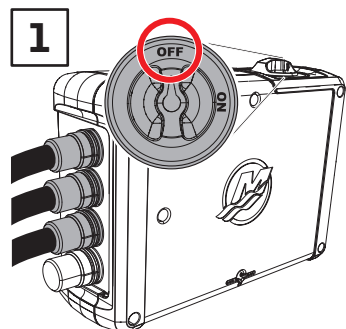


# MERCURY® AVATOR™

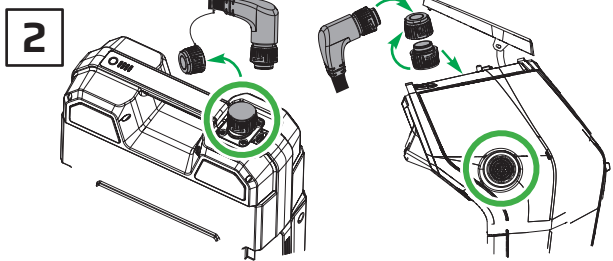
## IMPORTANT

This guide is intended to cover the basic instructions for connection of the batteries, the powering ON and OFF of the Avator 20e/35e outboards, directional thrust control, and the battery LED status light communication. For additional information, please reference the complete Operation, Installation, and Maintenance Manual included with this product.

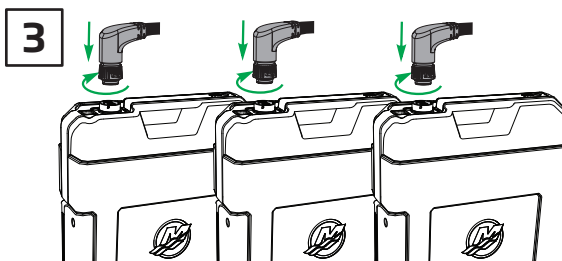
### 20e/35e Battery Connection Procedures



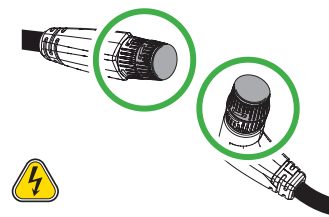
1 Verify the power switch on the Power Center, if equipped, is turned to the **OFF** position.



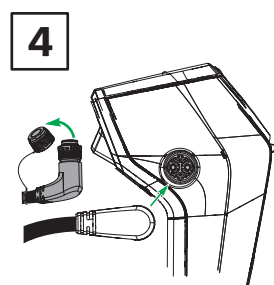
2 Remove all weather caps from the batteries, outboard, and power cables. Mate the battery weather cap to the tethered cap from the cable. For tiller models, mate the outboard weather cap to the power cable weather cap and stow them in the outboard by sliding the hood release. Verify charging ports on batteries and Power Center are closed.



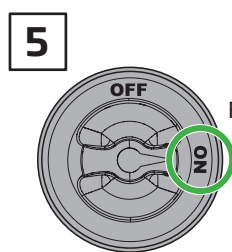
3 Ensure batteries are properly secured to the vessel using installed clamping brackets or tie-downs. Connect the battery terminal connectors. Push down and twist the connector collar as it is engaged. There will be an audible click to indicate connection.



**Note:** If a single battery is connected to a cable, battery voltage will be present on all battery cable connections that are left unconnected. Weather cap all unused cable connections to prevent injury or component damage.



4 For tiller models, ensure the battery cable on the outboard is connected and locked. Fully engage the cable connector into the socket and twist-lock the connector collar fully.



5 For boats with multiple batteries, rotate the Power Center main selector switch to the **ON** position. This will supply the battery power to the outboard.



6 The Avator 20e or 35e is now ready to be powered up. See: 20e/35e System Operation.

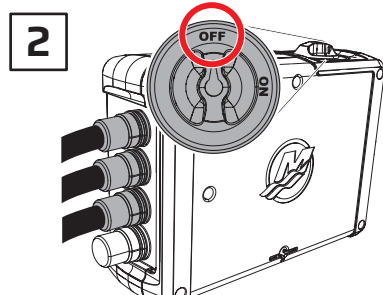
### Removing Batteries From the Boat



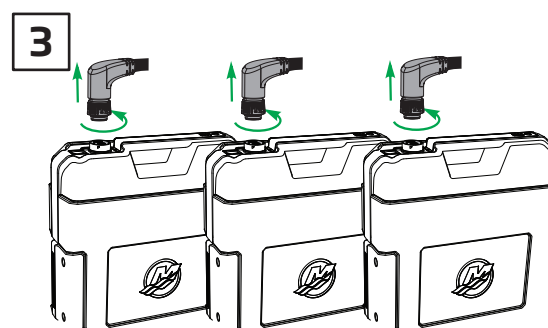
1 Remote model: To power off the outboard, turn the key to the **OFF** position.



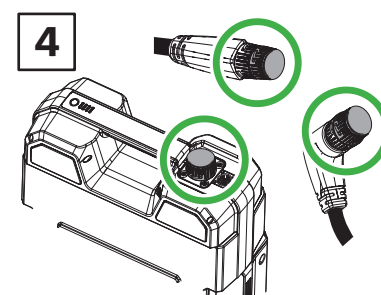
Tiller model: Press and hold the **POWER** button on the display until the LED sequencing on the display stops and the screen goes dark.



2 If the boat is equipped with more than one battery, verify the Power Center switch is turned to the **OFF** position.

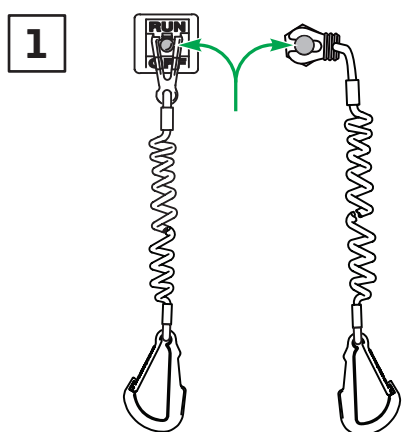


3 Disconnect the battery terminal connectors. Twist the connectors counterclockwise and lift up.



4 Install weather caps on the batteries and cables. Remove any clamping brackets or tie-downs and remove the batteries from the boat.

### 20e/35e System Operation



1 Engage the lanyard into the safety switch. Secure the clip end to the operator.



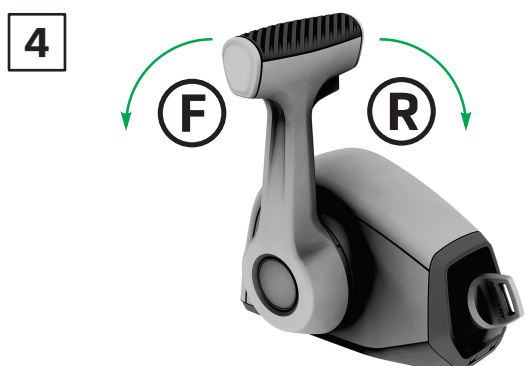
2 Depending on the control model of the outboard, verify the remote control or tiller is in the neutral position.



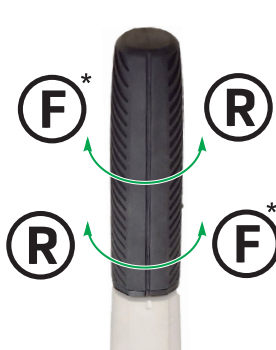
3 Remote model: Turn the key to the **ON** position.



Tiller model: Press the **POWER** button on the display.



4 Remote models: Squeeze the lockbar to release the handle from neutral. Move the handle forward or reverse to create corresponding thrust.



Tiller models: Rotate the grip clockwise or counterclockwise to create directional thrust.

\*Note: Tiller handle directional preference can be changed in the display.



5 Remote model: To power off the outboard, turn the key to the **OFF** position.




Tiller model: Press and hold the power button on the display until the LED sequencing on the display stops and the screen goes dark.

## IMPORTANT

This guide is intended to cover the basic instructions for connection of the batteries, the powering ON and OFF of the Avator 20e/35e outboards, directional thrust control, and the battery LED status light communication. For additional information, please reference the complete Operation, Installation, and Maintenance Manual included with this product.

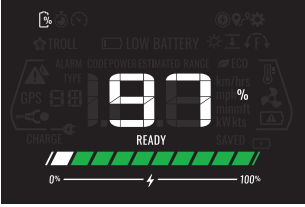
### 20e/35e Battery Charging and Status Lights

**1**



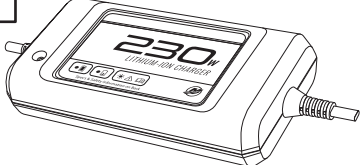
**CAUTION:** Exposure to hazardous voltage can cause electrical shock or injury. Avoid contact with exposed, damaged, or bare electrical connections. Do not make improper connections, or short-circuit the components.

**2**<sup>+</sup>



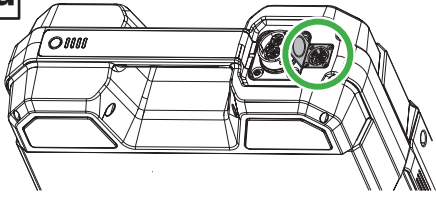
The combined state of charge (SOC) of the Avator outboard battery/batteries is shown on the display screen. 0 - 100%.

**3**



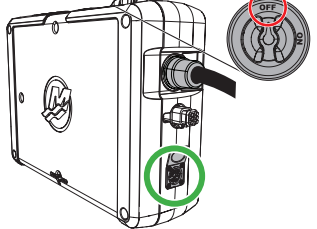
The 230 watt battery charger is the primary charger for the 2.3 kWh Avator batteries. For shorter charge times, use the 520 watt charger.

**4a**




Charging a single 2.3 kWh battery is done through the charging port on the top of the battery.

**4b**



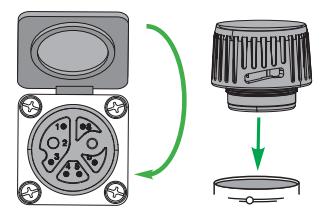
For charging multiple batteries through the Power Center, turn the power switch to the OFF position. Connect the charger to the charging port on the side of the Power Center.

**5**



Verify each battery is connected to the battery charger by monitoring the state of each battery's LED status lights. See: *Battery State of Charge (SOC) While Charging*.

**6**



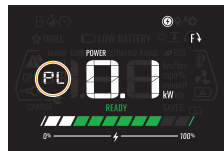
To protect the connections on the batteries, cables, and outboard, use the supplied weather-caps.

**Important: Read the Operation, Installation, and Maintenance manual in its entirety before operating or installing this product. In the event that service is needed, contact a local Mercury Authorized Dealer.**

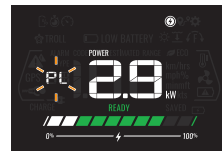
### <sup>+</sup>Operating with Different Levels of Battery State of Charge (SOC)

20e and 35e Avator outboards use a battery protection feature when multiple batteries are connected that have moderate differences in the state of charge (SOC) of each battery. This operational state is called Power Limit (PL). During this state, the outboard's power output is temporarily limited to protect the batteries from damage. Once the battery SOC's are equalized and the control has been placed into neutral, the PL indications on the display will cease and the outboard will return to full power.

For more information, refer to the Operation, Installation, and Maintenance Manual.



When the tiller or remote control are in neutral, 'PL' will be shown on the left side of the display.



When the throttle is advanced to approximately 65% or above, the 'PL' LED will flash in 1-second intervals.

### Battery State of Charge (SOC)

Push the LED status button to see SOC indications for each individual battery.



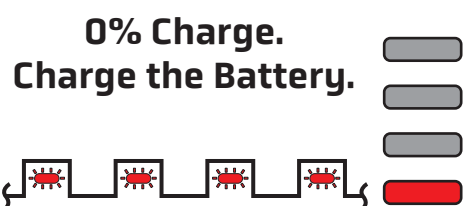
### Battery State of Charge (SOC) While Charging

The LED segments will display continuously while the battery is actively charging.

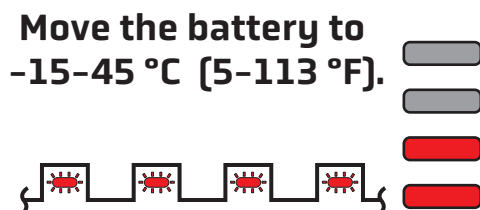


### Battery Fault Light Conditions

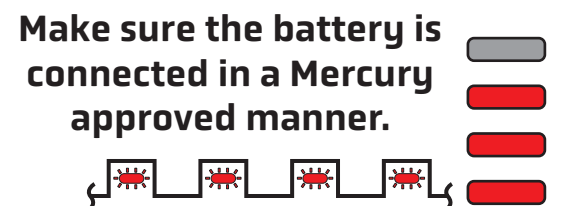
**0% Charge. Charge the Battery.**



**Move the battery to -15-45 °C (5-113 °F).**

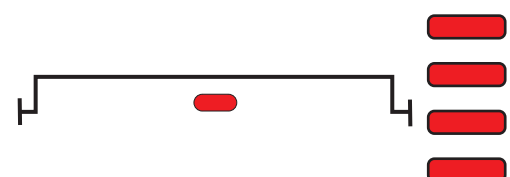


**Make sure the battery is connected in a Mercury approved manner.**



## IMPORTANT

**Battery Failure. Bring the boat or battery to an authorized Mercury Marine Dealer.**



## Boat Safe



**Always wear a personal flotation device when on the water.**

