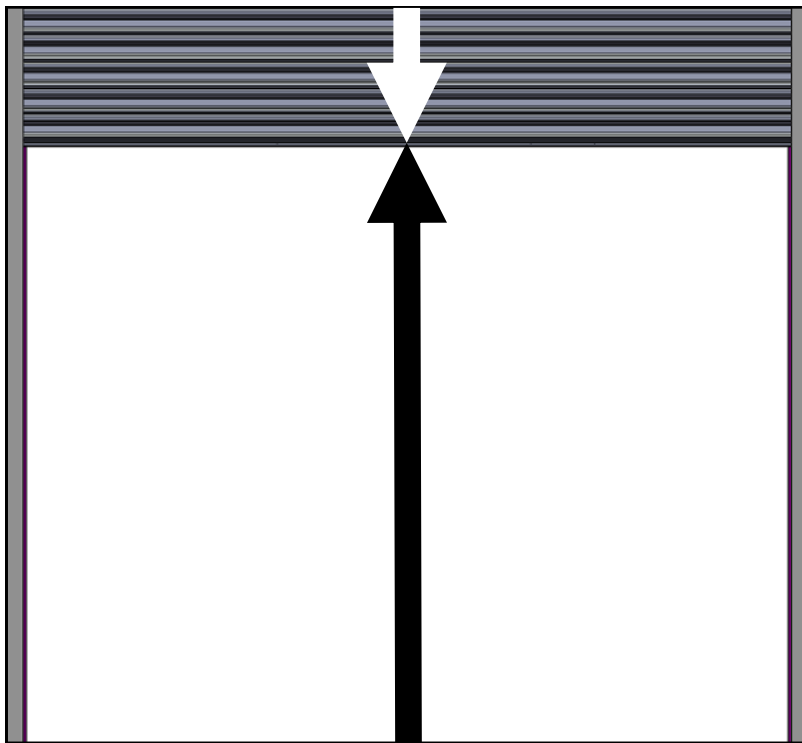


GRIFCO®



Grifco® eDrive +2.0 - Smoke Baffle Feature (SBF)



**Installation and Users
Manual supplement for
eDrive +2.0 with
Smoke Baffle Feature**

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SAFETY SYMBOL AND SIGNAL WORD REVIEW

Safety symbol and signal word review

This commercial door opener has been designed and tested to offer safe service provided it is installed, operated, maintained and tested in strict accordance with the instructions and warnings contained in this manual.



WARNING

Mechanical



WARNING

Electrical



CAUTION

When you see these Safety Symbols and Signal Words on the following pages, they will alert you to the possibility of serious injury or death if you do not comply with the warnings that accompany them. The hazard may come from something mechanical or from electric shock.

When you see this Signal Word on the following pages, it will alert you to the possibility of damage to your commercial door and/or the commercial door opener if you do not comply with the cautionary statements that accompany it.

THESE ARE IMPORTANT SAFETY INSTRUCTIONS. FOLLOW ALL INSTRUCTIONS AS INCORRECT INSTALLATION CAN LEAD TO SEVERE INJURY OR DEATH

	Keep commercial door balanced. Sticking or binding doors must be repaired. Commercial doors, door springs, pulleys, brackets and their hardware are under extreme tension and can cause serious personal injury. Do not attempt to loosen, move or adjust them. Call for commercial door service.		Disengage all existing commercial door locks to avoid damage to commercial door. Install the wall control (or any additional push buttons) in a location where the commercial door is visible during operation. Do not allow children to operate push button(s) or remote control(s). Serious personal injury from a closing commercial door may result from misuse of the opener.
	Do not wear rings, watches or loose clothing while installing or servicing a commercial door opener.		Permanently fasten all supplied labels adjacent to the wall control as a convenient reference and reminder of safe operating procedures.
	To avoid serious personal injury from entanglement, remove all ropes connected to the commercial door before installing the door opener.		Activate opener only when the door is in full view, free of obstructions and opener is properly adjusted. No one should enter or leave the building while the door is in motion.
	Installation and wiring must be in compliance with your local building and electrical codes. Connect the power supply cord only to properly earthed mains.		An electrician must disconnect electric power to the commercial door opener before making repairs or removing covers.
	Moisture and water can destroy the electronic components. Make sure under all circumstances that water moisture or storage moisture cannot penetrate the electronics. The same applies for openings and cable entries.		If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard. A disconnection device incorporated in the fixed wiring must be provided in accordance with the wiring rules of the country in which it is installed.
	After the installation a final test of the full function of the system and the full function of the safety devices must be done.		The actuating member of a biased-off switch is to be located within direct sight of the door but away from moving parts. Unless it is key operated, it is to be installed at a minimum height of 1500mm and not accessible to the public.
	When operating a biased-off switch, make sure that other persons are kept away.		Make sure that people who install, maintain or operate the door follow these instructions. Keep these instructions in a safe place so that you can refer to them quickly when you need to.
	The opener cannot be used with a driven part incorporating a wicket door (unless the opener cannot be operated with the wicket door open).		If the opener is installed at a height less than 2.5 metres from floor level or any other level from which the unit can be accessed (eg mezzanine) the installer is responsible to fit guards to the opener to prevent access to the chain drive.
	Ensure that entrapment between the driven part and the surrounding fixed parts due to the opening movement of the driven part is avoided		This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
	Motor may become hot during operation. Appropriate clearance and/or shielding should be supplied by the installer to ensure any cabling, wiring and/or other items cannot come in contact with the motor. If temperature rise exceeds 50°C all fixed wiring insulation must be protected, for example, by insulating sleeving having an appropriate temperature rating.		Use the commercial door opener for its intended purpose. eDrive +2.0 openers are designed for operating spring balanced roller shutters, spring balanced roller doors and counterweighted bi-fold and vertical lift doors.



WARNING: Important safety instructions. It is important for the safety of persons to follow all instructions. SAVE these instructions.

INTRODUCTION

Congratulations on your purchase of the Grifco® eDrive +2.0 with built in Smoke Baffle Feature (SBF).

This product has been specifically developed to provide features necessary to meet various fire and smoke alarm event conditions.

Carefully refer to the following instructional information as it relates to the Grifco® eDrive +2.0 opener.

Note that this information is supplementary only. You must also have the Grifco® eDrive +2.0 opener installation manual with you in order to complete the installation. Given the specialised nature of this product, some of the standard features of the Grifco® eDrive +2.0 opener may not be available or the behavior of features may slightly differ.

NOTE: AN EXPANSION BOARD CANNOT BE USED IN CONJUNCTION WITH THE SMOKE BAFFLE FEATURE

FUNCTIONAL OVERVIEW

The eDrive +2.0 SBF is a special feature eDrive+2.0 variant that is designed to meet certain fire regulations. It does not have the same functionality as a standard eDrive+2.0 and is not interchangeable.

It has been designed to drive from any position to the Smoke Baffle Position (mid position) only.

Other standard eDrive+2.0 functionality is limited to meet the fire and smoke alarm event functionality conditions. See below.

The SBF requires a N/C fire alarm event input to be connected prior to commissioning.

The SBF option requires the opener to have 3 limit positions set up **at installation**, whereby the mid position is the Smoke Baffle Position* (SBP). This position must be set in the upper half of the door opening, and above 2100mm from the floor. A closed fire alarm event input circuit must be supplied to the Main Control Board (MCB) in order to allow normal operation. An fire alarm event is signified by the sustained breaking of the fire alarm event input.

The features contained within the SBF option are detailed as follows:

If an fire alarm event occurs for longer than 3 seconds, the door will drive from any** position to the SBP, and hold that position while the fire alarm event remains. When the fire alarm event has concluded, the door will drive to the fully open position, and then normal operation will be allowed. Stopping the door during an fire alarm event will cancel the fire alarm event behavior. The fire alarm event movement cannot be interrupted by entrapment protection inputs, or open and closed buttons.

*** WARNING! TO ENSURE COMPLIANCE WITH ENTRAPMENT REGULATIONS, THE SMOKE BAFFLE POSITION MUST BE SET AT A HEIGHT OF 2100mm OR ABOVE.**

**** IF DIP switch 2 is turned OFF, the door will NOT drive from the fully closed position upon an fire alarm event. See below for further details of this setting.**

Limited Functionality:

Given the critical nature of the fire alarm event criteria, the SBF feature is not compatible with all Grifco products.

This includes, but is not limited to the following:

- Expansion boards are not compatible. Unexpected door behavior may occur when combining expansion board functionality and the fire alarm event behavior.
- Isolating controllers (e.g C21D) are not compatible as they will prohibit the fire alarm event behavior.

WARNING

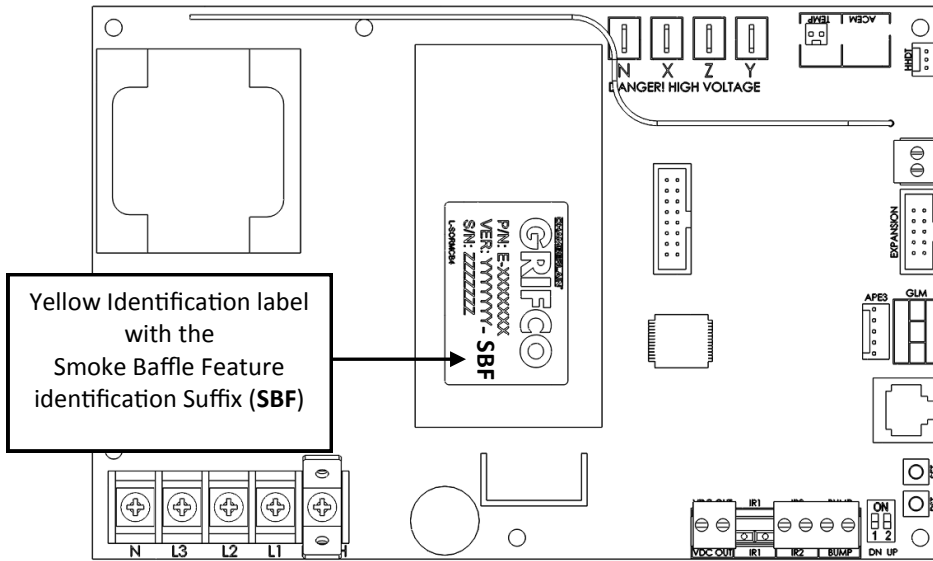
IF RELOCATING THE MAIN CIRCUIT BOARD TO ANOTHER INSTALLATION, ENSURE THE LIMITS ARE CLEARED, AND/OR A BRIDGE IS INSTALLED IN THE TOGGLE INPUT UNTIL SUCH TIME THAT LIMITS ARE SET, AND THE FIRE ALARM EVENT CONNECTION IS MADE.

FAILURE TO DO SO WILL RESULT IN UNCONTROLLED DOOR MOVEMENT AT POWER UP.

IDENTIFYING YOUR OPERATOR

The eDrive +2.0 SBF option is available as both a complete opener (ML5102SBF or ML5103SBF) or a Main Control Board (MCB) upgrade MCB5ED-SBF.

The SBF units are identified by the yellow label on the contactor located on the MCB.



INSTALLATION

For installation instructions, please refer to the eDrive +2.0 manual supplied with the Commercial Door opener.

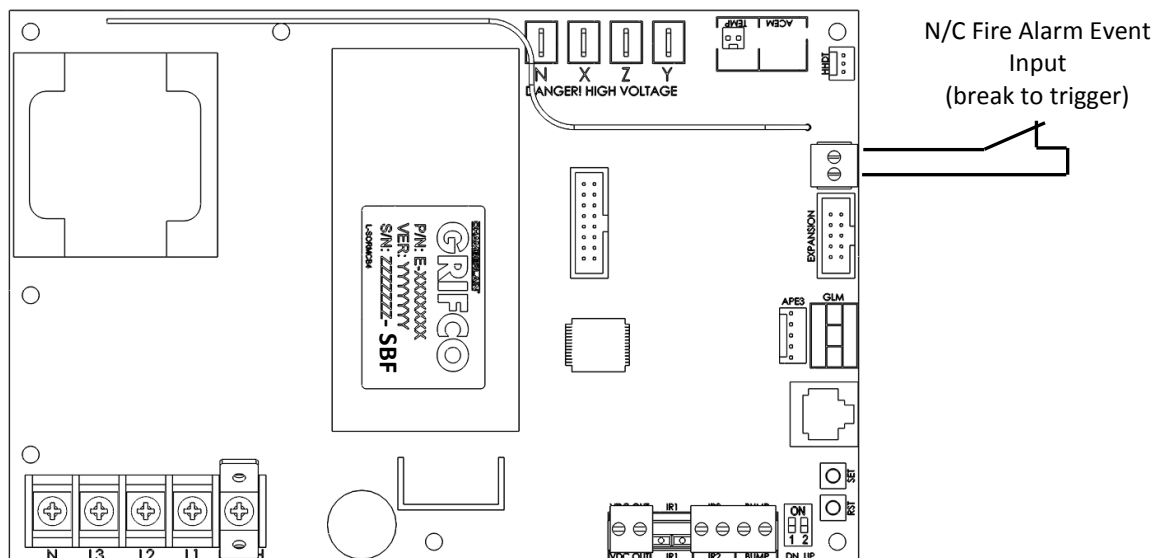
This section includes:

- Mounting the unit
- Installing the hand chain
- Electrical Connections
- Mounting the Controller

CONNECTION & CONFIGURATION

The illustration below shows connection of the fire alarm event input to the Toggle terminals on the MCB. A Normally Closed input must be connected to allow normal user operation. For all other connections, refer to the Grifco® eDrive +2.0 opener installation manual. Ensure mains power is isolated to opener before carrying out any works.

The N/C input MUST be connected prior to setting the limits



SETUP AND ADJUSTMENT

For Setup and Adjustment instructions, please refer to the eDrive +2.0 manual supplied with the Commercial Door opener. This section includes:

- Checking power
- Checking door direction
- Jog direction

For SBF specific limit setting instructions please see **below**.

SETUP AND ADJUSTMENT

Setting limits using the SBF eDrive+2.0

Until the three limits required for the SBF to be operational have been set, the Call For Service light will flash continually.

1. While holding STOP, press the SET button 3 times.
The LIMIT ERROR indicator will start flashing signifying 'limit setting mode'
2. Use the DOWN button to drive the door to the desired CLOSED position.
The manual hand chain can be used to accurately position the door before pressing SET
3. Press the SET button to save this as the CLOSED position.
The LIMIT ERROR indicator will flash quickly then return flashing slowly
4. Use the UP button to drive the door to the desired SMOKE BAFFLE position. This must be at or above 2100mm from ground level
The manual hand chain can be used to accurately position the door before pressing set
5. Press SET again to save this as the SMOKE BAFFLE position.
The LIMIT ERROR indicator will flash quickly then will go out
5. Position the door at the SMOKE BAFFLE position
6. While holding the UP button, press the SET button 3 times
The LIMIT ERROR indicator will flash
8. Use the UP button to drive the door to the desired OPEN position.
The manual hand chain can be used to accurately position the door before pressing set
9. Press SET again to save this as the OPENED position.
The LIMIT ERROR indicator will flash quickly then will go out

The Closed, SMOKE BAFFLE and Open limits have now been set. If at anytime you need to exit 'limit setting mode', just press the STOP button.

Once set, operate the door between limits 2 – 3 times to check they are suitable. If not, return to STEP 1.



WARNING

After the installation a final function test of the system and where present a full function test of the safety devices must be done.

DOOR BEHAVIOUR AND DIP SWITCH SETTINGS

Door Behaviour Modes

DIP switch 2 WILL NOT function as described in the eDrive +2.0 manual !

DIP switch 1	Enables Latch Down to fully close behaviour as per standard eDrive+2.0
DIP Switch 2	Enables the SBF to open the SBF position from the Closed position

Without Entrapment Protection devices fitted:

Latch up / Inch down mode / Open from fully closed (default):

The door will travel upwards with only a single press and release of the UP button. The door will stop at the OPEN limit. This mode is **latch up** and cannot be changed.

The door will only travel downwards when the DOWN button is held. The door will stop at the CLOSED limit or when the button is released. This mode is **inch down**.

When an fire alarm event is triggered, the door will move to the SMOKE BAFFLE position from ANY position including the fully closed position

Latch up / Inch down mode / DO NOT Open from fully closed

The door will travel upwards with only a single press and release of the UP button. The door will stop at the OPEN limit. This mode is **latch up** and cannot be changed.

The door will only travel downwards when the DOWN button is held. The door will stop at the CLOSED limit or when the button is released. This mode is **inch down**.

When an fire alarm event is triggered, the door will move to the SMOKE BAFFLE position from ANY position except the fully closed position

With Entrapment Protection devices fitted:

Latch up / Latch down to close mode / Open from fully closed (default):

The door will travel upwards with only a single press and release of the UP button. The door will stop at the OPEN limit. This mode is **latch up** and cannot be changed.

The door will travel downwards with only a single press and release of the DOWN button. The door will stop at the CLOSED limit. This mode is **LATCH down**.

When an fire alarm event is triggered, the door will move to the SMOKE BAFFLE position from ANY position including the fully closed position

Latch up / Latch down to close mode / DO NOT Open from fully closed

The door will travel upwards with only a single press and release of the UP button. The door will stop at the OPEN limit. This mode is **latch up** and cannot be changed.

The door will travel downwards with only a single press and release of the DOWN button. The door will stop at the CLOSED limit. This mode is **LATCH down**.

When an fire alarm event is triggered, the door will move to the SMOKE BAFFLE position from ANY position except the fully closed position

Notes:

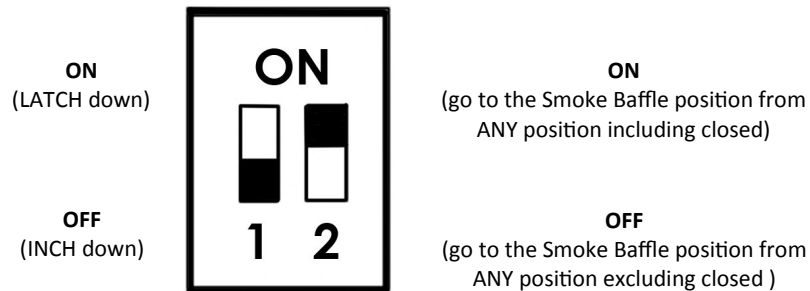
- The system regards the fully closed position to be at or near to the closed/bottom limit. (Deemed to be within 100mm of the closed position)
- No Entrapment Protection Devices are required for the opener to close the door to the Smoke Baffle Position
- Latch Down to Close mode is **only possible in conjunction with an Entrapment Protection Device such as an Infrared (IR) Beam or a Safety Bump Edge. (Failure to do so may result in damage to property or injury to persons.)** The door will travel upwards and downwards with only a single press and release of the UP or DOWN button. The door will stop at the set OPEN and CLOSED limit or when the STOP button is pressed. To set this mode refer to **Setting door behavior** information below
- For details on Entrapment Protection Devices and connections, refer to the eDrive+2.0 manual.

DOOR BEHAVIOUR AND DIP SWITCH SETTINGS

Setting door behaviour

To set the door behaviour modes, adjust the DIP switches in the corner of the MCB shown below.

Dip switch **1** is used to latch **DOWN** and switch **2** is used to change the Fire Alarm Event Input door behavior as stated above.



* The door can only be set to latch **DOWN** if there is a suitable **Entrapment Protection Device** installed. Failure to do so can lead to serious injury or death.

TESTING & TROUBLESHOOTING

Testing

Once the system has been installed, and the door behaviour is set, a test of the Fire Alarm Event Input trigger is required to confirm the behaviour.

Remove the N/C Fire Alarm Event Input trigger input connector from the MCB for more than 3 seconds to simulate the alarm trigger being activated.

The door will move (as set with DIP switch 2) to the Smoke baffle Position.

Routine testing of the system is recommended to ensure proper function in accordance with the relevant authorities, or building management requirements.

Troubleshooting

Status LED (green) is constantly flashing :

- Ensure limits are set correctly. The Third limit **MUST** be set (ref page 6 above)

- The Smoke Baffle Position **MUST** be set in the upper half of the entire door travel.

For further troubleshooting, refer to the eDrive +2.0 manual.

1. Do remote controls work?
YES... Remote controls using the on board radio receiver will operate the opener as expected from the closed position to the fully open position. The door will not stop at the Smoke Baffle Position.
Remotes will **NOT** override the fire alarm event when activated.
External receivers are not able to be connected to the Main Control Board. Call Grifco Customer Service for more information.

2. Will Auto Close work?
YES... Auto Close will operate the opener as expected to the fully closed position. The door will not stop at the Smoke Baffle Position
Auto Close will **NOT** override the fire alarm event when activated.

3. Do I need Entrapment Protection Devices to latch to the Smoke Baffle position?
NO... Entrapment Protection Devices are **NOT** required when latching to the Smoke Baffle position.
Entrapment Protection Devices are only required when latching to the fully closed position.

4. Will the Entrapment Protection Device prohibit the door from travelling to the Smoke Baffle position during an alarm fire alarm event?
NO... The Entrapment Protection Devices will not prohibit the door from travelling to the Smoke Baffle position when the fire alarm event is triggered.

5. Can I use the Toggle input to open the door?
NO... The Toggle Input is no longer a Toggle Input. It is now the Fire Alarm Event trigger input.

6. Can I connect Access Control?
YES... Access Control wiring should be connected to the C10A controller. A full test of the system should be conducted to ensure the connected controls do not prohibit the fire alarm event door behaviour.
NO... Any connections to the STP or E-Stop will prohibit the fire alarm event door behaviour.

7. Can I used a MiniEB?
NO... The MinEB is not compatible with the SBF. The combination door behaviour will result in undesirable door behaviour during the fire alarm event .

8. Can I use an EB1?
NO... The EB1 is not compatible with the SBF. The combination door behaviour will result in undesirable door behaviour during the fire alarm event .

NOTES

NOTES

CHAMBERLAIN LIMITED WARRANTY - Grifco Products

Chamberlain Australia Pty Limited / Chamberlain New Zealand Limited (**Chamberlain**) is committed to manufacturing and supplying high quality goods. As part of this commitment, we seek to provide reliable service and support for our goods and are pleased to provide you, the original purchaser, with this Chamberlain Limited Warranty.

We also provide the following statement as required by the Australian Consumer Law: In Australia, in addition to your rights under this Chamberlain Limited Warranty, 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 for 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.

Chamberlain's warranty

Chamberlain warrants to the original purchaser of the Grifco product (**Unit**) that:

- 1 The Unit (excluding the electric motor) is free from defects in materials and workmanship for a period of 24 months from the date of purchase.
- 2 The electric motor is free from defects in materials and workmanship for a period of 12 months from the date of purchase.

During the applicable Chamberlain Warranty period, if you are concerned that the Unit or electric motor may be defective, call our service centre on the toll free number below before removing the Unit and a Chamberlain technician will diagnose the problem. Once the problem has been diagnosed, subject to your rights under the Australian Consumer Law with respect to major failures, Chamberlain will provide you with:

- 1 parts for "do-it-yourself" repairs; or
- 2 shipping instructions for a factory repair or replacement.

If a factory repair or replacement is required, provided the defective part or Unit is returned to Chamberlain well-packaged and in accordance with Chamberlain's shipping instructions, Chamberlain will, subject to your rights under the Australian Consumer Law with respect to major failures:

- 1 in relation to the Unit (excluding the electric motor), repair or, at its option where permissible, replace any defective part or Unit (excluding the electric motor) and return it to you at no cost; and
- 2 in relation to the electric motor, replace the electric motor and return it to you at no cost.

Where the Unit has been installed by an authorised installer, you must call them for prompt on-site service. Chamberlain will furnish replacement parts free of charge through the authorised installer. A service fee for on-site service may apply.

Repairs and replacement parts provided under this Chamberlain Limited Warranty are provided free of charge and are warranted for the remaining portion of the original warranty period.

This Chamberlain Limited Warranty provides benefits which are in addition to your other rights and remedies as a consumer.

Exclusions

If our service centre determines that a warranty claim has been made in respect of a failure or defect arising under or out of any exclusion detailed below such that the claim is not covered under this Chamberlain Limited Warranty, we may, subject to your other rights and remedies as a consumer, charge you a fee to repair, replace and/or return the Unit to you.

This Chamberlain Limited Warranty does not cover any failure of, or defect in, the Unit due to:

- 1 non-compliance with the instructions regarding installation, operation, maintenance and testing of the Unit or of any product with which the Unit is used;
- 2 any attempt by a person other than an authorised installer to change settings, repair, dismantle, reinstall or move the Unit to another location once it has been installed;
- 3 tampering, neglect, abuse, wear and tear, accident, electrical storm, excessive use or conditions other than normal commercial use;
- 4 use of the Unit in conjunction with controls which have not been supplied, or pre-approved, by Chamberlain;
- 5 problems with, or relating to, the commercial door or commercial door hardware, including but not limited to the door springs, door rollers, door alignment, hinges, guides, slats and drums; or
- 6 problems caused by electrical faults.

If this Chamberlain Limited Warranty does not apply, you may have rights available to you under the Australian Consumer Law.

Liability – Australia only

Except as set out in the Australian Consumer Law (being Schedule 2 of the *Competition and Consumer Act 2010*) (as amended, consolidated or replaced):

- 1 all other guarantees, warranties and representations in relation to the Unit or its supply are excluded to the extent that Chamberlain can lawfully exclude them; and
- 2 under no circumstances will Chamberlain be liable for consequential, incidental or special damages arising in connection with the use, or inability to use, the Unit, other than those which were reasonably foreseeable as liable to result from the failure.

Liability – New Zealand only

Except as set out in the *Fair Trading Act 1986* and the *Consumer Guarantees Act 1993* (as amended, consolidated or replaced):

- 1 all other guarantees, warranties and representations in relation to the Unit or its supply are excluded to the extent that Chamberlain can lawfully exclude them; and
- 2 under no circumstances will Chamberlain be liable for consequential, incidental or special damages arising in connection with the use, or inability to use, the Unit, other than those which were reasonably foreseeable as liable to result from the failure.

Note

We request that you retain your sales docket or invoice as proof-of-purchase and attach it to this manual to enable you to establish the date of purchase in the unlikely event of a warranty service being required. Chamberlain reserves the right to change the design and specifications of the Unit without prior notification. Some features or accessories of the Unit may not be available in certain markets or areas. Please check with your distributor.

Chamberlain service centre contact details

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