

## ASSEMBLY AND INSTALLATION POSTER



FASTENERS\* SHOWN FULL SIZE

## RAIL TO POWER HEAD

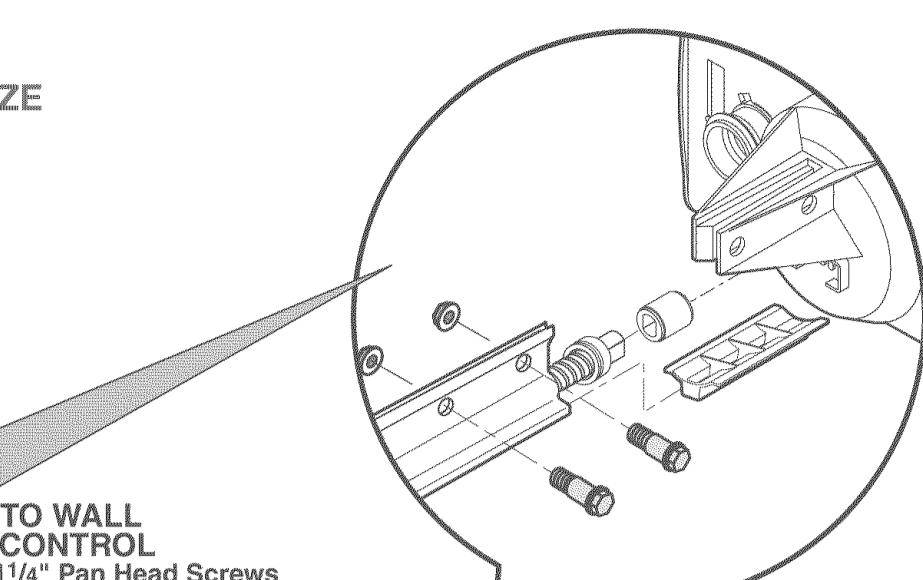
- Item #6 Carriage Stop
- TO WALL CONTROL Two #6 x 1 1/4" Pan Head Screws not shown (Red bag)
- Item #39 Coupler
- Item #4 1/4"-20 x 1" Hex Shoulder Bolt
- Item #5 1/4"-20 Hex Serrated Flange Nut

## POWER HEAD TO CEILING

- Item #46 5/16"-18 X 3/4" Hex Bolt
- Item #9 5/16"-18 Hex Flange Nut
- Item #22 1/4" x 2" Lag Screw

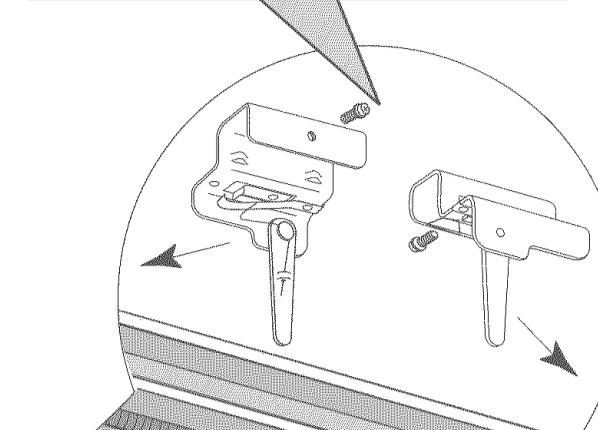
## RAIL SECTION CONNECTION

- Item #8 5/16"-18 x 11/16" Hex Shoulder Bolt
- Item #9 5/16"-18 Hex Flange Nut
- Item #11 Screw Joint Collar
- Item #12 Screw Joint Clip



## LIMIT SWITCHES

- Item #21 #8-32 x 3/8" Phillips Hex Screw



## READ OWNER'S MANUAL COMPLETELY PRIOR TO INSTALLATION

## HEADER / RAIL BRACKET / STRAP

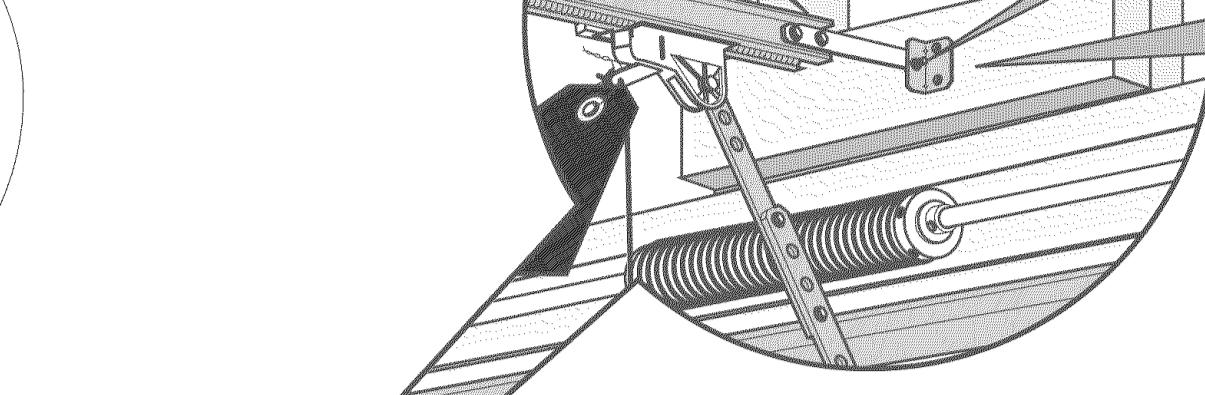
- Item #9 5/16"-18 Hex Flange Nut

- Item #22 1/4" x 2" Lag Screw

BASED ON THE HEIGHT OF YOUR HEADER, A MOUNTING BOARD MAY BE REQUIRED FOR ATTACHING HEADER BRACKET

## RAIL STRAP/RAIL

- Item #46 5/16"-18 x 3/4" Hex Bolt
- Item #9 5/16"-18 Hex Flange Nut



## WIRE CLIPS

- Item #44 Wire Clip



- Item #38 Insulated Staple



## DOOR BRACKET TO DOOR ARMS

- Item #24 Clevis Pin, 3/8" x 15/16"

- Item #25 Cotter Pin, .073" DIA.

- Item #47 1/4"-20 x 3/4" Self Drilling Screw

## LIGHTWEIGHT DOORS

- Item #22 1/4" x 2" Lag Bolt

## WOODEN DOORS

- NOT INCLUDED 1/4"-20 x 2" Carriage Bolt / 1/4"-20 Hex Flange Nut

## WOODEN DOORS

**DOORS MADE OF MASONITE, LIGHTWEIGHT WOOD, FIBERGLASS, AND METAL MUST BE PROPERLY BRACED BEFORE MOUNTING DOOR OPENER. CONTACT DOOR MANUFACTURER OR DISTRIBUTOR FOR BRACING INSTRUCTIONS.**

## SECTIONAL DOORS (SHORT AS POSSIBLE)

## ONE-PIECE DOORS (LONG AS POSSIBLE)

## DOOR ARMS

- Item #28 3/8"-16 Hex Flange Nut

- Item #27 3/8"-16 X 7/8" Hex Bolt



## Safe-T-Beam® BRACKETS

- Item #40 #10 x 1-1/4" Phillips Hex Screw

## GARAGE DOOR OPENER ASSEMBLY

## ASAMBLEA DEL ABREPUERTAS DEL GARAJE

## ASSEMBLY STEP 1: CONNECT RAIL TO POWER HEAD

## OPEN BLUE PARTS BAG

- A Turn Power Head so that front panel (with end of shaft and rail attachment flange) is facing up and place on a flat level surface.
- B Install Coupler on Motor Shaft (Figure 1).

- Place Coupler over end of shaft. Turn it until it drops down over the shaft.
- Lay Power Head on its bottom.

## CAUTION

The Drive Screw can slide out of Rail Sections. Keep Rail Sections level until the Opener is fully assembled.

- C Connect first Rail Section [with bearing (Figure 1)] to Opener Power Head.
- Slide Drive Screw so that bearing end extends several inches out of rail.
  - Insert bearing end of Screw into Coupler.
  - Slide Rail into attachment flange and align holes.
  - Connect with 2 (1/4"-20) Hex Head Shoulder Bolts and 2 (1/4"-20) Hex Serrated Flange Nuts (Figure 2). Finger-tighten until later.

- D Slide carriage stop into rail and up against the power head.

## ASSEMBLY STEP 2: INSTALL REMAINING RAIL SECTIONS

- A Arrange arrows on Rail Sections to point in same direction and away from Power Head. (Middle rail same on both ends.)
- Connect Screw settings:
    - Push Middle Drive Screw out about 2" toward Power Head.
    - Slide Collar over Middle Drive Screw Hook (Figure 3A).
    - Turn Middle Screw by hand to align Drive Screw Hooks between First and Middle Rail Sections.
    - Latch two Hooks together and slide Collar over them (Figure 3B) and (Figure 3C).

- B Attach Middle Rail Section to First Rail Section, using 2 Rail Clamps, 4 (5/16"-18) Hex Shoulder Bolts, and 4 (5/16"-18) Hex Head Serrated Flange Nuts (Figure 3C). Finger tighten until later.

## NOTE

If a Rail Extension is needed, attach it now per the instructions included with the Kit.

- C Attach End Rail Section to Middle Rail Section following procedures in Step A & B.

## ASSEMBLY STEP 3: INSTALL CARRIAGE

- A Flip Power Head / Rail Assembly upside down so that entire length of the screw is visible.

- B Slide Carriage Assembly into slot on End Rail Section with arrow pointing away from the Power Head (Figure 4).

Power Head Assembly Accione la asamblea de cabeza

First Rail Section Primera sección de baranda

Carriage Stop Parada de coche

Coupler El acoplador

Arrows point toward door Las flechas indican hacia la puerta

Collar El cuello

Rail Clamps La abrazadera de la baranda

Retaining Clips El clip que retiene

Middle Rail Section La sección media de la baranda

Engage La posición comprometida

Released Position Libere la posición

Toward door and header Hacia puerta

Carriage Assembly Asamblea del coche en Baranda

Toward Power Head Hacia cabeza de poder

Figure 1 Install Coupler and 1st Rail Section

Figura 1 Instale el acoplador y primera sección de baranda

Figure 2 Bolt 1st Rail Section to Power Head

Figura 2 Cierre primera sección de baranda a la cabeza del poder

Figure 3 Attach Middle Rail Section

Figura 3 Conecte la sección media de baranda

Figure 4 Slide Carriage onto Rail

Figura 4 Deslice la Asamblea del coche en Baranda

Figure 5 Attach Rail Strap

Figura 5 Correa del riel

Figure 6 Install Limit Switches on Assembled Rail

Figura 6 Instale los Interruptores de los Límites

Figure 7 Attach Emergency Release Cord/Knob and Tag

Figura 7 Conecte la Emergencia Cuerda de Liberación y Etiqueta

Figure 8 Emergency Release Tag

Figura 8 La etiqueta de liberación de emergencia

Figure 9 Emergency Release Knob

Figura 9 La Perilla de liberación de emergencia

Figure 10 Emergency Release Cord

Figura 10 La Cuerda de liberación de emergencia

Figure 11 Emergency Release Cord

Figura 11 La Cuerda de liberación de emergencia

Figure 12 Emergency Release Cord

Figura 12 La Cuerda de liberación de emergencia

Figure 13 Emergency Release Cord

Figura 13 La Cuerda de liberación de emergencia

Figure 14 Emergency Release Cord

Figura 14 La Cuerda de liberación de emergencia

Figure 15 Emergency Release Cord

Figura 15 La Cuerda de liberación de emergencia

Figure 16 Emergency Release Cord

Figura 16 La Cuerda de liberación de emergencia

Figure 17 Emergency Release Cord

Figura 17 La Cuerda de liberación de emergencia

Figure 18 Emergency Release Cord

Figura 18 La Cuerda de liberación de emergencia

Figure 19 Emergency Release Cord

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Figure 22 Emergency Release Cord

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Figure 24 Emergency Release Cord

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Figure 26 Emergency Release Cord

Figura 26 La Cuerda de liberación de emergencia

Figure 27 Emergency Release Cord

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Figure 35 Emergency Release Cord

Figura 35 La Cuerda de liberación de emergencia

Figure 36 Emergency Release Cord

Figura 36 La Cuerda de liberación de emergencia

Figure 37 Emergency Release Cord

Figura 37 La Cuerda de liberación de emergencia

Figure 38 Emergency Release Cord

Figura 38 La Cuerda de liberación de emergencia

Figure 39 Emergency Release Cord

# GARAGE DOOR OPENER INSTALLATION

## NOTE

For lightweight garage doors, make sure you have installed the proper reinforcement (See Check door Condition and Thickness in Operation and Maintenance Manual).

## INSTALLATION STEP 1: MOUNT HEADER BRACKET

### CAUTION

- The Header Bracket must be fastened to the garage framing. Do not fasten the Header Bracket to drywall, particle board, plaster, or other such materials.
- It may be necessary to attach a 2" x 6" board across the wall stud above the door header to serve as a mounting plate for the Header Bracket. The Bracket can then be mounted at the proper location and have sufficient support.
- If a door spring is in the way, place the Header Bracket above the spring. Do not move the door spring.

A Before mounting the header bracket, see CHECK STEP 4, in Operation and Maintenance Manual for mounting instructions. If needed, attach a 2" x 6" board across wall studs where you made your Header Bracket mounting point mark (Figure 8). Transfer your mark from wall to board.

## OPEN ORANGE PARTS BAG

B Attach Header Bracket to header at your mark above garage door.

## NOTE

It is critical that point where Rail attaches to Bracket be on centerline of door.

- Mark two Rail hole locations.
- Drill two (5/32") pilot holes.
- Attach Header Bracket using 2 (1/4" x 2") Lag Screws.

## INSTALLATION STEP 2: MOUNT DOOR BRACKET

### CAUTION

Doors made of masonite, lightweight wood, fiberglass, metal, or other lightweight materials must be properly braced before mounting door Opener.

## For sectional doors:

- Attach the door to the center door line, no lower than top roller and mark holes (Figure 9).
- Attach Door Bracket:
  - For metal doors, use 3 (1/4" - 20 x 3/4") Self-Drilling Screws (provided).
  - For wood doors, use 3 (1/4" x 2") Lag Screws or 3 (1/4" x 1-1/4") Lag Screws (not provided).

## NOTE

Before installing, check length of the included Lag Screws vs. the thickness of your garage door. For doors thinner than 2", use 1-1/4" Lag Screws. Check door condition and thickness. See Operation and Maintenance Manual.

## For one-piece doors:

- Position Door Bracket on door's center line, as high as possible or on top of door.
- Attach Door Bracket:
  - For metal doors, use 3 (1/4" - 20 x 3/4") Self-Drilling Screws (provided).
  - For wood doors, use 3 (1/4" x 2") Lag Screws.

## INSTALLATION STEP 3: ATTACH RAIL TO HEADER BRACKET

A While supporting the Power Head, place threaded end of Rail Strap Bolt through Header Bracket hole (Figure 10).

B Attach (5/16"-18) Flange Nut to Rail Strap Bolt. Finger-tighten until later.

## INSTALLATION STEP 4: MOUNTING POWER HEAD

### CAUTION

Mounting Brackets must be fastened to garage framing. Do Not fasten to drywall, particle board, plaster, or other such materials.

## NOTE

Mounting Brackets can be attached to brick walls or concrete floor using masonry anchors (not included).

B Make sure the rail of your supported Power Head is slightly higher than the highest point of door travel by raising the track. Adjust as needed.

C Materials needed for mounting Power Head to garage may vary. Read all instructions carefully. Extra material may be needed. See Check Power Head Mounting Area in Operation and Maintenance Manual.

## Figure 9 Attach Header Bracket

## Figure 9 Conecte el paréntesis de pared

## SECTIONAL DOORS LAS PUERTAS DE UN PEDAZO

## ONE-PIECE DOORS LAS PUERTAS DE UN PEDAZO

## UNFINISHED CEILINGS

## FINISHED CEILINGS

## LOS TECHOS TERMINADOS

## LOS TECHOS TERMINADOS

## Rail Strap Bolt

## Header Bracket

## Figure 10 Attach Rail Strap to Header Bracket

## Figure 10 Conecte baranda correal paréntesis del encabezamiento

- For multiple-door garages see (Figure 16).
- Preventing crossed signals is critical.
- Line up Power Head and Rail with center of garage door.
- Keep Power Head centered, mount to ceiling:
  - For sectional doors, mount power head at a height where rail is level or slightly lower:
    - Check for clearance between Rail and door as it opens.
  - For one-piece doors, mount power head so that there is a minimum clearance of 2" between Rail and door as it opens (Figure 12).

- Using one of the methods shown (Figure 12), mount Power Head (5/16"-18 x 3/4" hex head bolts, 5/16"-18 Flange Nuts and 1/4" x 2" Lag Bolts). It is possible to use other mounting methods. The critical factor is that the mounting assembly be rigidly enough to support the weight of the Power Head. DO NOT ATTACH TO DRYWALL OR SUSPENDED CEILING. It must be anchored to the garage framework.

## INSTALLATION STEP 5: ASSEMBLE AND CONNECT DOOR ARMS

## OPEN YELLOW PARTS BAG

## For sectional doors:

- Attach Curved Door Arm to Door Bracket with Clevis Pin and Cotter Pin (Figure 13).
- Attach Straight Door Arm to Carriage with Clevis Pin and Cotter Pin (Figure 14).
- Attach both Arms together with 2 (3/8" x 7/8") Hex Head Bolts and 2 (3/8") Serrated Flange Hex Nuts so overall length is as short as possible. Securely tighten fasteners.

- Adjust height of Emergency Release Cord Knob to 6" above floor:
  - Pull Cord through Carriage Release Lever until Knob is 6' from floor.
  - Tie a new overhand knot in Cord at Carriage Release Lever.

- For one-piece doors:
  - Attach Straight Arm to Door Bracket with Clevis Pin and Cotter Pin (Figure 14).
  - Attach Curved Arm to Carriage with Clevis Pin and Cotter Pin (Figure 15).
  - Attach both Arms together with 2 (3/8" x 7/8") Hex Head Bolts and 2 (3/8") Serrated Flange Hex Nuts so overall length is as long as possible. Securely tighten fasteners.

- Adjust height of Emergency Release Cord Knob to 6" above floor:
  - Pull Cord through Carriage Release Lever until Knob is 6' from floor.
  - Tie a new overhand knot in Cord at Carriage Release Lever.

- For doors made of masonite, lightweight wood, fiberglass, metal, or other lightweight materials must be properly braced before mounting door Opener.
- Do not skip Step D above!
- Failure to comply may leave Emergency Release Knob within reach of children. If the Knob is pulled with garage door fully or partially open, garage door may close RAPIDLY without warning!

- Attach Door Bracket:
  - For metal doors, use 3 (1/4" - 20 x 3/4") Self-Drilling Screws (provided).
  - For wood doors, use 3 (1/4" x 2") Lag Screws or 3 (1/4" x 1-1/4") Lag Screws (not provided).

- For doors made of masonite, lightweight wood, fiberglass, metal, or other lightweight materials must be properly braced before mounting door Opener.
- Do not skip Step D above!
- Failure to comply may leave Emergency Release Knob within reach of children. If the Knob is pulled with garage door fully or partially open, garage door may close RAPIDLY without warning!

- Before installing, check length of the included Lag Screws vs. the thickness of your garage door. For doors thinner than 2", use 1-1/4" Lag Screws. Check door condition and thickness. See Operation and Maintenance Manual.

## INSTALLATION STEP 6: INSTALL SAFE-T-BEAM® SYSTEM

### ELECTRICAL WARNING

Ensure there is NO power to the Opener before installing Wall Control Wires.

## NOTE

More than one lighted Wall Control per Opener will cause a malfunction.

## Wall Controls (Figure 21)

- A Finding the mounting location (Figure 22):**
  - Pick a convenient location for mounting wall control:
    - location you choose should be in direct sight of door.
    - It should be at least 5' above floor to prevent small children from operating door.
    - It must be away from any moving parts. You should not be able to reach the garage door while standing at Wall Control.

- B Wiring (Figure 22):**
  - Run wire from Power Head to Wall Control.
  - Screws fasten to ceiling and wall using insulation provided.
  - Split and strip ends of wire.
  - On Power Head:
    - Attach the white wire to Terminal #1 and striped wire to Terminal #2.
    - On back of Wall Control:
      - Attach striped wire to "B" and white wire to "W".

- C Mounting:**
  - Fasten wall control to wall with 2 screws.
  - Remove protective backing from Entrapment Warning Label.
  - Stick label on wall near Wall Control.

- D Attaching arms (Figure 23):**
  - Mounting Brackets can be attached to brick walls or concrete floor using masonry anchors (not included).
  - Attach Safe-T-Beam® Source (Red LED) and Sensor (Green LED) to Brackets with 2 (3/8" x 7/8") Hex Head Bolts and 2 (3/8") Serrated Flange Hex Nuts (not included).
  - Materials needed for mounting Power Head to garage may vary. Read all instructions carefully. Extra material may be needed. See Check Power Head Mounting Area in Operation and Maintenance Manual.

## NOTE

Mounting Brackets must be fastened to garage framing. Do Not fasten to drywall, particle board, plaster, or other such materials.

## NOTE

Mounting Brackets can be attached to brick walls or concrete floor using masonry anchors (not included).

## NOTE

Make sure the rail of your supported Power Head is slightly higher than the highest point of door travel by raising the track. Adjust as needed.

## NOTE

Materials needed for mounting Power Head to garage may vary. Read all instructions carefully. Extra material may be needed. See Check Power Head Mounting Area in Operation and Maintenance Manual.

## Figure 11 Adjust the power head height

## Figure 11 Ajuste la altura de cabeza de poder

## SECTIONAL DOORS LAS PUERTAS DE UN PEDAZO

## ONE-PIECE DOORS LAS PUERTAS DE UN PEDAZO

## UNFINISHED CEILINGS

## Floor strap bolt

## Header bracket

## Header bracket