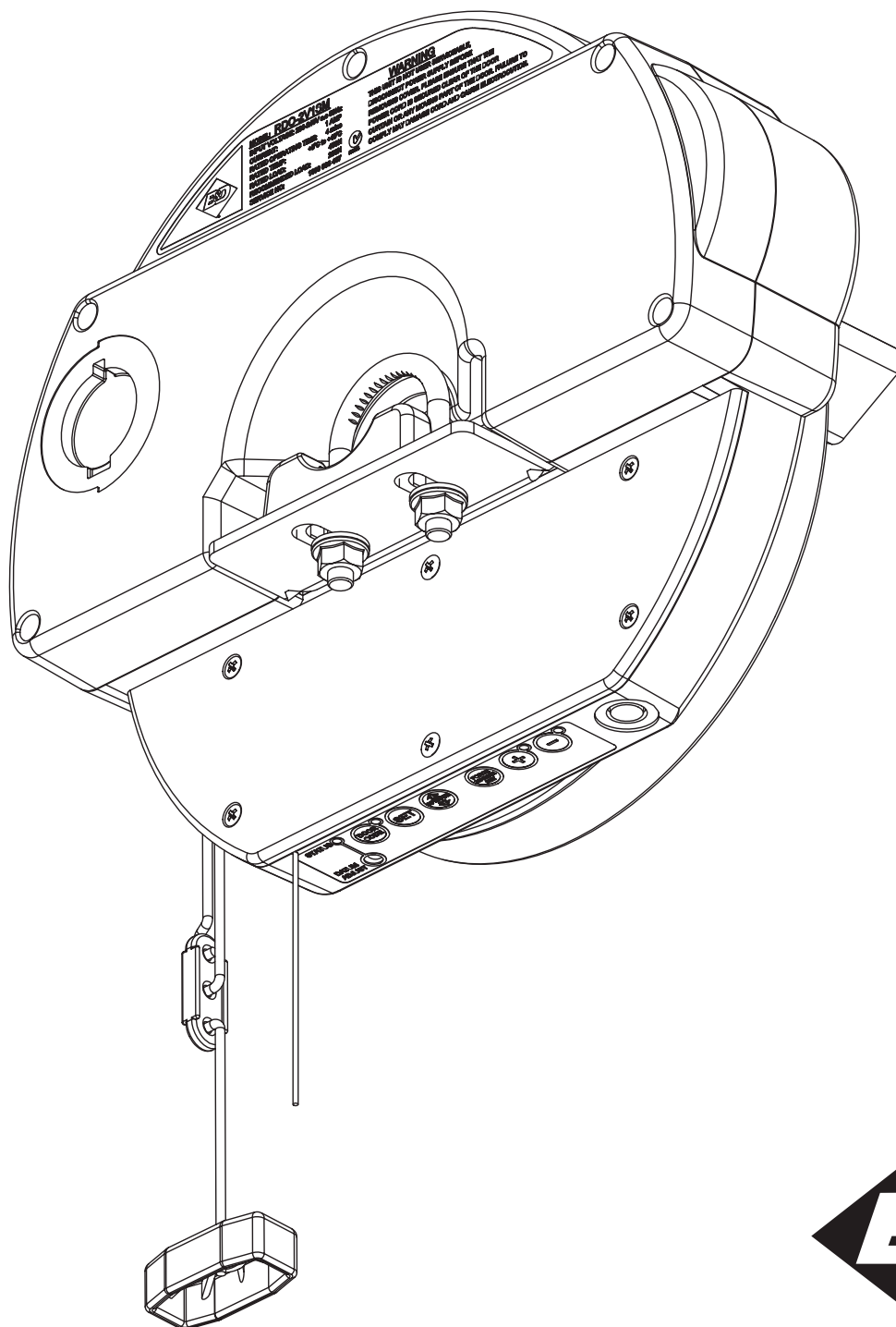


Econolift™

ROLLING GARAGE DOOR OPENER



RDO-2 v1EL EconoLift
AUTOMATIC ROLLING GARAGE DOOR OPENER
Installation Instructions

OWNERS COPY

WARNING

It is vital for the safety of persons to follow all instructions. Failure to comply with the installation instructions and the safety warnings may result in serious personal injury and/or property and remote control opener damage. Please save these instructions for future reference.

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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 an B&D Doors Rolling 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 Rolling Up 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. Failure to comply with the following Safety Rules may result in serious personal injury and/or property damage.

-  For **ADDITIONAL SAFETY** protection we **STRONGLY** recommend the fitting of a Photo Electric Beam. In most countries Photo Electric Beams are mandatory on all garage doors fitted with automatic openers. For a small additional outlay we recommend that Photo Electric Beams be installed with the automatic opener ensuring additional safety and peace of mind.
-  **DO NOT** operate the garage door opener unless the garage door is in full view and free from objects such as cars and children/people. Make sure that the door has finished moving before entering or leaving the garage.
-  **DO NOT** operate the garage door opener when children/persons are near the door. Children must be supervised near the garage door at all times when the door opener is in use. **SERIOUS PERSONAL INJURY** and/or property damage can result from failure to follow this warning.
-  **DO NOT** allow children to operate the garage door opener. **SERIOUS PERSONAL INJURY** and/or property damage can result from failure to follow this warning.
-  Regularly check to make sure that the **SAFETY OBSTRUCTION FORCE** is working correctly, and is **TESTED** and set as per the Installation Instructions Manual. Failure to follow the manual could result in **SERIOUS PERSONAL INJURY** and/or property damage. This test must be repeated at regular intervals and the necessary adjustments made as required.
-  **DO NOT** disengage the door opener to manual operation with children/persons or any other objects including motor vehicles within the doorway.
-  Install the wall switch or wall mounted transmitter in a location where it is out of reach of children and the garage door is visible.
-  The door opener is not intended for use by young children or infirm persons without adequate supervision. Children should be supervised to ensure that they do not play with the remote transmitters or the opener.
-  Keep hands and loose clothing **CLEAR** of the door and door opener at all times.
-  The unit is rated to IP24, however, it should be installed so that it is protected from the elements. Where possible it should not be exposed to water or rain. It is not to be immersed in water or sprayed directly by a hose or other water carrying device.
-  The garage door must be **WELL BALANCED**. Sticking or binding doors must be repaired by a qualified garage door installer prior to installation of the opener.
-  Frequently examine the installation, in particular cables, springs and mountings for signs of wear, damage or imbalance. **DO NOT** use if repair or adjustment is needed since a fault in the installation or an incorrectly balanced door may cause injury. **DO NOT** attempt to repair the door yourself as hardware is under extreme tension.
-  **REMOVE OR DISENGAGE** all garage door locks and mechanisms prior to installation of the opener.
-  Connect the garage door opener to a properly **EARTHED** general purpose 240V mains power outlet installed by a qualified electrical contractor. The outlet (and opener) must be positioned so that it is easily accessible.
-  **DISCONNECT THE POWER CORD** from mains power before making any repairs or removing covers. Only **EXPERIENCED** service personnel should remove covers from the garage door opener.
-  When using auto close mode, a **PHOTO ELECTRIC BEAM** 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.
-  In order for the garage door opener to **SENSE** an object obstructing the door way, some **FORCE** must be exerted on the object. As a result the object, door and/or person may suffer **DAMAGE or INJURY**.
-  If the power supply cord is damaged, it **MUST** be replaced by an B&D service agent or suitably qualified person.
-  Make sure that the door is fully open before driving in or out of the garage and fully closed before leaving the driveway.
-  Make sure that remote controls are kept out of reach of children.

FEATURES

Thank you for purchasing the B&D EconoLift Automatic Rolling Garage Door Opener. This opener is designed to suit vertical operating continuous curtain roll up doors. The components and materials used in this opener are of the latest technology and highest quality. Listed below are some of the many features.

OPERATION

To open or close the door simply press the hand held transmitter, the wall mounted transmitter, or optional wall switch for two seconds. During an open or close cycle the door can be stopped by pressing the button while the door is in motion. The next actuation will move the door in the opposite direction.

SECURITY CODE STORE

The EconoLift Garage Door Opener uses state of the art technology in storing your selected transmitter security code. Up to six smart code transmitters can be stored in the openers memory, plus one dipswitch unit and an entry keypad.

WEATHERPROOF DESIGN

The opener's control board is housed in a weather-proof enclosure rated to IP24. This offers protection from rain however the unit should not be sprayed by a hose or any other water carrying device.

AUTOMATIC LIMITS POSITIONING

The limits system automatically calculates the doors' travel limits and stores it in memory. If the door is moved manually within the travel limits during a power failure, it will recognise this once the power is restored and stop at the correct limit position if the door is activated.

INTELLIGENT FORCE MARGIN SAFETY OBSTRUCTION SYSTEM

While the door is performing a close cycle, should it hit an obstacle or be restricted in some manner, it will automatically reverse. The amount of force the door should encounter before reversing is automatically adjusted by the doors control system during the initialisation of the automatic door opener. The door will also stop if restricted whilst opening. The Safety Obstruction Force should be checked at least once a month. See installation manual for instructions.

LOCKABLE CONTROL PANEL

The control panel can be locked and disabled to prevent tampering. This is useful if the opener is to be mounted on an exposed carport or a perimeter door.

Locking the control panel will prevent operating the door via the Operate button, re profiling, clearing limits, clearing transmitters, changing force margins, and coding transmitters.

OVER LOAD INDICATOR

When the maximum opening and closing capacity of the opener is exceeded an audible beeper will sound to indicate that an overload has occurred.

PHOTO ELECTRIC BEAM (OPTIONAL)

The opener has an input for a photo electric beam to be connected for extra safety protection and use of the auto close mode.

MANUAL OPERATION

The opener is equipped with a unique patented manual disengaging device. If the power to the opener is disrupted for any reason the door can be put into manual mode by pulling down on the string handle, then releasing. This will allow you to manually open or close the door. When power is restored, by pulling down on the string handle and releasing, the opener is put back into automatic mode.

OPERATING CONTROLS

1. **P. E. SHUNT.** The shunt has to be removed when connecting a Photo Electric Beam.

NOTE: P.E. SHUNT must not be removed otherwise the opener will not function correctly. Remove only when a P.E beam is to be connected.

2. **STATUS LED** (Yellow) indicates when the datum adjustment screw has reached correct position.
3. **DATUM ADJUST SCREW**
Used to set mid point of door travel during limits set up.
4. **DOOR CODE button** (blue) is used for storing or erasing the transmitter button you wish to use to command the door to open, stop or close.
5. **CODING LED** (red) light indicates whether a code is being stored or when a transmitter button is pressed.
6. **SET button** (orange) is used during the installation phase together with the Plus and Minus buttons to set the door limit positions. The Set button is also used to re-initialise the Opener.

7. **OPERATE button** (blue) is used during installation to test the open, stop and close cycles for the opener. The opener has to be initialised by the Set button before the OPERATE button becomes operable.

8. **FORCE MARGIN SET** The obstruction force pressure is set automatically by the opener during installation. The pressure can be adjusted manually using the Force Margin Set button (White). Pressing the force margin set button and open or close button will increase or decrease the amount of force. The Force Margin Set is only ever used if other environmental factors (wind, etc.) affect the operations of the door/opener.

9. **PLUS button** (green) can be used during installation to set the open limit position. Pressing this button will move the door in the open direction. Movement stops when the button is released.

NOTE: The open safety obstruction detection is inoperable whenever the Close Drive button is used to move door. This button is disabled after initialisation.

This button is also used to increase the force margin sensitivity.

10. **OPEN LIMIT LED** (green) the led is very helpful during installation. It illuminates and flashes when the door is opening and remains steady on when the open limit position has been reached.

11. **MINUS button** (red) can be used during installation to set the close limit position. Pressing this button will move the door in the close direction. Movement stops when the button is released.

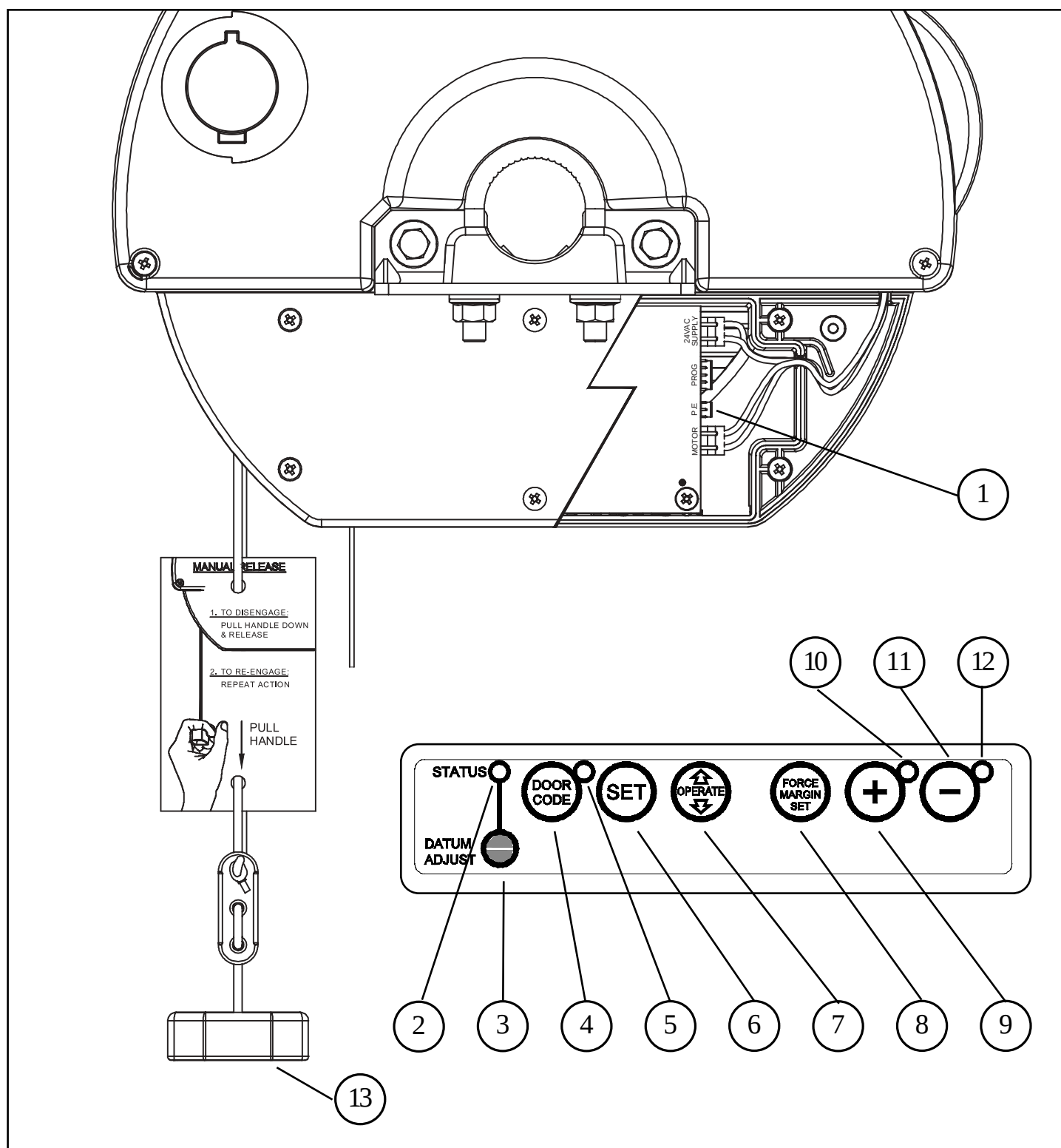
NOTE: The close safety obstruction detection is inoperable whenever the Close Drive button is used to move door. This button is disabled after initialisation.

This button is also used to decrease the force margin sensitivity.

12. **CLOSE LIMIT LED** (red) the led is very helpful during installation. It illuminates and flashes when the door is closing and remains steady on when the close limit position has been reached.

13. **ENGAGE/DISENGAGEMENT CORD** is used to switch the door into manual mode especially in case of a power failure. The length of the string is also adjustable.

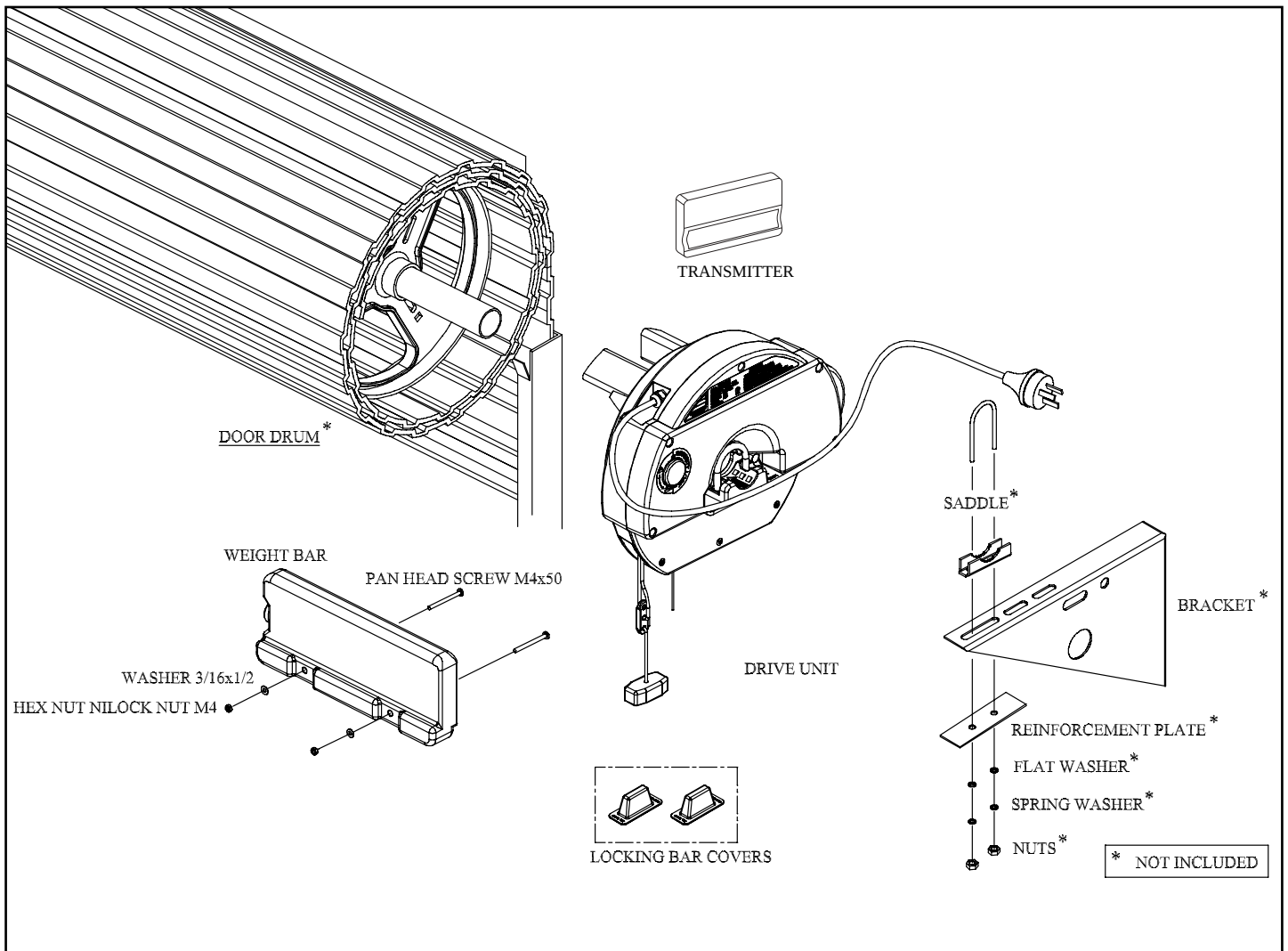
OPERATING CONTROLS



- | | |
|-----------------------------|--|
| 1) P.E. BEAM INPUT | 8) FORCE MARGIN SET BUTTON |
| 2) DOOR STATUS LED (YELLOW) | 9) PLUS BUTTON (FOR LIMITS SETTING & FORCE MARGIN) |
| 3) DATUM ADJUST SCREW | 10) OPEN LIMIT LED (GREEN) |
| 4) DOOR CODE BUTTON (BLACK) | 11) MINUS BUTTON (FOR LIMITS SETTING & FORCE MARGIN) |
| 5) CODING LED (RED) | 12) CLOSE LIMIT LED (RED) |
| 6) SET BUTTON (ORANGE) | 13) MANUAL RELEASE HANDLE |
| 7) OPERATE BUTTON (BLUE) | |

PACKAGE CONTENTS

ITEM	QUANTITY
RDO-2 ECONOLIFT DRIVE UNIT	1
HAND HELD TRANSMITTER	1
WEIGHT BAR (NOT INCLUDED IN SOME MODELS)	1
PAN HEAD SCREW M4x50mm (NOT INCLUDED IN SOME MODELS)	2
NILOCK HEX NUT M4 (NOT INCLUDED IN SOME MODELS)	2
FLAT WASHER I.D 3/16 x 1/2 (NOT INCLUDED IN SOME MODELS)	2
LOCKING BAR COVERS	2
INSTALLATION MANUAL	1



BEFORE INSTALLATION

IMPORTANT SAFETY INSTRUCTIONS FOR INSTALLATION

Warning: Incorrect installation can lead to severe injury. Follow ALL installation instructions.

SIDE ROOM REQUIREMENTS

Fig. 1 shows 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 40mm. However, for easier access it is recommended that at least 95mm is allowed.

1. CHECK OPERATION OF DOOR

BEFORE BEGINNING THE INSTALLATION OF THE ECONOLIFT AUTOMATIC OPENER CHECK THE OPERATION OF THE DOOR.

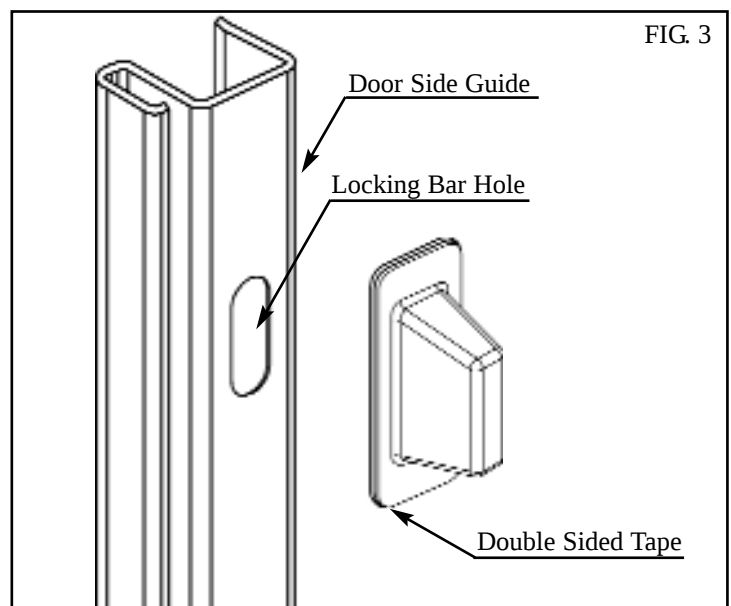
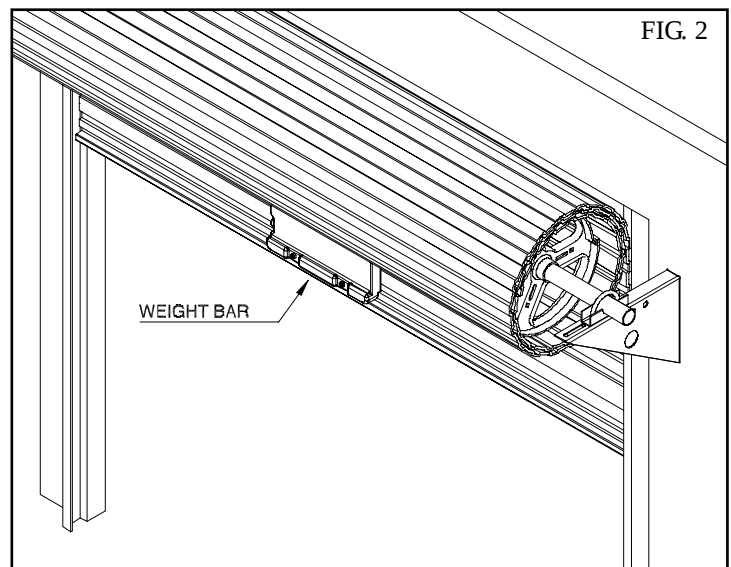
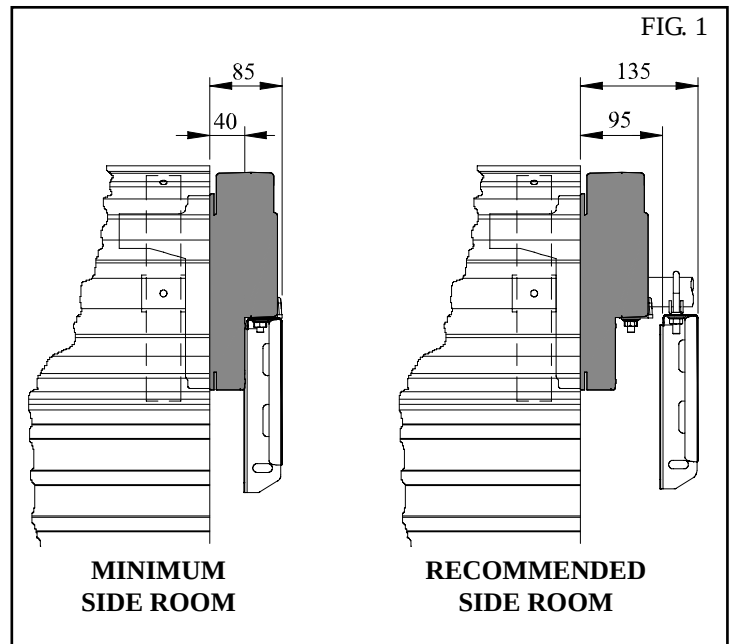
The door must be well balanced and be in a reasonable operating condition. You should be able to lift the door smoothly and with little resistance. It should stay open around 900mm to 1200mm above the floor. The door should not stick or bind in the guide tracks. The ideal operational effort in raising or lowering the door should not exceed a force of 10kg (22 lbs.). Make sure that all door locks, ropes, chains etc. are either released, or disabled and remove unnecessary accessories.

2. FIXING OF DOOR WEIGHT BAR

Move the door manually to the mid open position. Place the weight bar on the bottom rail, in the middle of the door and secure with the fasteners provided (**Fig. 2**). Check the operation of the door again. If the door feels heavy it may require extra tension to be added to the door springs. Refer to the door Installation manual from the manufacturer on how to tension the door.

3. INSTALLING LOCKING BAR COVERS

To protect against entrapment of fingers etc. inserted into door guides – remove the protective backing of the double sided tape and install the locking bar covers over the holes in each door guide.



MOUNTING THE OPENER

4. FIXING DRIVE UNIT TO THE DOOR

The B&D Drive Assembly can be fixed to the roll up garage door in a variety of ways. Described below is one method of fixing. Make sure there is enough side room to slide the drive assembly onto shaft.

PLEASE NOTE: THE INSTRUCTIONS FOR FIXING THE DRIVE ASSEMBLY TO THE DOOR IS FOR **RIGHT HAND INSTALLATION**.

FITTING DRIVE UNIT TO DOOR

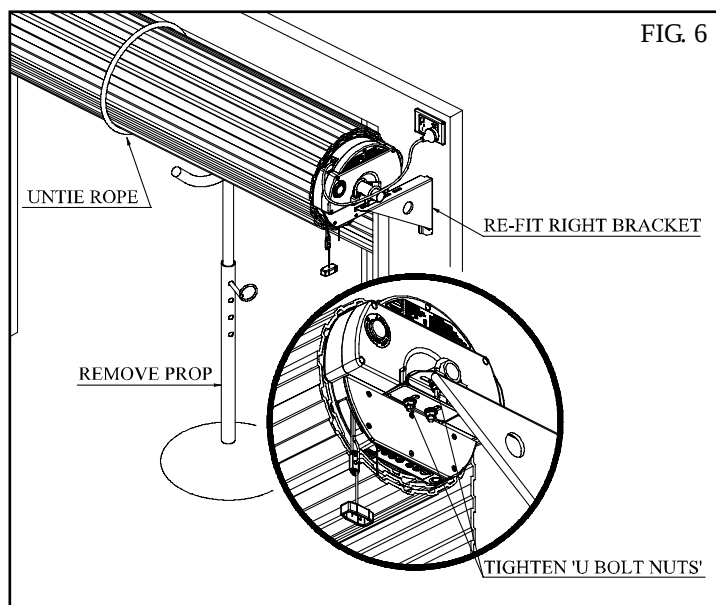
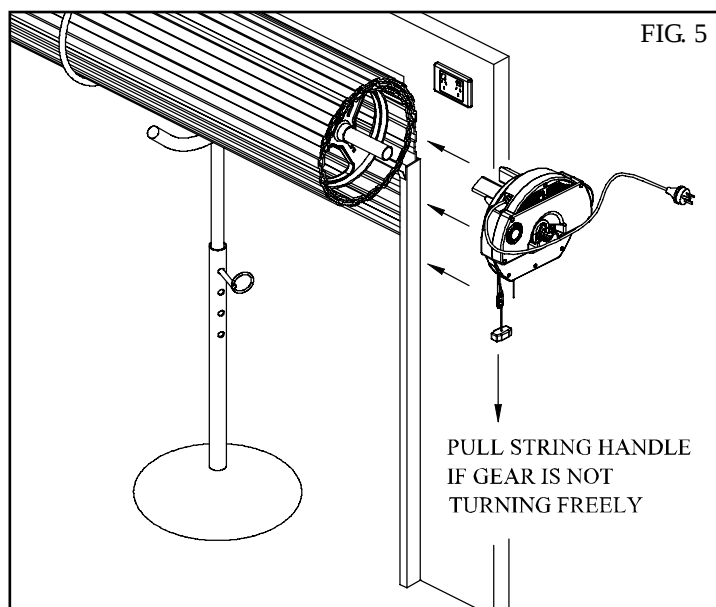
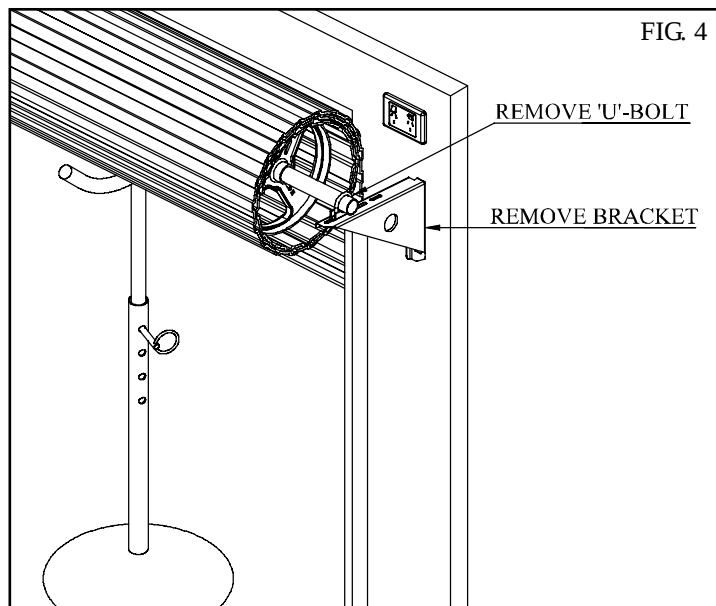
(Fig. 4, Fig. 5, and Fig. 6).

1. Check that the door shaft U bolt is securely tightened on the left hand side of the door.
2. Raise the door and tie a rope around the centre to secure the roll.
3. Support the right hand end of the door with a suitable prop, e.g. step ladder and soft padding to protect door surface.

WARNING: DO NOT ALLOW CHILDREN/PERSONS AROUND THE DOOR AND PROP. SERIOUS PERSONAL INJURY AND/OR PROPERTY DAMAGE CAN RESULT FROM FAILURE TO FOLLOW THIS WARNING.

4. Carefully loosen and remove the right hand door shaft U bolt.
5. Make sure that the door supporting prop is secure. While the door is supported remove the right hand door mounting bracket from wall.
6. Remove the drive assembly from the packaging. Try to rotate the drive gear by pushing on the fork. If the gear does not rotate the manual mode has to be selected. To select pull downward on the string handle, then release slowly. The drive gear should now rotate freely.
7. Slide the drive assembly over the door axle making sure that the fork extends into and over one of the spokes of the door drum wheel.
8. Refit the door mounting bracket to the wall. In some cases the bracket may have to be re-positioned. Re-fit and tighten the door shaft U bolt. Remove door supporting prop and untie the rope from the curtain.
9. Straighten the drive assembly and position as per Fig. 6. Tighten the two locking bolts firmly to secure the Drive Unit.
10. Check the manual operation of the door by raising and lowering the door. The door should run smoothly and not catch on any part of the drive assembly.
11. Adjust the length of the manual release cord so that it can be easily reached by an adult of average height (ie. less than 1.8m tall).

NOTE: After installation, ensure that parts do not extend over public footpaths or roads.

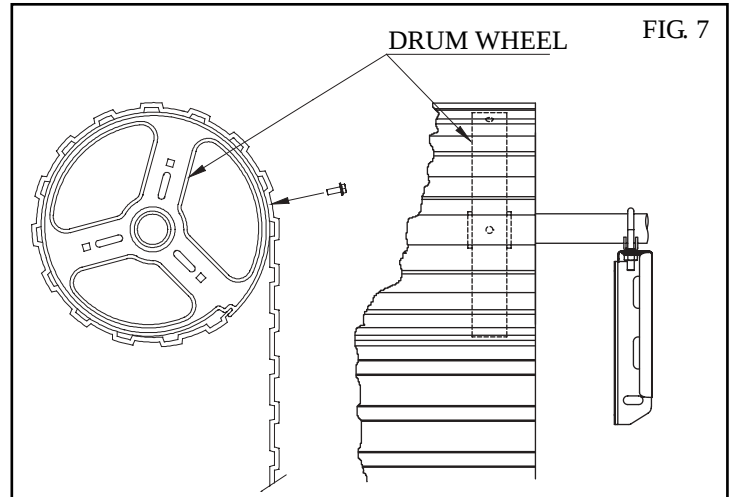


SETTING LIMITS

5. FIXING OF DOOR CURTAIN TO DRUM WHEEL

The door curtain has to be secured to the drum wheel with suitable fasteners.

1. With the door in the fully closed position, mark the curtain (Fig. 7) on both ends of the door.
2. Open door slightly to have access to the marked positions. Secure the curtain to drum wheel using self drilling screws (two on each end). The screws should be at least 90 degrees apart.



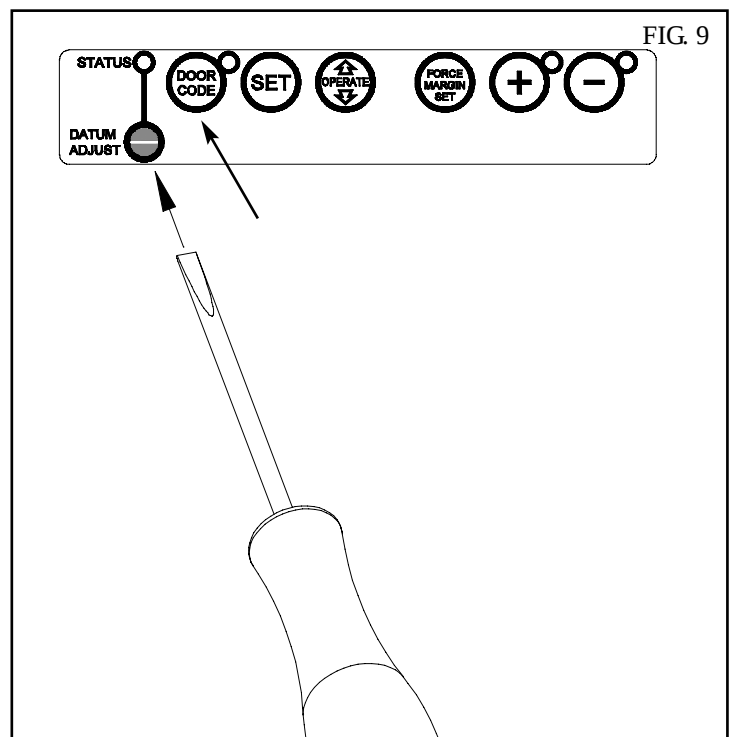
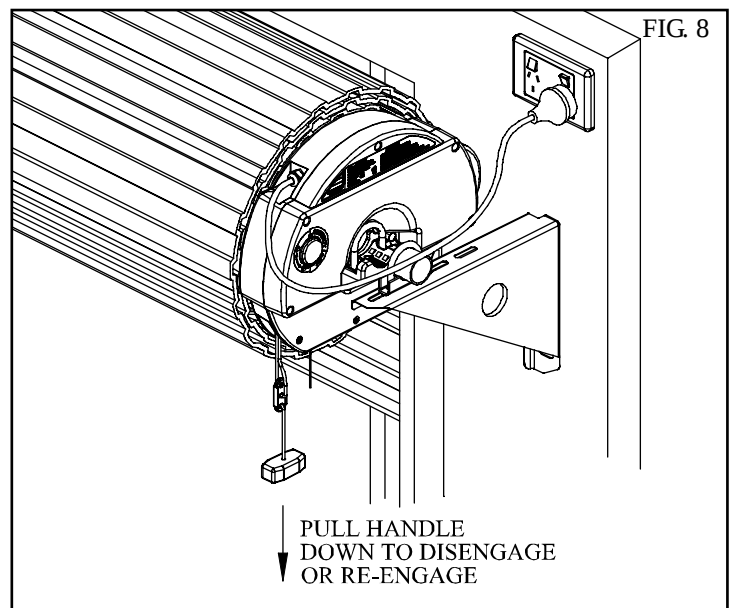
6. SETTING DOOR TRAVEL LIMITS

IMPORTANT NOTE: The OPERATE button will not function until the open and close limits positions are set.

6.1 SETTING DATUM POSITION

1. Switch the opener into manual mode (Fig. 8).
2. Move the door by hand to an approximately mid open position.
3. Re-engage the opener.
4. Using a small blade screw driver turn the datum adjust screw slowly until the yellow status LED just illuminates.

Note: If the status LED is already illuminated when power is connected then turn the datum adjust screw until the LED goes off then turn back one notch to illuminate again.



SETTING LIMITS

6.2 SETTING TRAVEL LIMITS

NOTE: The opener is factory preset for installation on the **RIGHT HAND SIDE**. When the opener is mounted on the left side of the door the opener will travel in reverse.

1. Press Minus (-) button, the door will start closing. If the door starts to open - press the Operate button (**Fig. 10**) within two seconds. Press Minus (-) button again - the door should now close. Release the button once you have reached your desired closed limit position.
2. Press Set button to store the closed limit position into memory.
3. Press Plus (+) button, the door will start opening. Release the button once you have reached your desired open limit position.

IMPORTANT WARNING: Please be aware that the garage door will start closing automatically once step 4 is performed. The door will also automatically re-open after fully closing with a short pause between the cycles.

4. Press Set button to store the open limit position into memory.

The door will now automatically close to its limit position then fully open to calculate the safety obstruction forces. Please be aware of the above warning.

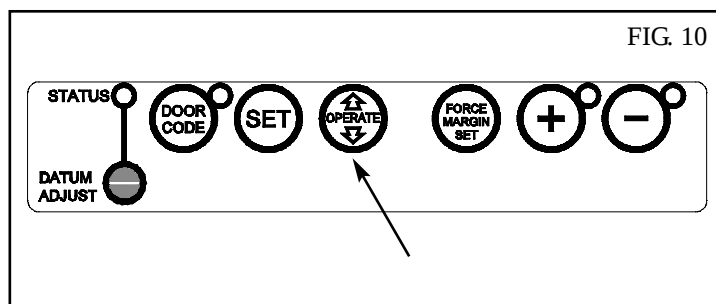
7. RESETTING DOOR LIMITS POSITIONS

The door limit positions can be deleted for new positions by following the steps below:

1. Press and hold the Minus button (**Fig. 10**) for six (6) seconds until you hear three beeps and the red Close Limit LED starts to flash. Release the button.
2. Follow STEP 6.2 above to set new travel limit positions.

Important: There is no need to re-code the transmitter used for setting the limit positions. After the limits are set the transmitter will automatically reset to normal operation.

Go to STEP 8 and test the Safety Obstruction Force.



SETTING SAFETY OBSTRUCTION FORCE

8. SAFETY OBSTRUCTION TEST

Please take care when testing the Safety Obstruction Force. Due to Excessive forces failure to follow this warning may cause **SERIOUS PERSONAL INJURY** and/or property damage. The test below should be repeated at regular intervals (approximately every two months).

8.1 TESTING CLOSE CYCLE

1. Open the door by pressing the OPERATE button (Fig. 11).
2. Place a length of timber approximately 50mm high on the floor directly under the door (Fig. 12).
3. Press the OPERATE button to close door. The door should strike the object and start to re-open.

NOTE: If the door stops and fails to reopen, it is possible that the motor direction is set incorrectly. Change the motor direction and retest.

IMPORTANT WARNING: If the test fails, there may be a problem with the door, discontinue use, put the door into manual operation and call for service.

8.2 TESTING OPEN CYCLE

1. With the door closed - press the OPERATE button. to open the door. When the door is approximately one metre above the hold the bottom rail of the door firmly, the door should stop.

ADJUSTING SAFETY OBSTRUCTION FORCE

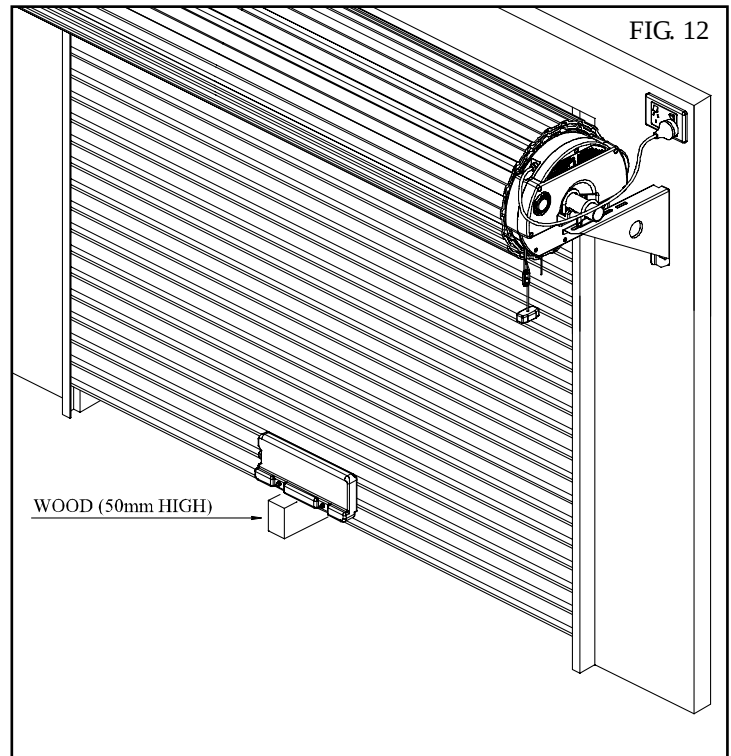
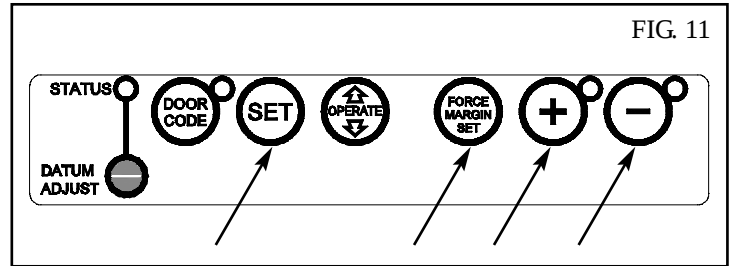
The Safety Obstruction Force is calculated automatically and set in memory on the EconoLift. It is usually not necessary to adjust the Safety Obstruction Force. The only time the force may need to be increased is due to environmental conditions, for example, windy or dusty areas, and areas with extreme temperature changes. If adjustments are made you must retest the obstruction force margin as per above.

8.3 TO INCREASE FORCE PRESSURE

1. Press and hold the Force Margin Set button (Fig. 11)
2. While holding down the Force Margin button, press the Plus button. Each press increases the force margin in both directions. The Open Limit LED will illuminate each time the Plus button is pressed. Each press increases the force margin. Test the force as per step 8.1 and 8.2. If the Open Limit LED flashes continuously when the Plus button is being pressed, this indicates that the maximum force pressure setting has being reached.

8.4 TO DECREASE FORCE PRESSURE

1. Press and hold the Force Margin Set button (Fig. 11).
2. While holding down the Force Margin button, press the Minus button. Each press decreases the force margin. The Close Limit LED will illuminate each time the Minus button is pressed. Test the force as per step 8.1 and 8.2. If the Close Limit LED flashes continuously when the Minus button is being pressed, this indicates that the maximum force pressure setting has been reached.



8.5 TO RECALL FACTORY SET FORCE

1. While holding down the Force Margin Set button (Fig. 11) press the SET button for two (2) seconds.
2. Release both buttons. The default setting should now be recalled.

8.6. TO RE-CALCULATE FORCE MARGIN

Press and hold the Set Button for two (2) seconds, the beeper will sound once. The door will start to move and re-calculate force margins. The door can move between the open and close limit positions up to four (4) times (depending on the position of the door and the power up condition). A single beep will be heard once the process is complete. The door is now ready for use.

IMPORTANT NOTE:

After installation ensure that the opener stops or is prevented from opening when the door is loaded with a mass of 20kg fixed centrally at the bottom edge of the door.

CODING TRANSMITTERS

9. SETTING TRANSMITTERS CODES

Make sure to insert the battery into the transmitter. The memory in the openers receiver can store up to six smart code remote control transmitters, one dipswitch transmitter and one entry keypad.

10.1 STORING THE TRANSMITTERS CODE

1. Press and hold the Door Code button (**Fig. 13**).
2. Press the button on the transmitter for two seconds, pause for two seconds. Press the button again on the transmitter for two seconds.
3. Release the Door Code button.
4. Press the transmitter button to test if it operates the door.

10. DELETING PROGRAMMED CODES

10.1 DELETING A STORED TRANSMITTER CODE

1. Select the transmitter you want to delete.
2. Press and hold the Door Code button (**Fig. 13**).
3. Press the transmitter button you would like to delete for two seconds. Pause for two seconds. Press the transmitter button again for two seconds.
4. Release the Door Code button. The code should now be deleted. Confirm this by pressing the transmitter button, the door should not respond.

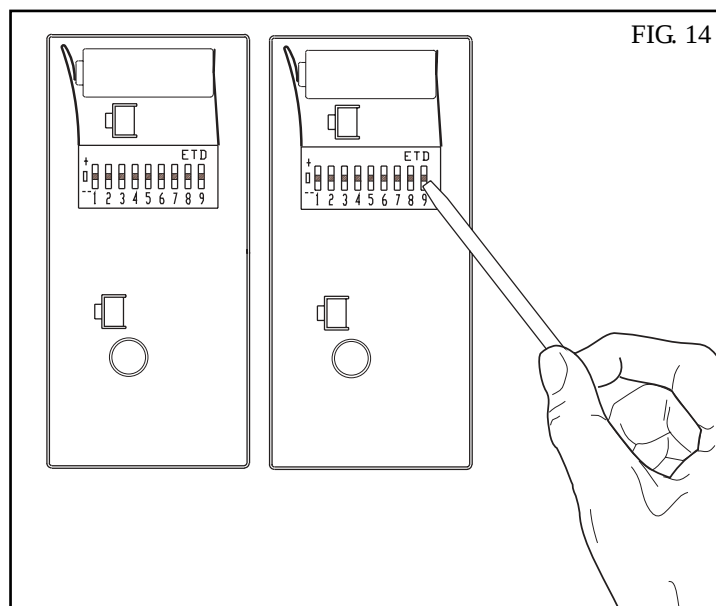
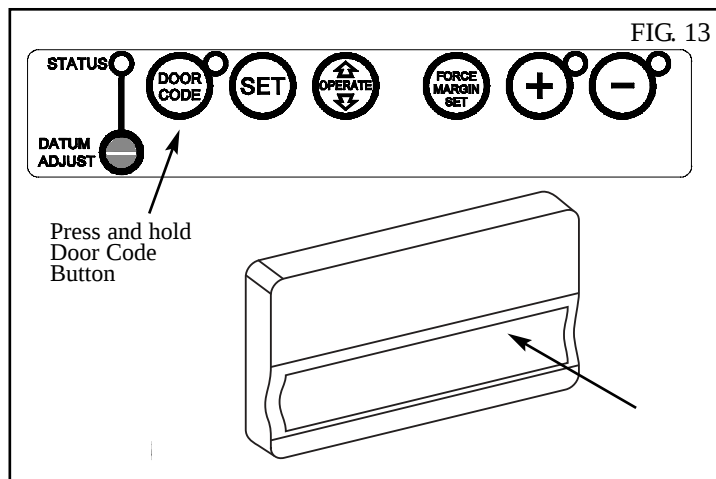
10.2 - SETTING OPTIONAL REMOTE CONTROL TRANSMITTER DIPSWITCH CODES.

Some remote control transmitters have a dip-switch facility. Generally, dipswitches are used when several persons are operating the same opener. The dip-switches must be set to matching positions in all remotes used to activate the opener.

1. Remove the battery cover.
2. Set switches in all remote controls to matching positions (+, -, 0). Use a pen or screwdriver (**Fig 14**).
3. Replace covers and program this code.

10.3 - SETTING ENTRY KEYPAD TRANSMITTER CODE.

1. Make sure that the battery is set in the Key Pad Transmitter.
2. Press the Code Set button on the opener, the Code Set LED will illuminate to indicate the opener is in Code Learn mode. (if a valid code is not stored within 15 seconds, the opener will exit Code Learn).
3. For an entry keypad the desired code should be typed (a minimum of four numbers or letters) and the ENTER button held down until the Code Set LED flashes to indicate that it has been learnt.
4. Release the button on the key pad transmitter. The code is now set.



10.4 DELETING ALL STORED TRANSMITTER CODES

1. Turn the power off to the opener.
2. Press and hold the Door Code button (**Fig. 13**).
3. Turn the power on again while holding the Door Code button. The Open Limit, Close Limit and Door Status LED's will illuminate for about five seconds. These LED's will turn Off and the Coding LED will illuminate. Release the Door Code button. All the stored codes should now be deleted. Confirm this by trying to operate the door by pressing the transmitters previously used to control the door, the door should not respond.

11. LOCKING THE CONTROL PANEL

To lock or disable the control panel a transmitter button must be coded for the operate function.

1. Press and hold Plus (+) button for 4 seconds until you hear a beep.
2. Press a coded transmitter button.
3. To test press the Operate button to confirm that the door does not move.

To unlock the control panel repeat the above procedure.

PE BEAM AND FINAL SET UP

13. FITTING THE SAFETY PHOTO ELECTRIC BEAM SENSOR (OPTIONAL)

Locate the Photo Electric Beam (P.E.) normally closed contact type in a strategic location within doorway. We recommend 150mm above the floor level and as close as possible to the door opening, inside the garage. Remove shunt from P.E. connector (**Fig. 14**) and connect the wires from the P.E. wiring harness as per **Fig. 15**.

Note: The wiring diagram is for a Transmitter/Receiver type photo electric beam: model: PE-2 (Order Code 90214) with Wiring Harness (Order Code 01900).

Make sure to align the beams correctly. Follow the manual supplied with the Photo Electric Beam.

WARNING; The location of the beam and manner in which it is installed might not give safety protection at all times. Check to make sure that the height of the beam and type used give maximum protection possible.

14. MANUAL RELEASE

To switch the opener to manual mode simply pull the red manual release handle down and release. To re-engage the opener repeat the above action (**Fig. 16**).

Note: The door may move uncontrollably if the spring tension is weak or not set properly or the door is unbalanced. If this occurs do not use the door and contact your installer for service.

The manual release handle can be locked to prevent unwanted disengagement (where fitted). This is useful if the opener is mounted on an exposed carport or perimeter door. To disable the manual release turn the key clockwise to the locked position as indicated on the label. To enable turn the key anti-clockwise.

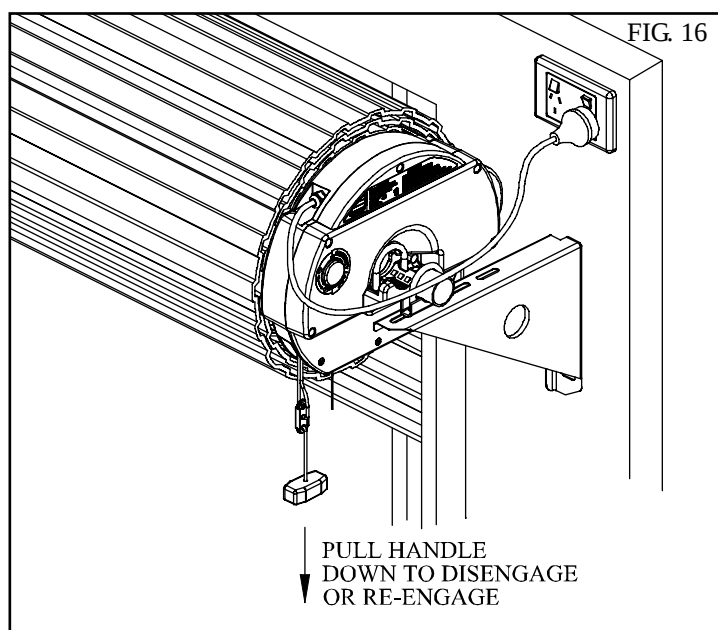
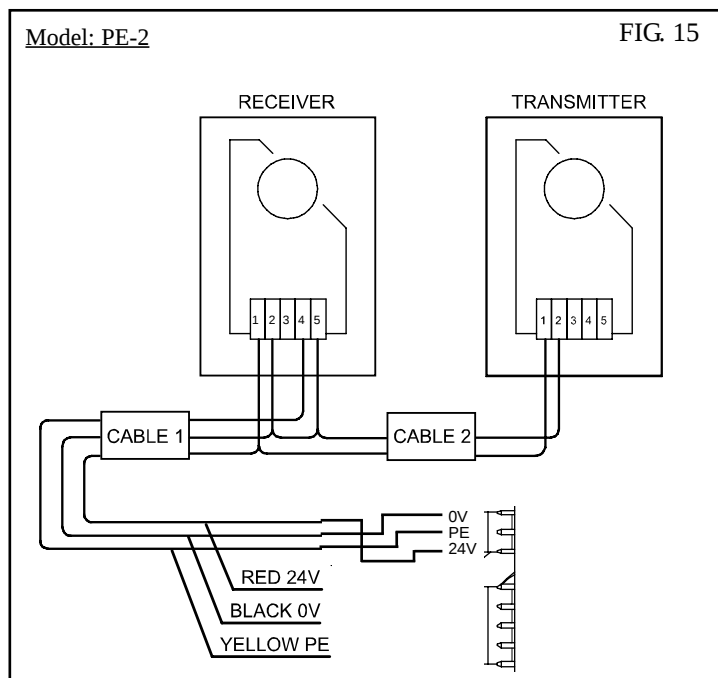
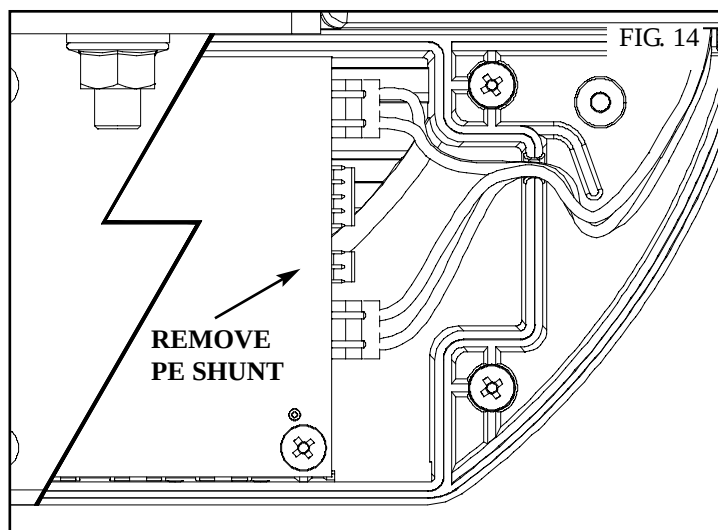
15. RESET ALL FACTORY DEFAULTS

1. Turn power off.
2. Press and hold Set button.
3. Turn power on and continue holding Set until all LEDs are off.

Note: This does not erase transmitter codes stored in memory.

16. RE-INITIALISING THE OPENER

To re-initialise the opener press and hold the Set Button for two (2) seconds, the beeper will sound once. The door will start to move and re-calculate force margins. The door can move between the open and close limit positions up to four (4) times (depending on the position of the door and the power up condition). A single beep will be heard once the initialisation is complete. The door is now ready for use.



PARAMETERS

DOOR STATUS INDICATORS

DOOR OPENER STATE	OPEN LED GREEN	CLOSE LED RED	DOOR STATUS LED YELLOW	BEEPER
OPEN	ON			
CLOSE		ON		
OPENING	FLASHING			
CLOSING		FLASHING		
DOOR TRAVEL STOPPED	FLASHING	FLASHING		
DOOR OBSTRUCTED WHEN OPENING	FLASHING			
DOOR OBSTRUCTED WHEN CLOSING		FLASHING		BEEPS WHILE DOOR IS MOVING
OPENER OVERLOADED	ALTERNATING FLASHES	ALTERNATING FLASHES		
MAINS POWER INTERRUPTED	RAPID FLASHES			

BUTTONS	FUNCTION
OPERATE	Opens/Stops/Closes the door
Door Code	Codes a transmitter button for OPERATE function
Force Margin Set + Plus (+)	Increases the obstruction force margin setting
Force Margin Set + Minus (-)	Decreases the obstruction force margin setting
Force Margin Set (then) Set	Reloads the factory set default obstruction force margin setting
Close for 6 Secs	Clears the door limits set positions. Limits then need to be reset.
Set (then power on) & hold until all LEDs are off	Deletes control parameters excluding transmitter storage memory.
Door Code (then power on) & hold until all LEDs are off	Deletes all transmitter stored in memory.
Set for 2 sec.	Re-initialises the Opener to re-calculate force margins

DEFAULT SETTINGS AND SPECIFICATIONS

FACTORY DEFAULT SETTINGS

	DEFAULT	STEP	MAXIMUM
MAXIMUM MOTOR RUN TIME	30 Secs.	—	—
OBSTRUCTION FORCE MARGIN	8	1	20

TECHNICAL SPECIFICATIONS

INPUT VOLTAGE:	230V - 240V AC 50Hz
CONTROLLER VOLTAGE:	24V DC
STANDBY POWER:	2.8 Watts
MOTOR POWER:	100 Watts
MOTOR TYPE:	24V DC Permanent Magnet
OPERATING TEMPERATURE:	+5° to +40°C
MAXIMUM DOOR OPENING: ^{1,2}	WIDTH: 5500mm
	HEIGHT: 2700mm
	WEIGHT: 100Kg
RATED LOAD:	450N (45Kg)
RECOMMENDED LOAD:	200N (20Kg)
OPENER LIMITS TRAVEL:	3.0 Turns of Door Drum Wheel
OPERATING TIME - INTERMITTENT:	4 Minutes
RECEIVER TYPE:	UHF 433.92 MHz. AM Receiver
RECEIVER CODE STORAGE CAPACITY:	6 Smart Code Transmitters
	1 Dipswitch Transmitter
	1 Entry Keypad
TRANSMITTER FREQUENCY:	433.92 MHz
CODING TYPE:	Fixed
No. of CODE COMBINATIONS:	Over 3.86 Billion Codes
TRANSMITTER BATTERY:	2 x 3V Type 2032 Button Cell

Note:

1. The maximum continuous curtain residential roll up door opening that the EconoLift can be installed on is 5500mm wide by 2700mm high. The door must be well balanced. A person of average strength should be able to lift up the door manually with very little effort in case of an emergency.
2. Intermittent operations may occur in areas which experience very strong winds. The strong wind puts extra pressure on the door and tracks which may in turn trigger the safety obstruction detection system intermittently.

TROUBLE SHOOTING

SYMPTOM	POSSIBLE CAUSE	REMEDY
Door will not operate.	Mains power not switched on. Door is obstructed. Door is locked or motor jammed. Door tracks/hardware damaged.	Switch on mains power. Remove obstruction. Unlock door or remove jam. Door requires service/repair by qualified technician.
Door starts to close but automatically reverses to open position.	Adverse weather conditions (wind or cold) causing door to stiffen and become tight in the tracks. Possible obstruction in the doorway.	Increase force margin setting See Step 8.3 on page 13. Or re-calculate force margin. See Step 8.6 on page 13. Remove obstruction.
Door operates from drive unit (OPERATE) button but not from transmitter.* See note.	Transmitter code not stored in memory. Flat Battery.	Code transmitter in to openers memory. Refer Step 9.1 on page 14. Replace battery.
Door will not open or close fully.	Door limits position need to be reset.	Reset limits position. See Page 12.
Door is overshooting or not reaching limits.	Datum position not set correctly.	Reset datum position. See Step 6.1 Page 11.
Cannot set limits.	Datum position not set correctly.	Set datum position. See Step 6.1 Page 11.
Door not working with PE installed.	PE Beam or wiring faulty PE Beam not aligned correctly. PE Beam is obstructed. Door obstructed when closing.	Repair PE Beam or replace wiring. Re-align optics. See PE Instructions. Remove obstruction from the path of PE. Remove obstruction.

***Please Note:** Some areas may be prone to excessive radio interference brought on by devices such as cordless telephones, wireless stereo headphones and baby monitors. It is possible that these devices could cause a degree of interference such as to greatly reduce the range of the transmitter. In such an instance please contact your B&D dealer for an alternative frequency replacement kit. As this is not a warrantable situation but an environmental issue charges may apply for the changeover.

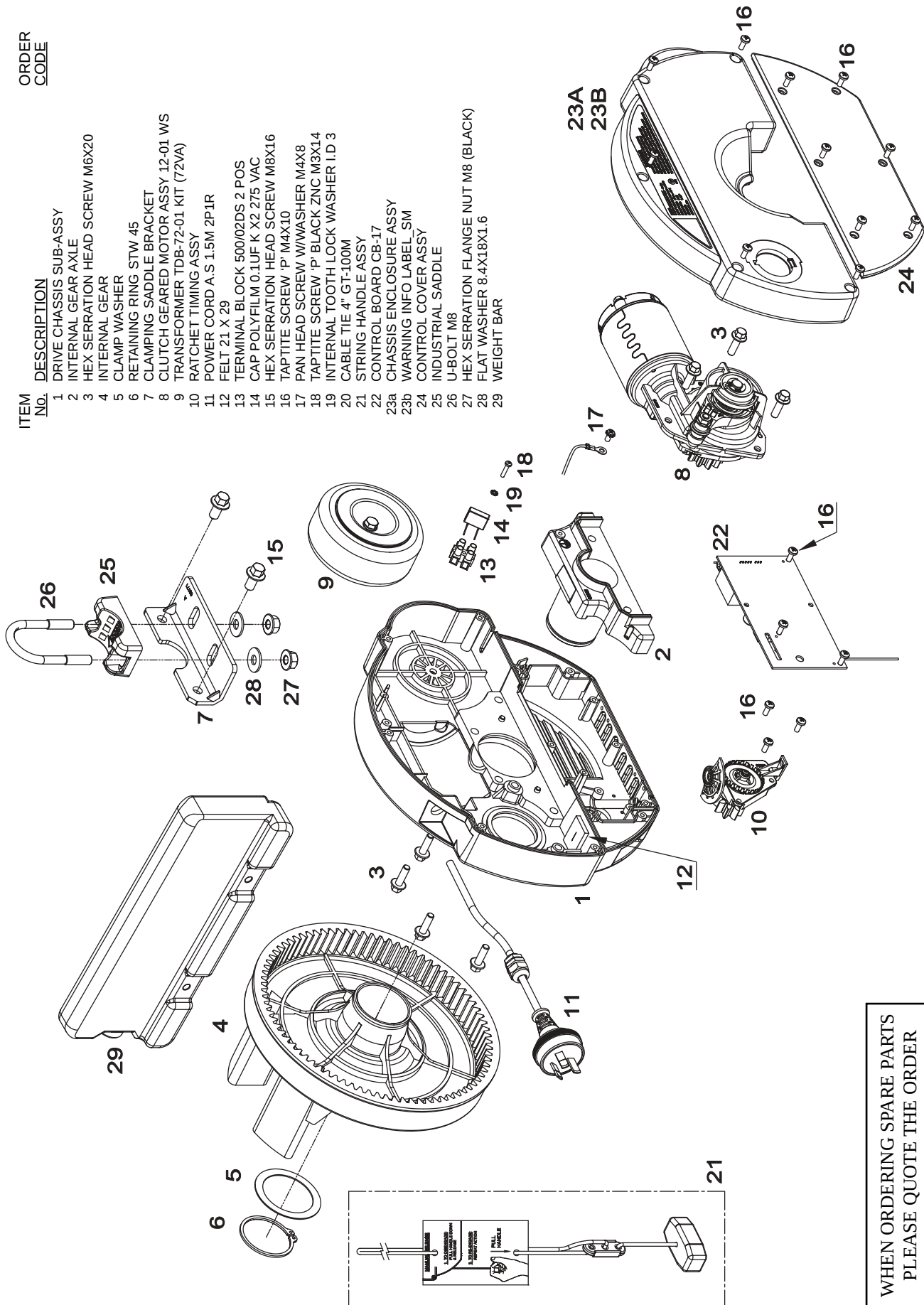
DATE	MAINTENANCE PERFORMED BY	SIGNATURE	AMOUNT	INV. No.

Please Note: Failure to maintain your garage door may void the warranty for your garage door opener.

SPARE PARTS LIST

ORDER
CODE

ITEM No.	DESCRIPTION
1	DRIVE CHASSIS SUB-ASSY
2	INTERNAL GEAR AXLE
3	HEX SERRATION HEAD SCREW M6X20
4	INTERNAL GEAR
5	CLAMP WASHER
6	RETAINING RING STW 45
7	CLAMPING SADDLE BRACKET
8	CLUTCH GEARED MOTOR ASSY 12-01 WS
9	TRANSFORMER TDB-72-01 KIT (72VA)
10	RATCHET TIMING ASSY
11	POWER CORD A.S 1.5M 2P1R
12	FELT 21 X 29
13	TERMINAL BLOCK 500/02DS 2 POS
14	CAP POLYFILM 0.1UF K X2 275 VAC
15	HEX SERRATION HEAD SCREW M8X16
16	TAPTITE SCREW 'P' M4X10
17	PAN HEAD SCREW W/WASHER M4X8
18	TAPTITE SCREW 'P' BLACK ZNC M3X14
19	INTERNAL TOOTH LOCK WASHER I.D 3
20	CABLE TIE 4" GT-100M
21	STRING HANDLE ASSY
22	CONTROL BOARD CB-17
23a	CHASSIS ENCLOSURE ASSY
23b	WARNING INFO LABEL SM
24	CONTROL COVER ASSY
25	INDUSTRIAL SADDLE
26	U-BOLT M8
27	HEX SERRATION FLANGE NUT M8 (BLACK)
28	FLAT WASHER 8.4X18X1.6
29	WEIGHT BAR



WHEN ORDERING SPARE PARTS
PLEASE QUOTE THE ORDER
CODE NUMBER TO YOUR
INSTALLER/DEALER

WARRANTY AND EXCLUSION OF LIABILITY

1. Definitions

'B&D' means

- (a) in Australia – B&D Doors of 17 Oasis Court, Clontarf Qld 4019, a division of B&D Australia (ABN 25 010 473 971), or
 - (b) in New Zealand – B&D Doors NZ Ltd of 70 Allens Road East Tamaki Auckland, which is a subsidiary of B&D Australia (an Australian company).
- 'Purchaser' means the purchaser of the Opener.
'Opener' means the 'EconoLift Automatic Garage Door Opener'
'Manufacturer's Written Instruction Manual' means the instruction manual provided with the Opener.

2. This warranty applies to every sale of an Opener to a Purchaser and is the only warranty given on behalf of B&D.

3. B&D warrants that it will, at its option, either repair or replace any defects for a period of twelve (12) months, provided that all costs of disconnection and reinstallation shall be borne by the Purchaser.

4. The warranty provided in clause 3 shall only apply to an Opener which is being used under normal use and service in accordance with the Manufacturer's Written Instruction Manual and are limited to the repair or replacement, at B&D's option, of any defective Opener or parts thereof.

5. The warranty provided in clause 3 shall apply from the date of purchase of the Opener by the Purchaser.

6. For service under warranty within Australia, the faulty item should be suitably packaged with the details of the problem and the customer details and sent via Australia post to the following address:

B&D Automatic Access Systems
34-36 Marigold Street, Reply Paid 76926
REVESBY 2212
For all enquiries phone 1800 636 407.
For service under warranty within New Zealand, contact B&D Doors New Zealand on 0800 427 236.

7. The Purchaser will pay for any service call made by B&D or an Authorised Distributor where such a call is made for the purpose of adjustment (as described in the Manufacturers Written Instruction Manual) and not for rectification of a defect pursuant to the warranty hereunder.

8. (i) The Purchaser shall be responsible for any expense incurred by B&D or an Authorised Distributor in ensuring that the Opener is readily accessible for any repair work carried out under this warranty.
(ii) Where an Opener is installed outside a capital city metropolitan area and a warranty claim is made pursuant to this warranty, any travelling expenses and costs of transporting the Opener, incurred by B&D or its Authorised Distributor, shall be borne by the Purchaser.

9. Subject to paragraph 12 hereof;

- (i) the obligations of B&D under this warranty are limited to those contained herein and such warranties are expressly in lieu of all other warranties, express or implied, including any implied warranty of merchantability or fitness for a particular purpose and notwithstanding any course of dealing between the parties or custom and usage in the trade to the contrary.
- (ii) B&D shall not be subject to nor incur and the Purchaser releases B&D from any claim or liability (including consequential loss or damage and loss or use or profit) by reason of delay, defective or faulty materials or workmanship, negligence or any act, matter or thing done, admitted or omitted by B&D.

The Purchaser shall complete this certificate and keep it together with a copy of the receipt of purchase in a safe place – production of such information will assist the handling of a claim made under this warranty.

Purchased From _____	Phone _____
Installed By _____	Date _____
Serial No. _____	

WARRANTY AND EXCLUSION OF LIABILITY

10. Subject to Clause 12 hereof, this warranty does not extend to and B&D will be relieved of all obligations, responsibilities and liabilities (direct or consequential) in the event that defects in manufacture of the Opener are directly or indirectly in the opinion of B&D due to or result from:

- (i) being fitted to any door or other closing device which is not of the type or condition defined in the Manufacturers Written Instruction Manual as suitable for installation of the Opener.
- (ii) Lack of proper maintenance or care of the Opener or door. Failure to have the door serviced annually may void this warranty.
- (iii) Incorrect and unreasonable use.
- (iv) Faulty installation or adjustment of the Opener or door to which the Opener is connected where such installation or adjustment is not carried out by B&D or one of its Authorised B&D Distributors.
- (v) Failure to observe any instructions or directions provided with the Opener or given to the Purchaser by B&D or an Authorised Distributor.
- (vi) Modifications or repairs made or attempted to be made by any unauthorised person.
- (vii) Faulty electrical wiring of structures to which the Opener is affixed.
- (viii) Radio or other electronic interference (including citizen band transmissions).
- (ix) Water damage.

11. The warranty contained in Clause 3 does not cover batteries or globes and B&D shall not be liable for any defect, malfunction or failure of such items.

12. It is expressly provided that the warranties or any terms and conditions of them or other statement contained in this document or other literature given to the Purchaser shall not be read or applied so as to purport to exclude, restrict or modify or have the effect of excluding, restricting or modifying the application in relation to the supply of the Opener of all or any of the provisions of Divisions 2 and 2A of Part V of the Trade Practices Act, 1974, or the Consumer Guarantees Act 1993 if the purchase is a 'consumer' and purchased the opener in New Zealand, ("The Act") as amended or the exercise of a right conferred by such a provision or any other condition or warranty implied by any relevant State Act or Territorial Ordinance or by the general law and which by law cannot be excluded, restricted or modified provided that to the extent that the Act permits B&D to limit its liability for a breach of condition or warranty implied by the Act, B&D's liability for such breach shall be limited to the payment of the cost of replacing the Opener or acquiring an equivalent Opener or repairing the Opener.

13. This warranty shall be governed by and construed in accordance with Australian law if the opener was purchased in Australia, or New Zealand law if the opener was purchased in New Zealand.

14. Upon making a claim under this warranty the purchaser must produce proof of the date of purchase, together with the details of the installer, the date of installation and the serial number of the unit.

For Product support within Australia contact 1800 636 407

For Product support within New Zealand contact 0800 427 236

QLD Office:	17 Oasis Court, Clontarf 4019	Ph: (07) 3883 0200
NSW Office:	34-36 Marigold Street, Revesby 2212	Ph: (02) 9722 5555
VIC/TAS Office:	147-153 Canterbury Road, Kilsyth 3137	Ph: (03) 9237 7766
SA Office:	23 Frederick Road, Royal Park 5014	Ph: (08) 8440 4747
WA Office:	96 Mulgul Drive, Malaga 6062	Ph: (08) 9247 8777
NZ Office:	70 Allens Road, East Tamaki, Auckland	Ph: (09) 273 8600
	www.bnd.co.nz	

B&D Doors is a Division of B&D Australia Pty Ltd

A.B.N. 25 010 473 971

www.bnd.com.au