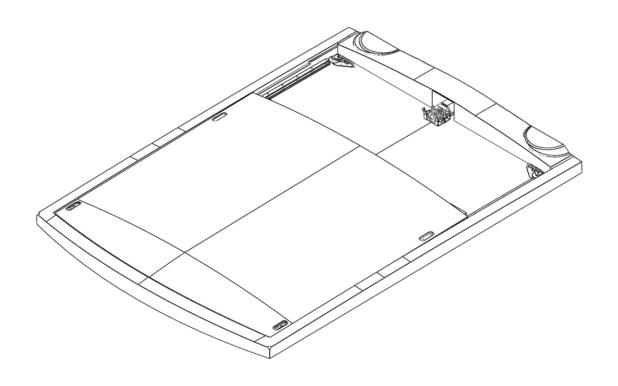


Standard Track Panel System Owners Manual



Legal note:

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SAFETY



DO NOT USE THE EQUIPMENT ABOVE +50°C (+122°F)



DO NOT USE THE EQUIPMENT BELOW -15°C (+5°F)



RISK OF ELECTRIC SHOCK



SOME PARTS CAN BE RECYCLED



INSTALLATION/USER MANUAL, READ BEFORE OPERATING THE EQUIPMENT



SPECIAL WARNING, READ CAREFULLY

ICONS



VISUAL INSPECTION REQUIRED



DRILLING REQUIRED



SCREWDRIVER REQUIRED



SILICONE SEALANT REQUIRED



ALLAN KEY REQUIRED



MEASUREMENT REQUIRED



MARK WITH PENCIL



SPANNER REQUIRED

Legal note:

TOOLS REQUIREMENTS FOR TYPICAL INSTALLATION



MAKEFAST TRACK WIDTH SETTING JIG (SUPPLIED WITH FIRST UNIT ONLY)

ELECTRIC DRILL

DRILL BITS Ø: 3.5MM-6MM, 12MM (M6 TAP MAY BE REQUIRED FOR SOME)

SCREWDRIVER: POZI DRIVE, ELECTRICAL SCREWDRIVER

ALLEN KEY: 4MM

SPANNERS: 8MM, 10MM, 14MM, ADJUSTABLE

TAPE-MEASURE

NOSE KEY (SUPPLIED)

SILICON SEALANT

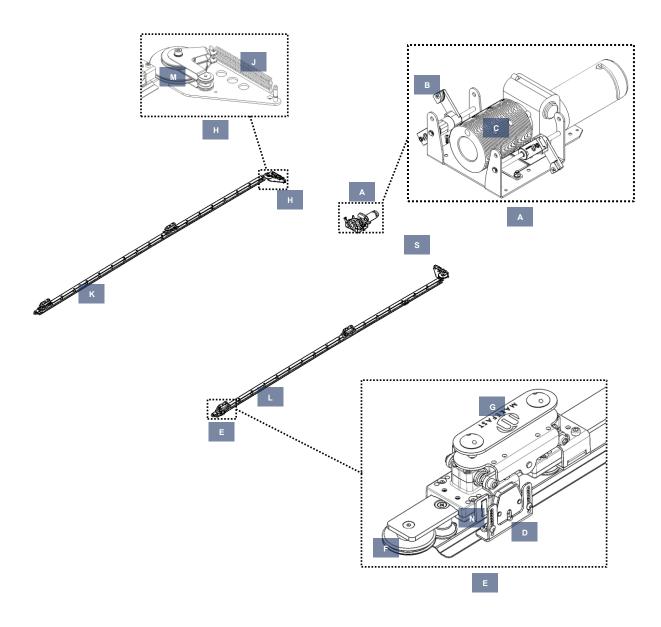
PENCIL

ADHESIVE TAPE

SILICONE GREASE (SUPERLUBE), NOTE: THIS MUST STAY WITH THE BOAT AFTER INSTALLATION



POWERED STANDARD PANEL SYSTEM OVERVIEW



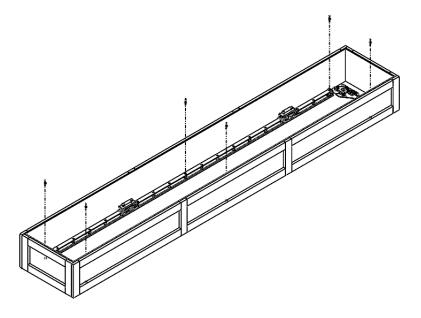
- A Motor Unit
- B Slack Adjuster
- c Cable Drum
- Sensor
- E Drive Car
- F Forward Cable Wheel
- G Panel Connection Plate

- H Aft Tensioner Assembly
- Aft Tensioner Springs
- K Starboard Track Assembly
- Port Track Assembly
- M Aft Tensioner Wheels
- N Drive Car Magnet

Legal note:

UNPACKING THE BOX

1. To unpack the box, first remove all assemblies from the packing board by removing the 3 packing screws in each track assembly and the packing screws from the motor assembly.



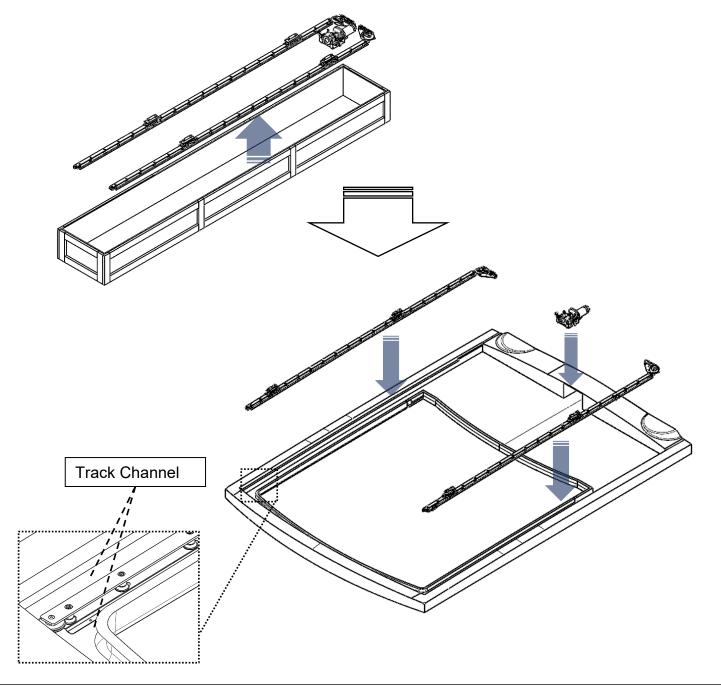
WHAT'S INSIDE (TYPICAL)

- 1 x Port Track Assembly (Cars attached)
- 1 x Motor Assembly
- 1 x Starboard Track Assembly (Cars attached)
- 1 x Control Box Assembly
- Fastener Pack
- Track Jigs (First unit only)
- Track Lube (Must stay with the boat not the installer)
- 2 x Sensors Assemblies (for some units these may be attached to track assemblies)
- Installation and User Manual

NOTE: If Sensor cables are not going to be mounted to the surface of the GRP channel, appropriate access will need to be allowed for. Holes within the track channel must be made prior to positioning the track and motor.

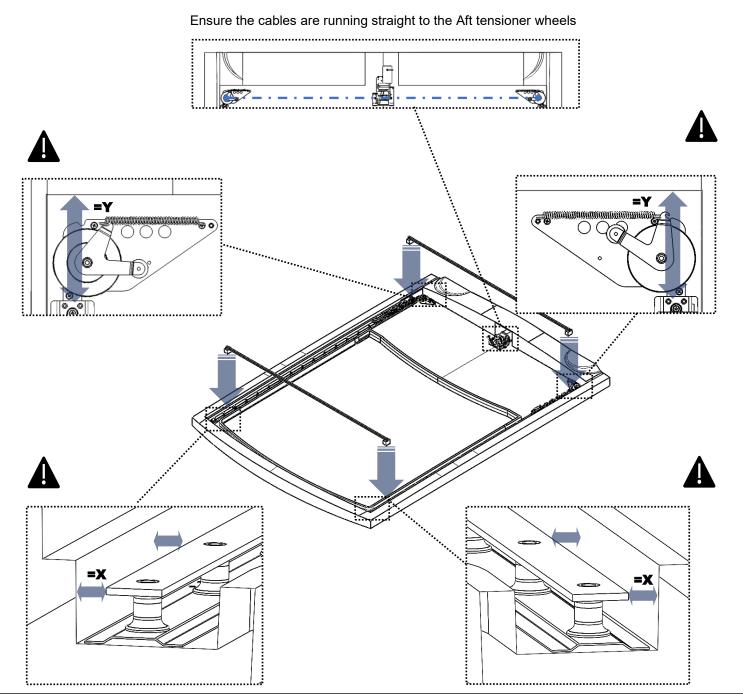
 Remove the track and motor unit from the box, ensure these are moved together, (these will be connected by the drive cable) and place on the roof in the correct approximate position.

NOTE: Do not remove drive cable clamps at this stage.



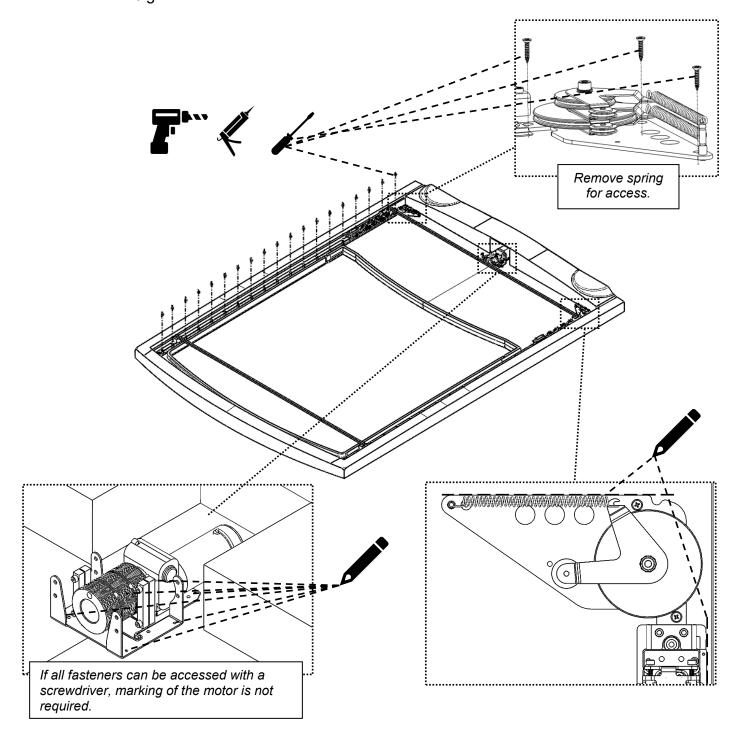
Legal note:

- 1. Move Cars forward of the end of the tracks, this will allow for the setting jig to be placed the fwd and aft ends of the track.
- Position Tracks and Motor as shown below.
 NOTE: Motor position and orientation may vary depending on boat type, and motor types may vary (see boat specific drawing).
- 3. Use the JIG Bars (supplied with first unit) to set the width of the tracks ensuring the tracks are equally spaced in channels. This should be checked along the length of the tracks.



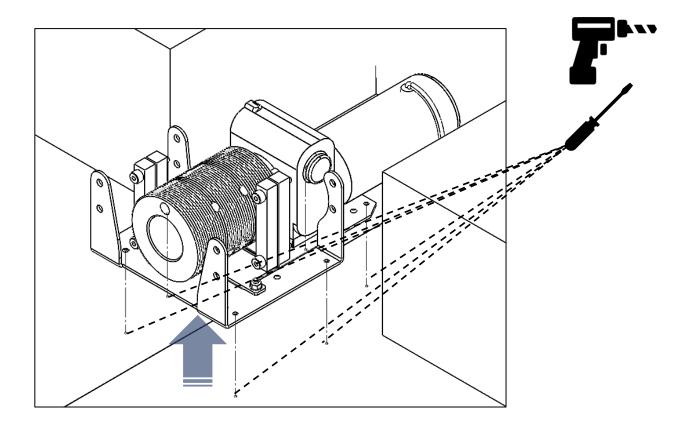
Legal note:

- 1. Once correctly positioned, secure down one side of the track with fasteners provided. (Drill 4mm hole, fill holes with silicone sealant and Screw down)
- 2. Mark the position of the motor fixing points with a pencil. (This step is only required for some units where motor fastener holes cannot be drilled with motor in place)
- 3. Mark the Aft Position of the unsecured track.
- 4. Remove Jig Bars

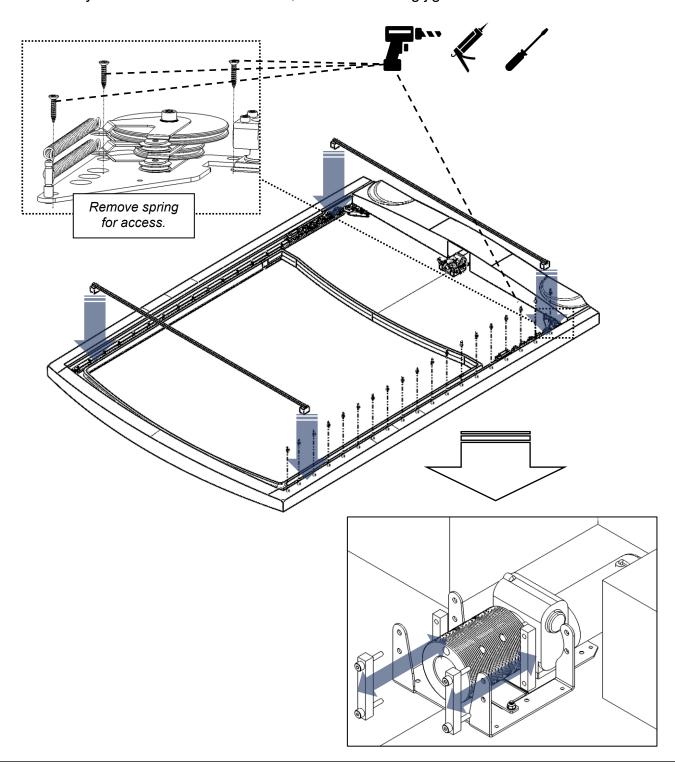


Legal note:

- 1. Lift/move motor to access marked mounting points. (Step not required if holes can be drilled with motor in place)
- 2. Drill Motor Securing points to suit fasteners.
- 3. Position motor and secure with fasteners.



- 1. Reinstall JIG Bars
- 2. Align opposite track (port shown) assembly with the pencil mark.
- 3. Drill 4mm holes, fill holes with silicone sealant and Screw down track and tensioner.
- 4. Visually check all cables are on runners
- 5. Remove Nylon blocks from drive cables, and track Setting jigs.

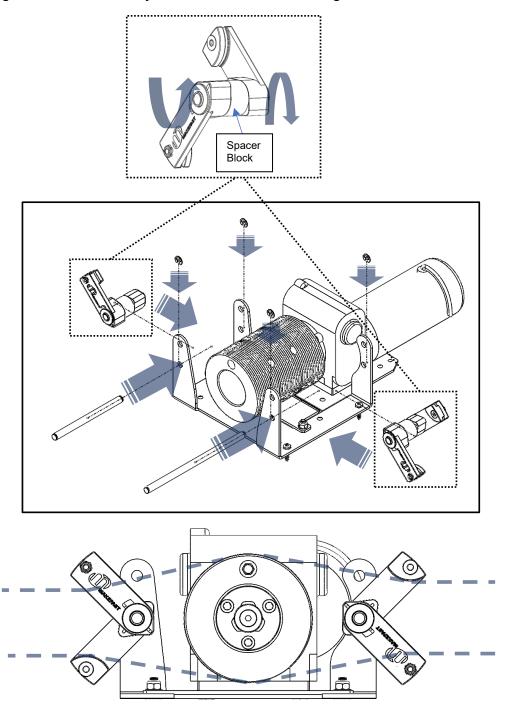


Legal note:

- 1. Pre-wind slack adjusters with a single turn. **Note:** Some versions may not be supplied with spacer block.
- 2. Install pins through the frame and slack adjusters. **Note:** pins may be fixed with clips or nuts depending on model type. Lubricant should be applied to both pins.



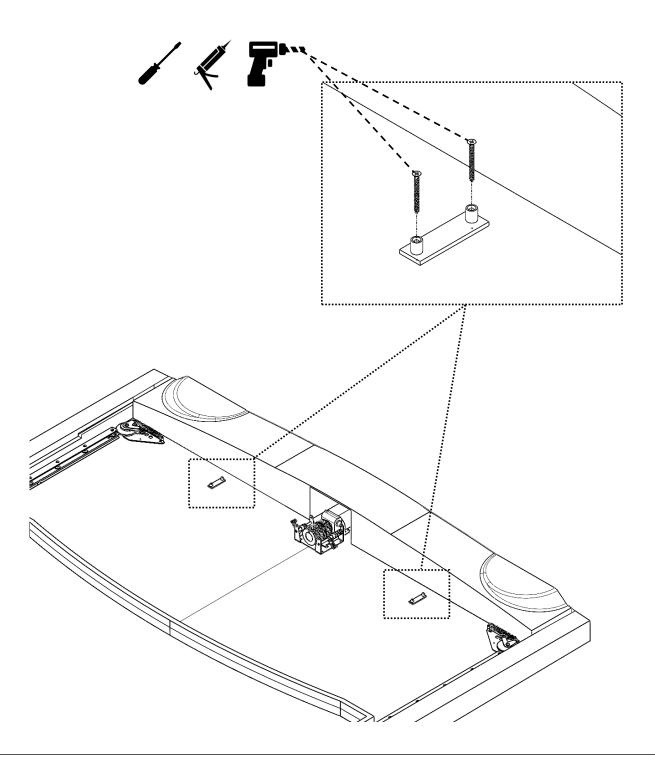
NOTE: We recommend that any holes in boat structure for motor cabling be at least at the height of the motor body in order to avoid water ingress.



Legal note:

INSTALLATION STAGE 7 (if cable pads are not included skip this step)

- 1. Place the cable pads as shown at the midpoint or at the point between the motor and aft cable tensioner where the cable is most likely to contact the hull. (See boat specific drawing)
- 2. Drill and screw down the cable pads on either side of the motor.



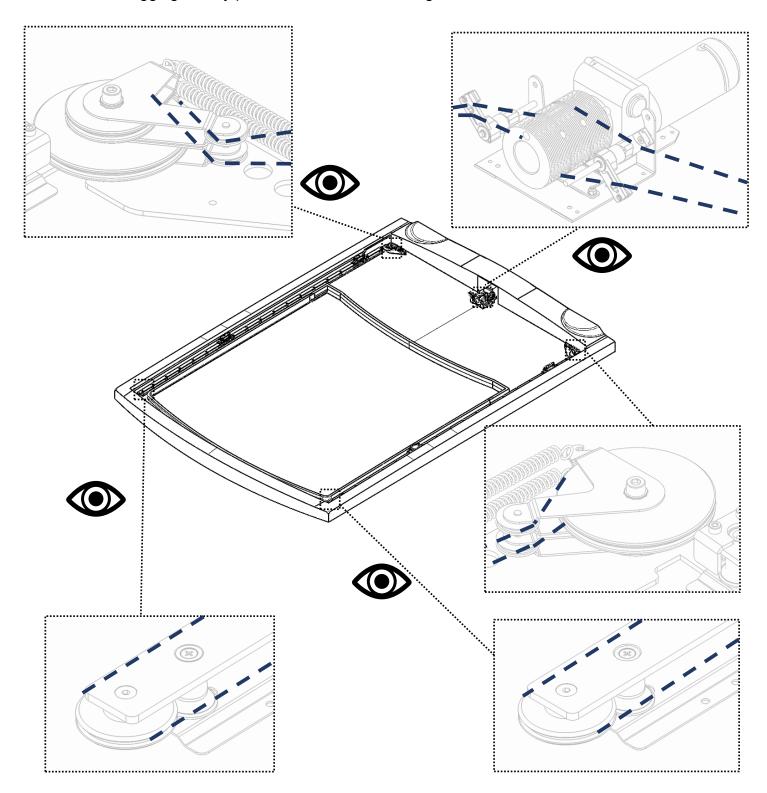
Legal note:

CABLE INSPECTION



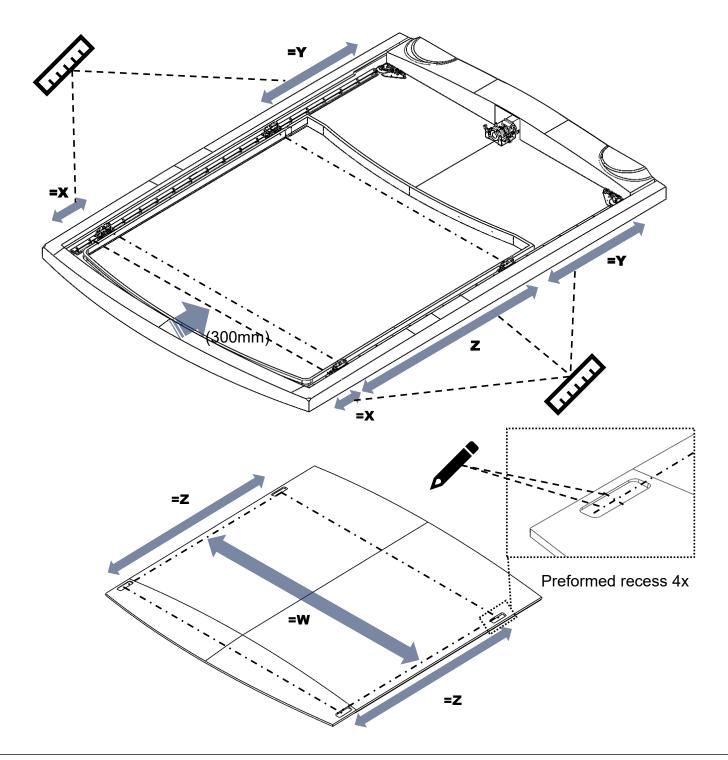


1. Ensure drive cable are running correctly in tensioned guide wheels. Cables should not be snagging on any parts and should be running within the channels on the wheels.



Legal note:

- 1. Move the Cars Approximately 300mm from the FWD end of the roof
- 2. Measure the distance from the fwd of each drive car, to the closest track end, these should be equal on both sides. Ensure that distance between centre of cars sits at the centre point of the preformed recess in the panel. If adjustment is needed see next step.
- 3. Mark the centre points of the preformed recess in the panel.



Legal note:

MOVING DRIVE CARS

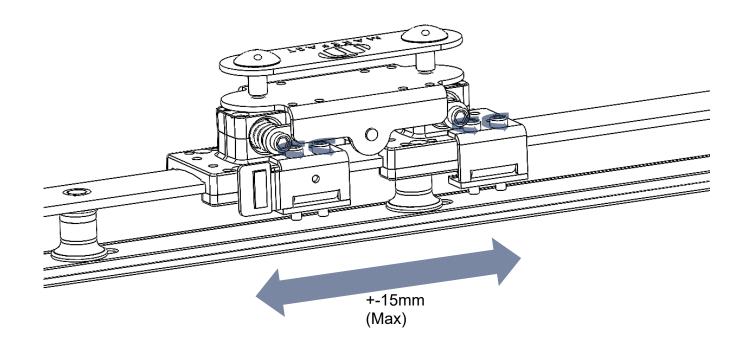
1. unscrew the 4mm Allen key bolt (loosen do not remove) slide track car to desired location and retighten.



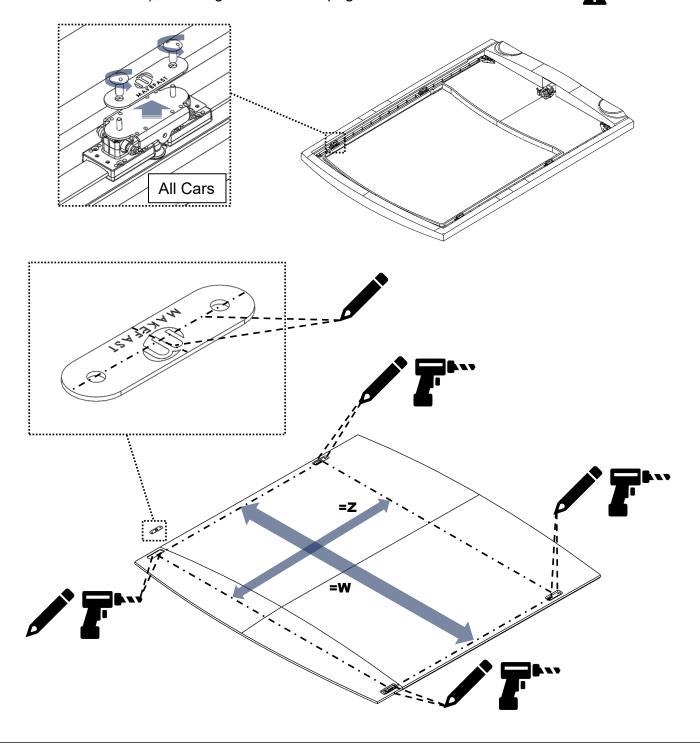
NOTE: Drive cars should not need to be move more than +-15mm (Max) from presecured location.



IMPORTANT: Drive cars must be the same distance from the end of the track on port and starboard sides.



- 1. Remove panel connection plates.
- 2. Mark centre lines on panel connection plates
- 3. Use panel connection plates as a template and align connection plates to marked lines on Panel.
- 4. Mark hole centres with pencil line and drill 12mm holes on marked positions (use pilot hole for this), ensuring drill remains upright. **DO NOT OVERSIZE HOLES**



Legal note:



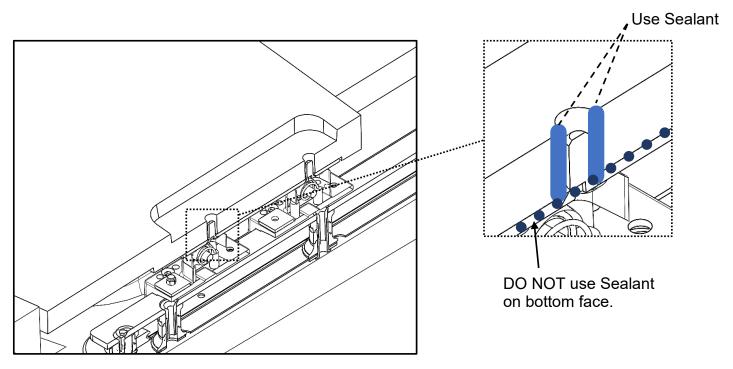


Inspection step: before securing the panel connection plates, any voids between the underside of the panel and the top of the drive car will need to be rectified with spacers. If this gap is not taken up with spacers then system may become overloaded.

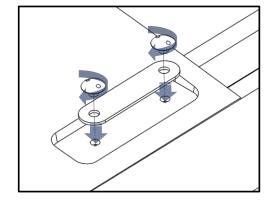
- 1. Slide the pins through the holes and attach the panel connection plate.
- 2. Use silicon sealant to fill drive car to nose connection holes to prevent water ingress.



IMPORTANT: Do not use sealant on the underside of the drive car connection point.



Section View of Driving Car – Applies all Sides



Legal note:

INSPECT: Confirm that the drive car magnets will move directly in front of the sensors, sensors will not pick up the signal unless magnets pass within close range.



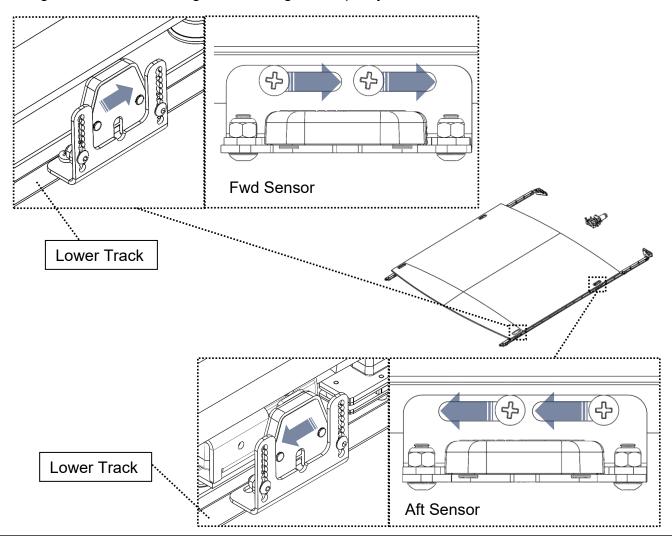
IMPORTANT: All sensors should be fully setup before installing any covering panels **IMPORTANT:** Please adjust sensors accordingly if fwd or aft seals are used on the panel

- 1. Attach the supplied sensors through the fixing holes in the lower track (some systems may already be attached)
 - **NOTE:** Sensors may be on either side of starboard or port track, this is dependent on the design of your system.
- 2. With sensor fixings loose slide the fwd sensor to the aft most position, and the aft sensor to the fwd most position.

A

IMPORTANT: this step will stop the system from overrunning and potentially damaging the system.

3. Tighten the sensor fixing down enough to stop any movement.



Legal note:



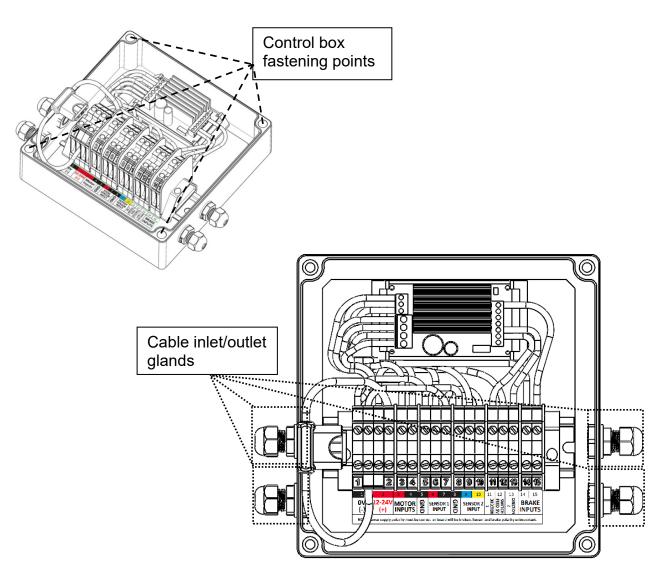
NOTE: Control box should be mounted as close to the roof system as possible within the boat structure

NOTE: Special attention must be given to the polarity of the power cables connecting to the control box, incorrect connection will cause irreparable damage to the control box.

NOTE: If extensions are made to the supplied components, please ensure all connection are made securely.

NOTE: Positions 14 and 15 are used for braked systems and cables can go in either point.

NOTE: Sensor connection will have brown and white wire, these can be connected to position 6,7 and 9,10 respectively in any orientation, however location in 6,7 and 9,10 should be the same. i.e. 6=Brown 7=White 9=Brown 10=White.

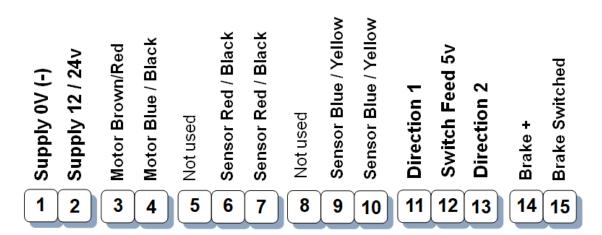


Legal note:

INSTALLATION STAGE 12 (Continued)

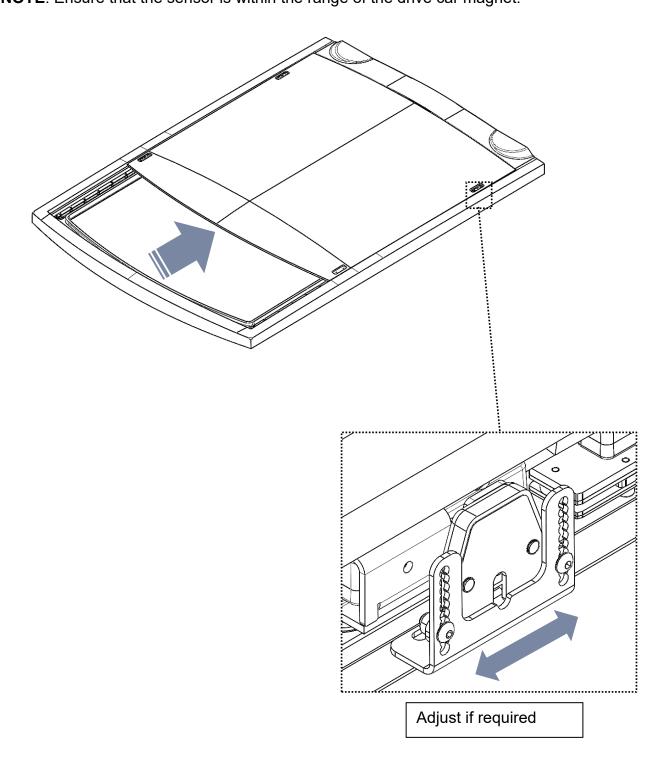
- 1. Feed all cables through the glands located on the bottom of the box, put power and sensor cables through different glands, which glands are used is down to the installer.
- 2. Connect cables as per wiring diagram.
- 3. Screw box into desired location using 4 the fixing points in corners of box.
- 4. The system is now ready to be powered up.
- 5. If direction of travel of system does not match switch indication, then swap position of cables in port 3 and 4.

NOTE: Always make first movement of the roof towards the open position



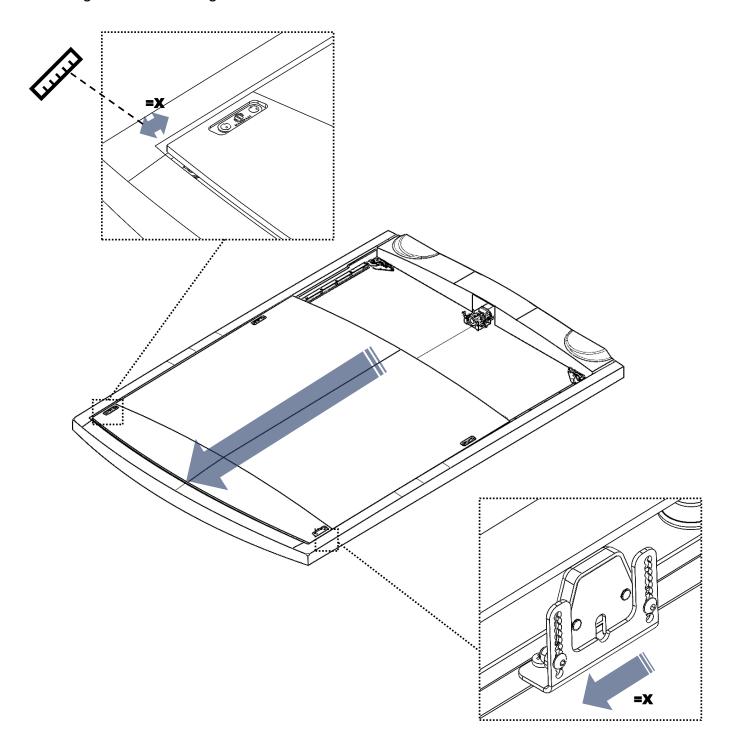
Note: Input polarity must be correct or board will be damaged.

- 1. Move the roof to the fully open position
- 2. The panel should stop at the aft sensor position. If the nose stops to far forward, move the sensor positions by sliding the sensors towards the aft, and secure in place.
- Tighten sensor fixings.
 NOTE: Ensure that the sensor is within the range of the drive car magnet.



Legal note:

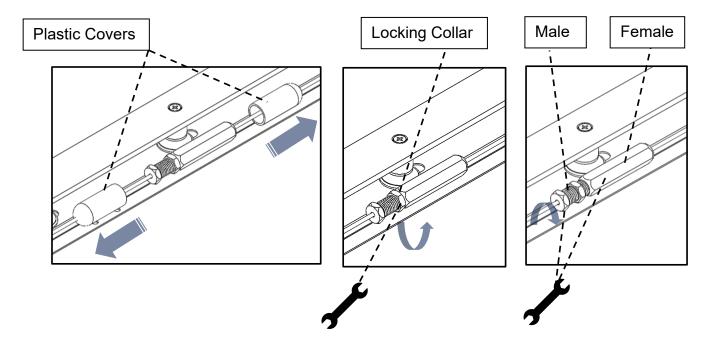
- 1. Move the roof to the fully closed position.
- 2. The nose should stop at the fwd sensor position. If the nose stops to far back, before creating the seal measure the distance of the gap and move the sensor position the same distance.
- 3. Tighten sensor fixings.



Legal note:

POST INSTALLATION PROCEDURE

- A. Clean all dust, debris and grease off the tracks and channels. This is very important to ensure the roof runs efficiently.
- B. Once the tracks are clean, rub a small amount of Superlupe (supplied with the roof system) along the edges of the track. This must be done at the end of installation process as dust and dirt will get into the grease.
- C. Run the roof back and forth as many times as possible to ensure the roof is running smoothly and efficiently. This procedure also works in the grease into the cars and tracks.
- D. Check the cable tension and adjust if required.
 - 1. Remove Plastic covers
 - 2. Release locking collar hold female section and tighten male section.
 - 3. Once tension achieved apply Loctite and secure locking nut.



E. Visually inspect system full to confirm all cables are running in their channels, and system is running smoothly. (see 'Cable inspection' section)

MAINTENANCE

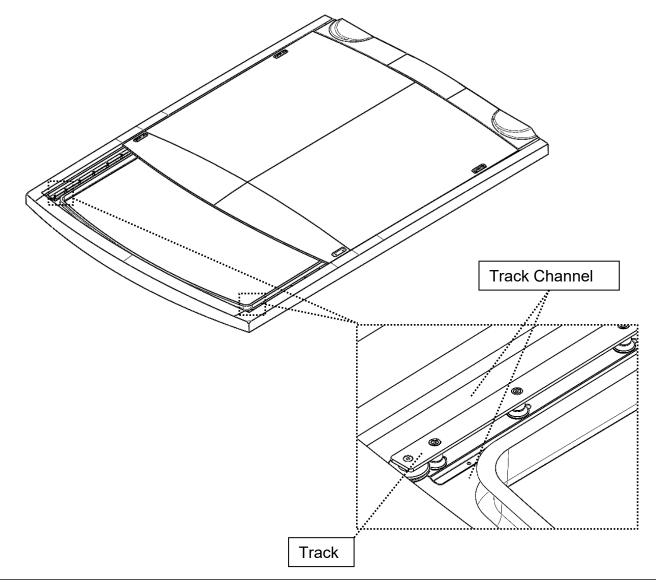


To ensure your sunroof operates smoothly and to prolong the life of your roof, the following tasks should be carried out at regular intervals.

The tracks on both sides should be cleaned down and lubricated after any long period of navigation or in 2 months intervals.

To clean the tracks:

- Wipe down each track with fresh soapy water, remove any traces of dust or debris from the tracks.
- Remove any foreign objects from the track channels and clean the cable to minimize the amount of dirt.
- Lubricate edges of track with Superlube Synthetic Grease



Legal note:

TROUBLESHOOTING

In the unlikely event of your sunroof failing to operate please refer to this page to help you solve the problem or give the dealer the correct information on what the malfunction is with the roof.

No movement:

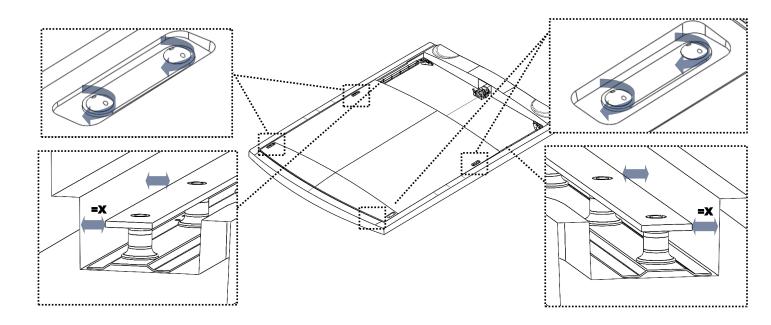
- Check power; ensure your batteries are fully charged and power is going to the roof i.e. no trips have been triggered (refer to boat manufacturer's guide).
- If you have power but still have no movement check the following:
 - Check that nothing is blocking the front of the roof travel as you may have triggered the trip.
 - Check that there is sufficient clearance between the vessel structure and nose/panel.
 Contact dealer for assistance.
 - Check the cables have not failed. Contact dealer for assistance.
 - If the roof still does not travel, there is likely an electrical issue.
 - Roof runs one way but not the other. Contact the dealer quoting a sensor problem.

Roof is Bouncing

- · Cables need tightening.
- · Tracks need lubricating.
- · Panel need balancing.

Sunroof is vibrating or noisy:

- If the roof is vibrating when in operation, please check the following:
- The tracks must be cleaned and lubricated as per maintenance guide.
- There should be no obstacles on the line of roof travel.
- Check the bolts on the nose mouldings are tight.
- Check the sunroof is parallel.



Legal note:

WARRANTY

Any product defect notification must be accompanied by a serial number, date of purchase, contact name, address and daytime telephone number. If this information is not provided, Makefast Ltd may be unable to process your warranty claim.

- 1. Makefast Ltd (We, Our, Us) warrants this Product (excluding labour, travelling and expenses) to be in free of manufacturing defects during the period of warranty. The period of warranty is 24 months and commences on the date of despatch of the Product from Makefast Ltd. Extended Warranty is available beyond the manufacturers 2-year standard Warranty. Please contact Makefast or your Boat Broker for details.
- 2. The Warranty consists of (at Makefast's discretion) either repair or replacement spare parts only that will be provided on an exchange basis and will either be new, equivalent to new or re-conditioned. All replaced spare parts and Products shall become the property of Makefast, and are required to be returned to Makefast for analysis, and acceptance of warranty terms.
- 3. Unless agreed in writing, the Warranty will not apply: (a) because you have not used, stored or fitted the Product properly; or because you are in breach of the terms of this warranty or the Contract terms, or have not followed Our instructions in the product manual, or because of damage or defect due to wilful neglect or negligence by anyone; (b) to loss of quality, degradation of performance or actual damage that results from the use of spare parts or other replaceable items that are neither made nor recommended by Makefast; (c) to a loss of quality, degradation of performance or damage that results from the installation of, damage to, or modification to the Product by someone else other than Our representatives or because of damage that results from changes required by you or a Third Party; (d) to damage that results from your connection of other fittings or accessories to the Product which We have not approved or your connection of other equipment or software not approved by Us; (e) because of external causes outside Our control which shall include accident, fire disaster or burglary; (f) because of faults caused by shock or fall, sand, dust, dirt, damp or corrosion, leaky batteries, repair by unauthorised personnel; (g) because of any malfunction or specific requirement of any other item of hardware, which you have linked to the Product in respect of items not included in the Contract.
- 4. As far as the law allows, we will not be responsible for the following: (a) loss of income, profits (actual or anticipated), and contracts or for any other business-related loss; (b) indirect or consequential loss or damage howsoever caused; (c) compensation for fitting of replacement parts.
- 5. These conditions shall in all respect be governed and construed in accordance with English Law and subject to the exclusive jurisdiction of the English Courts.

SERVICE CONTACT

Please ring Makefast Ltd +44 1686 629010 for contact details in the highlighted areas:

