Overview:

The RK 11-1570 Water Detection and Filter Restriction Kit is designed to be used with all Racor Turbine Series or Marine Turbine Series fuel filter/water separator assemblies. This kit is manufactured using the highest quality materials and is 100% electronically tested before leaving the factory. A water probe is only a component in the water detection system and will not work without an electronic water detection module. Water detection modules analyze electrical resistance at the probe tips and determine if water is present in fuel. If so, a low voltage circuit is completed and the warning light and buzzer are activated alerting the operator. The bowl must be drained (with the engine off) to remove trapped contaminants and water. The detection module will automatically reset itself once water is removed.

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Important Notes:

• The RK 11-1570 is for 12 or 24 volt, direct current applications.

• This detection module has a self-diagnosis feature that illuminates the DRAIN WATER LED and sounds a buzzer at each power-up. If no water is present, the light and buzzer will shut off within 2-5 seconds.

• Components and hardware are included to complete an installation. Due to the wide variety of applications this kit can be used on, other parts may be necessary and are customer supplied.
Mounting and Installation

Exercise great caution during kit installation to avoid fuel spills, electrical shock, or fire hazards. Close applicable fuel valves when appropriate. Disconnect battery ground cable to eliminate possible shock. Engine must be off and cool to touch. Your work area should be free of open flames or hot surfaces. Obtain good ventilation for work areas in enclosed spaces.

- Apply lubricant to O-ring or water probe and install into water probe port on fuel filter assembly (see Sample Bowl Configuration on next page).

- Mount water detection module in dashboard (requires a 2 1/16” diameter hole) or within instrumentation proximity for easy monitoring.

- Do NOT mount water detection module in any location exposed to excessive water spray, moisture, heat, vibration, dust, or excessive direct sunlight.

- Attach wires as shown on Installation Diagram. Use provided butt connectors, wire splices, or ring terminals as needed. Number 18 AWG wire is needed and is customer supplied.

- Use provided wire ties to route wires neatly away from heat sources or moving surfaces.

- This kit includes a pre-set vacuum switch (12 inHg) that illuminates CHANGE FILTER LED when filter needs servicing.

Wire Splice Instructions

When needed, use wire splicers (included in this kit) to simplify electrical installations while providing a durable connection.

1. Simply butt tap-wire against wire stop, fold top cover half over to meet base and squeeze with ordinary pliers until latch locks.

2. Lay run-wire in remaining section, fold over to meet base and squeeze to latch as before.
Sample Bowl Configurations

The bowl configurations shown below illustrate the location of the water probe on three different types of Racor assemblies (in order as listed):

Spin-on Series, Turbine Series, and Marine Turbine Series.

If your Racor assembly is not shown and/or the water probe location not clear; call our Technical Support Department at 1-800-344-3286, Monday through Friday, 7am to 4pm, Pacific Time.

Installation Test

1. Reconnect battery but do not prime fuel system at this time. Turn power on, but NOT engine (turn key to auxiliary position).

2. The presence of water can be simulated by running a ‘jumper’ wire from one metal probe tip to the other.

3. After 2-5 second delay, red LED on detection module will illuminate and buzzer will sound.

4. If your module fails to operate, check all connections. Verify power is in on and module is properly grounded. Continue to troubleshoot and repeat test until successful.

5. Turn power off and prime fuel system per manufacturer’s instructions.

Service Instructions

When water detection module’s DRAIN WATER light illuminates and buzzer sounds, the bowl of Racor filter should be serviced at your earliest convenience.

1. Turn engine off.

2. Place an appropriately sized container under bowl and open drain valve (or remove drain plug). Close drain (or replace drain plug) as soon as all water has drained out of filter and fuel begins to drain out (if you leave drain open too long, it may drain entire fuel filter assembly and possibly entire fuel system).

3. Turn power on (turn key to auxiliary position) but DO NOT start engine. After about 10 seconds, the light and buzzer should go off indicating that all water has been drained from filter (the detection module will reset itself once the water level drops below probe tips). If the light and buzzer stay on, repeat step 2 and 3 until they stop.

4. Discard waste fluid in accordance with local or applicable laws.

5. Prime filter according to service instructions that came with filter. Also, prime fuel system per manufacturer’s instructions.


When water detection module’s CHANGE FILTER light illuminates, the filter should be serviced at your earliest convenience. Use only genuine Racor Aquabloc® filters. Always carry extra filters as one thankful of excessively dirty fuel can clog a filter quickly. Refer to your filter assembly installation instructions for replacement filter part number and service instructions.
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