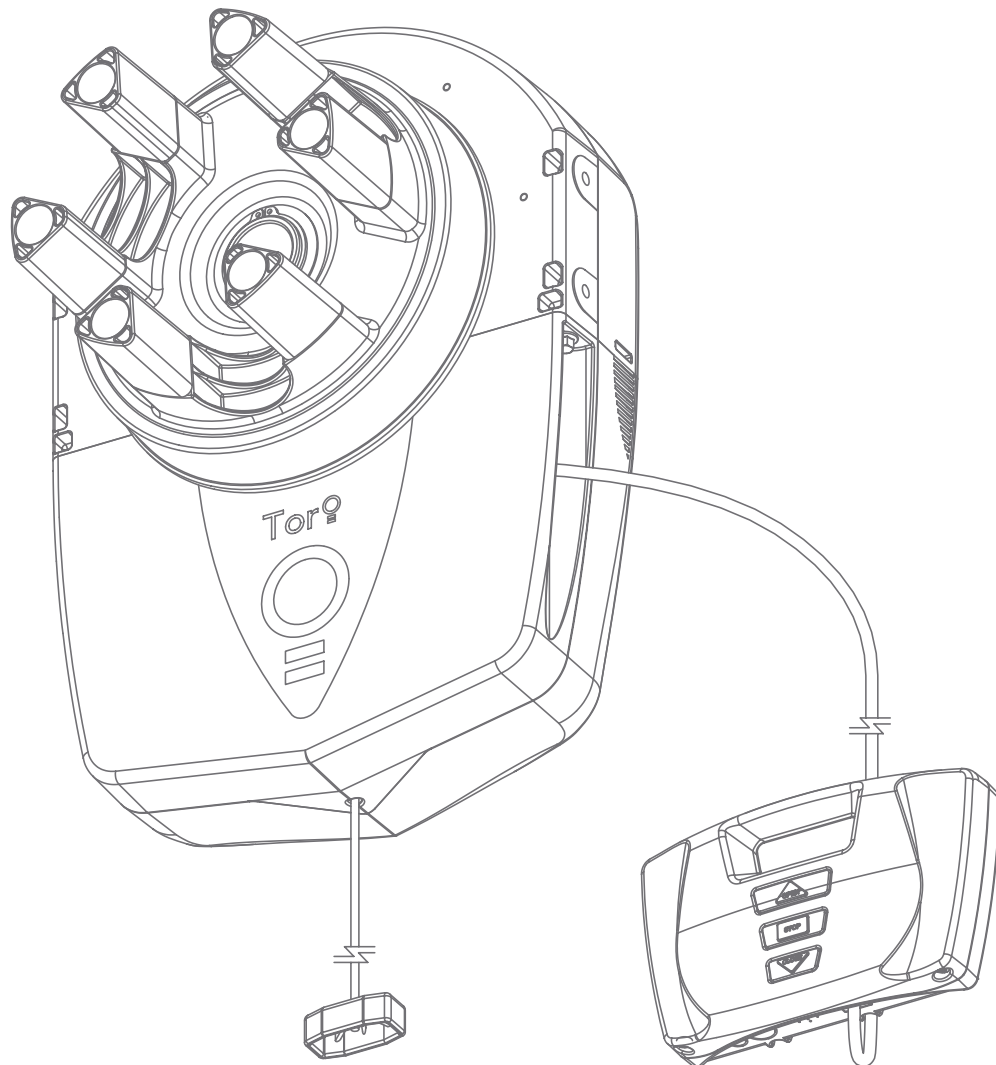




GDO-10V3L2 Toro™

Roll Up Garage Door Opener



Featuring **TrioCode™ 128** Technology

automatic
TECHNOLOGY



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.

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-10V3L2 Toro™

Roll Up Garage Door Opener

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1. Important Safety Instructions

The safety alert symbols below indicate a personal safety or property damage instruction exists. **READ THESE INSTRUCTIONS CAREFULLY.**

This automatic garage door opener is designed and tested to offer safe service provided it is installed and operated in strict accordance with the following safety rules. Failure to comply with the following instructions may result in death, serious personal injury or property damage.



WARNING!

- The door may operate unexpectedly, therefore do not allow anything to stay in the path of the door.
- When operating the manual release while the door is open, the door may fall rapidly due to weak or broken springs, or due to being improperly balanced.
- The drive must not be used with a door incorporating a wicket door, unless the drive cannot be operated with the wicket door open.
- The drive is intended to be installed at least 2.5m above the floor.
- Do not disengage the opener to manual operation with children/ persons or any objects including motor vehicles within the doorway.
- If the door is closing and is unable to re-open when obstructed, discontinue use. Do not use a door with faulty obstruction sensing
- 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.



ELECTROCUTION!

- Place opener in protected area so that it does not get wet.
- Do not spray with water .
- **Disconnect the power cord** from mains power before making any repairs or removing covers. Only **experienced** service personnel should remove covers from the opener.
- If the power supply cord is damaged, it **must** be replaced by an Automatic Technology service agent or suitably qualified person.
- Connect the opener to a properly **earthed** general purpose 240V mains power outlet installed by a qualified electrical contractor.

1. Important Safety Instructions



CAUTION:

Emergency access

Entrapment under operating door

Installation

Security

Entanglement in or laceration from moving door

- 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.
- **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 allow children to play with door controls or transmitters.
- 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**.
- Regularly check to make sure that the **Safety Obstruction Force** is working correctly, and is **tested** and set as per **Section 12 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.
- Ensure the garage door is in good working order by undertaking regular servicing.
- Install the optional wall transmitter in a location where the garage door is visible, but out of the reach of children at a height of at least 1.5m.
- For **ADDITIONAL SAFETY** protection we **STRONGLY** recommend the fitting of a Safety Beam. In most countries Safety Beams are mandatory on all garage doors fitted with automatic openers.
- Safety beams must be installed if the closing force at the bottom edge of the door exceeds 400N (40kg)
- 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.
- 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.
- **Remove or disengage** all garage door locks and mechanisms prior to installation of the opener.
- Ensure no parts of the door or installation extend over public paths or roads.
- Make sure that the door is fully closed before leaving the driveway.
- Keep hands and loose clothing clear of door and guides at all times
- Keep clear of door during operation as severe lacerations can occur on sharp edges of door..

2. Features

Thank you for purchasing the Automatic Technology Toro™ Automatic Garage Door Opener. Designed by our renowned engineers to suit roll up doors, the Toro™ will provide years of smart, simple & secure convenience to your home.

Operation

To open or close the door simply press the open or close button on the wall control unit, a button on a coded TrioCode™ hand held transmitter, optional 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 or by pressing the stop button on the wall control unit.

TrioCode™ 128 Technology

Only transmitters with the TrioCode™ 128 Technology can operate with the latest Openers, reducing the chance of interference from other radio frequency sources. Every time a TrioCode™ 128 transmitter is used a new security code is randomly generated from over 100 billion possibilities. This greatly enhances the security of the system and makes "code grabbing" a thing of the past. TrioCode™ 128 transmitters have the ability to code into earlier model openers.

M-ALPS (Magnetic Automatic Limits Positioning System)

M-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 limit 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 (if fitted) comes on automatically for one minute whenever the door is activated. The light can also be operated independently of the door by coding a dedicated button on a transmitter.

SmartSolar™ Compatibility (Optional)

The opener can be fitted with a SmartSolar™ kit (Part Number 60142) for operation where mains power access is not available.

NOTE: If the door is the only entrance to the garage, a keyed cable release should be fitted external 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 **Safety Beam** if this mode is selected, otherwise the door may cause personal injury or damage to property.

Safety Beams (S.B)

The opener has three inputs to connect one, two or three Safety Beams for extra safety and use of the Auto-Close mode.

Safety Beam Failure Emergency Close (SBFEC)

When a safety beam prevents movement due to any reason other than a 'real' obstruction, the user can secure their property by pressing and holding a button on the remote control or OSC on the console.

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.

Service Indicator

The opener has a built in service counter. When this counter expires the opener will beep and display "SERVICE DUE" to indicate a service is required.

3. Controller Input And Outputs

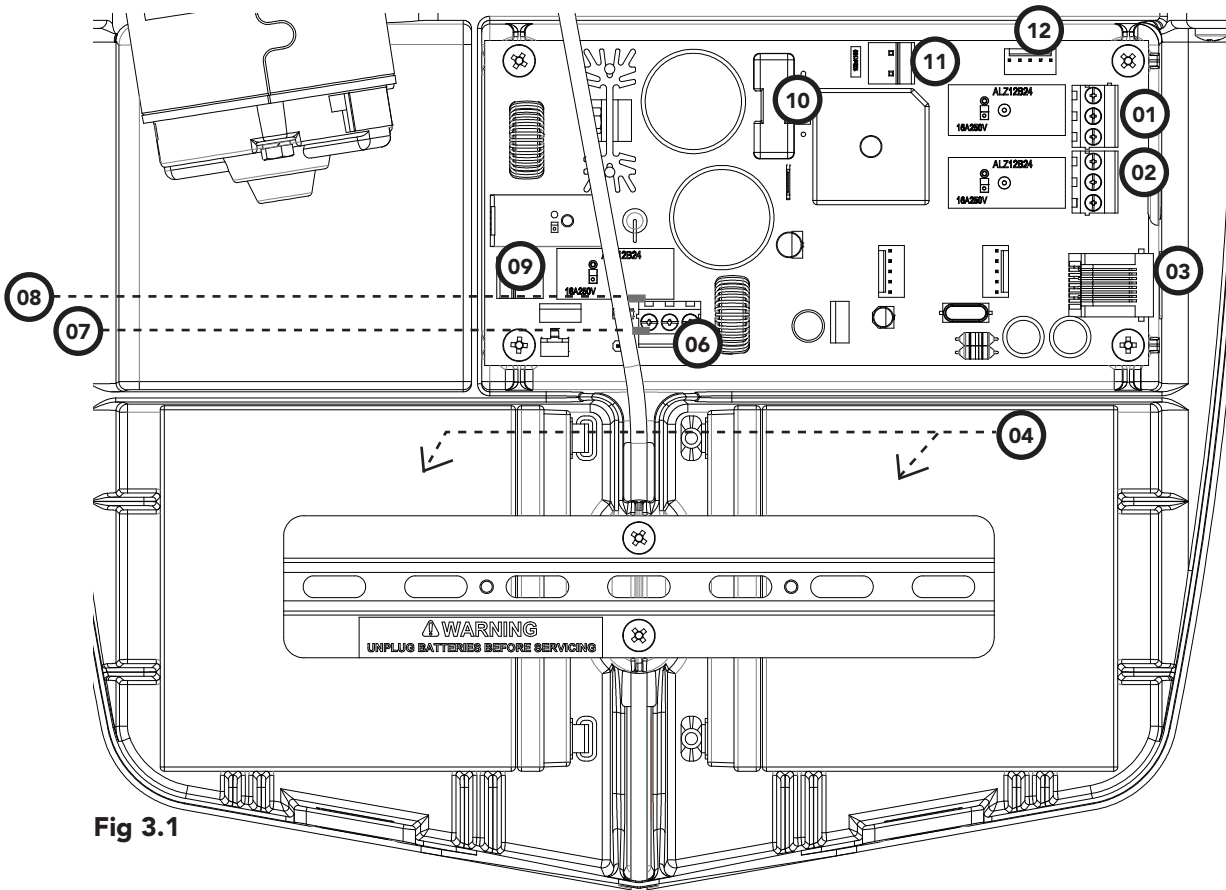


Fig 3.1

- | | | |
|--|--|--|
| <ul style="list-style-type: none"> 01 Light Relay Output N/O, Com, N/C Contact 02 Lock Relay Output N/O, Com, N/C Contact 03 Serial Interface Connector 04 12 volts 6 Amp - Hr Batteries 05 Engage/Disengagement Handle 06 Standby Battery Charger/Solar Connector 07 Solar Shunt | | <ul style="list-style-type: none"> 08 Standby Battery Shunt 09 Motor Connector 10 10 Amps Slow Blow Fuse 11 24 Volts Ac In Connector 12 Position Sensor Connector |
|--|--|--|



4. Operating Controls

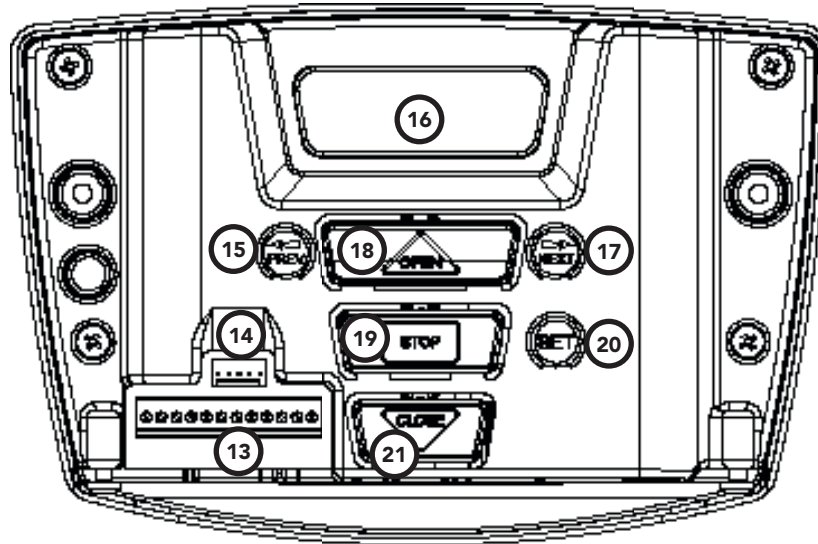


Fig 4.1

13 Terminal Block (From Left To Right)

AUX OUT Receiver's Auxiliary Output

V+ Accessory Supply

SB3 Third Safety Beam Input

SB2 Second Safety Beam Input

SB1 First Safety Beam Input

0V Common For Safety Beams

0V Common Terminal For Control Inputs

FIRE N/O , N/C Input Terminal

GPI N/O Input Terminal

OPN N/O , N/C Input Terminal

STP N/O , N/C Input Terminal

CLS N/O Input Terminal

14 Programmer PG-3 Input

15 Console Previous Button

16 Liquid Crystal Display

17 Console Next Button

18 Console Open Button

19 Console Stop Button

20 Console Set Button

21 Console Close Button



5. Set Up Requirements

5.1 Kit Contents

ITEM	DESCRIPTION	QTY	ORDER CODE
1	GDO-10V3L2 POWER DRIVE UNIT	1	60233
2	COMMUNICATION CABLE	1	61909
3	WALL CONTROL UNIT L2	1	61565
4	TRIO-CODE 4B PTX-5 TRANSMITTER	2	61161
5	LOCKING BAR COVER	2	71040
6	FORK EXTENSION	6	61486
ACCESSORY PACK (61480)			
7	CLIP CABLE CLIPSAL NO 564/1	5	72845
8	SCREW-EYE	2	10595
9	SELF TAPPING SCREW 6 X 25 (1")	2	10672
10	PLASTIC WALL PLUG 6.9 X 25 (1")	4	11152

5.2 Choosing your Set up

The GDO-10V3L2 can be set up in various ways and therefore may require additional items. Common Set ups are as follows;

Set Up	Items Required
Dead Man Set Up	Drive Unit, console
Automated Set Up	Drive Unit, console and transmitter
Automated Set Up with Safety Beams	Drive Unit, console, transmitter and safety beams (optional extra)

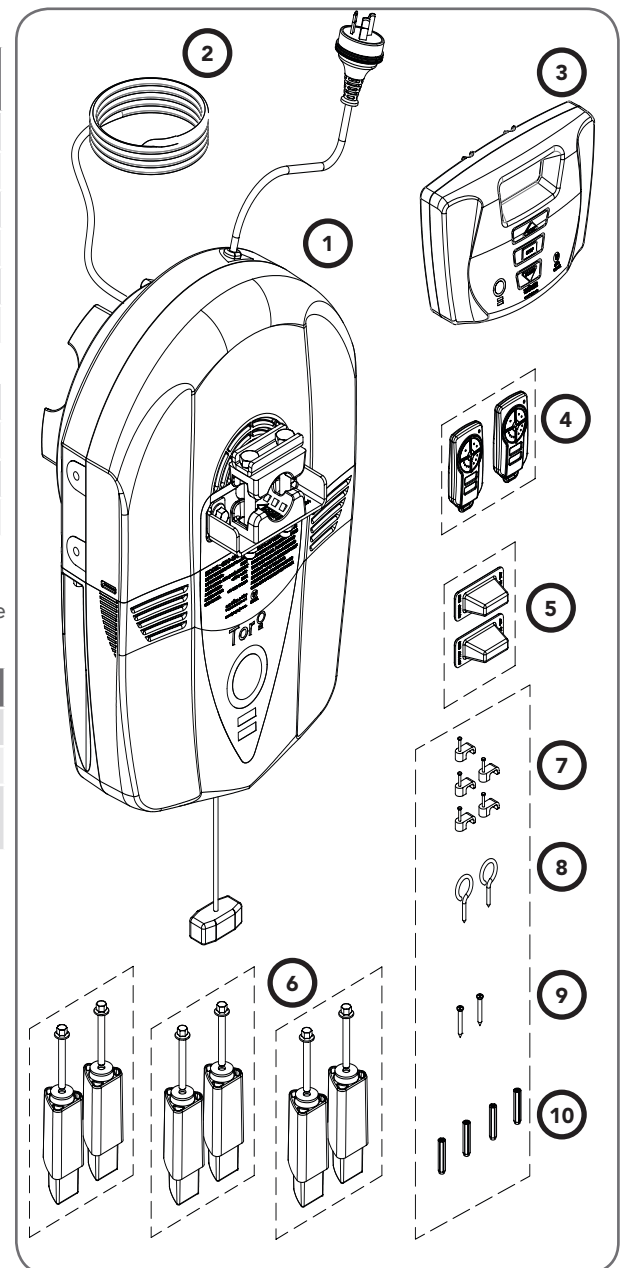


Fig 5.1

6. Pre-Installation Requirements



IMPORTANT SAFETY INSTRUCTIONS FOR INSTALLATION

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

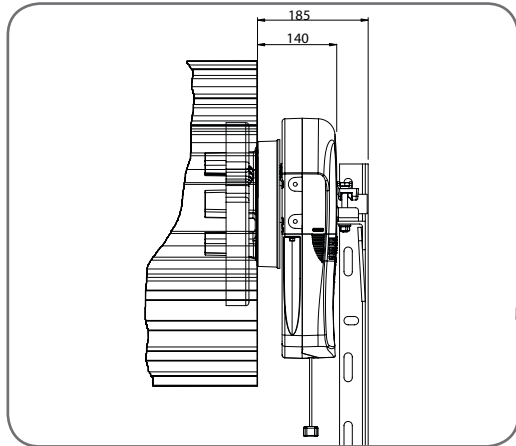


Fig 6.1

NOTE: Planetary chain equipment must be removed from the door prior to installation of GDO-10V3L2.

6.1 Door Operation

The door must be in good operating condition. The maximum effort to move the door up or down, from stationary, should not exceed 150 Newtons (15 kg force) at the bottom rail.

Lift the door to about halfway. When released, the door should stay in place supported entirely by its springs. Raise and lower the door to check for binding or sticking.

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

6.2 Unsuitable Door Types

The fitting of an opener to doors with removable mullions or doors incorporating a wicket door is not recommended.

6.3 Position

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

This opener must be installed in a dry position that is protected from the weather. Moisture or corrosion damage is not covered by the Warranty.

6.4 Power Supply

Properly earthed 3 pin single-phase power is required.



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

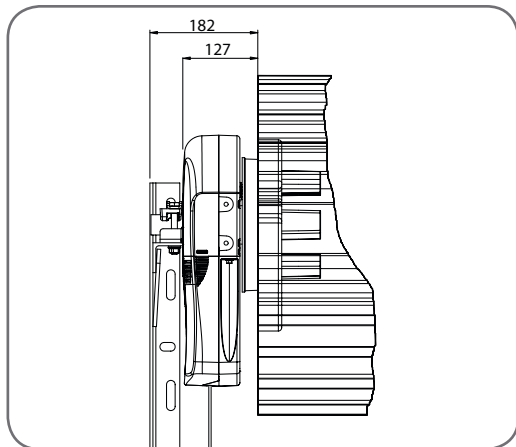


Fig 6.2

6.5 Sideroom

- Sideroom For Right Hand Side Installation

The minimum sideroom required from the edge of the door curtain is 140 mm to the inside of the door bracket when the opener is mounted on the door bracket (**Fig. 6.1**).

NOTE: The door axle diameter must not exceed 35mm.

- Sideroom For Left Hand Side Installation

The minimum sideroom required from the edge of the door curtain is 127 mm to the inside of the door bracket when the opener is mounted on the door bracket (**Fig. 6.2**).

6.6 Forks

Attach and secure all six (6) forks (6) to the drive unit (1) with screws supplied (**Fig. 6.3**). All the six (6) forks must be used and properly engaged into the drum of the door for the opener to work effectively.

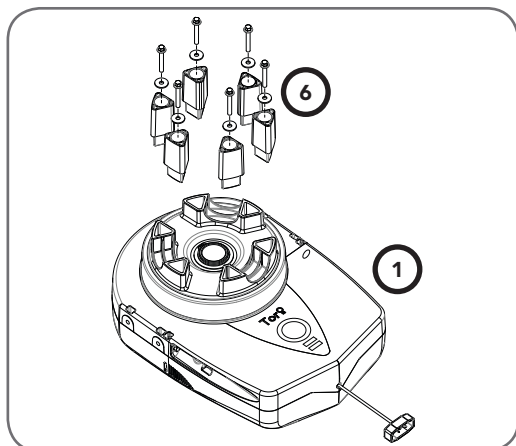


Fig 6.3

7. Installation

7.1 Preparation

- a. Check the door's operation:
 - i. The door must travel smoothly and be easy to operate by hand.
 - ii. Adjust any tight or twisted guides.
 - iii. Clean the guides if there is any oil or wax present using a suitable white spirit. The only lubricant suitable for use on door guides is silicon spray. DO NOT use WD-40, RP-7, petroleum grease, or similar.
- b. Install the locking bar covers ⑤ if there are locking bar holes in the guides.



CAUTION - Do not lock your door with the locking bars after installing the opener. Remove or disable the lock. Security is not affected as the opener has an inbuilt locking facility.

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

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

7.2 Fitting The Opener

- a. At the end opposite to where the opener will be fitted, check that the door axle is tightened to the bracket securely. **(Fig. 7.1)**
- b. Open the door completely and tie safety ropes around the door roll approximately 300 mm from each end. Do not tie the ropes too tight as damage to the curtain may ensue.
- c. At the end where the opener is to be fitted, support the door with a safe and suitable lifter.



WARNING! Make sure the support is snug under the door, is stable and will not move.

- d. At the end where the opener will be fitted, use pen to mark the position of the saddle on the door bracket and the position of the door bracket on the wall to assist in reassembling.
- e. Remove the bolts and saddle from the door bracket.
- f. Remove the door bracket allowing the door to rest on the support

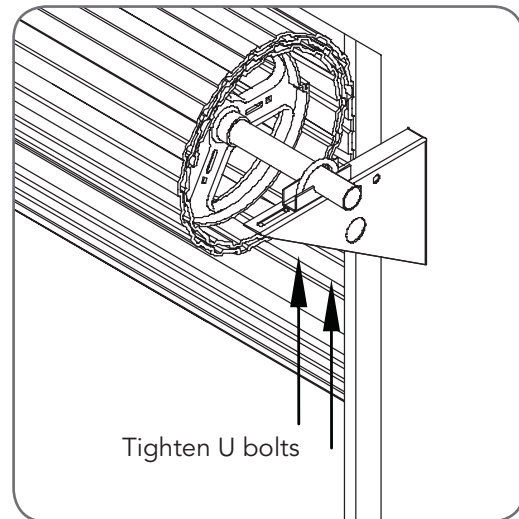


Fig 7.1

NOTE - For minimum sideroom installations, the door may have to be taken down.



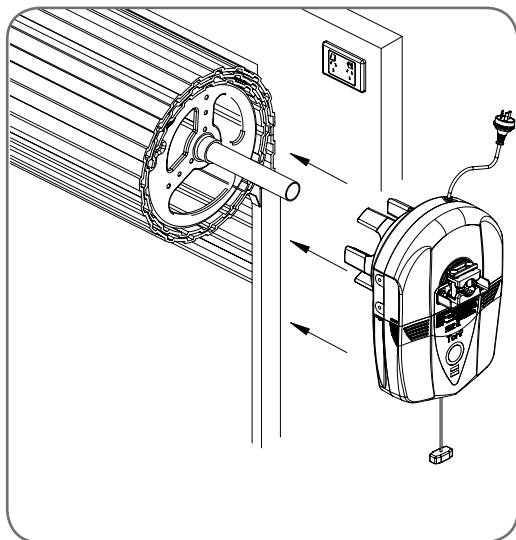
WARNING! The opener must not be used with a door incorporating a wicket door.



WARNING! The door and its springs are under significant tension. Adjustments should only be carried out by experienced persons, as this function can be dangerous if not performed under strict safety procedures.

7. Installation

Fig 7.2

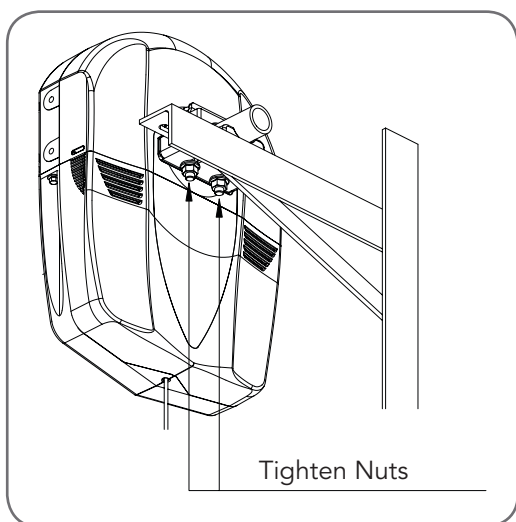


7.3 Mounting The Opener

- If the internal gear does not rotate freely, switch the opener to manual by pulling the disengagement handle down (there will be a click), so the ring gear can be rotated by hand.
- Slide the opener over the door axle and into the drum of the door (**Fig. 7.2**).
- Ensure the internal gear is pushed in as far as possible (without interfering with the door curtain) and that all of the door drum's wheel spokes are completely between the opener's drive forks.
- Re-attach the door bracket using your reference marks as a guide and tighten the bolts. Ensure that the slots in the mounting bracket of the opener align with the slots in the door bracket, otherwise the door bracket may have to be relocated. If the bracket cannot be relocated, the opener may be fitted onto the axle using the opener's saddle and bolts as follows:
 - Using your reference marks as a guide, sit the opener on the door mounting bracket and secure with the opener's bolts and saddle and tighten firmly (**Fig. 7.3**).
 - Adjust the door position (if necessary) on the brackets so that the door feeds smoothly into the guides. Make sure that the centre of the door doesn't hit the lintel and that the curtain is not pushed forward hard into the guide.
- Remove the support and safety ropes.

NOTE - If the manual release handle is more than 1.8 metres from floor level when the opener is installed, extend the handle to a height less than 1.8 metres.

Fig 7.3



7.4 Installing The Wall Mounted Control Unit

- Remove the face cover from the wall mount control unit (3).
- Affix the wall mount control unit (3) at a height of 1.5 metres within sight of the door but away from moving parts. Make sure this location of the wall control unit is out of reach of children and convenient to the customer.
- Replace the face cover.
- Connect the network cable (2) from the wall control unit to the GDO-10V3L2 powerhead unit (1) and secure with p clips (7).
- Connect the power cord to a suitable power point, but **DO NOT SWITCH ON**. Secure the power cord away from any moving object (e.g. the door) with the cable clips.
- With the opener still disengaged, pull the door up and down to make sure it runs freely.

8. Wired Safety Beams Installation

Safety Beams

Safety Beams extend across the garage door opening. The Safety Beam is designed to detect an obstruction while the door is closing and to send a signal to the garage door opener to reverse or stop the door movement. One, two or three sets of Safety Beams can be connected to GDO10V3L2 opener.

8.1 Fitting the Safety Beam

- Attach the mounting bracket ④ to the adjustment bracket ③ with the pan head screw ⑥. (Fig. 8.1)
- Attach the bracket ② to the Safety Beam transmitter with four taptite screws (m3x5) ⑤ and attach the other side to the adjustment bracket ③ with the pan head screw ⑥. (Fig. 8.2)
- Repeat steps a and b to assemble the Safety Beam receiver.

Locate the Safety Beam in a strategic location in the doorway. Automatic Technology recommend that the sensor is placed 100mm above the floor level and as close as possible to the door opening. Connect as per the wiring diagram (Fig. 8.3).

8.2 Alignment

- Power up the GDO10V3L2 with the Safety Beam connected. The green LED on the transmitter should turn ON to indicate power is present.
- If the receiver is connected to power and the red LED is flashing while the green LED on the transmitter is on, the transmitter and receiver are not aligned.
- Make horizontal and/or vertical adjustment on the transmitter and/or receiver until the red LED on the receiver turns on, indicating alignment.

NOTE: The sensors should be 100mm above the floor level, however, The exact position must be chosen in such a manner that it suits the application, the environmental conditions and provides maximum safety protection.



WARNING: Safety Beam must be installed if the closing force as measured at the bottom edge of the door exceeds 400N (40kg).

NOTE: Three wire safety beam is not compatible with GDO-10V3L2 opener.

GDO-10V3L2 Toro™ is compatible with wireless safety beams. Please refer to instructions provided with wireless safety beams for installation details.

8.3 Safety Beam Failure Emergency Close (SBFEC)

When the user finds that they are unable to move the door and suspect that it is due to a faulty SAFETY BEAM they can attempt to enter Safety Beam Failure Emergency Close mode by pressing and holding a pre-coded button on the remote control or OSC button on the console for more than five seconds. the door will start closing. See Appendix C Menu 6.24.

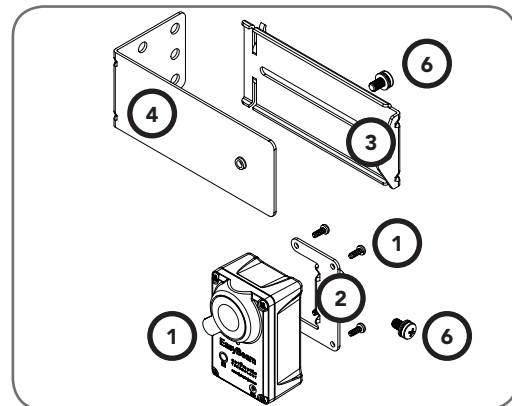


Fig 8.1

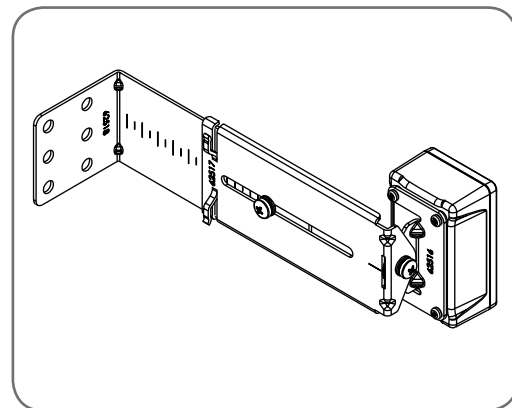


Fig 8.2

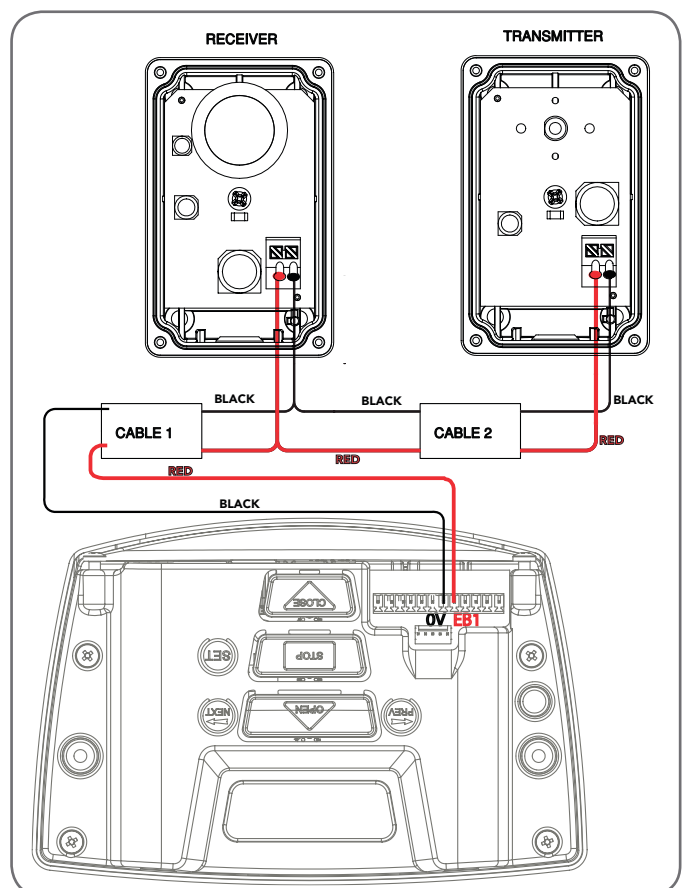


Fig 8.3

9. Programming The Opener

The three most common programs are;

Program	Menu's required	Function	Section
Dead Man Set Up	Menu 10.1	Setting the Limits	11.1
		Safety Obstruction Force	12.1 and 12.2
	Menu 1	Coding the Transmitter	13.1
Automated Set Up	Menu 10.1	Setting the Limits	11.1
		Safety Obstruction Force	12.1 and 12.2
	Menu 1	Coding the Transmitter	13.1
	Menu 6.1	Safety Close Mode	16.1
Automated Set Up with Safety Beams	Menu 10.1	Setting the Limits	11.1
		Safety Obstruction Force	12.1 and 12.2
	Menu 1	Coding the Transmitter	13.1
	Menu 3	Auto Close Times	16.3, 16.4 and 16.5

For the Dead Man Set Up and the Automated Set Up the door can not be closed by Auto-Close or by transmitters. When Safety Beams are not installed, the controller will display the following message;



ATTENTION! No Safety Beams have been detected. "Safety Close" mode has been turned on. See Manual for details. Press SET to continue.

If the closing force as measured on the bottom of the door is over 400N (40kg), a Safety Beam must be installed. The Safety Close mode can be turned off by changing the parameter in menu 6.1 (Section 16.1).

NOTE: Fitting Safety Beams enables the Auto-Close feature to become active.

11. Setting Limits

11.1 Setting 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.

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

WARNING! In setting the close limit position, do not force the door into the floor with excessive force, as this can interfere with the ease of operation of the manual release mechanism.

- Secure the engage/disengage handle and string with the accessory supplied in such a manner so that the string is away from the moving parts.
- Move the door to half way open. If necessary, disengage the opener by pulling the cord down (Fig.11.1). Re-engage the opener by pulling the cord down again.
- Unscrew the screws at the bottom of the logic console cover (Fig.11.2) and remove the cover to access the PREV, NEXT and SET buttons.
- Turn on the power to the opener. The controller will go through a start up sequence. After a short delay the MAIN SCREEN (Fig. 11.3) will be displayed. If this is the first time the GDO-10V3L2 is being used, the MAIN SCREEN should enter into limit set mode and the blue close LED will be flashing. If the display shows that an input is active, then rectify the situation before continuing with the procedure for setting the travel limits. Press and hold the CLOSE button - the door should start closing.
 - If the door opens, release the CLOSE button and press the STOP button once to change the motor's direction. Press and hold the CLOSE button until close position of the door is reached.
 - If the door overshoots press the OPEN 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 display will change and green open LED will start to flash (Fig. 11.4).
- Press and hold the OPEN button to open the door. When the door is at the desired open position, release the OPEN button. If the door overshoots, press the CLOSE button to move the door in the CLOSE direction.

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.

- Press the SET button to store the open limit. The door will now automatically close and open to calculate the safety obstruction settings. After this, if Safety Beam is installed, the opener can be operated with the OPEN or CLOSE button on the wall control unit or from the transmitter. Otherwise, the controller will be loaded with "Safety Close Mode." See Section 16.1 for further details.
- Place cover back on logic console and affix with screws when unit setup is complete.

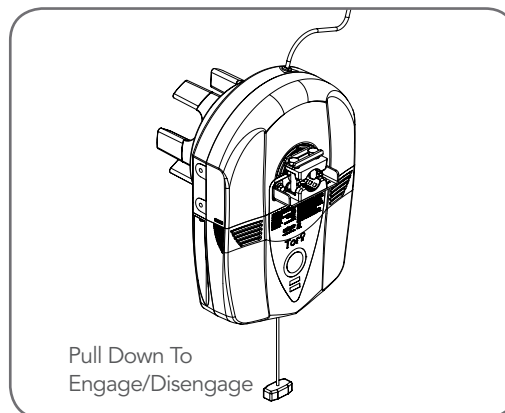


Fig 11.1

WARNING! Please test the manual release mechanism to ensure that the manual release is easy to operate. No more than 15 kg of force should be required to disengage the door using the manual release cord. If excessive force is required reset the close limit position.

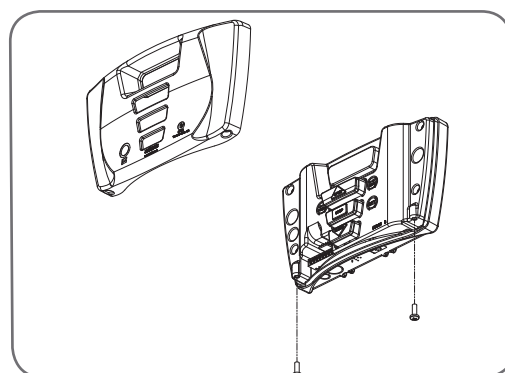


Fig 11.2

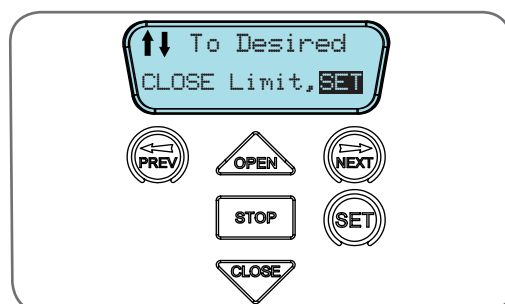


Fig 11.3

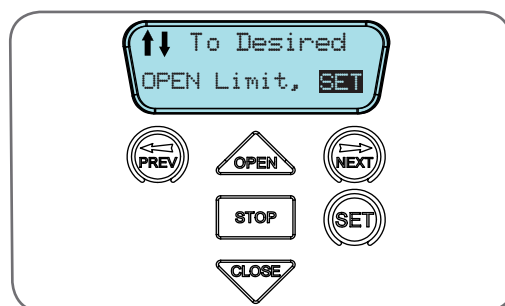


Fig 11.4

11. Setting Limits: Via Transmitter

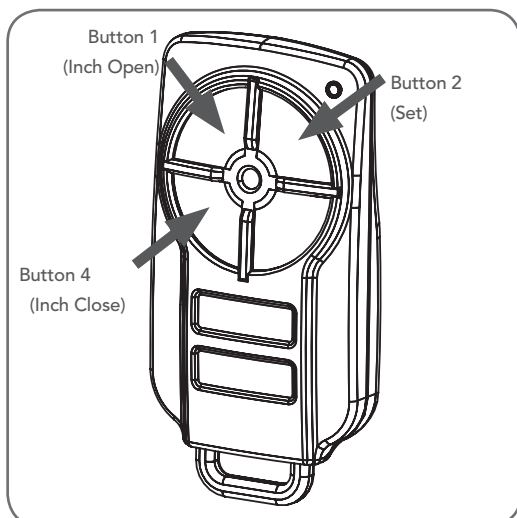


Fig 11.5

IMPORTANT NOTE:
Only TrioCode™128 Technology Transmitters are compatible with this product.

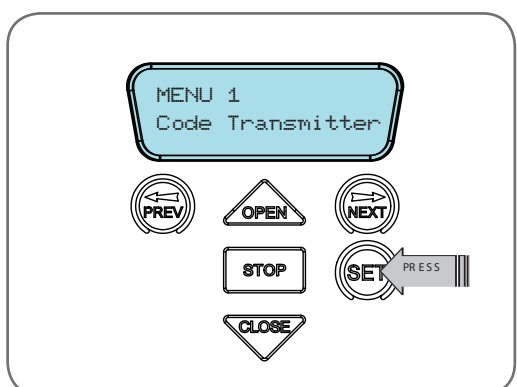


Fig 11.6



HELPFUL TIP: To access the PREV, NEXT and SET buttons, unscrew the screws at the bottom of the logic console cover and remove cover.

The GDO-10V3L2 has the alternate ability to set travel limits using a transmitter, allowing free movement around the garage to better assess the desired limit positions. In order to use a transmitter, it must first have at least one of its buttons coded to the door controller. The function assigned to the transmitter's buttons is of no concern here as the buttons are temporarily assigned to OPEN, CLOSE and SET (Fig. 11.5).

11.2 Code A Transmitter For Limit Setting

Navigating to "code transmitter" menu

- Press NEXT to navigate to Menu 1.
- Press SET to enter the code set procedure (Fig. 11.6).

Storing Transmitter Code

- Controller will prompt to press one of the transmitter's Button.
- Press the transmitter button you wish to use to operate the door opener (e.g. button 1).
- Press the same transmitter button again as prompted by display.
- Press the set button to store the transmitter.

Navigating To "Set Door Travel Menu"

- Press PREV to navigate to Menu 10.
- Press SET to display MENU 10.1.
- Press SET two times to enter the limit setting procedure. The close blue LED will start to flash.

11.3 Setting Limits Via Transmitter

- Press and hold Button 4 on the transmitter to close the door.
 - If the door opens, release Button 4 and press the stop button once on the wall control unit to change the direction of the motor.



WARNING! In setting the close limit position, do not force the door into the floor with excessive force, as this can interfere with the ease of operation of the manual release mechanism.

- Then press and hold Button 4 on the transmitter to close the door.
 - If the door is closed 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 the memory. The open green LED will start to flash.
- Press Button 1 to open the door.
 - If the door is opened too far, press Button 4 to "inch" the door towards close



WARNING: The door will automatically close and open once next step 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 and open to calculate the safety obstruction settings. After this, if Safety Beam is installed, then the opener can be operated with the OPEN or CLOSE button on the wall control unit or from the transmitter. Otherwise, the controller will be loaded with "Safety Close Mode". See Section 16.1 for further details.

12. 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**.

12.1 Testing Close Cycle

- Press the OPEN button to open the door.
- Place a piece of timber approximately 40mm high on the floor directly under the door (**Fig. 12.1**).
- Press the CLOSE button to close the door. The door should strike the object and start to re-open.

12.2 Testing Open Cycle

- Press the CLOSE button to close the door.
- Press the OPEN button 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.



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

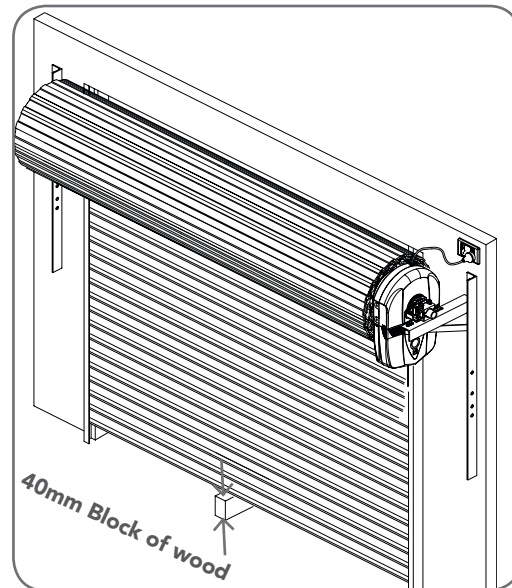


Fig 12.1

12. Adjusting Safety Obstruction Force



HELPFUL TIP: To access the PREV, NEXT and SET buttons, unscrew the screws at the bottom of the logic console cover and remove cover.

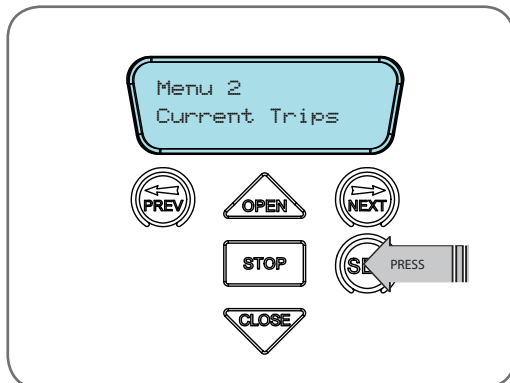
Safety Obstruction Force

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: The Safety Beam must be used if the closing force as measured on the bottom of the door is over 400N (40kg).

Fig 12.2

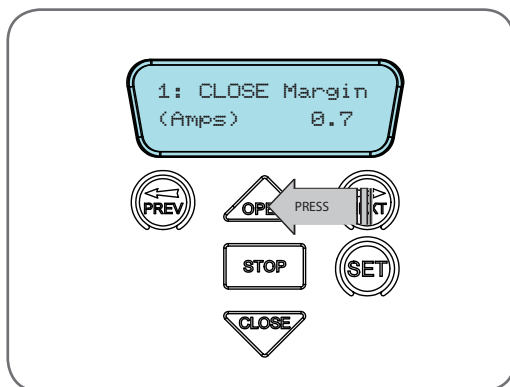


12.3 Force Pressure For Close Cycle.

Navigating To "Current Trips"

- Press NEXT or PREV to navigate to Menu 2 Current Trips.
- Press SET (Fig. 12.2)
- MENU 2.1: CLOSE Margin is displayed (Fig. 12.3).
- Press OPEN to increase or CLOSE to decrease the value.
- Press SET to save the new value.
- Test the force again as per "Safety Obstruction Force Test" in Section 12.1.

Fig 12.3

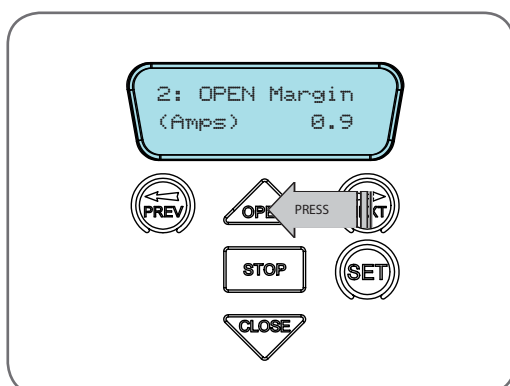


12.4 Force Pressure For OPEN Cycle.

Navigating To "Current Trips"

- Press NEXT to navigate to the Menu 2 Current Trips.
- Press SET (Fig. 12.2)
- Press NEXT.
- MENU 2.2: OPEN Margin is displayed (Fig. 12.4).
- Press OPEN to increase or CLOSE to decrease the value.
- Press SET to save the new value.
- Test the force again as per "Safety Obstruction Force Test" in Section 12.2.

Fig 12.4



12.5 To Recalculate Force Margins

- Reprofiling is a simplified way of re-learning the travel characteristic of a previously setup Limit Switch travel installation. Re-profiling can be used when the travel characteristics of the door change due to mechanical adjustments etc. To initiate a re-profile, simply locate "MENU 10.2 Reprofile Travel", press SET and follow the prompts. The door will start to move and recalculate force margins. The door can move between the open and close limit positions up to two (2) 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 "Safety Obstruction Force Test" (Section 12.1 and 12.2).



13. Coding Transmitter

The GDO-10V3L2 can store up to five hundred and eleven (511) transmitters in its memory. Each transmitter can be allocated an alpha-numeric ID label up to eleven (11) characters in length and each button can be assigned to one of several control functions. The settings for a transmitter are represented in (Fig. 13.1). It shows the transmitter's store number, ID label or serial number and the functions assigned to each of its four buttons. To toggle between ID/SN display, press UP/DOWN with the cursor on the ID/SN indicator. The procedures below code, delete, replace, edit and copy transmitter records.

IMPORTANT NOTE: Only TrioCode™128 Technology Transmitters are compatible with this product.

13.1 Coding Transmitter Button

Navigating To Menu 1 "Code Transmitter"

- Press NEXT to navigate to Menu 1 (Fig. 13.2).
- Press SET to enter the code set procedure.

Storing Transmitter Code

- The controller will prompt to press one of the transmitter's buttons.
- Press the transmitter button you wish to use to operate the Door Opener (e.g. button 1) (Fig. 13.3).
- Press the same transmitter button again as prompted by the display (Fig. 13.4).

13.2 Selecting Function Of The Button

The controller will now show the transmitter's record, with a cursor on the field for the button being coded (Fig. 13.5). Use OPEN/CLOSE to select the function for the button.

Available functions:

OSC (Open/Stop/Close)	PED (Pedestrian access)
SWP (Swipe)	CLS (Close)
OPN (Open)	STP (Stop)
LGT (Courtesy Light)	VAC (Vacation Mode)
AUX (Auxiliary)	OFF (No action)

NOTE: OSC will change to OS in the case where Safety Beam is not installed.

Press SET to save the settings or STOP to abort without saving (Fig. 13.6).

13.3 Returning To Main Screen

The "Code Transmitter" menu will now be shown. Press STOP to return to the MAIN SCREEN and test the transmitter.

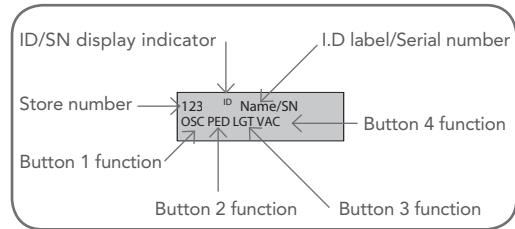


Fig 13.1



HELPFUL TIP: To access the PREV, NEXT and SET buttons, unscrew the screws at the bottom of the logic console cover and remove cover.

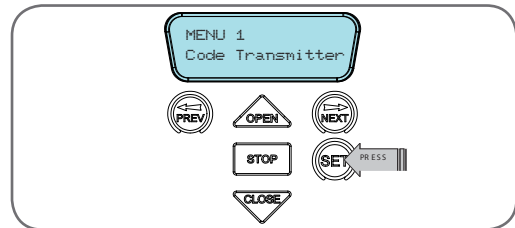


Fig 13.2

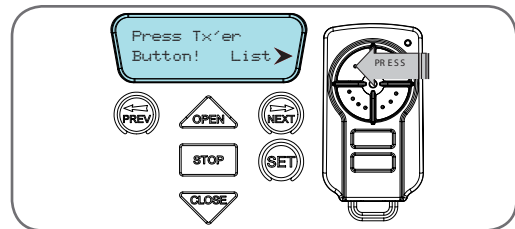


Fig 13.3

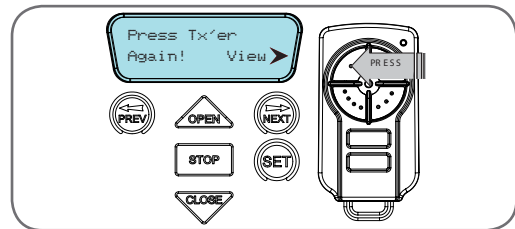


Fig 13.4

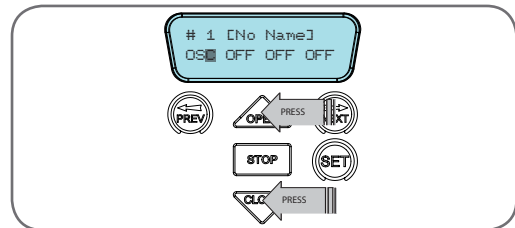


Fig 13.5

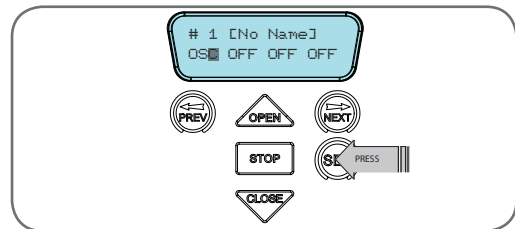


Fig 13.6



14. Remotely Coding Transmitters

Fig 14.1

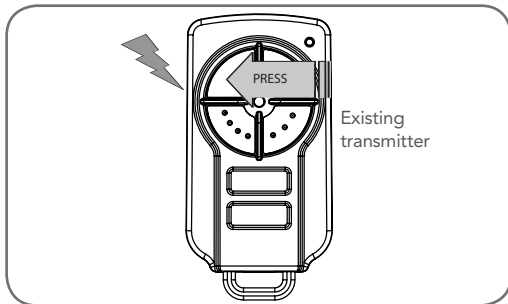


Fig 14.2

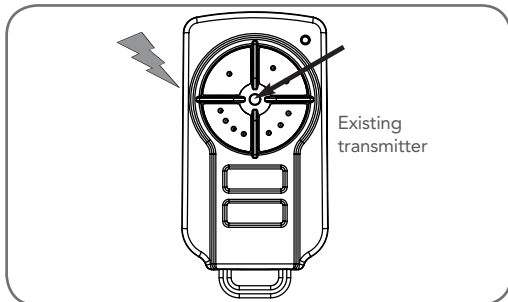


Fig 14.3

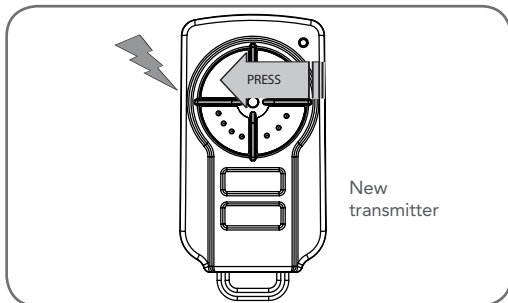
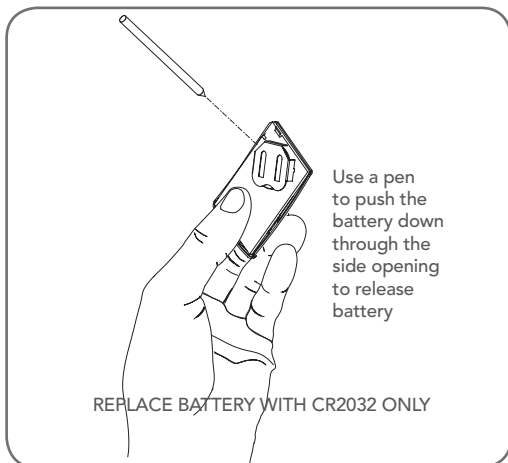


Fig 14.4



If a transmitter is already coded into the opener, additional transmitters can be coded without being in direct contact with the opener's control panel.

NOTE: Only the function of the existing transmitter button can be assigned to new transmitter. Please read instructions prior to proceeding - there is a time-out facility for security reasons.

14.1 Selecting The Function To Be Coded

- Using the existing transmitter, operate the door with the transmitter button which has the function to be coded (**Fig. 14.1**) (e.g. Button 1 has been coded with the OSC function assigned).
- If the button's function activates the door (PED, SWP, OSC, CLS, STP or OPN) wait for the door to complete its cycle.

14.2 Activate Remote Code Set Mode

- Use a small pin to press and hold through the Coding Hole of the existing transmitter for 2 seconds (**Fig. 14.2**).
- Within 10 seconds, press the button on the new transmitter you wish to code for 2 seconds (**Fig. 14.3**).
- Press the same button again (within 10 seconds) for confirmation.
- Test Operation. The new transmitter button should now function as the existing transmitter.

NOTE: When a transmitter is remotely coded, its ID label is set to that of the existing transmitter. If the existing transmitter does not have an ID label assigned, then the ID label of the new transmitter is set to: R/C Tx ###, where ### is the existing transmitters store number. This ensures that the originator of any remotely coded transmitter can be identified.

14.3 Removing the Battery From the Transmitter

(Battery Type: 3V Lithium Battery CR2032).

Use a non-metallic object (e.g. pen) to remove the battery. (**Fig. 14.4**). To test the battery is working, press and hold a transmitter button; (**Fig. 14.5**).

Light Status	Battery Status
Solid	OK
Flashing	Requires replacement
No light	Requires replacement

Fig 14.5

15. Setting Pedestrian Position

After completing the limit setup procedure the Pedestrian Access position is automatically set to a position which is approximately in the middle of the door travel. The position can be manually set by following the **Setting Pedestrian Position** procedure.

15.1 Setting Pedestrian Position

- Drive and stop the door at the desired Pedestrian Access position by using a transmitter or wall control unit.
- Press PREV to navigate to Menu 10.
- Press SET. MENU 10.1 will be displayed.
- Press NEXT to go to MENU 10.3
- Press SET on the wall control unit to save the Pedestrian Access position (**Fig. 15.1**).
- Press the STOP button to exit to the main screen.

15.2 Checking Pedestrian Position

When activated by a transmitter button which is coded as Ped mode, the opener drives the door to the preset position from either above or below. Ped Mode's active status is indicated on the display (**Fig. 15.2**). If a Ped Mode button is pressed while the door is moving, the door will stop. If a Ped Mode button is pressed when the door is in the Ped position, then the door will close.

15.3 Error Displays

During the above procedure many error checks are performed. If an error is detected, a message will be displayed indicating the error.



HELPFUL TIP: To access the PREV, NEXT and SET buttons, unscrew the screws at the bottom of the logic console cover and remove cover.

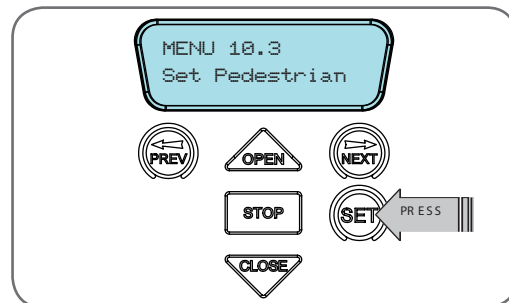


Fig 15.1

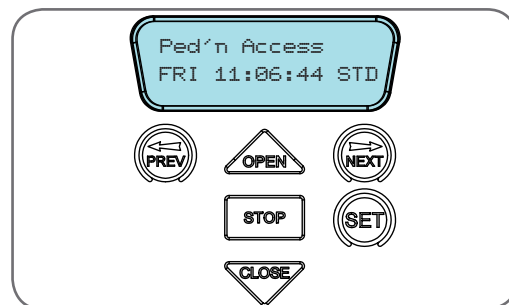


Fig 15.2

16. Safety Close & Auto-Close Mode

16.1 Safety Close Mode

The controller has a built in Safety Beam detection. If Safety Beams are not installed, the controller will automatically turn on the Safety Close Mode. By enabling this parameter, the door can only be closed by holding the close button on the wall control unit (Dead Man Set Up).

In order to facilitate an Automated Set Up and enable to door to be closed by a transmitter proceed by;

Navigate to "Safety Close Mode (menu 6.1)"

- a. Press the OPEN button.
- b. Warning will display.



DANGER! Read Manual before turning off Safety Close Mode. Press SET to continue.

- c. Press SET to accept the warning.
- d. Press either the OPEN or CLOSE arrows to change to OFF.
- e. Press SET to Save the change.



WARNING! The Auto-Close function is not available unless Safety Beam is installed.

16.2 Setting Up Standard Auto-Close

Menu 3. Auto-Close Times

Auto-Close mode is a function that automatically closes the door a preset time after the Safety Beam recognise that a vehicle has left the garage. The Auto-Close timer only starts after the Safety Beam path is broken and the Auto-Close timer has been set. If the Safety Beam 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 Safety Beam) while closing, the door will re-open and not Auto-Close until the Safety Beam path is broken again.

Menu 3.1 Auto-Close

This mode is selected by entering a non-zero time for the STD Auto-Close parameter. When selected, the door will Auto-Close after being fully opened (except when the door has reversed to the open position after a motor obstruction or overload unless A/C after open and/or close Obstruction are selected). Countdown is suspended by: S.B., OPN or SWP input being active. The countdown is aborted if the STP input is activated. If the door is already open and the OPN or the SWP input is activated, then the countdown will start.

16.3 Safety Beam Triggered Auto Close

Menu 3.2 (SB AC Trig)

This mode is selected by entering a non-zero time for the "Safety Beam Auto-Close" parameter. This mode is used to Auto-Close the door but only after an object has passed through the doorway and has triggered the Safety Beam input. Any Safety Beam or combination of Safety Beams can be configured to activate Safety Beam Auto-Close mode and combinations are:

One Beam only

- i. Safety Beam 1
- ii. Safety Beam 2
- iii. Safety Beam 3

Either Beam

- iv. Safety Beam 1 or Safety Beam 2
- v. Safety Beam 1 or Safety Beam 3
- vi. Safety Beam 2 or Safety Beam 3
- vii. Safety Beam 1 or Safety Beam 2 or Safety Beam 3

Combination

- viii. Safety Beam 1 and Safety Beam 2
- ix. Safety Beam 1 and Safety Beam 3
- x. Safety Beam 2 and Safety Beam 3
- xi. Safety Beam 1, Safety Beam 2 and Safety Beam 3

NOTE: The swipe input can be used to clear the Safety Beam triggered status so that the Safety Beam input must be activated again before the countdown will start. As with the other Safety Beam modes, the STP input will abort countdown and the OPN and SWP inputs will restart the countdown if the door is OPEN.

Menu 3.3 Directional Auto-Close (SB Auto Close)

This mode is selected by entering a non-zero time for the "S.B. Auto-Close" parameter. S.B 3 Beam must be installed and configured to EXIT WITH SB1. Sub in menu 6.5. This mode is used to Auto-Close the door only after a vehicle has passed through the Safety Beam 3 and then through Safety Beam 1 to exit the premises. This mode is useful for fire brigade, ambulance stations etc.

16.4 Pedestrian Auto-Close

Menu 3.4 Pedestrian Auto-Close

This mode is selected by entering a non-zero time for the "Ped'n A/C" parameter. When selected, the door will Auto-Close after being opened for pedestrian access unless it was following a reverse from an obstruction.

Menu 3.5 (Safety Beam) Pedestrian Triggered Auto-Close

Any Safety Beam or combination of Safety Beams can be configured to activate Safety Beam Auto-Close mode and combinations are:

Menu 3.6 (Safety Beam) Pedestrian Auto-Close

This mode is selected by entering a non-zero time for the "Ped'n A/C" parameter. When selected, the door will Auto-Close after being opened for pedestrian access unless it was following a reverse from an obstruction.

16.5 Auto-Close After Obstruction:

Three parameters are provided to enable the Auto-Close feature to be activated after obstructions and power up. Normally the Auto-Close feature is not enabled after obstructions for safety reasons. Safety Beams must be used for these features to be activated.

Menu 3.7

This mode enables the Auto-Close feature to be activated when a close obstruction occurs (requires Safety Beams).

Menu 3.8

This mode enables the Auto-Close feature to be activated when an open obstruction occurs.

Menu 3.9

This mode enables Auto-Close feature after power up.



17. Time Clock

The opener provides a programmable time clock which can be used to control the GDO-10V3L2 on a timed basis at various times of the week. This section details the time clock operation and configuration.

17.1 Time Clock Operation

The time clock consists of a 7 day clock and storage for 32 programs. The clock is powered by its own battery and therefore does not lose time when the GDO-10V3L2 is turned off. Each time clock program defines the time of the day and the days of the week it is to run and the output function to be executed. Any combination of the days of the week can be selected.

17.2 Time Clock Settings

The Time Clock settings are accessed by selecting the Time Clock menu (MENU 7). Press SET (Fig. 17.1) to enter the menu and then PREV or NEXT to navigate through the options.

Menu 7.1 Set Time/date

This is where the current time, date and day are displayed and set (Fig. 17.2).

NOTE: The time is in a 24 hour format and the Day of the week is not automatically set with the date. To change the settings simply press UP or DOWN to display the cursor and then move to the field to be changed using the NEXT / PREV buttons. Then press OPEN/CLOSE to change the setting and then the SET or STOP buttons to save.

Menu 7.2 View Programs

Select this menu to display or edit the Time Clock programs (Fig. 17.3). When selected, program number 1 is displayed and the cursor is shown on the program number field. The other fields shown include the function, time and days of operation. The example

Fig. 17.4 shows that the DOOR will OPEN at 7 am on Mondays, Tuesdays, Wednesdays, Thursdays and Fridays. Use the OPEN / CLOSE buttons to scroll through the other programs (Fig 17.5).

To edit a program, simply press the NEXT / PREV buttons to move the cursor onto the required field and press the OPEN/CLOSE button to change the value. To save the program settings, press SET or to exit without saving press STOP.



HELPFUL TIP: To access the PREV, NEXT and SET buttons, unscrew the screws at the bottom of the logic console cover and remove cover.

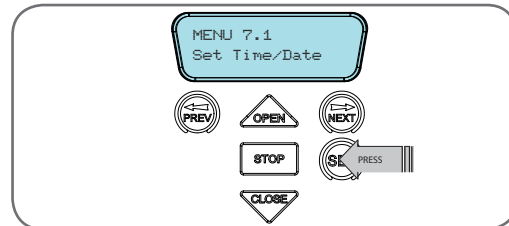


Fig 17.1

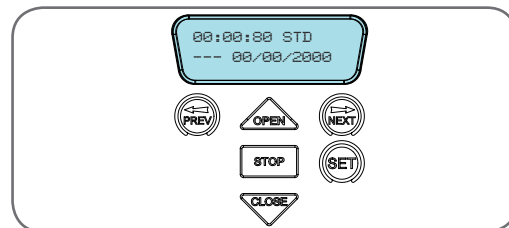


Fig 17.2



Fig 17.3

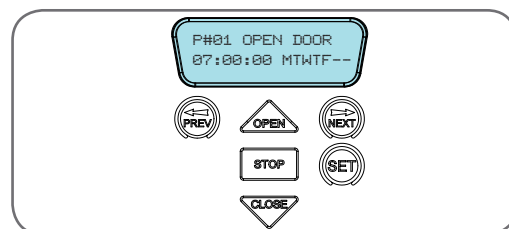


Fig 17.4

NOTE: The most recent program that applies to an output remains active until a new program takes effect.

NOTE: If a Time Clock program does not have a day selected then it can not be executed. If a Time Clock program is taking control of the opener, then this status is displayed on the LCD. The MAIN SCREEN and clock status screen flashes alternatively.

The selectable functions available are:

Function	Operation
RX = Off	From the time when the program with RX = OFF is activated, all the transmitters will be disabled.
RX = On	From the time when program with RX = ON is activated, all the transmitters will be enabled.
Open Door	From the time when the program with OPEN DOOR is activated, the door will open and stay open.
Stop Door	This feature will let the user activate the stop function until the next program starts. The door will not open or close while stop is activated.
Free Door	Release the controls from the timer.
Off	This will temporarily disable the program.

Fig 17.5

17. Time Clock

Menu 7.3 Settings

Under this menu, three sub menus are available:

- a. Run Programs. The programs of the timer can be interrupted by selecting RUN PROGRAM off.
- b. Configuration Of GPI Input. General Purpose Input can be configured as OSC, PED or DST setup.
- c. This is activated by the GPI input terminal with the N/O switch.
 - i. When GPI Selected As OSC: If the door is moving, the activation of GPI input or pressing a transmitter button with the OSC function assigned will cause the door to stop. The next trigger will move the door in the opposite direction to the last travelled.
 - ii. When GPI Input Is Configured As PED: The activation of the GPI input or by pressing a transmitter button with PED function assigned will open the door partially to allow pedestrian access but prevent vehicle access. The position the door is driven to is automatically set to halfway during setting of the travel limits, but can be adjusted to suit.
 - iii. When GPI Input Is Configured As DST: GPI input can be used to switch between STD time and DST (daylight savings time). The AUX input needs to be constantly active to show day light saving time.

17.3 Day Light Saving Time Adjustment

The time selected is the amount of time added to STD time when DST is selected by AUX input. Options are OFF, 30, 60, 90 or 120 minutes.

18. Accessories Installation



HELPFUL TIP: To access the PREV, NEXT and SET buttons, unscrew the screws at the bottom of the logic console cover and remove cover.

18.1 Fitting Courtesy Lights

An AC or DC courtesy light can be activated via an output on the door opener control board. Connect the light as per the diagram. (Fig. 18.1)



WARNING: A qualified electrician must perform the installation where 240V AC power is used.

Menu 4. Light/Lock Times

- Press NEXT or PREV on the wall control unit to navigate to Menu 5 Light/Lock Times.
- Press SET to select the sub menu.
- Press NEXT or PREV to navigate through the sub menu.
- Press OPEN to increase or CLOSE to decrease the time.
- Press SET to save the new time.
- Press the STOP button two times to exit.
- Test the light operation.

18.2 Fitting Solenoid Or Magnetic Locks

Install the lock mechanism on the door as per the manufacturers instructions. See Fig. 18.2 for the wiring diagram.

Menu 4. Light/Lock Times

Lock output can be programmed for both hold and pulse mode. The operation of the lock can be programmed to activate prior to the door and behave differently on open cycles to that on close cycles.

- Press NEXT or PREV on the wall control unit to navigate to Menu 4 Light / Lock Times.
- Press SET to select the sub menu.
- Press NEXT or PREV to navigate through the sub menu.
- Press OPEN to increase or CLOSE to decrease the time.
- Press SET to save the new time.
- Press the STOP button two times to exit and test the locks operation.

18.3 Installing The Wall Mounted Transmitter (Optional)

- Remove the face plate from the transmitter.
- Affix the base plate at a height of 1.5 metres within sight of the door. Make sure that the position of the transmitter is out of reach of children and convenient to the customer (Fig. 18.3).
- Replace the face plate.
- To code the transmitter, refer to Section 13.

18.4 Replacing Backup Batteries

- Unplug the drive unit from mains power.
- Disengage motor using manual release cord.
- Remove the bottom cover by pressing in from sides and sliding downward.
- Remove the two screws and slide upward the top cover upwards to remove it.
- Remove the battery bracket by undoing the battery bracket screws.
- Remove the batteries and replace with the same type (Fig. 18.4).

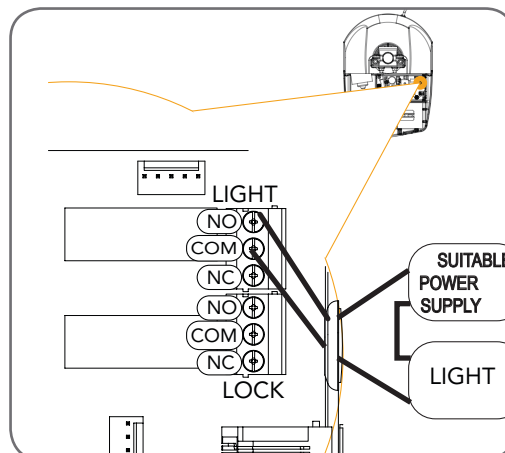


Fig 18.1

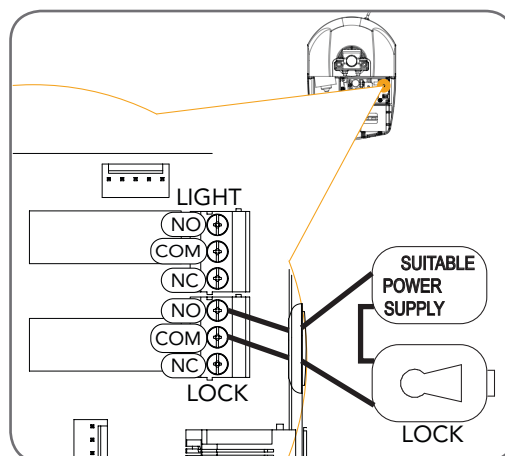


Fig 18.2

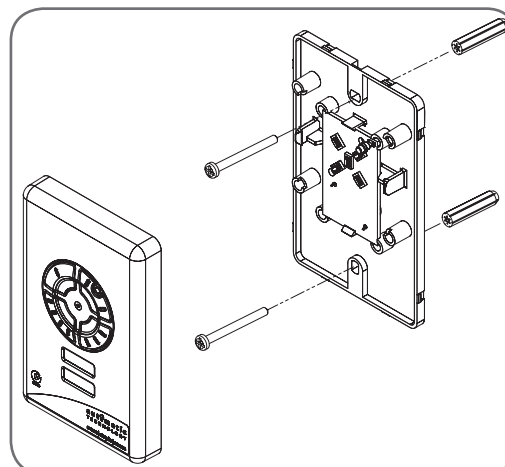


Fig 18.3

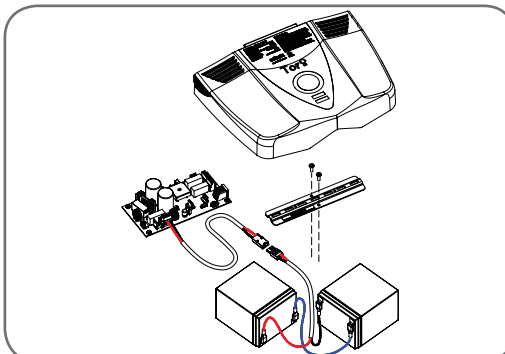


Fig 18.4

19. SmartSolar™ Installation



WARNING: Do not connect the batteries until after Step 24.2

30 Watt Solar Kit Part Number 60142 is suitable for GDO10-V3L2

19.1 Mount The Charger Board

- Unplug the drive unit from mains power.
- Disengage motor using manual release cord.
- Remove the bottom cover by pressing in from sides and sliding downward.
- Remove the two screws and slide the top cover upward to remove it.
- Remove the transformer, EMC board and mains power cable.
- Remove the two screws from the battery bracket then remove the batteries and harness
- Fix the Charger Board Holder to where the transformer was removed from. Fix the charger onto the charger holder (**Fig. 19.1**)
- Feed the two wire cable through the opening, then connect the red wire into solar + and black wire into solar - connector on the control board. (**Fig 19.2**)
- Move the shunt from "STBY BATT" to "SOLAR" on the control board in the power head.



WARNING: Do not connect battery or solar panel polarity incorrectly - this will result in serious damage to components. During Step 2, the opener will become active.

19.2 Connect The Solar Panel

- Mount the solar panel as described in the SmartSolar™ Instruction Manual.
- Feed the Solar Panel's cable through the black grommet on the chassis.
- Connect the **red wire** to the Charger Board's "SOLAR+" connector, and the **black wire** to the "-SOLAR" connector.

19.3 Mount & Connect The Battery

- Mount the Battery Box close to the opener.
- Feed the 2-core 18 awg 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. 19.3**).
- 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. 19.4**).
- Refit the timing cover, main cover and light diffuser.

19.4 Re-Setup And Test The Opener

- Setup travel limits and code transmitters as per the GDO10-V3L2 instruction manual.
- Press either the OPEN/CLOSE button, or use a transmitter to operate the opener.

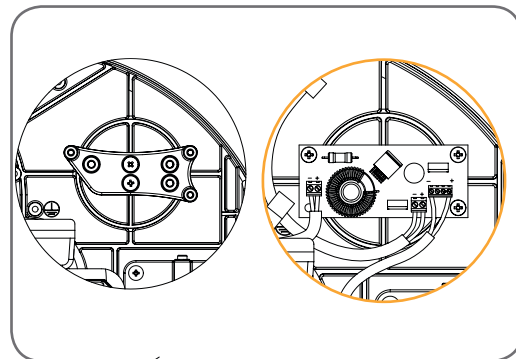


Fig 19.1

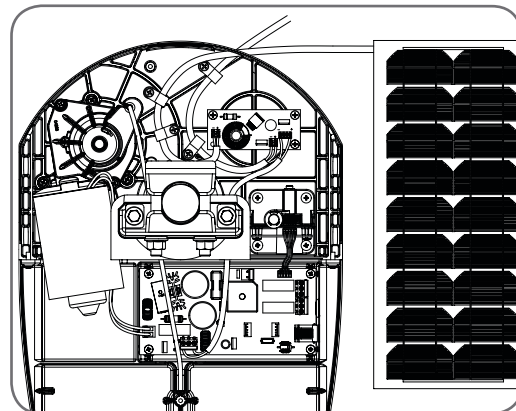


Fig 19.2

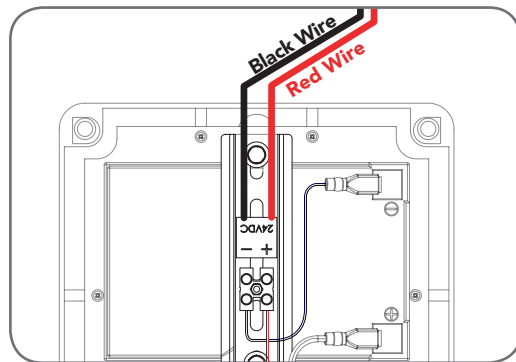


Fig 19.3

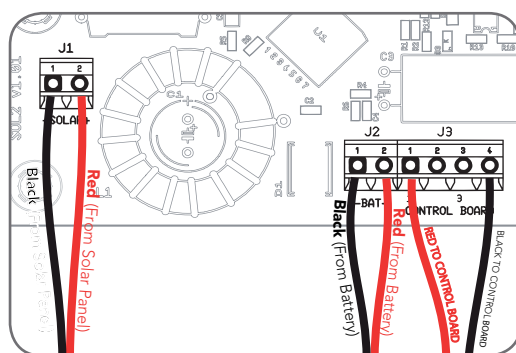


Fig 19.4



20. Specifications

Technical Specifications	
Power supply	230V - 240Va.c. 50Hz
Standby power	2.6 Watts
Geared Motor power	150 Watts
Motor type	24Vd.c. Permanent Magnet
Maximum door opening:	Height: Width: Weight:
	5500mm 5100mm 270kg
Opener Limits Travel	5.5 turns of Door Drum Wheel
Maximum Rated Load	500N
Nominal Load	150N
Duty Cycle	25 Operations/hr
Receiver type	UHF Multi-frequency FM Receiver
Receiver code storage capacity	511 X 4 button Transmitter Codes
Receiver Sensitivity	- 103 dB
Transmitter frequency	UHF Multi-frequency FM Transmitter
Coding type	Code hopping
Number of code combinations	Over 100 billion random codes
Code generation	Non-linear encryption algorithm
Courtesy light	Relay Output
Lock Output	Relay Output
Controller fuse	10 A slow blow
Transmitter Battery	CR - 2032 (3 Volts)
Real Time Clock Battery	CR -1220 (1.5 Volts)
Backup Battery	12 Volts 6 Amp Hr x 2

NOTE:

1. The door must be well balanced. A person should be able to lift the door up manually with very little effort in case of an emergency.
2. Intermittent operations may occur in areas which experience very strong winds. Strong wind puts extra pressure on the door and tracks which may in turn trigger the safety obstruction detection system intermittently.
3. If the Safety Beam are not installed then the controller will automatically goes into "Safety Close" mode. Limited number of features are available in this mode please refer to Section 16.1.



21. Troubleshooting

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. The stop function is activated The opener is in "Vacation Mode"	Switch on mains power. Remove obstruction. Unlock door or remove jam. Door requires service/repair by qualified technician. Deactivate the stop switch/timer Turn off "Vacation Mode"(Appendix C Menu 6.16).
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 (Section 12.4) Remove obstruction.
Door operates from wall control unit (OPEN/CLOSE) button but not from transmitter	Transmitter code not stored in memory. Transmitter does not contain TrioCode™128 Technology Flat battery in transmitter	Code transmitter in to openers memory. (Section 13.1) Check the transmitter. It should have grey buttons and the model number should display V2. Contact dealer for support if otherwise. Replace battery (Section 14.3)
Door does not close with transmitter	Safety Close Mode is on. Safety Beam not working properly.	Turn the Safety Close Mode off (Section 16.1) Make sure Safety Beam are operational. Temporarily door can be closed by using SBFEC MODE see Section 8.3 for more details
Door will not close fully.	Door limit positions need to be reset. Door obstructed and reverses.	Reset limits positions. Clear obstruction or adjust force margin (Section 12.3)
Door will not open fully.	Door limit positions need to be reset. Door obstructed.	Reset limits positions. Clear obstruction or adjust force margin (Section 12.3)
Auto-Close not working	Safety Beam not installed. Safety Beam or wiring faulty. Safety Beam not aligned correctly. Safety Beam is obstructed. Door obstructed when closing. Auto-Close time not set. Auto-Close mode not set	Install Safety Beam. (Section 8) Repair Safety Beam or replace wiring. Re-align optics. Remove obstruction from path of Safety Beams. Remove obstruction. Set Auto-Close times (Section 16.3). Set Auto-Close mode. (Section 16.2)

22. Maintenance



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



CAUTION: Door adjustments should only be carried out by experienced persons, as this function can be dangerous if not performed under strict safety procedures



ELECTROCUTION! Disconnect the opener power cord from the mains power before making any door repairs / maintenance or removing the opener button cover.

22.1 Door 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 / serious injuries or damage to property.

- Frequently examine the door, particularly the 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.

22.2 Lubrication (every 3 - 6 months)

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

- Guide Tracks: Clean the internal sections of the guide tracks with a cloth dampened with mineral turps or methylated spirits.

22.3 Door Service and Repair

If correct maintenance and servicing are not carried out, warranty may be void. To keep your door running well, it is recommended that your door be serviced by an experienced technician, every 12 months or earlier if required:

- Lifting Cables (if fitted): Check for wear through rubbing. If there is fraying or signs of corrosion contact your dealer immediately and discontinue use, leaving door in the closed position.
- Fasteners: Check all screws, nuts and bolts to ensure they are secure.
- Spring Tension: It is natural for springs to lose tension. Should the door become hard to operate or completely inoperative, contact your door professional

22.4 Opener Maintenance

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

- Monthly: Run the test procedures in Section 12 to ensure garage door is fit for use.

NOTE: If the door does not operate smoothly, call your nearest door professional.

22.5 Service Indicator

While the door opener does not require regular servicing, to function correctly the door must be in good operating condition. As a reminder the GDO-10V3L2 Toro™ has a built in maintenance counter. This counter has a factory default of 60,000 cycles, and it is adjustable from 0 to 60,000 cycles. When this counter expires, at the start of each door movement the beeper will sound three times and "SERVICE DUE" message displays on the console.

At this time Automatic Technology recommends you contact your door professional to perform an annual door service.

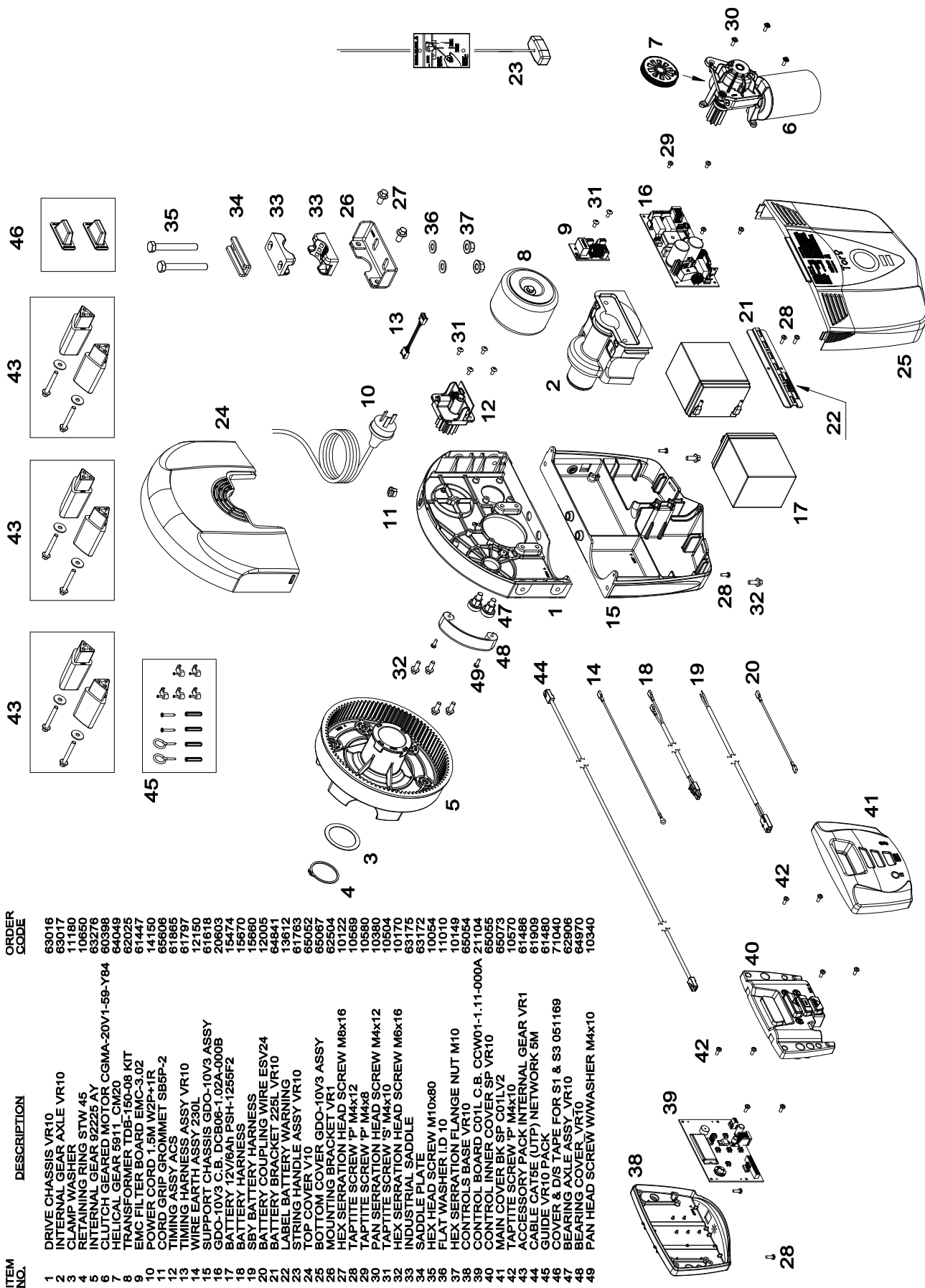
Service Record

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

Date	Service by	Signature	Invoice No.	Amount



23. Spare Parts



ITEM NO.	DESCRIPTION	ORDER CODE
1	DRIVE CHASSIS VR10	63016
2	INTERNAL GEAR AXLE VR10	63017
3	CLAMP WASHER STW 45	11180
4	RETAINING RING STW 45	10650
5	INTERNAL GEAR 92225 AY	63276
6	CLUTCH GEARED MOTOR CGMA-20V1-59-Y84	60398
7	HELICAL GEAR 5911_CM20	64049
8	TRANSFORMER TDB-150-08 KIT	62025
9	EMC FILTER BOARD EMC-3.02	61447
10	POWER CORD 1.5M W2P+1R	14150
11	CORD GRIP GROMMET SB5P-2	65806
12	TIMING ASSY ACS	61865
13	TIMING HARNESS ASSY VR10	61797
14	WIRE EARTH ASSY 230L	12150
15	SUPPORT CHASSIS GDO-10V3 ASSY	61618
16	GDO-10V3 C.B. DCB06-1.02A-000B	20603
17	BATTERY 12V/6Ah PSH-1256F2	15474
18	BATTERY HARNESS	15670
19	SBY BATTERY HARNESS	15660
20	BATTERY COUPLING WIRE ESV24	12005
21	BATTERY BRACKET 225L VR10	64841
22	LABEL BATTERY WARNING	13612
23	STRING HANDLE ASSY VR10	61763
24	TOP COVER V10	65052
25	BOTTOM COVER GDO-10V3 ASSY	65067
26	WINDING BRACKET VR	92904
27	HEX SERRATION HEAD SCREW M8x16	10522
28	TAPTITE SCREW P ⁺ M4x12	10568
29	PAN SELF TAPPING HEAD SCREW M4x12	10560
30	PAN SELF TAPPING HEAD SCREW M4x12	10564
31	HEX SERRATION HEAD SCREW M6x16	10170
32	INDUSTRIAL SADDLE	63175
33	SADDLE PLATE	10054
34	HEX HEAD SCREW M10x80	10054
35	FLAT WASHER LD 10	11019
36	HEX SERRATION FLANGE NUT M10	10149
37	CONTROL BOARD C011	65054
38	CONTROL BOARD C011 C.B. CCW01-1.11-000A	21104
39	CONTROL INNER COVER SP VR10	65055
40	CONTROL INNER COVER SP VR10	65073
41	MAIN COVER BK SP C01LV2	10570
42	TAPTITE SCREW P ⁺ M4x10	61486
43	ACCESSORY PACK INTERNAL GEAR VR1	61909
44	CABLE CAT5E (UTP) NETWORK 5M	61480
45	GUIDE VR10 PACK	71040
46	COVER & D/S TAPE FOR S1 & S3 051169	62906
47	BEARING AXLE ASSY VR10	64970
48	BEARING COVER VR10	
49	PAN HEAD SCREW W/WASHER M4x10	10340

24. Appendix

A - Console Menu Structure

OPERATIONAL BUTTONS:

1. Press PREV/NEXT buttons move to Left/Right.
2. Press OPEN/CLOSE buttons to change setting.
3. Press SET button to save changes.
4. Press STOP to return to MENU without saving changes.

NOTE: The System will automatically return to the main screen after 30 secs if a menu screen is displayed and no buttons are pressed.

Parameter	Min	Max	Default	Step	Unit	Menu No.	Section
Menu 1 - Code Transmitter							
STORING TRANSMITTERS	0.0	511				1	13.1
Menu 2 - Current Trips							
CLOSE MARGIN	0.0	4.0	0.7	0.1	AMPS	2.1	12.3
OPEN MARGIN	0.0	4.0	0.9	0.1	AMPS	2.2	12.4
REVERSE TIME AFTER CLOSE OBSTRUCTION	5.0	60	FULL	1.0	SEC	2.3	12.5
Menu 3 - Auto Close							
STD AUTO-CLOSE TIME Sets and enables the standard Auto-Close time	0.0	300.0	0.0	1.0	Sec	3.1	16.2
S.B AUTO-CLOSE TRIG Selects the Safety Beam or combination of Safety Beams to enable the S.B triggered Auto-Close mode.	None		None			3.2	16.3
S.B AUTO-CLOSE TIME Sets and enables the S.B triggered Auto-Close time	0.0	60.0	0.0	1.0	Sec	3.3	16.3
PEDESTRIAN AUTO-CLOSE TIME Sets and enables the Pedestrian Auto-Close time	0.0	60.0	0.0	1.0	Sec	3.4	16.4
S.B PEDESTRIAN AUTO-CLOSE TRIG Selects the Safety Beam or combination of Safety Beams to enable the S.B triggered Pedestrian Auto-Close mode.	None		None			3.5	16.4
S.B PEDESTRIAN AUTO-CLOSE TIME Sets and enables the PE Pedestrian Auto-Close time	0.0	60.0	0.0	1.0	Sec	3.6	16.4
AUTO-CLOSE AFTER CLOSE OBSTRUCTION Enables Auto-Close feature after close obstructions (requires Safety Beams)	Off	On	Off			3.7	16.5
AUTO-CLOSE AFTER OPEN OBSTRUCTION Enables Auto-Close feature after open obstructions	Off	On	Off			3.8	16.5
AUTO-CLOSE AFTER POWER UP Enables Auto-Close feature power up	Off	On	Off			3.9	16.5
Menu 4 - Light / Lock Times							
ON AFTER CYCLE LIGHT TIME Time light remains on for after a cycle	0	255	60	1	Sec	4.1	18.1
ON BEFORE OPEN CYCLE LIGHT TIME Minimum time light is activated for prior to opening	0	25.5	0	0.1	Sec	4.2	18.1
ON BEFORE CLOSE CYCLE LIGHT TIME Minimum time light is activated for prior to closing	0	25.5	0	0.1	Sec	4.3	18.1
OPEN LOCK TIME Set the time the lock is activated for on open cycles	0.0	Hold	0.0	0.1	Sec	4.4	18.2
CLOSE LOCK TIME Set the time the lock is activated for on close cycles	0.0	Hold	0.0	0.1	Sec	4.5	18.2
PRE-OPEN LOCK TIME Time the lock is activated for prior to opening	0.0	25.5	0.0	0.1	Sec	4.6	18.2
PRE-CLOSE LOCK TIME Time the lock is activated for prior to closing	0.0	25.5	0.0	0.1	Sec	4.7	18.2



Appendix

A - Console Menu Structure

Parameter	Min	Max	Default	Step	Unit	Menu No.	Section
Menu 5 - Motor Settings							
OPEN SPEED VOLTAGE Sets the full speed motor voltage	~12.0	~24	~22	~1	Volts	5.1	Appendix C
CLOSE SPEED VOLTAGE Sets the full speed motor voltage	~12.0	~24	~20	~1	Volts	5.2	Appendix C
Menu 6 - Operating Modes							
Safety Close Mode	Off	On	On			6.1	16.1
Safety Open Mode	Off	On	Off			6.2	Appendix C
Safety Beam Input Response Mode Sets the S.B response mode. Options are OPEN and CLOSE cycles stop, Close cycles stop or Close cycle reverse	OPN & CLS stop CLS to stop CLS to reverse		CLS to reverse			6.3-5	Appendix C
SB REVERSE TIME	5	FULL	FULL	1	Sec	6.6	Appendix C
GPI INPUT MODE configure the GPI input. Options are OSC, PED, SWP and DAY LIGHT SAVING	OSC, PED, DST		OSC			6.7	Appendix C
PED INPUT = SWIPE MODE Selects PED input functions as pedestrian access swipe input	Off	On	Off			6.8	Appendix C
OPN INPUT N/C OPERATION Selects operating polarity of OPN input	Off	On	N/O			6.9	Appendix C
STP INPUT N/C OPERATION Selects operating polarity of STP input	Off	On	N/O			6.10	Appendix C
FIRE INPUT N/C OPERATION Selects operating polarity of FIRE input	Off	On	N/O			6.11	Appendix C
FIRE INPUT MODE configure the fire input. Options are OPN, CLS and PED	OPN, CLS, PED		OPN			6.12	Appendix C
REMOTE CODE ENABLED Selects remote transmitter coding function	Off	On	On			6.13	Appendix C
ACTIVITY REPORTS Select report to be output	Off	255	Off	1		6.14	Appendix C
ACTIVITY REPORT ID Selects ID for controller, sent with activity report	0	65535	0	1		6.15	Appendix C
VACATION MODE Selects Vacation Mode - disables remote control	Off	On	Off			6.16	Appendix C
BATTERY/SOLAR MODE Selects Battery Backup/Solar operation	Off	On	On			6.17	Appendix C
PASSWORD Selects password protection for all changes	Off	On	Off			6.18	Appendix C
Transmitter Grouping	Off	On	Off			6.19	Appendix C
Fault Auto Reset Selects Fault Auto Reset	Off	On	Off			6.20	Appendix C
LED Low Power Mode Selects saving the power by turning LEDs Off	Off	On	Off			6.21	Appendix C
Console OSC Buttons Selects to lock out the console buttons	Off	On	On			6.22	Appendix C
AUX OUT O/P can be activated by either LIGHT DRIVE ,CLOCK/TXER / SB, OPEN or CLOSE status			LIGHT DRIVE			6.23	Appendix C
SBFEC MODE In the event of Safety Beam failure the door can be closed by pressing and holding a button on remote or on console	Off	On	On			6.24	Appendix C

Appendix

A - Console Menu Structure

Parameter	Min	Max	Default	Step	Unit	Menu No.	Section
Menu 7 - Time Clock							
SET TIME / DATE	Off	On	Off			7.1	17.1
VIEW / EDIT PROGRAMS	Off	On	Off			7.2	17.2
SETTINGS	Off	On	Off			7.3	17.3
Menu 8 - Diagnostics							
TEST INPUTS - Controls input display status			Inactive			8.1	Appendix D
TEST TRANSMITTERS (TX'ERS)						8.2	Appendix D
DISPLAY HISTORY						8.3	Appendix D
MEMORY USAGE						8.4	Appendix D
SERVICE COUNTER			60,000			8.5	Appendix D
EVENT COUNTER						8.6	Appendix D
INSTALL DATA						8.7	Appendix D
PARAMETERS						8.8	Appendix D
VERSION INFO - Firmware						8.9	Appendix D
Menu 9 - Memory Tools							
CLR CONTROL						9.1	Appendix E
CLR TRANSMITTERS (TX'ERS)						9.2	Appendix E
Menu 10 - Setup Travel							
SETUP LIMITS						10.1	11.1
REPROFILE TRAVEL						10.2	12.5
SET PEDESTRIAN						10.3	15.1



Appendix

B - Viewing and Editing Parameters

Fig B.1

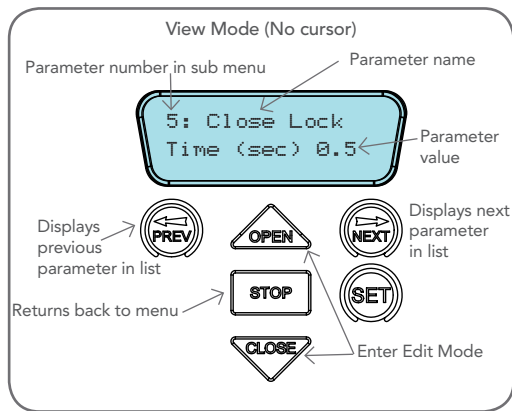
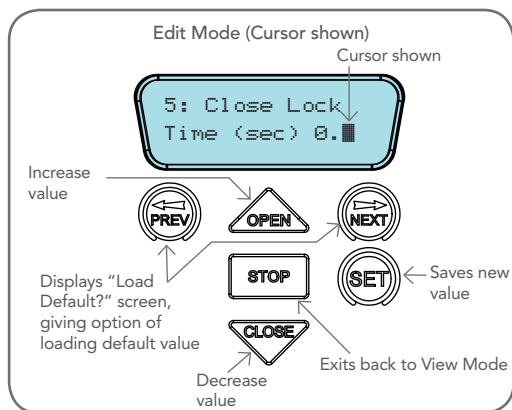


Fig B.2



This section illustrates how to locate, view and adjust parameters.

Locating parameters

Refer to Appendix A for Console Menu Structure. Locate the required parameter and note the MENU number. The example used in **(Fig. B.1)** displays "CLOSE LOCK TIME"

Changing Setting

- Press NEXT/PREV to navigate to the required menu.
- Press SET to show the sub-menu.
- Press NEXT/PREV to go to the required sub-menu.
- Press OPEN/CLOSE to change parameter setting. Holding the button down causes the parameter's value to change rapidly. The longer the button is held the faster the value changes.
- Press SET to SAVE setting.

Reload Default Setting

- Press NEXT/PREV buttons to display LOAD DEFAULT screen.
- Press SET to load the default value.

Return To Menu

If the parameter's value is not to be changed, press STOP to return to the submenu. Press STOP again to return to the MAIN SCREEN.

Appendix

C - Control Board Adjustments

The standard operation of the opener can be altered by editing various parameters. This section describes the parameters and the effect they have. Use the VIEWING AND EDITING PARAMETER PROCEDURE (Appendix B) to make changes.

Menu 2.3 Door Reverse Time After Close Obstruction

Normally after a close obstruction, the door will fully open to its open position. After a close obstruction, the open cycle can be reduced from 5 seconds to its full open position.

Menu 5. Motor Settings

Motor speed - The maximum speed the motors run at is controlled by the OPEN AND CLOSE SPEED VOLTAGE parameter. The default value is the maximum recommended for normal operation. If however the door moves too quickly for a particular installation, the voltage can be reduced to make the motors run slower.

NOTE: Altering these parameters will cause the travel limits to be cleared.

Menu 6.2 Safety Open Mode

By enabling this parameter, the user can open the door only by holding the open button on the wall control unit or by holding the open input active. The door can not be opened by the transmitters.

Menu 6.3 First (SB1) Safety Beam Response Mode

The Safety Beams input can be configured to respond in one of eight modes.

- i. **Reverses Close Cycles** In this mode, the Safety Beam input has no effect when opening but will cause the door to reverse if activated when closing.
- ii. **Close Cycles Stop** In this mode, the Safety Beam input has no effect when opening but will stop the door when closing.
- iii. **Open and Close Cycles Stop** In this mode, all cycles are prevented from being completed or initiated when the Safety Beam input is active.
- iv. **Open input** In this mode, open cycle is initiated when the Safety Beam is activated.
- v. **Swipe input** In this mode, open cycle is initiated when the Safety Beam is activated.
- vi. **Close input** In this mode, close cycle is initiated when the Safety Beam is activated.
- vii. **Ped input** In this mode, ped cycle is initiated when the Safety Beam is activated.
- viii. **Aux O/P trigger** In this mode, aux output is triggered when the Safety Beam is activated.
- ix. **Disabled** In this mode, Safety Beam is disabled.

Menu 6.4 Second Safety Beam (SB2) Response Mode

Same as above menu 6.3

Menu 6.5 Third Safety Beam (SB3) Response Mode

Same as above menu 6.3

Menu 6.6 Safety Beam Obstruction Reverse Time Mode

Normally after a Safety Beam obstruction the door will fully open to its open position. After a Safety Beam Close obstruction, the doors open cycle can be reduced from 5 sec to its full open position.

Menu 6.7 GPI Input

GPI input can be configured as OSC, PED or DST setup. The GPI input terminal is activated by the N/O switch.

- i. **When GPI Selected As OSC:** If the door is moving, the activation of the GPI input or by a transmitter button with the OSC function assigned will cause the door to stop. The next trigger will move the door in the opposite direction to the last travelled.
- ii. **When GPI Input Is Configured As PED:** The activation of the GPI input or by a transmitter button with PED function assigned will open the door partially to allow pedestrian access but prevent vehicle access. The position the door is driven to is automatically set to halfway during setting of the travel limits, but can be adjusted to suit.
- iii. **When GPI Input Is Configured As SWP:** Activation of GPI input in this mode will open the door.
- iv. **When GPI Input Is Configured As MANUAL OPERATION:** Activation of GPI input in this mode will disable all the transmitters.
- v. **When GPI Input Is Configured As DST:** The GPI input can be used to switch between STD time and DST (daylight savings time). The time selected is the amount of time added to STD time when DST is selected. The Options are OFF, 30, 60, 90 or 120 minutes. The GPI input needs to be constantly active to show day light saving time.

Menu 6.8 PED Input Function

If GPI or Fire Input is selected as PED then these inputs can be configured to a SWIPE type input for pedestrian access. This provides full functionality with the Safety Beam Triggered Pedestrian Auto-Close function.

Menu 6.9 Open Input Polarity

The OPN input is normally configured for N/O operation. This parameter allows its operation to be changed to N/C.

Menu 6.10 STP Input Polarity

The STP input is normally configured for N/O operation. This parameter allows its operation to be changed to N/C.

Menu 6.11 FIRE Input Polarity

The FIRE input is normally configured for N/O operation. This parameter allows its operation to be changed to N/C.

Appendix

C - Control Board Adjustments

Menu 6.12 FIRE Input Configuration

Fire input can be configuration as OPN ,CLS (available only if Safety Beams are installed) or PED function. Activated by FIRE input terminal with N/O or N/C (if selected) switch.

- i. **When Fire Input Is Configured As CLS :** Activating the fire input will cause the door to close only if Safety Beams are installed. Holding the input active will prevent door from opening.
- ii. **When Fire Input Is Configured As PED:** The activation of fire input will open the door partially to allow pedestrian access but prevent vehicle access. The position the door is driven to is automatically set to halfway during setting of the travel limits, but can be adjusted to suit.
- iii. **When Fire Input Is Configured As OPN :** Activating the fire input will cause the door to open. Holding the input will prevent the door from closing.

6.13 Remote Code

The controller supports the Remote Code Set feature. This parameter can be used to disable the feature for security or transmitter management reasons.

6.14 Activity Reports

This parameter enables activity report outputs. Contact Automatic Technology for more details.

6.15 Activity Report ID

This parameter sets the ID of the controller that is sent with the activity report. Contact Automatic Technology for more details.

6.16 Vacation Mode

Vacation Mode can be turned on or off using this parameter.

6.17 Standby Battery Enable/Disable

The controller can be instructed to turn off the Battery Backup facilities so that the control board can be shut down without having to disconnect the Battery Backup system.

6.18 Password Protection

The password feature enables all parameters and configuration settings to be protected unless a password is entered. When this feature is turned on, the user is requested to enter the desired password to be used. The password protection feature has a time-out that expires after 60 seconds of inactivity. Alternatively, the user may log out manually by pressing exit when the main screen is displayed.

6.19 Transmitter Grouping

The transmitter store number display format can be changed to show a grouped format. When grouping is selected, instead of displaying the store location as a number between 1 and 511, it will display as ##\$ where ## is the group number and \$ is a character a,b,c,d,e,f,g or h which indicates the group member.

6.20 Fault, Auto Reset

When selected, the controller will reset any fault automatically.

6.21 LED Low Power Mode

When LED low power mode is selected, the controller will turn the LED power off to save the power.

6.22 Console OSC Buttons

Console can be locked out by selecting console OSC buttons OFF.

6.23 AUX Output Operation

AUX output can be selected to be driven by:

- i. **Light Drive:** Although the GDO10V3L2 drive unit has a light relay output, a light relay module can be connected on the console between V+ and AUX OUT terminal which will turn the courtesy light on and off.
- ii. **Clock/Transmitter:** By selecting this option, AUX output can be triggered by programming the clock timer or by the transmitter.
- iii. **Open Status:** Selecting this option will cause the AUX output to stay active as long as the door stays open.
- iv. **Close Status:** Selecting this option will cause the AUX output to stay active as long as the door stays closed.

6.24 Safety Beam Failure Emergency Close Mode (SBFEC)

When a safety beam prevents movement due to any reason other than a 'real' obstruction, the user can secure their property by pressing and holding a button on the remote control or OSC on the console. The button must be held active for more than five seconds to activate this mode and hold the button for the entire duration of close cycle.

Appendix

D- Diagnostic Tools

The controller provides several diagnostic tools from within the Diagnostics Menu (Menu 8). This section details the function of each tool and its use.

Navigating To Diagnostics Menu

- Press PREV to navigate to Menu 8 (**Fig. D.1**).
- Press SET to display the menu of available functions.
- Press PREV or NEXT to cycle through diagnostic tools.
- Press SET to select.

Menu 8.1 Test Inputs

This tool is used to view the state of the control inputs. When selected, a screen is displayed (**Fig. D.2**) which indicates the state of each input. If the name of the input is in upper case or number in the bracket, then the input is active. Conversely if the input is in lower case and [---] dash in the bracket, then the input is inactive. For normal operation, all inputs should be inactive. When finished, press STOP.

Menu 8.2 Test Transmitters (Tx'ers)

This tool is used to test receiver/transmitter functionality. When selected, a screen is displayed which prompts for a transmitter button to be pressed (**Fig. D.3**) and whether ID or serial numbers are to be displayed.

The opener will then beep each time a transmission is received. If the transmitter button is stored in the controller memory and has a function assigned to it, a second screen will be displayed that shows the transmitter details along with the button pressed (**Fig. D.4**). The example shows the case where transmitter number 14 is activated by button 4. Note ID is selected for display.

Menu 8.3 Display History

The opener keeps a record of the last 64 events that have taken place. The events include the type of drive cycles executed, obstruction detection, various faults, power failures etc. When this tool is selected, the screen displays the last event that occurred (**Fig. D.5**). Press NEXT or PREV to view each event. The "EVENT#" field shows the sequence of the events, with (1) being the first and (64) being the last. The example shows that the last event was a close cycle which succeeded in closing the door. When finished viewing the events, press STOP to exit.

Menu 8.4 Memory Usage

This tool displays the number of transmitter store locations used and the number free (**Fig. D.6**).

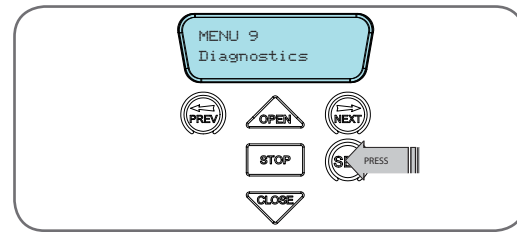


Fig D.1

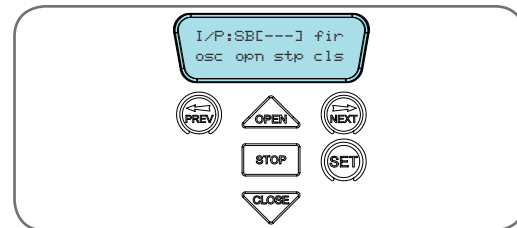


Fig D.2

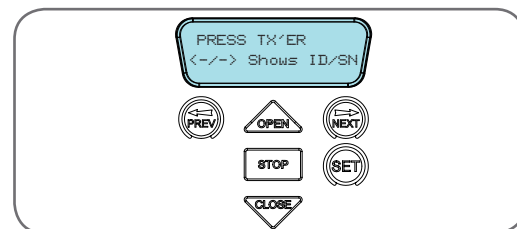


Fig D.3

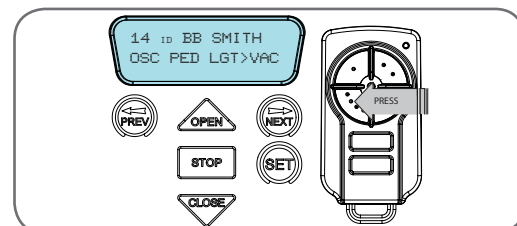


Fig D.4

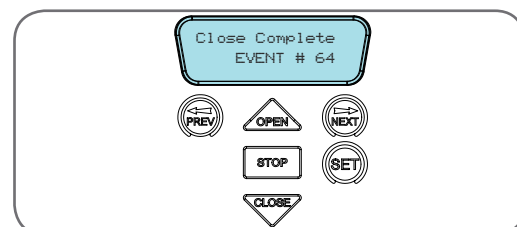


Fig D.5

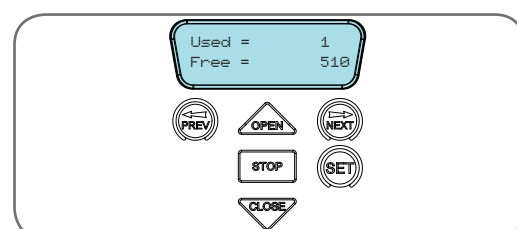


Fig D.6

Appendix

D- Diagnostic Tools

Menu 8.5 Service Counter

The opener provides a periodic service counter which can be set to expire after a number of drive cycles. When expired, the opener will beep three times at the beginning of each drive cycle and a message will be displayed on the MAIN SCREEN (**Fig. D.7**). This tool displays the current value of the service counter and allows the user to set its value using the normal parameter editing techniques (See PARAMETER VIEWING AND EDITING). If the service counter is not to be used, it can be set to the maximum number (60,000).

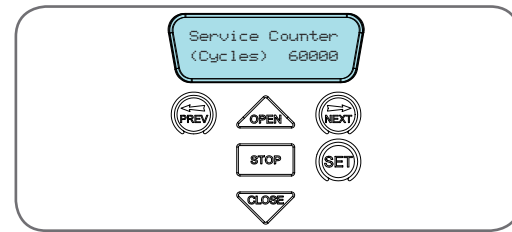


Fig D.7

Menu 8.6 Event Counters

The opener keeps a count of number of times a particular event occurs. The list of event counters kept is shown below. When this tool is selected, the first event counter is shown (**Fig. D.8**). Press NEXT or PREV to step through the list. The example shows the OPEN CYCLE event counter with a value of 500. When finished viewing press STOP.

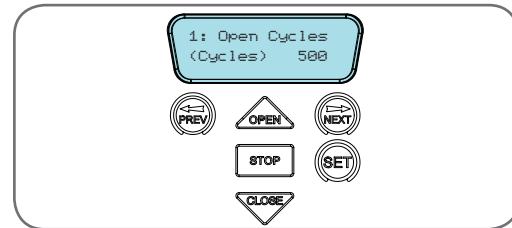


Fig D.8

- | | |
|----------------------------|--------------------------|
| 1: Open Cycles | 2: Close Cycles |
| 3: PED Cycles | 4: Warranty Cycles |
| 5: Open Obstructions | 6: Close Obstructions |
| 7: Open O/LS | 8: Close O/LS |
| 9: Setup Limits | 10: Drive Faults |
| 11: Volt Faults | 12: Low Motor Amp Faults |
| 13: Amp ADC Faults | 14: Supply Hi Faults |
| 15: Supply Low Faults | 16: Amp Trip Faults |
| 17: Position Sensor faults | 18: Drive Memory Faults |
| 19: Position Wrap Faults | 20: Direction Faults |

Menu 8.7 Install Data

- i. **Open Position:** Shows the fully open position door counter.
- ii. **PED Position:** Shows the pedestrian position counter.
- iii. **Open Time:** Time taken for the opener to drive the door to open position.
- iv. **Close Time:** Time taken for the opener to drive the door to the close position.

Menu 8.8 Parameters

Supply voltage, cutout maximum current allowed to use by the opener, percentage of charge in the batteries, battery voltage, battery charging voltage, motor voltage, current used by the system and current position counter value are displayed under this menu.

All the parameters mentioned above can also be viewed while the opener is running. By default, the current used by the motor will be displayed on the LCD screen. This can be useful to check the condition of the door. Scroll through other parameters by pressing NEXT or PREV buttons while the door is running.

Menu 8.9 Version Info

Firmware information for the GDO10 drive and console are shown here.

Appendix

E - Memory Tools

Menu 9.0 Memory Tools

The Memory Tools accessed from within Menu 9 are used to clear the transmitters codes from the openers memory and clear the controller's memory. Once selected, the PREV or NEXT buttons can be used to view the Memory Tool options. To execute the displayed option, simply press SET.

Menu 9.1 Clear Control

This option will clear the door control memory and reload the factory set defaults for parameters such as the lock time, light time, Auto-Close times etc. It will also clear the travel limits.

Menu 9.2 Clear Transmitters (Tx'ers)

This option will clear the transmitter storage memory.

Appendix

F- Transmitter Editing

Fig F.1

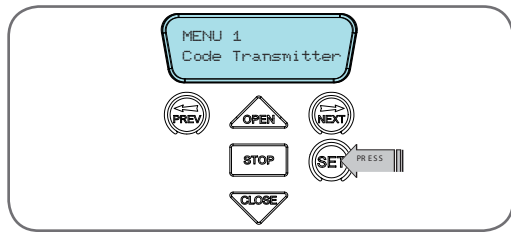


Fig F.2

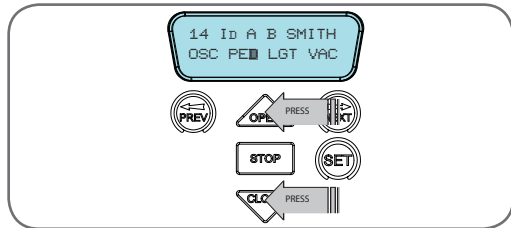


Fig F.3

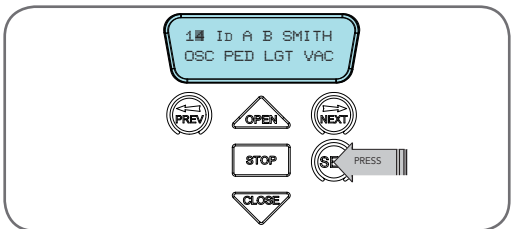


Fig F.4

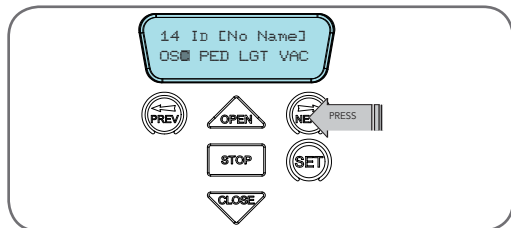


Fig F.5

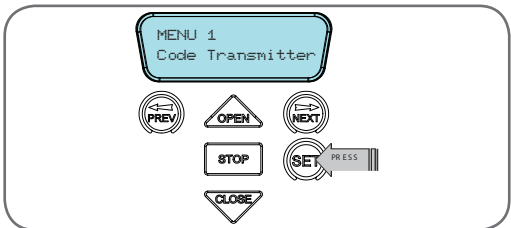


Fig F.6

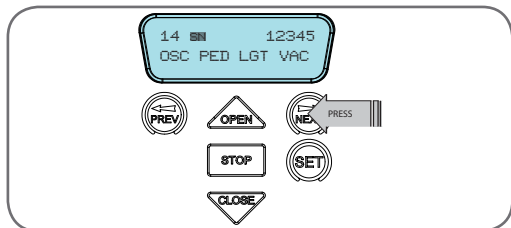
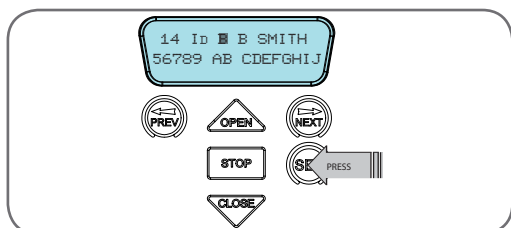


Fig F.7



Navigating To "Edit Transmitter" Menu

- Press NEXT to navigate to Menu 1 (**Fig. F.1**).
- Press SET to enter the transmitter edit procedure.
- Press NEXT to enter transmitter list and edit mode.

Editing Button Function Field

- Press NEXT or PREV to move the cursor to the left or right and between the top and bottom lines to select the desired field.
- Press OPEN or CLOSE to change the displayed value (**Fig. F.2**). The available functions are shown below. Selecting OFF will prevent the opener responding to that button.

Available functions

OSC (Open/Stop/Close)	PED (Pedestrian access)
SWP (Swipe)	CLS (Close)
OPN (Open)	STP (Stop)
LGT (Courtesy Light)	VAC (Vacation Mode)
AUX (Auxiliary)	OFF (No action)

NOTE: OSC will change to OS in the case where Safety Beam is not installed.

- Press SET to save changes or press NEXT or PREV to move to the next field. The example in (**Fig. F.3**) shows that PED is assigned to the transmitter button 2. The transmitter in the example is transmitter number 14 which has the ID label AB Smith.

NOTE: If all button functions are set to OFF, when SET is pressed, the opener will prompt to confirm if the transmitter is to be deleted. Press SET to delete or STOP to continue editing.

Editing The Store Location

This feature is only available when coding the first button of a new transmitter.

- Press NEXT or PREV to move the cursor over Store No. (**Fig. F.4**)
- Press UP or DOWN to select new Store No.
- Press SET to Confirm or NEXT/PREV to move to the next field.

This is useful when managing transmitters using a scheme which ties the store location to the transmitter's owner.

Selection Of ID or Serial Number Display

- Press NEXT to navigate to the Menu 1 "Code Transmitter" (**Fig. F.5**).
- Press SET to enter the transmitter edit procedure.
- Press NEXT to enter transmitter list and edit mode.
- Press NEXT/PREV to move the cursor over the ID field.
- Press NEXT to reveal the Serial Number (**Fig. F.6**).

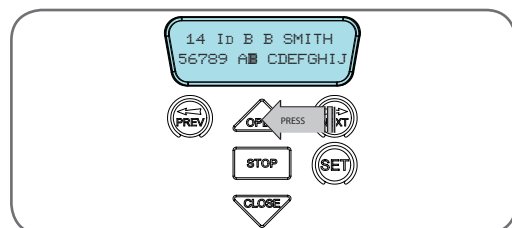
The serial number display is provided for additional means of identification. The transmitter in this example has serial number 12345.

Editing A Character Field

- Press NEXT or PREV to move select character. (**Fig. F.7**)
- Press UP or DOWN to scroll through and select a new character.
- Press NEXT or PREV to move to the next character.
- Repeat step 2.
- Press SET to record changes.

The second line of the display shows a list of characters with the current value indicated at the cursor position (**Fig. F.8**).

Fig F.8



Appendix

G- Transmitter Management

Transmitter Listing Facility

The GDO-10V3L2 provides a transmitter listing facility which enables the user to find a transmitter location within the memory. Once located a stored transmitter can be replaced, deleted, edited, copied or, if the location is empty, a new transmitter can be coded.

Method 1 - Go To The Start Of The List Accessing The List Menu

- Press NEXT to navigate to Menu 1 (**Fig. G.1**).
- Press SET to enter the transmitter edit procedure.
- Press NEXT to enter the transmitter list and edit mode.

Method 2 - Use The Transmitter To Go Direct To The List Accessing The List Menu

- Press NEXT to navigate to Menu 1 (**Fig. G.1**).
- Press SET to enter the transmitter edit procedure.
- Press the transmitter once (**Fig. G.2**).
- Press NEXT to view the transmitter parameters (**Fig. G.3**).
This method is used for quick navigation if the transmitter is available.

NOTE: "VIEW" will not be shown if the transmitter is not stored. Once the list is displayed, it can be sorted by stored number, ID Label or Serial Number. Use the NEXT or PREV buttons to select the sorting method.

NOTE: When sorting by ID label or S/N, only stored transmitter locations are displayed.

Navigating The List

- Press the OPEN or CLOSE buttons to navigate through the list (**Fig. G.4**).
- NOTE:** Holding a button down will step through the list faster.
- Press SET to display the menu of available functions.

Selecting An Operation

- Press NEXT or PREV to cycle through the four menu options (**Fig G.5**).
- Press STOP to return to the list. Press SET to execute the menu's operation.

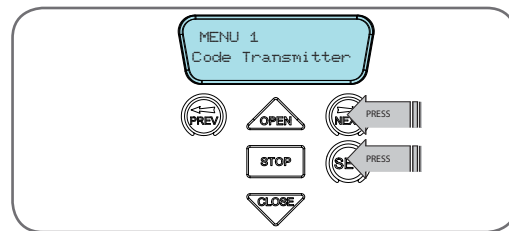


Fig G.1

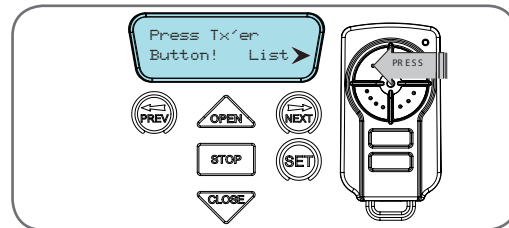


Fig G.2

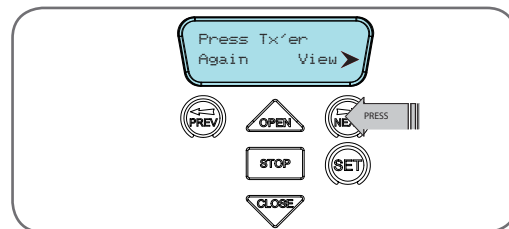


Fig G.3

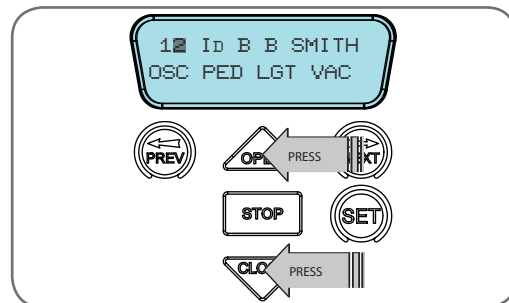


Fig G.4

Menu Option	Operation
Code Operation (location empty)	If the code operation is selected on an empty transmitter location, the BASIC CODE TRANSMITTER PROCEDURE will be initiated with the transmitter being saved in the selected location. This is useful when managing transmitters using a scheme which ties the store location to the transmitter's owner.
Code Operation (location used)	If the code operation is selected for a location that already contains a transmitter, then the BASIC CODE TRANSMITTER PROCEDURE will be initiated and the new transmitter will replace the existing one. Note that the button functions and name of the existing transmitter will be transferred to the new transmitter. This procedure is of great convenience when replacing a lost transmitter.
Delete Operation	The delete operation is used to remove a transmitter from memory along with the name and button function settings.
Edit Operation	The edit operation displays the transmitter record for editing purposes. See TRANSMITTER EDIT PROCEDURE (Section 14) for details.
Copy Operation	The copy operation is used to code multiple transmitters with the same button function as that of the selected transmitter. Once selected an abbreviated code set routine is initiated which repeats steps 2 & 3 of the BASIC CODE TRANSMITTER PROCEDURE for each transmitter to be coded. Coding is terminated by pressing the STOP button.
Exiting The List	To exit the transmitter list, simply press STOP to return to the Code menu.

Fig G.5

30. Warranty and Exclusion of Liability

1. This Warranty is given by Automatic Technology (Australia) Pty Ltd (ABN 11 007 125 368) (ATA), 6-8 Fiveways Boulevard, Keysborough 3173, 1300 133 944, sales@ata-aust.com.au
 2. The Competition and Consumer Act 2010 (including the Australian Consumer Law) and other relevant statutes provide a set of statutory consumer guarantees and other legal rights that cannot be excluded, restricted or modified by contract. This Warranty is in addition to and does not affect any of your rights under the Australian Consumer Law and other relevant statutes.
 3. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation of any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.
 4. Subject to your non-excludable rights under the Australian Consumer Law, ATA expressly excludes any liability for consequential loss, incidental or indirect damages (including but not limited to damages for loss of business profits, business interruption and loss of business information) due to a defect of the GDO-10 Toro™ (Product). In particular any loss or damage caused to other equipment or accessories used with the product or any loss resulting from a delay in repair is excluded to extent permitted by law.
 5. Subject to all of the matters set out below, ATA warrants in relation to the Product that:
 - (a) the Product's door opener drive units will be free of any defects in material and workmanship for at least 24 months after the date of purchase (as evidenced by the sales docket receipt), or 5,000 cycles, which ever occurs first; and
 - (b) the Product's other components and accessories will be free of any defects in material and workmanship for at least 12 months after the date of purchase (as evidenced by the sales docket receipt).
 6. No additional warranty will apply for Products repaired during the relevant warranty period.
 7. For all Products repaired outside the warranty period, a six (6) month warranty that the Product will be free of any defects in material and workmanship will apply from the date of dispatch of the Product to you. ATA may charge you for any repairs undertaken outside the warranty period, and will provide you with a quotation in relation to any such costs for your approval before proceeding with any repairs.
 8. This Warranty applies only where you:
 - (a) immediately notify ATA at the contact details provided in paragraph 1 above or notify the retailer that you purchased the Product from of the alleged defect;
 - (b) return the product to the retailer that you purchased the Product from; and
 - (c) present the relevant sales docket and this Warranty document to the retailer to confirm the date of purchase.
 9. Except for this Warranty, ATA gives no warranties of any kind whatsoever (whether express or implied), in relation to the product, and, subject to paragraph 1 above, all warranties of whatsoever kind relating to the product are hereby excluded.
 10. This Warranty excludes damage resulting from:
 - (a) normal wear and tear;
 - (b) accidental damage;
 - (c) incorrect installation of the Product;
 - (d) blown fuses, electrical surges, power surges or power spikes;
 - (e) theft, fire, flood, rain, water, lightning, storms or any other acts of God;
 - (f) any installation, configuration or use of the Product contrary to the instructions supplied with the Product;
 - (g) maximum continuous operating time exceeding 1 minute in 10;
 - (h) the operating force exceeding 15kg* (150 Newton) when moving the door manually to the open or closed position;
 - (i) door surface area and/or weight exceeding 28m² and 270kg respectively;
 - (j) the door used with the Product not being in safe working order and condition;
 - (k) repairs which are not authorised by ATA;
 - (l) any failure to install or maintain the Product in accordance with the instructions supplied with the Product;
 - (m) any use which is not in accordance with the instructions provided with the Product;
 - (n) deliberate or negligent damage to the Product;
 - (o) any unauthorised modification to the Product;
 - (p) faulty or unsuitable wiring in the building in which the Product is installed;
 - (q) damage caused by insects;
 - (r) any cost or expense relating to the recall of the Product;
 - (s) installation of a residential garage door opener in a commercial or industrial premises or in a dwelling other than a single-family dwelling;
 - (t) radio or electrical interference; or
 - (u) acts or omissions of any person (including service providers approved by ATA) other than ATA.
11. 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.
 12. This Warranty does not extend to cover labour for installation of the Product following repairs, the cost of which must be borne by you.
 13. This Warranty is limited to Return-to-Base (RTB) repair and does not cover labour for on-site attendance, the cost of which must be borne by you.
 14. Except as specified in this Warranty, ATA will not charge you for any repairs or replacements conducted under the Warranty. However, ATA will charge you for any repairs which are not within the scope of this Warranty (or which are not required to be undertaken free of charge pursuant to the Australian Consumer Law).
 15. This Warranty is void if the Product is not returned to the manufacturer in original or suitably secure packaging.
 16. This Warranty is only applicable for repairs to the product carried out within Australia.
 17. This Warranty does not cover consumable items including, without limitation, globes, batteries and fuses.
 18. This Warranty is not transferable.
 19. 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.
 20. Any provision of this Warranty that is prohibited or unenforceable in any jurisdiction is ineffective as to that jurisdiction to the extent of the prohibition or unenforceability. That does not invalidate the remaining provisions of this Warranty nor affect the validity or enforceability of that provision in any other jurisdiction.
 21. Products presented for repair may be replaced by refurbished goods of the same type rather than being repaired. Refurbished parts may be used to repair the Product.

NOTES:

1. One (1) cycle = one (1) open and one (1) close action of the door.
2. This Warranty is to be read in conjunction with the owner's copy of the installation instruction manual.
3. * The door that the Product is used with should be balanced in such a way that the user is able to open or close the door manually using a force not greater than 150 Newton (15 kg), other than to initially cause the door to start moving, which may require force in excess of that specified in this paragraph.

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