aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding

GreenMAX™

Heavy-Duty, High-Capacity, Fuel Filter/Water Separator With Options for All-Weather Operations

Parker Racor

ENGINEERING YOUR SUCCESS.

The World's Most Innovative

Diesel Fuel Filter Water Separator.

Clean is the new green.

GreenMAX is engineered for return on investment, and the operative word is GREEN – delivering a low cost filter change-out, low-cost per operation and environmentally friendly filter disposal.

GreenMAX. 40 years of Racor Innovation.

1 POWERFUL PACKAGE.

High-Performance All-Weather Filtration

- Patented, Progressive Two-Stage Aquabloc® Media
- Hot Engine Return Fuel Recirculating Heater
- Ultra-High Efficiency + Capacity
- Trademark Racor Clear Bowl & Quick Turn Drain
- Heavy-Duty Design & Construction

Quick Turn, Positive Seal Self-Venting Drain

Efficiency. Capacity. Economy. Reliability.

GreenMAX. The New State-of-the-Art.

Integrated Piston-Style Hand Priming Pump or Fill Port

Hot Engine Return Fuel Recirculating Heater

Dual Inlet / Outlet Ports

Low Restriction at High Flow Rates

Optional 300W Electric In-Head Heater

Patented Filter Valve Mechanism Holds Prime and Prevents Clean Side Contamination During Service

Durable Multi-Port Cast Aluminum Mounting Head Assembly

Add a Fuel Filter Change Indicator – Change Your Fuel Filter Only When Needed

Easy to Mount with Through-Holes for a 3/8" Bolt and Tapped for a M8 Bolt

Aquabloc High-Capacity, High-Flow Filter Element

Rated Diesel Flow Rate 150 gph (568 lph)

Optional 200W Electric In-Bowl Fuel Heater for Severe Cold Conditions (Not Shown)

High-Capacity Removable, Reusable and Extremely Durable Bowl – A See-Thru Bowl That Stays See-Thru

Water-In-Fuel (WIF) Water Sensor Alerts Operator for Service (1/2-20 SAE Port)

As never before, today's sensitive high-pressure fuel injection systems demand flawless removal of damaging water and solid contamination. Yet, fuel additives to diesel and biodiesel have made separation of harmful liquid and solid particulates more challenging than ever.

The one-word solution is the same as it has been for more than 40 years: Racor. Specifically, the new GreenMAX integrated fuel filter/water separator. GreenMAX is the apex of a continuous development effort to advance the art and science of filtration, a program that has made Racor filtration systems the preferred brand on engines worldwide.

Add a Fuel Filter Change Indicator – Change Your Fuel Filter Only When Needed

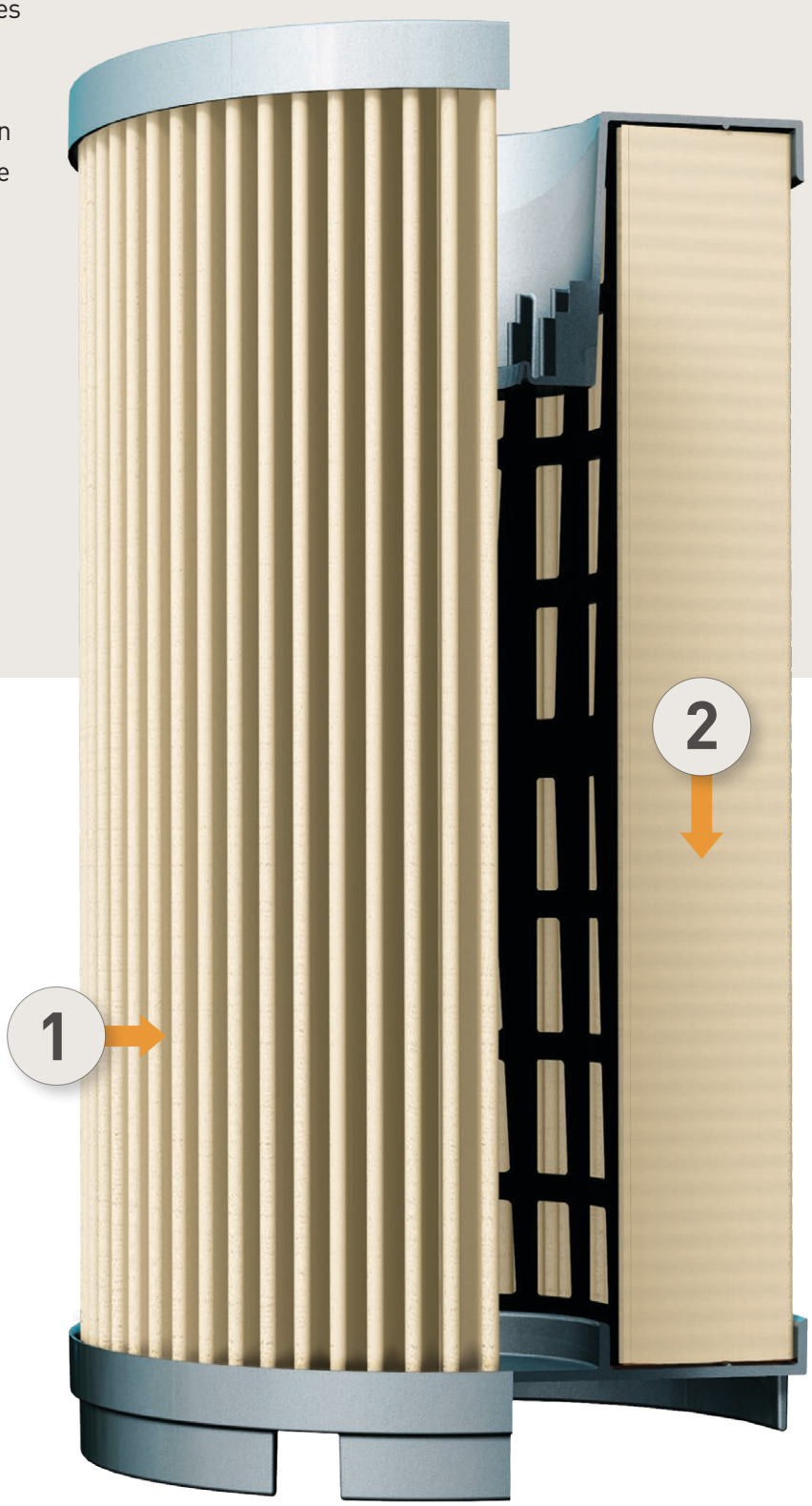
RK 32037
Fuel Service Indicator

AQUABLOC® ENGINEERED MEDIA

The Ultimate Engine Protection

Today's engines inject diesel fuel at pressures of up to 30,000 PSI. Injector tolerances are measured in microns, and the smallest particle of dirt or water can destroy precision components, leading to catastrophic damage to engines, operations and profitability.

GreenMAX is designed with exceptional water-removing efficiencies for both bulk and emulsified water, very low restriction of fuel flow and high dirt-holding capacity. The heart of the system is progressive, dual-stage coalescing and filtration delivered by the patented Aquabloc filter element, a process that makes GreenMAX the new global standard for filtration.



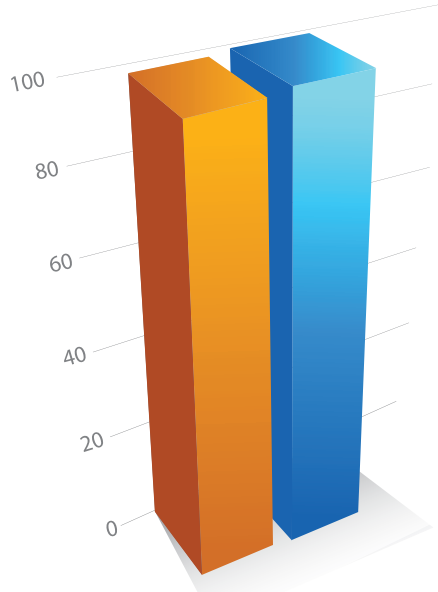
Stage One: Water Coalescing
Water droplets coalesce on the outside of a chemically treated composite media. As the droplets grow in size, being heavier than fuel, they fall into the collection bowl to be drained away. Importantly, the large surface area of the pleated media helps to slow fuel velocity, enabling extraordinary water removal efficiency.

Stage Two: Fuel Filtration
Engineered, pleated media filters microscopic particles of dirt and rust.

AQUABLOC – THE INSIDE STORY

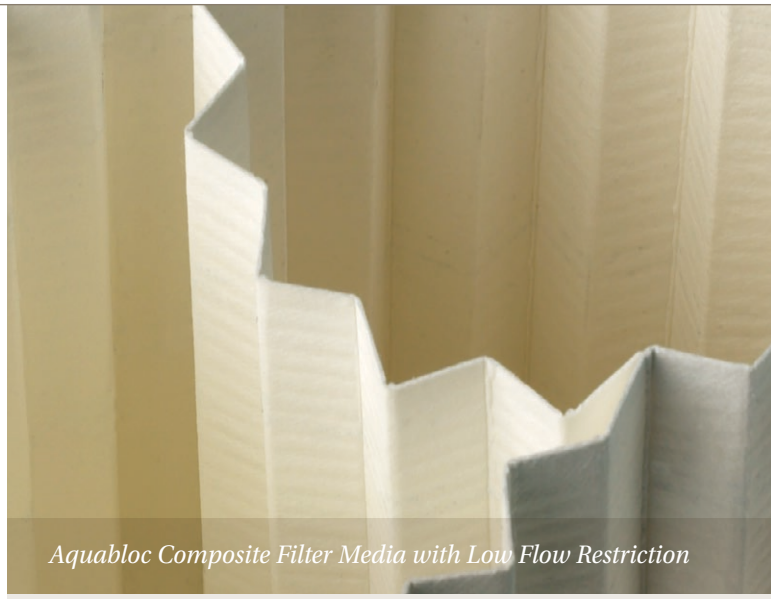
The ultra-high-efficiency Aquabloc media is an engineered blend of distinct media formulations – high-grade cellulose compounded with engineered fibers and chemical treatments proven to repel water.

- Ultra-high capacity means less frequent filter changes, boosting operating economy.
- Aquabloc media is both corrugated and pleated to present a large effective filtration surface area. This design innovation slows fuel velocity to improve coalescing and filtration efficiency.
- The high dirt-holding capacity Aquabloc media helps to dramatically extend the life of final-stage on-engine filters, and reduce the overall cost of the filtration program.



R61691T (10 micron): 99%, *SAE J1839 OCT2010, Coarse Droplet Water / Fuel Separation Test @ 150 GPH with ULSD*

R61691T (10 micron): 98%, *SAE J1985 AUG2006, Fuel Filter - Initial Single-Pass Efficiency Test @ 150 GPH*



Aquabloc Composite Filter Media with Low Flow Restriction

- Aquabloc cartridge filter elements are available in 2, 10, and 30 micron ratings so that protection can be tailored to the application, fuel quality, operating environments and service schedules.

AQUABLOC MEDIA HELPS

OEMs to meet rigid government emission standards. In fact, Racor engineers have helped to define the very SAE standards by which filtration efficiency is measured.

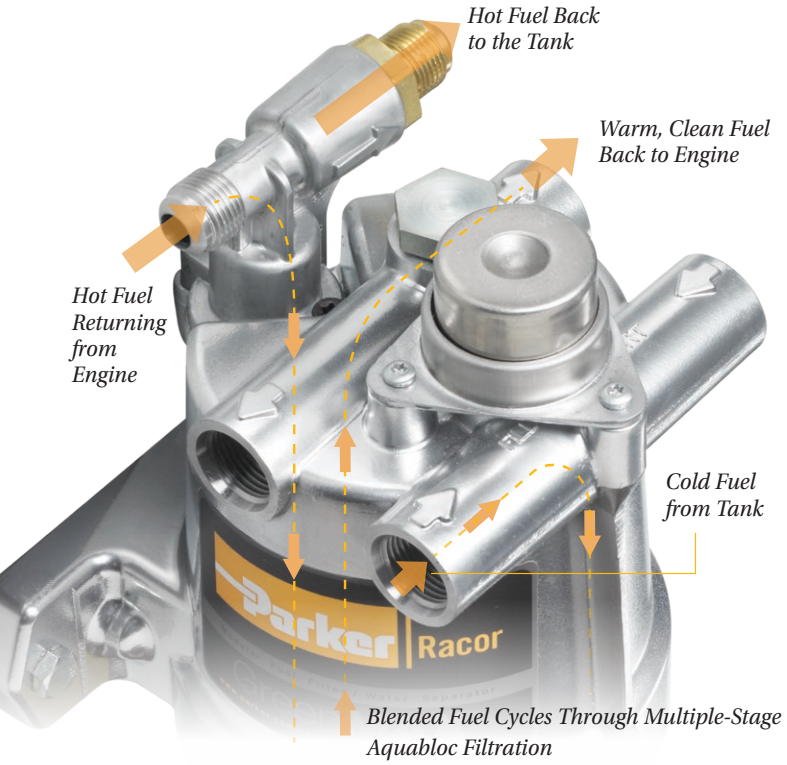
- A fuel filter/separator with replaceable cartridge element is the lowest-cost filtration solution.

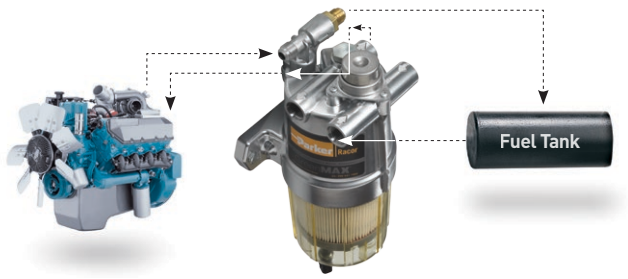
A patented filter ensures that the original Aquabloc replacement elements can be fitted – guaranteeing ongoing filtration quality, performance and warranty compliance.

GreenMAX Fuel Heating:

Go Fearlessly into the Cold.

Three heating options, including a patented engine return fuel recirculating technology, deliver free-flowing fuel even in the most severe weather conditions.





Engine Return Fuel Recirculation

The GreenMAX Fuel Filter Water Separator features an innovative patented technology that utilizes unused warm engine fuel returning to the tank to provide on-demand fuel heat transfer for cold weather operations. This cold weather feature melts the wax and paraffins that separate from diesel fuel at cold temperatures (cloud point) and restrict fuel flow during the filtration stage.

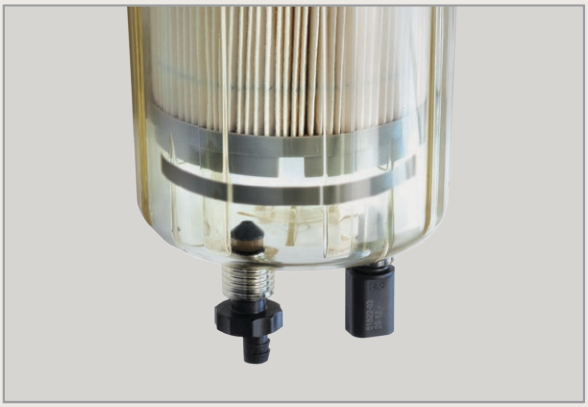
The recirculating valve is self-regulating, sensing fuel temperature and automatically closing once the fuel is warm, and returns hot fuel to the tank.

This option includes a fuel recirculation valve that is thermostatically controlled to direct engine return fuel into the GreenMAX prior to the filtration stage.

The engine return fuel is mixed with the GreenMAX incoming fuel flow from the fuel tank, providing optimum fuel temperature for efficient fuel filtration and engine performance.

When the fuel system temperature is stabilized for optimum fuel filtration and engine operation, the engine return fuel recirculation valve automatically redirects the engine return fuel to the fuel tank.

GreenMAX. The Compact Frame or Engine-Mount Filtration System.



Cold Start In-Head and In-Bowl Electric-Thermostatically Controlled Fuel Heating Options

To bring fuel quickly to operating temperatures in very cold conditions, optional 300W in-head heater and a 200W in-bowl heater are available. Both are thermostatically controlled and self-regulating, automatically shutting down once target fuel temperature is achieved.

To summarize GreenMax fuel heating options: Electric heaters help you get started; hot fuel recirculating keeps you running.

GreenMAX: General Specification

GreenMAX™ Fuel Filter/Water Separator	
Rated Flow Rate	150 GPH (568 LPH)
No. of Ports	Inlet Ports: 2, Outlet Ports: 2
Port Size	-10 SAE (7/8-14 UNF)
Hand Primer Pump	Optional
Micron Rating Available	2, 10, 30
Particulate Removal Efficiency (SAE J1985)	Min 98% (R61691T)
Water Removal Efficiency (SAE J1839)	Min 99% (R61691T)
Return Fuel Heat Valve (Thermostatically Controlled)	Optional: -8 SAE 45° Flare (3/4-16)
Electrical Heater 12 or 24 vdc	Optional (300W/200W)
Water Sensor	Optional (1/2-20 SAE port)
Vacuum (Maximum)	20" Hg
Ambient Temperature Range	-30° to +100° C
Maximum Fuel Temperature	85° C
Fuel Compatibility	Diesel fuel per ASTM D975 and Biodiesel blends up to B20 per ASTM D7467
Fuel Filter Change Indicator	Vacuum Gauge/Filter Minder/Vacuum Switch

Properties of biodiesel vary greatly and can have an impact on water separation performance.

Custom Options: Contact Racor

- Depth coalescing cartridge media
- Inlet & outlet port threading up to M22
- Short bowl
- Surface finishes and paint

FIRST FIT	DESCRIPTION
4400R02	GreenMAX FF/WS, W/Hand Primer Pump, 2 Micron
4400R10	GreenMAX FF/WS, W/Hand Primer Pump, 10 Micron
4400R30	GreenMAX FF/WS, W/Hand Primer Pump, 30 Micron
6600R02	GreenMAX FF/WS, 2 Micron
6600R10	GreenMAX FF/WS, 10 Micron
6600R30	GreenMAX FF/WS, 30 Micron
SERVICE	**DESCRIPTION**
R61691S	Element Assembly, GreenMAX 2 Micron
R61691T	Element Assembly, GreenMAX 10 Micron
R61691P	Element Assembly, GreenMAX 30 Micron
RK6165804	Engine Return Fuel Heat Kit

Worldwide Filtration Manufacturing Locations

North America

Compressed Air Treatment

Filtration & Separation/Balston
Haverhill, MA
978 858 0505
www.parker.com/balston

Filtration & Separation/Finite
Oxford, MI
248 628 6400
www.parker.com/finitefilter

Purification, Dehydration & Filtration Division
Lancaster, NY
716 685 4040
www.parker.com/pdf

Sales Office
Charlotte, NC
704 921 9303
www.parker.com/pdf

Engine Filtration & Water Purification

Racor
Modesto, CA
209 521 7860
www.parker.com/racor

Racor
Holly Springs, MS
662 252 2656
www.parker.com/racor

Racor
Beaufort, SC
843 846 3200
www.parker.com/racor

Racor – Village Marine Tec.
Gardena, CA
310 516 9911
desalination.parker.com

Hydraulic Filtration

Hydraulic Filter
Metamora, OH
419 644 4311
www.parker.com/hydraulicfilter

Process Filtration

Process Advanced Filtration
Oxnard, CA
805 604 3400
www.parker.com/processfiltration

Europe

Compressed Air Treatment

domnick hunter Industrial
England NE
+44 (0) 191 402 9000,
www.domnickhunter.com

Hiross Zander
Padova Business Unit
Angelo di Piove Padova, Italy
+39 049 9712 111
www.parker.com/hzd

Hiross Zander
Essen Business Unit
Essen, Germany
T +49 2054 9340, F +49 2054 934164
www.parker.com/hzd

Parker Gas Separations
Etten- Leur, Netherlands
+31 76 508 5300

Engine Filtration & Water Purification

Racor
England
+44 (0) 1924 487000,
www.parker.com/rfde

Racor Research & Development
Stuttgart Germany
+49 (0)711 7071 290-0
www.parker.com/racor

Hydraulic Filtration

Hydraulic Filter
Arnhem, Holland
+31 26 3760376
www.parker.com/eurofilt

Urjala Operation
Urjala as Finland
+358 20 753 2500
www.parker.com/fi

Condition Monitoring Center
Norfolk IP 24 1HP England
+44 1842 763299
www.parker.com/cmc

Process Filtration

domnick hunter Process
DH3 2SF England
T +44 (0) 191 410 5121
www.domnickhunter.com

Asia Pacific

Australia
NSW 2154, Australia
+61 2 9634 777
www.parker.com/australia

China
Shanghai 101206 China
+86 21 5031 2525
www.parker.com/china

India
Mahape, Navi Mumbai 400 709 India
T +91 22 5613 7081, 82, 83, 84, 85
www. parker.com/india

Japan
Yokohama-shi, 244-0003 Japan
T +81 45 870 1522
www.parker.com/japan

Korea
Hwaseong-City Gyeonggi-Do, Korea
T +82 31 359 0771
www.parker.com/korea

Singapore
Singapore 619 702
T +65 6887 6300
www.parker.com/singapore

Thailand
Bangkok 10250 Thailand
T +66 2717 8140
www.parker.com/thailand

Latin America

Parker Comercio Ltda.
Filtration Division
Sao Jose dos Campos
CEP 12225-390 SP Brazil
+55 12 4009 3500
www.parker.com/br

Pan American Division - Miami
Miami, FL
305 470 8800
www.parker.com/panam

Africa

Aeroport Kempton Park,
1620 South Africa
+27 11 9610700
www.parker.com/eu

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Parker Racor

Parker Hannifin Corporation
Filtration Group Global Headquarters
6035 Parkland Boulevard
Cleveland, OH 44124-4141
phone 216 896 3000
fax 216 896 4021
www.parker.com/racor