

CANDELA®



# C-8

## Owners Manual

# Welcome

Congratulations on becoming the new owner of a C-8! We hope that you will get many years of joy from your unique electric hydrofoil craft. Make sure you receive a full explanation of all systems from the person transferring the ownership to you.

For your own comfort and safety, ensure that you obtain handling and operating experience before assuming command of the boat. This is especially important if this is your first boat, or if you are unfamiliar with this type of boat.

Candela will be pleased to provide you with any training needed.

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# Introduction

## About this manual

This is the owner's manual for the C-8 Daycruiser. It has been written to help you enjoy operating your boat safely. It contains details of the boat, such as the supplied or fitted equipment, its systems, and operating instructions. Please read the manual carefully and familiarize yourself with the boat before use. Ensure that everyone who will operate the boat reads this manual before use.

Keep this manual in a safe place and hand it over to the new owner if you sell your boat. If the manual is lost, a copy can be downloaded or ordered from Candela.

This owner's manual is not a course on boating safety or seamanship. It is not a detailed maintenance or troubleshooting manual. For support or service, please contact Candela.

## Receiving the boat

When receiving the new boat, remove the plastic wrapping and inspect the boat for any damage while the carrier service are still onsite. Report any damage to the carrier service and contact Candela. If there is no damage, proceed as follows:

1. Connect the boat to shore power. [See "Charging" on page 81.](#)
2. Turn on the main switch. [See "12V battery switch" on page 45.](#)

Recycle the plastic wrapping according to local regulations.

## About C-8

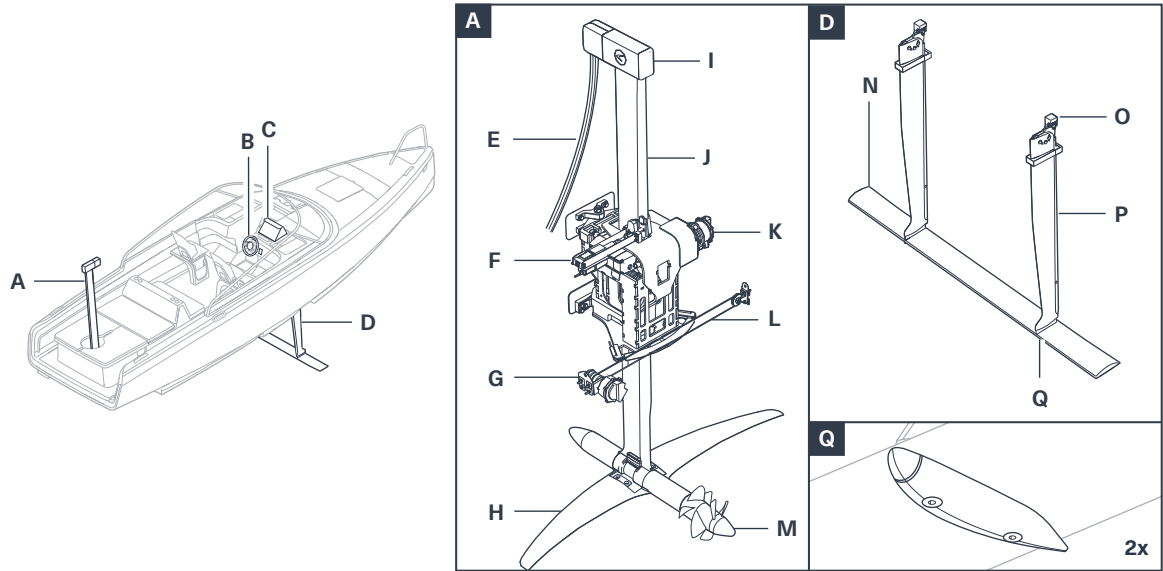
The C-8 is an electrical hydrofoil speedboat. The front and aft foil technology enables flying (foiling) half a meter above the water surface in speeds above 17 knots. The reduction of water friction, combined with no transmission losses from the electric pod motor, makes the boat highly efficient in driving range.

It is easy to extend and retract the foils in the user interface when conditions like speed and depth change.

Different types of sensors measure the position, speed, and acceleration of the boat, to ensure that a stable ride is maintained at all speeds.

## C-8 Overview

The characteristics of the C-8 steering, propulsion and foils are described as follows:



- |   |                                   |                                       |   |
|---|-----------------------------------|---------------------------------------|---|
| <b>A.</b> Aft foil system (AFS)           | <b>E.</b> Electrical motor cables | <b>J.</b> Rudder                      | <b>O.</b> Front foil motor/actuator x 2 |
| <b>B.</b> Steering wheel and throttle     | <b>F.</b> Foil locking mechanism  | <b>K.</b> Retraction motor            | <b>P.</b> Front foil strut x 2          |
| <b>C.</b> Touchscreen with user interface | <b>G.</b> Steering motor/actuator | <b>L.</b> Steering wire               | <b>Q.</b> Foil sacrificial anode x 2    |
| <b>D.</b> Front foil system (FFS)         | <b>H.</b> Aft foil (wing)         | <b>M.</b> Pod motor (propulsion unit) |   |
|   | <b>I.</b> Rudder connection box   | <b>N.</b> Front foil                  |   |

## Steering

The C-8 has an electrical steer-by-wire system. There is no physical connection between the steering wheel and the rudder. If the electrical steering system is disabled, only manual steering is possible. Manual steering is done by rotating the rudder, by hand.

## The aft foil system

The aft foil system contains components of the combined propulsion and steering system, such as the pod motor and rudder.

The rudder connection box contains the electric connections and cables for controlling the pod motor. Never pull or strain motor cables. This can damage motor functions.

The retraction motor generates power for retracting and extending the rudder. The different retraction modes are set via the user interface on the touchscreen.

The steering motor and connecting steering wire transmits the movements of the steering wheel to that of the rudder.

The pod runs very quietly, and idle running is silent. The driver must always know if the pod is on or off. Check that the propeller LED by the throttle is turned off.

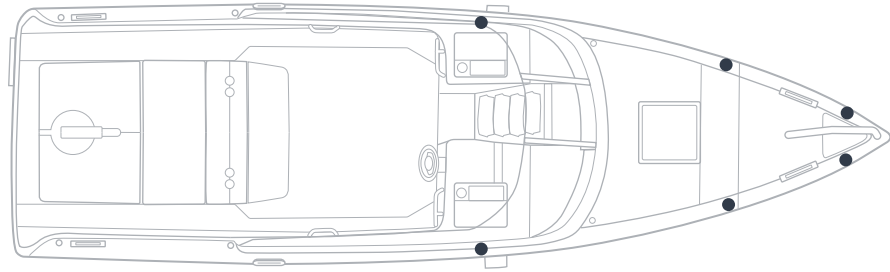
## The front foil system

The front foil system is only extended during foiling mode, and fully retracted inside the foil garage during other driving modes. An actuator motor on each foil strut controls the foil during flight. The foil is equipped with two sacrificial anodes, protecting the metal in the front foil system from galvanic corrosion.

The front foil system is extended and retracted via the user interface, on the touchscreen .

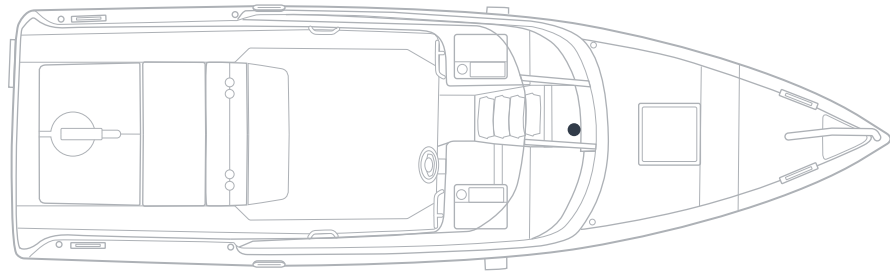
## Height sensors

The main function of the six height sensors is to provide input for foil control, measuring the distance between the hull and the water. The height sensors must be kept clean in order to function properly.



## Sonar depth finder (optional)

The sonar depth finder indicates sea depth and cays, via the user interface. Depth is not measured while foiling. The sonar depth finder must be kept clean in order to function properly.



# Safety

14 The instructions in this manual must be read and understood before taking command of the boat. For the safety of all passengers, pay special attention to the warnings.

## Intended use

The C-8 is intended to be used as a recreational boat in accordance with design category C.

The C-8 may only be used in accordance with the information and instructions provided in this manual, such as: safety, operation, maintenance, technical specifications, and referred information.

## Responsibilities of owner and operator

It is the responsibility of the owner or operator to ensure that both local and national regulations and laws are followed when handling the boat. The following list states responsibilities of the owner/operator of the boat. This list is not exhaustive.

- Follow the sea rule of the road (COLREG).
- Ensure all local legislation is complied with, including requirements for lifesaving equipment, driver's licensing , and environmental regulations.
- Do not drive under the influence of alcohol or drugs.
- Do not exceed the maximum number of passengers.
- Do not set out in a storm or very rough sea. Ensure that the anticipated wind and sea conditions will correspond to the design category of your boat, and that you and the passengers are able to handle the boat in these conditions.
- Any boat, no matter how strong it may be , can be damaged if not used properly. Inspect the boat regularly and whenever there is cause for concern.
- Adjust the speed in rough seas or under obstructed view, or if there are boats, objects, or people nearby in the water.
- Ensure that appropriate safety equipment is on board according to the type of boat, weather conditions, etc. This equipment is mandatory in some countries.
- If the boat is equipped with a life raft, carefully read the relevant documentation.
- Ensure that the boat is properly maintained. Consider the deterioration that will occur over time and due to heavy use or misuse of the boat.
- Ensure that you understand your boat's functions, limitations, and behavior.
- Ensure that all passengers can locate and operate the safety equipment, and are trained for emergency maneuvers.
- Ensure that all passengers wear a life jacket in accordance with national and local regulations.

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Disclaimer

Candela is not responsible for any injuries and/or damage resulting from incorrect installation, operation, maintenance, and/or modifications of the boat.







Misuse can lead to danger for the passengers, driver, and environment, and can damage the boat.

Maintenance, repair, or modifications must be carried out by qualified personnel. Modifications that can affect the safety characteristics of the boat shall be assessed, executed, and documented by an authorized Candela workshop. Only use the recommended equipment and spare parts. Candela cannot be held responsible for unauthorized modifications.

Safety warnings in this manual

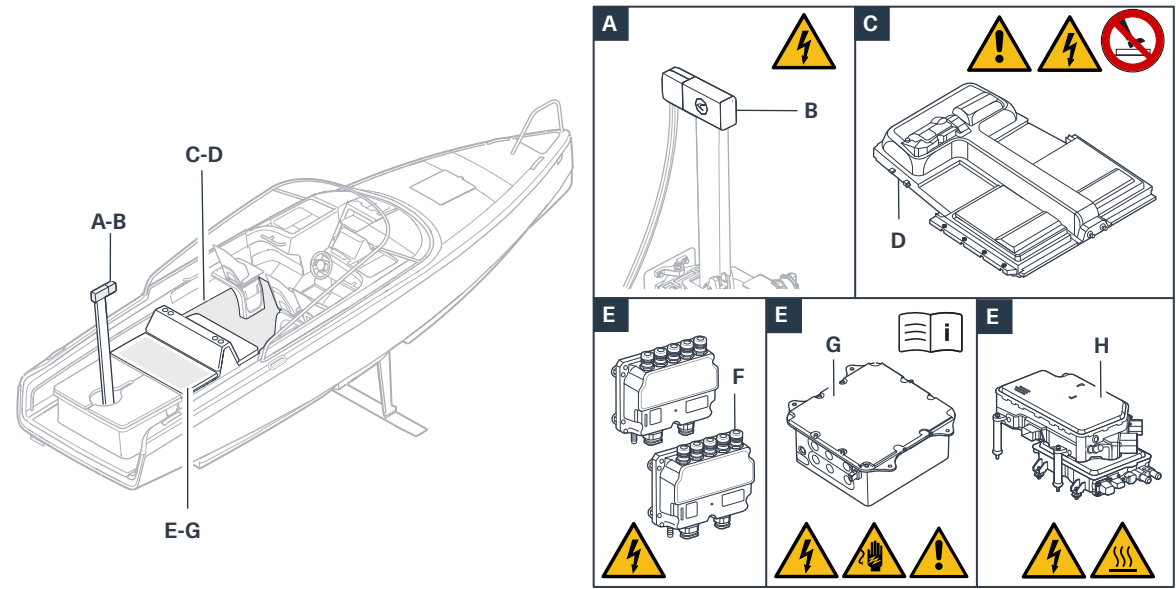
 <b>DANGER!</b>	Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.
 <b>WARNING!</b>	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
 <b>CAUTION!</b>	Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.
 <b>NOTICE!</b>	Indicates information considered important, but not hazard-related, for example, relating to property damage or impaired operation.

Safety symbols on the boat

Safety symbol	Name	Meaning	Position on the boat
	Warning	Indicates a hazardous situation which could result in death or serious injury.	<ul style="list-style-type: none"><li>• Power distribution unit</li><li>• High-voltage battery</li></ul>
	Warning: Electricity	Electrical hazard. Risk of life-threatening electrical shock.	<ul style="list-style-type: none"><li>• High-voltage battery</li><li>• Power distribution unit</li><li>• Motor controllers</li><li>• Inside rudder head connection box</li></ul>
	Warning: Electrical hazard.	Do not touch. Risk of life-threatening electrical shock.	<ul style="list-style-type: none"><li>• Power distribution unit</li></ul>
	Warning: Hot surface	Do not touch. Risk of burning.	<ul style="list-style-type: none"><li>• On board charger and DC/DC converters</li></ul>
	No trampling	If the battery hatch is open, avoid standing on the battery. This may cause damage to the component.	<ul style="list-style-type: none"><li>• High-voltage battery</li></ul>
	Read the manual	Read the instruction manual before performing any work on this component.	<ul style="list-style-type: none"><li>• Power distribution unit</li></ul>

# Safety stickers on the boat

The safety stickers are attached to the components, and visible only when the service hatches are open. If a replacement safety sticker is needed, please contact Candela.



- |                               |                         |                            |                     |
|-------------------------------|-------------------------|----------------------------|---------------------|
| A. Rudder                     | C. Battery hatch        | F. Motor controllers x2    | I. DC-DC converters |
| B. Rudder head connection box | D. High-voltage battery | G. Power distribution unit |                     |
|                               | E. Sunbed hatch         | H. On board charger        |                     |

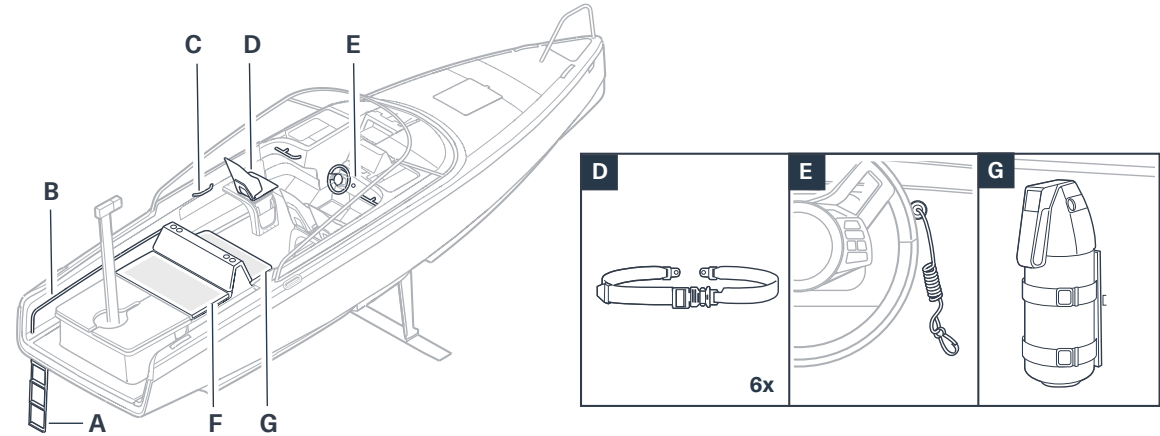
# Safety equipment on board

The C-8 is equipped with built-in seat belts for all passengers and safety handles to hold on to while underway.

An emergency switch connected to a kill cord is located next to the steering wheel. The kill cord must be secured to the driver while underway. When pulled or released it will stop the boat.

In case of fire, a 2 kg portable fire extinguisher is located under the sunbed hatch. The storage space under the sunbed hatch can also be used for a life raft (not included).

The boat is equipped with a safety ladder, which is accessible from both the deck and the sea. The ladder can be combined with an optional swim platform.



- |                               |                      |                                |                      |
|-------------------------------|----------------------|--------------------------------|----------------------|
| A. Safety ladder              | C. Safety handles x4 | E. Kill cord switch            | G. Fire extinguisher |
| B. Safety rails x2 (optional) | D. Seat belts x6-8   | F. Storage space for life raft |                      |

## Using the safety ladder and the swim platform (optional)



### **DANGER!**

**A rotating propeller can cause serious injury or death.**

- Turn off propulsion when swimmers are nearby.
- The propeller runs quietly. Always ensure that the propulsion LED is off.



### **CAUTION!**

**The pod has sharp edges. Risk of personal injury.**

- Pay attention when climbing onto the boat.
- Mind your head when pulling down the swim ladder from the sea.



**NOTICE! Pulling the rudder motor cable can damage motor functions.** Never pull the rudder cable when boarding.

## Using the safety ladder

The ladder can be released both from the aft deck and from the sea.

1. Pull the swim ladder out horizontally, then push it down vertically.
2. Hold on to the port rails when climbing onto the boat.

## Using the swim platform (optional)

1. Unfold the swim platform:
  - From the sea: Pull the lower platform strap.
  - From the deck: Pull the upper platform strap.
 The swim platform unfolds.

2. Pull the swim ladder out horizontally, then push it down vertically.


## Checking the safety equipment

Check the functionality of safety equipment annually. Ensure that:

- All seat belts can be locked and tightened.
- The swim ladder can be pulled out easily.
- The expiration date of the fire extinguisher has not passed.
- The fire extinguisher manometer is displaying the correct pressure.
- The fire extinguisher hose is in good condition.

Replace or repair faulty equipment.

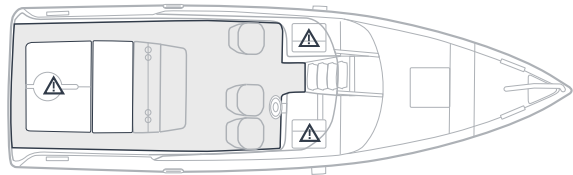
Safety on working deck

- 
- WARNING!**


**Moving parts. Crush and pinch point hazard.**

  - Always stay clear of moving rudder and struts.
  - Before changing retraction mode, ensure that the passengers are informed.
  - Never use the sunbed when underway.

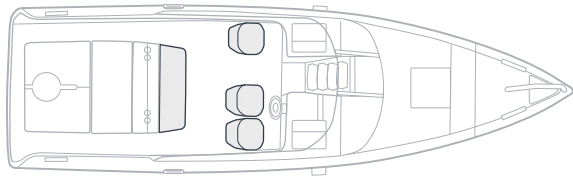
When underway, passengers must remain on working deck or in the cabin. All passengers must use a life jacket when on working deck.



Safety on working deck during foiling




- 
- WARNING ! Risk of personal injury.** When foiling, always use the designated seats and fasten the seat belts.

During foiling, all passengers must be seated in the designated seats on deck. Passengers are not allowed in the cabin.



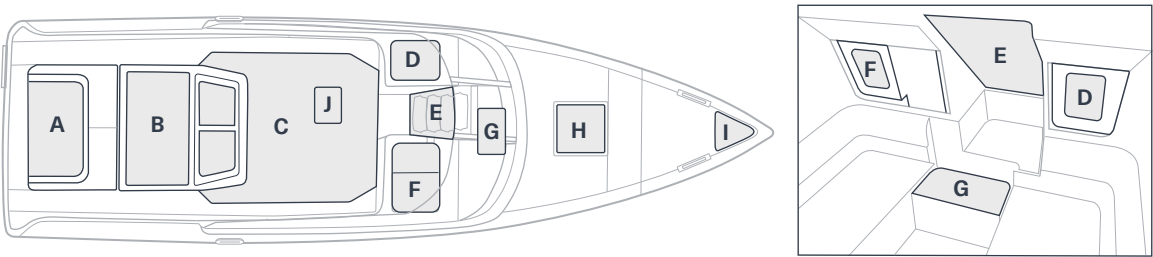
Hatches

Keep all hatches closed while underway to minimize the risk of flooding. The service-access hatches should always be kept closed. They may only be opened during maintenance by authorized personnel.

- 
- NOTICE! Risk of property damage.** The cabin hatch must be closed during foiling. The cabin hatch can be open for passage during Planing, Shallow and Harbor mode.
- 
- NOTICE! Risk of property damage.** Do not lean on the gas spring of the windshield front door. Applying side load on the gas spring can permanently damage it.
- 
- WARNING!**

**Risk of personal injury.**

  - Never open service access hatches. Service access hatches may be opened by authorized service personnel only.
  - Failure to comply could result in death or serious injury.



- |  |   |  |                          |
|--|---|--|--------------------------|
| <b>A.</b> Aft box hatch (service access) | <b>C.</b> High-voltage battery hatch (service access) | <b>E.</b> Cabin hatch                  | <b>H.</b> Cabin skylight |
| <b>B.</b> Sunbed hatch                   | <b>D.</b> Strut hatch (service access)                | <b>F.</b> Strut hatch (service access) | <b>I.</b> Anchor hatch   |
|  |   | <b>G.</b> Cabin inspection hatch       | <b>J.</b> MSD hatch      |

## Passenger seating



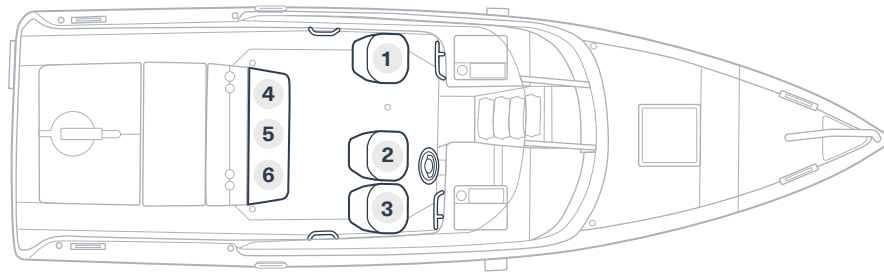
### WARNING!

#### Risk of personal injury.

- When foiling, use the designated seats and fasten the seat belts.
- The driver must always use the kill cord.
- Do not exceed the maximum recommended number of passengers.

The standard C-8 has six seats, including the driver's seat.

Candela recommends that all passengers are seated and use a safety belt when underway. When foiling, all passengers must be seated and belted. Passengers should never use the sunbed when underway.



## Mounting the additional seats to the safety rail (optional)

Additional seats are equipped with two magnetic buckle straps.

1. Strap and lock the seat to the safety rail and to the subed hatch.
2. Ensure that the seat is properly secured.

## Emergency procedures

### Stop the boat in case of emergency



**WARNING! Risk of personal injury.** The driver should always be secured to the kill cord when underway. If the driver is not able to pull the kill cord, a passenger can pull it instead.

If an immediate stop is necessary, pull the emergency kill cord. This will turn off the propulsion and shut down the boat. The driver should be secured to the kill cord when underway.

#### Pulling the kill cord

1. Pull the kill cord. The boat will immediately shut down.

#### Resetting the kill cord

1. Remount the kill cord.
2. Turn the key off and on to restart the boat.

## Fire on the boat



### **WARNING!**

#### **Risk of explosion and personal injury.**

- In case of fire near the high-voltage battery, immediately evacuate the boat and contact emergency services.
- The electrolyte within most lithium-ion batteries and the gases released under certain fault conditions are flammable. In case of fire in the battery, potential explosion cannot be ruled out.

### Extinguishing a fire

1. If the fire is confined and not near the high-voltage, lithium-ion battery, use the fire extinguisher.
2. Replace the fire extinguisher after use.

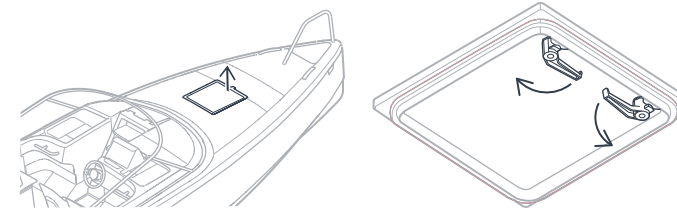
### Evacuating due to fire

If the fire cannot be contained, do the following:

1. Put on the life jackets.
2. Evacuate the boat.
3. Call the emergency services.

## Fire escape through skylight/emergency exit

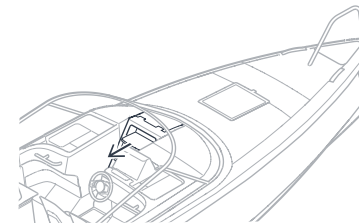
1. Use both hands to grip the skylight handles.
2. To unlock, turn the handles 90 degrees.
3. Push to open.



## Fire escape through cabin hatch

The cabin hatch is equipped with lock buttons on both sides of the cabin hatch.

1. Push the cabin hatch button.
2. If inside the cabin, push the cabin hatch open. If outside the cabin, pull the cabin hatch open.



## Man overboard



### **DANGER!**

**A rotating propeller can cause serious injury or death.**

- Turn off the pod when near someone in the water and ensure that the propeller is not rotating.
- The pod runs quietly, always double-check that the propeller LED is off.



**NOTICE! Pulling the rudder can damage motor functions.** Never pull the rudder motor cable when boarding.

1. Put throttle in neutral. If necessary, land and turn the boat around.
2. Press the stop button on the throttle to turn off the pod. Check that the propeller LED is off.
3. Throw the person a floating device.
4. Pull out the swim ladder.
5. In cold weather, be ready with a thermal blanket.

## Grounding



**NOTICE!** The outer skin of the boat may be damaged from hitting hard or sharp objects. If the outer skin is damaged, it must be repaired immediately. The outer skin of the boat is strong enough to resist the design pressure, but not local damage from hitting hard or sharp objects.

1. If possible, apply Shallow or Planing mode.
2. Immediately inspect the boat internally.
3. Consider hauling out the boat to perform an external inspection of the hull. The inspection should be carried out by a professional, as soon as possible. If any repairs are necessary, contact Candela.

## Flooding



### **WARNING!**

**Risk of flooding.**

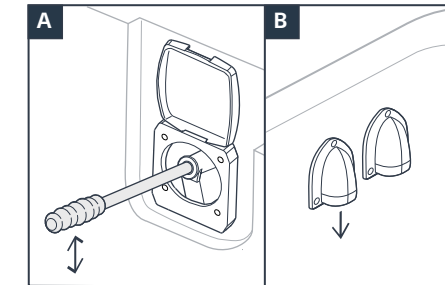
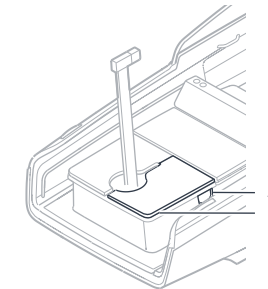
- If water enters the boat due to damage, do not rely on the bilge pump system. The bilge pump system is not designed for damage control.
- The manual bilge pump only pumps out water from the stern.

### Manual start of automatic bilge pumps

1. Select the Outputs settings in the user interface. Activate each of the automatic bilge pumps.
2. A faint buzzing sound and the sound of splashing water indicates that the bilge pumps are functioning.

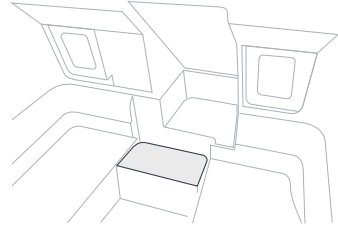
### Using the manual bilge pump

1. Locate the bilge pump handle under the sunbed hatch.
2. Attach the handle to the manual bilge pump.
3. Pump up and down. Any water in the stern is pumped out through two outlets in the aft box. If there is no resistance when pumping, there is no water to pump out.
4. Continue until there is no water coming out of the outlets.
5. Detach the handle from the manual bilge pump and place the handle under the sunbed.



- A.** Manual bilge pump with handle
- B.** Manual bilge pump outlet

### Checking for water in the bow

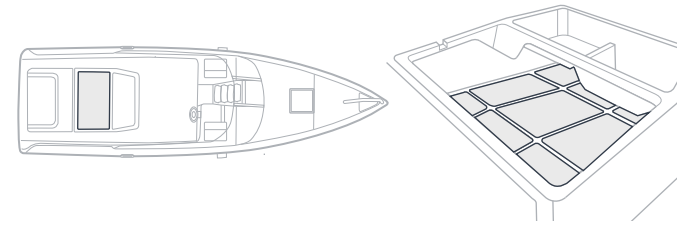


If water in the bow is suspected, wait for the automatic bilge pump to run, or start it from the user interface. During pumping, a faint buzzing noise and splashing water is heard.

To make a visual check, do as follows:

1. In the cabin, unscrew the hatch to the front bilge pump.
2. Check for water in the bow. A small amount of water is normal.
3. If there is excess water, wait for the automatic bilge pump to pump out the water, or start the pump manually from the user interface.
4. If the bilge pump functions, the water decreases and splashing water from the bilge pump drain outlet is heard.
5. If the water remains in the bow, the boat might be taking in water, contact emergency services.

### Checking for water in the stern



Check for water in the stern by waiting for the automatic bilge pump to run. To make a visual check, do as follows:

1. Open the sunbed hatch and remove the stowage bag.
2. Check for water in the stern. A small amount of water is normal.
3. If there is excess water, wait for the automatic bilge pump to pump out the water, or start the pump manually in the user interface.
4. If the automatic bilge pump is out of order, perform manual bilge pumping.

### Emergency steering

If the electrical steering system is disabled, steering is done by rotating the rudder by hand. If the pod motor is still functioning:

1. Remove the aft box lid to access the rudder.
2. Slowly steer to safe harbor by rotating the rudder.

### Loss of propulsion

If both steering and pod motor are disabled:

1. Anchor the boat, if possible.
2. Call the emergency services.



## Recommended equipment on board

Life at sea is unpredictable. Be prepared by always carrying the following equipment, as a minimum:

- Life jacket or buoyancy aid for each person
- Appropriate weatherproof clothing
- Compass
- Charts
- Anchor and line
- First aid kit, including compress and thermal blanket
- Fire extinguisher (included in boat delivery)
- Bucket
- Distress flares
- VHF radio
- Binoculars
- Knife in protective sheath
- Drinking water

## Stability and buoyancy

Any change in the mass distribution on board can significantly affect the stability, trim, and performance of the craft. Consider the following factors and recommendations before setting out to sea:

- Breaking waves are a serious stability hazard.
- Check the bilge water level; keep it at a minimum.
- Stability is reduced by any weight added above the main deck.
- In rough weather, hatches, lids, lockers, and doorways should be closed to minimize the risk of flooding.

- Stability may be reduced when towing, or by lifting heavy loads using a davit or boom.
- Ensure that any load is suitably distributed, properly stowed, and secured.
- Stability is significantly reduced at speeds above displacement speed.

## Environmental awareness



### **WARNING!**

#### **Risk of damage to the environment.**

- Only organic waste may be jettisoned at sea.
- Marine plastic pollution is a serious wildlife and environmental hazard.
- Comply with speed restrictions to avoid coastal erosion.



### **CAUTION!**

#### **Risk of damage to the environment.**

- Keep bilges clean to prevent the automatic bilge pumps from discharging illegal effluent.
- Comply with local marine discharge laws. Violators can be subject to penalty.

Comply with local marine discharge laws. Violators can be subject to penalty. Several sections of this manual provide information on how to protect the boat and its passengers from the environment. This section gives information on how the environment can be protected from the boat and its passengers.

The environment should be understood as including one's neighbors as well as the world of plants and animals.

In many regions of the world, there are strictly-enforced regulations regarding environmental protection. It is the responsibility of the operator to be aware of applicable regulations and to ensure compliance with them. Bear in mind the international convention against marine pollution (MARPOL).

No black water discharge at sea

The discharge of effluent into navigable waters is forbidden by law in many areas.

If such discharge causes:

- Discoloration of the water
- A film or sheen upon the surface
- A sludge or emulsion beneath the surface

It is the responsibility of the boat driver to ensure that they comply with local marine discharge laws. Violators can be subject to penalty.

The black water tank must not be discharged at sea. It must be pumped out onshore at a waste station.

Retain household waste until onshore

Retain any household waste until it can be properly disposed of onshore.

Considerations regarding noise and wake

Consider the safety and comfort of other boats, people and wildlife around you. Never make excessive noise. Comply with speed restrictions and adapt speed to sea conditions.

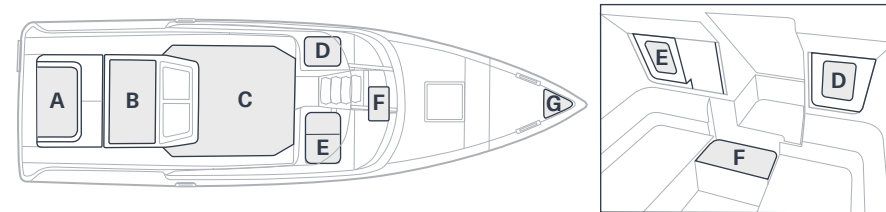
# Systems

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For information regarding the propulsion, steering and foil systems, see About C-8.

The system components are accessed through hatches on deck, or in the cabin. Only open the service-access hatches when a visual check is needed, or when a qualified technician can support in maintenance and service.

**⚠ WARNING! Risk of personal injury.** Never open the high-voltage battery hatch. If smoke or smell indicates a fire from this area, immediately evacuate the boat.



- A. Aft rudder box hatch (service access)
- B. Sunbed hatch
- C. High voltage-battery hatch (service access)
- D. Strut hatch (service access)
- E. Strut hatch (service access)
- F. Cabin inspection hatch
- G. Anchor hatch

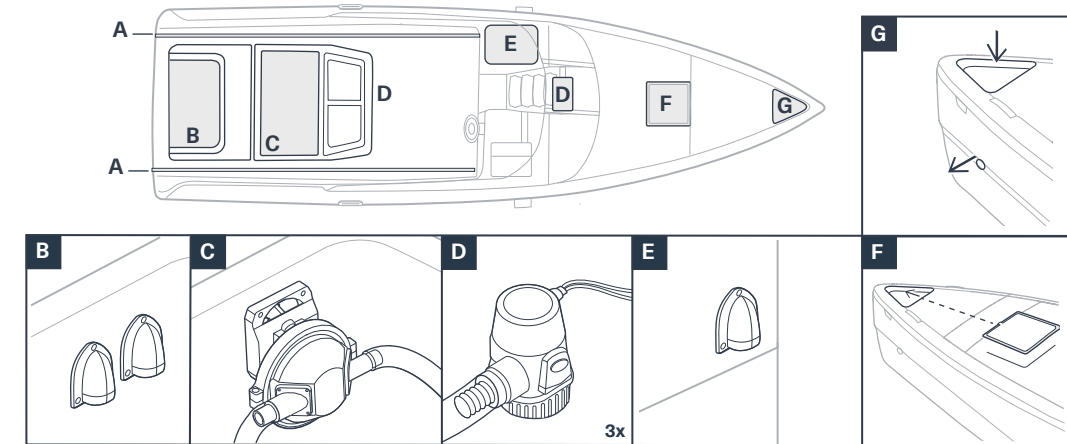
Systems

## Draining system

The draining system ensures that any water that enters the boat from waves, splashes, or rain will drain. A well-functioning draining system is essential to maintain the stability and buoyancy of the boat. Excess water is pumped out with the bilge pumps. The bilge pump drain outlets are through-hull fittings and should be kept clear from debris.

The deck angle and its gullies allow for natural overflow. Water accumulated around the skylight is drained through a built-in hose leading to the anchor box.

Excess water in the anchor box is drained through an outlet on the starboard side of the boat.



- A. Deck gullies
- B. Aft bilge pump drain (through- hull)
- C. Manual bilge pump
- D. Automatic bilge pump x 3
- E. Front bilge pump drain (through- hull)
- F. Skylight drain
- G. Anchor box drain

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### Bilge pumps

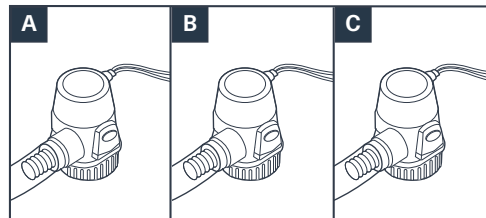
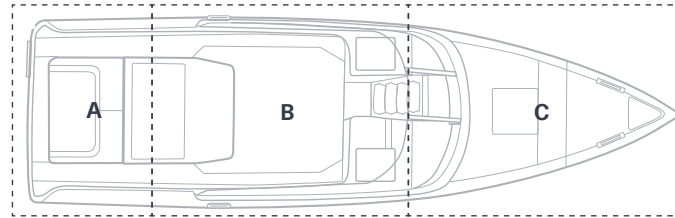
The C-8 has three automatic bilge pumps and one manual bilge pump.

The automatic bilge pumps are in the aft, middle and front bilge compartments. Every other minute they run automatically for a short period, pumping out the excess water from the bilge compartments. They generate a faint buzzing sound while running.

If necessary, the automatic bilge pumps can be activated manually via the user interface. The aft and middle automatic bilge pumps are started from the same button on the user interface. The front automatic bilge pump has its own button.

The automatic bilge pumps are electrical and remain active when the key is turned off. They will not function if the 12V battery switch is turned off, or if the boat suffers from power loss.

The manual bilge pump is located under the sunbed hatch and is only used if excess water has accumulated in the aft bilge compartment. This water is pumped out by hand.



A. Automatic Aft bilge pump  
B. Automatic Middle bilge pump  
C. Automatic Front bilge pump

**⚠ WARNING! Risk of flooding.** If water enters the boat due to damage, do not rely on the bilge pump system. The bilge pump system is not designed for damage control.

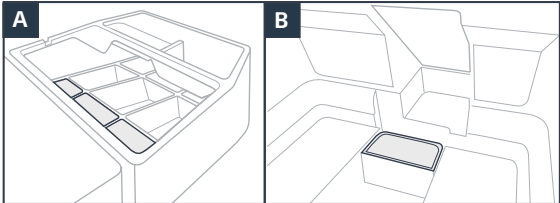
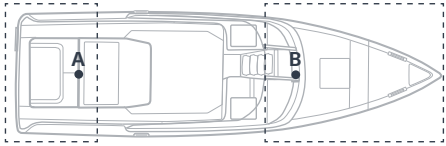
**⚠ NOTICE!** When the 12V battery switch is off, the automatic bilge pumps will not work.

**⚠ NOTICE !** Check the bilge pumps regularly and keep the bilge pump drain outlets clear from debris.

### Checking the automatic bilge pumps

To check the function of the automatic bilge pumps, wait for them to start, or start them manually:

1. In the Outputs settings in the user interface, start each of the automatic bilge pumps.
2. A faint buzzing sound and the sound of splashing water indicates that the bilge pumps are functioning.
3. If necessary, perform a visual check:
  - a. Open the sunbed hatch and make sure there is no excess water in the stern.
  - b. In the cabin, unscrew the hatch to the front bilge pump and make sure there is no excess water in the bow.

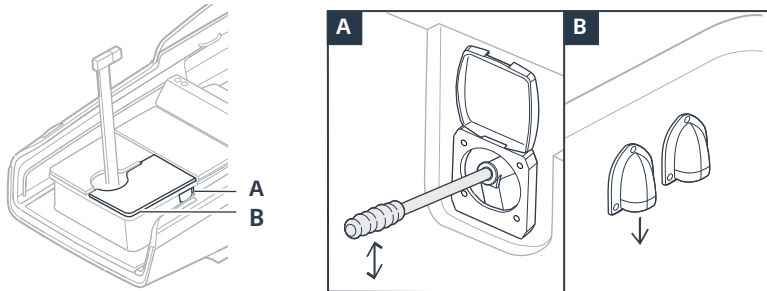


A. Check under sunbed hatch  
B. Check cabin inspection hatch

### Checking the manual bilge pump

**⚠ | NOTICE!** The manual bilge pump only pumps out water from the stern.

1. Locate the bilge pump handle under the sunbed hatch.
2. Attach the handle to the manual bilge pump.
3. Pump up and down. Any water in the stern is pumped out through two outlets in the aft box. If there is no resistance when pumping, there is no water to pump out.
4. Continue until there is no water coming out of the outlets.
5. Detach the handle from the manual bilge pump and place the handle under the sunbed.



A. Manual bilge pump with handle  
B. Manual bilge pump outlet

### Rinsing the anchor box drain

The anchor box should be rinsed regularly.

1. Remove any seaweed, mud, or debris from the anchor box.
2. Rinse the anchor box with water and drain it. Repeat this process until the drain is unclogged.

**⚠ | NOTICE!** Rinse the anchor after every use to prevent clogging.

## High-voltage battery system



### **WARNING!**

#### **Risk of life-threatening electrical shock.**

- Do not open the battery compartment.
- Do not perform any work on a high-voltage lithium-ion battery.
- Only authorized personnel may perform any kind of work on the battery and high-voltage components.
- Do not touch a damaged battery, as this may result in burns or serious electric shock.
- Avoid inhaling leaking gases from a damaged battery.
- Avoid handling the orange high-voltage cables.
- Avoid handling the high-voltage parts marked with yellow safety labels.



### **WARNING!**

#### **Batteries may explode. Risk of personal injury.**

- In case of fire in or near the high-voltage battery, immediately evacuate the boat and contact emergency services.
- The electrolyte within most lithium-ion batteries and the gases released under certain fault conditions are flammable. In case of fire in the battery, a potential explosion cannot be ruled out.



### **WARNING!**

#### **Risk of fire.**

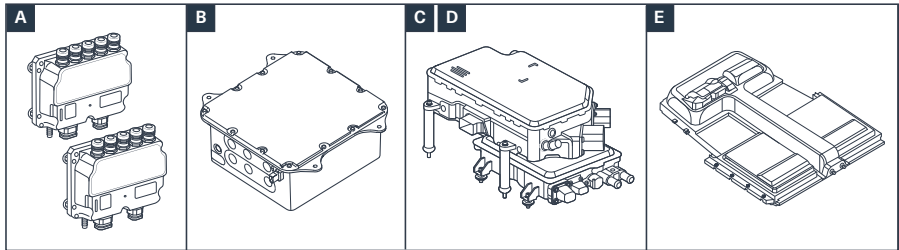
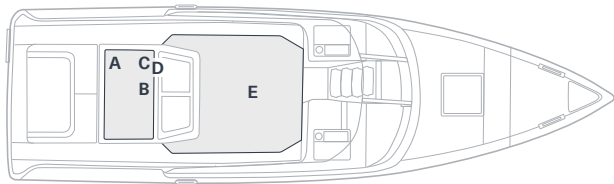
- If there is a gas leak or fire risk, immediately evacuate the boat.
- Do not use a defective battery. If any damage to the battery is noticed after delivery, do not operate the boat.

High voltage system overview

The boat's main power source is the 350V high-voltage lithium-ion battery. The main function of the high-voltage system is to supply and distribute power to the propulsion, steering and electrical systems.

Normally, the high-voltage battery does not require any regular maintenance, except maintaining a sufficient state of charge and ambient temperature.

The high-voltage battery is located in a ventilated space of the hull and has built-in protection against overheating. In case of error, warning messages are displayed in the user interface.



- A. Propulsion motor controllers
- B. High-voltage distribution
- C. On board charger  
D. DC/DC converters
- E. High-voltage battery

Prolonging battery life span

To optimize the battery lifespan, avoid low depth of discharge.

State of charge recommendation	
During operation	20-80%

## 12 Volt electrical system



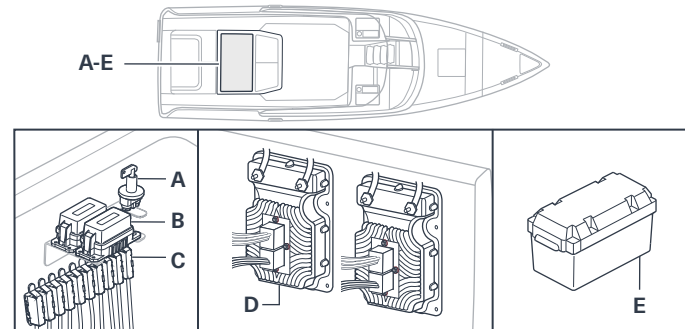
### WARNING!

#### Risk of personal injury. Risk of electrical shock.

- Do not modify the electrical system of the boat, or the electrical system drawings. Installation, alterations, and maintenance should be performed by an authorized Candela workshop.
- Never perform any electrical work while the system is energized.
- Never modify the propulsion system, battery type or system components.
- Never alter or modify the rated current amperage of overcurrent protective devices.
- Never install or replace electrical appliances, or devices with components that exceed the rated current amperage of the circuit.
- Avoid handling the orange high-voltage cables.

The 12V system supplies and distributes power to the low-voltage components, such as the navigation lights, the electrical automatic bilge pumps and various optional electrical equipment.

The 12V system has two power sources, the 12V battery, and the DC/DC converter, included in the high voltage system. The DC/DC converter generates 12V power from the high-voltage system and charges the 12V battery when needed.



- A. 12V battery switch
- B. 12V fuse box
- C. 12V fuse box
- D. Power management units
- E. 12V battery

## 12V circuit protection

The boat has electronic fuses in the power management unit and traditional, sacrificial fuses in the fuse boxes under the sunbed.

When an electronic fuse is triggered, the error is displayed in the user interface. A sacrificial fuse requires manual replacement.

A fuse map with circuit identification and fuse amperage ratings is located in the vicinity of the fuse boxes.



**NOTICE!** Under normal circumstances, a tripped fuse indicates a malfunctioning circuit, which should be investigated.

## 12V battery switch

The 12V battery switch is located under the sunbed on starboard side, next to the fuse boxes. During transport, or during longer periods without the charging cable connected to the boat, the 12V system must be turned off.

### Turn off the 12V system

1. Turn off the key.
2. Disconnect the boat charging cable.
3. Turn off the 12V battery switch.



**NOTICE!** When the 12V battery switch is off, the automatic bilge pumps will not work.

**Preventing 12V battery drain**

When the key is turned off, the high-voltage electrical system will monitor the 12V electrical system and charge the 12V battery when needed. This function requires that the high voltage battery has a minimum state of charge of 20%.

If the state of charge drops below 20%, the 12V battery will not charge, causing it to eventually drain.

To avoid draining the 12V battery:

- Always connect the charging cable when docked and the key is turned off.
- Make sure to maintain the recommended state of charge of 20-80%.

**Recharging the 12V battery**

If the boat doesn't start when the key is turned on, the 12V battery might be drained. Follow the instructions to recharge the battery:

1. Turn off the 12V battery switch.
2. Connect the 12V battery charger directly to the 12V battery poles.
3. Charge the 12V battery for 10-20 minutes.
4. Turn on the 12V battery switch.
5. Turn on the key. The boat should start and the high voltage system will charge the 12V battery.
6. Disconnect the 12V battery charger.

If the boat doesn't start contact Candela.



Fuse map

Fuse Id	Fuse Amp	Relay Id	Function	Fuse Id	Fuse Amp	Relay Id	Function
F100	7.5		Bilge Pump Front	F201*	30	K201*	Heater Element 2
F101	10		Bilge pump Mid & Aft	F202*	30	K202*	Heater Element 3
F102	5		Foil Control Unit	F203	3		DCDC
F103	5		Ignition	F204**	3		AFS Rake Starboard CAN ID
F104*	30		Stereo Head Unit	F205**	3		AFS Rake Port CAN ID
F105	5		Drive Control Unit	F300	150		12V Battery
F106	7.5	K100/K204/K206	Prop. Inverters Aft & Front	F301	80		FFS Retraction Starboard
F107	-		Spare	F302	80		FFS Retraction Port
F108	7.5	K205	HV Battery Control System	F303	80		AFS Retraction
F109	3		Logger Unit	F304	40		AFS Rake Starboard
F110	10		FFS Lock Pin Starboard	F305	40		AFS Rake Port
F111	10		FFS Lock Pin Port	F306	40		FFS Foil Actuator Starboard
F112	10		AFS Lock Pin	F307	40		FFS Foil Actuator Port
F113	3	K102	Electronic Steering Hub	F308	80		AFS Steering Actuator
F114	15	K203	User Interface	F309*	40		Stereo Power Amplifier
F115	3		General (Green) CAN bus	F310	30		FFS & AFS Lock Pin Supply
F116	3		Drive (Blue) CAN bus	F320	150		350V to 12V DC/DC Converter
F117	3		Foil (Red) CAN bus	F321	150		Fuse Box 1 & 2 Supply
F118	10		OBC	F322	100		Standard Powercore
F119	5		Gateway	F323*	100		Accessories Powercore
F200*	30	K200*	Heater Element 1 & Fan	F324	125	K300	KL15 Busbar

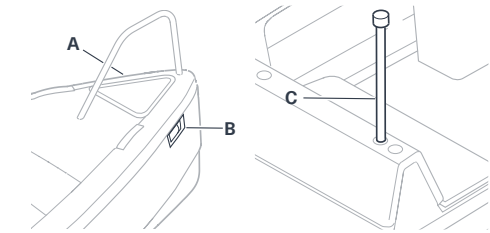
\*May not be mounted depending on accessory level  
\*\*May not be mounted depending system configuration

Navigation lights

The navigation lights are activated automatically or manually. The navigation lights are turned on 30 minutes before sunset, based on the geographical position of the boat. The automatic light function requires a cellular connection.

The navigation lights can also be activated manually, via the user interface. The sidelights are controlled separately from the all-round white light. As a result, the portable all-round light can be used as an anchor light, while the sidelights are turned off according to regulations.

**NOTICE!** The navigation lights must be activated manually when there is no cellular connection or low visibility. It is always the driver's responsibility to ensure that the lights are on when needed.



- A. Sidelight (port)
- B. Sidelight (starboard)
- C. All-round light ( stern and anchor light)

Mounting the all-round light

The all-round light is mounted on a portable, telescopic rod.

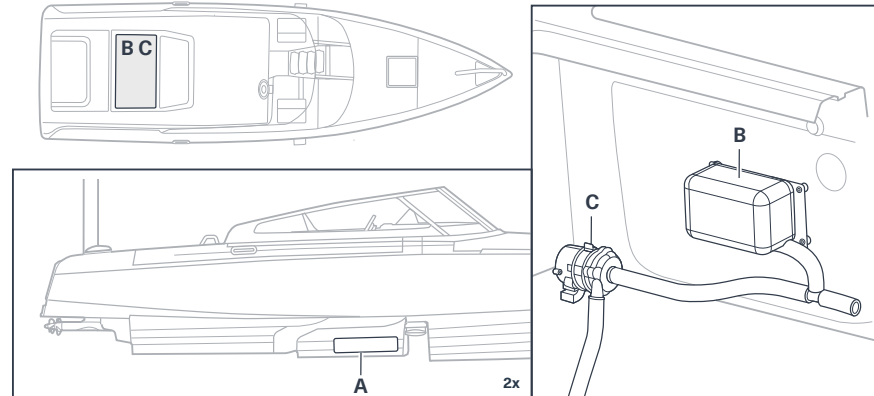
1. Extend the telescopic rod to its full length.
2. Mount the rod in the designated socket in the sunbed.
3. Ensure that the all-round light functions properly.

Checking the navigation lights

1. In the user interface, turn on the sidelights.
2. In the user interface, turn on the all-round light.

## Cooling system

The C-8 has a closed-loop cooling system. The electrical equipment is cooled by two cooling plates under the hull and circulating coolant. The seawater regulates the temperature of the cooling plates.



- A. Cooling plates x 2
- B. Coolant tank
- C. Circulation pump

## Checking the coolant level

The coolant tank is located under the sunbed stowage bag. A decrease in coolant indicates leakage.

1. Check the level of coolant in the coolant tank regularly.
2. If necessary, refill with coolant to the level indicated on the tank.
3. If you suspect a leakage, contact Candela.



**CAUTION! Risk of damage to the environment.** A coolant tank leak is an environmental hazard. Leaked coolant in the keel can be pumped into the sea by the bilge pumps.

## Refilling the coolant tank

The coolant tank is located under the sunbed stowage bag.

1. Mix concentrated ethylene glycol with water with a ratio of 50:50.
2. Fill the coolant tank to the level indicated on the tank.

## Cleaning the cooling plates

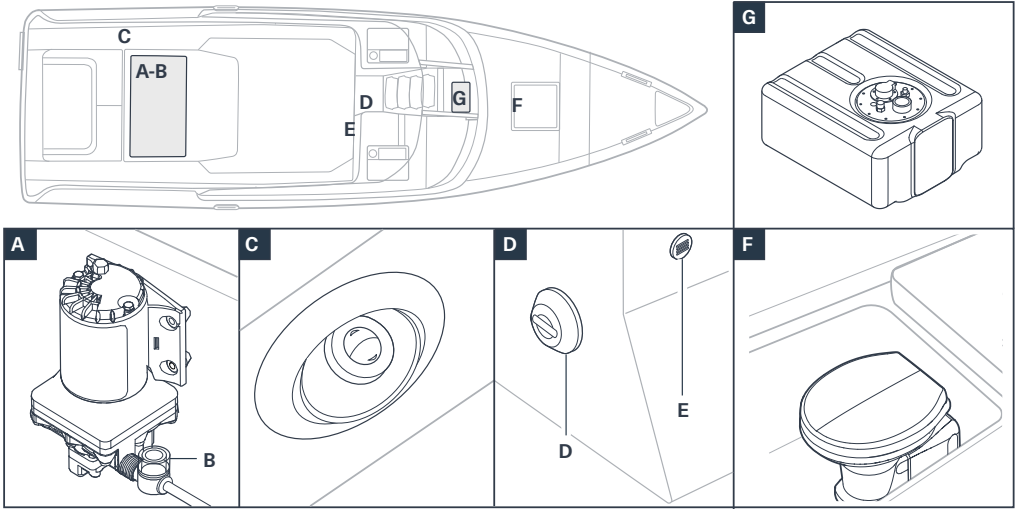
The cooling plates must be kept clean to function properly.

- Regularly remove any algae growth.
- Remove barnacle growth immediately after retrieving the boat. Use a scraper.

# Freshwater system (optional)

A freshwater system is installed if the boat is equipped with a shower and a toilet. The freshwater tank supplies the shower and toilet with fresh water. The tank inlet is located on deck, between the driver's seat and the cabin hatch. The freshwater tank level is displayed in the user interface.

The freshwater pump is located under the sunbed hatch on the port side of the boat. A filter on the freshwater pump keeps shower water free from debris.



**A.** Freshwater pump  
**B.** Freshwater filter  
**C.** Shower

**D.** Freshwater tank inlet  
**E.** Freshwater ventilation (hidden behind control panel)

**F.** Toilet  
**G.** Freshwater tank

# Activating the toilet

Before using the toilet:

1. Select the Output settings in the user interface and activate the toilet.

# Using the shower

If the freshwater system has been empty for a long time, it may take a while before the shower water is released.

1. Select the Output settings in the user interface and activate the freshwater pump.
2. Twist the shower nozzle to release the water.

# Filling the freshwater tank

1. Open the freshwater inlet by pulling the handle out, then turning it counterclockwise.
2. Insert a clean water hose and fill the tank.

# Emptying the freshwater tank

1. Use the shower to empty the freshwater tank.

# Cleaning the freshwater filter

1. The freshwater filter is located next to the freshwater pump.
2. Open the sunbed hatch and remove the stowage bag to access the freshwater pump.
3. Localize the freshwater pump and unscrew the freshwater filter.
4. Empty and clean the freshwater filter.
5. Reattach the filter to the freshwater pump. Be sure to position the sealing ring correctly.

## Black water system (optional)

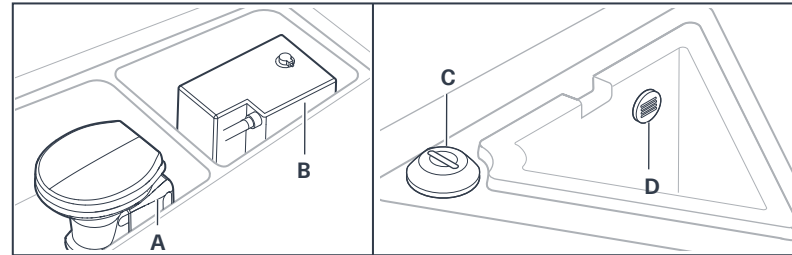
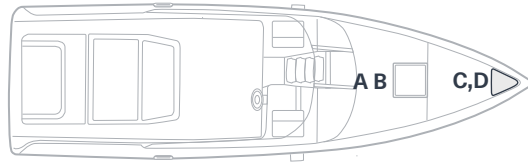
The black water holding tank is located under the front cabin bed and stores the black water waste from the toilet.

The black water tank must not be discharged at sea. It must be pumped out onshore at a waste station. The suction point is located in the anchor hatch.

An active carbon filter is installed close to the black water tank vent, preventing odors in the anchor box. Regular discharge of the black water tank optimizes the life span of the odor filter.

The black water tank level is displayed in the user interface.

**!** **NOTICE!** If the black water tank is not emptied in time, sewage will enter the anchor box and flow out through the anchor box drain.



- A. Toilet
- B. Black water tank with odor filter
- C. Waste suction point
- D. Black water ventilation

## Emptying the black water tank

1. Open the anchor box and unscrew the suction-point lid.
2. Ensure that the nozzle of the drain hose fits the suction point.
3. Insert the nozzle of the drain hose and start emptying.
4. When done, fasten the suction-point lid.

## Replacing the odor filter of the black water tank

The filter is located on the black water hose. Access the hose through the port speaker in the bow of the cabin.

1. Remove the speaker:
  - a. Carefully remove the speaker grille using a plastic spatula.
  - b. Unscrew the four screws holding the speaker. Use a flat screwdriver. Make sure not to drop the screws.
  - c. Disconnect the two speaker cords. Make sure not to drop the speaker cords behind the speaker.
2. Locate the odor filter on the hose.
3. Remove the two hose clamps that hold the odor filter. Use a cross-head screwdriver.
4. Pull out the odor filter and insert the new one.
5. Reattach the two hose clamps and tighten them.
6. Ensure that the odor filter and the hose clamps are firmly attached.
7. Install the speaker:
  - a. Connect the two speaker cords.
  - b. Fasten the four screws.
  - c. Reattach the speaker grille.

## Ventilation system

The ventilation system ensures that both components and cabin are kept fresh and dry and that any odors or gases are removed.

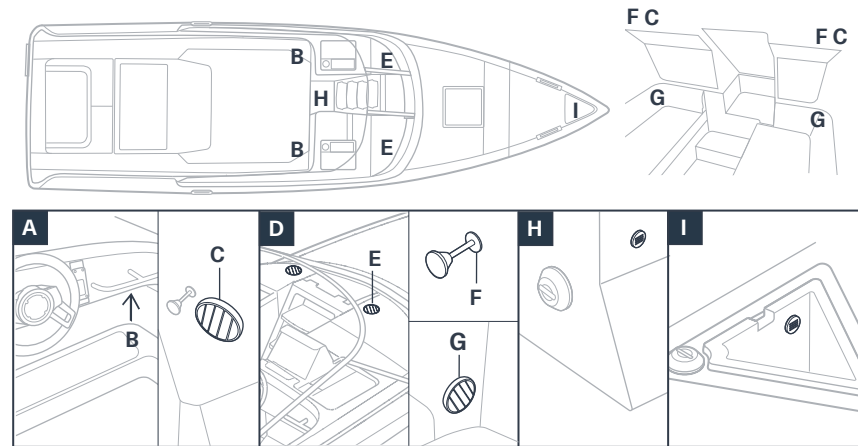
The cabin has a fresh air intake through ducts under the dashboard and in the cabin ceiling.

Hot air is released through the lower ducts, inside the cabin, and through the dashboard ducts, to prevent condensation on the windshield.

The optional holding tanks for freshwater and black water, are ventilated through a dashboard vent and through the anchor box. An odor from the anchor box might indicate that a change of odor filter is necessary.

The bilge pumps and battery are naturally ventilated through the sunbed and hull, respectively.

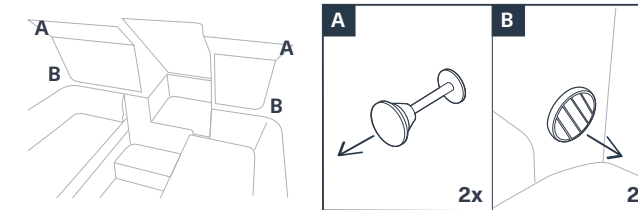
**NOTICE!** Keep all ducts free from blockage. This will maintain a well-functioning ventilation system and prevent odor.



- A. Cabin fresh air system
- B. Fresh air duct from dashboard x2
- C. Fresh air duct cabin x2
- D. Hot air system
- E. Hot air ducts windshield x2
- F. Hot air dampers x2
- G. Hot air ducts cabin x2
- H. Freshwater tank ventilation duct (behind the dashboard)
- I. Black water tank ventilation duct (anchor box)

## Heating the cabin

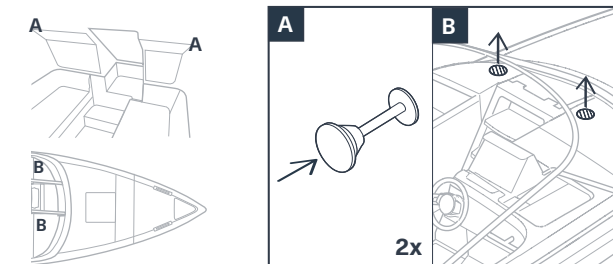
1. In the Outputs settings in the user interface, activate the Cabin heater.
2. Pull the hot-air damper(s) in the cabin.
3. Hot air is released from the hot air ducts.



- A. Hot air damper x2
- B. Hot air ducts cabin x2

## Defogging the windshield

1. In the Outputs settings in the user interface, activate the Defogger.
2. Push the hot air damper(s) in the cabin.
3. Hot air is released to the windshield from the ducts on the dashboard.



- A. Hot air damper x2
- B. Hot air ducts windshield x2

# Audio system

The C-8 is equipped with a six-speaker Bluetooth audio system, that can be controlled via the user interface or the steering wheel buttons.

The system supports Bluetooth device pairing to stream music.

For more information, refer to the audio system’s user manual.

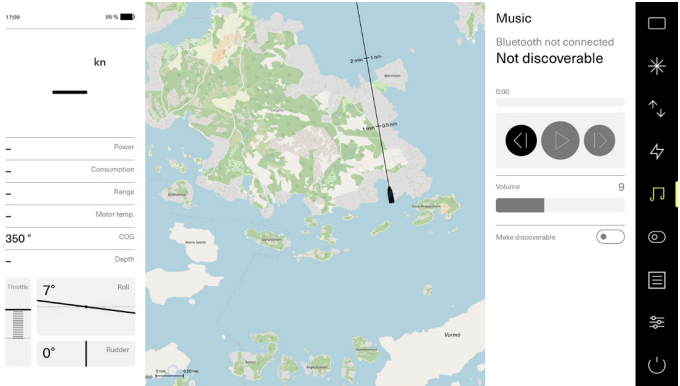
**! | NOTICE!** Devices cannot be paired if the ignition key is off.

## To pair your device:

1. Ensure the ignition key is on.
2. In the user interface, open the Music menu.
3. Toggle on “Make discoverable” switch
4. On your device, enable Bluetooth pairing mode
5. Select "Candela C-8" from the list of available devices.

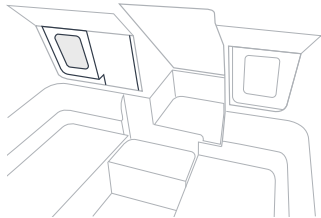
## To reset pairing from the user interface:

1. Ensure the ignition key is on.
2. In the user interface, open the Music menu.
3. Toggle off and on “Make discoverable” switch.
4. If resetting of pairing fails, try resetting from the audio system.




## To reset pairing from the audio system:

1. Open the starboard inspection hatch in the cabin.
2. Locate the stereo unit.
3. Press the Bluetooth button on the stereo to make it visible in your Bluetooth source list.
4. Select the stereo name from the Bluetooth source list and connect it to your phone.



# Optional accessories

## Table (optional)


 **CAUTION! Risk of personal injury.** Unmount the table and stow it away before take-off.  
Do not use the table while foiling.

To mount the table:

1. Insert the table legs into the quick locks on the deck by pushing down and rotating clockwise.
2. Align the tabletop's quick locks with the holes in the legs.
3. To secure the tabletop, lift and rotate the latches on the quick locks.

To unmount the table, perform the steps in reverse order. Store the parts inside the sunbed hatch.

To maintain the table:

 **NOTICE!** Only use silicone grease. Do not use abrasive cleaning products.

1. Rinse the quick locks with fresh water weekly.
2. Every 6 months, apply silicone grease to the moving parts of the quick locks.

## Sunshade DC (optional)

To assemble the sunshade:

1. Connect 4 poles to the rings on the sunshade canvas.
2. Insert the poles into the 4 sockets near the windshield to extend the sunshade.

## Sunshade HT/TT (optional)

To assemble the sunshade:

1. Attach the 2 adjustable straps on the sunshade canvas to the 2 band brackets on the hard top or t-top.
2. Attach the 2 poles to the rings on the sunshade canvas.
3. Insert the poles into the 2 sockets in the rear to extend the sunshade.

## Aft wall HT & (optional)

To assemble the aft wall:

1. Slide the canvas pieces into the rails on the hard top.
2. Secure the 6 canvas snaps.
3. Attach the 3 adjustable straps on the sunshade canvas to the band brackets on the sunbed.

## Harbor cover DC/TT (optional)

To install the harbor cover:

1. Slide the harbor cover over the windshield.
2. Attach the 4 adjustable straps on the sunshade canvas to the band brackets on the rear deck.

## Sunbed cover HT (optional)

To install the sunbed cover:

1. Slide the sunbed cover over the sunbed.
2. Secure the 10 canvas snaps.

# Operating and navigating

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## Read this before setting out to sea



### **WARNING!**

#### **Risk of serious injury or death.**

- A rotating propeller can cause serious injury or death. Turn off the pod when near someone in the water.
- Always use the seats provided.
- Always use the safety belt.
- As the driver, always use the kill cord.
- Do not exceed the maximum recommended number of passengers.
- Always proceed with a margin for error.
- Never go out in rough seas if you are uncertain whether the boat or passengers can cope.



### **CAUTION!**

#### **Risk of personal injury.**

- The operator is responsible for maintaining the normal mode of operation. The speed and handling of the boat must be appropriate for the prevailing conditions at sea, and good seamanship must be observed.
- When passing through the cabin hatch, be careful not to hit your head.



**NOTICE!** Be aware that factors such as altitude, water temperature, number of passengers, wind, speed, and hull conditions can affect performance.

| Always protect the screen from direct sunlight to avoid damage.

## Before leaving harbor

Always do the following before leaving harbor:

- Ensure that the battery has enough charge for the route that you are planning.
- Before a longer trip, read the long-term weather forecast.
- Ensure that the recommended equipment is on board.
- Perform manual bilge pumping.
- Ensure that the automatic bilge pumps function.
- Ensure that the telescopic stern light is mounted.
- Ensure that the navigation lights function.
- Ensure that the swim ladder is retracted.
- Ensure that the optional swim platform is retracted.
- Ensure that there are no flammable materials placed on or near hot surfaces.

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Visibility when steering

The international regulations for preventing collisions at sea (COLREG) apply. These regulations state that a proper lookout must always be maintained. Ensure you understand these regulations before setting out to sea.

Operator visibility from the helm can be affected by one or more of the following conditions:

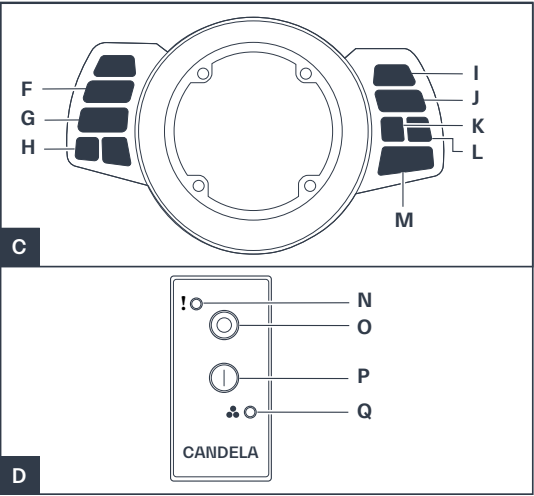
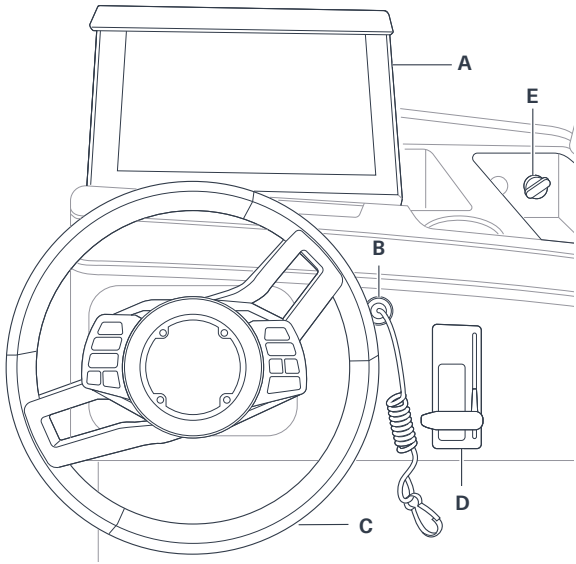
- Load and load distribution
- Speed
- Rapid acceleration
- Transition from displacement speed to Planing mode
- Sea conditions
- Rain, spray, darkness, and fog
- Interior lights
- Position of tops and sun-shade

Driving

- When at sea, always follow the navigation rules and the requirements of the Convention of International Regulations for Preventing Collisions at Sea (COLREG).
- Show consideration to others at sea.
- Avoid sudden maneuvers at elevated speeds.
- For comfort and safety, reduce speed in high or rough seas.
- Always use the kill cord when driving.
- Bear in mind that an electric foiling boat behaves differently than a planing engine boat.
- Follow all safety advice and safety warnings stated in this manual. Consider the operator responsibilities.

Driver’s seat

The user interface of the boat can be controlled from the touchscreen or with the controls on the steering wheel.



- |                                       |                                       |                           |                                 |
|---------------------------------------|---------------------------------------|---------------------------|---------------------------------|
| <b>A.</b> Touch screen user interface | <b>F.</b> Volume up/down              | <b>K.</b> Return          | <b>P.</b> Start button          |
| <b>B.</b> Kill switch                 | <b>G.</b> Play/pause and touch on/off | <b>L.</b> Confirm         | <b>Q.</b> Propulsion active LED |
| <b>C.</b> Steering wheel              | <b>H.</b> Windshield wipers           | <b>M.</b> Menu navigation |                                 |
| <b>D.</b> Throttle                    | <b>I.</b> Menu                        | <b>N.</b> RPM limited LED |                                 |
| <b>E.</b> Key                         | <b>J.</b> Up/down/zoom                | <b>O.</b> Stop button     |                                 |

# Throttle and speed



## DANGER!

**A rotating propeller can cause serious injury or death.**

- Turn off the pod when near someone in the water and ensure that the propeller is not rotating.
- The pod runs quietly, always double-check that the propeller LED is off.

The throttle controls the pod motor, the propulsion unit. The throttle has three distinct notches to indicate neutral, forward (up), and reverse (down).

The C-8 is optimized for 22 knots in Foiling mode. When not in Foiling mode, the total propulsion power is limited.

The limited pod speed LED on the throttle, indicates limited propulsion power. The propeller LED on the throttle, indicates if the pod is turned on or off.

## Turning on the Pod

1. Press the Pod start button on the throttle.
2. Check that the Propeller LED on the throttle is on.

## Turning off the Pod

1. Press the Pod stop button on the throttle.
2. Check that the Propeller LED on the throttle is off.

## Kill cord switch

The kill cord switch is a safety device designed to automatically stop the boat when pulled. The driver should always be secured to the kill cord when driving. If the driver loses steering ability, the kill cord will release the switch when pulled.

# The steering wheel controls

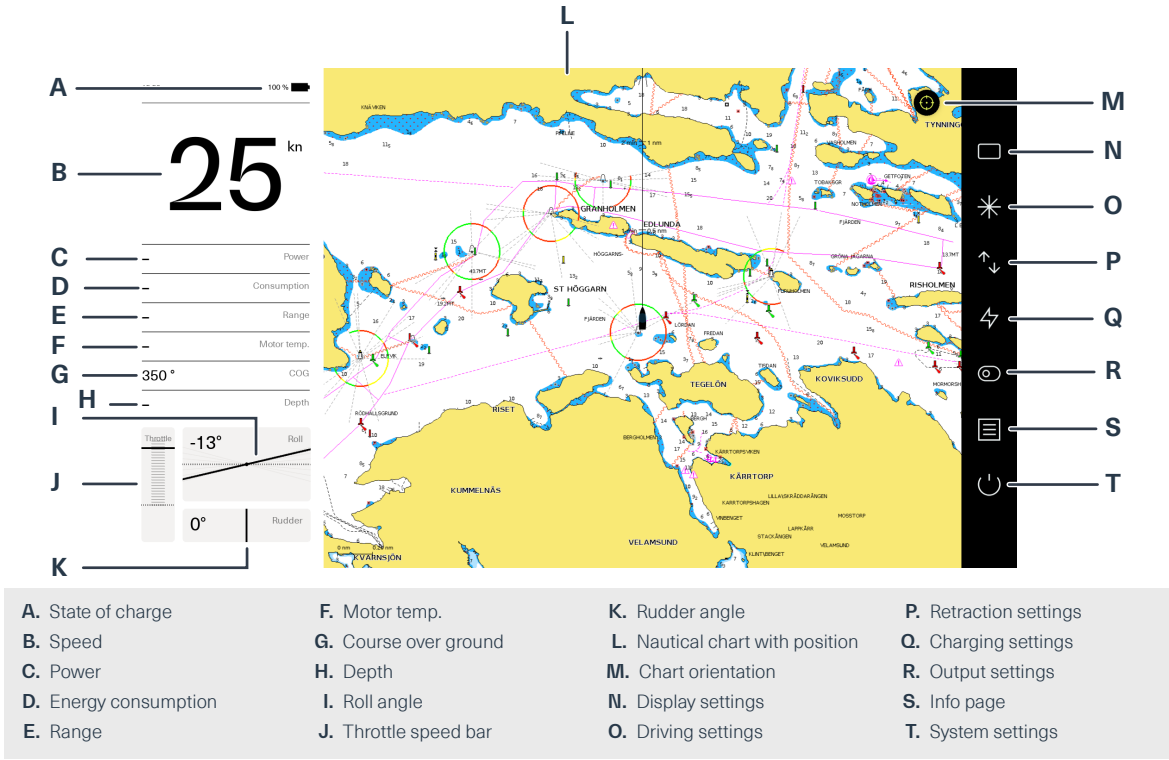
The interface on the touchscreen can be navigated either by touch or with the controls from the steering wheel.

## Navigating with the steering wheel controls

- Press Menu to activate the menu.
- Use Up and Down buttons to select an item.
- Press Enter to activate the selected item.
- Press the Return button to go back or close the menu.

# The User interface

The user interface displayed on the touchscreen, consists of a status and monitoring bar, a nautical chart with current position and a settings and functions menu. All equipment is controlled from the menu.



## Menu overview

The user interface menu includes the following pages:

### Display:

- Adjust the brightness of the user interface display, steering wheel LEDs.
- Enable night mode.
- Change touch screen and sea-chart settings.

### Driving:

- Control windshield wipers.
- Control navigation lights and anchor light.
- Enable and set Auto Routing. Long-press a destination on the map to activate it. After which, calculated route and final state of charge are displayed.

### Retraction:

- Control and monitor the retraction modes of the front and aft foil systems.

### Charging:

- Displays alarms, time to 100% charge and range at current state of charge.

### Music:

- Manage and adjust audio settings.

### Output:

- Control lights, cabin heater and other accommodation systems.
- Start freshwater pump.
- Manually start automatic bilge pumps.

### System Settings:

- Turn on/off the user interface

### Information Page:

- View real-time data on systems like batteries, propulsion, freshwater and blackwater tanks, GPS, and more.

# Chart orientation

To change the chart's orientation, select the Chart Orientation button at the top right corner of the chart. This will toggle between two modes:

**North up:**

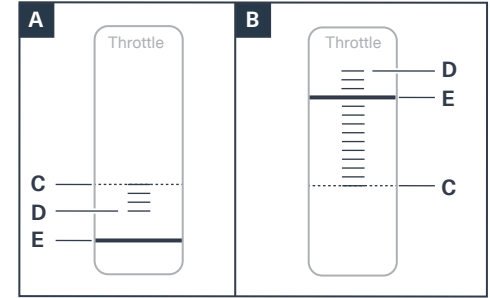
- Displays the chart with north upward.

**Heading up:**

- Displays the chart with the vessel's heading directed upward.

# The throttle speed bar

The throttle speed bar indicates the throttle target position and actual RPM according to the following examples:



- A. Throttle in reverse
- B. Throttle in forward
- C. Neutral position
- D. Actual RPM
- E. Throttle target position

Error messages and notifications in the user interface

When error messages and notifications are displayed in the user interface, always follow the instructions on how to proceed. Examples of error messages are alerts of deviations in temperature and capacity, such as:

- High propulsion unit temperature
- High battery compartment temperature
- Low insulation resistance
- Overheated motor controllers

Limited Propulsion Power

Propulsion power can be automatically limited for different reasons, including:

Cause	Indication	Description	Corrective action
Overheating of component	A warning message appears on the user interface. For example: "Motor controllers too hot. Propulsion will be limited or lost."	<ul style="list-style-type: none"><li>• Top speed is reduced.</li><li>• Take-off might not be possible.</li></ul>	Normal operation is automatically resumed after the component has cooled down.
Low battery charge	A warning message appears on the user interface. For example: "Low Battery. Speed is limited. Seek harbor immediately."	<ul style="list-style-type: none"><li>• Battery charge is critically low (below 5%).</li><li>• Propeller speed is limited to 1500 RPM.</li><li>• Taking off is not possible.</li><li>• Foiling can be continued until battery charge is 1%.</li></ul>	Return to port and charge the battery to resume normal operation.

Low state of charge

Low state of charge is indicated in the user interface as follows:


- 20% – “battery low”
- 10% – “battery critical low”
- 0% – “battery empty”

Software updates

The C-8 has multiple onboard computers and systems that manage all aspects of the boat. The software is updated regularly "over the air" to introduce new features, enhance performance and resolve issues.

For optimal performance and safety, always keep your boat updated with the latest software.

When a new update is available, you will receive a notification. You can choose when to install and update via the boat's user interface.

 **NOTICE!** Software updates will take a few minutes to complete. Wait for the software installation to complete before turning off or operating the boat.

To install a software update:

1. Ensure the boat is turned on.
2. Confirm that the internet connection is stable.
3. Accept the software update in the user interface.
4. Wait for the update to finish.

The Candela app

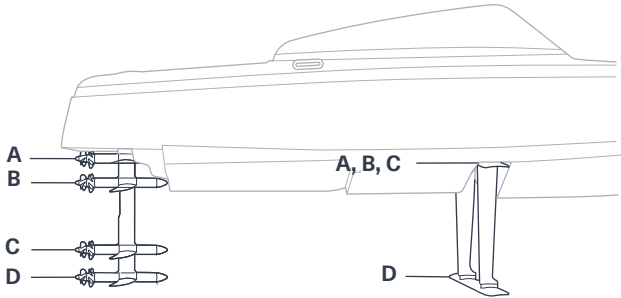
At the purchase of your C-8, you will get access to the Candela app. Visit [www.candela.com](http://www.candela.com) to download it. The app can be used to control and monitor functions in the user interface, such as:

- Lights
- Boat location
- State of charge
- Trip history
- Geofence Security (anti-theft, optional)

# Retraction modes

The aft and front foil systems are retractable and designed to operate in four different driving modes (retraction modes). The front foil system is only extended during Foiling mode and is fully retracted in the foil garage during the other driving modes.

The retraction modes are selected in the Retraction settings, in the user interface.



- A. Modes and their draft**
- B.** Harbor mode = 0.5 m / 1.6 ft
  - C.** Shallow mode = 0.5 m / 1.6 ft
  - D.** Planing mode = 1.25 m / 4.1 ft
  - E.** Foiling mode (when not foiling) = 1.5 m / 5 ft
  - F.** Foiling mode (when foiling) = 0.8 m / 2.6 ft

**Harbor mode.** The entire foil system is retracted above the waterline. Apply when moored and ashore.

**Shallow mode.** The aft foil system is lowered into the water, just above the keel line. Apply at low speeds only, for example, when leaving harbor. The throttle and steering ability are limited in Shallow mode.

**Planing mode, “boat mode”.** The aft foil system is further lowered into the water. Apply in rough seas and for speeds up to 14kn. A higher speed, combined with water friction will reduce the driving range.

**Foiling mode.** The aft foil system and front foil system are fully extended. Foiling mode can be applied for all speeds. Foiling above surface requires a speed above 17kn. Foiling is the most efficient way of driving, enabling the longest driving range.

**NOTICE!** Always apply Harbor mode when not using the boat. Algae growth on the foil system can seriously affect boat efficiency and range.

## Navigating in rough seas



Under rough weather conditions when the maximum capacity of the pod and rudder is required, apply Planing mode. The boat is designed for a significant wave height of 0.7 meters while foiling.

## Driving the boat

### Starting the boat


1. At the driver's seat, turn the key on. A start tone is heard.
2. Select Retraction settings in the user interface and press the preferred mode.
3. Wait for the foils to reach locked position in the new mode. This will be displayed in the user interface.
4. Secure yourself to the kill cord.
5. To activate the throttle, press the pod start button. A start tone is heard and the propeller LED turns on. You are ready to go.

### Switching retraction modes

-  **WARNING! Moving parts. Crush and pinch point hazard.**
- Stay clear of the moving rudder. In case of retraction motor failure, anyone or anything getting in the way risks getting crushed.
  - Stay clear of the moving rudder and struts. Before initiating any change in the retraction mode, ensure that the passengers are informed.
-  **NOTICE! Moving parts. Risk of item damages.** Never place anything on the lids of the struts. When changing retraction mode, the struts move vertically. Anything placed on the lids will fall off.


1. Select Retraction settings in the user interface and press the preferred mode.
2. Wait for the foils to reach locked position in the new mode. This will be displayed in the user interface.

## Shutting down the boat

-  **NOTICE!** Always switch off the ignition key before switching off low voltage main switch. Failure to comply may result in permanent damage to control units.

1. Slow down and press the pod stop button on the throttle. The throttle is deactivated, and the propeller LED is turned off.
2. Turn the key off.

### Foiling

-  **WARNING! Risk of personal injury.**
- Stay clear of the moving rudder. In case of retraction motor failure, anyone or anything getting in the way risks getting crushed.
  - Stay clear of the moving rudder and struts. Before initiating any change in the retraction mode, ensure that the passengers are informed.
  - When preparing for takeoff, ensure that you have an unobstructed view.
  - Use the designated seats and fasten the seat belts when underway.
  - Hold on to the designated handles when underway. The driver holds the steering wheel.
  - Always proceed with a margin for error. Incorrect handling of the boat when foiling can result in the boat landing on its side.
  - Avoid making sharp turns at high speed or in waves. Meet waves perpendicularly. The front foil should never be visible above the surface.

The C-8 will start foiling at about 17kn. When foiling, its keel is approximately 0.5m above the water surface. Foiling is a quiet driving mode. There is little noise from waves against the hull, and the pod runs quietly. It is the responsibility of the driver to keep an unobstructed view ahead when foiling.

When exceeding the bank limit, the boat will automatically lower the rpm, in order to decrease speed. To regain speed, steer straight. The boat will increase the rpm. If the bank limit is exceeded continuously, the decreased speed will cause the boat to land.

A foiling boat behaves differently to a planing boat. When foiling, the bow angle is almost flat, 1°. The bow angle of a planing boat is about 15°. A foiling boat rotates around the center of the boat when turning, while a planing boat rotates around the motor in the aft.


Before foiling

- Ensure that you obtain sufficient operating experience of the boat before welcoming any passengers on board. You are handling an advanced electrical hydrofoil.
- Inform passengers that the boat may land on its side while foiling and that they should use the handles and seat belts to avoid the risk of falling overboard or getting hurt.

Start foiling

1. Put on the seat belts and tighten them.
2. In the user interface, select Retraction settings and press Foiling mode until the foils are fully extended.
3. Prepare for takeoff. Make a visual check of the sea ahead. You should have an unobstructed view of 250m / 820ft.
4. Aim for a straight course and give full throttle. The boat will start foiling at about 17kn. Optimum foiling speed is 22kn.

Landing

1. Decrease speed. The boat will land at about 17kn.
-  | **NOTICE!** The foils remain extended until another mode is selected.

Anchoring, mooring, and towing

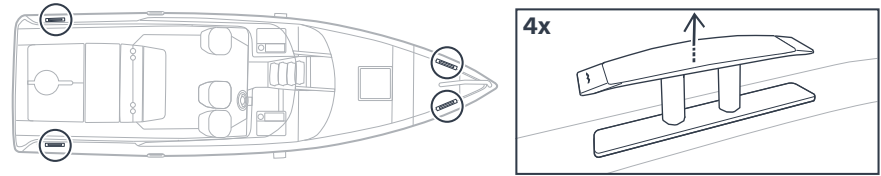
It is the responsibility of the driver to ensure that the anchoring, mooring, and towing lines meet the requirements of the boat.

Context	Required force strength
Anchoring forward	27.2 kN
Mooring forward	22.3 kN
Being towed forward	27.2 kN
Aft	19.0 kN

Tensile strength of lines	Maximum 80% of the strongpoint tensile strength.
---------------------------	--

Cleats and lines

The boat has four extendable cleats: two in the aft and two on the bow.





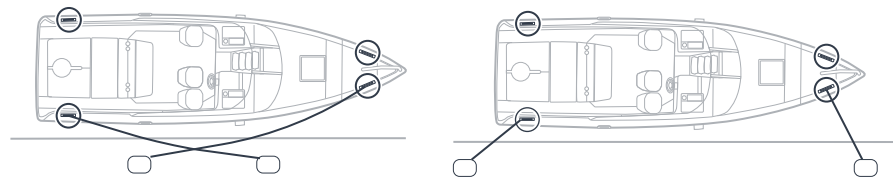
## Anchoring

**!** | **NOTICE!** Be careful not to scratch the boat with the anchor.

1. Confirm that anchoring is not forbidden.
2. In the user interface, check the depth.
3. Lower the anchor. Use an anchor line 7-10 times the depth.
4. To ensure that the anchor has taken hold on the seabed, pull on the anchor line.
5. If possible, tie a dock line onto a local strongpoint to distribute the weight of the boat more evenly.
6. Take note of the boat position.
7. Check the boat position regularly.

## Mooring

1. When approaching the wharf, release the boat fenders and prepare the dock lines. When in place, proceed as follows:
2. Extend the cleats by pulling them up.
3. Moor the boat according to either of the images.
4. Ensure that the boat can move without hitting the wharf.



## Towing

- Tow and be towed at low speed.
- Bear in mind that boat stability can decrease during towing.
- Attach the tow line so that it can be released under load.
- When towing a boat of displacement hull type, do not exceed the hull speed.

## When the boat is unattended

For security reasons, and to optimize the lifespan of the boat, follow the instructions when the boat is unattended:

1. Apply Harbor mode.
2. Connect the charging cable.
3. Turn the key off to shut down the boat.

## Charging



### **WARNING!**

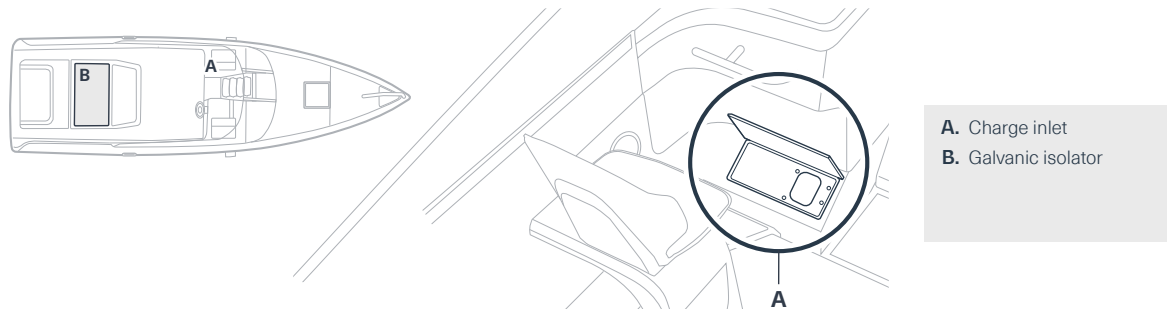
#### **Risk of life-threatening electrical shock.**

- When connecting: Always connect the charging cable to the charging inlet of the boat before connecting it to the dock outlet.
- When disconnecting: Always disconnect the charging cable from the dock outlet, before disconnecting it from the boat inlet.
- Keep the charging cable away from the water. It can severely injure nearby swimmers.
- Do not alter shore power cable connectors. Use only compatible cable connectors and shore power receptacles.
- Be careful not to compress the charging cable.
- Use only the designated charging cable.



**NOTICE!**

- Always use the charging cable supplied with the boat when using other than EV charger.
- Always charge the boat in an outlet that corresponds to the amperage of the boat. Candela assumes no responsibility or liability for any damages caused by charging in an outlet that does not correspond to the amperage of the boat.



**Charging the battery**

The charging inlet has a LED that displays different colors and flashing patterns to indicate various charging states:

LED	Meaning
White – solid on	Courtesy light
Yellow - blinking	Charging process is interrupted
Yellow – solid on	Wait mode – waiting for charging to start
Green - blinking	Charging is in progress
Green – solid on	Charging is completed
Red – solid on	Action required! Boat is plugged in but it fails to start charging.
Red - blinking	Charging cable release button function is blocked because the ignition key is turned off. This is to prevent the cable from being unplugged by an unauthorized person. Turn on ignition key to unlock the charging cable.

To charge the battery:

1. In the user interface go to Charging page.
2. Set target state of charge.
3. Connect appropriate charging adapter to the charging cable.
4. Plug the charging cable into the dock outlet.
5. Wait for the charging cable to light up.
6. Verify the correct amperage on the Info page on user interface.
7. Connect the charging cable to the boat's charging inlet to start charging.
8. Monitor the battery's state of charge on the boat's user interface display.
9. After charging is completed, or to interrupt charging, ensure ignition key is on and press the unlock button at the charging inlet, or select STOP CHARGING on the user interface display.
10. Disconnect charging cable, first from the boat's charging inlet, then from the dock outlet.
11. Stow and secure the charging cable.

**Galvanic isolator**

The protective earth of the shore power is connected to the ground system of the boat through a galvanic isolator, to minimize the risk of ground current and galvanic corrosion.

# Maintenance

## Maintenance schedule

Before performing any maintenance read this:



### **DANGER!**

**A rotating propeller can cause serious injury or death.**

- Turn off the pod when near someone in the water and ensure that the propeller is not rotating.
- The pod runs quietly, so always double-check that the propeller LED is off.



### **DANGER!**

**Risk of life-threatening electrical shock.**

- Avoid handling high-voltage parts marked with yellow labels.
- Avoid handling the orange high-voltage cables.
- Do not work on an energized AC system.

Maintenance

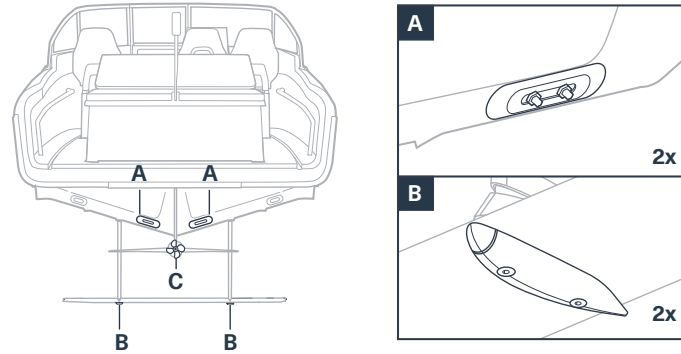
Task	Every use	Monthly	Every 2 months	Annually	As needed	Winterization	Spring recommission	By Candela
<a href="#">"Checking the navigation lights" on page 49</a>	•						•	
<a href="#">"Checking the safety equipment" on page 21</a>	•						•	
<a href="#">"Checking the manual bilge pump" on page 40</a>	•						•	
<a href="#">"Checking the anodes" on page 88</a>		•					•	
<a href="#">"Checking the coolant level" on page 50</a>		•					•	
<a href="#">"Checking for any corrosion, damages, or wear" on page 89</a>		•					•	
<a href="#">"Cleaning the foil system" on page 91</a>		•				•	•	
<a href="#">"Ensuring a smooth surface of the foil system and pod" on page 91</a>		•					•	
<a href="#">"Checking the automatic bilge pumps" on page 39</a>		•					•	
<a href="#">"Cleaning the sonar depth finder" on page 92</a>				•			•	
<a href="#">"Cleaning the height sensors" on page 92</a>				•			•	
<a href="#">"Rinsing the anchor box drain" on page 40</a>					•		•	
<a href="#">"Painting the hull" on page 92</a>					•			
<a href="#">"Replacing the aft anode pair" on page 88</a>		•			•			

Task	Maintenance							
	Every use	Monthly	Every 2 months	Annually	As needed	Winterization	Spring recommission	By Candela
"Replacing the front foil anode pair" on page 89					•			
"Replacing the odor filter of the black water tank" on page 55					•			
"Emptying the black water tank" on page 55					•	•		
"Refilling the coolant tank" on page 51					•	•		
"Cleaning the cooling plates" on page 51					•	•		
"Cleaning the hull" on page 92					•	•		
"Cleaning the deck and cabin" on page 91					•	•	•	
"Cleaning the freshwater filter" on page 53					•	•		
"Emptying the freshwater tank" on page 53						•		
"Checking the high-voltage battery state of charge" on page 90						•	•	
"Filling the freshwater tank" on page 53					•		•	
"Checking the function of the rudder and the struts" on page 90				•			•	
Checking the steering (page 85)				•			•	

Task	Maintenance							
	Every use	Monthly	Every 2 months	Annually	As needed	Winterization	Spring recommission	By Candela
"Checking the 12V battery" on page 90				•			•	
Replacing the 12V battery (page 89)					•			•
"Replacing the propeller anodes" on page 89				•	•			•

## Checking the anodes

The anode is consumed when only 50% of the material remains. If it is not replaced in time, the boat may suffer corrosion damages.



- A. Aft anodes
- B. Front anodes
- C. Propeller anodes (inside propeller)

## Replacing the aft anode pair

Annually or as often as necessary:

1. Loosen the nut of the anode. Use a socket wrench 19mm / 0.75in.
2. Check the condition of the screw and nut. If necessary, replace them.
3. Replace the anode.
4. Be sure to tighten the screw and nut properly.
5. Repeat the procedure on the second aft anode.

## Replacing the front foil anode pair



### NOTICE!

#### Risk of foil damage.

- Be careful not to drop the foil when loosening the screws.
- Be careful not to mix up the different screws. Using the wrong screw can seriously damage the front foil.

The front foil weighs about 5kg (11lbs) . When the screws are loosened, the foil will drop to the ground if not supported. Ensure the foil is supported.

1. Loosen the screws of the first anode while supporting the front foil. Use Allen key 6, 5 and 4mm ( 0.24, 0.2, and 0.16in). Note the position and corresponding type of screw(s).
2. Loosen the screws of the second anode. The front foil will become loose. Note the position and corresponding type of screw(s).
3. Check the condition of the screws. If necessary, replace them.
4. Replace the anodes and fasten the front foil. Make sure to replace the screws in the correct position.
5. Be sure to tighten the screws of both anodes properly.

## Replacing the propeller anodes

Replace the propeller anodes annually or when needed. The replacement should be made by an authorized Candela workshop.

## Checking for any corrosion, damages, or wear

Check all brass and stainless-steel metal parts annually. If any replacements are necessary, or if you are uncertain whether the damage needs repairing, contact Candela.

## Checking the high-voltage battery state of charge


Before winterization and spring recommissioning, check the state of charge status of the high voltage battery. The state of charge value during winterization should be 50-60 %.

1. Turn on the 12V battery switch.
2. Turn the key.
3. Check that the SOC status in the user interface is between 50-60%.
4. If the SOC status is below this value, charge the boat.
5. Turn off the key.
6. Turn off the 12V battery switch.

## Checking the 12V battery

1. Open the sunbed hatch and remove the stowage bag.
2. Locate the 12V battery and check:
  - For wear or tear on the cables and battery.
  - That the cables are secured to the battery.
  - That the battery and cable connections are clean and free from corrosion.

## Checking the function of the rudder and the struts

 **NOTICE! Risk of property damage.** Make sure you have an obstacle free space of 2m below the hull when extracting the rudder and struts.

1. Turn on the key.
2. Select Retraction settings in the user interface and select a new retraction mode.
3. Check that the rudder and struts reach locked position in the new retraction mode.
4. Repeat the procedure for all retraction modes.

## Checking the steering

1. Turn on the key.
2. Turn the steering wheel. Check that the rudder is moving accordingly.

## Ensuring a smooth surface of the foil system and pod

Candela recommends preparing a surface finish of the foil system annually.

The foil system requires low drag for maximum performance. Algae growth or wear and tear can increase drag greatly, decreasing propulsion efficiency by 30-40%.

Advice for keeping the surface of the foil system smooth:

- Apply Harbor mode when docked.
- Remove any seaweed from the foils immediately after applying Harbor mode.
- Use a boat lift when docked.
- Clean the foil system regularly.
- Have the foil system serviced to reduce the effects of wear and tear.


## Cleaning the deck and cabin

Use a medium-bristled brush, warm water, and an all-purpose, mild cleaner or washing-up liquid. The deck manufacturer recommends Dek Magic. Do not use a high pressure washer.

## Cleaning the foil system

1. Scrub the rudder, struts, foil, and pod with a hard brush. If necessary, use a non-abrasive detergent.
2. Continue until the surface is smooth.

### Cleaning the hull

 **NOTICE!** When removing barnacles, be careful not to cause any damages to the hull. The hull is made from carbon fiber. Any damage must be repaired by an authorized Candela workshop.

Keep the hull clean. Remove barnacle growth within 30 minutes after retrieving the boat, or it will harden, making removal strenuous and difficult. Use a scraper.


### Cleaning the height sensors

Wipe away dirt and algae growth using a soft cloth and a mild detergent. Do not use a scraper.

### Cleaning the sonar depth finder

See Third-party manuals.


### Painting the hull

 **NOTICE!**

- Do not paint the cooling plates.
- Do not paint the sonar depth finder.
- Do not paint the height sensors.

When needed, paint the hull.

### Cleaning and maintaining the upholstery

 **NOTICE!**

- Clean spills immediately to avoid stains.
- Fabrics do not promote mildew growth, but mildew can grow on dirt or other substances left on the fabric. Poor ventilation can cause mildew to grow.
- For more instructions, see Third-party manuals.

To maintain upholstery:

1. Apply waterproof grease to canvas snaps.
2. Use paraffin wax to lubricate zippers.


## Replacing the 12V battery

The 12V battery is located under the sunbed stowage bag.

1. Turn off the key and disconnect the charging cable.
2. Turn off the 12V battery switch.
3. Disconnect the 12V battery.
  - a. Remove the negative cable.
  - b. Remove the positive cable.
4. Lift out the battery.

To remount the 12V battery, perform the steps in reverse order.

## Winterization

 **NOTICE!** Do not cover the boat until it is completely dry. Covering it while wet may cause mildew growth and water stains.

Perform these tasks in preparation for winterization:

- Clean the deck and cabin.
- Clean the hull.
- Clean the foil system.
- Empty the boat of water:
  - Run the automatic bilge pumps.
  - Manually pump out water from the keel.
  - Empty the black water tank.
  - Empty the freshwater tank.
  - Empty the freshwater filter.
  - Drain the anchor box.
- Check the coolant level.

- Add corrosion protection on non-stainless steel metal parts.
- Leave the seat belts in the unlocked position, to prevent corrosion.
- Remove cushions and other textiles, to prevent them from molding.
- Prepare the high-voltage battery for storage.
- Cover the boat.

## Preparing the high-voltage battery for storage

When the boat is not used for a long period, such as during winter storage, follow these steps to minimize battery aging:

Temperature recommendation

Storage temperature -20 to 30 °C (-4 to 68 °F)

To prepare the battery for storage:

1. Charge the battery to 100%.
2. Use the boat until the battery's state of charge is between 30 to 35%.
3. Turn off the ignition key.
4. Turn off the main switch.
5. Repeat steps 1 to 4 every 6 months to maintain optimal charge

.




# Spring recommissioning

Perform these tasks in preparation for spring recommissioning.

- Clean the deck and cabin
- Ensure that the surface of the foil system and pod is smooth
- Check the hull – look for hacks, discoloration, moisture
- Recommission the high-voltage battery
- Check the 12V battery and charge it if necessary
- Check the function of the rudder and struts
- Check the steering
- Check the coolant level
- Check the function of the automatic bilge pumps
- Check the function of the manual bilge pump
- Check the state of the anodes
- Check that the anchor box drain is not clogged
- Check that the recommended equipment is on board
- Check the function of the safety equipment
- Check the function of the navigation lights
- Check that the sonar depth finder is clean
- Fill the freshwater tank

# Recommissioning the high-voltage battery

 **NOTICE!** Recommissioning the battery after a long period of inactivity ensures that the battery management system is calibrated.

To recommission the battery:

1. Charge the battery to 100% SOC

# Transporting

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## Lifting

**WARNING!****Risk of personal injury.**

- Do not stand under the boat during lifting.
- Empty the keel before lifting. Excess water in the keel can affect the center of gravity and mass of the boat, causing the boat to tilt.
- Be careful when handling the lines, lifting slings, and winch.

**NOTICE!****Risk of damage to the boat and lifting equipment.**

- Do not use the cleats as lifting points.
- Immediately repair the outer skin if it is damaged. The outer skin of the boat is strong enough to resist the design pressure, but not local damage from hitting hard or sharp objects.

## Lifting requirements

- Ensure that the mass of the boat during lifting does not exceed the stated mass of the boat.
- Ensure that the lifting company is fully insured.
- Ensure that the lifting equipment is suitable for the boat and its mass.
- Ensure that the winch strength meets the requirements of the boat.

## Preparing for lifting

1. Empty the keel, using the bilge pumps.
2. Apply Harbor mode.
3. Turn off the key.
4. Secure loose items.

## Positioning the lifting slings

**NOTICE!****Risk of property damage.**

- Never position the lifting sling beyond the keel edge or under the pod. This will seriously damage the boat.
- Be careful not to damage the pod, the front foil, or the hull.

1. Position the lifting slings according to the image.

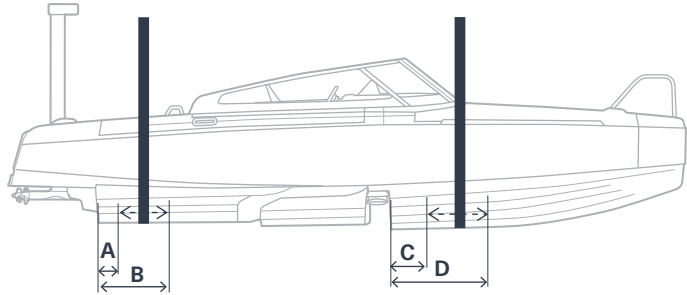
Aft: 100–400 mm from the keel edge.

Front: 300–700 mm in front of the foil garage.

2. Before lifting, ensure that the boat is firmly positioned and that the hull is protected.
3. Lift the boat into position.

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Position dimensions



- A. 100mm (3.9in)
- B. 400mm (15.7in)
- C. 300mm (11.8in)
- D. 700mm (27.6in)

Transporting

# Trailer



**WARNING!**  
**Risk of personal injury. Risk of damage to the boat and trailering equipment.**

- Pinch point hazard. Be careful when handling the lines and winch.
- Check that the keel is empty before trailering. Excess water in the keel can affect the center of gravity and mass of the boat, causing unexpected movements.



**NOTICE!**  
**Risk of property damage.**

- Immediately repair the outer skin if it is damaged. The outer skin of the boat is strong enough to resist the design pressure, but not local damage from hitting hard or sharp objects.
- Always secure the pod and rudder on the trailer.

Transporting

## Trailer requirements

- Ensure that the mass of the boat during trailering does not exceed the stated mass of the boat.
- Ensure that the trailer used is suitable for the boat and its mass.
- Ensure that the winch strength meets the requirements of the boat.

## Preparing for trailering

1. Empty the keel, using the bilge pumps.
2. Apply Harbor mode.
3. Turn off the key.
4. Secure loose items.

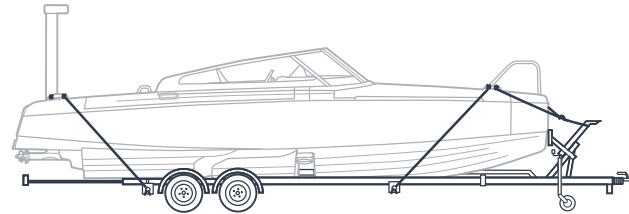
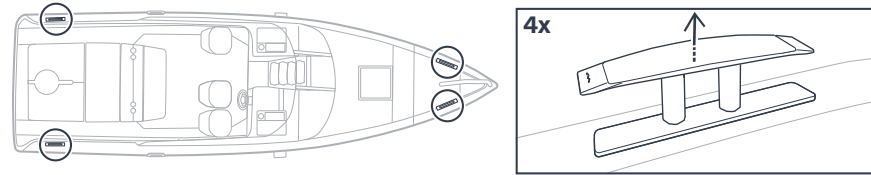
## Driving with a loaded trailer

Follow local laws and regulations when driving with the loaded trailer. Consider the following:

- Driving license with the correct authorization
- Tow ball pressure of the vehicle
- Any protruding part of the load
- Load height
- Speed limit

## Loading the boat onto the Candela trailer (optional)

There are four extendable cleats: two in the aft and two on the bow.



1. Attach the boat lines to the front cleats of the boat.
2. Attach the winch carabiner to the boat lines.
3. Confirm that the winch is latched and that the winch latch is activated.
4. Ensure that the boat and the trailer bed are correctly aligned.
5. Pull the boat onto the trailer by pressing the up button of the remote control.
6. Ensure that the boat keel is positioned on the center of the trailer bed, and the bow is against the rubber bow support.
7. Secure the boat to the trailer by attaching the straps.
8. Secure the rudder by attaching at least two straps around the pod to the cleats. Confirm that the rudder cannot move up or down.

## Unloading the boat from the Candela trailer (optional)

1. Detach the light ramp from the trailer.
2. Detach all straps except the winch carabiner.
3. Ensure that there are no remaining straps or other obstacles before lowering the boat.
4. Press the down button until the boat is in the water.
5. Detach the winch carabiner from the boat lines.
6. Press the up button to store the winch wire.

# Troubleshooting

When there is a malfunction, the user interface will show an error message and instructions for resolving the issue. For the most updated information, please visit [help.candela.com](http://help.candela.com).

Problem	Possible cause	Remedy
The boat does not start when the key is turned on.	The high-voltage battery is drained.	Connect the charging cable to shore power. See <a href="#">"Charging" on page 81</a> .
	The 12V battery is drained.	See <a href="#">"Recharging the 12V battery" on page 46</a> .
There is an issue with the sonar depth finder.	Blockage.	Remove anything blocking the sonar depth finder. See <a href="#">"Cleaning the sonar depth finder" on page 92</a> .
The automatic bilge pump does not stop pumping.	The drain is clogged.	Contact Candela.
	There is a large amount of water to be pumped out. The boat may be taking in water.	Contact Candela.

Problem	Possible cause	Remedy
Water is not pumped out during manual bilge pumping, even though there is water in the keel.	The manual bilge pump line is clogged.	Contact Candela.
The battery is not charging or charging inlet LED is red (solid-on).	Charging cable improperly connected.	<ol style="list-style-type: none"><li>1. Disconnect the charging cable from the dock outlet.</li><li>2. Ensure that the charging cable adapter is properly connected.</li><li>3. Reconnect the charging cable to the dock outlet.</li><li>4. Ensure that a LED on the portable charger illuminates indicating that it is powered</li></ol> If problem persists, contact Candela
	Target state of charge is below the actual state of charge.	Ensure that the target state of charge is set above the actual state of charge in the user interface.
The battery needs charging too often.	There is algae growth on the foil system.	See <a href="#">"Cleaning the foil system" on page 91</a>
The throttle LED indicates limited speed.	The foils are in an unlocked position.	Wait for the foils to reach a locked position and that the throttle LED is turned off (ca 1 minute).
	The height sensors are blocked.	See <a href="#">"Cleaning the height sensors" on page 92</a> .
	Parts are overheated.	If at sea, return to harbor and contact Candela.
There is a bad smell in the anchor box.	The black water tank odor filter needs replacing.	See <a href="#">"Replacing the odor filter of the black water tank" on page 55</a> .
The boat tilts.	There is excess water in the keel that is not being pumped out. The bilge pump system is faulty.	See <a href="#">"Using the manual bilge pump" on page 29</a> . Contact Candela.

# Technical specifications

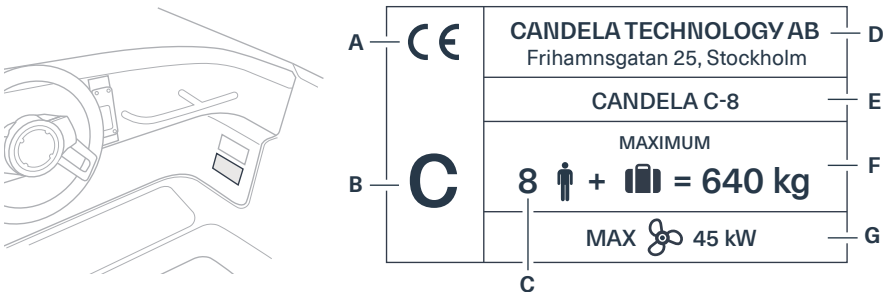
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## Design category

C-8 is classified as design category C; designed to operate in typical steady winds of Beaufort force 6 or less and the associated significant waves heights of up to 2 meters in planing mode. Such conditions might typically be encountered in exposed inland waters, in estuaries, and in coastal waters in moderate weather conditions. Depending on atmospheric conditions, gusts can reach about 18m/s.

## Builder's plate

The builder's plate is affixed near the driver's seat.



Technical specifications

- A. CE marking
- B. Craft design category
- C. Maximum persons capacity
- D. Manufacturer's name and contact address
- E. Model name
- F. Maximum recommended load\*
- G. Maximum outboard power rating (kW)

*\*Includes the mass of driver, passengers, all provisions and personal effects, and any equipment not included in the light craft mass, cargo minus liquids in fixed tanks.*

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### WARNING !

#### Risk of personal injury.

- Do not exceed the maximum recommended number of passengers. Regardless of the number of passengers on board, the total mass of passengers and equipment must never exceed the maximum recommended load. Always use the seats provided.
- When loading the craft, never exceed the maximum recommended load. Always load the craft carefully and distribute loads appropriately to maintain trim (approximately level). Avoid placing heavy weights high up.

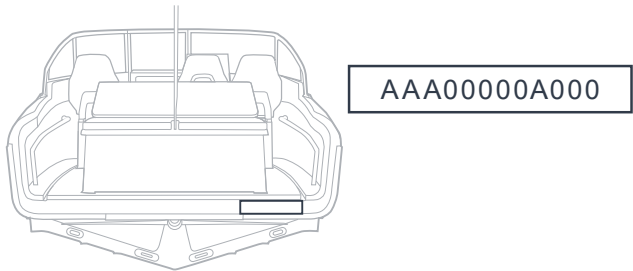
### Certification label (U.S. only)

The certification label is affixed near the driver's seat.

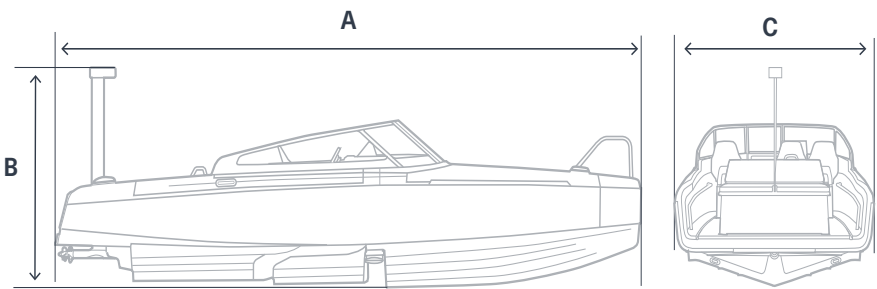


### Boat identification number

The boat's serial number, is assigned by Candela to identify the boat. It is affixed on the stern and must never be removed. In Europe the boats are equipped with one single CE approved CIN plate. (Craft Identification Number). Boats that are sold for the U.S. market have a CIN plate and a HIN plate (Hull Identification Number).



### Dimensions



- A. 8640 mm (28.35 ft)
- B. 2901 mm (9.52 ft)
- C. 2550 mm (8.37 ft)

Hull length	LH	8640 mm (28.35 ft)
Max. hull length (with optional equipment swim platform and rub rail)	Lmax	9210 mm (30.22 ft)
Length on waterline LWL	LWL	8640 mm (28.35 ft)
Beam of hull	BH	2548 mm (8.36 ft)
Max. beam of the hull	Bmax	2548 mm (8.36 ft)
Max. height (air draft) in light craft condition		2376 mm (7.80 ft)
Max. height (air draft) in fully loaded condition		2340 mm (7.68 ft)
Max. draft in light craft condition		1577 mm (5.15 ft)
Max. draft in fully loaded condition		1455 mm (4.77 ft)

Mass in light craft condition, unladen mass of the craft	mLC	1700–1800kg (3748–3968lbs)
Max. load for the builder’s plate (ISO 14946)	mMBP	640kg (1411lbs)
Fully loaded mass (builder’s plate + mLC)	mLDC	2340–2440kg (5159–5379lbs)
Mass when towed on a trailer	mT	1800kg (3968lbs)
Min. operating mass	mMO	1800kg (3968lbs)
Max. number of persons on board	-	8
Max. weight of life raft	-	50kg (110lbs)

### Safety equipment

Fire extinguisher Efficiency class	13A 89B C
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### Propulsion system

Max. engine power	45kW
Nominal battery energy	69kWh
Max. DC charging power	135kW
Max. AC charging power	11kW

Target speed	27kn
Target range (speed)	>50NM at~22kn

### Construction

Type of boat/hull	Fully foiling boat with double stepped planing hull
Design category	C
Construction	<ul style="list-style-type: none"><li>• Carbon fiber vacuum infused</li><li>• Hull bottom single skin</li><li>• Hull side and deck sandwich</li></ul>

### Component capacity

Automatic bilge pumps	31L /min
Freshwater tank	32L (8.5 gal)
Black water tank	40L (10.6 gal)



# Appendix

The following additional user information is retrieved accordingly:

## Third-party manuals

- Audio: Fusion Apollo MS-WB670
- Bilge pumps
- Windshield wiper
- Charging cable (charging cable type depends on region)
- Upholstery
- Fridge: Dometic CD20S (optional)
- Sonar depth finder (optional)
- Freshwater pump (optional)
- Life raft (optional)
- Toilet (optional)
- Candela dedicated trailer (optional)

Please contact Candela for further information on third-party manuals.

## Spare parts

Please contact Candela for information on recommended spare parts.

## Warranty

For warranty terms, please see the warranty appendix of the purchase agreement.

## Wiring diagrams

For more information on wiring diagrams, please contact Candela.

Candela Technology AB attempts to ensure that the content of this manual is accurate, but do not represent it to be free from errors. Please refer to the digitally published version for any updates, available at [www.candela.com](http://www.candela.com).

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