



#### Fill N Go

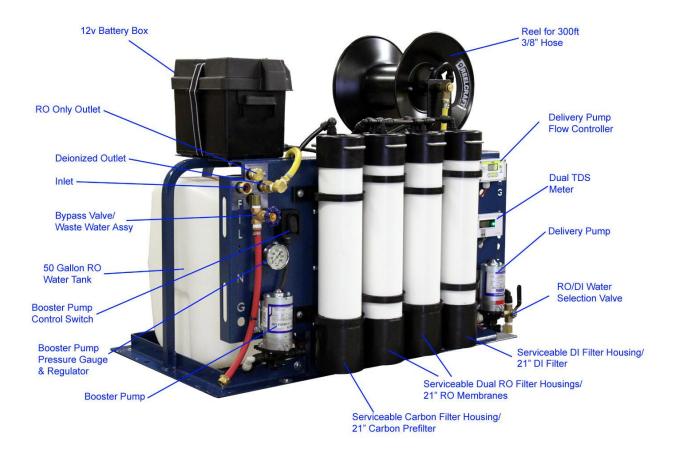
## 4-Stage RO/DI & Truck Mount Tank System User Manual

**RHG Products Company** 

www.rhgproducts.com

303-663-1779

#### Fill N Go System Features and Layout



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#### **New Machine Setup Procedure**

- 1. Unpack unit and inspect for any damage that may have occurred during shipping.
- 2. Any damage or missing components must be reported within 24 hours to the supplier of your system. Your Fill N Go system requires a 12v deep cycle battery, 9" max width. A hose reel is included, which is intended to accommodate 300' 8mm minibore hose, and connects with a  $\frac{1}{2}$ " FNPT fitting.

Fill N Go Systems ship fully assembled.

Fill N Go Systems are typically flushed and tested at RHG.

Replacement carbon filters must be flushed following this procedure:

- 3. Remove any plugs with attached tags and follow the instructions on the tag. (Step 4) Do not turn on any pumps at this time.
- 4. Thoroughly flush your carbon filter under normal tap pressure before connecting to any other filters.
  - •TIP: Disconnect the hose connecting the carbon outlet into the pump at the pump connection to allow carbon filters to be flushed from a short length of hose. Point this hose in a safe direction while flushing. If your Fill N Go is mounted into a vehicle interior you will want to flush your filter into a deep bucket. (BLACK WATER!)
- 5. Replace loose hose to connect carbon filter to pump inlet.

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#### **Operation Instructions**

- 1. (Optional) Connect a length of hose\* to the bypass hose to divert waste water away from system and work area.
- 2. Fully open bypass waste valve.
- 3. Attach a garden hose to the inlet of your system.
- 4. Turn tap water supply on.
- 5. As water begins to flow out of the bypass hose, slowly close the bypass valve all the way. Although the valve is fully closed, water will still flow out of it. This is normal. Water will begin to flow into the tank under tap pressure.
- 6. It will take a few minutes for all of the air to purge out of your system. Only turn on pumps after air has been purged.
- 7. After the initial 'air purge' you will not need to purge air again unless you replace a filter.
- 8. You are now ready to fill your holding tank.

\*extension hose not included

#### **Electric Motor Operation**

Fill N Go RO/DI systems come with 12v pumps to boost RO water production into the tank as well as deliver water to your pole with or without DI filtration. An on/off switch is mounted to the face of the systems to control the booster pump. The delivery pump is controlled with the use of a controller. The controller will likely require calibration. Refer to the Pump Controller Manual included in this documentation.

#### Features and Maintenance

Fill N Go Pure Water Systems come equipped with a RO Only feature.

#### **RO Only Option**

RO filters greatly reduce water TDS without the aid of DI filters. Under pump pressure this reduction will be greater than under tap pressure. Windows can be washed spot free with water up to 10ppm TDS. Non-Glass surfaces can typically be washed with water up to 40ppm TDS.

The 50 Gallon tank in your Fill N Go system fills with RO water. You can monitor the TDS of the water from the ROs during filling with your Dual TDS meter. The IN setting reads the RO water filling the tank. The OUT setting only reads water purity after DI filtration.

To clean with RO water directly from your tank, turn the RO/DI Water selection valve handle to the vertical position (up). To clean with Deionized water, turn the RO/DI Water selection valve handle to the horizontal position (right).

Turn on your delivery pump controller and adjust for desired flow. Water will flow from different system outlets depending on valve position.

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#### Filter Replacement Schedule & Procedure

Your carbon filter protects your system from damaging chlorine and water disinfection agents. It is recommended that you change your carbon filter cartridge every 6 months. Failure to do so will void your warranty. Order RHG #20051-C.

Your DI filter has a limited lifespan based on the amount of dissolved solids it is removing from the water. DI filter cartridges need to be replaced as needed for your cleaning application.

Order RHG #20051-D.

To change your filter cartridge, first disconnect any hoses from the elbow in the insert at the top of the filter housing. Remove the stainless steel U-Pin. Depress the insert into the housing *slightly*. Pry out the insert by 'hooking' the U-Pin into the oval holes and using leverage. Inserts for RO housings will likely have to removed together. Remove the spent filter cartridge and replace. Reassemble filter housing and reconnect hoses. Flush new carbon filter cartridge if needed.

RO membranes have a much longer service life and in the experience of RHG may last the life of the system. However ROs are only warrantied for factory defect and may eventually diminish in performance or fail. If you experience a reduction in RO performance in your Fill N Go system, contact RHG directly to troubleshoot.

RO MEMBRANES SHOULD NOT BE ALLOWED TO DRY OR COLLECT STAGNANT WATER IN THE BOTTOM OF THE MEMBRANE. THIS WILL DIMINISH PERFORMANCE, POTENTIALLY TO THE POINT OF FAILURE. TO PREVENT THIS, ROs SHOULD BE RUN ON A REGULAR BASIS, AT LEAST EVERY TWO WEEKS, AFTER FIRST USE, EVEN DURING "OFF-SEASON".

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#### **Shutdown Procedure**

- 1. Open the bypass valve fully to flush the system and turn off the pump.
- 2. Flush the system for 4 to 5 minutes at the end of the job. We recommend that you do this while coiling up your hoses and putting away your pole.
- 3. Turn off the water supply to the unit.
- 4. Disconnect the water supply.

It is important to always flush the system after each use. Failure to do so will decrease the filters life.

#### ANY ALTERATIONS TO THE SYSTEM WILL VOID THE WARRANTY

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# Operating Warnings

Adjust your flow settings carefully. Repeated false dead-end detection indicates that the Cal value should be increased (less sensitive).

necessary - the unit will protect itself under normal conditions.) For absolute safety always wire through the pump pressure switch. (The pressure switch can be bypassed if absolutely

This is a WATER PUMP controller: it will not work with air in the system. Always prime your system before starting work. If air in the system causes false dead-end detection, increase Cal value (less sensitive).

controller in a dead end situation. This can result in damage to Do not set the Cal value too high. Setting it higher than necessary places extra strain on both the pump and the both the pump and your controller.

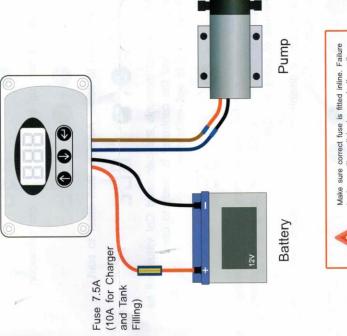
Specification	Value	
Supply Voltage	11 - 14 VDC	
Maximum Current	10A	
Typical Drive Current	4-5A	
Voltmeter Accuracy	+- 100mV	
Enclosure Material	ABS	
Water Resistance	IP65	
Dimensions	115 x 65 x 40(mm)	
Working Temperature	0 to 40 Deg C	

<sup>\*</sup> Your battery is at risk of permanent damage if you disable low battery cutoff and continue to use your controller for long periods when the battery voltage has fallen below +10.5V

# Pump Controller - Quick Start

## Step 1. Wiring

NOTE only fit the fuse once all connections are made. Connect the pump controller following this diagram.





Make sure correct fuse is fitted inline. Failure to do so will result in damage to the unit. Observe correct battery polarity. Failure

#### This message will start to flash when the battery An error has occured while using AutoCal. This will happen when the motor is not connected or the enter button has been pressed to cancel it. Pressure switch activated or motor disconnected. is low (<11.0V). If battery is below 10.5V the A dead end has been detected. If this is not pump will be disabled to protect the battery. Press enter again to return to the current flow rate. Press up or down to set a suitable flow of water. Press enter to display the current battery voltage. the case, try increasing the Cal value. (Unless low battery cutoff is disabled\*) 888,888 To turn the controller off, press and hold enter. Description **V** Step 3. Use Message ◆+← Then ♠, ♠ To select BBB/BBB The Cal value can be adjusted manually by following these Turn on the controller by pressing the up or down button. Keep the button held until the display lights up. To enable or disable the low battery cutoff (when battery After several moments the calculated Cal value will be steps and adjusting the Cal value using up and down, Press and hold up and enter to go into calibration. Press down to select AutoCal, then enter to start. displayed and the controller is ready to use. Connect your hose and brush to the pump. Press up until the display shows 30. Press enter to exit calibration. Step 2. Set Up - AutoCal **O** instead of using AutoCal. **⊕ ⊕**. Press enter to save. is below 10.5V): $\Theta$

#### **KHG Products Company**