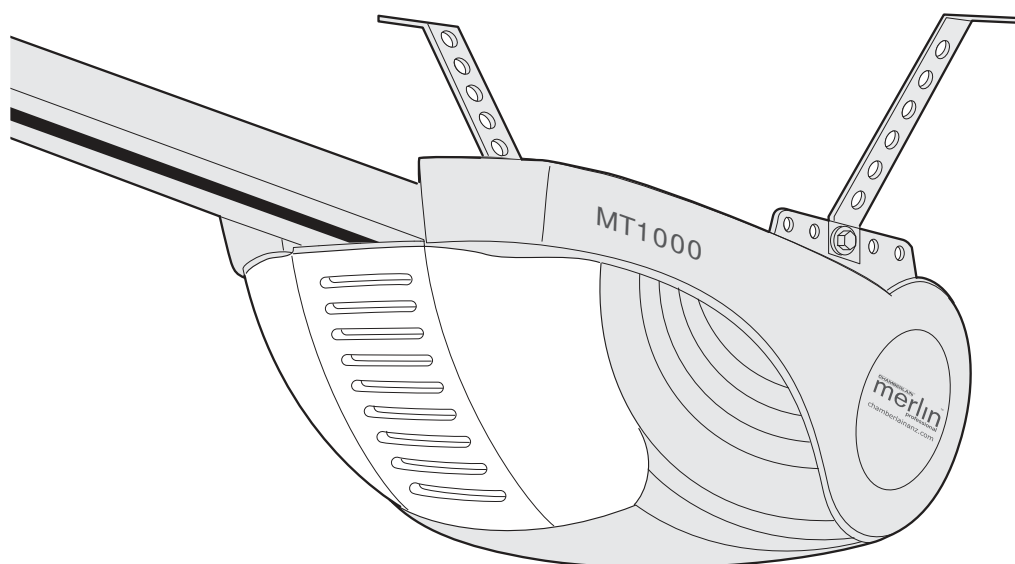


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## **MT600/MT1000**

### **Sectional and Tilt Garage Door Opener**

### **Installation and Operating Instructions**

**Owners Copy: Please keep these instructions for future reference**



This manual contains **IMPORTANT SAFETY** information.  
**DO NOT PROCEED WITH THE INSTALLATION BEFORE READING THOROUGHLY.**



**N2966**

# START BY READING THESE IMPORTANT SAFETY INSTRUCTIONS

## WARNING

- Failure to comply with the following instructions may result in serious personal injury or property damage.
- Read and follow all instructions carefully.
- The garage door opener is designed and tested to offer safe service provided it is installed and operated in strict accordance with the instructions in this manual.



These safety alert symbols mean **WARNING** : A possible risk to personal safety or property damage exists.



**Keep garage door balanced.** Do not let the garage door opener compensate for a binding or sticking garage door. Sticking, binding or unbalanced doors must be repaired before installing this opener.



**Do not wear rings, watches or loose clothing** while installing or servicing a garage door opener.



**Frequently examine the door installation,** in particular cable, springs and mountings for signs of wear, damage or imbalance. Do not use if repair or adjustment is needed since springs and hardware is under extreme tension and a fault can cause serious personal injury.



To avoid serious personal injury from entanglement, **remove all ropes, chains and locks connected to the garage door** before installing the door opener.



**Installation and wiring** must be in compliance with your local building and electrical codes.



**The safety reverse system test is very important.** Your garage door **MUST** reverse on contact with a 40mm obstacle placed on the floor. Failure to properly adjust the opener may result in serious personal injury from a closing garage door. **Repeat the test once a month and make any necessary adjustments.**



This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.



**This opener should not be installed in a damp or wet space exposed to weather.**



**The Protector System™ must be used for all installations where the closing force as measured on the bottom of the door is over 400N (40kgf).** Excessive force will interfere with the proper operation of the Safety Reverse System or damage the garage door.



**After installation, ensure that the parts of the door do not extend over public footpaths or roads.**



Install the wireless wall control (or any additional wall control) **in a location where the garage door is visible, at a height of at least 1.5m and out of the reach of children. Do not allow children to operate push button(s) or transmitter(s).** Serious personal injury from a closing garage door may result from misuse of the opener.



**Permanently fasten the Warning Labels in Prominent Places,** adjacent to Wall Controls and manual release mechanisms as a reminder of safe operating procedures.



**Activate opener only when the door is in full view, free of obstructions and the opener is properly adjusted. No one should enter or leave the garage while the door is in motion.**



**Do not allow children to play near the door, or door controls.**



**Disconnect electric power to the garage door opener before making repairs or removing covers.**

**KEEP THESE INSTRUCTIONS**

**Warning: If your garage has no service entrance door, a CM1702 outside quick release must be installed. This accessory allows manual operation of the garage door from outside in case of power failure.**

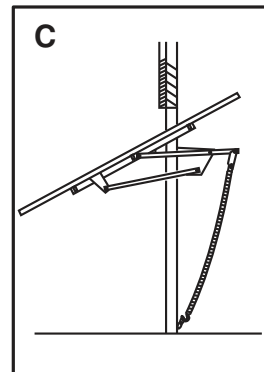
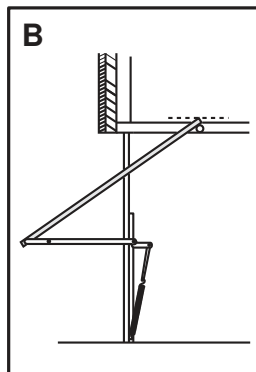
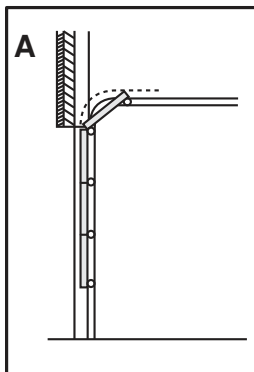
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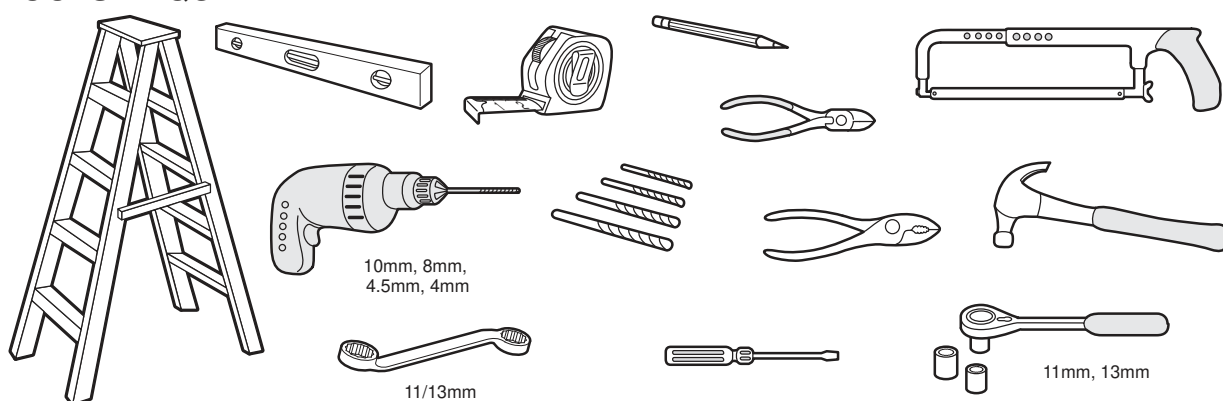
## 1 DOOR TYPES

- A. Sectional Door with curved track
- B. One-Piece Door with Horizontal Track Only
- C. One-Piece Door without track

To suit spring balanced doors up to 16.5m<sup>2</sup> (MT1000) or 13.5m<sup>2</sup> (MT600).

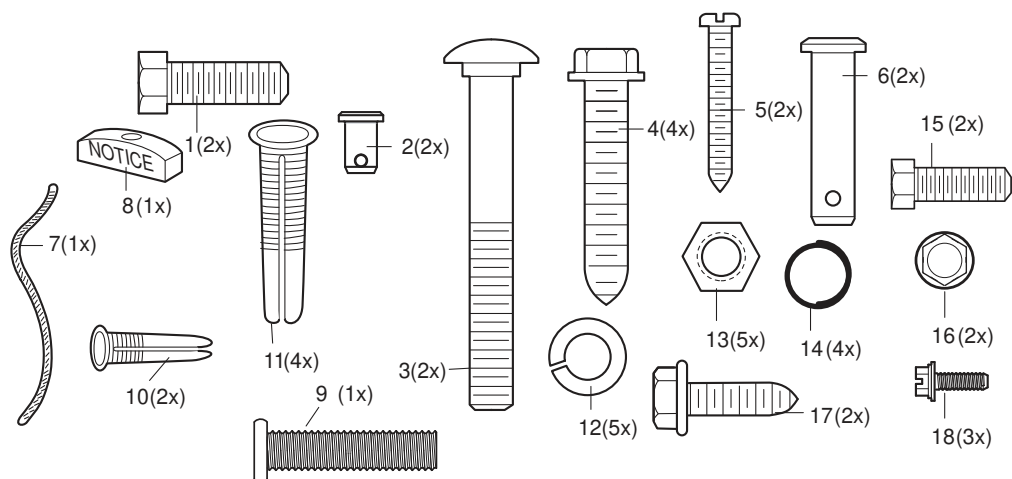


## 2 TOOLS REQUIRED



## 3 HARDWARE PROVIDED

- |                        |                           |
|------------------------|---------------------------|
| (1) Hex Bolt           | (10) Anchor               |
| (2) Clevis Pin         | (11) Concrete Anchor      |
| (3) 8mm Carriage Bolt  | (12) Lock Washer          |
| (4) Wood Screws        | (13) Hex Nut              |
| (5) Sheet Metal Screws | (14) Ring Fastener        |
| (6) Clevis Pin         | (15) Hex Bolt             |
| (7) Rope               | (16) Lock Nut             |
| (8) Handle             | (17) Metric Tapping Screw |
| (9) Stop Bolt (1)      | (18) Hex Screw            |

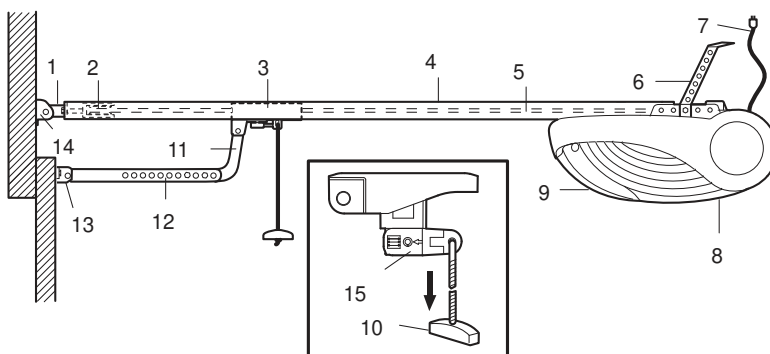


## BEFORE YOU BEGIN:

1. Look at the wall or ceiling above the garage door. The header bracket **must** be securely fastened to structural supports.
2. Do you have a finished ceiling in your garage? If so, a support bracket and additional fastening hardware (not supplied) may be required.
3. Do you have an access door in addition to the garage door? If not, Model CM1702 Outside Quick Release Accessory is required. This accessory allows manual operation of the garage door from outside in case of power failure.
4. Complete the following test to make sure your garage door is balanced and is not sticking or binding:
  - Lift the door about halfway. Release the door. If balanced, it should stay in place, supported entirely by its springs.
  - Raise and lower the door to see if there is any binding or sticking. If your door binds, sticks, or is out of balance, call a trained door systems technician.

## 4 COMPLETED INSTALLATION

As you proceed with the assembly, installation and adjustment procedures in this manual, you may find it helpful to refer back to this illustration of a completed installation for Tilt Doors (for sectional or tracked tilt doors refer to section 15).

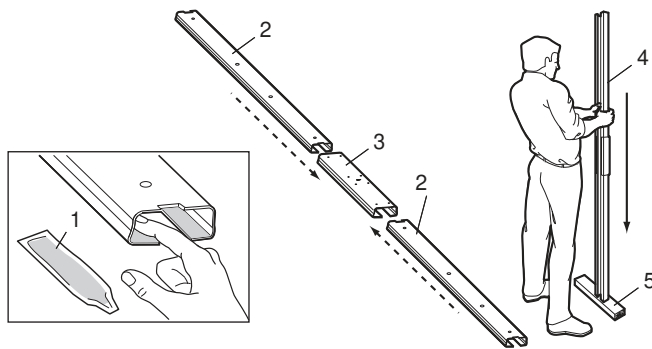


- (1) Header sleeve
- (2) Idler pulley bracket
- (3) Trolley
- (4) Rail
- (5) Chain/Belt
- (6) Hanging Bracket
- (7) Power Cord
- (8) Opener
- (9) Light Lens
- (10) Manual Release Rope & Handle
- (11) Curved Door Arm
- (12) Straight Door Arm
- (13) Door Bracket and Plate
- (14) Header Bracket
- (15) Trolley Release Arm

## ASSEMBLY SECTION

### 5 ASSEMBLE THE RAIL (SECTIONAL RAIL)

Grease inside edges of rail sections using grease (1). Place rail pieces (2) on flat surface for assembly. All four rail sections are interchangeable. Slide rail brace (3) onto rail section. Connect rail by sliding rail brace (3) onto next rail section. Tap rail assembly (4) on piece of wood (5) until rail sections are flush. Repeat with remaining rail sections.

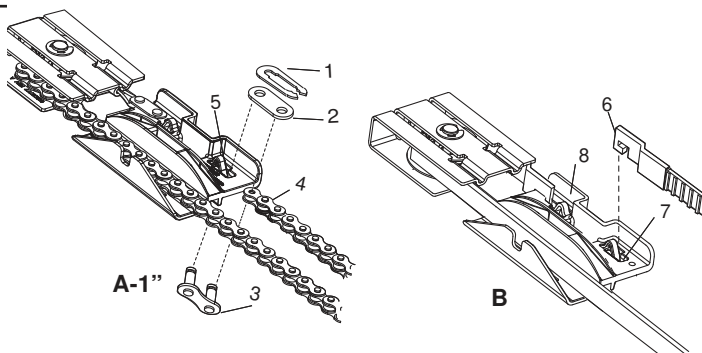


### 6 INSTALL THE CHAIN/BELT

Remove chain/belt from carton and lay chain out on floor (do not allow chain/belt to twist).

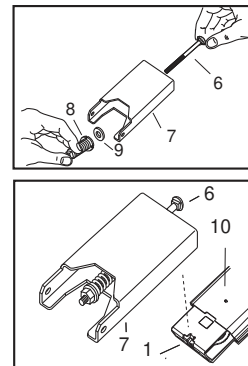
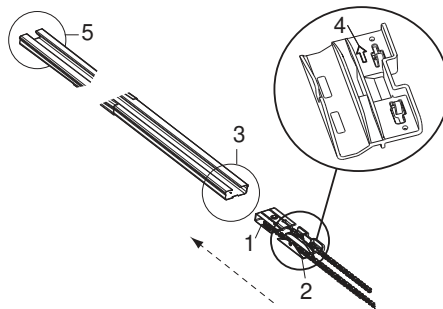
**A. Chain:** Push pins of master link bar (3) through chain link (4) and hole in back end of trolley (5). Push cap (2) over pins and onto notches. Slide clip-on spring (1) over cap and onto pin notches until both pins are securely locked in place.

**B. Belt:** Hook the trolley connector (6) into the slot (7) on the trolley (8).



## 7 INSERT CHAIN/BELT INTO RAIL & ASSEMBLE HEADER SLEEVE

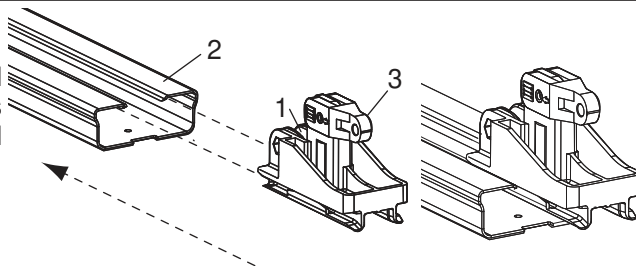
Slide pulley bracket (1) and inner trolley (2) into back (opener end) of rail assembly (3), be sure to insert pulley bracket as shown with arrow (4) pointing toward front (header end) of rail (5). Push bracket toward front (header end) of rail (5). Insert carriage bolt (6) through header sleeve bracket (7). Loosely thread spring nut (8) and flat washer (9) onto carriage bolt. Insert carriage bolt (6) of header sleeve assembly (7) into bold cut out in pulley bracket (1). Slide header sleeve assembly (7) on to front (header end) of rail (10).



## 8 ATTACH TROLLEY TO RAIL

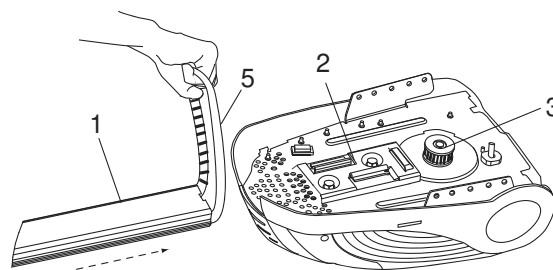
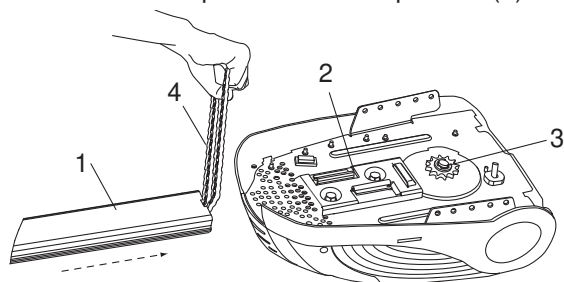
Slide outer trolley (1) into the back (**opener end**) of the rail assembly (2), be sure end with trolley release arm (3) is heading in direction of opener. Slide outer trolley down rail until it engages with inner trolley.

Move the engaged trolley assembly to the midpoint of the rail, then turn the rail assembly over ready to fasten to opener.



## 9 FASTEN RAIL TO OPENER AND INSTALL CHAIN/BELT

For Belt drive option, remove the chain drive cog and replace it with the belt drive cog supplied with your rail assembly. Holding chain (4) or belt (5) out of the way, slide rail (1) onto shim (2) until rail is secure. Take the chain/belt and wrap it around the sprocket (3). Make sure the teeth on the sprocket have engaged the chain/belt.

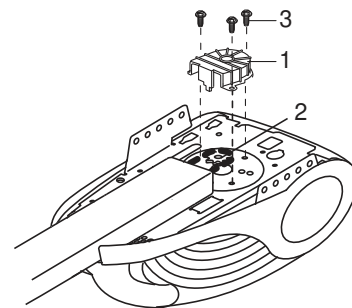
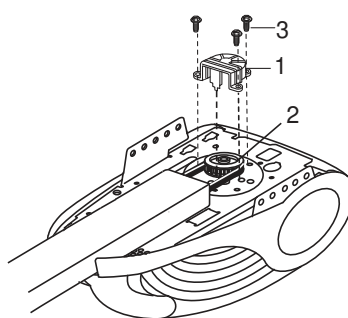


## 10 ATTACH SPROCKET COVER

For Belt drive option, grease the belt & sprocket liberally.

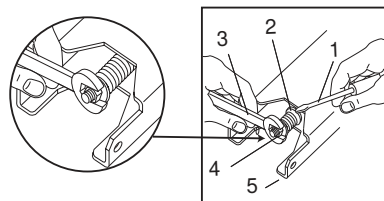
**NOTE: Be sure to use the correct belt sprocket cover supplied separately with the belt rail kit.**

Place sprocket cover (1) on top of the opener (2), secure with screws (3).



## 11 ASSEMBLE HEADER SLEEVE

Thread spring nut on carriage bolt until finger tight. Insert a screwdriver tip (1) into one of the slots of the nut ring (2) and brace it firmly against the header sleeve. Place an open end wrench (3) on the square end of the spring nut (4), slightly rotate nut about 1/4 turn clockwise until nut ring (2) is released against header sleeve (5). This sets spring to optimum chain tension. Chain may slip off sprocket if chain/belt is too loose. If chain does slip re-tighten spring nut by turning nut clockwise a half turn. **Do NOT over-tighten chain/belt.**





## INSTALLATION SECTION



**Wear protective goggles when working overhead to protect your eyes from injury.**

**Disengage all existing garage door locks to avoid damage to the garage door.**

**To avoid serious personal injury from entanglement, remove all ropes connected to the garage door before installing the opener.**

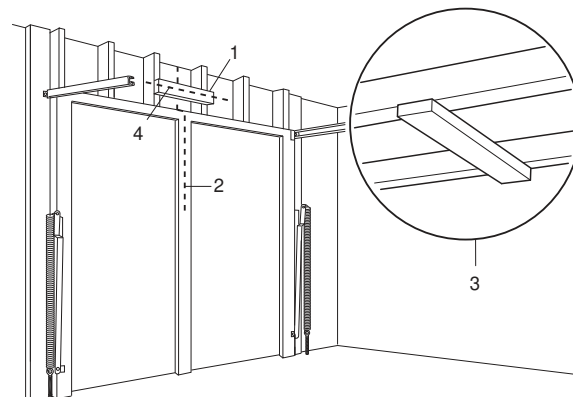
**It is recommended that the opener be installed 2.1m (7 feet) or more above the floor where space permits.**

### 12 POSITION THE HEADER BRACKET

**NOTE:** The header bracket must be rigidly fastened to a structural support of the garage. Reinforce the wall or ceiling with a 40mm (1-1/2") board if necessary. Failure to comply may result in improper operation of safety reverse system

You can attach the header bracket either to the header wall (1) or to the ceiling (3). Follow the instructions which will work best for your particular requirements. With the door closed, mark the vertical centreline (2) of the garage door. Extend line onto header wall above the door.

Open door to highest point of travel. Draw an intersecting horizontal line (4) on header wall 50mm to 200mm above high point to provide travel clearance for top edge of door (height varies depending on door type see section 15).

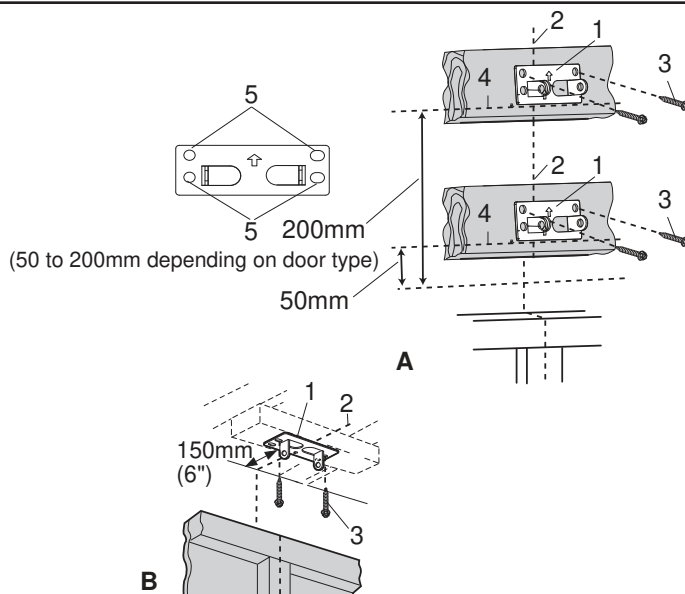


### 13 INSTALL THE HEADER BRACKET

**NOTE:** Refer to vertical centre and horizontal lines created in section 12 for proper placement of header bracket.

**A. Wall Mount:** centre the header bracket (1) on the vertical centre line (2) with the bottom edge of the header bracket on the horizontal line (4) (with the arrow pointing toward the ceiling). Mark all of the header bracket holes (5). Drill 4.5mm (3/16") pilot holes and fasten the header bracket with wood screws (3).

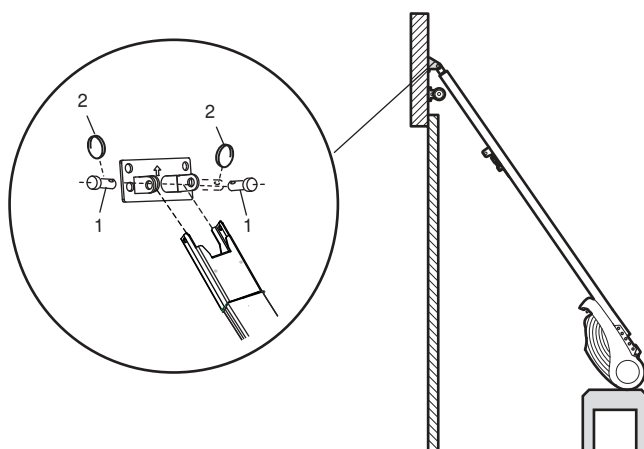
**B. Ceiling Mount:** Extend vertical centre line (2) onto the ceiling. Centre the header bracket (1) on the vertical mark no more than 150mm (6") from the wall. Make sure the arrow is pointing toward the opener. Mark all of the header bracket holes (5). Drill 4.5mm (3/16") pilot holes and fasten the header bracket with wood screws (3). For concrete ceiling mount, use concrete anchors provided.



### 14 ATTACH RAIL TO HEADER BRACKET

Position opener on garage floor below the header bracket. Use packing material to protect the cover. Raise rail until holes in the header sleeve and holes in the header bracket align. Join with clevis pin (1). Insert ring fastener (2) to secure.

**NOTE:** To enable the rail to clear sectional door springs, it may be necessary to lift opener onto a temporary support. The opener must either be secured to a support or held firmly in place by another person.

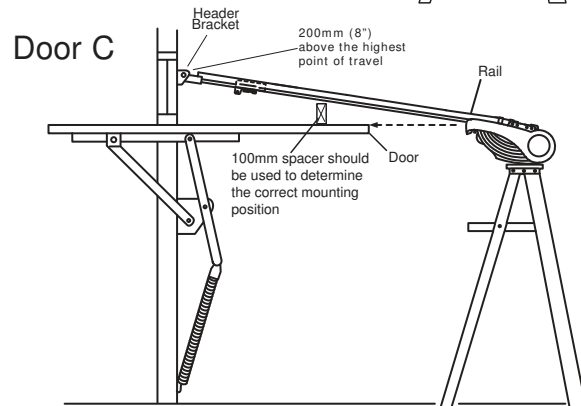
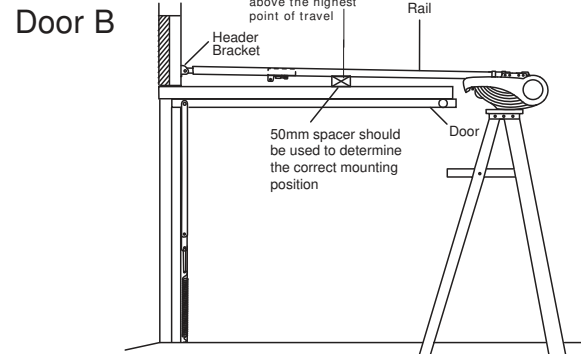
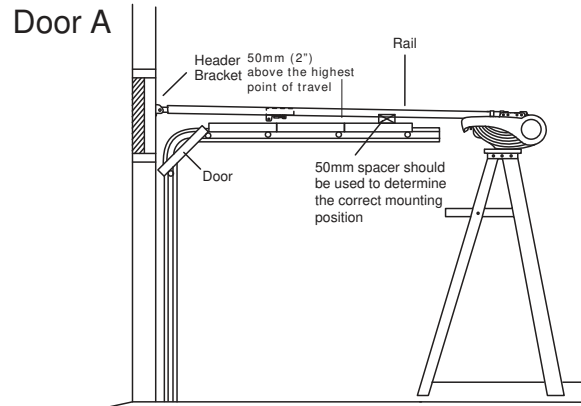


## 15 POSITION THE OPENER

### SECTIONAL DOOR OR TRACKED TILT DOOR

You will need a 50mm piece of timber or similar spacer to gauge the distance between door and rail.

1. Raise the opener onto support.
2. Open the door completely, place a 50mm spacer between the door and the rail (as shown).
3. If the top section or panel hits the trolley when you raise the door, pull down on the trolley arm to disengage the motor. Leave the trolley in this position until motor is fastened in place.



### ONE PIECE TILT DOOR (NON TRACKED)

You will need a 100mm (4") piece of timber or similar spacer to gauge the distance between door and rail.

1. Raise the opener onto support.
2. Open the door completely, place a 100mm spacer between the door and the rail (as shown).
3. The top of the door should be level with the top of the motor. Do not position the opener more than 50mm (2") above this point.

## 16 HANG THE OPENER

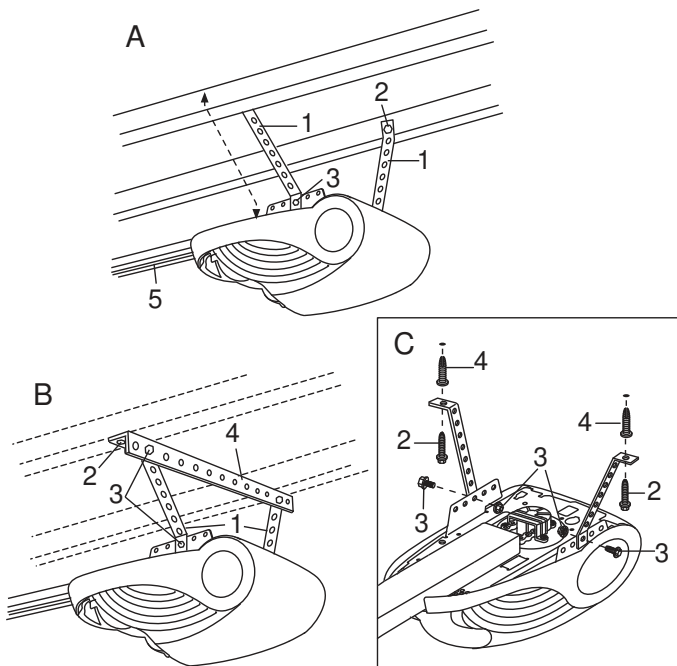
**The opener must be securely fastened to a structural support of the garage.**

Three typical installations are shown. Yours may be different. Hanging brackets (1) should be angled (Figure A) to provide rigid support. On finished ceilings, (Figure B) attach a sturdy metal bracket (not supplied) (4) to a structural support before installing the opener. For concrete ceiling mount, (Figure C), use concrete anchors provided.

On **each** side of opener measure the distance from the opener to the structural support (or ceiling).

Cut both pieces of the hanging bracket to required lengths. Flatten one end of each bracket and bend or twist to fit the fastening angles. **Do not bend at the bracket holes.** Drill 4.5mm (3/16") pilot holes in the structural supports (or ceiling). Attach brackets to supports with wood screws (2).

Lift opener and fasten to hanging brackets with screw, lock washer and nut (3). Check to make sure rail is centred over the door. REMOVE 50mm or 100mm board. Operate door manually. If door hits the rail, raise header bracket. Use rail grease and lubricate bottom surface of rail (5).



## 17 ATTACH EMERGENCY RELEASE ROPE & HANDLE

Thread one end of rope (1) through hole in top of red handle so "NOTICE" reads right side up as shown (3). Secure with an overhand knot (2). Knot should be at least 25mm (1") from end of the rope to prevent slipping.

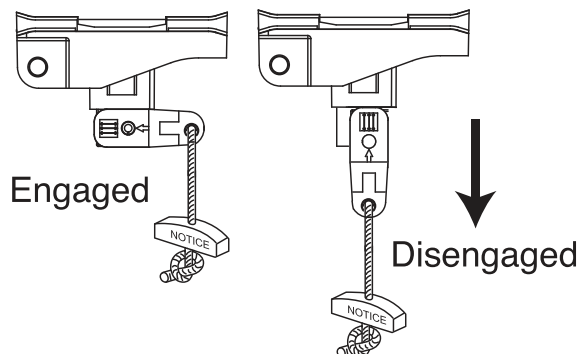
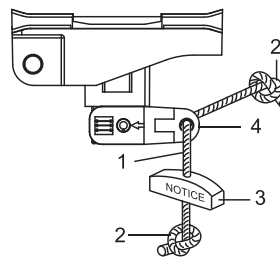
Thread other end of rope through hole in release arm of the outer trolley (4). Adjust rope length so that handle is less than 1.8m (6 feet) above the floor. Secure with an overhand knot.

**NOTE: If it is necessary to cut rope, heat seal cut end to prevent fraying.**

*Door should be released in the closed position if possible.  
To Release the trolley PULL down on the red handle.  
DO NOT USE THE HANDLE TO OPEN OR CLOSE THE DOOR.*



**DO NOT DISENGAGE THE OPENER TO MANUAL OPERATION WITH CHILDREN, PERSONS OR OTHER OBJECTS INCLUDING MOTOR VEHICLES WITHIN THE DOORWAY: (The door is under significant tension and if the door has developed a fault or incorrect tension, it may be unsafe and may fall rapidly.)**



*Connect Electric Power*

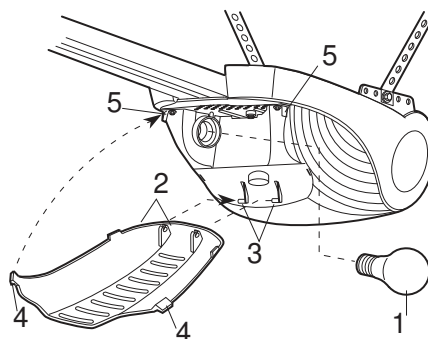
**TO AVOID INSTALLATION DIFFICULTIES, DO NOT RUN THE GARAGE DOOR OPENER UNTIL INSTRUCTED TO DO SO. Connect to properly fused and earthed power outlet.**

## 18 INSTALL THE LIGHT AND LENS

Install the 40 watt maximum (230-240V, E27) light bulb in the socket (1). Hinge the bottom of the lens (2) onto the cover from left of the hinge bars (3) as shown. Close the lens by gently squeezing the upper corners and inserting the tabs (4) into slots on the cover (5).

To change bulb, squeeze the upper corners of the lens to disengage tabs. The lens will drop open, securely hinged at bottom.

The light will turn on and remain lit for 2-1/2 minutes when power is connected. After 2-1/2 minutes it will turn off.



## 19 FASTEN DOOR BRACKET

### Sectional and One-Piece Door Installation Procedure:

Door bracket (1) has left and right side fastening holes. If your installation requires top and bottom fastening holes use both the door bracket and door bracket plate (2) as shown.

1. Centre door bracket (with or without door bracket plate, as required) at the top inside face of door as shown. Mark holes.

**A. One-piece doors:** locate bracket at inside face of the door 0-100mm down.

**B. Sectional door:** 150 - 250mm below the top of the door.

2. Fasten bracket to the door using the appropriate screws.

### A. Wooden doors

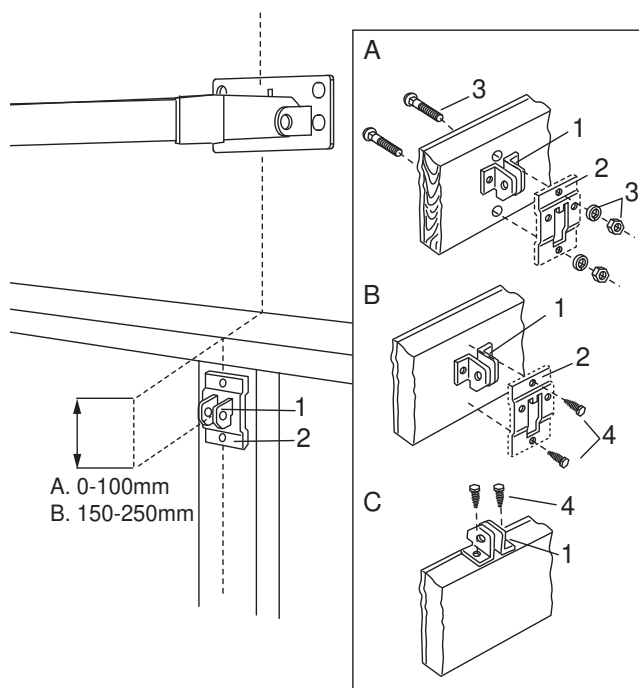
Drill 8mm holes (5/16") and fasten the door bracket with nut, lock washer, and carriage bolt (3).

### B. Sheet metal doors

Fasten with wood screws (4).

### C. One-piece door optional

Fasten with wood screws (4).





## 20 ASSEMBLE DOOR ARM

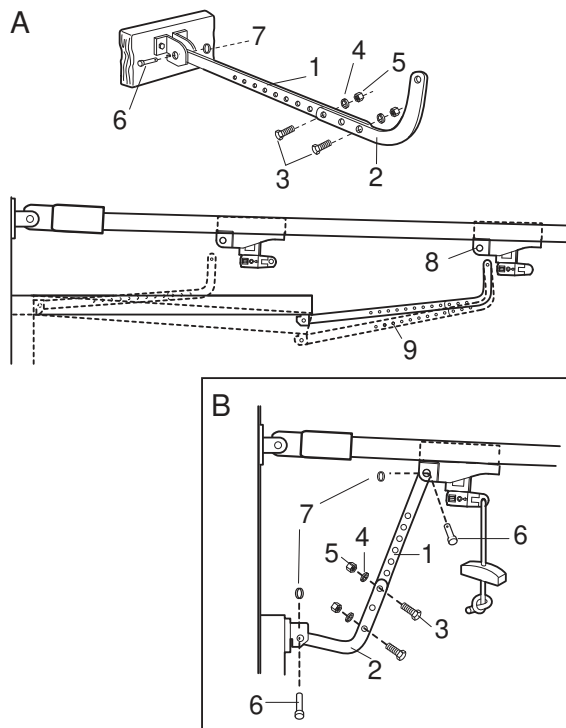
### A. ONE-PIECE DOOR INSTALLATION:

Fasten the straight (1) and curved (2) door arm sections together to the longest possible length (with a 2 or 3 hole overlap) using carriage bolts (3), lock washers (4) and hex nuts (5). With the door closed connect the straight door arm section (1) to the door bracket with clevis pin (6). Secure with ring fastener (7). Disconnect the inner and outer trolley. Slide the outer trolley back toward the opener and join the curved arm (2) to the connector hole in the trolley (8) with clevis pin (6). It may be necessary to lift the door slightly to make the connection. Secure with ring fastener (7).

**NOTE:** When setting the up limit, the door should not have a “backward” slant when fully open. A slight backward slant (9) will cause unnecessary bucking and/or jerking whilst operating the door from the fully open position.

### B. SECTIONAL DOOR INSTALLATION:

Connect according to Figure B, then proceed to Section 21.



## 21 INSTALL DOOR CONTROL (OPTIONAL ACCESSORY)



**Locate door control where the garage door is visible, away from door and door hardware and out of the reach of children. Mount at least 1.5 m (5 feet) above the floor.**

**Serious personal injury from a moving garage door may result from misuse of opener. Do not allow children to operate the door control or transmitter.**

**Permanently fasten the caution label to the wall near the door control as a reminder of safe operating procedures.**

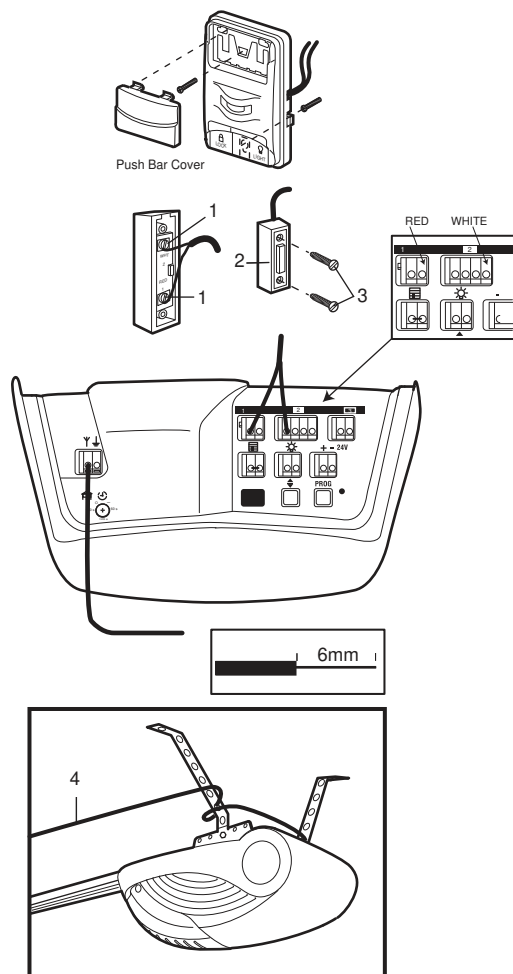
There are 2 screw terminals on the back of the door control. Strip about 6mm (1/4") of insulation from bell wire. Separate wires enough to connect the white/red wire to RED terminal screw 1 and the white wire to WHT terminal screw 2.

Fasten the door control to an inside garage wall with sheet metal screws (3) provided. Drill 4mm (5/32") holes and use anchors if installing into a plaster wall. A convenient place is beside the service door and out of reach of children.

Run the bell wire up the wall and across the ceiling to the garage door opener. Use insulated staples to secure wire. The receiver quick connect terminals are located behind the light lens of the opener. Connect the bell wire to the terminals as follows: white/red to red (1) and white to white (2) as shown.

### Operation of the Door Control

Press to open or close the door. Press again to stop the door while moving.



## 22 SETTING THE LIMITS

Travel limits regulate the points at which the door will stop when moving up or down. Follow the steps below to set the limits.

**NOTE: The door must be in the mid or closed position to begin setting the limits.**

**TURN POWER ON.**

### Setting the limits :

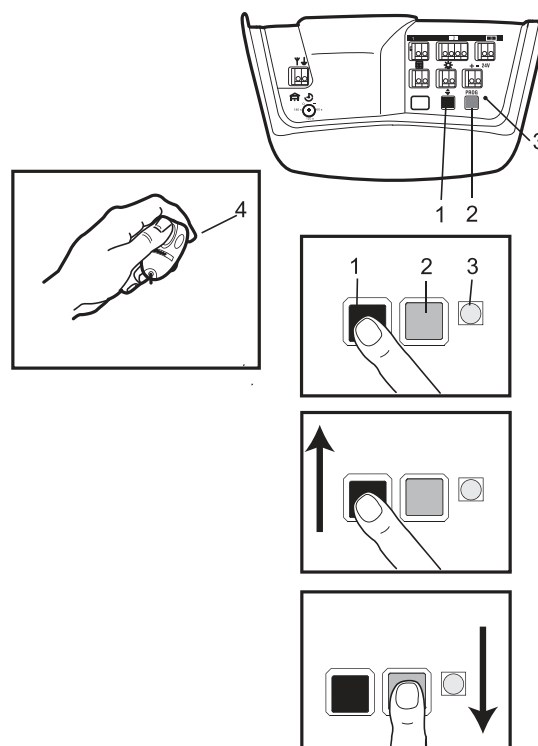
1. Press and hold the black button until the yellow indicator light starts flashing slowly then release.
2. Adjust the position of the door to the desired up position by using the black button. Black moves the door UP (open) and orange moves the door DOWN (close). Check to be sure the door opens high enough for your vehicle.
3. Push the transmitter or door control. This sets the UP (open) limit and begins closing the door.

Immediately press either the orange or the black button. The door will stop.

Adjust the desired DOWN (close) limit position using the black and orange buttons. Check to be sure the door is fully closed without applying excessive pressure on the rail (rail should not bow upwards and the chain/belt should not sag or droop below the rail). Push the transmitter or door control. This sets the DOWN (close) limit and begins opening the door.

4. Open and close the door with the transmitter or door control 2 or 3 times. Leave door in the open position ready for force setting.

**NOTE: The force must now be set in order to complete your installation (refer section 23).**



## 23 SETTING THE FORCE

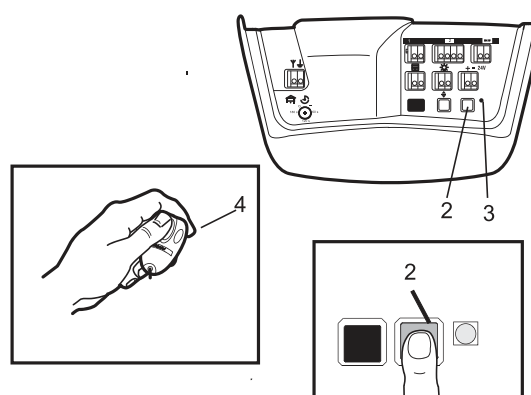
The force, as measured on the closing edge of the door, should not exceed 400N (40kg). If the closing force is measured to more than 400N, the Protector System™ (IR Beams) must be installed (refer section 26).

The force setting regulates the amount of power required to open and close the door.

1. Locate the orange button (2).
2. Push the orange button (2) twice to enter unit into Force Adjustment Mode. The LED (3) (indicator light) will flash quickly.
3. Push the programmed transmitter (4) or push bar on the door control that was shipped with your opener. The door will travel to the DOWN (close) position. Push the transmitter (4) again, the door will travel to the UP (open) position.

The LED (3) (indicator light) will stop flashing when the force has been learned.

The door must travel through a complete cycle, UP and DOWN, in order for the force to be set properly. If the unit cannot open and close your door fully, inspect your door to insure that it is balanced properly and is not sticking or binding.

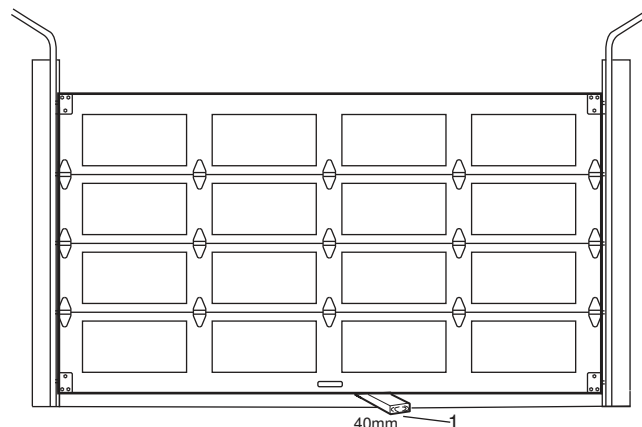
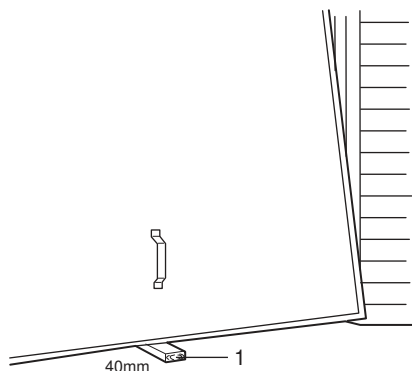


## 24 TEST THE SAFETY REVERSE SYSTEM

The safety reverse system test is important. Garage door must reverse on contact with a 40mm obstacle laid flat on the floor. Failure to properly adjust opener may result in serious personal injury from a closing garage door. Repeat test once a month and adjust as needed.

Procedure: Place a 40mm obstacle (1) laid flat on the floor under the garage door. Operate the door in the down direction. The door must reverse upon contact with the obstruction. If the door stops on the obstacle, remove obstacle and repeat Setting the Limits and Force Sections 22 & 23 and repeat safety reverse test.

When the door reverses on the 40mm obstacle, remove the obstacle and run the opener through a complete travel cycle. Door must not reverse in closed position. If it does, repeat Setting the Limits and Force sections 22 and 23 and repeat safety reverse test.



## 25 USING THE C98 MOTION DETECTING CONTROL PANEL (OPTIONAL ACCESSORY)

Press the push bar to open or close the door. Press again to stop the door.

### Light feature

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

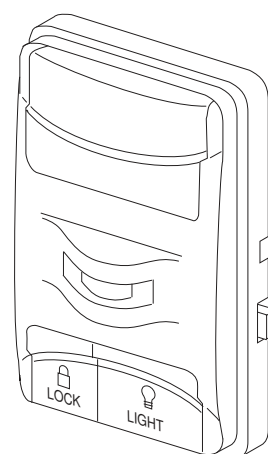
### Lock feature

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

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

To turn off, press and hold the Lock button again for 2 seconds. The push bar light will stop flashing.

The Lock feature will also turn off whenever the "LEARN" button on the opener panel is activated.



**Locate minimum 1.5m above the floor.**

## 26 INSTALL THE PROTECTOR SYSTEM™ (IR BEAMS)

**Install this accessory for all installations on Canopy doors, One-Piece Door with Horizontal and Vertical Track, doors over 2.5m and when the closing force as measured on the bottom of the door is over 400N (40kg).**

After opener has been installed and adjusted, the Protector System™ accessory can be installed. Instructions are included with this accessory.

**The Protector System™ provides an additional measure of safety against a small child being caught under a garage door.** It uses an invisible beam which, when broken by an obstruction, causes a closing door to open and prevents an open door from closing and is **strongly recommended for homeowners with young children.**

**NOTE:** The opener will automatically detect the Protector System™ when it is installed and operating for 5 minutes (during this time the beams must remain unobstructed). The opener will not close unless the sensors are aligned.

### Connecting the Protector System

Locate the terminals on the back of the unit. Strip all wires back about 10mm then twist the two white wires and the two white/black wires together. Trim the twisted wires to approximately 6mm. Use a small screwdriver or pen to hold down the spring terminals, insert the white/black wires into the grey terminal (3), then terminate the white (only) wires into the white terminal (2).

**NOTE:** Optional connections: Connect the white (only) wires and white/black wires into separate terminals on the back of the unit as illustrated above. This may be required if larger diameter cable extensions have been used to extend wiring.

### Setting Auto-close (MT1000 ONLY)

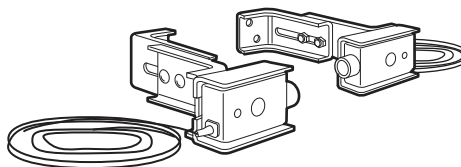
**NOTE:** The Protector System™ MUST be installed to enable this feature.



**Auto close is NOT recommended for households with young children.**

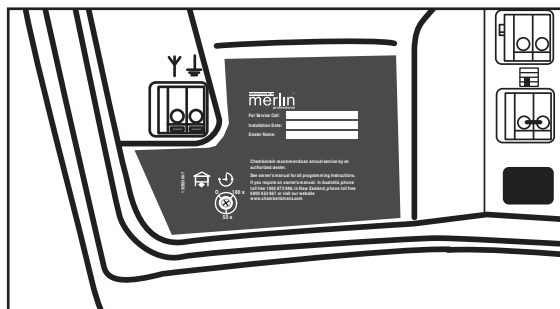
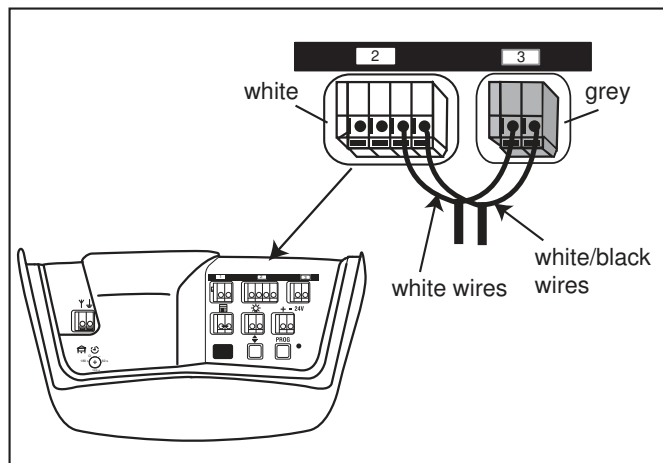
Ensure that the trim pot is set to 0s when terminating cables. Beams must be uninterrupted for up to five minutes after turning on to initialise. (The Trim pot should not be adjusted during this 5 minute initialising period).

**NOTE:** After the beams are initialised, they are constantly monitored, and if removed the opener will not close until the beams are re-installed.



#### SAFETY FIRST!

Whilst Chamberlain have engineered safety features into your garage door opener, we urge you to consider fitting IR Beams. In many countries these devices are compulsory to assist in the prevention of serious injury or property damage. For your own peace of mind and the safety of others please install this inexpensive safety device.



**Door may operate unexpectedly, therefore do not allow anything to stay in the path of the door.**

## 27 WIRELESS PROGRAMMING



**Activate the opener only when door is in full view, free of obstruction and properly adjusted. No one should enter or leave garage while door is in motion. Do not allow children to operate push button(s) or transmitter(s). Do not allow children to play near the door.**

**NOTE:** The transmitters supplied with your opener are pre-programmed to your receiver in the factory. If you purchase additional transmitters, you will need to program them into your opener using the steps below.

### Program the Receiver to Match Additional Transmitter Codes:

#### Using the orange "LEARN" button:

1. Press and release the orange "learn" button on the opener. The learn indicator light will glow steadily for 30 seconds (1).
2. Within 30 seconds, press and hold the button on the hand-held transmitter that you wish to operate your garage door (2).
3. Release the button when the opener light blinks. It has learned the code. If the light bulb is not installed, two clicks will be heard (3).

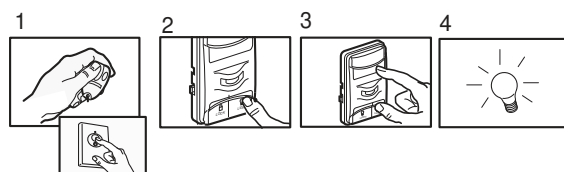
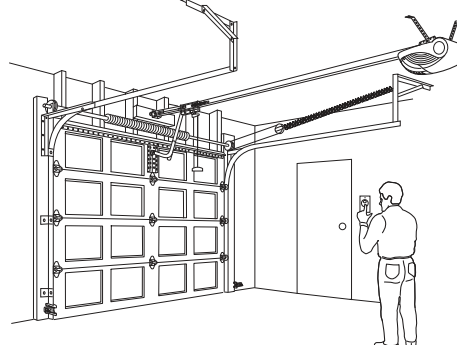
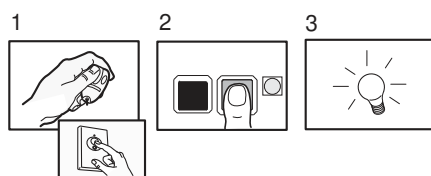
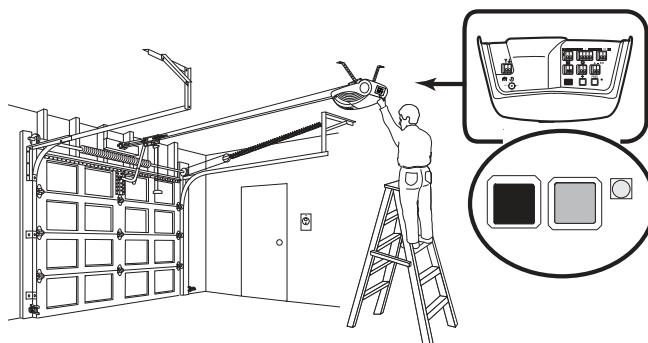
#### Using the Motion Detecting Control Panel (optional accessory):

1. Press and hold the button on the hand-held transmitter that you wish to operate your garage door.
2. While holding the transmitter button, press and hold the LIGHT button on the Motion Detecting Control Panel.
3. Continue holding both buttons while you press the push bar on the Motion Detecting Control Panel (all three buttons are held).
4. Release buttons when the opener light blinks. It has learned the code. If the light bulb is not installed, two clicks will be heard.

Now the opener will operate when the transmitter push button is pressed. If you release the transmitter push button before the opener light flashes, the opener has not learned the code.

#### To Erase all Transmitter Codes:

To deactivate any unwanted transmitter, first erase all codes: Press and hold the orange "learn" button on opener until the learn indicator light goes out (approximately 6 seconds). All previous codes are now erased. Reprogram each transmitter or keyless entry you wish to use.



## 28 INSTALLING THE CM128 WIRELESS WALL BUTTON

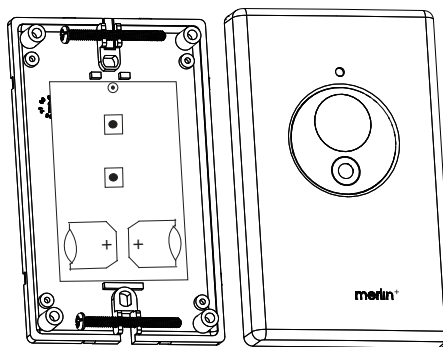
**Carefully pry open the CM128 and locate the two screws for mounting.**

Attach to the wall using the two screws and wall anchor provided if mounting to plaster wall. If using a recessed wall box do not use anchors.

**NOTE: Tightening the wall mount screws will reduce clearance between bracket and wall.**

**NOTE: Your CM128 Wireless wall button should be pre-programmed into your unit. You should only need to program additional units. Program the wall control into the rolling code receiver using the orange "LEARN" button:**

1. Press and release the orange "learn" button on opener. The learn indicator light will glow steadily for 30 seconds.
2. Within 30 seconds, press and hold the button on the radio wall control that you wish to operate your garage door.
3. Release the button when the opener light blinks. It has learned the code. Where no light is installed, two clicks will be heard.



**Locate minimum 1.5m above the floor.**



## 29 KEYLESS DEVICE PROGRAMMING (OPTIONAL ACCESSORY)

**! Activate the opener only when door is in full view, free of obstruction and properly adjusted. No one should enter or leave garage while door is in motion. Do not allow children to operate push button(s) or transmitter(s). Do not allow children to play near the door.**

**NOTE:** Your new keyless entry system must be programmed to operate your garage door opener. Program the receiver to match additional transmitter code.

### Using the orange “LEARN” button:

1. Press and release the orange “learn” button (1) on opener. The learn indicator light will glow steadily for 30 seconds.
2. Within 30 seconds, enter a four digit personal identification number (PIN) of your choice on the keypad (2), then press and hold the ENTER button.
3. Release the button when the opener light blinks (3). It has learned the code. If the light bulb is not installed, two clicks will be heard.

### Using the Motion Detecting Control Panel (optional accessory):

**NOTE:** This method requires two people if the keyless entry is already mounted outside the garage.

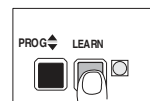
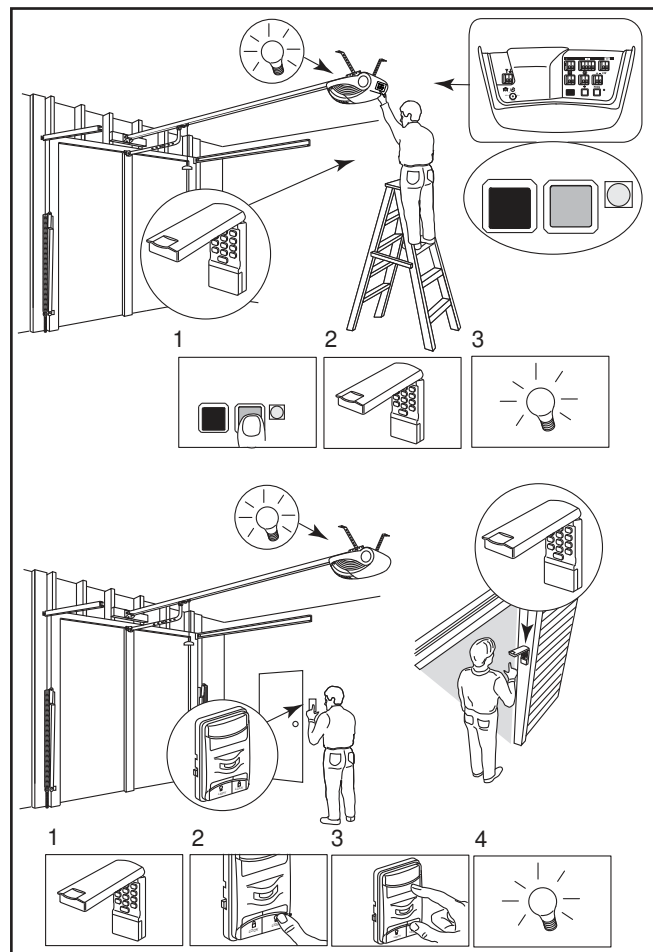
1. Enter a four digit personal identification number (PIN) of your choice on the keypad, then press and hold ENTER.
2. While holding the ENTER button, press and hold the LIGHT button on the motion detecting control panel.
3. Continue holding the ENTER and LIGHT buttons while you press the push bar on the motion detecting control panel (all three buttons are held).
4. Release buttons when the opener light blinks. It has learned the code. If the light bulb is not installed, two clicks will be heard.

### Wireless fingerprint entry system C379

Full instructions are available with this accessory. Once you have enrolled your users into the C379 you can program the unit into your opener.

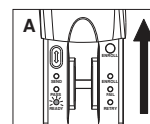
### Using the orange “LEARN” Button:

1. Press and release the orange “learn” button (1) on opener. The learn indicator light will glow steadily for 30 seconds.
2. Within 30 seconds slide the cover of the C379 up as illustrated (A). Swipe your finger on the reader head at a steady speed (B) until the yellow LED turns on (C).
3. When the opener light blinks (3) it has learned the code. If the light bulb is not installed, two clicks will be heard, ensure there are no obstructions in the path of the door, then press the send button (D) to test the door.

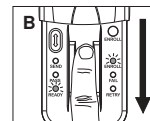


**Press orange LEARN Button**

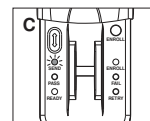
**LED will start flashing**



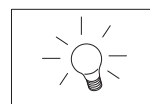
**Slide the cover plate up (A)**



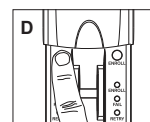
**Swipe finger at a steady speed (B)**



**Yellow LED will indicate successful swipe (C)**



**Courtesy light will flash once.**



**Test reader by pressing the send button (D)**

## 30 SPECIAL FEATURES

### 1. Flashing light connection

The flashing light can be installed anywhere. Connect light leads to quick connect terminals, white terminal is ground.

### 2. Auto Close

The Protector System™ must be installed to use this function (refer section 26).

### 3. Door within a door connection

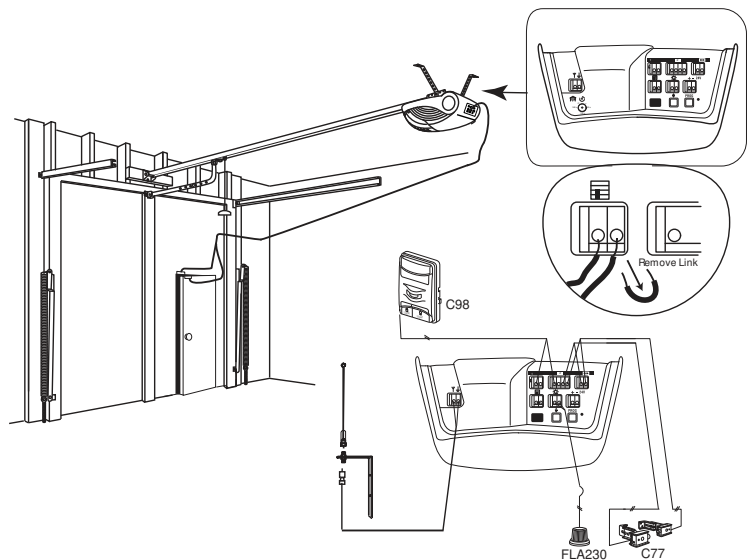
(If this feature is not installed, the jumper must remain intact.) If installed, the door must be closed during door within a door operation, and wiring must be correct. Remove jumper from terminal leads. Replace with contact switch leads.

### 4. Coaxial antenna adaptor

A coaxial antenna connection can be used if the transmitter range is too short.

### 5. External radio feature

To supply power to an external radio receiver or accessory.

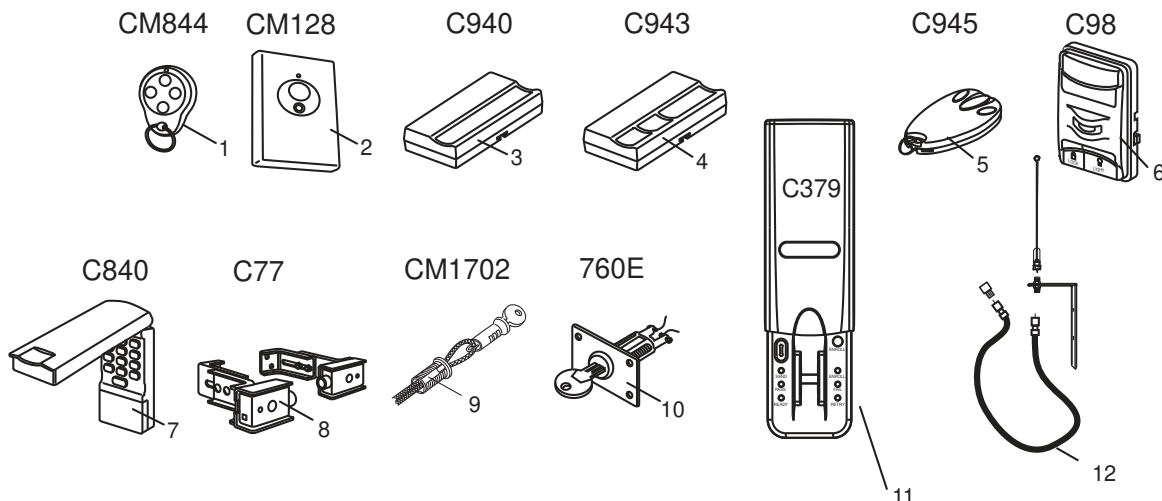


## 31 ACCESSORIES

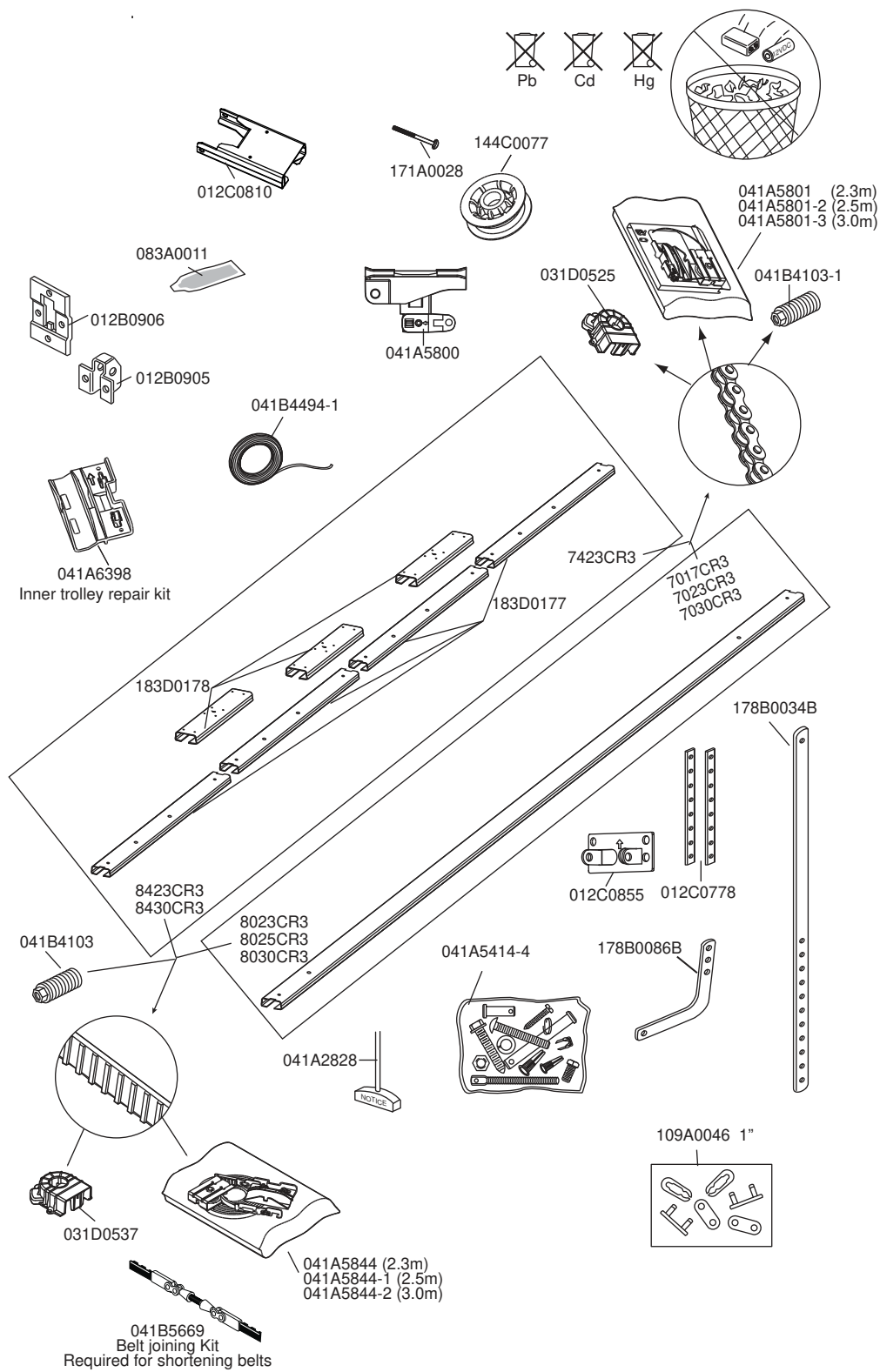
- |                      |                                    |
|----------------------|------------------------------------|
| (1) Model CM844      | 4 Channel transmitter              |
| (2) Model CM128      | Wireless wall button               |
| (3) Model C940       | 1 Channel transmitter              |
| (4) Model C943       | 3 Channel transmitter              |
| (5) Model C945       | 3 Channel mini transmitter         |
| (6) Model C98        | Motion detecting control panel     |
| (7) Model C840       | Keyless entry system               |
| (8) Model C77        | The Protector System™              |
| (9) Model CM1702     | Quick release lock                 |
| (10) Model 760E      | Outside keyswitch                  |
| (11) Model C379      | Wireless fingerprint access system |
| (12) Model ANT4X-1LM | 433MHz Antenna, cable and adaptor  |

### WIRING INSTRUCTIONS FOR ACCESSORIES

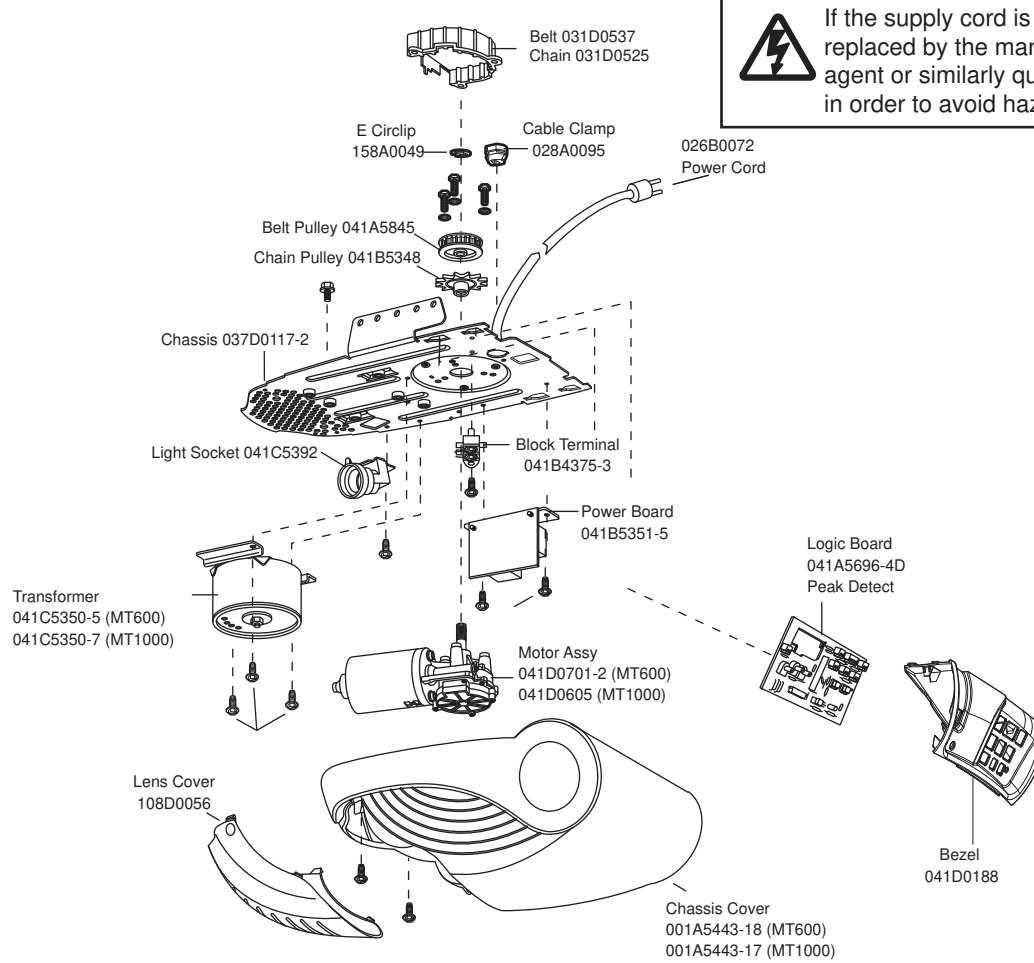
**Outside Keyswitch** – To opener terminals: Red-1 and White-2  
**Protector System™** – To opener terminals: White-3 and Grey-4  
**Door Control Panel** – To opener terminals: Red-1 and White-2



## 32 REPLACEMENT PARTS



## 33 REPLACEMENT PARTS



## TROUBLE SHOOTING

### **1. Opener doesn't operate from either door control or transmitter:**

- Does the opener have electric power? Plug lamp into outlet. If it doesn't light, check the fuse box or the circuit breaker. (Some outlets are controlled by a wall switch.)
- Have you disengaged all door locks? Review installation instruction warnings on page 1.
- Is there a build-up of ice or snow under door? The door may be frozen to ground. Remove any obstruction.
- The garage door spring may be broken. Have it replaced.

### **2. Opener operates from transmitter but not from door control:**

- Is door control button lit? If not, remove the bell wire from the opener terminals. Short the red and white terminals by touching both terminals at the same time with a piece of wire. If the opener runs, check for a faulty wire connection at the door control, a short under the staples, or a broken wire.
- Are wiring connections correct? Review section 21.

### **3. Door operates from door control but not from transmitter:**

- Replace battery if necessary.
- If you have two or more transmitters and only one operates, review Wireless Programming, Keyless Device Programming sections 27 to 29.
- Is the door control button flashing? The opener is in lock mode. If you have a Motion Detecting Control Panel, push and hold the Lock button for 2 seconds. The door control button will stop flashing.

### **4. Transmitter has short range:**

- Is battery installed?
- Change the location of the transmitter on the car.
- A metal garage door, foil-backed insulation or metal siding will reduce the transmission range.

### **5. Door reverses for no apparent reason and opener light doesn't blink:**

- Is something obstructing the door? Pull manual release handle. Operate door manually. If it is unbalanced or binding, call for professional garage door service.
- Clear any ice or snow from garage floor area where garage door closes.
- Repeat Setting Limits and Force, see adjustment sections 22 and 23.
- Repeat safety reverse test after adjustment is complete.

### **6. Door reverses for no apparent reason and opener light blinks for 5 seconds after reversing:**

- Check The Protector System™ (IR Beams) if you have installed this accessory. If the light is blinking, correct alignment.

### **7. Opener noise is disturbing in living quarters of home:**

- If operational noise is a problem because of proximity of the opener to the living quarters, Vibration Isolator can be installed. This kit was designed to reduce the "sounding board effect" and is easy to install.

### **8. The garage door opens and closes by itself:**

- Make sure transmitter push button is not stuck "on".

### **9. Door stops but doesn't close completely:**

- Repeat setting the limits, see adjustment section 22.
- Repeat safety reverse test after any adjustment of door arm length, close force or down limit.

### **10. Door opens but won't close:**

- Check The Protector System™ (if you have installed this accessory). If the light is blinking, correct alignment.
- If opener light does not blink and it is a new installation, repeat setting the limit and force sections 22 and 23.
- Repeat the safety reverse test after the adjustment is complete.

### **11. Opener light does not turn on:**

- Replace light bulb (230V/40W maximum). Replace burned out bulbs with rough service light bulbs or energy saving Halogen light bulbs.

### **12. Opener strains:**

- Door may be unbalanced or springs are broken. Close door and use manual release rope and handle to disconnect trolley. Open and close door manually. A properly balanced door will stay in any point of travel while being supported entirely by its springs. If it does not, call for professional garage door service to correct the problem.

### **13. Opener motor hums briefly, then won't work:**

- Garage door springs are broken. SEE ABOVE.
- If problem occurs on first operation of opener, door is locked. Disable door lock. Repeat safety reverse test after adjustment is complete.

### **14. Opener won't activate due to power failure:**

- Pull manual release rope and handle down to disconnect trolley. Door can be opened and closed manually. When the power is restored, pull the manual release handle down and toward opener. The next time the opener is activated, the trolley will reconnect.
- The Outside quick release accessory (if fitted) disconnects the trolley from outside the garage in case of power failure.

### **15. Setting the limits manually:**

1. Press and hold the black button until the yellow indicator light starts flashing slowly then release.
2. Adjust the position of the door by using the black and orange buttons. Black moves the door UP (open) and orange moves the door DOWN (close).  
Check to be sure the door opens high enough for your vehicle.
3. Push the transmitter or door control. This sets the UP (open) limit and begins closing the door.  
**Immediately press either the orange or the black button.** The door will stop.  
Adjust the desired DOWN (close) limit position using the black and orange buttons. Check to be sure the door is fully closed without applying excessive pressure on the rail (rail should not bow upwards and the chain/belt should not sag or droop below the rail). Push the transmitter or door control. This sets the DOWN (close) limit and begins opening the door.

**NOTE: If neither the black or the orange button is pressed, the door will reverse off the floor and the DOWN travel limit will be set automatically.**

4. Open and close the door with the transmitter or door control 2 or 3 times.
- If the door does not stop in the desired UP (open) position or reverses before the door stops at the DOWN (close) position, repeat setting the limits and force, see adjustment sections 22 and 23.
- If the door stops in both the desired UP (open) and DOWN (close) positions, proceed to *Test the Safety Reversal System*.



## OPERATION OF YOUR OPENER

Your opener can be activated by any of the following devices:

- **The Lighted Door Control Button.** Hold the button down until door starts to move.
- **The outside keyswitch or keyless entry system** (if you have installed either of these accessories).
- **The Transmitter.** Hold the push button down until the door starts to move.

### Opening the Door Manually:



**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.**

The door can be opened manually by pulling the release handle down. To reconnect the door, pull the release handle down and toward the opener.

**Do not use the manual release handle to pull the door open or closed. When the opener is activated by transmitter or door control button:**

1. If open, the door will close. If closed, the door will open.
2. If closing, the door will stop.
3. If opening, the door will stop (allowing space for entry and exit of pets and for fresh air).
4. If the door has been stopped in a partially open or closed position, it will reverse direction.
5. If an obstruction is encountered while closing, the door will reverse.
6. If an obstruction is encountered while opening, the door will reverse and stop.
7. The optional Protector System™ uses an invisible beam which, when broken by an obstruction, causes a closing door to open and prevents an open door from closing. It is **STRONGLY RECOMMENDED** for homeowners with young children.

Allow a 15 minute cooling period after 5 continuous operations of the opener.

### The opener light will turn on:

1. when opener is initially plugged in;
2. when the power is briefly interrupted;
3. when the opener is activated.

The light turns off automatically after 2-1/2 minutes. Bulb size is 230V/40W maximum.

## MAINTENANCE OF YOUR OPENER

### Once a Month:

- **Repeat safety reverse test.** Make any necessary adjustments.
- **Manually operate door.** If it is unbalanced or binding, call for professional garage door service.
- **Check to be sure door opens and closes fully.** Set limits and/or force if necessary.

### Once a Year:

- **Oil door rollers, bearings and hinges.** The opener does not require additional lubrication. Do not grease the door tracks.
- **GREASE THE RAIL AND THE TROLLEY.**

## CARE OF YOUR OPENER

When properly installed your opener will operate with minimal maintenance. The opener does not require additional lubrication.

**Limit and Force Settings:** These settings must be checked and properly set when opener is installed. Weather conditions may cause some minor changes in the door operation, requiring some re-adjustments, particularly during the first year of operation.

Refer to *Setting the Limits and Force* sections 22 and 23. Follow the instructions carefully and **repeat the safety reverse test after any adjustment.**

**Transmitter:** The transmitter may be secured to a car sun visor with the clip provided. Additional transmitters can be purchased at any time for use in all vehicles using garage. Refer to Accessories. Any new transmitters must be programmed into the opener.

**Transmitter Battery:** If transmission range lessens, replace battery.

**To Change Battery:** To replace batteries, use the visor clip or screwdriver blade to pry open the case. Insert batteries *positive side up*. To replace cover, snap shut along both sides. Do not dispose of the old battery with household waste. Take batteries to a proper disposal centre.

## SPECIFICATIONS

|                        |   |
|------------------------|---|
| Input Voltage .....    | 230-240 VAC, 50Hz   |
| Max. Pull Force .....  | 600N (MT600), 1000N (MT1000)  |
| Power .....            | 6Nm (MT600), 10Nm (MT1000)  |
| Watts .....            | 130W (MT600), 190W (MT1000)   |
| Standby Power.....     | 3 Watts nominal   |
| <b>Motor</b>           |   |
| Type .....             | DC gearmotor permanent lubrication  |
| <b>Drive Mechanism</b> |   |
| Drive .....            | Chain/belt with two-piece trolley on steel rail.  |
| Length of Travel ..... | Adjustable to 3.0 metres  |
| Travel Rate.....       | 5"-7" (127-178mm) per second  |
| Lamp .....             | On when door starts, off 2-1/2 minutes after stop.  |
| Door Linkage.....      | Adjustable door arm. Pull cord trolley release.   |
| <b>Safety</b>          |   |
| Personal .....         | Push button and automatic stop in <b>down</b> direction. Push button and automatic stop in <b>up</b> direction. |
| Electronic .....       | Automatic force adjustment  |
| Electrical.....        | Transformer overload protector and low voltage push button wiring.  |
| .....                  | Optical RPM/Passpoint detector.   |
| Limit Device .....     | Electronic, semi and fully automatic.   |
| Limit Adjustment.....  | Low voltage push button circuit.  |
| Start Circuit .....    |   |
| <b>Dimensions</b>      |   |
| Length (Overall) ..... | 3.2m (122-1/2")(with Standard rail)   |
| Headroom Required      | 30mm  |
| Hanging Weight.....    | 9.5kg   |
| <b>Receiver</b>        |   |
| Memory Registers...    | 16 (MT600), 64 (MT1000)   |
| Operating Frequency    | 433.92MHz   |

**SPECIAL NOTE:** Chamberlain strongly recommends that The Protector System™ (IR Beams) be installed on all garage door openers.

## **CHAMBERLAIN 2 YEAR LIMITED WARRANTY**

**Merlin MT600,MT1000**

**Garage Door Opener**

**Chamberlain Australia Pty Limited / Chamberlain New Zealand Limited (Seller) warrants to the original purchaser of the Merlin MT600,MT1000 Garage Door Opener (Unit) that it is free from defects in material and/or workmanship for a period of 2 YEARS from the date of first purchase from the Seller. The (MT600/MT1000) motor is covered by an additional 5 years from date of purchase (if used on a domestic door).**

Please retain your proof-of-purchase in the unlikely event you require warranty service.

If, during the limited warranty period, the Unit fails due to defects in materials or workmanship Chamberlain will, provided the defective part or Unit is returned freight and insurance prepaid and well packaged to the nearest Chamberlain office or authorised installer, undertake to repair or, at its option, replace any defective part or Unit and return it to the Buyer at no cost. Repairs and replacement parts are warranted for the remaining portion of the original warranty period.

### **Limited warranty on opener**

Chamberlain will furnish a replacement motor free of charge, if it is found to be defective. Labour costs may apply.

Where the Unit has been installed by an authorised installer, Chamberlain will furnish replacement parts free of charge through the authorised installer. A service fee for on-site service may apply.

### **In-warranty service**

During the warranty period, if the product appears as though it may be defective, call our toll free service before removal of the unit. A Chamberlain technician will diagnose the problem and promptly supply you with the parts for "do-it-yourself" repairs, or provide you with shipping instructions for a factory repair or replacement. If an authorised installer installed your unit you must call them for prompt on-site service.

If our service centre determines that a warranty claim has been made in respect of a failure or defect arising under out of any exclusion set out below, we may charge you a fee to repair and/or return the Unit to you.

### **Exclusions**

This warranty does not cover any failure of the Unit due to:

1. non-compliance with the instructions regarding installation, operation, maintenance and testing of the Unit or of any product with which the Unit is used.
2. any attempt to repair, dismantle, reinstall or move the Product to another location once the Product is installed by any person other than an authorised installer.
3. tampering, neglect, abuse, wear and tear, accident, electrical storm, excessive use or conditions other than normal domestic use.

This warranty does not cover any problems with, or relating to, the garage door or garage door hardware, including but not limited to the door springs, door rollers, door alignment or hinges, any problems caused by electrical faults, replacement of batteries or light bulbs or labour charges for reinstalling a repaired or replaced Units.

### **Liability – Australia only**

Under no circumstances shall the Seller be liable for consequential, incidental or special damages arising in connection with the use, or inability to use, the Unit. In no event shall the Seller's liability for damages or injury arising from breach of law or contract or for negligence, exceed the cost of repairing or replacing the Unit or refunding the purchase price of the Unit.

Under Division 2 Part V of the Trade Practices Act, 1974, certain warranties and conditions (Implied Terms) are implied into contracts for the supply of goods or services if the goods or services are of a kind ordinarily acquired for personal, domestic or household use or consumption. Liability for breach of those Implied Terms cannot be excluded or limited and the limitations and exclusions above do not apply to the Implied Terms.

Except for the Implied Terms and the warranties set out above, the Seller excludes all warranties and conditions implied by statute, at law, in fact or otherwise.

### **Liability – New Zealand only**

Except as set out in the Fair Trading Act 1986 and the Consumer Guarantees Act 1993:

- (a) all other guarantees, warranties and representations in relation to the Unit or its supply are excluded to the extent that the Seller can lawfully exclude them; and
- (b) under no circumstances shall the Seller be liable for consequential, incidental or special damages arising in connection with the use, or inability to use, the Unit, other than those which were reasonably foreseeable as liable to result from the failure.

**NOTE: We request that you attach your sales docket or invoice to this manual to enable you to establish the date of purchase in the unlikely event of a service call being made. Chamberlain reserves the right to change the design and specification without prior notification. Some features or accessories may not be available in certain markets or areas. Please check with your distributor.**

### **CONTACT DETAILS:**

#### **Chamberlain service centres:**

##### **Australia**

**Phone toll free 1800 638 234**

**Fax toll free 1800 888 121**

##### **New Zealand**

**Auckland phone 09 477 2823**

**Phone toll free 0800 653 667**

**Fax toll free 0800 653 663**

**[www.chamberlainanz.com](http://www.chamberlainanz.com)**

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