



NZ LOUVRES™

Love your Lifestyle

Installation Manual:

All components should be checked carefully prior to arriving on site for both condition and to make sure you have everything you need to complete the installation. Motors should be installed prior (See Motor Installation Page?), and all necessary cables routed appropriately during assembly. Only the approved sealant “SIKA FAÇADE MS” is to be used in an appropriate colour to best suit the installation. Sika Façade is available in Grey, Black and White.

Site specific installation details should be clear in your own plans and specifications and where possible this should refer to the appropriate sections within the Technical Design Manual / TDM.

Pre-Assembly of Kitsets

Kitsets require some additional pre-assembly and preparation as follows.

- Installation of Motor and Drive Components
- Installation of Pivot Bushes
- Sealing of Pivot Channels
- Cutting of Stainless-Steel Connecting Rod to length
- Securing of HDPE Packers to Posts where applicable.

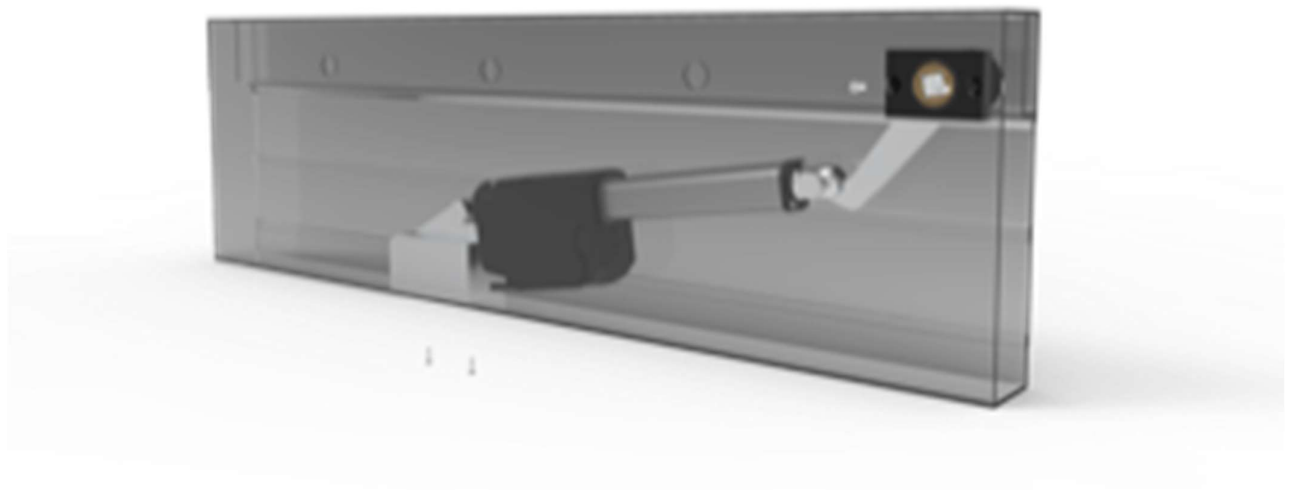


1. Installing Motor and Drive Components.

See illustration “Motor and Drive Components 20190601” and check that each item is in the component pack. There should be a complete set for each Motor.

- 1.1.1 Install HDPE Support Bush Mounting Plate to beam using 2 X 10g C/S Self Drilling Screws (No.2 SQ Drive). Take care not to overtighten screws.
- 1.1.2 Install 30mm Drive Bush by tapping in gently with a Rubber Mallet.
- 1.1.3 Unpack Motor and install Motor Cable and Clip. Failure to install clip may allow moisture to enter the motor resulting in damage and void any warranty.
- 1.1.4 Check that the Motor Piston is wound in fully clockwise (Finger tight) then rotate anti-clockwise until the clevis is vertical. Do not rotate the Motor Piston anti-clockwise from the fully wound in position more than 180 degrees. Failure to complete this procedure properly may result in motor failure and void any warranty.
- 1.1.5 Connect the Motor Cable to the Special Service Tool “NZLSST001” and retract Motor to the fully closed position. The Red LED will illuminate when fully closed. Do not proceed if the LED does not come on.
- 1.1.6 While still connected to the Service tool mark the piston with a pencil and open precisely 4.0mm. Disconnect service tool.
- 1.1.7 Assemble 6mm SS Drive Profile (Hockey Stick) to motor piston clevis using M10 X 30 SS Bolt and Nut. Use “Loctite Thread Locker 273” on the nut and do not over tighten. When correctly assembled the Hockey Stick should pivot in the clevis with minimal force but not move un-assisted. Incorrect tension will make installation and alignment difficult.
- 1.1.8 Fit Rear Mounting Bracket to Motor as per illustration “Motor Assembly 20190601”. Use “Loctite Thread Locker 273” on the nut and do not over tighten. When assembled correctly the motor should pivot on the mounting bracket with minimal force but not move un-assisted. Incorrect tension will make installation and alignment difficult.
- 1.1.9 Insert “T” Nuts in the bottom slot of the adjustable Mounting bracket. A small piece of masking tape can be used to stop the “T” Nut from falling out during assembly.
- 1.1.10 Install Bronze Support Bush
- 1.1.11 Insert Motor in Beam through the service cavity in the bottom of the beam. The Motor Cable should naturally extend to outside the service cavity. Note: During installation on site the Motor Extension Cable should be fed into the beam from the opposite side to the motor. The cable therefore does not need to pass the Motor or Mounting Bracket. Feeding the cable from the wrong side will make installation of the Motor difficult and increases the risk of damage to the cable.

- 1.1.12 Hold 6mm SS Drive profile (Hockey Stick) in place while inserting 13mm SS Internal Drive Shaft. Check that the Drive Shaft is inserted the right way around. When correct the SS "R" Clip can be inserted as per the Illustration "Motor Assembly 20190601". Install "R" Clip.
- 1.1.13 Install Bronze Drive Coupling. A small piece of masking tape can be placed over the Coupling and Bush to keep it in place for the remainder of the Motor installation and transporting to site.
- 1.1.14 Align "T" Nut in the bottom of the mounting bracket with the holes in the bottom of the beam. Insert M6 screws. Tighten with Allen Key (Finger tight only).
- 1.1.15 Hold tension on the motor and bracket away from the drive Pivot to take up any slack and fully tighten the M6 screws.
- 1.1.16 Re-connect service tool. Extend Motor Fully open. Check that Green LED Illuminates. Retract Motor to the fully closed position. AMP Meter should not exceed 2.0amps and Red Light should illuminate. If Red Light does not come on this indicates that the Motor is not reaching its fully closed position, potentially overloading the motor. Premature failure is likely. Open motor slightly before loosening M6 mounting screws. and repeat process from step 17 until the Red LED Light comes on when fully closed.



1.2 Install Pivot Bushes

Using a rubber Mallet lightly tap into beams. Check that the flange on the bush is hard against the beam when finished.

1.3 Seal Pivot Channels

Sealing the ends of the Pivot Channels in the beams minimises the risk of water tracking into the pivot channels and creating a leak. Seal as per the attached photo using the approved sealant “Sika Facades MS”.



1.4 Cut 8mm SS Connecting Rod to Length

Cut to length using the following formula. Use a hacksaw and file to avoid overheating. Overheating will cause stainless steel to lose its anti-corrosive properties and without proper polishing will rust.

Formula: Number of Operable Blades minus 1 X 200mm (Blade Centres) + 20mm (Allows for 10mm past the centre of the two end pivots)

Example: If there are 23 operable blades


$$(23-1) \times 200 + 20 = \text{Cut Length of } 4420\text{mm}$$

1.5 Secure 10mm HDPE Packers to Posts

Using Silicone or construction adhesive, glue packers inside posts and secure with a sash clamp or similar until the adhesive has cured. The packers can also be installed on site during post installation. Be careful not to drop them down the post!



2. Attach and assemble frame.

- 1.1.1 Check your plans for fixing details and follow carefully in conjunction with the TDM.
- 1.1.2 Ensure that the frame is level. Use Acrow Props whenever possible to support and adjust safely. 
- 1.1.3 While it is possible to assemble a frame completely prior to installation we strongly advise against this unless it is an insert to a frame provided for and there is available safe means to lift into place.
- 1.1.4 Ensure frame is joined in each corner using the stakes provided.
- 1.1.5 Carefully align the mitres at each join before pre-drilling with a 4.0mm drill bit and secure using 10g self-tapping countersunk screws provided.



2 Posts

- 2.1.1 Install any required posts in accordance with the plans/specifications provided in conjunction with the TDM.
- 2.1.2 Install 65mm downpipe inside post as per specifications if required.
- 2.1.3 Where concrete footings are required, leave Acrow props installed for 48 hours to allow concrete to cure sufficiently.

3 Gutters

- 3.1.1 Check plans to determine downpipe location.
- 3.1.2 Install Gutter 1 Mitre/Mitre. Position the dropper end flush with the bottom of the beam. The opposing end should be positioned upwards from the bottom of the beam by 9mm. Secure all Gutters with 1/8th rivets provided 75mm from each corner and then evenly distributed at no more than 900mm centers.
- 3.1.3 Install Gutter 2 Lap/Mitre. The lap should sit snug on top of Gutter 1 with the opposing end 20mm up from the bottom of the beam.
- 3.1.4 Install Gutter 4 Mitre/Lap. The lap should sit snug on top of Gutter 1 with the opposing end 11mm up from the bottom of the beam.
- 3.1.5 Install Gutter 3 Lap/Lap. Gutter 3 sits snug on top of Gutters 2 and 4.
- 3.1.6 Fold back tabs on each Lap, drill and secure with 1/8th rivets

Notes: A chalk line can be used to mark out the top of each gutter. This ensures the gutters are straight and that there are no dips along the length that might encourage ponding. The Maximum height of any gutter should be no more than 23mm from the bottom of the beams. Interference will occur between the blade and gutter if the gutter is any higher.

When long gutter sections are installed, it may be necessary to use more of the available fall on the longest and lowest gutter with the balance evenly distributed over the remaining 3 gutters. Ideally the motor side should also be the dropper side. This means most of the water will be shed directly into the dropper side so less fall is required on the other 3 gutters as they will remain relatively dry.

4 Flashing Tape.

- 4.1.1 Thoroughly clean/degrease all inside surfaces.
- 4.1.2 Run a very fine bead – 3mm-5mm in the corner before installing the tape.
- 4.1.3 Using the supplied pre-cut flashing tape install carefully in each internal corner, starting from the cover incision in the beam.
- 4.1.4 The tape should finish 30mm below the top of each Gutter.



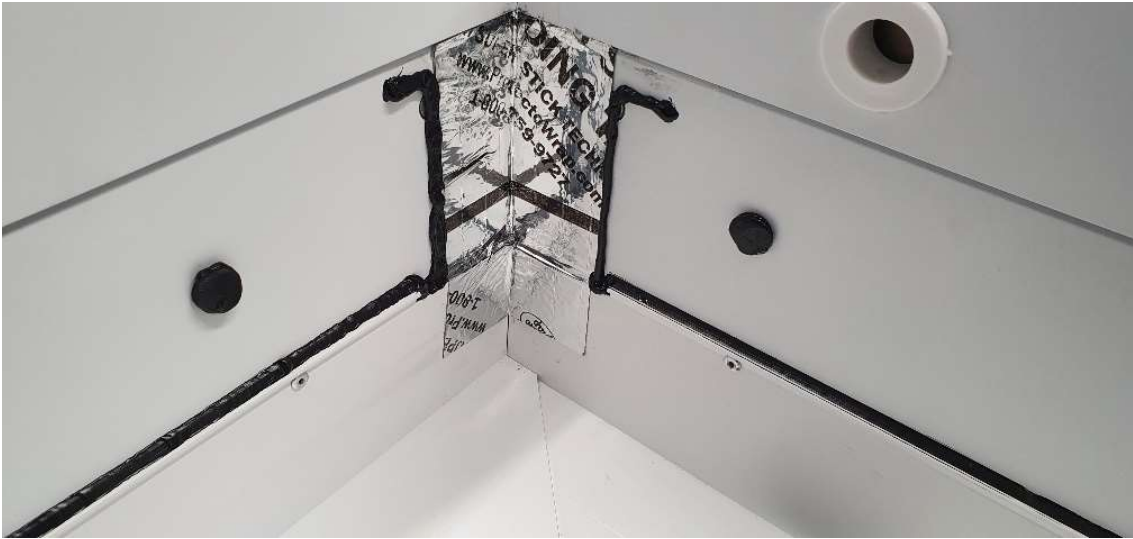
5 Dropper

- 5.1.1 Drill out downpipe dropper hole using a 64mm hole saw. The v groove in the bottom of the gutter is centred.



6 Covers.

- 6.1.1 Dry fit each cover to make sure they fit snug but not too tight. If they are too tight, they will damage the flashing tape and the system will leak. Covers should have 1mm clearance at each end. Trim covers if necessary.
- 6.1.2 Tape over any fixing holes.
- 6.1.3 Seal gutters to the top of the beams with approved sealant.
- 6.1.4 Seal corners and add spots of sealant to beam at 600mm centers.



- 6.1.5 Add sealant to inside of covers just below the top as shown.



- 6.1.6 Install covers ensuring they are pushed up hard into the beam incision. Secure with 1/8th rivets 100mm from each corner and evenly spaced at max 3.0m centers.



6.1.7 Vacuum all debris from gutters and thoroughly clean before moving on to sealing of the gutters

7 Seal Gutters and internal corners

7.1.1 Run a fine bead (5mm-7mm) of approved sealant across the mitres on the top of the beam, down the internal corner and all the way to the bottom of the beam.

7.1.2 Seal gutters as shown. Only use the bare minimum amount of sealant



8 Install EZ Dropper

8.1.1 Install supplied EZ-Dropper using approved sealant.

9 Touch ups

9.1.1 Using the correct colour touch up paint and a fine artist's brush paint the heads of all rivets.

10 Blade Installation

10.1.1 Start from one end.

10.1.2 With the base of the blade **as flat as possible**, slide the idler end spigot into its corresponding bush while holding the drive end slightly above the drive beam. As the idler end spigot slides into the bush drop the drive end in so it lines up with the drive end bush then slide the blade towards the drive end until the drive end spigot is located firmly into its corresponding bush.



10.1.3 Make sure all blades are pushed hard towards the drive beam.

10.1.4 Using a 3.0mm drill bit, drill out every second blade's idler end spigot approximately 2.0mm away from the flange of the corresponding bush.



10.1.5 Using a pin punch tap in the stainless-steel tension pin until it is centered within the spigot.



10.1.6 Repeat steps xvi. and xvii. on the two blades either side of the drive blade.

11 Install the 8mm Stainless Steel Connecting Rod

11.1.1 A separate rod must be used for each motor.

11.1.2 Ensure the grub screw holes are pointing upwards before inserting the rod.

11.1.3 Slide the rod through each of the stainless-steel pivots on each of the blades. The rod should be cut to length, so it passes the center of the 2 end pivots by 10mm. The calculation to determine rod length is the number of blades -1 X 200 + 20. So, if there are 22 blades $(22-1) \times 200 + 20 = 4220\text{mm}$.

11.1.4 Make sure the drive blade is sitting perfectly flat.

11.1.5 Align the rest of the blades to they are also sitting flat.



11.1.6 Insert the drive blade grub screw first and tighten.

11.1.7 Working away from the drive blade insert and tighten each grub screw.



12 Electrical

This section Covers All Electrical work and is broken down as follows.

- Cabling – Planning, specifications, and routing of all cables.
- Wiring Connections – Connecting each of the components.
- Programming Receivers
- Testing
- Commissioning

12.1.1 Background / System Information and Planning

NZ Louvres products run on 24V DC Systems. The controls are all therefore run from a 24V DC Power Supply. This is the only component that requires 240V AC and is provided via a std 3 pin plug.

A 24V system allows you to safely and legally carry out most of the electrical work required. You must not touch any of the 240V AC wiring or attempt to service any 240V component. This can only be done by a registered electrician.

There are some basic rules with installation and service of 24V Cables and Components.

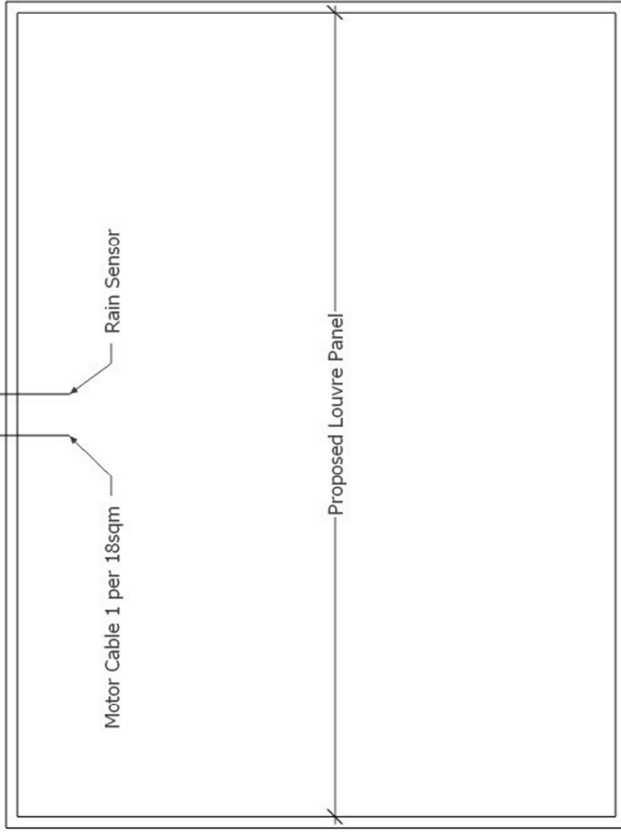
- Do not run low voltage cables next to 240V cables. They must be separated. For example, do not use the same holes in timber nogs to run high and low voltage cables.
- Always protect cables in areas where there is risk to damage. For example, use conduit to protect cables from chaffing when running through steel or aluminium holes etc.
- Ensure approved connectors are used or solder and heat shrink, particularly where there is any risk of moisture.

The following sheet shows the typical wiring plan and explains the various cables and specifications. When necessary, this can be provided to an electrician, particularly during new builds, so they can pre-wire and provide the 240V plug prior to your arrival to complete the installation. It is important to discuss this directly with the electrician to ensure they understand the instructions 100%. Cable specifications provided must be followed precisely. Ideally you should visit the site and help mark out the locations for each of the positions marked out on the wiring plan.

DBL Power Point



Louvre Control Gear / Distribution Cupboard



Cable Specifications:
Motor - 1.5mm 4 Core Flex
Wall Switch - 0.44mm 4 Core Security Cable
Rain Sensor - 0.44mm 4 Core Security Cable
Note: Cables for Louvre panel to exit building envelope approximately centre of 225mm wide beam

12.1.2 Checking Plans

Check plans thoroughly so you can confirm, the number of motors, best position for the rain sensor and how much cable you will need. Note: The Rain Sensor should be in the most exposed position as is practical giving consideration so that it can be accessed safely for periodic cleaning.

12.1.3 Locate position for Louvre Control Gear.

This should always be as close as possible to the Louvres, reducing cable lengths as much as possible. The location must be dry and protected from dust, vermin, or insects. When this is not possible a suitable approved waterproof enclosure should be used. Up to 10m of cable from the component to the power source is acceptable using the recommended cable specifications. If longer lengths are required, then larger cable diameters may be necessary to ensure voltage drop is at an acceptable level. Excessive voltage drop will reduce performance. Motors may be sluggish and rain sensors and remotes less responsive.

12.1.4 Locate position for internal switch if required.

An internal switch is ideal but generally not practical unless installed during the build or alteration/renovation. The Switch should be positioned next to a doorway that accesses the outdoor area. Note: NZ Louvres does not provide an internal switch. We advise the electrician to source a switch that matches the specification of other switch gear in the house. The switch must be a momentary type (you must physically hold down on the switch to operate as soon as you release the switch the motor stops). Each motor or group of motors requires an open and closed switch with a 24V common supply.

12.1.5 Run Cables

Allow approximately 500mm more cable than you need at each end. Do not allow any of the cables to run next to a 240V Cable. Make Sure Motor cables approach each motor from the drive side. This minimises risk of damage to cable and makes installation of motors easier. Use Conduit, glands, or rubber grommets where there is any risk of damage to the cables either during installation or when in use.

12.1.6 Wiring Connections

Before terminating any cables, the cables must be stripped back to expose the wires, be clean and tinned with solder or have boot lace terminals attached. Do not simply twist the ends as the connections can fail over time and increases the risk of short circuiting across cables or terminals.

Please Study the attached wiring chart and component diagrams. This details each component, terminals, and cables. It is important that you understand the function of each as long term this will assist you with not only the initial setup but any problem solving in future. Note: The extension cables are typical only. This will vary from time to time, particularly when an electrician has run the cables prior. This is a good example why it is so important to understand function and not just rely on colour to identify the different connections.

12.1.7 Pre-Wire

On A bench, tin all wires with solder or use Boot Lace Terminals and pre-wire 24V Power Supply and Remote Receiver/s (Controls) as per chart / Illustrations attached. Use a Connector Strip so that connecting Motor/s and Rain Sensor is quick and easy particularly if you need to climb into a roof space or similar.

13 NZ Louvres Louvre Control box (LAUS203234) installation sheet

Care should be taken to use this in conjunction with the relevant user manuals and datasheets for all other associated components including:

- LA23
- RF receiver/transmitter
- Rain sensor
- SMPS006 power supply

13.1.1 Initial setup

Determine what configuration is required. The Louvre Control Box (LAUS203234) supports operation of single or dual actuators with either independent or simultaneous operation. It supports rain sensor triggering and has an output which allows the rain sensor to be daisy chained to a second Louvre Control Box such that up to 4 actuators (2 actuators per Louvre Control Box) can all be triggered by a single rain sensor. There are 3 different configurations as detailed below:

Single channel – Standard/default option

One actuator driven with a single channel remote.

- 1 x actuator
- 1 x rain sensor
- 1 x RF receiver

Dual channel – Simultaneous drive

2 actuators driven from the same single channel remote. Actuators operate simultaneously.

- 2 x actuator
- 1 x rain sensor
- 1 x RF receiver

Dual channel –Independent drive

Two actuators independently driven from either two separate single channel remotes, or a single multichannel remote. (Refer RF remote/receiver user manual) Actuators operate independent of each other.

- 2 x actuator
- 1 x rain sensor
- 2 x RF receiver

13.2 Wiring and connections

13.2.1 Actuator 1

- Connect the blue and brown wires from the actuator to the Ground, and 24V terminals respectively of the ACTUATOR_1 connector.
- Connect the red and black wires to the Fwd. and Rev terminals respectively of the ACTUATOR_1 connector.
- Connect the yellow and green wires to the “Retracted signal_1” and “Extended signal_1” terminals respectively of the EOS_CONFIRM connector.

13.2.2 Actuator 2 – If applicable

- Connect the blue and brown wires from the second actuator to the Ground, and 24V terminals respectively of the ACTUATOR_2 connector.
- Connect the red and black wires of the second actuator to the Fwd. and Rev terminals respectively of the ACTUATOR_2 connector.
- Connect the yellow and green wires to the “Retracted signal_2” and “Extended signal_2” terminals respectively of the EOS_CONFIRM connector.

13.2.3 For single channel

- Pair the remote with the preinstalled receiver according to the included instructions.
- Operate the actuator all the way out to the fully extended position. Ensure that the actuator can activate its internal limit switch and that that the A1_OUT LED illuminates when the actuator reaches end of stroke. Ensure that the FWD_1 LED is illuminated while the button is pressed.
- Operate the actuator all the way into the fully retracted position. Ensure that the actuator can activate its internal limit switch and that that the A1_IN LED illuminates when the actuator reaches end of stroke. Ensure that the REV_1 LED is illuminated while the button is pressed.

13.2.4 For dual channel – Simultaneous drive

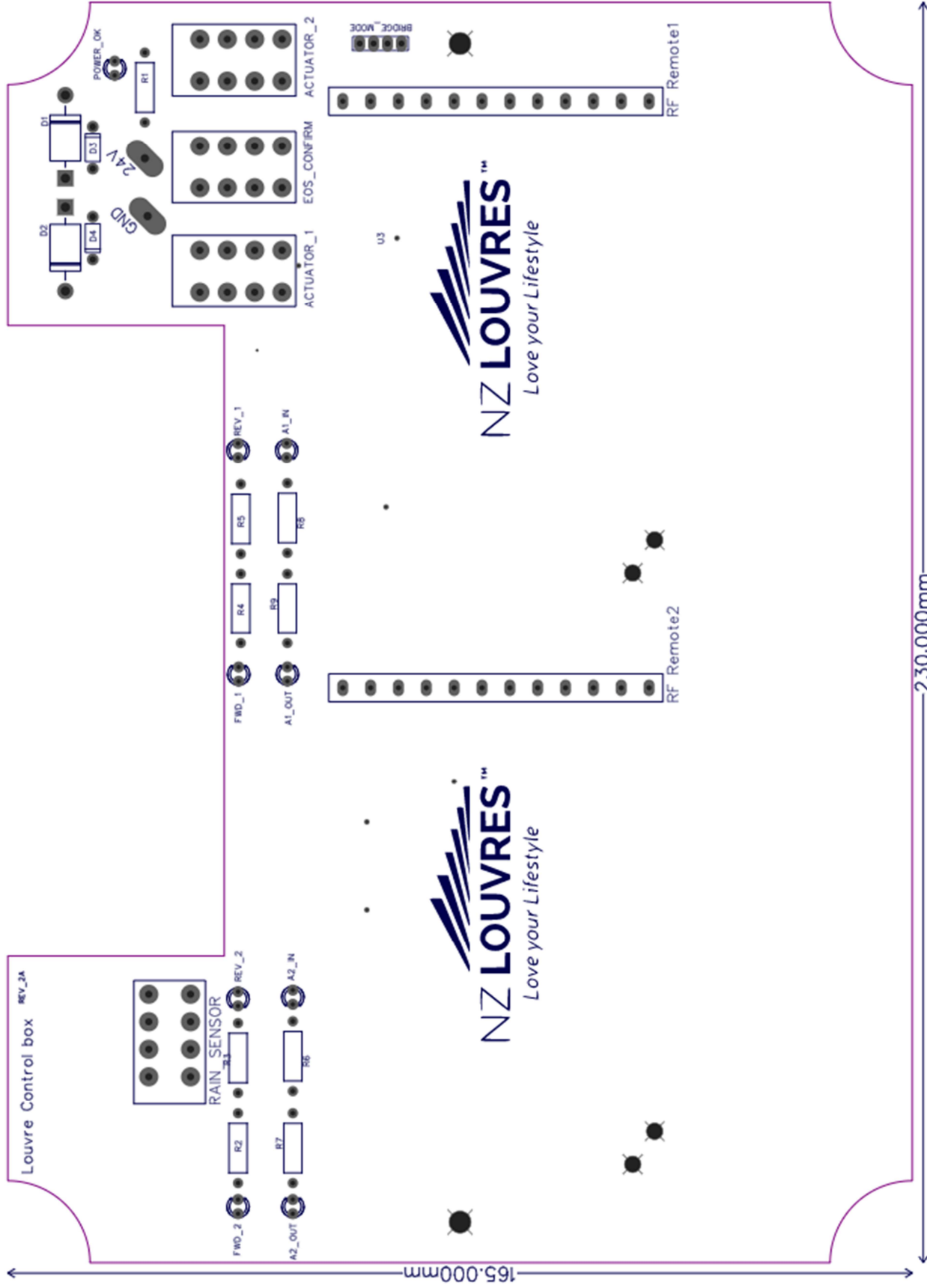
- Connect the two jumpers across the four pins of the BRIDGE_MODE header such that each outer pin is connected to its corresponding inner pin. (See diagram)
- Operate the remote and confirm that both actuators operate simultaneously.
- Operate the actuators all the way out to the fully extended position. Ensure that the actuators can activate their internal limit switches and that that the A1_OUT LED and

A2_OUT LED both illuminate when the actuators reach their respective end of stroke. Ensure that the FWD_1 LED and FWD_2 LED are both illuminated while the button is pressed.

- Operate the actuators all the way into the fully retracted position. Ensure that the actuators are both able to activate their internal limit switches and that that the A1_IN LED and A2_IN LED both illuminate when the actuators reach their respective end of stroke. Ensure that the REV_1 LED and FWD_2 LED are both illuminated while the button is pressed.

13.2.5 For dual channel – Independent drive

- Ensure the BRIDGE_MODE header jumpers are NOT connected.
- Install a second RF receiver board and pair with its remote according to the included instructions.
- Operate the first actuator all the way out to the fully extended position. Ensure that the actuator can activate its internal limit switch and that that the A1_OUT LED illuminates when the actuator reaches end of stroke. Ensure that the FWD_1 LED is illuminated while the button is pressed.
- Operate the first actuator all the way into the fully retracted position. Ensure that the actuator can activate its internal limit switch and that that the A1_IN LED illuminates when the actuator reaches end of stroke. Ensure that the REV_2 LED is illuminated while the button is pressed.
- Operate the second actuator all the way out to the fully extended position. Ensure that the actuator can activate its internal limit switch and that that the A2_OUT LED illuminates when the actuator reaches end of stroke. Ensure that the FWD_2 LED is illuminated while the button is pressed.
- Operate the second actuator all the way into the fully retracted position. Ensure that the actuator can activate its internal limit switch and that that the A2_IN LED illuminates when the actuator reaches end of stroke. Ensure that the REV_2 LED is illuminated while the button is pressed.



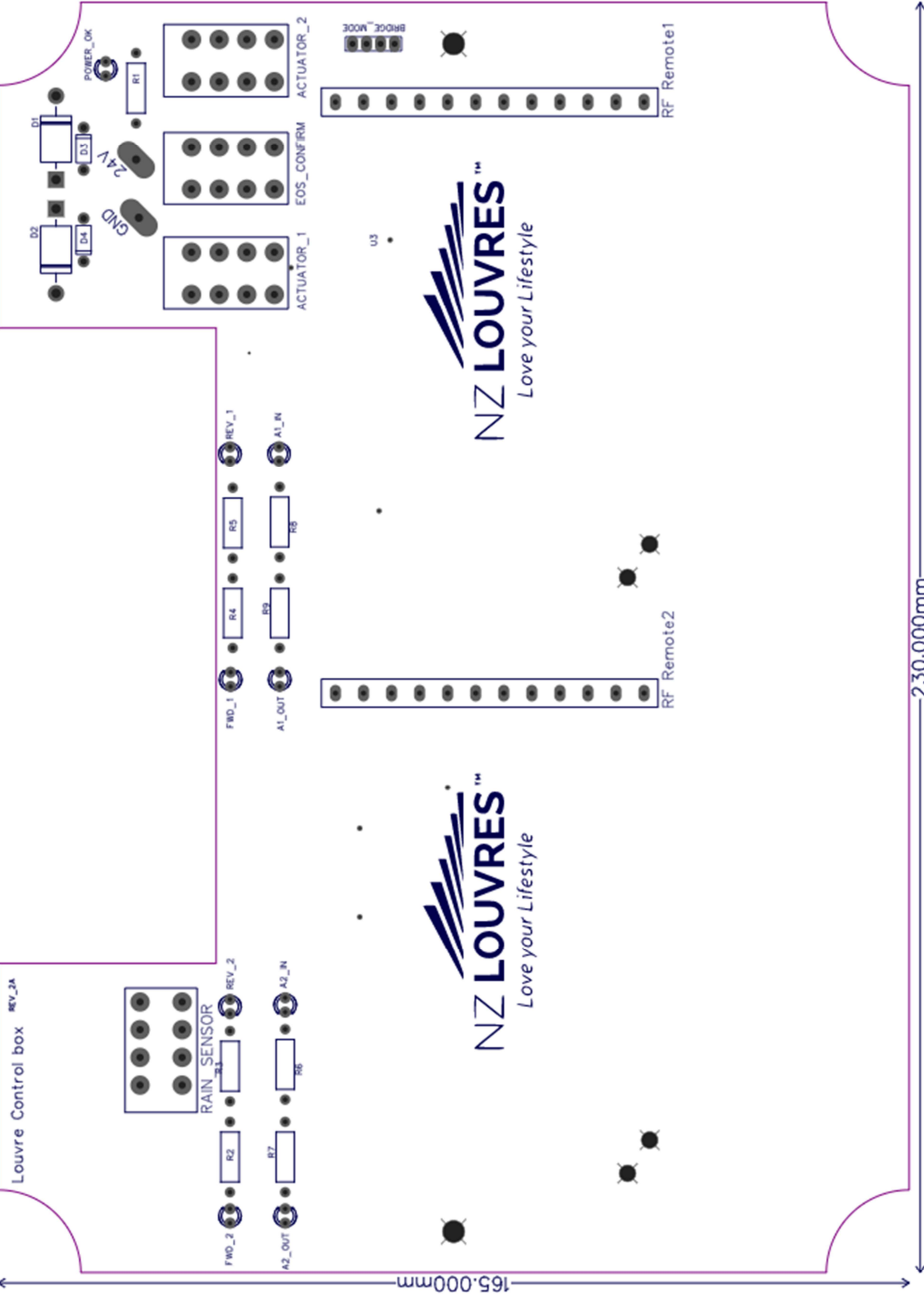
Louvre Control box REV_2A

165.000mm

230.000mm

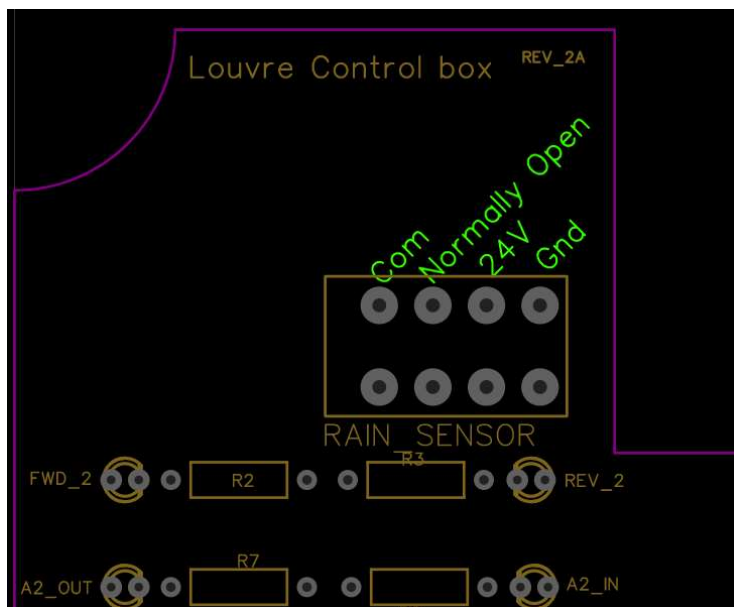
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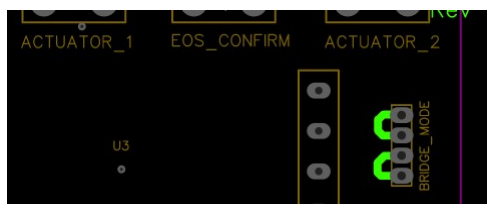


13.3 Rain Sensor

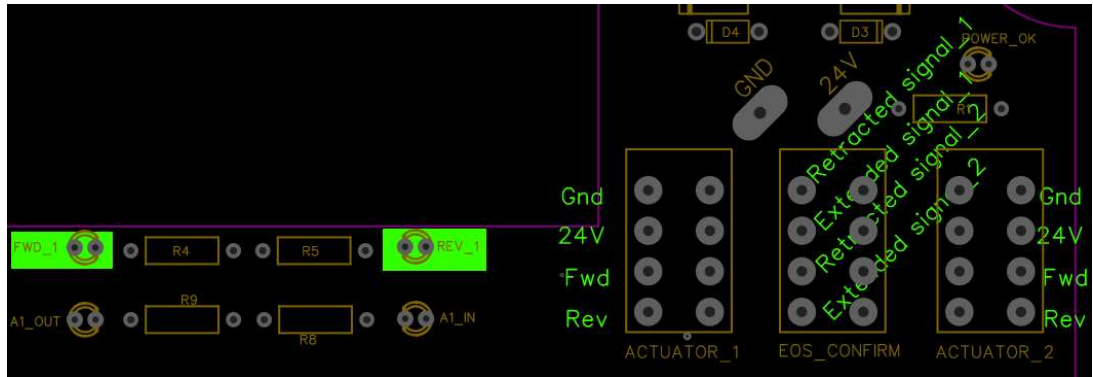
- 13.3.1 Connect the PWR1 wire from the rain sensor to the 24V terminal of the RAIN_SENSOR connector.
- 13.3.2 Connect the PWR2 wire from the rain sensor to the GND terminal of the RAIN_SENSOR connector.
- 13.3.3 Connect the Common wire from the rain sensor to the COM terminal of the RAIN_SENSOR connector.
- 13.3.4 Connect the NO wire from the rain sensor to the Normally Open terminal of the RAIN_SENSOR connector.
- 13.3.5 Activate the rain sensor and ensure that both the REV_1 and REV_2 LEDs illuminate, and that the actuator(s) retracts.



13.4 Bridge mode connector



13.5 ACTUATOR_1, ACTUATOR_2, and EOS_CONFIRM connectors



13.6 Optical Rain Sensor Installation

Open unit (remove 4 screws) There is a terminal block that you can connect cable to directly as follows.

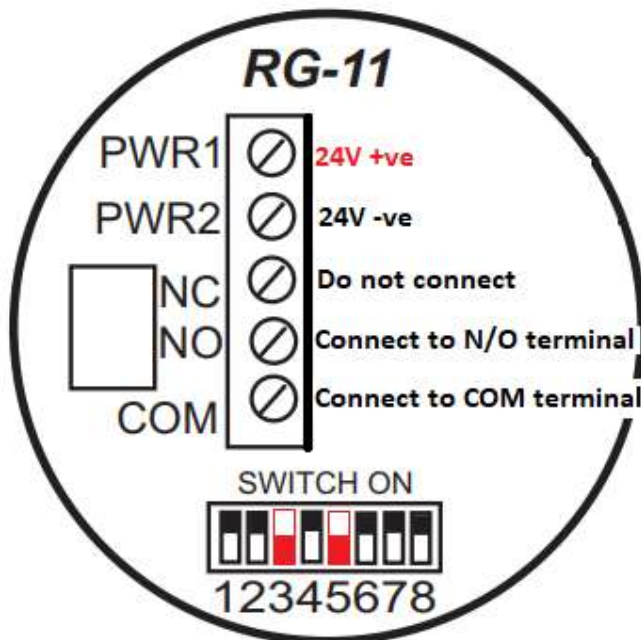
- **P1:** 24V +ve. Connect to 24V terminal of Rain Sensor Connector in Louvre Control Box
- **P2:** 24V -ve. Connect to the Gnd terminal of the rain sensor connector in Louvre Control box
- **NC:** No connection required
- **NO:** Connect to N/O terminal in control box
- **COM:** Connect to COM terminal in control box
- **DIP SWITCHES 1-8:** Turn ON 3 and 5. All the others should be in the OFF Position.

Note: When the rain sensor has been activated a visible green LED, light comes on. Covering it with your hand will set it off. Rain sensor will continue close signal and the green LED light will stay on for approximately 15 minutes. This means that during normal operation the roof cannot be opened for approximately 15 minutes or when the green LED goes off.

Mount the sensor where it can be easily accessed for periodic cleaning.

Clean gently using a soft damp cloth only. The use of any chemicals or aggressive wiping will damage the lens cover and void any warranty. The lens cap is not replaceable. A new sensor will be required if damaged.

Part No: HYD-RG11



Use the following information when working with older control gear prior to the release of the NZL control box.



Wiring Instructions
Internal control LA231C actuator

Note: System voltage is 24VDC. NZ Louvres supplies 24VDC Transformers as required. Location for transformers to be confirmed by electrician. Electrician to provide 240VAC supply for 24VDC transformers. Max current typically 2.7amps per motor.

Cables to run as per NZ Louvres Wiring Plan

Motors: 1.5mm 4 Core FLEXY Motor. 1 Motor per roof module (Max 18sqm)

Rain Sensor: .44mm 4 Core Security Cable

Internal Switch: 0.44mm 4 Core Security Cable - 1 Cable per roof motor if independent operation required.

Releever	24V Power Supply	LA231C Motor	Typical Motor Extn Cable	UF406K Rain Sensor	Typical Rain Sensor Extn Cable
1	Antennae				
2	RF Ground				
3	Close - LA231C Motor Cable "BLACK"	BLACK	WHITE	ORANGE	BLUE
4	Common - Loop to 7 and 9				
5	N/C - No Connection				
6	Open - LA231C Motor Cable "RED"	RED	GREEN		
7	Common - Loop to 4 and 9				
8	N/C - No Connection				
9	Red/Brown	Brown	RED	GREY and WHITE	RED and WHITE
10	24V+VE Black/Blue	Blue	BLACK	BLACK	BLACK

13.7 Set-Up and Programming procedure for Remote Receiver/s and Transmitters.

- 13.7.1 Remove Cover and set all DP switches to off.
- 13.7.2 Press the Up (Open) and Down (Closed) buttons on the receiver simultaneously for 1-2 seconds, LED will illuminate, and alarm will beep three times. Release buttons and receiver will enter learning mode.
- 13.7.3 Press Open or Close on the Remote Transmitter. Wait a few seconds. Receiver will beep two times to indicate Receiver and Remote have been paired successfully. LED will stay on for a few seconds then Receiver will beep 5 times and the LED will go out to indicate programming complete.
- 13.7.4 For Multi-Channel remotes, select channel and repeat steps for each channel. Multi-Channel receivers must be set to momentary mode. All DP switches off.
- 13.7.5 To Reset/Delete programming hold down Open and Close Buttons on receiver for 5 Seconds. Receiver will sound a long beep to indicate all remotes have been deleted. LED will now be off.

NZL420PC RF Receiver



Terminal No.	Description
1	Antennae – No Connection typically required
2	RF Ground
3	Close – LA231C Motor Cable “BLACK”
4	Common – Loop to 7 and 9
5	NC – No Connection required
6	OPEN – LA231C Motor Cable “RED”
7	Common – Loop to 4 and 9
8	NC – No Connection required
9	24V +VE Loop to 7 and 4
10	24V -VE

Remote Transmitter Types



13.8 Install Controls

Install all controls in position and terminate both Motor and Rain Sensor Extension Cables

13.9 Install Rain Sensor

Install Rain Sensor using two strips of Double-Sided Tape on the underside of the housing and Connect to Extension Cable.

13.10 Test

After all the Blades are installed, it is critical that this test procedure is followed to confirm that the motor is setup 100% before connecting to controls and commissioning. This is the same procedure for the initial motor setup except now the motor will be subject to normal operating loads with all blades now installed. Re-connect service tool to the motor cable. Extend Motor Fully open while watching the amp meter. Under normal operation the motor should not draw much more than 1 Amp except when reaching its limits. Check that the Green LED Illuminates when the motor reaches the fully open position, and the Amp Meter does not exceed 2.0 amps. Now retract Motor to the fully closed position. Again, under normal operation the motor should not draw much more than 1 Amp except when reaching its limits. As the motor reaches the closed position the AMP Meter should not exceed 2.0amps and the Red Light should Illuminate.