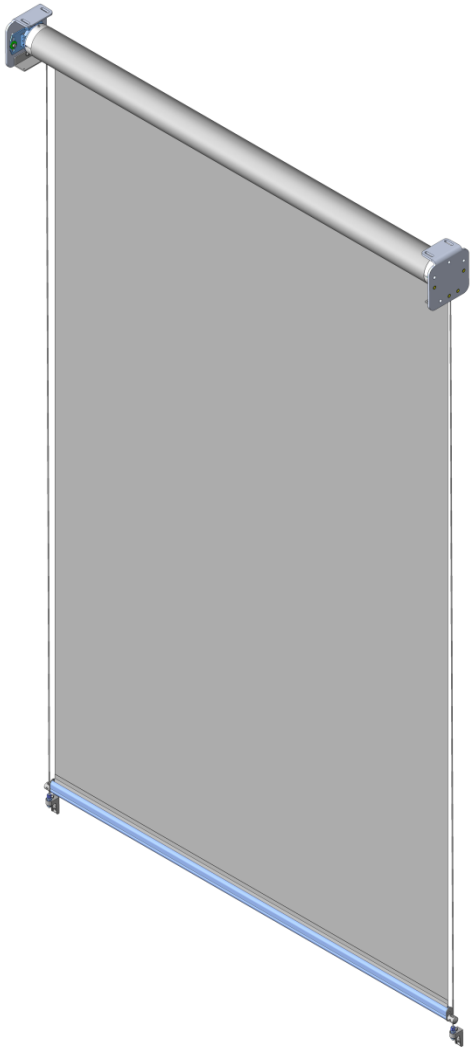
# TESS™ 308

## Installation Manual



Please read these instructions in full prior to starting your installation.

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Guthrie Douglas

**Contents**

# 1. Important information about TESS Systems

Guthrie Douglas TESS Systems are technical products that require installation, servicing and maintenance by professionals with the appropriate skills. If in doubt, please contact us for further advice and training.

All products are designed, tested, and manufactured in line with relevant EU regulations. General certificates of conformity and declarations of performance are available on our website www.guthriedouglas.com .

Alternatively please contact us for any special local testing requirements.

As the product installer, you are responsible for ensuring that the installed product conforms with relevant standards and legislation.

TESS Systems are designed to operate at temperatures between 0 and 55 $^{o}$C,

Guthrie Douglas Group Limited

12 Heathcote way,

Heathcote Industrial Estate,

Warwick,

UK,

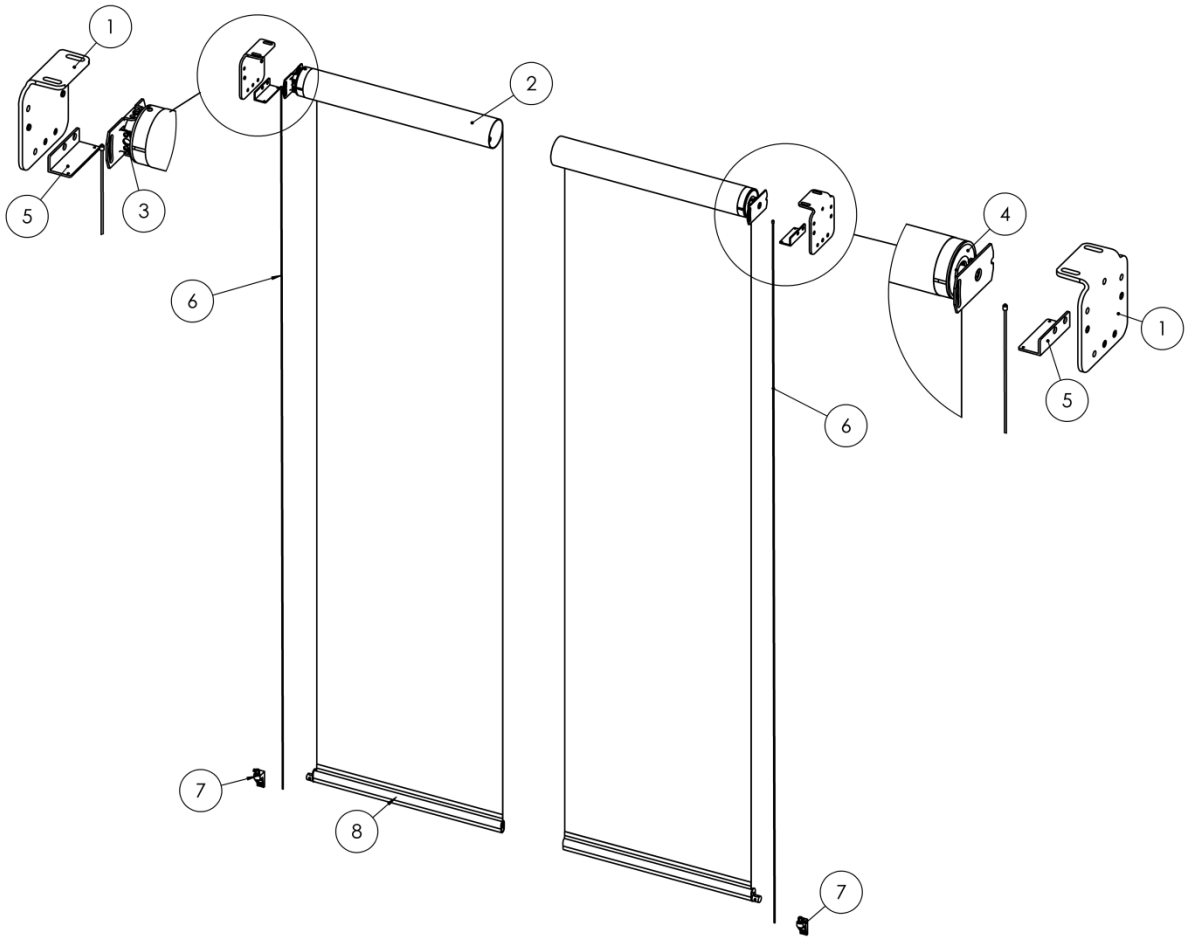
CV34 6TE

E-mail: solar@guthriedouglas.com

Tel: +44 (0) 1926 310850

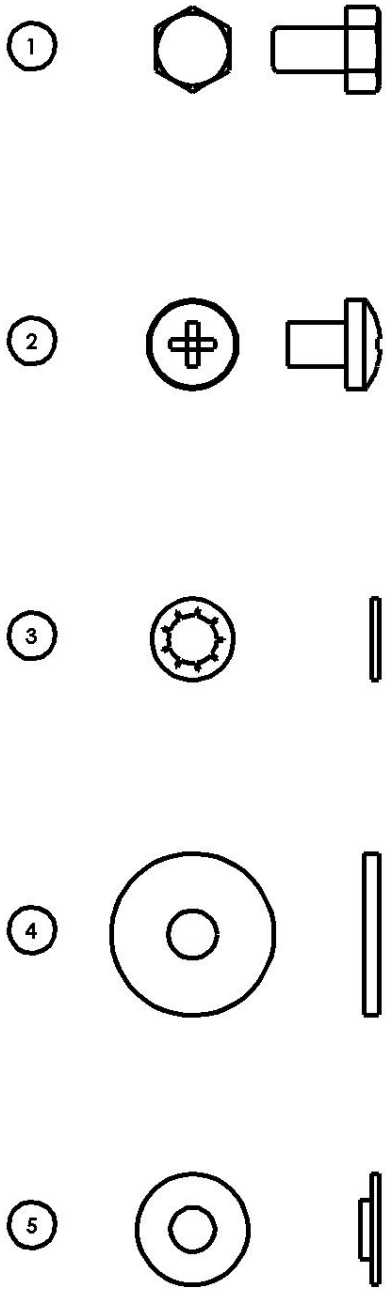
# 2. Tess 308 System

Standard components and assemblies supplied



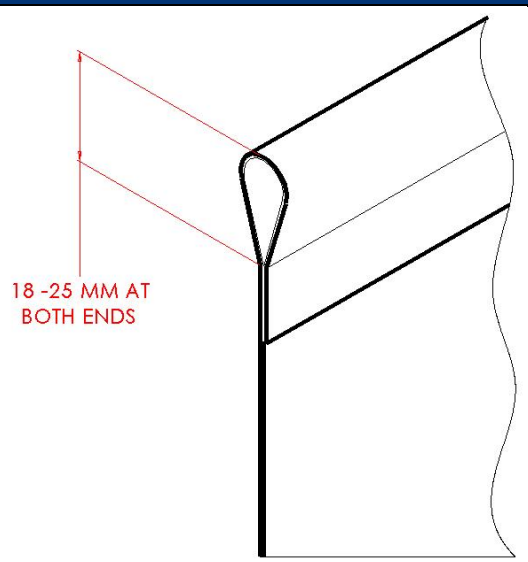

| Description | Qty |
|---|---|
| 1. End Plate Sub Assemblies (Top fix shown, face fix also available) | 2 |
| 2. Barrel Assembly 85 mm Diameter (including fabric if supplied ) | 1 |
| 3. Motor Assembly | 1 |
| 4. Bobbin Assembly | 1 |
| 5. Cable Guide Retention Bracket | 2 |
| 6. 2mm Diameter Guide Wire | Roll Length |
| 7. Cable Anchor Brackets | 2 |
| 8. Hem Bar Assembly | 1 |
| Fitting Kit to include : | |
| • 2mm Diameter Aluminium Ferrule | 2 |
| • Installation Manual | 1 |
| • Motor Limit Setting Key | 1 |
| • Fixings | See page 5 |

# 3. Fitting Kit




| REF NO. | FIXING | WHERE USED |
|---|---|---|
| 1 | M6 x 10 BOLT | MOUNTING PLATE |
| 2 | M6 x 8 PAN HEAD | MOUNTING BRACKET |
| 3 | M6 SHAKE PROOF | MOUNTING PLATE |
| 4 | M6 WASHER | MOUNTING PLATE |
| 5 | M6 PLASTIC TOP HAT WASHER | MOUNTING BRACKET |

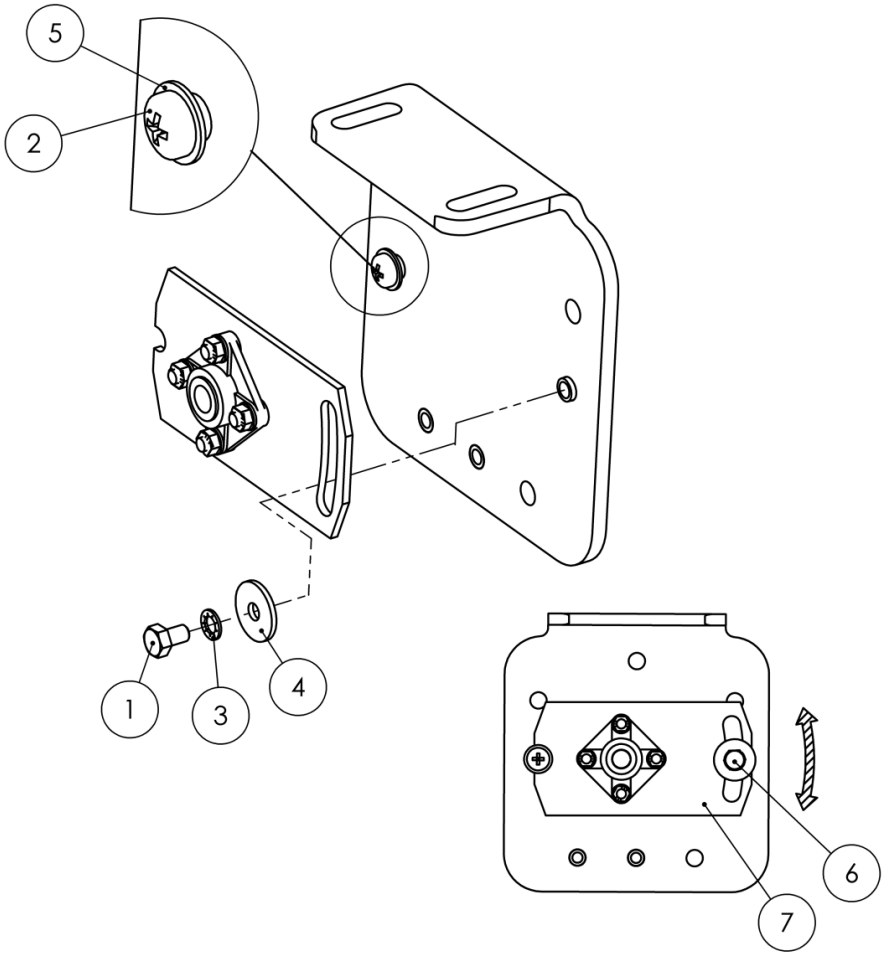
# 4. System Preparation – Fabric fitting if not pre-fitted




**3.1**

- The fabric to be fitted is to have been manufactured in line with Guthrie Douglas specifications. The fabric must have pockets as shown at each end. Fabric drawing is available on request.
- A fabric retaining rod will be supplied already fitted into the steel barrel tube, remove this and insert into the fabric pocket and slide the fabric onto the barrel assembly.
- Wind the fabric onto the barrel.
- Remove the fabric rod from the hem bar, insert into the fabric pocket and slide the hem bar into place.

# 5. Installation

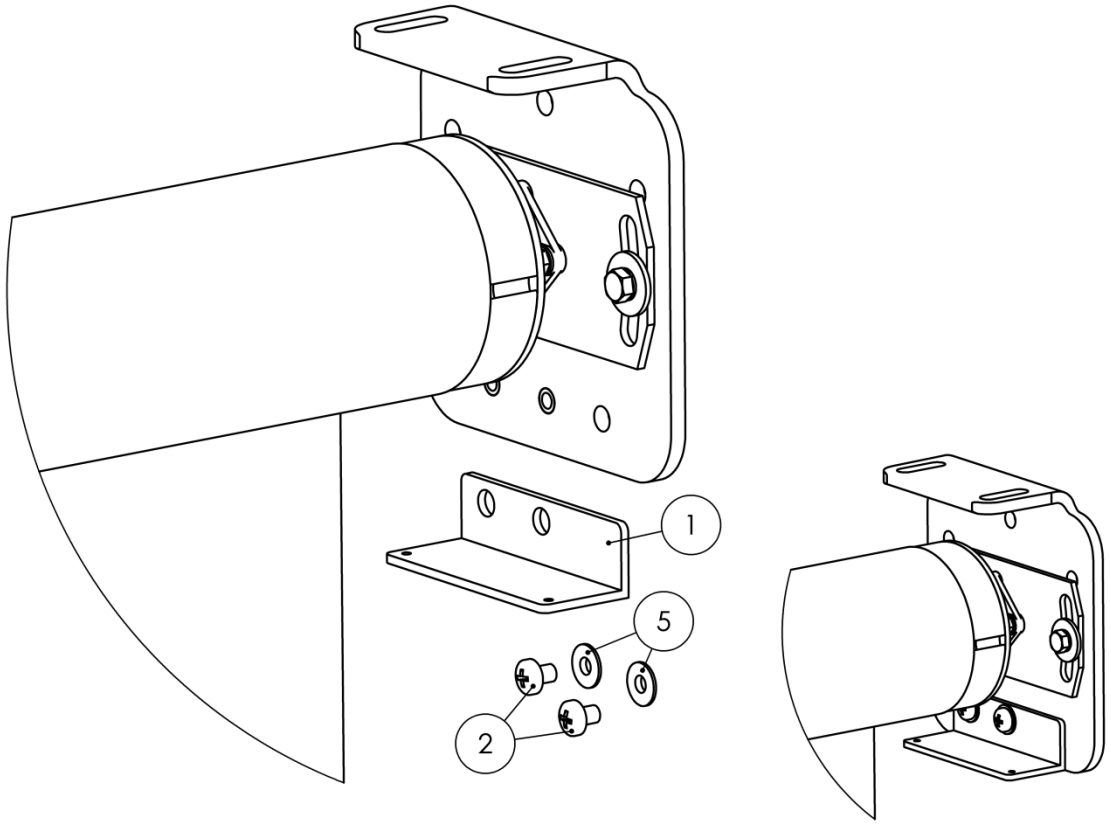



**5.1**

Image above shows the fixings required and position to install the barrel assembly:

- Items 1-5 shown above refer to fixing listed in the supplied fitting kit in section 3 (page 5).
- The same fixings are required for both end plates, motor and bobbin side.
- Fit end plates and adjust the spacing so the distance between them is as ordered system width.
- Install the barrel assembly.
- Ensure the barrel assembly is level, adjust if necessary by slackening the fixing screw (6) adjusting the tracking plates (7).

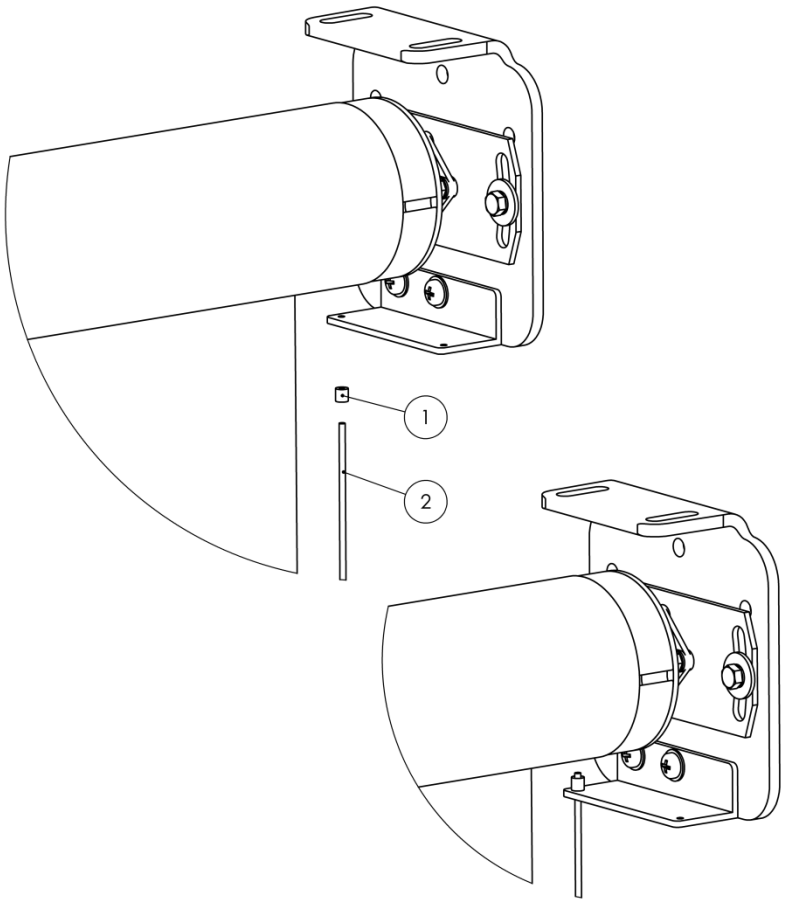
# 5. Installation




**5.2**

- Fit the cable retention bracket (1) using the fixings (2) and (5) supplied in the fitting kit in section 3 (page 5).

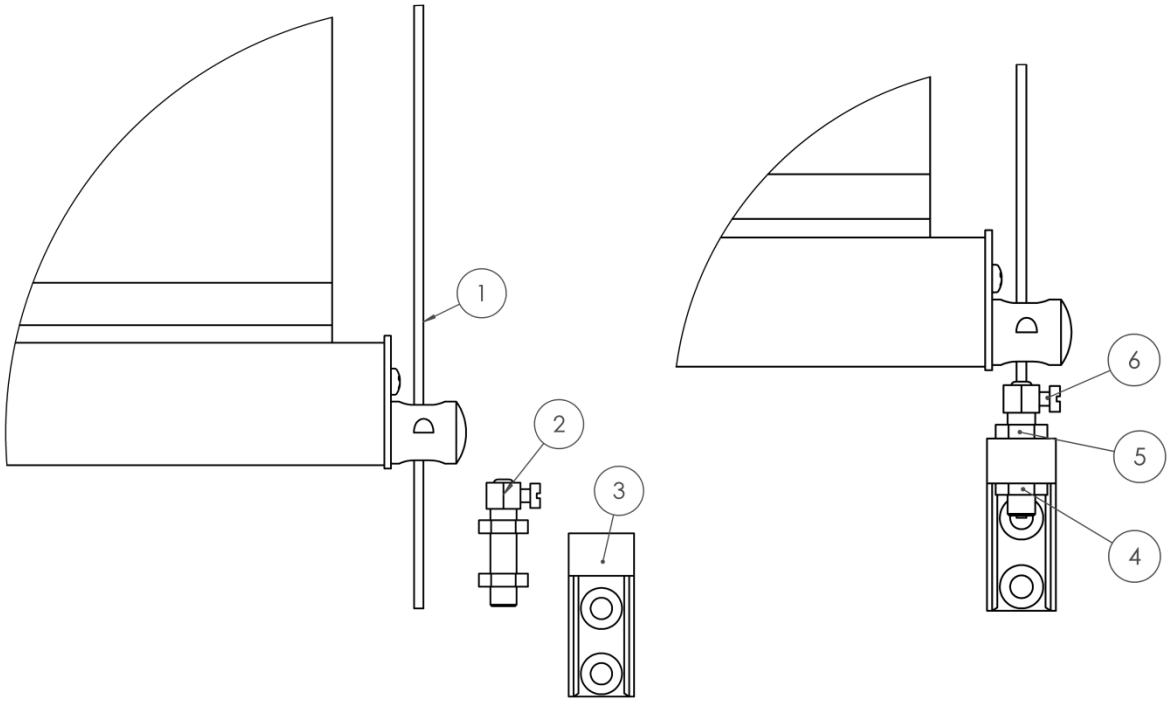
# 5. Installation




**5.3**

- Fit the guide wires (2). Supplied in the fixing kit are two aluminium ferrules (1)
- Using a suitable crimping tool crimp the ferrule (1) to the end of the cable (2) removing the coating where the ferrule is to be crimped.
- Ensure the ferrules are securely fixed.
- Guide wires are required to be fitted on both end plate assemblies.
- Insert the guide wire into the cable retention bracket. Ascertain the approximate length required and cut the wire taking care not to cut too short.

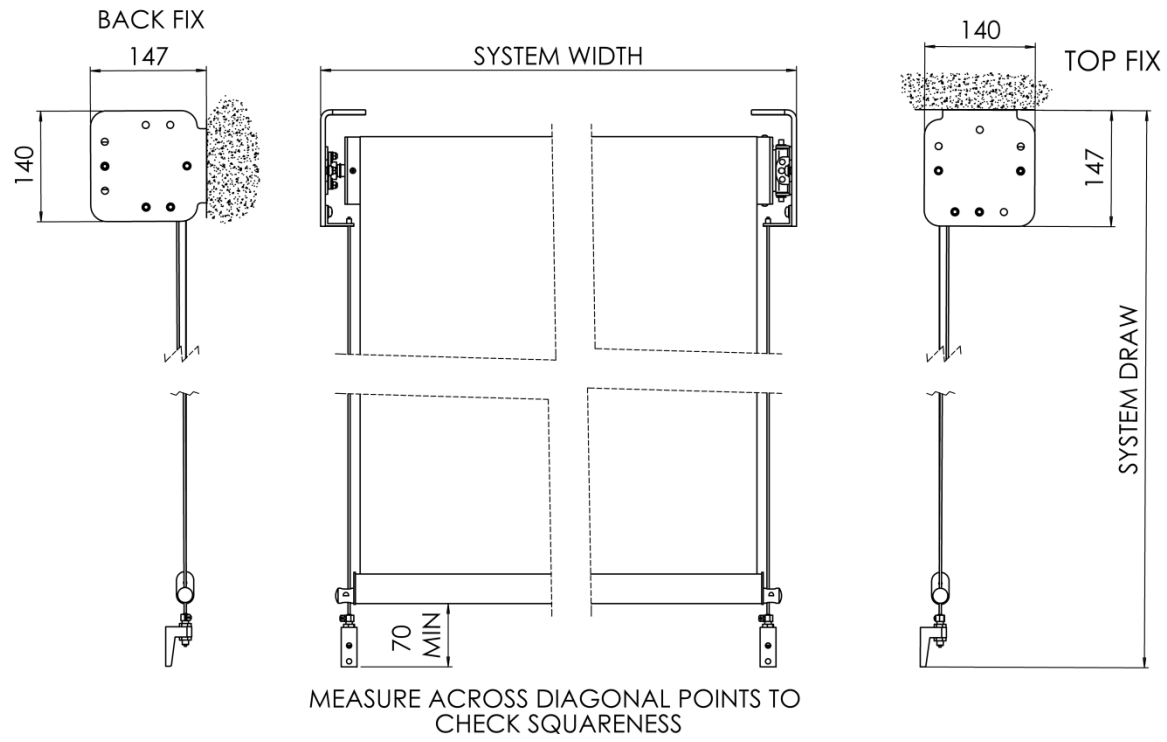
# 5. Installation




**5.4**

- Fit Cable Anchor Bracket (3), ensure the guide wire (1) is perpendicular to the barrel assembly.
- Fit the Cable Tensioning screw (2) to the Anchor Bracket (3) and feed the guide wire through.
- Secure the guide wire in place using the fixing screw (6). Tension the guide wire using a 11mm and 13mm spanner. 11mm spanner to hold in place the tension screw (2) and the 13mm spanner to tighten the nut (item 4). Once the guide wire is tight, tighten the lock nut (5) to secure.
- Cut off any excess guide wire.

# 5. Installation

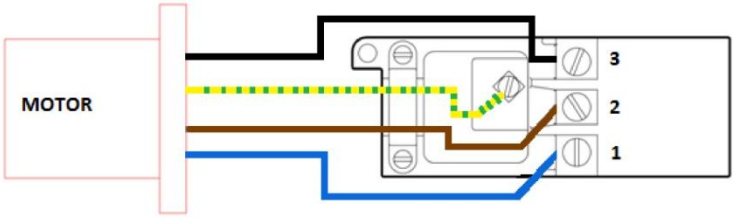



**5.5**

- Check System Width
- Check System Draw
- Check across diagonals to ensure system squareness is correct.

# 6. Hirschmann Fitting

HIRSCHMANN
STAS3



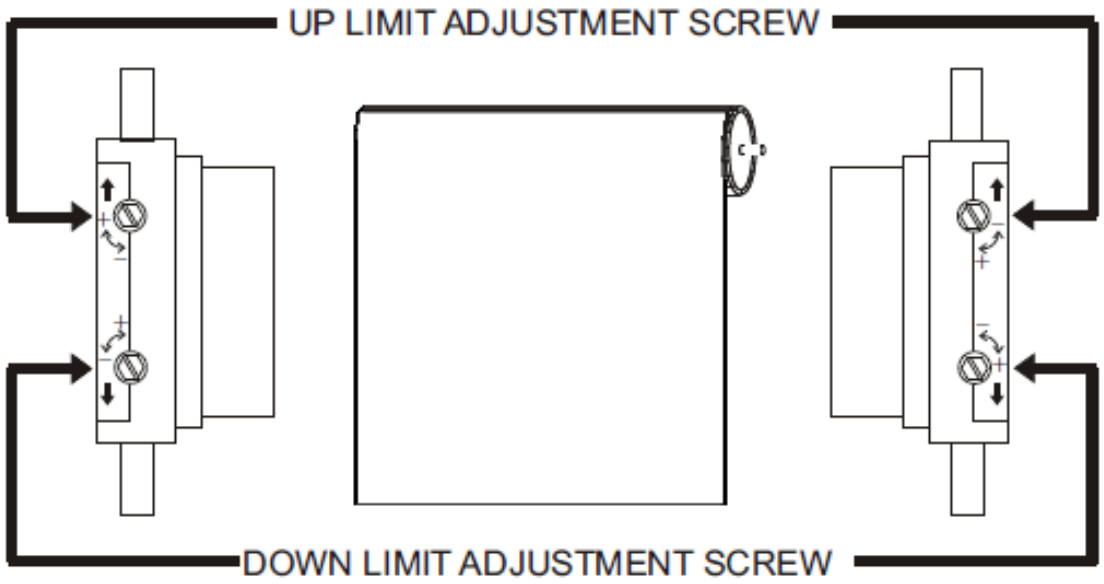

3. BLACK
2. BROWN
1. BLUE
GROUND. YELLOW/GREEN

**6.1**

Hirschmann Plug

- The diagram above shows the Hirschmann plug wiring as per Guthrie Douglas (GDE50360).

# 7. Manual Motor Limits Setting

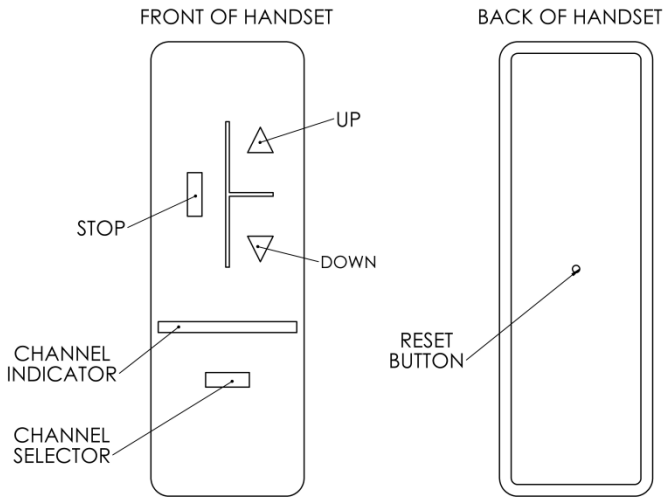



**7.1**

- Identify the adjustment screw controls, when the material rolls down on the same side as the limit adjusters, the upper adjuster controls the upper limit and the lower adjuster controls the lower limit (note – these are reversed when the material rolls down on the opposite side to the limit adjusters).
- Upper limit – by turning the limit adjuster clockwise the barrel will continue to retract, turning the limit adjuster counter clockwise will lower the limit (when lowering the limit remember to deploy and retract the system using the hand controls to ensure that the limit is correct).
- Lower limit – by turning the limit adjuster clockwise the limit will become shorter, turning the limit adjuster counter clockwise will lower the limit (when lowering the limit remember to retract and deploy the system using the hand controls to ensure that the limit is correct).
- When close to the desired position make small adjustments to the limit adjusters and retract and deploy the system away from the limit by approximately 2-3 feet, this will allow you to accurately set the limit
- If the motor does not stop near to the limit position stop the motor with the hand controls and turn the limit adjuster counter clockwise, continue turning until the motor stops (this could be up to 120 turns of the adjuster)

NOTE: the motors have a built in thermal cut off. If after several minutes of use the motor will not run in either direction, allow the motor to cool down for approximately 20 minutes.

# 8. Radio Motor Limits Setting




**8.1**

**Important**

- Only power up one motor at a time.
- Have the transmitter within 3m of the motor during setting process.
- Motors acknowledge by running briefly in both directions (shuffle).
- Motor will only run in deadman (impulse) mode until a transmitter is added to the memory.

**Setting motor limits**

1. Connect the mains supply to the motor. This should be via an isolator switch in case programming has to be wiped.
2. Press the up and down button at the same time to initiate programming, the motor will acknowledge. The motor operation will be impulse only at this stage.

**Checking the motor direction**

1. Press the up button on the transmitter. The blind should retract. If the motor direction is incorrect then press the middle stop button for approximately 3 seconds. The motor will acknowledge.

**Setting the end limits**

1. Press and hold the down button and the motor will deploy. Continue this until the required deployed position is reached, use the up/down buttons to achieve the correct position. To memorise the fully deployed position press the stop and up button simultaneously. The motor will then run automatically in the retract direction.
2. When the motor arrives at the desired retract position press the stop button. Should it be necessary to adjust the final position use the up/down buttons.
3. To memorise the limit position press the stop and down buttons simultaneously. The motor will now run in the deploy direction automatically. To validate the settings press and hold the stop button for 2 seconds. The motor will acknowledge.

**Confirming the master transmitter**

1. To operate the motor in stable mode press the programming button for approximately 1 second, the motor will again acknowledge . This is now the master transmitter and can be used to programme additional transmitters.

# 8. Radio Motor Limits Setting

**Programming additional transmitters**

1. To program additional transmitters do the following: press the master transmitter programming key for approximately 3 seconds, the motor will acknowledge. Take the new transmitter and select the required channel. Press the programming key for 1 second, the motor will again acknowledge and is now programmed.

**Re-adjustment of end limits**

1. The end limits can be altered as follows: go to the required limit position
2. Press simultaneously the up/down buttons for approximately 5 seconds, the motor will acknowledge.
3. Adjust the motor to the new position with the up/down buttons.
4. Validate the new position by pressing the stop button for 2 seconds; the motor will acknowledge.
5. Please note: the motor must be on the limit to be adjusted. If the limit cannot be reached then the programming will have to be cancelled and the re-started.

**Cancelling the Programming & Settings**

1. In order to undertake this successfully a mains power switch is essential and the timings are given to the minimum. If the timing is too quick then the programming will not be cancelled and will have to be repeated.
2. As a safety precaution, use the up/down button to deploy/retract the system to a central position away from either pre existing limits.
3. Turn off the power supply to all other motors that you do not want cancelled out of the programming. Failure to do so will cancel all programmed motors.
4. With the mains switch turn OFF the power supply for 2 seconds
5. Switch ON the power supply for 7 seconds
6. Switch OFF the power supply for 2 seconds
7. Switch the power supply back ON and the motor will run in a random direction for 5 seconds
8. Validate the programming by pressing and holding the “programming key” for more than 7 seconds. Maintain pressure on the programming key, the motor will acknowledge and a few seconds later the motor will acknowledge again. If this does not happen then the cancellation of the programming is not complete and it will have to be repeated from the beginning.

**Faulty programming**

1. If during the programming process the mains supply is turned off then back on then a situation could be encountered where the motor will do nothing. This is because the programming mode is still active.
2. Complete the operation by pressing the programming key. This will take the motor out of programming and it can then have the programming cancelled to restore it to “factory default” the programming process can then be repeated.

# 9. Maintenance

Maintenance must be considered with local conditions in mind but it is expected the installed system will be checked every year.

Every 12 Months

- Check tracking and fabric condition (creases)
- Check that tracking is correct
- Make adjustments where required.
- Check limit positions
- Check fabric edges for small rips / cuts / damage
- Check fixing screws
- Tighten any loose screws
- Clean and remove any debris from the system

Every 10 Years (additional checks)

- Check motor operation
- Depending motor usage and working conditions and consider replacement