

⚠ IMPORTANT SAFETY INSTRUCTIONS FOR INSTALLATION

WARNING – INCORRECT INSTALLATION CAN LEAD TO SEVERE INJURY FOLLOW ALL INSTALLATION INSTRUCTIONS CAREFULLY

Before installing the operator check that the door is in good mechanical condition, and correctly balanced, and that it opens and closes properly.

- Do not use the force adjustments to compensate for a binding or sticking garage door. Excessive force will interfere with the proper operation of the Safety Reverse System or damage the garage door.
- Do not wear rings, watches or loose clothing while installing or servicing a garage door operator.
- To avoid serious personal injury from entanglement, **remove any ropes** connected to the garage door before installing the door operator.
- Install the remote mounted bell push button within sight of the door but away from any moving parts and at a height of at least 1.5 metres.
- **The safety reverse system test is very important.** The garage door must reverse when obstructed on closing. **Failure to properly adjust the operator may result in serious personal injury from a closing garage door.** Repeat the test once a month.

Installation and wiring must be in compliance with your local building and electrical codes. The plug on cord is fitted with a 3 amp fuse.

NOTE: For optimum electrical safety this operator should be connected to a circuit protected by an R.C.D.

- If the garage has no service entrance door then an exterior release kit **MUST** be fitted. This accessory allows manual operation of the garage door from outside in case of power failure. (See back page)
- Disconnect electric power to the garage door operator before making repairs or removing covers.
- Use the manual release lever to disengage the motor drive **ONLY** when the drive is switched OFF and, if possible, when the door is fully closed.
- Examine the installation, in particular the cables, spring and mountings, for signs of wear, damage or imbalance. Do not use if repair or adjustment is needed since a fault in the installation or an incorrectly balanced door may cause injury.

IMPORTANT SAFETY NOTE

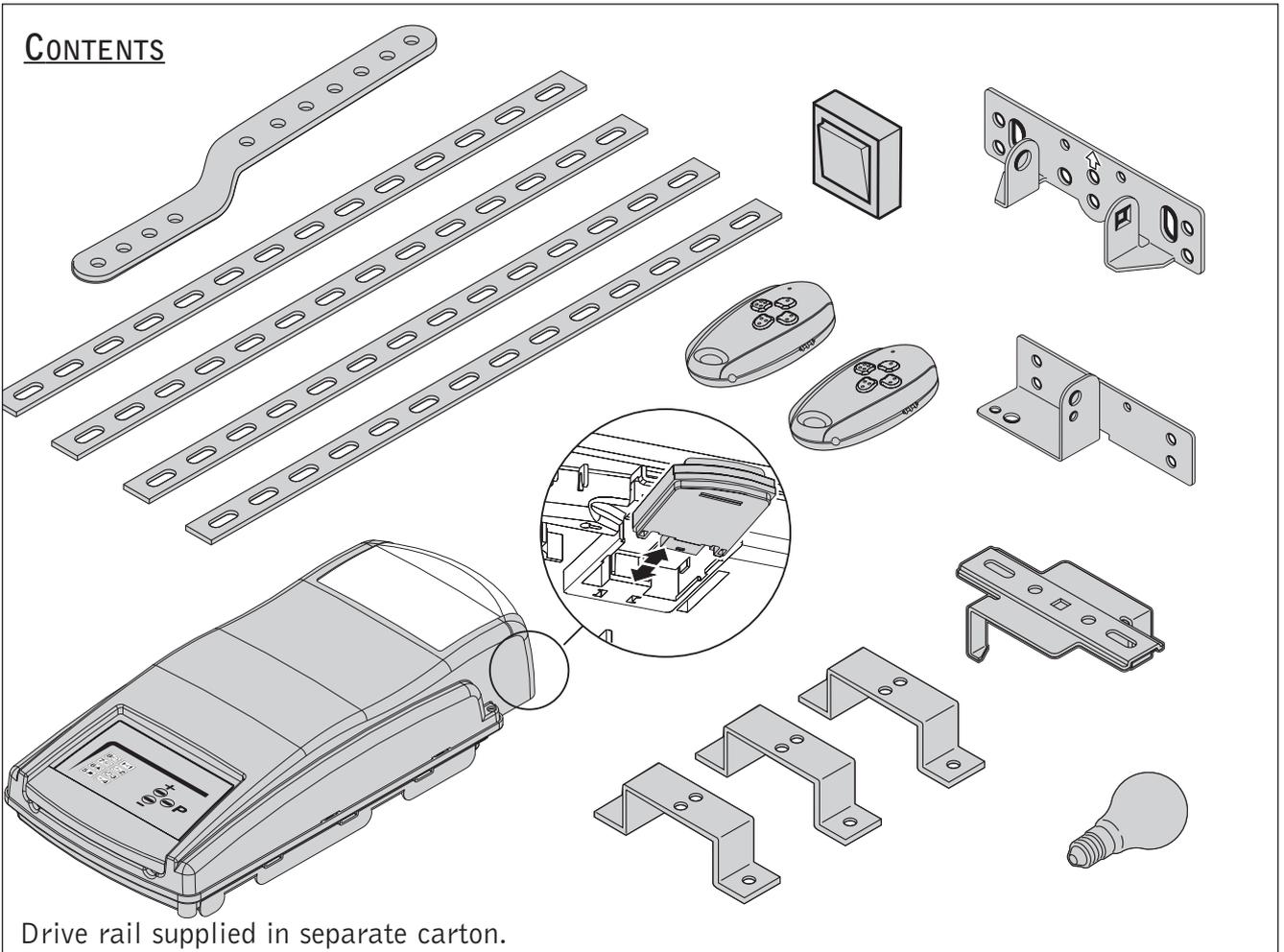
Only operate the door when the door is in full view, free of obstacles with no persons (particularly children) near the door. Nobody should be allowed to enter or leave the garage whilst the door is in motion.

Please keep this manual for future reference, repair and maintenance.

INTRODUCTION

Congratulations on the purchase of your new automatic garage door operator. It is designed to offer you convenience, durability and quality. This operator has been factory tested to ensure maximum quality and safety.

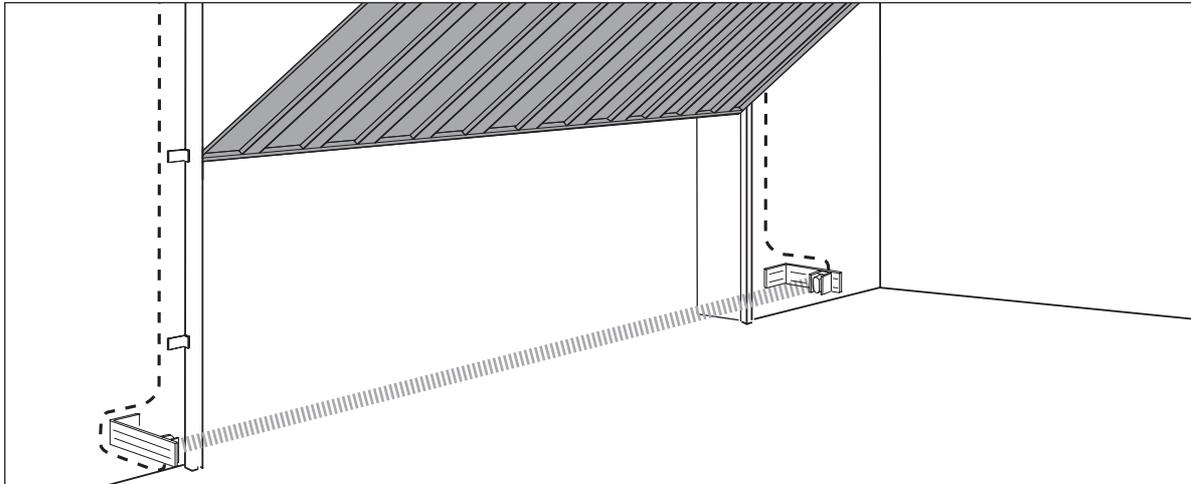
In order to prevent damage to the garage door or garage door operator and to comply with the Machinery Directive it is important that this operator is fitted in accordance with these instructions.



<p>Fix draw bar</p>					
<p>Draw bar to door</p>	<p>Track to power head</p>	<p>Bracket to door (non-Cardale)</p>	<p>Bracket to door (only Cardale)</p>	<p>Track mounting</p>	<p>Track to header</p>

SAFETY FEATURES

- **Automatic Door Reverse**
An unmodified closing door will automatically reverse within 2 seconds if door is obstructed by person or object.
- **Automatic Time Reverse**
Closing door will automatically reverse if the door is not fully closed within 88 seconds.
- **Safety Stop**
Opening door will immediately stop when obstructed by person or object.
- **Beam Break**
For additional safety we recommend a Beam Break is installed. If the INFRARED BEAM is broken by a person or object whilst the door is closing, it will automatically reverse to the fully open position without actually having touched the closing door itself.

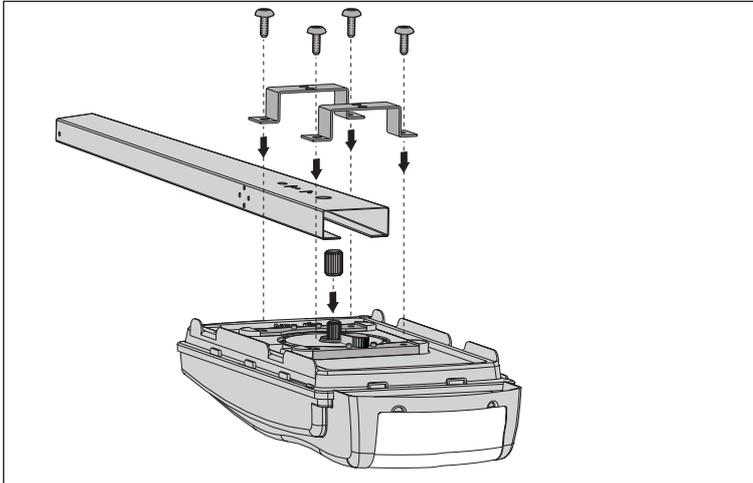


OPERATOR ASSEMBLY

Note: Where the operator has been specified with a 2-piece boom, please refer to the assembly instructions for this item supplied with the boom.

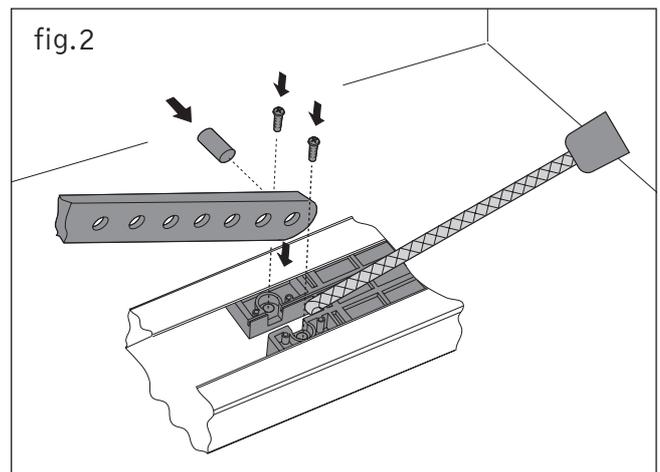
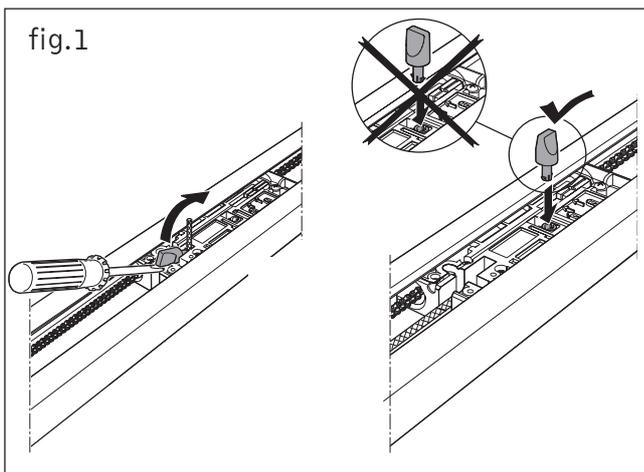
1 Bolt rail with brackets and screws to motorhousing.

Make sure the screws are tightly fastened.



2 Fit the red slider that re-engages the emergency release and operator pull bar onto carriage.

- Refer to fig.1 to fit the red slider that re-engages the emergency release knob onto carriage.
- Refer to fig.2 to fit pull bar onto carriage. Note position of emergency release cord to ensure correct cord position after installation.



4 Carriage quick release.

- a. Pull cord "a" to disengage. Carriage re-engage remain disengaged. See fig. 3
- b. Move red slider "b" in direction of arrow to re-engage carriage at next movement. Start operator. See fig. 4.

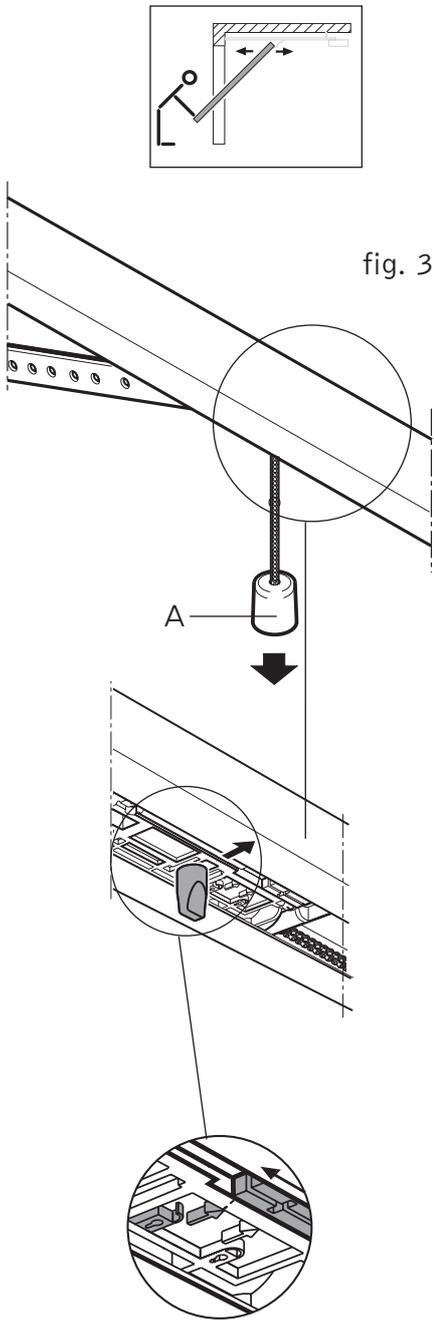


fig. 3

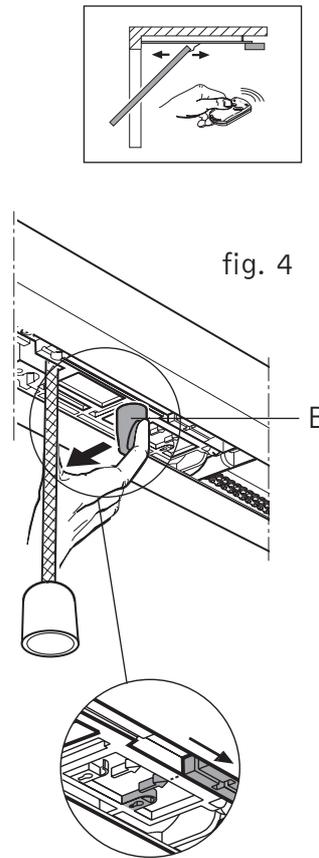


fig. 4

OPERATOR INSTALLATION

DETERMINE GARAGE DOOR TYPE

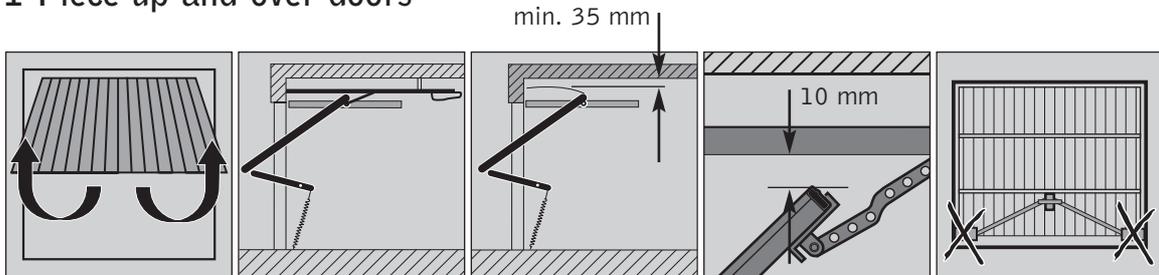
Determine your garage door type as indicated in Step **4A** or **4B**.

Follow the individual instructions required for your specific garage door type.

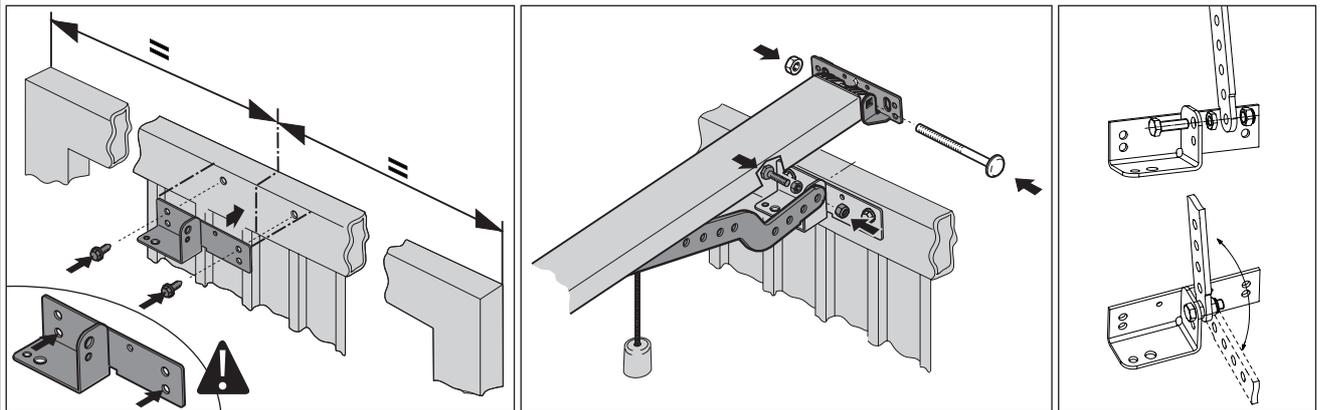
If your garage door type is not included, please contact your distributor.

Special accessories or operator modifications may be required.

4A 1-Piece up-and-over doors

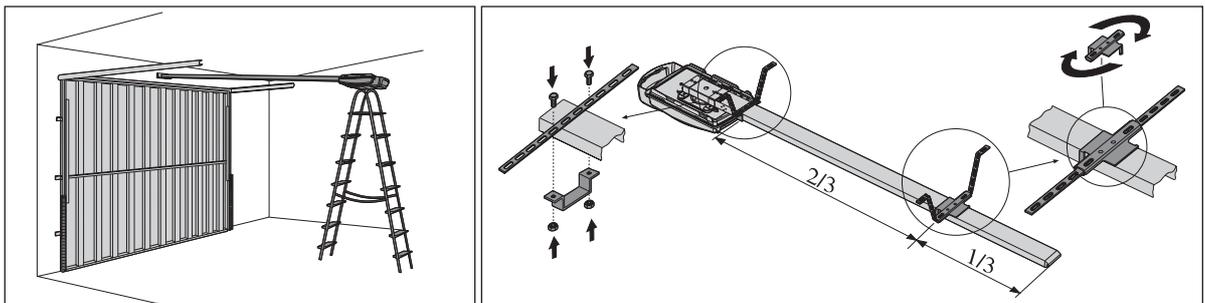


Install door bracket at centre position of door and rail bracket on centre position above door. Make sure there is at least 10 mm clearance between highest travel point of door and rail.



! For doors fitted with 3 point latching: Before fitting the door bracket to the door, the top latch assembly must be removed. For GRP doors only –also remove the retaining screws alongside the door bracket fixing holes. When fitting the door bracket, use the lower holes for GRP doors only and the upper holes for all other doors.

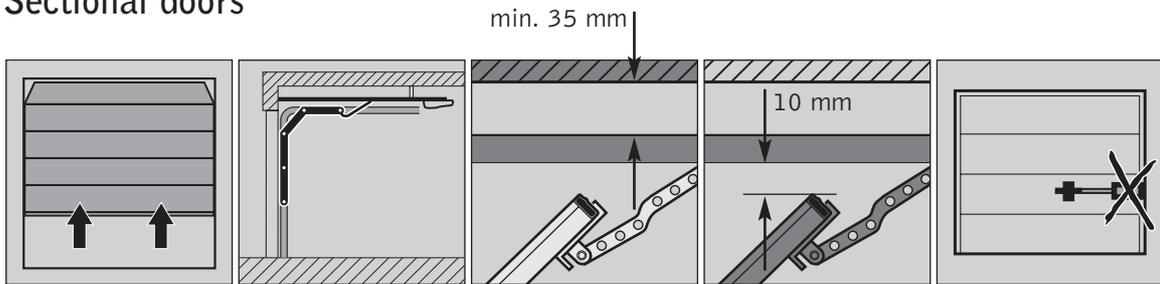
- Level and mount operator.



- Disengage carriage from chain or belt! Door may only be moved with moderate speed.
- Connect operator pull bar to door bracket.
Note: Remove or disengage all door latches and disable the door lock prior to installation!

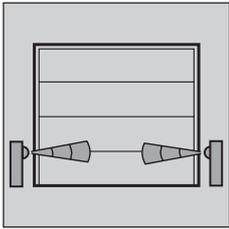
4B

Sectional doors



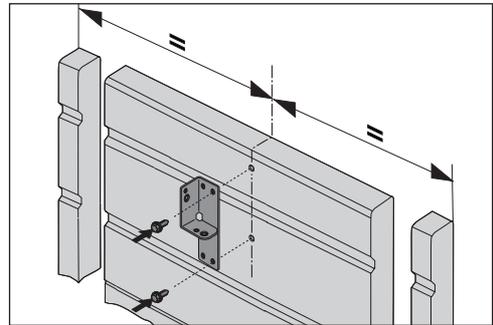


ATTENTION

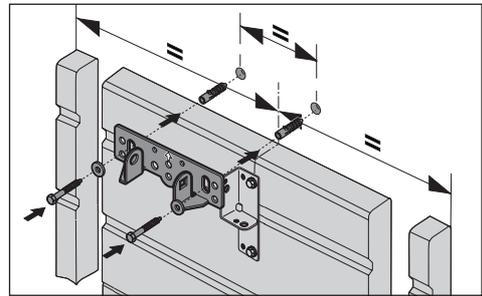


A beam break is strongly recommended for use with sectional doors (available separately).

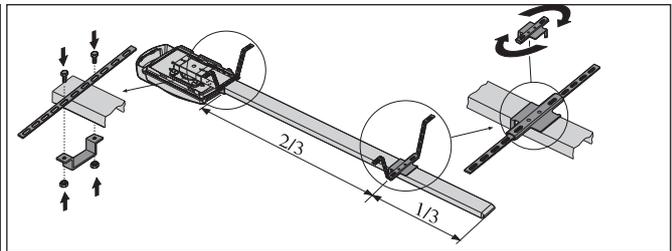
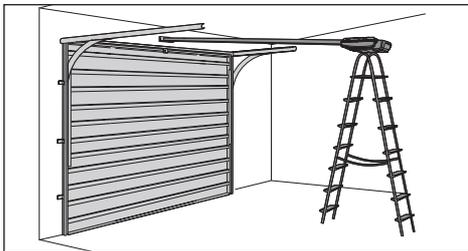
- Fix adjustable door fitting bracket to top section at the centre of the door.



- Install rail bracket on centre position above door. Make sure there is at least 10 mm clearance between highest travel point of door and rail.



- Level and mount operator.

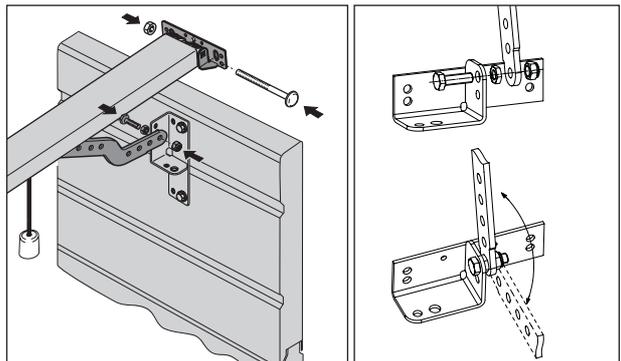


- Disengage carriage from chain or belt.

Door may only be moved with moderate speed.

- Connect operator pull bar to door bracket.

Note:
Remove or disable all door locks before installation!



FOR ALL OTHER DOOR TYPES PLEASE CONTACT YOUR DISTRIBUTOR!

- 5 Make sure motorhousing and rail are mounted correctly and secured.
Strengthen where needed.
- 6 Install light bulb.
Type E14, max. 40 Watt.

OPERATOR CONTROL PANEL INDICATIONS

Your automatic door operator is provided with an easy to read LED display panel with 8 light icons and three program buttons.

Light icons

-  external beam break
-  Door in set position OPEN
-  automatic timer
-  Door in set position CLOSED
-  Door passes reference point
-  Malfunction. CHECK error message by pressing "P" button briefly.
-  operator impulse (slow flash when on vacation lock)
-  power on (230V)

Adjustment buttons

-  Program button "decrease" and CLOSE test button
-  Program button "increase" and OPEN test button
-  Programming button

LEGEND

LED off	i.e. 	Default setting:	i.e. 
LED illuminated	i.e. 		
LED blinking	i.e. 		
LED rapid blinking	i.e. 		
Button pressed	 or  or 		
Operator light bulb	on:  off: 		
External Lights	on:  off: 		

PROGRAMMING OVERVIEW CARDALE DC 800 N II

Menu	Basic Settings
Menu ①	Programming 'door open position'
Menu ②	Programming 'door closed position'
Menu ③	Programming of remote control

Level 2	Advanced Settings	Explanation	Factory Settings
Menu ①	Add beam break (photocell)	Setting whether the operator runs with or without photocell	no photocell existing
Menu ②	Set maximum OPENING force	The sensitivity of power limit can be set in steps from 1 - 16	step 6/16
Menu ③	Set maximum CLOSING force	The sensitivity of power limit can be set in steps from 1 - 16	step 6/16
Menu ④	Set 'offset' learned power limit (sensitivity)	The sensitivity of power limit can be set in steps from 1 - 15	step 7/15
Menu ⑤	Set 'operator speed'	The speed the door is moved by the operator can be set	step 16 (max. speed)

Level 3	Advanced Settings	Explanation	Factory Settings
Menu ①	Set door open period	The time the door remains open until it closes automatically. Note: This function only works when photocell is connected and programmed.	deactivated
Menu ②	Set warning phase time	Setting whether a signal light will flash before the door closes	deactivated
Menu ③	Set start-up warning phase	Setting whether a signal light will flash before the door starts to move with a delayed door start	warning before start deactivated
Menu ④	Set early closing after passing the driveway photocell	Setting whether the door will close after passing the photocell and before the set time has expired	no

Level 4	Advanced Settings	Explanation	Factory Settings
Menu 1	Set period light remains on	The light time of the operator can be programmed	180 sec.
Menu 2	Set timed security cut-out	Programs the maximum door travel time	80 sec.
Menu 3	Set external signal light	The signal light can be set to flash or permanent light	none
Menu 4	Set operator lighting	The operator light can flash at automatic time function	none
Menu 5	Set external relay alarm function	The electric push open security device can be programmed as alarm output signal	none

PREPARATION FOR PROGRAMMING

- The operator has to be mounted ready for operation
- The door is not yet closed completely
- If there is a beam break (photocell), it should be connected!



Advice:

If the photocell is correctly mounted and aligned, the function 'photocell' is recognized automatically during programming!

- If applicable, before programming the operator, stick battery into your hand transmitter(s).
- When the door operator is turned on (plug in power cord) it runs a self-test; all 8 LEDs will glow and operator 230V light will illuminate for approximately 2 seconds. When the light is off and LED is illuminated the operator is in normal operating mode.

ADJUSTMENT BUTTONS:

All settings and adjustments can be made with the three adjustment buttons.

Use and to change settings of chosen program menu
 to store menu setting and go to next menu.



Advice:

The programming is cancelled if none of the three buttons (, ,) is actuated during a time period of more than 120 sec.

All functions saved before with button remain unchanged.

When programming is cancelled, LED is flashing.

After shortly pressing button the error message 7 is displayed.



Attention:

The operator has **four** programming levels.

For normal operation of the operator you only program the end positions and the remote control in the Basic settings.

Changes in the extended programming level may only be carried out by specialists.



Advice:

To determine the error number add the figures of the irregularly flashing LED's. See as well 'error messages'.

In case of a malfunction the control light MALFUNCTION is flashing.

- Shortly press button .
-> The current error number is displayed by irregularly flashing LED's (e.g. error).

**Advice:**

The end positions can only be programmed if there is a valid reference point.
For this travel the door electrically once to open or close position.

Display of the reference point

The operator passes the reference point sensor:

- LED  shortly glows up.

**Advice:**

All menus can be reset by a RESET function to the original values set by factory.
Reset is activated by pressing ,  and  together for more than 30 seconds.

MENU OVERVIEW:

- ① Set door OPEN position
- ② Set door CLOSED position
- ③ Program hand transmitter

To SET UP THE OPERATOR:

Menu ①

SET DOOR OPEN POSITION

1. Press **⊖P** for 2 seconds until LED  blinks and all others are illuminated.
2. To move the garage door to desired fully OPEN position press & hold the  until desired DOOR OPEN position is reached.
For fine-tuning use the  (OPEN) and  (CLOSE) buttons.



Advice:

The reference point has to be passed 1x.

 will light up briefly when reference point has to be passed 1x.

3. Press **⊖P** to store and to go to Menu ②.

Menu ②

SET DOOR CLOSE POSITION

1. LED  blinks and all others are illuminated.
2. To move the garage door to desired fully CLOSED position press & hold the  until desired DOOR CLOSE position is reached.
For fine-tuning use the  (CLOSE) and  (OPEN) buttons.



Advice:

The reference point has to be passed 1x.

 will light up briefly when reference point has to be passed 1x.

3. Once door position is correct press **⊖P** to store and go to Menu ③.

Menu 3

PROGRAM THE TRANSMITTER CODE

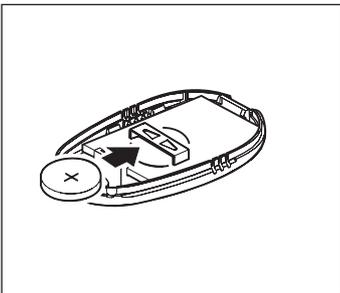
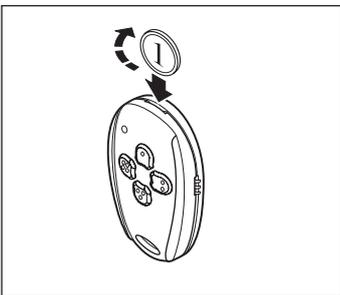
1. LED **7** blinks and all others are illuminated.
2. Press transmitter button until LED **7** blinks rapidly
3. Press **P** to store multi-bit transmitter code and to finish basic programming. LEDs will automatically turn off starting at LED **8** and ending at LED **1**.
The operator is now in operational (normal) mode **8**.

MAKING ADJUSTMENTS:

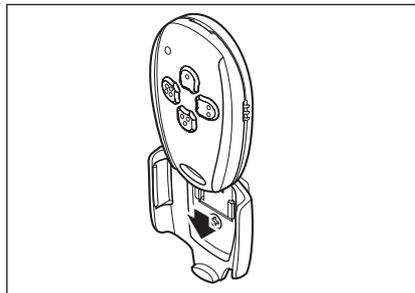
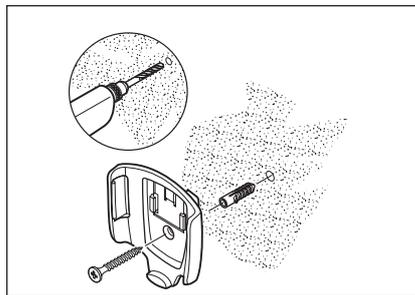
To change the settings of an individual menu:

1. Press **P** for approximately 2 seconds until LED blinks
2. Repeatedly press **P** until desired indicator blinks.
If an individual programming menu is skipped its settings remain unchanged.
3. Follow individual instructions for Program menu
4. Repeatedly press **P** to scroll through the menus. When you reach last menu by pressing **P** the LEDs will automatically turn off starting at LED **8** and ending at LED **1**.

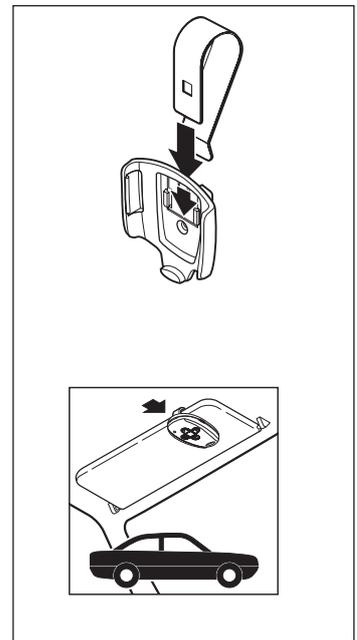
A



B



C



HOW TO PROGRAM AN ADDITIONAL TRANSMITTER



Advice:

- Both sides of the plug connections can be used identically.
- For multi-channel hand transmitters this step has to be carried out separately for each button.



Attention:

- An actuation of the hand transmitter may start the door movement!
- After the hand transmitter has been recoded, the garage door system to be actuated must also be reprogrammed to adopt the new coding, since the old coding has been irretrievably lost!

Learning the coding

This function is meant to transmit the coding of an existing hand transmitter to an additional hand transmitter.

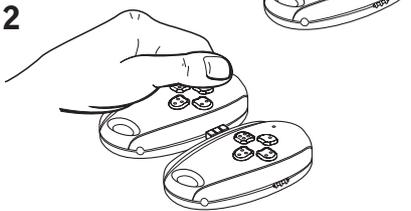
1



Step 1

- Connect both hand transmitters by means of the enclosed coding plug ①.

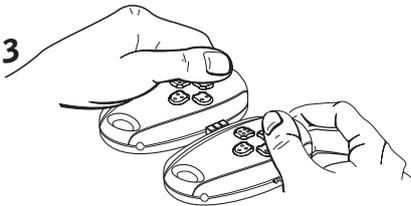
2



Step 2

- Actuate the existing hand transmitter and hold the button.
The LED on the transmitter is on.

3



Step 3

- Actuate the desired button of the new hand transmitter and hold the button of the existing hand transmitter.

After 1 - 2 sec. the LED on the new transmitter is glowing permanently.
Programming is terminated.

The new hand transmitter has now taken over the coding of the existing hand transmitter.

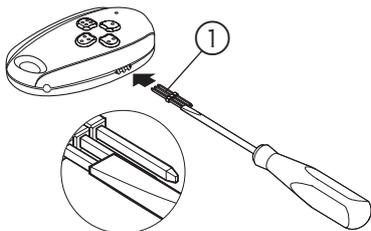
- Remove the coding plug ①.

Altering the coding

It is possible to change the coding of the hand transmitter in case that a hand transmitter has gone lost.

For this insert the coding plug ① into the hand transmitter that has to be reprogrammed.

1



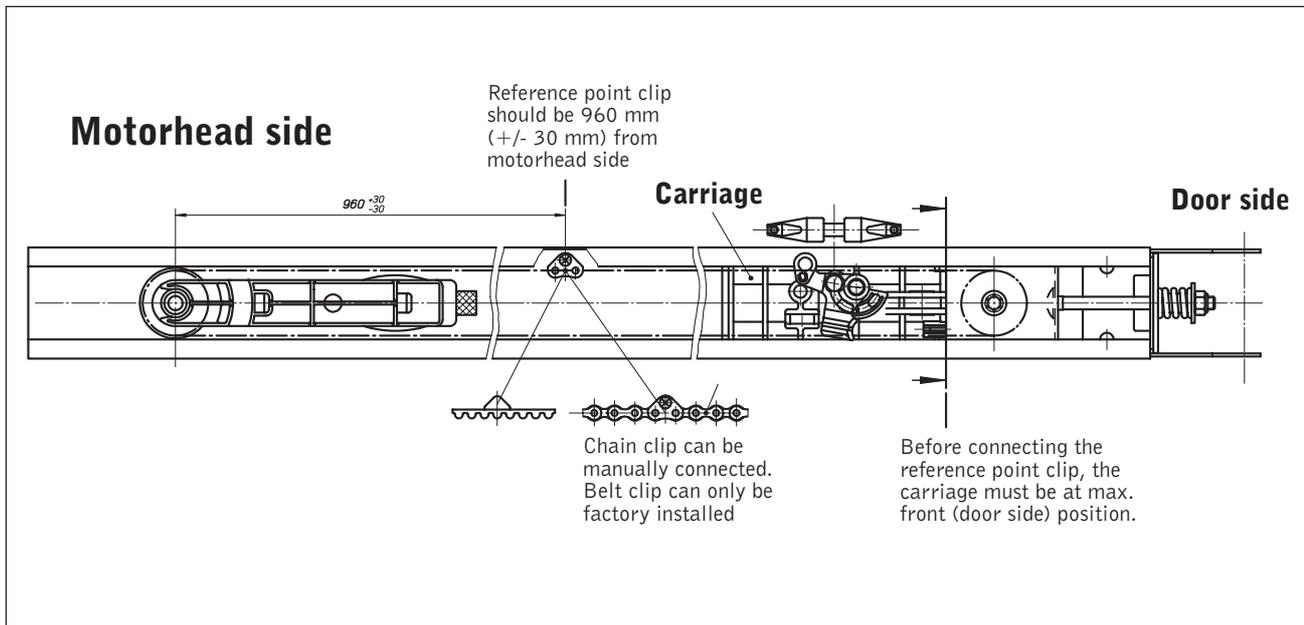
Step 1

- Insert the coding plug ① into the hand transmitter.
- Short-circuit one of the outer pins of the coding plug with the centre lead (e.g. by means of a screwdriver).
- Actuate the desired button on the hand transmitter. The integrated random program generates a new code. The LED is flashing quickly.

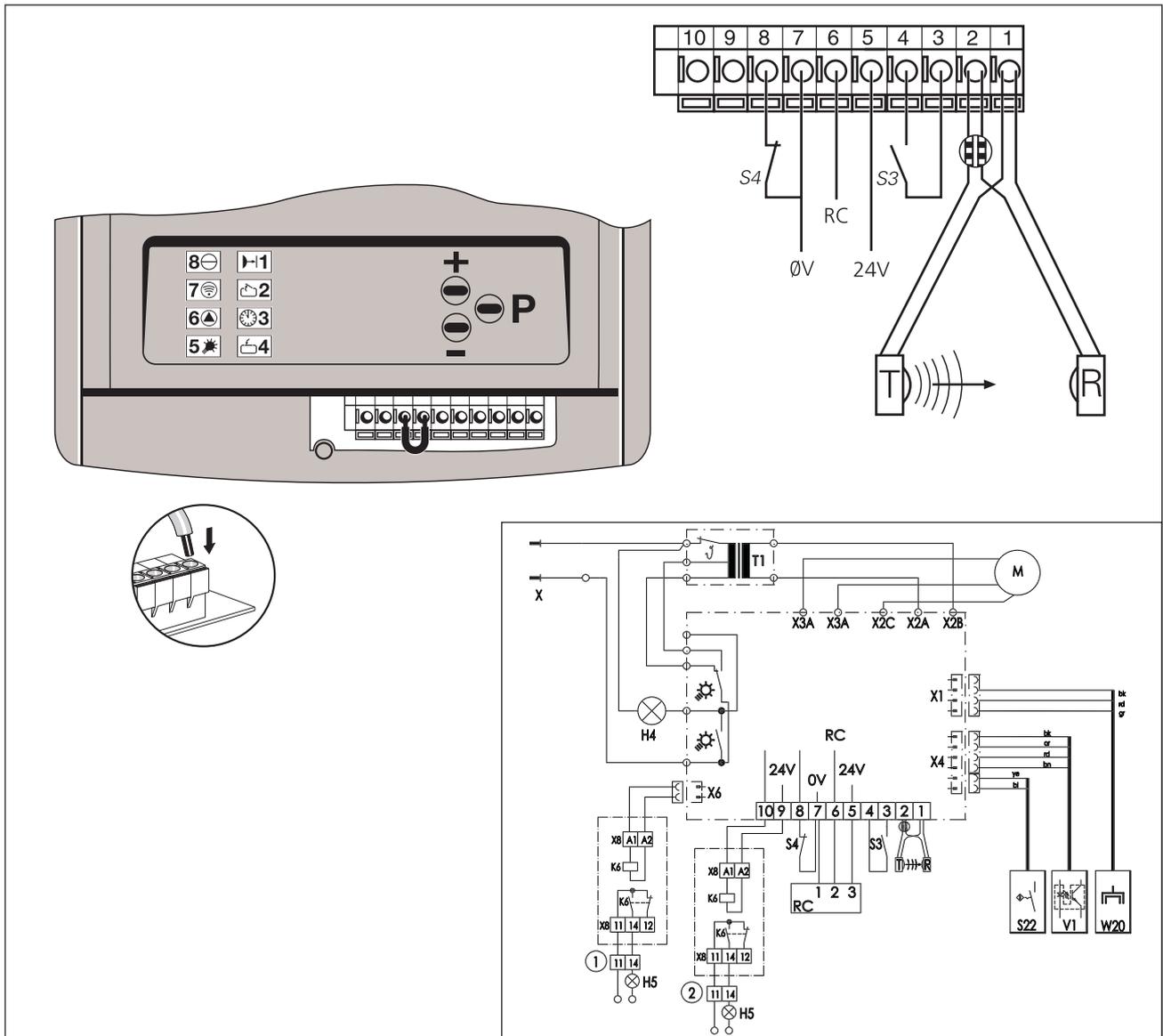
As soon as the LED on the hand transmitter is on permanently, release the button of the hand transmitter and remove the coding plug.

LIMIT CAM POSITION (REFERENCE POINT CLIP)

In case you have to install a new limit cam on to your chain, please follow below instructions. It is only possible to install a clip onto a chain. When you have a belt drive boom, it is not possible to reinstall a limit cam.



EXTERNAL CONNECTIONS



- M motor
- T1 transformer
- V1 RPM sensor
- S22 reference point switch
- T photocell transmitter
- R photocell receiver
- S3 push button IMPULSE
- S4 push button STOP
- X1 plug 1~N 220-240V 50Hz
- X3A flat cable connector dc motor
- X2C ground
- X2A and X2B = 24V
- X6 Relay output contact 1
- H4 Operator light
- H5 signal light
- ① internal relay (optional)
- ② external relay (optional)
- W20 Receiver HF module output
- 24V 24 VDC, 50mA max.

- 0V masse (ground)
- RC Contact
- bk black
- bn brown
- or orange
- rd red
- gr green
- bl blue
- ye yellow

Wall control (push button impulse):

It is possible to either connect a push button or a 3-function wall console with impulse, light on/off and an electronic vacation lock functions. When operator LED 8 burns and LED 7 flashes the 'vacation' lock is activated. De-activate 'vacation' lock on 3-function wall console or by briefly pressing **OP** button on operator.

TROUBLESHOOTING

Fault	Cause	Remedy
Indicator 8 does not glow.	No voltage.	Check mains supply. Check electric socket.
	Thermal protection in mains transformer activated.	Allow mains transformer to cool down.
	Defective control unit.	Cut off mains supply to operator. Remove lamp cover and motor cover. Unscrew control unit, pull slightly forward and withdraw the connecting plug. Remove control unit and have it checked.
Indicator 6 flashes. Error 10 or 28	Automatic cut-out set too sensitively. Door operation too sluggish. Door blocks.	Re-set automatic cut-out to be less sensitive (Level 2 Menu 2 & 3 page 21). Ensure door moves easily.
Indicator 6 flashes. Error 6 or 15	External photocell defective or interrupted.	Remove obstruction or have photocell checked.
Drive only operates in "OPEN" but not in "CLOSE" direction. Error 15	Photocell programmed, but not connected (Level 2 Menu 1 page 21).	Reprogramme photocell function or connect photocell.
No response on impulse. Indicator 7 glows. Error 36	Connecting terminals for "IMPULSE" button bridged, e.g. due to short-circuit or wrong terminal connection.	Temporarily isolate cabled key switches or interior push buttons from control unit. Remove plug, insert plug and look for cable fault.
No response on impulse. Error 36	Short-circuit label removed, but "STOP" button not connected.	Connect "STOP" button.
Transmitter problems	Hand transmitter coding is not consistent with receiver coding.	Check coding Menu 3, page 14.
	Flat battery.	Insert new battery. Flashing LED in transmitter indicates Flat battery.
	LED 7 does not light up when pressing transmitter button	Electronic aerial not connected or wrong installation
	Hand transmitter or control unit defective.	Have both components checked.
Insufficient range of remote control (less than 5 m).	Flat battery in hand transmitter.	Insert new battery. Flashing LED in transmitter indicates battery condition.
Operator only starts to run shortly. Error 9	RPM sensor defective.	Have operator checked.
	Door too sluggish.	Check door.
Transmitter command does not respond but wall control does (LED 8 on, LED 7 flashes)	Operator is in electronic 'vacation' lock	De-activate 'vacation' lock on 3-function wall console or by briefly pressing OP button on operator.

ERROR MESSAGES

When LED **6** is blinking the error message can be retrieved by pressing **OP** briefly.
The total sum of numbers in blinking LEDs indicate so-called error number.

LED flashes erratically	Error number	Fault
6	6	Photocell actuated
7	7	Programming aborted
8	8	Reference point switch defective
8 + 1	9	Defective RPM sensor Anti-lock system actuated
8 + 2	10	Power limit is active
8 + 3	11	Excess travel stop is active
8 + 7	15	Photocell self-monitoring unit not o.k.
8 + 7 + 1	16	Power limit self-monitoring unit not o.k.
8 + 7 + 6 + 5	26	Voltage monitoring is active
8 + 7 + 6 + 5 + 1	27	Response sensitivity of power limit
8 + 7 + 6 + 5 + 2	28	Learned power limit is active
8 + 7 + 6 + 5 + 4 + 3 + 2	35	Electronics defective
8 + 7 + 6 + 5 + 4 + 3 + 2 + 1	36	NC contact (Terminal 7&8) broken

OPERATOR PROGRAMMING - ADVANCED SETTINGS



Attention:

Programming the advanced features of this operator must only be undertaken by fully trained and qualified personnel. Please contact your dealer for details.

ADVANCED PROGRAMMING FEATURES:

- Advanced settings (Level 2)
- Automatic closing (Level 3)
- (External) Lighting (Level 4)

Level 2 ADVANCED SETTINGS

MENU OVERVIEW Level 2 :

- 1 Add beam break (photocell)
- 2 Set maximum OPENING force
- 3 Set maximum CLOSING force
- 4 Set offset learned power limit (sensitivity)
- 5 Set "operator speed"



Advice:

Changes in the programming levels of extended operator functions should be carried out by specialist personnel.



Attention:

The automatic cut-out is set automatically. Only change it if necessary!
Set the automatic cut-out as sensitive as possible, according to EN 12445 and EN 12453.



Advice:

The setting of the automatic cut-out corresponds to the maximum power of the operator. At the first travel to OPEN or CLOSE direction after 'POWER ON' the automatic cut-out is effective according to the adjustment. For further travels the self-learned power, that is more sensitive, is effective. The automatic cut-out is still the upper limit of power.

Level 3 Menu 3

SET START-UP WARNING

1. Make sure LED  is blinking and all others are illuminated.
2. Use  and  to change the start-up warning phase
 minimum phase: 0 seconds
 maximum phase: 7 seconds

        0 seconds	        1 seconds	        2 seconds	        3 seconds	        4 seconds	        5 seconds	        6 seconds	        7 seconds
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3. Press  to store and go to Menu **4**.

Level 3 Menu 4

SET EARLY CLOSING AFTER PASSING THE DRIVEWAY PHOTOCELL

1. Make sure LED  is blinking and all others are illuminated.
2. Use  and  to choose the required setting:
 - A. LED  blinking: Door will close after set door open period
 - B. LED  illuminated: Door will close immediately after driving through the Beam Break

        Door will close after set door open period	        Door will close immediately after driving through the Optical Sensor
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3. Press  to store and to finish setting up the automatic closing feature.

The LEDs will automatically turn off starting at LED  and ending at LED  .
 Operator is now in operational (normal) mode (recognizable by illuminated LED )
 and possible LED  (door fully open) or LED  (door fully closed).

Level 4 CONTROL EXTERNAL LIGHT

Your operator allows the connection of an external signal light provided the optional external light relay kit is connected and the automatic closing function is activated.

Signal lights can be programmed to be: - constant illuminated signal light
- blinking signal light

MENU OVERVIEW **Level 4** :

- ① Set period lights remain on
- ② Set timed security cut-out
- ③ Set external signal lights
- ④ Set operator lighting
- ⑤ Set external relay alarm function

Level 4 Menu ①

SET PERIOD LIGHT REMAINS ON (💡)

Operator is in normal operating mode

1. Press **⊖P** for 10 seconds until LED **||🔍2||** flashes rapidly and all others are illuminated. Still hold the P button and press the **⊕** **⊖** button until LED **||🔍4||** blinks and all others are illuminated.
1. LED **||🔍1||** blinks and all others are illuminated.
2. Use **⊕** or **⊖** to set desired period
minimum phase: 90 seconds
maximum phase: 240 seconds

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Level 4 Menu 3

SET EXTERNAL SIGNAL LIGHTS (☀/☾)

1. LED  blinks and all others are illuminated.
2. Use  or  to set the signal light function
LED  blinks: external signal will be illuminated
LED  illuminated: external signal will blink

 blinks and all others are illuminated. external signal will be illuminated	 blinks and all others are illuminated. external signal will blink
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3. Press  to store and go to Menu 4.

Level 4 Menu 4

SET OPERATOR LIGHTING (💡/🕒)

1. LED  blinks and all others are illuminated.
2. Use  or  to set the signal light function.
LED  blinks: operator light will be illuminated during warning phase
LED  illuminated: operator light will blink during warning phase

 blinks and all others are illuminated. operator light will be illuminated during warning phase	 blinks and all others are illuminated. operator light will blink during warning phase
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3. Press  to store and go to Menu 5.

Level 4 Menu 5

SET EXTERNAL RELAY ALARM FUNCTION

1. LED  blinks and all others are illuminated.
2. Use  or  to set the light function
LED  blinks: external light will be illuminated during lighting phase.
LED  illuminated: external light relay 30 seconds alarm signal on actuation of the back drive protection system

 blinks and all others are illuminated. External light will be illuminated during lighting phase	 blinks and all others are illuminated. External relay 30 seconds alarm signal on actuation of the back drive protection system
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3. Press  to store and to finish setting up the external light.

The LEDs will automatically turn off starting at LED  and ending at LED . Operator is now in operational (normal) mode (recognizable by illuminated LED ) and possible LED  (door fully open) or LED  (door fully closed).

TECHNICAL SPECIFICATIONS

DC-800N II Garage Door Operator

Connected loads:

230 V
250 W (in operation with lighting)
3.9 W (out of operation without lighting)

Door travel speed:

0.14 m/s with "soft" start and "soft" stop

Push and pull force:

800 N

Excess travel stop:

88 secs.

Lighting:

1 x 40 W E14

Control voltage:

Low voltage below 24 V DC.

Automatic timer:

With additional relay for signal lights connection and photocell to monitor the through-traffic area (both items available as accessories). Warning phase adjustable from 2 to 70 seconds. Open phase adjustable from 5 - 255 seconds.

Automatic cut-out:

Electronic power limit through microprocessor and power sensor.

Anti-Block system:

Through microprocessor and RPM sensor.

Device to prevent forced opening of door:

Electronic back-drive prevention by permanent protection of the closed door position. Door will automatic close after ca. 1cm detected unauthorized reverse movement.

Protection category:

For dry buildings only.

⚠ Attention: Observe local regulations!
Always lay mains cable (230V) and control wire (low voltage) separately.

⚠ Attention: Only operate garage door when certain there is no person or object in garage door opening and travel path.

Initial operation

Power-operated windows, doors and gates for industrial or commercial use must be checked by a specialist after installation and then regularly at intervals of 1 year minimum.

Maintenance

This garage door operator is virtually maintenance-free.

However, all movable parts of the door and operator system should be checked regularly and kept in an easily movable condition.

The OPEN and CLOSE automatic cut-out settings should be checked regularly.

The door must be running smoothly and regularly maintained.

Check the lifting regularly.

MAIN UK & EIRE DISTRIBUTOR:

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Brackley
Northants
NN13 7EA
England

Tel: 01280 703022
Fax: 01280 702195
<http://www.cardale.uk.inter.net>

CARDALE
GARAGE DOORS

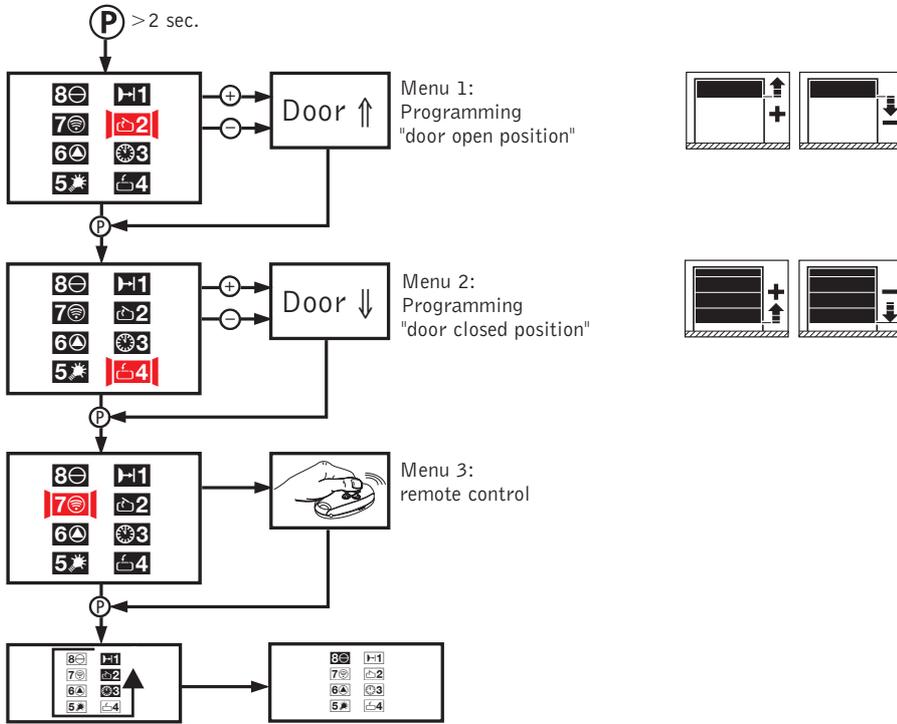


Art.-Nr.: 67 095
Version: 10.2003

SHORT PROGRAMMING DC 800 N II

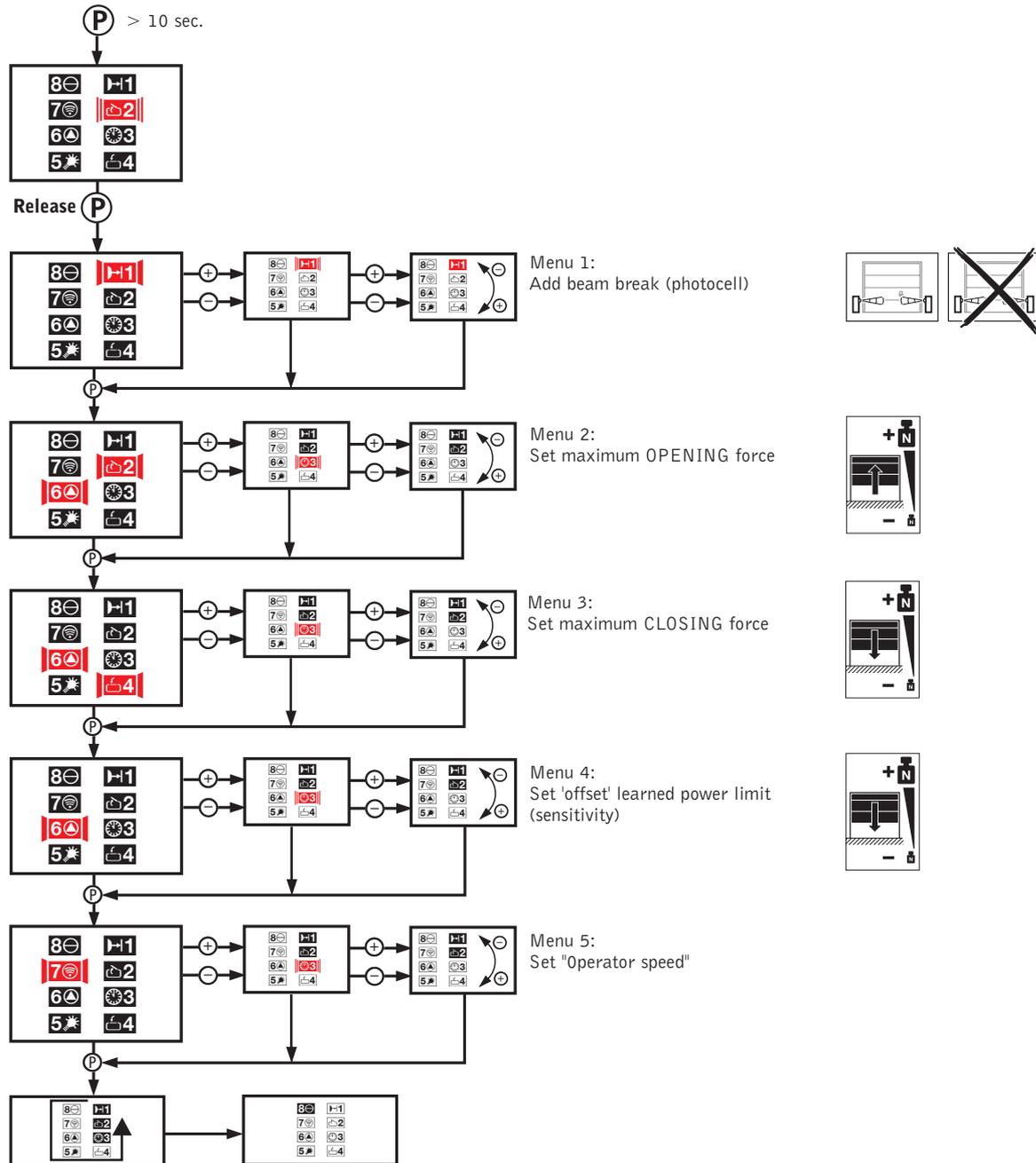
Basic Settings:

Press **P** for 2 sec. until LED **2** blinks and all others are illuminated.



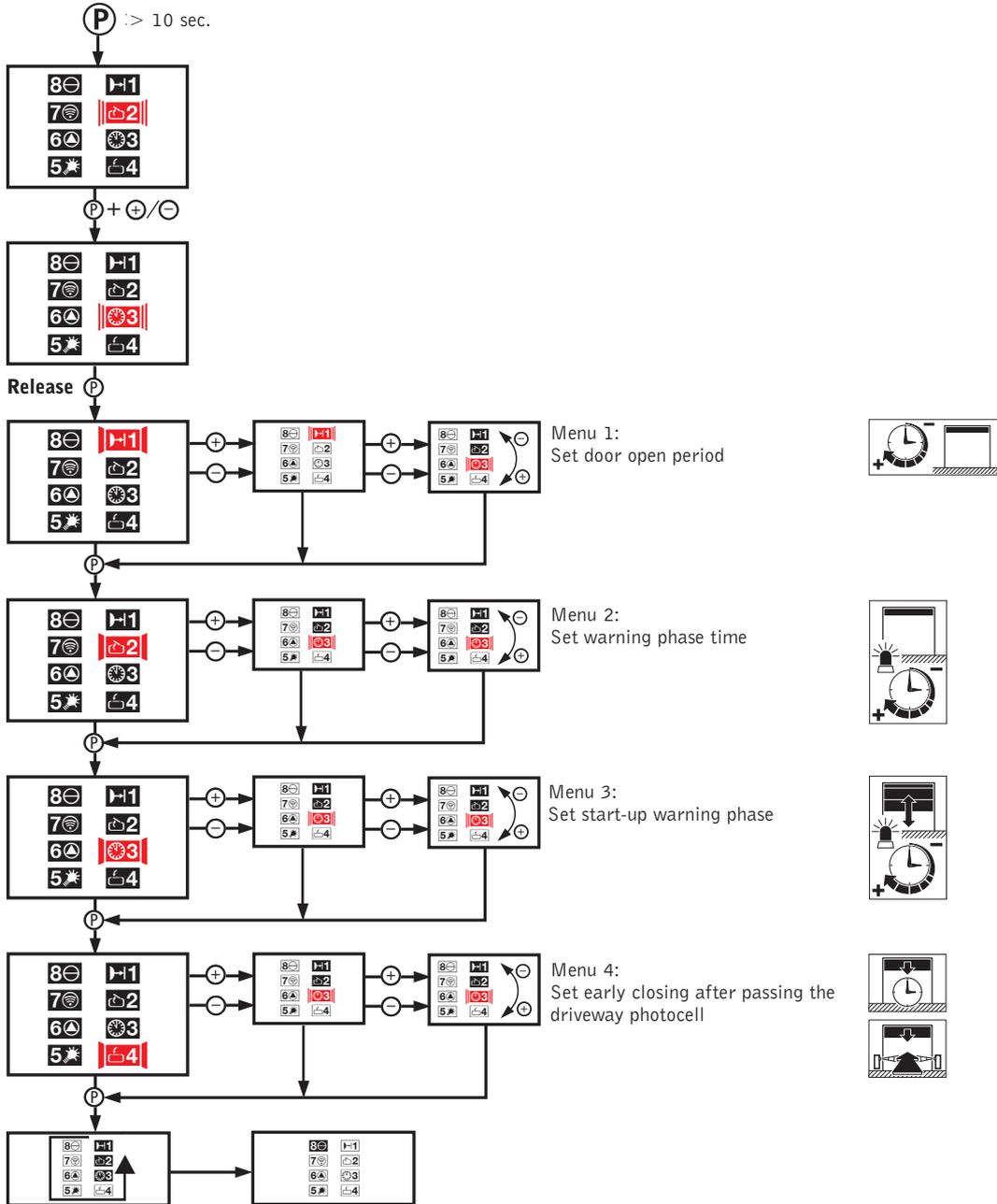
Advanced Settings: Level 2

Press **P** for more than 10 sec. until LED **|2|** blinks rapidly and all others are illuminated.



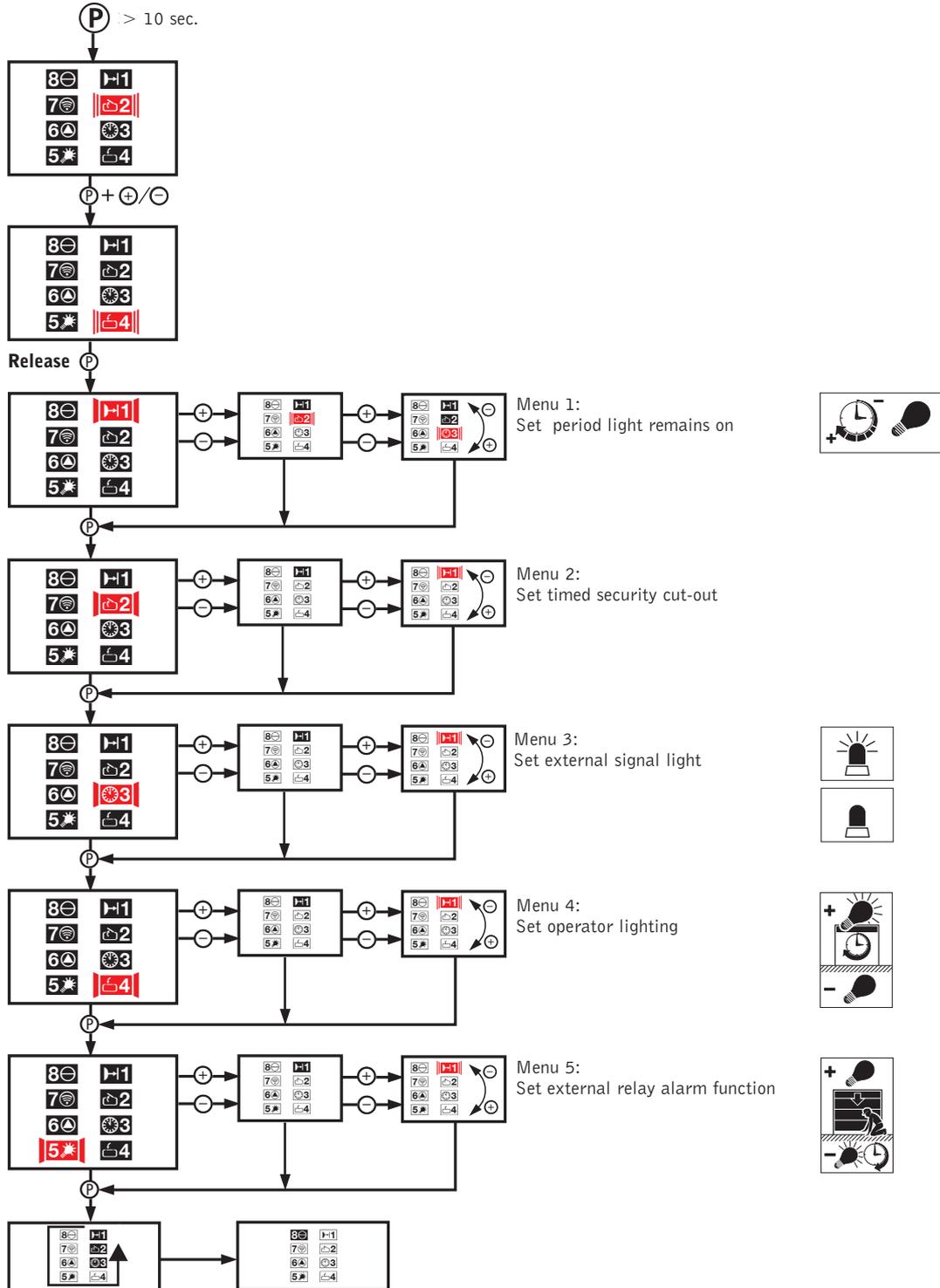
Advanced Settings: Level 3

Press **P** for more than 10 sec. until LED **||L2||** blinks rapidly and all others are illuminated.
 Hold **P** button and press simultaneously **+** or **-** until; LED **||L3||** blinks rapidly and all others are illuminated.



Advanced Settings: Level 4

Press **P** for more than 10 sec. until LED **||L2||** blinks rapidly and all others are illuminated.
 Hold **P** button and press simultaneously **+** or **-** until; LED **||L4||** blinks rapidly and all others are illuminated.



Supply of Machinery (Safety) Regulations 1992

EC Declaration of Incorporation

Powered Garage Door Operators

The powered garage door operator models listed below are intended to be incorporated with a suitably designed garage door (see matrix below) to provide powered operation.

Figures refer to maximum aperture width (mm), maximum aperture height (mm) and maximum door weight (kg) respectively.

Door type	Operator suitability			
	DC-650N (standard boom)	DC-650N (extended boom)	DC-800N (standard boom)	DC800N (extended boom)
Slide away	5030/2410/85	5030/2630/85	5182/2410/100	5182/2630/100
Sectional (with torsion spring)	5030/2160/85	5030/2410/85	5182/2160/100	5182/2410/100

Samples of powered door operators of the above types have been tested/checked and found to conform with the provisions of the Machinery Directive (98/37/EC), the Low Voltage Directive (73/23/EEC) and the E.M.C. Directive (89/336/EEC).

A powered door operator must not be put into service until it has been completely and safely assembled and installed, with an appropriate type, size and weight door, in accordance with the door and operator manufacturer's fitting instructions, using a suitable connection arm and appropriate safety devices, etc; and not until the complete installation has been declared to be in conformity with the provisions of the Machinery Directive.

The technical files for the operators listed above are held by Cardale Doors Ltd. and will be made available for inspection by an enforcing authority, should the need arise:-

This Declaration is made by:



C. Parkman, Operations Director

Being the responsible person appointed by the manufacturer and employed by:

Cardale Doors Ltd. Registered Office: Arundel House, Arundel Road, Luton, Bedfordshire. LU4 8DY
Registered No. 926537 (England)

DECLARATION OF INCORPORATION

This Declaration of Incorporation has been prepared by the powered garage door operator manufacturer to meet the requirements of the Supply of Machinery (Safety) Regulations {Machinery Directive} and signifies that the accompanying powered garage door operator, if installed in accordance with the manufacturer's detailed instructions, will be suitable to be incorporated with a suitably designed garage door with a compatible Declaration of Incorporation.

It is the responsibility of the installing company to ensure that doors and drive units are correctly matched prior to installation.

It is also the responsibility of the installing company, as the Responsible Person, to ensure that a suitably nominated person should confirm that the power operated door has been installed in accordance with the instructions provided by both the door and drive unit manufacturer.

It is also the responsibility of the installing company to check after installation the operation of the power operated door and that any safety devices provided are suitable for the application and are all working satisfactorily. This will permit the nominated person to attach a CE label identifying the name of the installing company, a unique door reference number and a date of completion, and to complete and issue a Declaration of Conformity (see note below).

One copy of the Declaration of Conformity is to be issued to the client and one copy is to be retained by the installing company, together with the relevant two Declarations of Incorporation. In accordance with the requirements of the Machinery Directive and the UK supply of Machinery (Safety) Regulations, these records are to be retained on file for a period of ten years.

NOTE

Duplicate printed pads set out in the format of Declarations of Conformity in order to allow on site completion are available at a reasonable cost from the DSMA for both members and non-members. Alternatively, for an additional cost, a technical records file with full details of requirements and procedures for compliance, and including the necessary filing divisions, is also available.



The Door & Shutter Manufacturers' Association, 42 Heath Street,
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