

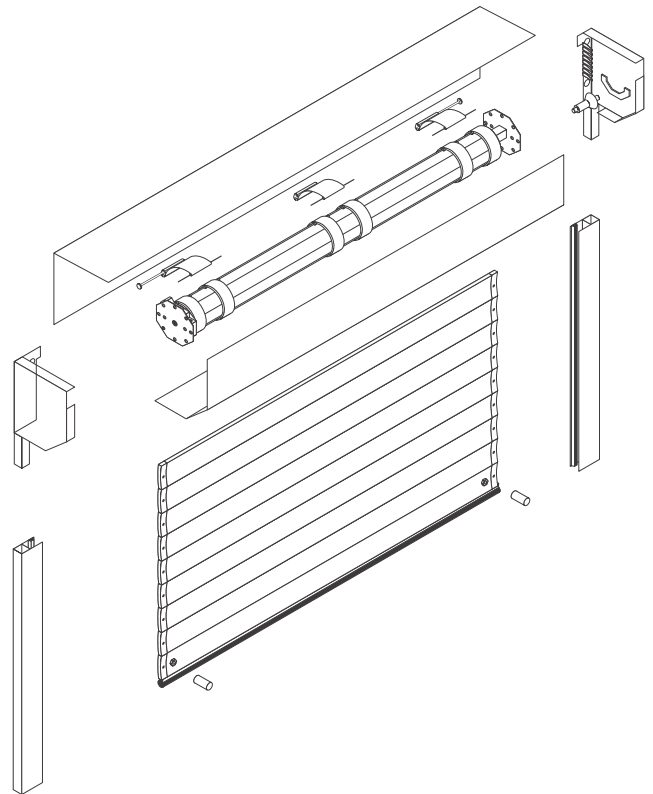
# Electric Roller Garage Door Installation Instructions

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 BEFORE REMOVING ANY EXISTING DOORS.**

## Sequence of Installation & Contents

1. Pre-installation and component check
2. Installation options and criteria for compliance with LPS 1175
3. Prepare the opening
4. Prepare the guide rails
5. Fit end plates, guides & axle (& optional fascia)
6. Fit emergency overrides
7. Curtain adjustment (reducing height/making repairs)
8. Install the curtain in the guides, attach to axle & fit stops
9. Curtain locking & setting motor limit switches
10. Commissioning
11. Maintenance, repairing and dismantling instructions

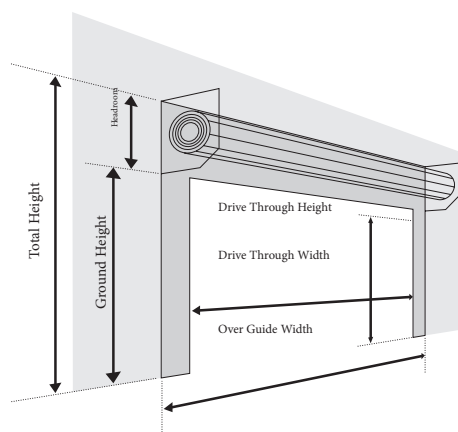


## 1. PRE-INSTALLATION AND COMPONENT CHECK:

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.**



### Heights

Order Height = Guide Height  
**Total Height** = Guide Height + End Plate  
**Headroom/End Plate**  
 up to 2.5m Guide Height = 300mm  
 up to 3.5m Guide Height = 350mm  
**Drive Through Height** = Guide Height less 55mm

### Widths

Order Width = Over Guide Width  
**Drive Through Width** = Over Guide Width less 150mm for 75mm guides  
 Drive Through Width = Over Guide Width less 180mm for 90mm guides  
**Curtain Width** = Over Guide Width less 90mm  
**Axle Width** = Over Guide Width less 90mm (without spring)  
 = Over Guide Width less 73mm (with spring)

**ELECTRIC ROLLER GARAGE DOOR COMPONENTS**

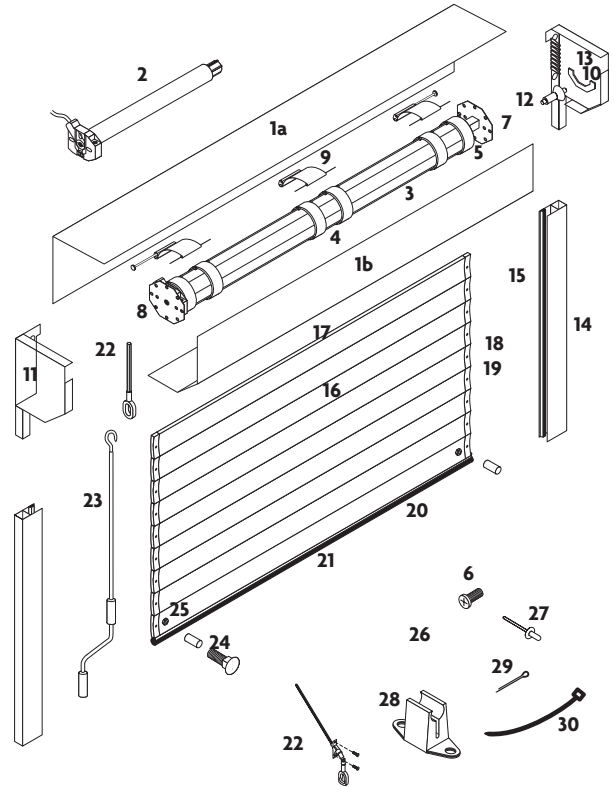
- 1a OPTIONAL 90 DEGREE FASCIA
- 1b OPTIONAL 45 DEGREE LID
- 2 MOTOR (fitted into axle)
- 3 102mm ROUND AXLE
- 4 LOCKING COLLARS (fitted to axle 6 No. up to 2.5m, 8 No. up to 3.5m  
10 No. over 3.5m)
- 5 DUMMY END or SPRING
- 6 6 x No. 8 x 38 PAN HEAD SCREWS \* (for securing octagonal fixing plates  
in mounting bracket, see component 7)
- 7 DUMMY END OCTAGONAL FIXING PLATE (secured to shaft by split  
pin - see component 29)
- 8 MOTOR OCTAGONAL FIXING PLATE (bolted to motor)
- 9 ATTACHMENT/LOCKING ARM (1 No. L/H 1 No. R/H complete with  
locking bolt and lock nut, 1 - 3 No. intermediate)
- 10 R/H END PLATE
- 11 L/H END PLATE
- 12 GUIDE ROLLER (fitted to end plates with star clinch lock washer)
- 13 MOUNTING BRACKET (fitted to end plates)
- 14 GUIDE RAILS
- 15 BRUSH INSERT (fitted to guides)
- 16 CURTAIN
- 17 TOP SLAT (fitted to door curtain)
- 18 POLYESTER WEBBING STRIP (fitted to curtain)
- 19 8 x 1/2 FLANGE HEAD SELF TAPPING SCREW (securing webbing to curtain)
- 20 BOTTOM SLAT (fitted to curtain)
- 21 RUBBER SEAL (fitted to bottom slat)
- 22 RIGID OVERRIDE EYE (inc. allen cap screw & washer) or DROP EYE  
JOINT (if 350mm end plates are required) \*
- 23 CRANK HANDLE
- 24 STOP BLOCKS \* (for fitting to bottom slat)
- 25 2 No. M6 NUTS (inserted in bottom slat for securing stop blocks)
- 26 2 No. M6 X 30 BOLTS \* (for fixing stop blocks)
- 27 7 No. 4.8mm x 9.3mm x 12mm POP RIVETS  
\* (for securing axle collars)
- 27b 3 No. 8 x 1/2 FLANGE HEAD SELF TAPPING SCREWS  
\* (for securing webbing strips to curtain)
- 28 CRANK HANDLE CLIP \*
- 29 1 x 60mm SPLIT PIN (to secure the octagonal fixing plate to the dummy  
end/ spring shaft)
- 30 3 x CABLE TIES \* (for securing motor cable to end plate)

\* Supplied in accessory pack.

Recommended Fixings (not supplied)

12 x 1" Self Tapping Screws for Steel

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

**PACKAGING METHOD:**

1. Axle, guides, crank handles, facias (if the door is 3.5m wide or greater) and if applicable the external override kit will be wrapped together in one bubble wrapped parcel and strapped together.

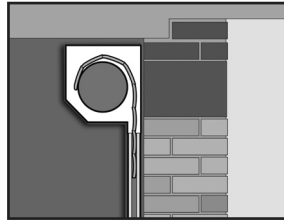
2. The curtain and aluminium facias (if the door is less than 3.5m wide) will be packed together.

3. A separate accessories box is packed with the installation and end user instructions, the two end plates, the attachment /locking arms, the accessory pack and a box containing the electrical items.

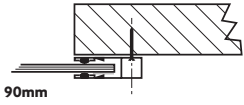
**2. INSTALLATION CRITERIA FOR COMPLIANCE WITH LPS 1175: ISSUE 5**

**Internal installation only**

The garage door must be installed internally and the end plates must be face fitted above the opening



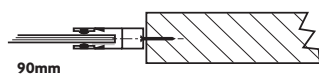
**Face fit**



If the guide rails are face fitted they must not protrude into the opening and they must be 90mm.

**Reveal fit**

If the guide rails are reveal fitted they must be 90mm guide rails complete with steel reinforcement plates to protect the base of the guide rails.



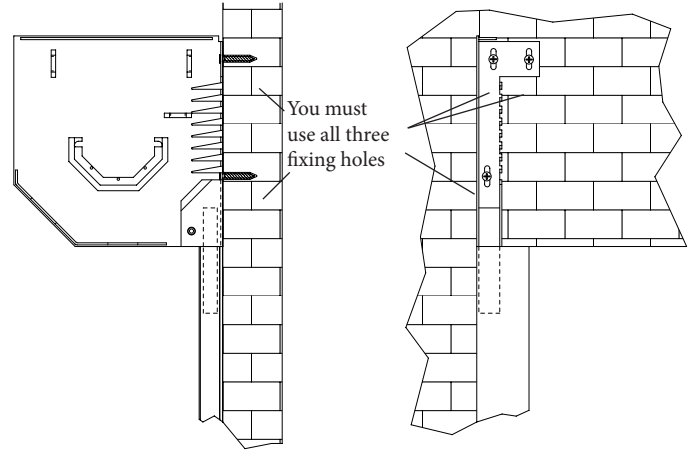
**Minimum number of fixings per guide rail**

Height of guide rails	Minimum no. of fixings required
less than or equal to 1000mm	3
1001mm to 1500mm	4
1501mm to 2500mm	5
2501mm to 3500mm	6
3500mm +	7

**Proximity of holes to the end of the guide rails**

The first and last holes at the ends of the guide rails must be drilled 120mm from the ends of the guide rails.

**Minimum number of fixings per end plate**



All three fixing holes in each end plate must be used

**Minimum required fasteners**

**Brick / Blockwork**

No. 12x2" screw with suitable plastic plug

**Timber frame**

No. 12x2" screw

**Steel fixing** (any of the following)

- a. 5 x 25mm Tec screws
- b. No. 10x1" Pozi Pan head screws
- c. M8 x10mm hex head or dome head bolts tapped in to the steel work (minimum 5mm thick steel)
- d. M8 bolts and nuts

**All fixing heads must be spoiled for compliance with LPS 1175.**

**All switches, key switches and remote control equipment must be installed on the inside of the garage for compliance with LPS 1175**

**The label supplied, stating the manufacturer, the product, the security rating and the certificate number must be attached to the door.**

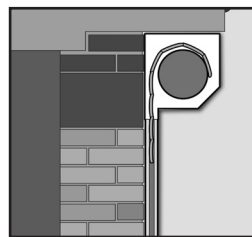
Please note: The validity of the LPCB certification is contingent upon the roller garage door being installed in accordance with the requirements of LPS 1175

**ALTERNATIVE INSTALLATION OPTIONS (not compliant with LPS 1175)**

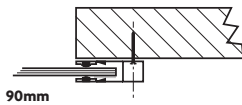
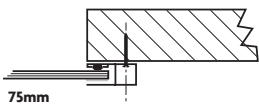
**External installation**

The door can be installed externally if compliance with LPS 1175 is not required.

Please note the remote control receiver unit and the bottom slat safety edge transmitter must be installed internally and not exposed to the elements



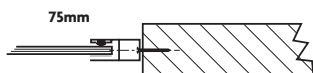
**Face fit**



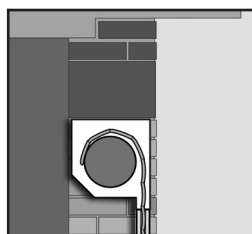
75mm guide rails can be used if compliance with LPS 1175 is not required.

**Reveal fit**

If the end plates are fitted in the opening rather than above the opening the door

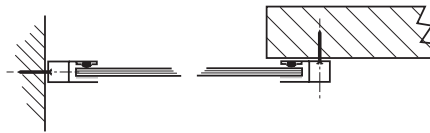


will not be compliant with LPS 1175. If compliance with LPS 1175 is not required 75mm guide rails can be fitted within the reveal.



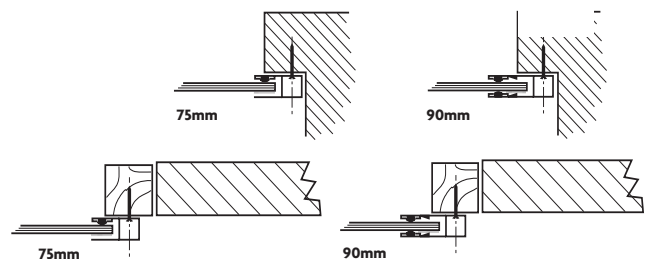
**Combination of face and reveal fit**

In this situation one guide rail is reveal fitted and the other guide rail is face fitted.



**Undersize face fit**

In this situation the guide rails are face fitted but they will protrude into the opening. This installation will not be compliant with LPS 1175.



### 3. PREPARE THE OPENING:

Check:

- i) structure is sound/even & can carry the weight of the door (curtain weight is approximately 5kg/m<sup>2</sup> and allow an extra 15kg for the guides, end plates and axle assembly).

- ii) no obstacles in fitting footprint e.g. no sharp objects, pipes, cables, bumps etc. sticking out from the pillars, lintel or

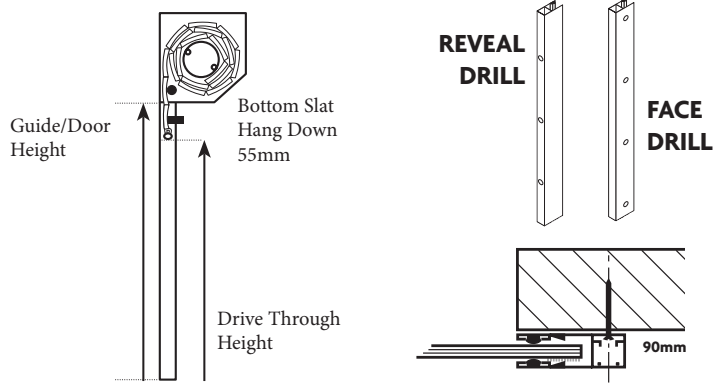
High winds and high temperatures can cause increased deflection of the door. It is the **installer's responsibility** to ensure that the door is packed off the wall sufficiently to allow for door movement during these extreme weather conditions.

### 4. PREPARE THE GUIDE RAILS:

Please note: The validity of the LPCB certification is contingent upon the roller garage door being installed in accordance with the requirements of LPS 1175 (see section 2 for further details).

If the guides require cutting down refer to the information at the start of Section 1 and also section 6 for reducing the curtain height. If face fixing where possible set the guide height at least 55mm above the structural opening height to maximise drive through height.

- i) position guides

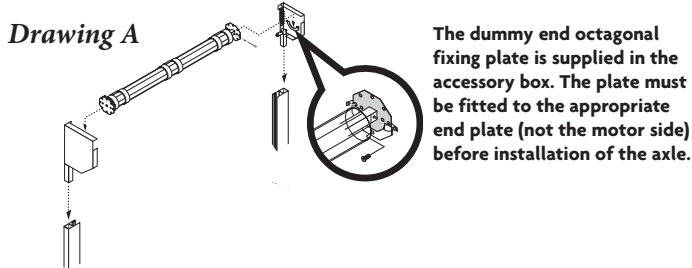


**N.B.** 90mm guides are handed

### 5. FIT END PLATES, AXLE ASSEMBLY, GUIDES (& OPTIONAL FASCIA):

N.B. When fitting doors with 300mm end plates and the guide height is more than 2300mm it is important that you check that the lintel does not bow inwards or have any projections that may catch on the curtain. If in doubt pack the guides and end plates out by at least 10mm.

- i) slot end plates into guides (and fix optional fascia if supplied) - see drawing A



If using 90mm guides make sure the back face of the end plate is in line with the back of the guide.

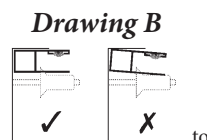
If using the optional fascia we recommend that you rivet the end plates to the fascia then slot the end plates into the guide rails.

- ii) position guides, end plates (and optional fascia) against/in opening

- iii) hold or prop securely in position

**Before proceeding any further check:**

- back faces of guides and end plates are flush and untwisted - see drawing B
- that the distance between the outside edges of the guides is 90mm more than the curtain width
- ensure that the distance between the outer edges of the end plates is equal the stated overall width of the door.

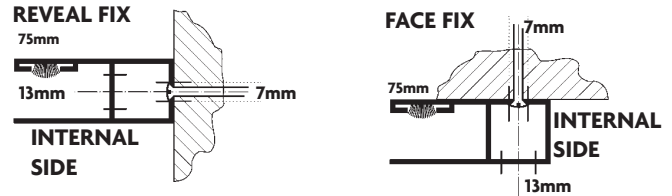


header to twist the guides, distort the fascia or catch on the curtain

- iii) floor is flat/level

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

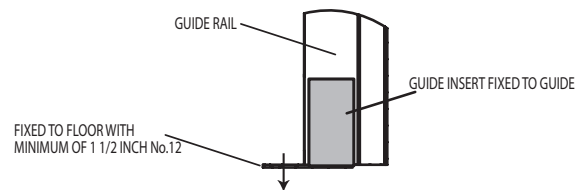
- ii) drill guide fixing holes 7mm pilot hole 13mm outer hole (min 4) avoid mortar joints and edges of bricks etc.



### LPS 1175 compliant doors

Doors which are compliant with LPS 1175 will be supplied with a bottom slat anchor system prefitted to the bottom slat and guide rails.

Once the guide rails have been fastened in place the bottom slat anchor guide insert must be fastened to the floor as shown below.

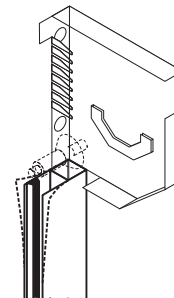


- iv) drill fixing holes (minimum of 4 in guides and 2 in each end plate if not LPS 1175 compliant)

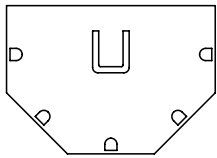
- v) fix guides/end plates with minimum No. 12 x 2 1/2" countersunk screws (and plugs) to masonry/timber or 12 x 1" self tapping screws to steel. Fix fascia every metre with minimum 12 x 1" screws. Penny washers must be used to spread fixing load on fascia. If there is nothing to fix to, 50 x 20 box section should be ordered to reinforce the fascia and prevent deflection which may damage the curtain. Drill and pop rivet from inside the fascia ensuring that the rivet leaves a smooth surface.

- vi) ease open top of guides - see drawing C

*Drawing C*



- vii) The dummy end octagonal fixing plate is supplied in the accessory box. The plate must be fitted to the appropriate end plate (not the motor side) before installation of the axle.



Dummy end octagonal fixing plate must be this way up

Offer up the axle assembly to the end plates inserting the octagonal plate attached to the motor into the end plate mounting bracket and the dummy end/spring shaft into the U cup on the dummy end octagonal fixing plate. Secure the shaft using the 60mm split pin provided. Make sure the motor and override hole are correctly orientated and the limit switches are accessible from below - see motor drawings 1 to 3 - Section 6.

- viii) secure axle by inserting the No. 8 x 3/8 pan head screws supplied into the holes in the mounting brackets (give the axle a tug to make sure it is securely retained) - see bubble detail drawing A

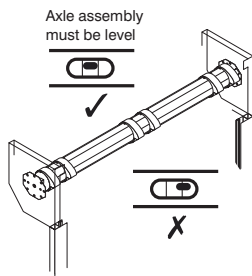
If end plate fixing is secure enough or if fitting into a reveal, firmly knock in with a punch deformable locking tabs into slots in octagonal fixing plate.

Lock dummy end shaft securely in place, hard up against the dummy end, with clip provided so as to prevent the axle from moving from its correct position.

Check:

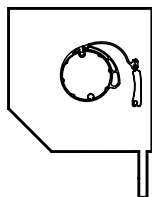
- a) guides are vertical / parallel / same height and axle is level - see drawing D

**Drawing D**



- b) collars are the correct way around - see drawing F

**Drawing F**

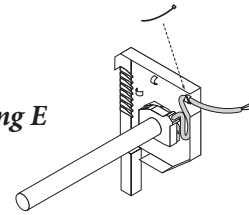


N.B. In the event that the screw does not hold, drill a new pilot hole through the mounting bracket and octagonal fixing plate and try again.

For safety reasons it is essential that the fixing plate is secured with three fixings.

- ix) secure motor POWER LEAD with CABLE TIES so that it is tight against THE end plate - see drawing E

**Drawing E**



Alternatively you may drill a hole in the end plate to pass the cable through in order to keep it clear of the locking bolt.

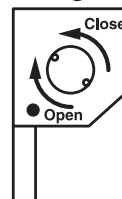
N.B. This may not be possible with tight reveal fixes.

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.

If an anti-fall back spring has been supplied fitted in the axle you must now tension the spring as follows:

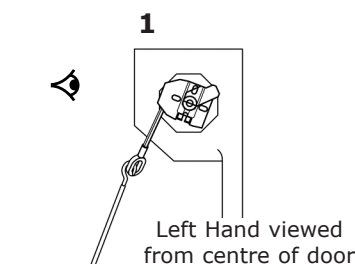
- 1) Connect the motor to either a test lead or the remote control.
- 2) Remove and retain the limit cover cap from the motor. Fully press in the limit switches on the motor. Using either the test lead or remote control rotate the axle in the close direction (see drawing G and label on axle).
- 3) The number of turns required will be clearly stated on a label.

**Drawing G**



- 4) When complete the axle will be fully tensioned and will be ready for installation and attachment of the curtain in the fully closed position.
- 5) Replace the limit cover cap.

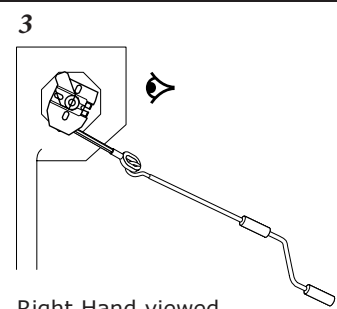
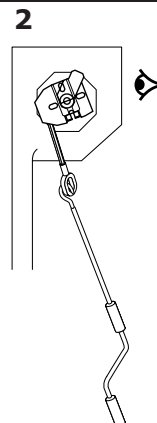
**6. FITTING EMERGENCY OVERRIDES:**



Left Hand viewed from centre of door

POSSIBLE OVERRIDE EXIT OPTIONS

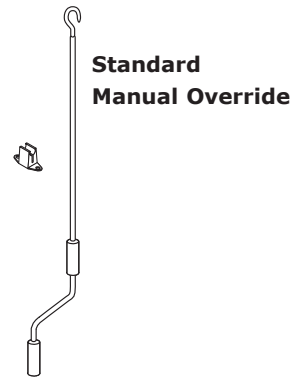
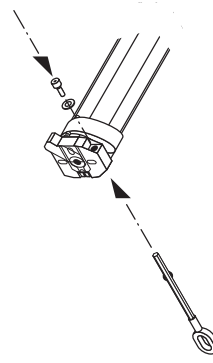
N.B. We recommend override exits 1 or 2 shown above as option 3 will be more difficult to operate



Right Hand viewed from centre of door

**A) Standard Manual Override**

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

**B) Optional external low level override**

Detailed installation instructions are supplied in the low level override kit.

The external low level override is not compliant with LPS 1175, a battery backup must be ordered when required.

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

**DO NOT CUT THROUGH THE SAFETY EDGE!** If the door needs to be reduced in width it will need returning to the supplier.

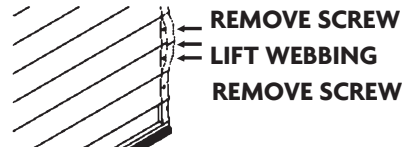
The curtain needs to be the correct height for the door to lock properly (if too tall remove slat(s) - If too short notify supplier). The optimum curtain height finishes midway up the end plate to ensure the locking mechanism engages.

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.

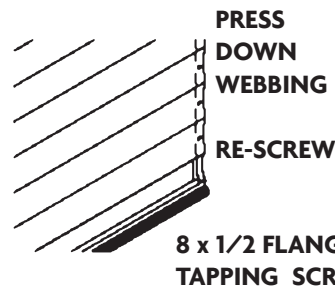
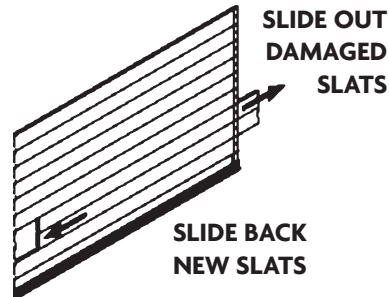
The number of slats shown is the number of foam filled slats only. The curtain height shown includes the bottom slat and the extruded top slat.

- i) Roll out the curtain on a flat and protected surface, such as bubble wrap and/or cardboard packaging in which the curtain was delivered.

- ii) Unscrew webbing from every slat which needs to be removed or replaced, gently lifting the webbing away from the surface of the slat.



- iii) Slide out damaged slats and replace with new slats. Press down webbing and screw to the new slat.



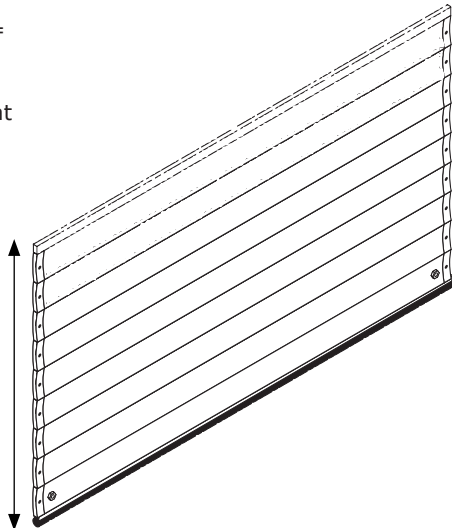
SLATS	CURTAIN HEIGHT	END PLATE
21	1769	300
22	1847	300
23	1926	300
24	2004	300
25	2083	300
26	2161	300
27	2240	300

SLATS	CURTAIN HEIGHT	END PLATE
28	2318	300
29	2397	300
30	2475	300
31	2554	300
32	2632	300
33	2711	350
34	2789	350

SLATS	CURTAIN HEIGHT	END PLATE
35	2686	350
36	2946	350
37	3025	350
38	3103	350
39	3182	350
40	3260	350

SLATS	CURTAIN HEIGHT	END PLATE
41	3339	350
42	3417	350
43	3496	350
44	3574	350
45	3653	350
46	3731	350

- Curtain height =  
 Curtain slats  
 + Extruded top slat  
 + Bottom slat

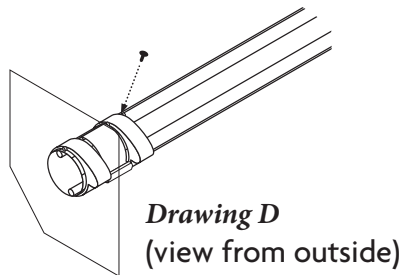


- iv) If the number of slats has been reduced, trim the webbing accordingly and carefully melt the cut ends to prevent fraying.



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

- i) Check that there are at least 3 pairs of collars on the axle and that they are facing the correct direction – see drawing D.



The outside collars **must be** right at the ends of the axle and the third pair in the middle.

If 4 or more pairs are fitted then two of the additional pairs need to be fitted approx. 700mm in from the outside pair. (N.B. the outside collars are held in place by the motor collar at one end and the dummy end at the other. Intermediate pairs will have one collar pre-positioned at the factory with a securing rivet already in place).

It is recommended that the locking bolt position is checked prior to installing the curtain.

Temporarily position attachment arms in correct place on axle, wind the axle towards the 'shut' position and adjust locking bolt so that it will mesh with the locking comb and clear the motor cable and override eye. If the locking bolt hits one of the comb teeth bend the tooth slightly so that it will mesh with the locking comb.

After a door has been installed, during normal operation, the door will settle causing the fully open and fully closed positions to move slightly from the original positions.

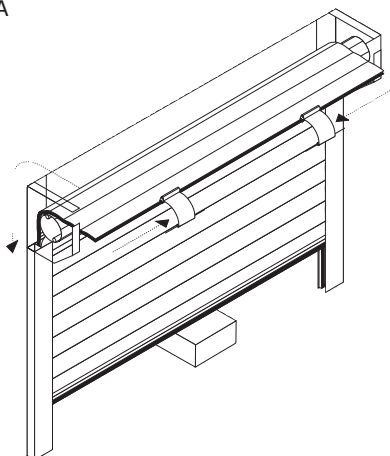
To allow for this the teeth directly above and below the opening, where the locking bolt engages, should be bent a little further than is required during the installation.

Remove attachment arms, wrap bubble wrap around the axle to protect the curtain and continue with remaining instructions.

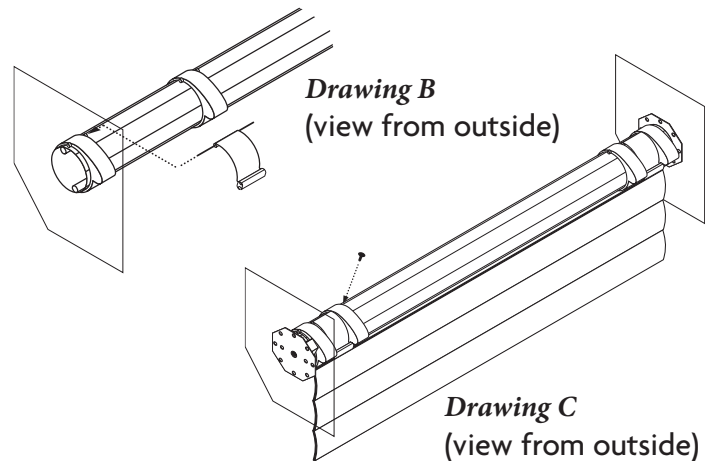
- ii) Lift coiled curtain up level with axle and feed bottom of curtain into guide
- iii) Slowly unroll curtain and gently lower onto a tool box or block
- N.B. Do not allow the curtain to free fall over the axle as this will result in damage to the curtain
- iv) slide the locking/attachment arms on to the top slat making sure that the two with the 'locking bolt' are at their respective ends of the curtain

For the above see drawing A

**Drawing A**  
(view from inside)

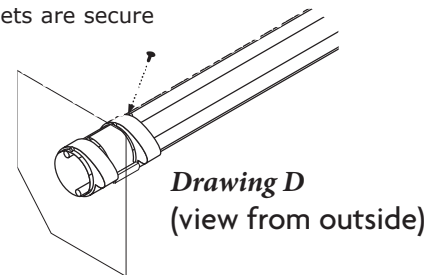


- v) position unattached end of locking/attachment arm so that the fixing bolt line up with locating holes in the two collars (rotate axle with override if necessary) and slide collars together making sure pre-positioned collar is tight against rivet – see drawings B & C



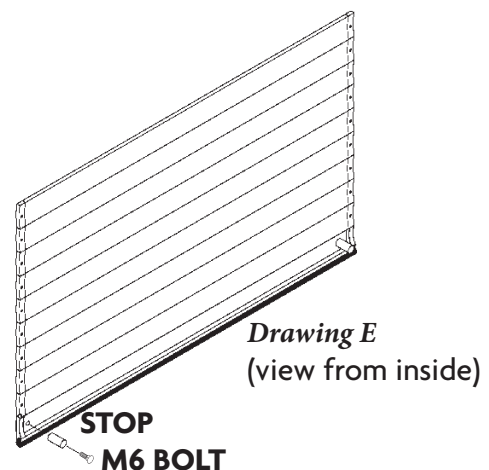
- vi) fix 'loose' collars in position by placing a 4.8mm x 9.3mm x 12mm pop rivets tight up against the outside edge of the collar in the rounded cut-out in the axle. There is no need to drill a hole – see drawing D

N.B. Make sure rivets are secure



- vii) use override to raise door sufficiently to remove toolbox/block. Leave door in partially open position
- viii) secure stops to captive nuts in bottom slat with bolts provided – see drawing E

N.B. It is essential to fit stops for health and safety reasons



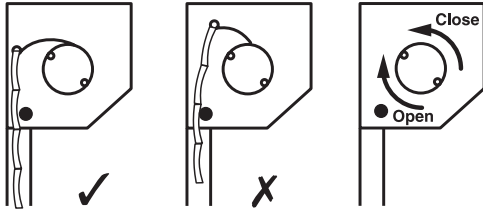
### LPS 1175 Compliance

All doors which have been ordered to comply with LPS 1175 will have been supplied with a **silver label** stating the product name, the manufacturer and the security level the door achieved. This label must be attached to the guide rail for the door to be compliant.

## 9. CURTAIN LOCKING & SETTING MOTOR LIMIT SWITCHES

**Before you operate the door electrically you may want to operate the door slowly using the manual override provided to ensure that the door will not catch on any protrusions as it travels up and down.**

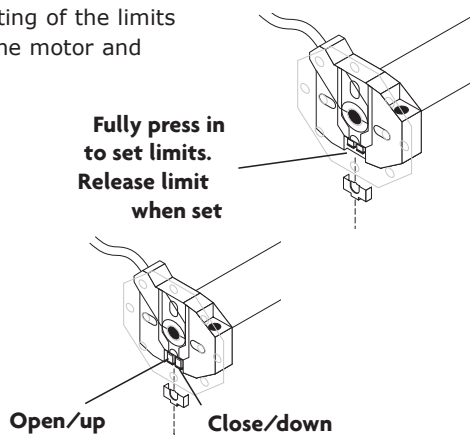
Your garage door is manufactured with the curtain height to suit the length of guide supplied. The door will not lock down properly if the curtain is either too tall or too short. (If too tall remove slat(s) – if too short notify supplier). For best results the top of the curtain should be as near as possible in line with the centre of the axle. The locking bolt must not be above or below the locking comb on the end plate (see below).



Both limits require setting along with a final adjustment of the locking arms/ bolts.

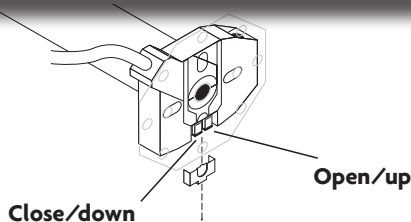
We recommend the use of the manual override to set the limits and to make final adjustments as you will have far greater control of the door as it travels up and down. To set the limits remove the cap covering the white/yellow limit switches, fully press in both switches (they will lock into position) and then proceed as follows.

N.B. Incorrect setting of the limits risks damage to the motor and curtain.



### 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.

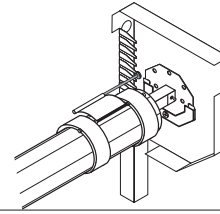
## Closed / down limit setting and locking section adjustment:

The cable and locking bolt position must be checked before proceeding – see instruction iii)

- wind door down with override handle until the curtain is touching the floor but stop just before the top of the curtain closes against the 'shut' face.
- Check that the locking bolt will 'mesh' with the locking comb attached to the end plate (slightly bend the comb tooth if necessary) – see drawing A

- Continue to wind door down until the curtain is tight against 'shut face' but not over tight as the locking of the curtain is

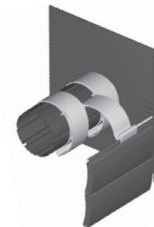
**Drawing A**



After a door has been installed, during normal operation, the the door will settle causing the fully open and fully closed positions to move slightly from the original positions.

To allow for this the teeth directly above and below the opening, where the locking bolt engages, should be bent a little further than is required during the installation.

provided by the locking bolt being securely located into the comb – see drawing B (the extrusions will deform if you force the top slat too hard into the lintel)

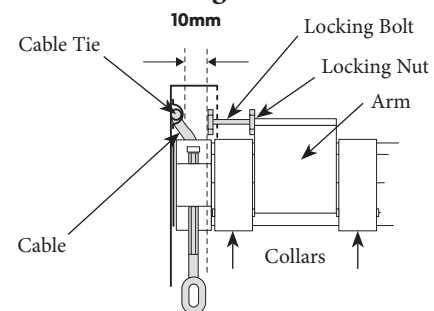


**Drawing B**

The head of the locking bolt needs to project beyond the comb by at least 3mm but by no more than 10mm. **ON THE MOTOR SIDE SUFFICIENT CLEARANCE MUST BE KEPT TO PREVENT THE HEAD OF THE LOCKING BOLT CUTTING THROUGH THE MOTOR CABLE OR HITTING THE OVERRIDE EYE BAR** – see drawing C

The locking nut must then be firmly locked against the locking/ attachment arm. Caution – do not over tighten as this may strip

**Drawing C**

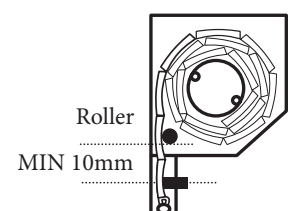


the threads in the arm.

- set the motor closed/down limit by releasing limit switch.

### Open/Top Limit Setting:

- Wind the door with the hand crank to open / up position and stop (50mm of curtain should still be in guide. Stops should be min. 10mm below guide rollers)
- press and release the open/up limit switch



**N.B.** To prevent damage to the motor make sure the door is stopped by reaching the limit switch. Do not allow stops to come into contact with guide rollers.

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



## 10. 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.

N.B. Check the front of the curtain to make sure that it is not rubbing on the 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.***

## 11. MAINTENANCE, REPAIRING AND DISMANTLING INSTRUCTIONS

Always isolate the mains power before attempting any maintenance, repairs or dismantling.

### 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) Check the operation of the manual override.

### RECOMMENDED SERVICE PERIOD

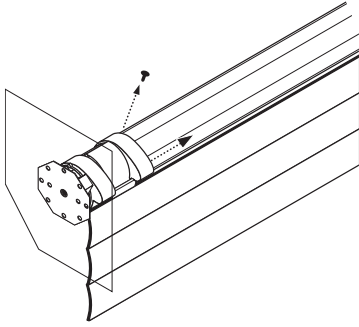
The recommended service period for a garage door, which will operate on average two cycles per day, is once every 12 months. If the garage door will perform a greater number of cycles per day the service period should be shortened accordingly. One cycle is a full open and close sequence.

### REPAIRS

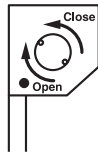
For curtain repairs please refer to section 6.

## REPLACING MOTORS / DUMMY ENDS / ANTI-FALL BACK SPRINGS:

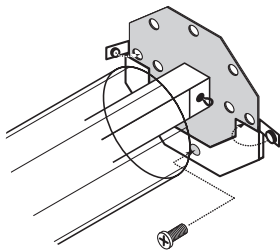
- 1) Lower the curtain to the fully closed position.
- 2) Disconnect the curtain from the axle.



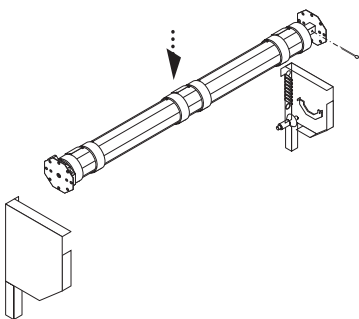
- 3) If the axle contains an anti-fall back spring the tension must be removed from the spring before attempting to remove the axle. To remove the tension you must rotate the axle in the direction which would open the door the number of turns stated on the label provided.



- 4) Isolate the mains power then disconnect the motor leads from the control unit.
- 5) Remove screws securing motor octagonal fixing plate and lever out retaining tabs with a screwdriver



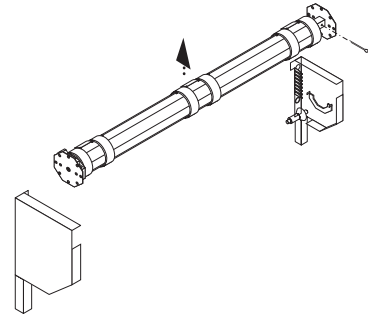
- 6) Remove split pin from dummy end shaft and slide shaft free of fixing plate.
- 7) Lift the axle assembly out



- 8) If you need to replace or remove the motor, unbolt the octagonal fixing plate and drill out rivets in the axle securing the motor, make sure that any loose drilled out rivet 'slugs' are removed from inside the axle to prevent them making an unnecessary rattling noise.
- 9) The dummy end and anti-fall back spring are also held in place by rivets and should be removed in a similar manner.

- 10) Replace the motor / dummy end / anti-fall back spring, re-rivet and refit the octagonal fixing plate to the motor end.

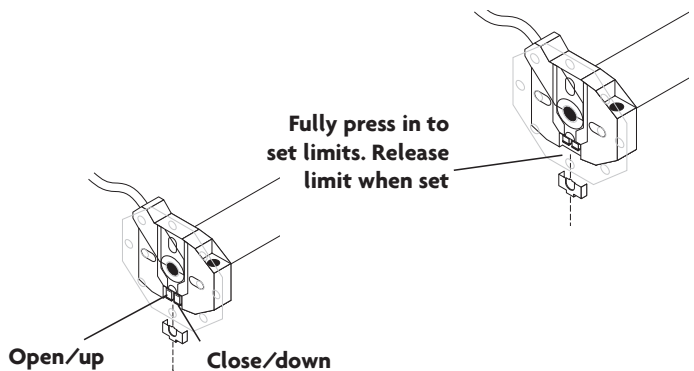
- 11) Install the axle assembly as per section 5 remembering to tension the anti-fall back spring if one is installed.



- 12) Re-connect motor lead to the control unit.

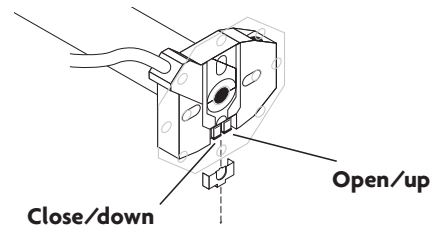
- 13) Reset motor limits.

N.B. Incorrect setting of the limits risks damage to the motor and curtain.



### 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.



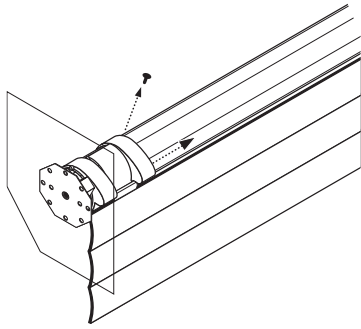
### Right Hand Motor

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.

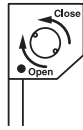
- 14) If a remote control has been supplied you will need to follow the set up procedure outlined in the separate set up guide.

**REVERSING THE MOTOR HAND:**

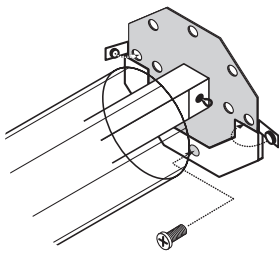
- 1) Lower the curtain to the fully closed position.
- 2) Disconnect the curtain from the axle.



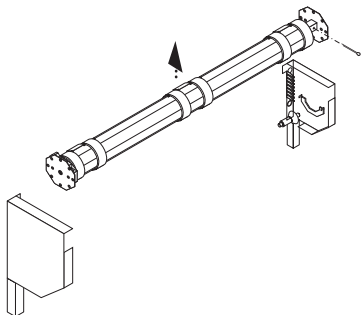
- 3) If the axle contains an anti-fall back spring the tension must be removed from the spring before attempting to remove the axle. To remove the tension you must rotate the axle in the direction which would open the door the number of turns stated on the label provided.



- 4) Isolate the mains power then disconnect the motor leads from the control unit.
- 5) Remove screws securing motor octagonal fixing plate and lever out retaining tabs with a screwdriver



- 6) Remove split pin from dummy end shaft and slide shaft free of fixing plate.
- 7) Lift the axle assembly out.



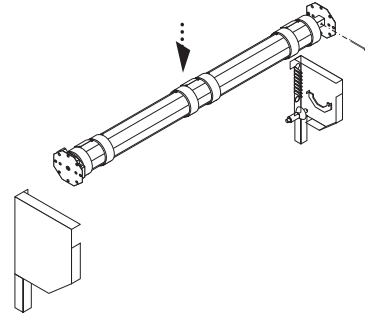
- 8) Drill out the rivet securing the dummy end / spring to the axle (hidden beneath end collar) make sure that any loose drilled out rivet 'slugs' are removed from inside the axle to prevent them making an unnecessary rattling noise
- 9) Drill out the rivets holding the collars in place or tap the rivets along the channel using a screwdriver and a mallet
- 10) Slide out dummy end / spring and remove all collars

- 11) If an anti-fall back spring has been fitted you will need to remove the spring inserts at both ends of the spring and swap them round to reverse the handing of the spring. The spring inserts are held in place with circlips.

- 12) Refit collars, ensuring that the 'snail' points towards the flat of the end plate (see page 3 drawing F). Replace dummy end / spring.

- 13) Re-rivet dummy end / spring / collars

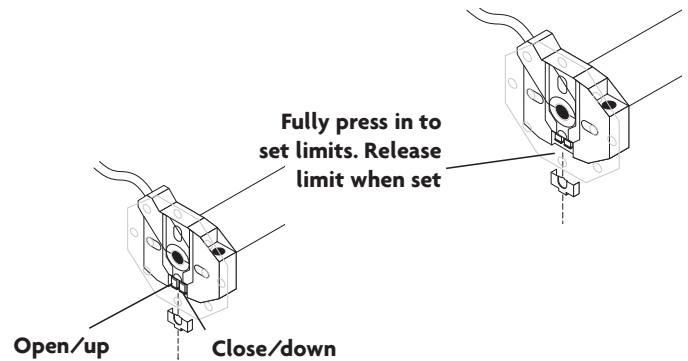
- 14) Install the axle assembly following the instructions provided in section 5.



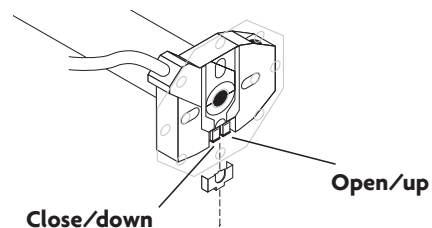
- 15) Re-connect motor lead to the control unit.

- 16) Reset motor limits.

N.B. Incorrect setting of the limits risks damage to the motor and curtain.

**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.

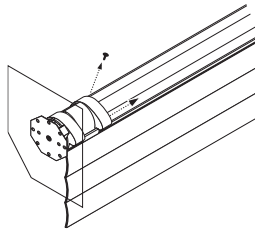
**Right Hand Motor**

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.

- 17) If a remote control has been supplied you will need to follow the set up procedure outlined in a separate document.

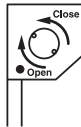
## DISMANTLING PROCEDURE

- 1) Lower the curtain to the fully closed position.
- 2) Disconnect the curtain from the axle.
- 3) If you would like to use the curtain again you should cover the

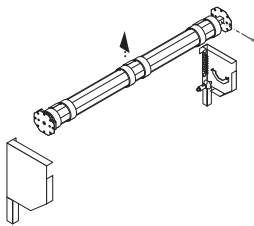


axle with bubble wrap or similar packaging material to avoid damaging the curtain when you remove it.

- 4) Remove the curtain by lifting it up and over the axle.
- 5) If the axle contains an anti-fall back spring the tension must be removed from the spring before attempting to remove the axle. To remove the tension you must rotate the axle in the direction which would open the door the number of turns stated on the label provided.



- 6) Isolate the mains power then disconnect the motor leads from the control unit.
- 7) remove screws securing motor octagonal fixing plate and lever out retaining tabs with a screwdriver.
- 8) Remove split pin from dummy end shaft and slide shaft free of fixing plate.
- 9) Lift the axle assembly out.



- 10) Unfasten and remove the guide rails, end plates and fascia (if supplied).