

# SailForce

*Kit de motorisation*



## INSTALLATION

ENGLISH

*by Ewincher™*

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# SailForce


## *Kit de motorisation*

### 1 INTRODUCTION

*You have just purchased a Sailforce motorization kit.*

*Depending on the model you have chosen, this motorization kit can be installed on:*


- *Hutton ST winches in sizes 40, 45, 52, 57, 60 and 70*
- *Harken Radial or Performa winches in sizes 35, 40, 46 and 50*

 *SailForce™ electrification kits for Harken winches are available for sale in all countries, except for the following, where they are not available for sale under any circumstances : France, Italy, Germany and United Kingdom.*

*This is a high-performance product which must be installed with the utmost care to ensure safe and trouble-free operation.*

*Before beginning installation, it is essential that you read this manual in its entirety and ensure that you have all the knowledge and skills necessary to install this product. Incorrect handling could result in injury to the operator or damage to the product.*

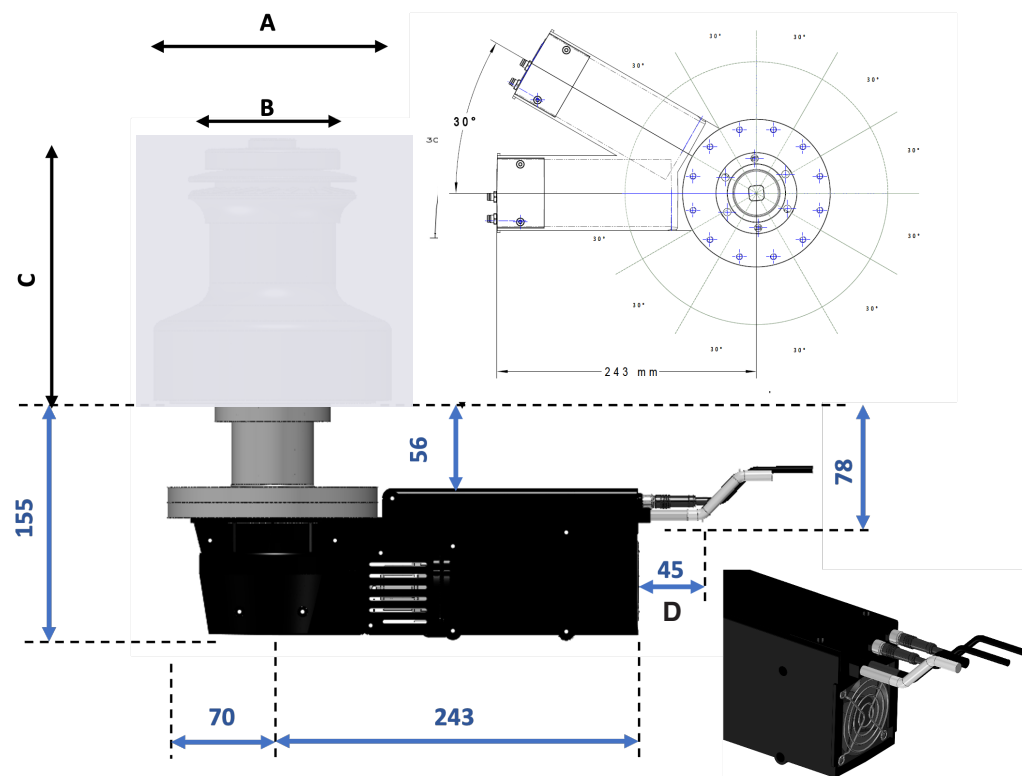
*In case of doubt, please contact Ewincher's technical service at:*  
**[contact@ewincher.com](mailto:contact@ewincher.com)**

 **Ewincher accepts no liability for injury or product damage caused by incorrect assembly**

**by Ewincher™**

## 2 DIMENSIONS OF SAILFORCE MOTORISATION KIT COMPONENTS

### a) Motor



A, B and C depend on the brand and type of winch on which you are installing the SailForce motorization kit.

**Note:** it is possible to purchase an angled connector to reduce the length D from 45mm to 25mm.

### b) Other elements

#### Lithium-ion Battery



#### Power cables between battery and motor

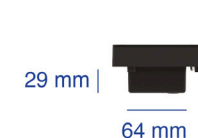
Your SailForce is supplied with the right cables for your situation. Depending on the distance you have chosen (between the battery pack and the motor), you will receive one of 3 options:

**Power cable (Li-ion battery to 12 or 24V service battery) : length 2 meters, Ø 6 mm**

- 2x2,5 meters, section of 6 mm<sup>2</sup>, Ø 5 mm
- 2x5 meters, section of 10 mm<sup>2</sup>, Ø 6 mm
- 2x8 meters, section of 16 mm<sup>2</sup>, Ø 8 mm

#### Command Units

##### ○ Advanced Command



##### ○ Essential Command



#### Command Unit's Cables

These cables go from the motor of the winch to the corresponding control command. Depending on the chosen command type:

- **Essential Command**: 2 meters, Ø 5 mm
- **Advanced Command**: 2 meters, Ø 5 mm
- **Full Command**: 1x2 meters + 1x6 meters, Ø 5 mm

***Your delivery has been checked with the greatest care by our teams. Before starting the installation, please make sure that you have all the components. Depending on your order, you should find in your delivery:***

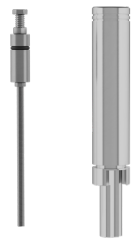
## Contents of the pack

All the components needed to install your electric winch are included in our package.

### 1 Motorisation kit

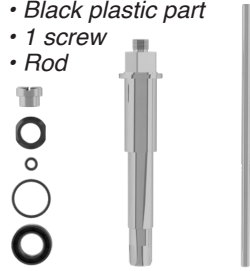
#### Winch Hutton

- Center shaft
- Sealing rod
- Washer



#### Winch Harken

- Center shaft
- Lip seal 17\*30\*7
- 2 O-rings
- Black plastic part
- 1 screw
- Rod



### Command Unit

3 options

#### *Essential Command*



#### *Advanced Command*



#### *Full Command*



### 1 motor with a flange



### 1 Lithium Battery

30V, charges on the boat's 12V



## Screws and bolts

You'll also find all the nuts and bolts you need for installation in your pack:

#### ○ **Fixing the flange to the winch:**

- \* For Hutton winch motorization : 4 screws (TCHC1/4"UNC\*5/8") + 4 narrow washers M6 + Allen wrench for American standard screws
- \* For Harken winch motorization : 6 CHC M6x16 screws

#### ○ **Fixing the motor to the flange:** 4 M6x25 torx screws + 4 M6 medium washers

#### ○ **Control box mounting:** see §6-a (p20) and/or 7-a (p24)

#### ○ **Battery pack mounting:** 4 self-tapping screws 3.5 x 16 pozidrive

## Cables required for installation

All cables are supplied with connectors adapted to each component of the electric winch: motor, battery and control command.



### **Power cable (batterie Lithium to service battery)**

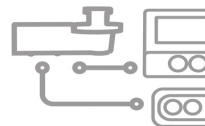
Length 2 meters, Ø 6 mm



### **Lithium battery/Motor cable**

3 options:

- 2x2,5 meters, section of 6 mm², Ø 5 mm
- 2x5 meters, section of 10 mm², Ø 6 mm
- 2x8 meters, section of 16 mm², Ø 8 mm



### **Command Unit's network cables**

Depending on the chosen command type:

- *Essential Command* : 2 meters, Ø 5 mm
- *Advanced Command* : 2 meters, Ø 5 mm
- *Full Command* : 1x2 meters, 1x6 meters, Ø 5 mm

## Documentation

- Installation instructions
- User's manual
- Drilling template for : Boat drilling  
Advanced Command  
and/or Essential Command



## a) General precautions

The various stages of SailForce assembly require particular vigilance to avoid injury or damage to the product.

**Certain precautions must therefore be observed:**

- Make sure you have mastered the skills required for each stage of assembly before you start. Read this manual in its entirety before handling.
- The various tools used for assembly entail risks. It is the operator's responsibility to use them in a normal context of use. We accept no liability for the risks associated with these tools.
- SailForce contains heavy parts, which can injure the operator if dropped. Handle the parts with care to prevent them from falling.
- Make sure you work in a well-lit, uncluttered environment, as dark or cluttered spaces are prone to accidents.
- Follow steps and warnings throughout the process to avoid errors and product damage.

## b) Tools required

**You will need:**

- Phillips, Pozidriv and flathead screwdrivers
- A set of Allen keys
- Scribing and measuring equipment
- Ø80 mm hole saw
- 10 mm open-end wrench
- Drill
- Drill bits (Ø2, Ø4, Ø8, Ø12)
- Jigsaw, or preferably a vibrating multi-tool with plunge blade
- Marine sealant
- Thread locker
- Hammer

## c) Reminder of the winch positioning



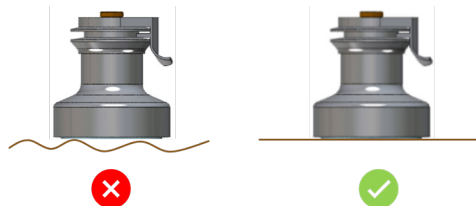
**You have purchased a winch motorization kit. As the winch is already installed on your boat, your first priority will be to avoid modifying its layout. However, take advantage of this installation to ensure that your winch is properly installed.**

**Here are some general installation rules. These guidelines, which are very general in nature, outline the mechanical and space constraints involved in installing a winch.**

## c) Reminder of the winch positioning

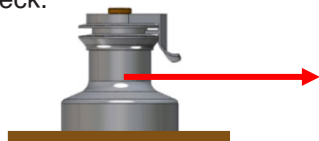
The location must satisfy several conditions

### ○ The winch must be installed on a flat deck surface



### ○ Deck strength

The final assembly must withstand at least twice the maximum load allowed by the winch (indicated above according to winch size). It is the installer's responsibility to ensure that the deck area concerned can withstand such a load. In some cases, it may be necessary to reinforce the deck.

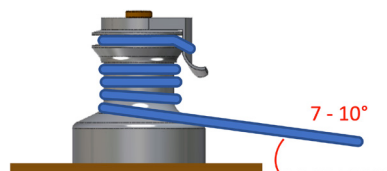


**WARNING:**  
Serious consequences can result from incorrect installation of the winch on the deck

### ○ Rope entry angle

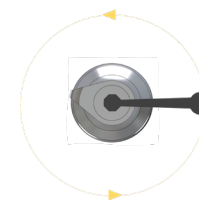
Ensure that the winch configuration will allow the rope to enter the headstock at a downward angle of between 7 and 10°. This is important to avoid overfitting, which can be dangerous.

If necessary, you may need to add a block on the deck to obtain the right angle.



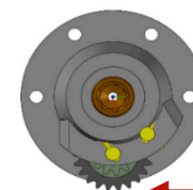
### ○ No obstacles

Check that a conventional winch crank can make a complete turn without encountering any obstacles.



### ○ Drive gear orientation

Position the winch's main gear at the point where the rope enters the winch headstock. This is indicated on the drilling template supplied with the winch (be sure to use the template that corresponds to the size of your winch).



Line entry

## 4 PRECAUTIONS AND MOTOR ASSEMBLY OPERATIONS

### d) Installing the kit on a Hutton winch

#### 1. Conversion from manual to electric winch

The steps in this section describe how to dismantle the winch, drill holes in the boat's deck and reassemble the winch using the parts in the kit to make it electrical.

**Step 1:** Dismantle the winch following the steps below

Remove spiral retaining ring using a thin flat-blade screwdriver



Remove top plate and second retaining ring

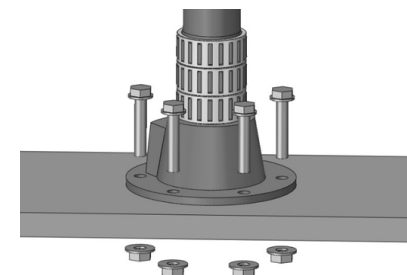


Finally, remove the outer headstock from the baseplate



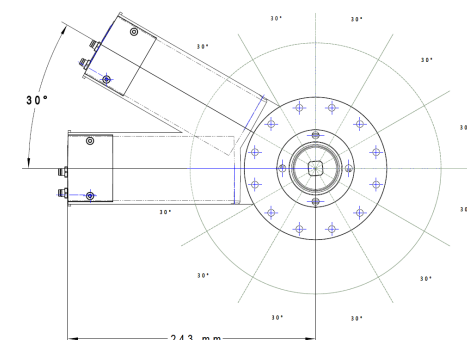
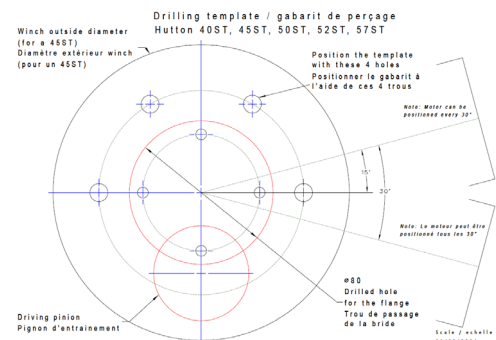
**WARNING:** Take care not to lose any bearings that may remain in the outer headstock.

**Step 2:** Unbolt the winch from the boat and remove it from the deck

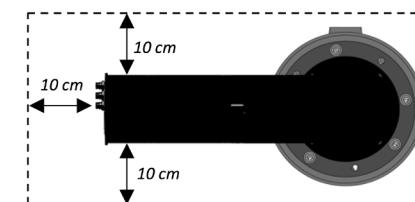


**Step 3:** Checking the position of the engine block (below deck)

Once you have removed your winch following the instructions above, you can use the positioning template to visualise the different options available for your below-deck engine block. The fixing system allows you to position the engine block every 30°. It is necessary to ensure that the motor can be installed without obstacles. If this is not the case, you will need to consider repositioning the winch on the deck.



Ideally, we recommend a 10cm clearance from any surrounding walls (see diagram opposite). This will allow you to connect electrical cables without difficulty, and ensure optimum cooling.

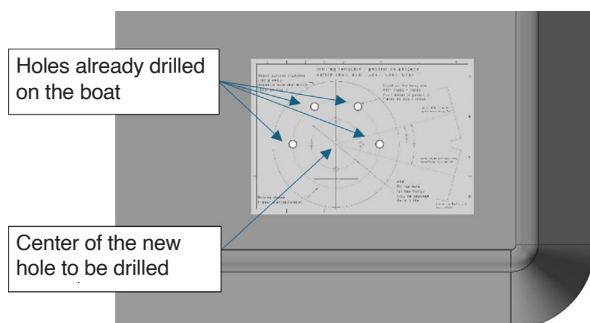


As you'll see in Chapter 10, the SailForce motor is extremely compact, and can also be fitted with a discreet, space-saving overhead housing in the rear cabin.

## d) Installing the kit on a Hutton winch

### 1. Conversion from manual to electric winch

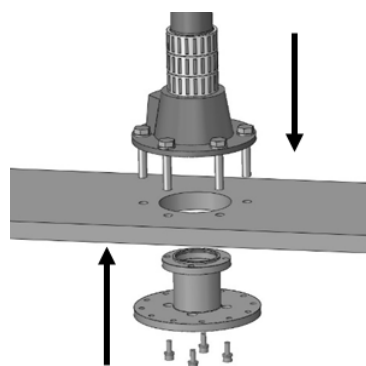
**Step 4:** Once you are sure that the motor can be installed without any obstacles, use the template to mark the centre of the hole to be drilled, using the 4 holes already drilled.



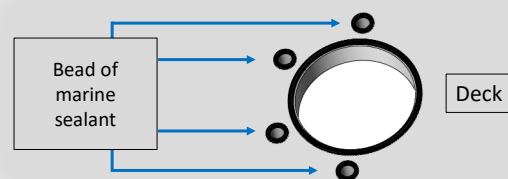
Next, drill an 80mm diameter hole in the deck, centred on the marked point. We advise you to make an initial centring hole with a diameter of 5mm, then use an 80mm diameter hole saw with a centring drill.

### Step 5: Blank assembly

By positioning the winch with its screws, check that the flange can be fitted without any problem. It must be possible to engage the flange in the winch without it being blocked by the edges of the central hole (which could happen due to improper centring when drilling the central hole).

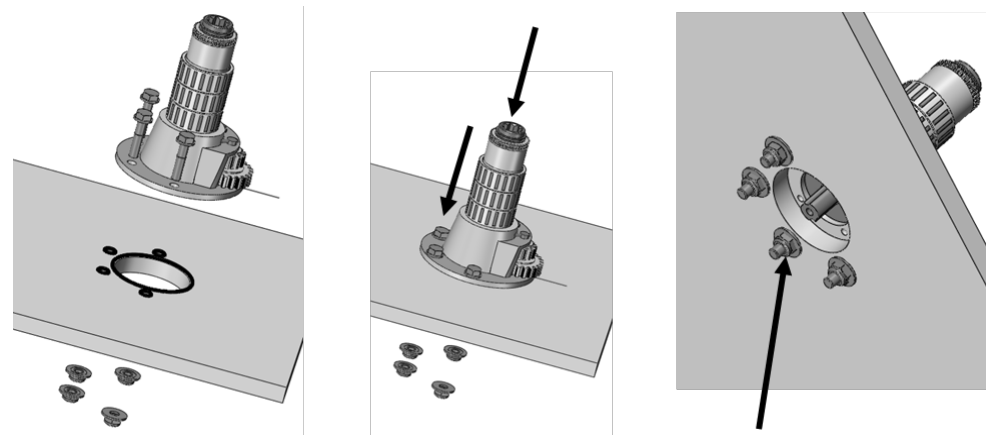


**Step 6:** Apply a bead of nautical sealant around the central hole and the bolt holes according to the sketch.



**Step 7:** Fit and secure the winch base as shown in the diagrams below.

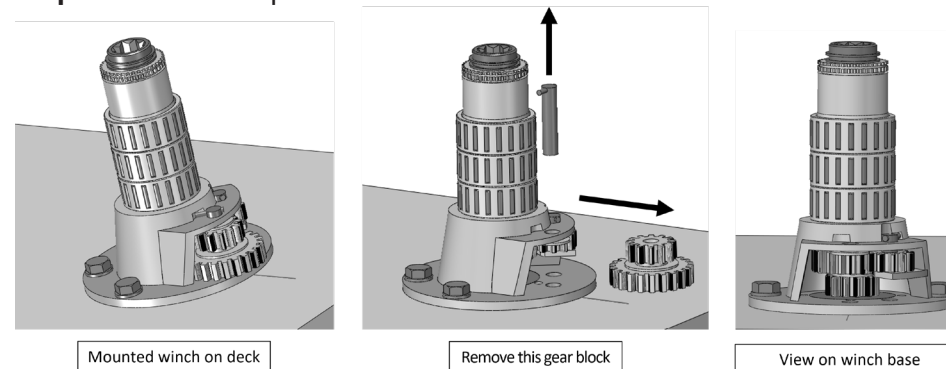
- Positioning the winch base and fixing screws
- After checking that the system is centred in relation to the hole in the flange, tighten the nuts previously removed



### 2. Mounting the flange and changing the axis

The following steps explain how to fit the flange to the winch and how to change the manual winch shaft for the shaft from the kit to make the winch electric. To begin with, follow the instructions below to remove the gear block. This will allow you to remove the existing shaft so that you can see exactly what is happening inside the winch and check that there are no errors in the screws you are going to use to screw the clamp on.

**Step 1:** remove the pinions

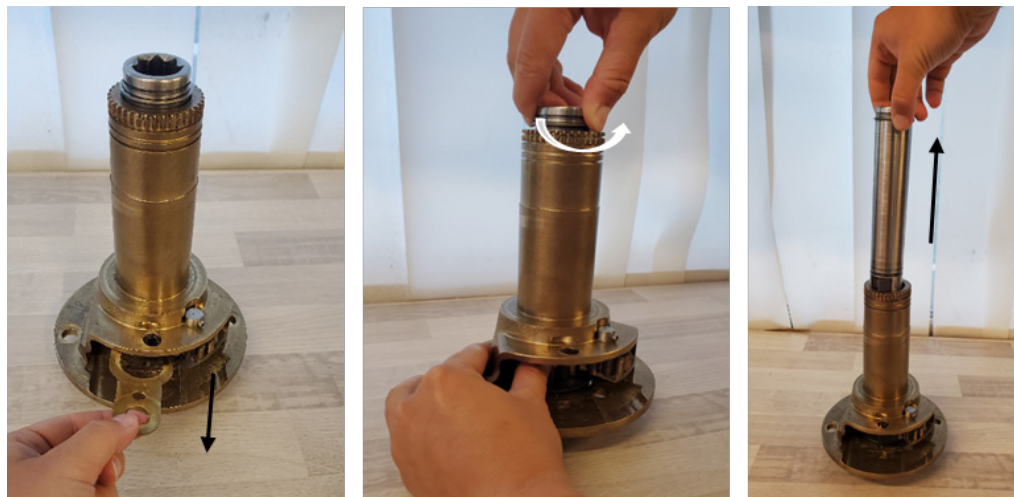




## d) Installing the kit on a Hutton winch

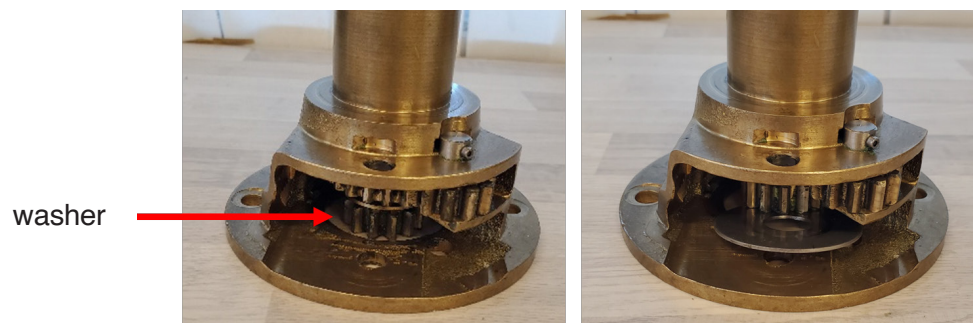
### Step 2: Remove the fork, then the shaft

Pull the shaft out of the winch. If it is blocked, hold the sprockets inside the winch and turn the shaft to retract the pawls housed in the shaft. These will lock the shaft vertically if they are pulled out. By retracting them, you can then pull the shaft out.



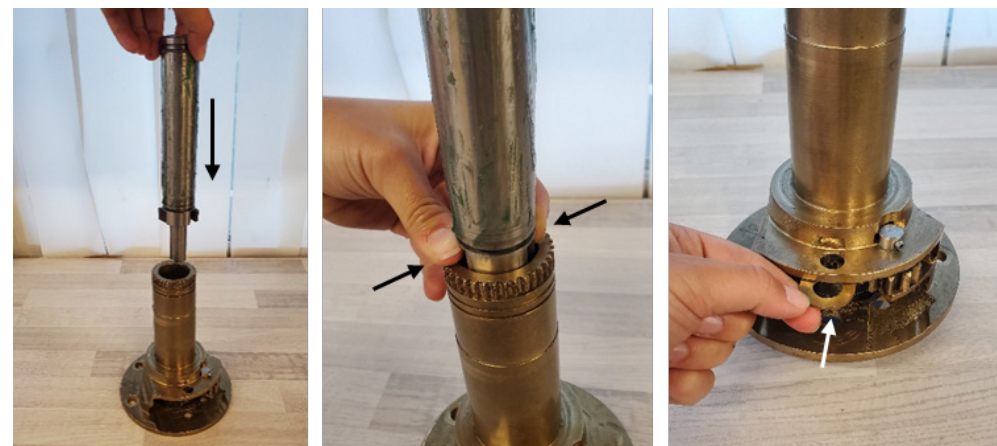
### Step 3: Replacing the washer

Remove the washer at the foot of the winch and replace it with the one included in the kit, with a larger diameter hole in the center.

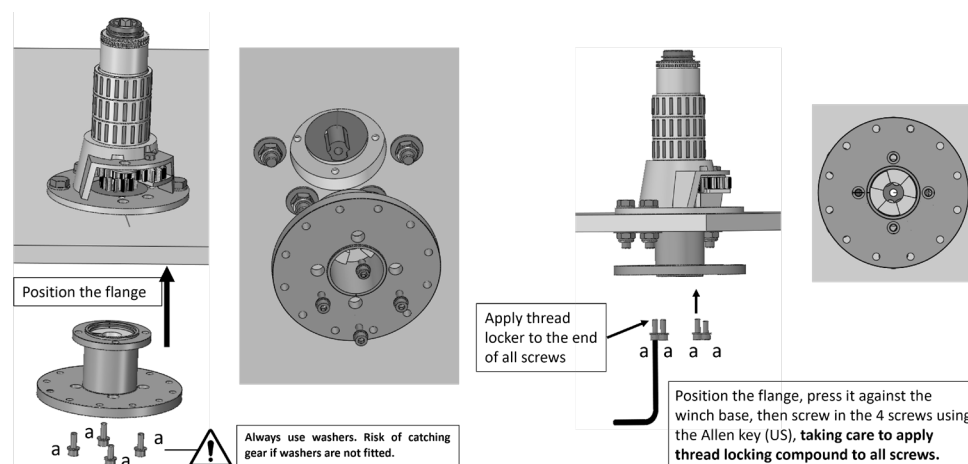


### Step 4: Insert the new shaft, then the fork

Use the shaft included in the kit. Check that the 2 pawls are correctly seated in the housing with the springs. Grease the outer surface of the shaft. Retract the pawls and pass the shaft through the centre of the winch. The 2 central gears must be centred for the shaft to pass through. Finally, refit the fork which had previously been removed.



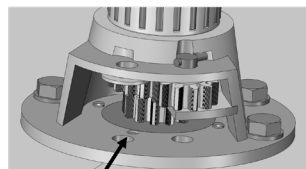
### Step 5: Install the flange



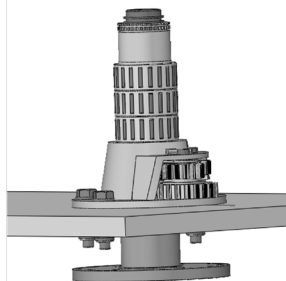
## d) Installing the kit on a Hutton winch

Check that there are no screws protruding from the removed sprocket, then refit the sprocket. Check that the winch rotates correctly using a crank handle.

Reassemble your winch.



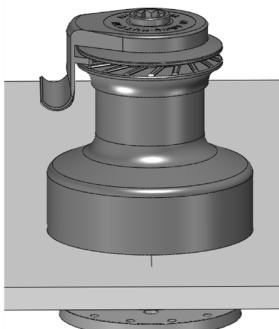
Check that the screw is not protruding



The winch base and flange are now securely in place. Insert the crank to check that the winch turns properly.



Make sure there is no hard spot by cranking the winch.



You can now reassemble your winch. Reverse the disassembly operation.

## 3. Motor assembly

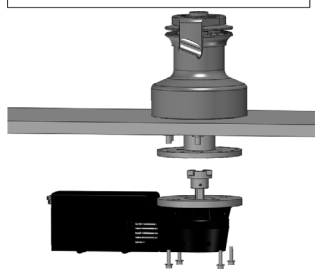
### Secure the motor to the flange

- Engage and angularly position the motor on the flange
- Secure motor with 4 M6x25 torx screws and washers

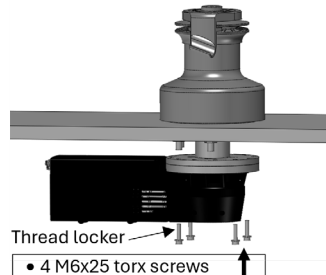
**Don't forget the thread locker!**

- The motor is now mounted on the winch!

Engage and position motor on winch flange. Orientation every 30° possible

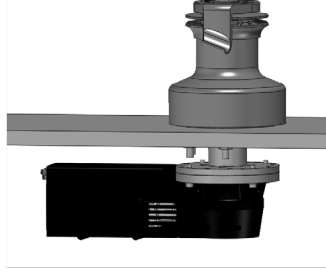


Secure the motor by tightening the 4 screw-washer assemblies



- 4 M6x25 torx screws
- 4 washers M6

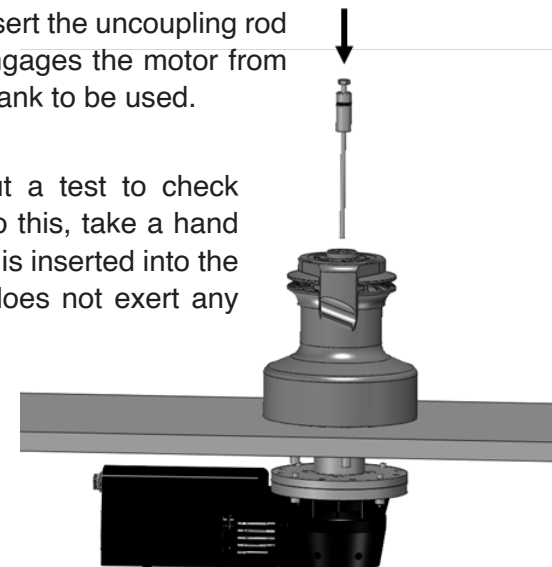
The motor is mounted on the winch



Now that the motor is installed, insert the uncoupling rod supplied in the kit. This rod disengages the motor from the winch, allowing the manual crank to be used.

After inserting the rod, carry out a test to check that it disengages correctly. To do this, take a hand crank and make sure that when it is inserted into the winch and operated, the motor does not exert any resistance.

Please note: this procedure only works with a crank with a square lock (not with a one-touch crank, for example).



## e) Installing the kit on a Harken winch

### 1. Conversion from manual to electric winch

The steps in this section describe how to dismantle the winch, drill holes in the boat's deck and reassemble the winch using the parts in the kit to make it electrical.

**Step 1:** Unscrew the central screw using a flathead screwdriver, then remove the sleeve and protective washer.



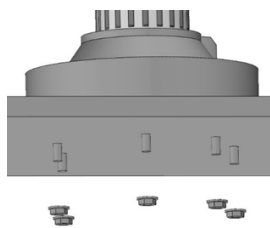


## e) Installing the kit on a Harken winch

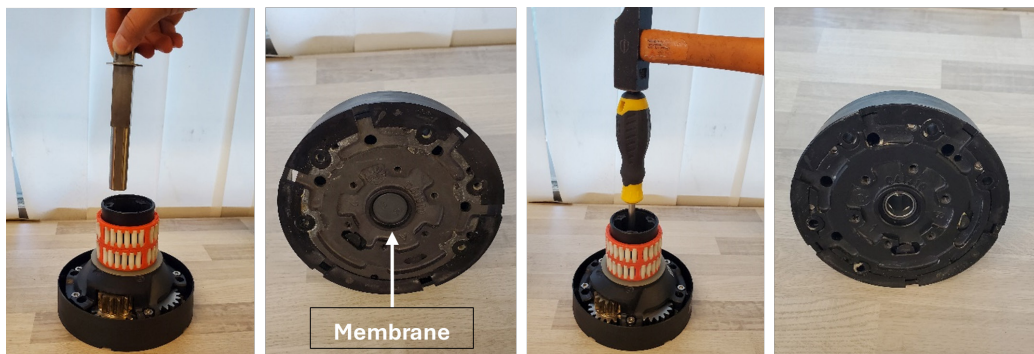
**Step 2:** Unscrew the 3 screws using a flathead screwdriver, then remove the metal part, the winch drum and the black cylindrical part



**Step 3:** Unbolt the winch from the boat and remove it from the deck

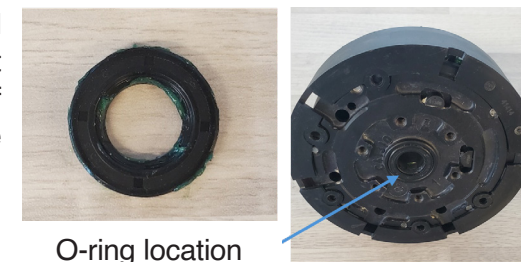


**Step 4:** Remove the central shaft from the winch and, using a screwdriver and hammer, break and remove the membrane blocking the winch's central shaft. The new shaft will pass through, so it must be completely clear.



Membrane

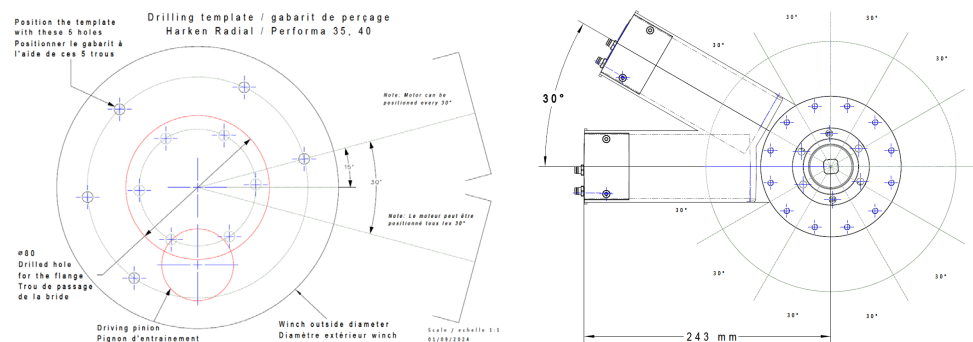
**Step 5:** Grease the lip seal included in the motorisation kit, then insert it into the recess at the bottom of the winch. The groove must face towards the top of the winch.



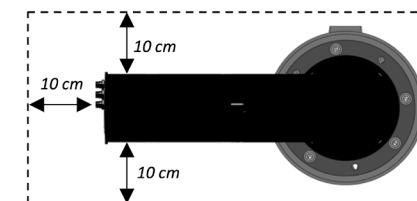
O-ring location

**Step 6:** Checking the position of the engine block (below deck)

Once you have removed your winch following the instructions above, you can use the positioning template to visualise the different options available for your below-deck engine block. The fixing system allows you to position the engine block every 30°. It is necessary to ensure that the motor can be installed without obstacles. If this is not the case, you will need to consider repositioning the winch on the deck.



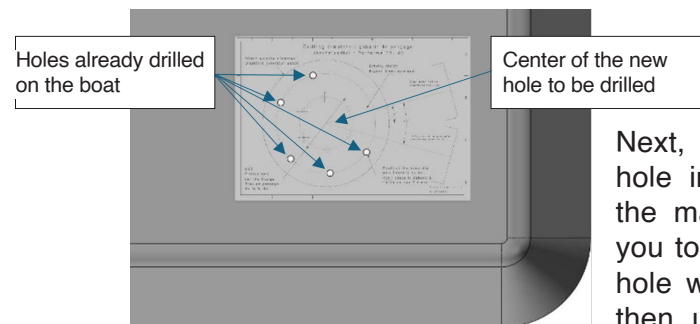
Ideally, we recommend a 10cm clearance from any surrounding walls (see diagram below). This will allow you to connect electrical cables without difficulty, and ensure optimum cooling.



As you'll see in Chapter 10, the SailForce motor is extremely compact, and can also be fitted with a discreet, space-saving overhead housing in the rear cabin.

## e) Installing the kit on a Harken winch

**Step 7:** Once you are sure that the motor can be installed without any obstacles, use the template to mark the centre of the hole to be drilled, using the 4 holes already drilled.

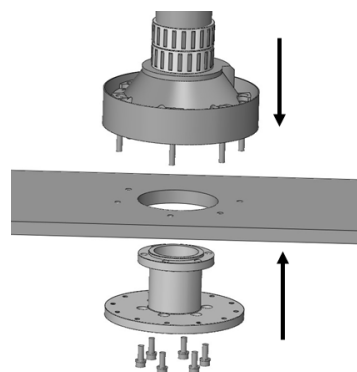


Next, drill an 80mm diameter hole in the deck, centred on the marked point. We advise you to make an initial centring hole with a diameter of 5mm, then use an 80mm diameter

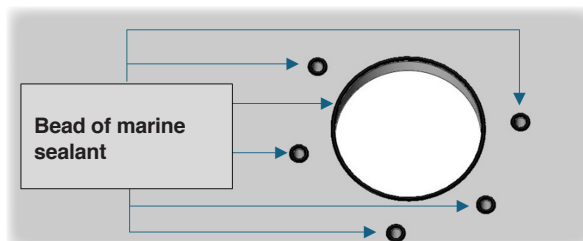
hole saw with a centring drill.

### Step 8: Blank assembly

By positioning the winch with its screws, check that the flange can be fitted without any problem. It must be possible to engage the flange in the winch without it being blocked by the edges of the central hole (which could happen due to improper centring when drilling the central hole).

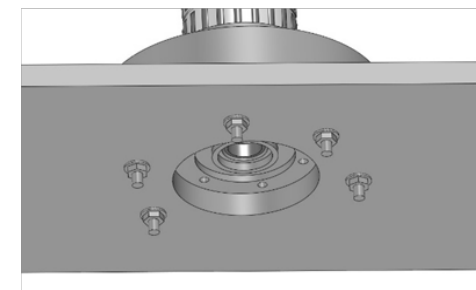
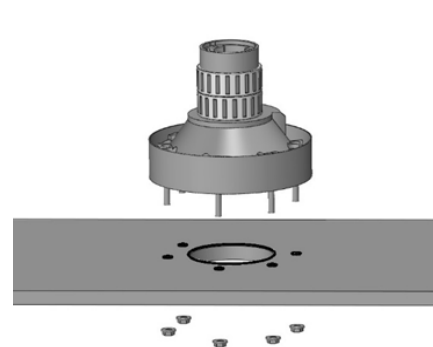


**Step 9:** Apply a bead of nautical sealant around the central hole and the bolt holes according to the sketch.

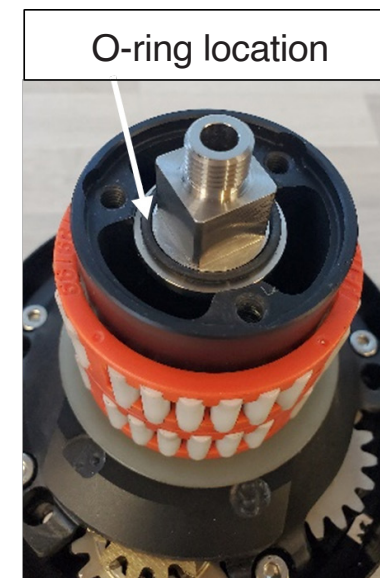


**Step 10:** Fit and secure the winch base as shown in the diagrams below

- Positioning the winch base and fixing screws
- After checking that the system is centred in relation to the hole in the flange, tighten the nuts previously removed



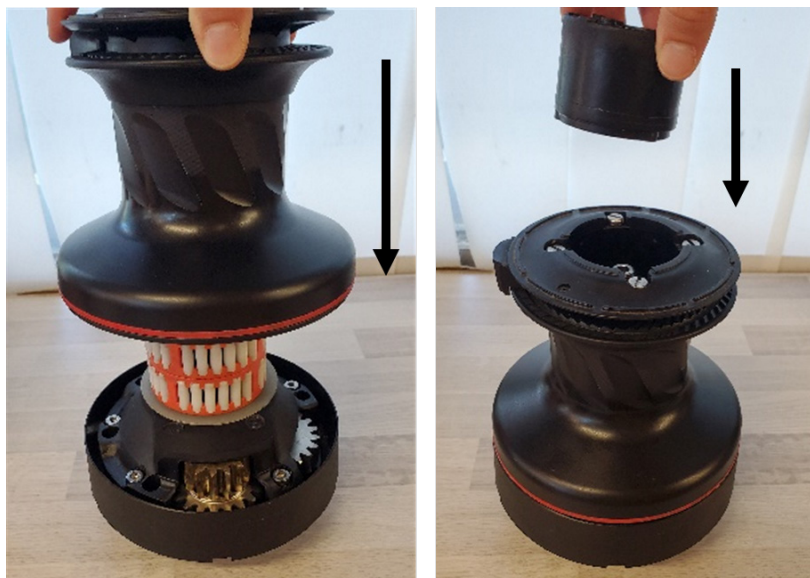
**Step 11:** Insert the new shaft (included in the kit) inside the winch and fit the O-ring (the one with the biggest diameter) on the shoulder of the shaft.





## e) Installing the kit on a Harken winch

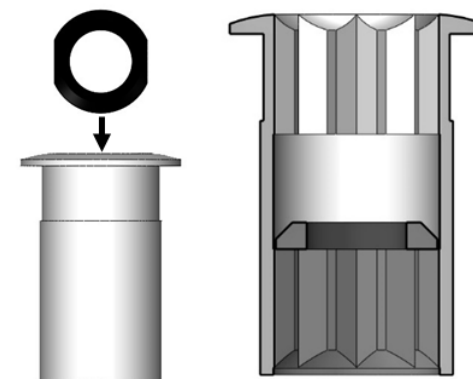
**Step 12:** Replace the winch drum and the black cylindrical part



**Step 13:** Remove the countersunk screw from the bushing, then the black washer inside the bushing. To remove the washer, turn the part over so that it is askew as shown in the diagram below.



**Step 14:** Insert the new black washer included in the kit (with a larger diameter central hole) inside the bushing. To do this, place it askew as shown in the diagram below. Once inside, turn it over so that it lies flat, paying careful attention to the direction (refer to the 2nd diagram).



**Step 15:** Insert the smaller O-ring inside the new screw included in the kit, then place it inside the socket. Finally, insert the bushing into the winch (not forgetting the black washer that goes around the bushing) and tighten the screw using a flathead screwdriver.

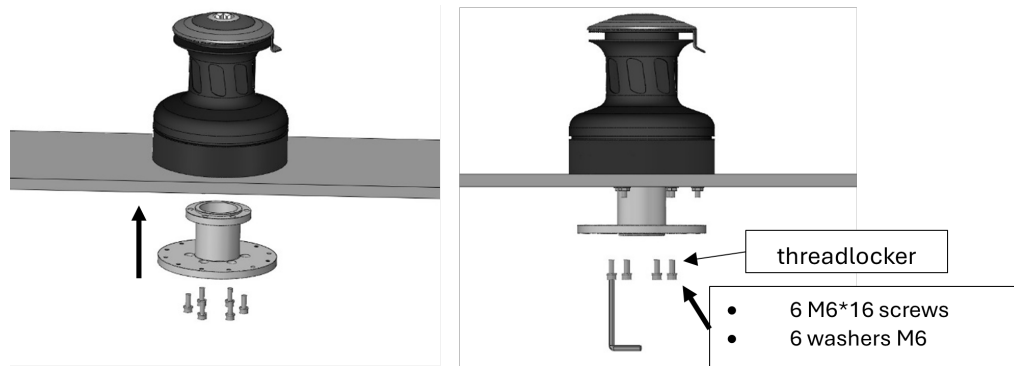


## e) Installing the kit on a Harken winch



### 2. Mounting the flange

Position the flange, snap it onto the winch base, then screw in the 6 M6\*16 screws, taking care to apply threadlocker to all the screws.



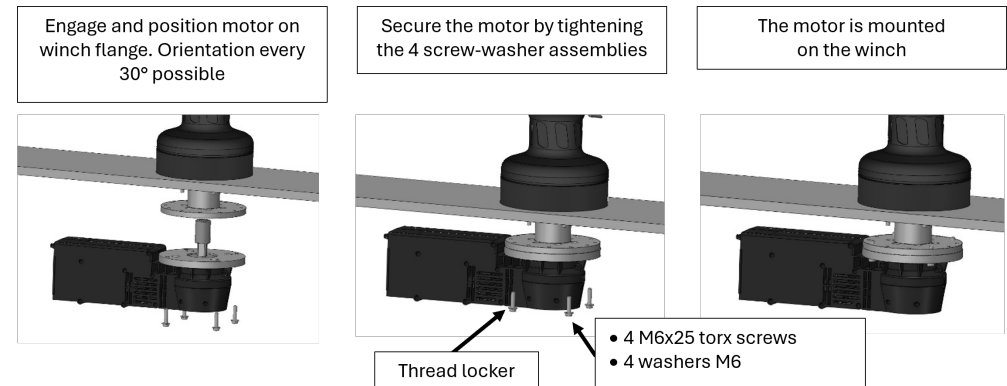
Once the clamp has been installed, check that the winch rotates correctly using a crank handle.

### 3. Motor assembly

#### Secure the motor to the flange

- Engage and angularly position the motor on the flange
- Secure motor with 4 M6x25 torx screws and washers

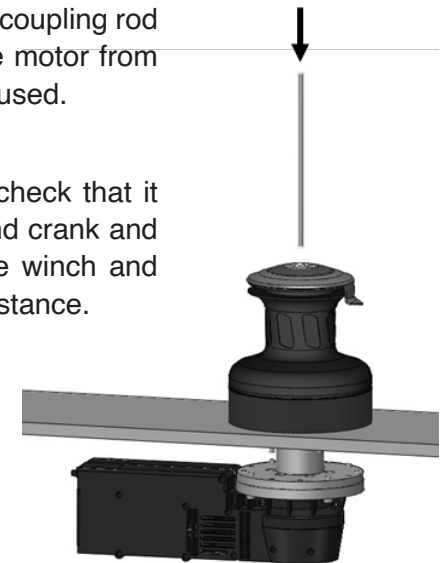
**Don't forget the thread locker!**



Now that the motor is installed, insert the uncoupling rod supplied in the kit. This rod disengages the motor from the winch, allowing the manual crank to be used.

After inserting the rod, carry out a test to check that it disengages correctly. To do this, take a hand crank and make sure that when it is inserted into the winch and operated, the motor does not exert any resistance.

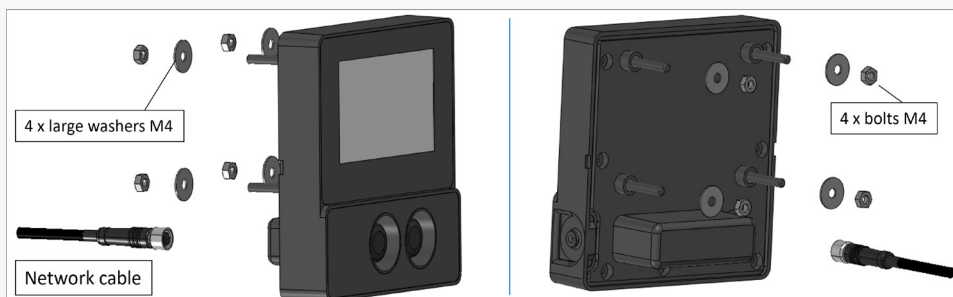
Please note: this procedure only works with a crank with a square lock (not with a one-touch crank, for example).



## a) Mounting parts

- **Advanced Command box**
- **4 M4 nuts**
- **4 M4 wide washers**
- **2 or 6 meters cable**
- **Drilling template**

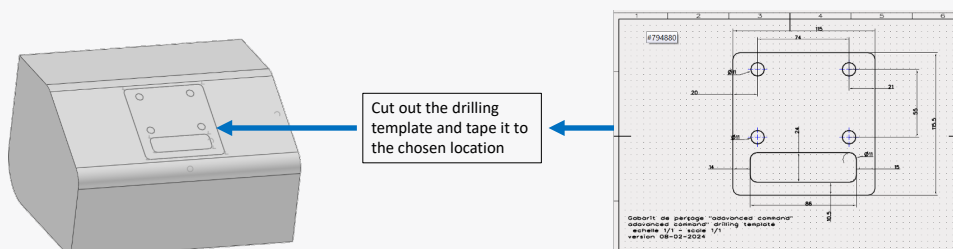
You'll also need to prepare all the necessary tools and sealing compound.



## b) Layout and positioning

*Advanced Command* is designed to fit into a cockpit alongside conventional navigation instruments. It has the same format as repeaters (Garmin, Simrad, B&G...).

We advise you to cut out the drilling template to position and check the layout. You can tape the template to the chosen location or trace the cut-outs to be made.

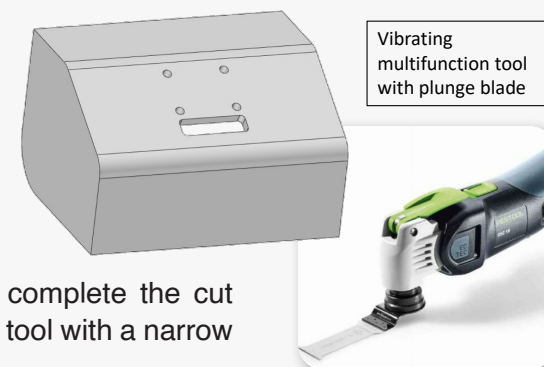


## c) Drilling and cutting

○ Start by drilling the 4 holes with a diameter of 11 mm. We recommend pre-drilling with a diameter of 5mm for better positioning.

○ For the rectangular part, we recommend you drill the 4 "corners" to 11 mm diameter, pre-drilling to 5 mm diameter for greater precision (same method as 6-c, see details).

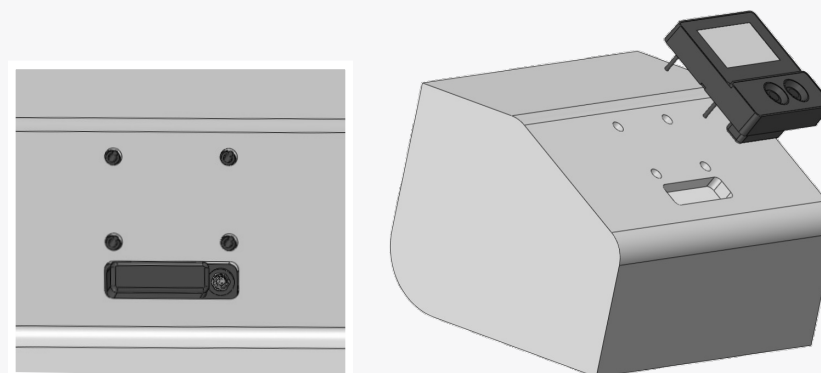
Cutting by drilling and using a vibrating multifunction tool with a plunge blade



○ Then, we recommend you complete the cut using a vibrating multi-purpose tool with a narrow plunge blade.

## d) Checking and blank assembly

Make a blank assembly and make any necessary adjustments

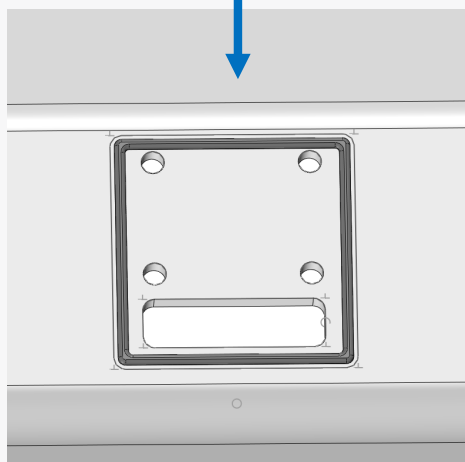


## e) Final assembly and sealing

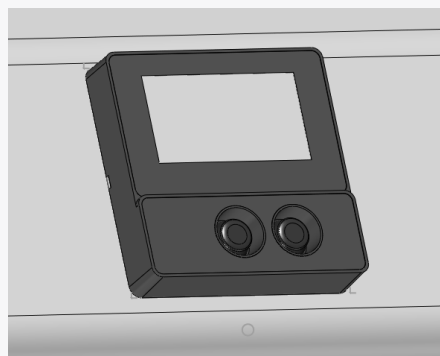
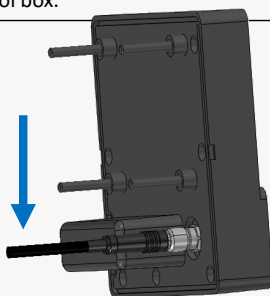


### Indoor/outdoor sealing

Apply a good bead of continuous sealant around the inside of the case (it's extremely useful to mark the periphery of the case with a pencil before doing this).



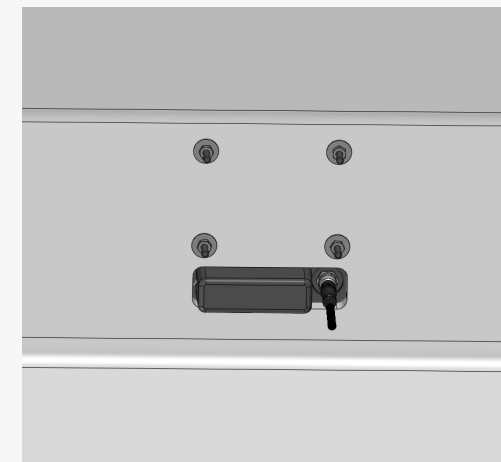
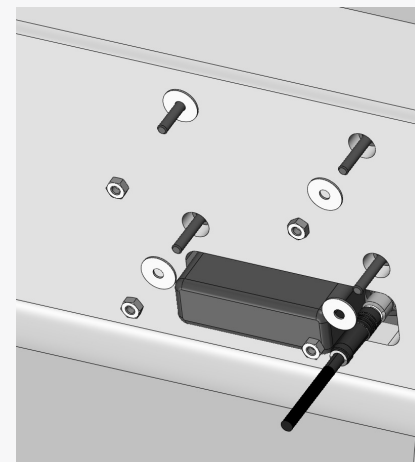
For ease of installation, connect the network cable before attaching the "advanced" control box.



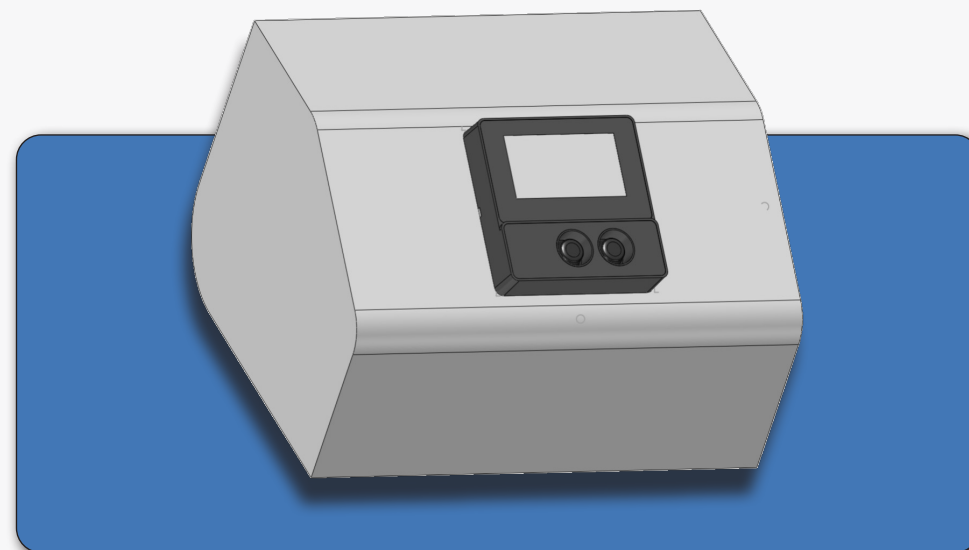
Now tighten the housing.  
While holding the housing in place, fit the washers and tighten the M4 nuts moderately.

**Remember to apply thread locker to the nuts or threaded rods.**

We recommend that you enlist the help of another person to hold the Advanced Command steady on the boat's deck.



**Your *Advanced Command* unit is installed.**



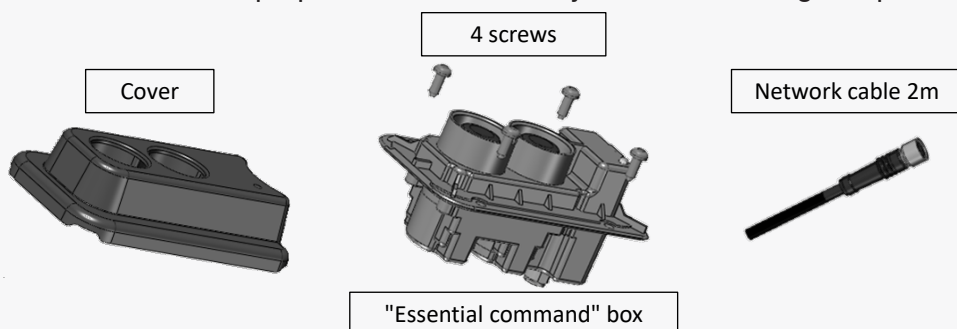


## 6 INSTALLING THE *ESSENTIAL COMMAND* BOX

### a) Mounting parts

- *Essential Command* box
- The cover ⚠ *Do not clip on until assembly is complete*
- 4 self-tapping screws 3,9 x 16 pozidriv head
- 2 meters network cable
- Drilling template

You'll also need to prepare all the necessary tools and sealing compound.



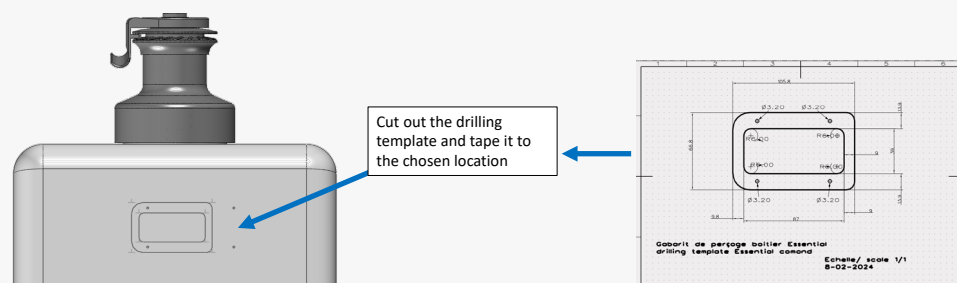
Note: *Essential Command* can be installed in the 2 positions shown below. Depending on the orientation chosen, it can be operated with the left or right hand.



### b) Layout and positioning

*Essential Command* is designed to control a dedicated winch from the side. The network cable connecting the *Essential Command* unit to the motor block is 2 m long.

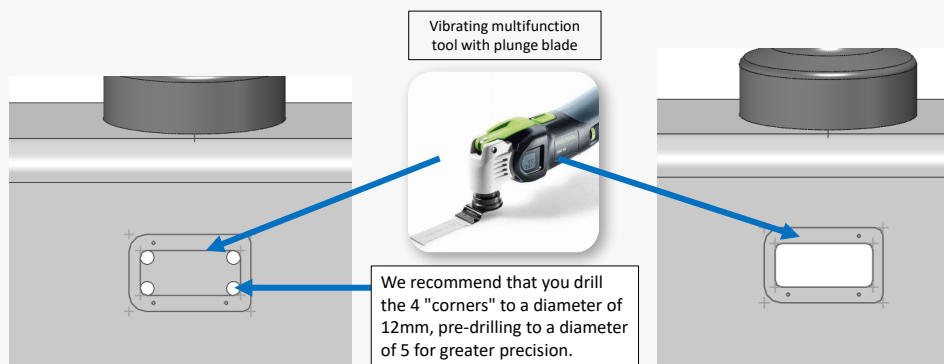
We advise you to cut out the drilling template to position and check the layout. You can tape the template to the chosen location or trace the cut-outs to be made.



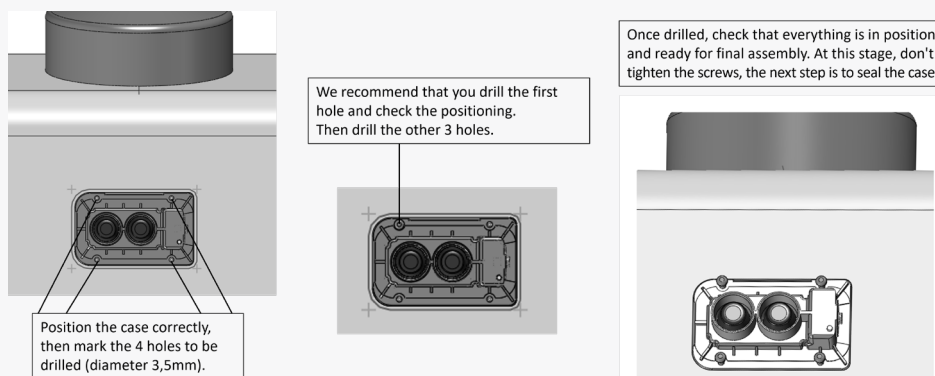
### c) Drilling and cutting

- Cut out the 87 x 39 section with rounded corners, diameter 12 mm.

We recommend that you drill the 4 "corners" to a diameter of 12 mm, pre-drilling to a diameter of 5 for greater precision. Then, we recommend you complete the cut using a vibrating multi-purpose tool with a narrow plunge blade.



- Position your *Essential Command* box to mark and drill the screw holes
- Drill a first hole, carefully dimensioned 3,5 mm
- Check the positioning of the assembly and the markings of the 3 other holes by positioning the first screw
- Drill the other 3 holes
- Check positioning before sealing



## d) Final assembly and sealing

- Apply a generous bead of sealing compound around the inside of the case (follow instructions below)
- Press the case firmly onto the support and tighten the 4 screws

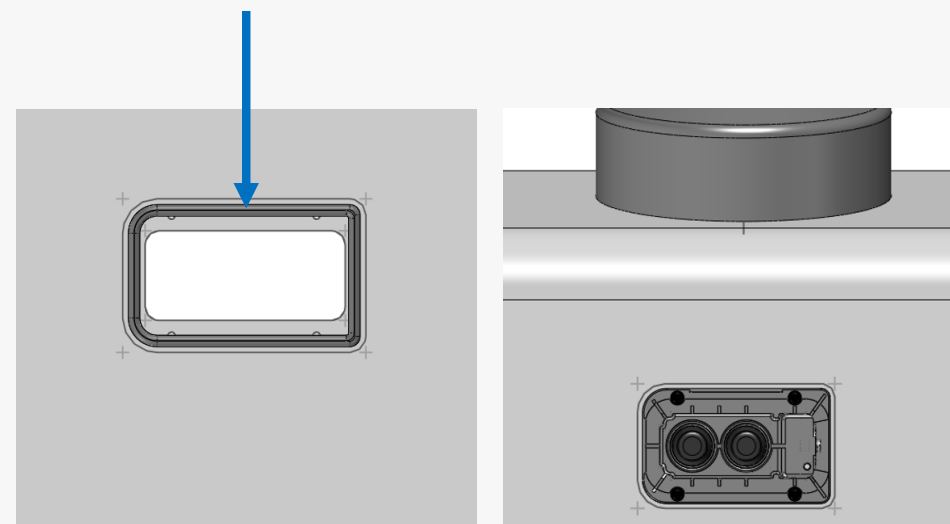


Indoor/outdoor  
sealing



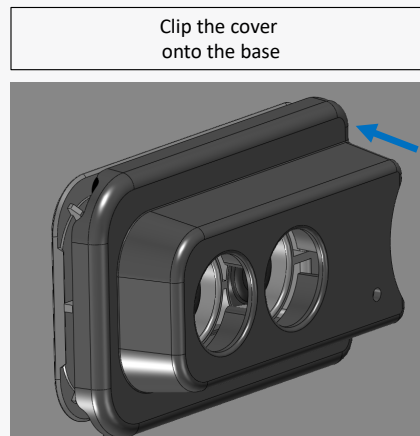
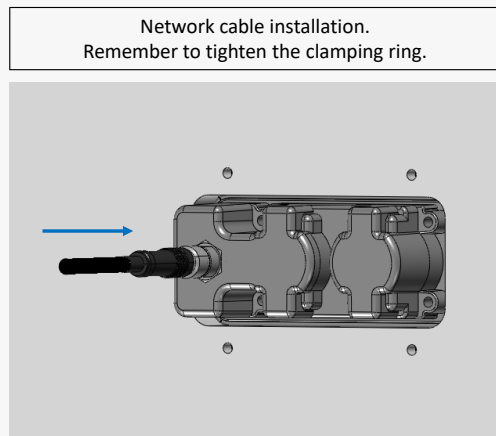
Apply a continuous bead of sealing compound around the inside of the case (it's extremely useful to mark the periphery of the case with a pencil before doing this).

Press your "Essential" case firmly onto the support, screw in the 4 screws and clean off any excess sealant.

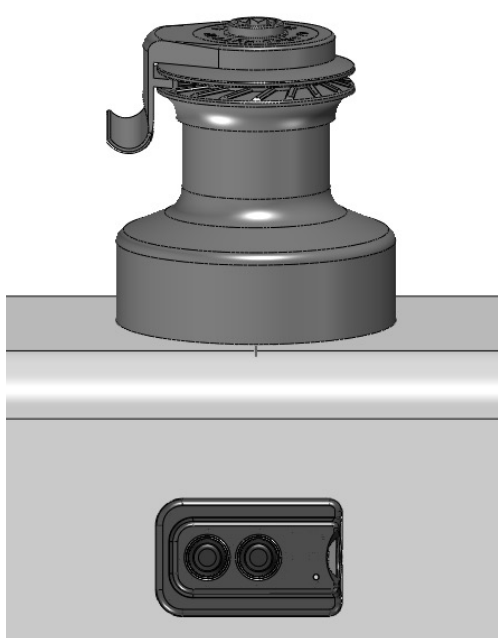


- Screw on the network cable (this can also be done before screwing if more convenient)
- Clip on the cover

## 6 INSTALLING THE *ESSENTIAL COMMAND* BOX



**Your *Essential Command* unit is installed.**



## 7 BATTERY PACK INSTALLATION

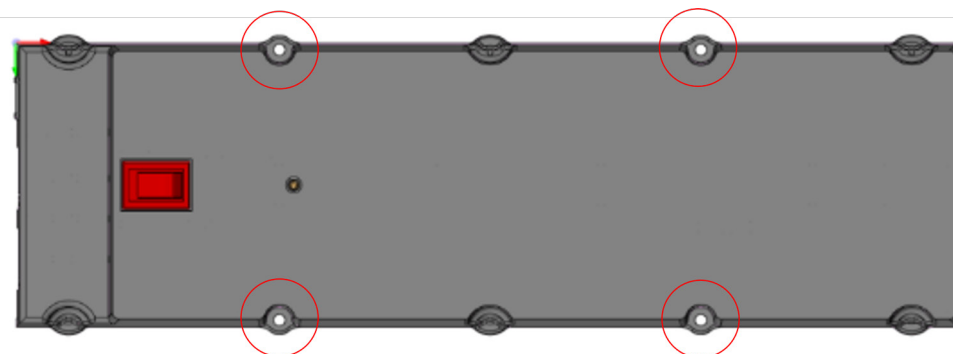
You need to choose where to install the SailForce battery pack. Here are the most important points (if necessary, refer to the general wiring diagram in section 8):

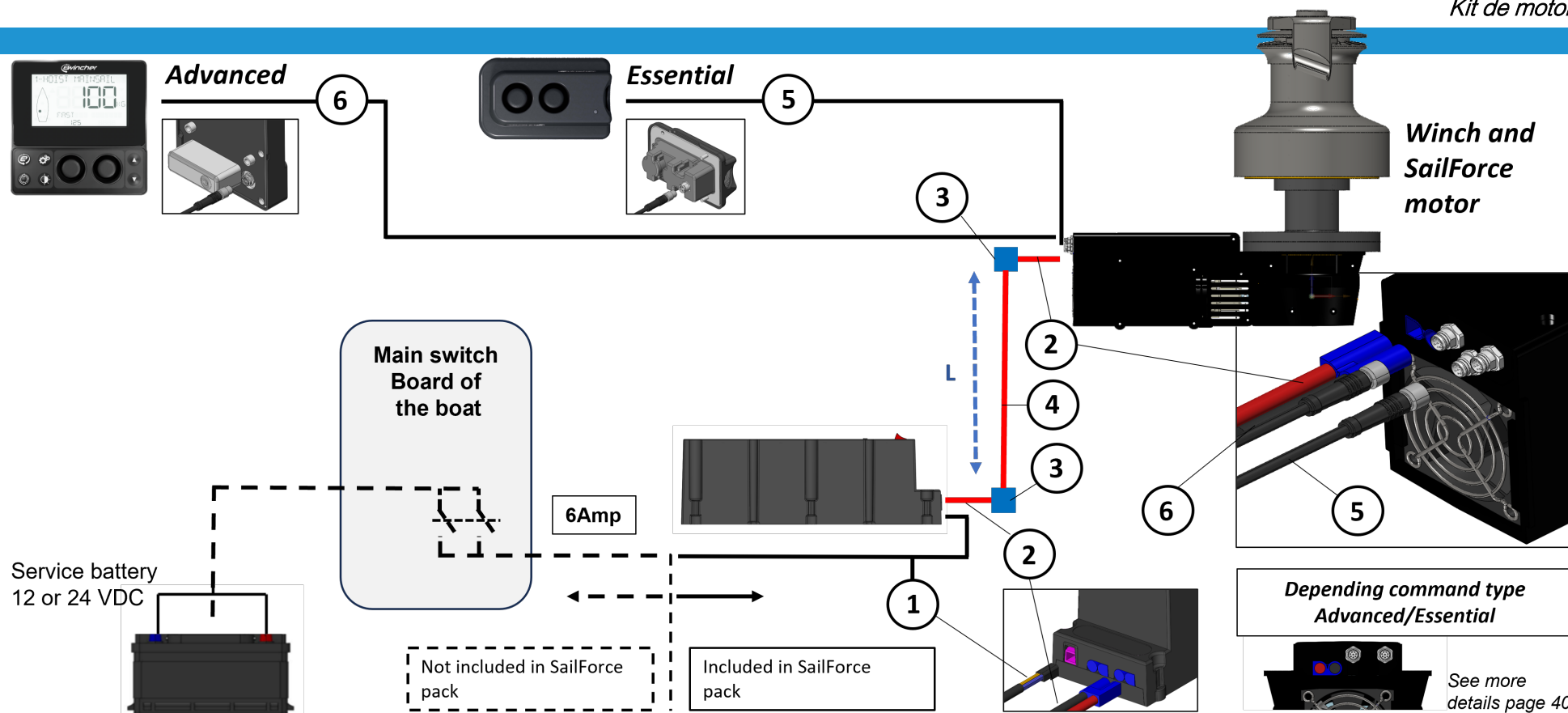
- ⚠ Choose a dry location
- ⚠ Respect the length L between the battery and the motor, and the associated cable cross-section (precisely indicated on the nomenclature table in section 8)
- ⚠ Provide a 12 or 24 VDC power supply for the battery pack, with a general cut-off at the main switchboard.

It may be advisable to install the battery pack in a cupboard. In this case, we recommend screwing the block into the wood of the cupboard.

Installation and fastening are very simple:

- Position the battery pack
- Mark the location of the 4 mounting holes to be drilled (battery mounting holes are 3,5 mm in diameter)
- Use self-drilling screws or wood screws with a diameter of 3 mm, drilling at 3,1 mm





Rep	Designation	characteristics	Observation important to be read
1	Battery power cable	2 m cable, 2 x 1.5 mm <sup>2</sup> , fitted with a black metripack connector at one end	<i>If you need to extend this cable to the boat's main switchboard, check the cross-section you need to use for a power supply of 6 A at 12 VDC and 3 A at 24 VDC. We recommend using 2.5 mm<sup>2</sup> for 12 VDC and 1.5 mm<sup>2</sup> for 24 VDC</i>
2	Cable and connector Pw	10 cm long 10 mm <sup>2</sup> cable with EC5 connector for battery or motor connection	
3	Connecting terminal block	In 2 or 4 entries	<i>Supplied with 4 inputs for electric multiwinch installations</i>
4	Power cable	3 options depending on length L specified when ordering: - if $L < 2.5\text{m}$ 6mm <sup>2</sup> cable - if $2.5\text{m} < L < 5\text{m}$ 10mm <sup>2</sup> cable - if $5\text{m} < L < 8\text{m}$ 16mm <sup>2</sup> cable	<i>It is very important to check the length and cross-section of the cables. Ewincher declines all responsibility if the assembly and choice of cables is not perfectly respected.</i>
5	Network cable for Essential control unit	2m network cable with 2 M8 plugs	<i>All the network cables are identical, they come in 2m or 6m lengths. The Essential Command box must be connected to the motor with a 2m cable (not a 6m cable).</i>
6	Network cable for Advanced control unit	2 or 6 m network cable with 2 M8 plugs	<i>All the network cables are identical and come in 2m or 6m lengths. The Advance control unit can be connected to a single motor or to several motors using a single 2m or 6m network cable. The network can be extended to connect to other motors using connection tees and other network cables.</i>



### a) Precautions

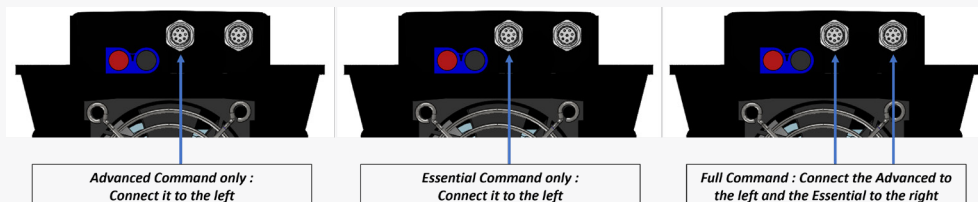
- ⚠ As already indicated in these installation instructions, cable lengths and cross-sections must be respected to avoid abnormal heating. Ewincher declines all responsibility if these recommendations are not respected.
- ⚠ Electrical installation must be carried out with the power off.

### b) Wiring instructions

Follow the wiring diagram detailed in section 4 and the steps explained below:

- First connect the double cables (2) (one to the motor, the other to the battery).
- Using terminal blocks (3), connect the double cables (2) with cables (4).
- Then connect the network cables (5) and/or (6) to the motor.

**Be careful** when connecting the network cables to the motor, depending on the configuration you have chosen:



Finally, plug cable (1) into the battery unit, then connect the other end to your 12 or 24VDC service battery, using 2 terminal blocks. Pay close attention to polarity when making connections:

- Brown wire : polarity +
- Blue wire : polarity -



Inserting the cable (1)  
into the battery pack



To remove the cable, use a flathead screwdriver to lift the top of the connector and delicately pull the cable out.

### c) Starting instructions

Switch on the system:  
Turn on the main switch and the battery switch.  
The *Advanced Command* display will show the following message: "NO MOTOR INSTALLED".  
If this is not the case, check your connections.



As you can see from the diagrams below, there are two possible situations:

#### 1) Full Command ou Advanced Command



#### 2) Essential Command



Note that if you only have an Essential Command, you will not see this message, but the procedure below applies in exactly the same way. This procedure is valid for any type of installation.

Take a smartphone, PC or tablet and activate the Wifi network search.

**To connect to the application:** on the last page of your user manual, you will find a sticker giving you:

- The Wifi network name
- The network password

Once you've connected to the Wifi network,

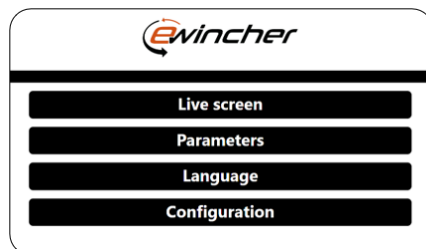
- Following address in your browser:

**192.168.4.1**

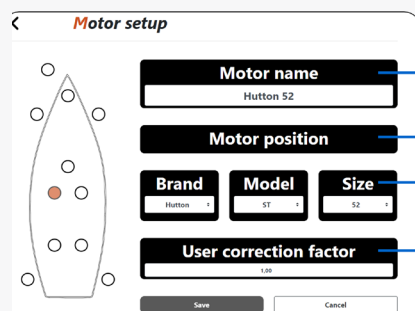
- Or scan the QR-code below



The following window should appear



Click on the install button. This will redirect you to a new Window:



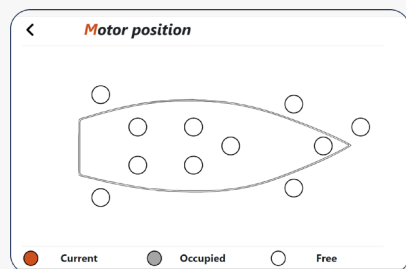
Motor name

Motor Position on the boat

Winch Specifications

The correction factor is used to adjust the rope tension calculation: if the winch ages, the factor must be lowered so that the rope tension calculation remains accurate (do not touch the installation).

Here you can enter all the information relating to your motorized winch.



The "Motor position" tab lets you choose from 11 available positions. Once all the information has been entered, validate the data by pressing save. The information is now saved, and you should see your motorization on the Advanced Command screen.

You can repeat this operation if you have more than one SailForce motorization.

### Case where several drives need to be initialized:

In this case, you'll need to initialize your motors one by one.

- To do this, first connect only one motor to the *Advanced Command*. Switch on the motor and follow the procedure described in section 9-c to install your motor on the *Advanced Command*.
- Then, connect your second motor to the *Advanced Command*, using the connection tee supplied. Don't forget to switch on the 2nd motorization, then repeat the operation described in section 9-c. When selecting the position of this 2nd motor, a location will already be grayed out, and therefore unselectable.
- Do this for each motor you want to connect.

### Motor operation

Now it's time to check that the system is working properly.

*Advanced Command* and *Essential Command* are equipped with dual controls to prevent accidental starting. Pressing the side button in addition to one of the 2 potentiometers is all that's needed to set the motor into rotation.



Test that the 2 speeds work on the different control systems.

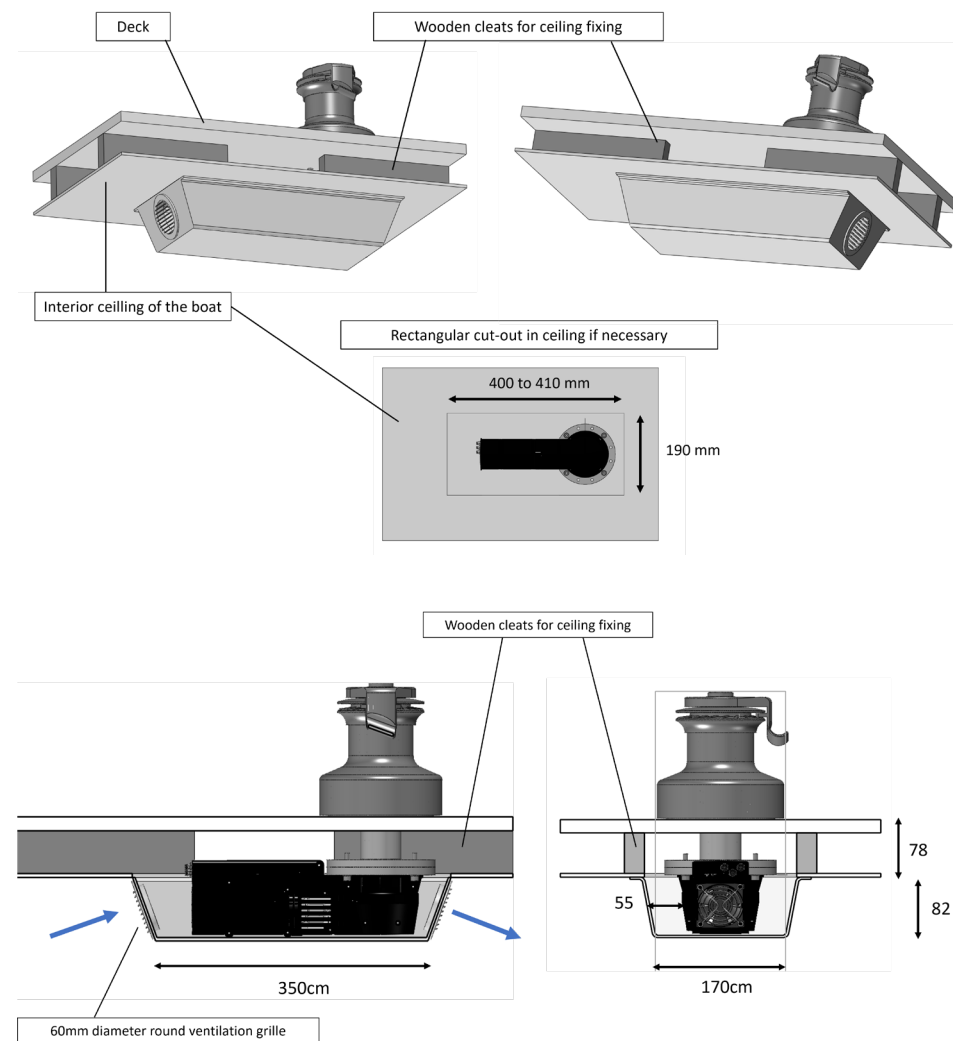
Depending on the type of boat (monohull, multihull, ketch, sloop, etc.), there can be a wide variety of installation configurations.

If your motor is installed in a technical area, as is often the case for genoa sheet winches on a monohull, for example, your motor will have no problems running because there will be plenty of space around the engine to ensure that it cools without difficulty.

There are a wide variety of configurations, and there will be no cooling problems as long as you have a minimum volume around the engine of 50 cm length x 40 cm wide x 20 cm height.

If your engine is located in an interior space such as a cabin, you'll need to dress it up to look its best and take up as little space as possible.

The SailForce motor is very compact, so you can limit any impact on cabins. Here's an example of an motor cover that's both compact and aesthetically pleasing, allowing you to keep your engine accessible and guaranteeing the best cooling performance.









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