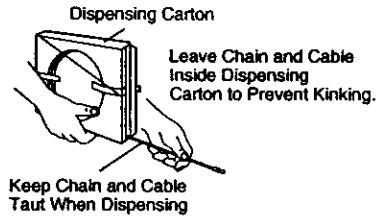


Figure 1

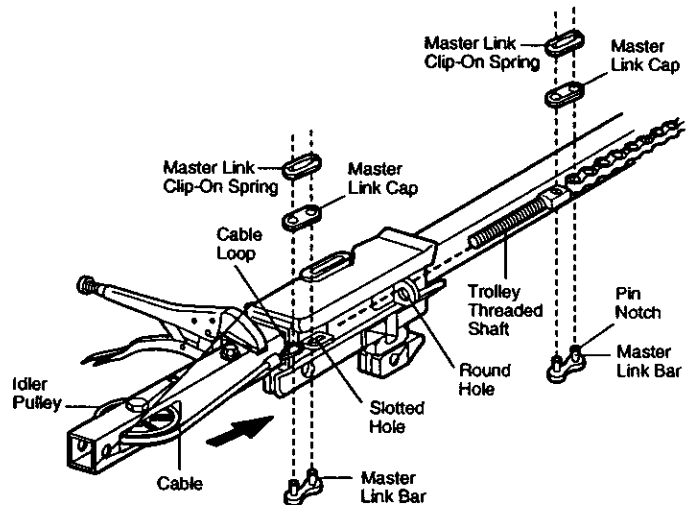
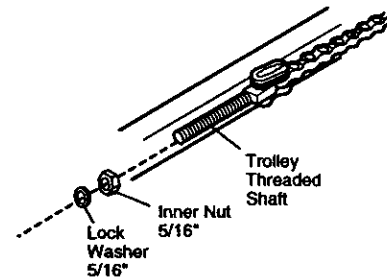


Figure 3



ASSEMBLY STEP 5

Tighten the Chain

- Spin the inner nut and lock washer down the trolley threaded shaft, away from the trolley.
- To tighten the chain, turn outer nut in the direction shown (Figure 1).
- When the chain is approximately 1/2" above the base of the rail at its midpoint, re-tighten the inner nut to secure the adjustment.

Sprocket noise can result if chain is too loose.

When installation is complete, you may notice some chain droop with the door closed. This is normal. If the chain returns to the position shown in Figure 2 when the door is open, do not re-adjust the chain.

NOTE: During future maintenance, ALWAYS pull the emergency release handle to disconnect trolley before adjusting chain.

NOTE: You may notice loosening of chain after Adjustment Step 3 (Test the Safety Reversal System). Check for proper tension and readjust chain if necessary. Then repeat Adjustment Step 3.

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

Figure 1

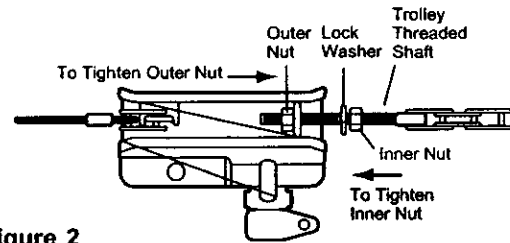
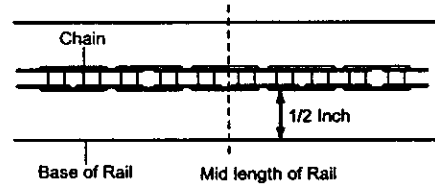


Figure 2



INSTALLATION

IMPORTANT INSTALLATION INSTRUCTIONS

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 or more above floor.
6. Mount emergency release handle 6 feet above floor.
7. 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
 - away from all moving parts of the door.
10. 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 one-inch high object (or a 2x4 laid flat) on the floor.

INSTALLATION STEP 1

Determine the Header Bracket Location

⚠ 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.

SECTIONAL DOOR AND ONE-PIECE DOOR WITH TRACK

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

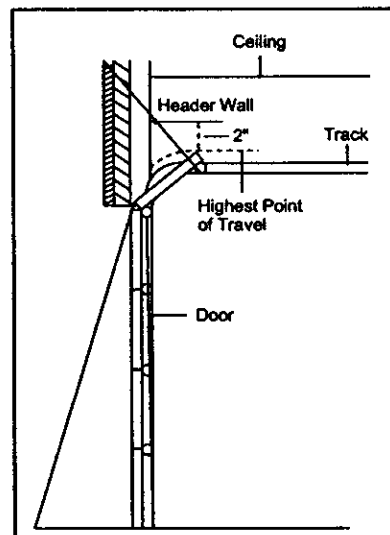
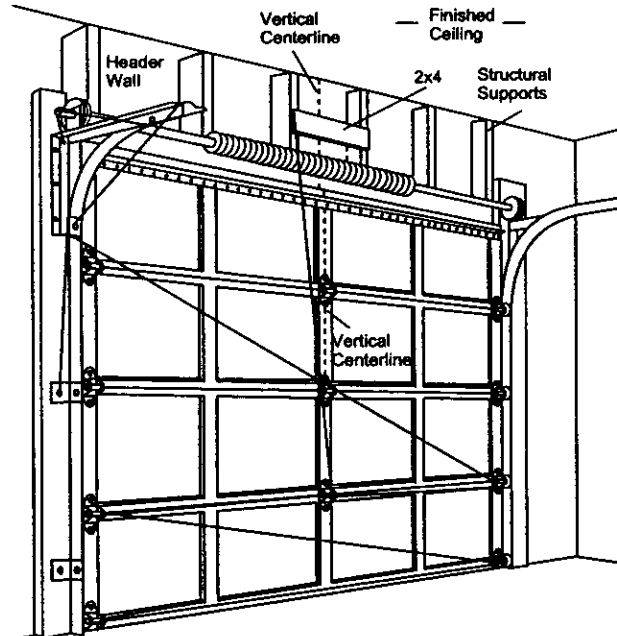
You can fasten the header bracket within 4 feet of the left or right of the door center only if a torsion spring or center bearing plate is in the way; or you can attach it to the ceiling (see page 14) when clearance is minimal. (It may be mounted on the wall upside down if necessary, to gain approximately 1/2".)

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 13.

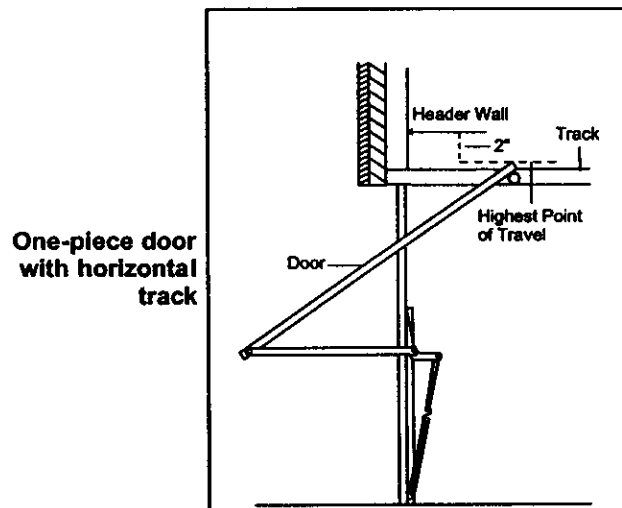
3. Open your door to the highest point of travel as shown. Draw an intersecting horizontal line on the header wall 2" above the high point. This height will provide travel clearance for the top edge of the door.

NOTE: Door clearance brackets are available for sectional doors when headroom clearance is less than 2". See accessory page 39.

Proceed to Step 2, page 14.



Sectional door with curved track

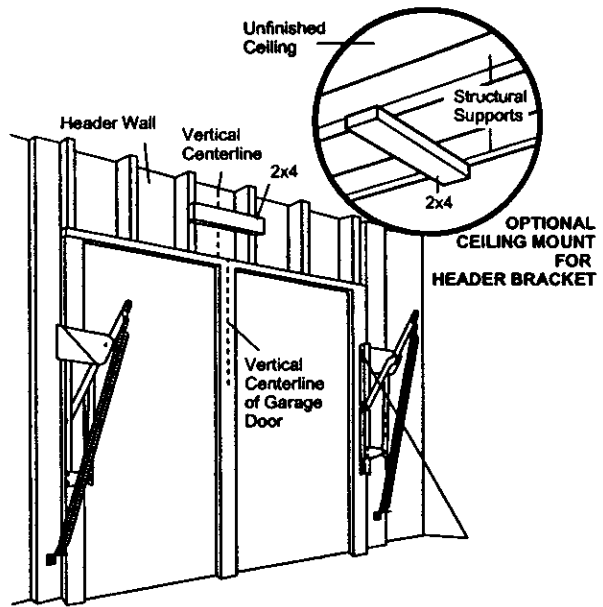


One-piece door with horizontal track

ONE-PIECE DOOR WITHOUT TRACK

1. Close the door and mark the inside vertical centerline of your garage door. Extend the line onto the header wall above door, as shown.
If headroom clearance is minimal, you can install the header bracket on the ceiling. See page 14.
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.
2. Open your door to the highest point of travel as shown. Measure the distance from the top of the door to the floor. Subtract the actual height of the door. Add 8" to the remainder. (See Example).
3. Close the door and draw an intersecting horizontal line on the header wall at the determined height.

NOTE: If the total number of inches exceeds the height available in your garage, use the maximum height possible, or refer to page 14 for ceiling installation.

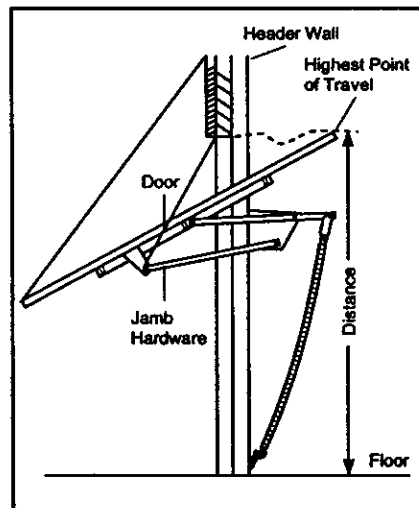


EXAMPLE

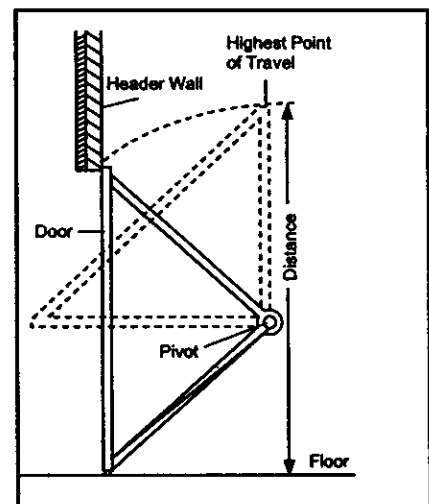
Distance from top of door (at highest point of travel) to floor	92"
Actual height of door	-88"
Remainder.....	4"
Add	+8"
Bracket height on header wall.....	=12"

(Measure UP from top of CLOSED door.)

Proceed to Step 2, page 14.



One-piece door without track: jamb hardware



One-piece door without track: pivot hardware

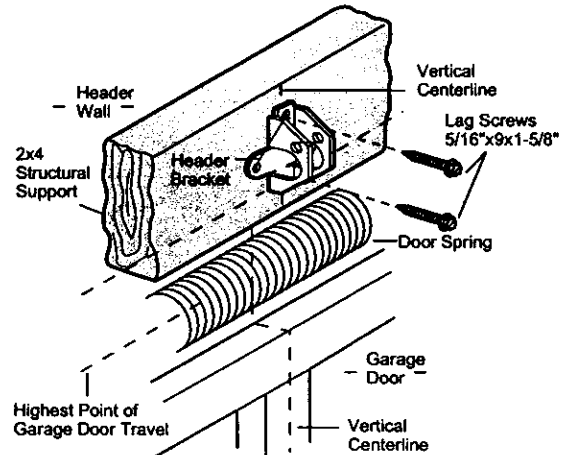
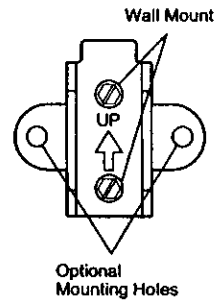
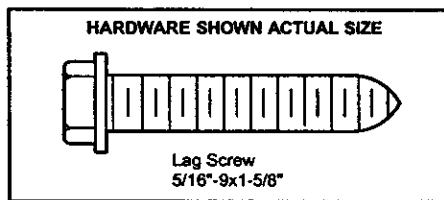
INSTALLATION STEP 2

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).**

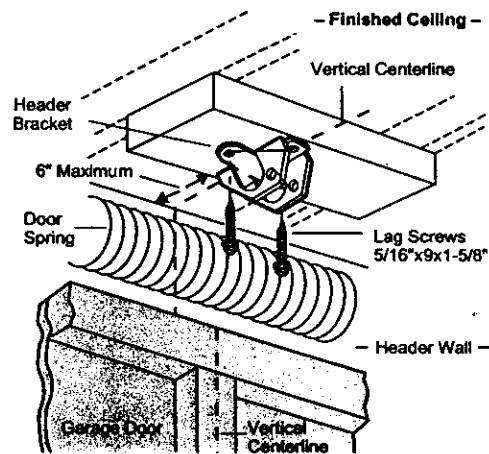
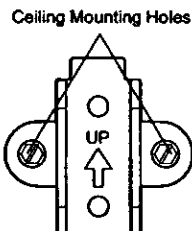
WALL HEADER BRACKET INSTALLATION

- 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. 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" from the wall. Make sure the arrow is pointing away from 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.

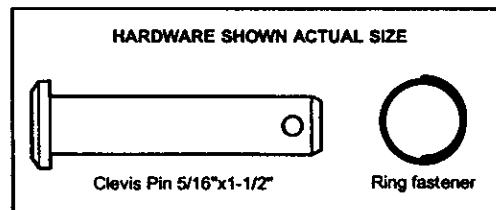
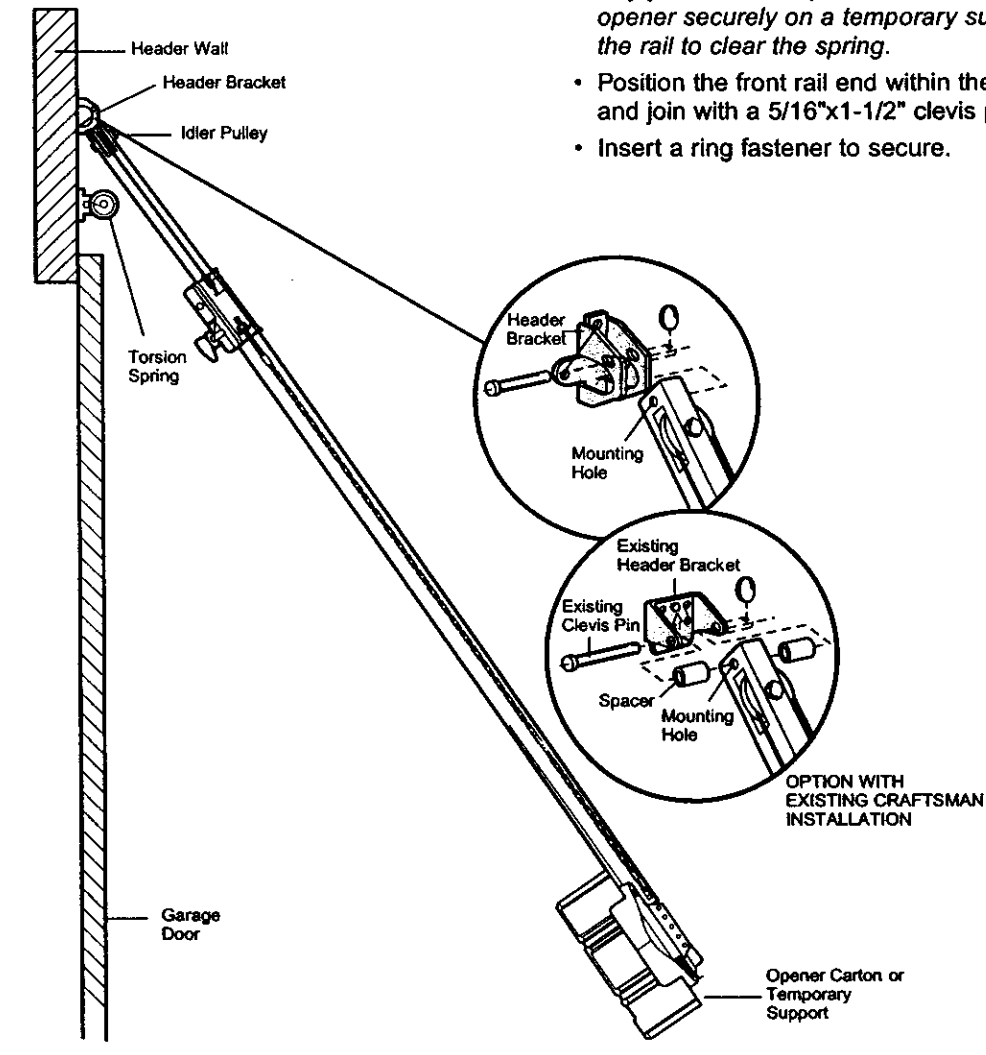


INSTALLATION STEP 3

Attach the Rail to the Header Bracket

NOTE: (Optional) With an existing Craftsman installation, you may re-use the old header bracket with the two plastic spacers included in the hardware bag. Place the spacers inside the bracket on each side of the rail, as illustrated.

- 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 front rail end within the header bracket and join with a 5/16"x1-1/2" clevis pin as shown.
- Insert a ring fastener to secure.



INSTALLATION STEP 4

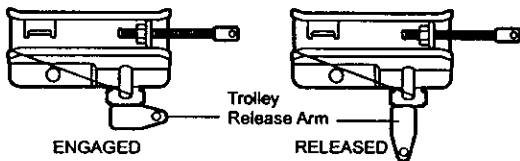
Position the Opener

Follow instructions which apply to your door type as illustrated.

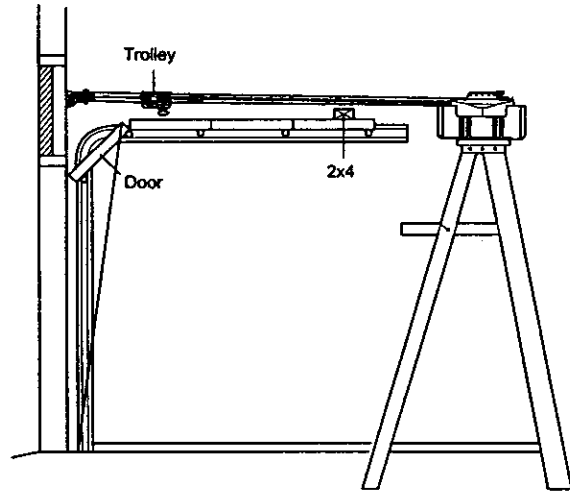
SECTIONAL DOOR OR ONE-PIECE DOOR WITH TRACK

A 2x4 laid flat is convenient for setting an ideal door-to-rail distance.

- Raise the opener onto a stepladder. You will need help at this point if the ladder is not tall enough.
- Open the door all the way and place a 2x4 laid flat on the top section beneath the rail.
- If the top section or panel hits the trolley when you raise the door, pull down on the trolley release arm to disconnect inner and outer sections. Slide the outer trolley toward the motor unit. The trolley can remain disconnected until Installation Step 12 is completed.

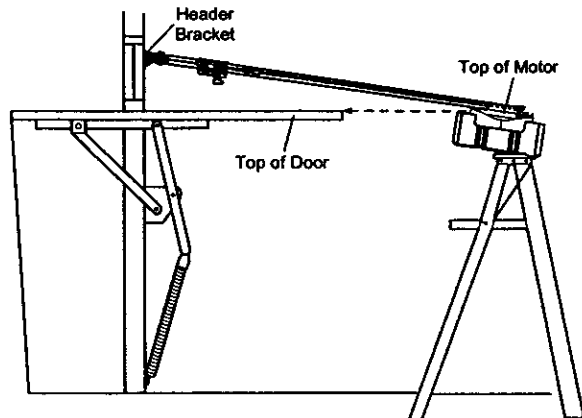


CAUTION
To prevent damage to garage door, rest garage door opener rail on 2x4 placed on top section of door.



ONE-PIECE DOOR WITHOUT TRACK

- With the door fully open and parallel to the floor, measure the distance from the floor to the top of the door.
- Using a stepladder as a support, raise the top of the opener to this height.
- The top of the door should be level with the top of the motor unit. Do not position the opener more than 2" above this point.



INSTALLATION STEP 5

Hang the Opener

Two representative installations are shown. Yours may be different. Hanging brackets should be angled (Figure 1) to provide rigid support. On finished ceilings (Figure 2), attach a sturdy metal bracket to structural supports before installing the opener. This bracket and fastening hardware are not provided. (See Accessories).

1. Measure the distance from each side of the motor unit to the structural support.
2. Cut both pieces of the hanging bracket to required lengths.
3. Drill 3/16" pilot holes in the structural supports.
4. Attach one end of each bracket to a support with 5/16"-18x1-7/8" lag screws.
5. Fasten the opener to the hanging brackets with 5/16"-18x7/8" hex bolts, lock washers and nuts.
6. Check to make sure the rail is centered over the door (or in line with the header bracket if the bracket is not centered above the door).
7. Remove the 2x4. Operate the door manually. If the door hits the rail, raise the header bracket.

NOTE: DO NOT connect power to opener at this time.

!
To avoid possible **SERIOUS INJURY** from a falling garage door opener, fasten it **SECURELY** to structural supports of the garage. Concrete anchors **MUST** be used if installing any brackets into masonry.

Figure 1

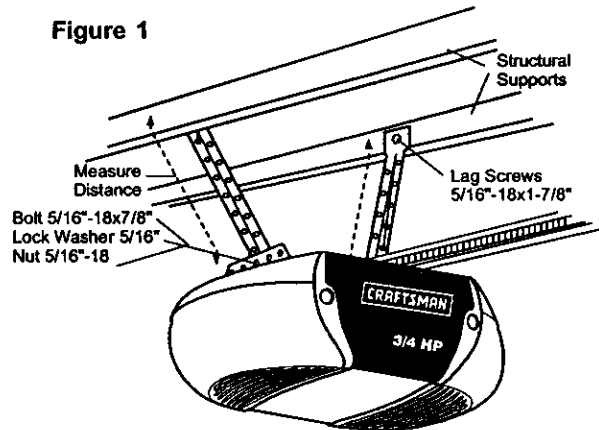
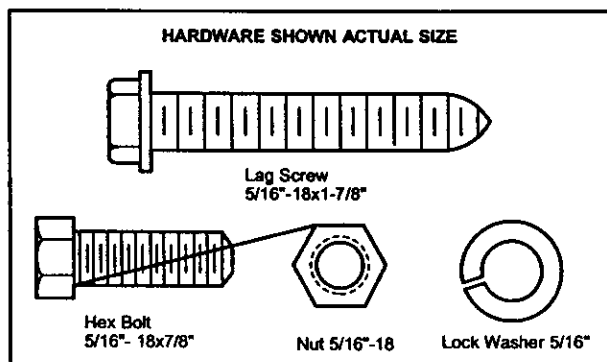
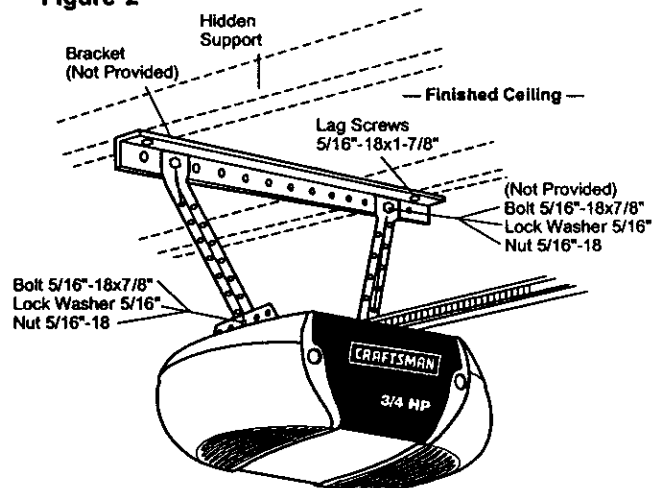


Figure 2



INSTALLATION STEP 6

Install the Door Control

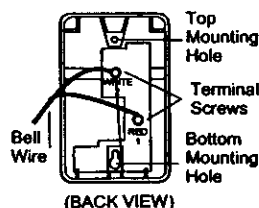
Locate door control within sight of door, at a minimum height of 5 feet where small children cannot reach, away from moving parts of door and door hardware. If installing into drywall, drill 5/32" holes and use the anchors provided. For pre-wired installations (as in new home construction), it may be mounted to a single gang box (Figure 2).

- Strip 7/16" of insulation from one end of bell wire and connect to the two screw terminals on back of door control by color: white wire to 2 and white/red wire to the 1.
- Remove white cover by gently prying at slot in top of the cover with a small flat head screwdriver. Fasten with 6ABx1-1/4" self-tapping screws (drywall installation) or 6-32x1" machine screws (into gang box) as follows:
 - Install bottom screw, allowing 1/8" to protrude above wall surface.
 - Position bottom of door control on screw head and slide down to secure. Adjust screw for snug fit.
 - Drill and install top screw with care to avoid cracking plastic housing. **Do not over tighten.**
 - Insert top tabs and snap on cover.
- (For standard installation only) Run bell wire up wall and across ceiling to motor unit. Use insulated staples to secure wire in several places. Do not pierce wire with a staple, creating a short or open circuit.
- Strip 7/16" of insulation from end of bell wire. Connect bell wire to the quick-connect terminals as follows: white to white and white/red to red.

NOTE: When connecting multiple door controls to the opener, twist same color wires together. Insert wires into quick-connect holes: white to white and red/white to red.

- Position the antenna wire as shown.
- Use tacks or staples to permanently attach entrapment warning label to wall near door control, and manual release/safety reverse test label in a prominent location on inside of garage door.

NOTE: DO NOT connect power and operate opener at this time. The trolley will travel to the full open position but will not return to the close position until the sensor beam is connected and properly aligned.



WARNING

To prevent possible **SERIOUS INJURY** or **DEATH** from electrocution:

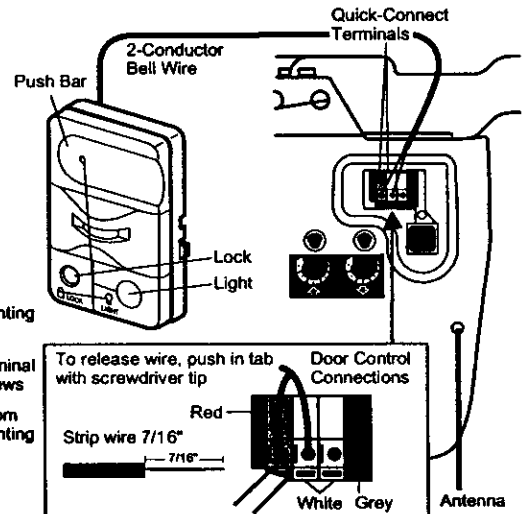
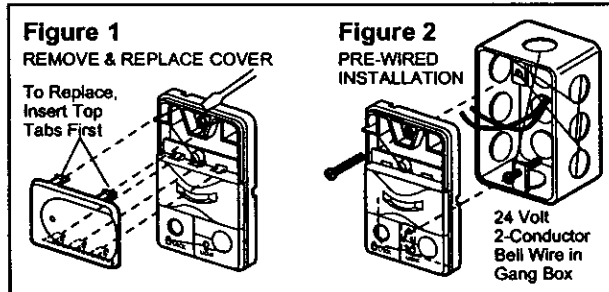
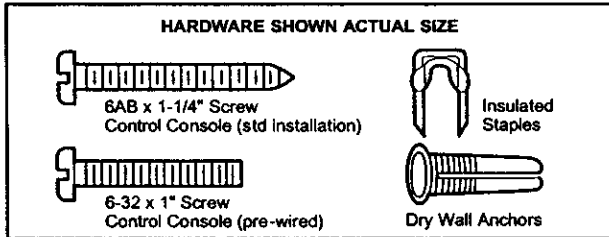
- Be sure power is not connected **BEFORE** installing door control.
- Connect **ONLY** to 24 VOLT low voltage wires.

To prevent possible **SERIOUS INJURY** or **DEATH** from a closing garage door:

- Install door control within sight of garage door, out of reach of children at a minimum height of 5 feet, and away from all moving parts of door.
- **NEVER** permit children to operate or play with door control push buttons or remote control transmitters.
- Activate door **ONLY** when it can be seen clearly, is properly adjusted, and there are no obstructions to door travel.
- **ALWAYS** keep garage door in sight until completely closed. **NEVER** permit anyone to cross path of closing garage door.

Outside Keylock Accessory Connections

To opener quick-connect terminals: white to white; white/red to red.

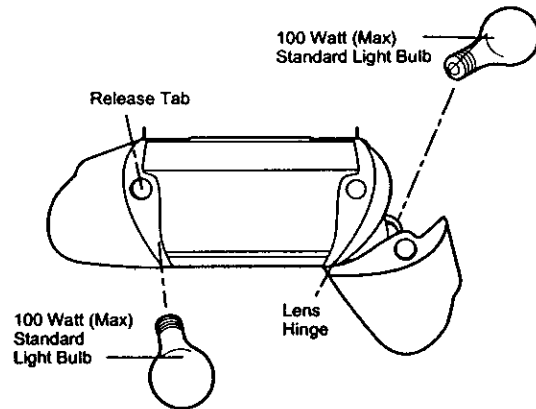


INSTALLATION STEP 7

Install the Lights

- Press the release tabs on both sides of lens. Gently rotate lens back and downward until the lens hinge is in the fully open position. Do not remove the lens.
- Install up to a 100 watt maximum light bulb in each socket. The lights will turn ON and remain lit for approximately 4-1/2 minutes when power is connected. Then the lights will turn OFF.
- Reverse the procedure to close the lens.
- If the bulbs burn out prematurely due to vibration, replace with a Garage Door Opener bulb.

NOTE: Use only standard light bulbs. The use of short neck or speciality light bulbs may overheat the endpanel or light socket.



INSTALLATION STEP 8

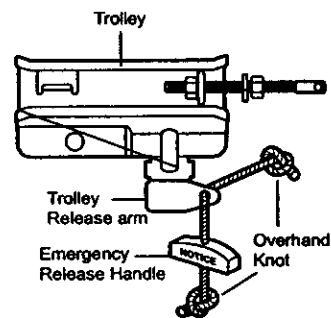
Attach the Emergency Release Rope and Handle

- Thread one end of the rope through the hole in the top of the red handle so "NOTICE" reads right side up as shown. Secure with an overhand knot at least 1" from the end of the rope to prevent slipping.
- Thread the other end of the rope through the hole in the release arm of the outer trolley.
- Adjust rope length so the handle is 6 feet above the floor. Secure with an overhand knot.

NOTE: If it is necessary to cut the rope, heat seal the cut end with a match or lighter to prevent unraveling.

! VARYING

- To prevent possible **SERIOUS INJURY** or **DEATH** from a falling garage door:
 - If possible, use emergency release handle to disengage trolley **ONLY** when garage door is **CLOSED**. Weak or broken springs or unbalanced door could result in an open door falling rapidly and/or unexpectedly.
 - **NEVER** use emergency release handle unless garage doorway is clear of persons and obstructions.
- **NEVER** use handle to pull door open or closed. If rope knot becomes untied, you could fall.

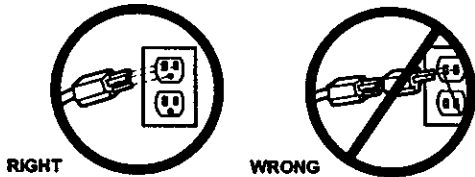


INSTALLATION STEP 9

Electrical Requirements

To avoid installation difficulties, do not run the opener at this time.

To reduce the risk of electric shock, your garage door opener has a grounding type plug with a third grounding pin. This plug will only fit into a grounding type outlet. If the plug doesn't fit into the outlet you have, contact a qualified electrician to install the proper outlet.



If permanent wiring is required by your local code, refer to the following procedure.

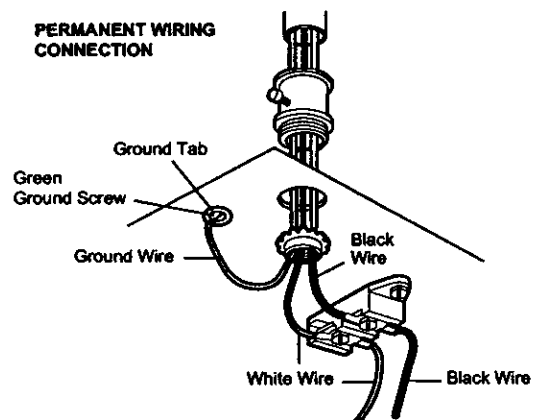
To make a permanent connection through the 7/8" hole in the top of the motor unit:

- Remove the motor unit cover screws and set the cover aside.
- Remove the attached 3-prong cord.
- Connect the black (line) wire to the screw on the brass terminal; the white (neutral) wire to the screw on the silver terminal; and the ground wire to the green ground screw. **The opener must be grounded.**
- Reinstall the cover.

WARNING

To prevent possible **SERIOUS INJURY** or **DEATH** from electrocution or fire:

- Be sure power is not connected to the opener, and disconnect power to circuit **BEFORE** removing cover to establish permanent wiring connection.
- Garage door installation and wiring **MUST** be in compliance with all local electrical and building codes.
- **NEVER** use an extension cord, 2-wire adapter, or change plug in any way to make it fit outlet. Be sure the opener is grounded.



INSTALLATION STEP 10

Install The Safety Reversing Sensor

The safety reversing sensor must be connected and aligned correctly before the garage door opener will move in the down direction.

IMPORTANT INFORMATION ABOUT THE SAFETY REVERSING SENSOR

When properly connected and aligned, the sensor will detect an obstacle in the path of its electronic beam. The sending eye (with an orange indicator light) transmits an invisible light beam to the receiving eye (with a green indicator light). If an obstruction breaks the light beam while the door is closing, the door will stop and reverse to full open position, and the opener lights will flash 10 times.

The units must be installed inside the garage so that the sending and receiving eyes face each other across the door, no higher than 6" above the floor. Either can be installed on the left or right of the door as long as the sun never shines directly into the receiving eye lens.

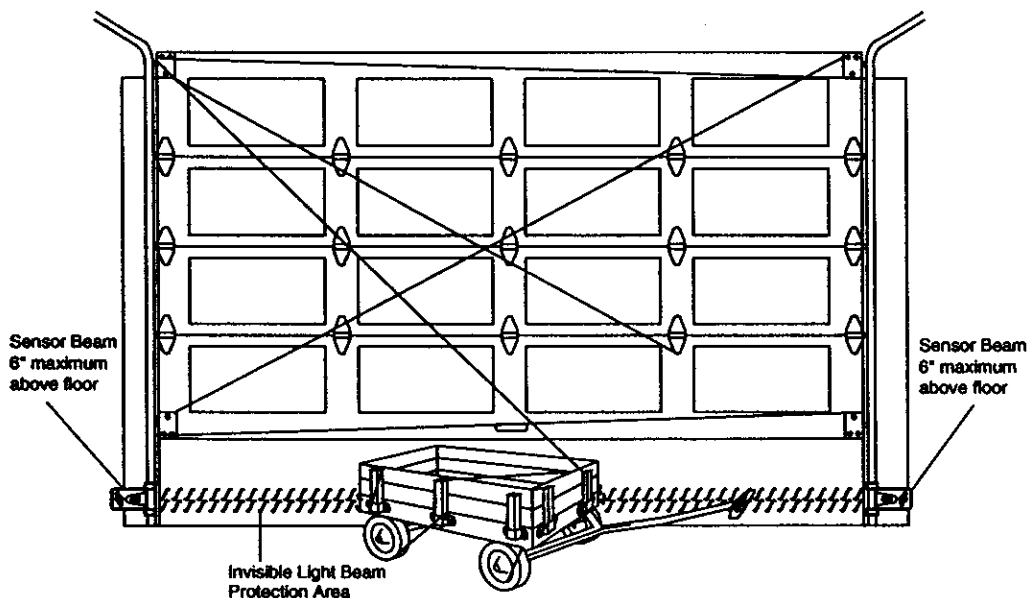
The mounting brackets are designed to clip onto the track of sectional garage doors without additional hardware.

WARNING

- Be sure power is not connected to the garage door opener BEFORE installing the safety reversing sensor.
- To prevent **SERIOUS INJURY** or **DEATH** from a closing garage door:
 - Correctly connect and align the safety reversing sensor. This required safety device **MUST NOT** be disabled.
 - Install the safety reversing sensor so beam is **NO HIGHER** than 6" above garage floor.

If it is necessary to mount the units on the wall, the brackets must be securely fastened to a solid surface such as the wall framing. Extension brackets (see accessories) are available if needed. If installing in masonry construction, add a piece of wood at each location to avoid drilling extra holes in masonry if repositioning is necessary.

The invisible light beam path must be unobstructed. No part of the garage door (or door tracks, springs, hinges, rollers or other hardware) may interrupt the beam while the door is closing.



Facing the door from inside the garage

INSTALLING THE BRACKETS

Be sure power to the opener is disconnected.

Install and align the brackets so the sensors will face each other across the garage door, with the beam no higher than 6" above the floor. They may be installed in one of three ways, as follows.

Garage door track installation (preferred):

- Slip the curved arms over the rounded edge of each door track, with the curved arms facing the door. Snap into place against the side of the track. It should lie flush, with the lip hugging the back edge of the track, as shown in Figure 1.

If your door track will not support the bracket securely, wall installation is recommended.

Wall installation:

- Place the bracket against the wall with curved arms facing the door. Be sure there is enough clearance for the sensor beam to be unobstructed.
- If additional depth is needed, an extension bracket (see Accessories) or wood blocks can be used.
- Use bracket mounting holes as a template to locate and drill (2) 3/16" diameter pilot holes on the wall at each side of the door, no higher than 6" above the floor.
- Attach brackets to wall with lag screws (not provided).
- If using extension brackets or wood blocks, adjust right and left assemblies to the same distance out from the mounting surface. Make sure all door hardware obstructions are cleared.

Floor installation:

- Use wood blocks or extension brackets (see Accessories) to elevate sensor brackets so the lenses will be no higher than 6" above the floor.
- Carefully measure and place right and left assemblies at the same distance out from the wall. Be sure all door hardware obstructions are cleared.
- Fasten to the floor with concrete anchors as shown.

Figure 1 DOOR TRACK MOUNT (RIGHT SIDE)

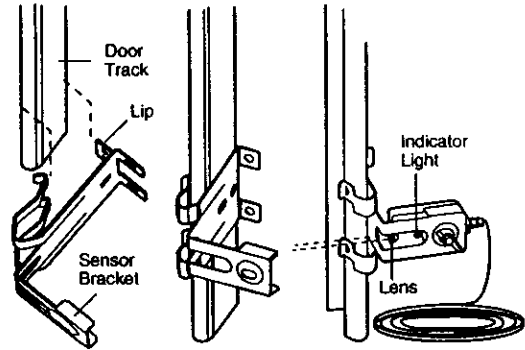


Figure 2 WALL MOUNT (RIGHT SIDE)

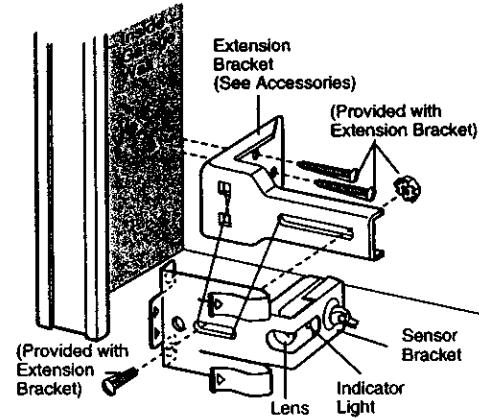
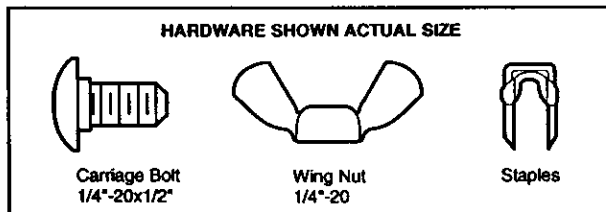
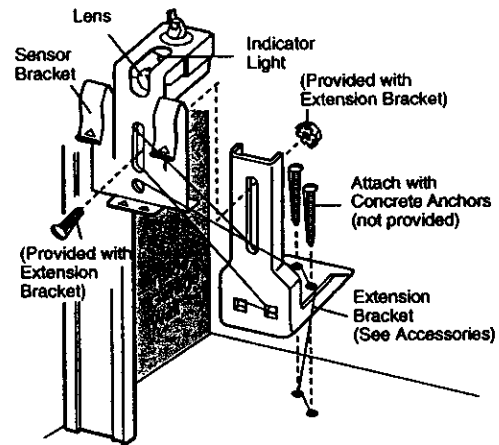


Figure 3 FLOOR MOUNT (RIGHT SIDE)



MOUNTING AND WIRING THE SAFETY SENSORS

- Slide a 1/4"-20x1/2" carriage bolt head into the slot on each sensor. Use wing nuts to fasten sensors to brackets, with lenses pointing toward each other across the door. Be sure the lens is not obstructed by a bracket extension (Figure 4).
- Finger tighten the wing nuts.
- Run the wires from both sensors to the opener. Use insulated staples to secure wire to wall and ceiling.
- Strip 7/16" of insulation from each set of wires. Separate white and white/black wires sufficiently to connect to the opener quick-connect terminals. Twist like colored wires together. Insert wires into quick-connect holes: white to white and white/black to grey (Figure 5).

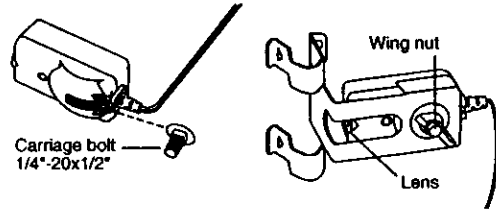
ALIGNING THE SAFETY SENSORS

- Plug in the opener. The indicator lights in both the *sending* and *receiving eyes* will *glow steadily* if wiring connections and alignment are correct.

The *sending eye* orange indicator light will glow regardless of alignment or obstruction. If the green indicator light in the *receiving eye* is off, dim, or flickering (and the invisible light beam path is not obstructed), alignment is required.

- Loosen the *sending eye* wing nut and readjust, aiming directly at the receiving eye. Lock in place.
- Loosen the *receiving eye* wing nut and adjust sensor until it receives the sender's beam. When the green indicator light *glows steadily*, tighten the wing nut.

Figure 4

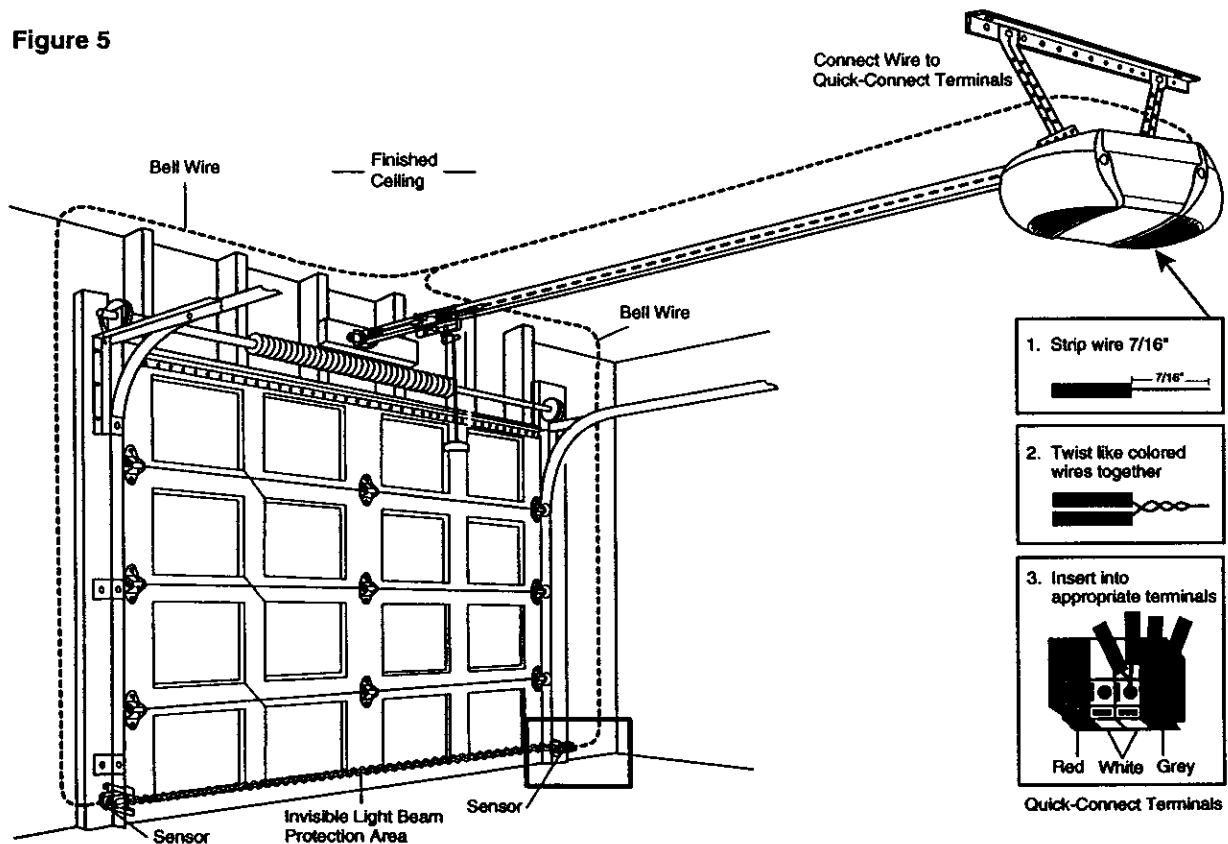


TROUBLESHOOTING THE SAFETY SENSORS

1. If the *sending eye* indicator light does not *glow steadily* after installation, check for:
 - Electric power to the opener.
 - A short in the white or white/black wires. These can occur at staples, or at opener connections.
 - Incorrect wiring between sensors and opener.
 - A broken wire.
2. If the *sending eye* indicator light *glows steadily* but the *receiving eye* indicator light doesn't:
 - Check alignment.
 - Check for an open wire to the *receiving eye*.
3. If the *receiving eye* indicator light is dim, realign either sensor.

NOTE: When the invisible beam path is obstructed or misaligned while the door is closing, the door will reverse. If the door is already open, it will not close. The opener lights will flash 10 times. See page 21.

Figure 5



INSTALLATION STEP 11

Fasten the Door Bracket

Follow instructions which apply to your door type as illustrated below or on the following page.

A horizontal reinforcement brace should be long enough to be secured to two vertical supports. A vertical reinforcement brace should cover the height of the top panel.

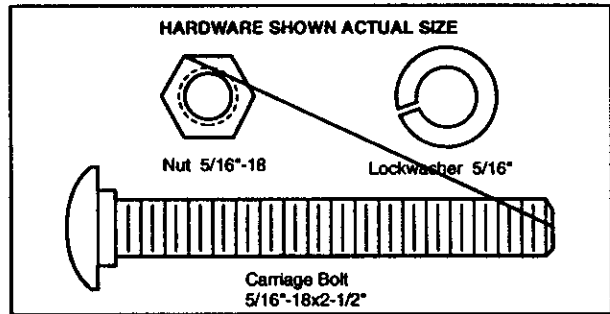
The illustration shows one piece of angle iron as the horizontal brace. For the vertical brace, two pieces of angle iron are used to create a "U"-shaped support (Figure 1). The best solution is to check with your garage door manufacturer for an opener installation door reinforcement kit.

NOTE: Many vertical brace installations provide for direct attachment of the clevis pin and door arm. In this case you will not need the door bracket; proceed to Installation Step 12.

SECTIONAL DOORS

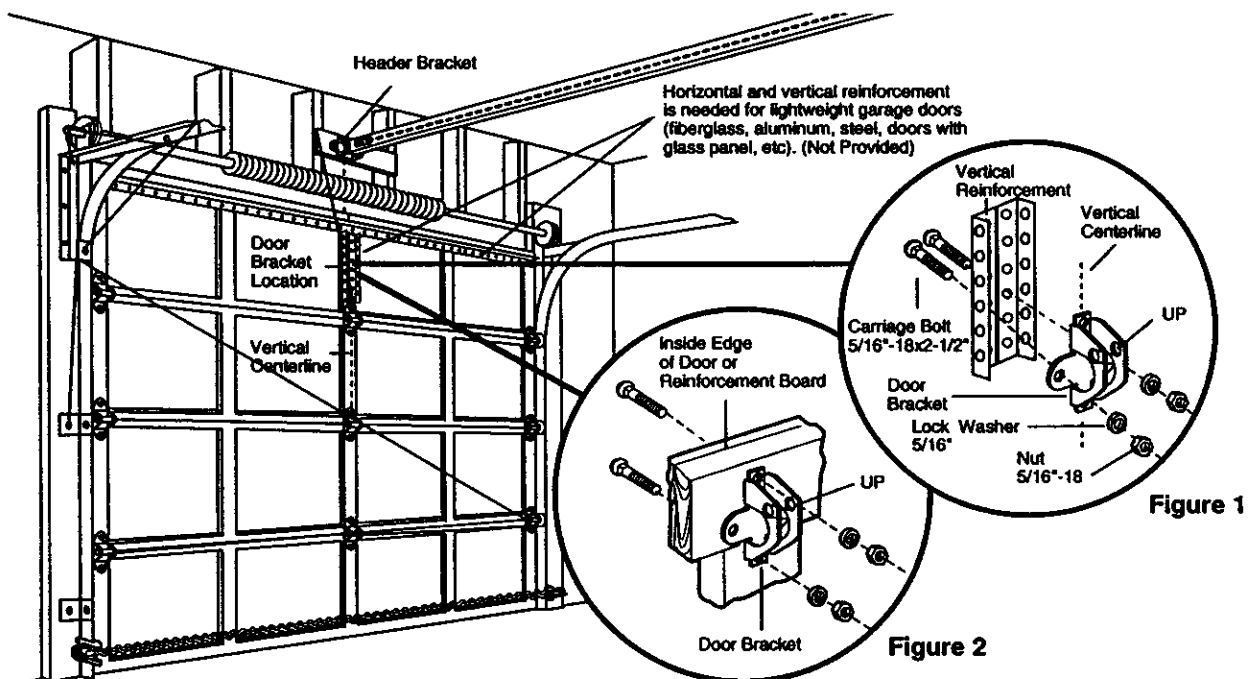
- Center the door bracket on the previously marked vertical centerline used for the header bracket installation. Note correct UP placement, as stamped inside the bracket (Figure 2).
- Position the bracket on the face of the door within the following limits:
 - The top edge of the bracket 2"-4" below the top edge of the door.
 - The top edge of the bracket directly below any structural support across the top of the door.

CAUTION!
To prevent damage to garage door, reinforce inside of door with angle iron both vertically and horizontally.



- Mark and drill 5/16" left and right fastening holes. Secure the bracket as shown in Figure 1 if there is vertical reinforcement.

If your installation doesn't require vertical reinforcement but does need top and bottom fastening holes for the door bracket, fasten as shown in Figure 2.



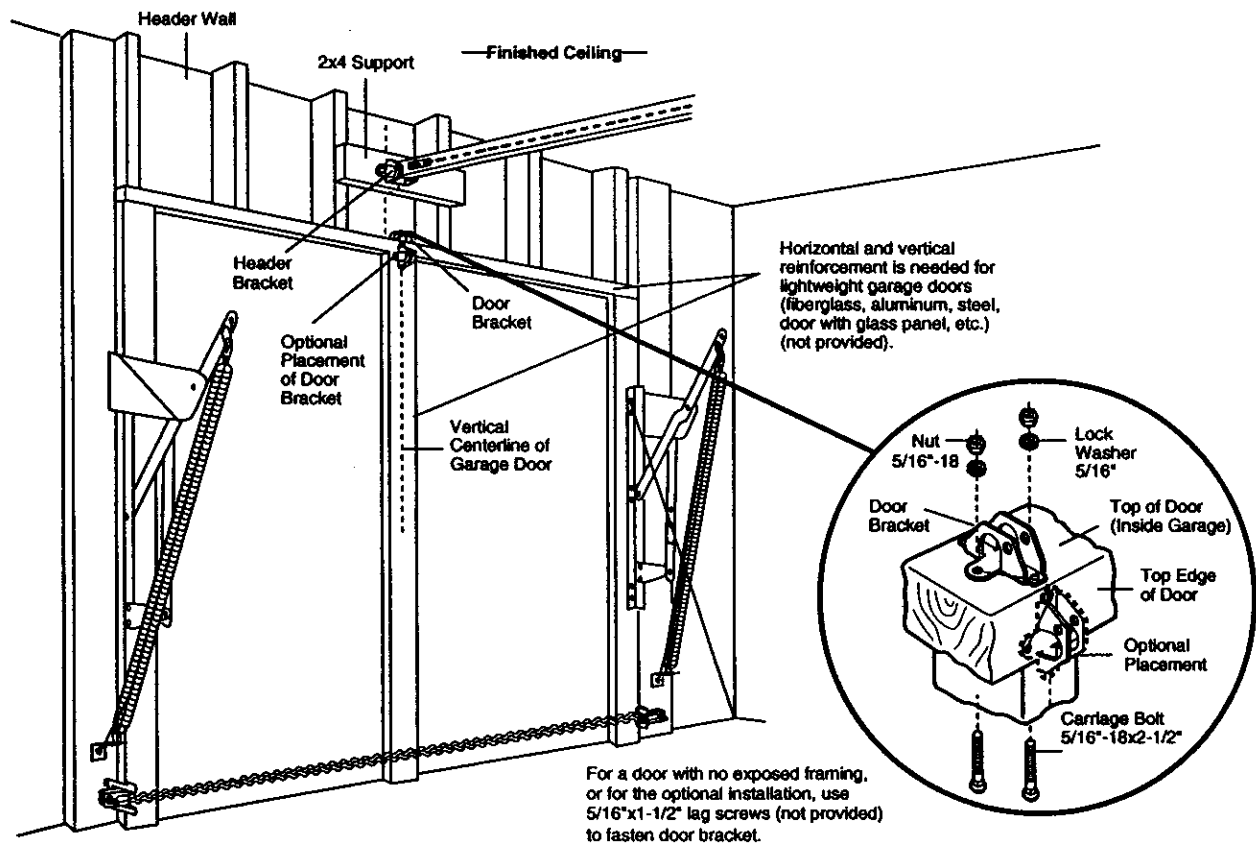
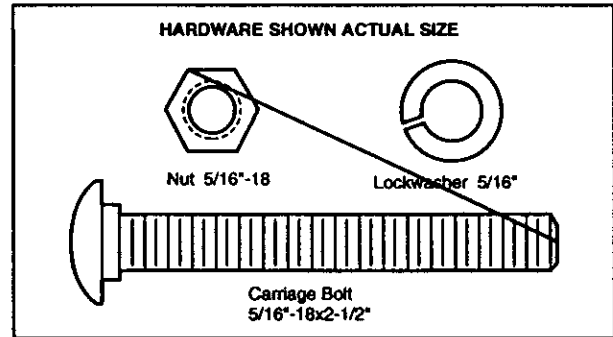
ONE-PIECE DOORS

Please read and comply with the warnings and reinforcement instructions on the previous page. They apply to one-piece doors also.

- Center the door bracket on the top of the door, in line with the header bracket as shown. Mark either the left and right, or the top and bottom holes.
- Drill 5/16" pilot holes and fasten the bracket with hardware supplied.

If the door has no exposed framing, drill 3/16" pilot holes and fasten the bracket with 5/16"x1-1/2" lag screws (not provided) to the top of the door.

NOTE: The door bracket may be installed on the top edge of the door if required for your installation. (Refer to the dotted line optional placement drawing.) Drill 3/16" pilot holes and substitute 5/16"x1-1/2" lag screws (not provided) to fasten the bracket to the door.



INSTALLATION STEP 12

Connect Door Arm to Trolley

Follow instructions which apply to your door type as illustrated below and on the following page.

SECTIONAL DOORS ONLY

- Make sure garage door is fully closed. Pull the emergency release handle to disconnect the outer trolley from the inner trolley. Slide the outer trolley back (away from the pulley) for 8" minimum as shown in Figures 1, 2 and 3.

• Figure 1:

- Fasten straight door arm section to outer trolley with the 5/16"x1" clevis pin. Secure the connection with a ring fastener.
- Fasten curved section to the door bracket in the same way, using the 5/16"x1-1/4" clevis pin.

• Figure 2:

- Bring arm sections together. Find two pairs of holes that line up and join sections. Select holes as far apart as possible to increase door arm rigidity.

• Figure 3, Hole alignment alternative:

- If holes in curved arm are above holes in straight arm, disconnect straight arm. Cut about 6" from the solid end. Reconnect to trolley with cut end down as shown.
 - Bring arm sections together.
 - Find two pairs of holes that line up and join with bolts, lock washers and nuts.
- Pull the emergency release handle toward the opener at a 45° angle so that the trolley release arm is horizontal. Proceed to Adjustment Step 1, page 28. Trolley will re-engage automatically when opener is operated.

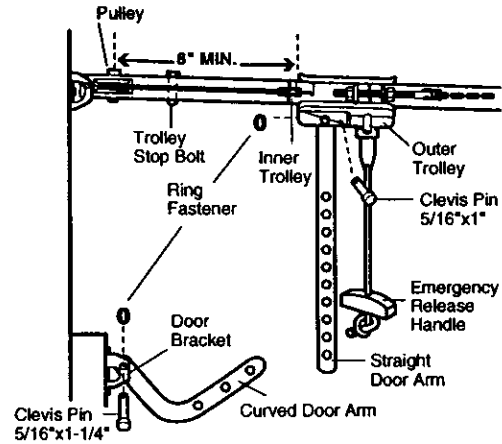


Figure 1

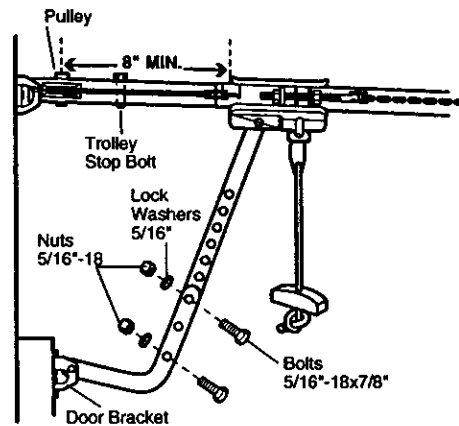


Figure 2

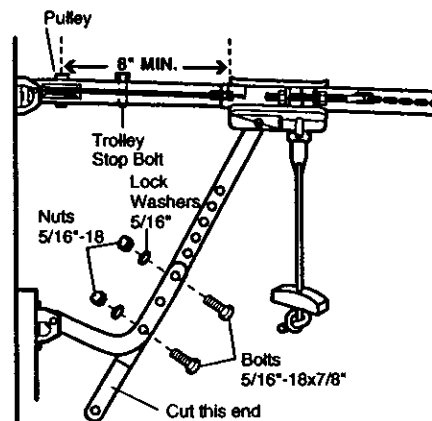
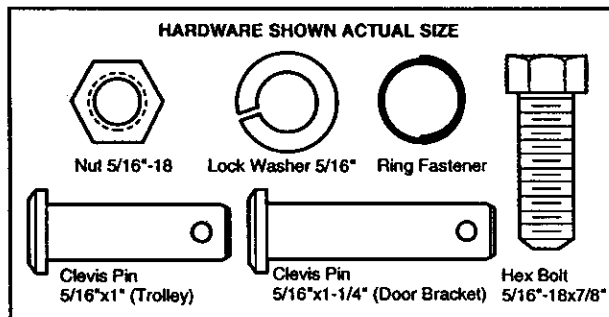


Figure 3



ALL ONE-PIECE DOORS

1. Assemble the door arm, Figure 4:

- Fasten the straight and curved door arm sections together to the longest possible length (with a 2 or 3 hole overlap).
- With the door closed, connect the straight door arm section to the door bracket with the 5/16"x1-1/4" clevis pin.
- Secure with a ring fastener.

2. Adjustment procedures, Figure 5:

- On one-piece doors, before connecting the door arm to the trolley, the travel limits must be adjusted. Limit adjustment screws are located on the left side panel as shown on page 28. Follow adjustment procedures below.
- **Open door adjustment: decrease UP travel limit**
 - Turn the UP limit adjustment screw counter-clockwise 4 turns.
 - Press the Door Control push button. The trolley will travel to the fully open position.
 - Manually raise the door to the open position (parallel to the floor), and lift the door arm to the trolley. The arm should touch the trolley just in back of the door arm connector hole. Refer to the fully open trolley/door arm positions in the illustration. If the arm does not extend far enough, adjust the limit further. One full turn equals 3" of trolley travel.
- **Closed door adjustment: decrease DOWN travel limit**
 - Turn the DOWN limit adjustment screw clockwise 4 complete turns.

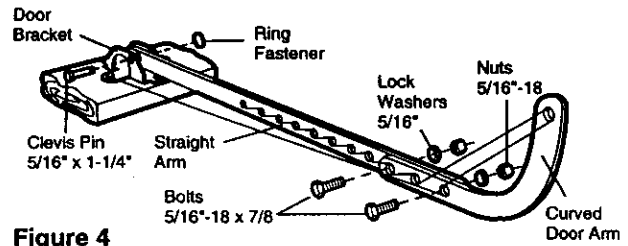


Figure 4

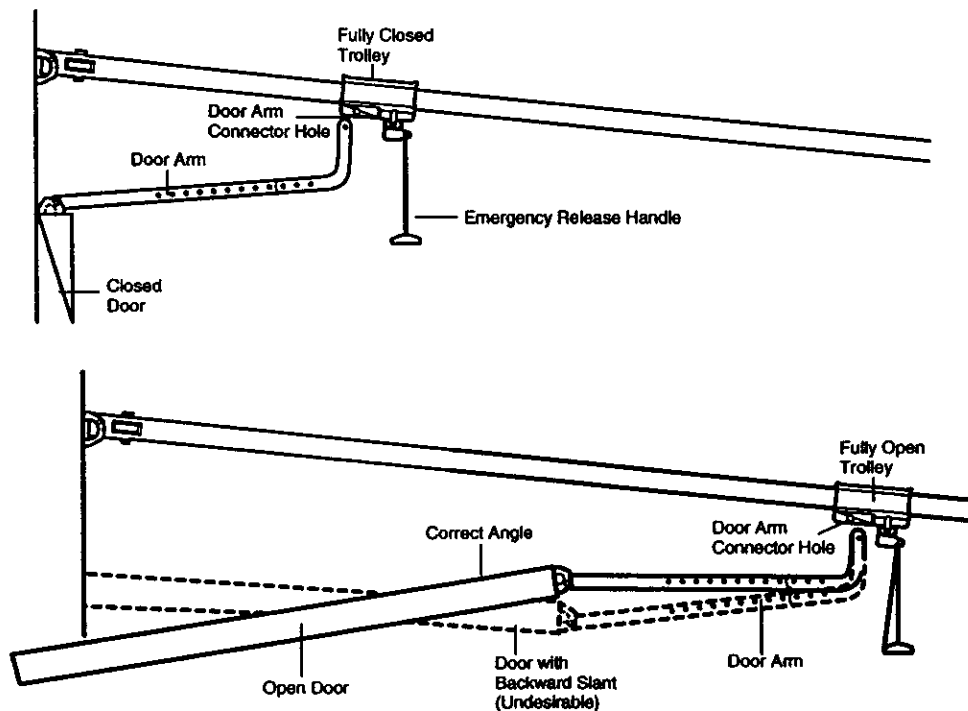
- Press the Door Control push button. The trolley will travel to the fully closed position.
- Manually close the door and lift the door arm to the trolley. The arm should touch the trolley just ahead of the door arm connector hole. Refer to the fully closed trolley/door arm positions in the illustration. If the arm is behind the connector hole, adjust the limit further. One full turn equals 3" of trolley travel.

3. Connect the door arm to the trolley:

- Close the door and join the curved arm to the connector hole in the trolley with the remaining clevis pin. It may be necessary to lift the door slightly to make the connection.
- Secure with a ring fastener.
- Run the opener through a complete travel cycle. If the door has a slight "backward" slant in full open position as shown in the illustration, decrease the UP limit until the door is parallel to the floor.

NOTE: When setting the up limit on the following page, the door should not have a "backward" slant when fully open as illustrated below. A slight backward slant will cause unnecessary bucking and/or jerking operation as the door is being opened or closed from the fully open position.

Figure 5



ADJUSTMENT STEP 1

Adjust the UP and DOWN Travel Limits

Limit adjustment settings regulate the points at which the door will stop when moving up or down.

To operate the opener, press the Door Control push button. Run the opener through a complete travel cycle.

- Does the door open and close completely?
- Does the door stay closed and not reverse unintentionally when fully closed?

If your door passes both of these tests, no limit adjustments are necessary unless the reversing test fails (see Adjustment Step 3, page 30).

Adjustment procedures are outlined below. Read the procedures carefully before proceeding to Adjustment Step 2. Use a screwdriver to make limit adjustments. **Run the opener through a complete travel cycle after each adjustment.**

NOTE: Repeated operation of the opener during adjustment procedures may cause the motor to overheat and shut off. Simply wait 15 minutes and try again.

NOTE: If anything interferes with the door's upward travel, it will stop. If anything interferes with the door's downward travel (including binding or unbalanced doors), it will reverse.

HOW AND WHEN TO ADJUST THE LIMITS

- **If the door does not open completely but opens at least five feet:**

Increase up travel. Turn the UP limit adjustment screw clockwise. One turn equals 3" of trolley travel.

NOTE: To prevent the trolley from hitting the cover protection bolt, keep a minimum distance of 2-4" between the trolley and the bolt.

- **If door does not open at least 5 feet:**
Adjust the UP (open) force as explained in Adjustment Step 2.
- **If the door does not close completely:**
Increase down travel. Turn the down limit adjustment screw counterclockwise. One turn equals 3" of trolley travel.
If door still won't close completely, try lengthening the door arm (page 26) and decreasing the down limit.
- **If the opener reverses in fully closed position:**
Decrease down travel. Turn the down limit adjustment screw clockwise. One turn equals 3" of trolley travel.

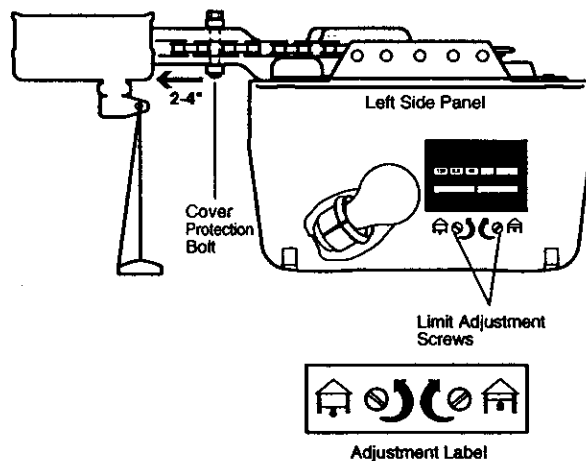
! SAFETY

Without a properly installed safety reversal system, persons (particularly small children) could be **SERIOUSLY INJURED** or **KILLED** by a closing garage door.

- Incorrect adjustment of garage door travel limits will interfere with proper operation of safety reversal system.
- If one control (force or travel limits) is adjusted, the other control may also need adjustment.
- After **ANY** adjustments are made, the safety reversal system **MUST** be tested. Door **MUST** reverse on contact with one-inch high object (or 2x4 laid flat) on floor.

! WARNING

To prevent damage to vehicles, be sure fully open door provides adequate clearance.



- **If the door reverses when closing and there is no visible interference to travel cycle:**
If the opener lights are flashing, the Safety Reversing Sensors are either not installed, misaligned, or obstructed. See Troubleshooting, page 23.
Test the door for binding: Pull the emergency release handle. Manually open and close the door. If the door is binding, call a trained door systems technician. If the door is not binding or unbalanced, adjust the DOWN (close) force. See Adjustment Step 2.

ADJUSTMENT STEP 2

Adjust the Force

Force adjustment controls are located on the right side panel of the motor unit. Force adjustment settings regulate the amount of power required to open and close the door.

If the forces are set too light, door travel may be interrupted by nuisance reversals in the down direction and stops in the up direction. Weather conditions can affect the door movement, so occasional adjustment may be needed.

The maximum force adjustment range is about 3/4 of a complete turn. Do not force controls beyond that point. Turn force adjustment controls with a screwdriver.

NOTE: If anything interferes with the door's upward travel, it will stop. If anything interferes with the door's downward travel (including binding or unbalanced doors), it will reverse.

HOW AND WHEN TO ADJUST THE FORCES

1. Test the DOWN (close) force

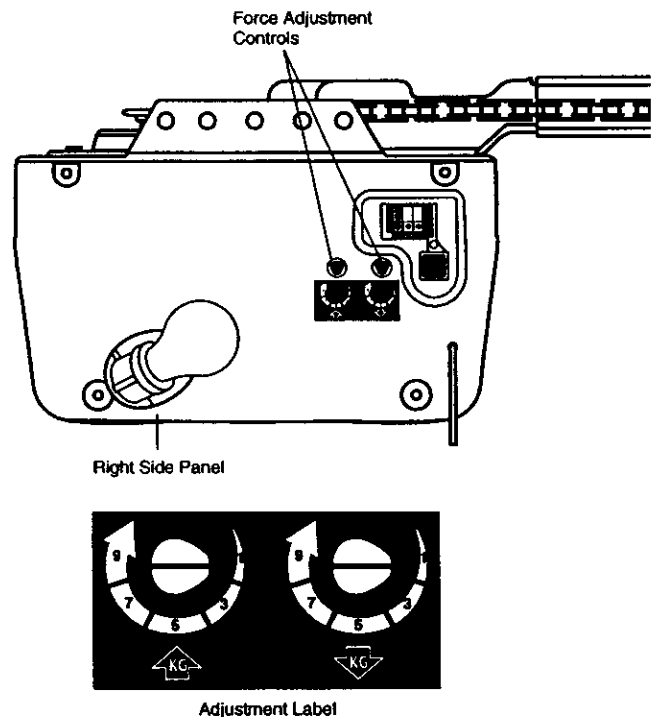
- Grasp the door bottom when the door is about halfway through DOWN (close) travel. The door should reverse. *Reversal halfway through down travel does not guarantee reversal on a one-inch obstruction. See Adjustment Step 3, page 30.* If the door is hard to hold or doesn't reverse, **DECREASE** the DOWN (close) force by turning the control counterclockwise. Make small adjustments until the door reverses normally. After each adjustment, run the opener through a complete cycle.
- If the door reverses during the down (close) cycle and the opener lights aren't flashing, **INCREASE** DOWN (close) force by turning the control clockwise. Make small adjustments until the door completes a close cycle. After each adjustment, run the opener through a complete travel cycle. *Do not increase the force beyond the minimum amount required to close the door.*

2. Test the UP (open) force

- Grasp the door bottom when the door is about halfway through UP (open) travel. The door should stop. If the door is hard to hold or doesn't stop, **DECREASE** UP (open) force by turning the control counterclockwise. Make small adjustments until the door stops easily and opens fully. After each adjustment, run the opener through a complete travel cycle.
- If the door doesn't open at least 5 feet, **INCREASE** UP (open) force by turning the control clockwise. Make small adjustments until door opens completely. Readjust the UP limit if necessary. After each adjustment, run the opener through a complete travel cycle.

Without a properly installed safety reversal system, persons (particularly small children) could be **SERIOUSLY INJURED** or **KILLED** by a closing garage door.

- Too much force on garage door will interfere with proper operation of safety reversal system.
- **NEVER** increase force beyond minimum amount required to close garage door.
- **NEVER** use force adjustments to compensate for a binding or sticking garage door.
- If one control (force or travel limits) is adjusted, the other control may also need adjustment.
- After **ANY** adjustments are made, the safety reversal system **MUST** be tested. Door **MUST** reverse on contact with one-inch high object (or 2x4 laid flat) on floor.



ADJUSTMENT STEP 3

Test the Safety Reversal System

TEST

- With the door fully open, place a one-inch board (or a 2x4 laid flat) on the floor, centered under the garage door.
- Operate the door in the down direction. The door must reverse on striking the obstruction.

ADJUST

- If the door stops on the obstruction, it is not traveling far enough in the down direction. Increase the DOWN limit by turning the DOWN limit adjustment screw counterclockwise 1/4 turn.

NOTE: On a sectional door, make sure limit adjustments do not cause the trolley to move within 2-1/2" of the trolley stop bolt. If necessary lengthen straight door arm to maintain this minimum distance.

- Repeat the test.
- When the door reverses on the one-inch board, remove the obstruction and run the opener through 3 or 4 complete travel cycles to test adjustment.

IMPORTANT SAFETY CHECK:

Repeat Adjustment Steps 1, 2 and 3 after:

- Each adjustment of door arm length, limits, or force controls.
- Any repair to or adjustment of the garage door (including springs and hardware).
- Any repair to or buckling of the garage floor.
- Any repair to or adjustment of the opener.

ADJUSTMENT STEP 4

Test the Safety Reversing Sensor

- Press the remote control push button to open the door.
- Place the opener carton in the path of the door.
- Press the remote control push button to close the door. The door will not move more than an inch, and the opener lights will flash.

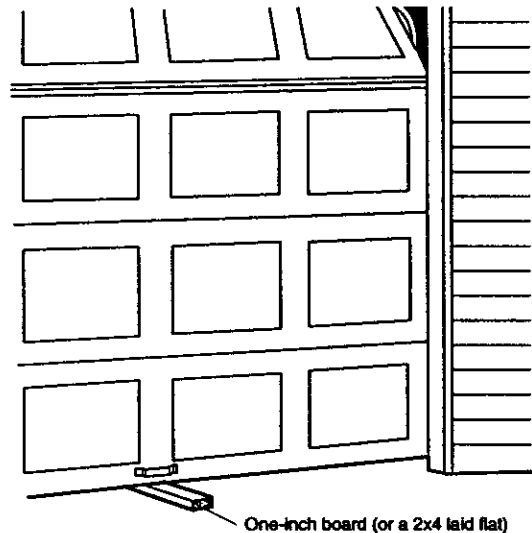
The garage door opener will not close from a remote if the indicator light in either sensor is off (alerting you to the fact that the sensor is misaligned or obstructed).

If the opener closes the door when the safety reversing sensor is obstructed (and the sensors are no more than 6" above the floor), call for a trained door systems technician.

⚠ WARNING

Without a properly installed safety reversal system, persons (particularly small children) could be **SERIOUSLY INJURED** or **KILLED** by a closing garage door.

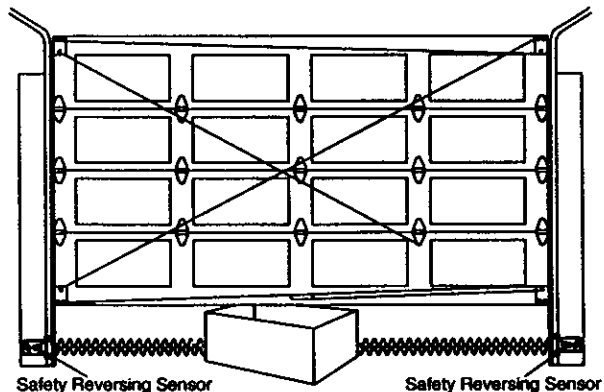
- Safety reversal system **MUST** be tested every month.
- If one control (force or travel limits) is adjusted, the other control may also need adjustment.
- After **ANY** adjustments are made, the safety reversal system **MUST** be tested. Door **MUST** reverse on contact with one-inch high object (or 2x4 laid flat) on the floor.



One-inch board (or a 2x4 laid flat)

⚠ WARNING

Without a properly installed safety reversing sensor, persons (particularly small children) could be **SERIOUSLY INJURED** or **KILLED** by a closing garage door.



OPERATION

IMPORTANT SAFETY INSTRUCTIONS



To reduce the risk of severe injury or death:

1. READ AND FOLLOW ALL WARNINGS AND INSTRUCTIONS.
2. ALWAYS keep remote controls out of reach of children. NEVER permit children to operate or play with garage door control push buttons or remote controls.
3. ONLY activate garage door when it can be seen clearly, it is properly adjusted, and there are no obstructions to door travel.
4. ALWAYS keep garage door in sight until completely closed. NO ONE SHOULD CROSS THE PATH OF THE MOVING DOOR.
5. If possible, use emergency release handle to disengage trolley ONLY when garage door is CLOSED. Weak or broken springs or unbalanced door could result in an open door falling rapidly and/or unexpectedly.
6. NEVER use emergency release handle unless garage doorway is clear of persons and obstructions.
7. NEVER use handle to pull garage door open or closed. If rope knot becomes untied, you could fall.
8. If one control (force or travel limits) is adjusted, the other control may also need adjustment.
9. After any adjustments are made, the safety reversal system MUST be tested.
10. Safety reversal system MUST be tested every month. Garage door MUST reverse on contact with one-inch high object (or a 2x4 laid flat) on the floor.
11. ALWAYS KEEP GARAGE DOOR PROPERLY BALANCED (see page 3). An improperly balanced door may not reverse when required and could result in severe injury or death.
12. All repairs to cables, spring assemblies and other hardware, all of which are under EXTREME tension, MUST be made by a trained door systems technician.
13. ALWAYS disconnect electric power to garage door opener before making any repairs or removing covers.
14. SAVE THESE INSTRUCTIONS.

Using Your Garage Door Opener

Your Security+ opener and hand-held remote control have been factory-set to a matching code which changes with each use, randomly accessing over 100 billion new codes. Your opener will operate with up to eight Security+ remote controls and one Security+ Keyless Entry System. If you purchase a new remote, or if you wish to deactivate any remote, follow the instructions in the *Programming* section.

Activate your opener with any of the following:

- *The hand-held Remote Control:* Hold the large push button down until the door starts to move.
- *The wall-mounted Door Control:* Hold the push button down until the door starts to move.
- *The Keyless Entry (See Accessories):* If provided with your garage door opener, it must be programmed before use. See *Programming*.

When the opener is activated (with the safety reversing sensor correctly installed and aligned)

1. If open, the door will close. If closed, it will open.
2. If closing, the door will reverse.
3. If opening, the door will stop.
4. If the door has been stopped in a partially open position, it will close.
5. If obstructed while closing, the door will reverse. If the obstruction interrupts the sensor beam, the opener lights will blink for five seconds.

6. If obstructed while opening, the door will stop.
7. If fully open, the door will not close when the beam is broken. The sensor has no effect in the opening cycle.

If the sensor is not installed, or is misaligned, the door won't close from a hand-held remote. However, you can close the door with the Door Control, the Outdoor Key Switch, or Keyless Entry, *if you activate them until down travel is complete*. If you release them too soon, the door will reverse.

The opener lights will turn on under the following conditions: when the opener is initially plugged in; when power is restored after interruption; when the opener is activated.

They will turn off automatically after 4-1/2 minutes or provide constant light when the Light feature on the Motion Detecting Control Console is activated. Bulb size is 100 watts maximum.

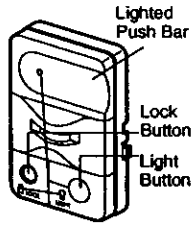
Security+ Light Feature: Lights will also turn on when someone walks through the open garage door. With a Motion Detecting Control Console, this feature may be turned off as follows: With the opener lights off, press and hold the light button for 10 seconds, until the light goes on and off again. To restore this feature, start with the opener lights on, then press and hold the light button for 10 seconds until the light goes off, then on again.

Using the Wall-Mounted Door Control

THE MOTION DETECTING CONTROL CONSOLE

Press the push bar to open or close the door. Press again to reverse the door during the closing cycle or to stop the door while it's opening.

This door control contains a motion detector that will automatically turn on the light when it detects a person entering the garage. This feature can be easily turned off for extended work light use.



Light Feature

Press the Light button to turn the opener light on or off. It will not control the opener lights when the door is in motion. If you turn it on and then activate the opener, the light will remain on for 4-1/2 minutes. Press again to turn it off sooner. The 4-1/2 minute interval can be changed to 1-1/2, 2-1/2, or 3-1/2 minutes as follows: Press and hold the Lock button until the light blinks (about 10 seconds). A single blink indicates that the timer is reset to 1-1/2 minutes. Repeat the procedure and the light will blink twice, resetting the timer to 2-1/2 minutes. Repeat again for a 3-1/2 minute interval, etc., up to a maximum of four blinks and 4-1/2 minutes.

When using the opener lights as working lights, we recommend that you first disable the motion sensor. See *Automatic Light Feature*, below.

Automatic Light Feature: The opener light will turn on automatically when a person enters the garage. When a person walks in front of the door control, the light will come on for five minutes, then shut off. This feature works by detecting body heat and may not work in temperatures around 100°F.

To disable this feature, slide the Detector Switch on the right side of the door control down (off).

We recommend that you disable the motion sensor when using the opener lights as working lights. Otherwise, they will turn off automatically if you are working beyond the sensors range.

Lock Feature

Designed to prevent operation of the door from hand-held remote controls. However, the door will open and close from the Door Control, the Outside Keylock and the Keyless Entry Accessories.

To activate, press and hold the Lock button for 2 seconds. The push bar light will flash as long as the Lock feature is on.

To turn off, press and hold the Lock button again for 2 seconds. The push bar light will stop flashing. The Lock feature will also turn off whenever the "Smart" (learn) button on the motor unit panel is activated.

Additional feature when used with the 3-function hand-held remote

To control the opener lights:

In addition to operating the door, you may program the remote to operate the lights.



1. With the door closed, press and hold a small remote button that you want to control the light.
2. Press and hold the Light button on the door control.
3. While holding the Light button, press and hold the Lock button on the door control.
4. After the opener lights flash, release all buttons.

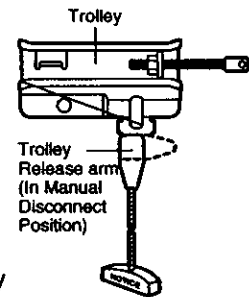
To Open the Door Manually

! WARNING

- To prevent possible **SERIOUS INJURY** or **DEATH** from a falling garage door:
 - If possible, use emergency release handle to disengage trolley **ONLY** when garage door is **CLOSED**. Weak or broken springs or unbalanced door could result in an open door falling rapidly and/or unexpectedly.
 - **NEVER** use emergency release handle unless garage doorway is clear of persons and obstructions.
- **NEVER** use handle to pull door open or closed. If rope knot becomes untied, you could fall.

DISCONNECT THE TROLLEY:

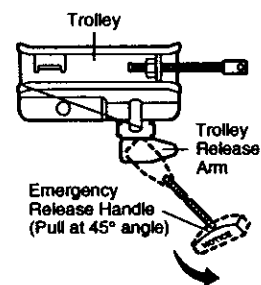
The door should be fully closed if possible. Pull down on the emergency release handle (so that the trolley release arm snaps into a vertical position) and lift the door manually. The *lockout feature* prevents the trolley from reconnecting automatically, and the door can be raised and lowered manually as often as necessary.



Lockout position (Manual disconnect)

TO RE-CONNECT THE TROLLEY:

Pull the emergency release handle toward the opener at a 45° degree angle so that the trolley release arm is horizontal. The trolley will reconnect on the next UP or DOWN operation, either manually or by using the door control or remote.

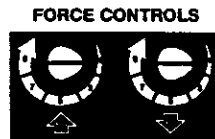


To reconnect

Care of Your Opener

LIMIT AND FORCE ADJUSTMENTS:

Weather conditions may cause some minor changes in door operation requiring some re-adjustments, particularly during the first year of operation.



Pages 28 and 29 refer to the limit and force adjustments. Only a screwdriver is required.



Follow the instructions carefully.

Repeat the safety reverse test (page 30) after any adjustment of limits or force.

MAINTENANCE SCHEDULE

Once a Month

- Manually operate door. If it is unbalanced or binding, call a trained door systems technician.
- Check to be sure door opens & closes fully. Adjust limits and/or force if necessary. (See pages 28 and 29.)
- Repeat the safety reverse test. Make any necessary adjustments. (See Adjustment Step 3.)

Twice a Year

- Check chain tension. Disconnect trolley first. Adjust if necessary (See page 11).

Once a Year

- Oil door rollers, bearings and hinges. The opener does not require additional lubrication. Do not grease the door tracks.

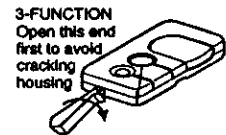
THE REMOTE CONTROL BATTERY

WARNING

To prevent possible **SERIOUS INJURY** or **DEATH**:

- NEVER allow small children near batteries.
- If battery is swallowed, immediately notify doctor.

The lithium battery should produce power for up to 5 years. To replace battery, use the visor clip or screwdriver blade to pry open the case as shown. Insert battery positive side up.



Dispose of old battery properly.

NOTICE: To comply with FCC and or Industry Canada (IC) rules, adjustment or modifications of this receiver and/or transmitter are prohibited, except for changing the code setting or replacing the battery. THERE ARE NO OTHER USER SERVICEABLE PARTS.

Tested to Comply with FCC Standards FOR HOME OR OFFICE USE. 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.

Having a Problem?

1. The opener doesn't operate from either the Door Control or the remote control:

- Does the opener have electric power? Plug a lamp into the outlet. If it doesn't light, check the fuse box or the circuit breaker. (Some outlets are controlled by a wall switch.)
- Have you disabled all door locks? Review installation instruction warnings on page 11.
- Is there a build-up of ice or snow under the door? The door may be frozen to the ground. Remove any restriction.
- The garage door spring may be broken. Have it replaced.
- Repeated operation may have tripped the overload protector in the motor. Wait 15 minutes and try again.

2. Opener operates from the remote, but not from the Door Control:

- Is the door control lit? If not, reverse the wires. If the opener runs, check for a faulty wire connection at the door control, a short under the staples, or a broken wire.
- Are the wiring connections correct? Review *Installation Step 6*, page 18.

3. The door operates from the Door Control, but not from the remote control:

- Is the door push button flashing? If your model has the Lock feature, make sure it is off.
- Program the opener to match the remote control code. (Refer to instructions on the motor unit panel.) Repeat with all remotes.

4. The remote control has short range:

- Change the location of the remote control in your car.
- Check to be sure the antenna on the side or back panel of motor unit extends fully downward.
- Some installations may have shorter range due to a metal door, foil backed insulation, or metal garage siding. (Antenna Extender Kit 41A3504)

5. Opener noise is disturbing in living quarters of home:

- If operational noise is a problem because of proximity of the opener to the living quarters, the Vibration Isolator Kit 41A3263 can be installed. This kit was designed to minimize vibration to the house and is easy to install.

6. The garage door opens and closes by itself:

- Be sure that all remote control push buttons are off.
- Remove the bell wire from the door control terminals and operate from the remote only. If this solves the problem, the door control is faulty (replace), or there is an intermittent short on the wire between the door control and the motor unit.
- Clear memory and re-program all remote controls.

7. The door doesn't open completely:

- Is something obstructing the door? Is it out of balance, or are the springs broken? Remove the obstruction or repair the door.
- If the door is in good working order but now doesn't open all the way, increase the up force. See *Adjustment Step 2*.
- If the door opens at least 5 feet, the travel limits may need to be increased. One turn equals 3 inches of travel. See *Adjustment Step 1*.

Repeat the safety reverse test after the adjustment is complete.

8. The door stops but doesn't close completely:

- Review the travel limits adjustment procedures on page 28.

Repeat the safety reverse test after any adjustment of door arm length, close force or down limit.

9. The door opens but won't close:

- If the opener lights blink, check the safety reversing sensor. See *Installation Step 10*.
- If the opener lights don't blink and it is a new installation, check the down force. See *Adjustment Step 2*. For an existing installation, see below.

Repeat the safety reverse test after the adjustment is complete.

10. The door reverses for no apparent reason and opener lights don't blink:

- Is something obstructing the door? Pull the emergency release handle. Operate the door manually. If it is unbalanced or binding, call a trained door systems technician.
- Clear any ice or snow from the garage floor area where the door closes.
- Review *Adjustment Step 2*.
- If door reverses in the fully closed position, decrease the travel limits (*Adjustment Step 1*).

Repeat safety reverse test after adjustments to force or travel limits. The need for occasional adjustment of the force and limit settings is normal. Weather conditions in particular can affect door travel.

11. The door reverses for no apparent reason and opener lights blink for 5 seconds after reversing:

- Check the safety reversing sensor. Remove any obstruction or align the receiving eye. See *Installation Step 10*.

12. The opener lights don't turn on:

- Replace the light bulbs (100 watts maximum). Use a standard neck garage door opener bulb if regular bulb burns out.

13. The opener lights don't turn off:

- Is the Light feature on? Turn it off.

14. The opener strains or maximum force is needed to operate door:

- The door may be out of balance or the springs may be broken. **Close the door** and use the emergency release handle to disconnect the trolley. Open and close the door manually. A properly balanced door will stay in any point of travel while being supported entirely by its springs. If it does not, disconnect the opener and call a trained door systems technician. **Do not increase the force to operate the opener.**

15. The opener motor hums briefly, then won't work:

- The garage door springs may be broken. See above.
- If the problem occurs on the first operation of the opener, door may be locked. Disable the door lock. If the chain was removed and reinstalled, the motor may be out of phase. Remove the chain; cycle the motor to the down position. Observe the drive sprocket. When it turns in a clockwise direction and stops in the down position, reinstall the chain.

Repeat the safety reverse test after the adjustment is complete.

16. The opener won't operate due to power failure:

- Use the emergency release handle to disconnect the trolley. The door can be opened and closed manually. When power is restored, press the Door Control push button and trolley will automatically reconnect (unless trolley is in lockout position.) See page 32.
- The Emergency Key Release accessory (for use on garages with no service door) disconnects the trolley from outside the garage in case of power failure.

17. The chain droops or sags:

- It is normal for the chain to droop slightly in the closed door position. Use the emergency release to disconnect the trolley. If the chain returns to normal height when the trolley is disengaged and the door reverses on a one-inch board, no adjustments are needed (see page 11).

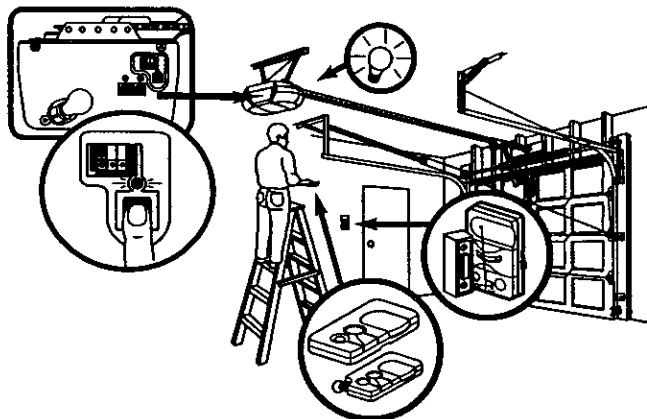
PROGRAMMING

Your garage door opener has already been programmed at the factory to operate with your hand-held remote control. The door will open and close when you press the large push button.

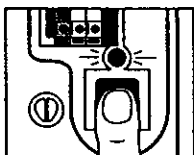
Below are instructions for programming your opener to operate with additional Security+ remote controls.

To Add an Additional Hand-held Remote Control

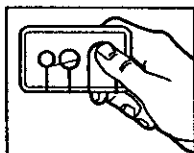
USING THE "LEARN" BUTTON



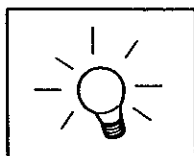
1. Press and release the "learn" button on the motor unit. The learn indicator light will glow steadily for 30 seconds.



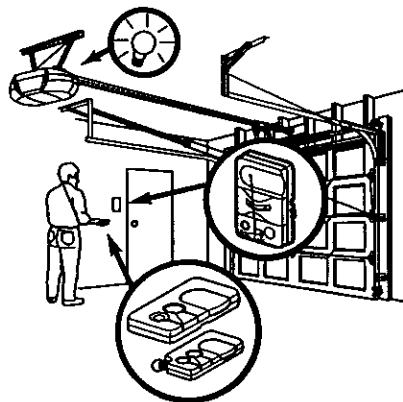
2. Within 30 seconds, press and hold the button on the hand-held remote* that you wish to operate your garage door.



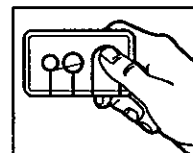
3. Release the button when the motor unit lights blink. It has learned the code. If light bulbs are not installed, two clicks will be heard.



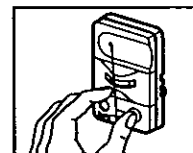
USING THE MOTION DETECTING CONTROL CONSOLE



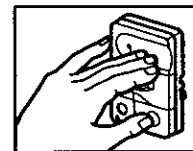
1. Press and hold the button on the hand-held remote* that you wish to operate your garage door.



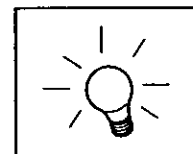
2. While holding the remote button, press and hold the LIGHT button on the Motion Detecting Control Console.



3. Continue holding both buttons while you press the push bar on the Motion Detecting Control Console (all three buttons are held).



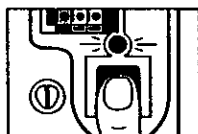
4. Release buttons when the motor unit lights blink. It has learned the code. If light bulbs are not installed, two clicks will be heard.



To Erase All Codes From Motor Unit Memory

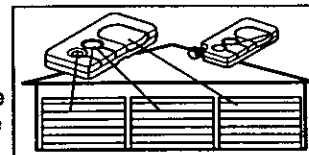
To deactivate any unwanted remote, first erase all codes:

Press and hold the "learn" button on motor unit until the learn indicator light goes out (approximately 6 seconds). All previous codes are now erased. Reprogram each remote or keyless entry you wish to use.



*3-Function Remotes

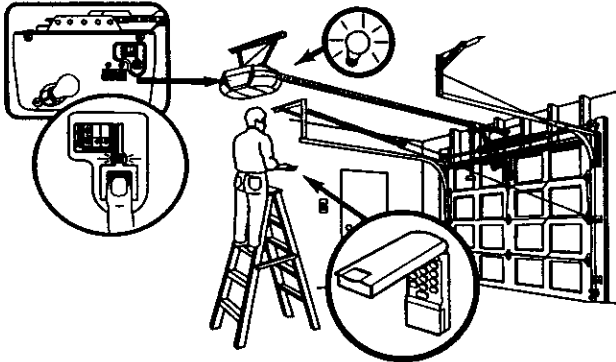
If provided with your garage door opener, the large button is factory programmed to operate it. Additional buttons on any Security+ 3-function remote or compact remote can be programmed to operate other Security+ garage door openers.



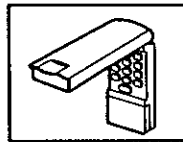
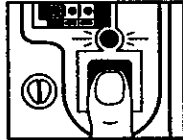
To Add or Change a Keyless Entry PIN

NOTE: Your new Keyless Entry must be programmed to operate your garage door opener.

USING THE "LEARN" BUTTON



1. Press and release the "learn" button on motor unit. The learn indicator light will glow steadily for 30 seconds.
2. Within 30 seconds, enter a four digit personal identification number (PIN) of your choice on the keypad. Then press and hold the ENTER button.
3. Release the button when the motor unit lights blink. It has learned the code. If light bulbs are not installed, two clicks will be heard.



To change an existing, known PIN

If the existing PIN is known, it may be changed by one person without using a ladder.

1. Press the four buttons for the present PIN, then press and hold the # button.
The opener light will blink twice. Release the # button.

2. Press the new 4-digit PIN you have chosen, then press Enter.

The motor unit lights will blink once when the PIN has been learned.

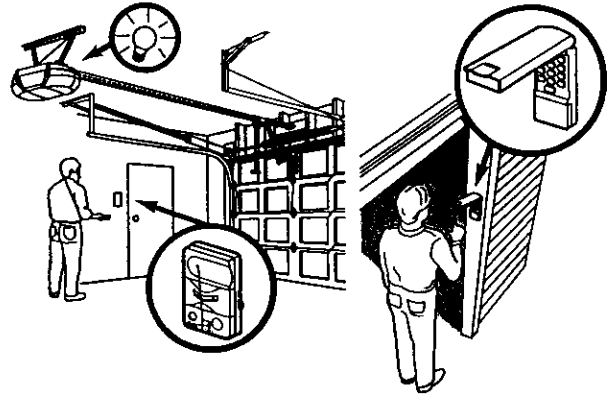
Test by pressing the new PIN, then press Enter. The door should move.

To set a temporary PIN

You may authorize access by visitors or service people with a temporary 4-digit PIN. After a programmed number of hours or number of accesses, this temporary PIN expires and will no longer open the door. It can be used to *close* the door even after it has expired. To set a temporary PIN:

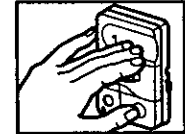
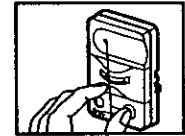
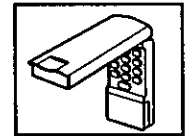
1. Press the four buttons for your personal entry PIN (not the last temporary PIN), then press and hold the * button.
The opener light will blink three times. Release the button.

USING THE MOTION DETECTING CONTROL CONSOLE



NOTE: This method requires two people if the Keyless Entry is already mounted outside the garage.

1. Enter a four digit personal identification number (PIN) of your choice on the keypad. Then press and hold ENTER.
2. While holding the ENTER button, press and hold the LIGHT button on the Motion Detecting Control Console.
3. Continue holding the ENTER and LIGHT buttons while you press the push bar on the Motion Detecting Control Console (all three buttons are held).
4. Release buttons when the motor unit lights blink. It has learned the code. If light bulbs are not installed, two clicks will be heard.



2. Press the temporary 4-digit PIN you have chosen, then press Enter.

The opener light will blink four times.

3. To set the number of *hours* this temporary PIN will work, press the number of hours (up to 255), then press *.

OR

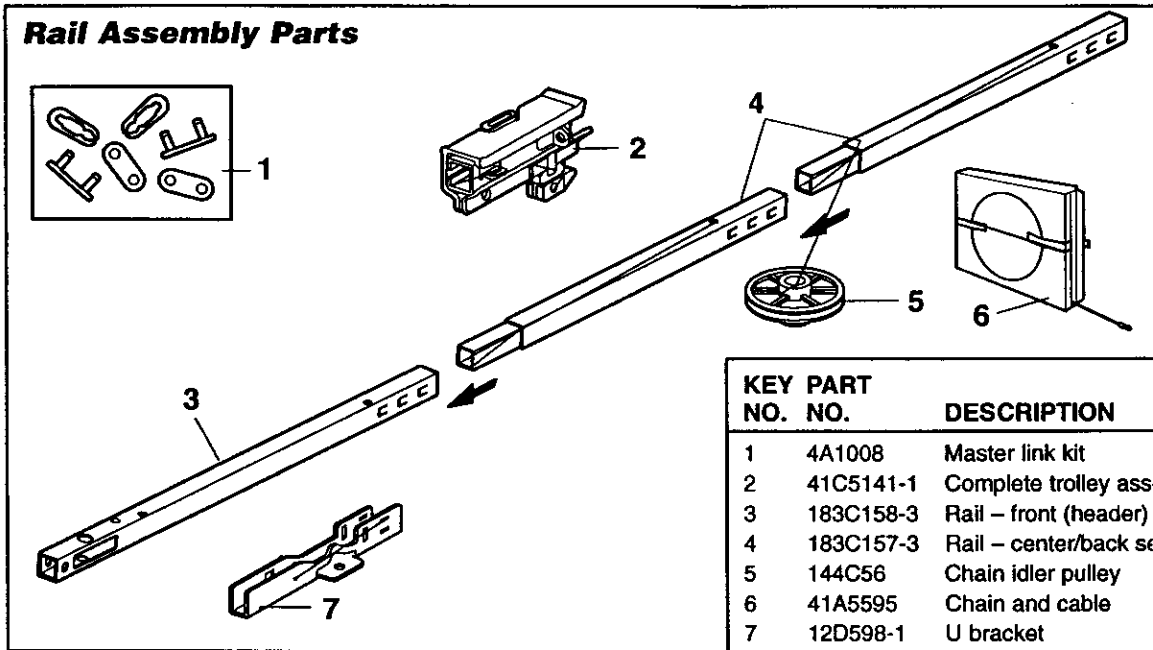
3. To set the number of *times* this temporary PIN will work, press the number of times (up to 255), then press #.

The opener light will blink once when the temporary PIN has been learned.

Test by pressing the four buttons for the temporary PIN, then press Enter. The door should move. If the temporary PIN was set to a certain number of openings, remember that the test has used up one opening. To clear the temporary password, repeat steps 1-3, setting the number of hours or times to 0 in step 3.

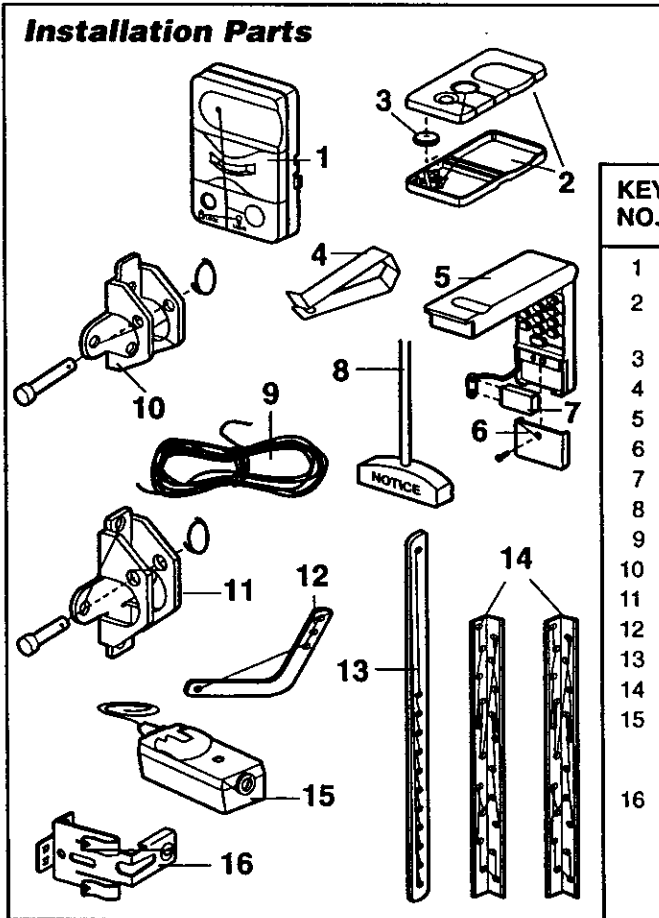
REPAIR PARTS

Rail Assembly Parts



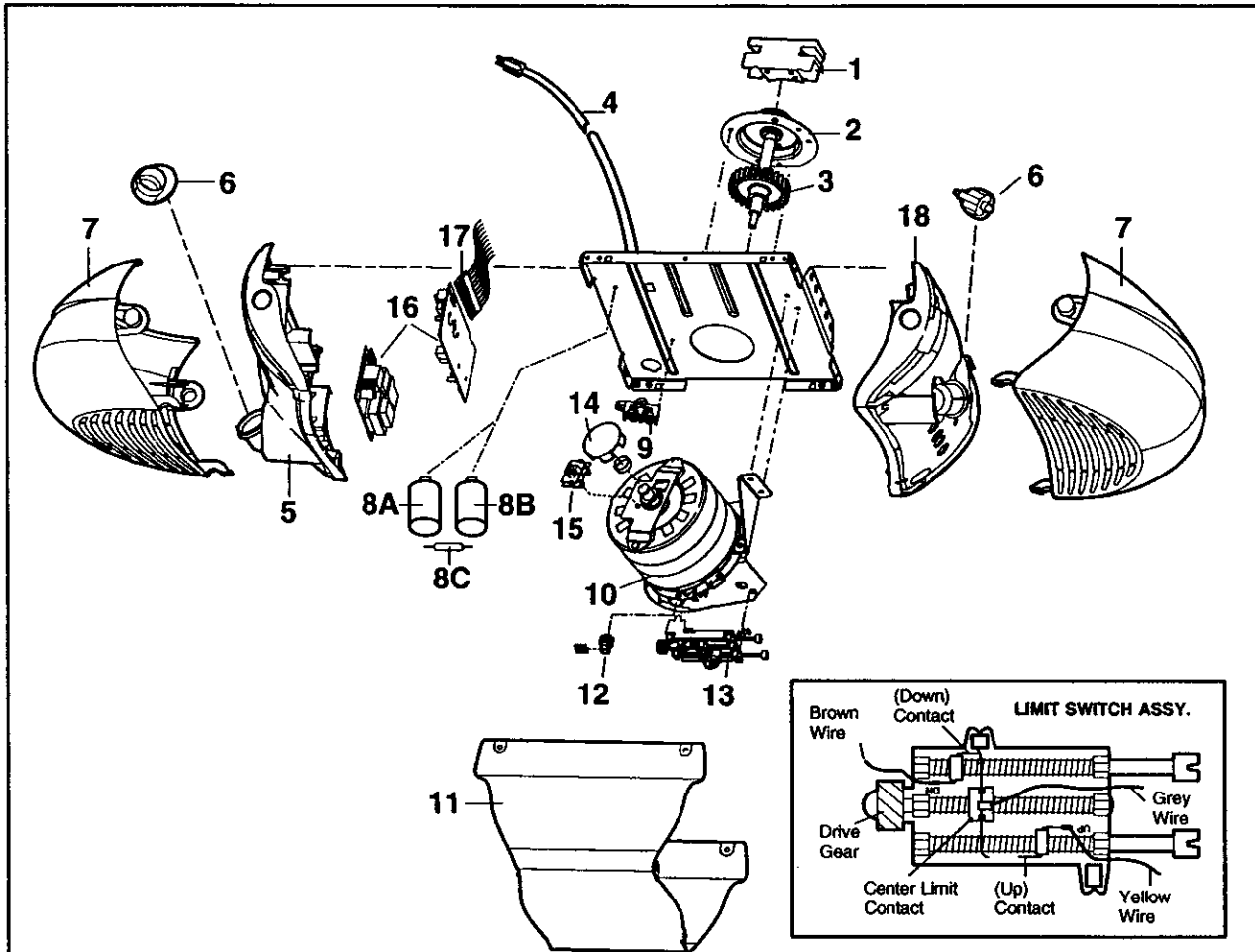
KEY PART NO.	PART NO.	DESCRIPTION
1	4A1008	Master link kit
2	41C5141-1	Complete trolley assembly
3	183C158-3	Rail – front (header) section
4	183C157-3	Rail – center/back section (2)
5	144C56	Chain idler pulley
6	41A5595	Chain and cable
7	12D598-1	U bracket
		NOT SHOWN
	183A163	Wear pads
	19A47	Cover protection bolt spacer

Installation Parts



KEY NO.	PART NO.	DESCRIPTION
1	2C472-1	Motion Detecting Control Console
2	41A5076	3-function remote control case (no circuit board)
3	10A20	3V 2032 Lithium battery
4	29B137	Visor clip
5	31D431	Keyless entry keypad cover
6	31B430	Keyless entry battery cover
7	10A2	9 Volt battery
8	41A2828	Emergency release rope & handle assy.
9	217A238	2-Conductor bell wire: white & white/red
10	12B590	Header bracket w/clevis pin & fastener
11	41A5047	Door bracket w/clevis pin & fastener
12	178B35	Curved door arm section
13	178B34	Straight door arm section
14	12B350	Hanging brackets
15	41A5034	Safety sensor kit: receiving and sending eyes with 3' 2-conductor bell wire attached
16	41A5266-1	Safety sensor bracket
		NOT SHOWN
	41A5258-7	Assy & Installation hardware bag (see page 7)
	114A2629	Owner's manual

Motor Unit Assembly Parts



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	41C10	Chain Spreader	11	41A5594	Cover
2	41A5585	Gear and sprocket assembly Complete with: Spring washer, thrust washer, retaining ring, bearing plate, roll pins (2), drive gear and worm gear, helical gear w/retainer and grease	12	41A2818	Limit switch drive & retainer
3	41A2817	Drive/worm gear kit w/grease, roll pins (2)	13	41D3452-2	Limit switch assembly
4	41B4245	Line cord	14	41A2822-1	Interrupter cup assembly
5	41A5484-3	End panel w/all labels	15	41C4398A	RPM sensor assembly
6	4A1344	Light socket	16	41A5483-14	Receiver logic board assy. Complete with: Logic board, end panel w/all labels, light socket
7	108D67	Lens	17	41C5588	High voltage wire harness assy.
8A	30B530	Motor capacitor 56uF		41C5587	Low voltage wire harness assy.
8B	30B529	Motor capacitor 40uF	18	41D178-1	End panel w/all labels
8C	41A5637	Resistor			NOT SHOWN
9	41A3150	Terminal block w/screws		41A2826	Motor shaft bearing kit
10	41D5563	Universal replacement motor & bracket assembly Complete with: Motor, worm, bracket, bearing assembly, RPM sensor		41A2825	Opener assembly hardware kit (includes screws not designated by a number in illustration)

ACCESSORIES

139.53702



Emergency Key Release:

Required for a garage with NO access door. Enables homeowner to open garage door manually from outside by disengaging trolley.

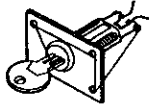
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SECURITY+ 3-Function Remote Control:

Includes visor clip.

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Outdoor Key Switch:

Operates the garage door automatically from outside when remote control is not handy.

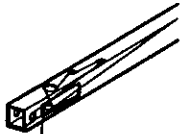
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SECURITY+ Compact 3-Function Remote Control:

With loop for attaching key ring.

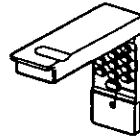
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8 Foot Rail Extension:

To allow an 8 foot door to open fully.

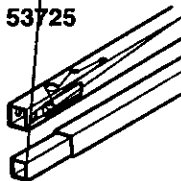
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SECURITY+ Keyless Entry:

Enables homeowner to operate garage door opener from outside by entering a password. Also can add a temporary password for visitors or service persons.

53725



10 Foot Rail Extension:

To allow a 10 foot door to open fully.

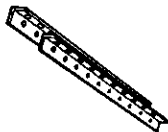
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Premium Control Console:

Provides a lock feature to prevent operation of garage door from portable remotes. A light feature controls the opener lights. Can be used to program the opener to accept additional remotes.

53589



Support Brackets:

For finished ceilings or where additional support is required, based on garage construction. Includes brackets and fastening hardware.

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Plug-In Light Control:

Enables homeowner to turn on a lamp, television or other appliance from car, bedside, or anywhere in the home with a remote.

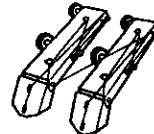
41A5281



Extension Brackets: (Available only through Sears Parts & Service)

(Optional) For safety sensor installation onto the wall or floor.

139.53709



Door Clearance Brackets: (For Sectional Doors Only)

Replaces top brackets and rollers on door to reduce height of door travel. For use when installing opener in garage with low headroom clearance.

WARRANTY

SEARS WARRANTY

Sears warrants to the first retail purchaser of this product, for the residence in which this product is originally installed.

90-DAY WARRANTY ON CRAFTSMAN GARAGE DOOR OPENER

For 90 days from the date of purchase, Sears will repair this Craftsman Garage Door Opener, free of charge, if defective in material or workmanship. In the event you have a question with the assembly or operation of your garage door opener, or have any damaged or missing parts, please contact one of our technical service representatives at 1-800-528-5236.

LIMITED WARRANTY

From the 91st day until five years from the date of purchase, Sears will furnish replacement parts for any defective parts, free of charge. Labor not included.

LIFETIME LIMITED WARRANTY ON MOTOR

If the motor on this Garage Door Opener requires replacement, Sears will furnish a new motor, free of charge. Labor not included.

LIMITATION ON LIABILITY

3/4HP MOTOR: This limited warranty is in lieu of any other warranties, express or implied, including any implied warranty of merchantability of fitness for a particular purpose. This limited warranty does not cover non-defective damage, damage caused by improper installation, operation or care, replacement of batteries and light bulbs or units installed for non-residential use.

Under no circumstances shall seller be liable for consequential, incidental or special damages arising in connection with use, or inability to use, this product. In no event shall seller's liability for breach of warranty, breach of contract, negligence or strict liability exceed the cost of the product covered hereby. No person is authorized to assume for us any other liability in connection with the sale of this product.

FROM THE 91ST DAY, WARRANTY SERVICE IS AVAILABLE BY SIMPLY CONTACTING THE NEAREST SEARS STORE OR SEARS SERVICE CENTER IN THE UNITED STATES.

This warranty applies only while this product is in use in the United States.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Sears, Roebuck and Co., Dept. 817 WA, Hoffman Estates, IL 60179