

# Electric Compact Roller Garage Door Fitting Instructions

# Garage FEB 2013



Note: Due to ongoing development some of the information and procedures may not exactly correlate to the product received. If in doubt, please ask your supplier.

**ALWAYS CHECK ON DELIVERY THAT THE ORDER DETAILS ARE CORRECT AND THE DOOR IS UNDAMAGED; AND ESPECIALLY BEFORE REMOVING ANY EXISTING DOORS.**

## Sequence of Installation

1. Pre-Installation and Component Check
2. Prepare the Opening
3. Prepare the Guide Rails
4. Fix Guide Rails & Axle Assembly
5. Fit Emergency Overrides
6. Curtain Adjustment (reducing height/making repairs)
7. Install the Curtain in the Guides, Attach to Axle & Fit Stops
8. Curtain locking and setting motor limit switch
9. Commissioning
10. Repairing and dismantling instructions

## ELECTRIC COMPACT GARAGE DOOR COMPONENTS

1. 90° FASCIA
2. MOTOR (fitted into axle)
3. 60mm OCTAGONAL AXLE
4. 4 Pairs COMPACT LOCKING COLLARS (fitted on axle)
5. AXLE CAP (fitted into axle)
6. R/H END PLATE
7. 4 No. COMPACT LOCKING SPRINGS AND ATTACHMENT BRACKETS \* (and 8 hinge pins)
8. 8 No. RETENTION CLIPS \*
9. L/H END PLATE
10. GUIDE TERMINALS (fitted to end plate)
11. OPTIONAL 45° LID
12. GUIDE RAILS (UPH 140)
13. BRUSH INSERT (fitted to guide)
14. CURTAIN
15. END LOCKS (fitted to curtain)
16. BOTTOM SLAT (fitted to curtain)
17. RUBBER SEAL (fitted to bottom slat)
18. OVERRIDE EYE \*
- (not supplied with external fit Compacts)
19. 6 No. M8 x 21mm PENNY WASHERS \*
20. 2 No. STOP BLOCKS \*
21. 2 No. M6 x 30mm COACH BOLTS \* (for fixing stop blocks)
22. 2 No. M6 NYLOC NUTS \* (for fixing stop blocks)
23. 10 No. 4mm x 8mm RIVETS \* (for securing endlocks)
24. 3 No. CABLE CLIPS \*
25. CRANK HANDLE CLIP \*
26. BRUSH STRIP FOR FASCIA \*
- \* Supplied in accessory pack.
27. CRANK HANDLE (removable 45° crank handle supplied with external fit Compacts)

Axle, end plates, 90 degree fascia (and optional 45 degree lid) are supplied pre-assembled. Guides, crank handle and if applicable external override kit will be wrapped together in one bubble wrapped parcel and strapped together. The curtain axle/fascia assembly are all individually packed. A separate accessories box is packed with the installation and end user instructions, the attachment/locking arms, the accessory pack and a box containing the electrical items.

### Recommended Fixings (not supplied)

12 x 1" Self Tapping Screws for Steel

12 x 2 1/2" Countersunk Screws for Masonry and Wood

## 1. PRE-INSTALLATION AND COMPONENT CHECK:

Check:

- i) delivery note
- ii) order sheet
- iii) door dimensions/colour
- iv) opening dimensions \ clearances
- v) components
- vi) Check for any damage to the guide rails or the outside roll of the curtain

Do not proceed further with the installation unless you are sure that the door is the correct size, and all components are present.

### Widths

Manufacturing Width = Over Guide Width

Drive Through Width = Over Guide Width less 120mm for 60mm guides

Curtain Width = Over Guide Width less 75mm excluding endlocks

Axle Width = Over Guide Width less 80mm

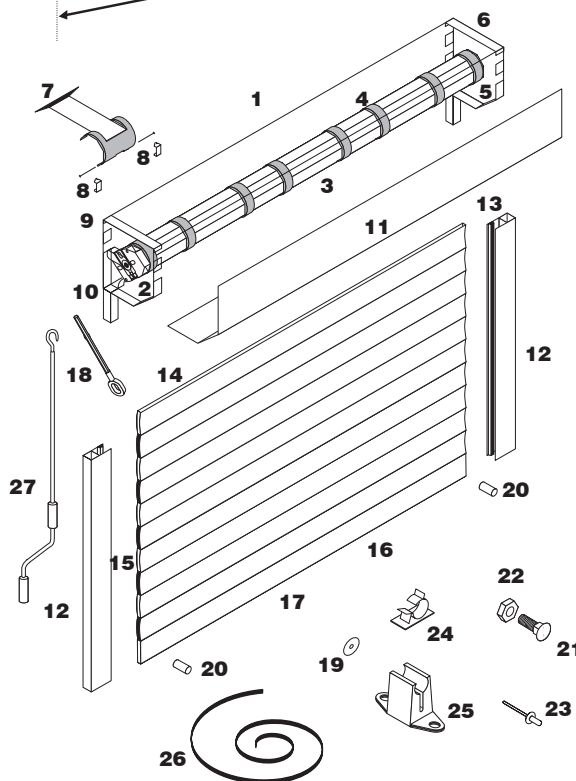
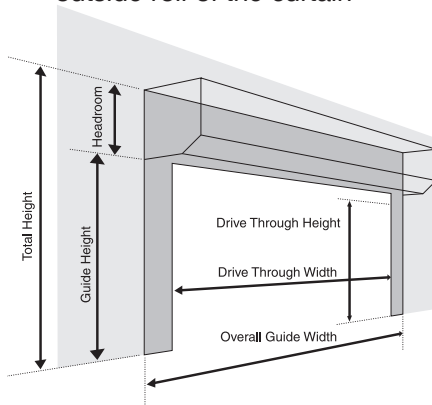
### Heights

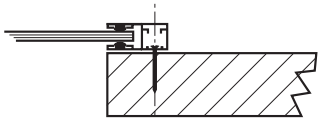
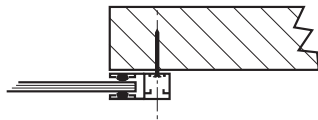
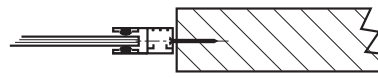
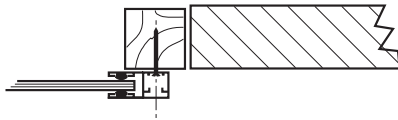
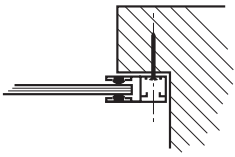
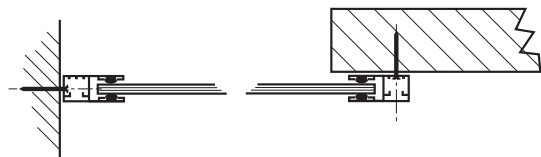
Manufacturing Height = Guide Height

Total Height = Guide Height + End Plate

Headroom/End Plate up to 2.3m Guide Height = 205mm

Drive Through Height = Guide Height less 50mm



**INSTALLATION OPTIONS****External Fit****Internal Face Fit****Reveal Fit****Undersize Face Fit****Fitted to existing or New Timber Frame****Combination of Face and Reveal Fit****SET BACK FACE****2. PREPARE THE OPENING**

Check:

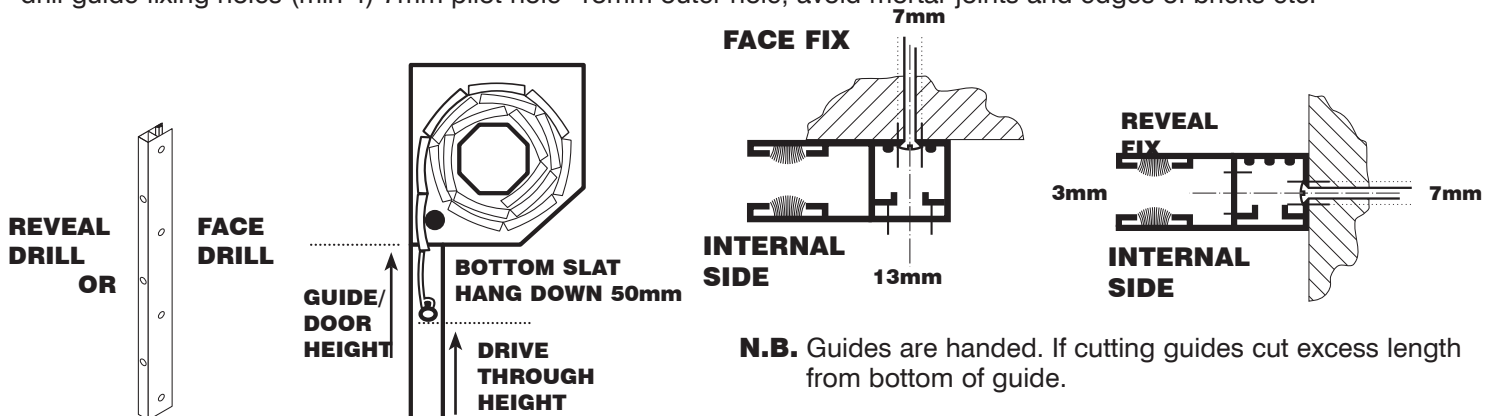
- structure is sound/even & can carry the weight of the door
- no obstacles in fitting footprint eg. no sharp objects, pipes, cables, bumps etc. sticking out from the pillars, lintel or header to twist the guides, distort the fascia or catch on the curtain
- floor is flat/level

If necessary install a sub-frame to ensure secure, flush and level fixing (Recommended minimum 70 X 70 PAR).

**3. PREPARE THE GUIDE RAILS:**

If the guides require cutting down refer to the 'Widths and Heights' information in section 1. If face fixing where possible set the guide height at least 50mm above the structural opening height to maximise drive through height.

- position guides
- drill guide fixing holes (min 4) 7mm pilot hole 13mm outer hole, avoid mortar joints and edges of bricks etc.



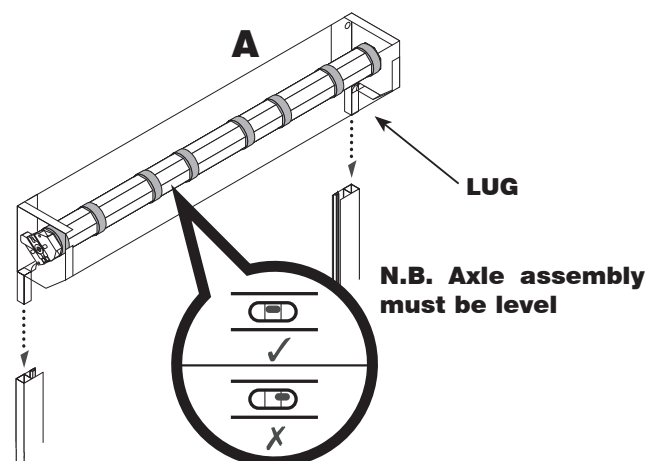
**N.B.** Guides are handed. If cutting guides cut excess length from bottom of guide.

**4. FIX GUIDE RAILS & AXLE ASSEMBLY**

**N.B.** Before positioning check that there are no sharp objects or bumps sticking out from the pillars, lintel or header to twist the guides or distort the fascia.

- slot end plate lugs into guides (see drawing A) remembering the guides are handed (check guide terminals are in place, see drawing B)
- position guides and fascia against opening
- hold or prop securely the assembly in position
- drill fixing holes (min 4 in guides and 2 in each end plate)
- fix guides/end plates with minimum No. 12 x 2 1/2" countersunk screws (and plugs) to masonry/timber or 12 x 1" self tapping screws to steel. Fix fascia every metre with minimum 12 x 1" screws. Penny washers supplied must be used to spread fixing load on end plates and fascia
- stick brush strip to inside bottom edge of 90° fascia (optional see drawing B)

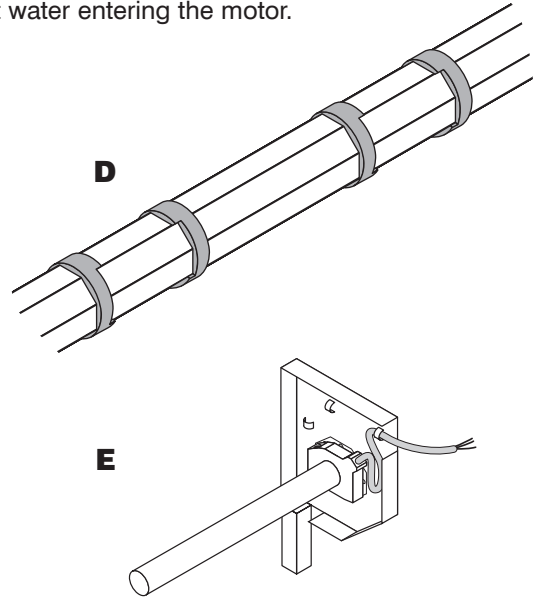
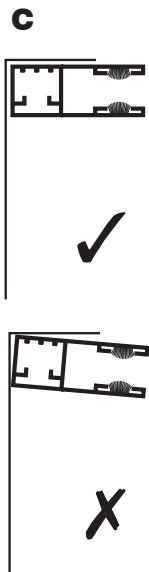
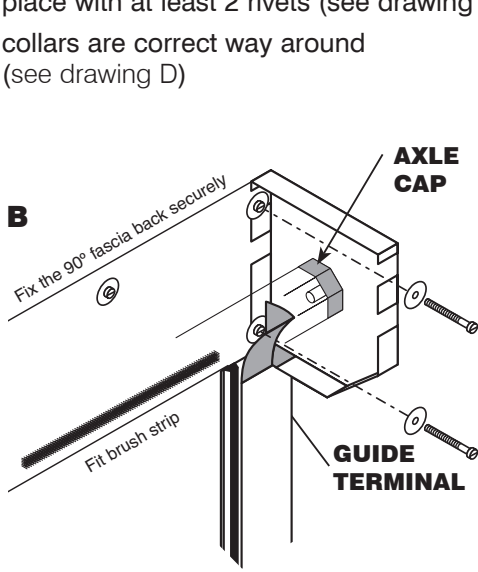
**N.B.** Extreme care should be taken while manoeuvring the door into place to avoid the possibility of snapping the end plate lugs. It is imperative that fixings are put through the end plates into the wall as the aluminium lugs are not designed to carry the weight of the door.



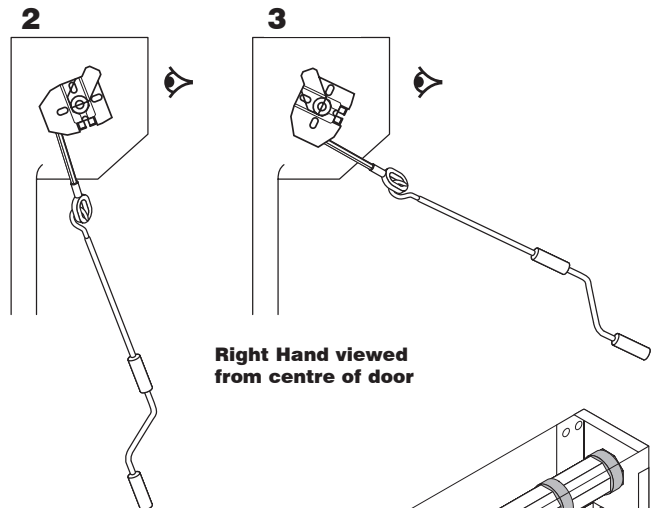
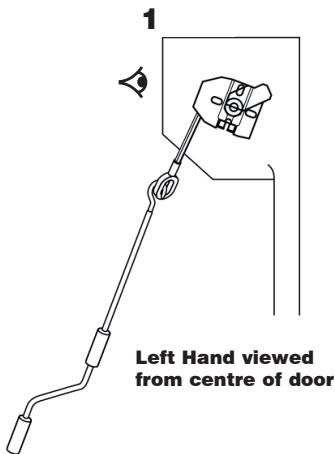
Check:

- i) back faces of guides and end plates are flush and untwisted (see drawing C)
- ii) guides are vertical/parallel/same height, this is essential for the bottom slat transmitter (if fitted) to function correctly.
- iii) axle cap is butting up against the end plate and held in place with at least 2 rivets (see drawing B)
- iv) collars are correct way around (see drawing D)

- v) SECURE MOTOR POWER LEAD WITH CABLE CLIPS SO THAT IT IS TIGHT AGAINST THE END PLATE – see drawing E. You must ensure that you allow for a drip loop in the motor cable to prevent water from running down the cable and into the motor. Spare cable ties can be attached to the motor cable to act as drip loop to prevent water entering the motor.



**5. FITTING EMERGENCY OVERRIDES:**



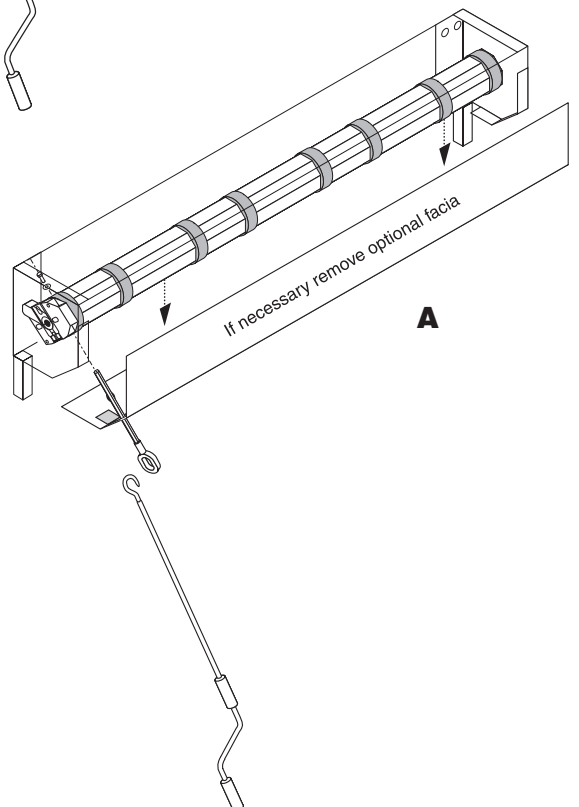
**POSSIBLE OVERRIDE EXIT OPTIONS**

**N.B.** The factory assembled options 1 & 2 are recommended

**a) Standard Manual Override Internal Fitting**

(see drawing A):

- i) drill hole for override eye through end plate flange
- ii) insert override eye in hole in motor adjacent to limit adjusters
- iii) insert and tighten the holding screw and washer from above
- iv) hook crank handle in eye
- v) secure clear of shutter with crank handle clip



**b) Optional Low Level External Override**

**N.B.** It is suggested that the override exits as per diagram 2 on the previous page.

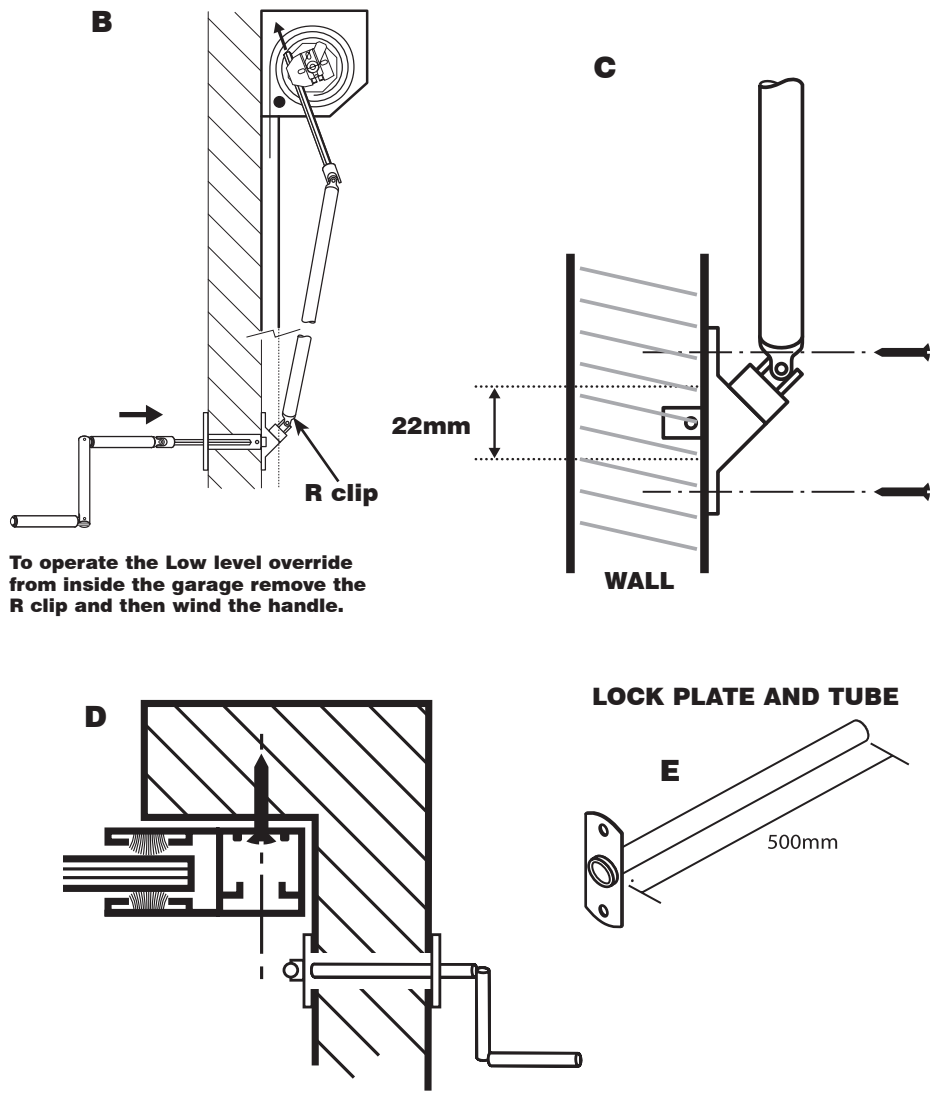
Please note more detailed installation instructions are supplied in the override kit.

- i) drill hole for override eye through end plate flange
- ii) insert hexagonal bar through hole in motor adjacent to limit adjusters (see drawing B)
- iii) mark position for hole through wall adjacent to guide rail at bottom end of crank (see drawing C). Crank can exit at 90° if door tight to return wall (see drawing D). Length of shaft can be shortened to adjust operating height.
- iv) drill 22 mm hole through the wall (see drawing C)
- v) secure universal joint bracket to wall
- vi) insert tube (cut to length) and fix plate to wall (see drawing E)

**N.B.** Fixings not supplied.

**Externally Fitted Compact Roller Garage Door**

The crank handle is not permanently attached but is only inserted as required (also see Section 10)



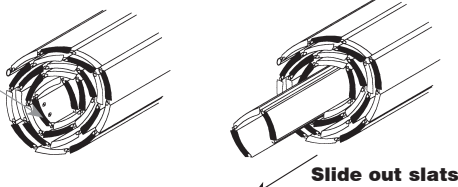
**6. CURTAIN ADJUSTMENT (REDUCING HEIGHT/MAKING REPAIRS)**

If the door needs to be reduced in width it will need returning to the supplier.

The curtain needs to be the correct height for the door to lock properly (if too tall remove slat(s) - If too short notify supplier). Check you have the correct number of slats in the curtain for the guide height (particularly if you have shortened the guide height) and adjust the curtain accordingly.

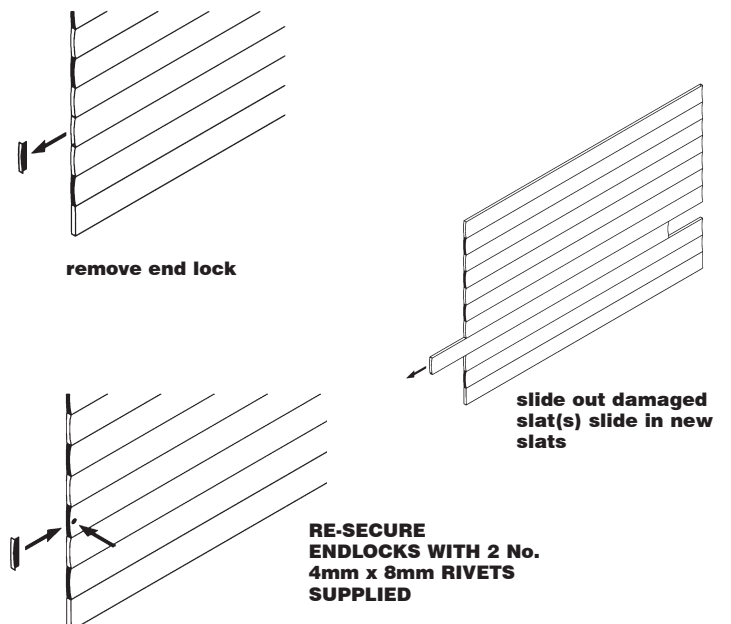
Remove slat by carefully snipping ear off end lock before sliding out slat. Preferably take slats off from the top of the curtain to save having to remove and refit bottom slat. Either roll curtain out on a flat and protected surface such as the bubble wrap and/or cardboard packaging in which the curtain is delivered, or do as below.

Snip ear off endlock to release slats



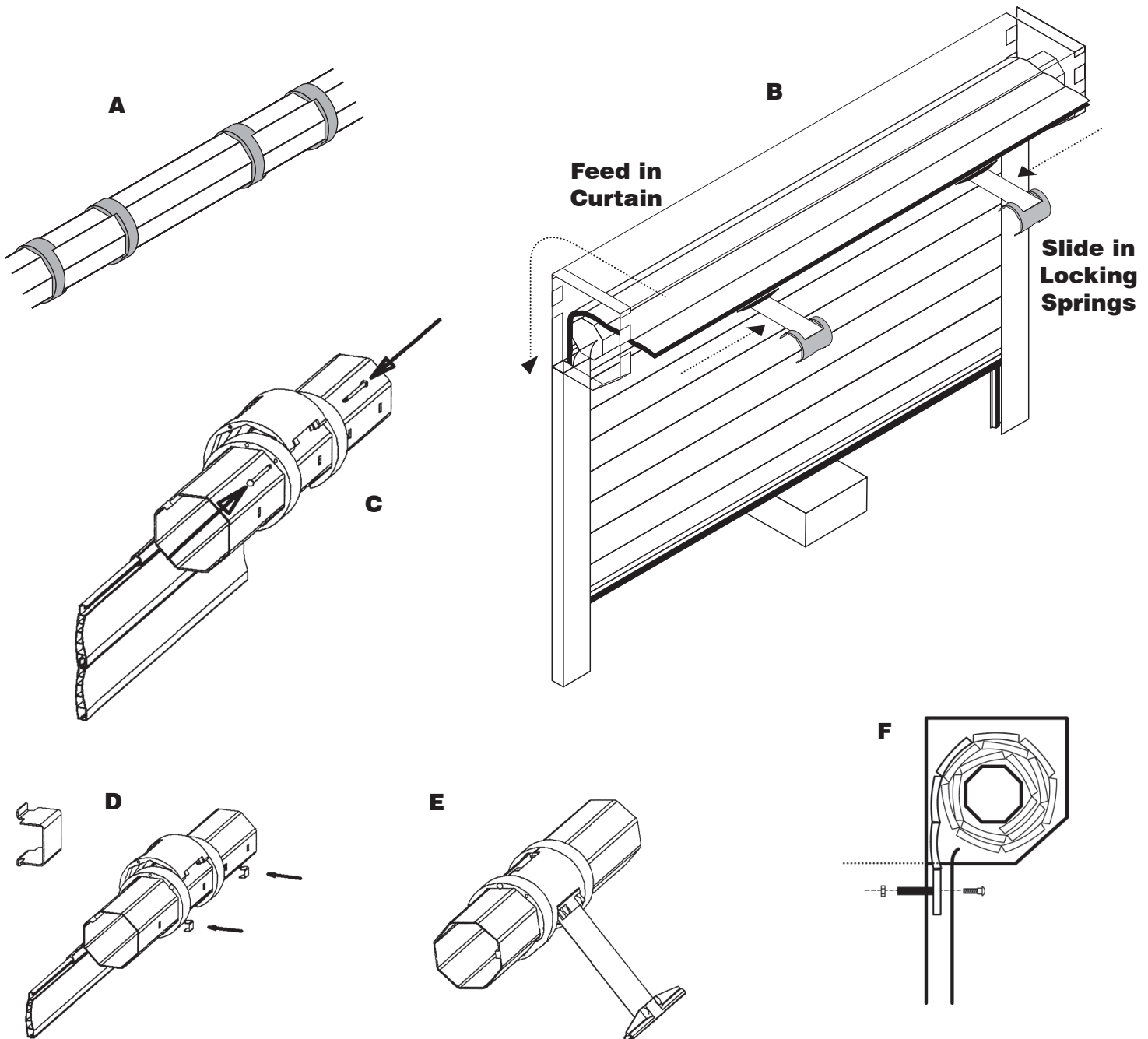
Number of Slats including the bottom slat	Guide Rail Height
25	1380
26	1435
27	1490
28	1545
29	1600
30	1655
31	1710
32	1765
33	1820
34	1875
35	1930
36	1985
37	2040
38	2095
39	2150

**REPAIR PROCEDURE**



## 7. INSTALL THE CURTAIN IN THE GUIDES, ATTACH TO AXLE & FIT STOPS

- i) Check that there are at least 4 pairs of compact locking collars on the axle and that each pair of collars has the cut-out towards the centre and line up with other pairs of collars along the axle (see drawing A). One pair must be approx. 150mm in from each end of the axle and the remaining pairs evenly spaced.
- ii) lift coiled curtain up level with axle and feed bottom of curtain into guide (see drawing B)
- iii) slowly unroll curtain and gently lower onto a tool box or block (see drawing B)  
**N.B: Do not allow the curtain to free fall over the axle as this will result in damage to the curtain.**
- iv) slide the locking springs with semi-circular attachment bracket onto the top slat. Rotate the axle with the manual override until the attachment holes in the collars are accessible. Use the special attachment pins as supplied to attach the semi-circular attachment bracket between the collars.  
**N.B. You must use the second hole. Ensure that the pin is fully engaged in the attachment bracket (it should click into place) to prevent product failure (see drawing C).**
- v) Fit small retention clips into the cut-outs in the axle to stop the locking assemblies moving along the axle. The clips do not have to be tight up against the collar. (see drawing D)
- vi) Use override to raise door sufficiently to remove toolbox/block. Ensure that the semi-circular curtain attachment bracket coils up flush with the collars (see drawing E). Leave door in partially open position.
- vii) drill 8mm hole close to edge of bottom slat and fit stops (preferably to the outside, see drawing F). It is essential the stops are fitted for health and safety reasons



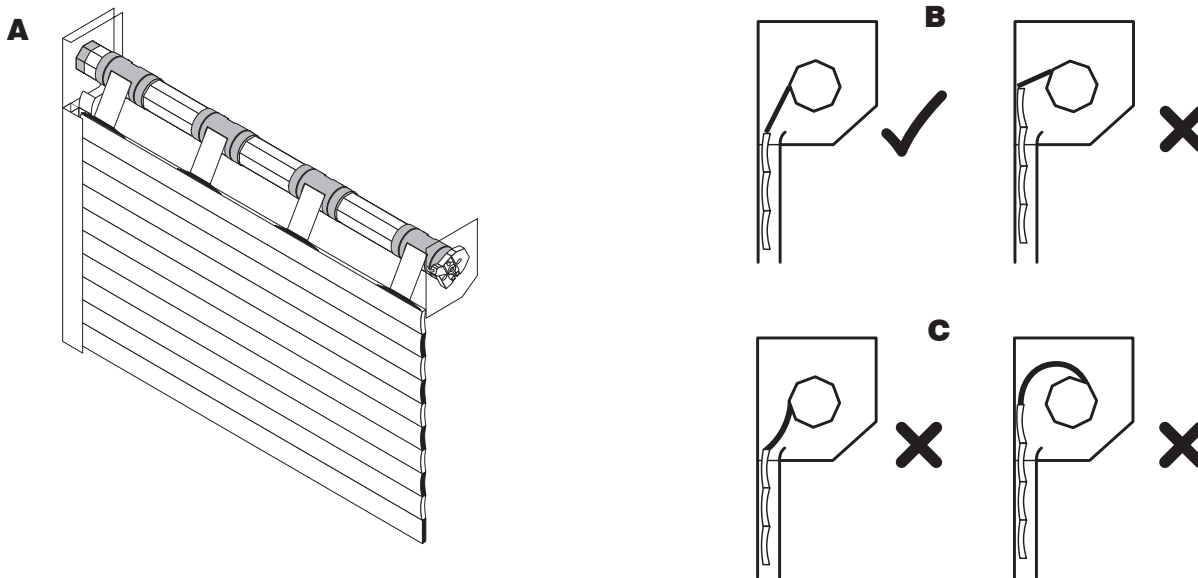
## 8. CURTAIN LOCKING & SETTING MOTOR LIMIT SWITCHES

Compact Roller Garage Door is manufactured with the curtain height to suit the length of guide supplied. The door will not lock down properly if the curtain is either too tall or too short. If the guide height has been adjusted on site, check that the top of the curtain is neither below the top of the guide nor more than one slat above (see drawing A & B below). Both limits require setting along with a final adjustment of the locking springs. **We recommend the use of a Test Lead\* to set the limits and to make the final locking adjustment.** For external fits the two hole 45° crank handle can be inserted and removed as required. To set the limits remove the cap covering the white/ yellow limit switches, fully press in both switches (they will lock in position - see motor drawings below) and then proceed as follows. \*Should you not have a test lead use the override to set the limits.

**N.B: Incorrect setting of the limits risks damage to the motor, curtain and attachment devices.**

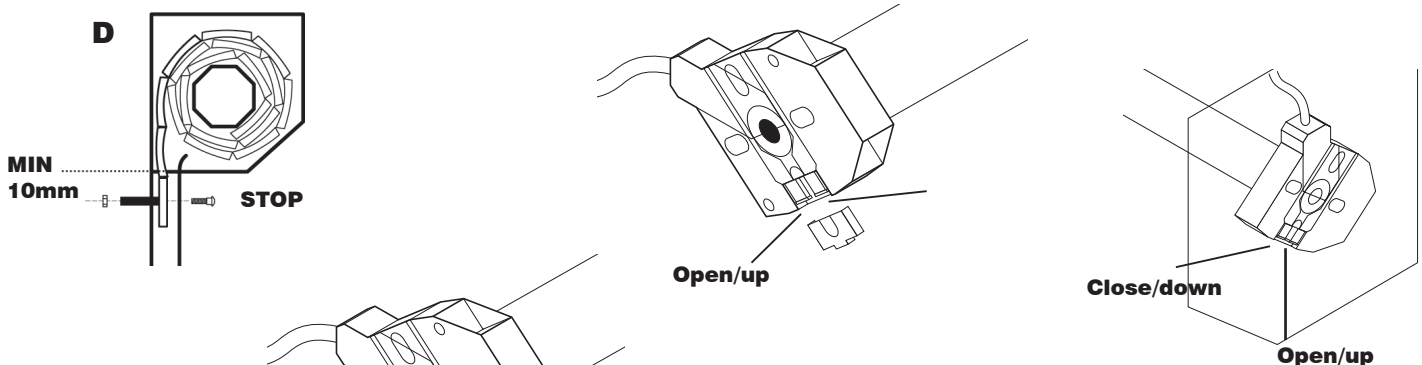
### CLOSED / DOWN LIMIT SETTING AND LOCKING SPRING ADJUSTMENT

- Send down with the test lead so that the curtain is fully down and the top slat is pushed forward so that it touches the fascia. The metal attachment springs should be taut but not bent or distorted (see drawings A, B & C).
- Now set the motor closed/down limit (see left-hand/right-hand motor text boxes).



### OPEN/UP LIMIT SETTING

- Send the door up with the test lead to open/up position and stop (50mm of curtain should still be in guide. Stops should be 10mm below fascia - see drawing D).
- press and release the open/up limit switch



**Fully press in to set limits. Release limit when set**

**N.B. Always replace the yellow limit switch cover cap once limits are set.**

#### Left Hand Motor

Fully press in limit switch to activate. Press and release switch when door has been set to stop in correct position. The yellow limit switch activates the OPEN/UP limit. The white limit switch activates the CLOSE/DOWN limit.

#### Right Hand Motor

Fully press in limit switch to activate. Press and release switch when door has been set to stop in correct position. The yellow limit switch activates the CLOSE/DOWN limit. The white limit switch activates the OPEN/UP limit.

**TROUBLESHOOTING**

FAULT	CAUSE	SOLUTION
The shutter/door fails to operate when the button is pressed/key is turned.	<ol style="list-style-type: none"> <li>1. There has been a power failure.</li> <li>2. The wrong direction is been selected on the control equipment.</li> <li>3. The thermal trip in the motor may have activated if the door has been operated several times recently.</li> </ol>	<ol style="list-style-type: none"> <li>1. Wait for power to come back on or operate the shutter/door with the manual override if installed.</li> <li>2. Select the correct direction.</li> <li>3. Allow the motor to cool for approximately 30minutes before attempting to operate the shutter/ door again.</li> </ol>
The shutter/door stops before fully opening or closing, or fails to stop when reaching its final open or closed position.	The limits in the motor have failed to operate or may not have been set correctly.	Contact your installer.

**9. COMMISSIONING****INTERNAL FITTING**

Fit optional 45 degree lid. A slot may have to be cut into the lid to pass over the override eye.

**FINAL CHECKS**

- i) remove any protective plastic coverings
- ii) wipe curtain & guides with damp cloth
- iii) touch-up any small scratches
- iv) check all electrical & operating equipment is installed and functioning correctly (especially the safety edge) and complete CE marking label and paperwork
- v) check direction handle needs winding to open door and fit appropriate label supplied to crank handle.
- vi) If the door is fitted externally apply a bead of silicone around the box edge to prevent water ingress.
- vii) Attach stops to bottom slat 230mm in from the outer edges of the bottom slat.

**N.B.** Check front of curtain not rubbing on fascia etc.

The manual override will not function after the door is operated, by remote control, until the power to the motor has 'timed out'. This will take a few moments to occur. If you wish to demonstrate the manual override immediately after opening the door press either the stop button on the handset or simulate a power cut by switching off the power to the Control unit.

If a low level external override is fitted or the door is fitted externally remind customers to keep the override handle in a convenient place (not in the garage if no other way in!)

**Upon completion it is your responsibility to train the customer how to operate the door correctly and safely and provide them with the operating and maintenance instructions supplied.**

**10. MAINTENANCE, REPAIRING AND DISMANTLING INSTRUCTIONS**

Always isolate the mains power before attempting any maintenance, repairs or dismantling. If you need to use the remote control during any maintenance, repairs or dismantling procedure you must engage the commissioning mode.

**MAINTENANCE CHECK LIST**

- i) Curtain free running and clean
- ii) No debris in the guide rails
- iii) Guide rails and end plates are securely fastened to the wall (check also the fascia if fitted)
- iv) All axle collars are in the correct original position
- v) Split pin in octagonal dummy end fixing plate is in correct position and is not damaged or worn
- vi) Check action of locking pins to ensure they are locking correctly
- vii) Motor cable is correctly retained has not been damaged or in danger of being damaged
- viii) If a remote control has been supplied check the functionality of the safety devices
- ix) If required view the service counter on the remote control
- x) Check the operation of the manual override.

**RECOMMENDED SERVICE PERIOD**

The recommended service period for a garage door, which will operate on average two cycles per day, is once every 12 months. If the garage door will perform a greater number of cycles per day the service period should be shortened accordingly. One cycle is a full open and close sequence.

**REPAIRS**

For curtain repairs please refer to section 6.

**CHANGING MOTOR OR REVERSING MOTOR HAND**

If the door is already fitted you will need to disconnect the motor leads from the control unit and the curtain from the axle. If the door is reveal fitted or tight up against a sidewall the whole installation may need to be dismantled.

**CHANGING MOTOR**

- i) drill out rivets in axle securing motor and axle cap
- ii) remove bolts securing motor to end plate
- iii) knock axle cap into axle to release from spigot on end plate
- iv) lift out axle and replace motor
- v) replace axle, slide back axle cap (making sure it is tight up against end plate) rebolt motor to end plate and re-rivet motor and axle cap

**REVERSING MOTOR HAND**

- i) drill out rivet in axle securing axle cap
- ii) remove bolts securing motor to end plate
- iii) knock axle cap into axle to release from spigot on end plate
- iv) lift out axle
- v) turn axle around
- vi) replace axle, slide back axle cap (making sure it is tight up against end plate) rivet axle cap and drill new holes and bolt motor to end plate (making sure it is in the correct position, see section 8)

**DISMANTLING PROCEDURE**

- i) drill out rivet in axle securing axle cap
- ii) remove bolts securing motor to end plate
- iii) knock axle cap into axle to release from spigot on end plate
- iv) lift out axle
- v) Continue to dismantle the Compact Garage Door following the installation procedure in reverse.