

MANUAL

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; AND ESPECIALLY BEFORE REMOVING ANY EXISTING DOORS.

Sequence of Installation & Contents

1. Pre-installation and component check
2. Installation options
3. Prepare the opening
4. Prepare the guide rails
5. Fit end plates & guides
6. Install axle assembly
7. Curtain adjustment (reducing height/making repairs)
8. Install the curtain in the guides, tension the spring(s) attach to axle & fit stops
9. Maintenance, repairing and dismantling instructions

Please note:

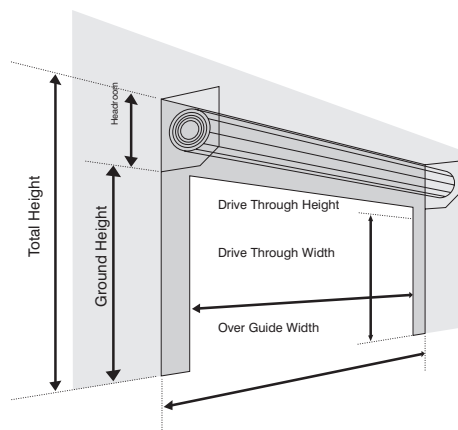
These instructions have been produced assuming that this door will be installed by two engineers to assist with the tensioning of the spring.

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 2.3m Guide Height = 300mm

Drive Through Height = Guide Height less 105mm

Widths

Order Width = Over Guide Width

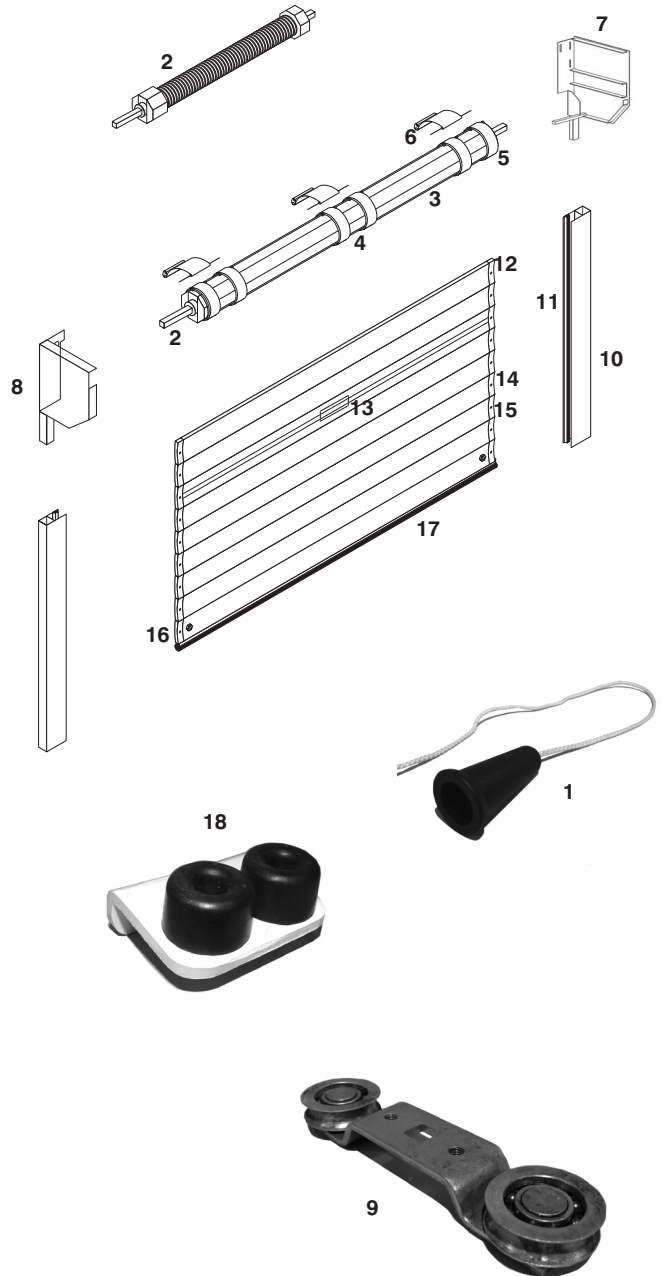
Drive Through Width = Over Guide Width less 150mm for 75mm guides

Curtain Width = Over Guide Width less 90mm

Axle Width = Over Guide Width less 90mm (with dummy end)
= Over Guide Width less 73mm (with two springs)

MANUAL ROLLER GARAGE DOOR COMPONENTS

- 1 PULL DOWN CORD *
- 2 SPRING (fitted into axle)
- 3 102mm ROUND AXLE
- 4 LOCKING COLLARS (fitted to axle 6 No. up to 2.5m, 8 No. up to 3m)
- 5 DUMMY END or SECOND SPRING
- 6 ATTACHMENT ARM * (3 - 4 No.)
- 7 R/H END PLATE *
- 8 L/H END PLATE *
- 9 ROLLER BRACKET BEARING *
- 10 GUIDE RAILS
- 11 BRUSH INSERT (fitted to guides)
- 12 CURTAIN
- 13 LOCKING / HANDLE SLAT (fitted to door curtain 10th slat up)
- 14 POLYESTER WEBBING STRIP (fitted to curtain)
- 15 8 x 1/2 FLANGE HEAD SELF TAPPING SCREW (securing webbing to curtain)
- 16 BOTTOM SLAT (fitted to curtain)
- 17 RUBBER SEAL (fitted to bottom slat)
- 18 STOP BRACKETS * (2No. for fitting to bottom slat)



* 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 and guides will be wrapped together in one bubble wrapped parcel and strapped together.

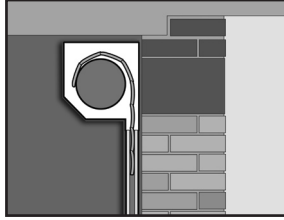
2. The curtain will be packed as a separate item.

3. A separate accessories box is packed with the installation and end user instructions, the two end plates, the attachment arms and the accessory pack.

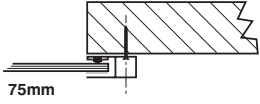
2. INSTALLATION OPTIONS

Internal installation only

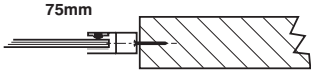
The garage door must be installed internally



Face fit

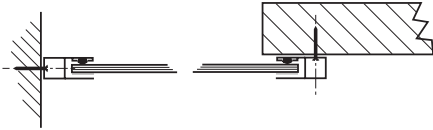


Reveal fit



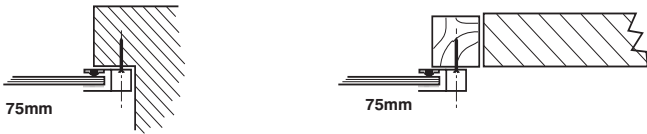
Combination of face and reveal fit

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.



Minimum number of fixings per guide rail

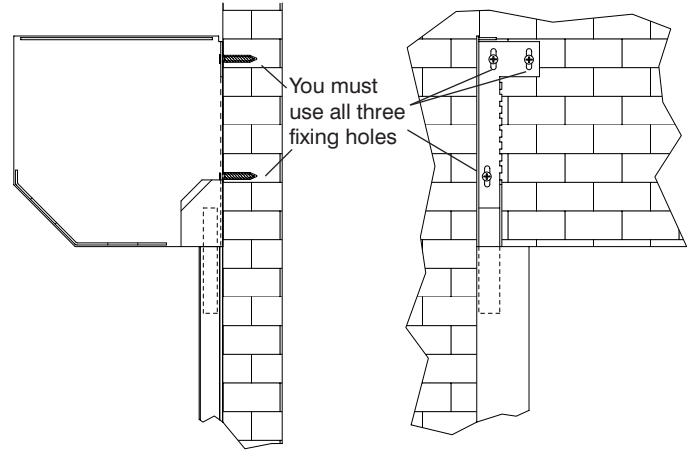
Due to the additional forces that a manually operated door is subjected to we recommend that you use the minimum number of fixings stated above.

Height of guide rails	Minimum no. of fixings required
less than or equal to 1000mm	3
1001mm to 1500mm	4
1501mm to 2300mm	5

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

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 header to twist the guides, or catch on the curtain
- iii) floor is flat/level

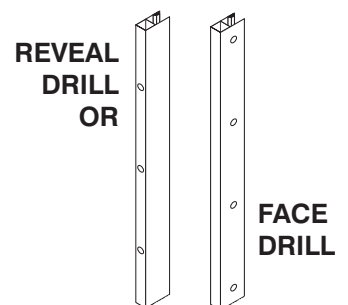
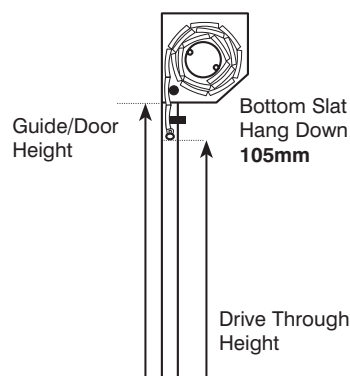
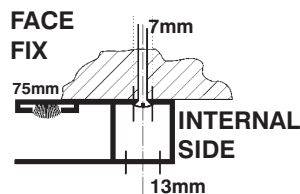
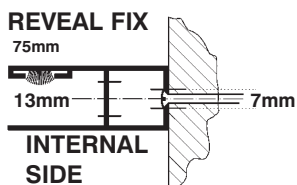
iii) floor is flat/level

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

4. PREPARE THE GUIDE RAILS:

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 **105mm** above the structural opening height to maximise drive through height.

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



5. FIT END PLATES & GUIDES:

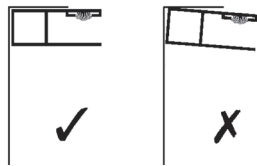
N.B. When fitting doors it is important that you check that the lintel does not bow inwards or have any projections that may catch on the curtain. If in doubt pack the guides and end plates out by at least 10mm.

Assemble Guide Rails & End Plates

- i) attach the short sections of webbing (supplied in the accessory box) to the end plate fixing plate
- ii) slot end plates into guides - **see drawing A**
- iii) position guides and the end plates against/in opening
- iv) hold or prop securely in position



Drawing A



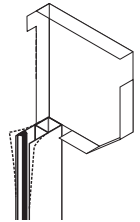
Drawing B

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 to the stated overall width of the door.

Fix Guide Rails & End Plates

- iv) drill fixing holes
- 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.
- vi) ease open top of guides, slots will have been cut in to the top of the guide rails to assist with this – **see drawing C**



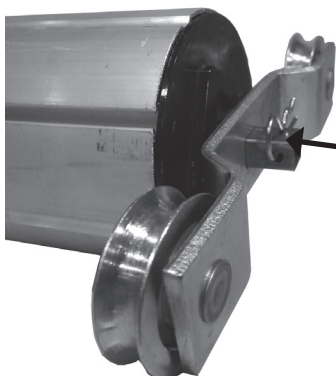
Drawing C

6. INSTALL AXLE ASSEMBLY:

Before proceeding any further check:

- a) guides are vertical / parallel / and not twisted – **see drawing B (above)**
- b) that the distance between the outer edges of the guide rails is 90mm more than the curtain width
- c) ensure that the distance between the outer edges of the end plates is equal to the stated overall width of the door

- i) Place the roller bracket bearings on to the square bars protruding from the ends of the axle assembly and secure in place using the R clips provided. - **see image D**



R clip must be orientated as shown.

Image D

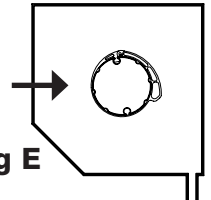
- ii) The number of axle turns required to tension the spring is shown on a label attached to the left hand end plate.

Before proceeding any further check:

It is important that you make a note of the number of turns required before you offer up the axle assembly as this number will determine the axles orientation when it is loaded in to the end plates.

Full Turns

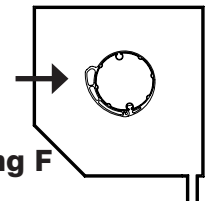
If the number of turns is a whole number (for example 8 turns) the axle and its collars must be orientated as **drawing E**.



Drawing E

Half Turns

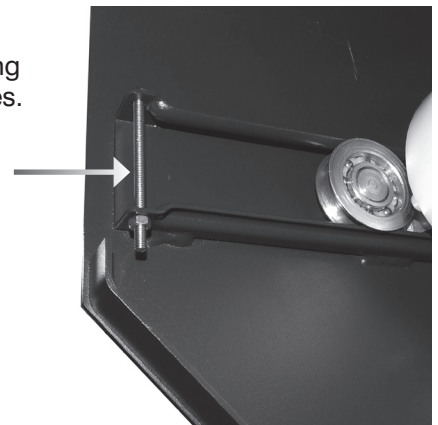
If the number of turns is a half number (for example 8 1/2 turns) the axle and its collars must be orientated as **drawing F**.



Drawing F

- iii) Offer up the axle assembly to the end plates and slide the roller brackets in to the tracks.

- iv) Fit the two bolts supplied to prevent the axle assembly from sliding back out of the end plates.



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 operate correctly (if too tall remove slat(s) - If too short notify supplier).

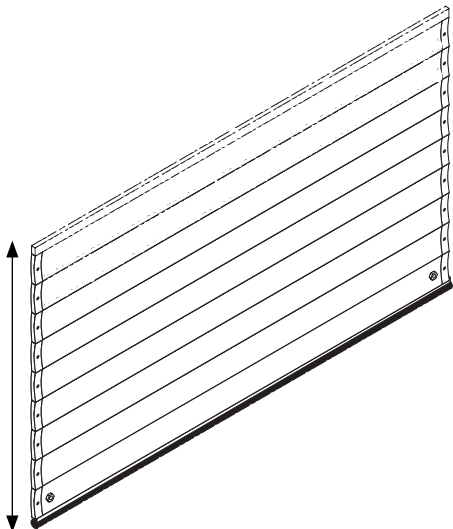
The optimum curtain height finishes midway up the end plate.

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.

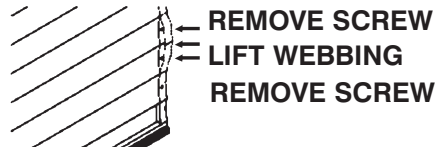
The number of slats shown includes the foam filled slats, the lock slat, the bottom slat and the extruded top slat. The curtain height shown also includes all the slat profiles.

SLATS	CURTAIN HEIGHT	END PLATE
23	1769	300
24	1847	300
25	1926	300
26	2004	300
27	2083	300
28	2161	300
29	2240	300
30	2318	300

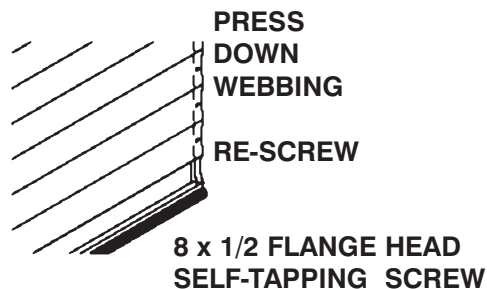
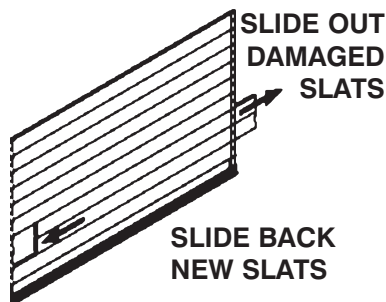
Curtain height =Curtain slats
+Extruded top slat
+Bottom slat



- 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.



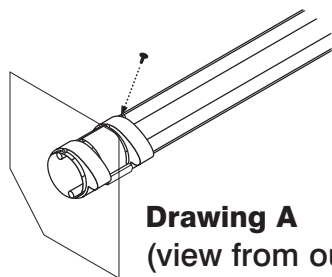
- iii) Slide out damaged slats and replace with new slats. Press down webbing and screw to the new slat.



- 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

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



Drawing A
(view from outside)

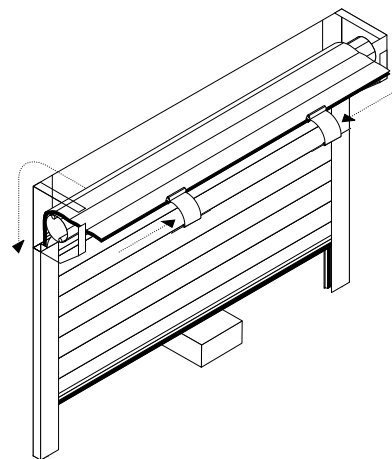
Wrap bubble wrap around the axle to protect the curtain and continue with remaining instructions.

- 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 approximately 250mm tall

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 attachment arms on to the top slat

For the above see drawing B

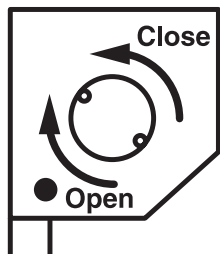


Drawing B
(view from inside)

8. TENSION THE SPRING & ATTACH CURTAIN TO AXLE

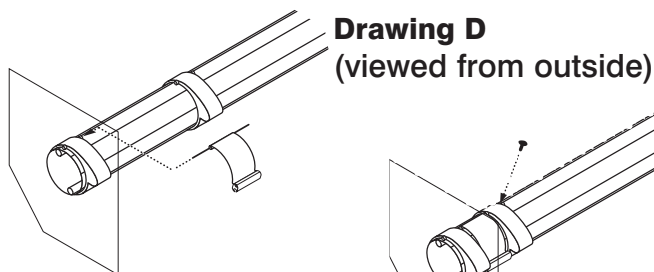
- i) Add 5 (or 5 1/2 if starting from half position) turns of tension to the spring by rotating the axle in the close direction

- **see drawing C**

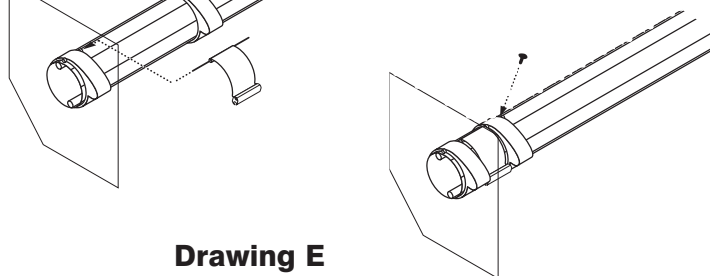


- ii) position unattached end of attachment arm so that the fixing bolt line up with locating holes in the two collars and slide collars together making sure pre-positioned collar is tight against rivet – **see drawings D & E**

- iii) fix 'loose' collars in position by placing a 4.8mm x



Drawing D
(viewed from outside)



Drawing E
(viewed from outside)

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

N.B. Make sure rivets are secure

- iv) Open the door so that the entire curtain is coiled around the axle.

Lift the curtain out of the guide rails and rotate the curtain, while holding the bottom slat to keep the coil tight.

Rotate the axle in the close direction to complete the number of turns required which is stated on the end plate label. For example if 8 turns are required another 3 complete turns of the axle will be required.

- v) Lower the curtain back in to the guide rails. If the spring tension has been set correctly:

- The door should not slide down under its own weight
- When the door is fully closed the spring should not try to significantly lift the door back up

- vi) If the tension is not correct that a whole turn of tension can either be added or removed as required.

- vii) Lower the door to a suitable position for attaching the bottom slat stops.

- viii) Secure stop brackets to the bottom slat with M6 bolts, M6 Nylock Nuts and washers provided

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

PREPARING THE GUIDE RAILS FOR THE LOCK BAR

- ix) Lower the door to the fully closed position. Using a pencil mark on the guide rails the height where the lock bar enters the guide rails.

- x) Raise the curtain to the fully open position. Using the pencil marks drill a 13mm hole in each guide rail for the lock bar in the centre of the guide rail. The holes do not need to go all the way through the guide rail.

For most installations the guide rail marking will be done on the inside of the garage and the installer will push the curtain towards the outside.

During normal operation the door will be unlocked from the outside and the user will push the curtain towards the inside.



To allow for this the 13mm hole drilled for the lock bar should be extended into a horizontal slot.

The hole must be deburred to ensure the burrs do not catch on the curtain.

12. COMMISSIONING

FINAL CHECKS

- i) remove any protective plastic coverings
- ii) wipe curtain & guides with damp cloth
- iii) touch-up any small scratches
- iv) If required the optional pull down cord can be attached to one of the stop brackets to assist with closing the door.

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

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.

13. MAINTENANCE, REPAIRING AND DISMANTLING INSTRUCTIONS

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

RECOMMENDED SERVICE PERIOD

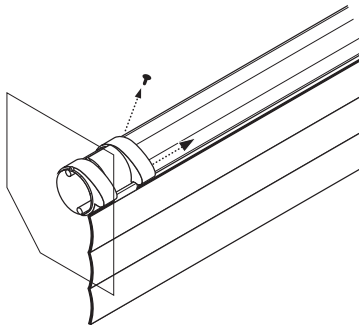
The recommended service period for a garage door, which will operate on average two cycles per day, is once every 12 months. If the garage door will perform a greater number of cycles per day the service period should be shortened accordingly. One cycle is a full open and close sequence.

REPAIRS

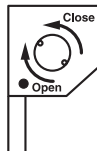
For curtain repairs please refer to section 6.

REPLACING SPRINGS / DUMMY ENDS

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

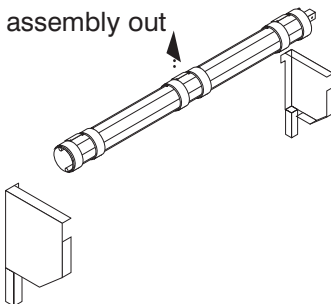


- 3) The tension must be removed from the spring before attempting to remove the axle. To remove the tension you must rotate the axle in the direction which would open the door the number of turns stated on the label provided.



- 4) If supplied remove the split pin from dummy end shaft and slide shaft free of fixing plate.

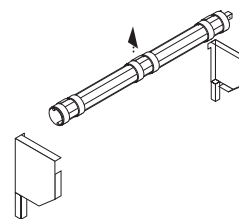
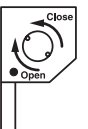
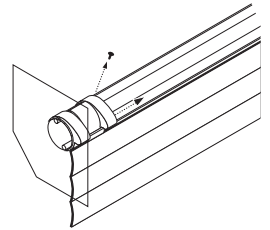
- 5) Lift the axle assembly out



- 6) The dummy end and anti-fall back spring are held in place by rivets. Drill out rivets in the axle, make sure that any loose drilled out rivet 'slugs' are removed from inside the axle to prevent them making an unnecessary rattling noise.
- 7) Replace the dummy end / spring and re-rivet.
- 8) Install the axle assembly as per section 5 remembering to tension the spring.

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



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

