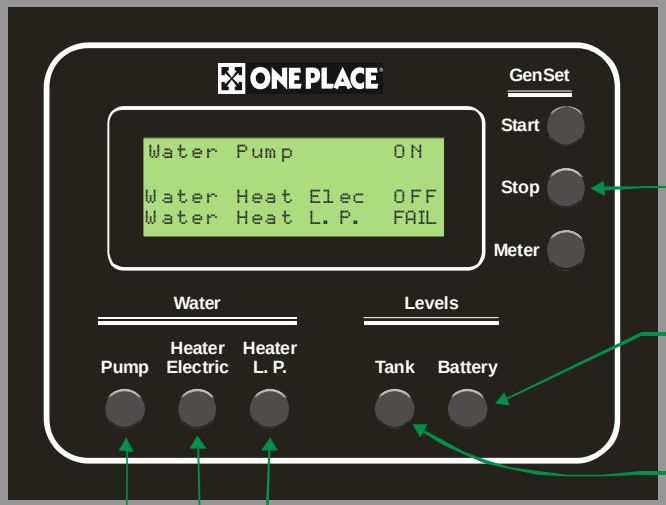
PRECISION CIRCUITS INC

One Place Monitor Panel



Part #00-10032-100

4. Generator Switches. See #4 below for detailed operation.

5. Battery Level Switch. See #5 below.

6. Tank Level; Fresh, Gray, Black & L.P. See #6 below.

3. Touch to turn L.P. Water Heater On and Off. Display will be ON, OFF, or FAIL, if the L.P. Heater fails to light.

2. Touch to turn Electric Water Heater On and Off. Display will be ON, or OFF.

1. Touch to turn Water Pump On and Off. Display will be ON, or OFF.
Works with separate Water Pump Control, and switches in multiple locations.
Displays status of Water Pump, no matter where switch is pressed.

To conserve Battery power, after 1 minute Backlighting will go off, and display will return to this Default Screen. However, the Panel is still live.

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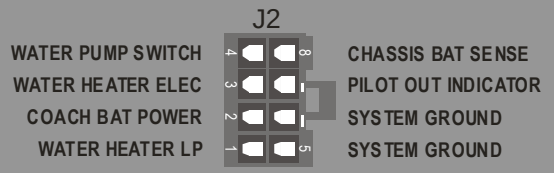
Trouble Shooting

- If Monitor Panel is completely non-operational, Check to make sure there is between +11Volts and +15Volts between pins 2 and 5.



View of connector is from Wire Harness contact insertion side

Trouble Shooting Water Pump

- If Pump Indicator will not Show when Pump Is On, place Voltmeter between pins 4 and 5 of the connector. Voltage should be 2.5 when Pump is off, and 8 volts when Pump is running. If not test Water Pump Control.

- If Pressing Water Pump Switch on Panel does not turn on Water Pump, place Voltmeter between pins 4 and 5 of the connector. Voltage should momentarily go near Zero when the Pump Switch is pressed

Trouble Shooting Water Heater Switches

- Place Voltmeter between pins 3 and 5 of the connector. When Water Heat Elec is On, Voltage should be +12V. When Water Heat Elec is Off, Voltage should be 0. Momentarily press Water Heat Electric Button to toggle between On and Off.

- Place Voltmeter between pins 1 and 5 of the connector. When Water Heat LP is On, Voltage should be +12V. When Water Heat LP is Off, Voltage should be 0. Momentarily press Water Heat LP Button to toggle between On and Off. While Water Heat LP is On, a +12V signal on pin 7, Pilot Out Indicator, will cause the Display to read “FAIL”.

Trouble Shooting Battery Voltmeters

- Place Voltmeter between pins 2 and 5 of the connector. Voltage should be close to House Bat Voltage.
- Place Voltmeter between pins 8 and 5 of the connector. Voltage should be close to Chassis Bat Voltage.

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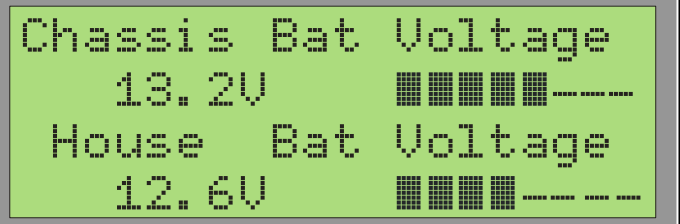
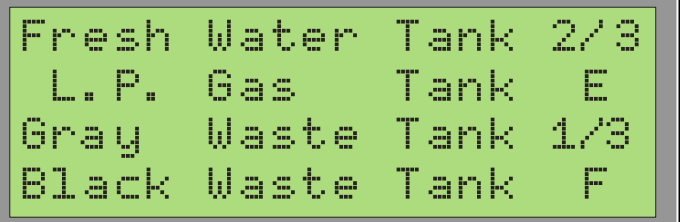
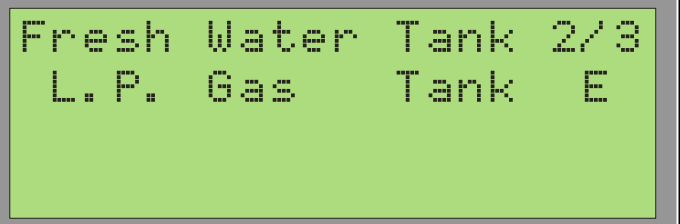
5. Touching Battery Levels button brings you to this screen. The Chassis and House Battery Voltages will display in both Digital and Analog (bar graph) format. The Analog range is 10.0V-15.0V; with bar graph meter increments of 0.125Volts.

The screen will continually update every 1 second.



6. Pressing Tank Levels switch brings you to this screen.
The screen will continually update every 1 second.
After 1 minute Backlighting will go off, and display will return to the Default Screen (Water Pump.) Should a sensor exceed normal limits, ERR will display in place of the level. Depending on your RV, the Levels will be displayed in either 1/3's or 1/4's. E, 1/3, 2/3, F, or ERR; or E, 1/4, 1/2, 3/4, F, or ERR.





If your RV is equipped with extra Waste Tanks, then the display is split onto two screens as shown below, and touching the Tank Levels button toggles between the two screens.



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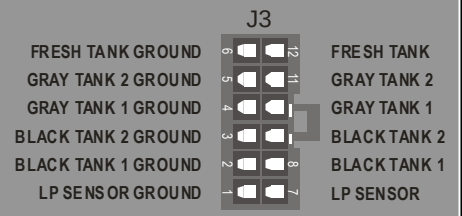
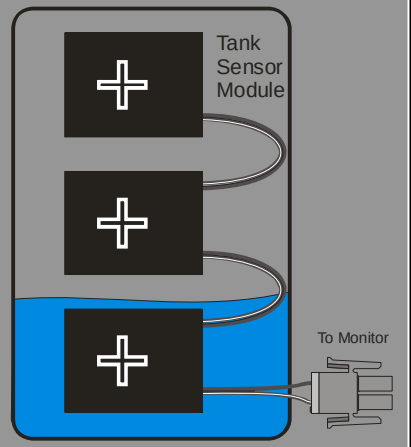
Trouble Shooting Water Level Sensors

There is potentially up to 5 Tanks on the RV. Each one has a pair of wires going to the J3 connector.
When the Tank Level Button is pressed, and the Display is showing the levels of the Tanks, each one of the 5 pairs of wires should measure +5V. For example for the Fresh Water Tank there should be +5V from pin 6 Ground to pin 12 Signal.



Shorting the two pins together will display ERR on the screen. Shorting the two wires at the tank will test those wires.

Each Sensor on the Tank will send a signal to the Monitor Panel when it senses water. In the picture to the right, the bottom sensor pad should be sending a signal. Placing a piece of sheet metal next to either of the top two sensors should change the display from 1/3 to 2/3. In this way each individual sensor pad can be tested.



Trouble Shooting LP Tank.

Unplugging the connector from the board (or an open connection to the LP Tank Sensor) will produce an ERR display.

With the connector removed from the Panel, place an ohm meter between pins 1 and 7 of the connector. The LP sensor should measure approximately 0 ohms when empty and 90 ohms when full.

With the connector plugged in, place a Voltmeter between pins 1 and 7 of the connector. The voltage reading should be 0 volts when empty and 2.25 volts when full.

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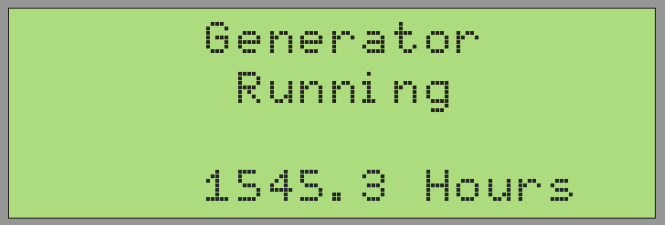

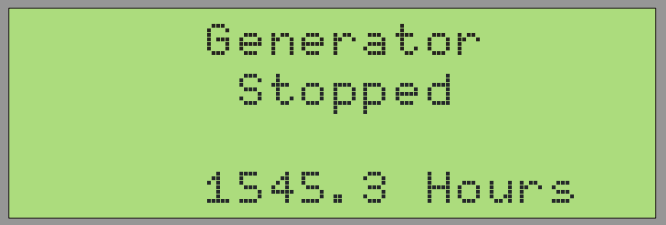

4. GenSet Display and Function:

Meter Button - Touching the Meter Button simply displays the status of the Generator above, without performing any functions. The display will show the status of the Generator, and Hour Meter.

Start Button - (Note: Generator status must be Stopped.)

a) Pressing and holding the Start button will operate the Generator Starter; Display = Starting.

b) Touching the Start button will activate the Auto-Start function, and the Panel will attempt to start the Generator automatically; Display = Auto-Start.
(If the Auto-Start functions fails to start the Generator; Display = Will Not Start.)

Stop Button-

a) Pressing and holding Stop button will operate the Generator Stop Relay; Display = Stopping.
If the Generator is Running this will Stop the Generator.
If the Generator is Stopped this will prime the fuel system.

b) Touching the Stop button will activate the Auto-Stop function, and the Panel will attempt to stop the Generator automatically; Display = Auto-Stop .
(If the Auto-Stop function fails to Stop the Generator; Display = Will Not Stop.)
(See Generator Manual for Operation or Troubleshooting Guide)

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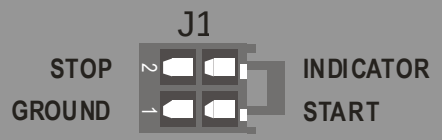
Trouble Shooting Generator Function

Voltage between Pins 4 and 1 should be +12V when the Generator is running, and change the display from “Stopped” to “Running”.

While Pressing and Holding the Generator Stop Button, pin 2 Stop voltage should go to zero, and return to +12V when the Button is released.



Make Sure Generator is not already running.

While Pressing and Holding the Generator Start Button, pin 3 Start voltage should go to zero, and return to +12V when the Button is released.

Note: Semi-automatic functions will operate as long as the above three tests perform properly.

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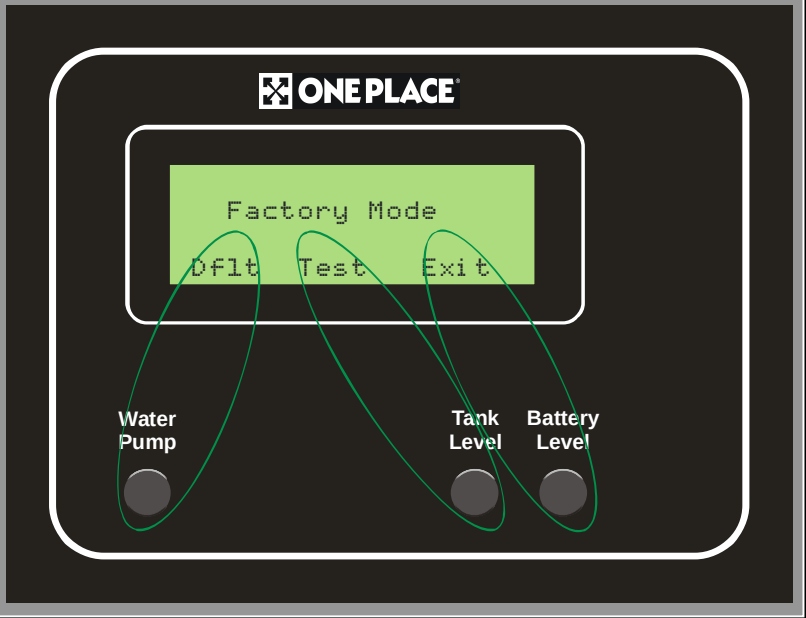
- The One Place Monitor Panel has three automatic learn features :
- 1. If the Water and Waste Tanks have 1/3 or 1/4 increment sensors.
- 2. If a second Gray and/or second Blank Waste Tank exists.
- 3. If Water Heater Function exists.
- Each feature above is learned independently, even for the individual Tanks.
- Once a feature is learned, it is stored in non-volatile memory, and remembered even if Battery Power is removed from the Panel.
- The One Place Monitor Panel has many safe guards to prevent improperly learning a feature. Should the Panel have learned something incorrectly, an option exists on the Panel to reset the original factory default, so that the Panel can re-learn the proper features.

To Reset the Panel to Default

1. Press and hold all three buttons shown above for approximately 6 seconds, until the above screen appears.
2. Press the Default Button (Water Pump)
3. Press the Exit Button (Battery Level).
4. The Panel will return to the Water Pump Display.



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