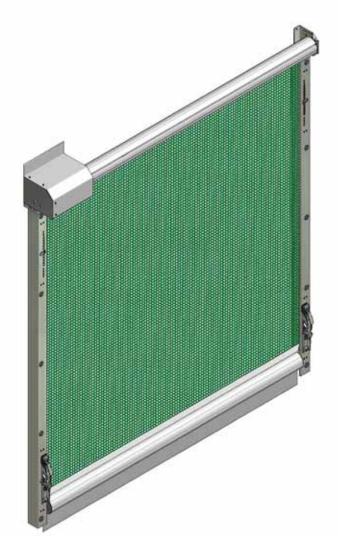
# Electric Rollerdoor with Guide Rails



Installation Instructions



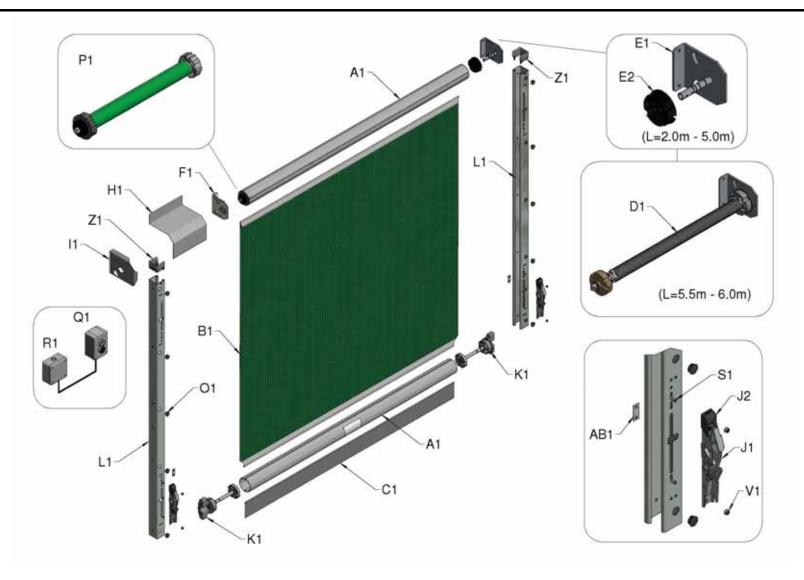


Figure 1, System Overview and Individual Component

# INTRODUCTION

# Parts List

REFERENCE	QTY	PRODUCT DESCRIPTION
A1	2	Top and Bottom Tubes
B1	1	Screen Material
C1	1	Bottom Flap
D1	1	Doors Over 5.5m in Width: Small Safety Spring (Orange tag)
E1	1	Doors Up to 5.0m wide: Free End Bracket (with shaft)
E2	1	Doors Up to 5.0m wide : Free End Collar
F1	1	Motor Bracket
H1	1	30cm Cowling
I1	2	Cowling End (Left and Right Hand)
J1	2	Locking Catch Bracket
J2	2	Locking Catch Cap
K1	2	Bottom Tube Inserts
L1	2	'C' Section Guide Rail (4 supplied in some instances)
M1	4	Aligning Pins if Guide Rails Require Joining
N1	1	6mm Nylon Insert For Bottom Flap (not shown)
01	22	Guide Rail Plug
P1	1	Electric Motor Assembly
Q1	1	Drive Switch - Optional
Q2	1	Contactor Box and Drive Switches - Optional
R1	1	80x80x5 Plastic Junction Box
S1	6	M8x20 HT Set Screw
T1	*	M8x30 HT Set Screw
U1	*	M8 Washer
V1	*	M8 Nyloc BZP
W1	4	M4.2x19 Posi-Pan Self Drill Screw
W2	4	M4.2x25 C/Sunk Self Drill Screw
W3	4	M5.5x19 Hex Self Drill Coarse Screw
X1	2	Nylon Cable Tie 150 x 3.6mm (not shown)
Y1	1	140x45mm Yellow template (not shown)
Z1	1 pr	Guide
AA1	2	M6 x 12 Hex bolt and Nyloc Nut
AB1	2	Locking Catch Adjuster Stop

Quantity dependent on door size

# Your Safety

The larger doors will require a mechanical lift to mount the roller assembly onto the top brackets. The respective weights are given in the table below based on standard material. Add 5% to this figure for doors supplied with 'HP' fabric, and 15% for doors supplied with black Stockscreen and solid fabrics.

WIDTH \ HEIGHT	3.1m	4.1m	5.1m	
2.5m	25kg	26kg	27kg	
3.0m	27kg	28kg	29kg	
3.5m	29kg	30kg	31kg	
4.0m	32kg	33kg	34kg	
4.5m	34kg	35kg	36kg	
5.0m	36kg	37kg	38kg	
5.5m	45kg	46kg		
6.0m	47kg	48kg		

Table 1, Roller Assembly Weights





CAUTION: To safeguard against any danger points, the minimum height 'H' of any door is 2.5m.

In the event of power or door failure, the door must not form the only means of exit from the building to which it is fitted.

# Wind Loadings

The structure to which the door is fitted needs to be of adequate strength to resist the following wind loads.

Wind Speed (km/hr)	Wind Load (N)*	Wind Load (Kg)*
70 km/hr	= W x H x 233	= W x H x 24
100 km/hr	= W x H x 481	= W x H x 49
140km/hr	= W x H x 933	= W x H x 95

\*No allowance made for safety margins

# **Pre-Installation Check**

Figure 2 indicates space required to install your door with additional information for mounting multiple doors series.

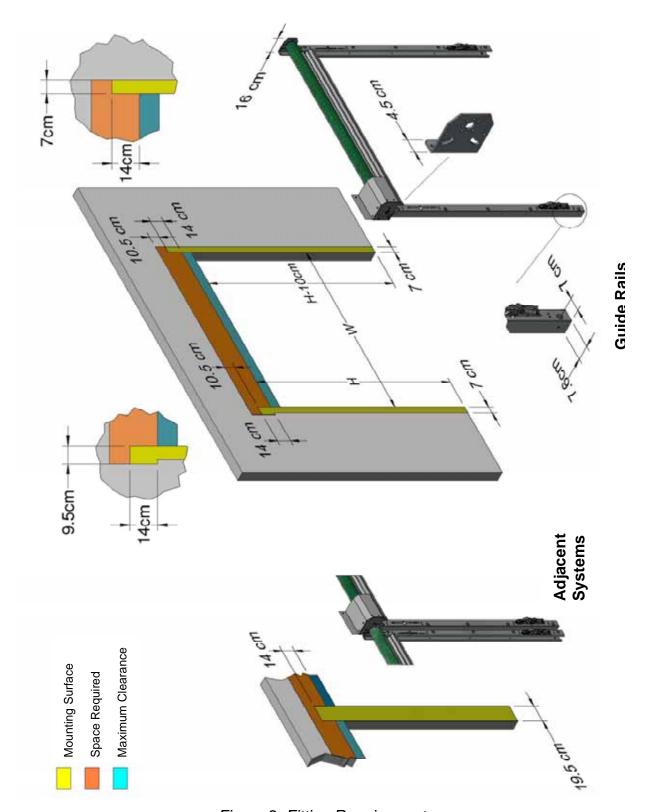


Figure 2, Fitting Requirements

Order Width (m)	Max Width W (m)
2.5	2.5
3.0	3.0
3.5	3.5
4.0	4.0
4.5	4.5
5.0	5.0
5.5	5.5
6.0	6.0

Order Height (m)	Max Height H (m)	Max Clearance H-10cm (m)
3.1	3.1	3.0
4.1	4.1	4.0
5.1	5.1	5.0
6.1	6.1	6.0

## Right or Left Hand Drive

Your door is a non-handed product and can be installed with the motor on either side. The images and text in these Instructions are based on a door with a left-hand motor.

#### **Electrics**

Only allow qualified electricians to work on the electrical connections of the door. This document covers the key instructions with regards to bringing the Electric Drive into service. Read the additional information from the supplier of the Electrical Motor and Control Box for full installation instructions.



ATTENTION: The power supply must be taken from a LOCKABLE isolation switch positioned within 2m from the door.

#### Installer Competence

The installer should be able to demonstrate the required level of competence via evidence of installing similar products or formal training. If competence cannot be proven then they should not be allowed to install the product.

## **Product Description**

The door is a power operated vertically moving rolling door comprising of a flexible curtain capable of being rolled and for which the main intended uses are giving safe access for goods and vehicles accompanied or driven by persons.

#### **Noise Levels**

A-weighted sound pressure level (dB)	50
C-weighted sound pressure level (dB)	60

#### Items Required By the Installer

Standard tool kit including:

- Electric drill
- Angle grinder
- · Sharp pair of scissors or knife
- Spirit level
- Bolts for fixing the brackets to steel up to 12mm thick are supplied, if fixing to a
  wooden or concrete building you will require eight M8 fixings to fasten the top
  brackets and M8 fixings for the guide rail at 1m centres.

## **Key Instructions**



CAUTION: Potentially hazardous situation: must be avoided otherwise injuries may result.



ATTENTION: Observe the given instructions otherwise the product or adjacent items may be damaged

NOTE: Helpful comments and information to assist in installation or use of your product

NOTE: Before starting the installation it is advisable to read these instructions completely to understand the procedure. Keep the instructions supplied for reference purposes.

NOTE: Colour versions of the installation instructions can be downloaded from our website:

www.galebreaker.com

## **INSTALLATION**

#### Door Assembly

- 1. Check the contents of your door against the parts list using Figure 1. Do not let the screen material come into contact with any sharp objects or edges. The motor can be mounted on either side of the top tube, for convenience the drawings depict a door with the gearbox mounted on the left (Drive End = Left Hand Side). To change drive orientation on-site, refer to Appendix I for details of safety spring conversion.
- 2. Using the yellow template (Y1), drill M8 holes for the two top brackets. The maximum recommended overlap for Post Fixing (Drive End) = 120mm, Post Fixing (Free End) = 100mm and for Lintel Fixing = 175mm (Figure 3). It is essential that the top brackets are level and upright.

## **Post Fix**

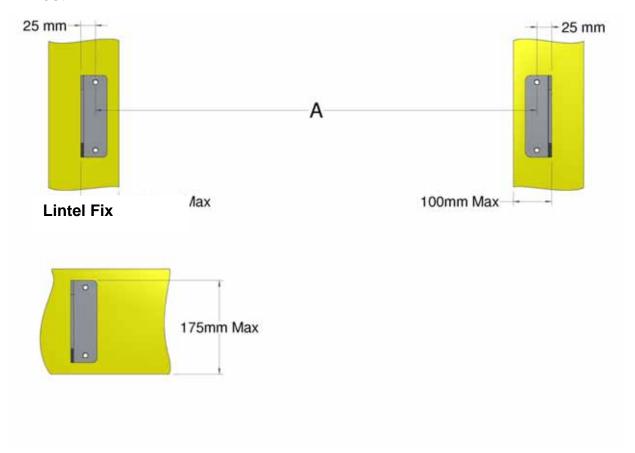


Figure 3, Top Bracket Positioning



ATTENTION: To prevent abrasion and material fray, maximum overlap between face and edge of fixing must not exceed that shown in Figure 3. If overlap exceeds these recommendations ensure there are no sharp objects on the building to damage the material, rough surfaces as concrete is protected with PVC strip or similar.

**ENG** 

## 3. Cutting lengths

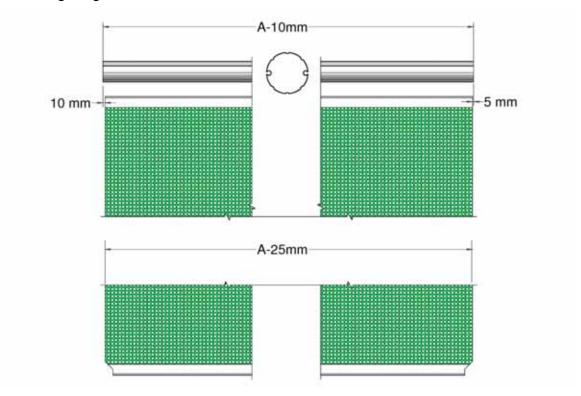


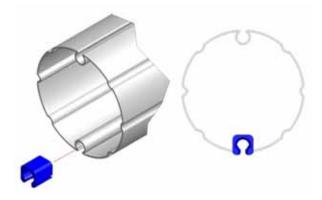
Figure 4, Cutting Lengths of Top Tube and Fabric

Top tube = Distance between centre of the drilled holes -10mm (-0.010m)

Screen = Distance between centre of the drilled holes -25mm (-0.025m)

(15mm shorter than top tube)

4. Push the Flute Guide Insert over the end of the flute in the tube to protect the fabric sheet as it is being fitted. When the fabric is inserted remove the Flute Guide Insert form the end of the flute



Slide the screen material (B1) into the flute of the top tube and fully roll up. To align with guide rail the fabric must roll off the back of the top tube, Figure 5.

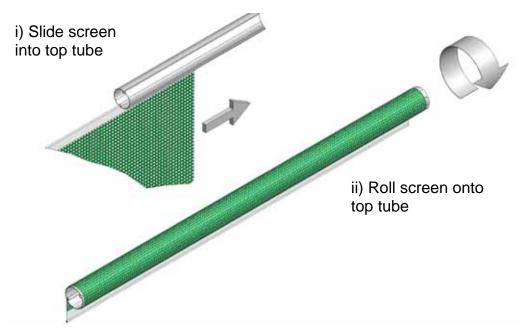


Figure 5, Attaching Fabric to Top Tube and Rolling Up

5. Insert motor assembly (P1) into drive end of top tube, and then attach the drive end wall bracket (F1) to the motor using M5 split pin supplied as shown in Figure 6.

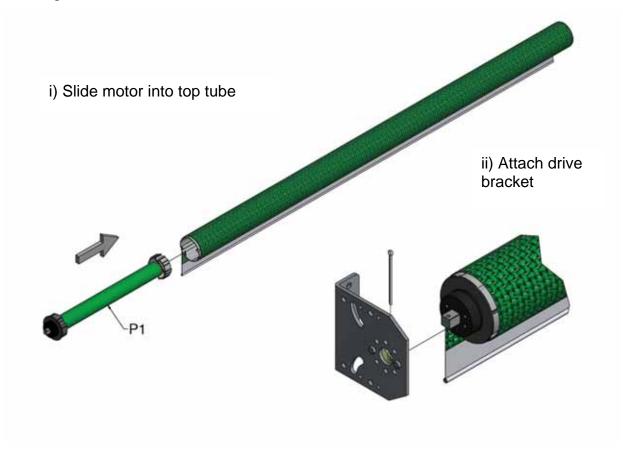


Figure 6, Motor Inserted into Top Tube and Drive Bracket Attached

# 6.1. Doors up to 5.0m wide, Figure 7a:

Fasten the free end bracket (E1) to the holes drilled in the building at the free end, using the M8 fixings supplied (T1). Push free end collar (E2) into the top tube at the free end. Lift the assembly into position and slide top tube onto free end bracket. When in position fasten drive bracket (F1) to building.

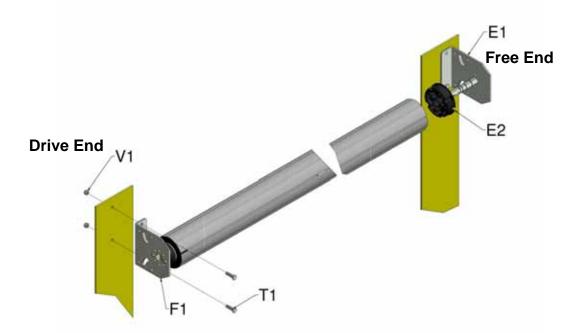


Figure 7a, Mounting Doors up to 5.0m wide to building



CAUTION: Referring to Table 1 on page 4, ensure the building is of sound construction and that the most suitable type of fastener is used. Use only M8 bolts or greater to fit these items and ensure they are securely fastened to the building. Failure of these fixings will result in your door falling off the building, potentially injuring operators and bystanders.

#### 6.2. Doors over 5.5m wide, Figure 7b:

Slide safety spring (D1) into the top tube, opposite end to the motor. Lift the assembly into position, and bolt both brackets on using the M8 fixings supplied.

NOTE: If you wish to fit the safety spring to the opposite side to that ordered, refer to instructions in Appendix I.



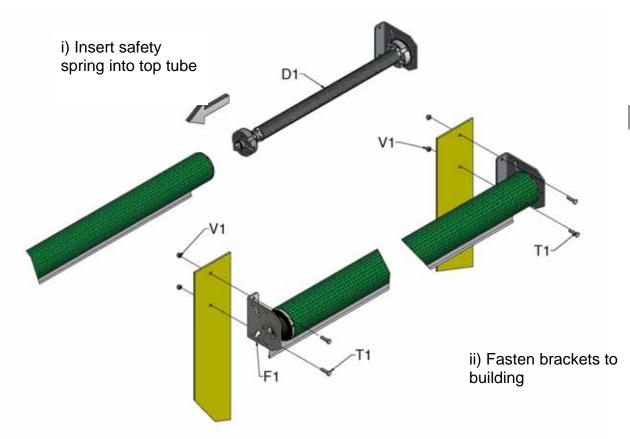


Figure 7b, Attaching Doors over 5.5m wide to building

7. Equally cut the two guide rails (L1) to fill the gap between the underside of the top brackets and the ground allowing 4 cm for the guide (Z1). Make sure that the uncut end with the slot and holes is at the bottom ready to accept the locking catches. Fit the pair of guides into the top of the guide rails (cut end) and secure with the M6x12 bolt and nut (AA1) in the front face, Figure 8.

NOTE: If multiple guide rails are to be used for each length, only the top set of guide rails need to be cut

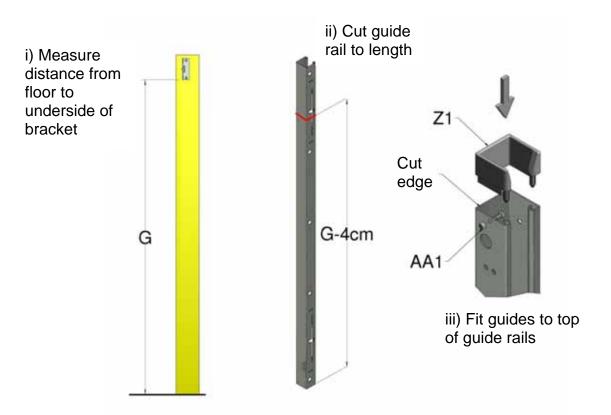


Figure 8, Cutting Lengths of Guide Rails.

8. The guide rails are to be positioned so that the free end guide rail is flush with the wall bracket (E1) and the drive end guide rail is offset by 25mm from the motor bracket (F1), as shown by Figure 9a. The cut end of the guide rails are to be positioned next to the wall brackets.

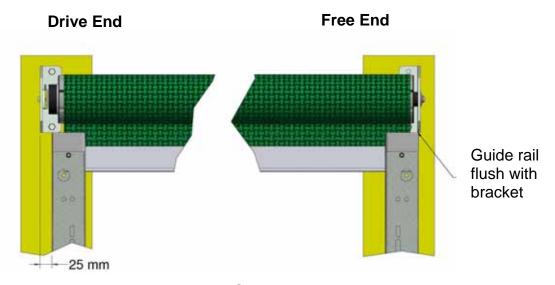


Figure 9a, Guide Rail Positioning

Fit the guide rails to the building with M8 fixings supplied (T1) using the pre-drilled holes in guide rails at 50cm centres.

CAUTION

CAUTION: Use only M8 bolts or greater to fit these items and ensure they are securely fastened to the building.

**ENG** 

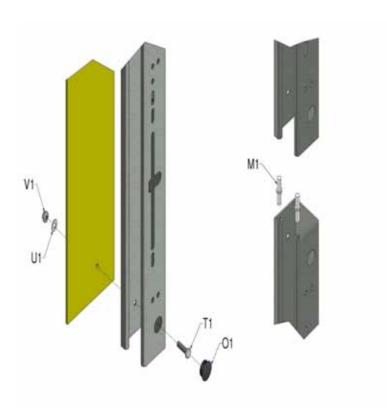


Figure 9b, Bolting of Guide Rail to Wall

9. Bolt the locking catches (J1) to the pre-punched slots at the base of the guide rails using the M8x20 set screws (S1) and lock nuts supplied (V1). Pass the upper catch screws through the locking catch stop plate (AB1) fitted on the inside of the guide rail to prevent the catch sliding up the pre-punched slots. Ensure the swinging arm of the locking catch clears the long slot in the guide rail. Fit caps (J2) to top of locking catch.

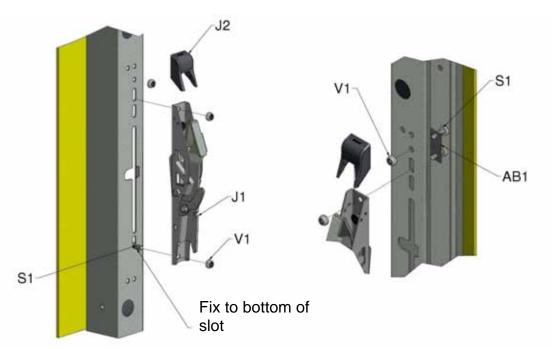


Figure 10, Bolting of Locking Catches

# 10. Cutting bottom tube and flap

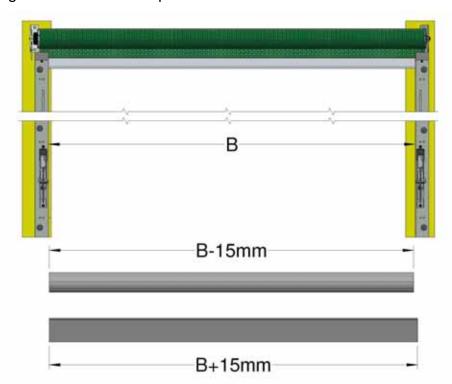


Figure 11, Cutting Length of Bottom tube, Insert and Flap

Bottom tube = gap between inner faces of guide rails - 15mm (-0.015m)

Insert = gap between inner faces of guide rails +15mm (+0.015m)

Bottom Flap = gap between inner faces of guide rails +15mm (+0.015m)

-16-

11. Slide the nylon insert (N1) into the pocket of the flap (C1) and slide the flap into the bottom flute.

# **Powering Motor**

12. Secure the junction box (R1), switch (Q1) and wires to the building. Ensure all wires exiting from the drive bracket, junction box and switch point down to form a drip-loop so that rain water cannot enter the motor or switch. To prevent entrapment by the lower tube, feed the cable between the top bracket and guide rail and fasten with cable-tie supplied, Figure 12.

Ensure the cable glands are correctly seated to prevent water ingress. Wire the 4-core motor cable into the junction box as detailed in Figure 13a for right hand drive or Figure 13b for left hand drive.

To operate the door, press the switch in the direction you want the door to travel as indicated by the arrows on the front panel.

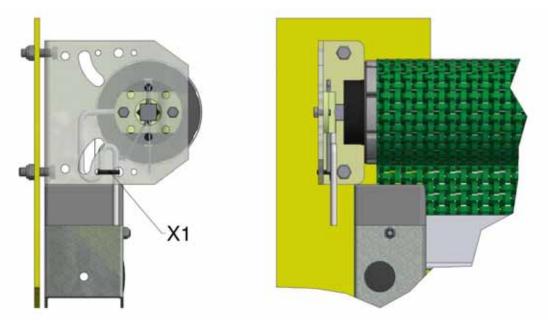
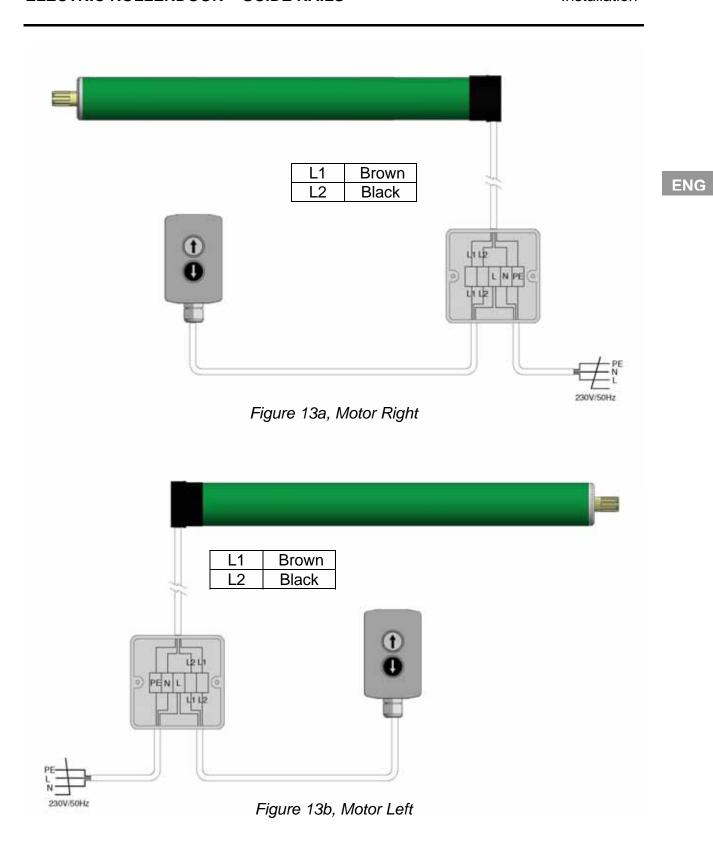


Figure 12, Securing Motor Wire



CAUTION: For safety, position the switch in sight of the door



# **Attaching Bottom Tube**

13. Lower the door; pull the fabric outside the guide rails. Centralise and trim excess fabric in each corner at 45° as shown in Figure 14b.

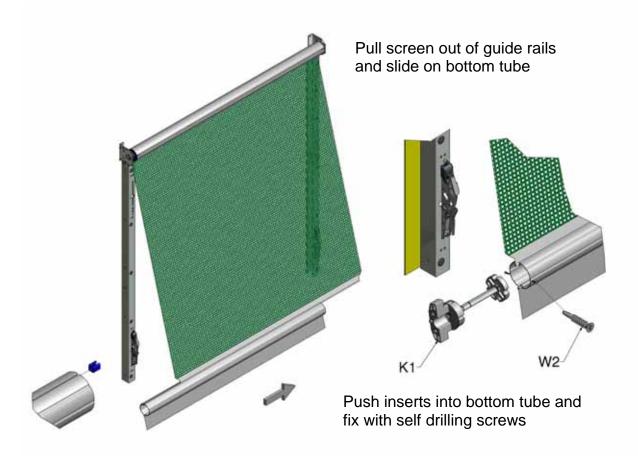


Figure 14a, Attaching Bottom Tube

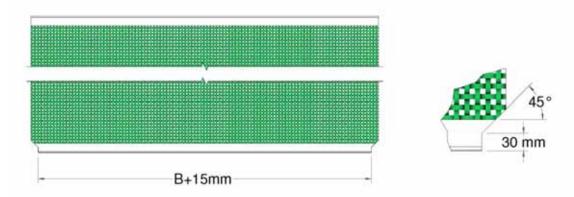


Figure 14b, Trimming Sheet

Slide on the bottom tube. Push the inserts (K1) in to the ends of bottom tube, and fix using the M4 x 19mm self-drilling screws (W2). Re-engage screen and bottom tube inside guide rails.

#### Securing Fabric

14. Lower your door fully, centralise the screen and secure each corner using 19mm self-drilling screws supplied (W1). It is important to tension sheet sideways before fixing to remove creases as shown in Figure 15.

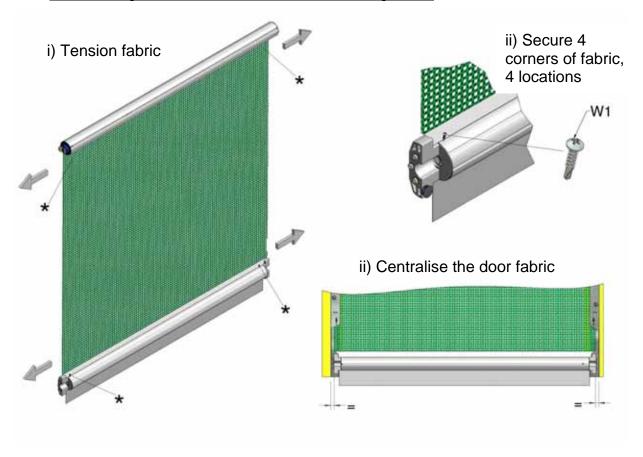


Figure 15, Centralising Screen.

#### Setting the Motor Limits

- 15. The motor is supplied in "semi-automatic" mode (when operated it gives two short stops after each start) and allows the motor limits to be set using the operating switch.
  - Fully lower the door so that the bottom tube inserts pass below the locking catches with 2-3cm of clearance, Figure 16(i).
  - Disengage both locking catches Figure 16(ii).
  - Press and hold the UP button to open the door fully and stall against the tube at the top, Figure 16(iii). This MUST be done without interruption.
     When the motor stalls the limits are set.

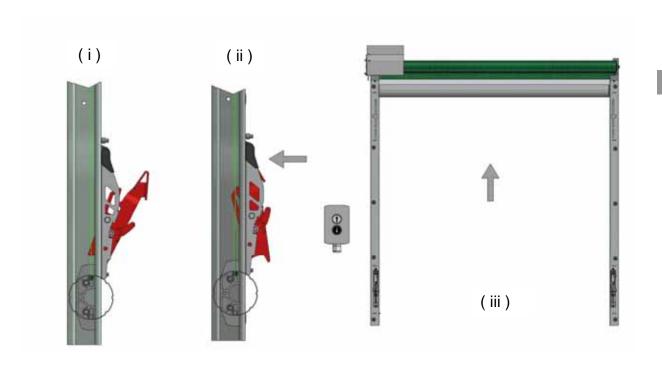


Figure 16, Setting the Limits

# Deleting the limits

To reset the motor to factory settings, open the door to the top limit. Press and hold the UP button for 3 seconds and release for 3 seconds, repeat this 5 more times and on the 6<sup>th</sup> operation the door will lower 10cm confirming the factory settings are reestablished.

16. Attach the locking catch instruction labels to the front of the guide rails at a convenient height, typically 1.5m from the ground. Attach the company detail label centrally to the front of the bottom tube.

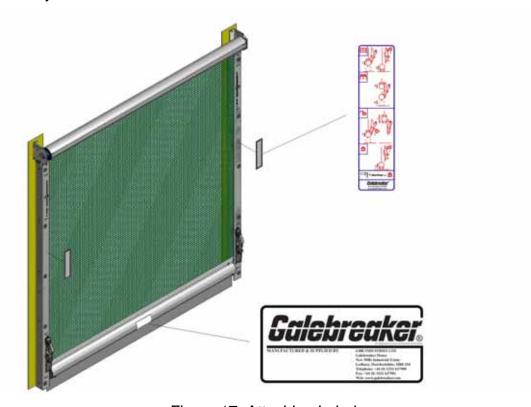


Figure 17, Attaching Labels

# Installing Motor Cowling (Standard) or Door Cowling (Optional)

17. Fix the cowling end (I1) to the motor bracket using the M8x20 set screws (S1) and lock nuts (V1). Attach the motor cowling (H1) to the cowling end and to the building at the free end using the screws (W3) as shown in Figure 18.

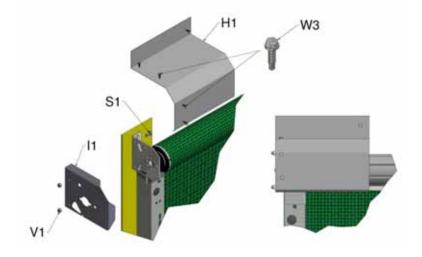
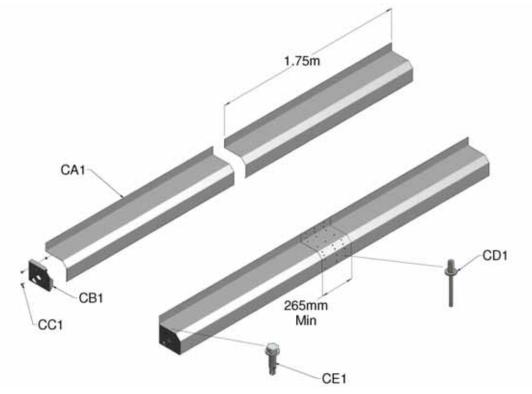


Figure 18, Motor Cowling Assembly

# 18. Door Cowling (optional at extra cost)



REF:	QTY	PART DESCRIPTION
CA1	*	1.75M Lengths of Cowling
CB1	1 pr	Cowling End
CC1	2	M8x20 Hex bolt and Nut
CD1	24	M4.8 x 8 St Steel Rivets per join
CE1	6	M5.5 x 19 Self Drilling Screws
CF1	1	5mm Drill for rivets (not shown)

Figure 19, Door Cowling Assembly

- C1. Fit the cowling ends (CB1) to the end brackets using the M8x20 bolts and nuts, similar to that used at the drive end as shown above in Figure 19.
- C2. Join the main cowling (CA1) with a minimum overlap of 265mm, using the M4.8 x 8 rivets, (CD1) 6 in each of the four faces. Fix the cowling to the cowling ends, using the M5.5 x 19 self-drilling screws (CE1), three per side.

NOTE: The Cowling is self supporting and does not require intermediate brackets

19. CE Marking Electrically Operated Products under Machinery Directive

It is the responsibility of the installer to check that the installation conforms to the specific safety features detailed in the Manufacturer's Installation Instructions, to issue the CE Declaration of Conformity and mark a power operated product under the Machinery Directive 2006/42/EC. To do this you will require the following which should be delivered with the product:

- 1) This set of Installation Instructions (operating and maintenance instructions)
- 2) Maintenance Log Book, (including Installation Checklist and Customer Declaration of Conformity)
- 3) 1 x Declaration of Conformity (Installer Copy) to be completed
- 4) A CE Label

When CE marking a power operated Galebreaker product, it is vital to follow the steps outlined below:

- a) Install the product as per instructions, with no adaptations or modifications and complete of the *Health and Safety Checklist* in the Maintenance Log Book.
- b) Complete the two 'Declarations of Conformity' using the following:

Model Type:
 As shown on CE Label

• Serial Number: As shown on CE Label

• Installation Company: Your company name

• Date Installed: Date Installed

• **Declaration made by:** Responsible Person

• **Declaration and Instructions received by:** Customer's Signature

c) Fix the supplied CE label to the bottom tube. The label should be accessible / visible. Where the serial number does not incorporate the door size, add the Product width and Product height to the end of serial number using a permanent marker pen. i.e. the full serial number should read

Serial Number: 1234 / RDE W X H

[W] Product Width (m)

[H] Product Height (m)

- d) Your customer must be given a copy of the completed 'Maintenance Log Book' along with the 'Installation Instructions' supplied by Galebreaker. These should be stored adjacent to the door controls for reference purposes.
- e) Finally, ask your customer to sign the 'Declaration of Conformity' (Installer Copy). This important document must be filed back at the office of the installer for future reference.



ATTENTION: Use of motors or controllers that are not supplied by Galebreaker, will make the installer the manufacturer (as defined by the Machine Directive 2006/42/EC) of the system and will require the installer to produce their own 'EC Declaration of Conformity' and product 'CE label'.

In such circumstances the door supplied by Galebreaker becomes a partly completed machine and therefore a Certificate of Incorporation can be supplied on request. The installer <a href="MUST NOT">MUST NOT</a> use the CE documentation supplied by Galebreaker.

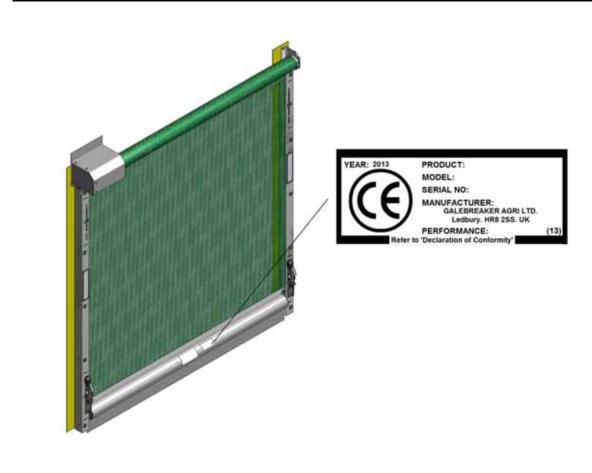


Figure 20, CE Label Location

YOUR DOOR IS NOW READY TO USE.

## **OPERATION & MAINTENANCE**

## How to use your door

• Windspeed less than 32kph / 20mph

In light wind conditions, the locking catch can be disabled. If the locking catch (J1) is active, disable it by pushing on the disengagement lever (Figure 21). Operate the switch until the motor automatically turns off at the upper or lower position.

Alternatively you can move the door to any required position by manually turning the motor off.

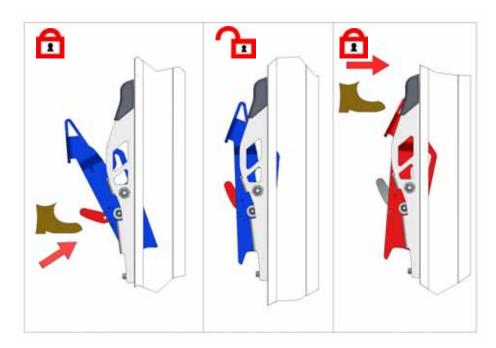


Figure 21, Engaging and Disengaging Locking Catch

Windspeed over 32kph / 20mph



ATTENTION: It is vital that a closed door is secured via the locking catches when the wind speed is above 32kph / 20mph

From Open: If the locking catch (J1) is disabled push on the top section of the locking plate for re-activation (Figure 22i). Operate the switch to close your door, the motor should automatically stop when bottom tube passes the locking catch (Figure 22ii), operate the switch again to backwind the door until the bottom tube engages with the locking catch and the motor automatically turns off when it stalls (Figure 22iii). This action will tension the sheet & protect it from wind damage.

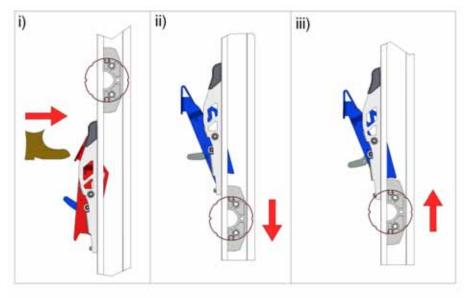


Figure 22, Locking Door Closed



ATTENTION: The motor has built-in obstacle recognition and is not damaged by stalling under power

From Closed: Operate the switch to lower the door until the motor automatically stops, open the both locking catches by pushing on the top section of the locking plate (Figure 23). Operate the switch again and allow the door to fully open.

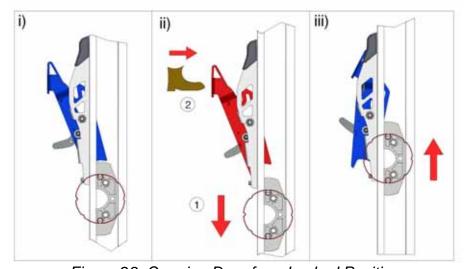


Figure 23, Opening Door from Locked Position



ATTENTION: To prevent damage to the lower panel of your door, ensure both catches are open before raising.

#### Door Duty Cycle

The maximum frequency of door operation is once every 30 minutes. One operation is classed as an open & close cycle. If the frequency is more than once every 30 minutes then the motor could overheat, and to protect itself from damage the motor will automatically stop. Should this occur leave the door for a minimum of 15 minutes to cool down & reset itself.

**ENG** 

To gain access during power supply failure, slide the bottom tube up the guiderails, which will collect the fabric and windbars above it. Support bottom tube in the elevated position by either tying it to the top tube or with secure props.

## Important Safety Information

- This door must only be operated by users familiar with its operation.
- When operating the door do not place fingers near the guide rails or other moving parts at any time.
- The person operating the door must have the door in sight at all times during its operation.
- Do not permit children to play with the door or its electrical controls.
- Do not modify or attach any objects to the door as this may cause damage and/or injury.
- Operate the door only when properly adjusted and free from obstructions.
- Should the door become difficult to operate or inoperable, consult your local dealer. Repairs should only be carried out by competent personnel.

#### Maintenance of your door

- Check annually for corrosion of the supporting bolts fixing the product to the building, the bolt holding the shaft into the top brackets and the blind in general.
   Replace suspect items to ensure it is safe for operators and bystanders alike
- The spring has a design life of 10,000 operations, which equates to using the door approximately 3 times a day for 10 years. After 10 years we recommend a replacement spring be fitted, or following the dismantling instructions given below remove the spring annually to ensure it has not broken.
- Annually clean the magnet on the locking catches to remove surface dirt.

 Should Screen material be damaged, repair with special repair kit (code SPS-99) available from your Galebreaker dealer, importer or head office.

## How to dismantle your door

Follow the installation instructions in reverse order.



CAUTION: For doors over 5.5m in width, ensure all spring tension is removed before unbolting the top brackets to remove the roller assembly and safety spring.

NOTE: Tried and tested in the harshest weather conditions, a summary of our guarantee is listed below, see our website for full details:

- Mechanical components: 100% guarantee for two years, followed by an eight year graduated guarantee.
- Electrical components: 100% guarantee for two years, followed by a four year graduated guarantee.

RAIN INGRESS: Please note that in extreme weather conditions some moisture will penetrate a mesh material.

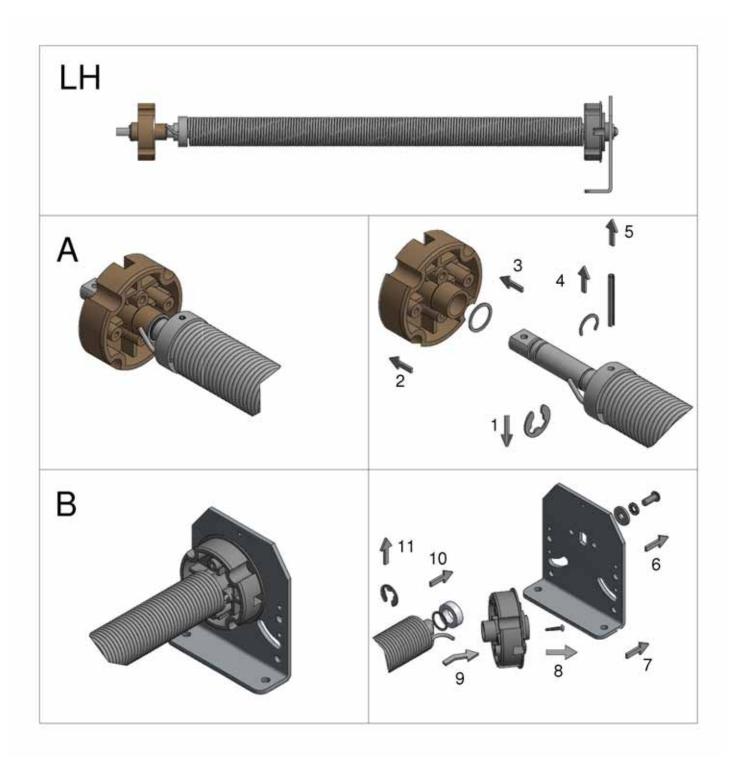
Wind Load Resistance:

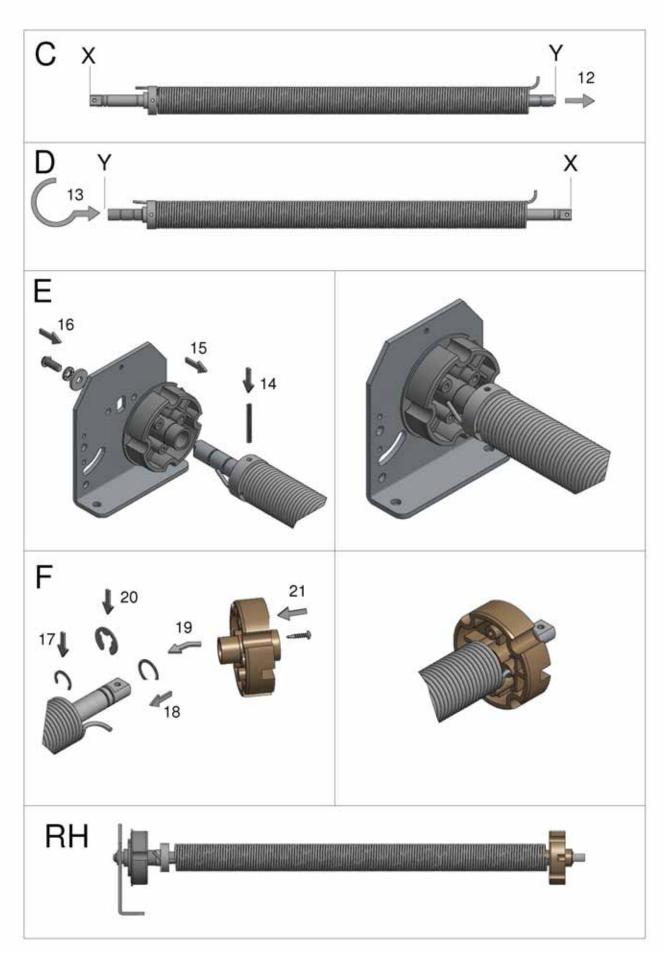
Mesh 75% Solid Up to 25sqm = Class 5

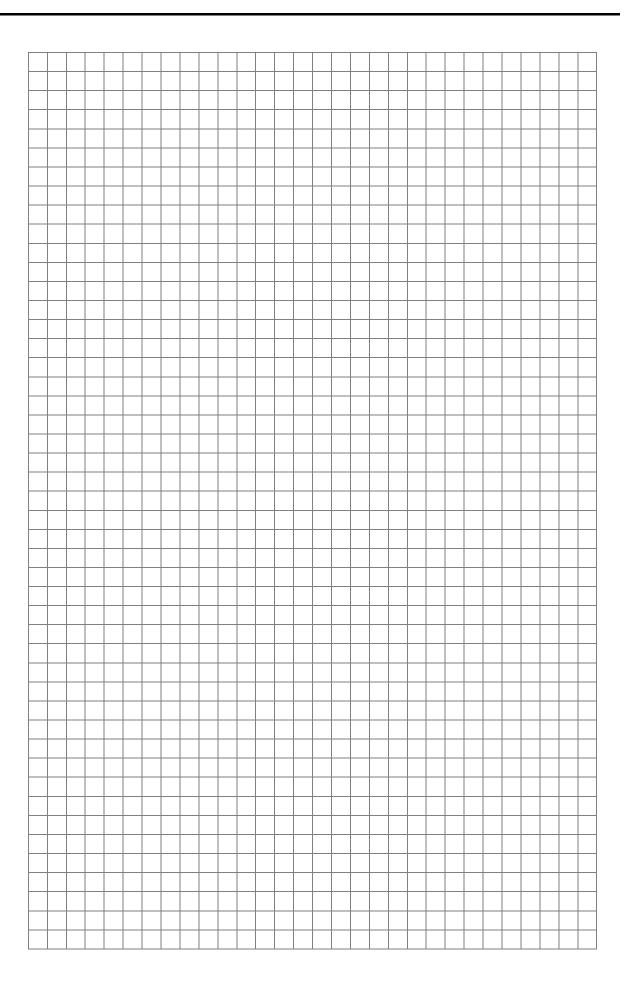
Solid Material Up to 25sqm = Class 5

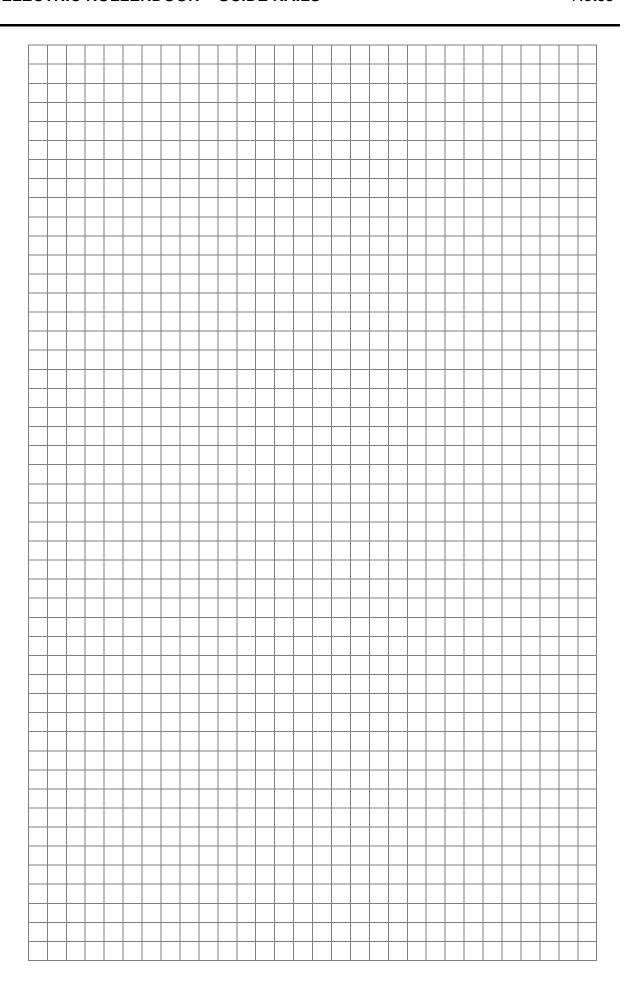
# **LEFTHAND TO RIGHTHAND SAFETY SPRING CONVERSION**

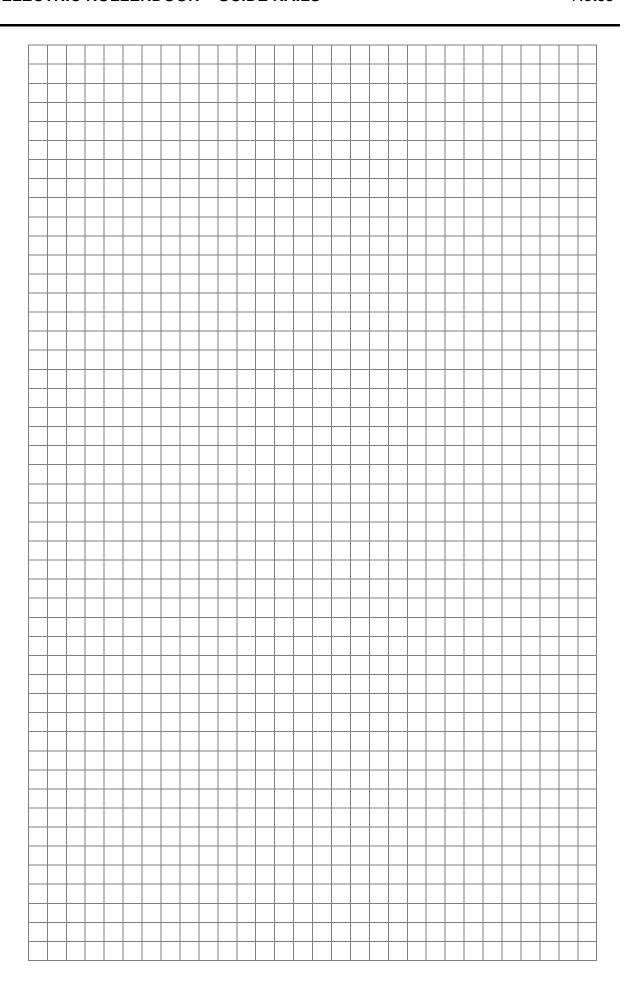
LH = Drive bracket on the left with spring bracket on right
For RH to LH conversion, follow instructions in reverse order













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**Original Instructions** 

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