



ASM-01049



NMEA 2000
NMEA 0183

3DHC Controller

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Disclaimer

The interceptor units are also steering equipment and it is the sole responsibility of the navigator-operator to ensure that, at any point, any problem that will alter the boat's course, rising from malfunction of interceptors, should be dealt immediately by the operator. At no circumstances, fault of our interceptor equipment leading to any kind of accident, creates liability for the manufacturer.

Trademark Notice

Hydrotab is a registered trademark of Olympic Engineering Ltd, Greece. All other trademarks, trade names or company names referenced herein are used for identification only and are property of their respective owners.

Patent Notice

The Hydrotab products are protected by patents and industrial design patents, patents pending or design patents pending.

Declaration of conformity

This product conforms to the following Electromagnetic Compatibility (EMC) regulations and standards for use in marine environments.
CE EN 60945

Technical information and Documentation

The technical information provided in this document was accurate and correct at the corresponding production time of the Hydrotab interceptors. Our operating principal for improving the manufactured product, may lead to changes regarding its specifications without prior notice. Liability will not be accepted for any inaccuracy considering the product and the user manual.

Fair use statement

This manual can be printed or copied for your own use only. Copies should not be provided to third parties and manual should not be commercialized.

Product Disposal

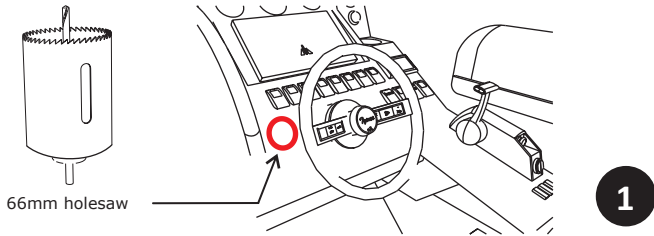
Waste removal of this product must be according to the Waste Electrical and Electronic Equipment (WEEE) Directive.

Product Registration

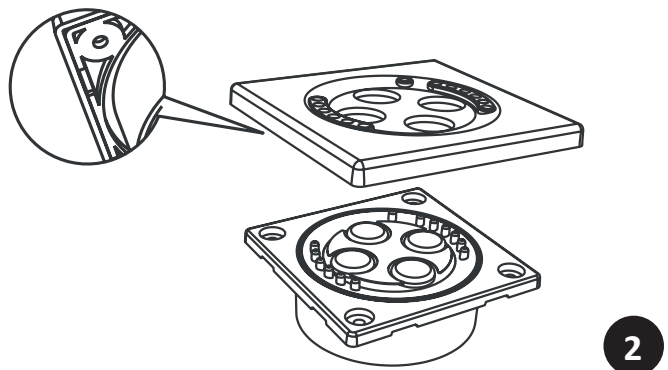
Please register your product online in order the warranty to be valid.

Controller and Air Unit Installation

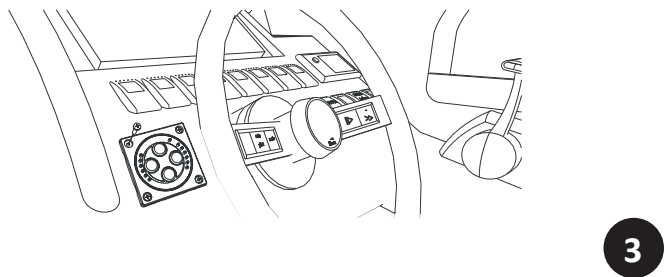
3DHC Controller Installation



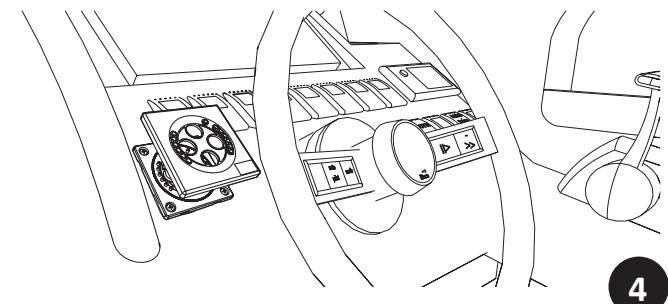
Use 66mm holesaw to create a hole in the desired position.



Remove the cap.

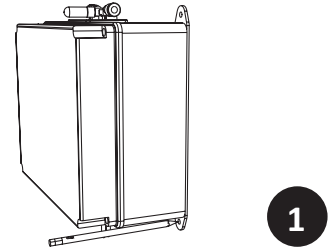


Mount the panel with the corresponding screws.

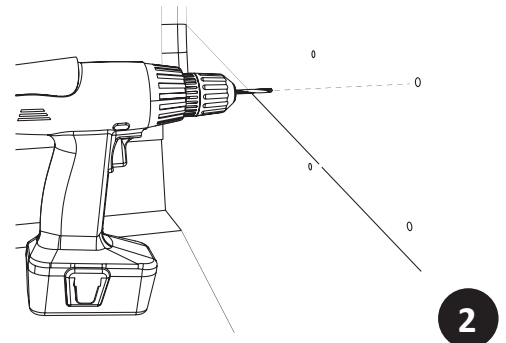


Place the cap until it is firmly closed.

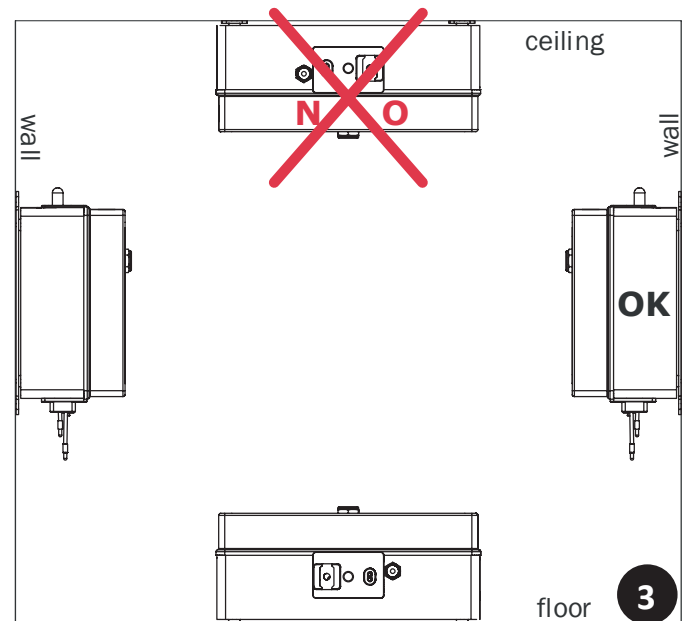
Air Unit Installation



Place the unit in the desired position at the inner of the boat and make the marks that will be used to drill the holes for the mounting screws.

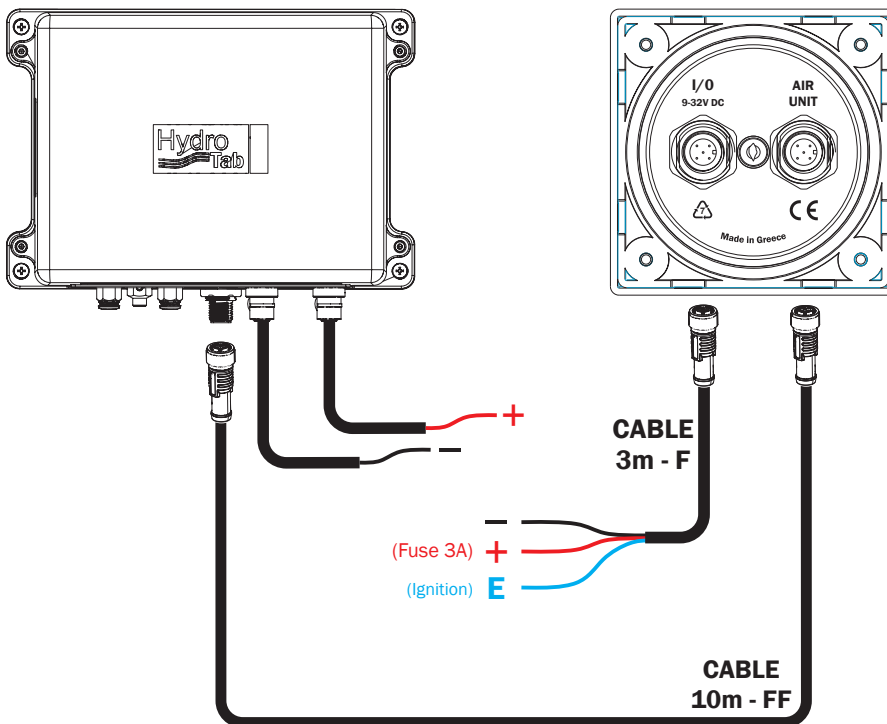


Open the 4 holes (Figure 2), and mount the AIR Unit by tightening firmly the screws.



NOTE: Please be noted, that the AIR Unit it is recommended to be mounted on a flat surface, according to Figure 3.

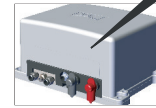
Installation Schematic overview - Single Air Unit (ASM-01051) with One 3DHC Controller



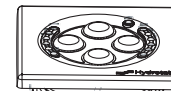
Attention!

DC	Amps	Use Fuse
12V	9A	15A
24V	16A	25A

Supply 12/24V



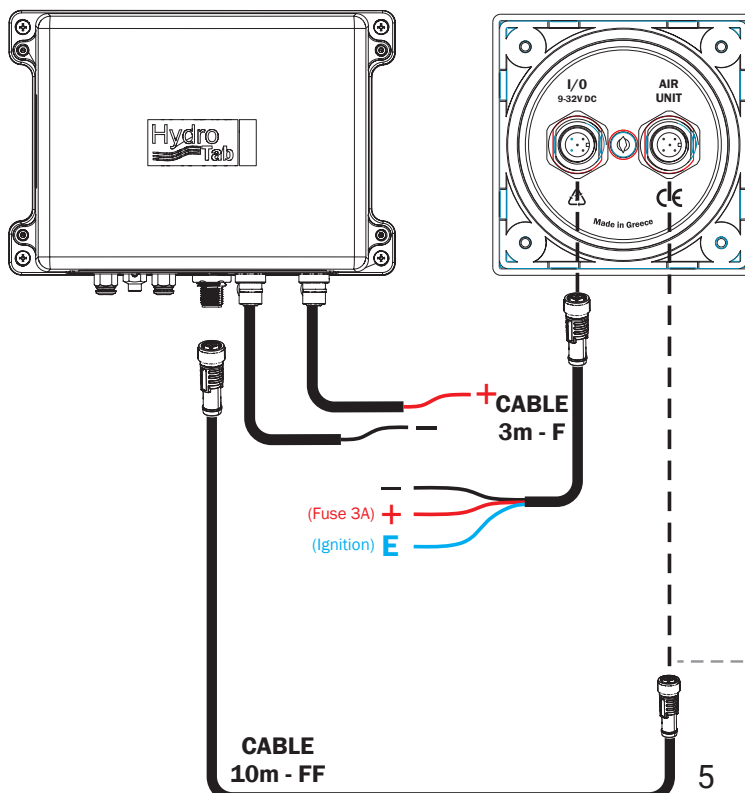
*Advice the fusing table and ensure that you apply the right fuse according to your boat's voltage.



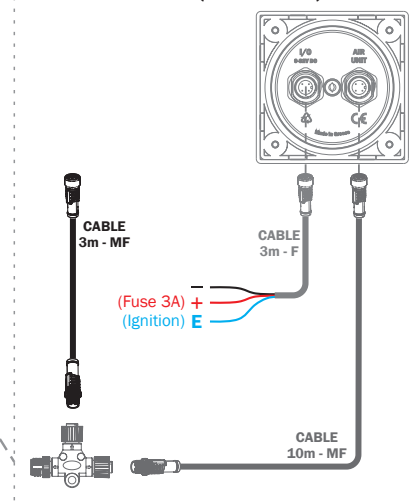
- (Fuse 3A)
+ (Ignition)

**In order to start the controller, the E wire must be connected to the "ON" Ignition Switch contact.

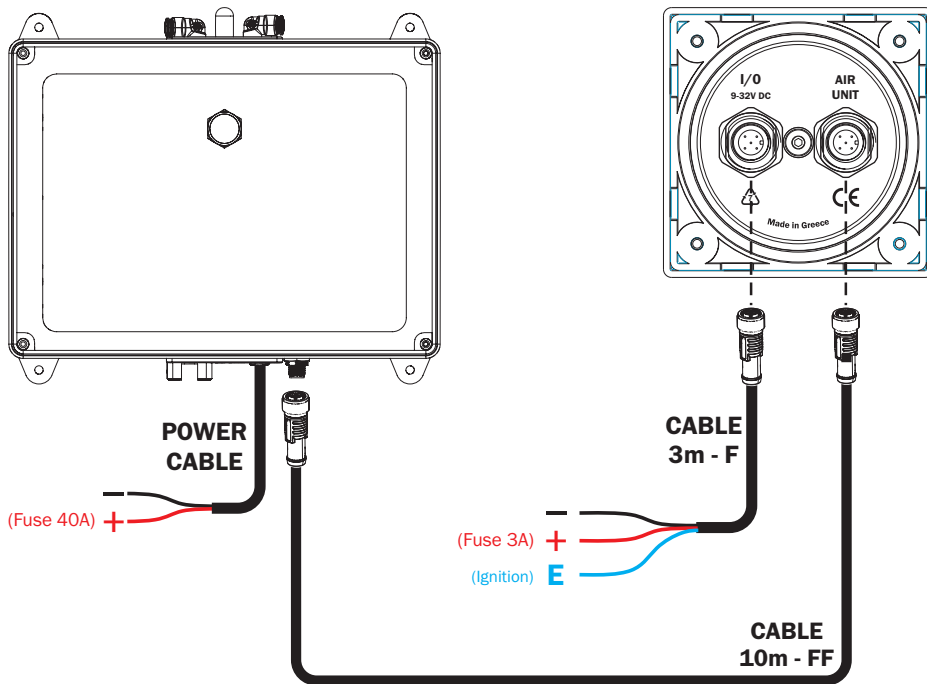
Installation Schematic overview - Single Air Unit (ASM-01051) with Two 3DHC Controller



FLYBRIDGE OPTIONAL Controller Kit (ASN-01088)



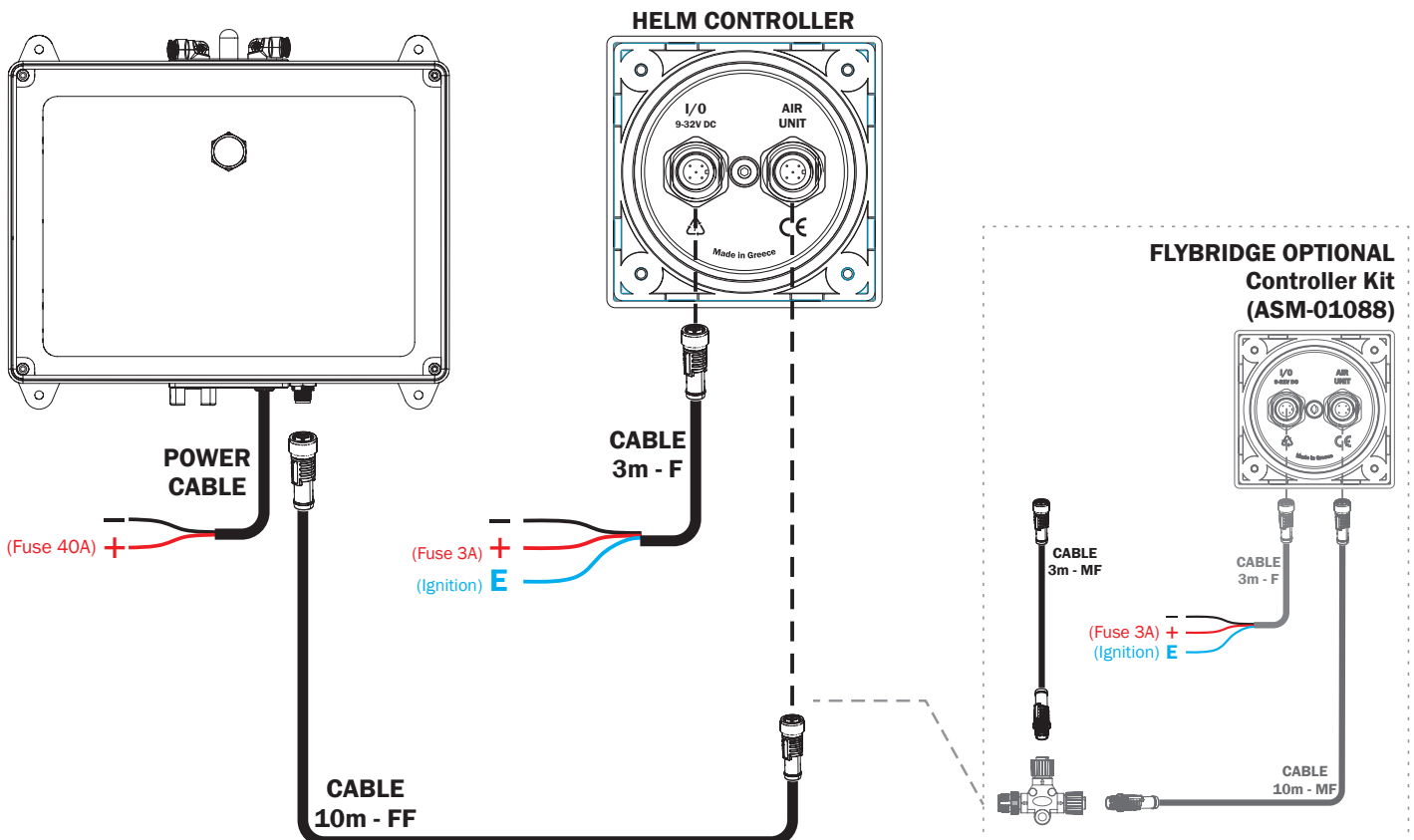
Installation Schematic overview - Double Speed Air Unit (ASM-01086) with One 3DHC Controller



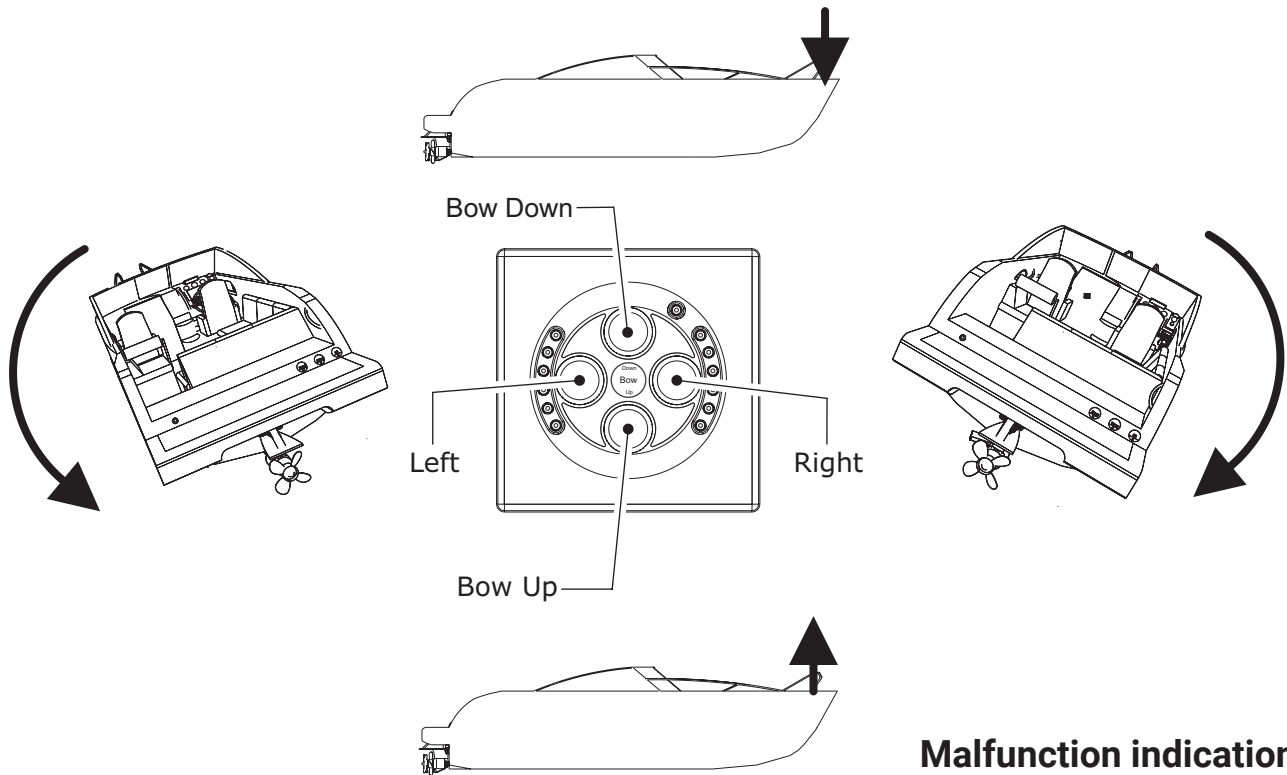
Attention!

**In order to start the controller, the E wire must be connected to the "ON" Ignition Switch contact.

Installation Schematic overview - Double Speed Air Unit (ASM-01086) with Two 3DHC Controller



THE 3DHC Controller



Malfunction indication

BLINKING LED	MALFUNCTION
1st green on the left	Left interceptor does not return
1st green on the right	Right interceptor does not return
2nd green on the left	Left interceptor does not extend
2nd green on the right	Right interceptor does not extend

The 3DHC controller operation

Interceptors operate when voltage comes from the ignition. When there is no voltage from the ignition, system does not work.

System Reset - Retracting

The system resets and interceptors retract automatically:

- On engine start
- On engine stop
- On simultaneously pressing the UP+ DOWN buttons for 1 second.

Note: During reset process controller LEDs are flashing.

Night and day mode

The indication brightness changes by pressing simultaneously the buttons LEFT + RIGHT for 1 second.

Memory

Setting the desired trim angle

You may save the desired trim angle for the cruising speed. Just manually adjust the position and then press simultaneously any diagonal press buttons for about 3 seconds. This position of trim tabs is stored in 3DHC memory and the power-on led is flashing to confirm the setting. switch of the boat.

Whenever the user presses instantaneously two diagonal press buttons, the trim tabs get the preset position. The saved position is stored even after switching off the main switch of the boat.

Maintenance

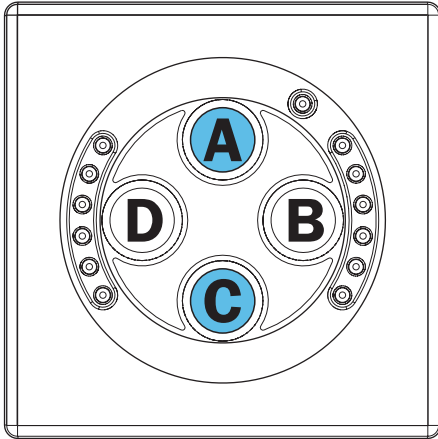
Check connectors for corrosion or liquid pollution. Check in regular intervals the condition of the sacrifice anodes. Below 50% in volume, anodes must be replaced. When the boat is out of the water (end of season):

- extend the blades
- spread the decalcifying liquid with a brush
- let it for 15-20 min
- wash out with clean water
- retract the blades

Every two years remove the cover and clean the inside of the units, using water pressure.

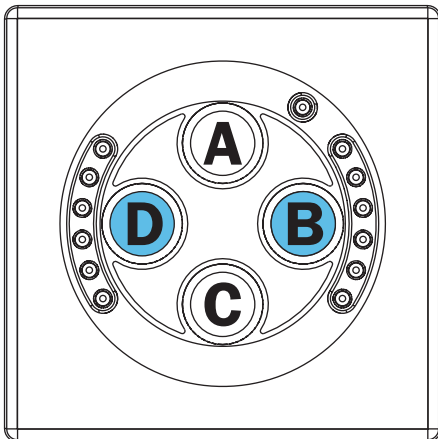
Every three years check the springs condition.

THE 3DHC Controller Functions



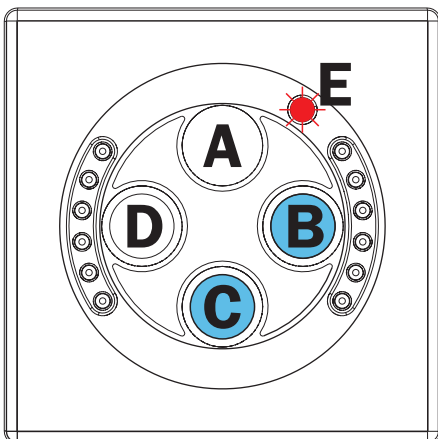
EMERGENCY RETRACTING

Press the **A + C** buttons simultaneously for 1 second.



NIGHT AND DAY MODE

The indication brightness changes by pressing simultaneously the **B + D** buttons for 1 second.



INTERCEPTOR POSITION MEMORY

Press **B + C** buttons simultaneously until the red led **E** blinks, to save the interceptor position in the memory.

Next time you press **B + C** simultaneously for 1 second, the interceptors will be extended automatically in the previous memorized position.

If you save a new position in memory, automatically the previous position is cancelled.

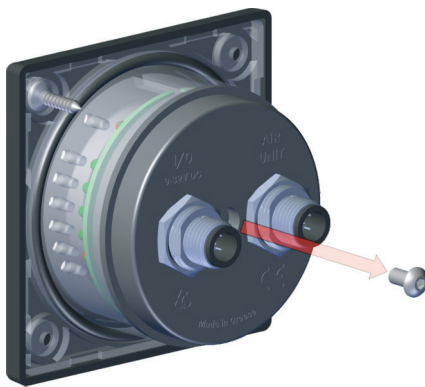
3DHC Controller Adaption

The controllers included in packaging, are pre-adjusted.

The instructions of this page must be executed only by authorised technicians and only in case of:

- Controller replacement with a new one after failure
- Installation of a secondary controller that **does not included in the initial set** (Flybridge)

To open the 3DHC Controller



1

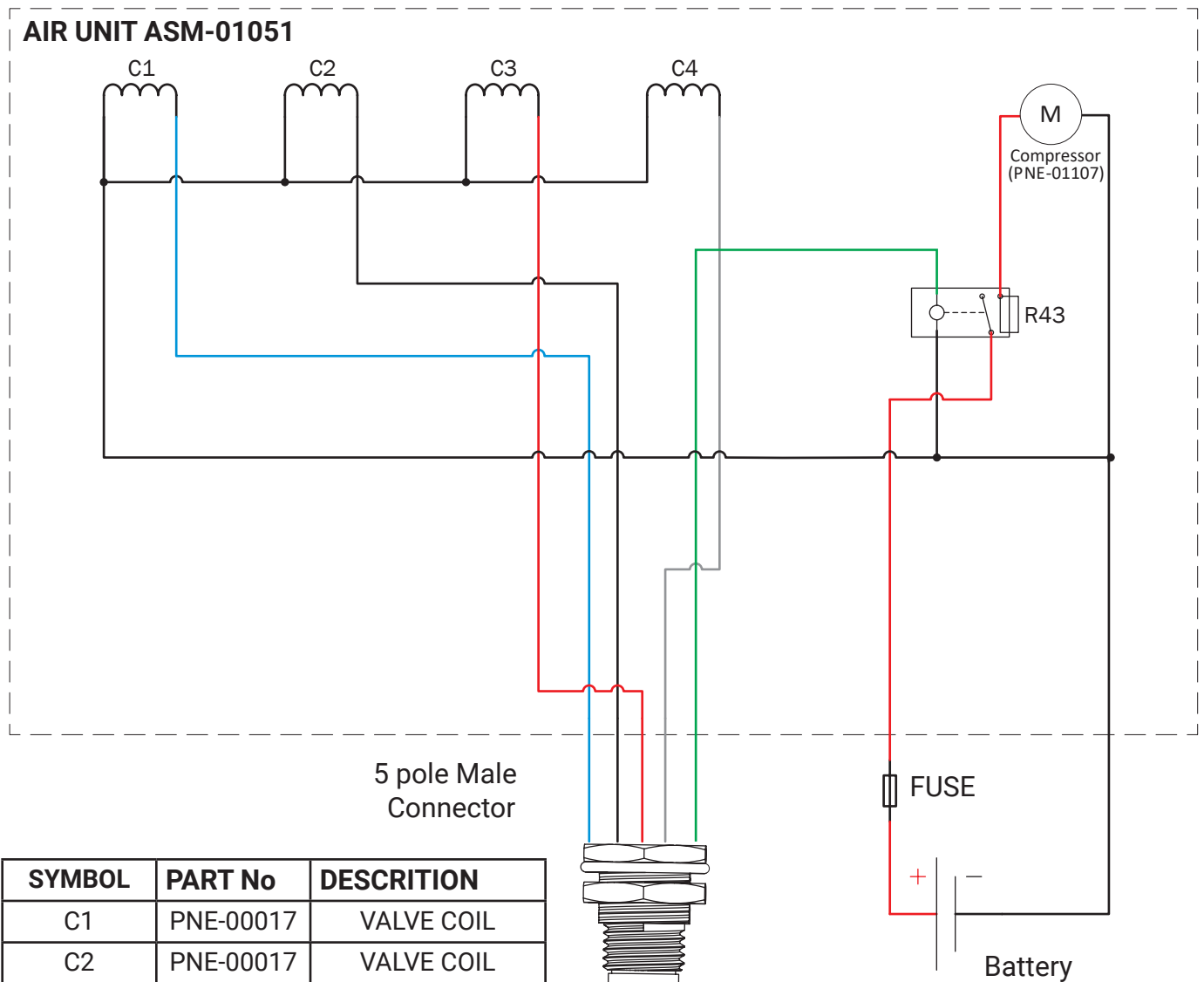
Remove the screw.



2

Find the switch and adjust as shown .

Electrical Diagram



SYMBOL	PART No	DESCRIPTION
C1	PNE-00017	VALVE COIL
C2	PNE-00017	VALVE COIL
C3	PNE-00017	VALVE COIL
C4	PNE-00017	VALVE COIL
R43		RELAY 12 OR 24V
F2		FUSE 3A

ATTENTION!

To avoid voltage drop use the right cable size.

AIR UNIT POWER CABLE SIZE	
DISTANCE FROM BATTERY	CABLE SIZE
up to 2.5m	2 x 2.5mm
up to 4m	2 x 4mm
up to 6m	2 x 6mm
up to 10m	2 x 10mm

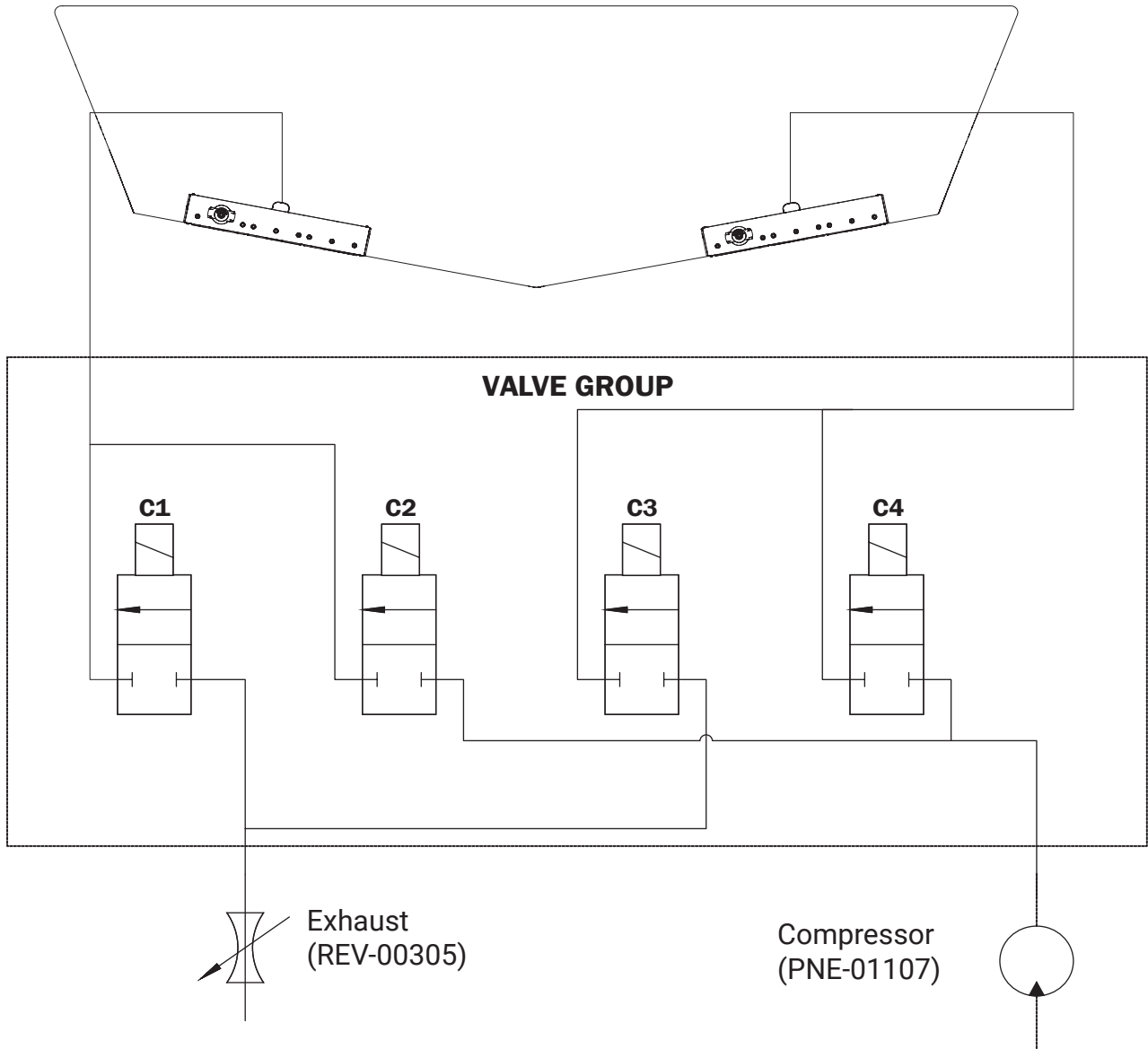
WARNING!

Advise the fusing table and ensure that you apply

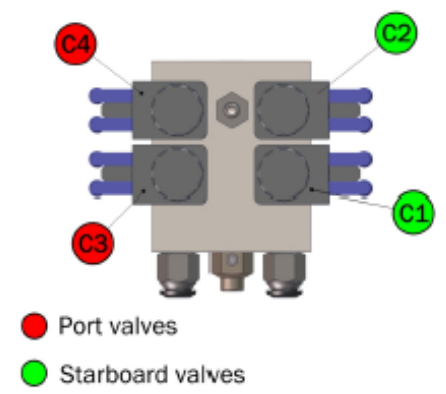
DC	Amps	Use Fuse
12V	9A	15A
24V	16A	25A

Supply 12/24V

Pneumatic Diagram



SYMBOL	PART No	DESCRIPTION	NOTES
C1	PNE-00017	COIL	STARBOARD RETRACT
C2	PNE-00017	COIL	STARBOARD EXTEND
C3	PNE-00017	COIL	PORT RETRACT
C4	PNE-00017	COIL	PORT EXTEND





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