





Installation Instructions and Owner's Manual

READ THIS MANUAL CAREFULLY BEFORE BEGINNING INSTALLATION

Installer: Permanently attach manual to the wall.

Specification

Electrical Rating	GDC6	GDC12	
Input	AC 230V 50/60Hz		
Current	~1A		
Power	~200W		

Motor

Туре	DC 24V Brush		
Max. capacity	600 Nmm	1000 Nmm	

Operation

Lifting capacity	35kg Balanced Door
Travel rate	150mm/s approx.

Door Type

Max. Door Size	14m ²	18m ²
Travel/Force Adjustments	Digital co	ntrols

Courtesy Light

Light bulb	LED array
Lighting time	4.5 minutes

Transmitter

Frequency	433MHz
Operation range	50m (open-field)
Coding type	Fixed-code
Battery	12V (A23 Alkaline) x 1

Safety and Features

Soft opening and closing	
Safety reverse on closing and stop on opening	

Miscellaneous

Operating temperature	−20°C to +50°C
Dimension (mm)	411 L x 212 W x 175 H
Weight	5kg approx.

Accessories (Optional)

Wall Push Button (Standard / Illuminated / Wireless)
Wireless Keypad
1 / 2 / 3 / 4 Button Transmitters
Safety Photo Eye System

Read and Follow These Important Safety Instructions

You will see Warning and Caution statements on the following Pages.

Read and follow these safety instructions carefully. Failure to do so could result in serious personal injury or death.



Warning Caution

means that severe injury or death may result from failure to follow instructions means that property damage or injury may result from failure to follow instructions

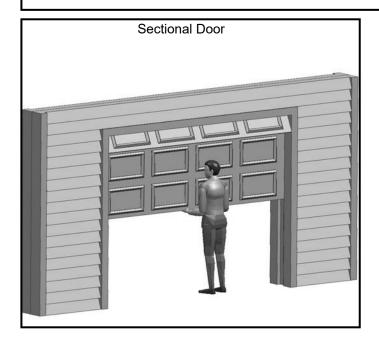
- Be sure to read and follow all instructions carefully.
- To reduce the risk of electric shock, this equipment has a grounding type plug, that has a third (grounding) pin. This plug will only fit into a grounding type outlet. If the Plug does not fit into the outlet, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.
- Check to make sure the garage door is properly installed and balanced. Garage door & parts are under extreme
 tension and under no circumstance should you attempt to adjust on your own. Have a qualified garage
 door service person make repairs to cables, spring and other hardware before installing the opener.
- Install Entrapment Warning Label next to control button. Read the Control Adjustment Warning Label. Install Emergency Release Tag to the Emergency Release Cord. Mount the Emergency Release Knob 180cm from the floor. Use the manual release only to disengage the trolley. Do not use the Red Release Cord and Knob to pull door up or down. If possible, use the Emergency Release only when the door is closed.
- Do not connect opener to power source until instructed. Install door opener 210cm or more above floor.
- After installing opener, the door must reverse when it comes in contact with a 5cm high object. Check this safety feature often.
- REMOVE ALL ROPES CONNECTED TO THE GARAGE DOOR.
- DISENGAGE ALL EXISTING GARAGE DOOR LOCKS TO AVOID DAMAGE TO THE GARAGE DOOR.
- Fiberglass, aluminum and steel doors must be reinforced to prevent damage. Consult with manufacturer for recommendations.
- All installation and wiring must be done in strict compliance with local and state building and electrical codes. Connect the power cord to a properly grounded outlet only. Do not in any way alter or remove the grounding pin. Photo Eye System must be installed properly. Operators recommend Photo Eye System is installed on every garage door for your added protection. Opening doors must not close and Closing doors must open once the beam is broken. See the test procedure page 16.
- Locate push button within sight of garage door, away from all moving parts and out of reach of children (minimum 150cm above floor). To reduce the risk of injury to persons, use this operator only with a sectional door.
- Never operate the opener if the system is not operating properly.
- Always disconnect electric power before making repairs or removing cover.
- Activate opener only when the door is in full view and free from obstructions.
- No one should enter or leave the garage while the door is moving. Do not allow children to play near, or operate the door. Keep the remote control away from children.
- After Installation is complete fasten this manual near the garage door. Perform periodic safety checks and recommended maintenance and adjustments.
- NEVER GO UNDER A STOPPED, PARTIALLY OPEN DOOR.
- Test door opener monthly. The garage door MUST reverse on contact with a 5cm high object (or a two by 4 board laid flat) on the floor. After adjusting either the force or the limit of travel, retest the door opener. Failure to adjust the opener properly increases the risk of severe injury or death.
- For products having an emergency release, when 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 are capable of increasing the rate of door closure and increasing the risk of severe injury or death.
- KEEP GARAGE DOORS PROPERLY BALANCED. See owner's manual. An improperly balanced door increases
 the risk of severe injury or death. Have a qualified service person make repairs to cables, spring assemblies, and
 other hardware.
- SAVE THESE INSTRUCTIONS.

Product Features

- 1. Motor: Permanent Magnet Direct Current 24V DC Brush Motor.
- 2. Opener Lights: Turn on and off automatically with 4.5 minutes illumination for your safety and convenience.
- 3. Sensing System: A built-in sensing system detects obstructions during door operation. If in the Downward (close) travel mode, the Opener will sense an obstruction and reverse to the full open position. In the Open mode, the Opener will stop. In both cases the operator will beep continuously for 20 seconds. Since all doors are different, the Sensing System has independent adjustments for customizing the level of force for the normal opening and closing of specific door.
- 4. Close Limit positioning: In winter months it's common for small pieces of ice or packed snow to be trapped under the door. Ground swelling may also effect the close limit setting of the Opener. The Close Limit Switch overrides the Sensing System under the last 5cm of closing travel and prevents the door from reversing if it encounters an obstruction at this point. In case, it's about time to shovel the snow or re-adjust the close limit higher.
- 5. Emergency Release: A pull cord allows manual disconnect and operation of door during power failure. Unit will automatically reconnect when release is reset (the trolley release lever is snapped back to its original position), power is restored and Opener is activated.
- 6. Mechanical Door Lock: When properly adjusted, opener locks door in closed position preventing unwanted entry.
- 7. Easy Connect Continuous Monitor Entrapment System: System allows quick and easy installation of "Silent Guard" Photo Eye System while control circuitry monitors these devices continuously for proper operation.
- 8. Constant Contact to Close: For utmost safety if Photo Eye system fails constant contact of mechanical push button is necessary to close door. In this mode of operation, a radio transmitter cannot be used to close door.
- 9. Momentary Contact to Close: Single touch to Radio Transmitter or Wall Button will allow door to close as long as Silent Guard Photo eye system is operational.
- 10. Photo Eye System: An invisible infra-red beam of light guards the door opening and reverses a downward moving door if the beam is broken by a stationary or moving object. If the beam is broken, the opener will beep for 20 seconds. Motor control circuitry constantly monitors the Photo Eye System for proper operation.
- 11. Digital Radio Control: Built in allowing over 1.6 million private codes, easily selected without use of tools. Bright transmitter LED indicates operation and monitors battery condition.
- 12. Auto Force Learning: After setting the Up Limit and Down Limit is complete the door will run once from the Up Limit to the Down Limit the data from this is stored in the memory. The red and green LED turn off and the opener beeps 3x, the learning is then complete.
- 13. Soft Open/Close: The door soft open/close for a distance of 20-30cm depending on the size of the door being lifted.
- 14. Security Switch: When the Security Switch is activated the Door will not be able to operate. Signal from the Wall Box, Transmitter, Push Button, and Up/Down button are all ignored. Light button will continue to function normally.

Door Test

Before beginning installation of the operator please complete the following test to insure that your door is balanced and in good working condition. A poorly balanced door could cause severe personal injury and damage to the opener. Always have a qualified garage door service person make any needed adjustments and/or repairs to your door before proceeding with installation.



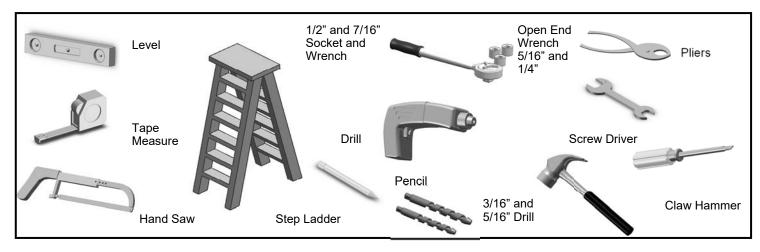
- Raise and lower the door and check closely for areas of sticking and binding. Check for loose hinges, wobbly rollers, frayed cables and damaged or broken springs. Contact a qualified garage door service person to make the necessary adjustments.
- 2. Lift the door approximately halfway. When released, the door should stay in that position. If door pulls open or moves downward, the spring mechanism is not adjusted properly. Contact a qualified garage door service person to make the necessary adjustments.
- 3. When properly installed and adjusted the door will remain clear of the opening, when allowed to rest at its natural full open position. If door drifts up or down the door is not adjusted properly. Contact a qualified garage door service person to make the necessary adjustments.



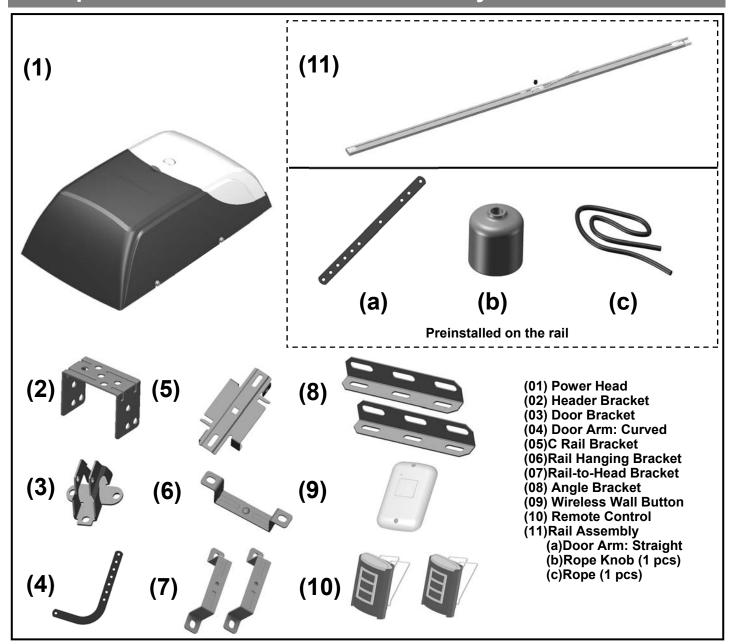
Do not install the opener until these adjustments and repairs have been made.

Carefully follow the instructions for the assembly and installation of the garage door opener contained in this manual

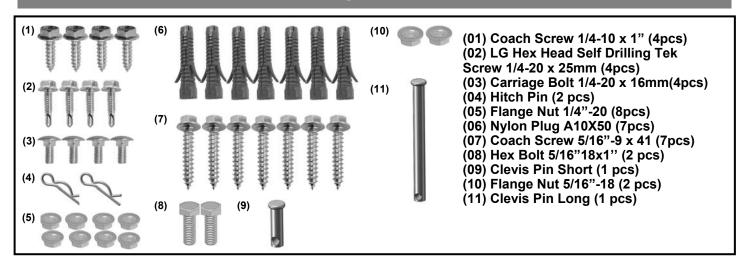
Tools Required for Assembly and Installation



Components Identification and Inventory



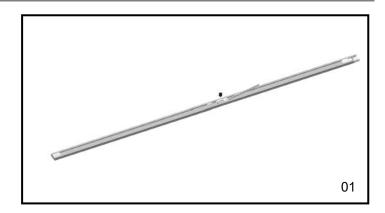
Fastener (parts in screw bag) Identification



Assembly 01

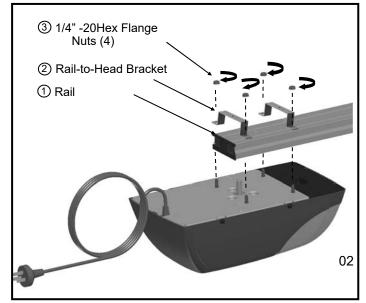
STEP 1.

Remove packing materials.



STEP 2.

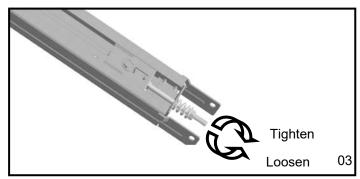
Place the rail support on the power head. Align rail and power head and slide rail over drive shaft & retaining lugs. Fasten with 4 nuts.



STEP 3.

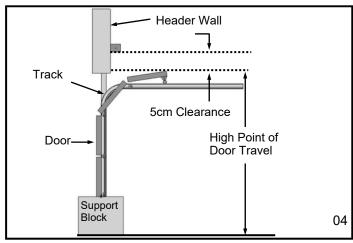
Adjust the tension of chain/belt at end rail. Turn clockwise to tighten and counterclockwise to loosen.

NOTE: Improper tension will result in abnormal opener operation.

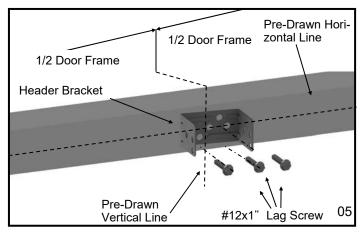


STEP 4

Install head bracket. The height is seen in fig.5 Head bracket position is higher than header wall and mark the horizontal line.

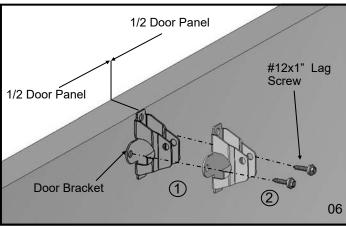


Assembly 02



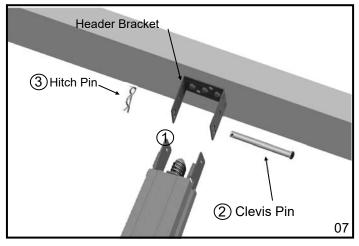
STEP 5.

Make a centerline on door frame, and cross the previous horizontal line. Fasten the cross point with screws.



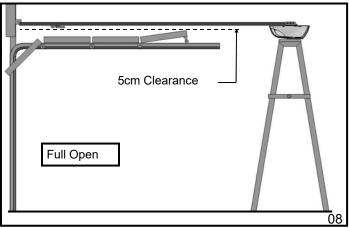
STEP 6.

Mount door bracket at the position of center of top panel with screws.



STEP 7.

Connect track end and header bracket using clevis pin long. Insert hitch pin into clevis pin long .



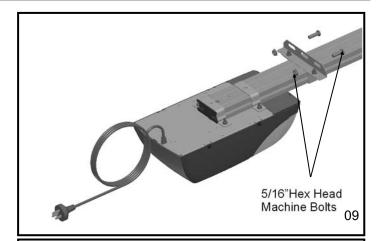
STEP 8.

Open the door to the full open position. Allow 5cm of space between the rail and the door

Assembly 03

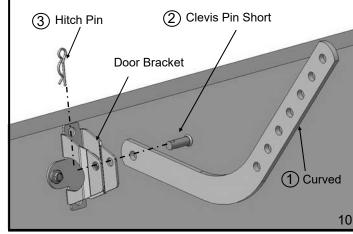
STEP 09.

Attach hanging bracket and angle bracket to the rail



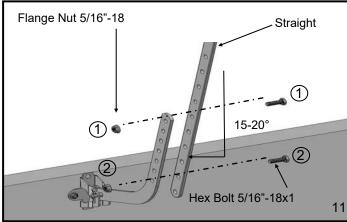
STEP 10.

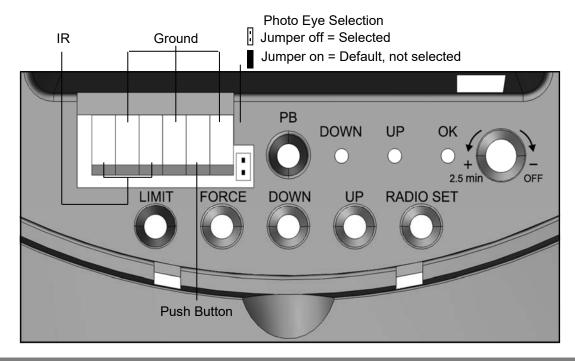
Insert curved arm into door bracket using clevis pin short.



STEP 11.

Connect straight arm and curved arm and adjust to the required length. Fix it with hex bolts and flange nuts.





Connecting Photo Eye Safety System (OPTIONAL)

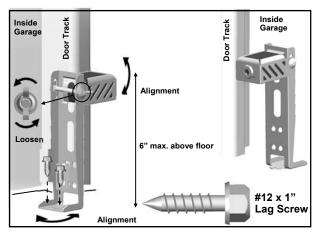


Fig. 1 (Floor Mount)

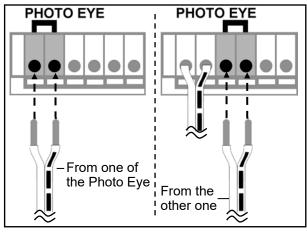


Fig. 2

Mounting Photo Eye Safety System

- 1. Place the Photo Eyes facing each other on each side of the garage door, as shown in Fig.1.
- 2. If attaching to concrete, secure the photo eyes using concrete anchors and bolts (not provided).
- 3. If necessary, align the Photo Eyes by loosening the wing nut.

To Connect Photo Eye Safety System

- 1. Connect a pair of wires from either one of the Photo Eyes to a pair of "PHOTO EYE" terminals on the rear of the Opener as shown in Fig. 2.
- 2. Repeat above step to connect the other Photo Eye.
- 3. Remove the Photo Eye Selector jumper
- 4. Disconnect and reconnect power

Travel Limit Adjustment— I. UP Limit

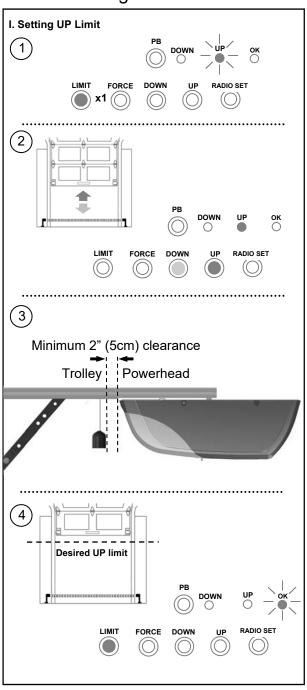
♠ WARNING

To prevent SERIOUS INJURY or DEATH from improper Force Adjustment:

- DO NOT adjust force to compensate binding or sticking of the garage door. Call a qualified garage door service person to make necessary adjustments in case of binding.
- DO NOT increase force beyond minimum force required for closing the door. Too much force will cause improper operation of safety reversal mechanism.

- After ANY adjustments, Safety Reverse Test MUST be performed to ensure the door reverses on contact with a 5cm high object.

NOTICE: This opener will not work until you set the travel limits and the travel force adjustment. The opener will beep 5 times if it is operated without programming.



About Travel Limit Adjustment

Limit Adjustments regulate the fully-open (UP limit) position and fully-closed (DOWN limit) position, at which the door will stop when opening and closing.

Make sure the trolley is engaged before proceeding adjustments.

I. Setting UP Limit

- 1. Press "LIMIT" button once to enter Travel Limit Adjustment. "UP" indicator (green) is on*.
 - *NOTE: Once you have pressed and released the "Limit" button, the "UP" light will stay for 10 seconds for you to press the "UP" button and begin programming. If the "UP" light goes out before you are finished you need to start over.
- 2. Press & hold the "UP" button, the door travels up. You may use both "UP" or "DOWN" buttons to inch-adjust the door to the desired UP limit position.
- Make sure there is enough clearance for your vehicle(s), and there is a minimum 2" (5cm) gap between Trolley and Powerhead.
- Once the door is at the desired UP limit position, press "LIMIT" button once, "OK" indicator (orange) flashes and goes off. The UP limit is set.

Travel Limit Adjustment— II. DOWN Limit

↑ WARNING

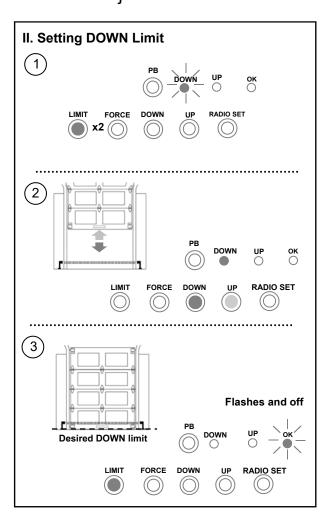
To prevent SERIOUS INJURY or DEATH from improper Force Adjustment:

- DO NOT adjust force to compensate binding or sticking of the garage door. Call a qualified garage door service person to make necessary adjustments in case of binding.
- DO NOT increase force beyond minimum force required for closing the door. Too much force will cause improper operation of safety reversal mechanism.



- After ANY adjustments, Safety Reverse Test MUST be performed to ensure the door reverses on contact with a 5cm high object.

NOTICE: The opener will not work until you set the travel limits and the travel force adjustment.



CAUTION: WHILE SETTING THE DOWN LIMIT, CAREFULLY WATCH DOOR TRAVEL DISTANCE. RELEASE BUTTON WHEN THE DOOR MAKES CONTACT WITH THE GROUND!

II. Setting DOWN Limit

- Following UP limit setting, press "LIMIT" button twice to enter DOWN-limit setting, "DOWN" indicator (red) is on*.
 - *NOTE: Once you have pressed and released the "LIMIT" button, it will stay for 10 seconds for you to press the "DOWN" button and begin programming. If the "DOWN" light goes out before you are finished you need to start over.
- 2. Press & hold the "DOWN" button, the door travels down. You may use both "UP" or "DOWN" buttons to inch-adjust the door to the desired DOWN limit position.
- Once the door is at the desired DOWN limit position, press "LIMIT" button once, "OK" indicator (orange) flashes and goes off. DOWN limit is set.

Both "UP" and "DOWN" (green and red) indicators are now on, indicating that both UP and DOWN limits are set, and the opener is ready for Auto Force Adjustment, see Page19.

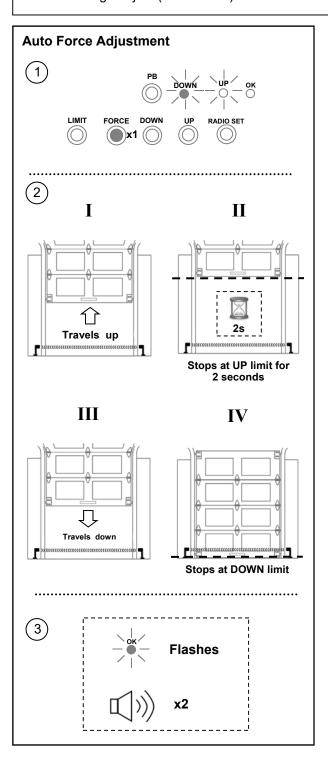
Auto Force Adjustment

↑ WARNING

To prevent SERIOUS INJURY or DEATH from improper Force Adjustment:

- DO NOT adjust force to compensate binding or sticking of the garage door. Call a qualified garage door service person to make necessary adjustments in case of binding.
- DO NOT increase force beyond minimum force required for closing the door. Too much force will cause improper operation of safety reversal mechanism.
- After ANY adjustments, Safety Reverse Test MUST be performed to ensure the door reverses on contact with a 1.5" high object (2x4 laid flat).





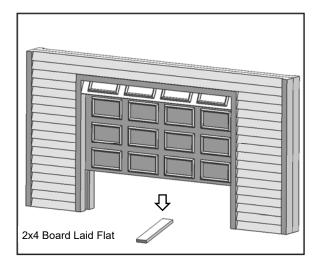
Following limit-setting, the unit is now ready to automatically adjust the forces for opening and closing the door. Proceed with the following steps to complete adjustment.

- 1. With both "UP" and "DOWN" indicators are on after Travel Limit Adjustment, press the "FORCE" button once to enter Auto Force Adjustment.
- 2. The door will travel up automatically (I) and stop at UP limit for 2 seconds (II). Door will then travel down automatically (III) and stop at down limit (IV).
- 3. The "OK" indicator (orange) will flash with beeps, the Auto Force Adjustment is completed.

Testing the Safety Reverse System



Warning: Failure to Test Reversing System Could Result in Death or Serious Injury. Test This System Once A Month.



To test the Opener Reversing Feature at floor level place a solid object 5cm thick on the ground so that the center of the door will come into contact with it. Close the door. If the close force adjustments are correct, the door will reverse within one and a half seconds upon contacting the object and travel to the full open position. The door will emit short beeps continuously for 25 seconds. If this does not occur, re-check Limit Adjustments on pg.13 and Force/Sensitivity Adjustments

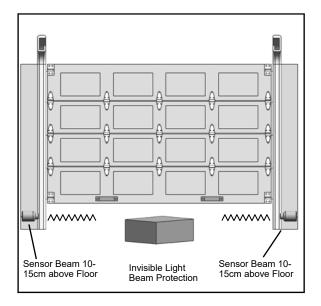
Note: Any time any adjustments are made to Limits or Sensitivity, You must retest the opener for the Reversing Feature at floor level as outlined above.

> Warning: The Sensitivity System Reversing Test should be performed monthly to ensure that this important system remains in proper adjustment



Warning: A damaged or malfunctioning Photo Eye System can enable a garage door to close on people or property, causing serious injury or even death. Perform this test

monthly to ensure proper operation.



Testing the Photo eye system (OPTIONAL)

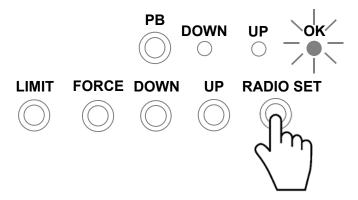
Start the door down and then place an obstacle approximately 20cm high by 30cm wide in the path of the beam. The Red Pilot Light on the Silent Guard Photo Eye System should go off. The door should stop for 1-1/2 seconds and reverse to the full open position. The Opener will emit long beeps continuously for 20 seconds. If the door is moving up and the beam is broken, the door will continue up to full open. With the door fully open and at rest, place the obstacle in the path of the beam once again. Activate the Wall Push Button, The Opener will revert to and remain in the Up limit position. Hold the Wall Push Button to close the door (door will beep while it travels to the down limit position).

*Auto Close Timer is only available with the Photo Eye System present.

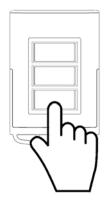
NOTE: If the garage door travels more than 5cm in a downward path after releasing the button, the Silent Guard Photo Eye System is malfunctioning. Check all electrical connections and alignment of the Photo Eye System.

Programming the Remote Controls

1. To program transmitter, press "SET" button, "OK" LED glows with a beep. The unit is ready to accept a transmitter within a 30 seconds time frame.



2. Press desired button on the transmitter within 30 seconds.



3. The operator beeps twice, acknowledging the transmitter is set.

To ERASE ALL transmitters:

Press and hold "RADIO SET" button for about 5 seconds until "OK" LED flashes and beeps 3 times.

Final Installation

Make Sure That:

- 1. The front and rear mounts for the opener are sound and secure and the rail is positioned correctly above the high arc of the door and that the opener is positioned over the door action centerline.
- 2. For sectional doors and tilt doors, the position of the door arm with the opener closed, is such that its connecting point on the trolley is 12cm to 20cm behind its connecting point on the door bracket. The door arm should never be perfectly vertical when the door is in the closed position (there should be an angle of 15-20°).
- 3. The emergency release knob and cord are secured to the emergency release lever on the trolley. The knob is located 180cm above the floor and requires no more than 20kgs pull to actuate. The trolley and release mechanism are properly lubricated. **Recommend: Silicone based lubricant**
- 4. The standard push button is in such a position and at such a height that it can only be actuated by an adult. The caution label is prominently displayed next to the push button.
- 5. All wiring is correct to code. There is ground continuity in the supply. The ground prong on the power cord is intact.
- 6. All ropes have been removed from the door, and any lock mechanisms removed or disabled. The door moves freely without binding when operated manually. The door is correctly balanced and lubricated. All door hardware is secure and sound. The sensitivity has been adjusted to minimum force. The appropriate warning sticker has been affixed to the door.
- 7. The door reverses on obstructions to within 5cm of the floor. The floor beneath the closed door provides uniform contact.
- 8. The manual is attached to the wall near the push button.
- 9. On doors with extension type springs, safety restraint cables have been installed through the springs.
- 10. There is surge protection on the power line to the opener.
- ***Operators recommend photo eyes to be installed on all garage doors for added safety***

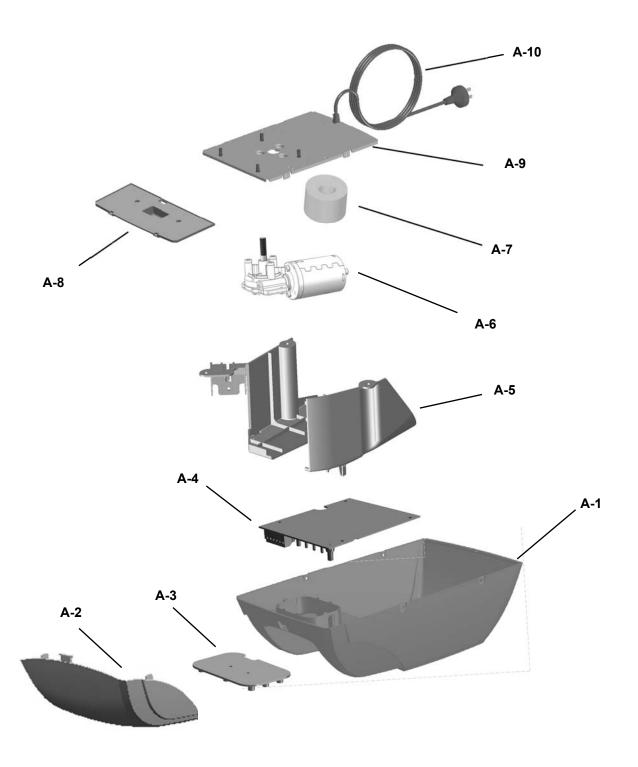
After the Installation

- Never permit children to play with or operate the garage door opener either from the wall station or the remote controls. Keep radio transmitter locked in the car. Misuse of the push button or transmitter could result in serious injury or even death.
- 2. Open the garage door with the remote controls only when the garage door is fully visible to you and clear of all obstructions. The garage door should be kept in sight until it is completely open or closed and you are certain that the garage door opener has shut off.
- 3. Attempting to exit the garage through the garage door opening, while the door is in motion, is a very dangerous activity that could result in serious injury or even death.
- 4. Children and pets should always be clear of the door opening while the garage door is in motion.
- 5. Check the safety reverse mechanism at least once a month to make sure that it will reverse with the minimum amount of force. Also check to be sure that the door will reverse within 5cm of the floor. See p.14.
- 6. Check the manual operation of your garage door at least every 90 days to be sure that it is operating smoothly and does not bind or stick. Tighten all bolts on the door and visually check all hardware including springs for wear of damage. **Caution**: If service is needed contact your local garage door service person.
- 7. Do not decrease the safety reversing sensitivity mechanism to overcome a damaged or poorly operating door. This will adversely affect the operation of the safety reverse mechanism which could result in damage to the door, personal injury or even death.

Caution: Never operate the door opener if the reversing mechanism is not functioning properly.

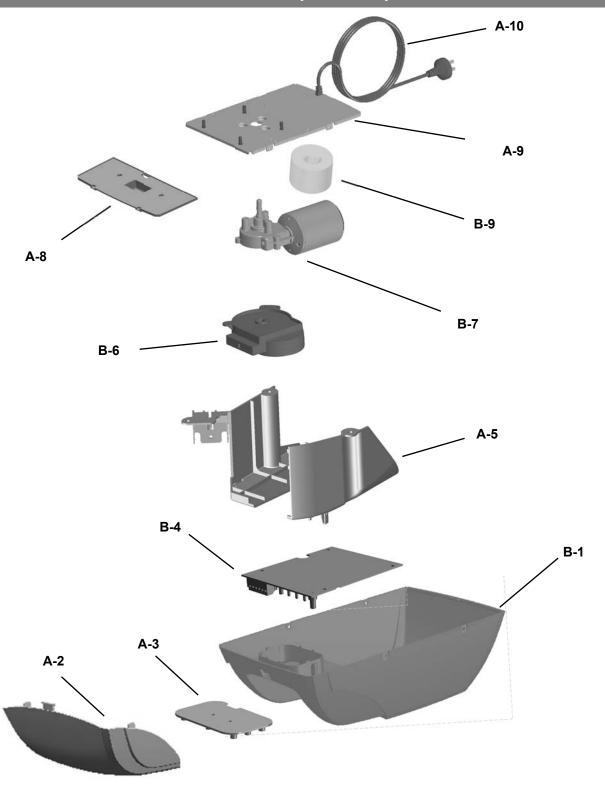
- 8. Whenever possible, the manual disconnect should only be used when the door is fully closed. Caution: Extreme care must be taken whenever the disconnect cord is pulled with the door partially open. Weak or broken springs may allow the door to fall rapidly resulting in property damage, personal injury or death. If a broken spring is evident, contact your local garage door service person immediately before disconnecting the door from the opener. Never attempt servicing a broken spring.
- 9. Always disconnect electrical power supply to the opener when performing any maintenance or service to the opener or garage door. Failure to do so could result in electrical shock, property damage, personal injury or death.
- 10. If any damage to any mechanical or structural component of the opener is observed, discontinue use and contact your local garage door service person immediately.
- 11. If the door auto reverses, please ensure there is no obstruction to the track or door.

Rail and Hardware Parts List(GDC6)



A-1	Housing Assembly	A-2	Dome Cover	A-3	LED Light
A-4	Logic Board	A-5	Logic Board Holder	A-6	Motor
A-7	Transformer	A-8	LED Light Cover	A-9	Chassis
A-10	Power Cord				

Rail and Hardware Parts List(GDC12)



B-1	Housing Assembly	A-2	Dome Cover	A-3	LED Light
B-4	Logic Board	A-5	Logic Board Holder	B-6	RPM Encoder
B-7	Motor	A-8	Transformer	B-9	LED Light Cover
A-9	Chassis	A-10	Power Cord		



WARRANTY

Doorworks Garage Door Operators hereafter referred to as the Manufacturer hereby warrants:

- 1. Garage Door Operators to be free from defects in material and workmanship for a period of five (5) years for motors and one (1) year for Electronics and Mechanics from date of purchase, if installed by an authorized reseller, otherwise if installed by the purchaser one (1) year will apply.
- 2. Garage Door Operators (Commercial and Industrial Application) to be free from defects in material and work-manship for a period of three (3) months from date of purchase.
- 3. Where the garage door operator has been returned to the manufacturer for Warranty repairs, all costs incurred in the return will be paid for by the purchaser. If in the opinion of the manufacturer the product is faulty, all defective parts will be replaced at no charge to the purchaser.
- 4. Proof of purchase must be given to the manufacturer at time of Warranty claim.
- 5. The manufacturer reserves the right to modify any existing or future products without incurring any obligation to in corporate such modification to products already manufactured or to which this Warranty may relate.
- 6. Warranty only applies if this product has been installed to the Manufacturers recommendation (in the opinion of Guardian Garage Door Operators).
- 7. This is only for goods installed in Australia/New Zealand.
- This Warranty does not apply to any defect, loss or damage arising or caused directly or indirectly by or as a result of:
 - (i) Any defect (including defects in component parts or accessories) arising from or attributable to the failure to carry out normal preventive maintenance or adjustment itself.
 - (ii) To any additional damage or deterioration arising from attributable to the operation of the Operator after it is known to be defective.
- 9. Exclusions to Warranty Period:
 - (i) Repair or Warranty Work three (3) month warranty
- 10. Not include in Warranty:
 - (i) Batteries.
 - (ii) Fuses.
 - (iii) Globes.
 - (iv) Sensitivity adjustment.
 - (v) Hand Transmitters.
- 11. Note: All Warranties will be void subject to:
 - (i) Water damaged and condensation.
 - (ii) Power supply black out or surge.
 - (iii) Act of God
 - (iv) Modification or adjustment by unauthorized persons.
 - (v) Any interference from radio (including citizen band radios or and other electronic device.)
 - (vi) Preventative maintenance and regular servicing not undertaken.
 - (vii) Account not paid in full by the purchaser.
- 12. Subject only to the provisions of the Trade practices Act and any legislation of the State or Territory wherein the Operators of the Manufacturer shall have been sold or installed (which may confer certain rights on consumers of goods and those rights by such legislation may rendered incapable of exclusion) this Warranty supersedes and excludes all representations, warranties and conditions whether expressed or implied by law and the Manufacturer shall have no liability or otherwise than herein provided for any loss and damage (including consequential loss and damage, loss of use or profits) by reasons of delay, defective or faulty materials or workmanship, negligence or any act, matter or thing done permitted or omitted to be done by the Manufacturer.

WARRANTY

THIS WARRANTY FORM SHOULD BE COMPLETED AT TIME OF INSTALLATION

This Warranty Form should be retained by the purchaser at all times and produced with the purchase docket by the Purchaser as proof of the purchase date.

PURCHASE'S NAME: PURCHASE'S ADDRESS: INSTALLED BY: INSTALLER'S ADDRESS: INSTALLER'S SIGNATURE: DRIVE UNIT SERIAL NO:		