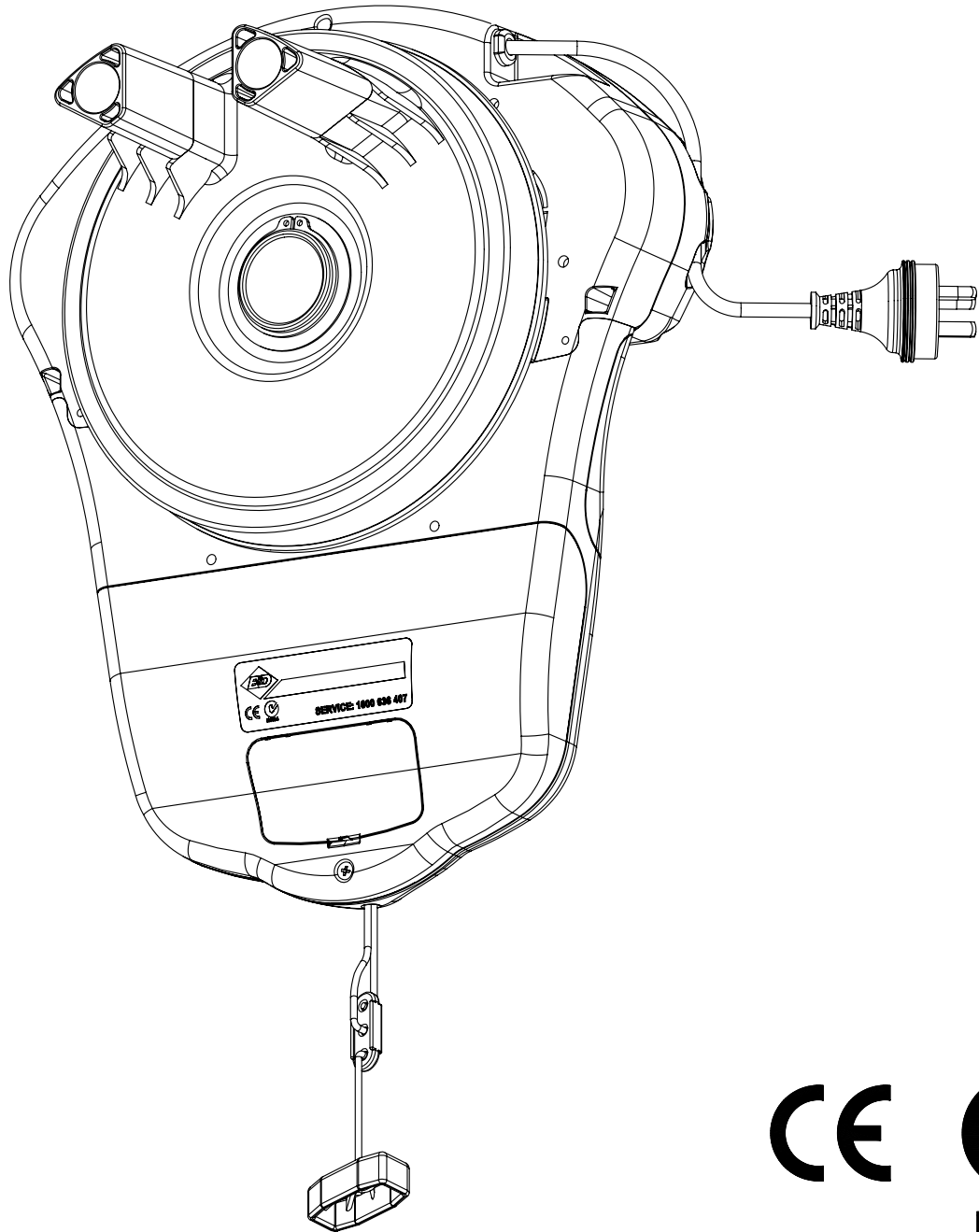


Firmamatic™



N1854

Instruction Manual



B&D Doors is a Division of B&D Australia Pty Ltd ABN 25 010 473 971
www.bnd.com.au

PLEASE READ THESE IMPORTANT SAFETY RULES



These safety alert symbols mean **Caution** – a personal safety or property damage instruction. Read these instructions carefully.



This Automatic Garage Door Opener is designed and tested to offer safe service provided it is installed and operated in strict accordance with the following safety rules. Failure to comply with the following instructions may result in serious personal injury or property damage.

Caution: If your garage has no pedestrian entrance door, an emergency access device should be installed. This accessory allows manual operation of the garage door from outside in case of power failure.



Position the Garage Door Opener so that the power plug is accessible when inserted into the power outlet (EN 60335-1)



This opener should be installed in accordance with relevant Australian Standards



Do not allow children to play with door controls (AS3350).



Keep remote controls away from children (AS3350).



Watch the moving door and keep people away until the door is completely opened or closed (AS3350)



Activate the opener only when the garage door is in full view, free of obstructions and with the opener properly adjusted.



Keep garage door balanced. Sticking or binding doors must be repaired. Garage doors, door springs, brackets and their hardware are under extreme tension and can cause serious personal injury. Do not attempt any garage door adjustment. Do not use if repair or adjustment is needed. Call for professional garage door service.



Install optional door control button in a location where the garage door is visible, but out of the reach of children at a height of at least 1.5m (AS3350).



Disconnect electric power to the garage door opener before removing covers.



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



This opener is not suitable for commercial, industrial or common entry applications



To avoid serious personal injury from entanglement, remove all unnecessary ropes or chains and disable any equipment such as locks which are not needed for powered operation (AS3350).



Installation and wiring must be in compliance with your local building and electrical codes. Connect the power cord only to properly earthed mains. If an extension lead is used, make sure it is a 3 core lead and approved to 7 amp capacity.



If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.



When using optional auto close mode, a safety infrared beam (Part No 62153) must be fitted correctly and tested for operation at regular intervals. Extreme caution is recommended when using auto close mode. All safety rules must be followed



This opener is a plug in domestic appliance and is designed for indoor use only. It must be installed in a dry position that is protected from the weather.



The opener is not intended for use by young children or infirm persons without supervision

B&D Doors to the extent that such may be lawfully excluded hereby expressly disclaims all conditions or warranties, statutory or otherwise which may be implied by laws as conditions or warranties of purchase of a B&D Doors Garage Door Opener. B&D Doors hereby further expressly excludes all or any liability for any injury, damage, cost, expense or claim whatsoever suffered by any person as a result whether directly or indirectly from failure to install the B&D Doors Garage Door Opener in accordance with these installation instructions.

IMPORTANT SAFETY INSTRUCTIONS

WARNING – It is vital for the safety of persons to follow all instructions.

SAVE THESE INSTRUCTIONS

AS3350

SYSTEM SPECIFICATIONS

Maximum Door Size	3000mm high 5500mm wide (16.5m ²) Residential Rolling Garage Door or 2400mm high Wind Lock Residential Rolling Garage
Maximum Door Load	Door that does not exceed 200N (20kgs) bottom rail load. Recommended load 70N (7kgs)
Supply Voltage	220 - 240 V AC 50/60Hz
Current	Max. 1A
Lamp	LED (Light Emitting Diode) lighting; 2 X LED modules. Light comes on when door starts, off approx. 4 ½ minutes later, or can be programmed to operate from a remote control transmitter
Limit Adjustment	Electronic
Force Control	Electronic - fully automatic. Can be adjusted for environmental reasons
Transmitter Frequency	433.92MHz
Powerhead Weight	7.6kg
Auxiliary Power Supply	24-35VDC at 100mA
Rated Load	550N
Door Closed Status Output	Opto-isolated transistor output 35V 100mA. Connected to GND when door closed Note: Output will not be activated after power failure until a closed drive cycle has been completed - even if the door is closed
Auxiliary Output Supply	Opto-isolated transistor output 35V 100mA. Connected to GND when activated
External Aerial Connection	2-Pin Screw Connector AS3350

ABOUT YOUR FIRMAMATIC OPENER

Thank you for choosing a Firmamatic automatic garage door opener. This automatic garage door opener has been designed and developed in Australia by B&D Doors.

The technically advanced construction of this B&D opener ensures you enjoy the following benefits:

Warranty

Two (2) years full parts and labour warranty on motor electronics and mechanical components of the opener when installed by an approved B&D Dealer (conditions such as having the garage door serviced annually also apply).

Security Code

Your own private security code with over 3 billion available codes, meaning only you can open your garage door. Allows you to electronically program your security code at the touch of a button.

Multi-Channel Transmitter

Standard multi channel remote control transmitter allows you to operate other devices such as an adjoining garage door or automated gate.

Soft Start/Soft Stop

The opener eases into and out of an operating cycle. This makes operation smoother and quieter and most importantly reduces wear and tear on the door and opener.

Warranty Expired Indicator

When the opener reaches the number of cycles covered by warranty, the courtesy light will flash 10 times after each operation to indicate that warranty has expired. The flashing will continue for twenty cycles unless the opener is reset by pressing the LIMIT SET button while the courtesy light is flashing.

Safety Reversing System

Automatic safety reverse ensures personal protection from death or serious injury if trapped under a door while closing. Safety reverse force can be adjusted for environmental conditions, for example windy areas, etc.

LED Courtesy Light

Taking advantage of the latest advances is Light Emitting Diode (LED) technology your opener will never need to have the light globes replaced.

The LED courtesy light automatically switches on for approximately 4 ½ minutes (time programmable) when operating the door. Can be programmed to turn on and off from a remote control transmitter.

Manual Release

Emergency manual release handle (red knob) for manual operation of the door in the event of a power failure.

Disengagement handle doubles as a wireless transmitter, when pressed will operate door.

Memory Retention

Automatic memory of all remote control transmitter codes and door travel limits after a power failure.

Self Locking

No need to manually lock your garage door, as the opener 'positively' locks the door when closed.

Periodic Maintenance Indicator

The service LED will illuminate to indicate that periodic maintenance is required. Contact your dealer/installer for service.

Service Fault Indicator

Flashing LED's to easily identify operational problems or service requirements.

Dynamic Door Profiling

Automatically compensates for changes in door operating characteristics.

Auto-Close

Auto closing option can be programmed to close the door approximately 30 seconds after the door has opened. N.B. Safety Infra Red Beams must be installed for this option to function.

External Antenna

An external antenna can be connected - for sites where radio range can be a problem.

Vacation Mode

A transmitter can be programmed to disable the garage door opener radio receiver. This is ideal if the door is to be left idle for prolonged periods.

Pet Mode

A transmitter can be programmed to open the door partially to allow pets access to the garage. The door opening height is adjustable via a handheld programmer.

Door Status

Door Closed Output – for those situations when you need to know when the door is open.

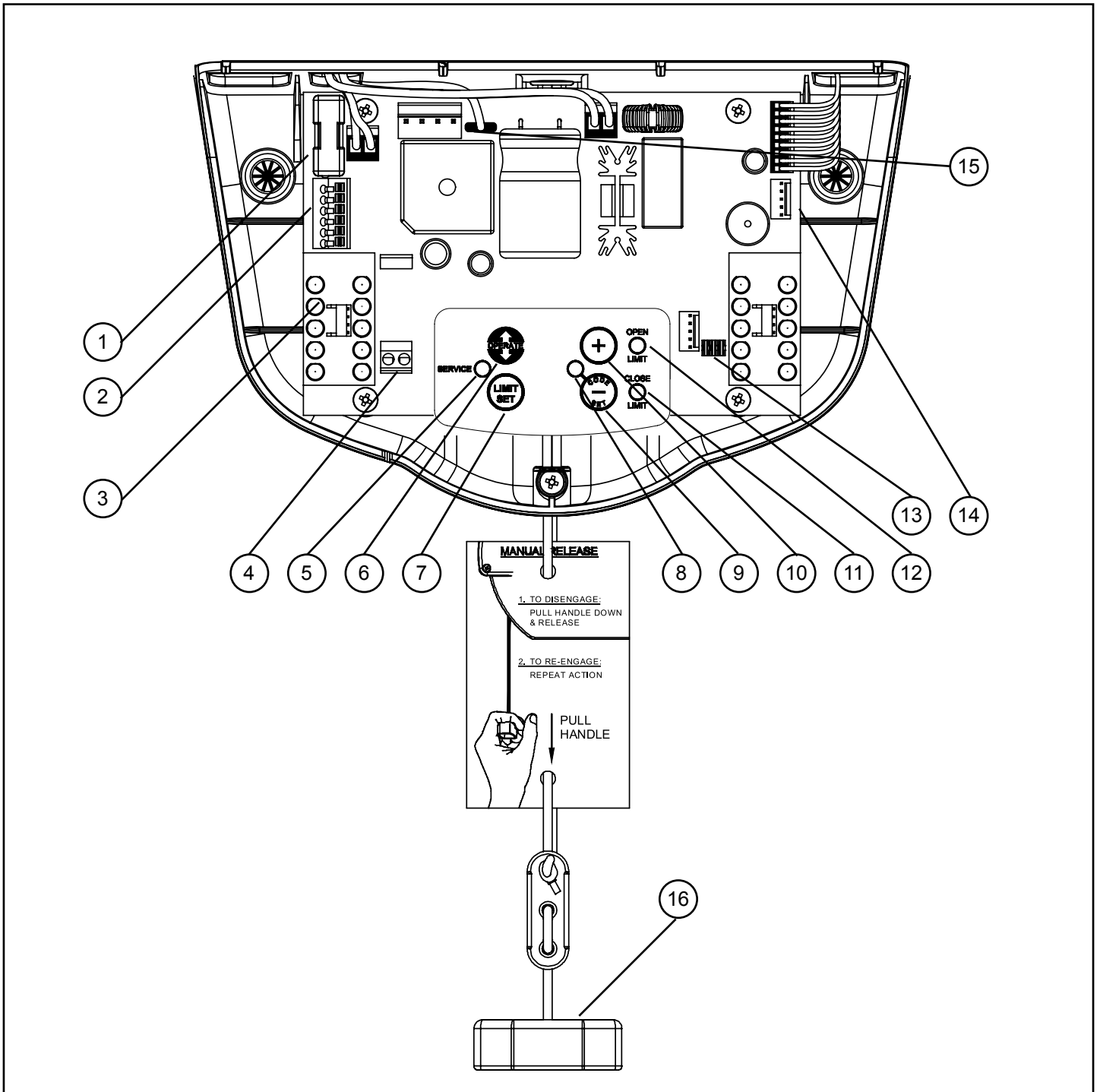
Auxiliary Output

You can program a spare button of your remote control transmitter to operate this output to control items that can be switched using a momentary close.

Battery Back Up

Optional battery back up or solar power is available.

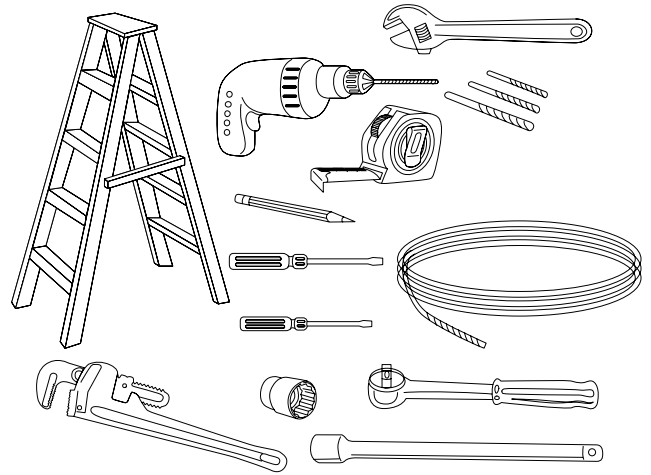
OPENER FEATURES



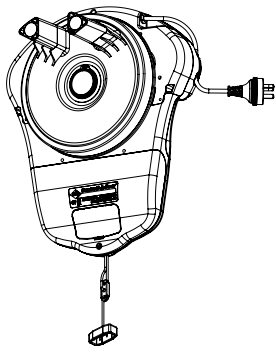
- | | |
|-----------------------------------|--|
| 1. FUSE | 8. CODE SET LED INDICATOR (RED) |
| 2. TERMINAL BLOCK - GND | 9. MINUS (-) AND CODE SET BUTTON (RED) |
| IR BEAM | 10. PLUS (+) BUTTON (GREEN) |
| 30V PWR | 11. CLOSE LIMIT LED INDICATOR (RED) |
| OPERATE | 12. OPEN LIMIT LED INDICATOR (GREEN) |
| CLS OUT | 13. JUMPERS - OPT 1 |
| AUX OUT | OPT 2 |
| 3. LED LIGHT ARRAY | AUTO-CLS |
| 4. ANTENNA TERMINAL | 14. UNIVERSAL PROGRAMMER CONNECTOR |
| 5. SERVICE LED INDICATOR (YELLOW) | 15. BATTERY BACK UP CONNECTOR |
| 6. OPERATE BUTTON (BLUE) | 16. MANUAL RELEASE HANDLE |
| 7. LIMIT SET BUTTON (BLACK) | |

TOOLS YOU MAY NEED FOR INSTALLATION

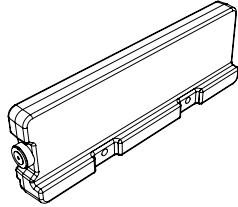
- Suitable door support
- Ladder
- Phillips screwdriver
- Suitable sockets and handle with a 150mm extension
- 450mm pipe wrench (Stillson) or similar
- Adjustable wrench or spanner set
- Marking pencil
- Tape measure
- Drill
- Drill bit 4.5mm for mounting weight bar
- Drill bit 3.2mm for pinning door curtain
- Length of rope



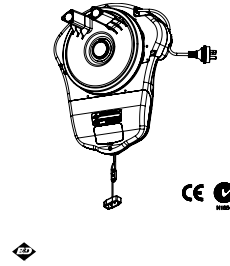
KIT CONTENTS



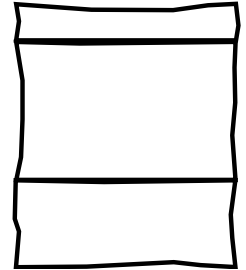
1. Powerhead



2. Weight Bar

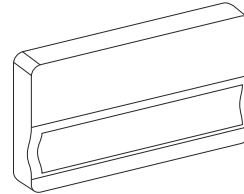


3. Instruction Manual



4. Installation Bag

1. Powerhead
2. Weightbar
3. Instruction manual and warning labels,
4. Installation bag containing:
 - a. Qty 2 Hand held remote control transmitter
 - b. Qty 2 Screw M4 x 50
 - c. Qty 2 3/16x1/2 flat washers
 - d. Qty 2 Nilock Nut M4
 - e. Qty 2 Hex head screw M6x45
 - f. Qty 2 Flat washer 107D 6.4x20.5x1.6
 - g. Qty 2 Ring gear extension fork
 - h. Qty 2 Screw 10x32 self tapping
 - i. Qty 2 Washer 6.4x20.6x1.2 to pin the door curtain
 - j. Qty 2 Locking bar covers
 - k. Qty 1 Coning collar kit
 - l. Qty 1 Transmitter wall bracket
 - m. Qty 2 Wall bracket screw
 - n. Qty 2 Wall plug



a. Qty 2



b. Qty 2



c. Qty 2



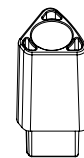
d. Qty 2



e. Qty 2



f. Qty 2



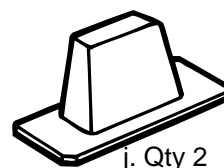
g. Qty 2



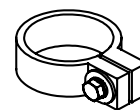
h. Qty 2



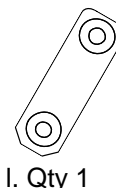
i. Qty 2



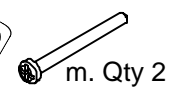
j. Qty 2



k. Qty 1



l. Qty 1



m. Qty 2



n. Qty 2

SECTION 1 - REQUIREMENTS

IMPORTANT SAFETY INSTRUCTIONS FOR INSTALLATION

WARNING – INCORRECT INSTALLATION CAN LEAD TO SEVERE INJURY

FOLLOW ALL INSTALLATION INSTRUCTIONS

AS3350

1.1 - DOOR OPERATION

The door must be in good operating condition and the maximum effort to move the door up or down, from stationary, should not exceed 200 Newtons (20kg force) at the bottom rail. The recommended force should be 70N (7kg) for manual operation.

Lift the door to about halfway, when you release the door it should stay in place supported entirely by its springs. Raise and lower the door to see if there is any binding or sticking.

The door may need to be serviced to meet these requirements – refer to the door manufacturer's servicing instructions or contact an authorised dealer.



Before installing the opener, check that the door is in good mechanical condition and correctly balanced and that it opens and closes properly

Note: The fitting of an opener to doors with removable mullions is not recommended.

1.2 - POSITION

The opener can be installed on either the right hand or left hand side of the door (when viewed from inside the garage).

This opener is not designed for external use. It must be mounted in a dry position that is protected from the weather.

Moisture or corrosion may damage the opener and this is not covered by the Warranty.

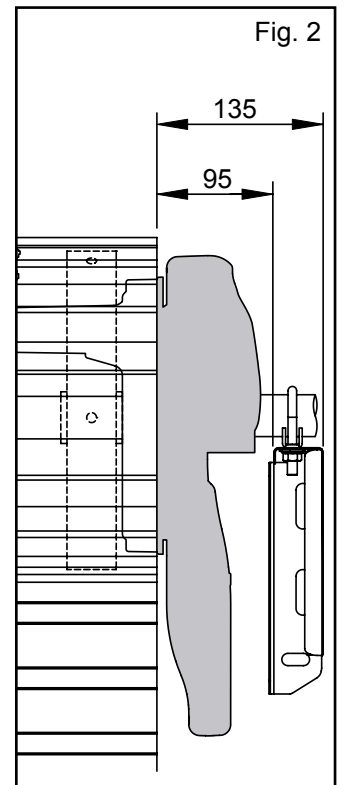
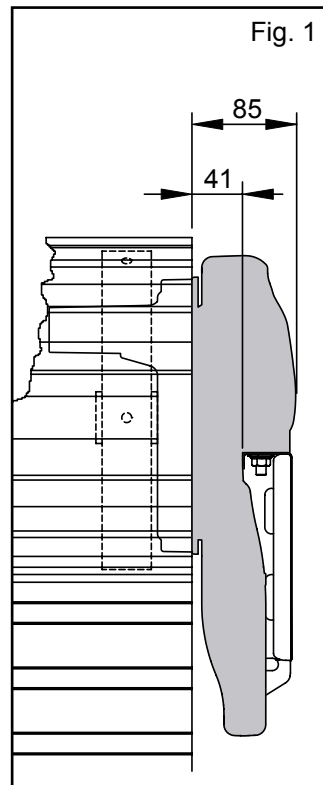
Do not allow water, or other liquids, to enter the opener or remote control transmitter.

1.3 - POWER SUPPLY



A properly earthed, 3 pin, single-phase power supply is required.

WARNING! - A portable power generator is not recommended. The opener may appear to malfunction due to spikes, surges and fluctuations in the generated voltage.



1.4 - SIDE ROOM

Figures 1 and 2 show the minimum and recommended side room that is required to mount the opener. The distance between the edge of the door curtain and the inside of the bracket must be at least 41mm with a total side room requirement of 85mm. However, for easier access it is recommended that at least 95mm is allowed for between the curtain and bracket and a total of 135mm from the edge of the curtain to the wall.

Note: **Door Axle Diameter not to exceed 35mm**

SECTION 2 - INSTALLATION PROCEDURE

The following is the preferred method for installing the opener.

Step 1 - PREPARATION

- a. Check the door operation:
 - i. The door must travel smoothly and be easy to operate by hand.
 - ii. Operating force on the bottom rail should be approximately 70N (7kgs) force.
 - iii. Adjust the guides if they are tight or twisted.
 - iv. Clean the guides if there is any oil or wax present using a suitable white spirit. The only lubricant suitable for use on door guides is silicon spray. **DO NOT** use WD-40, RP-7, petroleum grease, or similar.
- b. Install locking bar covers if there are locking bar holes in the guides. (Fig. 3)

Note: DO NOT lock your door with the locking bars after installing the opener. Remove or disable the lock using wire or cable ties. This will not affect door security as the opener has an inbuilt locking facility.

- c. Affix the warning labels supplied with this opener in a prominent place where they are clearly visible.
- d. Choose the side where the opener will be installed ensuring there is sufficient sideroom.
(Refer to sideroom requirements - previous page).

Step 2 - FITTING THE WEIGHT BAR

The weight bar must be fitted to the bottom-centre of the door as follows:

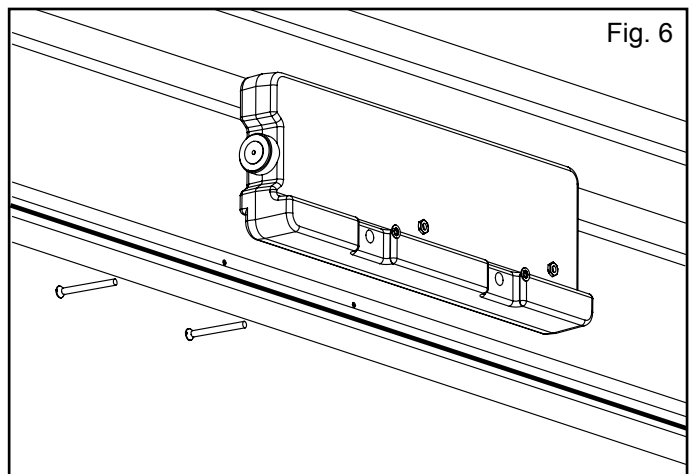
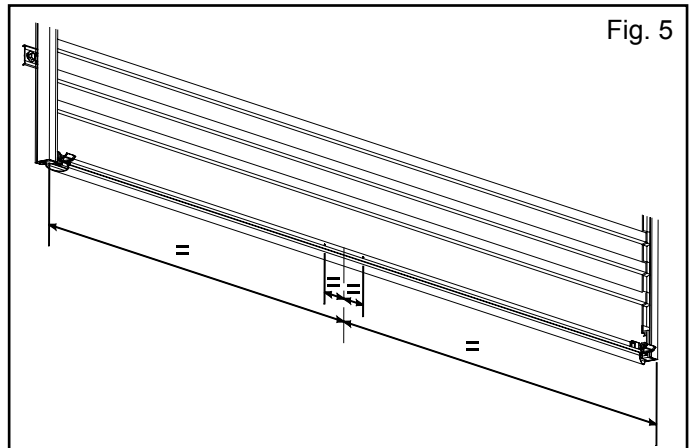
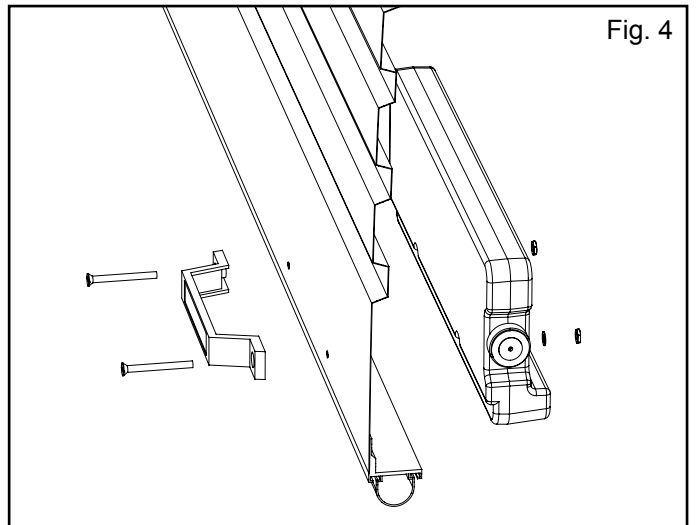
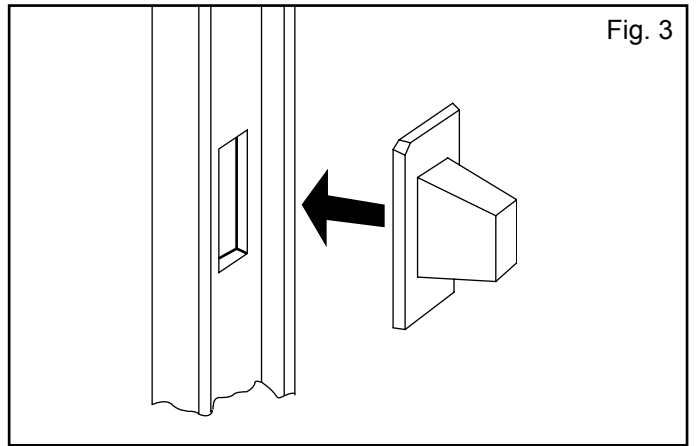
If the door has a handle: (Fig. 4)

1. Remove the door handle, and
2. Fit the weight bar and refit the handle using the new fasteners provided

If the door does not have a handle: (Fig. 5)

1. Locate the centre of the door at the bottom rail.
2. Place the weight bar at this point (there is a centerline marked on the weight bar) and mark the two positions where the fasteners will go.
3. Drill the two 4.5mm holes in the door and fit the weight bar using the new fasteners provided. (Fig. 6)

Check that the door is balanced and smooth to operate. If it is not then the door may require servicing (refer to door manufacturer's instructions).



The door is held under significant tension. Adjustments should only be carried out by experienced persons, as this function can be dangerous if not performed under strict safety procedures.

INSTALLATION

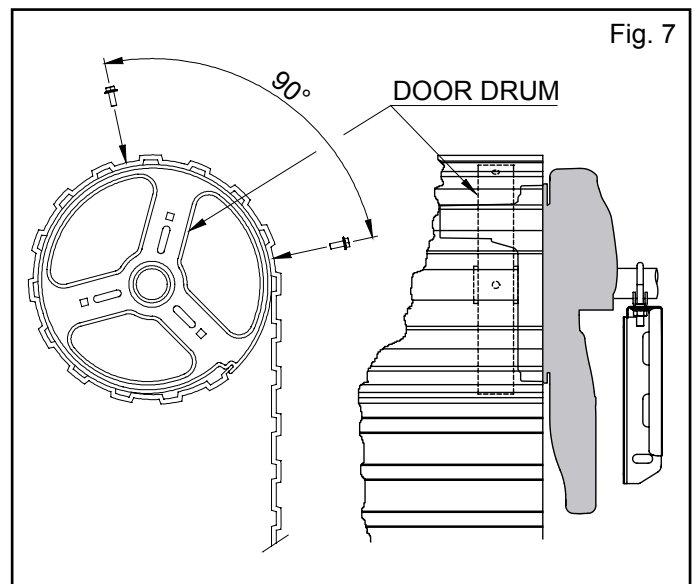
Step 3 - PINNING THE DOOR CURTAIN

Pin the door curtain to the door drum at each end of the door to maintain security when the opener closes and locks.

With the door fully closed:

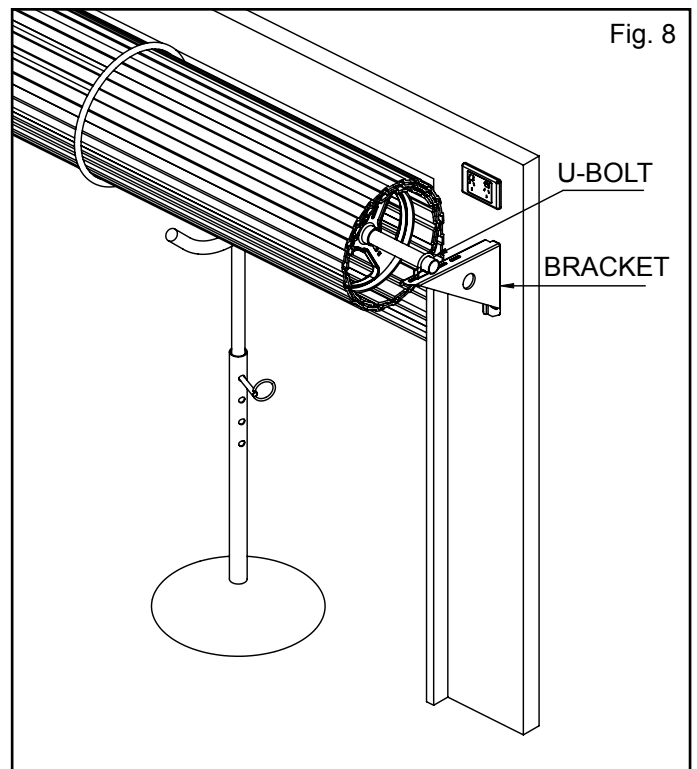
1. Mark positions to drill in both end of the drum. (**Fig. 7**)
2. Open door slightly to get access to these positions.
3. Drill using 3.2mm (1/8") drill.
4. Fit a No 10 x 32mm screw and washer to each end.
While this screw should be positioned as low as possible, make sure that it does not alter the curtain's normal approach to the guide (lead-in angle).

NOTE: Make sure that the screws do not project into the area where the ring gear will fit.



Step 4 - FITTING THE OPENER

1. At the end opposite to where the opener will be fitted, check to make sure the "U" bolt is tightened securely and fit the anti-coning collar to the axle ensuring it is in contact with the door drum - right hand fitting is recommended where possible.
2. Open the door completely and tie two safety ropes around the door roll approximately 300mm from each end (not too tight) as a safety precaution.
3. At the end where the opener is to be fitted, support the door. It is recommended that you support the door with either:
 - a sling or a block and tackle from above the door, or
 - a suitable stand e.g. a ladder and blocks (see illustration). If you use blocks make sure they are flat on the top of the ladder and that they are wide enough to take the weight of the door without damaging it.



Warning - Make sure the support is snug under the door and that both the support and door are stable and will not move.

4. Mark the position of the "U" bolt in the door bracket and the position of the door bracket on the wall to assist when reassembling (use masking tape or marking pen).
5. Remove the "U" bolt (or bolts) and saddle from the door bracket at the end where the opener is to be fitted.
6. Remove this door bracket allowing the door to rest on the support. (**Fig. 8**)

Note: For minimum sideroom installations the door may have to be taken down.

