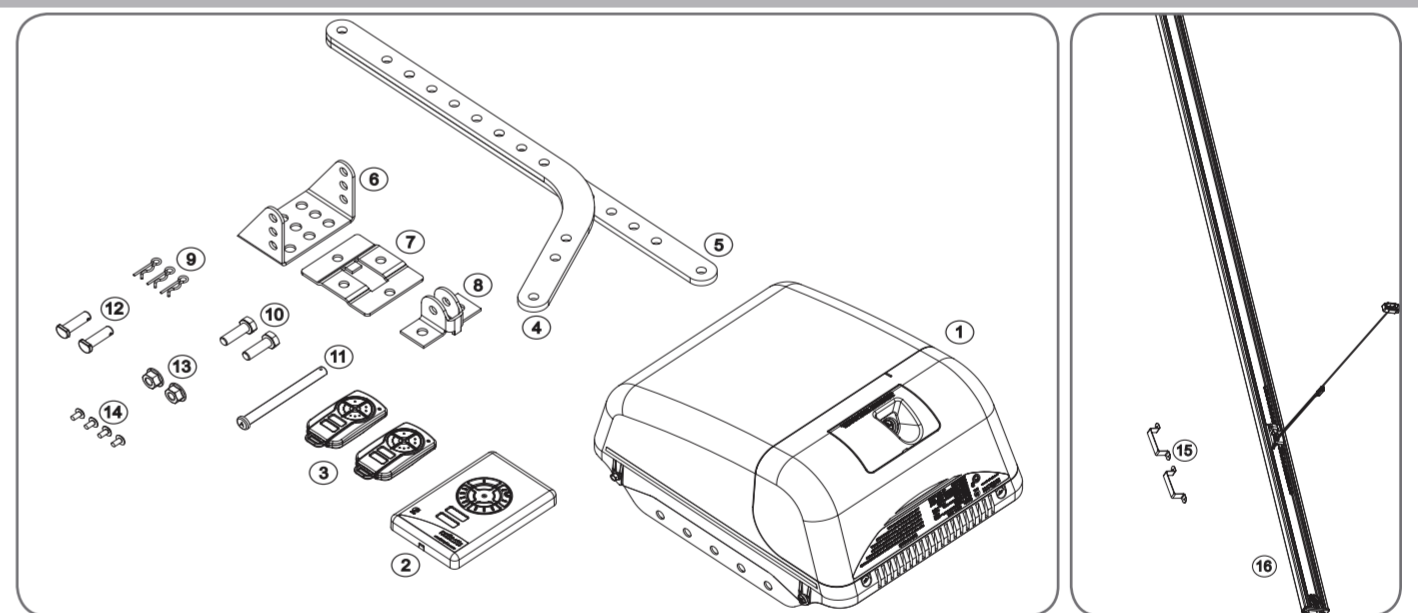# Important Safety Instructions

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

WARNING!
- The door may operate unexpectedly, therefore do not allow anything to stay in the path of the door.
- When operating the manual release while the door is open, the door may fall rapidly due to weak or broken springs, or due to being improperly balanced.
- The drive must not be used with a door incorporating a wicket door, unless the drive cannot be operated with the wicket door open.
- The drive is intended to be installed at least 2.5m above the floor.
- Do not disengage the opener to manual operation with children/persons or any objects including motor vehicles within the doorway.
- If the door is closing and is unable to re-open when obstructed, discontinue use. Do not use a door with faulty obstruction sensing
- When using auto close mode, a **Photo Electric beam** must be fitted correctly and tested for operation at regular intervals. **Extreme caution** is recommended when using auto close mode. **All safety rules** must be followed.

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

CAUTION:

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

Muscular strain
- Practice correct lifting techniques (carton weighs approx 9kgs)
- Practice correct lifting techniques when required to lift the door as per installation instructions.

Fall from ladder
- Ensure ladder is the correct type for job.
- Ensure ladder is on flat firm ground that will take the weight without the legs sinking.
- Ensure user has 3 points of contact while on ladder.

Crush injury from unsecured door
- Place a 2 metre exclusion zone around area under the door while it is unsecured.
- Do not move under a door while it is on the door support (or ladder)
- Follow the installation instructions
- Fit door support (or ladder) snugly under door before removing bracket.
- Ensure door support (or ladder) is on flat ground

Garage Door
- Examine the door installation, in particular cables, springs and mountings for signs of wear, damage and imbalance.
- The garage door must be **well balanced.** Sticking or binding doors must be repaired by a qualified garage door installer prior to installation of the opener.
- **Remove or disengage** all garage door locks and mechanisms prior to installation of the opener.

Entanglement
- Never plug in and operate opener prior to installation.
- Keep hands and loose clothing clear of door and guides at all times.

Entrapment under operating door
- **DO NOT** operate the opener unless the garage door is in full view and free from objects such as cars and children/people. Make sure that the door has finished moving before entering or leaving the garage
- In order for the opener to **sense** an object obstructing the door way, some **force** must be exerted on the object. As a result the object, door and/or person may suffer minor **damage** or **injury.**
- Ensure the garage door is in good working order by undertaking regular servicing.
- Install the optional wall transmitter in a location where the garage door is visible, but out of the reach of children at a height of at least 1.5m.
- Photo Electric beams must be installed if the closing force at the bottom edge of the door exceeds 400N (40kg)

GDO-9 Dynamo™ Gen 2

Overhead Garage Door Opener Installation Instructions

Kit Contents
1. 1 x GDO-9 Dynamo™ Gen 2 drive unit
2. 1 x Wall mount transmitter with battery
3. 2 x Transmitters and batteries
4. 1 x Bent arm door attachment
5. 1 x Straight arm door attachment
6. 1 x Wall bracket TS01
7. 1 x Door bracket Locator
8. 1 x Door bracket
9. 3 x Pin Snap SSP 8 ZNU 31080
10. 2 x Hex Head screw M8x25
11. 1 x Pin 0890
12. 1 x Clevis Pin 0829
13. 2 x Hex Serration flange nut M8
14. 4 x Hex flange screw taptite 'S' M4 x 10 PLUS
15. 2 x Track Bracket
16. 1 x Pre-Assembled Single Piece C-Rail

Tools Required
- Ladder
- Door Stand
- Adjustable Wrench
- Socket set
- Drill
- Screwdrivers
- Marker Pen

Power Supply
Properly earthed 3 pin single -phase power is required.

WARNING! A portable power generator is not recommended due to spikes, surges and fluctuations in the supply.

Head Room
The minimum height required between the highest point of the door's travel and the ceiling is 57mm.
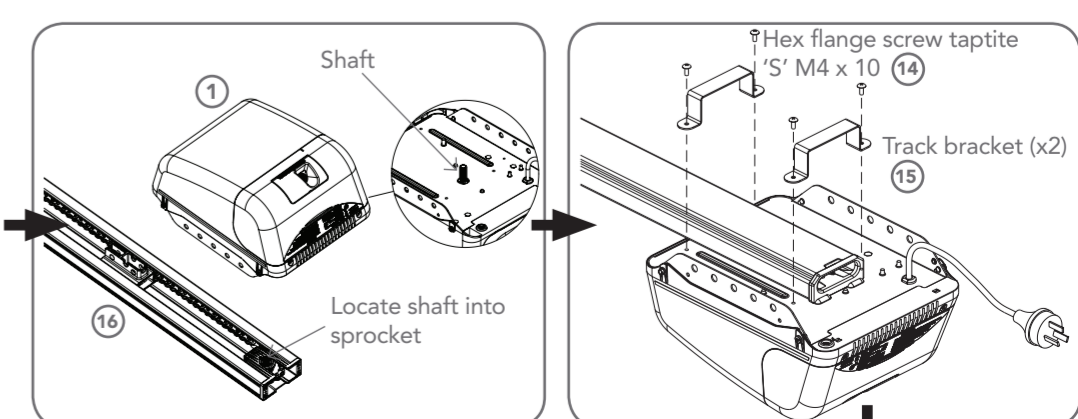
Quick Install Guide

C-Rail Attachment

Single piece

C-Rails are pre-tensioned during manufacturing for transport. Some extra tension may be required after installation.

If the C-Rail needs to be shortened or lenghtened (using the extension kit) ensure these modifications are made to the drive unit end.

To prevent scratching the unit after attaching the C-Rail, place the drive unit back in its packing box.

Diagram labels: Shaft · Locate shaft into sprocket · Hex flange screw taptite 'S' M4 x 10 (14) · Track bracket (x2) (15) · Open to Determine your Door Type

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Safety Obstruction Forces

WARNING! Take care when testing or adjusting the Safety Obstruction Force. Excessive force may cause SERIOUS PERSONAL INJURY and/or PROPERTY DAMAGE.

Testing Close Cycle
a. Press the programmed transmitter to open the door.
b. Place a piece of timber approximately 40mm high on the floor directly under the door.
c. Press the programmed transmitter to close door.
d. The door should strike the object and re-open.

Testing Open Cycle
a. Press the transmitter to close the door.
b. Press again to open the door.
c. When the door reaches approximately half way, firmly grab the door's bottom rail – the door should stop.
d. If the door does not reverse readily when closing, or stop when opening, the force may be excessive and need adjusting.

NOTE: Once the travel limits are set and safety obstruction force tested check the chain or belt tension. As per the sticker on the C-rail the chain or belt should sag slightly, so there is a 5mm gap between the bottom of the C-rail and the chain or belt.
The tension can be varied by using a spanner to adjust the bolt at the door end of the C-rail.
Be sure not to over-tension the chain or belt as this can cause damage to the C-rail or opener.

Diagram label: 40mm block of wood

WARNING! Photo electric beams must be installed if the closing force at the bottom edge of the door exceeds 400N (40kg) force.

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

Adjusting Safety Obstruction Force
The Safety Obstruction Force is calculated automatically during setup. Adjusting this is normally only necessitated by environmental conditions such as windy or dusty areas, and areas with extreme temperature changes.

To Increase Force Pressure
a. Hold down FORCE MARGIN SET button.
b. While holding the FORCE MARGIN SET button, press the PLUS (+) button. Each press increases the force margin.
c. The OPEN LIMIT LED will flash each time the PLUS (+) button is pressed to indicate a force increase
d. If the OPEN LIMIT LED is on continuously when pressing the PLUS (+) button, this indicates that the maximum setting has been reached.
e. Test the force again as per Testing Close Cycle and Testing Open Cycle.

To Decrease Force Pressure
a. Hold down FORCE MARGIN SET button.
b. While holding the FORCE MARGIN SET button, press the MINUS (-) button. Each press decreases the force margin.
c. The CLOSE LIMIT LED will flash each time the MINUS (-) button is pressed to indicate a force decrease.
d. If the CLOSE LIMIT LED is on continuously when pressing the MINUS (-) button this indicates that the maximum setting has been reached.
e. Test the force again as per Testing Close Cycle and Testing Open Cycle.

To Recall Factory Set Force
a. While holding down the FORCE MARGIN SET button, press the SET button for two (2) seconds.
b. Release both buttons. The default setting should now be recalled.
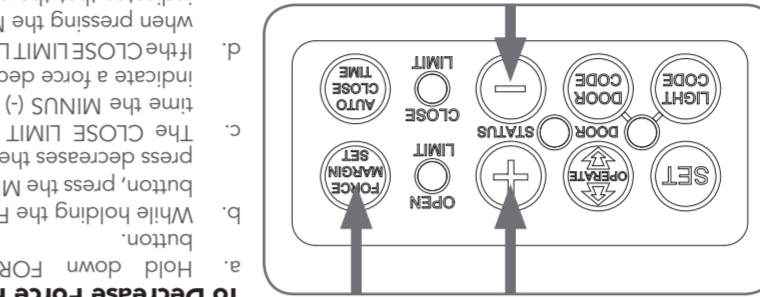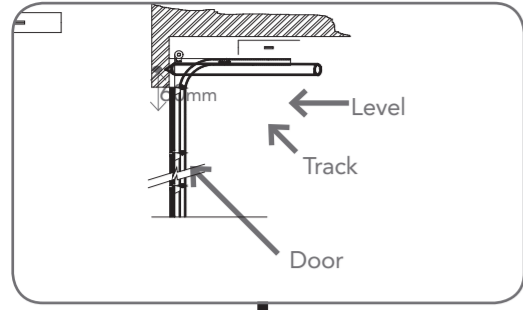
To Recalculate Force Margins
a. Press and hold the SET button for two (2) seconds, the beeper will sound once.
b. The door will start to move and re-calculate force margins. The door can move between the open and close limit positions up to four (4) times (depending on the position of the door and the power up condition).
c. A single beep will be heard once the process is complete.
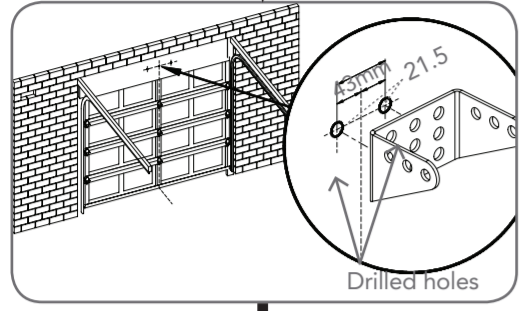d. Test the force again as per Testing Close Cycle and Testing Open Cycle.

Troubleshooting Guide

Symptom	Possible cause	Remedy
The opener does not work from the transmitter	Garage door in poor condition e.g. springs may be broken	Check the door's operation
	The opener does not have power	Plug a device of similar voltage (e.g. a hairdryer) into the power point and check that it is OK
	The battery in the transmitter is flat	Replace the battery
The opener has been put into "Vacation Mode"	Turn off "Vacation Mode" (Section 8.3, step e of Home Owners Manual)	
The transmitter button is not programmed to operate the door:	Coding the transmitter	
Door Code LED is flashing yet the opener is not working.	Ensure the correct button on the transmitter is being pressed.	
One transmitter works but the others do not	Faulty transmitter	Replace transmitter
The chain moves but the door remains stationary	Flat battery	Replace battery
	The opener is disengaged	Re-engage the opener
Motor is running but chain is not moving	Damage motor assembly	Contact your dealer for support.
The transmitter range varies or is restricted	Variations are normal depending on conditions e.g. temperature or external interference	Make sure you can see the door when you use the transmitter.
	The battery life is exhausted	Check the battery status by pressing a button (flashing or no light requires battery to be changed)
	Position of the transmitter in the motor vehicle	Aim the transmitter through the windscreen.
The Courtesy light does not work	LED has failed	Change LED.
The door reverses for no apparent reason	This may occur occasionally from environmental conditions such as areas that are windy, dusty or have extreme temperature changes.	Ensure the door runs smoothly before increasing the force pressure.
	If Safety beams are installed they may be partially obstructed.	Ensure the beam path is not obstructed. Check the Alignment.
Auto Close not working	Safety Beam or wiring faulty	Repair Safety Beam or replace wiring.
The door stops or moves very slowly under battery (Optional Battery Back Up Accessory)	The batteries may have little or no charge	Connect mains power and leave the batteries to charge. The batteries may take 24 to 48 hours to reach their maximum charge capacity. Re-align optics. See Safety Beam instructions.
The SERVICE LED has started to flash and is beeping numerous times	A Fault has been detected. The fault will be active each time an attempt is made to operate the door.	Record opener function (How many beeps?) then press the SET button once to reset the opener. If the fault continues to be tripped contact 1300 736 410 for support.
The Open (Green) LED and Close (Red) LED are flashing alternatively	Opener is overloaded	Check the doors operation by disengaging the motor and ensuring the door runs smoothly. If necessary make door adjustments or contact your door professional.
The Open (Green) LED continues to flash	Door obstructed when opening	Clear away any obstructions and test door opens correctly. (If door is damaged, contact your door professional)
The Close (Red) LED continues to flash	Door obstructed when closing	Clear away any obstructions and test door closes correctly. (If door is damaged, contact your door professional)
	Limits may be cleared	Remove all power sources (including the battery backup). Wait till all lights are out (10-15 secs), then reconnect power. If Red LED is flashing, limits are not set. Reset Limits.

6 - 8 Fiveways Boulevard, Keysborough, VIC, Australia 3173   ABN 11 007 125 368
P: 1300 133 944   E: sales@automatictechnology.com.au   W: www.automatictechnology.com.au
Doc # 160017_00
Part # 13362
automatic TECHNOLOGY
SMART SIMPLE SECURE

Determine the Door Type

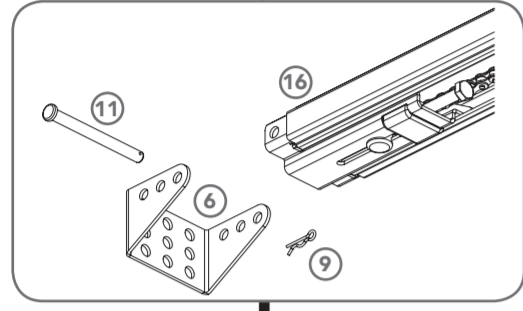## Sectional door with track / B&D Flex-A-Door®

a. Open the door and find the highest point of travel of the top door panel.
b. Using a level, transfer this height to the wall above the door and mark a line 60mm above it.
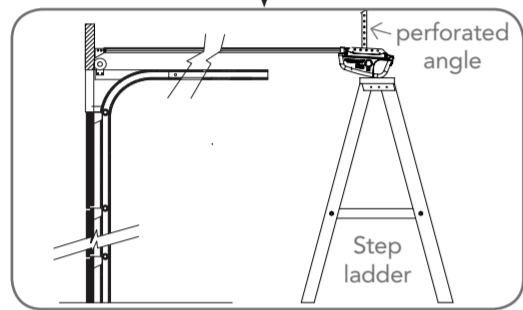
⚠️ **WARNING!** Make sure concrete, brick wall or timber lintels are solid and sound so as to form a secure mounting platform.
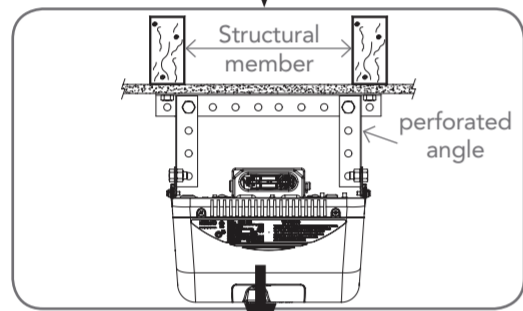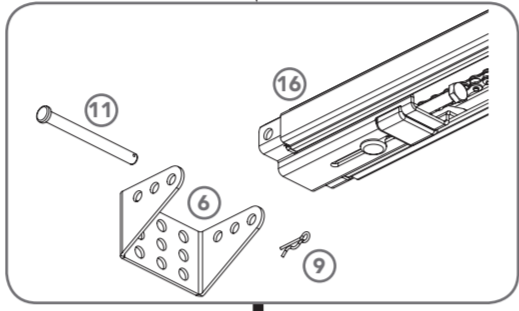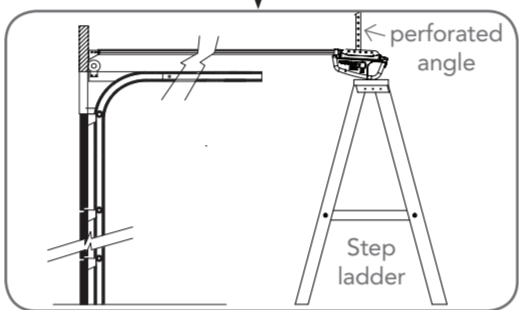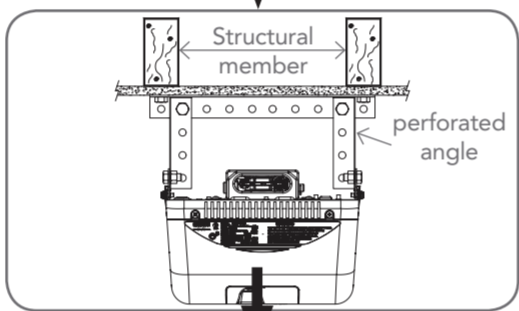
c. Determine the centre point on the wall above and on top of the door. Draw two lines extending 21.5mm (43mm in total) from each side of the centre point.
d. Centre the bracket over the intersection of these two lines. Mark centres for holes.
e. Drill holes into wall and secure as follows:
IF CONCRETE OR BRICK
8mm drill bit for holes
8mm (5/6") loxins / dynabolts to secure
IF TIMBER
min. 50mm wood screw or similar to secure

f. Leave the drive unit in its packing box on the floor for protection and lift the other end of the C-Rail.
g. Attach the C-Rail assembly ⑯ to the wall bracket ⑥ with the 90mm long clevis pin ⑪ and secure with the supplied snap pin ⑨.
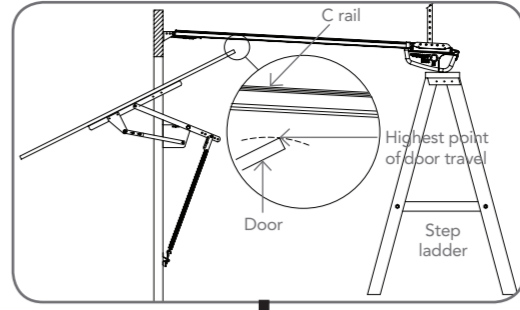
h. Raise the drive unit from the packing box and support it in the horizontal position with a step ladder.
i. Line up the track perpendicular to the wall.
j. Secure the perforated angle (not supplied) to the ceiling above where drive unit's mounting holes will be once fully installed.

k. Connect the drive unit to the ceiling mounted perforated angle with M8x20mm screws and nuts (not supplied). Strips should not extend more than 18mm below centre of drive unit mounting holes.
l. To prevent moisture on the C-rail running into the powerhead it is recommended a strip of silicon sealant is placed across the top of the C-rail just before the opener.

One piece door with track (T-Type)

a. Open the door and find the highest point of travel of the top door panel.
b. Using a level, transfer this height to the wall above the door and mark a line 60mm above it.

⚠️ **WARNING!** Make sure concrete, brick wall or timber lintels are solid and sound so as to form a secure mounting platform.

c. Determine the centre point on the wall above and on top of the door. Draw two lines extending 21.5mm (43mm in total) from each side of the centre point.
d. Centre the bracket over the intersection of these two lines. Mark centres for holes.
e. Drill holes into wall and secure as follows:
IF CONCRETE OR BRICK
8mm drill bit for holes
8mm (5/6") loxins / dynabolts to secure
IF TIMBER
min. 50mm wood screw or similar to secure

f. Leave the drive unit in its packing box on the floor for protection and lift the other end of the C-Rail.
g. Attach the C-Rail assembly ⑯ to the wall bracket ⑥ with the 90mm long clevis pin ⑪ and secure with the supplied snap pin ⑨.

h. Raise the drive unit from the packing box and support it in the horizontal position with a step ladder.
i. Line up the track perpendicular to the wall.
j. Secure the perforated angle (not supplied) to the ceiling above where drive unit's mounting holes will be once fully installed.

k. Connect the drive unit to the ceiling mounted perforated angle with M8x20mm screws and nuts (not supplied). Strips should not extend more than 18mm below centre of drive unit mounting holes.
l. To prevent moisture on the C-rail running into the powerhead it is recommended a strip of silicon sealant is placed across the top of the C-rail just before the opener.

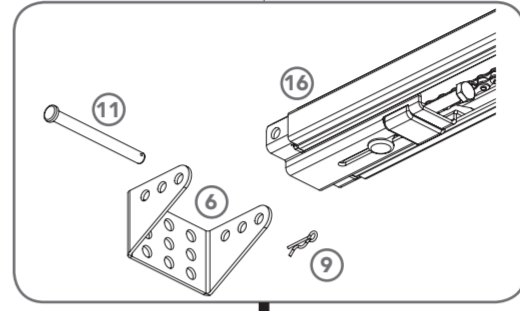## One piece door without track (Tilt Door / J-Type)

a. Open the door and find the highest point of travel of the top door panel.
b. Using a level, transfer this height to the wall above the door and mark a line 25mm above it.
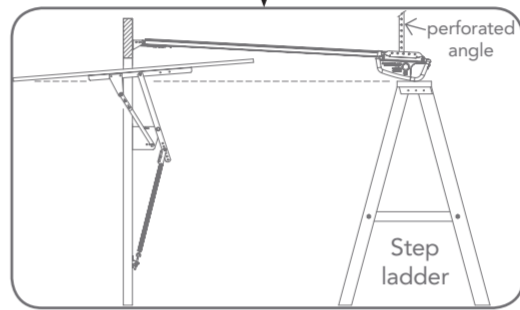
⚠️ **WARNING!** Make sure concrete, brick wall or timber lintels are solid and sound so as to form a secure mounting platform.
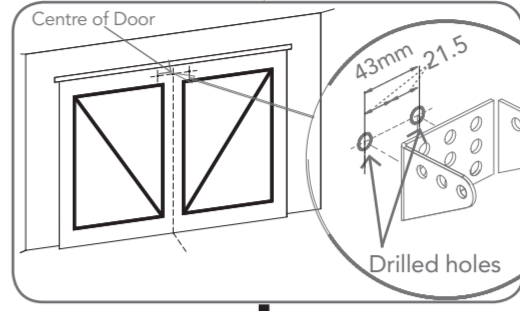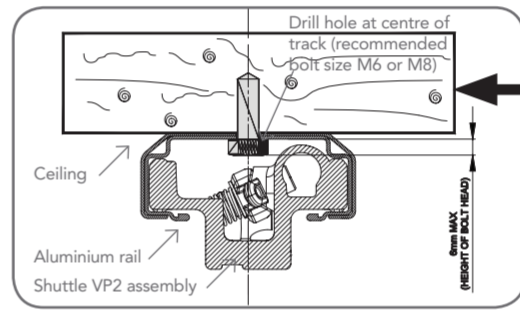
c. Determine the centre of the door. Mark this location both on the line drawn in step (b) and on top of the door. Draw two lines extending 21.5mm (43mm in total) from each side of the centre point on the wall.
d. Centre the bracket over the intersection of these two lines. Mark centres for a minimum of two holes.
e. Drill holes into wall and secure as follows:
IF CONCRETE OR BRICK
8mm drill bit for holes
8mm (5/6") loxins / dynabolts to secure
IF TIMBER
min. 50mm wood screw or similar to secure.

f. Leave the drive unit in its packing box on the floor for protection and lift the other end of the C-Rail.
g. Attach the C-Rail assembly ⑯ to the wall bracket ⑥ with the 90mm long clevis pin ⑪ and secure with the supplied snap pin ⑨.

h. Raise the drive unit from the packing box and support it in the horizontal position with a step ladder.
i. Line up the track perpendicular to the wall.
j. Secure the perforated angle (not supplied) to the ceiling above where drive unit's mounting holes will be once fully installed.
k. Connect the drive unit to the ceiling mounted perforated angle with M8x20mm screws and nuts (not supplied). Strips should not extend more than 18mm below centre of drive unit mounting holes.
l. To prevent moisture on the C-rail running into the powerhead it is recommended a strip of silicon sealant is placed across the top of the C-rail just before the opener.
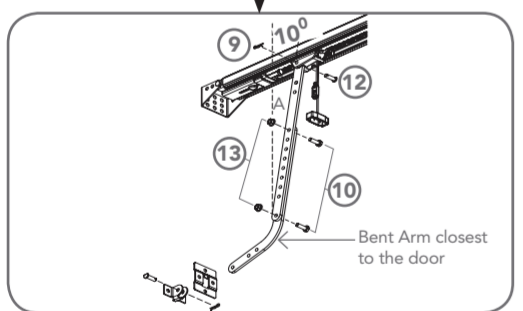
Alternative Mounting Option
The opener can be fastened to the roof by driving a bolt through the C-Rail into a structural timber support. The bolt head's height must not exceed 6mm.

Mounting Door Bracket & Arms
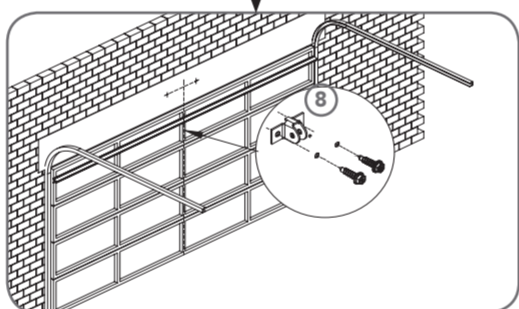
Sectional door with track / B&D Flex-A-Door®
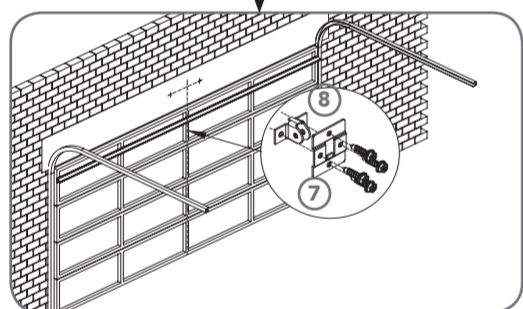
a. The door bracket locator ⑦ is placed over the door bracket ⑧, on the door's centre line one-third down the top panel and mounted using M6 or equivalent screws (not supplied).
b. STEEL DOORS ONLY: Bracket can be welded in place.

NOTE: If in doubt about the door's strength, reinforcement may be added to the door's frame where necessary. Door damage may occur if the bracket is installed on a panel with insufficient strength. The opener's warranty does not cover damage caused to the door and/or door panels.
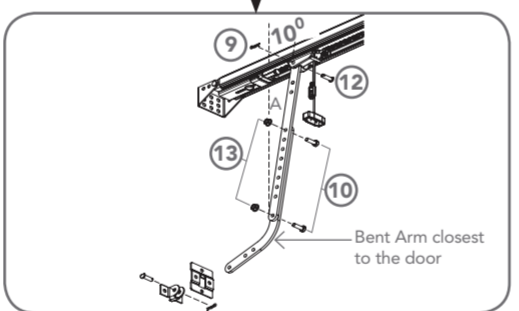
c. Assemble the bent arm ④ (connecting to the door) to the right side of the straight arm ⑤ (connecting to the shuttle) with bolts ⑩ and nuts ⑬ supplied in the accessory pack. Always use both bent and straight arms.
d. Connect the assembled arm to the bracket and the disengaged trolley with clevis ⑫ and snap pins ⑨. The angle "A" must be more than 10°.

⚠️ **CAUTION:** Connecting the bent arm the other way around may damage the door. The straight arm should not protrude beyond the heel of the bent arm.
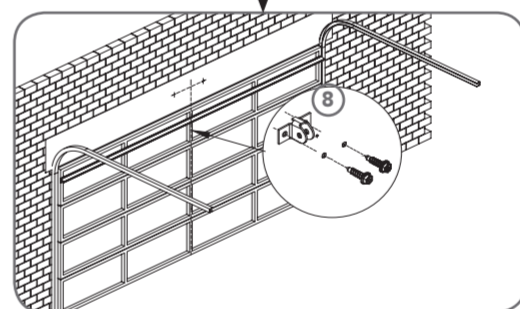
One piece door with track (T-Type)

a. Mount the door bracket ⑧, on the door's centre line one-third down the top panel and mounted using M6 or equivalent screws (not supplied).
b. STEEL DOORS ONLY: Bracket can be welded in place.

NOTE: If in doubt about the door's strength, reinforcement may be added to the door's frame where necessary. Door damage may occur if the bracket is installed on a panel with insufficient strength. The opener's warranty does not cover damage caused to the door and/or door panels.
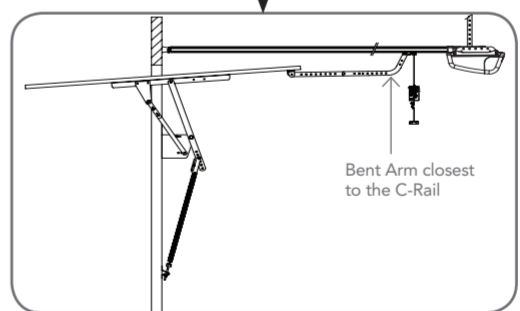
c. Assemble the bent arm ④ (connecting to the door) to the right side of the straight arm ⑤ (connecting to the shuttle) with bolts ⑩ and nuts ⑬ supplied in the accessory pack. Always use both bent and straight arms.
d. Connect the assembled arm to the bracket and the disengaged trolley with clevis ⑫ and snap pins ⑨. The angle "A" must be more than 10°.

⚠️ **CAUTION:** Connecting the bent arm the other way around may damage the door. The straight arm should not protrude beyond the heel of the bent arm.

## One piece door without track (Tilt Door / J-Type)

a. Mount the door bracket ⑧, on the door's centre line one-third down the top panel and mounted using M6 or equivalent screws (not supplied).
b. STEEL DOORS ONLY: Bracket can be welded in place.

NOTE: If in doubt about the door's strength, reinforcement may be added to the door's frame where necessary. Door damage may occur if the bracket is installed on a panel with insufficient strength. The opener's warranty does not cover damage caused to the door and/or door panels.

c. Assemble the bent arm ④ and straight arm ⑤ with bolts ⑩ and nuts ⑬ supplied in the accessory pack. Always use both the bent and straight arms.
d. Connect the assembled arm to the bracket and the disengaged trolley with clevis ⑫ and snap pins ⑨.
e. If installing on a door with a bad wave action, lengthening the arm will assist in reducing this effect.

⚠️ **CAUTION:** Adjust the length of the cord so that its toggle is no more than 1.8m from the ground.

Programming the Opener
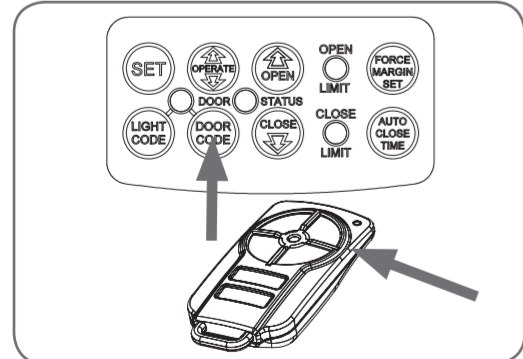
Code a Transmitter for Limit Setting
Ensure the opener is powered up and button cover is removed.
a. Press and hold the DOOR CODE button.
b. Press Button 1 on the transmitter for two seconds. Release and pause for two seconds. Press the Button 1 again for two seconds.
c. Release the DOOR CODE button. Press the transmitter to test.

Setting Limits via Transmitter
a. Engage the C-Rail's trolley (attached to the door via the arms) with the chain or belt index by moving the door.
b. If the trolley does not "click" firmly onto the chain index, pull the cord backwards until it locks in place, and try again.
c. Press and hold Button 4 on the transmitter to close the door. When the door is approx. 20mm from the ground, release Button 4.
d. Each press of Button 4 will allow you to "inch" the door closed. Keep doing this until the door reaches the desired close limit position.
e. If the door overshoots, press Button 1 to "inch" the door towards open
f. When in the correct close limit position, press Button 2 to store this in memory.
g. Press and hold Button 1 to open the door. When approx. 20mm from the desired open position, release Button 1.
h. Each press of Button 1 will allow you to "inch" the door open. Keep doing this until the door reaches the desired open limit position.
i. If the door overshoots, press Button 4 to "inch" the door towards closed.

⚠️ **WARNING!** The door will automatically close, open and close again **once the next step is performed.**
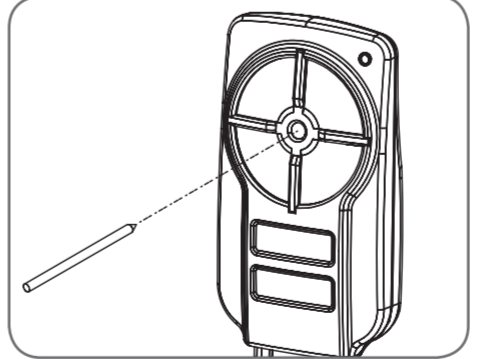Ensure that no persons or objects are in the door's path.

j. When in the correct open limit position, press Button 2 on the transmitter to store into memory.
k. The door will now automatically close, open and close to calculate the safety obstruction settings. After this, the opener can be operated with the OPERATE button.

Resetting the Door Limit Positions
Limit positions can be deleted by the following steps:
a. To reset the limits, press and hold the MINUS (-) button (on the opener) for 6 seconds until the CLOSE LIMIT LED flashes quickly. If no action is taken within 30 seconds, the opener will return to normal operating mode and restore the original settings..
b. Repeat the above processes to set new travel limit positions.

NOTE: There is no need to re-code the transmitter upon resetting travel limits. The transmitter will still be stored in memory.

Coding Transmitters

NOTE: Refer to the Complete Instruction Manual to code transmitters with extra features such as Pet Mode, Vacation Mode and Courtesy Light.
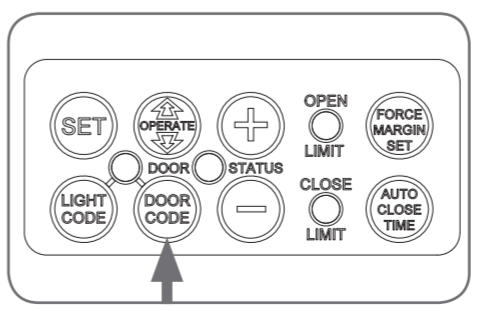

Remotely Coding Transmitters
Using this method transmitters can be coded without access to the opener's control panel as long as a pre-coded transmitter is available.

NOTE: The door or courtesy light must activate when the steps below are performed. This indicates that the pre-coded transmitter is in range of the opener, and the correct button has been pressed.

a. Take any pre-coded transmitter. Press the button for the function to be duplicated and release.
b. Using a small needle / pen, press and hold firmly for two seconds the middle button, through the Coding Hole.
c. Within 10 SECONDS take the additional transmitter you wish to code. Hold the new transmitter's button for two seconds, pause for two seconds, hold again for two seconds and then release.
d. Wait for 10 seconds and then press the new transmitter's button to test.

Erasing a Stored Transmitter Code
a. Select the transmitter you want to delete.
b. Press and hold the DOOR CODE BUTTON.
c. Press the transmitter button you would like to delete for two seconds, pause for two seconds, press again for two seconds and then release.
d. Release the DOOR CODE BUTTON. The code should now be deleted. Confirm this by pressing the transmitter button - the function (e.g. door opening) should not respond.

Erasing All Transmitter Codes
a. Turn off power to the opener.
b. While switched off, press and hold the DOOR CODE BUTTON. Turn on power to the opener while holding this button.
c. The OPEN LIMIT, CLOSE LIMIT and DOOR STATUS LEDs will illuminate for about five seconds. These LED's will turn off and the CODING LED will illuminate.
d. Release the DOOR CODE BUTTON. All stored codes will now be deleted. Confirm this pressing buttons on any previously coded transmitters - the opener should not respond.

Proceed to Safety Obstruction Forces