



Quantum™

GARAGE DOOR OPENER

OWNER INSTALLATION AND USER MANUAL Series 3000 Models 3214, 3314, 3316 & 3414

**Automatic Garage Door Opener
For Sectional Overhead Residential Doors Only
DO NOT USE ON ONE PIECE DOORS**

**Before Starting Installation Read all Instructions Thoroughly
to Familiarize Yourself with All Aspects of Installation and Adjustment!**



**DOOR AND OPENER WILL NOT OPERATE PROPERLY UNTIL INFRARED SAFETY
SENSORS ARE INSTALLED AND PROPERLY ADJUSTED! DO NOT OPERATE DOOR
OPENER UNTIL FULLY INSTALLED, ADJUSTED & INSTRUCTED TO DO SO!**

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Read These Important Safety Rules Before Proceeding



This symbol indicates caution and appears throughout this instruction manual. This garage door opener is designed and tested to offer reasonably safe operation if installation is followed in strict accordance with these safety instructions. Failure to comply with these instructions may result in serious personal injury or property damage.

IMPORTANT INSTALLATION INSTRUCTIONS

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



READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS.



Do not connect opener to source of power until instructed to do so.



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



Installation and wiring must comply with local building and electrical codes. Connect the power cord to a properly grounded outlet. Do not remove round ground pin from power cord.



To reduce the risk of injury to persons, use this operator only with sectional overhead doors.



Install entrapment warning label next to control button in a prominent location, such as the inside of the garage door, or as instructed in the installation instructions. If label adhesive will not adhere to the surface, secure the label by additional mechanical means such as staples, nails or screws. If necessary, use an intermediate mounting surface, such as plywood, cut to the appropriate size. Install Emergency Release tag to the emergency red cord.



Fiberglass, aluminum and steel doors must be reinforced to prevent damage to the door. Check with your garage door manufacturer for their recommendations.



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



After installing opener, the door must reverse when it contacts a 1 inch high solid test object on the floor.



Do not use sensitivity adjustments to compensate for a poorly operating door. This will interfere with the proper operation of the safety reverse mechanism and may damage the door.



Open door must not close and closing door must open if photoelectric system is obstructed by 6" x 12" object, using test procedure described in Step 30.



Locate control button: within sight of door, at a minimum height of 5 feet, so small children cannot reach it, and away from all moving parts of the door.



Do not wear rings, watches or loose clothing when installing or servicing a garage door system. Use a sturdy, non-metallic step ladder.



If possible, install door opener 7 feet or more above floor. Mount the emergency release knob 6 feet above the floor.

AFTER INSTALLATION IS COMPLETE, FASTEN THIS MANUAL NEAR GARAGE DOOR.

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

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

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

IC Regulatory Information: This Class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations. 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.

Veillez lire ces règles de sécurité importantes avant de commencer les travaux



Ce symbole vous demande de prendre les précautions voulues. Vous le trouverez d'un bout à l'autre du présent guide d'installation. Cet ouvre porte de garage a été conçu et essayé pour vous offrir un fonctionnement sécuritaire dans la mesure où les directives d'installation sont respectées conformément à ces mesures de sécurité. Le non respect de ces mesures de sécurité risqué d'entraîner des blessures corporelles graves et des dommages matériels.

IMPORTANT —NOTICE D'INSTALLATION— AVERTISSEMENT —POUR REDUIRE LES RISQUES DE BLESSURES MORTELLES



LISEZ CETTE NOTICE ET CONFORMEZ-VOUS AUX INSTRUCTIONS.



NE POSEZ CET OUVERTE-PORTE QUE SUR UNE PORTE DE GARAGE CORRECTEMENT ÉQUILIBRÉE. UNE PORTE MAL ÉQUILIBRÉE PEUT CAUSER DES BLESSURES GRAVES. CONFIEZ LA RÉPARATION DES CABLES, DES RESSORTS, ET DE TOUT AUTRE ÉLÉMENT À UN TECHNICIEN QUALIFIÉ AVANT D'ENTREPRENDRE L'INSTALLATION.



POUR RÉDUIRE LE RISQUE DE BLESSURES CORPORELLES, UTILISER CET OUVERTE-PORTE POUR DES PORTES BASCULANTES SECTIONNELLES UNIQUEMENT.



LES PORTES EN FIBRE DE VERRE, EN ALUMINUM ET EN ACIER DOIVENT ÊTRE RENFORCÉES POUR ÉVITER D'ENDOMMAGER LA PORTE. CONSULTEZ LE FABRICANT DE VOTRE PORTE DE GARAGE POUR OBTENIR SES RECOMMANDATIONS.



ENLEVEZ LES CORDES ET ENLEVEZ OU NEUTRALISEZ TOUT DISPOSITIF DE VERROUILLAGE SOLIDAIRE DE LA PORTE DE GARAGE AVANT L'INSTALLATION.



NE VOUS SERVEZ PAS DES RÉGLAGES DE LA SENSIBILITÉ POUR COMPENSER LE MAUVAIS FONCTIONNEMENT D'UNE PORTE. CECI POURRAIT FAIRE OBSTACLE AU BON FONCTIONNEMENT DU MÉCANISME DE L'INVERSEUR DE SÉCURITÉ ET POURRAIT ENDOMMAGER LA PORTE.



DANS LA MESURE DU POSSIBLE, INSTALLEZ L'OUVERTE-PORTE À AU MOINS 2.14M (7PI) DU SOL. POSEZ LE DISPOSITIF DE DÉSCOUPLEMENT D'URGENCE À 1.83 M (6 PI) DU SOL.



INSTALLEZ LE BOUTON DE COMMANDE À UN ENDROIT QUE L'ON PEUT VOIR DE L'EMBRASURE DE LA PORTE, À UNE HAUTEUR MINIMALE DE 1.53 M (5 PI) DU SOL —AFIN QUE LES JEUNES ENFANTS NE PUISSENT PAS L'ATTEINDRE—ET À L'ENCART DES PIÈCES MOBILES DE LA PORTE.



APOSEZ L'ÉTIQUETTE DE MISE EN GARDE RELATIVE AU DANGER DE HAPPEMENT À PROXIMITÉ DU BOUTON DE COMMANDE ET L'ÉTIQUETTE RELATIVE AU RÉGLAGE DE LA COMMANDE À UN EMPLACEMENT EN ÉVIDENCE—PAR EXEMPLE SUR LA PAROI INTÉRIEURE DE LA PORTE DE GARAGE OU SELON LES INSTRUCTIONS DE LA NOTICE D'INSTALLATION. APOSEZ L'ÉTIQUETTE RELATIVE AU DÉSCOUPLEMENT D'URGENCE SUR LE DISPOSITIF OU À PROXIMITÉ DE CE DERNIER.



NE BRANCHEZ PAS L'OUVERTE-PORTE AVANT D'ÊTRE AUTORISÉ PAR LA NOTICE.



UNE FOIS L'OUVERTE-PORTE INSTALLÉ, LES SENS DE LA COURSE DOIT S'INVERSER LORSQUE LA PORTE ENTRE EN CONTACT AVEC UN OBJET D'UNE HAUTEUR DE 25.4MM (1 PO) POSE SUR LE SOL.



L'INSTALLATION ET LE BRANCHEMENT ÉLECTRIQUE DOIVENT ÊTRE CONFORMES AUX CODES LOCAUX DU BÂTIMENT ET DE L'ÉLECTRICITÉ RACCORDER LE CORDON D'ALIMENTATION À UNE PRISE ADÉQUATEMENT MISE À LA TERRE. NE PAS ENLEVER LA BRANCHE RONDE DE MISE À LA TERRE DU CORDON D'ALIMENTATION.



SI LE SYSTÈME PHOTOÉLECTRIQUE EST BLOQUÉ PAR UN OBJET DE PLUS DE 6 PO X 12 PO, LA PORTE OUVERTE NE DOIT PAS SE FERMER ET LA PORTE SE FERMANT DOIT S'OUVRIRE. VÉRIFIER CELA EN UTILISANT LA VÉRIFICATION DÉCRITE À L'ÉTAPE 20.



NE PAS PORTER DES BAGUES, DES MONTRES OU DES VÊTEMENTS LÂCHES PENDANT L'INSTALLATION OU LA VÉRIFICATION TECHNIQUE DU SYSTÈME DE PORTE DE GARAGE. UTILISER UNE ÉCHELLE NON MÉTALLIQUE STABLE.



CONSERVEZ CES INSTRUCTIONS.

APRÈS L'INSTALLATION, PLACER CE MANUEL À PROXIMITÉ DE LA PORTE DE GARAGE FAIRE RÉGULIÈREMENT LES VÉRIFICATIONS RECOMMANDÉES CONCERNANT LA SÉCURITÉ L'ENTRETIEN ET LES RÉGLAGES

"Cet appareillage numérique de la classe B répond à toutes les exigences de l'interférence canadienne causant des règlements d'équipement. L'opération est sujette aux deux conditions suivantes: (1) cet dispositif peut ne pas causer l'interférence nocive, et (2) ce dispositif doit accepter n'importe quelle interférence reçue, y compris l'interférence qui peut causer l'opération peu désirée."

Automatic Garage Door Opener – For Residential Doors Only

FEATURES

- 1. Open and Close Cycle Control:** Allows garage door to be started and stopped by push button, transmitter or wall station. The next impulse sends garage door in opposite direction.
- 2. Emergency Disconnect:** Manual disconnect permitting operation of door during power failure with automatic reconnect when opener is reactivated. See pg 26.
- 3. Opener light:** Automatically turns on when opener is activated and remains on for 4 minutes for convenience and safety.
- 4. Mechanical Door Lock:** When properly adjusted, opener locks door in closed position preventing unwanted entry. See Adj. # 3 pg 22.
- 5. Obstruction Warning Light:** The convenience light will flash after sensing an obstruction in the down direction and/or if the safety system malfunctions while in the open position.
- 6. Motor:** Permanently lubricated, thermally protected, heavy duty motor with automatic reset.
- 7. Safety System:** Independent up and down force adjustments. When properly adjusted, the safety system will automatically reverse when obstructed in down direction and return to fully open position. The door will stop when obstructed in the up direction. See Adj. #2, pg 22.
- 8. Infrared Safety Sensors:** Wired or wireless infrared reversing sensors detect an obstruction in door path and react by reversing door.
- 9. Multi-Function Wall Station:** Wired wall station provides up/down door motion control and independent overhead light on/off control. Wireless wall station provides up/down door motion control, independent overhead light on/off control, door down delay, adjustable “pet position” function, and “pet position” program button.
- 10. Homelink™ Compatibility:** Opener is capable of “learning” automobile equipped Homelink™ transceivers. Visit: www.homelink.com.
- 11. Rolling Code Technology:** Wireless transmitters and wall stations use rolling code which prevents would-be thieves from “grabbing” the transmitter’s digital code.

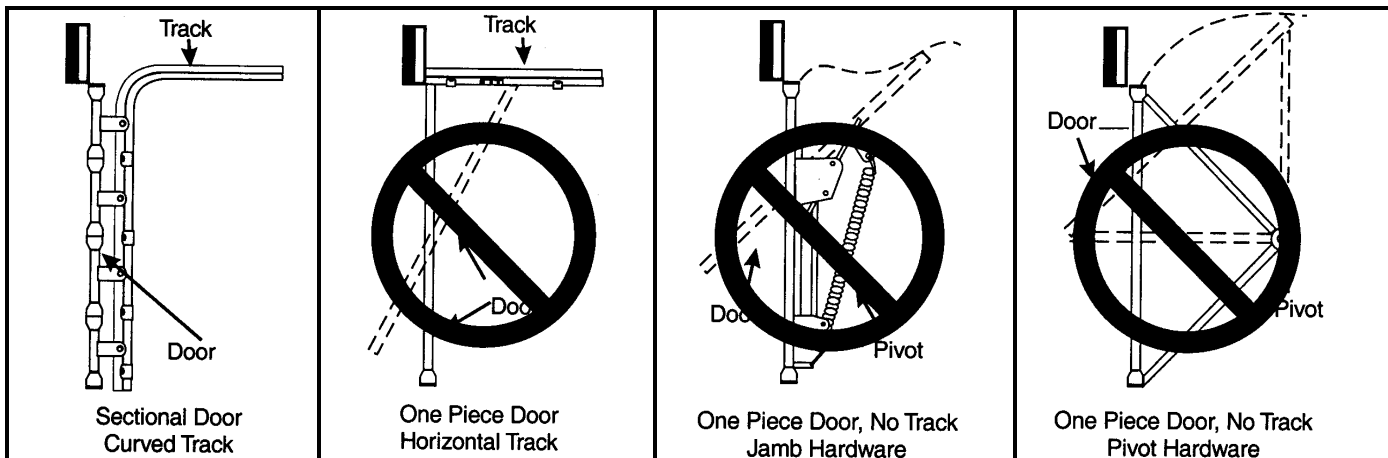
Before Starting Installation Read These Instructions Thoroughly to Familiarize Yourself with All Aspects of Installation and Adjustment!

Caution: If your garage has no service entrance door, install optional outside quick release lock. This accessory allows manual operation of garage door from outside in case of power failure.

Before Starting

Identify the door referring to illustrations below and verify that the door type is a sectional door with curved track. Do not install if the door is any type of one piece door.

Note: The opener has been designed for sectional doors. Do not attempt to install this opener on any style one piece door. Use of the enclosed opener on a one-piece door may result in serious personal injury or property damage.

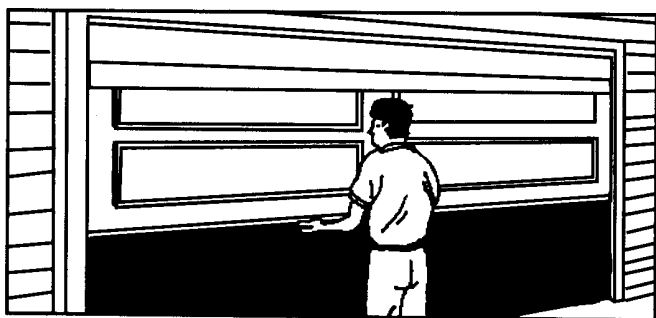


Door Tests Before Starting

Before you begin, complete the following two tests to insure that the door is balanced and working properly. A door that binds, sticks or is out of balance could cause severe injury. Do not attempt to compensate for an improperly adjusted door by the installation of an opener. This will interfere with the proper operation of the opener mechanism and/or may damage the door. Have a qualified service person make any needed adjustments or repairs to cables, spring assemblies and other hardware before proceeding with installation.

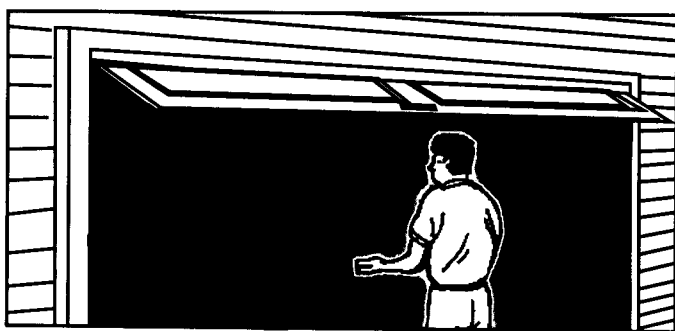
Door Test One

Raise and lower the door and check closely for any sticking or binding that occurs. Lift the door approximately half way open, as illustrated. When releasing the door, it should stay in position. If spring pressure pulls the door further open or door weight pulls it further down, your door is not properly adjusted.



Door Test Two

When properly installed, a door should remain clear of the opening, when allowed to rest at its natural, full open position. If "door drift" pulls door back into opening or spring tension is not sufficient to pull door totally clear of opening, the door is not properly adjusted.



IMPORTANT PRE-ASSEMBLY CHECK

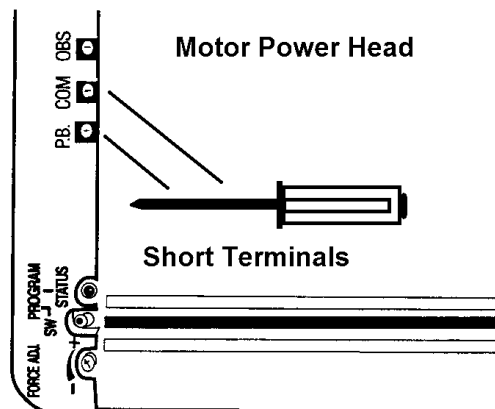
If assembling a motor head unit from a factory sealed box skip this check.

Every Power Head Unit is factory tested and shipped with the limit switch adjustment in the door CLOSED position.

If the Motor Power Head Unit has been powered up before assembly, perform the following steps to insure that the limit switch adjustment is in the door CLOSED position.

Connect Motor Head Unit to a power source and short across the screw terminals labeled "PB" and "COM" with a metal screw driver.

Motor should start; run through a full OPEN cycle, and stop. This will leave Motor Power Head Unit in OPEN position. To get Motor Power Head Unit back to full CLOSE position, short and hold motor terminals again. Continue to short terminals until Motor Power Head Unit stops in the CLOSED position. Disconnect from power source and proceed to assembly.



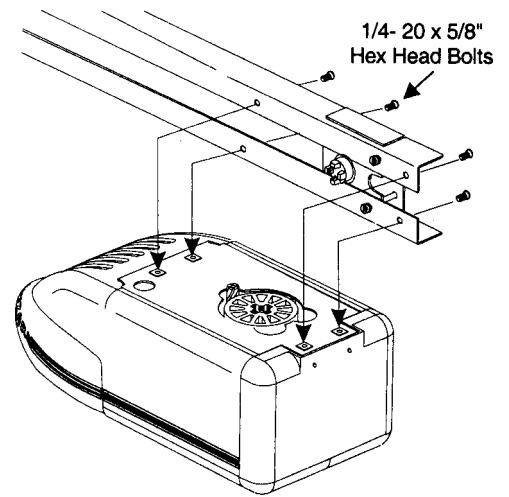
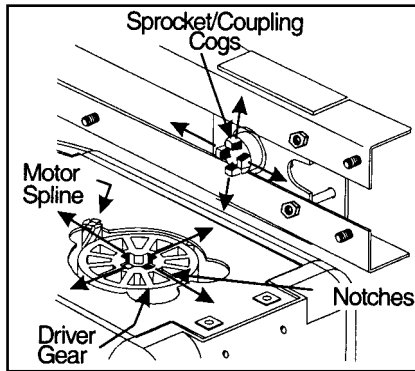
INSTALLATION INSTRUCTIONS

Step 1: Attaching Motor Power Head Unit to Rail

Before assembly, align sprocket/coupling cogs to match notches of driver gear. Rotate the Motor Spline to position Driver Gear so that the nearest notch in Driver Gear is directly behind Motor Spline, as illustrated. **Note: Do not rotate more than 1/2 turn.**

Place opposite end of rail on temporary support approximately 6" in height.

Proceed to attach rail to motor Power Head Unit making sure that pre-alignment allows proper engagement between sprocket/coupling cog and driver gear notches. Realign as necessary, making sure to keep any rotation only to the nearest notch. Using four (4) supplied 1/4"-20 x 5/8" hex head bolts, assemble Motor Power Head Unit to rails with a 3/8" socket. Tighten securely.



Do not plug the opener power cord into electrical outlet until fully installed and instructed to do so in this manual. Door springs, pulleys and cables are under extreme tension and can cause severe injury. Do not attempt to adjust or repair. Call a professional door service company.



Do not wear rings, watches or loose clothing when installing or servicing a garage door system. Use a sturdy, non-metallic step ladder. Remove all ropes or cords attached to the garage door. Failure to do so may result in personal injury due to entanglement. Disable all existing locking devices on the garage door, by securing lock/latch to inside face of door with suitable screw.



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



READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS

Step 2: Positioning and Installing Front Wall Bracket



CAUTION: Do not attempt to loosen or remove any portion of door spring system in order to reinforce header wall or to mount wall bracket. If these are necessary, call a professional garage door service person.

Note: it is recommended that the door opener be installed 7 feet or more above the door.

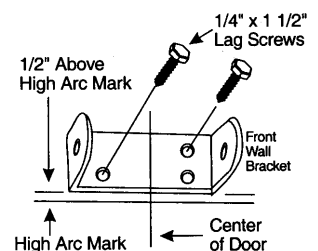
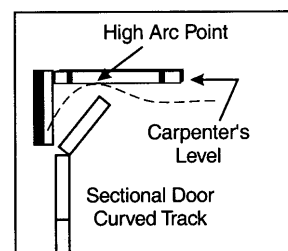
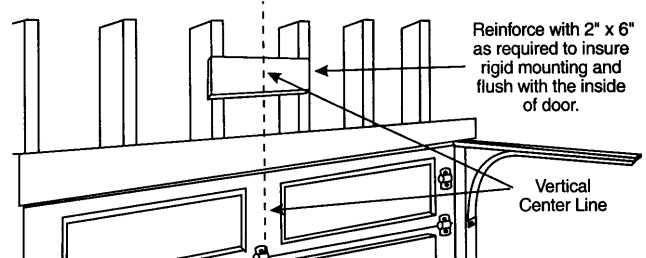
REINFORCE THE HEADER WALL

Reinforce the header wall (wall above door opening) as required, to ensure rigid mounting of the front wall bracket.

Locate the vertical center line of the garage door and mark it on the header above the door and on the top rail of the door.

Raise the door slightly until the top rail reaches the highest point of travel (see illustration); using a carpenter's level, transfer and mark the highest point of travel on the header wall.

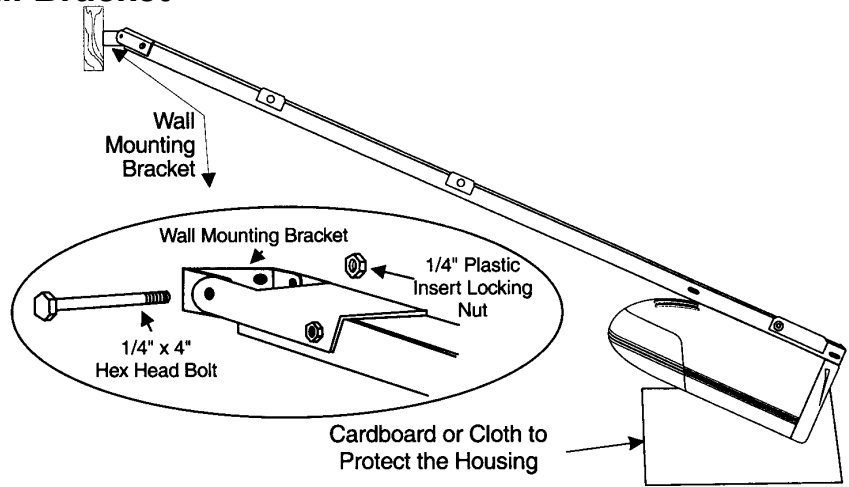
Mount the front wall bracket with its lower edge approximately 1/2" (room permitting) above the mark showing the highest point of travel centered on the vertical center line. Mark the two mounting holes and pre-drill with a 3/16" drill. Mount wall bracket using the lag screws supplied (1/4" x 1-1/2") to ensure rigid mounting.



Step 3: Attach Unit to Front Wall Bracket

Raise the front end of the opener and attach it to the front wall bracket, using the 1/4" x 4" hex head bolt and the supplied 1/4" plastic insert locking nut. Take care not to over tighten nut; tighten only until end of bolt is flush with outside of nut.

NOTE: If you have a torsion spring counter-balance system, it will be necessary to raise the motor Head Assembly of the opener and support it on a step-ladder to attach the front end of the opener to Wall Bracket.



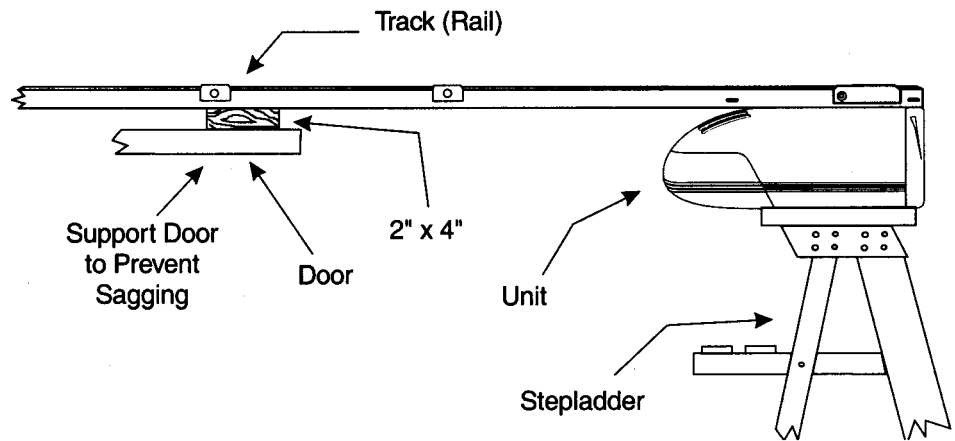
Step 4: Positioning the Motor End of Operator

! To prevent damage to steel, aluminum, fiberglass or glass panel doors do not rest the opener of the door without using a 2" x 4" at least 12" long.

Raise the motor end of the opener and support it so you can open the door to its fully open position. You may need help raising motor end if ladder is not high enough.

Open the door and place a 2" x 4" piece of wood along the top section of the garage door. Rest the double rails on the 2" x 4", as illustrated.

Support the top section of the door to prevent sagging.



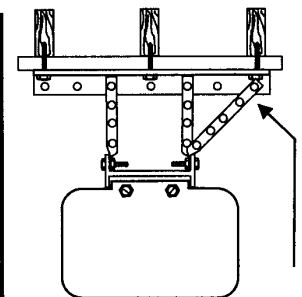
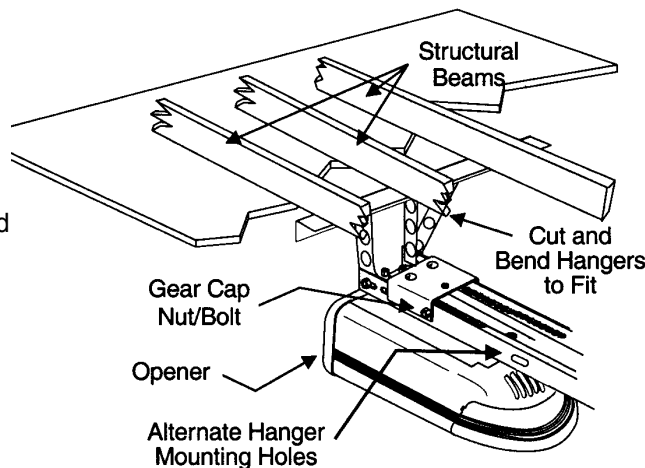
Step 5: Mounting Motor End of Opener

Align the center of opener tracks with the center line previously marked on the top section of the garage door to ensure rail will be parallel with the direction of door travel.

Use perforated hangers (cut as needed to adjust length) from ceiling or beams to hang opener at motor end (be sure to locate and mount to solid structural beams, as illustrated). Pre-drill with 3/16" drill bit and use 1/4" x 1-1/2" lag screws to ensure a rigid mount.

Attach opener to hangers.

! Do not use gear cap bolt or nut for hanger attachment!



For finished ceilings, or if structural beams are out of position for mounting, use a third mounting angle making sure it is securely mounted to beams.

Note: Hanging brackets should be at an angle to provide rigid support. If hangers have no angle or if you use long hangers, cross brace the hangers to eliminate the possibility of sway during operation of the opener.

Step 6: Mounting Door Bracket

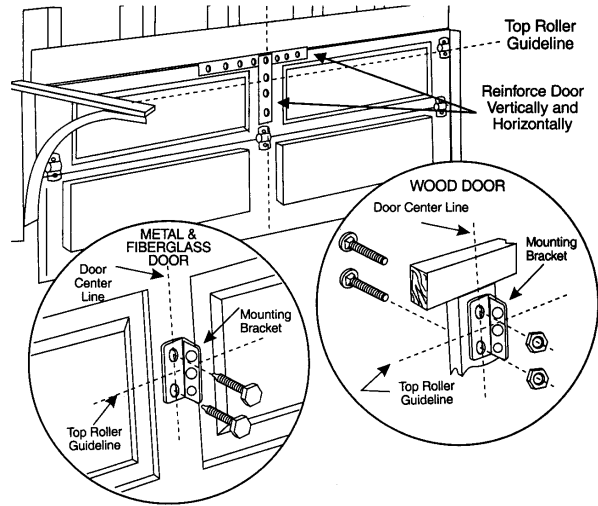


Fiberglass, aluminum and steel doors must be reinforced to prevent damage to the door. Check with your garage door manufacturer for their recommendations.

Reinforce light weight doors, as illustrated.

For wood doors, mount door bracket, using two 1/4"-20 x 2" carriage bolts and 1/4" nuts supplied, on center line of door with middle hole in line with top rollers.

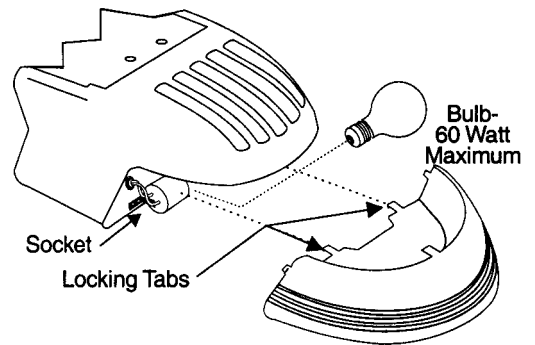
For metal doors, mount door bracket, using two 1/4"-20 x 1/2" self drilling screws supplied, on center line of door with middle hole in line with top rollers.



Step 7: Installing Light

Remove diffuser cover by pressing on both sides of the bottom of the lighting cover at the junction of the housing, releasing the locking tabs, and pulling forward. Screw a 60 Watt bulb (60 Watt Maximum) into socket. **For maximum bulb life, "rough service" bulbs are recommended.** Align top and bottom tabs on cover to Motor Power Head Unit and push straight on until cover locks into place.

Note: light turns on automatically when door is activated and a 4 minute time delay circuit automatically turns light off, allowing ample time to enter the house. A fully open door with light blinking indicates an obstruction or problems with external safety sensors during close travel. See trouble shooting section for further details.



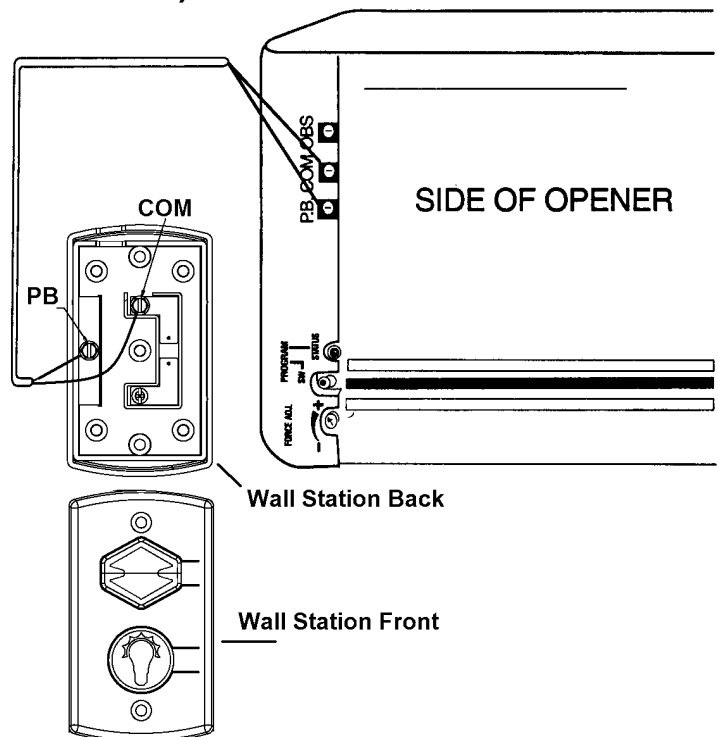
Step 8: Installing Wired Wall Station (if included)



Install all wall controls out of the reach of children and in a location where the door can be seen before activating. Do not mount wall controls near or next to garage door.

Wired Wall Station: Wire the garage door opener wall station using bell wire (low voltage electrical wire) connected to COM and P.B. on vertical screw terminal strips, as illustrated.

Locate push button adjacent to service entrance door at a minimum height of 5 ft., and at least 5 ft. away from garage door; (see illustration in Step 10); additional wired wall stations may also be installed in accordance with these instructions.



Step 9: Installing Deluxe Wireless Wall Station (if included)



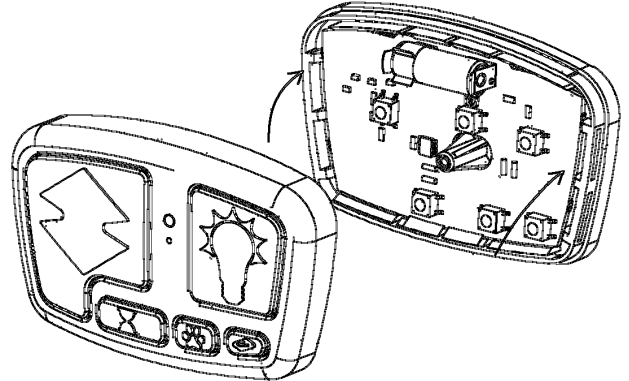
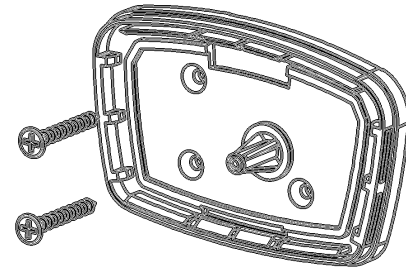
Install all wall controls out of the reach of children and in a location where the door can be seen before activating. Do not mount push buttons near or next to garage door.

Locate a convenient place to mount wall station. To keep wall station out of the reach of children, measure at least five feet up from the floor and secure wall station base into wood wall framing using (2) Phillips head screws. Pilot drill mounting holes using a 3/32" bit. Use 2 of 3 holes that best align with wood framing.

CAUTION: Over tightening the screws could deform plastic base and interfere with circuit board snaps.

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

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

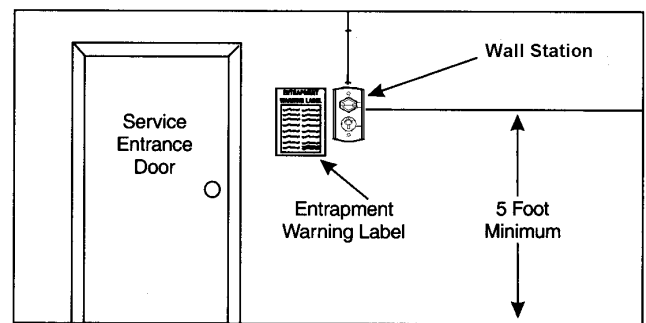


Step 10: Install Entrapment Warning Label



Install Entrapment Warning Label next to wall station in a prominent location

Install Entrapment Warning Label next to Wall Station as illustrated. If label adhesive will not adhere to the surface, secure the label by additional mechanical means such as staples, nails or screws.



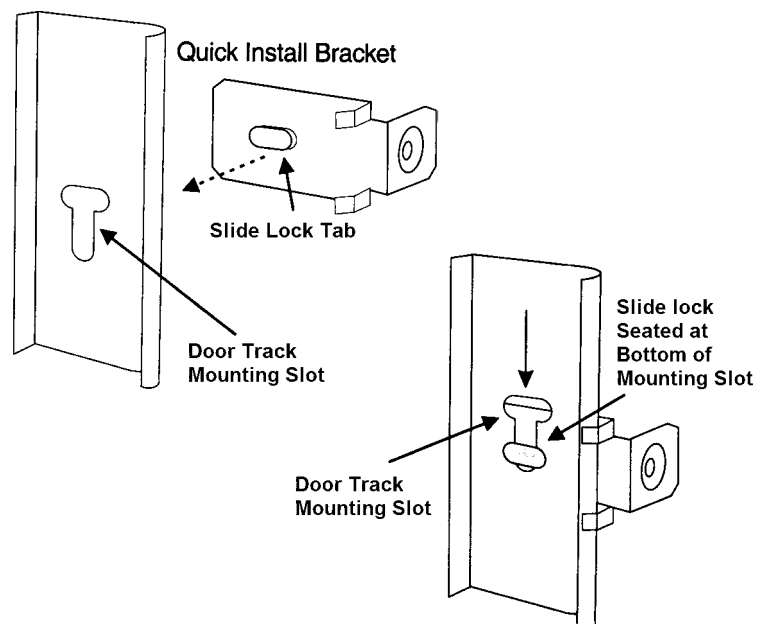
Step 11: Install Wireless Infrared Safety Sensor Quick-Install (QI) Mounting Bracket. (If Opener is Equipped with Wired Infrared Safety Sensor Go to Step 15)

Use the following instructions if your door tracks come pre-punched for using QUICK-INSTALL brackets otherwise go to step 12.

Each bracket is marked either L or R just below the slide lock. (L & R refers to left and right side of garage door as viewed from inside the garage).

Start with the right side bracket as illustrated. Slip the Slide Lock tab of the QI bracket into the door track mounting slot near the bottom of the door track. Slide the bracket downward until it seats at the bottom of the slot. Repeat the same step for the left vertical track using the left Quick Install Bracket. You should encounter some resistance when pushing down on the QI-bracket. If needed, use a flat blade screwdriver against the top edge of the bracket and gently tap into position with a hammer.

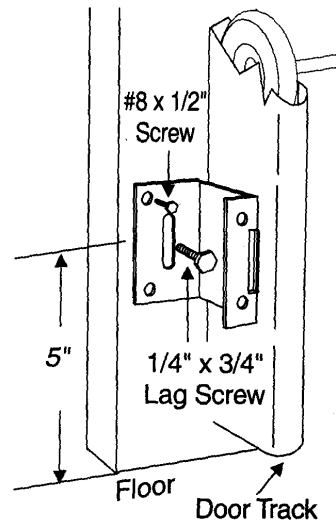
NOTE: It is very important that both brackets are mounted at the same height so sensors align.



Step 12: Install Wireless Infrared Safety Sensors Wall Mounting Bracket (If Included)

Select a mounting position 5 inches above the floor to center line of wall bracket. The EMITTER and TRANSPONDER units must be mounted inside the door opening to minimize any interference by the sun; however, the sensors must be mounted against the door track. The brackets may be temporarily mounted to the wall (or jamb) with a #8 X1/2" screw provided and should be in contact with the door track. Leave this screw in place after installation is completed to prevent accidental rotation of beam sensor. **It is very important that both wall brackets be mounted at the same height for proper alignment.**

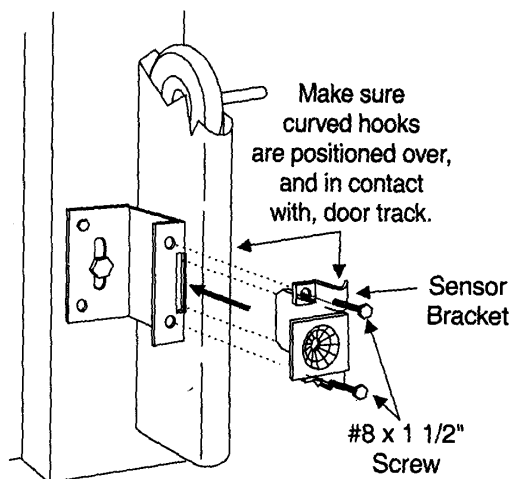
Using the 1/4" x 3/4" lag screw provided, attach the wall mounting bracket to the wall. In some installations it may be necessary to attach wooden spacers to the wall to achieve the required clearance. Expansion bolts (not supplied) may be required to attach brackets to walls constructed of materials other than wood or gypsum.



Step 13: Install Wireless Infrared Safety Sensor Bracket

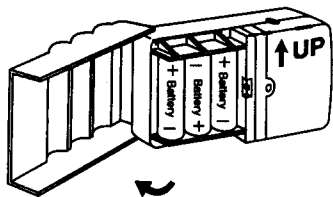
Attach the sensor bracket to the wall bracket using the two #8 x 1-1/2" screws supplied (make sure that the curved hooks protruding from the bracket are positioned over and in firm contact with the door track).

Note: This opener is equipped with state-of-the-art wireless infrared safety sensors which are activated by door movement. It is extremely important to position and mount the sensor brackets in firm contact with the door track so that the sensors are immediately activated by the door movement.

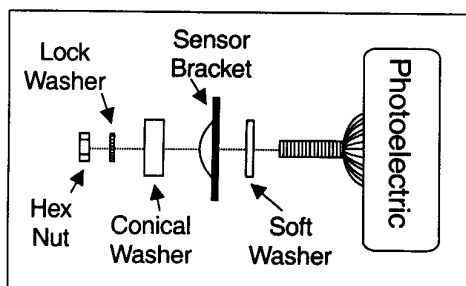
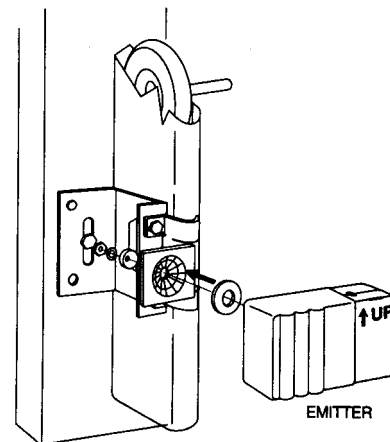


Step 14: Install Wireless Infrared Safety Sensor

Open hinged cover on infrared safety sensors and remove battery protective paper strip. Observe proper battery polarity, as illustrated, in battery compartment.



Identify the TRANSPONDER (green LED) and mount this unit on the right side (from inside the garage looking to the outside) of the garage door and the EMITTER (red LED) on the left side. This same right/left mounting procedure must be followed on two and three door installations.



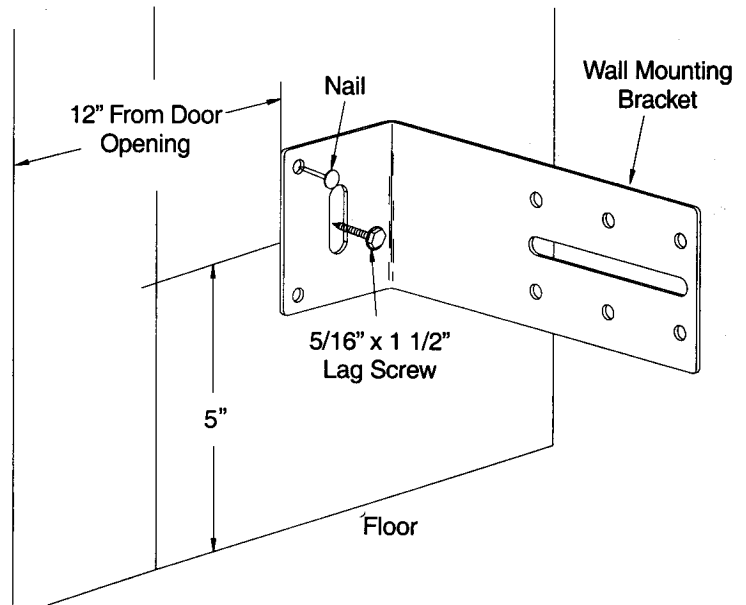
Mount the infrared safety sensors to the sensor bracket keeping the soft washer between the sensor and sensor bracket and then place the conical washer, lock washer and hex nut on the extender bolt, as illustrated.

Keeping the sensors pointing in towards door and aimed at each other, tighten nut until there is enough friction to hold in place. Do not fully tighten until the final alignment has been completed.

Step 15: Install Wired Infrared Safety Sensor Wall Mounting Brackets

Use the following instructions if your opener is equipped with Wired Infrared Safety Sensors. If you just installed the Wireless Infrared Safety Sensors go to step 20.

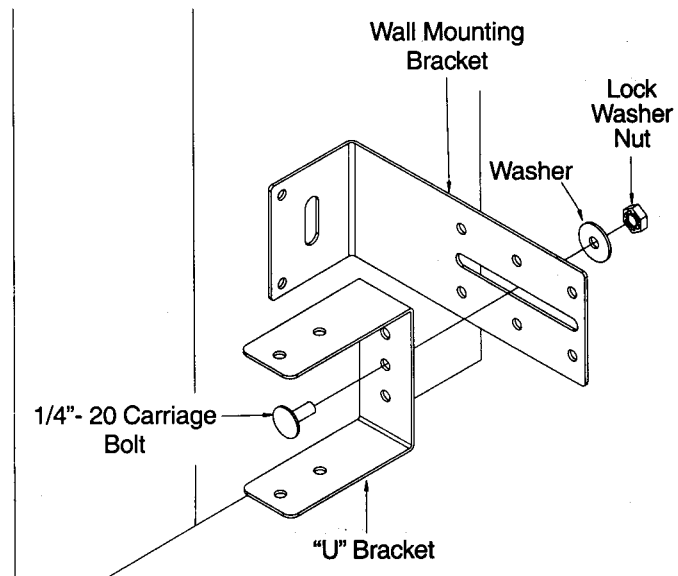
Select a mounting position 5 inches above the floor to center line of wall bracket. The sending and receiving units should be mounted inside the door opening to minimize any interference by the sun. However, the sensors should be mounted as close to the door track or inside edge of the door as possible to offer maximum entrapment protection. **It is very important that both wall brackets be mounted at the same height for proper alignment.**



The brackets may be temporarily mounted to the jamb with a 1" flat head nail (provided), permanently mount the wall mounting bracket to both door jambs. In some installations it may be necessary to attach wooden spacers to the wall to achieve the required clearance. Expansion bolts (not included) may be required to attach brackets to walls constructed of materials other than wood or gypsum.

Step 16: Install Wired Infrared Safety Sensor Wall Mounting Brackets

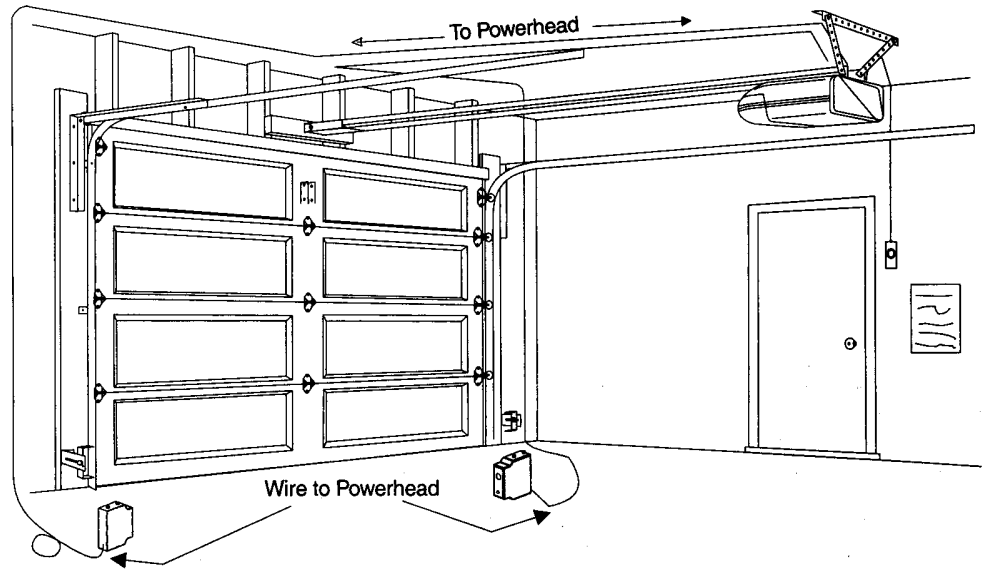
Attach the "U" brackets to the wall brackets with a 1/4" -20 carriage bolt, washer and hex nut (provided). Insert the bolt from the inside of the "U" bracket and hand tighten only at this time.



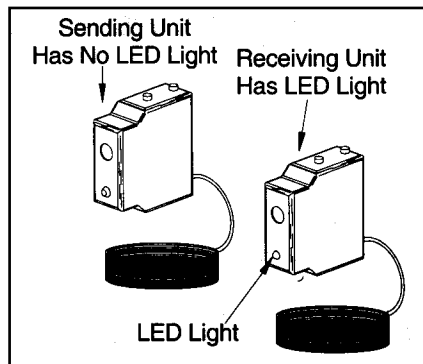
Step 17: Install Wiring for Wired Infrared Safety Sensor

Identify which side of the garage door opening (if any) the sun is "likely" to shine on to. Since sunlight may affect infrared safety sensors, you should mount the sending unit on the side of the door opening exposed to the sun.

Uncoil the wires from the infrared safety sensors and route the wire up the garage wall across the ceiling and down to the back of the power head, as illustrated. Tack the wires in place using staples. Take care to run the wires in a location where they will not interfere with the operation of the door and do not staple through wire. Be sure to leave about 12" of excess wire at each end so you will have enough slack wire to mount units.



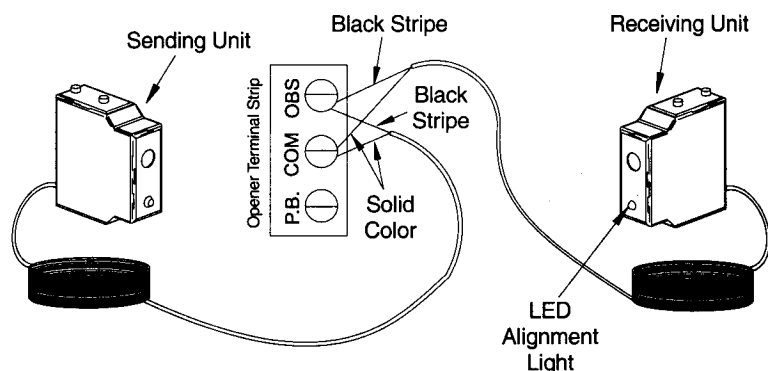
Note: *If wires must be lengthened or spliced into pre-wired installation, use wire nuts or a suitable connector.*



Step 18: Connecting Wired Infrared Safety Sensor to Opener

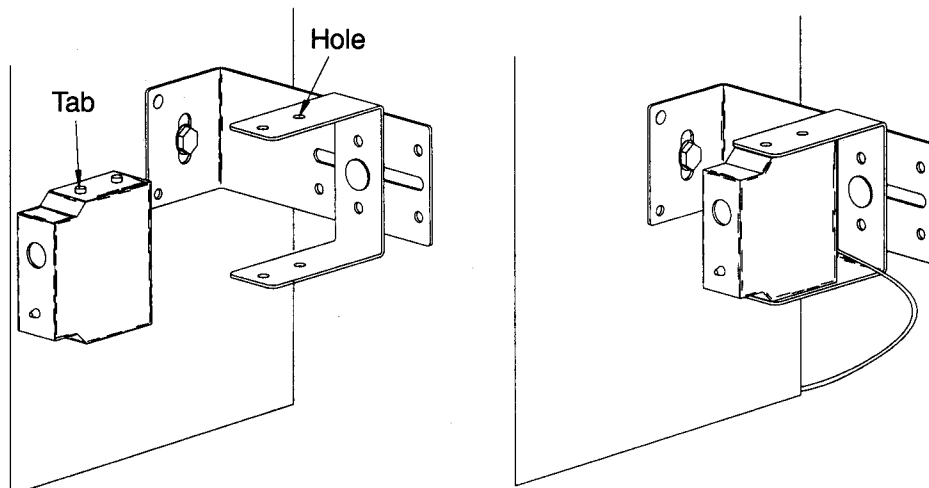
Connect Infrared Safety Sensors to power head as per diagram. Shorten the wires as necessary and separate the wire ends. Strip about 1/2" of insulation off each wire and attach the wires to the proper terminal screws, then tighten securely, using a small blade screwdriver.

One wire has marking on it (numbers, black stripe, etc). Be sure to observe polarity. Apply tension to external wires to test for secure connection. Check that the wires are stapled in place.



Step 19: Mount Wired Infrared Safety Sensors

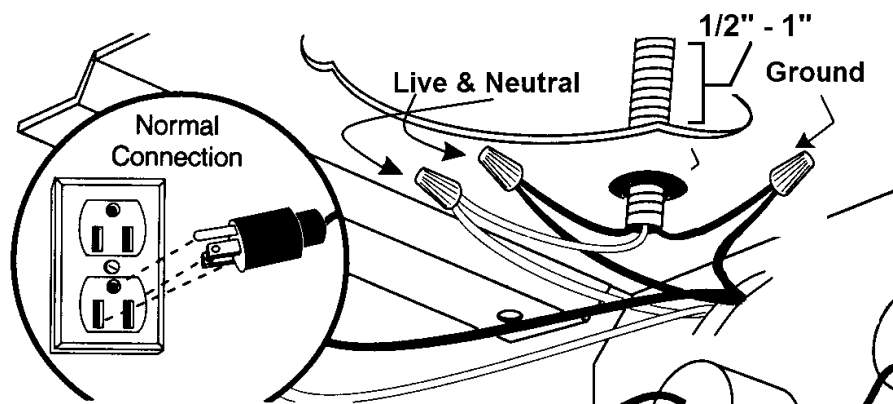
Attach the sending and receiving units to the "U" brackets by inserting their tabs into their respective holes.



Step 20: Connecting Electrical Power

To reduce the risk of electrical shock, connect the power cord only to a properly grounded 3 prong, 120 volt outlet.

Do not use an extension cord or change the plug in any way. At this point, plug in the opener to an electrical outlet. If the plug does not fit into the outlet, or you require permanent wiring, contact a qualified electrician to install the proper outlet. As soon as power is applied to the unit, the light on the opener will blink once to indicate a successful self-check of the controls.



Check your local electrical codes. If your local code requires permanent wiring, use the specifications called for and instructions illustrated.

Permanent Wiring Procedure

1. Ensure line cord is disconnected from power source.
2. Cut line cord 1/2" – 1" from strain relief / bushing.
3. Use needle nose pliers to remove strain relief bushing from frame. Squeeze tabs in on underside of bushing and work bushing out of hole.
4. Pull or strip off remaining section of outer insulation from three conductors of line cord. Pull the three wires into the operator. Discard remaining line cord.
5. Strip 1/2" of insulation from the black, white, and green wires.
6. Using UL/CSA approved wire nuts for 14-18AWG wire, wire nut black-black, white-white, and green-green (earth) wires securely.
7. Replace Power Head Unit cover.

DO NOT USE AN ELECTRICAL EXTENSION CORD OF ANY TYPE

Step 21: Wireless Wall Station Security Code Change and Programming

Note: The following steps describe the process to change the Wireless Wall Station security code and to program the Wireless Wall Station to the opener.

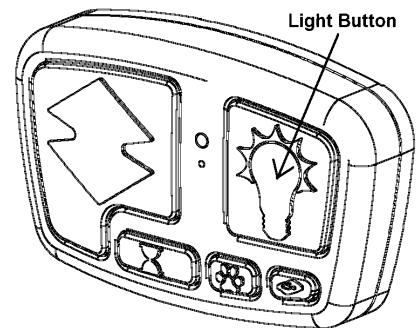
IMPORTANT: You **MUST** change the Wireless Wall Station security code prior to programming the device to the power head unit.



WARNING: During programming the garage door may operate. Keep people and objects clear of the moving door to prevent door damage or possible personal injury.

Changing Wireless Wall Station Code

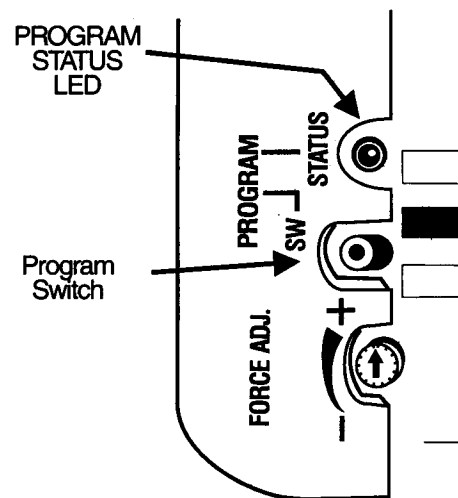
1. Press and hold the wall station's light button for approximately 10 seconds until the wall station's LED begins to blink rapidly. Release button (LED will turn off).
2. Press and hold the wall station's light button again (LED will light) for approximately 5 seconds until the wall station's LED begins to blink rapidly. Release button.
3. LED will blink on and off three times indicating a successful security code change.



Programming Wireless Wall Station to Power Head Unit

Note: Do not press any button on the wall station until instructed

1. Press the PROGRAM Switch button located on the garage door power head unit once. The red PROGRAM STATUS light on the motor power head unit and overhead lamp will turn on and remain lit for one minute, indicating that it is ready to learn the wall station.
2. Press the light on/off button on the wall station. The PROGRAM STATUS light will turn on and off three times indicating a successful learn.
3. Press the light on/off button on the wall station once more to confirm operation. The overhead light will toggle from on to off and from off to on.



At this point you will be able to activate the opener. It will open, but will not close the door. Before unit will close door the beam sensors must be aligned and programmed (next step).

Battery: If the LED (light) on wall station does not turn on when a button is pressed, repeat “changing wireless wall station code” operation. If LED fails to light replace battery. To change battery, insert a coin in the coin slot and twist coin to access battery compartment. Replace battery with a single MN21 or equivalent battery. Snap case together after replacing.

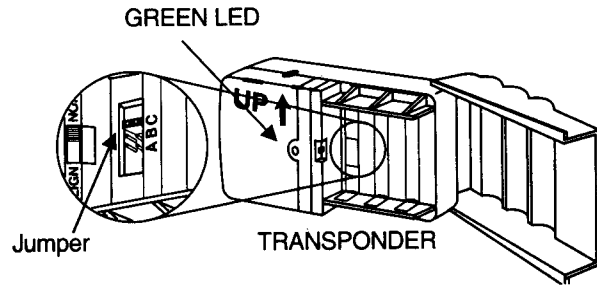
Step 22: Alignment of the Wireless Infrared Safety Sensors

Use the following instructions if your opener is equipped with Wireless Infrared Safety Sensors. If your opener is equipped with Wired Infrared Safety Sensors proceed to step 23.



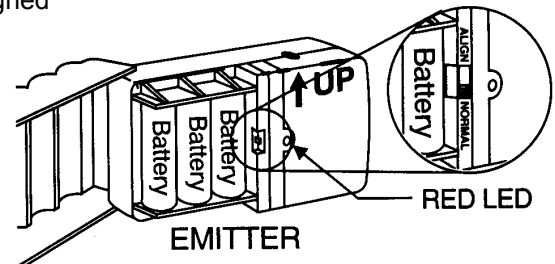
IMPORTANT: This infrared beam sensor sends an invisible beam of light from the emitter unit to the transponder unit across from the pathway of the door. The door opener will not operate until the safety sensor is programmed to the power head and it is properly aligned. If the invisible beam of light is obstructed, an open door cannot be closed by the transmitter or a momentary activation of the wall station up/down button. However, the door may be closed by continuously holding your finger on the wall station up/down button (constant pressure) until the door travels to a fully closed position.

Note: If two or more door openers are installed in the same garage, the safety sensor transponder for the second and/or third doors must be set to a different code to prevent interference with the first transponder. The code is set by a jumper, located under the battery, closest to the center of the compartment, as illustrated. The code jumper has three positions (A-B-C), selected by a moveable jumper, and has been randomly set at the factory to one of these positions. If the factory random selection of the jumper position has resulted in a different code for each transponder, no further changes are necessary. If not, note the position of the jumper (A, B or C) on the first door transponder and set the second door transponder jumper to one of the other two positions. A third door will use the remaining un-used position. Temporarily remove the batteries from all but the door being worked on and then replace when all jumpers have been set. The jumper has no polarity and can be applied to the pins in either direction. For more than three doors, call for technical assistance.



At this point you will be able to activate the opener. It will open, but will not close the door. Before unit will close door the beam sensors must be aligned and programmed.

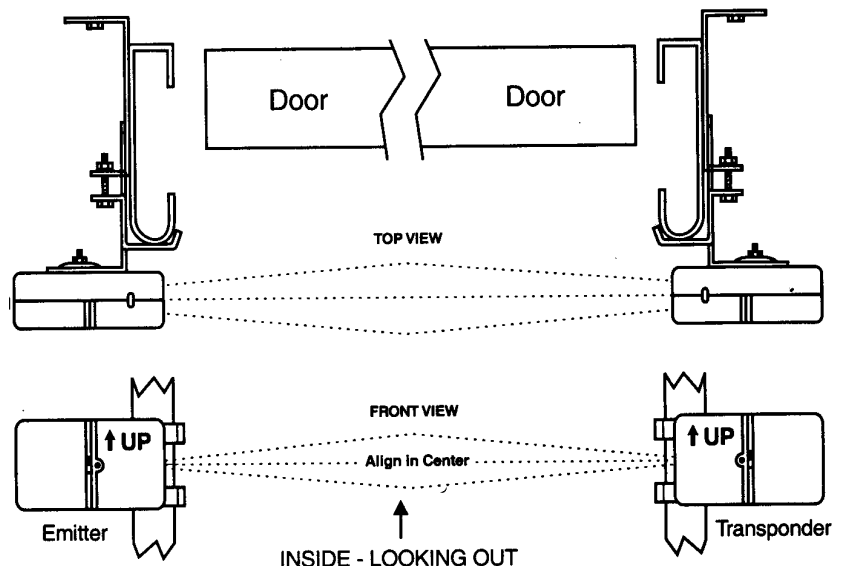
First, the "Align-Normal" switch on the EMITTER (under the protective cover) must be set to Align. (See illustration). This should cause the adjacent RED LED indicator light to turn on. Check to see that the EMITTER is pointed toward the TRANSPONDER and that the hex nut holding the EMITTER in place is tight enough that the unit will not move.



Loosen the hex nut on the TRANSPONDER just enough that you can rotate it up and down and side to side. Rotating the TRANSPONDER will cause the GREEN LED on the TRANSPONDER to blink when aligned. Rotate TRANSPONDER up and down and side to side to determine best alignment. We recommend wide rotations to help determine the closest center point of alignment.

Tighten hex nut on TRANSPONDER and push and hold PROGRAM SWITCH button on the opener until the light bulb and PROGRAM STATUS LED on the opener blinks showing programming and alignment are completed. Reset "Align-Normal" switch on the EMITTER to Normal and snap cover shut.

Now, using the wall control up/down button, activate the opener and check that it will operate through full open and close cycles.



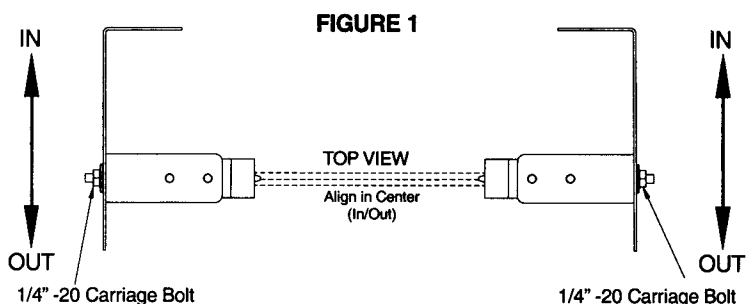
Step 23: Alignment of the Wired Infrared Safety Sensors

Use the following instructions if your opener is equipped with Wired Infrared Safety Sensors. Otherwise proceed to step 24.



IMPORTANT: This infrared beam sensor sends an invisible beam of light from the sending unit to the receiver unit across from the pathway of the door. The door opener will not operate until the safety sensor is connected to the power head and properly aligned. If the invisible beam of light is obstructed, an open door cannot be closed by the transmitter or a momentary activation of the wall station up/down button. However, the door may be closed by continuously holding your finger on the wall station up/down button (constant pressure) until the door travels to a fully closed position.

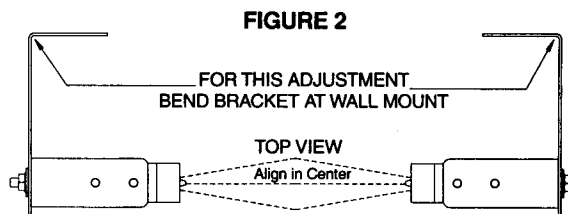
At this point you will be able to activate the opener; it will open, but will not close the door unless the beam is aligned. The beam sensors must be aligned by moving the sending and receiving units in or out (see Figure 1) until the alignment light on the receiving unit comes on. The 1/4"-20 carriage bolt can be loosened to move the unit in or out, as required. If you have difficulty aligning beams, check that both brackets are mounted at the same height (see Step 9) and remount if necessary. Additional minor adjustments can be made by lightly bending the mounting brackets (see Figure 2).



Once the alignment light comes on, tighten all bolts and mounting screws.

Finish securing all wire making sure not to break or open any of the conductors. Loop and secure any extra wire.

Now, using the wall station up/down button, activate the opener and check that it will operate through full open and close cycles.



Step 24: Transmitter Security Code Change and Programming

Note: The following steps describe the process to change the Transmitter security code and to program the Transmitter to the opener.

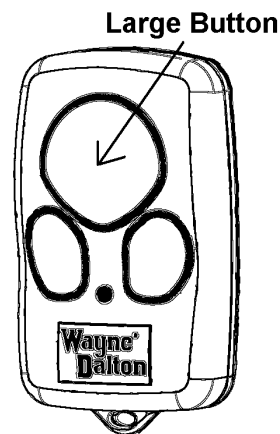
IMPORTANT: You **MUST** change the Transmitter security code prior to programming the device to the power head unit.



WARNING: During programming the garage door may operate. Keep people and objects clear of the moving door to prevent door damage or possible personal injury.

Changing the Transmitter Code

1. Press and hold the Transmitter's large button for approximately 10 seconds until Transmitter's LED begins to blink rapidly. Release button (LED will turn off).
2. Press and hold the Transmitter's large button again (LED will light) for approximately 5 seconds until the Transmitter's LED begins to blink rapidly. Release button.
3. LED will blink on and off three times indicating a successful security code change.



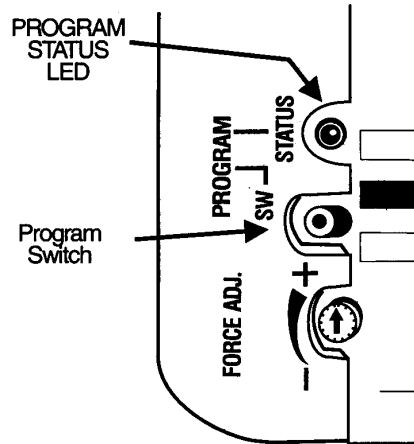
Programming Transmitter to Power Head Unit

Note: Do not press any button on the Transmitter until instructed

1. Press the PROGRAM Switch button located on the garage door power head unit once. The red PROGRAM STATUS light on the motor power head unit and overhead lamp will turn on and remain lit for one minute, indicating that it is ready to learn the Transmitter.
2. Press the button on the Transmitter you wish to use to operate the door. The PROGRAM STATUS light on the power head will turn on and off three times indicating a successful learn.
3. Press the same button on the Transmitter once more to confirm operation. The opener will turn on and move the door.

At this point you will be able to activate the opener.

Battery: If the LED (light) on Transmitter does not turn on when a button is pressed, repeat "changing the transmitter code" operation. If LED fails to light replace battery. To change battery, insert a coin in the coin slot and twist coin to access battery compartment. Some transmitters use two CR2016 or equivalent batteries while others use a single MN21 or equivalent battery. Snap case together after replacing.



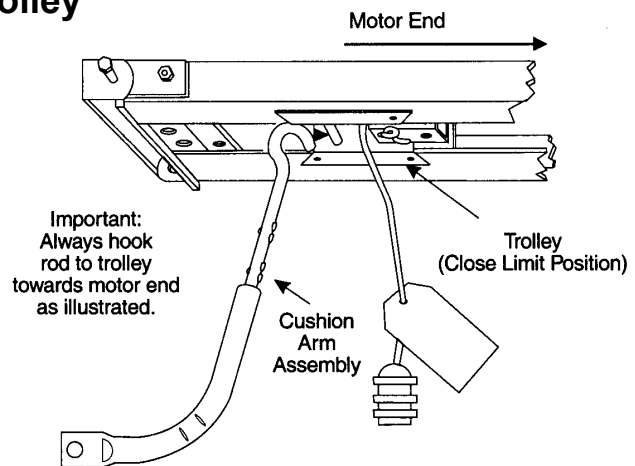
Step 25: Connecting Cushion Arm to Trolley

Activate opener to bring trolley to factory pre-set close limit (See illustration).

Cushion arm assembly consists of the door arm tube section and door arm rod, which are packed separately. To assemble, screw the door arm rod into the door arm tube in a clockwise direction approximately ten turns.

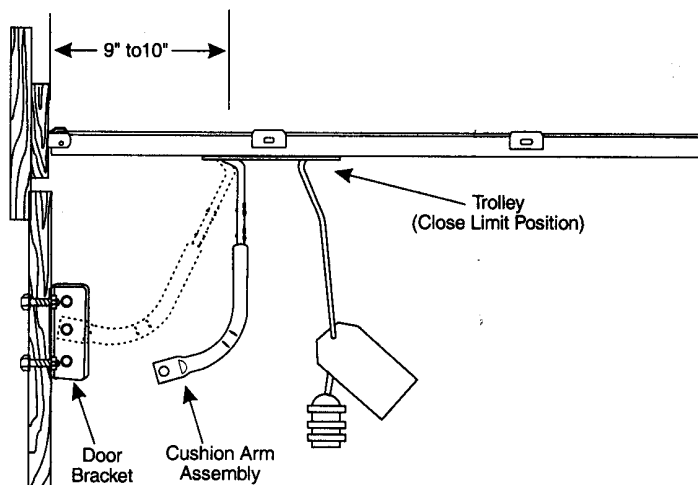
Connect cushion arm assembly into trolley with open end of rod hook facing motor.

Attach warning tag and red pull knob to red release cord connected to trolley.



Step 26: Setting Trolley Close Position

Activate opener to confirm trolley close position is 9" to 10" between the inside face of the door and the solid cushion arm rod. If adjustment of the trolley position is necessary, use the CLOSE TRAVEL ADJUSTMENT knob located on the bottom of the motor power head unit. A 1/4 turn equals approximately 1" of trolley movement; turn clockwise to move forward; counter-clockwise to move back.



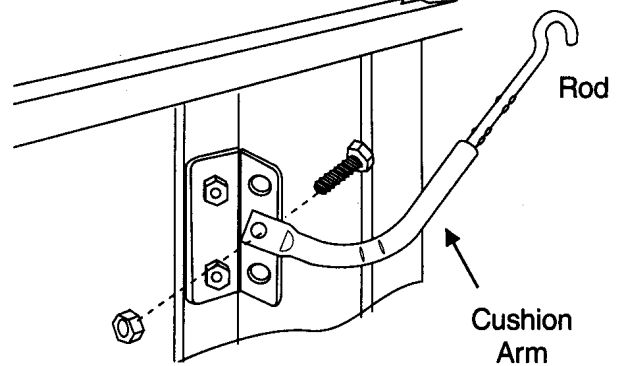
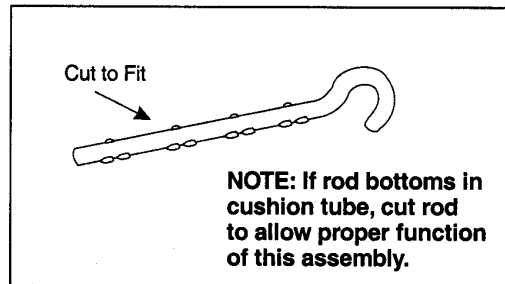
Step 27: Connecting Door Arm to Door

Door Mounted Bracket

Visually align cushion arm connecting hole with middle hole of door bracket by rotating tube section in appropriate direction.

Release trolley (cushion arm attached) with manual release cord and pull trolley a few inches toward motor. Now rotate cushion arm tube section 2 turns counterclockwise to provide a cushion when door is closed or encounters an obstruction. Align connecting hole in cushion arm to middle hole in door bracket; insert 3/8" dia. bolt and tighten locking nut, allowing for free pivoting of arm.

Note: Do not over tighten locking nut, as this will cause binding between cushion arm and door bracket.



Step 28: Setting Door Close Travel Plus "Contact Obstruction Sensing" Test

With wall control up/down button, activate door to full open position; reactivate to close position. The door should stop on the floor with the cushion arm and the bottom door seal slightly compressed. If the door reverses off the floor, turn close travel knob 1/4 turn "less". If door is not completely closed, turn travel knob 1/4 turn "more". Repeat if necessary.



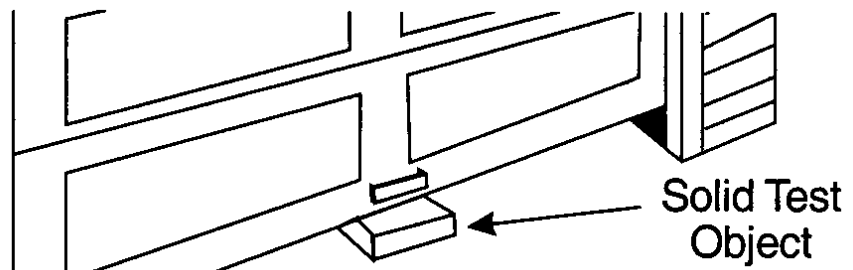
IMPORTANT! Test "Contact Obstruction Sensing Feature"



After installing opener, the door must reverse when it contacts a 1 inch high object on the floor

Activate the door to the full, open position and place a 1" (25mm) solid test obstacle on the floor under the garage door. Activate the door to the closed position. The door should reverse upon contact with the 1" obstacle.

If door stops on the 1" obstacle, adjust the close travel knob 1/4 turn "more" until door reverses upon contact with obstacle. Repeat if necessary.



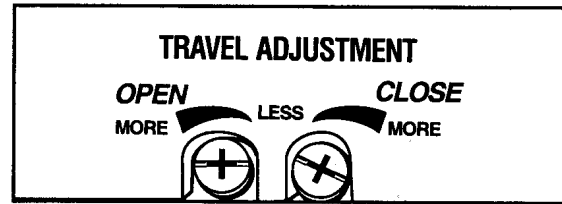
When the door reverses, remove the test object and run the full cycle of open and close of the door. Door should not reverse when it comes to the fully closed position.

Note: If opener fails to pass this test, repeat Step 28. Also see Adjustment #2, page 22, (Contact Obstruction Sensing Adjustment).

Step 29: Setting Door Opening Travel

Do not use adjustments to compensate for a poorly balanced door. This will interfere with the proper operation of the travel adjustments and may damage door.

The door opener is assembled with the open travel adjustment preset for a typical door, but all doors should be adjusted to stop as close as possible to the door's "natural" fully open, resting position.

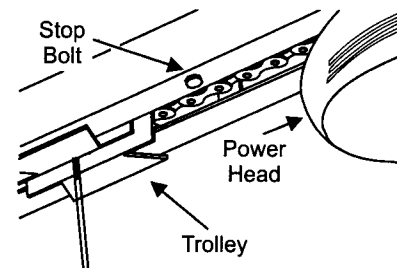


To determine the door's "natural" fully open, resting position, disconnect door from opener using the Emergency Release Disconnect (see page 26, HOW TO OPERATE YOUR DOOR MANUALLY) and manually raise door to its "natural" fully open, resting position. Use this location for your open limit setting. To determine if door needs adjustment, activate the opener to bring door to fully open position.

NOTE: If door does not open fully and opener light flashes (*make sure the bulb is installed and operating*) check for an obstruction or see Adjustment #1, page 22 (Adjusting Opening Force).

To adjust for a non-standard door or to precisely set the open position: Using the wall station, operate the door and stop it in mid-travel position; using a flathead screwdriver turn the OPEN travel adjuster for more (counter-clockwise) or less (clockwise) travel. A 1/4 turn equals approximately 1" of trolley movement.

NOTE: Confirm that the door has stopped in the UP position as a result of the Upper Limit Switch and not because the Trolley has hit the open Stop Bolt, which is mounted in the Rail near the power head. The correct condition can be verified by observing that the openers Convenience Light does not flash after the fully open door comes to a stop. The faulty condition may also be confirmed visually by checking to see if the Trolley is resting against the stop bolt.

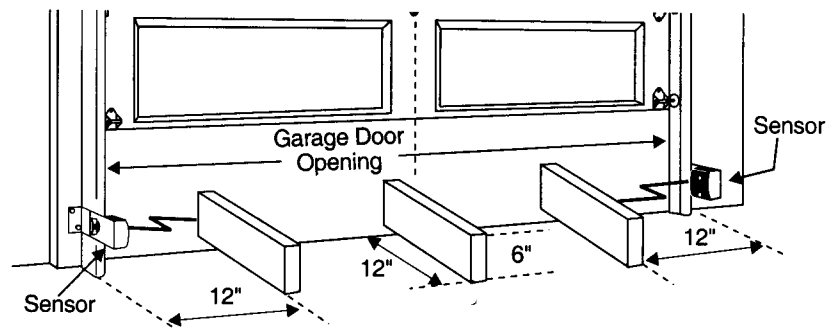


To confirm final OPEN travel adjustment, activate the opener to bring door to fully open position. The opener light should **not** be flashing.

Step 30: Infrared Safety Sensor Obstruction Test

Test Procedure

Starting with the door in the fully open position, place a 6" x 12" object on the floor progressively one foot from the left side of the door; center of door and one foot from the right side of door (as illustrated). In each position, activation of the opener with the wall station should cause the door to move approximately one foot, stop and then reverse to fully open position. The same 6" x 12" object when placed on the floor should also cause a closing door to reverse.



If the door does not respond properly to these tests, the Infrared Safety Sensors must be adjusted (refer to step 22 or 23 depending on type of sensors used). Repeat this test procedure. If the door opener still will not respond properly and fails this test, the door may cause severe injury or death. Have a qualified service person make repairs.

Step 31: Programming Wireless Keyless Entry (If Included)

NOTE: To facilitate installation, program the Keyless Entry station to the opener before mounting to wall.

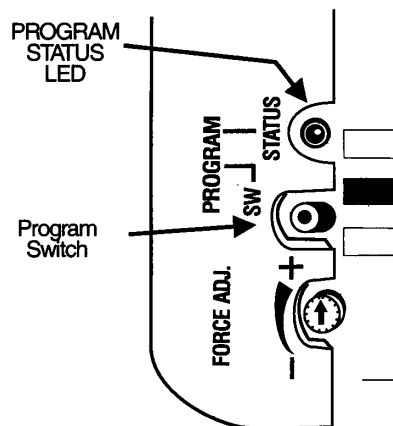


WARNING: During programming the garage door may operate. Keep people and objects clear of the moving door to prevent door damage or possible personal injury.

NOTE: Before programming ensure garage door is in the “down” position.

1. Press the PROGRAM Switch button located on the garage door power head unit once. The red PROGRAM STATUS light on the motor power head unit and overhead lamp will turn on and remain lit for one minute, indicating that it is ready to learn the Keyless Entry.
2. Press the desired five digit PIN (PERSONAL IDENTIFICATION NUMBER), Example 1-2-3-4-5. The PROGRAM STATUS light will turn on and off three times indicating a successful learn.
3. Wait five seconds and press any button on the keyless entry. The door will move to the up position.

NOTE: If an error is made entering codes, simply press and hold both the “7/8” and “9/0” buttons for two seconds. The Keyless Entry will reset. Repeat programming procedure again.



A single Wireless Keyless Entry device may be programmed to operate multiple garage door openers. To program additional openers, repeat programming steps using a different five digit PIN for each additional opener

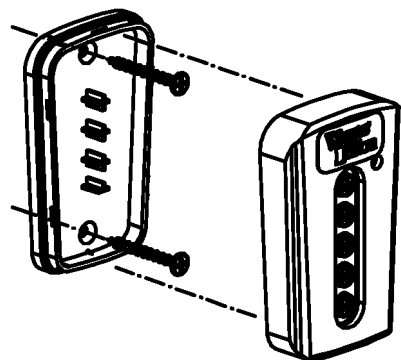
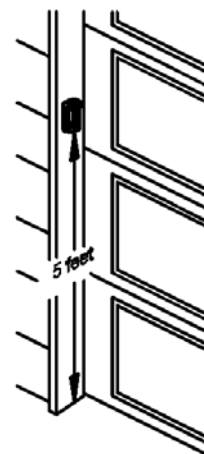
Step 32: Installing Wireless Keyless Entry (If Included)



Install all wall controls out of the reach of children and in a location where the door can be seen before activating.

CAUTION: The keypad should be mounted a minimum of 5 feet from the floor to keep it out of the reach of small children.

Locate a convenient place to mount the Wireless Keyless Entry. Choose a convenient location that does not interfere with the normal opening and closing of the door. To keep keyless entry out of the reach of children, measure and mark a spot at least five feet up from the floor. Use the drilling template located on Page 32 to determine hole positions. Drill 5/54” pilot holes 3/4” deep at each screw location.



Snap open the Wireless Keyless Entry case with a coin. Secure keyless entry base into wood wall framing using the two screws provided. Snap the front case half with the base. Remove paper backing from instruction label and apply to a clean surface inside garage.

NOTE: Two screws are included for mounting to wood structures. Ensure proper hardware is used for mounting to other materials.

Battery Replacement: Under normal operating conditions, the batteries should be changed once every 12 months. **Dispose used batteries properly.** To change batteries, snap open case with a coin and remove old batteries. Insert two CR2032 or equivalent coin cell batteries and snap case together.

ADJUSTMENTS

Adjustment # 1 Opening and Closing Force

This garage door opener is built with a safety system that allows the door to reverse in the close direction and stop in the open direction. This must be adjusted so your opener does not use excessive force in the down direction or react to the weight of the door during upward travel.

CLOSING FORCE ADJUSTMENT

To help determine that the closing door force is not excessive, grasp the door handle or bottom edge during downward travel. The opener should REVERSE to this force. **NOTE: Do not stand under door during this test.**

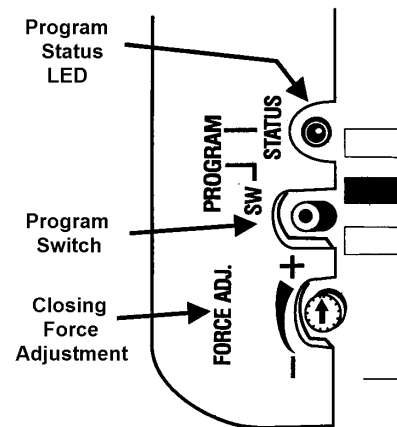
To adjust the closing force follow one of the two methods listed below.

Method A (manual)

1. Turn the **FORCE ADJ.** (see illustration) counter clockwise to decrease force and repeat reversal test until door reacts properly.

Method B (computer assisted)

1. Operate the door to the fully open position.
2. Turn the **FORCE ADJ.** (see illustration) counter clockwise to the minimal force setting.
3. Press the **PROGRAM SWITCH** button two times or the **PROGRAM** button on the Wireless Wall Station (if included) until the LED turns on solid (5 sec.). The **STATUS LED** and the overhead lamp will flash on and off at a slow rate.
4. Operate the door to the fully closed position.
5. Turn the **FORCE ADJ.** clockwise until the **STATUS LED** flickers or just turns off.
6. Press the **PROGRAM SWITCH** once to confirm setting.



OPENING FORCE ADJUSTMENT

To determine that the opening force is not excessive, grasp the door handle or bottom edge during upward travel. If the opener does not stop or is hard to hold, decrease the open force setting. The opener should STOP without using excessive force.

To change the opening force follow the procedure listed below.

1. Operate the door to the fully closed position.
2. Press the **PROGRAM SWITCH** button three times. The **STATUS LED** and the overhead lamp will flash on and off. The blink rate which corresponds to the force setting will consist of 1 to 5 fast blinks follow with a long pause between blink sets.
3. The first time an attempt is made to increase the force, the setting will begin at the lightest setting (1 blink).
4. To increase the force, press and release the door up/down button on any control (The **STATUS LED** will remain lit during button press).
5. Continue to press and release the door button until the desired force setting is achieved.
6. Press the **PROGRAM SWITCH** once to confirm setting.

Adjustment # 2 Contact Obstruction Sensing (Closing Direction)

The opener is designed to automatically reverse the door during closing travel whenever it comes in contact with an object up to the last 1 inch of travel above the floor. An object on the floor with a height less than 1" will cause the door to stop. (Test according to instructions on Step 30.)

If opener reverses properly with a 1" high solid test object laid flat on garage floor (Step 28) and stops without the solid test object in the fully closed position, proceed to Adjustment # 3.

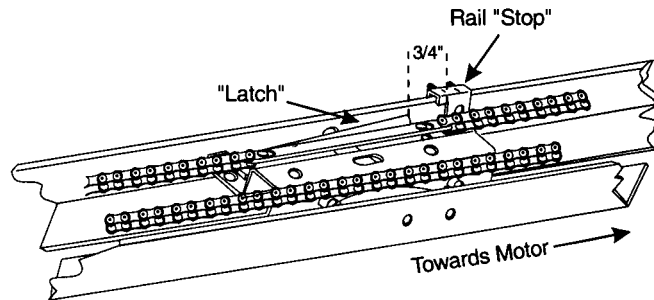
When door comes in contact with a 1" high solid test object laid flat on garage floor and stops instead of reversing, reset the door close limits according to instruction in Step 28, adjusting until door reverses upon contact with the 1" high solid test object.

If door reverses when it comes in contact with the floor, reset the door close limits according to instruction in Step 28.

Adjustment # 3 Positive Mechanical Door Lock

The garage door opener is designed with an automatic mechanical locking system. This lock secures the door in the fully closed position.

To adjust, activate the door opener and allow the door to go to its fully closed position. Loosen the two screws on the rail stop and move it behind the chain latch assembly with a gap of 3/4" between "stop" and "latch". Retighten screws.



IMPORTANT SAFETY INSTRUCTIONS

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

Before you proceed, please thoroughly read the safety rules on page 2 and the following operating instructions. Operate only when opener is properly adjusted and the door is visible and unobstructed.



READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS.



Always keep moving door in sight and away from people and objects, until it is completely closed. **NO ONE SHOULD CROSS THE PATH OF A MOVING DOOR.**



Never let children operate or play with door controls. Keep remote control away from children.



NEVER GO UNDER A STOPPED, PARTIALLY OPEN DOOR.



KEEP GARAGE DOORS PROPERLY BALANCED. See owner's manual. An improperly balanced door could cause severe injury or death. Have a qualified service person make repairs to cables, spring assemblies and other hardware.



If possible, use the emergency release only when the door is closed. Use caution when using this release with the door open. Weak or broken springs may cause the door to fall rapidly, causing serious injury or death.



Test door opener monthly. The garage door **MUST** reverse on contact with a 1 inch high solid test object on the floor. If adjusting either the force or the limit of travel, retest the door opener. Failure to adjust the opener properly may cause severe injury or death.



Test door opener monthly. Open door must not close and closing door must open if Infra-red Safety System is obstructed by 6" x 12" object, using test procedure described in Step 30.



SAVE THESE INSTRUCTIONS.

IMPORTANT—MESURES DE SÉCURITÉ

AVERTISSEMENT—POUR RÉDUIRE LES RISQUES DE BLESSURES MORTELLES

Avant de commencer, veuillez lire attentivement les règles de sécurité, page 3 et les instructions suivantes. Faire fonctionner uniquement lorsque l'ouvre-porte est correctement réglé et que la porte est visible et sans obstacle.



LISEZ CETTE NOTICE ET CONFORMEZ-VOUS AUX INSTRUCTIONS.



NE LAISSEZ JAMAIS LES ENFANTS MANOEUVRER LES COMMANDES DE LA PORTE. NE LAISSEZ PAS LA TÉLÉCOMMANDE À PORTÉE DES ENFANTS.



SURVEILLEZ LA COURSE DE LA PORTE JUSQU'À CE QUE CETTE DERNIÈRE SOIT COMPLÈTEMENT FERMÉE EN VEILLANT À TENIR À L'ÉCART TOUTE PERSONNE ET TOUT OBJET AVOISINANT. IL NE FAUT JAMAIS PASSER EN DESSOUS D'UNE PORTE EN MOUVEMENT.



VÉRIFIEZ LE FONCTIONNEMENT DE L'OUVREPORTE UNE FOIS PAR MOIS. LE SENS DE LA COURSE DOIT S'INVERSER LORSQUE LA PORTE ENTRE EN CONTACT AVEC UN OBJET D'UNE HAUTEUR DE 1 PO POSÉ SUR LE SOL VÉRIFIEZ À NOUVEAU L'OUVREPORTE APRES TOUT RÉGLAGE DE LA FORCE DE DÉCLENCHEMENT OU DU SEUIL DE FIN DE COURSE. UN RÉGLAGE INCORRECT DE L'OUVREPORTE PEUT CAUSER DES BLESSURES MORTELLES.



DANS LA MESURE DU POSSIBLE, NE DÉCLENCHÉZ LE DISPOSITIF DE DÉSACCOUPLEMENT QUE LORSQUE LA PORTE EST FERMÉE. USEZ DE PRUDENCE SI VOUS DÉCLENCHÉZ LE DISPOSITIF LORSQUE LA PORTE EST OUVERTE ; UN RESSORT AFFAIBLI OU CASSÉ PEUT ENTRAÎNER UNE DESCENTE BRUTALE DE LA PORTE ET CAUSER DES BLESSURES MORTELLES.



ASSUREZ-VOUS QUE LA PORTE DE GARAGE EST CORRECTEMENT ÉQUILBRÉE. UNE PORTE MAL ÉQUILBRÉE PEUT CAUSER DES BLESSURES GRAVES. CONFINEZ LA RÉPARATION DES CÂBLES, DES RESSORTS, ET DE TOUT AUTRE ÉLÉMENT À UN TECHNICIEN QUALIFIÉ.



VÉRIFIER L'OUVREPORTE UNE FOIS PAR MOIS. SI LE SYSTÈME PHOTOÉLECTRIQUE EST BLOQUÉ PAR UN OBJET DE PLUS DE 6 PO X 12 PO, LA PORTE OUVERTE NE DOIT PAS SE FERMER ET LA PORTE SE FERMANT DOIT S'OUVRIRE. VÉRIFIER CELA EN UTILISANT LA VÉRIFICATION DÉCRITE À L'ÉTAPE 30.



CONSERVEZ CES INSTRUCTIONS

Operation of Your Opener

HOW TO ACTIVATE THE OPENER



Never let children operate or play with door controls. Keep remote control away from children.

Use any of the following devices:

1. The Remote Control Transmitter; momentary push of the button and the door will start to move.
2. The Wall Station Up/Down button; push momentarily the button until the door starts to move. Constant push of the button, until door is closed is required if light flashes (*indicating a Safety Sensor obstruction*).
3. The Wireless Keyless Entry System; (*see below*)
4. The Outside Key Switch (*see manufacturer's instructions for use of this device*).

HOW THE DOOR MOVES WHEN THE OPENER IS ACTIVATED



Always keep moving door in sight and away from people and objects, until it is completely closed. NO ONE SHOULD CROSS THE PATH OF THE MOVING DOOR.

1. If open, the door will close. If closed, the door will open.
2. If closing, the door will stop. Next activation will open.
3. If opening, the door will stop. Next activation will close.
4. If an obstruction is contacted or the beam is interrupted while closing, the door will reverse and the light will flash.
5. If an obstruction is encountered while opening, the door will stop and the light will flash. The next activation will close the door.
6. The Infrared Safety Sensor uses an invisible beam which, when broken by an obstruction, causes a closing door to reverse, prevents an open door from closing and causes the light to flash.
7. If door stops travel for 1 second at midpoint during close and then continues to close, it indicates that the batteries in the Wireless Infrared Safety Sensors are weak and need replacement.

HOW LIGHT WORKS AND WHAT IT MEANS WHEN IT FLASHES

1. Overhead light automatically turns on when opener is activated and remains on for 4 minutes for convenience and safety.
2. The light will flash after coming upon an obstruction in the up or down direction to warn you of a problem. It will continue flashing for 4 minutes, and then shut off.

If the light begins to flash and the door moves a short distance and then reverses from a wall station button, transmitter or keyless entry, the external safety sensor device is activated or defective. To temporarily override and close door, activate wall station up/down button, keeping button depressed; opener will begin in down direction. The button must remain depressed until cycle is completed. If the button is release before cycle is completed, the door will reverse and come to full up position. *Problems in the safety system should be inspected by a professional garage door installer.*

HOW TO OPERATE THE WIRELESS KEYLESS ENTRY (*if Included*)

1. Enter the 5-digit PIN number assigned to the door. Door will move.
2. Unit remains active for 25 seconds. Pressing any key will stop the door if opening and stop or reverse the door if closing.

NOTE: If an error is made entering codes, simply press and hold both the "7/8 and 9/0 buttons for two seconds. The Keyless Entry will reset.

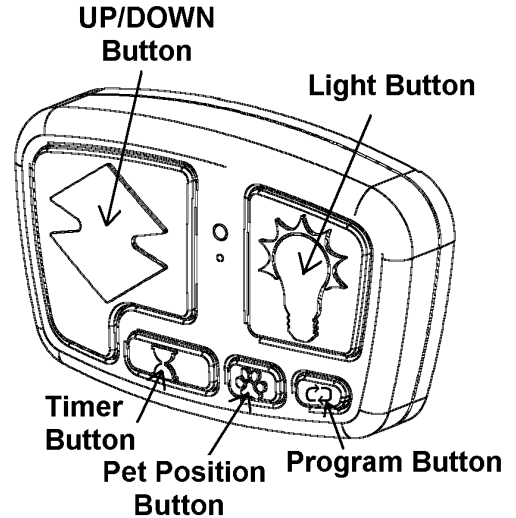
HOW TO OPERATE THE WIRELESS WALL STATION (If Included)



Never let children operate or play with door controls.
Keep remote control away from children.

The Wireless Wall Station Provides the Following Features:

1. Momentarily pressing the UP/DOWN button activates the door. An open door will close and a closed door will open.
2. Momentarily pressing the LIGHT button will toggle the overhead light on and off. The light will remain on until it is turned off by another LIGHT button press or the door is activated. The overhead light turns on automatically with door activation and will turn off automatically after a 4 minute delay.
3. Momentarily pressing the Timer button activates a 10 second exit delay. The overhead light will flash on and off for 10 seconds. After the 10 second delay the door will close. The exit delay feature works only when the door is in the up position.
4. Pressing the PET LOCK button opens a closed door to a preset position between eight and thirty inches above the floor, allowing pets to enter and exit the garage without the door being fully open. The door must be fully closed to activate the pet open feature. Pressing the PET LOCK button while the door is in the pet position will cause the door to close. Pressing the UP/DOWN button while the door is in the pet position will cause the door to open. **NOTE: a door in the pet position is not locked and should not be used as a secured door position.**
5. The wall station PROGRAM button has several functions.
 - a. It can be used to set a custom pet position. (see below)
 - b. It can be used to set the opener's closing force (See Adjustment #1 Page 21).



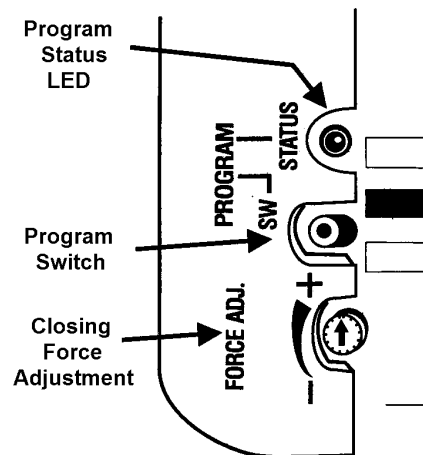
To set a custom pet position, start with the door in the closed position.

1. Operate the door then stop it at the desired height. If desired height is not achieved, the door must be returned to the closed position.
2. Press the wall station PROGRAM button until the LED turns on solid (5 sec.), or the opener power head PROGRAM SWITCH button two times. The STATUS light on the power head unit and the overhead light will flash on and off at a normal rate.
3. Press the PET POSITION button. The STATUS light on the power head and the overhead light will flash on and off three times indicating successful programming.

OPENER POWER HEAD CONTROLS

The PROGRAM SWITCH located in the opener power head has several functions.

1. Pressing the PROGRAM SWITCH button once, will make the STATUS light and overhead lamp turn on solid. This mode allows programming of Transmitters, Wireless Keyless Entry, and Wireless Wall Stations (see pages 14, 17, and 20).
2. Pressing the PROGRAM SWITCH button two times will make the STATUS light and overhead lamp blink on and off. This mode allows programming of a custom pet position (see above).
3. Pressing the PROGRAM SWITCH button three times will make the STATUS light and overhead lamp blink on and off with a long pause at each blink cycle. This mode allows programming of the opening force (see page 21).
4. Pressing and holding the PROGRAM SWITCH button for 10 seconds will erase all transmitters from memory. The STATUS light and overhead light will flash 3 times indicating a successful erase operation.



HOW TO OPERATE THE DOOR MANUALLY – Emergency Release Disconnect



The door should be fully closed if possible, weak or broken springs could allow an open door to fall rapidly. Property damage or serious personal injury could result. Do not use the manual release knob to pull the door open or closed. Do not stand near or in the path of door when using the emergency release disconnect.

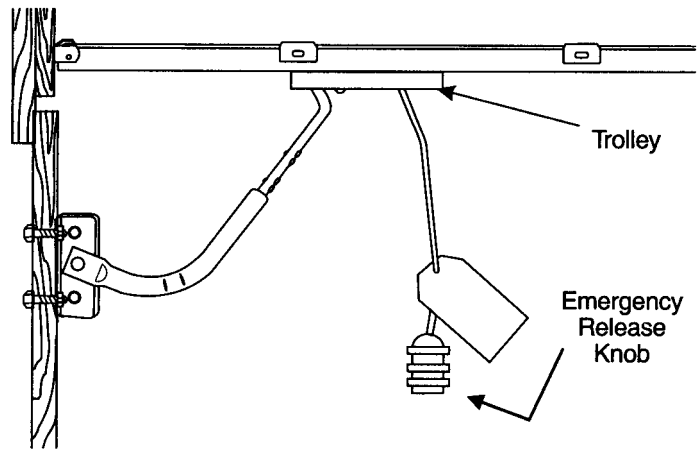
The opener is equipped with an emergency release recessed trolley-type disconnect system, enabling manual operation of the garage door during power failure.

The trolley is disconnected from the chain by pulling down on the red release knob, allowing the garage door to be operated manually.

The trolley will automatically reconnect when power is restored and door is activated.

If emergency release is used, close door before operating opener.

Note: Outside keylock emergency releases are an available accessory and are recommended for garages without a service entrance.



Programming a HomeLink™ Equipped Automobile to the Power Head Unit



WARNING: During programming the garage door may operate. Keep people and objects clear of the moving door to prevent door damage or possible personal injury.

NOTE: Use the instructions included with your vehicle FIRST. If the Power Head Unit does not activate with the vehicle then follow the instructions listed below.

Make sure you use a hand held transmitter which is already programmed to the Power head (see step 24), to perform the procedure listed below.

1. Press and hold the two outside buttons on the HomeLink™ unit until the light begins to flash rapidly (approx. 20 sec.). Release both buttons. (Do not perform this step to train additional hand-held transmitters).
Note: This operation erases all previously trained transmitters. Additional transmitters must be programmed using steps 2-5 below.
2. Hold the hand held transmitter about 1" to 3" away from the HomeLink™ unit keeping the both units indicator lights in view.
3. Press and hold the hand held transmitter large center button. The transmitter's red indicator will turn on. After 10 seconds the red indicator will blink rapidly. After 5 more seconds the red indicator will come on steady. Do not release the button.
4. While still holding the Wayne-Dalton transmitter button (red indicator on steady), immediately press and hold the desired HomeLink™ button. Keep pressing the buttons until step 5 has been completed.
5. The HomeLink™ indicator light will be blinking during the training operation. When the HomeLink™ indicator light flashes rapidly or turns off (approx. 5 to 60 seconds), both buttons may be released. The HomeLink™ light flashing rapidly or turning off indicates successful programming of the new frequency signal.

Now that HomeLink™ has learned the hand held transmitter code you must program HomeLink™ to the Power Head Unit.

1. Press the PROGRAM Switch button located on the garage door Power Head Unit once. The red PROGRAM STATUS light on the motor Power Head Unit and overhead lamp will turn on and remain lit for one minute, indicating that it is ready to learn the Transmitter.
2. Now press the HomeLink™ button used in Step 4 above for 1 to 3 seconds. The PROGRAM STATUS light on the power head will turn on and off three times indicating a successful learn.
3. Press the HomeLink™ button once more to operate the door. The opener will turn on and move the door.

MAINTENANCE OF YOUR OPENER SYSTEM



Test door opener monthly. The garage door **MUST** reverse on contact with a 1 inch high solid test object on the floor. If adjusting either the force or the limit of travel, retest the door opener. Failure to adjust the opener properly may cause severe injury or death.



KEEP GARAGE DOORS PROPERLY BALANCED. See owner's manual. An improperly balanced door could cause severe injury or death. Have a qualified service person make repairs to cables, spring assemblies and other hardware.

Once a Month:

1. Manually operate door, if unbalanced or binding, call a professional garage door service person.
2. Check to be sure door opens and closes fully. Adjust Limits and/or Force, (see pages 17, 19 and 21).
3. Perform safety reverse tests (Step 28 and 30). Make any necessary adjustments.

Twice a Year:

Check chain tension. If chain rests on bottom of rail, adjust tension by turning the two chain adjusting nuts at the end of the rails (*opposite the power head end*) clockwise. Make sure to adjust both nuts equal amounts and adjust until chain is approximately 5/8" above rails. If your opener is equipped with only a single nut simply turn the nut to adjust the rail.

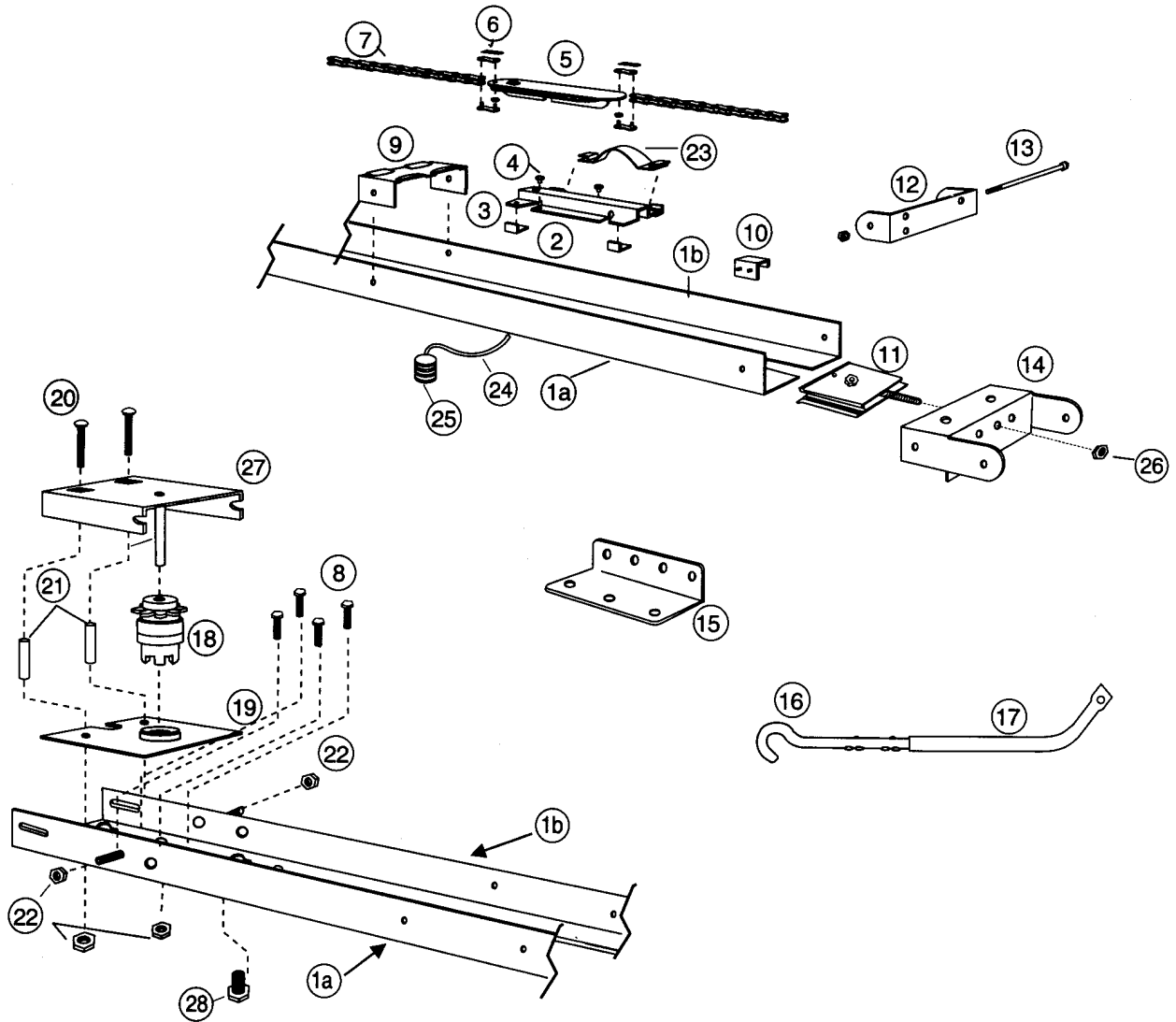
Once a Year:

1. Lubricate door rollers, bearings and hinges. (*Refer to door owner's manual for maintenance information*).
2. Check batteries in Transmitters, Wireless Wall Station, Wireless Keyless Entry and Wireless Infrared Safety Sensors (*if included*). When replacing batteries always use new batteries; never mix old and new batteries. Never mix different types of batteries (see pages 14, 17 and 20). Alkaline or Lithium batteries are recommended for longer life. Dispose of used batteries properly.

TROUBLE SHOOTING SECTION

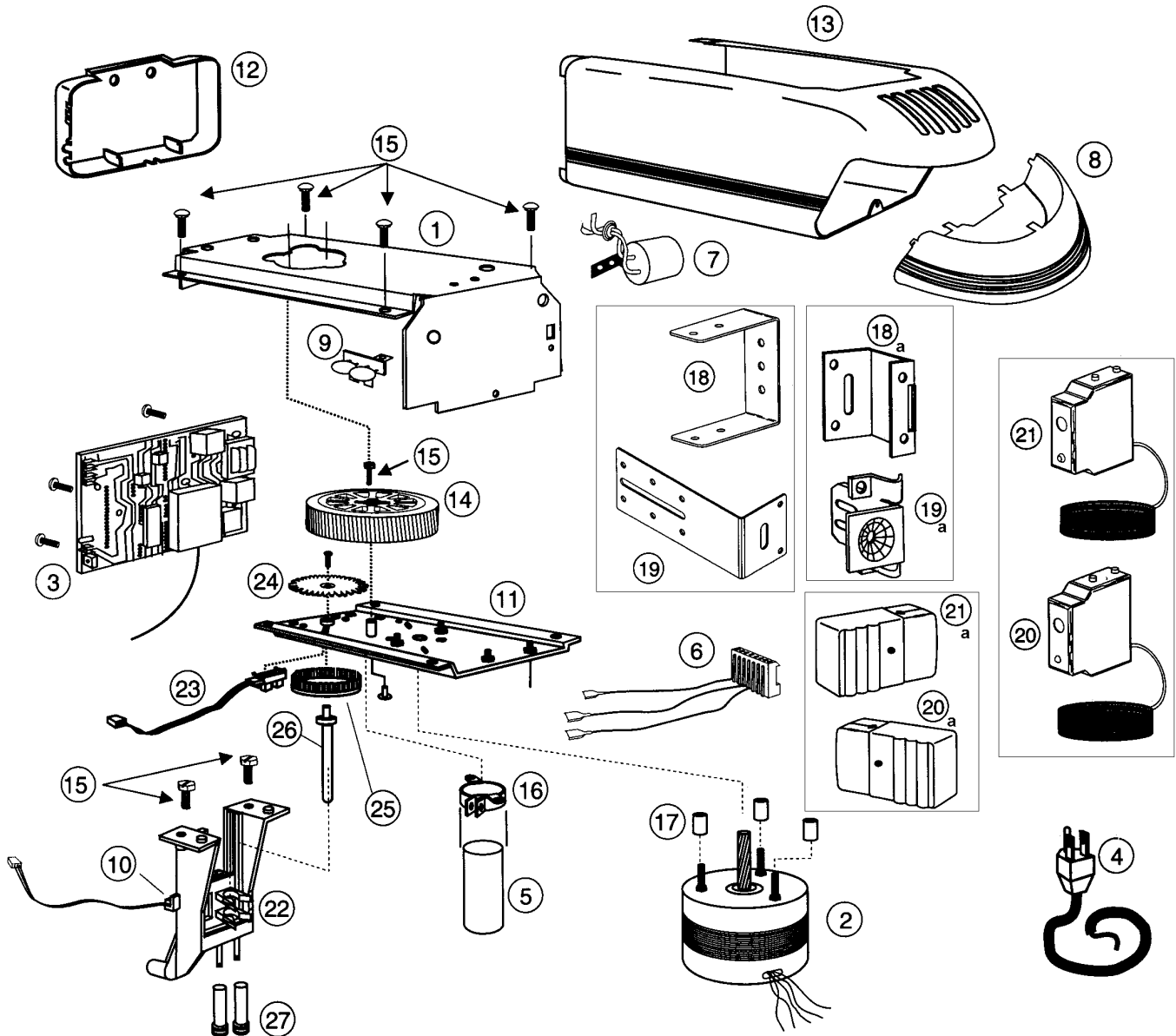
SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
Opener won't work from wall button or radio control.	<p>No power to opener.</p> <p>Short circuit in wires to opener or wall button.</p> <p>Motor Protector trips open due to excessive use.</p>	<p>Check cord to outlet, wall switch and circuit breaker.</p> <p>Isolate by disconnecting the wires at the opener from the wall station.</p> <p>Allow motor to cool for 20 minutes and try again.</p>
Opener works from wall button but not from radio control.	Radio control system non-operational.	<p>Weak or dead battery in transmitter-replace.</p> <p>Security Code not matched between receiver and transmitter (see page 16)</p> <p>If two or more transmitters don't work, have Motor Control Board Tested.</p>
Door does not open and opener light flashes.	<p>Something obstructing door travel.</p> <p>Insufficient opening force.</p> <p>Build up of ice and snow around door.</p>	<p>Disconnect door from operator. Operate door by hand to locate obstruction or call a service person.</p> <p>Adjust opening force. (See Adj. #1).</p> <p>Shovel and clear door area.</p>
Door does not open fully and light does not flash.	Open Limit not set properly.	Adjust Open Travel with screwdriver, turn counter-clockwise to desired setting. 1/4 turn equals to 1" of travel (see Step 29).
Door stops and does not close fully.	Close Limit not set properly.	Adjust Close Travel with screwdriver, turn clockwise to desired setting. 1/4 turn equals 1" of travel (See Step 28).
Door closes and then returns to fully open position and opener light flashes.	<p>Door arm adjustment.</p> <p>Close travel adjustment is set beyond normal door position.</p> <p>Obstructions on floor.</p>	<p>Adjust rod in tube to provide 1" of "cushion" compression when door is fully closed (See Step 25 and 27).</p> <p>Adjust Close Travel with screwdriver, turn clockwise to desired setting. 1/4 turn equals 1" of travel (See Step 28).</p> <p>Check for stones or ice under door and remove.</p>
When activated with door in fully open position, door travels for 1 second, stops, and returns to fully open position and light begins to flash.	<p>Infrared Safety Sensors out of adjustment or defective.</p> <p>Batteries in Wireless Safety Sensors.</p> <p>Obstructions in door opening.</p>	<p>Infrared Safety Sensors alignment should be checked per instructions. (See Step 22 and 23).</p> <p>Check batteries and contact points.</p> <p>Check for object blocking Infrared Safety Sensors.</p>
Door reverses travel before reaching fully closed position and opener light flashes.	<p>Activation of obstruction sensing system.</p> <p>Loose or hanging objects on door activating Infrared Safety Sensor</p> <p>Insufficient closing force.</p>	<p>Check for binding in door travel (door "stops", door tracks, etc).</p> <p>Remove objects.</p> <p>Adjust closing force. (See Adj. #1).</p>
Door stops travel for 1 second at midpoint during close and then continues to close.	Weak battery in Wireless Infrared Safety Sensors.	Replace batteries in Wireless Infrared Safety Sensors.
Door fully opens and then light flashes.	Open limit is set too high and trolley is hitting the stop bolt.	Adjust Open Travel with screwdriver, turn counter-clockwise to desired setting. 1/4 turn equals to 1" of travel (see Step 29).

Parts Breakdown Rail Assembly – All Models




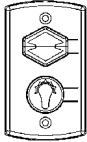
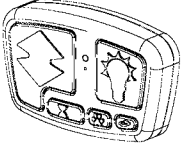
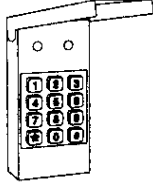

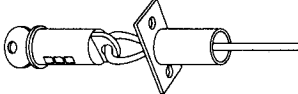

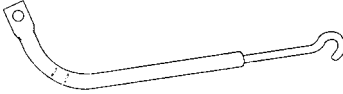



#	Part #	Description	# Per Unit	#	Part #	Description	# Per Unit
	1a. 282903	Rail Angle, R.H. (7 foot)	1	14.	220958	Front Rail Bracket	1
	1b. 282904	Rail Angle, L.H. (7 foot)	1	15.	240956	Door Bracket	1
	2. 198077	Trolley Assembly	1	16.	229858	Arm Rod, 14"	1
	3. 221020	Trolley Wing Foot	4	17.	252107	Tube Arm, 13"	1
	4. 220961	Nylon Button	4	18.	305894	Sprocket Coupling (with bushing)	1
	5. 252109	Chain Latch Assembly	1	19.	252106	Sprocket Coupling Base Assembly	1
	6. 157666	Master Link Assembly with Spacers	2	20.	251228	5/16 - 18 x 2" Hex Bolts	2
	7. 220966	Chain, 7' Opener	1	21.	221014	Spacer Tube	2
	220967	Chain, 8' Opener	1	22.	220999	5/16 - 18 Kep Nut	4
	220968	Chain, 9' Opener	1	23.	220987	Molded Chain Guard	1
	220969	Chain, 10' Opener	1	24.	220977	Reg Release Cord	1
	8. 157510	Motor Head Mounting Screw 1/4-20	4	25.	157143	Red Release Knob	1
	9. 220960	Rail Spacer Bracket	2	26.	157665	Chain Adjusting Nut	2
	10. 294674	Rail Stop with Set Screws	1	27.	287265	Sprocket Coupling Cap Assembly	1
	11. 252110	Front Chain Guide Assembly	1	28.	157500	Stop Bolt	1
	12. 220959	Front Wall Bracket	1				
	13. 157559	1/4 - 20 x 4" Hex Bolt with Lock Nut	1				

Parts Breakdown Power Head Assembly – All Models



#.	Part #	Description	Per Unit	#.	Part #	Description	# Per Unit
1.	157167	Frame	1	17.	157496	5/16" Motor Spacers	3
2.	292123	Motor – 1/2 H.P.	1	18.	157166	Wired Sensor Mounting Bracket	2
3.	306137	Motor Control Board (all models)	1	18a.	157159	Wireless Sensor Wall Mounting Bracket	2
4.	306364	Power Supply Cord	1	19.	157165	Wired Sensor Sliding Bracket	2
5.	260570	Capacitor – 1/2 H.P.	1	19a.	157162	Wireless Sensor Mounting Bracket	2
6.	306486	Wiring Harness	1	20.	250597	Wired Receiving Unit	1
7.	269025	Light Socket	1	20a.	260598	Wireless Transponder Unit	1
8.	260552	Lens	1	21.	260600	Wired Sending Unit	1
9.	252994	MOV Surge Suppressor	1	21a.	260599	Wireless Sending Unit	1
10.	252993	Limit Switch	1	22.	252092	Limit Assembly (includes items #10, 27 & 26)	1
11.	252125	Sub-Frame	1	23.	249321	LED interrupter	1
12.	260532	End-Cap	1	24.	260556	Limit Driver Gear	1
13.	260530	Housing	1	25.	157039	Interrupter Disk	1
14.	260525	Gear, Driven	1	26.	260557	Shaft, Limit Driver	1
15.	251248	Screw 1/4-20 x 3/8	7	27.	157055	Limit Adjuster	2
16.	249257	Capacitor Clamp	1				

QUANTUM ACCESSORIES

Three Button mini/visor Transmitter	Part#302083		Controls up to 6 doors or wireless accessories. Includes visor clip.
Wired Deluxe Wall Station	Part#		Allows independent door up/down control and overhead light on/off control. Unit will fit over a standard electrical outlet box.
Wireless Deluxe Wall Station	Part#302090		Completely wireless unit with independent door up/down control, light on/off control, custom pet opening, delay exit timer, and program button.
Wireless Keyless Entry	Part# 302078		Illuminated 10-digit numeric keypad which allows the operation of the garage door opener from outside by entering a programmable personal code on a keypad. Can be programmed to hundreds of doors. Flip lid covers keypads when not in use.
Multi-Function Wall Control Station	Part# 297137		Allow independent door up/down control and overhead light on/off control. Unit includes an electronic lock feature that prevents opening the garage from any wireless device.
Key Cable Outside Disconnect	Part# 157277		Recommended for all vault type garages without an access door
Outside Key Switch	Part#160383		Used to open the door automatically from outside the garage whenever the remote control is not available. Shipped with 2 keys.
Extender Arm Assembly Kit	Part#241171		Use for high door arc installations.
Short Arm Assembly Kit	Part#241172		Use for low headroom installations.
Wire Spool	Part#260701		80ft. 22 gauge, 2 conductor polarized. UL listed (CL-2, 75deg. C.).
Wire Reel	Part#157702		1000ft. 22 gauge, 2 conductor polarized. UL listed (CL-2, 75deg. C.).

Questions? For quick answers and helpful advice, Call Toll Free 1-800-305-4349

LIMITED LIFETIME WARRANTY

The Manufacturer warrants that the Quantum™ garage door opener will be free from defects in materials and workmanship for a period of five years (3214, 3314), ten years (3316), and fifteen years (3414). Electronic components are warranted for three years (3214, 3314) and five years (3316, 3414). The garage door opener (materials, workmanship, and electronic components) is warranted from the installation date, provided it is properly installed, maintained and cared for under specified use and service. The motor has an extended **LIFETIME** warranty (all models) against defects in materials and workmanship.

This Warranty extends to the original homeowner, providing the garage door opener is installed in his/her place of primary residence. It is not transferable. The warranty applies to residential property only and is not valid on commercial or rental property.

NO EMPLOYEE, DISTRIBUTOR, OR REPRESENTATIVE IS AUTHORIZED TO CHANGE THE FOREGOING WARRANTIES IN ANY WAY OR GRANT ANY OTHER WARRANTY ON BEHALF OF MANUFACTURER.

The Manufacturer shall not be responsible for any damage resulting to or caused by its products by reason of installation, improper storage, unauthorized service, alteration of products, neglect or abuse, any acts of nature beyond Manufacturer's control (such as, but not limited to, lightning, power surges, water damage, etc.), or attempt to use the products for other than the customary usage or for their intended purposes. The above warranty does not cover normal wear or any damage beyond Manufacturer's control or replacement labor.

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

Claims for defects in material and workmanship covered by this warranty shall be made in writing to the dealer from whom the product was purchased within the warranty period. Manufacturer may either send a service representative or have the product returned to the Manufacturer at Buyer's expense for inspection. If judged by Manufacturer to be defective in material or workmanship, the product will be replaced or repaired at the option of the Manufacturer, free from all charges except authorized transportation and replacement labor.

THE REMEDIES OF BUYER SET FORTH HEREIN ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER REMEDIES, THE LIABILITY OF MANUFACTURER, WHETHER IN CONTACT, TORT, UNDER ANY WARRANTY OR OTHERWISE, SHALL NOT EXTEND BEYOND ITS OBLIGATION TO REPAIR OR REPLACE, AT ITS OPTION, ANY PRODUCT OR PART FOUND BY MANUFACTURER TO BE DEFECTIVE IN MATERIAL OR WORK SHALL NOT BE RESPONSIBLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE.

This Warranty gives you specific legal rights and you may have other rights, which may vary from state to state. However, some states do not allow limitation on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages so the above limitations or exclusions may not apply to you.

Pre-drill a 5/64 pilot
hole 3/4" deep

X

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

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Pre-drill a 5/64 pilot
hole 3/4" deep

**Drilling Template
For Keyless Entry**

Cut Template to Aid in Keyless Entry Installation (See Step 32)

Wayne-Dalton Corp. P.O. Box 67 Mt. Hope, OH 44660 1-800-305-4349