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# Why Buy Racor?

An objective look at unauthorised Racor fuel filter copies





# Racor takes pride in manufacturing a quality product that is fit for purpose and durable in all applications.

The manufacturing and design teams working at Racor are constantly striving to improve product performance to remain the leader in fuel filtration.





Some of the benefits a customer can expect to receive when buying a genuine Racor product are:

- OEM Quality and Validation
- Quality Certified Production Facilities to ISOTS16949
- Qualified Products and Materials
- Correct Performance and Durability
- Up to 70% Increased Service Life
- Extensive QA and Development Facilities
- \$10Bn Corporation: Continuity of Product/Service.



Extensive laboratory testing facilities at the Racor factory give assurance to all customers that the genuine Racor product will meet the demands of the engine system.

- ISO13353 Filter Efficiency/DHC
- ISO19438 Filter Efficiency/DHC
- SAE J 905 Filter Efficiency
- SAE J 1985 Filter Efficiency
- ISO 4020 6.1 Filter Cleanliness
- ISO 4020 6.2 /ISO 2942 Filter Integrity
- ISO 4020 6.3 Filter Differential Pressure
- ISO 4020 6.5 Water Separation
- ISO 4020 6.6 Filter Element Collapse
- ISO 4020 6.7 Hydrostatic Burst
- ISO 4020 6.8 Pressure Pulse Fatigue
- SAE J1839 Course Droplet Removal
- SAE J1488 Emulsified Water Removal
- ASTM B 117 Salt Fog Corrosion
- Numerous Internal Racor Test Standards and Customer Standards

Racor manufacturing locations are manufacturing to the highest possible standards. Some of the quality standards being maintained are listed below.

- QS9000
- ISO TS16949
- ISO14001
- Ford Q1
- UL listed
- Bureau Veritas Listed
- American Bureau of Shipping Listed
- API 5th Edition

# **Racor Spin On Series**

The Racor Spin on Series has standard primer pumps that tops the list of extensive options that allows bus fleets, truck fleets, RV owners and others to tailor a filter/separator system specifically to their operating requirements.

These options include a choice of three micron ratings for the Aquabloc filter element, 300 watt in head PTC (positive temperature coefficient heater) water sensor and flow rates up to 600 l/hr (160 US gph).





#### Pump Diaphragm:

Racor use high quality support laminated high grade rubber fit for life diaphragms. Poor quality pump diaphragms will swell in the fuel, and leak in cold conditions, and eventually wear out under even mild Pressure pulsation/vibration



Crucial in a modern fuel filter, Racor use high quality automotive grade materials in all seals and valves. Poor quality seals will swell excessively In the fuel, and leak in cold conditions

#### Filter Media:

The true heart of the filter- Racor develop proprietary semi synthetic Aquabloc medias to meet the exacting specifications of injection system OEMs. These meet critical water removal and particle efficiency requirements. Copy cats regularly save cost on low quality medias which do not perform, and block up to 70% sooner.

#### Accessories:

Racor have a wide range of heater and sensor accessories all validated for integrity, EMC Compatibility and safety. Unlike unauthorised copies.

#### Head casting

Racor validate castings under extreme vibration and climatic conditions to meet chassis and engine specifications.

Unlike unauthorised copies.

#### Filter Can Components:

Racor validate canisters under extreme vibration and climatic conditions to meet chassis and engine specifications.

Unlike unauthorised copies.

#### Coatings and plating:

Racor validate canisters under extreme salt spray and climatic conditions to meet OEM specifications and environmental requirements and are free from banned substances. Unlike unauthorised copies.

#### Clear Bowl:

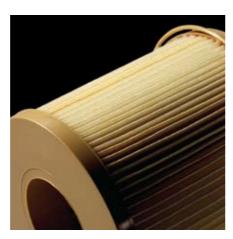
Racor use a unique and durable clear plastic bowl material with high clarity, excellent UV, Low temp/high temp resistance, impact resistant and impervious to all fuel types. Validated under extreme vibration and climatic conditions to meet strict OEM specifications. Copies often use more economical materials.

### **Racor Turbine Series**

Every engine runs better with a system that cleans fuel, removes water, heats fuel and senses when it's time for service. The system is the Racor Turbine Series and it's the most complete, most efficient, most reliable high-capacity engine protection you can install.

A system that protects your investment in engines and fuel is a system that contains genuine Racor Turbine Series.



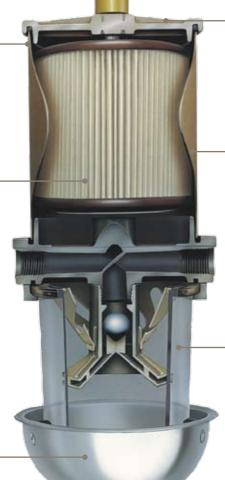


#### Seal Materials:

Crucial in a modern fuel filter, Racor use high quality automotive grade materials in all seals and valves. Poor quality seals will swell In the fuel, and leak in cold conditions

#### Filter Media:

The true heart of the filter- Racor develop proprietary semi synthetic Aquabloc media to meet the exacting specifications of injection system OEMs. These meet critical water removal and particle efficiency requirements. Copy cats regularly save cost on low quality medias which do not perform, and block up to 70% sooner.



#### Filter housing casting and components:

Racor validate castings under extreme vibration and climatic conditions to meet chassis and engine specifications.

Unlike unauthorised copies.

#### Coatings and plating:

Racor validate coatings under extreme salt spray and climatic conditions to meet OEM specifications and environmental requirements and are free from banned substances. Unlike unauthorised copies.

#### Clear Bowl:

Racor use a unique and durable clear plastic bowl material with high clarity, excellent UV, Low temp/high temp resistance, impact resistant and impervious to all fuel types. Validated under extreme vibration and climatic conditions to meet strict OEM specifications. Copies often use more economical materials.

#### Accessories:

Racor have a wide range of heater, electric primer Pumps, heat shields, metal bowls and sensor accessories all validated for integrity, EMC compatibility and safety. Unlike unauthorised copies.

# Common problems with copies that are not genuine Racor filters.

Issue	Concerns with Competitor Copies	Racor Commitment to Quality
Blocked Filter	Low quality media can block 70% sooner than Racor media.	Racor uses patented Aquabloc media that meets the exacting specifications of injection system OEM's meeting critical water removal and particle efficiency requirements.
Bypassing	Poorly constructed filter elements may bypass internally allowing dirty fuel to reach the engine	Racor use high quality materials and production processes to ISOTS16949 to avoid bypass problems.
Split / Leaking Seal	Poor quality seals will swell excessively, leak and may deteriorate within the service period.	Racor use high quality automotive grade materials. (For example; NBR, HNBR, Viton and bio-diesel compatible.)
Dirty fuel reaching engine	Incorrect efficiency filters will not protect the engine	Replacement to OEM grades will perform as designed for the application.
Water in fuel reaching engine	Few, if any of the copy filter elements work to original equipment levels	Racor use the same media and materials in original equipment and replacement filter elements.
Cold Conditions	Poor quality pump diaphragms and seals will harden and cause leaking. Incorrectly selected media will block in cold conditions.	Racor use high quality material rated for -40 deg C. Racor original applications are correctly selected for operating conditions.
Cracked head casting	Poor quality head castings cannot cope with extreme environmental conditions and vibrations.	Racor products are validated under extreme vibration and climatic conditions.
Contains banned substances	Some copy filters contain banned substances in the canister coating and plating.	Racor canisters contain no banned substances and are validated under extreme salt spray and climatic conditions.
Cracked Clear Bowl	Copy filter bowls are often made from poor quality material that will crack under extreme temperature or continuous vibrations.	Racor use a unique durable clear plastic bowl material with high clarity, excellent UV, low temperature / high temperature resistance, impact resistance and impervious to all fuel types.
Can I buy accessories for my fuel filter?	Unauthorized Racor copies do not always offer accessories. If they do they are likely not to be tested.	Racor have a wide range of heater and sensor accessories that are validated for integrity, EMC compatibility and safety.





# Water separation efficiency

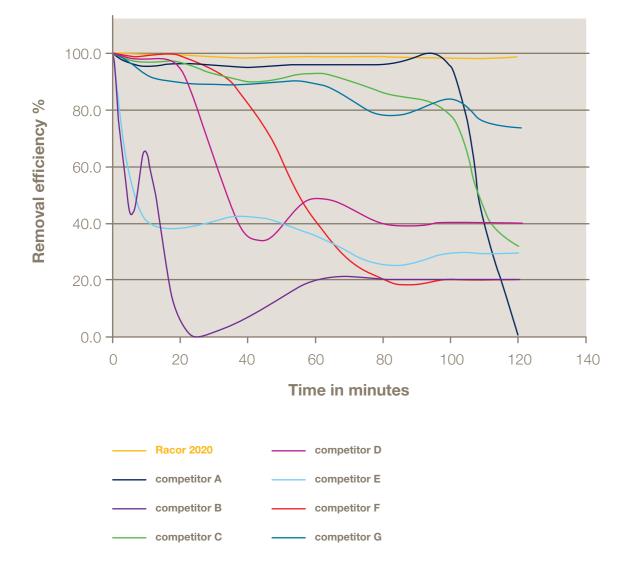
The critical performance factor for any fuel filter is the water separation efficiency. The graph below shows the performance level of the Racor product versus some competitor copies. It is clear to see that the Racor water separators outperforms that of the competitor copies.

Be aware that some of these competitor products fail to remove particulates from the fuel and put the engine system in danger. Some of the known manufacturers of low cost Racor copies are listed below.

- Griffin
- Separ
- Vetus Rauma
- YNY
- Sampiyon
- ASASChinese R90MER01
- Turbinas Chinas



#### Water separation efficiency





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