

500FG Turbine Series

Fuel Filter/Water Separator

Instruction Part Number 15332 Rev E



The Racor 500FG Turbine Series fuel filter/water separator protects the precision components of your engine from dirt, rust, algae, asphaltines, varnishes and especially water, which is prevalent in low distillate fuels. Contaminants are removed from fuel using the legendary three stage process described below.



Contact Information

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www.parker.com/racor

How It Works

Stage 1 - Separation

Using the fuel flow, the stationary turbine separates large solids and free water through enhanced centrifugal force.

Stage 2 - Coalescing

Smaller water droplets and solids coalesce on the conical baffle and fall to the collection bowl.

Stage 3 - Filtration

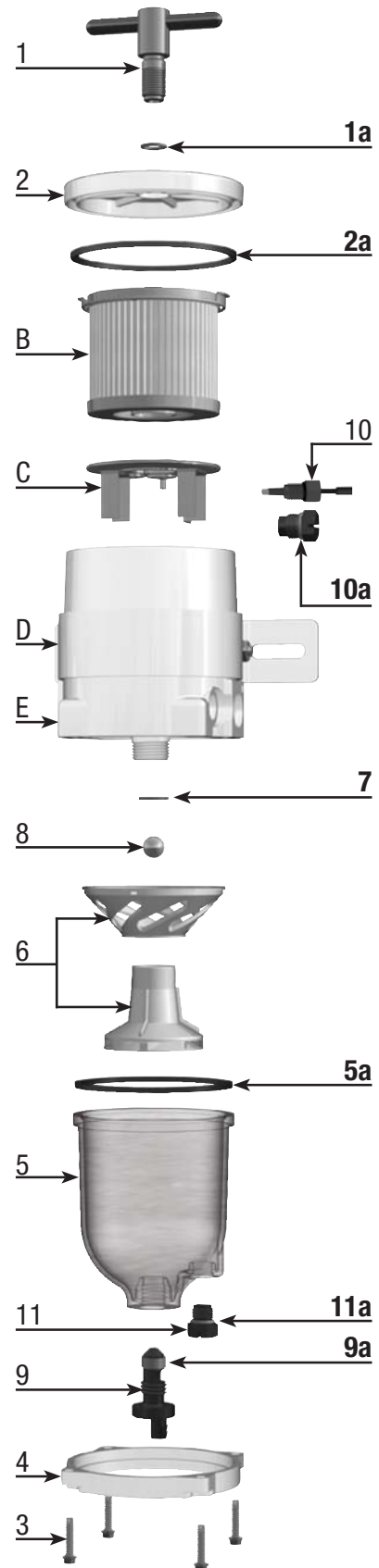
Engines will benefit from near 100% water separation and fuel filtration with Racor's proprietary Aquabloc® water repelling media. The replaceable filters are available in 2, 10, and 30 micron ratings.



ENGINEERING YOUR SUCCESS.

Parts and kits listed can be purchased from a Racor distributor.
Go to www.racorcustomers.com for a distributor near you.

Part Number		Description
1	RK 11888	T-handle and O-ring Kit (9/16" -18 UNF Threads) Hand Tighten
1a	11350	T-handle O-ring
2	RK 15078 (FG)	Lid Kit
2a	15005	Lid Seal
B	2010SM-OR (2 micron), 2010TM-OR (10 micron), or 2010PM-OR (30 micron)	Replacement Filter (All Models)
C	RK 15383-01	Heater Kit (12 vdc, 300 watt)
	RK 15383-02	Heater Kit (24 vdc, 300 watt)
3	RK 15081	Bowl Fasteners (4) Tighten to 60 in. lbs (6.78 Nm)
4	RK 15035 (FG)	Bowl Ring Kit
5	RK15405 (FG >2002) RK 15279-01 (FG <2002)	Clear Bowl Kit (includes 5, 5a, 9, 9a, 11, & 11a) Clear Bowl Kit (includes 5*, 5a, 11, & 11a)
5a	15374	Bowl Seal
6	RK 15013D	Turbine Centrifuge and Conical Baffle Kit Hand Tighten
7	(not sold seperately)	Check Ball Seal
8	RK 15010B	Check Ball Kit (includes 7)
9	RK 30476 (FG >2002)	Self-venting Drain Kit Tighten to 30 in. lbs (3.39 Nm)
9a	(not sold seperately)	Drain Gasket
10	RK 21067	Heater Feedthru Kit Tighten to 15 in. lbs (1.69 Nm)
	RK 11-1679	Feed-thru Plug Kit Tighten to 15 in. lbs (1.69 Nm)
10a	43506	Feedthru or plug O-ring
11	RK 21069	Water Probe Kit Tighten to 15 in. lbs (1.69 Nm)
	RK 20126 (FG)	Bowl Plug Kit Tighten to 15 in. lbs (1.69 Nm)
11a	(not sold seperately)	Water Probe or Plug O-ring
12	RK 11780 (FG <1993)	Drain Assembly Kit
12a	(not sold seperately)	Drain Seal (Finger)
12b	(not sold seperately)	Drain Body O-ring
12c	(not sold seperately)	Drain O-ring
13	RK 30488 (FG 1994-2002)	Drain Assembly
9a	(not sold seperately)	Drain Gasket
12b	(not sold seperately)	Drain Body O-ring
D	RK 15378 (FG)	Clamp Bracket Kit
	RK 11838	Carraige Bolt Kit
E	(not sold seperately)	500 Body/Housing



Turbine Series - 500MA/500MAM

FUEL

Specifications:

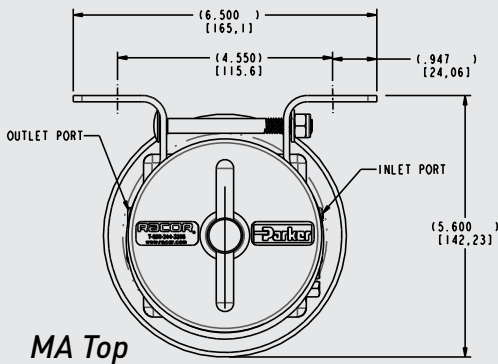
Height: MA - 10.82" (27.48 cm)
 MAM - 10.77" (27.36 cm)
Width: 4.15" (10.5 cm)
 with Bracket 6.5" (16.51 cm)
Depth: 4.15" (10.5 cm)
 with Bracket 5.17" (13.13 cm)
Weight: MA - 4.0 lbs (1.8 kg)
 MAM - 5.0 lbs (2.2 kg)
Ports: 3/4"-16 UNF (SAE J1926)
Service Clearance (Top): 4.0" (10.16 cm)
Vacuum Installation Recommended
Maximum Pressure: 15 psi (1.03 bar)
Max Flow Rate: 60 gph (227 lph)

Create a Part Number

Housing Type	Assembly Options	Filtration Rating
Turbine Model - Marine Standard 3/4"-16 Ports Clear Bowl/Heat Shield	Metal Bowl Option	2 micron 10 micron 30 micron
500MA	M	2 10 30

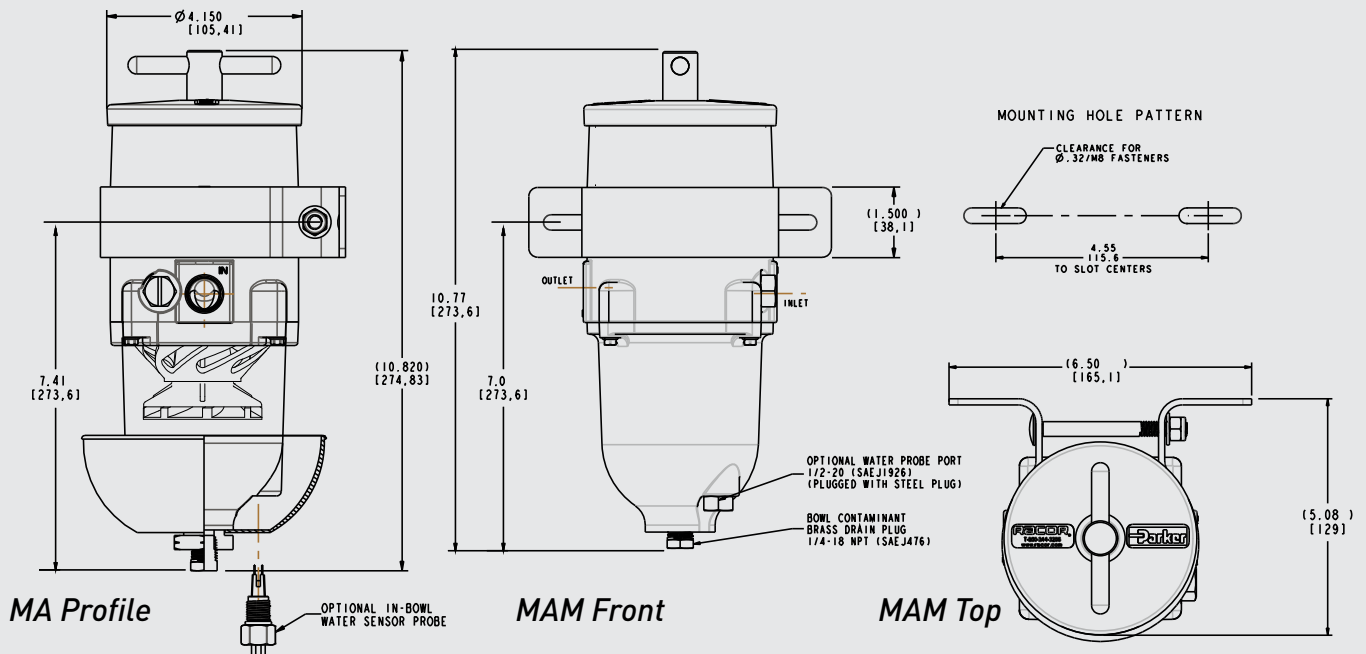
RACOR®

Dimensions:



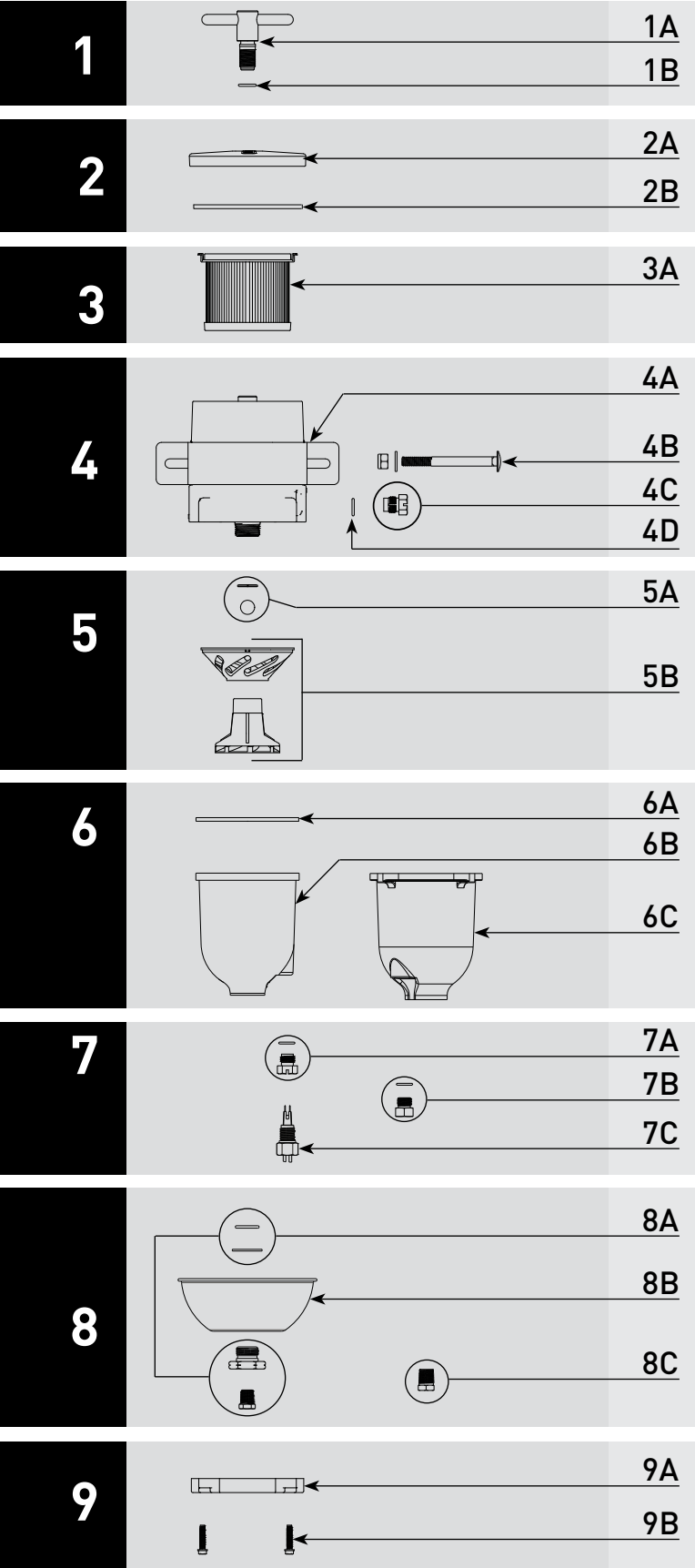
ASSEMBLY	DESCRIPTION
500MA2	Marine - 500 Turbine Assy., 2 micron Filter
500MA10	Marine - 500 Turbine Assy., 10 micron Filter
500MA30	Marine - 500 Turbine Assy., 30 micron Filter
500MAM2	Marine - Metal Bowl - 500 Turbine Assy., 2 micron Filter
500MAM10	Marine - Metal Bowl - 500 Turbine Assy., 10 micron Filter
500MAM30	Marine - Metal Bowl - 500 Turbine Assy., 30 micron Filter

SINGLE ASSEMBLY



PARTS

Turbine - 500MA/500MAM



Part #		Description
1A	RK23183 RK19671	T-handle Kit - Includes 1B <i>Optional</i> - T-handle Vacuum Gauge Kit - For 500MA/MAM Assemblies Manufactured After 2002
	1B	T-handle O-ring
2A	RK15078-02	500MA/MAM Lid Kit - Includes 1B and 2B
2B		Lid Gasket - Included in 10A
3A	2010SM-OR	Replacement Element 2 micron - Includes 1B and 2B
	2010TM-OR	Replacement Element 10 micron - Includes 1B and 2B
	2010PM-OR	Replacement Element 30 micron - Includes 1B and 2B
4A	RK15441-01	Clamp Bracket Kit - Includes (1) Bolt, (1) Washer, and (1) Nut
4B	RK 11838	Carriage Bolt Kit - Includes (2) Bolt, (2) Washer, and (2) Nut
4C	RK 11-1679	Feed-thru Plug Kit - Includes 4D
4D		Plug O-ring - Included in 10A
5A	RK 15010B	Checkball and Gasket Kit
5B	RK 15013D	Centrifuge and Baffle Kit - Includes 5A and 6A
6A		Bowl Gasket - Included in 10A
6B	RK 15279-01	Bowl Kit (Clear) - Includes 6A, 7A and 8A Seal/Gasket
6C	RK 15301-02	Bowl Kit (Metal) - Includes 6A, 7B, 8C and 9B
7A	RK 20126	Bowl Plug Kit (MA) - Nylon - 1/2"-20 UNF
7B	RK 20022	Bowl Plug Kit (MAM) - Metal - 1/2"-20 UNF
7C	RK 21069	WIF Probe Kit - 1/2"-20 UNF - 2-wire (MA) - <i>Requires 10B</i>
	RK23191	WIF Probe Kit (Stainless Steel) - 1/2"-20 UNF - 2-wire (MAM) - <i>Requires 10B</i>
8A	RK 11-1910	Drain Plug Kit (MA)
8B	RK 15104	Heat Deflector (MA) - Includes 8A
8C		Drain Plug (MAM) - <i>Contact Technical Support</i>
9A	RK 15035-01	Bowl Ring - (For MA Only - White) Includes 6A
9B	RK 15081	Bowl Fasteners (set of 4)

Accessories and Parts Available (Not Shown)

10A	RK 15211	Complete Seal Service Kit - 500 Series Filters
10B	RK 14329	Water Detection Module - 12 vdc
	RK 14321	Water Detection Module - 24 vdc
10C	RK 19492	Shut-off Valve Drain Kit - UL Listed



Turbine Series - 75500FGX

FUEL

Specifications:

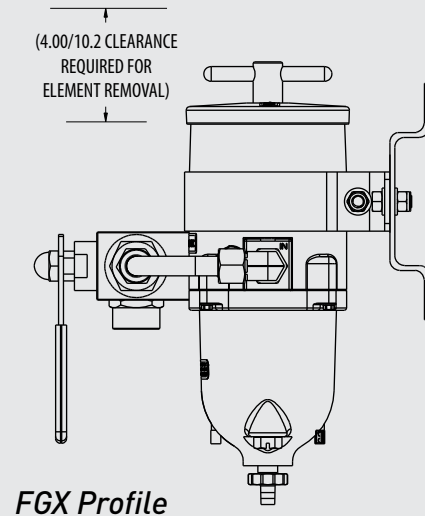
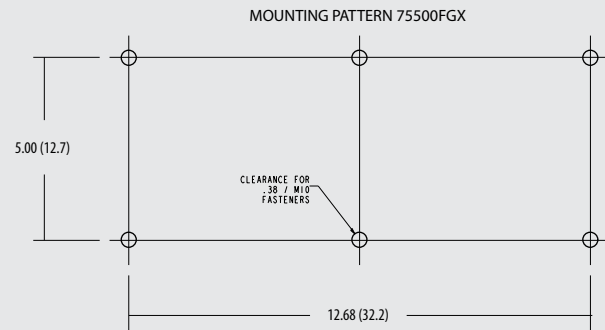
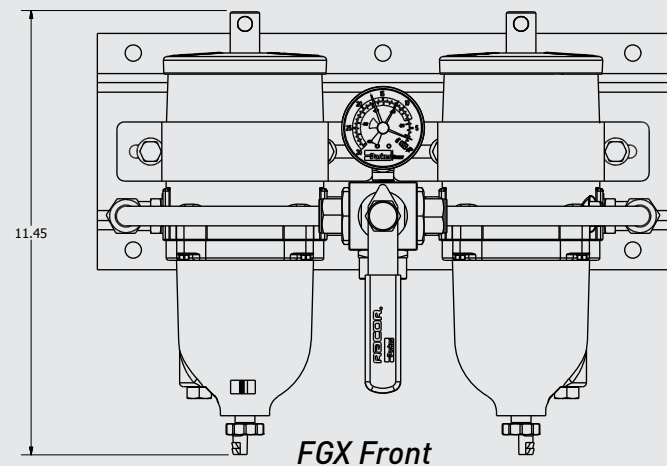
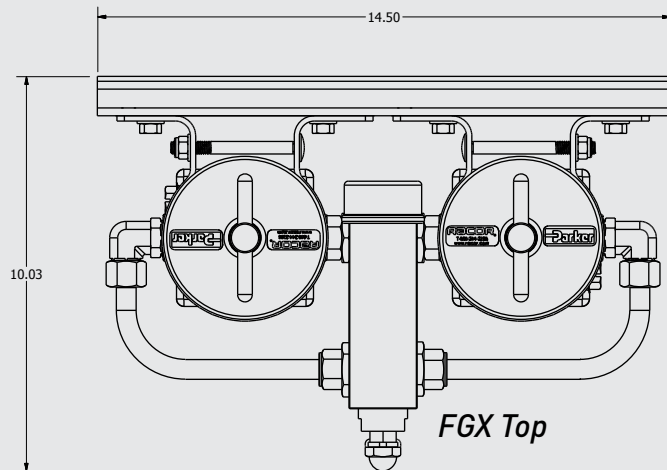
Height: 11.45" (29.08 cm)
Width: 14.5" (36.8 cm) with Bracket
Depth: 10.03" (25.5 cm) with Bracket
Weight: 17.0 lbs (7.7 kg)
Valve Ports: 3/4"-16 UNF
 (SAE J1926 O-ring Boss)
Service Clearance (Top): 4.0" (10.16 cm)
Vacuum Installation Recommended
Maximum Pressure: 15 psi (1.03 bar)
Max Flow Rate: 120 gph (454 lph)

Create a Part Number

Housing Type	Dual Assembly	Filtration Rating	Turbine Model 60/120 GPH Flow Rate	Valve Type	6-Port Ball Valve	Filtration Rating	2 micron 10 micron 30 micron
75	500FG	X	2 10 30				

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Dimensions:



ASSEMBLY	DESCRIPTION
75500FGX2	Dual 500 Turbine Assy., 2 micron Filter
75500FGX10	Dual 500 Turbine Assy., 10 micron Filter
75500FGX30	Dual 500 Turbine Assy., 30 micron Filter

DUAL ASSEMBLIES

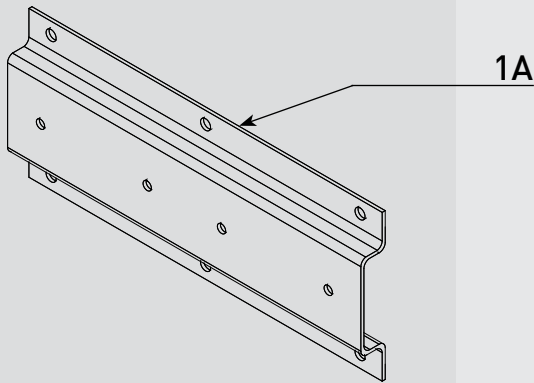


WARNING: The products described in this literature can expose you to chemicals including Diisononyl phthalate, Carbon black extract, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

PARTS

Turbine Series - 75500FGX

1



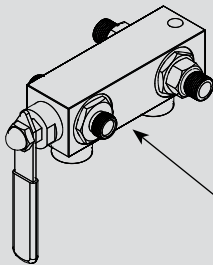
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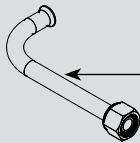
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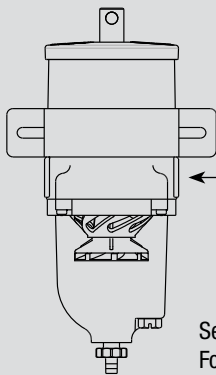
3A

4



4A

5



5A

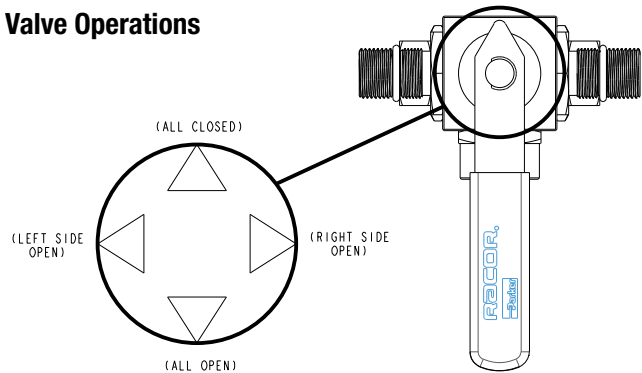
See RSL0288
For Complete 500FG
Parts Breakdown

Part #	Description
1A	Mounting Bracket - Bracket only
2A RK19669 RK19667	Vacuum Gauge (30" Hg) - 3 needles: Theshold (red), Max Change Out (Red - Adjustable), Gauge (Black) <i>Optional</i> - Compound Gauge Kit (Vacuum 30" HG / Pressure 15psi)
3A RK 15390 RK 15419	6-Port Ball Valve - 1.5 in. Body Valve Rebuild Kit - For 2.0 in. Valve Body Only
4A RK 15391	Rigid Tubing Kit - Includes (1ea.) Tube, Ferrule and Fitting
5A	Turbine Fuel Filter - 500FG Series See Cutsheet RSL0288 for available Parts and Accessories

Accessories and Parts Available (Not Shown)

6A	RK 15211	Complete Seal Service Kit - 500 Series Filters (<i>Requires 2</i>)
6B	RK33802	WIF Probe Kit - 1/2"-20 UNF - Requires 6D
6C	RK30880E	WIF Sensor and Light Kit - 1/2"-20 UNF
6D	RK 14329 RK 14321	Water Detection Module - 12 vdc Water Detection Module - 24 vdc
7A	2010SM-OR 2010TM-OR 2010PM-OR	Replacement Element 2 micron Replacement Element 10 micron Replacement Element 30 micron
8A		Bowl Gasket - Included in 6A
8B	RK15405	Bowl Kit (2002 to Present) - Includes 8A, 9A and 9B **Bowl has 5/8"-11 drain port
8C	RK 15279-01	Bowl Kit (Before 2002) - Includes 8A and 9B **Bowl has 7/8"-14 drain port
9A		Self-venting Drain Kit (<i>2002 to Present - Use with 8B</i>)
9B	RK 20126	Bowl Plug Kit
9C	RK 30488	Self-venting Drain Kit (<i>Before 2002 - Use with 8C</i>)

Valve Operations



Turbine Series - 75500MAX-MAXM

FUEL

Specifications:

Height: MAX/MAXP 11.5" (29.21 cm)
MAXM 10.58" (29.08 cm)

Width: 14.5" (36.8 cm) with Bracket

Depth: 9.88" (25.1 cm) with Bracket

Weight: 17.0 lbs (7.7 kg)

Ports: 3/4"-16 UNF-2B
(SAE J1926 O-ring Boss)

Service Clearance (Top): 4.0" (10.16 cm)

Vacuum Installation Recommended
Maximum Pressure: 15 psi (1.03 bar)

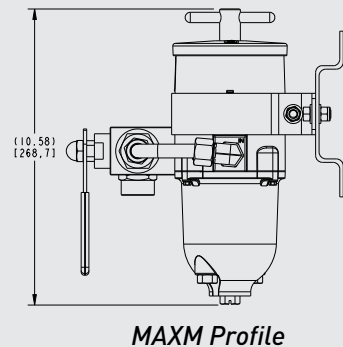
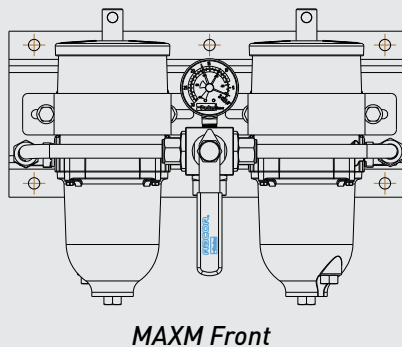
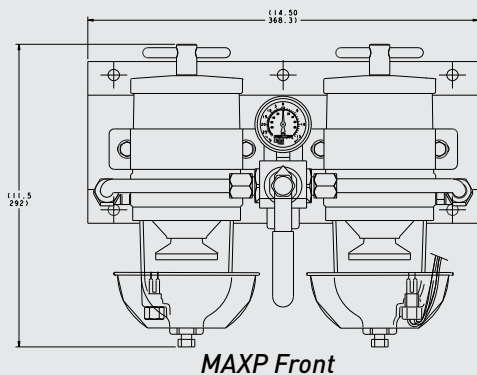
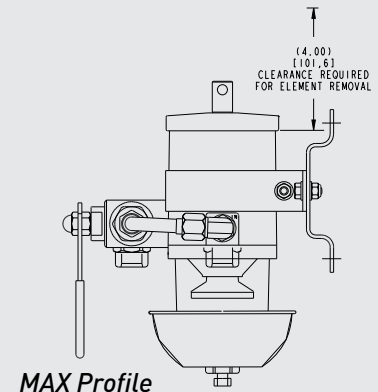
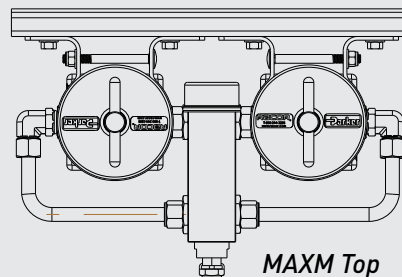
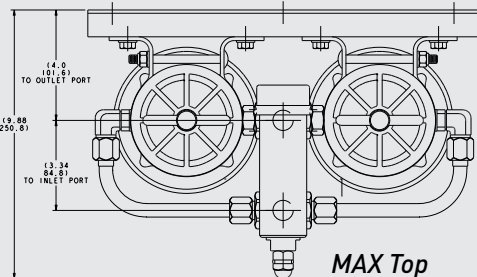
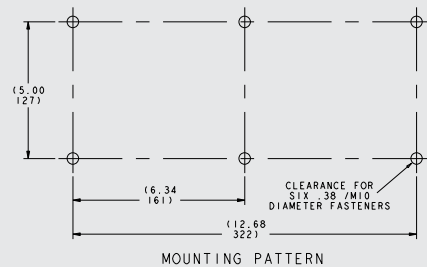
Max Flow Rate: 120 gph (454 lph)

Create a Part Number

Housing Type	Dual Assembly	75
Filtration Model	Turbine Model 60/120 GPH Flow Rate	500MA
Valve Type	6 Port Valve	X
Assembly Options	Metal Bowl Option WIF Probe Option	M P
Filtration Rating	2 micron 10 micron 30 micron	2 10 30

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Dimensions:



ASSEMBLY	DESCRIPTION
75500MAX2	Marine - Dual 500 Turbine Assy., 2 micron Filter
75500MAX10	Marine - Dual 500 Turbine Assy., 10 micron Filter
75500MAX30	Marine - Dual 500 Turbine Assy., 30 micron Filter
75500MAXM2	Marine - Metal Bowl - Dual 500 Turbine Assy., 2 micron Filter
75500MAXM10	Marine - Metal Bowl - Dual 500 Turbine Assy., 10 micron Filter
75500MAXM30	Marine - Metal Bowl - Dual 500 Turbine Assy., 30 micron Filter
75500MAXP30	Marine - Dual 500 Turbine Assy., Water Sensor Probe, 30 micron Filter

DUAL ASSEMBLIES

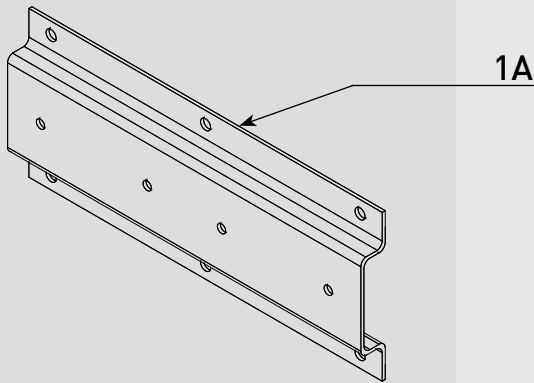


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PARTS

Turbine Series - 75500MAX-MAXM

1



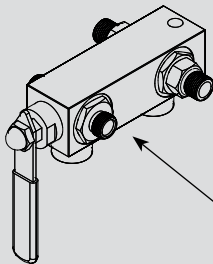
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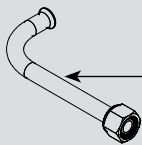
2A

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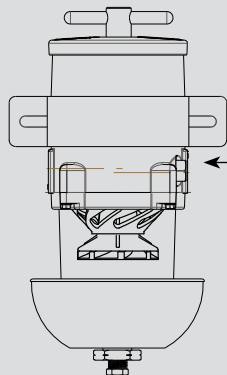
3A

4



4A

5



5A

See RSL0289
For 500MA/MAM
Parts Breakdown

Part #	Description
1A	Mounting Bracket - Bracket only (Tan)
2A	RK19669 Vacuum Gauge (30" Hg) - 3 needles: Theshold (red), Max Change Out (Red - Adjustable), Gauge (Black) RK19667 <i>Optional</i> - Compound Gauge Kit (Vacuum 30" HG / Pressure 15psi)
3A	RK 15390 6-Port Ball Valve - 1.5 in. Body RK 15419 Valve Rebuild Kit - For 2.0 in. Valve Body Only
4A	RK 15391 Rigid Tubing Kit - Includes (1ea.) Tube, Ferrule and Fitting
5A	Turbine Fuel Filter - 500MA/MAM Series See Cutsheet RSL0289 for available Parts and Accessories

Accessories and Parts Available (Not Shown)

6A	RK 15211	Complete Seal Service Kit - 500 Series Filters (<i>Requires 2</i>)
6B	RK 21069	WIF Probe Kit - 1/2"-20 UNF - 2-wire (MA) - Requires 6C
	RK23191	WIF Probe Kit (Stainless Steel) - 1/2"-20 UNF - 2-wire (MAM) - Requires 6C
6C	RK 14329	Water Detection Module - 12 vdc
	RK 14321	Water Detection Module - 24 vdc
7A		Bowl Gasket - Included in 6A
7B	RK 15279-01	Bowl Kit (Clear) - Includes 7A, 8A and Drain Seal/Gasket
7C	RK 15301-02	Bowl Kit (Metal) - Includes 7A, 8B, 9C and 10B
8A	RK 20126	Bowl Plug Kit (MA) - Nylon - 1/2"-20 UNF
8B	RK 20022	Bowl Plug Kit (MAM) - Metal - 1/2"-20 UNF
9A	RK 11-1910	Drain Plug Kit (MA)
9B	RK 15104	Heat Deflector (MA) - Includes 9A
9C		Drain Plug (MAM) - <i>Contact Technical Support</i>
10A	RK 15035-01	Bowl Ring - (For MA Only - White) Includes 7A
10B	RK 15081	Bowl Fasteners (set of 4)
11A	2010SM-OR	Replacement Element 2 micron
	2010TM-OR	Replacement Element 10 micron
	2010PM-OR	Replacement Element 30 micron

Valve Operations

