

# **RUTLAND**

## **MARINE MOUNTING & STAYS KITS**

Part Nos:

Rutland 500 Series Marine Mounting Kit CA-12/01

Rutland 910 Series Marine Mounting Kit CA-12/02

Rutland Standard Marine Stays Kit CA-12/32



**Marlec Engineering Co Ltd**

## RUTLAND 910 & 500 SERIES MARINE MOUNTING KITS

Each Rutland mounting kit is designed for easy installation of the relevant Rutland 910 & 500 series of Windchargers on most sailing yachts. The separately supplied stays kit is compatible with both kits. All are manufactured from mirror finished stainless steel. Please Note: Additional bracing is required appropriate to the individual installation. Please read through these instructions carefully before commencing installation.

### Check you have received: (Refer to Figure 1.)

#### 910 Series

- 1x Mounting Tube Upper Section
- 4x Guy Brackets
- 2x M8 x60mm bolts, Lock Washers and Locking Nuts
- 4x M10 x 16mm Screws and LockWashers
- 1x Aluminium Tube Joiner
- 1x Mounting Tube Lower Section
- 2x Deck Mounting Bracket
- 1x M10 x 60mm Bolt & Locking nut

#### 500 Series

- 1x Mounting Tube Upper Section
- 4x Guy Brackets
- 6x M8 x 12 Screws & Lock Washers
- 1x Aluminium Tube Joiner
- 1x Mounting Tube Lower Section
- 2x Deck Mounting Bracket
- 2x M8 x 50 Bolts & Lock Nuts
- 1x M10 x 50 Bolt & Lock Nut

### What you will need:

- Drill
- Drill Bits
- Suitable Deck Fixings
- Silicone Grease
- Suitable Guys and Fixings
- Suitable Cable and Watertight Cable Glands (if necessary)
- Silicone Sealant
- 6mm AF Allen Key
- 2x 13mm Spanner (or adjustable spanner)
- 2x 17mm Spanner (or adjustable spanner) 913 only

### Installation considerations:

- Choose a suitable location for the mounting, paying particular attention to fixing to the deck, suitable guy anchor points, and cable route.
- The mounting kit can be installed using 3 or 4, wire rope or rigid guys. Ensure the guy attachment points are as equally spaced as possible around the tube.

### Fitting the deck mounting brackets:

- Choose a suitable location for fixing the deck mounting brackets.
- Place the brackets on the deck and mark the hole positions.
- Remove the brackets and drill the marked positions.
- Apply silicone sealant around the holes and the area covered by the brackets.
- Bolt the mounting brackets in position using suitable M8 fixings, ensuring a watertight seal.

**Assemble the mounting tube:**

- Before joining tubes, thread cable through top tube section, then tube joiner and then bottom tube section.
- Apply silicone grease to the aluminium tube joiner and place half way in to the mounting tube tower section, ensuring the holes in the tube align with the threaded holes in the tube joiner. This is also good practise for all stainless steel bolts.
- Secure in position using 2 of the M10x 16mm screws and lock washers for the 910 Series or 2 of the M8 x 12 screws and lock washers for the 500 Series.
- Repeat the above procedure for the mounting tube upper section.
- Position the assembled mounting tube onto the deck mounting brackets and secure in position with the M10x 60mm bolt and nut for the 910 Series or the M10 x 50mm bolt for the 500 Series.
- The deck brackets can be mounted at an angle if the need arises.
- Ensure that the mounting tube is perfectly vertical
- Ensure that the mounting tube is braced to another vertical or horizontal structure to afford extra strength to the completed assembly. This has to withstand large forces during operation.

**Fitting the stays:**

- Follow the instructions for the stays kit.

**Other components available:**

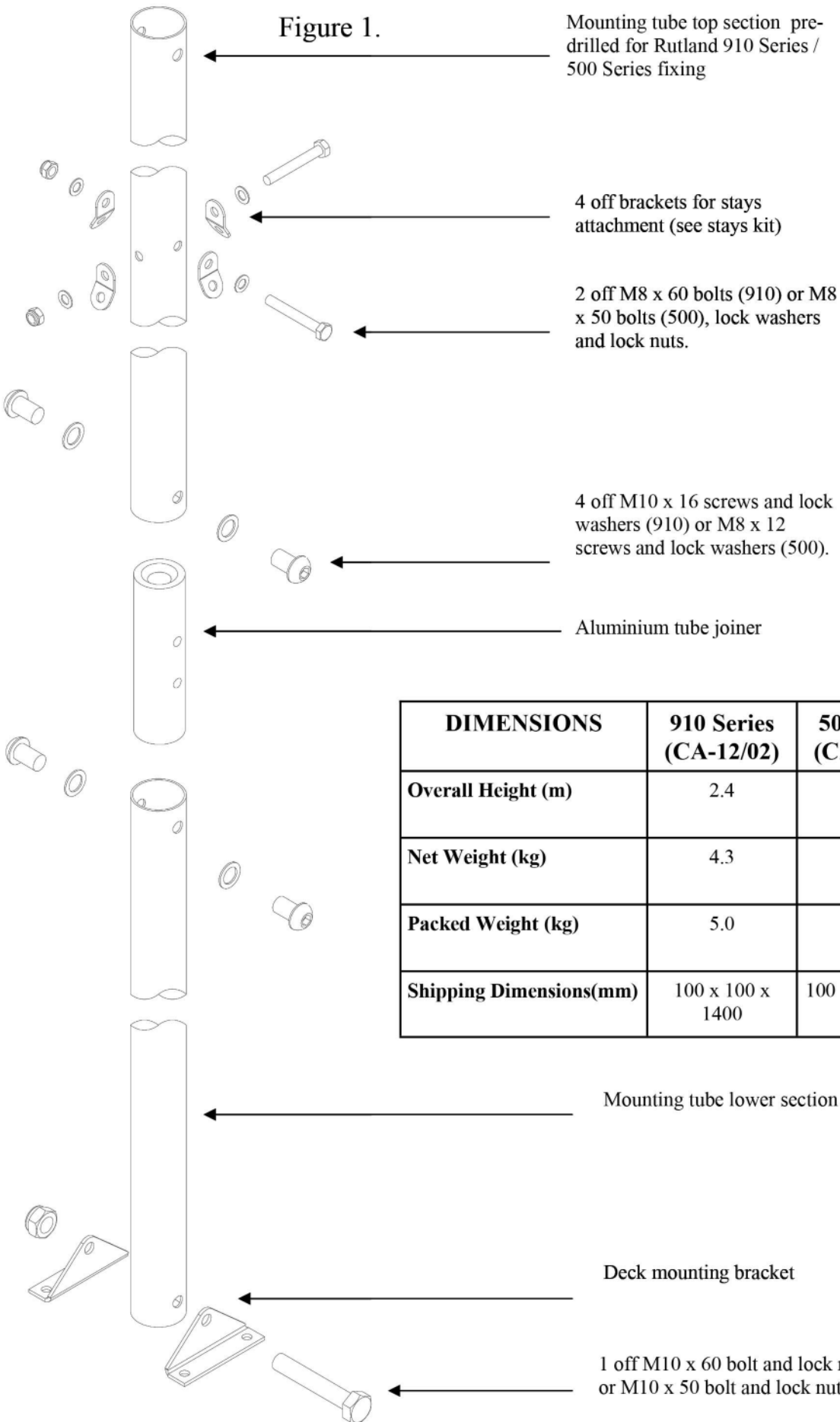
If a full Rutland mounting kit is inappropriate for the vessel it will still be necessary to mount the Windcharger on a dedicated pole length of the correct external diameter to ensure correct blade clearance. This may be joined to an existing structure. The following are available from your Rutland dealer :-

- 500mm Stainless Steel Tube (500 Series) Part No: CA-12/16
- 1000mm Stainless Steel Tube (500 Series) Part No: CA-12/15
- 600mm Stainless Steel Tube (910 Series) Part No: CA-12/04
- 1200mm Stainless Steel Tube (910 Series) Part No: CA-12/03

**Fitting to other vessels or vehicles:**

The Rutland Marine Mounting & Stays Kits were primarily designed to be fitted to yachts. It is possible to adapt them for use for Narrowboats, Motorhomes, Caravans, etc., although the stays kit may be wholly inappropriate and guys may have to be used instead. Please contact the support team at Marlec for further help.

Figure 1.



Mounting tube top section pre-drilled for Rutland 910 Series / 500 Series fixing

4 off brackets for stays attachment (see stays kit)

2 off M8 x 60 bolts (910) or M8 x 50 bolts (500), lock washers and lock nuts.

4 off M10 x 16 screws and lock washers (910) or M8 x 12 screws and lock washers (500).

Aluminium tube joiner

DIMENSIONS	910 Series (CA-12/02)	500 Series (CA-12/01)
Overall Height (m)	2.4	2.0
Net Weight (kg)	4.3	3.0
Packed Weight (kg)	5.0	3.1
Shipping Dimensions(mm)	100 x 100 x 1400	100 x 50 x 1100

Mounting tube lower section

Deck mounting bracket

1 off M10 x 60 bolt and lock nut (910) or M10 x 50 bolt and lock nut (500).

## RUTLAND MARINE MOUNTING STAYS KIT

This kit is designed for use with the Rutland Windcharger Marine Mount Pole Kit (Part Nos: CA-12/01 & CA-12/02). Please refer to installation instructions thereof. This Stays Kit is designed for attaching your Rutland Marine Mounting Pole Kit to a 1" (25mm) diameter handrail (usually around the push-pit). It is highly recommended that the complete system is installed first without the Windcharger fitted. Read through these instructions carefully before commencing installation.

### Check you have received: (see Fig.4-5)

- 2x 22mm dia x 1200mm Stays
- 4x 22mm i.d. dia drilled End Caps
- 4x M5 x 35mm bolts
- 4x M5 Nylock Nuts
- 2x Hinged Rail Clamps
- 2x Split PVC Tubes 25mm (spacers)
- 2x 8mm Grommets
- 2x M6x20 Hex Head Screws/Washers & Nyloc Nuts
- 1x 3mm Allen Key
- 1x 3/16" Allen Key

### What you will need:

- Screwdriver (Flat-blade)
- 2x10mm Spanner
- 2x 8mm Spanner
- Measuring Tape
- Hacksaw
- Spirit Level
- 5mm drill bit

### Determining the length of Stays:

When the location for the mounting pole has been established and the pole kit assembled the length of the stays must be determined. It is recommended that the angle of the stays between each other is in the range of 60 to 120° (see Fig.2) and the angle to the upright in the range of 30 to 45° (see Fig.3).

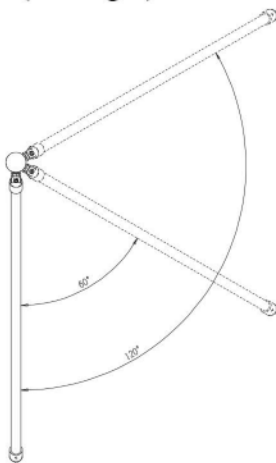


Figure 2

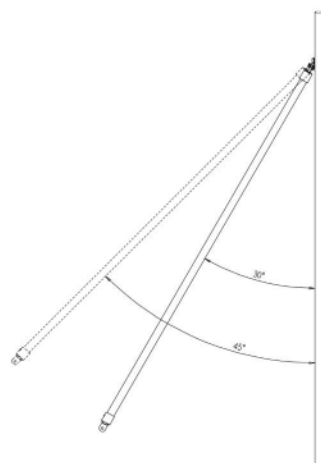
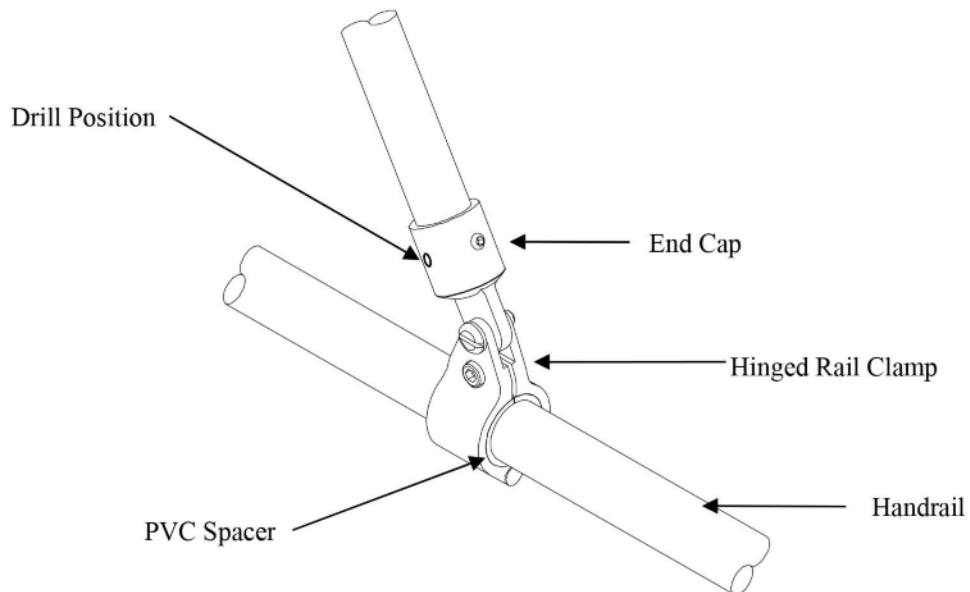
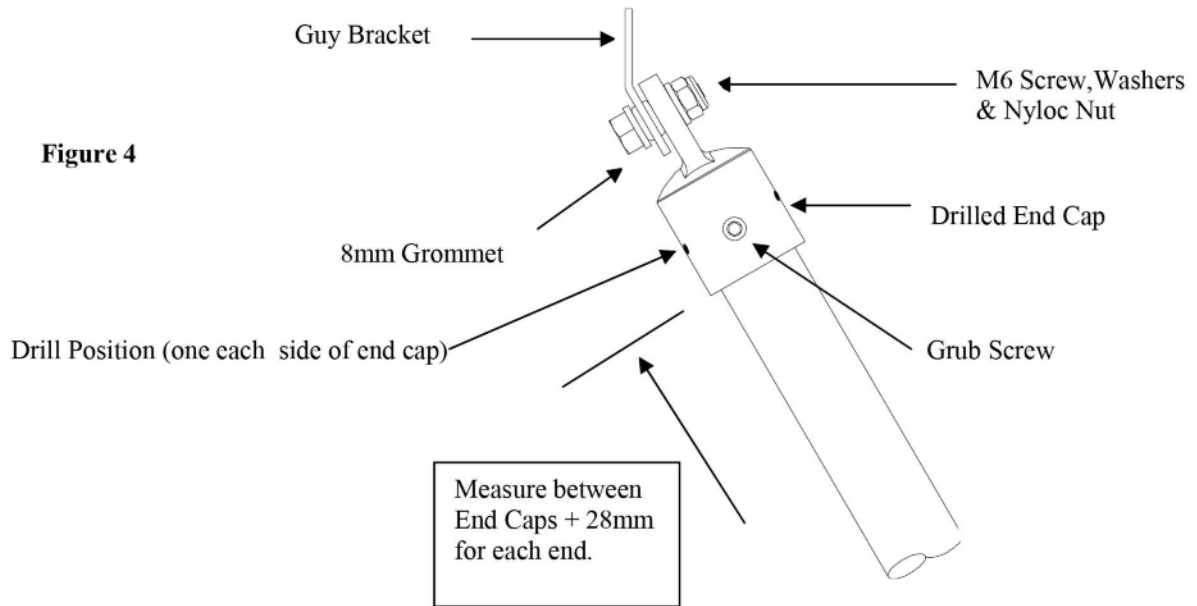


Figure 3

If this angle is exceeded then the stays should be cut down with a hacksaw. To determine the length fit the End Caps to the pole using the guy brackets supplied with the pole kit (see Fig.4) and the Hinged Rail Clamps and End Caps to the rail in the desired position (see Fig.5). Measure between the two and add 28mm x 2 to allow for the depth of the End Caps. Cut the stays to the required length and de-burr the cut ends.



**Figure 5**

### Final Assembly:

- Fit the End Caps onto the Stays and secure with the 3mm Allen Key supplied.
- Using a 5mm drill bit, drill the pole through each entry hole SEPARATELY.
- Insert the M5 x 35mm bolt and nylock nuts
- Fit the 8mm grommet in one hole in each guy bracket.
- Attach the top End Caps to the guy brackets using M6x20 screws, washers & nyloc nuts (Fig.4).
- Attach the Hinged Rail Clamps to the rail in approximately the correct position with the PVC spacer between the clamp and rail-do not tighten at this stage (Fig.5).
- Using a spirit level ensure the pole is vertical-slide the clamps along the rail as necessary.
- When the pole is vertical tighten the clamps using the 3/16" Allen key and flat blade screwdriver.
- Tighten the M6 nyloc nuts on the guy brackets using 10mm spanners.(see Fig.6)

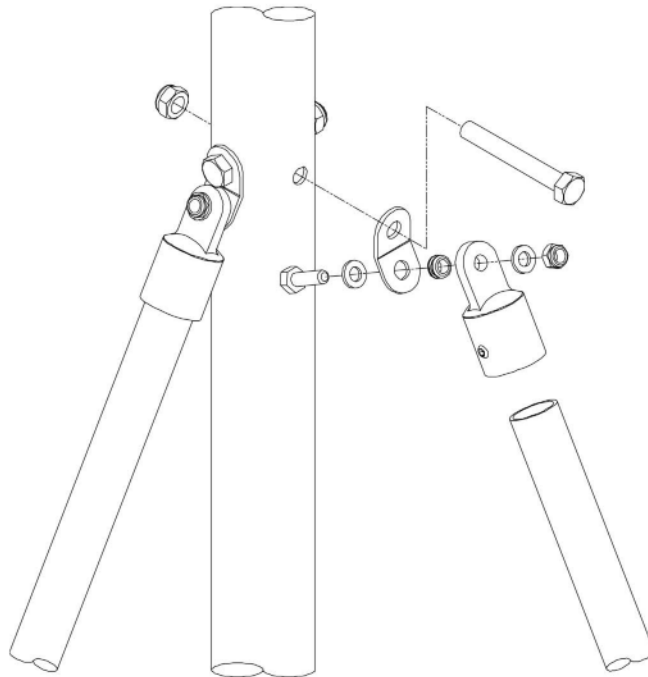


Figure 6

### Final Checklist & Routine Maintenance

- Before commissioning the installation, run a final check on the tightness of all nuts, screws and grub screws. These should be checked regularly.
- Periodically check that sleeves and brackets have not moved from their original positions.
- Wipe down stainless steel surfaces from time to time to prevent blemishing.



## **LIMITED WARRANTY**

**The Marlec Engineering Company Limited Warranty provides free replacement cover for all defects in parts and workmanship for 12 months from the date of purchase. Marlec's obligation in this respect is limited to replacing parts which have been promptly reported to the seller and are in the seller's opinion defective and are so found by Marlec upon inspection. A valid proof of purchase will be required if making a warranty claim.**

**Defective parts must be returned by prepaid post to the manufacturer Marlec Engineering Company Limited, Rutland House, Trevithick Road, Corby, Northamptonshire, NN17 5XY, England, or to an authorised Marlec agent.**

**This Warranty is void in the event of improper installation, owner neglect, misuse, damage caused by flying debris or natural disasters including lightning and hurricane force winds. This warranty does not extend to support posts, inverters, batteries or ancillary equipment not supplied by the manufacturer.**

**No responsibility is assumed for incidental damage. No responsibility is assumed for consequential damage. No responsibility is assumed for damage caused by the use of any unauthorised components.**

**Manufactured in the UK by  
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