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

<table>
<thead>
<tr>
<th>Height</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order Height</td>
<td>Guide Height</td>
</tr>
<tr>
<td>Total Height</td>
<td>Guide Height + End Plate</td>
</tr>
<tr>
<td>Headroom/End Plate</td>
<td>up to 2.5m Guide Height = 300mm</td>
</tr>
<tr>
<td></td>
<td>up to 3.5m Guide Height = 350mm</td>
</tr>
<tr>
<td>Drive Through Height</td>
<td>Guide Height less 55mm</td>
</tr>
</tbody>
</table>

Widths

<table>
<thead>
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<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Order Width</td>
<td>Over Guide Width</td>
</tr>
<tr>
<td>Drive Through Width</td>
<td>Over Guide Width less 150mm for 75mm guides</td>
</tr>
<tr>
<td></td>
<td>Over Guide Width less 180mm for 90mm guides</td>
</tr>
<tr>
<td>Curtain Width</td>
<td>Over Guide Width less 90mm</td>
</tr>
<tr>
<td>Axle Width</td>
<td>Over Guide Width less 90mm (without spring)</td>
</tr>
<tr>
<td></td>
<td>Over Guide Width less 73mm (with spring)</td>
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</tbody>
</table>

February 2013 Issue 4 MK541B0
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. allan 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

<table>
<thead>
<tr>
<th>Height of guide rails</th>
<th>Minimum no. of fixings required</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than or equal to 1000mm</td>
<td>3</td>
</tr>
<tr>
<td>1001mm to 1500mm</td>
<td>4</td>
</tr>
<tr>
<td>1501mm to 2500mm</td>
<td>5</td>
</tr>
<tr>
<td>2501mm to 3500mm</td>
<td>6</td>
</tr>
<tr>
<td>3500mm +</td>
<td>7</td>
</tr>
</tbody>
</table>

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

You must use all three fixing holes

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

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/m² 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

![Diagram of Guide/Door Height]

Guide/Door Height

Bottom Slat
Hang Down
55mm

Drive Through
Height

REVEAL DRILL

FACE DRILL

N.B. 90mm guides are handed

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.

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

![Drawing A]

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.

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

![Drawing B]

Before proceeding any further check:

a) back faces of guides and end plates are flush and untwisted – see drawing B

b) that the distance between the outside edges of the guides is 90mm more than the curtain width

c) ensure that the distance between the outer edges of the end plates is equal the stated overall width of the door.

![Drawing C]

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 2½” 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
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](image)

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

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

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Drawing F
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ix) Secure motor POWER LEAD with CABLE TIES so that it is tight against THE end plate – see drawing E

![Drawing E](image)

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.

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Drawing G
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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 OVER RIDES:

1) Left Hand viewed from centre of door

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

<table>
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<tr>
<th>SLATS</th>
<th>CURTAIN HEIGHT</th>
<th>END PLATE</th>
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<td>21</td>
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<td>300</td>
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<td>46</td>
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</tr>
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Curtain height =
- Curtain slats
- Extruded top slat
- Bottom 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.

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

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

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**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.

Closed / down limit setting and locking section adjustment:

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

i) 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’.

ii) 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

iii) Continue to wind door down until the curtain is tight against ‘shut face’ but not over tight as the locking of the curtain is 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)

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 the threads in the arm.

iv) Set the motor closed/down limit by releasing limit switch.

Open/Top Limit Setting:

i) 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)

ii) Press and release the open/up limit switch

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

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. COMMISSIONING

11. MAINTENANCE, REPAIRING AND DISMANTLING INSTRUCTIONS

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

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.

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.
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.

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

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**REVERSING THE MOTOR HAND:**

Open/up
Close/down

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**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.

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**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).