CHAIN-DRIVE GARAGE DOOR OPERATORS

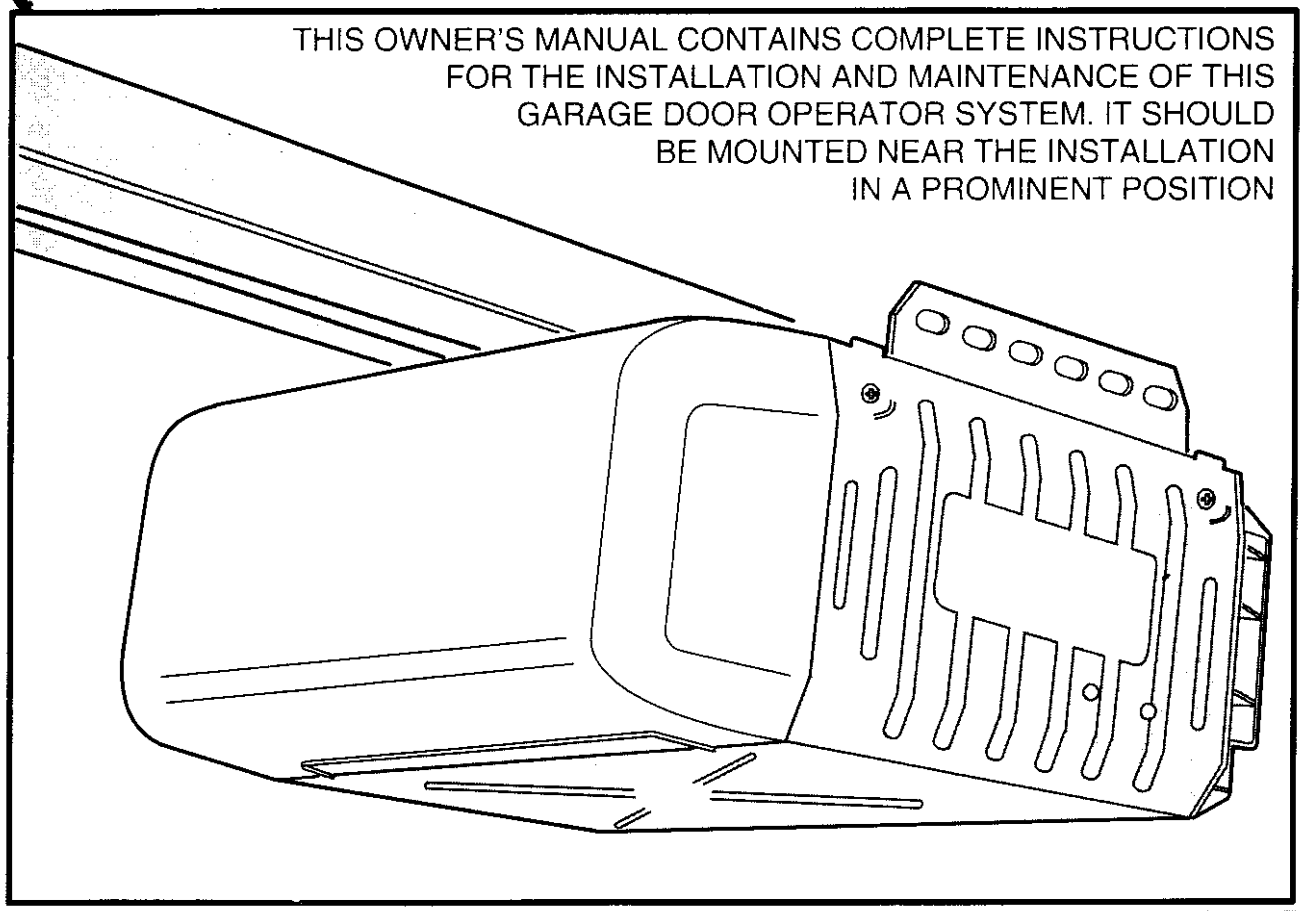
DRAFT

With DoorSentry® Infrared Safety Beam

Models XX125, XX133 & XX150

Assembly and Installation Instructions

THIS OWNER'S MANUAL CONTAINS COMPLETE INSTRUCTIONS FOR THE INSTALLATION AND MAINTENANCE OF THIS GARAGE DOOR OPERATOR SYSTEM. IT SHOULD BE MOUNTED NEAR THE INSTALLATION IN A PROMINENT POSITION



⚠ WARNING ⚠

To reduce the risk of injury to persons, install this operator on:
SECTIONAL DOOR if channel box is labeled "XSX" or XST.
ONE PIECE JAMB DOOR if channel box is labeled "XJX" or XJT.

⚠ CAUTION ⚠

This door operator will require constant pressure on the wall button to close the door unless the infrared emitter and detector are installed and properly aligned.

MOORE-O-MATIC

Quality Garage Door Operators with Linear Radios

(800) 835-5666

CONTENTS

IMPORTANT SAFETY NOTES

Please read the instructions carefully! This garage door operator is designed to provide safe and reliable service if installed and tested as described in this manual. A garage door is the largest mechanical appliance in a residence. Care must be taken to prevent injury or death during installation and operation of the garage door and garage door operator.

The following formats are used for safety notes in this manual:

⚠ WARNING ⚠

This type of warning note is used to indicate possible mechanical hazards that may cause serious injuries or death.

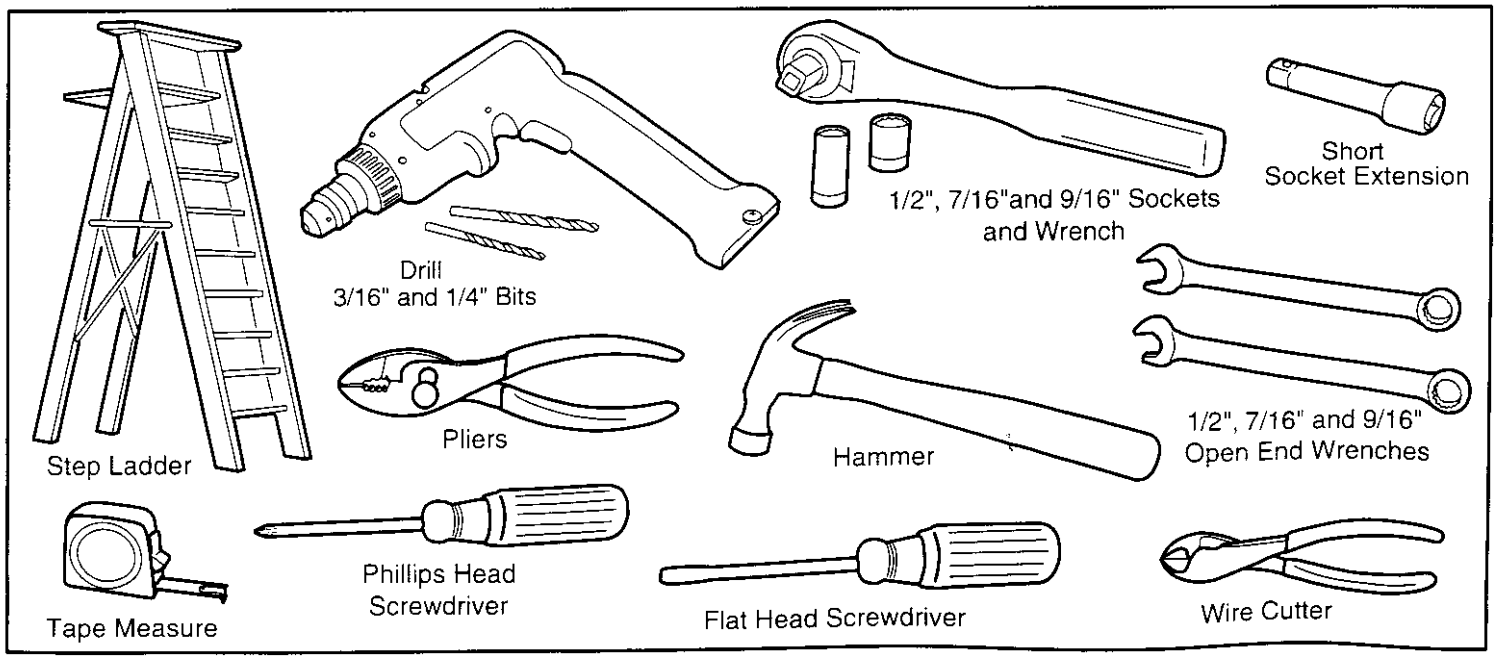
⚠ WARNING ⚠

This type of warning note is used to indicate possible electrical shock hazards that may cause serious injuries or death.

⚠ CAUTION ⚠

This type of warning note is used to indicate the possibility of damage to the garage door or garage door operator.

INSTALLATION TOOLS REQUIRED

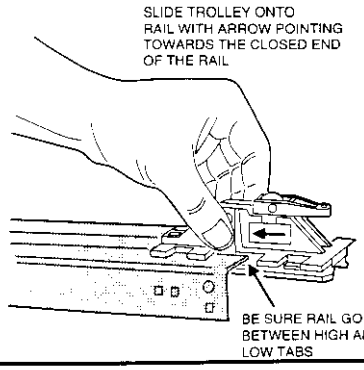


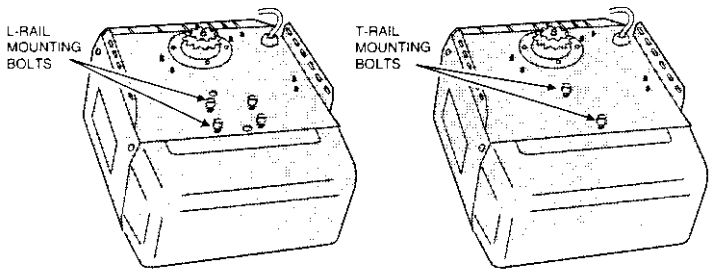
ASSEMBLY STEP 1

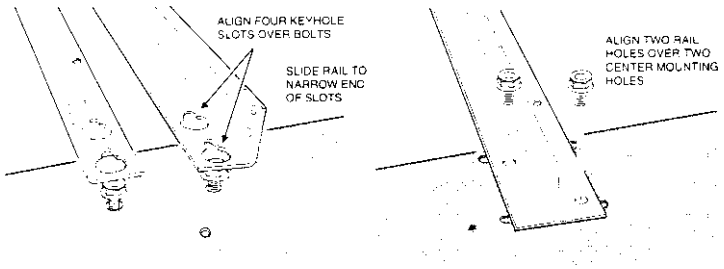
Attaching Rail to Operator

Attaching L-Rail

- ☐ Place operator head on garage floor with cardboard underneath to protect the finish.
- ☐ Slide trolley onto rail with arrow on trolley pointing towards the closed end of the rail (end with chain tightner).
- ☐ Locate the four 1/4-20 x 1/2" bolts pre-installed into the operator head.
- ☐ Align the four keyhole slots on the end of the rail over the four bolts.
- ☐ Slide channel to narrow end of keyhole slots and tighten bolts with a 7/16" socket.
- ☐ Install 1/4-20 x 1/2" sems bolt into hole in rail near operator head from the bottom of the rail. Secure sems bolt with 1/4-20 keps nut, tighten with 7/16" socket.

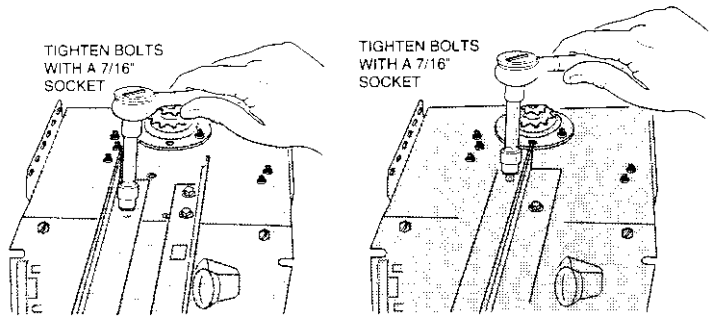


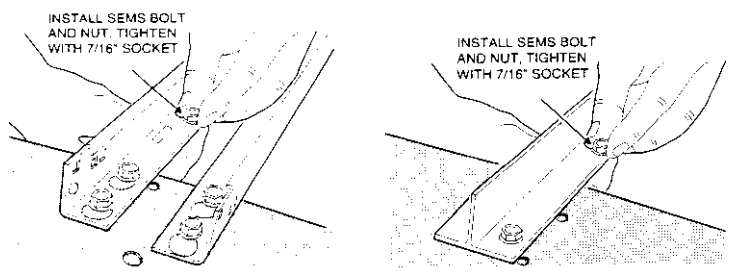




Attaching T-Rail

- ☐ Place operator head on garage floor with cardboard underneath to protect the finish.
- ☐ Locate the four 1/4-20 x 1/2" bolts pre-installed into the operator head. (Two of the bolts will not be used)
- ☐ Remove bolts and align t-rail over the two diagonal holes.
- ☐ Replace and tighten bolts with a 7/16" socket.
- ☐ Install 1/4-20 x 1/2" sems bolt into hole in rail near operator head from the bottom of the rail. Secure sems bolt with 1/4-20 keps nut, tighten with 7/16" socket.





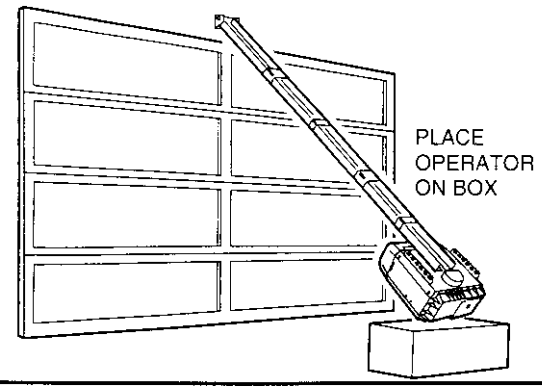
INSTALLATION STEP 3

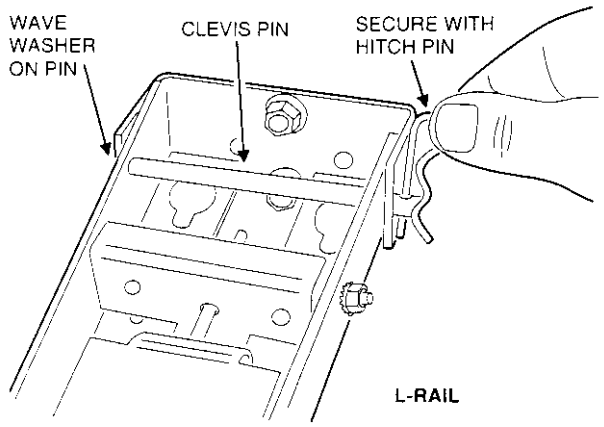
Connecting Rail to the Header Bracket

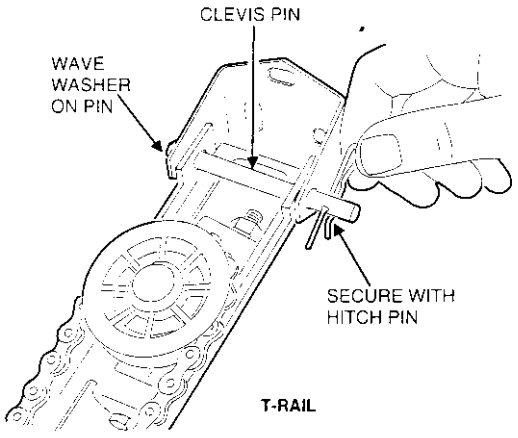
- ☐ Place assembled operator on the empty carton on the floor with rail towards the door.
- ☞ ***NOTE:*** *If door is equipped with a torsion spring it may be necessary to place the operator head on a ladder so the rail will clear the spring.*

Connecting Rail to the Header Bracket

- ☐ Place wave washer on clevis pin.
- ☐ Insert the end of the rail into header bracket.
- ☐ Insert the 5/16" x 4" clevis pin through header bracket and rail.
- ☐ Secure the clevis pin with the hitch pin.







INSTALLATION STEP 6

Installing the Pushbutton

⚠ WARNING ⚠

Children operating or playing with a garage door operator can injure themselves or others. The garage door could close and cause serious injury or death. Do not allow children to operate the wall station or the remote control transmitters.

Install the pushbutton out of reach of children and away from all moving parts of the door. The door must be clearly visible from the pushbutton.

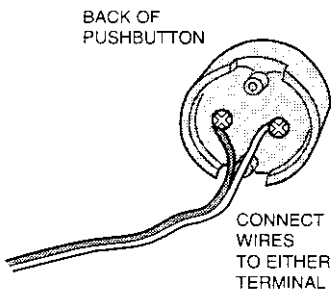
A moving garage door could injure someone under it. Only activate the door when it is properly adjusted, when it can be seen clearly and when there are no obstructions to the door travel.

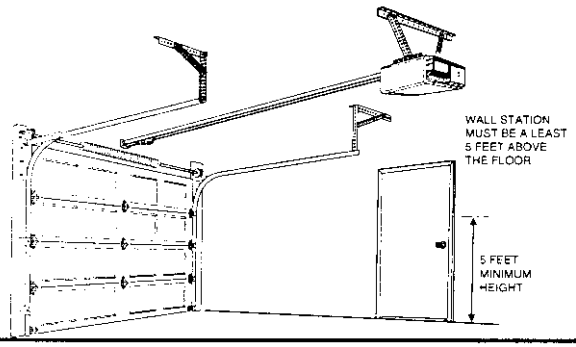
☞ *NOTE: A standard round pushbutton is supplied with the operator. An optional 3-button wall station (Model XX-WS) with light control and vacation lock can also be used with this operator (see Operator Accessory page).*

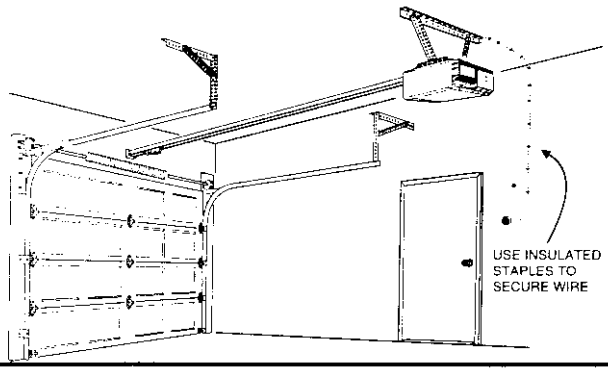
- ☐ Strip 1/4" of insulation from one end of the 2-conductor black and white wire supplied with the operator.
- ☐ Connect the wires to the two terminals on the back of the pushbutton. With the standard pushbutton, polarity of the wires is unimportant.
- ☐ Select a convenient location for mounting the pushbutton near an access door. **The door must be clearly visible from the wall station.** Use the screws provided to mount the pushbutton at a minimum height of 5 feet, where children cannot reach it and away from all moving parts of the door.
- ☐ Route the wire to the back of the operator. Use the insulated staples provided to secure the wire. Staples must straddle both wires to avoid electrical shorts.
- ☐ Cut the wire, leaving about 6" slack, strip back each conductor about 1/4".
- ☐ Connect the black wire to the black pushbutton terminal and the white wire to the white pushbutton terminal on the back of the operator.
- ☐ **Apply the User Safety Instruction Label to the wall next to the pushbutton. Use staples or tacks to help the label remain in place over time.**

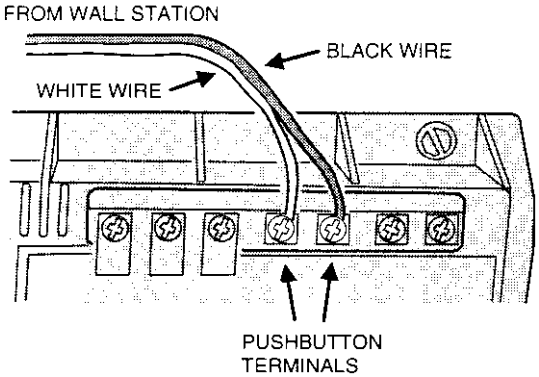
⚠ WARNING ⚠

DO NOT PLUG THE OPERATOR IN AT THIS TIME! More installation is required.



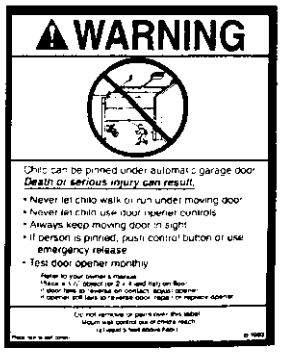






IMPORTANT!

Apply the User Safety Instruction Label to the wall next to the pushbutton. →



INSTALLATION STEP 9

Installing the DoorSentry® Infrared Safety Beam

The DoorSentry consists of two units, an infrared emitter and an infrared detector. The emitter constantly sends a narrow infrared beam to the detector. If the door is moving down, and an obstacle interrupts the beam, the DoorSentry will stop the door and reverse it causing the door to go up.

If the door is up and there is an obstacle interruping the beam, or the DoorSentry is not aligned, the radio transmitter will not function. The operator will only run the door down if constant pressure is applied to the wall station pushbutton.

⚠ WARNING ⚠

Without a properly installed and adjusted DoorSentry object sensor, persons (particularly children) could be killed by a closing garage door. Read and follow all instructions carefully.

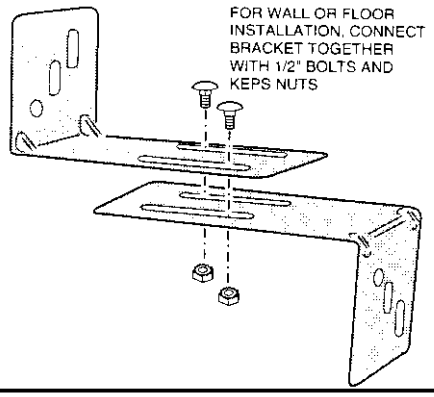
☞ ***NOTE:*** *The "DoorSentry" must be installed so the path of the light beam is not obstructed by the garage door, door tracks, springs, hinges, rollers or any other part of the door mechanism. It may be necessary to add a piece of wood to the wall at mounting locations to insure proper clearance or for installation on masonry wall construction.*

⚠ WARNING ⚠

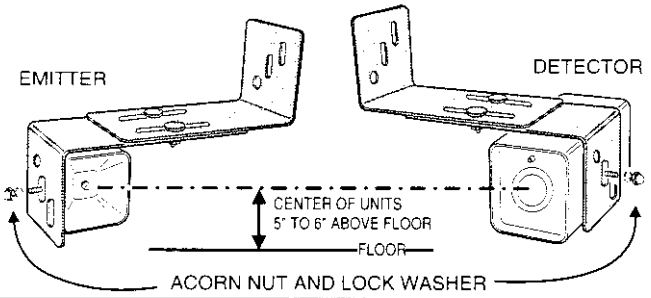
Install the DoorSentry no higher than 5" to 6" from the floor to the center of the emitter and detector to protect small children.

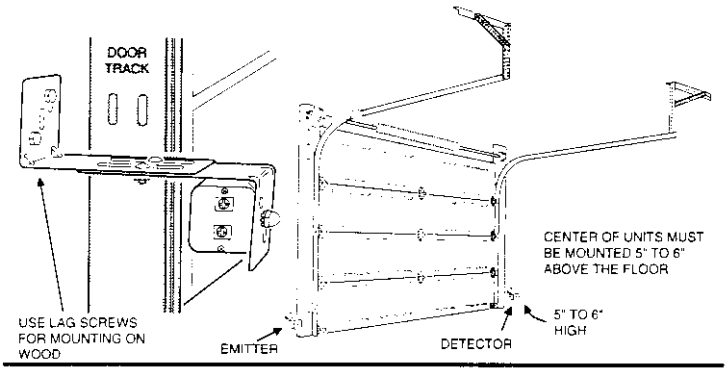
☞ ***NOTE:*** *The detector must be installed on the "shade" side of the garage door, where sun will not shine directly into the detector lens.*

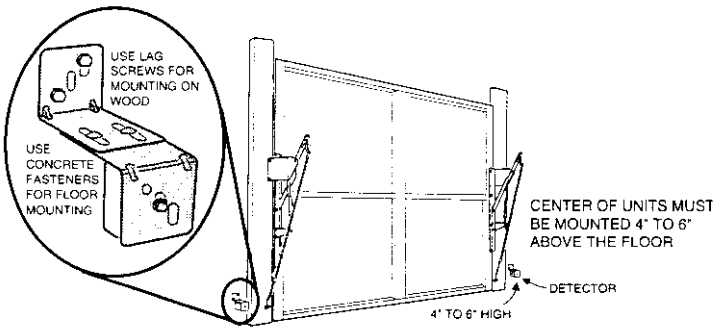
- ☐ Assemble the two DoorSentry brackets from the four L-shaped brackets using four 1/4-20 x 1/2" carriage bolts and 1/4-20 keps nuts. Finger tighten hardware only until later adjustment.
- ☐ Position detector and emitter on their brackets and secure them with the 1/4-20 acorn nuts and lock washers.
- ☐ Position the units at the same height (approximately 5" to 6" above the floor). The clear emitter infrared light must point towards the clear detector lens. Use a pencil to mark the locations for the lag screws for wall or floor mounting.
- ☐ Drill two 3/16" pilot holes for lag screws at marks. Mount the brackets with two 1/4" x 1" lag screws (or proper concrete fasteners when floor mounting), tighten with a 7/16" socket.



FOR GARAGE WALL OR FLOOR INSTALLATION
MOUNT UNITS INSIDE BRACKETS







INSTALLATION STEP 10

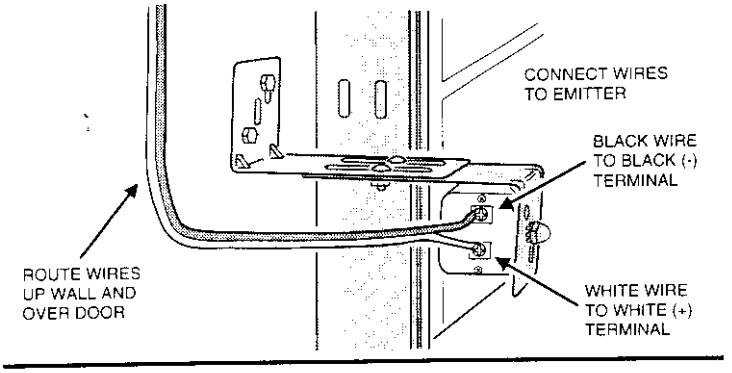
Wiring the DoorSentry® Infrared Safety Beam

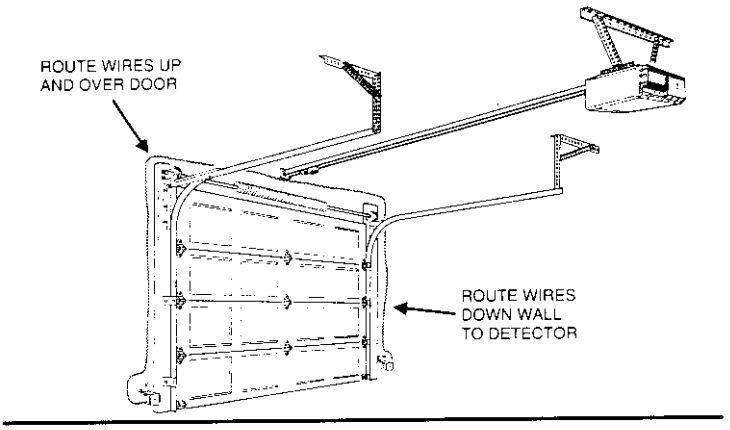
Through two wires, (red & white), the DoorSentry detector receives power from the operator and sends its control signals back to the operator. The emitter connects to the detector through two wires (white & black) for its power.

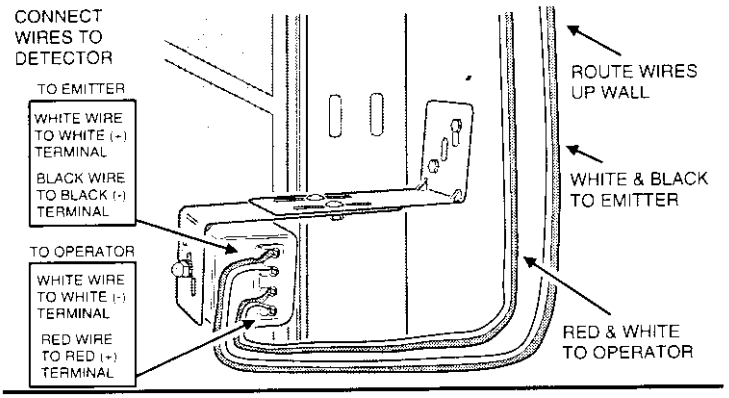
- ☐ Strip 1/4" of insulation from the black & white wires. Attach them to the terminals marked BLACK & WHITE on the *emitter.*
- ☐ Route the wires up the wall, over the door and down the other side to the *detector.*
- ☐ Cut the black & white wires (leaving about 6" slack) at the rear of the detector. Strip 1/4" of insulation from the wires and attach them to the terminals marked BLACK & WHITE on the *detector.*
- ☐ Strip 1/4" of insulation from the red & white wires. Attach them to the terminals marked RED & WHITE on the *detector.*
- ☐ Route the wires up the wall, halfway over the door, along the top of the rail using zip-ties supplied or across ceiling and back of the operator head, leaving about 6" slack.
- ☐ Strip 1/4" of insulation from the red & white wires. Attach them to the terminals marked EXT. OBST. RED & WHITE on the *operator.*
- ☐ Secure all the wires to the wall and ceiling with the insulated staples. Staples must straddle both wires to prevent shorts.

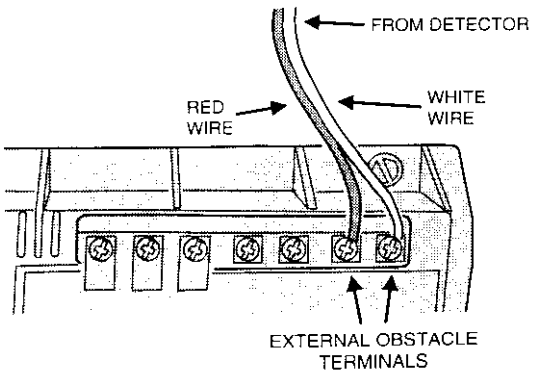
⚠ WARNING ⚠

Failure to test and adjust safety reverse system may result in serious injury or death from a closing garage door. Repeat the test once a month and adjust as needed. See Page 19 for adjustment and testing details.









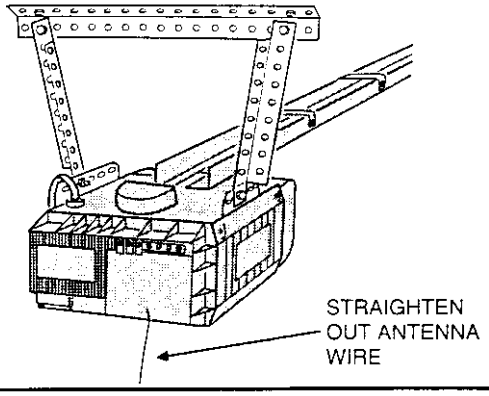
ADJUSTMENT STEP 2

Testing the Radio Remote Control

⚠ WARNING ⚠

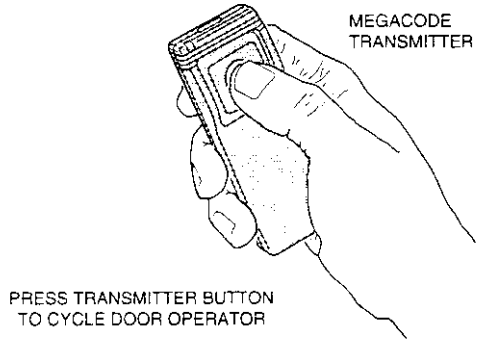
Children operating or playing with a garage door operator can injure themselves or others. The garage door could cause serious injury or death. Do not allow children to operate the radio remote control(s) or the wall station.

A moving garage door could injure or kill someone under it. Activate the operator only when the door is clearly visible, free of obstructions and adjusted properly.



The radio receiver is located in the rear bulkhead of the operator. The small white wire serves as an antenna for the receiver.

More transmitters can be purchased for additional users of the door operator. Before purchasing, check to see if your operator is equipped with MegaCode radio remote controls.



MegaCode Radio Controls

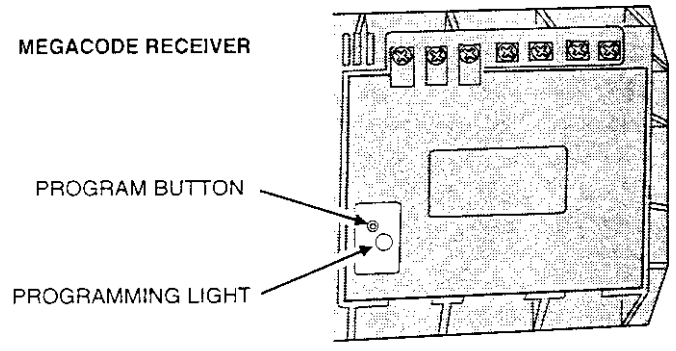
MegaCode transmitters are permanently factory coded. Up to 10 MegaCode transmitters can be stored in the receiver's memory.

To add a MegaCode transmitter:

- ☐ Momentarily press the receiver's program button. The receiver's red programming light will glow if there's room in the receiver's memory for more transmitters. The red light will stay on for about 5 seconds. **A transmitter must be entered while the red light is still on.** Press the transmitter button. The red light will flicker indicating that the receiver has accepted the transmitter.

To remove a MegaCode transmitter:

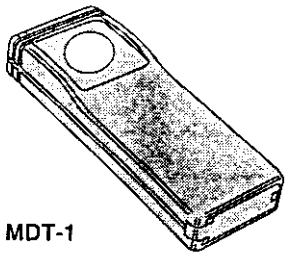
- ☐ Press and hold the receiver's program button for 5 seconds or more. **This will erase *all* of the transmitters stored in the receiver's memory.** The receiver's red programming light will blink, counting the transmitters in memory then blink once as the memory is erased.
- ☐ Follow the previous step to re-program all needed transmitters.
- ☐ For programming multi-channel MegaCode radios refer to the instructions supplied with the equipment.



Testing

- ☐ Before testing the radio control, straighten out the antenna wire so it points down toward the floor.
- ☐ Stand clear of the door, press the transmitter button and verify that the operator starts.

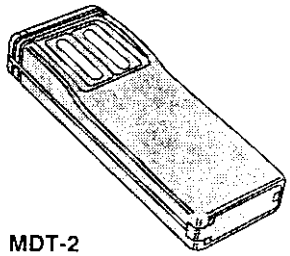
OPERATOR ACCESSORIES



MDT-1

1-Channel MegaCode Transmitter

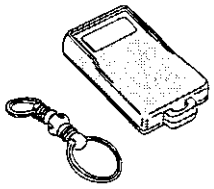
Controls single garage door operator.



MDT-2

2-Channel MegaCode Transmitter

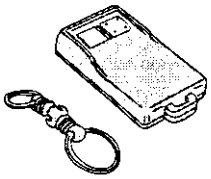
Controls two devices. The top button can be used to control a third device.



MMT-1

MegaCode Mini Transmitter

Designed to be used with the keychain provided. Activates one device.



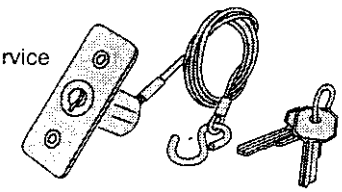
MMT-2

MegaCode Mini Transmitter (Two Button)

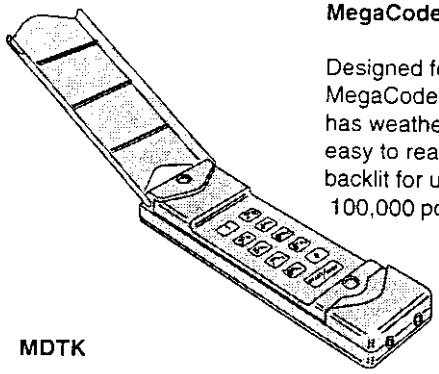
Designed to be used with the keychain provided. Activates two devices.

Vault Door Cable Release

For garage doors with no service door. Release operator from outside.



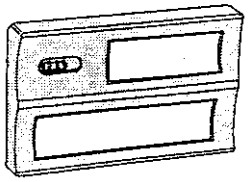
VDCR



MDTK

MegaCode Wireless Keypad

Designed for use with MegaCode radios. Keypad has weather-proof construction, easy to read numbers and is backlit for use at night. 100,000 possible codes.



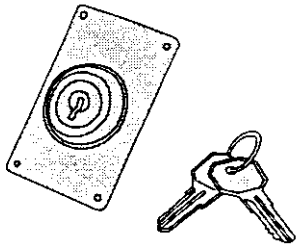
XX-WS

Wall Station

Independently controls garage door operator and lights. Vacation switch disables radio for added security.

Key Lock Switch

A wired control station outside a garage. Secure from anyone without a key.



KLS

DRAFT

LIMITED WARRANTY

THE WARRANTOR WARRANTS THAT: The motor on this operator is warranted to the consumer against defects in material and workmanship for Ten years from the date of purchase. The drive train will be free from defects in materials and/or workmanship for a period of:

Model XX150 - *Five years*
Model XX133 - *Three years*
Model XX125 - *One year*

All other parts will be free of defects in materials and workmanship for a period of One year from date of purchase. This warranty applies to first retail buyers of new devices. The product must be used in complete accordance with Moore-O-Matic's instructions for installation, operation and care.

Warrantor will repair, or at its option, replace, any device it finds that requires service. The device must be sent to the warrantor at the consumer's expense to one of the following addresses:

MOORE-O-MATIC, INC.
Repair Center
419 Oak Street
Waupaca, WI 54981

MOORE-O-MATIC, INC.
Repair Center
2580 Pioneer Avenue, Suite C
Vista, CA 92083

The consumer must contact the warrantor at one of the addresses shown to obtain shipping instructions prior to shipping the device to the warrantor. The warrantor will return the repaired or replaced device to the consumer at the warrantor's cost.

Remedies provided by this warranty are exclusive. Implied warranties under state law are limited to a period of one year from the date of purchase by the consumer. This limitation is not valid in jurisdictions which do not allow limitations of incidental or consequential damages. To obtain service under this warranty, the consumer must present a copy of proof of purchase of the device when submitting a device for service.

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

Changes or modifications to the unit may void the user's authority to operate the equipment.

MOORE-O-MATIC

Quality Garage Door Operators with Linear Radios