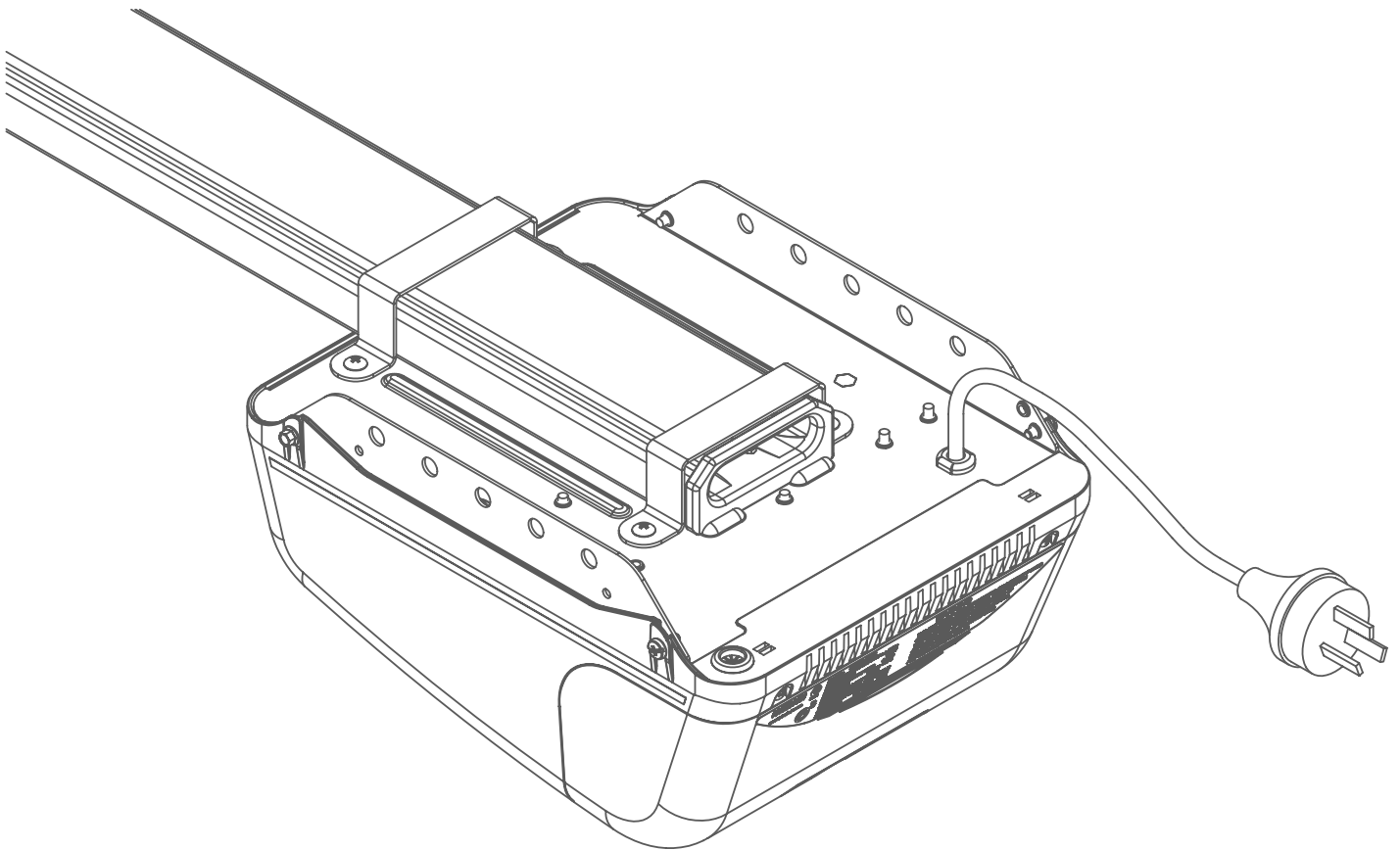




# GDO-9

## Overhead Garage Door Opener



Featuring **TrioCode™** Technology

aut<sup>o</sup>matic  
TECHNOLOGY

smart | simple | secure



**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 damage.

Please save these instructions for future reference.

Automatic Technology (Australia) Pty Ltd 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 Automatic Technology (Australia) Pty Ltd Garage Door Opener. Automatic Technology (Australia) Pty Ltd 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 Automatic Technology (Australia) Pty Ltd Garage Door Opener in accordance with these installation instructions.



# GDO-9

## Overhead Garage Door Opener

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# Important Safety Instructions

**WARNING: It is vital for the safety of persons to follow all instructions. Failure to comply with the following Safety instructions may result in serious personal injury and/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.

For **ADDITIONAL SAFETY** protection we **STRONGLY** recommend the fitting of a Photo Electric (PE) Beam. In most countries PE Beams are mandatory on all garage doors fitted with automatic openers. For a small additional outlay Automatic Technology recommends that Photo Electric Beams be installed with the automatic opener ensuring additional safety and peace of mind.

**DO NOT** operate the 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 opener when children/people are near the door. Children must be supervised at all times when the Enduro™ or Dynamo™ 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 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 **page 20 of this manual**. Failure to follow these instructions 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.

Photo Electric beams must be installed if the closing force at the bottom edge of the door exceeds 400N (40kg).

**DO NOT** disengage the door opener to manual operation with children/people or any other objects including motor vehicles within the doorway.

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.



# Important Safety Instructions

The unit should be installed so that it is protected from the elements. 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 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 opener to a properly **earthed** general purpose 240V mains power outlet installed by a qualified electrical contractor.

**Disconnect the power cord** from mains power before making any repairs or removing covers. Only **experienced** service personnel should remove covers from the 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 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 Automatic Technology 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.

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.





# Features

Thank you for purchasing the Automatic Technology **GDO-9** Overhead Garage Door Opener. Designed to suit sectional overhead and one piece tilt up doors, the components and materials used ensure this opener will provide years of smart, simple and secure operation. Listed below are some of the many features:

## **Operation**

To open or close the door simply press a button on a TrioCode™ handheld transmitter, a wall mounted transmitter, or optional wall switch for two seconds. During open and close cycles the door can be stopped by pressing the button again. The next actuation will move the reverse the door's direction.

## **TrioCode™ Code Hopping Technology**

Every time a TrioCode™ transmitter is used a new security code is randomly generated from over 4.29 billion possibilities. This greatly enhances the security of the system and makes "code grabbing" a thing of the past

These transmitters also overcome interference issues by simultaneously sending a signal over three different frequencies. Even if two of the three signals are jammed, the system will still work.

## **ALPS (Automatic Limits Positioning System)**

ALPS does away with manual adjustment of the door's limits position using mechanical parts, such as cams and microswitches. During installation the hand held transmitter can be programmed to set the door limits positions.

## **ISS (intelligent 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 initial installation of the automatic door opener. The door will also stop if restricted whilst opening. The Safety Obstruction Force should be checked monthly.

## **Auto courtesy light**

The courtesy light comes on automatically for three minutes whenever the door is activated. The light can also be operated independently of the door by coding a dedicated button on a transmitter.





### **SmartSolar™ and Battery Backup Compatibility (optional)**

The opener can be fitted with a SmartSolar™ or Battery Backup kit for operation in the event of a power outage, or where mains power access is not available. **NOTE:** If the door is the only entrance to the garage, and a battery backup kit is not fitted, a keyed cable release should be fitted externally to the garage.

### **Vacation mode**

A hand held transmitter can be programmed to lock and unlock all other transmitters that have been programmed into the openers' memory. The vacation mode can be used when the door is left idle for long periods of time.

### **Pet/Pedestrian mode**

The transmitter can be programmed to open the door to an adjustable partial height so that the family pet can enter and exit the garage at any time. You may also wish to open the door to a height suitable only for pedestrian access.

### **Auto-Close mode**

The opener can be programmed to automatically close after an open cycle. The Auto-Close time is adjustable. It is compulsory to install a PE Beam if this mode is selected, otherwise the door may cause personal injury or damage to property.

### **Photo Electric (PE) Beam (optional)**

The opener has an input to connect a PE Beam for extra safety and use of the Auto-Close mode.

### **Manual operation**

The opener is equipped with a unique manual disengaging device. If the power to the opener is disrupted, the door can be put into manual mode by pulling down on the string handle on an angle towards the door. This allows for manual operation of the door. To re-engage the opener, pull the string handle away from the door.





# Enduro™ Controls

## 01 Terminal Block.

24V PWR is used to power devices such as:

- » PE (Input) for photo electric beam for safety and Auto-Close function.
- » LGT (Input) allow hard wired external trigger for the opener's courtesy light.
- » O/S/C INPUT is used for the connection of a wired switch (momentary contact). This switch can then be used to open, stop or close the door. Install the wall switch in a location where the switch is out of reach of children and the garage door is visible.

02 **SET** button (orange) is used during the installation phase together with the Open and MINUS (-) buttons to set the door limit positions. The Set button is also used to re-initialize the Opener.

03 **LIGHT CODE** button (white) is used for storing or erasing the transmitter button (code) you wish to use to switch the courtesy light on the opener on or off.

04 **CODING LED** (red) light flashes when a code is being stored or when a transmitter button is pressed.

05 **OPERATE** button (Yellow) 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 to make the O/S/C button operable.

06 **DOOR CODE** BUTTON (blue) is used for storing or erasing transmitter buttons for door operation

07 **DOOR STATUS LED** (Yellow)

08 **MINUS** (-) button (red) is used during installation to help set the close limit position. Pressing and holding this button will move the door in the close direction. Movement stops when the button is released.  
**NOTE:** The safety obstruction detection is inoperable when the CLOSE button is used to move door.

09 **PLUS** (+) button (green) is used during installation to help set the open limit position. Pressing and holding this button will move the door in the open direction, releasing stops the door.  
**NOTE:** The safety obstruction detection is inoperable when the PLUS (+) button is used to move door.

10 **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.

11 **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.

12 **AUTO CLOSE TIME** button (White) is used to adjust the auto close time. While holding in the AUTO CLOSE TIME button and then pressing the PLUS (+) button the time is increased. Each press will increase the time by 1 second. Pressing the MINUS (-) button will decrease the time.

13 **FORCE MARGIN SET** Button: The obstruction force margin is set automatically during installation. The margin can be adjusted manually using the Force Margin Set button (White). Holding the Force Margin Set button and pressing PLUS (+) or MINUS (-) buttons will increase or decrease the amount of force. The Force Margin Set should only be used if environmental factors (wind, etc.) affect the door's operation.

14 **JP1 SOLAR CONNECTOR** onto this the shunt must be fitted for solar operation.

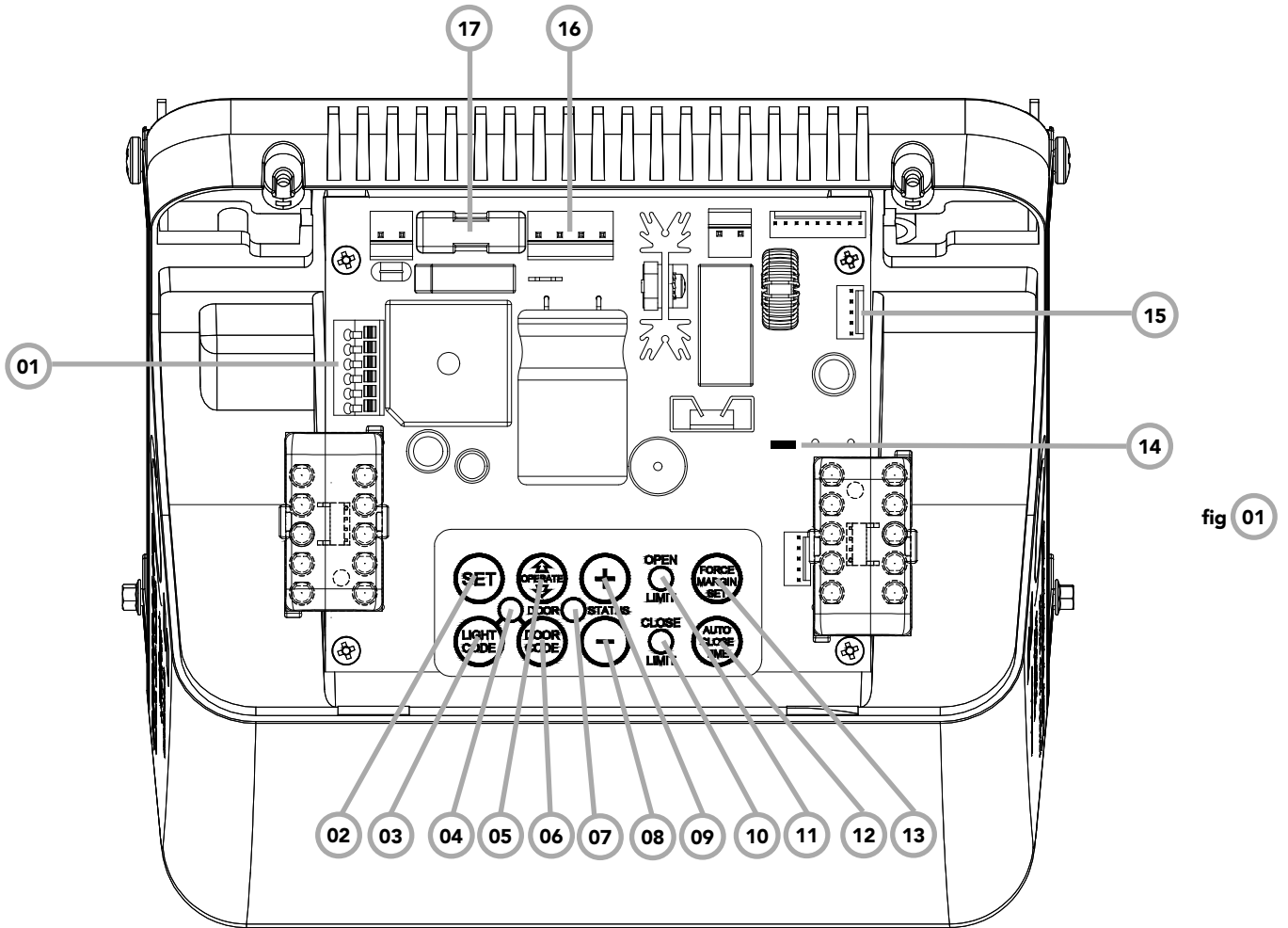
15 **PROG INPUT** is used to connect the Automatic Technology Handheld Programmer "PG-3" for editing control and receiver functions, accessing diagnostic tools, and activating special features and operating modes.

16 **SBY-3 CONNECTOR** is used to connect both Battery Backup Kits and SmartSolar™ kits.

17 **10A FUSE**









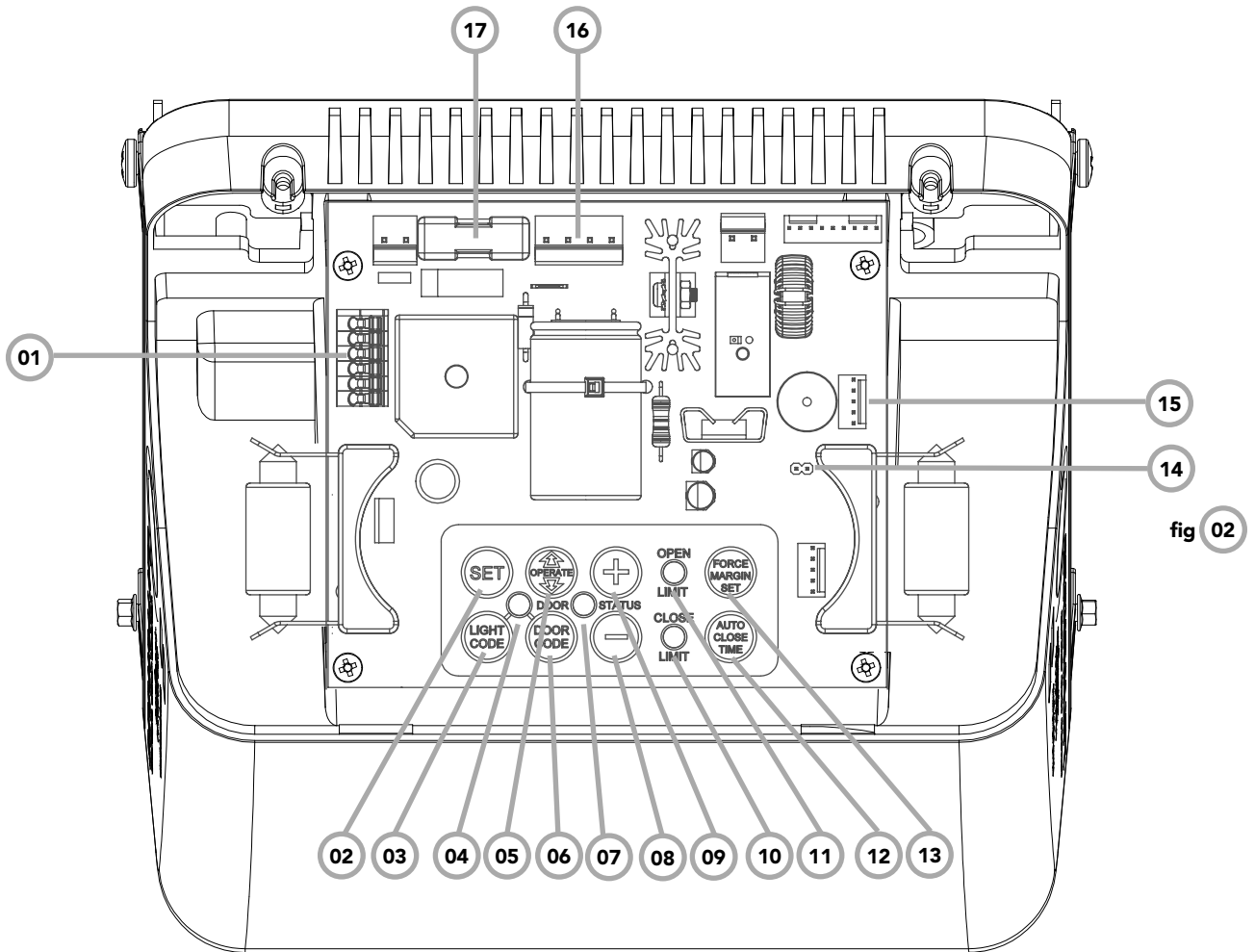
# Dynamo™ Controls

- 01 Terminal Block.**

24V PWR is used to power devices such as:

  - » PE (Input) for photo electric beam for safety and Auto-Close function.
  - » LGT (Input) allow hard wired external trigger for the opener's courtesy light.
  - » O/S/C INPUT is used for the connection of a wired switch (momentary contact). This switch can then be used to open, stop or close the door. Install the wall switch in a location where the switch is out of reach of children and the garage door is visible.
- 02 SET** button (orange) is used during the installation phase together with the Open and MINUS (-) buttons to set the door limit positions. The Set button is also used to re-initialize the Opener.
- 03 LIGHT CODE** button (white) is used for storing or erasing the transmitter button (code) you wish to use to switch the courtesy light on the opener on or off.
- 04 CODING LED** (red) light flashes when a code is being stored or when a transmitter button is pressed.
- 05 OPERATE** button (Yellow) 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 to make the O/S/C button operable.
- 06 DOOR CODE** BUTTON (blue) is used for storing or erasing transmitter buttons for door operation
- 07 DOOR STATUS LED** (Yellow)
- 08 MINUS** (-) button (red) is used during installation to help set the close limit position. Pressing and holding this button will move the door in the close direction. Movement stops when the button is released.  
**NOTE:** The safety obstruction detection is inoperable when the CLOSE button is used to move door.
- 09 PLUS** (+) button (green) is used during installation to help set the open limit position. Pressing and holding this button will move the door in the open direction, releasing stops the door.  
**NOTE:** The safety obstruction detection is inoperable when the PLUS (+) button is used to move door.
- 10 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.
- 11 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.
- 12 AUTO CLOSE TIME** button (White) is used to adjust the auto close time. While holding in the AUTO CLOSE TIME button and then pressing the PLUS (+) button the time is increased. Each press will increase the time by 1 second. Pressing the MINUS (-) button will decrease the time.
- 13 FORCE MARGIN SET** Button: The obstruction force margin is set automatically during installation. The margin can be adjusted manually using the Force Margin Set button (White). Holding the Force Margin Set button and pressing PLUS (+) or MINUS (-) buttons will increase or decrease the amount of force. The Force Margin Set should only be used if environmental factors (wind, etc.) affect the door's operation.
- 14 JP1 SOLAR CONNECTOR** onto this the shunt must be fitted for solar operation.
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- 16 SBY-3 CONNECTOR** is used to connect both Battery Backup Kits and SmartSolar™ kits.
- 17 10A FUSE**

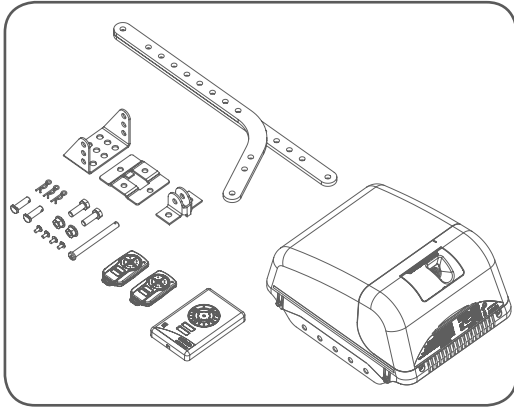






# Kit Contents

fig 03

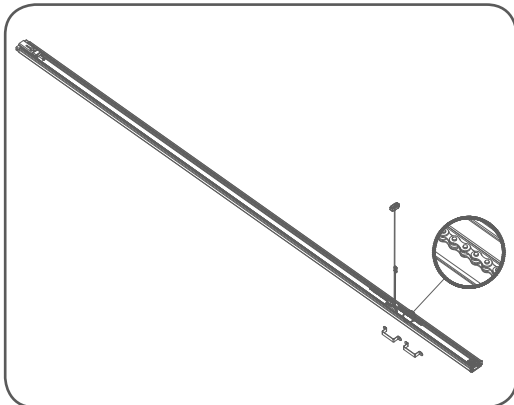


## Drive Unit

- 1 x GDO-9 drive unit (Fig. 03)
- 1 x TrioCode™ Transmitter pack (Fig. 03)  
(Pack includes two keyring transmitters and batteries)
- 1 x Wall mount transmitter with battery (Fig. 03)
- 2 x Door attachment arms (Fig. 03)
- 1 x Accessory and hardware pack (Fig. 03)
- 1 x Installation Manual

## PLUS

fig 04



## Pre-Assembled Single Piece C-Rail

NOTE: The chain or belt in the one piece rail has been tensioned by the factory.

IMPORTANT NOTE: If a modification to the length of the track is required, the adjustment must be made from the drive unit end only.



# C-Rail Attachment

## Step 1 - Secure C-Rail to Drive Unit

- a. Locate and insert the shaft of drive unit into the C-Rail's sprocket (**Fig. 05**).
- b. Fix the two track brackets with four screws supplied in accessory pack (**Fig. 06**).

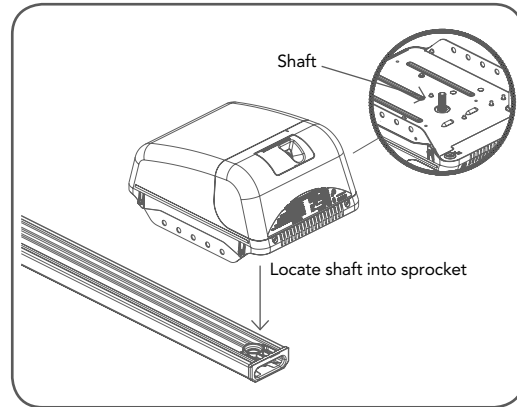


fig 05

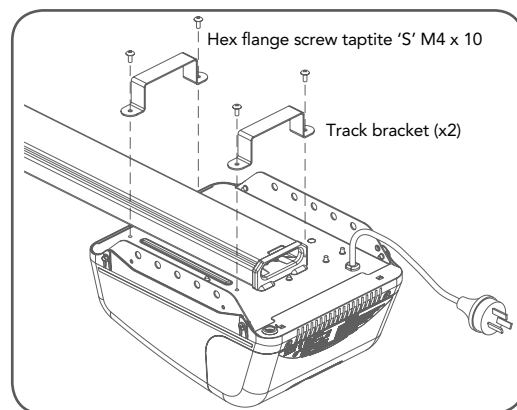


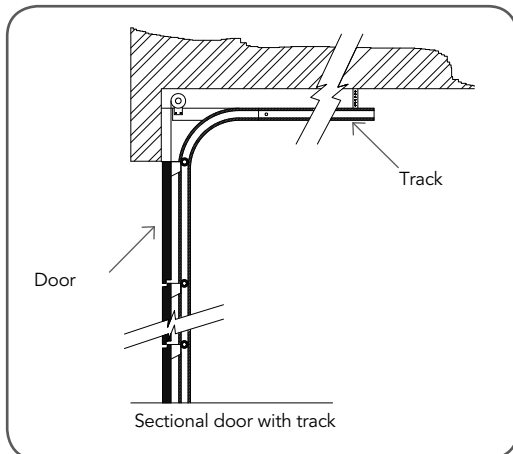
fig 06





# Determine the Door Type

fig 07

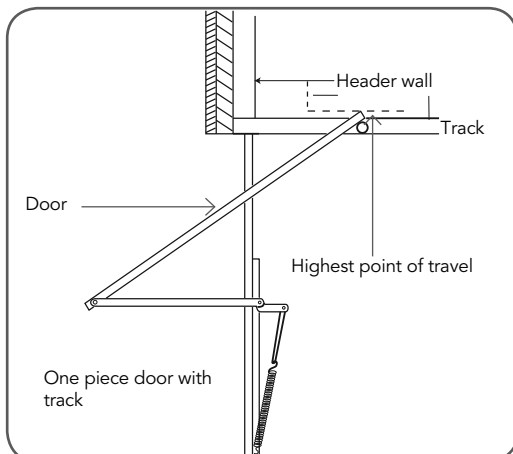


## Step 2 - Determine Door Type

Determine which type of garage door you have as illustrated below. (Fig. 07 to Fig. 09) .

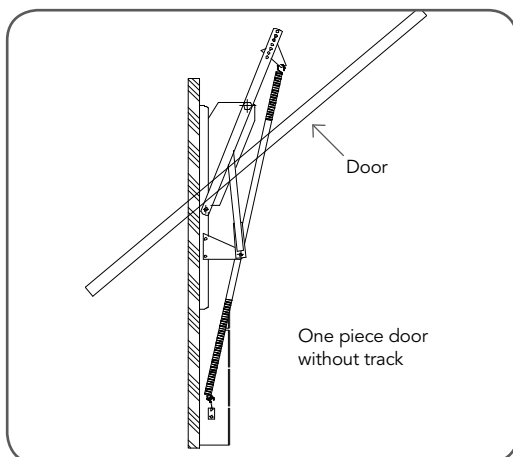
For a sectional (panel) door on tracks (Fig. 07) proceed with the installation from Step 3.

fig 08



For a one-piece door on tracks (Fig. 08) proceed with the installation from Step 3.

fig 09



For a one-piece door without tracks (on springs) (Fig. 09) proceed with the installation from Step 7.



# Mounting on a Track Type Door



**WARNING:** The opener must be securely fastened to structural supports, otherwise opener failure may ensue causing serious personal injury and/or property damage.

## Step 3 - Determine Bracket Position

- Open the door and find the highest point of travel of the top door panel.
- Using a level, transfer this height to the wall above the door (**Fig. 10**) and mark a line 60mm above it.
- Determine the centre point on the wall above and on top of the door. Draw two lines extending 21.5mm from each side of the centre point. (**Fig. 11**)

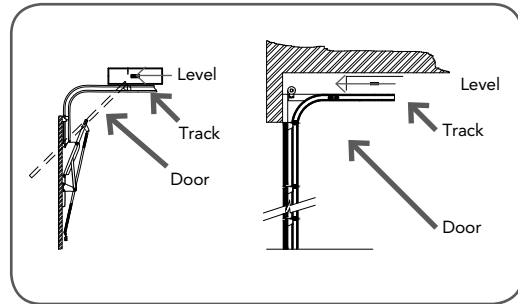


fig 10

## Step 4 - Mounting the Wall Bracket

- Centre the bracket over the intersection of these two lines. Mark centres for at least two holes (**Fig. 11**) and ensure it is into a solid mounting point.
- Drill holes into the wall with an appropriate bit.
- Secure to the wall using:  
IF CONCRETE OR BRICK - 8mm (5/6") loxins/dynabolts.  
IF TIMBER - wood screw #20 or similar (min. 50mm).

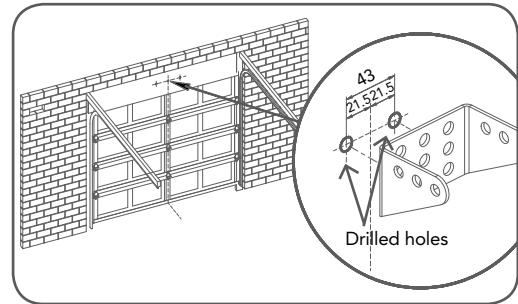


fig 11



**WARNING:** Make sure concrete, brick wall or timber lintels are solid and sound so as to form a secure mounting platform.

## Step 5 - Attach the Rail to the Wall Bracket

- Attach the C-Rail assembly to the wall bracket with the 90mm long clevis pin and secure with the supplied snap pin (**Fig. 12**)
- Leave the drive unit in its packing box for protection during installation.

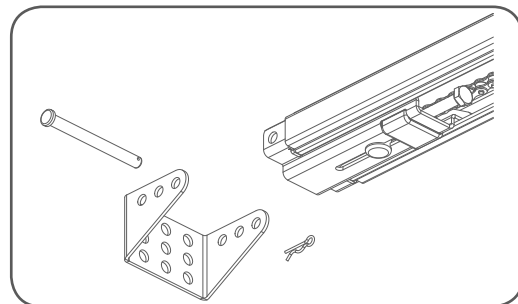


fig 12

## Step 6 - Secure the Drive unit to the Ceiling

- Raise the drive unit from the packing box and support it in the horizontal position with a step ladder.
- Open the garage door. Rest the opener on the open door and use a scrap piece of wood to bring it to horizontal level.
- Line up the track perpendicular to the wall.
- Secure the perforated angle (not supplied) to the ceiling above where drive unit's mounting holes will be once fully installed. A representative mounting is shown (**Fig. 13**)
- Connect the drive unit to the ceiling mounted perforated angle with M8x20mm screws and nuts. Strips should not extend more than 18mm below centre of drive unit mounting holes.

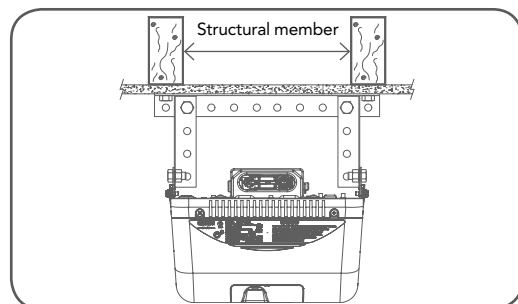


fig 13

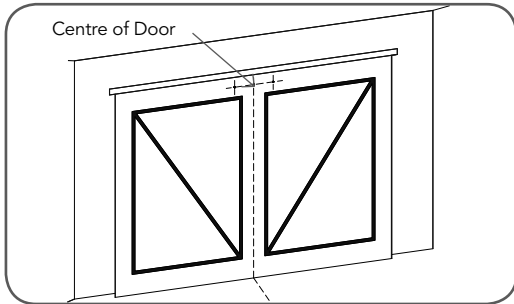
Go to Step 11 on page 17.





# Mounting on a Spring Loaded Door

fig 14



**WARNING:** The opener must be securely fastened to structural supports, otherwise opener failure may ensue causing serious personal injury and/or property damage.

## Step 7 - Determine the Door's Centre

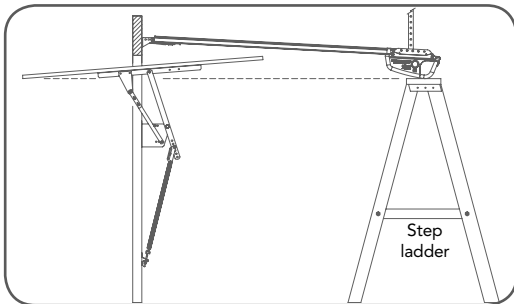
- Find the centre of the door and mark this location both above the door and on top of the door.
- Draw two lines 21.5mm either side of this (Fig. 14).

## Step 8 - Prepositioning the Opener

- Raise the door to open position.
- Rest the opener on the top edge of the door with end of the rail against the wall (Fig. 15).
- Support the drive unit level with the lowest point of the open door (Fig. 15).

**NOTE:** Do not slide rail along the face of the door.

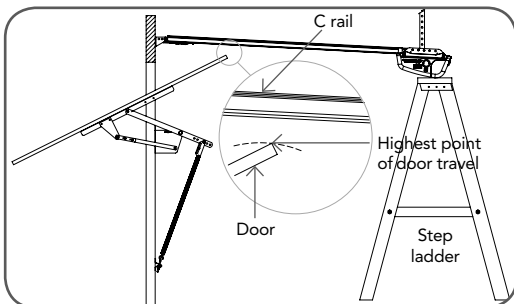
fig 15



## Step 9 - Mounting the C-Rail

- Close the door slowly. The rail will be elevated by the top edge of the door as it moves.
- Stop the door when it is at its highest point of travel. Allow 25mm additional height for clearance between the door and the track (Fig. 16).
- Support the Rail in this position and close the door.
- The height determined in Step 10(b) will be the height at which to mount the wall bracket.
- Centre the bracket along the line determined in Step 8.
- Using the bracket as a template, mark a minimum of two holes and drill with appropriate size bit. For a more secure fitting, the wall bracket can be anchored using more than two holes.
- Secure the bracket to the wall using:  
IF CONCRETE OR BRICK - 8mm (5/6") loxins/dynabolts.  
IF TIMBER - wood screw #20 or similar (min. 50mm)
- Attach the bracket and C-Rail with supplied pins (Fig. 12).

fig 16

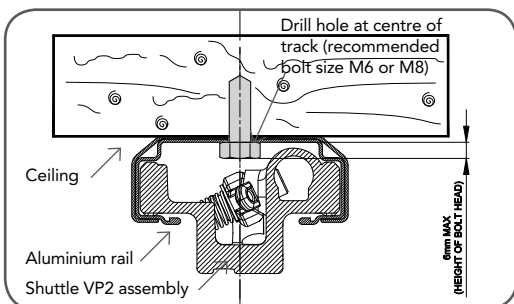


**WARNING:** Make sure concrete, brick wall or timber lintels are solid and sound so as to form a secure mounting platform.

## Step 10 - Secure the drive unit to the Ceiling

- Secure the perforated angle (not supplied) to the ceiling above where drive unit's mounting holes will be. See (Fig.19) for a representative mounting.
- Connect the drive unit to the ceiling mounted perforated angle with M8x20mm screws and nuts. Strips should not extend more than 18mm below centre of drive unit's mounting holes (Fig. 13).

fig 17



## Step 10.1 - Alternative Mounting Option

The opener can be fastened to the roof by driving a bolt through the C-Rail into a structural timber support. The bolt head's height must not exceed 6mm (Fig. 17).







# Mounting Door Bracket & Arms

## Step 11 - Mounting Door Bracket

The door bracket comes in two parts. The bottom plate with two mounting holes is used on its own for one piece doors. For sectional doors, the top plate is placed over the bottom plate and is fixed with four (4) screws (**Fig. 18**).

- Mount the door bracket, or bracket assembly, on the door's centre line one-third down the top panel (**Fig. 18**) using M6 or equivalent screws (not supplied),
- STEEL DOORS ONLY:** Bracket can be welded in place.

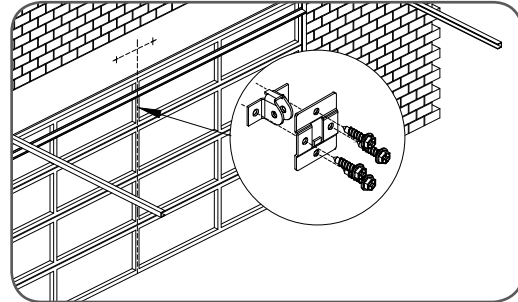


fig 18



**NOTE:** If in doubt about the door's strength, reinforcement may be added to the door's frame where necessary. Door damage may occur if the bracket is installed on a panel with insufficient strength. The opener's warranty does not cover damage caused to the door and/or door panels.

## Step 12 - Attaching the Arms

FOR SECTIONAL AND ONE PIECE DOORS WITH TRACK:

- Assemble the bent arm(connecting to the door) to the right side of the straight arm (connecting to the shuttle) with bolts and nuts supplied in the accessory pack (**Fig. 19**). Always use both bent and straight arms.
- Connect the assembled arm to the bracket and the disengaged trolley with clevis and snap pins. The angle "A" must be more than 10° (**Fig. 20**).

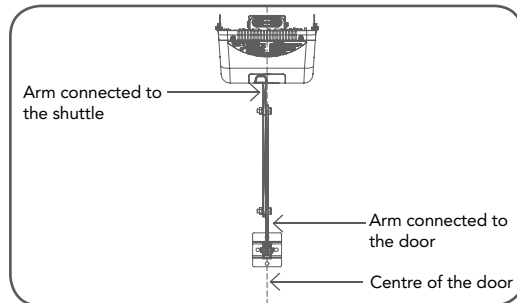


fig 19



**WARNING:** Connecting the bent arm the other way around may damage the door. The straight arm should not protrude beyond the heel of the bent arm.

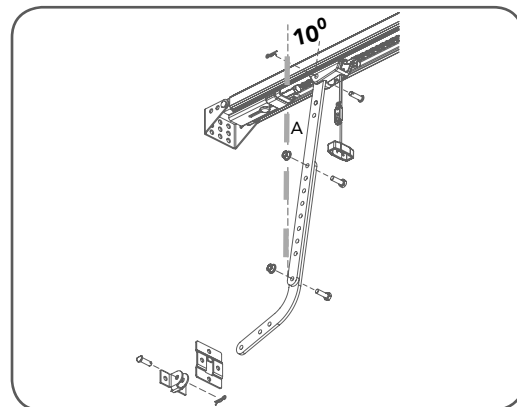


fig 20

FOR ONE PIECE DOORS WITHOUT TRACK

- Assemble the bent and straight arms as shown in (**Fig. 21**) with bolts and nuts supplied in the accessory pack. Always use both the bent and straight arms.
- Connect the assembled arm to the bracket and the disengaged trolley with clevis and snap pins.
- If installing on a door with a bad wave action, lengthening the arm will assist in reducing this effect.

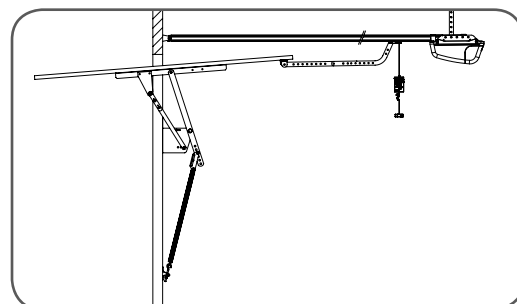


fig 21



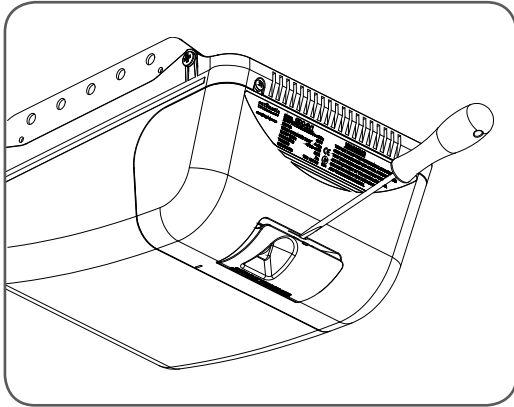
**IMPORTANT NOTE:** Adjust the length of the cord so that its toggle is no more than 1.8m from the ground.





# Programming The Opener

fig 22



## Setting Travel Limits : Via Control Panel Step 13.1 - Setting Travel Limits

**NOTE:** If PE Beams are to be used they must be installed before setting the travel limits.

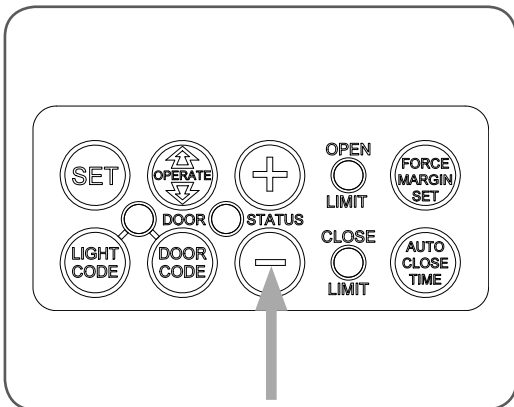


**WARNING!** Use caution when operating the manual release with the door open since it may fall rapidly due to weak or broken springs, or an improperly balanced door.



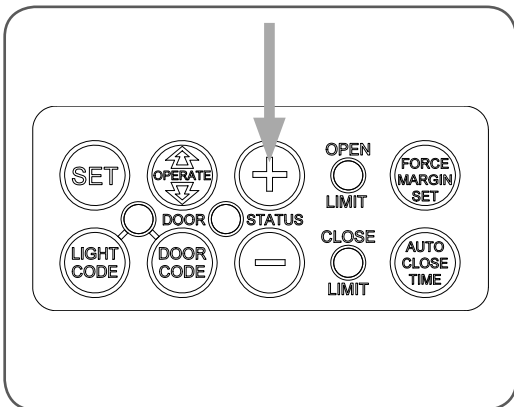
**CAUTION!** Do not disengage the opener to manual operation with children, persons or any objects including motor vehicles within the doorway.

fig 23



- Engage the C-Rail's trolley (attached to the door via the arms) with the chain index by moving the door.
- If the trolley does not "click" firmly onto the chain index, ensure that the manual release cord is not in the disengaged position by pulling it backwards.
- Turn on the power to the opener. The CLOSE LIMIT LED will be flashing.
- Remove the button cover with a blade screwdriver (**Fig. 22**).
- Press and hold the MINUS (-) button - the door will start closing (**Fig. 23**).
- Release the MINUS (-) button when the door is near the desired closed position. Single presses of the MINUS (-) button will "inch" the door closed.
- If the door overshoots press the PLUS (+) button to move the door in the open direction.
- When the door is at the desired close position, press the SET button to record the close limit position. The OPEN LIMIT LED will now flash.
- Press and hold the PLUS (+) button to open the door (**Fig. 24**).
- Release the PLUS (+) button when the door is near the desired open position. Single presses of the PLUS (+) button will "inch" the door open.
- If the door overshoots press the MINUS (-) button to move the door in the open direction.

fig 24



**WARNING!** Once the next step is performed, the door will automatically close and open to calculate force settings. Keep persons and objects clear of the door until it stops and the opener sounds a beep.

- Press the SET button to store the open limit. **Please read the above warning.**

## Step 13.2 - Resetting Travel Limits

To reset the limits, press and hold the MINUS (-) button for 6 seconds until the CLOSE LIMIT LED flashes quickly. If no action is taken within 30 seconds, the opener will return to normal operating mode and restore the original settings.





# Programming The Opener

## Setting Travel Limits : Via Transmitter

The GDO-9 has the alternate ability to set travel limits using the transmitter, allowing free movement around the garage to better assess the desired limit positions.

### Step 14.1 - Code a Transmitter for Limit Setting

- Ensure the opener is powered up.
- Press and hold the DOOR CODE button (Fig. 25).
- Press Button 1 on the transmitter for two seconds (Fig. 26). Release and pause for two seconds. Press the Button 1 again for two seconds.
- Release the DOOR CODE button.

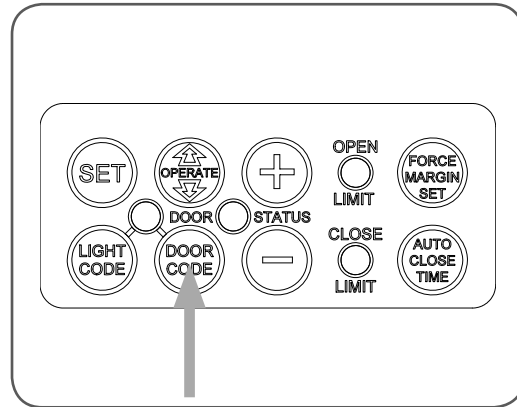


fig 25

### Step 14.2 - Setting Limits via Transmitter

- Engage the C-Rail's trolley (attached to the door via the arms) with the chain or belt index by moving the door.
- If the trolley does not "click" firmly onto the chain index, pull the cord backwards until it locks in place, and try again.
- Press and hold Button 4 on the transmitter to close the door. When the door is approx. 20mm from the ground, release Button 4 (Fig. 26).
- Each press of Button 4 will allow you to "inch" the door closed. Keep doing this until the door reaches the desired close limit position.
- If the door closes too far, press Button 1 to "inch" the door towards open.
- When happy with the close limit position, press Button 2 to store this in memory.
- Press and hold Button 1 to open the door. When approx. 20mm from the desired open position, release Button 1.
- Each press of Button 1 will allow you to "inch" the door open. Keep doing this until the door reaches the desired open limit position.
- If the door is opened too far, press Button 4 to "inch" the door towards closed.

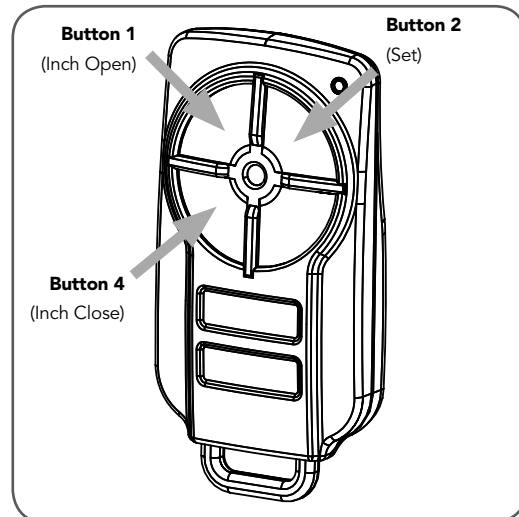


fig 26



**IMPORTANT WARNING:** The door will automatically close, open and close again **once Step 14.2(j) is performed**. Ensure that no persons or objects are in the door's path.

- When happy with the open limit position, press Button 2 on the transmitter to store into memory.
- The door will now automatically close, open and close to calculate the safety obstruction settings. After this, the opener can be operated with the OPERATE button.

### Step 14.3 - Resetting the Door Limit Positions

Limit positions can be deleted by the following steps:

- Follow Steps 13.2, as outlined previously.
- Repeat Steps 14.1 and 14.2 to set new travel limit positions.
- There is no need to re-code the transmitter (Step 14.1) upon resetting travel limits. The transmitter will still be stored in memory.





# Safety Obstruction Forces

fig 27

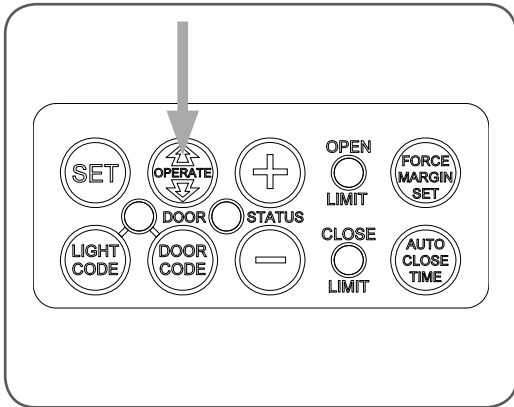
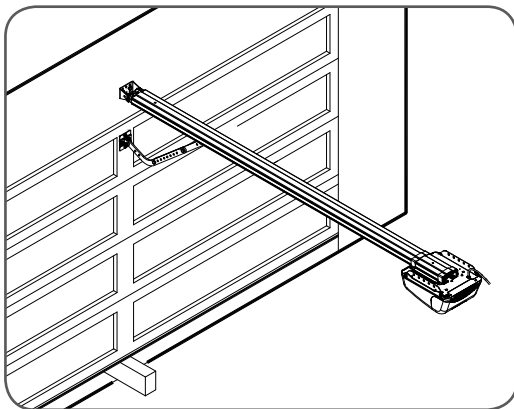


fig 28



## Safety Obstruction Force Test



**WARNING!** Take care when testing or adjusting the Safety Obstruction Force. Excessive force may cause **SERIOUS PERSONAL INJURY** and/or **PROPERTY DAMAGE**.



**WARNING!** Photo electric beams must be installed if the closing force at the bottom edge of the door exceeds 400N (40kg) force.

### Step 15.1 - Testing Close Cycle

- Press the OPERATE button to open the door (**Fig. 27**).
- Place a piece of timber approximately 40mm high on the floor directly under the door (**Fig. 34**).
- Press the OPERATE button to close door. The door should strike the object and start to re-open.

### Step 15.2 - Testing Open Cycle

- Press the OPERATE button to close the door (**Fig. 28**).
- Press again to open the door. When the door reaches the half open point, grab the bottom rail of the door firmly and the door should stop.
- If the door does not reverse readily when closing, or stop when opening, the force may be excessive and need adjusting, refer below.



**DANGER!** If the door fails these tests, put the opener into manual mode, only operate the door by hand and call for service.



# Safety Obstruction Forces

## Adjusting Safety Obstruction Force

The Safety Obstruction Force is calculated automatically during setup. Adjusting this is normally only necessitated by environmental conditions such as windy or dusty areas, and areas with extreme temperature changes.



**WARNING!** Photo electric beams must be installed if the closing force at the bottom edge of the door exceeds 400N (40kg) force.

### Step 16.1 - To Increase Force Pressure

- Hold down FORCE MARGIN SET button (Fig. 29)
- While holding the FORCE MARGIN SET button, press the PLUS (+) button. Each press increases the force margin (Fig. 29).
- The OPEN LIMIT LED will flash each time the PLUS (+) button is pressed to indicate a force increase
- If the OPEN LIMIT LED is on continuously when pressing the PLUS (+) button, this indicates that the maximum setting has been reached.
- Test the force again as per Steps 15.1 and 15.2

### Step 16.2 - To Decrease Force Pressure

- Hold down FORCE MARGIN SET button (Fig. 29)
- While holding the FORCE MARGIN SET button, press the MINUS (-) button. Each press decreases the force margin (Fig. 29).
- The CLOSE LIMIT LED will flash each time the MINUS (-) button is pressed to indicate a force decrease.
- If the CLOSE LIMIT LED is on continuously when pressing the MINUS (-) button this indicates that the maximum setting has been reached.
- Test the force again as per Steps 15.1 and 15.2

### Step 16.3 - To Recall Factory Set Force

- While holding down the FORCE MARGIN SET button, press the SET button for two (2) seconds. (Fig. 30)
- Release both buttons. The default setting should now be recalled.

### Step 16.4 - To Recalculate Force Margins

- Press and hold the SET Button for two (2) seconds, the beeper will sound once (Fig. 31).
- 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.
- Test the force again as per Steps 15.1 and 15.2.

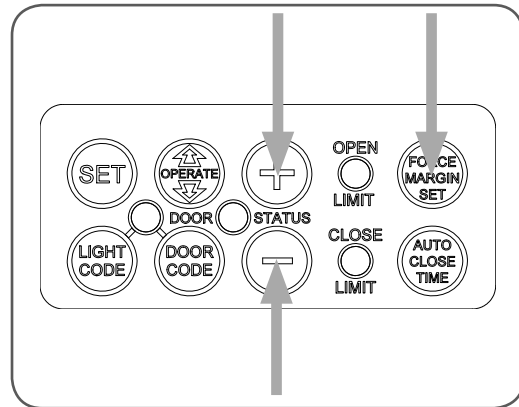


fig 29

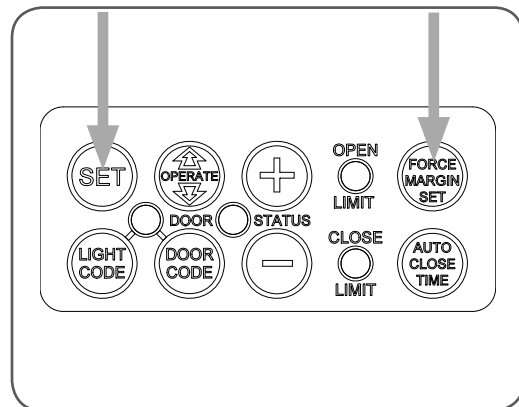


fig 30

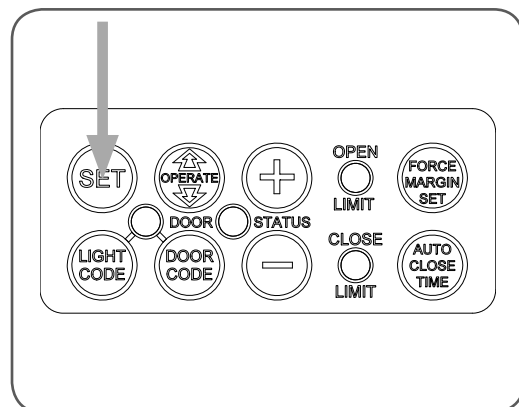


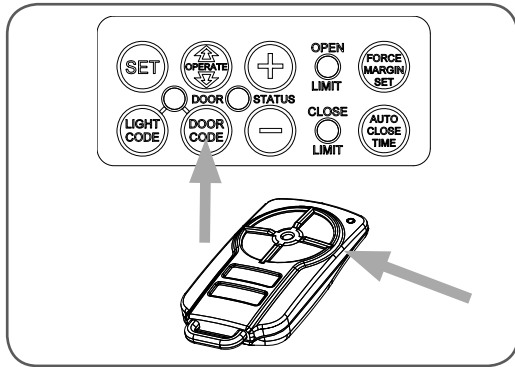
fig 31





# Coding Transmitters

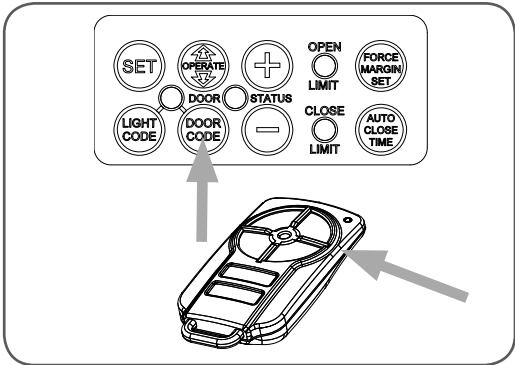
fig 32



## Step 17.1 - Code a Transmitter Button for Door Operation

- Press and hold the DOOR CODE button (**Fig. 32**).
- Press one of the four buttons on the transmitter for two (2) seconds, pause for two (2) seconds, then press the same button again for two (2) seconds.
- Release the DOOR CODE BUTTON.
- Press the transmitter button to test.

fig 33

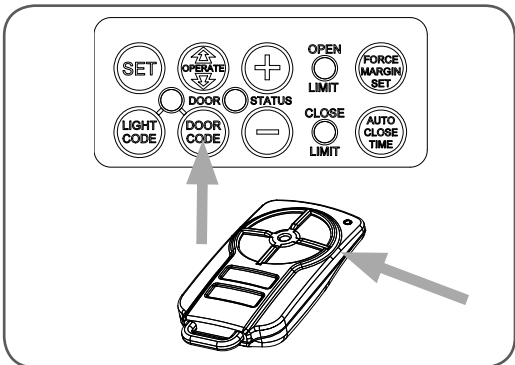


## Step 17.2 - Code a Transmitter Button to Enable Vacation mode

The opener can be programmed into a "Vacation Mode" where the opener will not respond to any transmitter except the button of the transmitter that was programmed for vacation mode.

- Briefly press the DOOR CODE button once, then press it again and hold (will beep two times on second press (**Fig. 33**)).
- Press one of the four (4) buttons on the transmitter for two (2) seconds, pause for two (2) seconds, then press the same button again for two (2) seconds.
- Release DOOR CODE button.
- Press and hold the transmitter button for six (6) seconds to set Vacation Mode. The door code LED will stay lit while Vacation Mode is active.
- To reset Vacation Mode, press the same button for two seconds.

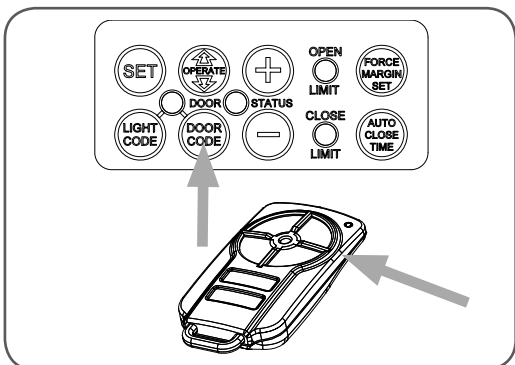
fig 34



## Step 17.3 - Code a Transmitter Button to Enable AUX OUTPUT

- Briefly press the DOOR CODE button two (2) times, then press it again and hold (will beep three times on third press (**Fig. 34**)).
- Press one of the four buttons on the transmitter for two (2) seconds, pause for two (2) seconds, then press the same button again for two (2) second.
- Release the DOOR CODE button.
- Press the transmitter button to test.

fig 35



## Step 17.4 - Code a Transmitter Button for Pet (Pedestrian) Mode

- Briefly press the DOOR CODE button three times, then press it again and hold (will beep four times on fourth press (**Fig. 35**)).
- Press one of the four buttons on the transmitter for two (2) seconds, pause for two (2) seconds, then press the same button again for two (2) seconds.
- Release the DOOR CODE button.
- Press the transmitter button to test.

To change the default pet (pedestrian) door opening position, refer Step 24.





# Coding Transmitters

## Step 17.5 - Coding a Transmitter Button to the Courtesy Light

The transmitter can be programmed to operate the courtesy light on the opener independently of the door moving.

- Press and hold LIGHT CODE button (**Fig. 36**).
- Press one of the four buttons on the transmitter for two (2) seconds, pause for two (2) seconds, then press the same button again for two (2) seconds.
- Release the LIGHT CODE button.
- Press the transmitter button to test.

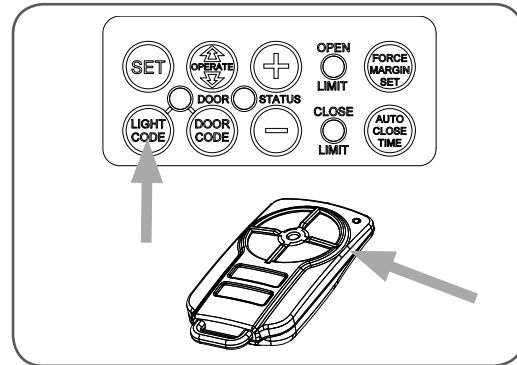


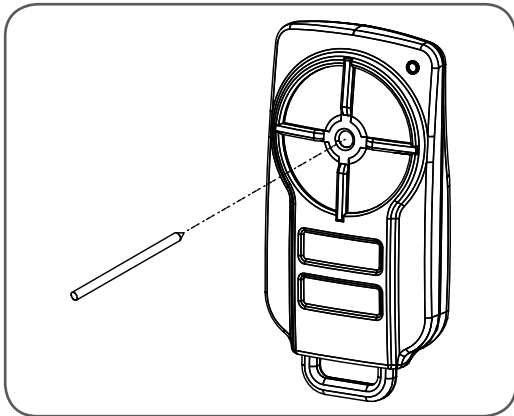
fig 36





# Coding Transmitters

fig 37



## Step 18 - Remotely Coding Transmitters

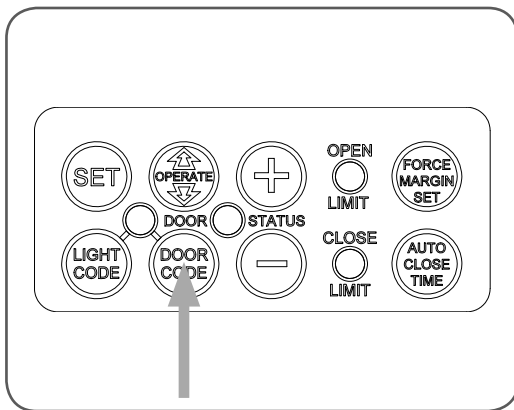
Using this method transmitters can be coded without access to the opener's control panel as long as a pre-coded transmitter is available.



**IMPORTANT NOTE:** The door or courtesy light must activate when the steps below are performed. This indicates that the pre-coded transmitter is in range of the opener, and the correct button has been pressed.

- Take any pre-coded transmitter. Press the button for the function to be duplicated and release.
- Using a small needle, press and hold firmly for two seconds through the Coding Hole (**Fig. 37**).
- WITHIN 10 SECONDS take the additional transmitter you wish to code. Decide which button that you want to activate the function to be duplicated (e.g. activate the door, or turn on the courtesy light)
- Hold the new transmitter's button for two seconds, pause for two seconds, hold again for two seconds and then release.
- Wait for 10 seconds and then press the new transmitter's button to test.

fig 38



## Step 18.1 - Deleting a Stored Transmitter Code

- Select the transmitter you want to delete.
- Press and hold the DOOR CODE BUTTON (**Fig. 38**).
- Press the transmitter button you would like to delete for two seconds, pause for two seconds, press again for two seconds and then release.
- Release the DOOR CODE BUTTON. The code should now be deleted. Confirm this by pressing the transmitter button - the function (e.g. door opening) should not respond.

## Step 18.2 - Deleting All Transmitter Codes

- Turn off power to the opener.
- While switched off, press and hold the DOOR CODE BUTTON (**Fig. 38**). Turn on power to the opener while holding this button.
- The OPEN LIMIT, CLOSE LIMIT and DOOR STATUS LEDs will illuminate for about five seconds. These LED's will turn off and the CODING LED will illuminate.
- Release the DOOR CODE BUTTON. All stored codes will now be deleted. Confirm this by pressing buttons on any previously coded transmitters - the opener should not respond.







# Accessories

## PE Beam & Auto-Close



**WARNING!** Photo electric beams must be installed if the closing force at the bottom edge of the door exceeds 400N (40kg) force.

### Step 19 - Fitting the PE Beams (optional)

- Affix the PE Beams in a strategic location within the doorway. We recommend 150mm above the floor level and as close as possible to the door opening, inside the garage.
- Connect the wires from the PE Beam's wiring harness to the terminal block (**Fig. 39**). The wiring diagram is for Model PE-2 (Order Code 90214).

Make sure to align the beams correctly. Follow the manual supplied with the PE Beams.



**WARNING:** When using Auto-Close Mode and PE Beams, the doorway must be clear of all obstructions and persons at all times. The location of the beams 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.

### Step 20 - Setting Up Auto-Close Mode



**IMPORTANT NOTICE:** It is compulsory to have PE Beams installed when using Auto-Close mode.

Auto-Close mode is a function that automatically closes the door a preset time after the PE Beams recognise that a vehicle has left the garage.

The Auto-Close timer only starts after the PE Beam's path is broken the Auto-Close timer has been set. If the PE Beam's path is not broken the door will remain open until the path is broken. If the opener incurs a physical obstruction (i.e. not from the PE Beams) while closing the door, it will re-open and not Auto-Close until the PE Beam's path is broken again.

#### Step 20.1 - Setting Auto-Close Time

- Hold down the AUTO CLOSE TIME button (**Fig. 40**).
- While holding in the AUTO CLOSE TIME button, press the PLUS (+) button, - each press will add one second to the Auto-Close delay.
- To decrease the delay time follow Step 20.1(a) and press the MINUS (-) button - each press will deduct one second from the Auto-Close delay.
- Press the OPERATE button or transmitter to open the door. When the door is fully opened the OPEN LIMIT LED will flash to indicate that Auto-Close mode is operational.
- Break the PE Beam's path momentarily to initialise Auto-Close. When the door reaches the fully opened position, the door will pause for the set Auto-Close time and then close.

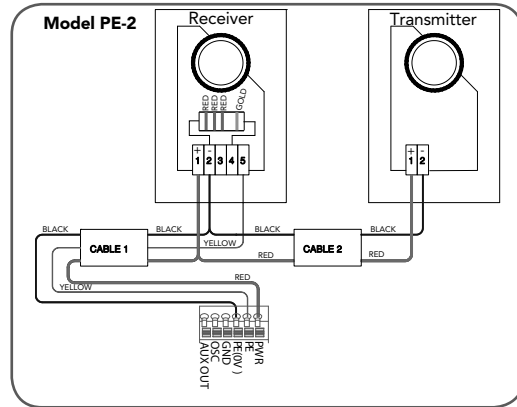


fig 39

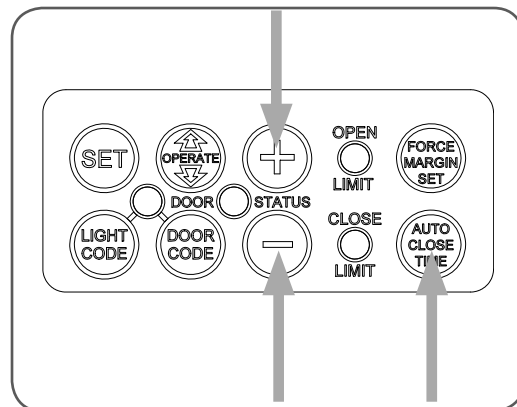


fig 40





# Accessories

Fig 41

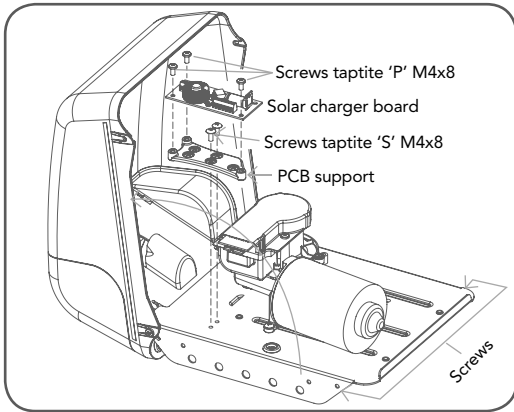


Fig 42

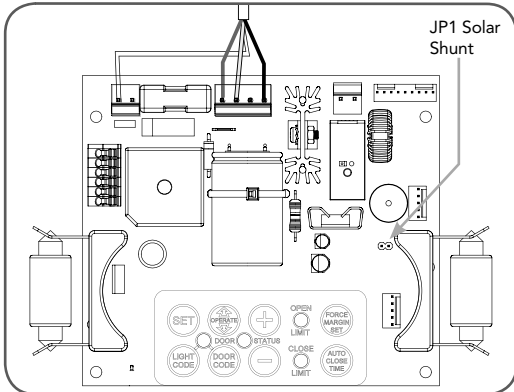


Fig 43

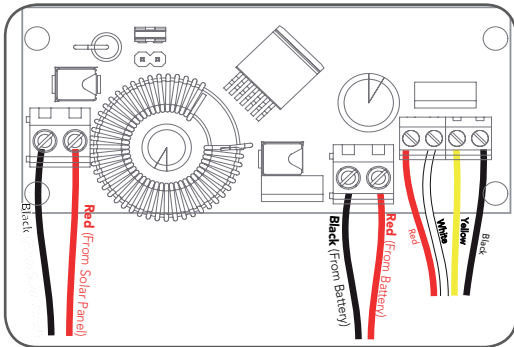
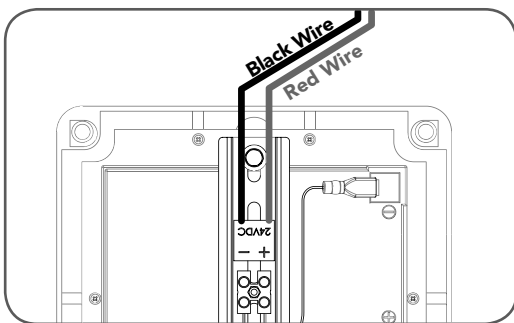


Fig 44



## SmartSolar™ Installation



**WARNING:** Do not connect batteries until Step 21.3

### Step 21.1 - Mount the Charger Board

- Unplug the drive unit from mains power.
- Remove the screws, swing open the main cover. Then remove the transformer, EMC board (if fitted) and mains power cable.
- Mount the PCB support with two screws. Secure the Solar charger board on to the PCB support with 3 screws. (Fig. 41).
- Plug the Charger Board's three wire harness (red/yellow/black) onto the control board's "SBY-3" connector (Fig. 42).
- Plug the Charger Board's white one wire harness onto the control board's "24vac in" connector (Fig. 42).
- Plug the black solar shunt onto both pins of the control board's "JP1 Solar" connector (Fig. 42)



**IMPORTANT WARNING:** Do not connect battery or solar panel polarity incorrectly - this will result in serious damage to components.

### Step 21.2 - Connect the Solar Panel

- Mount the solar panel as outlined in the SmartSolar™ Installation Manual.
- Feed the Solar Panel's cable through black grommet located on the top of the plastic drive unit cover.
- Connect the **red wire** to the Charger Board's "SOLAR+" connector, and the **black wire** to the "SOLAR-" connector (Fig. 43).



**WARNING:** During Step 21.3 the opener will become active.

### Step 21.3 - Mount & Connect the Battery

- Mount the Battery Box close to the opener.
- Feed the 2-core 18awg gauge cable (supplied) through the Battery Box's grommet.
- Connect the **red wire** to the Battery Box's "+" terminal, and the **black wire** to the "-" terminal (Fig. 44).
- Feed the other end of the battery cable through the drive unit's black grommet.
- Connect the **red wire** to the Charger Board's "BAT+" connector, and the **black wire** to the "BAT-" connector (Fig. 43).
- Refit the light diffuser and main cover.

### Step 21.4 - Re-setup and Test the Opener

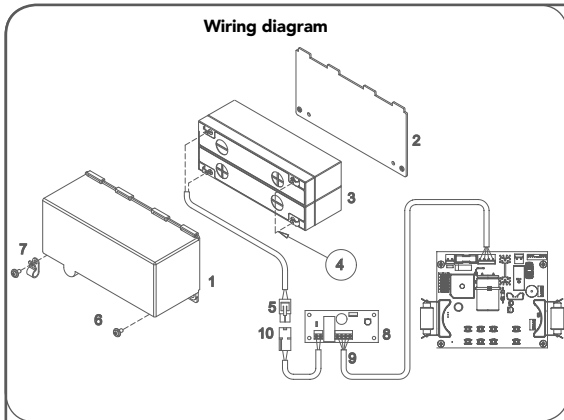
- Setup travel limits and code transmitters as per the GDO-9 instruction manual.
- Press either the OPERATE button or use a transmitter to operate the opener.



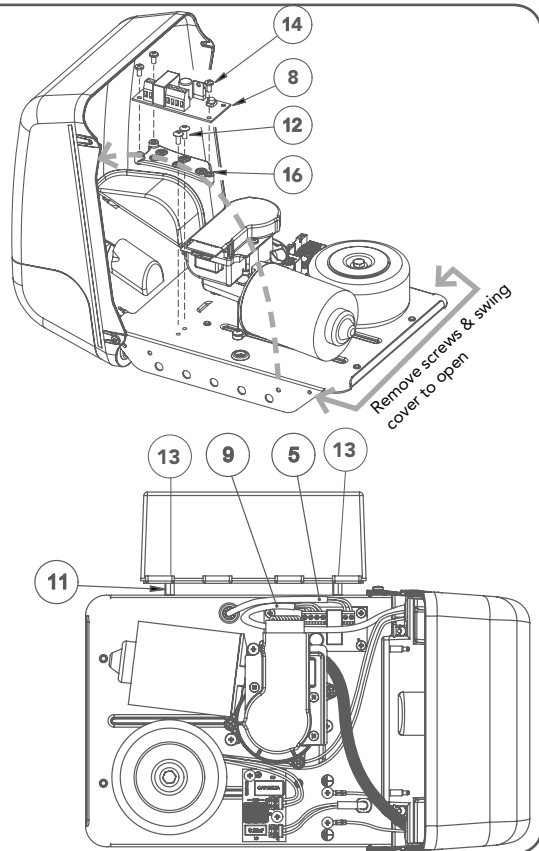


# Accessories

fig 45



Item	Description	Qty	Order Code
1.	Batteries cover	1	16460
2.	Batteries support	1	16480
3.	Battery 12v sec 12-2.2Agm type	2	15470
4.	Battery coupling wire esv 24	1	12005
5.	Battery harness	1	15670
6.	Pan head screw w/washer m4x8	2	10320
7.	Cable clamp acc-1.5(3/16")	1	11750
8.	SBY-3 version 1.00	1	00852
9.	SBY-3 esv24 charger harness	1	14115
10.	SBY-2 battery harness	1	15560
<b>Battery pack # 1</b>			
11.	Hex stand off m4	2	11190
12.	Thru separation hd screw	6	10503
13.	Pan head screw w/washer m4x8	4	10320
14.	Taptite screw 'p' m4x8	3	10580
15.	Bracket ra 31x20x31	2	02508
16.	PCB support 76x27	1	16421
17.	Cable clamp acc-2.5(5/16")	1	11760



## Battery Backup Installation

### Step 22.1 - Connect the Battery Back Up Kit

- Disconnect power to the opener.
- Remove screws and swing open the cover (**Fig 45**).
- Mount the PCB support with two screws item # 12. Secure the SBY-3 Charger Board onto the PCB support with three (3) screws item #14.
- Feed the 2-wire battery harness item # 5 through the grommet on the base plate and connect to SBY-3.
- Feed charger harness from SBY-3 to the control board and plug into the 4 pin connector marked "SBY-3" onto the control board.
- Mount Battery Backup and secure with item 6 and 11.



**WARNING:** After Step 22.1(g) the opener may become active (even when power is off). This is a result of a residual charge in the batteries.

- Connect battery harnesses item 5 and 10 together (**Fig 45**).
- Reconnect power.

### Step 22.2 - Testing Battery Back Up

- Press either the OPERATE button or transmitter to test the opener.
- Whilst door is in motion, disconnect mains power the door should continue to operate as normal.

**NOTE:** Wait for the door to complete its travel.

- Press the OPERATE button or transmitter to activate the door.
- Whilst door is in motion re-connect power. The door should complete the cycle as normal.

### Step 22.3 - Troubleshooting

If door stops or moves very slowly under battery power, the batteries may be weak or have no charge. Connect mains power and allow the batteries to charge. This may take 24 - 48 hours to reach maximum charge capacity.





# Final Setup

fig 46

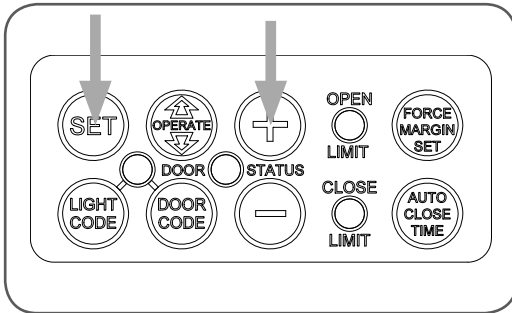


fig 47

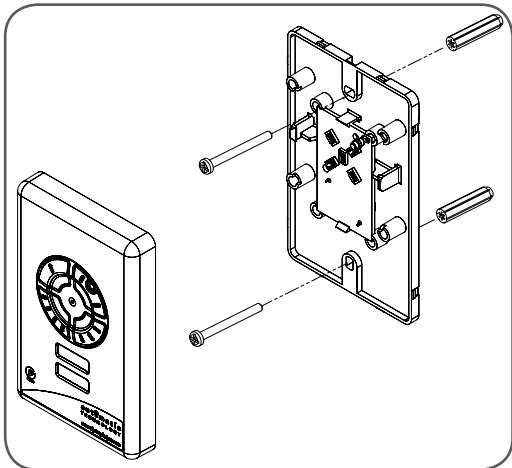
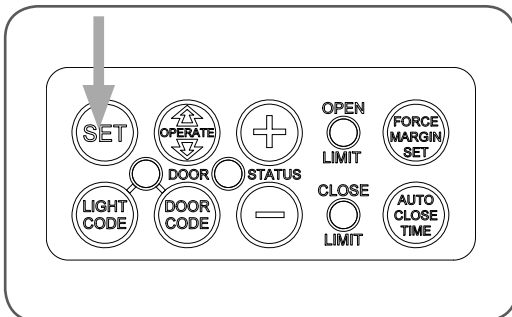


fig 48



## Step 23 - Setting of Courtesy Light Time

The preset courtesy light time is three minutes. This time can only be changed by "PG3" programmer.

## Step 24 - Setting the Pet Mode position

The default Pet Mode height can be changed as follows:

- Make sure the door is closed, then press and hold the OPEN button for six (6) seconds (**Fig. 46**), until you hear three beeps and the OPEN and CLOSE LEDs flash rapidly.
- Press the OPEN button to move the door to the desired Pet Mode open position.
- Press the SET button to record the new position.

When activated, Pet Mode drives the door to the preset position from either above or below. Pet Mode's active status is indicated by both the OPEN and CLOSE LIMIT LEDs being illuminated. If a Pet Mode button is pressed while the door is moving the door will stop. If a Pet Mode button is pressed when the door is in the Pet Mode position, then the door will close.

## Step 25 - Installing the Wall Mounted Transmitter (Optional)

- Remove the faceplate from the transmitter.
- Affix the baseplate in a convenient wall location that is out of reach of children and convenient to the customer (**Fig 47**). Make sure the door is visible from this location.
- Replace the faceplate.
- To code the transmitter, see Steps 18.1 through 18.5 on page 21 and 22.

## Step 26 - Reset all Factory Defaults

- Turn power to opener off.
- Press and hold the SET Button (**Fig 48**).
- Turn power on while holding the SET button. Continue to hold until all the LED's are off.
- This will not erase transmitter codes stored in memory.



# Default Settings & Specifications

## Factory default settings

	Default	Step	Maximum
Courtesy light time	3 Mins.		4 Mins.
Obstruction force margin	2	1	12
Auto close time	0 Secs	1 Sec.	255 Secs.

## Technical specifications

	Dynamo™	Enduro™
Power supply	230V - 240V AC 50Hz	230V - 240V AC 50Hz
Transformer rating	24V DC	24V DC
Standby power	2.2 Watts	2.2 Watts
Motor power	100 Watts	100 Watts
Motor type	24V DC permanent magnet	24V DC permanent magnet
Shuttle travel distance in the C-Rail	2.8m approx (standard)	2.8m approx (standard)
Maximum shuttle travel distance in the C-Rail	5m (with extended C-Rail)	5m (with extended C-Rail)
Maximum door opening: Width x Height Weight:	16.5m <sup>2</sup> 100 kg	18m <sup>2</sup> 100 kg
Minimum Clearance <i>(Bottom of C-Rail to highest point of door travel)</i>	25mm	25mm
Short term peak force	800N (80kg)	1000N (100 kg)
Lift force	500N (50kg)	500N (50kg)
Nominal force	150N (15kg)	150N (15kg)
Receiver code storage capacity	14 x 4 button transmitter codes	14 x 4 button transmitter codes
Transmitter frequency	433.47, 433.92, 434.37MHz	433.47, 433.92, 434.37MHz
Coding type	Multi-frequency Code hopping	Multi-frequency Code hopping
Number of code combinations	Over 4.29 billion random codes	Over 4.29 billion random codes
Code generation	Non-linear encryption algorithm	Non-linear encryption algorithm
Transmitter battery	CR 2032, 3 Volts	CR 2032, 3 Volts
Courtesy light	Festoon style 24 volts 15 watts lamp	24 volts LED Module
Controller fuse	10A slow blow	10A slow blow





## Door Status Indicators

Door Opener State	OPEN LED (Green)	CLOSE LED (Red)	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 as door moves
Opener overloaded	Alternating flashes	Alternating flashes		
Door in open position with Auto-Close mode selected	One second flashes			
Pet Mode Engaged	On	On		
Mains power interrupted	Rapid flashes			
Service Due			On	3 Beeps At The Start Of Each Cycle

## Button Functions

Buttons	Function
OPERATE	Opens/Stops/Closes the door
DOOR CODE	Codes a transmitter button for operate, vacation, auxiliary and pedestrian functions
LIGHT CODE	Codes a transmitter button for light 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	Resets the factory default force margin settings
AUTO CLOSE TIME (then) PLUS (+)	Increases the auto close delay time
AUTO CLOSE TIME (then) MINUS (-)	Decreases the auto close delay time
AUTO CLOSE TIME (then) SET	Resets the factory default auto close delay time
MINUS (-) for 6 secs.	Clears the door limits set positions. Limits then need to be reset
PLUS (+) for 6 secs.	Enters pet (pedestrian) position mode
SET (then power on) & hold until all LED's are off	Deletes control parameters excluding transmitter storage memory
DOOR CODE (then power on) & hold until all LED's are off	Deletes all transmitter storage memory
SET & DOOR CODE (the power on) and hold until all LED's are off	Deletes all control parameters and transmitter storage memory.
SET	Re-initialises the Opener to re-calculate force margin





# Troubleshooting Guide

Symptom	Possible cause	Remedy
Door will not operate	Mains power not switched on	Switch on mains power
	Door is obstructed	Remove obstruction
	Door is locked or motor jammed	Unlock door or remove jam
	Door tracks/hardware damaged	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	Increase force margin setting. See Step 16 on page 21
	Possible obstruction in the doorway	Remove obstruction
Gate operates from drive unit (operate) button but not from transmitter.* *See note	Transmitter code not stored in memory	Code transmitter into opener's memory. Refer Step 17.1 on page 22
	Flat battery	Replace battery
Door will not close fully	Door limits position need to be reset	Reset limits positions. Refer Step 14.3 on page 19
Door will not open fully	Door limits position need to be reset	Reset limits positions. Refer Step 14.3 on page 19
Courtesy light not working	Faulty light	Replace globe or LED module
Auto close not working	PE Beam or wiring faulty	Repair PE Beam or replace wiring
	PE Beam not aligned correctly	Re-align optics. See PE Beam's instructions
	PE Beam is obstructed	Remove obstruction from the path of PE Beam
	Door obstructed when closing	Remove obstruction
	Auto-close time not set	See Step 20 on page 25

## 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 Automatic Technology dealer for an alternative frequency replacement kit. As this is not a warrantable situation but an environmental issue. Charges may apply for the changeover.

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.

**PHOTO ELECTRIC BEAMS** must be installed if the closing force at the bottom edge of the door exceeds 400N (40 kg) force





# Maintenance

## Maintenance

Whilst your opener does not require any periodic maintenance, the door that it is fitted to, does. Your garage door is a large, heavy, moving object and should be tested regularly to ensure it is in good condition. A poorly maintained door could cause fatal or serious injuries or serious damage to property.

To ensure a long and trouble free life for your opener, the following is recommended:

### Monthly

- Disengage the opener and manually operate the door: The door must be smooth to operate by hand. An operating force on the bottom rail should not exceed 150N (15kg) force.
- Each month, check that the opener reverses when the door contacts a 40mm high object placed on the floor (AS3350).

**NOTE:** If the door does not operate smoothly, call your installer.

## Yearly

Automatic Technology suggests you contact your installer to perform an annual door service.



**CAUTION:** Frequently examine door, particularly 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. (AS3350)



Adjustments should only be carried out by experienced persons, as this function can be dangerous if not performed under strict safety procedures.



**WARNING!** Failure to maintain your garage door may void the warranty on your garage door opener.

## Service Record

Record any maintenance in the following table to assist in any warranty service.

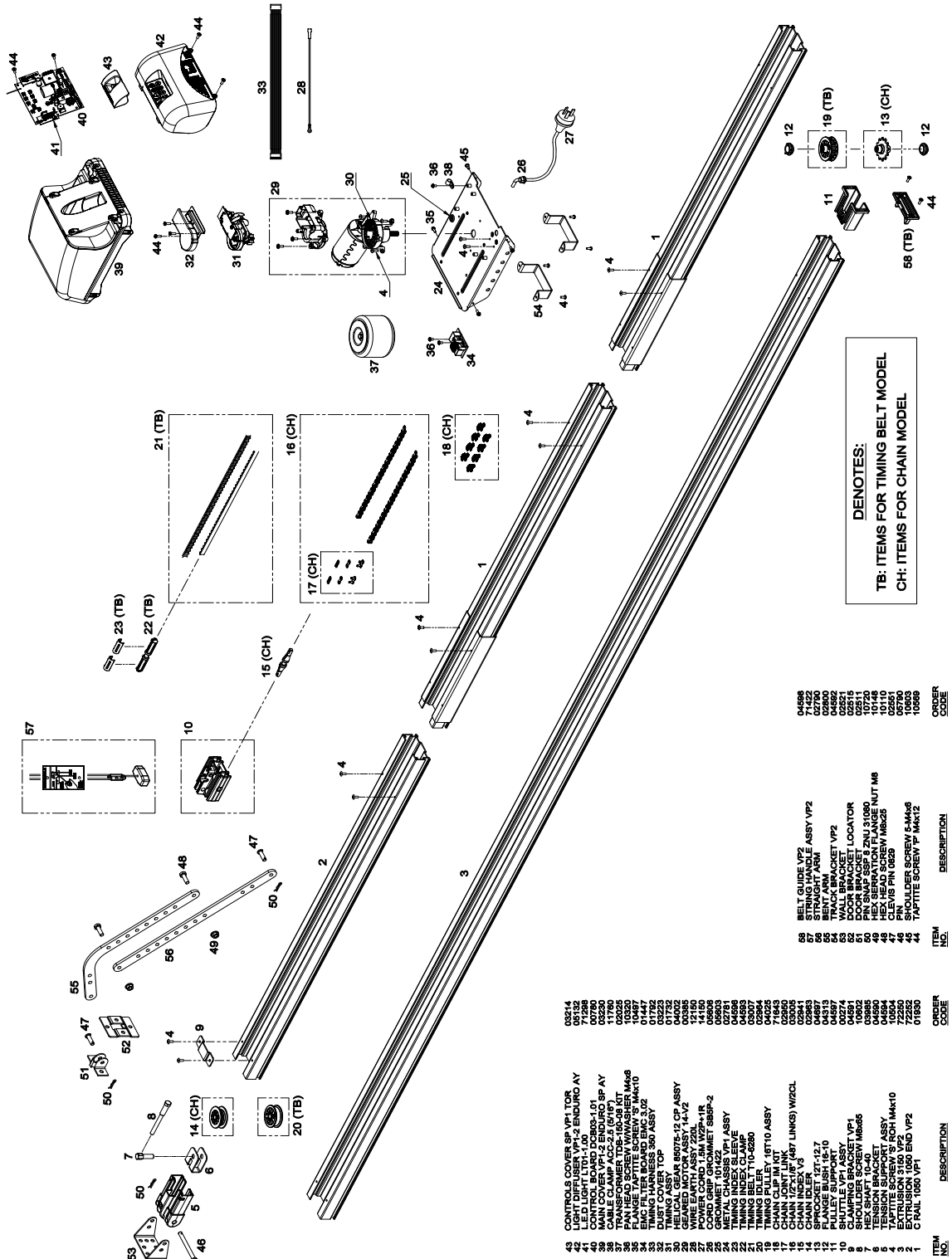
Date	Service by	Signature	Invoice No.	Amount







# Enduro™ Parts Listing



**DENOTES:**  
TB: ITEMS FOR TIMING BELT MODEL  
CH: ITEMS FOR CHAIN MODEL

ITEM NO.	DESCRIPTION	ITEM NO.	DESCRIPTION	ORDER CODE
03214	CONTROLS COVER SP VP1 TOR	04698	BELT GUIDE VP2	04698
05132	LIGHT DIFFUSER VP1-2 ENDURO AY	02750	STRAIGHT ARM	02750
06158	GEAR KIT	02600	BENT ARM	02600
07080	CONTROL BOARD DC8083-01	02824	WALL BRACKET	02824
08230	MAIN COVER VP1,2 ENDURO SP AY	02515	DOOR BRACKET LOCATOR	02515
09545	CORD GRIP (FOR MOTOR KIT)	02824	DOOR BRACKET	02824
09615	TRANSFORMER TDR-100-08 KIT	10720	PIN SNAP-SEF 8 ZHU 31090	10720
02026	WIRE HARNESS 390 AY	10110	HEX HEAD SCREW M3X2	10110
02027	PAN HEAD SCREW W/ WASHER M4X6	02561	CLEVIS PIN 0829	02561
10520	EMC FILTER BOARD EMC 3.02	10620	SHOULDER SCREW 6-AMX8	10620
01447	WIRE HARNESS 390 AY	10660	TAPITITE SCREW P- M4X12	10660
01725	WIRE HARNESS 390 AY			
01732	WIRE HARNESS 390 AY			
05082	GEARED MOTOR ASSY 1.4A-2			
12160	WIRE EARTH ASSY 220L			
02176	CORD GRIP (FOR MOTOR KIT)			
05608	CORD GRIP ORCONNKT SRSP-2			
02003	ORCONNKT SRSP-2			
02004	ORCONNKT SRSP-1			
04698	TIMING INDEXT SLEEVE			
03602	TIMING BELT 110-9260			
03607	TIMING IDLER			
02984	TIMING BELT 148T10 ASSY			
02985	TIMING BELT 148T10 ASSY			
02986	CHAIN JOINT LINK			
02987	CHAIN CLIP IM KIT			
02988	CHAIN CLIP WZCL			
02989	CHAIN INDEXT V3			
02991	SPOCKET 12T-127			
04687	FLANGE BUSH 16-10			
04319	SHUTTLE VPI ASSY			
00274	SHUTTLE VPI ASSY			
04871	CLAMPING BRACKET VPI			
04872	HEX SHAFT 10-40			
03866	TENSION BRACKET ASSY			
04894	TAPITITE SCREW 5-RH M4X10			
10864	EXTRUSION 1060 END VP2			
72832	C RAIL 1060 VPI			
01890				

fig 49



# Dynamo™ Parts Listing

ITEM NO.	DESCRIPTION	ORDER CODE
34	SHOULDER SCREW 6.5Mx8	10603
33	FLANGE TAPINUT SCREW 'S' M4x10	10497
32	CONSOLE TAPINUT SCREW 'S' M4x10	05133
31	LIGHT DIFFUSER VP1-3 DYNAMO AY	05133
30	GLOBE 24V/15W 15x44	05440
29	CONTROL BOARD DCB03-1.01	00806
28	MAIN COVER VP1-3 DYNAMO SP AY	03232
27	TRANSFORMER TDR-100-432 KIT	02022
26	TRANSFORMER TDR-100-432 KIT	02022
25	THRUS SERRATION HD SCREW 'S' M4x10	10504
24	EMC FILTER BOARD EMC 3.02	01447
23	TIMING HARNESS 350 ASSY	01792
22	TAPINUT SCREW 'P' M4x12	10569
21	TIMING GEARBOX CAP	04270
19	TIMING ASSY	01732
18	HELIICAL GEAR 58-1M CP	04053
17	GEARED MOTOR ASSY 18V1	00364
16	TIMING GEAR 18V1	00364
15	WIRING GMA-18V1	14280
14	POWER CORD 1.5M WZP-1R	14150
13	CORR GRIP GROMMET SBRP-2	05606
12	METAL CHASSIS VP1-3 ASSY	02783
11	CHAIN CLIP 1M KIT	71843
10	CHAIN 12M/1187 (687 LINKS) WZCL	03005
9	CHAIN INDEX V3	03005
8	SPROCKET SUPPORT TS01	02841
7	SPROCKET 12T-12.7 TS01	04898
6	FRUSION CHAIN ASSY TS01	04752
5	FRUSION CHAIN ASSY TS01	04752
4	C RAIL SLEEVE 80.6x32.2x400 TS01	04659
3	C RAIL TRACK 77.8x31.8x790 TS01	10110
2	C RAIL TRACK 77.8x31.8x3160 TS01	04653
1		

ITEM NO.	DESCRIPTION	ORDER CODE
45	STRAIGHT ARM	02790
44	BENT ARM	02800
43	WALL BRACKET VP2	02552
42	DOOR BRACKET TS01	02511
41	DOOR BRACKET LOCATOR	10720
39	PIN SWAP SPRING ZNU 81080	10170
38	HEX HEAD SCREW M8x25 NUT M8	10110
36	HEX HEAD SCREW M8x25	02551
35	CLEVIS PIN 0829	05790

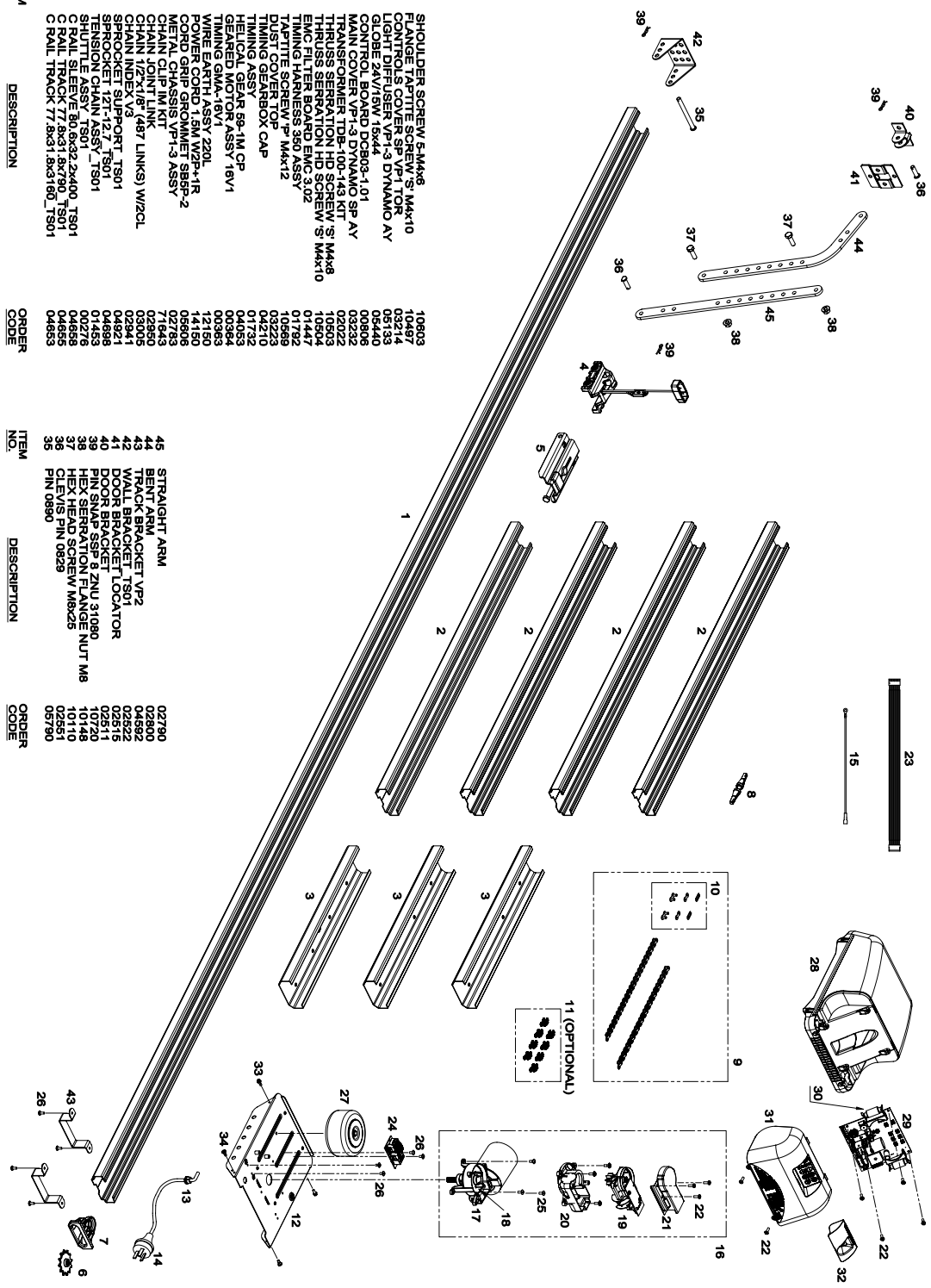


fig 50



# Warranty and Exclusion of Liability

1. This warranty is an addition to any non-excludable conditions or warranties that are implied into this contract by relevant statute, including the Trade Practices Act 1974 (Cwth).
2. Subject to all of the matters set out below, Automatic Technology Australia Pty Ltd ("ATA") warrants:
  - (a) overhead door opener drive units for twenty four (24) months or 5000 cycles, whichever occurs first; and
  - (b) all accessories for twelve (12) months, from the date of purchase (specified in the sales docket receipt) as free of any defects in material and workmanship.
3. This warranty applies only where the purchaser:
  - (a) immediately notifies ATA or the retailer of the alleged defect;
  - (b) returns the product to the retailer; and
  - (c) presents the relevant sales docket and this warranty document to the retailer to confirm the date of purchase.
4. Except for this warranty, ATA gives no warranties of any kind whatsoever (whether express or implied), in relation to the product, and all warranties of whatsoever kind relating to the product are, to the extent permissible by statute, hereby excluded.
5. To the extent permissible by statute, ATA disclaims any liability of whatsoever nature in respect of any claim or demand for loss or damage which arises out of:
  - (a) accidental damage to or normal wear and tear to the product or to the product's components;
  - (b) any cost relating to damage resulting from wear and tear;
  - (c) blown fuses, loss or damage caused by electrical surges, power surges or power spikes;
  - (d) loss or damage due to theft, fire, flood, rain, water, lightning, storms or any other acts of God;
  - (e) maximum continuous operating time exceeding one (1) minute in ten (10);
  - (f) maximum operating force exceeding \*15kg (150N) when moving the door manually to the open or closed position;
  - (g) door surface area and/or weight exceeding 16.5m<sup>2</sup> and 100kg respectively;
  - (h) door not in safe and correct working order and condition;
  - (i) evidence of unauthorised repairs;
  - (j) any cost relating to damage caused by misuse, negligence or failure to maintain the equipment in a proper working order as per clauses (d) through (h);
  - (k) installation, adjustment or use which is not in accordance with the instructions set out in installation instruction manual
  - (l) attempted or complete modification or repairs to the product carried out by a person who is not authorised or has not been trained by ATA to carry out such modification or repairs;
  - (m) faulty or unsuitable wiring of structure to which the product is fixed or connected;
  - (n) radio (including citizen band transmission) or any electrical interference;
  - (o) damage caused by insects;
  - (p) loss or damage to any property whatsoever or any loss or expense whatsoever resulting or arising there from or any consequential loss;
  - (q) any cost or expense arising due to manufacturer recall of any product;
  - (r) any cost or expense due to negligence of the approved service provider;
  - (s) installation of a residential garage door opener in a commercial or industrial situation or a non-single residential dwelling.
6. ATA's liability under this warranty is limited, at ATA's absolute option, to replacing or repairing the product which ATA, in its unfettered opinion, considers to be defective either in material and/or workmanship or to credit the dealer with the price at which the product was purchased by the dealer.
7. This warranty does not extend to cover labour for installation.
8. This warranty is limited to Return-to-Base (RTB) repair and does not cover labour for on-site attendance.
9. This warranty is void if the Product is not returned to the manufacturer in original or suitably secure packaging.
10. This warranty is only applicable for repairs to the product carried out within Australia.
11. This warranty does not cover consumable items including globes, batteries and fuses.
12. This warranty is not transferable.
13. Where the Product is retailed by any person other than ATA, except for the warranty set out above, such person has no authority from ATA to give any warranty or guarantee on ATA's behalf in addition to the warranty set out above.

## NOTES:

1. One (1) cycle = one (1) open and one (1) close action of the door or gate.
2. This warranty is to be read in conjunction with the owner's copy of the installation instruction manual.
- 3 \*The door should be balanced in such a way that the user manually is able to open or close the door without using force not greater than 150N (15kg ) although a greater force may be required for the start of the movement.





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TECHNOLOGY

smart | simple | secure

an alesco company

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