





INSTALLATION INSTRUCTIONS

HIGH FLOW FUEL FILTER

Support: info@radiumauto.com
 Document# 19-0105

WARNING: DO NOT EXPOSE WORK AREA TO ANY SPARKS OR FIRE. DO NOT SMOKE WHILE OPERATING ON THE FUEL SYSTEM. CLEAN UP ALL FUEL SPILLS IMMEDIATELY. WORK IN A WELL VENTILATED AREA.

The Radium fuel filter housing is designed for high fuel pressures < 200psi. Please reference the chart below describing each available element and illustrating where the filter should be plumbed in the system.

	Micron Rating	Reusable	Best Use	Compatibility	Notes
 CELLULOSE PAPER	10µm Nominal 92% Efficiency	No	Post Pump	Gasoline Diesel	-Excellent filtration -Most economical element -Most commonly used element -No maintenance but requires replacing
 MICRO FIBERGLASS	6µm Absolute 99.9% Efficiency	No	Post Pump	Gasoline Diesel E85* Ethanol* Methanol*	-Excellent element for all applications -Newest advanced technology offering the highest filtration efficiency available on the market -No maintenance but requires replacing
 STAINLESS CLOTH FINE	10µm Nominal	Yes	Pre or Post Pump	Gasoline Diesel E85* Ethanol* Methanol*	-Excellent filtration -Superior compatibility with all fuels -Requires occasional cleaning to maintain optimal flow rate.
 STAINLESS CLOTH COARSE	100µm Nominal	Yes	Pre Pump	Gasoline Diesel E85* Ethanol* Methanol*	-Excellent prepump filter for any application -Low pressure drop prevents fuel pump cavitation -Superior compatibility with all fuels

* Alcohols may reduce service life if poor quality fuel or excessive water absorption is present. To prevent, use high-quality fuel mixtures and purge alcohol fuels from the fuel system when the vehicle is stored for long periods.

PLUMBING

The inlet and outlet ports are threaded for -10AN ORB (7/8"-14 O-Ring). Adapter fittings are available for a wide variety of hose connections. **DO NOT USE ANY TYPE OF THREAD SEALANT ON ADAPTER FITTING THREADS.** Generously lubricate the adapter fitting O-rings with oil and tighten in place.

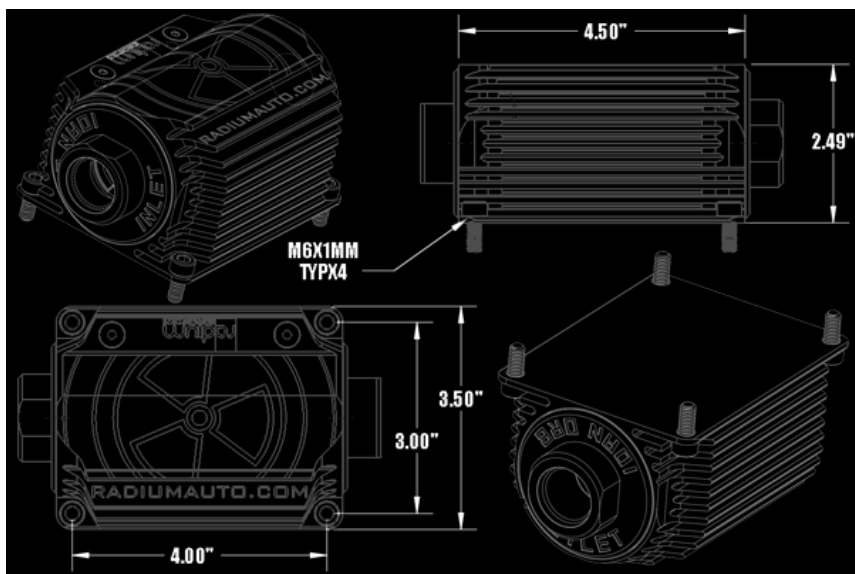
For proper flow direction, the BLACK end cap signifies the filter INLET and the GREEN end cap indicates the filter OUTLET. The GREEN cap also denotes the end to remove for servicing the filter element.



MOUNTING

Select a suitable location that is clear of moving components, high heat sources, and high current electrical components. The Radium Engineering filter should be positioned so that fuel hoses can be routed without kinks or sharp bends.

If using one of the Radium Engineering clamps, ensure there is a solid mounting surface.



If installing a **20-0218 2-Piece Clamp** (shown above), use the included M5x.8mm nuts and bolts. All bolts require a 4mm Allen wrench. The nuts require an 8mm wrench.

If installing the **20-0221 Heat Exchanger Mount** (shown left), it is imperative that it is placed near cool circulating air for proper heat transfer. Slide the filter body through the unit and fasten the 2 countersink screws with a 3mm Allen wrench. Use the four included M6x1mm bolts to secure to a cool flat surface for maximum conductivity. Fasten down with a 5mm Allen wrench.

SERVICING

If possible, take pressure readings while the fuel pump is running before and after the filter. If the difference is more than 10psi, the element should be replaced. To replace the filter element, unscrew the GREEN "outlet" end cap from the filter body, as shown. All other components can stay intact. NOTE: the large O-ring should be lubricated when reassembled.

When inspecting the element, look for excess buildup of contaminants. If the element inspection reveals no significant contaminant buildup, continue to use the filter and inspect at the next interval according to the following schedule.



<i>P/N</i>	<i>ELEMENT</i>	<i>FUEL</i>	<i>INSPECTION</i>	<i>SERVICE ACTION</i>
18-0025-01	Cellulose	Gasoline	10,000 miles	Replace as needed
		Alcohols, Diesel	5,000 miles	
18-0025-05	Microglass	Gasoline	8,000 miles	Replace as needed
		Alcohols, Diesel	3,000 miles	
18-0025-03	Stainless, Fine	Gasoline	10,000 miles	Preferred cleaning method: Ultrasonic solvent bath Alternative cleaning method: Carb cleaner followed by light air blast from inside out
		Alcohols, Diesel	5,000 miles	
18-0025-04	Stainless, Coarse	Gasoline	15,000 miles	Preferred cleaning method: Ultrasonic solvent bath Alternative cleaning method: Carb cleaner followed by light air blast from inside out
		Alcohols, Diesel	10,000 miles	

NOTE: A vehicle that is inactive for a long period of time should have the fuel system drained to prevent gelling of the fuel and water absorption. Failure to do this could lead to premature clogging of the filter element.