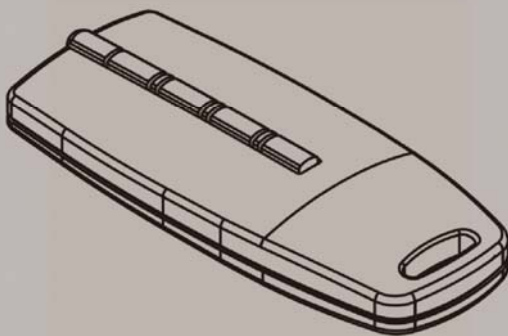




CENTURION
GARAGE DOORS®



RDO-10A

Roller Door Opener

- * Safety Obstruction Detection
- * Rolling Code Security
- * Anti Theft Security System
- * Automatic Closing
- * Automatic Courtesy Light

Installation Instructions and User Guide

IMPORTANT SAFETY RECOMMENDATIONS

FAILURE TO COMPLY WITH THE FOLLOWING SAFETY RECOMMENDATIONS MAY RESULT IN SERIOUS PERSONAL INJURY, DEATH AND/OR PROPERTY DAMAGE

- The installation of the Automatic Garage Door Opener (Opener) must be carried out by a technically qualified or licensed person. Attempting to install the Opener without suitable technical qualification may result in severe personal injury, death and/or property damage.
- Only install the Opener on a well functioning, properly balanced and aligned garage door. An improperly balanced or malfunctioning garage door could cause serious injury. Have a qualified person check and if required, make repairs to the door before installing the Opener. As a general rule a garage door is deemed to be well balanced and aligned if it; A. requires an equivalent amount of applied force to manually open or close and, B. requires no more than 150N (15kg) of applied force to either manually open or close and, C. does not rise or fall more than 100mm when stopped at any position between fully open or fully closed positions and, D. does not rub on or make contact with any supporting or surrounding structures.
- Repairs to garage doors must only be carried out by technically qualified persons. Attempting to repair the garage door without suitable technical qualification may result in severe personal injury, death and/or property damage.
- Remove or render inoperative all existing locks and ropes prior to installation of the Opener.
- Do not connect the Opener to the power source until this manual instructs you to do so.
- The Opener must be connected to a properly earthed general purpose 220 - 240VAC power outlet.
- Locate the wall control panel/push button; A. within site of the garage door and, B. at a minimum height of 1.5 meters above the ground so that it remains out of the reach of small children and, C. away from all moving parts of the door.
- Affix the entrapment warning label in a prominent position adjacent to the garage door.
- After installing and adjusting the Opener the door must stop and reverse direction when it comes into contact with a 40mm high solid object placed under it on the floor.
- The correct function of the safety reversing system should be checked on a monthly basis.
- Make sure that the door reverses easily when it makes contact with an obstruction.
- Never use the Opener unless the door is in full view and free from objects such as cars, children and/or adults.
- Never allow children to use the Opener.
- Never use the Opener when children/persons are under or near the path of the door.
- Children must be supervised at all times when near the door and when the Opener is in use.
- Never attempt to disengage the Opener when there are children/persons or and other objects including motor vehicles under or near the path of the door.
- Removal of the screw-on protective covers must only be performed by a technically qualified person.
- Attempting to remove the protective covers or repair the Opener without suitable technical qualification may result in personal injury, death and/or property/product damage.
- Never attempt to make any repairs or remove any screw-on covers from the Opener without first disconnecting the power supply cord from main power supply.
- Always ensure that the garage door is fully open before driving into or out of the garage.
- Always ensure the door is fully closed before leaving the driveway.
- Keep hands and loose clothing clear of the door at all times.
- For the safety reverse system to function it must first exert force on an object/person/obstruction. As a result the object/person/door may suffer damage or injury.
- Adjustments to the safety reverse force settings must be carried out in strict accordance with the procedure set out in this manual. Failure to do so may result in severe personal injury, death and/or property damage.
- The safety reverse system is designed to work on STATIONARY objects only. If the door encounters a moving object during an Open or Close Cycle, serious personal injury, death and/or property/product damage may occur.

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INSTALLATION INSTRUCTIONS

The procedures outlined in this manual require a degree of technical and mechanical skill. The Opener should always be installed and adjusted by a technically qualified person. It is not recommended to be installed by a home handyman. Never install the Opener on a poorly adjusted or worn garage door.

1. Check for Correct Function of the Garage Door

- Before commencing installation of the Opener check that the garage door is functioning correctly. It must be well balanced and operate smoothly and freely and not bind or stick in the side tracks nor make contact with any supporting members.
- When released from any position it should not rise or fall more than 100mm. The effort required to open or close the door by hand should not exceed 150N (15kg).

2. Check Side Room Requirement

- The min and max mounting positions, as measured from the edge of the door curtain to the inner edge of its mounting bracket, are 40 and 50mm. (Fig.1)
- If the distance is less than 40mm or more than 50mm then door bracket must be moved so as to fall within the bounds of these 2 dimensions.

3. Select Installation Side

- Determine to which end of the door the Opener will be installed and select the dip switch according to the following:
- **Left Hand Side Installation** - Dip 6 "ON" (Fig.7-G) **Right Hand Side Installation** - Dip 6 "OFF" (Fig.7-G)
- Note – Installation side is referred to as "inside looking out"

4. Fit Opener to Door (right hand installation described)

- Remove or render inoperative all existing locks and ropes.
- Select the side of the door to which the Opener will be fitted
- Ensure that the door bracket, to which the Opener will be installed, is the correct distance from the edge of the curtain.
- Open the door fully and ensure that the door stoppers have engaged with track stoppers.
- Place a prop under the door as close to the edge as possible and is adjusted so that it sits firmly under the garage door. (Fig.2)
- Check U-bolt on opposite side of door and ensure that it is securely tightened.
- Remove the (Opener side) U-bolt from the door bracket and then remove the door mounting bracket from the wall.
- Orient the Opener so that its 2 forks line up with the narrowest of the garage door drum wheel spokes.
- Slide the Opener onto the door axle and push it fully into the door so that it sits against the drum wheel. (Fig.2)
- Refit the door mounting bracket to the wall making sure to tighten the mounting bracket screws securely. (Fig.3)
- Insert the U-bolt supplied through the Opener and door bracket slots and then secure with the nuts and washers provided.
- Check the manual operation of the door by fully raising and lowering it several times and ensure it runs smoothly and does not catch on any part of the Opener

5. Pin Curtain to Drum Wheel

- The door curtain must be secured to the drum wheel with self drilling screws at both sides of the door.
- With the door **fully closed**, mark the curtain at points "A" and "B" ensuring that the fixing points are at least 90 deg apart. (Fig.4)
- Open the door slightly so as to have access to the marked positions then secure the curtain to the drum wheel as depicted.
- Ensure screws do not interfere with the running of the door or operator.

6. Fit Weight Bar

- Securely fix the weight bar to the top edge of the door rail with the screws and nuts provided. (Fig.5)

7. Attach Entrapment Warning Label

- Attach the Entrapment Warning Label to the wall in a prominent position adjacent to the Opener. (Fig.5)

8. Connect to Power Supply

- Connect to a properly earthed power supply using the power cord provided. (Fig.5)
- **Important Note: Ensure that the power cord does not touch the moving door and that no excess cord hangs below the Opener when it is plugged in.**
- The Opener is now installed and ready for adjustment.

SETTINGS AND ADJUSTMENTS

The following section outlines the selectable options and features which are available to the user

9. Engaging & Disengaging the Opener

Important Note - Always disengage the Opener with the door in the fully closed position. If disengaging from any position other than the door fully closed ensure that there are no persons or property near or directly under the path of the door.

To Disengage

- Pull down on the red release cord (Fig.6)

To Engage

- Pull down on the green release cord (Fig.6)

10. Transmitters – Learning & Deleting

A. SIMPLE LEARNING

Function

Learns individual Transmitter Buttons

To Enable

Set Dip 5 to “OFF” position (Fig.7-G)

A1. Run A

Function

Learns Run function only

To Learn

- Momentarily press Learn Button (Fig.6-A or 7-A)
 - Light paused single blink
- Momentarily press desired Transmitter Button
 - Light extinguish
- Momentarily press same Transmitter Button again
 - Light rapid blink then extinguish
 - Learn completed

A2. Run B

Function

Auto Close Disabled – Functions same as Run A

Auto Close Enabled – Door will not Auto Close when opened from this button.

To Learn

- Momentarily press Learn Button (Fig.6-A or 7-A) 2 times
 - Light paused 2 times blink
- Momentarily press desired Transmitter Button
 - Light extinguish
- Momentarily press same Transmitter Button again
 - Light rapid blink then extinguish
 - Learn completed

A3. Courtesy Light On/Off

Function

Turns Courtesy Light on/off

To Learn

- Momentarily press Learn Button (Fig.6-A or 7-A) 3 times
 - Light paused 3 times blink
- Momentarily press desired Transmitter Button
 - Light extinguish
- Momentarily press same Transmitter Button again
 - Light rapid blink then extinguish
 - Learn completed

A4. Vacation Mode

Function

Disables Learn and Run button function

- Momentarily press Learn Button (Fig.6-A or 7-A) 4 times
 - Light paused 4 times blink

- Press desired Transmitter Button

– Light extinguish

- Press same transmitter button again

– Light rapid blink then extinguish

– Learn complete

B. MASS LEARNING

Function

Learns ALL 4 Transmitter Buttons in the following order; 1-Run, 2-Auto Close Override, 3-Courtesy Light, 4-Vacation

To Enable

Set Dip 5 to “ON” position (Fig.7-G)

To Learn via Control Panel

- Momentarily press Learn Button (Fig.6-A or 7-A)
 - Light paused single blink
- Momentarily press desired Transmitter Button
 - Light extinguish
- Momentarily press same Transmitter Button again
 - Light rapid blink then extinguish
 - Learn completed

To Learn via Transmitter

- *Pre Learned transmitter* - Long press button 3
 - Light paused single blink
- *New transmitter* - Momentarily press desired button
 - Light extinguish
- *New transmitter* - Momentarily press same Button again
 - Light rapid blink then extinguish
 - Learn completed

C. Wireless Wall Switch

The wireless wall switch can be programmed in the same way as a transmitter.

Select one of the methods outlined in points A or B and Learn accordingly.

D. DELETING TRANSMITTERS

Function

Deletes all previously Learned Transmitters

To Delete

- Momentarily press Learn Button (Fig.6-A or 7-A)
 - Light paused single blink
- Long press Run button (Fig.6-B or 7-B)
 - Light rapid blink then extinguish
 - Deleting completed

E. BATTERY REPLACEMENT

Follow the procedure outlined in Fig.9

Replace the battery with one of identical specification

SETTINGS AND ADJUSTMENTS

11. Door Height

Function

Adjusts the open direction slow stopping point to cater for high doors

Enabling

- Dip 7 “OFF” – doors up to 2.5 meters high
- Dip 7 “ON” – doors over 2.5 meters high

12. Door Travel Adjustment

Important Note - When adjusting limits always ensure that the Opener is disengaged from the door and not connected to the power supply

Open Direction

- Move the door by hand to the fully open position
- Remove light cover to expose Limit Cams (Fig. 7-E & F)
- Loosen the 3 lock screws so that the Cams turn freely.
- Rotate the “Open” Cam (Fig.7-E) in the direction of the limit switch until the switch is heard to “click”
- Once the switch “clicks” continue to rotate the cam a further 5 degrees **towards** the switch
- Check adjustment by partially raising and lowering the door by hand. The switch should “click” approx 50mm **before** the door stoppers reach the track stoppers
- If necessary adjust the Open Limit Cam accordingly - turn the cam **towards** switch to **decrease** door travel and **away** from the switch to **increase** door travel.

Close Direction

- Move the door by hand to the fully closed position
- Rotate the “Close” Cam (Fig.7-F) in the direction of the limit switch until the switch is heard to “click”
- Once the switch “clicks” rotate the cam by 5 degrees back away from the switch
- Check adjustment by partially raising and lowering the door by hand. The switch should “click” approx 20mm **before** the door reaches the ground
- If necessary adjust the Close Limit Cam accordingly - turn the cam **towards** switch to **decrease** door travel and **away** from the switch to **increase** door travel.
- Re tighten the 3 lock screws so that the cams are secured firmly in place

13. Safety Reverse

During a closing movement Auto Reverse ensures that the garage door will stop and reverse (Safety Reverse) when it encounters an obstruction thus ensuring the safety of people and property. During an opening movement the garage door will stop (Safety Stop) when it encounters an obstruction. The amount of force required to make the garage door Safety Reverse/Stop can be adjusted. A low force value ensures maximum safety, but requires a very well sprung and installed door in order to avoid ghosting (false safety reversing/stopping). A high force value ensures that even a badly sprung or worn door will work without ghosting. The following details the correct force value set up and adjustment procedure.

A MODE

Description

The most sensitive system best suited for use on new well sprung doors - automatically compensates on each and every cycle for door wear ageing and seasonal temperature change for the lifetime of the door

Function

During a closing movement the Opener will Safety Reverse upon encountering an obstruction

During an opening movement the Opener will Safety Stop upon encountering and obstruction

Enabling

- Switch power off at power outlet
- Remove the Light Cover
- Select Dip 1 (Fig.7-G) to “ON” position

Learning

In order to Learn Safety Reverse and Safety Stop values the Opener will be required to complete 6 uninterrupted open and close cycles. During the learning process the LED (Fig.7-I) will rapid blink. The LED will extinguish once learning is complete

Adjustment

Rotate the Green “Offset” Adjust Pin (Diag.7-C) in a clockwise direction (towards Max) to increase the force required to make the garage door Safety Reverse or Stop and in an anti clockwise direction (towards Min) to decrease the force required to make the garage door Safety Reverse or Stop.

Testing Close Direction Force

Ensure that the garage door is resting firmly against the ground. Open the door and place a 40mm thick block of wood on the ground under the path of the door. Now close the door – if the drive force value is correct the opener will stop and reverse direction upon encountering the block of wood. If too little or too much force is required to make the opener reverse direction – turn the Green “Offset” Adjust Pin (7-C) 5 degrees in the appropriate direction – clockwise (towards “MAX”) to increase the amount of force and anti clockwise (towards “MIN”) to decrease the amount of force and then repeat the test.

Important Note: During Learning - if the door load is excessive Opener will stop and Courtesy Light will double blink

SETTINGS AND ADJUSTMENTS

Forced Learn

May be initiated by long press of;

- Learn Button (Fig.6-A or 7-A) for 3 sec, or
- Button 4 of a Mass Learned transmitter
 - Light will paused single blink once Opener has entered Forced Learn Mode
- Repeatedly cycle the opener
 - Light will extinguish once learning is complete

M MODE

Description

A less sensitive Safety Reverse system more suited for use suited for use on large, heavy or badly worn doors.

Function

Features conventional one time force adjustment – during a closing movement the Opener will stop and commence to Safety Reverse upon encountering an obstruction.

Enabling

- Switch power off at power outlet
- Remove the light cover
- Select Dip 1 (Fig.7-G) to the “OFF” position

Adjustment

- Long Press Learn Button (Fig.7-A) - Light (Fig.7-I) paused 2 x blink – force adjustment can only be carried out while the Light is blinking
- Open Direction - turn the Green “Open” adjust pin (Fig.7-C) to adjust open direction Safety Stop value – clockwise to increase force, anti-clockwise to decrease force
- Close Direction - turn the Red “Close” adjust pin (Fig.7-D) to adjust close direction Safety Reverse value – clockwise to increase force and anti-clockwise to decrease force
- Momentarily press “Learn” Button to close out the adjustment mode

Automatic Relearn

An Automatic Re Learn will be initiated immediately subsequent to either one of the following 3 occurrences;

- Run time deviation becoming excessive, or
- Safety Reverse occurring on 3 consecutive occasions, or
- Safety Stop occurring on 3 consecutive occasions.

During relearn LED (Fig.7-I) will paused single blink then extinguish once relearn is complete

Testing Close Direction Force

- Ensure that the garage door is resting firmly against the ground.
- Open the door and place a 40mm thick block of wood on the ground under the path of the door.
- Initiate a close movement via transmitter or run button – if the drive force value is correct the opener will stop and reverse direction upon encountering the block of wood.
- If too little or too much force is required to make the opener reverse direction – turn the Red Offset Adjust Pin (Fig.7-D) 5 degrees in the appropriate direction – towards Max to increase force – towards MIN to decrease the amount of force – and then repeat the test.

Testing Open Direction Force

- During an open movement apply some firm downward force to the garage door.
- If the Safety Stop value is correct the Opener will stop upon sensing the resistance.
- If too little or too much force is required to make the opener stop turn the Green “Offset” Adjust Pin (Fig.7-C) 5 degrees in the appropriate direction – towards “MAX” to increase force – towards “MIN” to decrease the amount of force – and then repeat the test

14. Auto Close

Function

Auto Close automatically closes the door; either 5 sec after a car has passed through the doorway or after 30 sec if a car has not passed through the doorway.

To Enable

- Select Dips 2 and 3 (Fig.7-G) to the “ON” position.
- Note - Auto Close will only function when Safety Beams have been fitted and enabled

15. Courtesy Light

Function

The Courtesy Light;

- provides garage illumination and opener status indication
- will illuminate automatically each time the Opener is activated and will switch off 90 sec after the last activation
- may be switched on and off via button 3 of a bulk learned transmitter (refer sec.10)

Indication

- Slow blink – Learning Force values
- 2 x blink when transmitter is pressed – Safety Beam malfunction
- 3 x blink during Force learning – door load is excessive
- 4 x blink when transmitter is pressed – Opener has entered Vacation Mode

16. Dip Switches

	ON	OFF	ON	OFF
Dip 1	Auto Force Mode	Manual Force Mode	Dip 5	Mass Learning
Dip 2	Safety Beams Enabled	Safety Beams Disabled	Dip 6	Left Hand Installation
Dip 3	Auto Close Enabled	Auto Close Disabled	Dip 7	Doors over 2.5m high
Dip 4	Door Service Enabled	Door Service Disabled		Simple Learning
				Right Hand Installation
				Doors up to 2.5m high

SETTINGS AND ADJUSTMENTS

17. Door Service monitor

Function

Constantly monitors the spring balance of the garage door and warns the user when door is out of balance. Courtesy lamp will triple blink every 15 sec once imbalance is

excessive. At this time the garage door should be serviced by a suitably qualified technician.

To Enable

- Select Dip 4 to the "ON" position

18. LED Indicator

Function

The LED (13-l) provides Opener status information.

Indication

- Glow Solid – Opener has reached close limit position

- Slow Blink – Opener has reached open limit position
- Rapid Blink – Opener Learning new drive force values
- Intermittent Blink – Sleep Mode

19. Safety Beams

Function

Safety Beams constantly monitor for persons or objects which may cross the path of a moving garage door. The Opener will commence to Safety Reverse when the Safety Beams become momentarily or permanently interrupted during a closing movement. The Opener will support the connection of 2 or 4 wire Safety Beams.

Fault Indication

Courtesy Lights will double blink and the Opener will not move if the Safety Beams are faulty or misaligned.

Override

- Press and hold the Run Button (Fig.6A or 7-A) until the Opener has reached the fully closed position

To Enable

- Select Dip 2 to the "ON" position (Fig.7-G)

Connection

- 2 Wire Beams – Select jumper (Fig.7-H) to "1-2" position and connect the wires as per Fig.8-A
- 4 Wire Beams – Select jumper (Fig.7-H) to "2-3" position and connect wires as per Fig.8-B

20. Speed Control

Function

Allows speed adjustment of the Opener to best suit the door type. (Only available in A Mode)

Adjustment

- Stop Opener midway between open and close position.
- Press and hold Learn Button (Fig.6-A or 7-A) until LED (Fig.7-l) begins to rapid blink.

- Rotate the Speed Adjust Pin (Fig.7-D) while opener is running - clockwise to increase speed and anti clockwise to decrease speed.
- Speed may only be adjusted while the Opener is traveling between limits.
- Adjustment function will close out automatically once either one of the limits has been reached

21. Terminal Connections

Function

The following accessories may be connected;

- a. 2 wire Safety Beams (Fig.8-A)
- b. N.O. 24V DC 4 wire Safety Beams (Fig.8-B)
- c. 24V DC universal receiver (Fig.8-C)

- d. N.O. momentary (dry) contact wall switch (Fig.8-D)
- e. 240V relay driven courtesy light – output 24VDC, 150mA maximum (Fig.7-J)

22. Vacation Mode

Function

Disables push button functionality in order to provide utmost security whilst user is absent for extended periods of time

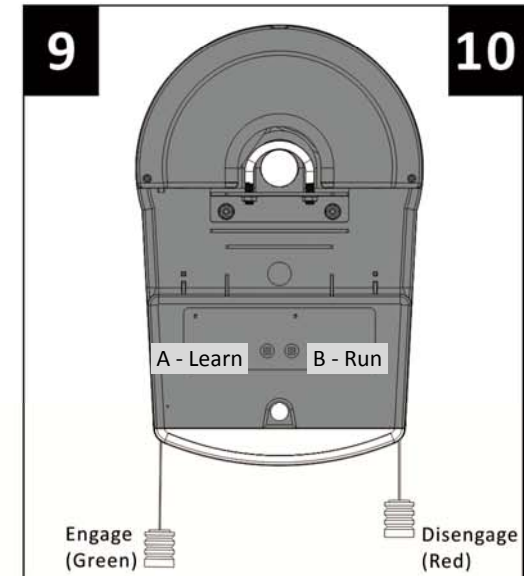
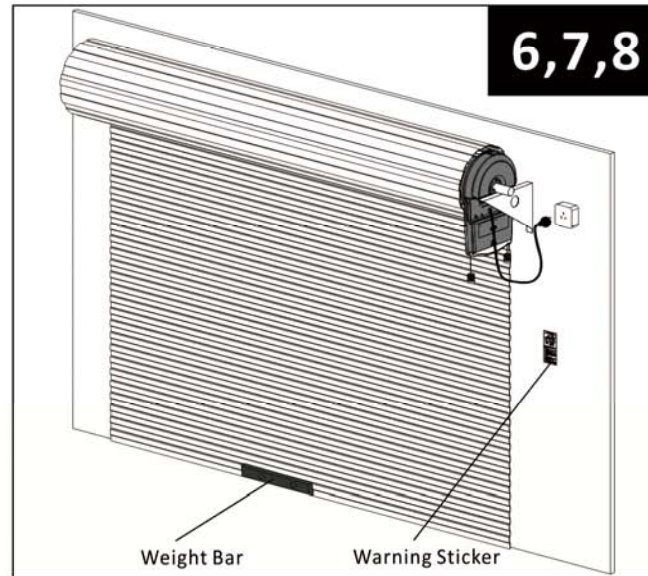
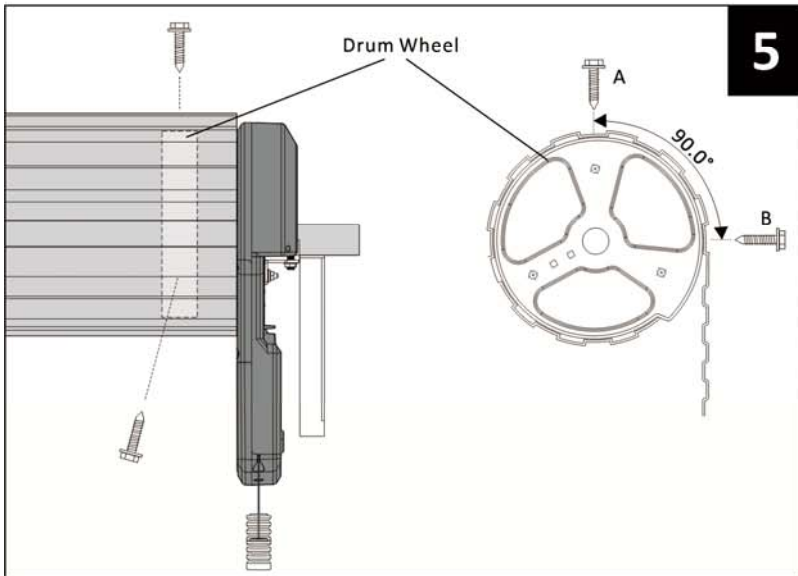
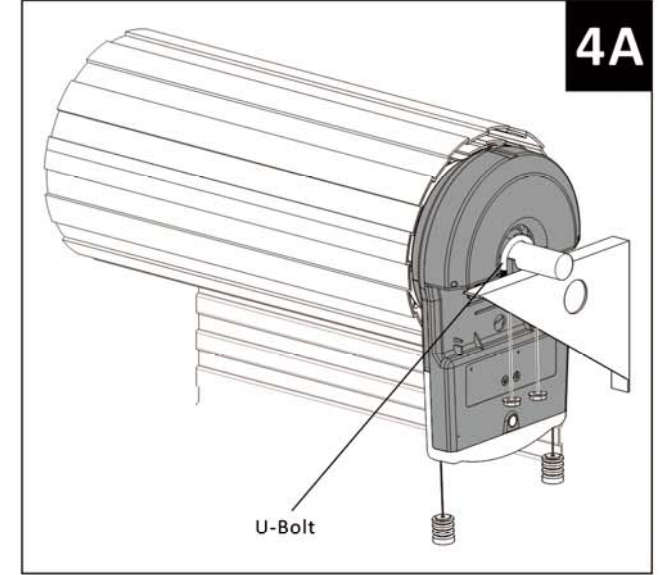
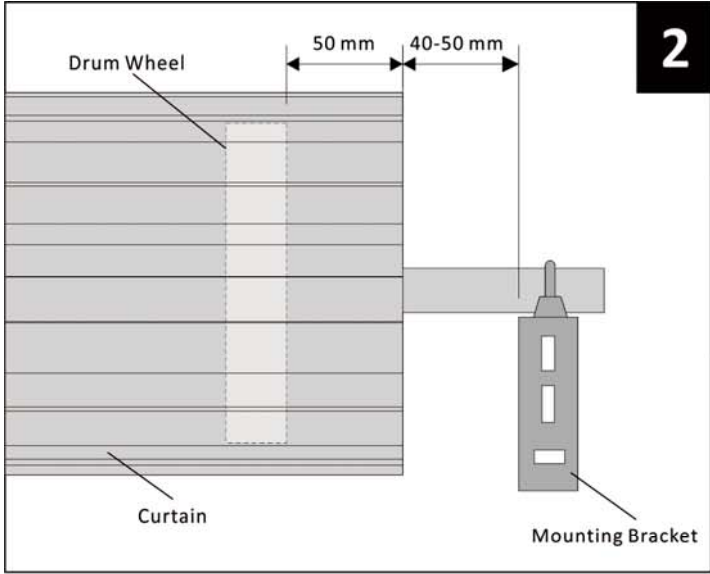
To Enable

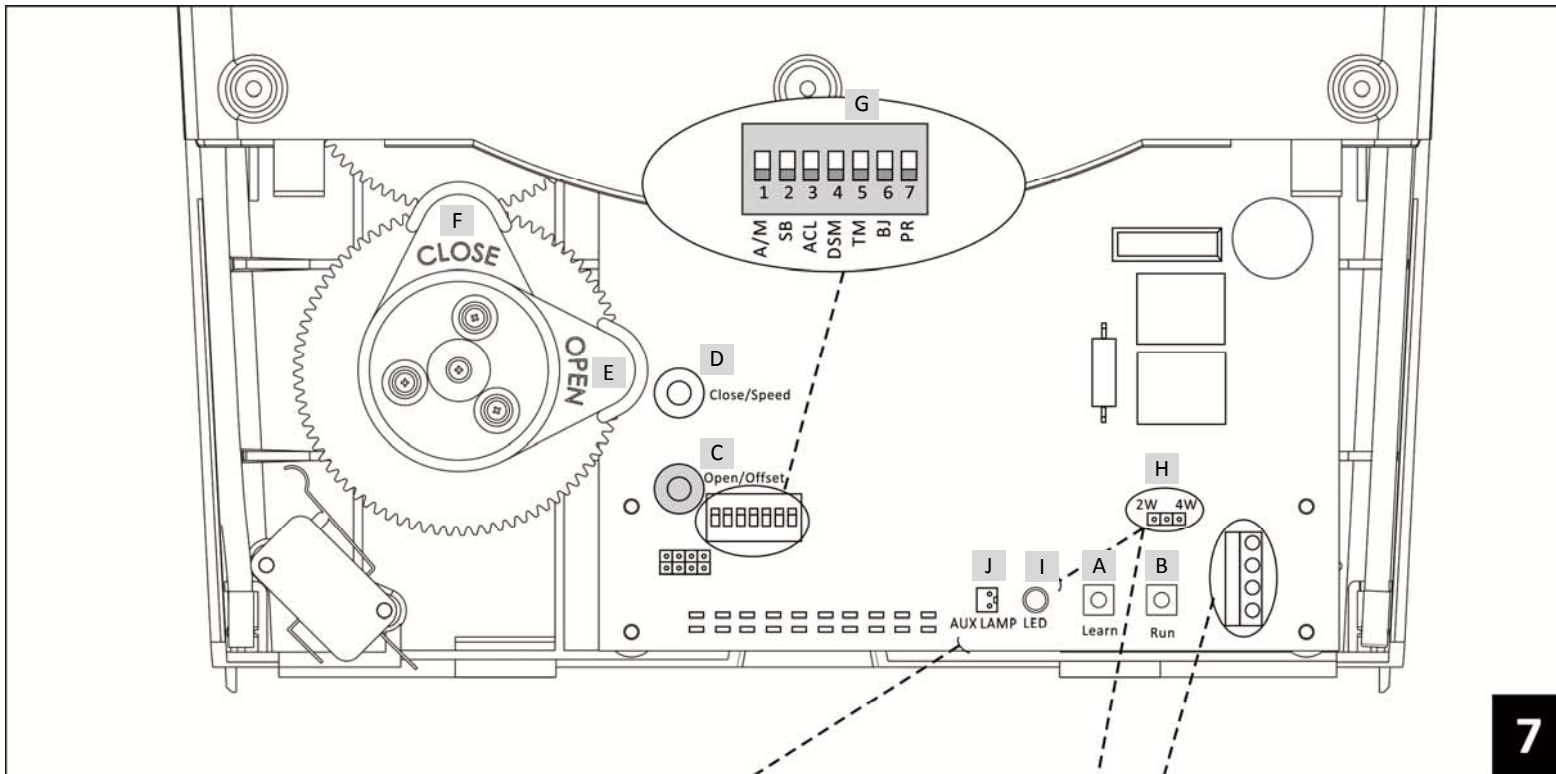
- Press button 4 of Mass Learned transmitter

- Courtesy Light 4 x blink to indicate Opener has entered Vacation Mode

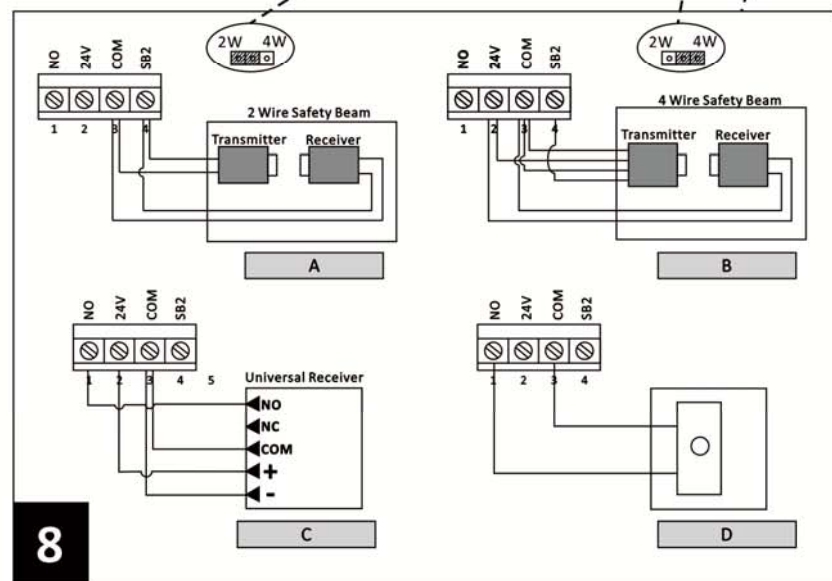
To Disable

- Momentarily press either button 1 or button 2 of a Mass Learned transmitter

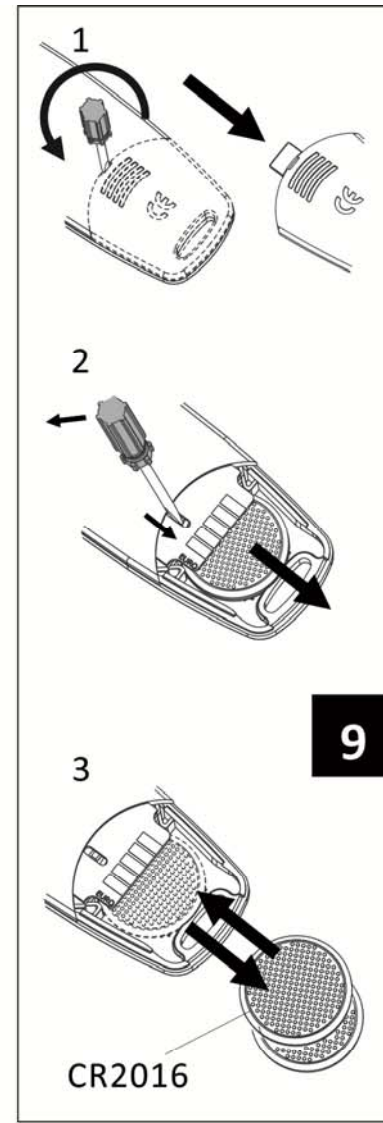




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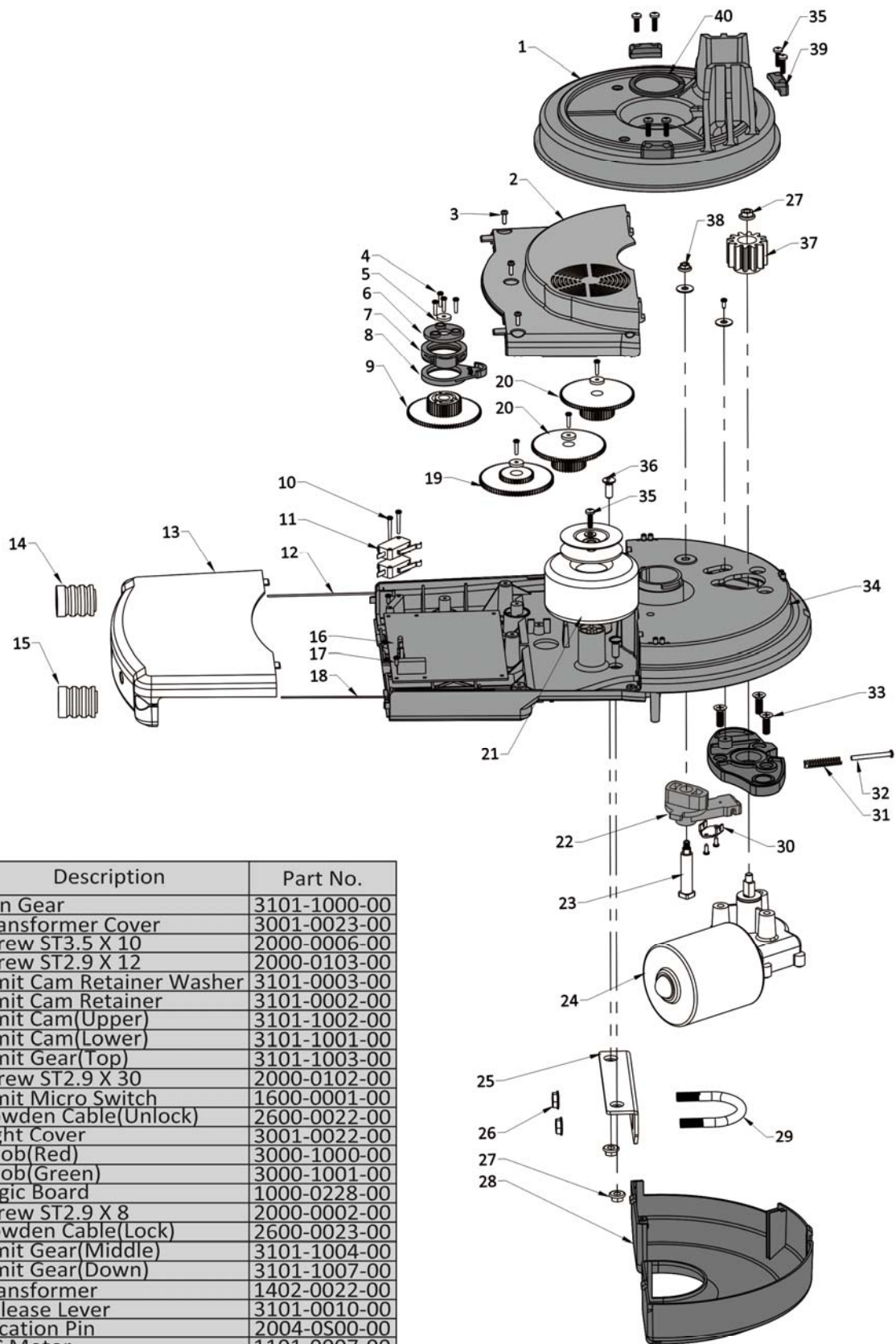
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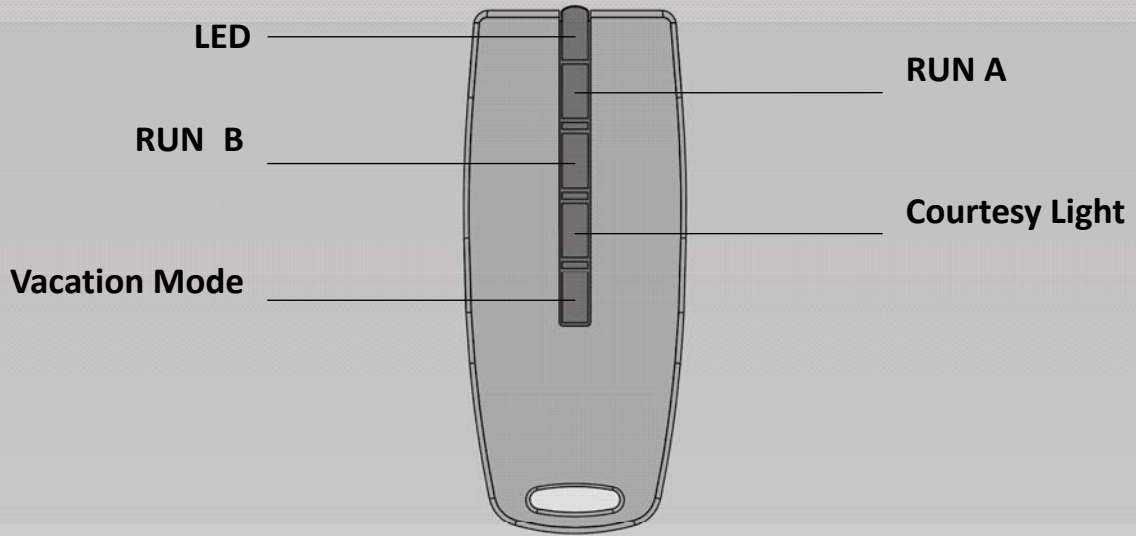
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EXPLODED PARTS VIEW



Item	Qty.	Description	Part No.
1	1	Sun Gear	3101-1000-00
2	1	Transformer Cover	3001-0023-00
3	3	Screw ST3.5 X 10	2000-0006-00
4	9	Screw ST2.9 X 12	2000-0103-00
5	4	Limit Cam Retainer Washer	3101-0003-00
6	1	Limit Cam Retainer	3101-0002-00
7	1	Limit Cam(Upper)	3101-1002-00
8	1	Limit Cam(Lower)	3101-1001-00
9	1	Limit Gear(Top)	3101-1003-00
10	2	Screw ST2.9 X 30	2000-0102-00
11	2	Limit Micro Switch	1600-0001-00
12	1	Bowden Cable(Unlock)	2600-0022-00
13	1	Light Cover	3001-0022-00
14	1	Knob(Red)	3000-1000-00
15	1	Knob(Green)	3000-1001-00
16	1	Logic Board	1000-0228-00
17	4	Screw ST2.9 X 8	2000-0002-00
18	1	Bowden Cable(Lock)	2600-0023-00
19	1	Limit Gear(Middle)	3101-1004-00
20	2	Limit Gear(Down)	3101-1007-00
21	1	Transformer	1402-0022-00
22	1	Release Lever	3101-0010-00
23	1	Location Pin	2004-0500-00
24	1	DC Motor	1101-0007-00
25	1	Brace Bracket	2201-0107-00
26	2	Nut M8 Wizzlock	2001-0100-00
27	3	Nut M6 Wizzlock	2001-0101-00
28	1	Motor Cover	3001-0021-00
29	1	U-Blot(M8 Special)	2000-0514-00
30	1	Release Rope Plate	2201-0108-00
31	1	Spring(Motor Plate Pin)	2005-0002-00
32	1	Pin(Motor Plate)	3101-0001-00
33	3	Screw M6 X 18	2000-0500-00
34	1	Base	3001-0019-00
35	7	Screw ST4.2 X 14F	2000-0101-00
36	2	Bolt M6 X 16 - Special	2000-0526-00
37	1	Motor Sprocket - Iron	2301-0D00-00
38	1	Nut M5	2001-0101-00
39	3	Sun Gear Plastic Retainer	3001-0024-00
40	1	Retainer(Sun Gear)	3001-3000-00



Run A	Refer Sec.10 A1	Vacation Mode	Refer Sec.10 A4
Run B	Refer Sec.10 A2	Battery Replacement	Refer Sec.10 E
Courtesy Light	Refer Sec.10 A3	Transmitter Learning and Deleting	Refer Sec.10

