automatic
TECHNOLOGY

GDO-10 Toro
Roll Up Door Opener
Installation Manual

SMART
SIMPLE
SECURE
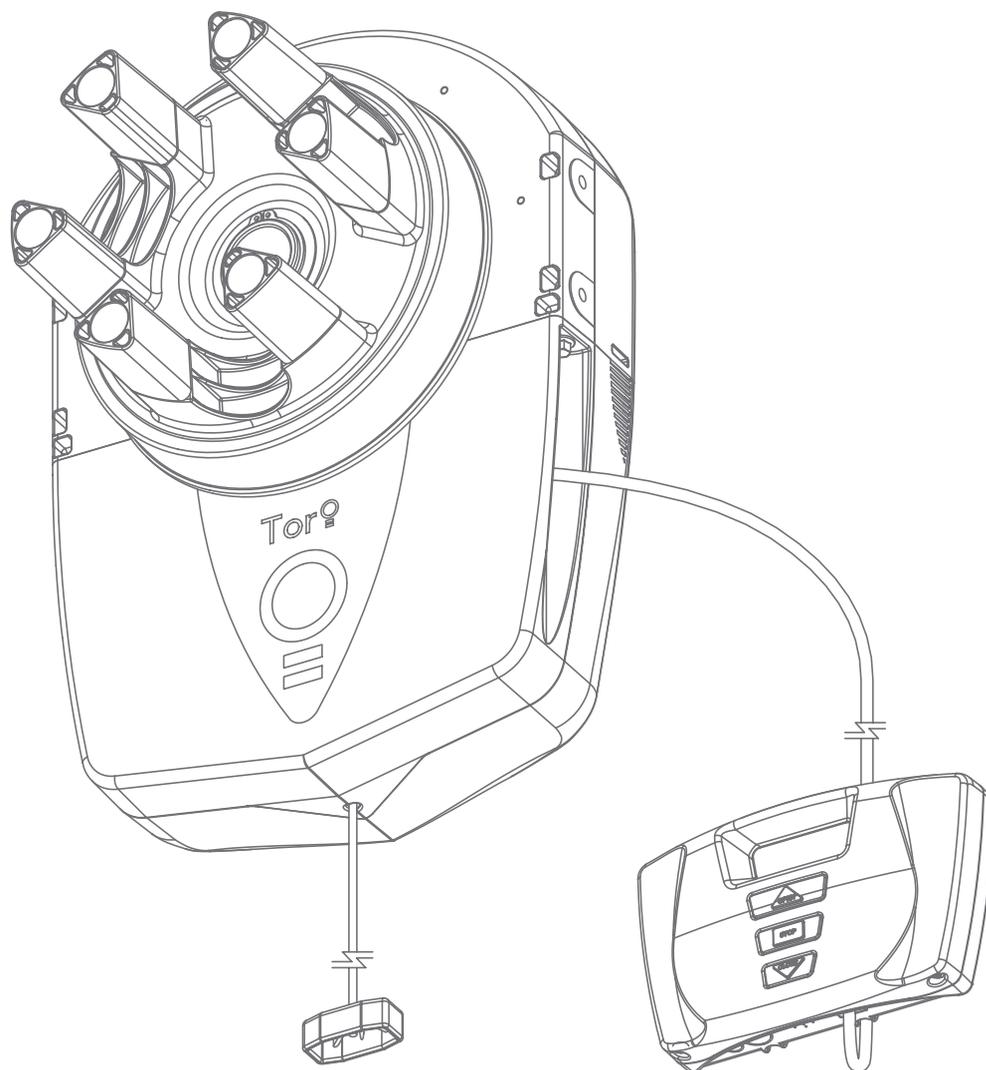
GDO-10V3L2 Toro™

Roll Up Garage Door Opener

Contents

1. Safety Information

Please read these important safety rules

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

This automatic garage door operator 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 installation instructions and the safety warnings may result in death, serious personal injury and/or property damage.

WARNING!

- To reduce the risk of injury to persons – Use this operator only with a rolling door. The drive must not be used with a door incorporating a wicket door, unless the drive cannot be operated with the wicket door open.

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

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

- Watch the moving door and keep people away until the door is completely opened or closed.

ELECTROCUTION:

- Installation and wiring must be in compliance with your local building and electrical codes.

- This operator is not equipped for permanent wiring. Contact a qualified electrician to install a suitable receptacle if one is not available.

- To reduce the risk of electric shock, this equipment has a grounding type plug that has a third (grounding) pin. This plug will only fit into a grounding type outlet. If the plug does not fit into outlet, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

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

- Connect the power cord only to properly earthed mains. If an extension lead must be used, make sure it is a 3-core lead and approved to 7 amp capacity.

- This unit is not user serviceable. Unplug the power cord before removing the cover. Ensure that the power cord is attached clear of all moving parts. Ignoring these instructions can cause electric shock.

- Disconnect the power supply when cleaning or other maintenance is being carried out.

BATTERY WARNING!

- This product contains a lithium button/coin cell battery in the transmitters. If a new or used lithium button/coin cell battery is swallowed or enters the body, it can cause severe internal burns and can lead to **DEATH** in as little as 2 hours. Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the battery and keep it away from children. If you think batteries might have been swallowed or placed inside any part of the body, **SEEK IMMEDIATE MEDICAL ATTENTION.**

CAUTION:

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

- Frequently examine the installation for imbalance where applicable and signs of wear or damage to springs and mounting. Do not use if repair or adjustment is necessary. Sticking or binding doors must be repaired. Garage doors, door springs, brackets and their hardware are under extreme tension and can cause serious personal injury. Do not attempt any garage door adjustment. Call for professional garage door service.

- Position the Garage Door Operator so that the power plug is accessible when inserted into the power outlet.

- Install the wall transmitter in a location where the garage door is visible, but out of the reach of children at a height of at least 5 feet (1.53m).

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

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

- Ensure ladder is the correct type for the job and is on flat ground. We recommend the user has 3 points of contact while on ladder.

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

- The operator is not intended for use by young children or infirm persons without supervision.

- Keep transmitters away from children.

- Do not allow children to play with door controls

2. Controller Input And Outputs
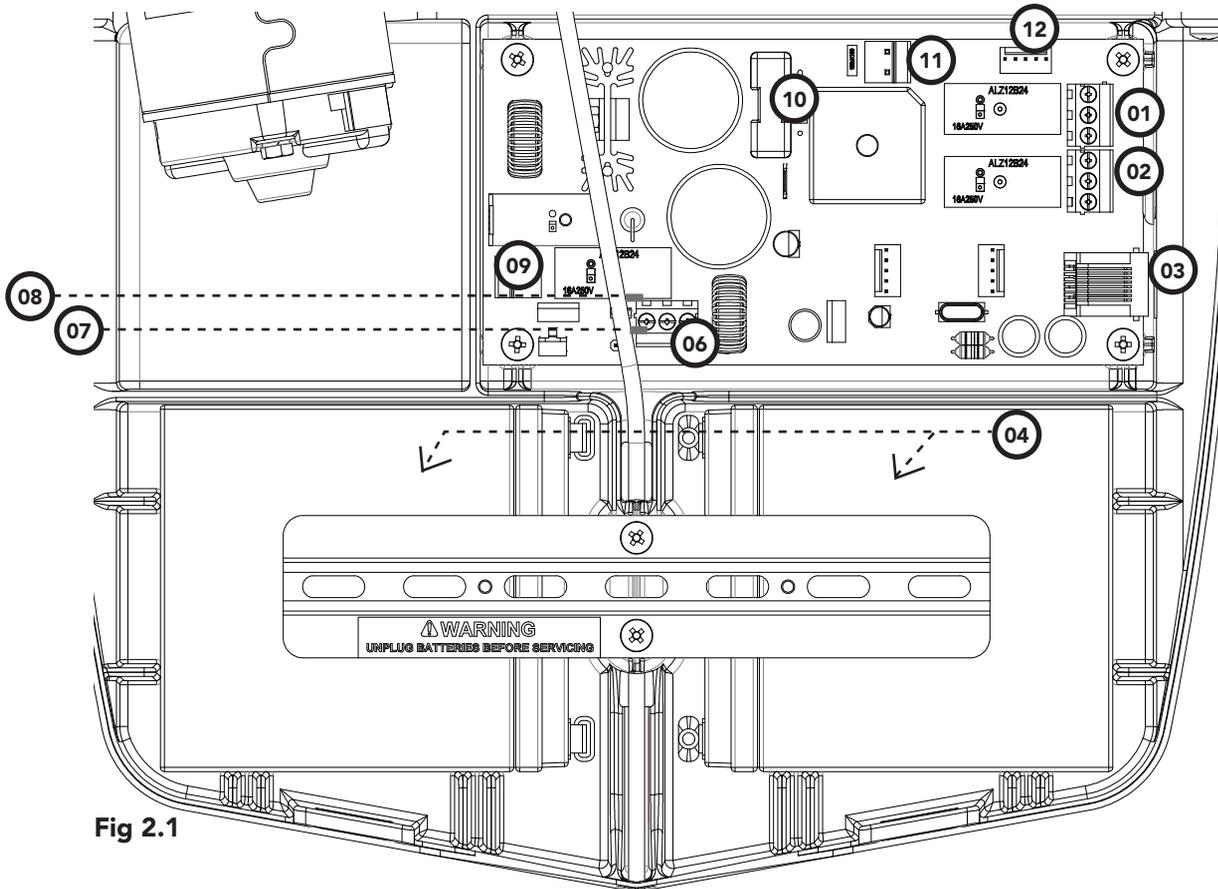
Fig 2.1

01 Light Relay Output N/O, Com, N/C Contact	**07** Solar Shunt
02 Lock Relay Output N/O, Com, N/C Contact	**08** Standby Battery Shunt
03 Serial Interface Connector	**09** Motor Connector
04 12 volts 6 Amp - Hr Batteries	**10** 10 Amps Slow Blow Fuse
05 Engage/Disengagement Handle	**11** 24 Volts Ac In Connector
06 Standby Battery Charger/Solar Connector	**12** Position Sensor Connector
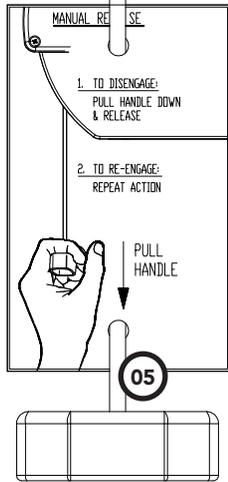
3. Operating Controls

Fig 3.1

(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**

4. Set Up Requirements

4.1 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

4.2 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)
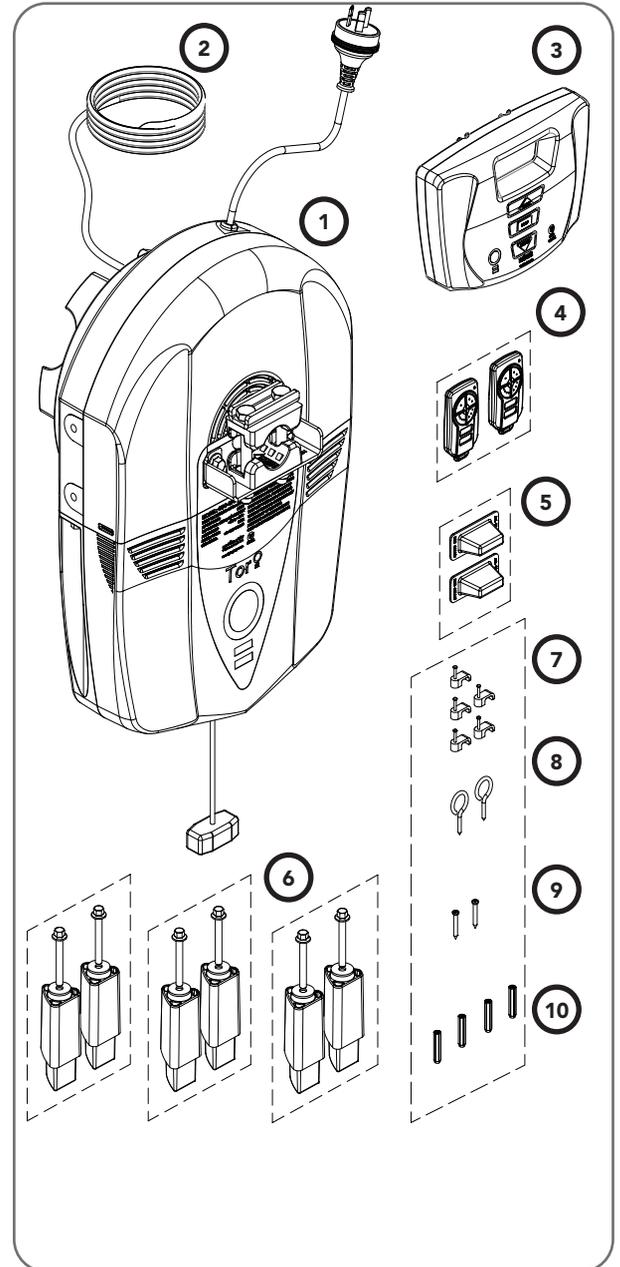
Fig 4.1

5. Pre-Installation Requirements

IMPORTANT SAFETY INSTRUCTIONS FOR INSTALLATION
Warning: Incorrect installation can lead to severe injury.
Follow ALL installation instructions.
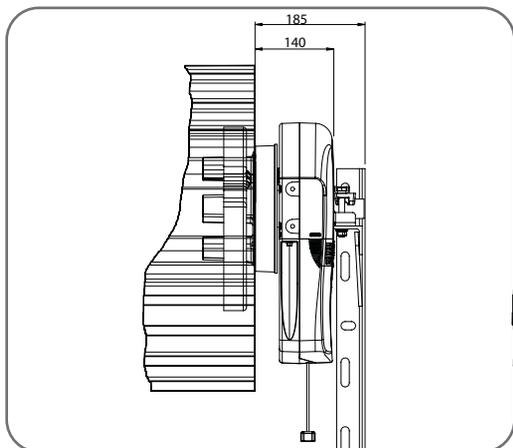
Fig 5.1

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

5.1 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.
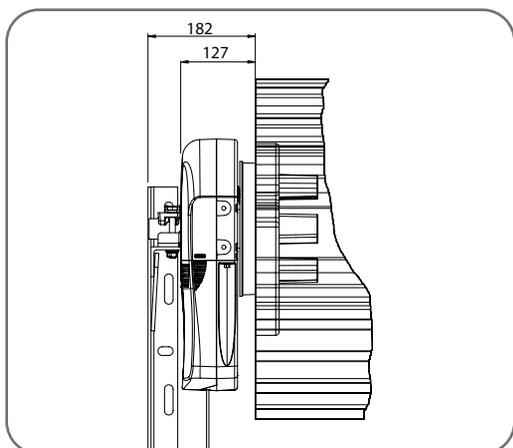
5.2 Unsuitable Door Types
The fitting of an opener to doors with removable mullions or doors incorporating a wicket door is not recommended.

Fig 5.2

5.3 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.

5.4 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.
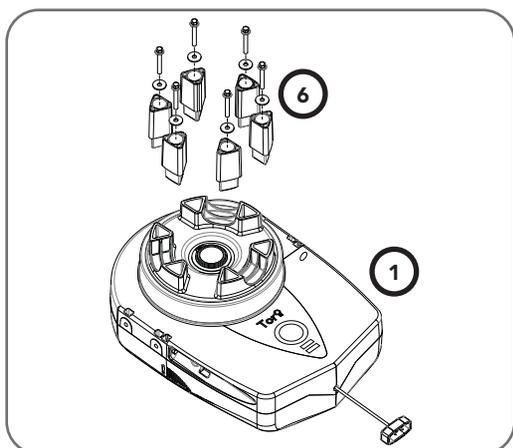
5.5 Sideroom
Sideroom For Right Hand Side Installation
The minimum sideroom required from the edge of the door curtain is 140 mm to the inside of the door bracket when the opener is mounted on the door bracket **(Fig. 5.1)**.

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

Fig 5.3

• 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. 5.2)**.

5.6 Forks
Attach and secure all six (6) forks ⑥ to the drive unit ① with screws supplied **(Fig. 5.3)**. All the six (6) forks must be used and properly engaged into the drum of the door for the opener to work effectively.

6. Installation

6.1.1 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.
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).

6.1.2 Pinning the Door to the drum:
Pinning the door's curtain to its drum maintains security when the opener is closed. If the curtain is not pinned the door can be partially opened manually.
a. Fully close the door.
b. Mark a minimum of two (2) drill holes on the drum to each end of the door.
c. Drill holes using 3.2mm ($^1/_8$") drill bit.
d. Fit M10 x 32mm screws and washers (not supplied) to each of the four (4) holes. This screw should be positioned as low as possible in the grove, but make sure that it does not alter the curtain's normal lead in to the guide as per **Fig. 6.1.**

Screw into the low part of grove

Fig 6.1

Pin Points

BALLOONING DOOR

FREE DOOR   **PINNED DOOR**
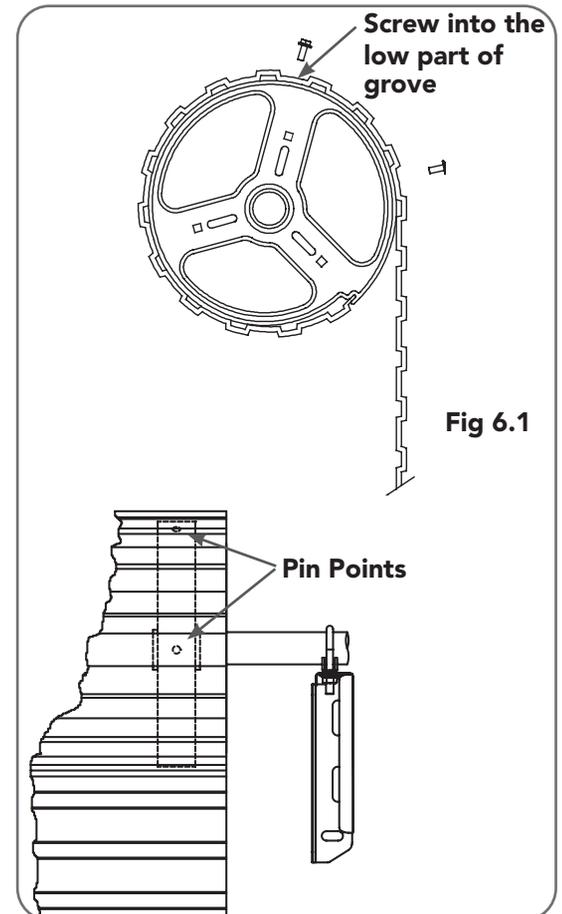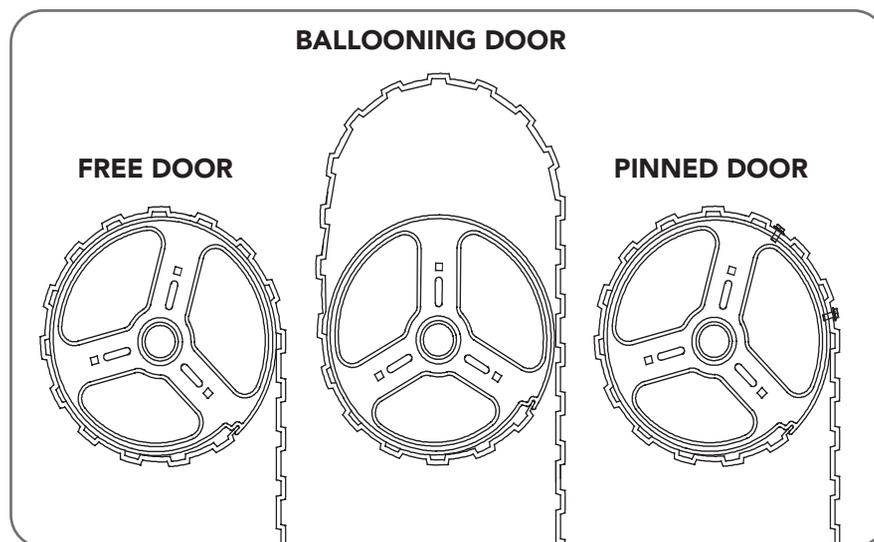
6.2 Door prop preparation
a. At the end opposite to where the opener will be fitted, check that each nut securing the door axle, is tightened (to a torque setting of 40Nm) to the bracket. **(Fig. 6.2)**
b. Open the door completely and tie safety ropes around the door roll approximately 300 mm from each 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 door is secure in the support, 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. Raise the door off the door bracket and secure in the support.

Fig 6.2

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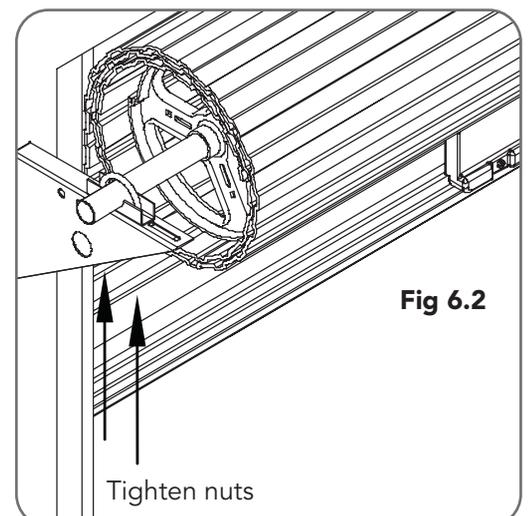
NOTE - For minimum sideroom installations, the door may have to be taken down.

6.3 Mounting The Opener

a. 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.

b. Slide the opener over the door axle and into the drum of the door **(Fig. 6.3)**.

c. 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.

d. 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:

   i. 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. 6.4)**.

Fig 6.3

Fig 6.4

Tighten Nuts

   ii. 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.

e. 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.

**WARNING!**

- **The opener must not be used with a door incorporating a wicket door.**
- **The doors axle must be securely clamped otherwise the door can loose spring tension.**
- **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.**

6.4 Installing The Wall Mounted Control Unit

a. Remove the face cover from the wall mount control unit ③.

b. 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.

c. Replace the face cover.

d. Connect the network cable ② from the wall control unit to the **GDO-10V3L2** powerhead unit ① and secure with p clips ⑦.

e. 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.

f. With the opener still disengaged, pull the door up and down to make sure it runs freely.

7. 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.

8. Setting Limits

8.1 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.**

a. 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.

b. Move the door to half way open. If necessary, disengage the opener by pulling the cord down **(Fig.8.1).** Re-engage the opener by pulling the cord down again.

c. Unscrew the screws at the bottom of the logic console cover **(Fig.8.2)** and remove the cover to access the PREV, NEXT and SET buttons.

d. Turn on the power to the opener. The controller will go through a start up sequence. After a short delay the MAIN SCREEN **(Fig. 8.3)** 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.

   i. 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.

   ii. If the door overshoots press the OPEN button to move the door in the open direction.

e. 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. 8.4)**.

f. 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.**

g. 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 13.1 for further details.

h. Place cover back on logic console and affix with screws when unit setup is complete.

Pull Down To Engage/Disengage
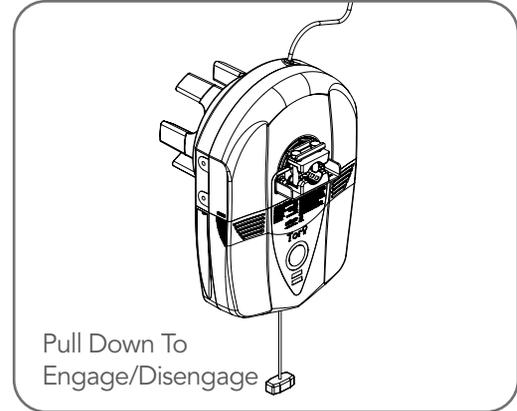
Fig 8.1

⚠ **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 8.2

↑↓ To Desired
CLOSE Limit,SET

PREV   OPEN   NEXT
STOP   SET
CLOSE

Fig 8.3

↑↓ To Desired
OPEN Limit, SET

PREV   OPEN   NEXT
STOP   SET
CLOSE
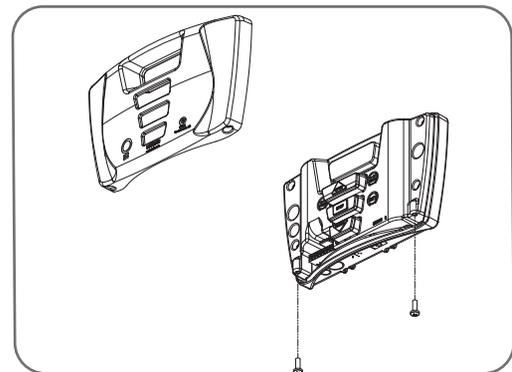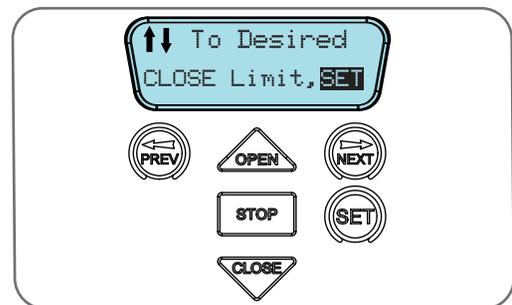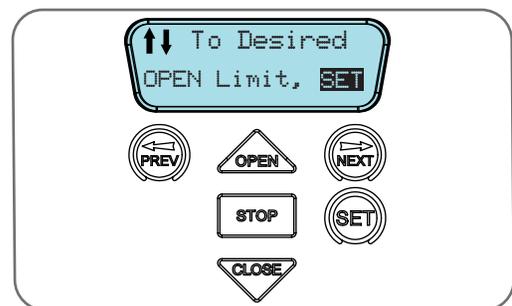
Fig 8.4

8. Setting Limits: Via Transmitter

Fig 8.5
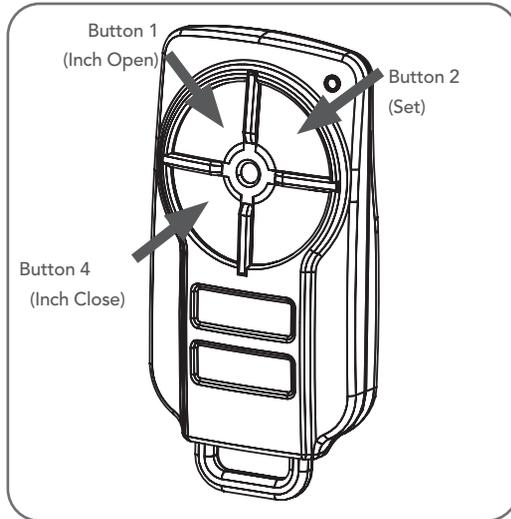
Button 1
(Inch Open)

Button 2
(Set)

Button 4
(Inch Close)

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

Fig 8.6

MENU 1
Code Transmitter

PREV   OPEN   NEXT

STOP   SET   PRESS

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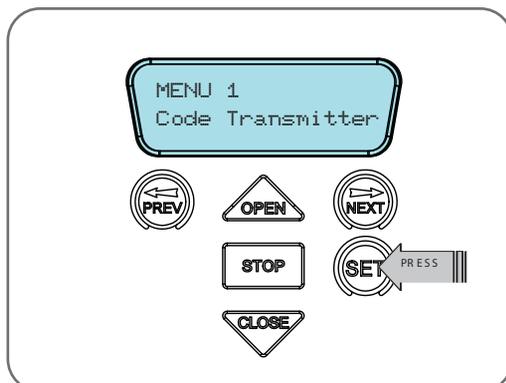
HELPFUL TIP: To access the PREV, NEXT and SET buttons, unscrew the screws at the bottom of the logic console cover and remove cover.

The GDO-10V3L2 Toro™ 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 temporally assigned to OPEN, CLOSE and SET **(Fig. 8.5)**.

8.2 Code A Transmitter For Limit Setting
Navigating to "code transmitter" menu
a. Press NEXT to navigate to Menu 1.
b. Press SET to enter the code set procedure **(Fig. 8.6)**.

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

Navigating To "Set Door Travel Menu"
a. Press PREV to navigate to Menu 10.
b. Press SET to display MENU 10.1.
c. Press SET two times to enter the limit setting procedure. The close blue LED will start to flash.

8.3 Setting Limits Via Transmitter
a. Press and hold Button 4 on the transmitter to close the door
   i. 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.**

b. Then press and hold Button 4 on the transmitter to close the door.
   i. If the door is closed too far, press Button 1 to "inch" the door towards open.
   ii. When happy with the close limit position, press Button 2 to store this in the memory. The open green LED will starts to flash.
c. Press Button 1 to open the door.
   i. 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 13.1 for further details.

9. 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. 9.1).** 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.

9.1 Coding Transmitter Button

Navigating To Menu 1 "Code Transmitter"
a. Press NEXT to navigate to Menu 1).
b. Press SET to enter the code set procedure.

Storing Transmitter Code
a. The logic console will prompt to press one of the transmitter's buttons.
b. Press the transmitter button you wish to use to operate the opener (e.g. button 1) (**Fig. 9.2**) .
c. Press the same transmitter button again as prompted by the display.

9.2 Selecting Function Of The Button
The logic console will now show the transmitter's record, with a cursor on the field for the button being coded **(Fig. 9.3)**. 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 can change to OS and CLS (Close) function, but is not available in the case where PE Beams are not installed.
Press SET to save the settings or STOP to abort without saving.

9.3 Returning To Main Screen
Press STOP to return to the MAIN SCREEN and test the transmitter.
NOTE: To edit the other settings, refer to transmitter edit procedure in Appendix F.
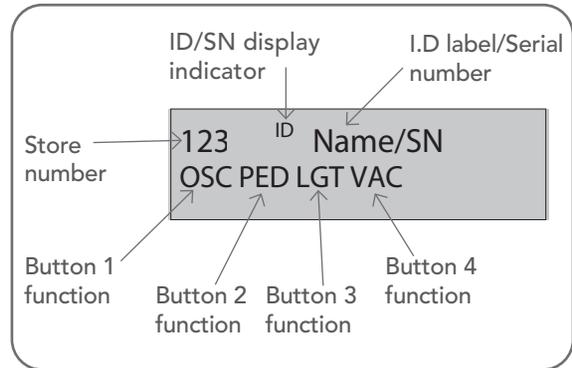
Fig 9.1

HELPFUL TIP: To access the PREV, NEXT and SET buttons, unscrew the screws at the bottom of the logic console cover and remove cover.
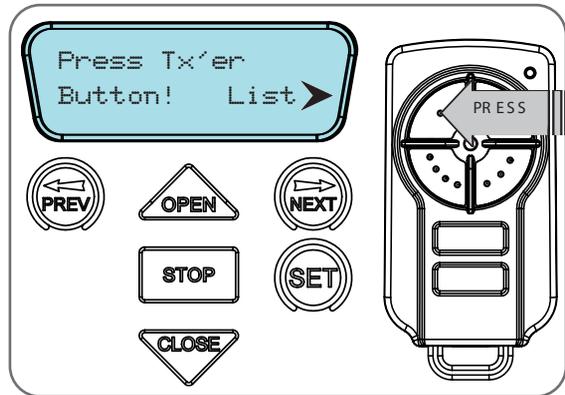
Fig 9.2
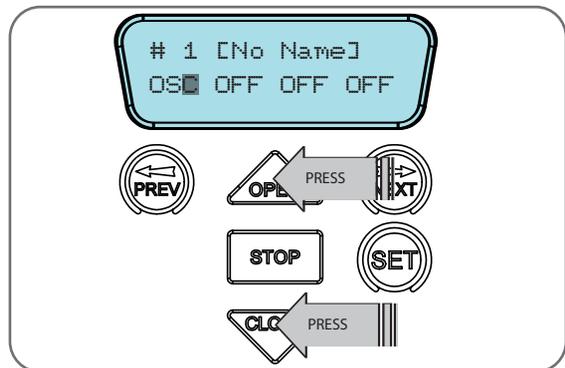
Fig 9.3

10. Remotely Coding Transmitters

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

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.

10.1 Selecting The Function To Be Coded
a. Using the existing transmitter, operate the Door with the transmitter button which has the function to be coded **(Fig. 10.1)** (e.g. Button 1 has been coded with the OSC function assigned).
b. If the button's function activates the Door (PED, SWP, OSC, CLS, STP or OPN) wait for the Door to complete its cycle.

10.2 Activate Remote Code Set Mode
a. Use a small pin / pen to press and hold through the Coding Hole of the existing transmitter for 2 seconds **(Fig. 10.2).**
b. Within 10 seconds, press the button on the new transmitter you wish to code for 2 seconds **(Fig. 10.3)**.
c. Press the same button again (within 10 seconds) for confirmation.
d. Test Operation. The new transmitter button should now function as the existing transmitter.

NOTE: To Manage your Transmitters, refer to Transmitter Management in Appendix G.

Existing transmitter

Fig 10.1

Existing transmitter

Fig 10.2

New transmitter

Fig 10.3
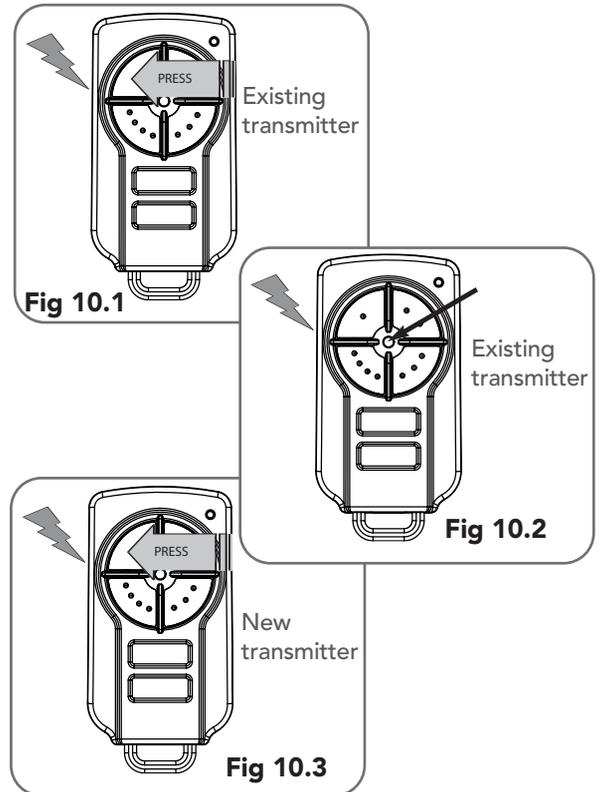
11. Setting Pedestrian Position

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.

11.1 Setting Pedestrian Position
a. Drive and stop the door at the desired Pedestrian Access position by using a transmitter or wall control unit.
b. Press PREV to navigate to Menu 10.
c. Press SET. MENU 10.1 will be displayed.
d. Press NEXT to go to MENU 10.3
e. Press SET on the wall control unit to save the Pedestrian Access position **(Fig. 11.1).**
f. Press the STOP button to exit to the main screen.

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

```
MENU 10.3
Set Pedestrian
```

Fig 11.1

11.2 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. 11.2)**. 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.

```
Ped'n Access
FRI 11:06:44 STD
```

Fig 11.2

11.3 Error Displays
During the above procedure many error checks are performed. If an error is detected, a message will be displayed indicating the error.
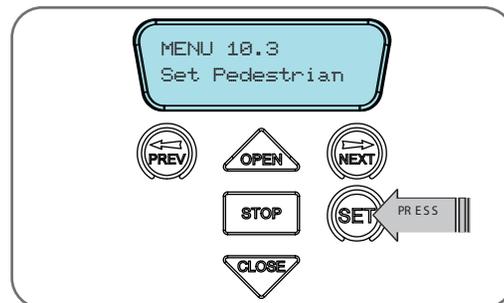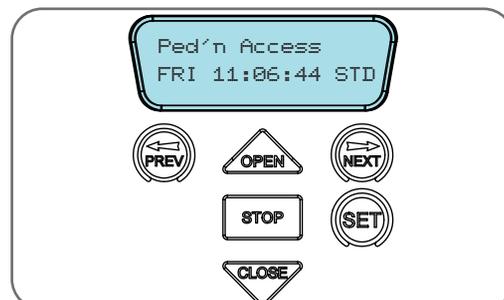
12. Safety Obstruction Force Test

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

12.2 Testing Open Cycle
d. Press the CLOSE button to close the door.
e. 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.
f. 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.**

12.3 Adjusting the 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.

Force Pressure For Close Cycle.
Navigating To "Current Trips"
a. Press NEXT or PREV to navigate to Menu 2 Current Trips.
b. Press SET.
c. MENU 2.1: CLOSE Margin is displayed **(Fig. 12.2)**.
d. Press OPEN to increase or CLOSE to decrease the value.
e. Press SET to save the new value.
f. Test the force again as per "Safety Obstruction Force Test" in Section 12.1.

Force Pressure For OPEN Cycle.
Navigating To "Current Trips"
a. Press NEXT to navigate to the Menu 2 Current Trips.
b. Press SET.
c. Press NEXT.
d. MENU 2.2: OPEN Margin is displayed **(Fig. 12.3)**.
e. Press OPEN to increase or CLOSE to decrease the value.
f. Press SET to save the new value.
g. Test the force again as per "Safety Obstruction Force Test" in Section 12.2.

12.4 To Recalculate Force Margins
a. 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 re-calculate 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).
b. A single beep will be heard once the process is complete.
c. Test the force again as per "Safety Obstruction Force Test" (Section 12.1 and 12.2).

Fig 12.1

40mm Block of wood


```
1: CLOSE Margin
(Amps)      0.7
```
PREV OPEN NEXT
STOP SET
CLOSE
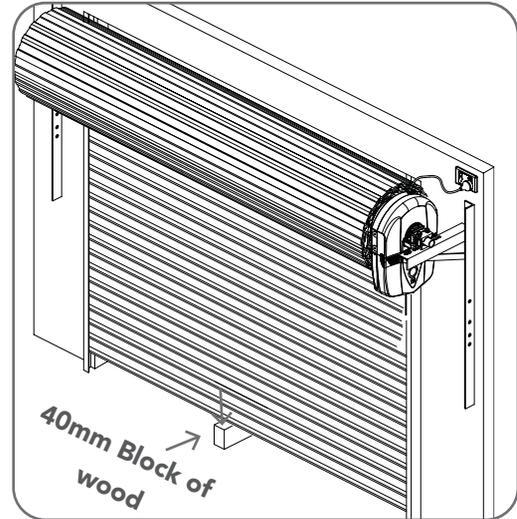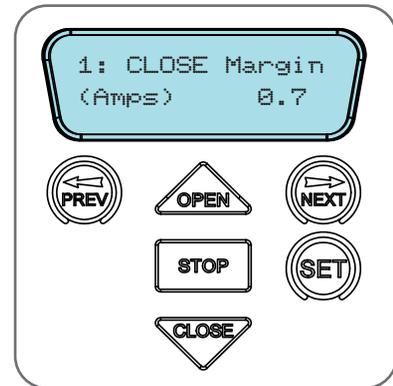
Fig 12.2

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



```
2: OPEN Margin
(Amps)      0.9
```
PREV OPEN NEXT
STOP SET
CLOSE

Fig 12.3

13. Safety Close & Auto-Close Mode

13.1 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.
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.**

13.2 Setting Up Satndard Auto-Close Mode
Menu 3. Auto-Close Times
The Auto-Close modes automatically close the Door after it has been operated. To implement this the controller starts a timer once the Door has reached its desired open position. The timer then counts down and when it expires the controller starts to close the Door. Details about the four Auto-Close modes follow. Automatic Technology strongly recommend using a Safety Beam for added safety.

Menu 3.1 Standard 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. 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.

13.3 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	Either Beam
i. Safety Beam 1	i. Safety Beam 1 or Safety Beam 2
ii. Safety Beam 2	ii. Safety Beam 1 or Safety Beam 3
iii. Safety Beam 3	iii. Safety Beam 2 or Safety Beam 3
	iv. Safety Beam 1 or Safety Beam 2 or Safety Beam 3

Combination
i. Safety Beam 1 and Safety Beam 2
ii. Safety Beam 1 and Safety Beam 3
iii. Safety Beam 2 and Safety Beam 3
iv. 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.

13.4 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.

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.

13.5 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. The three parameters are:

Menu 3.7 (Auto-Close after close overload)
This mode enables the Auto-Close feature to be activated when a close overload occurs (requires Safety Beams).

Menu 3.8 (Auto-Close after open overload)
This mode enables the Auto-Close feature to be activated when an open overload occurs.

Menu 3.9 (Auto-Close after power up)
This mode enables Auto-Close feature after power up.

14. Time Clock

Fig 14.1

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

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.

14.1 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.

14.2 Time Clock Settings
The Time Clock settings are accessed by selecting the Time Clock menu (MENU 7). Press SET (**Fig. 14.1**) to enter the menu and then PREV or NEXT to navigate through the options.

Fig 14.2

Menu 7.1 Set Time/date
This is where the current time, date and day are displayed and set (**Fig. 14.2**).

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. 14.3)**. 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 14.3

Fig. 14.4 shows that the DOOR will OPEN at 7 am on Mondays, Tuesdays, Wednesdays, Thursdays and Fridays. Use the OPEN /CLOSE buttons to scroll though the other programs **(Fig 14.5)**.
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.

The selectable functions available are:

Fig 14.4

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 14.5
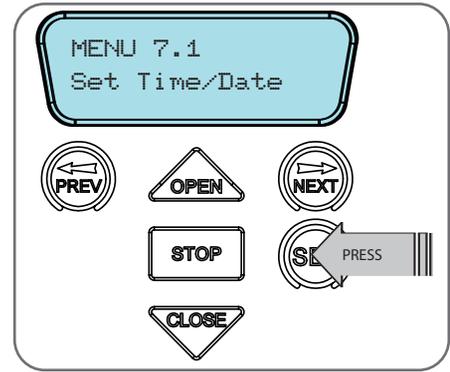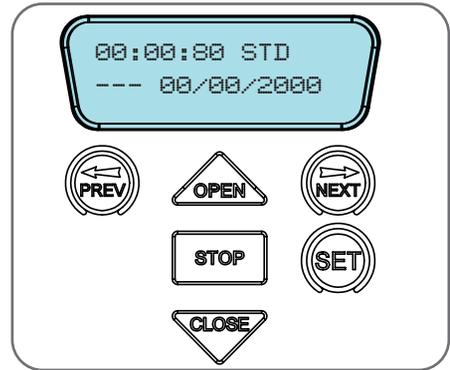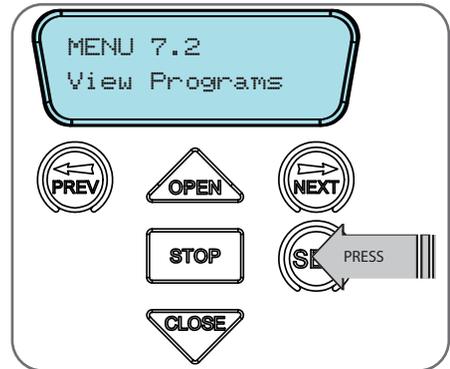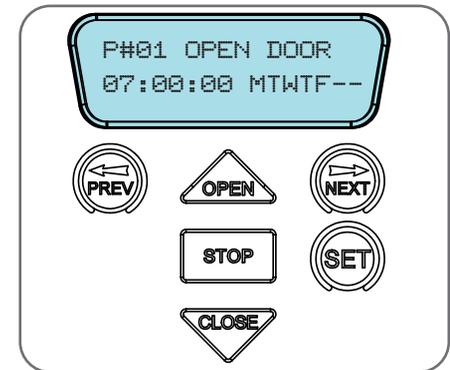
NOTE: The most recent program that applies to an output remains active until a new program takes effect.

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.

14. 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.

14.3 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.

15. Accessories Installation

15.1 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. 15.1)**

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

Menu 4. Light/Lock Times

a. Press NEXT or PREV on the wall control unit to navigate to Menu 5 Light/Lock Times.

b. Press SET to select the sub menu.

c. Press NEXT or PREV to navigate through the sub menu.

d. Press OPEN to increase or CLOSE to decrease the time.

e. Press SET to save the new time.

f. Press the STOP button two times to exit.

g. Test the light operation.

15.2 Fitting Solenoid Or Magnetic Locks

Install the lock mechanism on the door as per the manufacturers instructions. See **Fig. 15.2** 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.

a. Press NEXT or PREV on the wall control unit to navigate to Menu 4 Light / Lock Times.

b. Press SET to select the sub menu.

c. Press NEXT or PREV to navigate through the sub menu.

d. Press OPEN to increase or CLOSE to decrease the time.

e. Press SET to save the new time.

f. Press the STOP button two times to exit and test the locks operation.

HELPFUL TIP: To access the PREV, NEXT and SET buttons, unscrew the screws at the bottom of the logic console cover and remove cover.
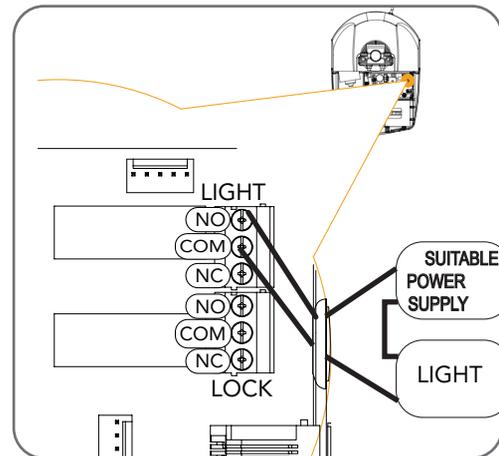
Fig 15.1
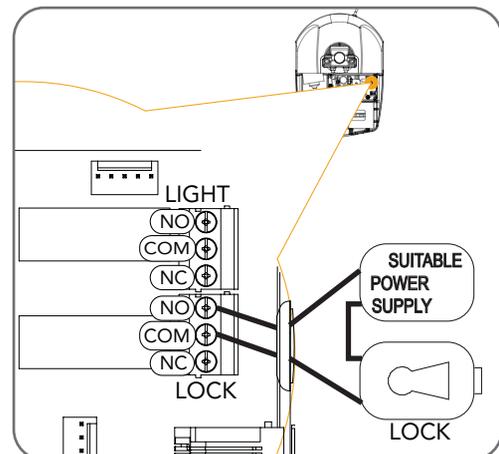
Fig 15.2

16. Battery Replacement

16.1 Replacing Backup Batteries

a. Unplug the drive unit from mains power.

b. Disengage motor using manual release cord.

c. Remove the bottom cover by pressing in from sides and sliding downward.

d. Remove the two screws and slide upward the top cover upwards to remove it.

e. Remove the battery bracket by undoing the battery bracket screws.

f. Remove the batteries and replace with the same type **(Fig. 16.1)**.

Fig 16.1

16.2 Replacing Transmitter Batteries

(Battery Type: 3V Lithium Battery CR2032).

Use a non-metallic object (e.g. pen) to remove the battery. **(Fig. 16.2)**.

To test the battery is working, press and hold a transmitter button; **(Fig. 16.3).**
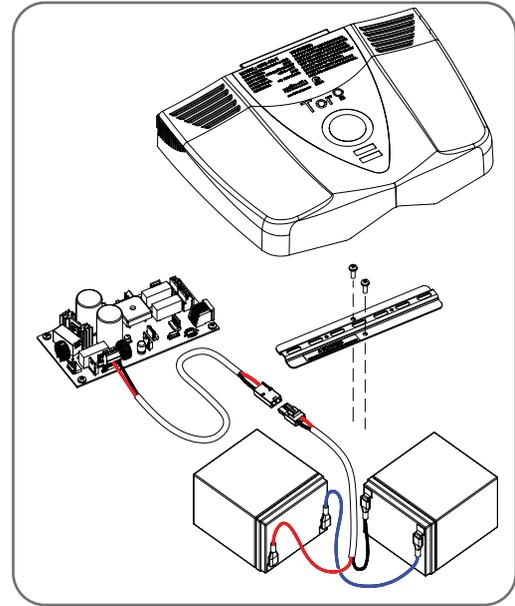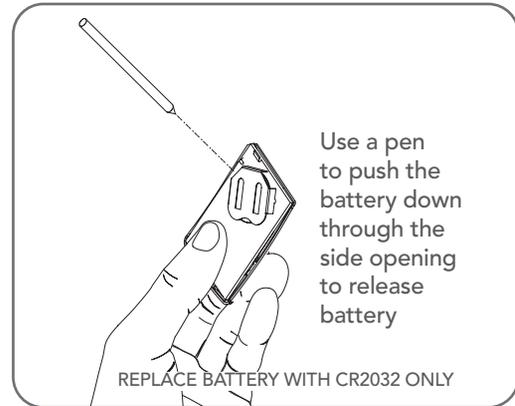
Light Status	Battery Status
Solid	OK
Flashing	Requires replacement
No light	Requires replacement

Fig. 16.3

Use a pen to push the battery down through the side opening to release battery

Fig. 16.2

⚠ **WARNING! Chemical Burn Hazard. Keep batteries away from children**

REPLACE BATTERY WITH CR2032 ONLY

17. Battery Disposal

When batteries reach the end of their usual life in accordance with Australian Battery Recycling Initiative please follow the next simple steps for protecting the environment.

⚠ **WARNING**! The Battery shall be disposed of properly, including keeping them away from children. Even used batteries may cause injury.

🗑 **DO NOT** throw the batteries in municipal waste. This symbol of the crossed out wheeled bin indicates that the battery should not be placed in the municipal waste. Check your local regulations for appropriate disposal of the batteries.

Recycling all batteries will have other environmental and social benefits:

• Some batteries are less toxic but hazardous for other reasons. Lithium batteries can explode or catch fire in landfill, while button cells are dangerous if swallowed by children. Recycling offers a safe and environmentally responsible solution for end of life batteries.

• Battery recycling recovers non-renewable materials such as lead, cadmium, stella, zinc, manganese, cobalt, silver, plastics and rare earth elements.

• Removal of batteries and other hazardous household products from household waste facilitates the recovery of organic materials through alternative waste technologies such as composting. Batteries and heavy metals are known contaminants in compost.

• The community supports recycling because it reduces waste to landfill and achieves environmental benefits.

⚠ **WARNING!** Prior to disposal, recycling, or collection, all battery terminals must be securely insulated with a non conductive material to prevent any two batteries from short circuiting and generating heat during storage or transport. Battery terminals may be insulated with electrical tape; or batteries may be individually packaged in a non conductive material (e.g., plastic bag or original packaging).

18. 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:	5100mm 5500mm 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
Number of code combinations	Over 100 billion random codes
Code generation	Non-linear encryption algorithm
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 13.1.

19. Troubleshooting

Symptom	Possible cause	Remedy
Door will not operate	Mains power not switched on.	Switch on mains power.
	Door is obstructed.	Remove obstruction.
	Door is locked or motor jammed.	Unlock door or remove jam.
	Door tracks/hardware damaged.	Door requires service/repair by qualified technician.
	The stop function is activated	Deactivate the stop switch/timer
	The opener is in "Vacation Mode"	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.	Increase force margin setting (Section 12.4)
	Possible obstruction in the doorway.	Remove obstruction.
Door operates from wall control unit (OPEN/CLOSE) button but not from transmitter	Transmitter code not stored in memory.	Code transmitter in to openers memory. (Section 9.1)
	Transmitter does not contain TrioCode™128 Technology	Check the transmitter. It should have grey buttons and the model number should display V2. Contact dealer for support if otherwise.
	Flat battery in transmitter	Replace battery (Section 16))
Door does not close with transmitter	Safety Close Mode is on.	Turn the Safety Close Mode off (Section 13.1)
	Safety Beam not working properly.	Make sure Safety Beam are operational.
Door will not close fully.	Door limit positions need to be reset.	Reset limits positions.
	Door obstructed and reverses.	Clear obstruction or adjust force margin (Section 12.3)
Door will not open fully.	Door limit positions need to be reset.	Reset limits positions.
	Door obstructed.	Clear obstruction or adjust force margin (Section 12.3)
Auto-Close not working	Safety Beam not installed.	Install Safety Beam.
	Safety Beam or wiring faulty.	Repair Safety Beam or replace wiring.
	Safety Beam not aligned correctly.	Re-align optics.
	Safety Beam is obstructed.	Remove obstruction from path of Safety Beams.
	Door obstructed when closing.	Remove obstruction.
	Auto-Close time not set.	Set Auto-Close times (Section 13.3).
	Auto-Close mode not set	Set Auto-Close mode. (Section 13.2)

20. After Installation Care

20.1 Service Checklist

Preventative servicing of your garage door and opener, is just as important as servicing your car. Much like the engine of your car, your garage door is made up of numerous moving parts designed to lift and lower your door safely and efficiently.

Ongoing preventative servicing ensures that your door continues to function within factory specifications, greatly reduces the risk of failure and repair bills down the track and ensures you maintain your Warranty.

Run the Safety Testing procedures MONTHLY in Section 12 to ensure garage door is fit for use.

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

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

TECHNICIAN CHECKLIST

1. Lubrication of the critical moving parts including chain drive, tracks, wheels or cable drum.
2. Tightening of door mounting points along with door bolts, screws, cables and connectors.
3. Adjustment of spring tension to limit 'spring fatigue'.
4. Adjustment of opener travel limits and force margin to ensure the door opens and closes to specification.
5. Assessment and adjustment of safety components and accessories including safety beams, Auto-Lock and Safe Lock (if installed)
6. Assessment of the door alignment and the diagnosis of irregular operation remedies.
7. Record Cycle count at each service to establish next date of service (as per table)

	SERVICE 1 (12 months after installation or 3,000 cycles)		SERVICE 2 (3 years after installation)		SERVICE 3 (5 years after installation)	
DATE:						
BUSINESS NAME:						
TECHNICIAN NAME:						
PG3 COUNTERS	OPEN	CLOSE	OPEN	CLOSE	OPEN	CLOSE
STALLS						
OBSTRUCTIONS						
SENSOR FAULTS						
OVERLOADS / CUT-OUTS						
WARRANTY CYCLES						
FIRMWARE UPDATE AVAILABLE? IF 'YES' PLEASE UPDATE FIRMWARE	YES	NO	YES	NO	YES	NO
CURRENT FORCE MARGIN						
TECHNICAL SIGNATURE:						

	SERVICE 4 (7 years after installation)		SERVICE 5 (9 years after installation)	
DATE:				
BUSINESS NAME:				
TECHNICIAN NAME:				
PG3 COUNTERS	OPEN	CLOSE	OPEN	CLOSE
STALLS				
OBSTRUCTIONS				
SENSOR FAULTS				
OVERLOADS / CUT-OUTS				
WARRANTY CYCLES				
FIRMWARE UPDATE AVAILABLE? IF 'YES' PLEASE UPDATE FIRMWARE	YES	NO	YES	NO
CURRENT FORCE MARGIN				
TECHNICAL SIGNATURE:				

20.2 Warranty

Warranty conditional on proper servicing as listed in 20.1 Service Checklist. Full details of the warranty are available in your Owners Opener Handbook, from your nearest ATA office or visit theATA Website ata-aust.com.au.

21. 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	2.0	0.7	0.1	AMPS	2.1	12.3
OPEN MARGIN	0.0	2.0	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
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

Parameter	Min	Max	Default	Step	Unit	Menu No.	Section
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
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

Appendix
A - Console Menu Structure

Parameter	Min	Max	Default	Step	Unit	Menu No.	Section
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 & Editing Logic Console Parameters

This section illustrates how to locate, view and adjust parameters in the logic console unit.

Locating parameters
Refer to MENU STRUCTURE on Page 15 or the preceding section for CONTROL BOARD ADJUSTMENTS. Locate the required parameter and note the MENU number. The example used in **(Fig. B.1)** displays Menu 2.2 "100% O/L Time"

Changing Settings
a. Press NEXT/PREV to navigate to the required menu.
b. Press SET to show the sub-menu.
c. Press NEXT/PREV to go to the required sub-menu.
d. Press OPEN/CLOSE to change the parameter setting.
e. Holding the button down causes the parameter's value to change rapidly.
f. The longer the button is held, the faster the value changes.
g. Press SET to SAVE the setting.

Reload Default Setting
a. Press NEXT/PREV buttons to display the LOAD DEFAULT screen.
b. 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 sub menu. Press STOP again to return to the MAIN SCREEN.

Fig B.1

View Mode (No cursor)
Parameter number in sub menu — Parameter name
`2: 100% O/L Time`
`(sec)    10` — Parameter value
Displays previous parameter in list — PREV
Displays next parameter in list — NEXT
OPEN / STOP / SET / CLOSE
Returns back to menu
Enter Edit Mode

Fig B.2

Edit Mode (Cursor shown)
`2: 100% O/L Time`
`(sec)    1▮`
Increase value — OPEN
PREV / NEXT
Displays "Load Default?" screen, giving option of loading default value — CLOSE
STOP
SET — Saves new value
Exits back to View Mode
Decrease value

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

Fig D.1

```
MENU 9
Diagnostics
```
PREV OPEN NEXT STOP SET PRESS CLOSE

Fig D.2

```
I/P:SB[---] fir
osc opn stp cls
```
PREV OPEN NEXT STOP SET CLOSE

Fig D.3

```
PRESS TX'ER
<-/-> Shows ID/SN
```
PREV OPEN NEXT STOP SET CLOSE

Fig D.4

```
14 ID BB SMITH
OSC PED LGT>VAC
```
PREV OPEN NEXT STOP SET CLOSE PRESS

Fig D.5

```
Close Complete
    EVENT # 64
```
PREV OPEN NEXT STOP SET CLOSE

Fig D.6

```
Used =         1
Free =       510
```
PREV OPEN NEXT STOP SET CLOSE
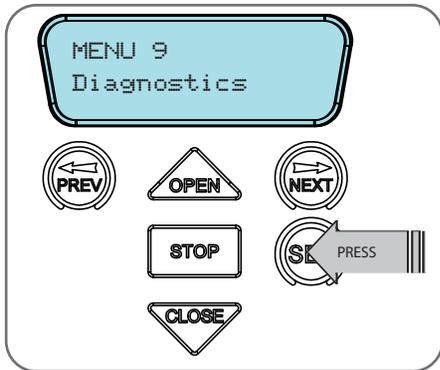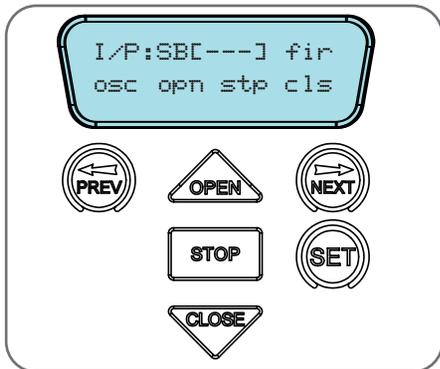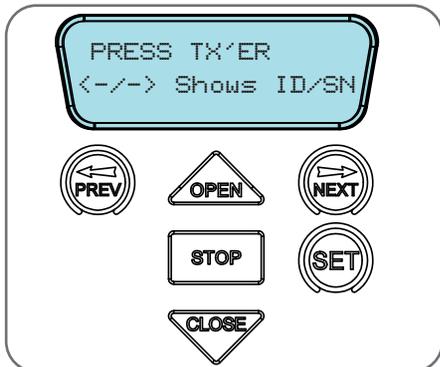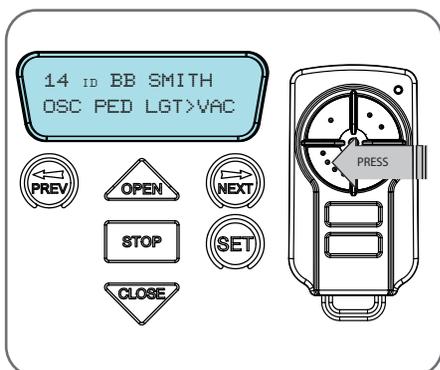
The controller provides several diagnostic tools from within the Diagnostics Menu (Menu 8). This section details the function of each tool and its use.

Navigating To Diagnostics Menu
a. Press PREV to navigate to Menu 8 (**Fig. D.1**).
b. Press SET to display the menu of available functions.
c. Press PREV or NEXT to cycle through diagnostic tools.
d. 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**).
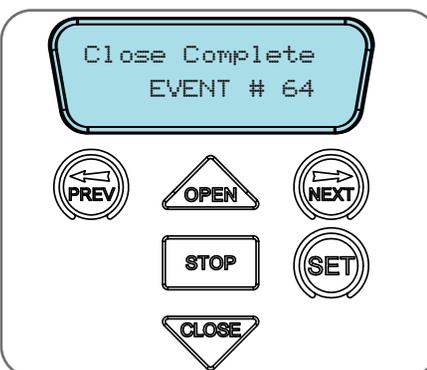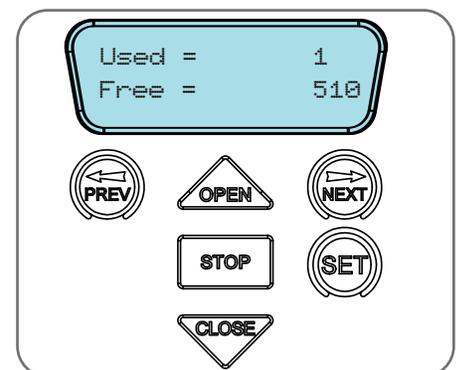
Appendix

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 Appendix B). If the service counter is not to be used, it can be set to the maximum number (60,000).
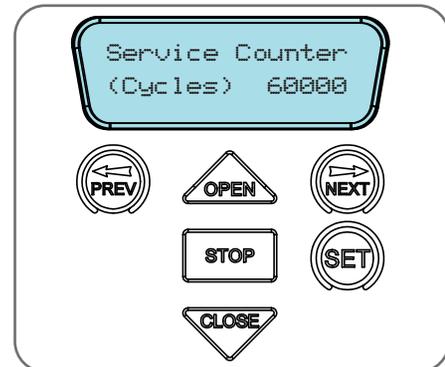
Fig D.7

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: Setup Limits
5: Warranty Cycles	6: Open O/LS
7: Close O/LS	8: Open Stalls
9: Close Stalls	10: Direction Faults
11: Position Sensor faults	12: Drive Memory Faults
13: Position Wrap Faults	14: Console Volt Faults
15: PCB Temp Fault	16: Comms Compat Faults
17: INV logic faults	18: Low DC Bus Volt Faults
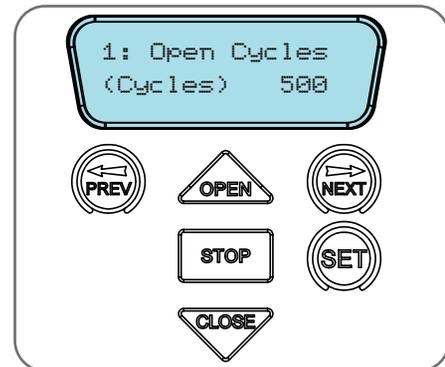
Menu 8.7 Install Data

    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

Position of the limit counter, frequency, current used by the motor, overload graph, PCB temperature and DC bus voltage 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 Axess® Pro 1505's 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

Display Transmitter Record
Using one of the methods below, you can display the required transmitters details.

Navigating To "Edit Transmitter" Menu
a. Press NEXT to navigate to Menu 1 **(Fig. F.1)** .
b. Press SET to enter the transmitter edit procedure.
c. Press NEXT to enter transmitter list and edit mode.

Editing Button Function Field
a. 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.
b. 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 and CLS (Close) function is not available in the case where PE Beams are not installed.

c. Press SET to save changes or press NEXT or PREV to move to the next field.
    i. The example in **(Fig. F.3)** shows that PED is assigned to the transmitter button two.
    ii. 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.
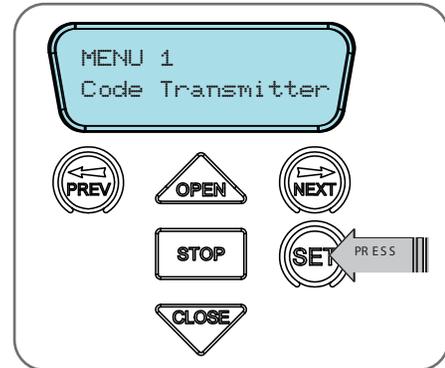

Fig F.1
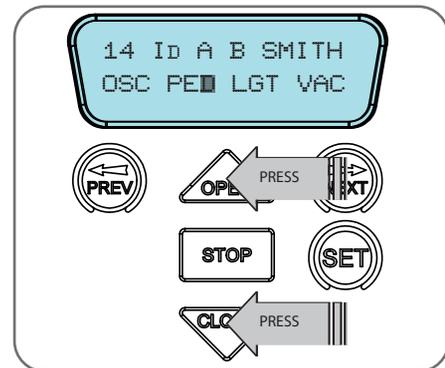
Fig F.2
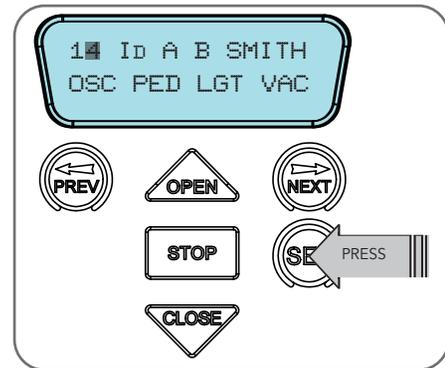
Fig F.3

Appendix
F - Transmitter Editing

Editing The Store Location
This feature is only available when coding the first button of a new transmitter.
a. Press NEXT or PREV to move the cursor over Store No. (**Fig. F.4**)
b. Press UP or DOWN to select new Store No.
c. 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
a. Press NEXT to navigate to Menu 1 "Code Transmitter" (**Fig. F.5**).
b. Press SET to enter the transmitter edit procedure.
c. Press NEXT to enter transmitter list and edit mode.
d. Press NEXT/PREV to move the cursor over the ID field.
e. 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
a. Press NEXT or PREV to move the cursor. (**Fig. F.7**)
b. Press UP or DOWN to scroll through and select a new character.
c. Press NEXT or PREV to move the cursor to the next character.
d. Repeat step 2.
e. Press SET to record changes.

The second line of the display shows a list of available characters with the current value indicated at the cursor position (**Fig. F.8**).
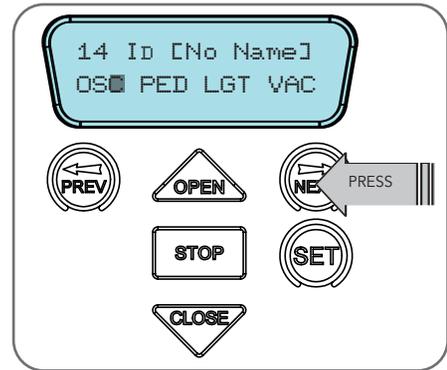
Fig F.4
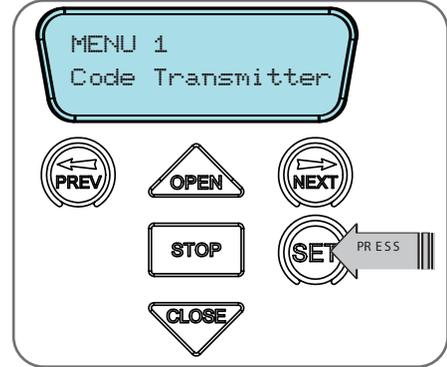
Fig F.5
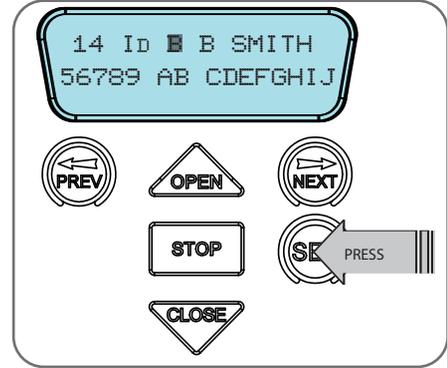
Fig F.6
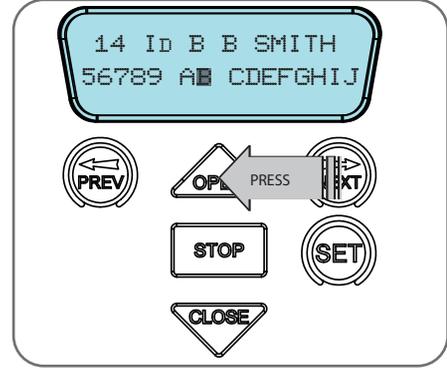
Fig F.7
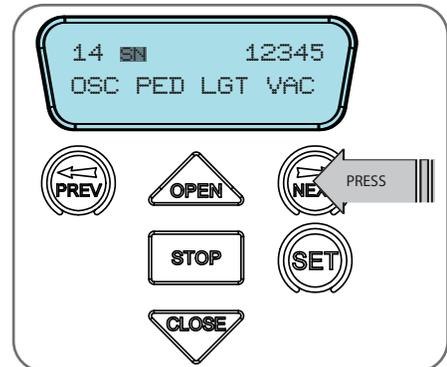
Fig F.8

Appendix

G - Transmitter Management

Transmitter Listing Facility
The GDO-10V3L2 Toro™ 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
a. Press NEXT to navigate to Menu 1 **(Fig. G.1)**.
b. Press SET to enter the transmitter edit procedure.
c. 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
a. Press NEXT to navigate to Menu 1 **(Fig. G.1).**
b. Press SET to enter the transmitter edit procedure.
c. Press the transmitter once **(Fig. G.2)**.
d. 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 transmitters locations are displayed.

Navigating The List
a. 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.
b. Press SET to display the menu of available functions.

Selecting An Operation
a. Press NEXT or PREV to cycle through the four menu options **(Fig G.5)**
b. 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 used)	If the code operation is selected for a location that already contains a transmitter, then the storing transmitter code procedure (Section 10.1) will be initiated and the new transmitter will replace the existing one. Note 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 (Appendix B) 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

**SMART
SIMPLE
SECURE**