Pontoon Boat Wiring Harness Installation Instructions

Thank you for your purchase of the PontoonStuff.com Pontoon Boat Wiring Harness. This OEM quality harness is engineered to be easy to install, long lasting, and trouble free.

Preliminary

- Unwrap your new wiring harness being careful not cut or damage any wires
- Locate the following connections:
 - Battery connection larger red and black wires with ring terminals and an in-line circuit breaker near the end of the red lead.
 - Livewell pump brown/orange and black wires near battery connection
 - Stern/White navigation light gray/blue and black wires
 - Main helm connection 12 position white nylon connector
 - Starboard/Right front connection 6 wires orange/white, gray/green, gray/black, and
 3 black wires
 - Port/Left front connection 4 wires gray/green, gray/black, and 2 black wires



Installation

- Cut a 2" diameter hole through the floor inside the helm if one doesn't exist. Take care to ensure that a cross member or some other below deck component is not directly in line with the hole. A separate hole is not necessary for the wiring harness if one already exists for steering and other cables. The wire harness can simply share the same hole.
- From below, route the 12 position main helm connector through the hole into the helm. Pull harness into helm until main forward and aft breakout reaches the deck (About 48 inches).
- Route the main aft section of the harness (the breakout with the battery connection and in-line circuit breaker) towards the stern of the boat. Route the harness between the deck and the pontoon tube. Your harness can be secured to the deck or other cabling with nylon tie wraps.
 - Route the battery connection to your battery box or tray. Important note: Do not connect the harness to the battery until all connections are made.
 - Route the livewell breakout to your transom mounted livewell pump if applicable. The electrical connection should be above the water line.
- Route the main forward section of the harness (the breakout with the orange/white, gray/green, and gray/black wires) towards the bow of the boat. As with the stern section, route the harness between the deck and the pontoon tube. Your harness can be secured to the deck or other cabling.
 - Route the breakout for the starboard/right from corner to the starboard bow of the boat. This breakout contains 6 wires (white/orange, gray/green, gray/black, and 3 black wires)
 - Route the breakout for the port/left front corner below the deck of the boat. Secure the harness to the lower side of the deck with nylon cable ties. Important note: Make sure harness is adequately secured when routing across the bow of the boat. Loose wiring can easily get caught when trailering.

Electrical Connection

- Connections can be made using any type of crimp on connector. We always recommend a waterproof connection like a heat shrink butt connector, but quick disconnect push together connectors will work fine.
- Port/left front corner connection
 - At the port/left front corner, locate the gray/green wire and 16AWG black wire. There are 2 black wires at this breakout. The larger, 14 AWG wire, is used for the docking light. The smaller, 16 AWG wire, is used for the navigation light. The wire size is printed on the wire and the 14 AWG wire is noticeably larger than the 16 AWG. Connect your port/red navigation light to the gray/green and 16 AWG black wire. If you are using an LED light, pay attention to polarity. Positive connects to the gray/green and negative to the black.

- If applicable, connect your port/left docking light to the gray/black and 14 AWG black wires. As with the navigation lights, if you are using an LED light, pay attention to polarity. Positive connects to the gray/black and negative to the black.
- Starboard/right front corner connection
 - At the starboard/right front corner, locate the gray/green and one of the 16AWG black wires. There are 3 black wires at this breakout. The larger, 14 AWG wire, is used for the docking light. The smaller, 16 AWG wires, are used for the navigation light and horn. The wire size is printed on the wire and the 14 AWG wire is noticeably larger than the 16 AWG. Connect your starboard/green navigation light to the gray/green and 16 AWG black wire. If you are using an LED light, pay attention to polarity. Positive connects to the gray/green and negative to the black.
 - If applicable, connect your starboard/right docking light to the gray/black wire and 14
 AWG black wire. As with the navigation lights, if you are using an LED light, pay
 attention to polarity. Positive connects to the gray/black and negative to the black.
 - If a horn is installed, connect your horn to the orange/white wire and remaining 16 AWG black wire. If using a peizo horn, pay attention to polarity. Positive connects to the orange/white and negative to the black.
- Helm connection
 - If installing any of the Pontoonstuff.com pre-wired switch panels, simply plug the 12 position connector directly into the mating connector on your new panel. Secure the wiring inside using nylon cable ties and move on to Final Steps.
 - If connecting your new pontoon boat harness to your existing helm wiring, use the 6" harness adaptor that is provided with your new boat harness. Connect the wires from the adaptor to your legacy wiring per the following:
 - 12AWG Black Connects directly to the negative bus on your fuse panel. In the case where a bus doesn't exist, connect with the existing grounds using whatever wire terminal is necessary.
 - Brown/Orange Connects to your livewell pump switch.
 - 12AWG Red Connects directly to the positive bus on your fuse panel (bus that feeds existing fuses) or to the jumpered side of any panel mounted circuit breakers. It is acceptable to lengthen the wire (with the same size) and to change to connector to meet your needs.
 - Gray/black Connects to your docking light switch
 - Gray/blue Connects to the navigation light switch position that turns on the white/stern light. This light is to illuminate when the switch is in either the navigation light position or the anchor light position.
 - Gray/green Connects to the navigation light switch position that turns on the red-green/navigation lights. This light is to illuminate when the switch is only in the navigation light position.
 - Orange/white Connects to the horn button.

- Stern/white navigation light Route the gray/blue and black stern/white navigation light wires up to the top of your pontoon rail at the bimini top mount. Using any type of quick disconnect, connect the gray/blue and black wires to the wires in your bimini frame that connect to the stern light. LED stern lights are polarity sensitive. If using a LED, ensure the gray/blue wire is connected to the positive and the black is connected to the negative.
- Livewell pump Route the brown/orange and black livewell pump wires to the stern end of either pontoon. Connect the brown/orange wire to the brown wire on the pump and connect the black wire to the black wire on the pump. Ensure the connection point is above the water line and connection is water tight.
- Battery connection Route the larger black and red battery wires to the battery. Once all other connections have been made and double checked, connect the red wire to the positive post on the battery and the black wire to the negative post on the battery.

Final Steps

- Try each circuit individually. Ensure that all functions work properly. Keep in mind, most of the time there is a very simply solution to a circuit that doesn't work properly. With LED lights, it us usually reverse polarity. With incandescent bulbs, it usually a bad bulb connection or a burnt out bulb. With navigation lights, the gray/blue and gray/green wires are swapped.
- Tie up all excess wire. Connections will pull loose if excess slack is allowed to pull on them when the boat is underway.