

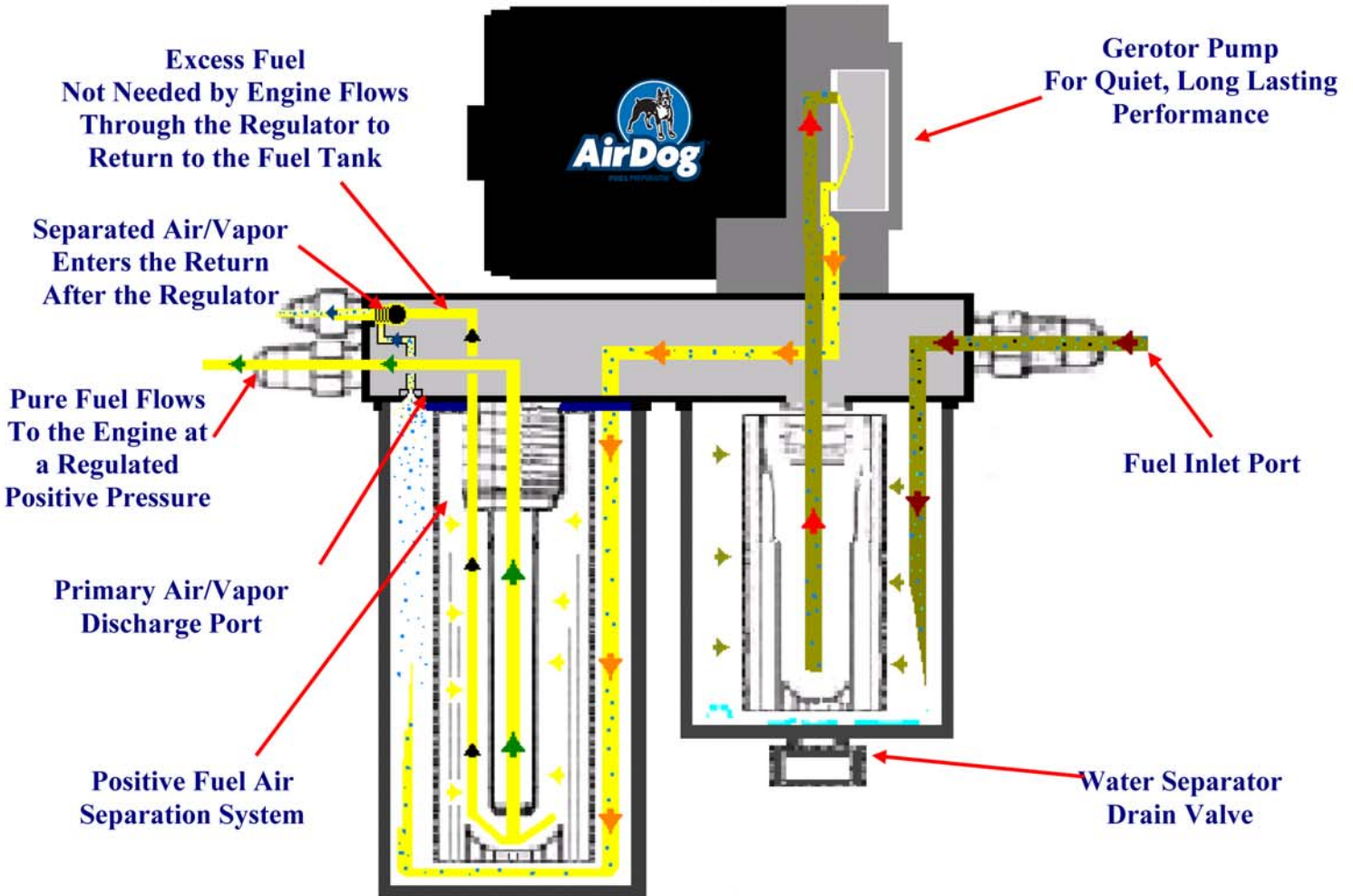


Fuel Preparator®

The Original Fuel Air Separation System!

First Commercial System for Class 8 Trucks Sold March 15, 1993

How the Original Fuel Air Separation System Works!

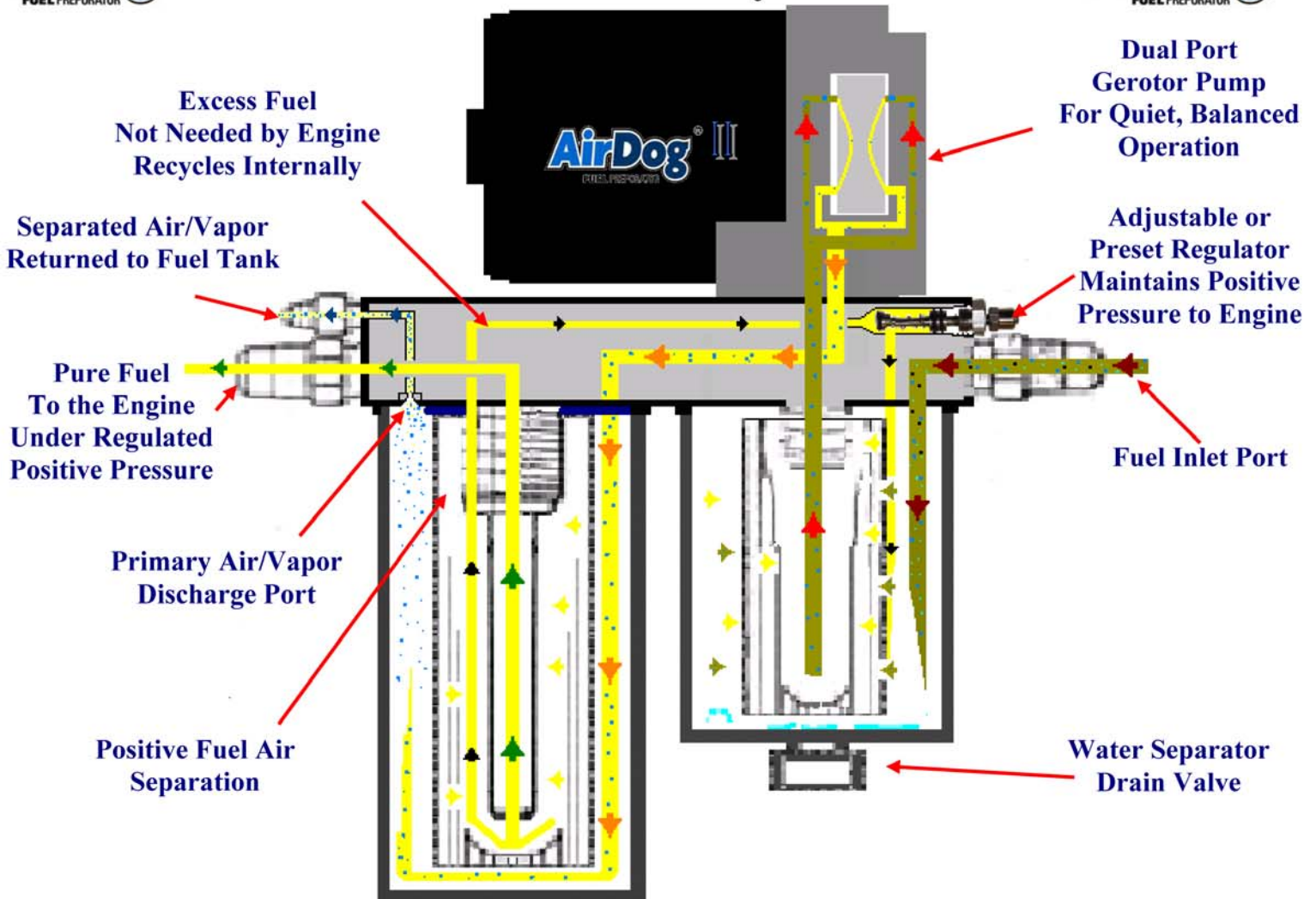




The AirDog® Fuel Preparator®, with the capability to provide fuel at flows and pressures beyond the maximum requirements of the engine, receives fuel under vacuum from the fuel tank containing entrained air/vapor, particulate contaminants and unknown quantities of water (●●●●●). The fuel passes through the water separator which removes the water and large particulate contaminants that could damage or jam the gerotor fuel pump. The fuel, with only entrained air/vapor and tiny particulate contaminants remaining (●●●●●), enters the fuel pump.



The fuel, now under positive pressure flow (●●●●●), enters the filter. As the fuel passes through the filter media and the remaining particulate contaminants are caught and contained, the entrained air/vapor is also separated. Through the POSITIVE FUEL AIR SEPARATION FEATURES of the PATENTED FUEL PREPARATOR® the separated air/vapor (●●●●●) is discharged from the filter through the Primary Air/Vapor Discharge Port and into the return to tank passage after the regulator.



The fuel passing through the filter media {free of contaminants & power robbing air/vapor and at pressures and flows to meet the needs of the engine} exits the fuel filter through two passageways. The fuel for the engine (●●●●●), passes into the fuel pickup tube and out to the engine. The excess fuel (●●●●●) not needed by the engine is released through the pressure regulator to combine with the air/vapor and foam as it returns to the fuel tank.

The Fuel Preparator®II Demand Flow System Fuel Air Separation System! How the Demand Flow System Works!



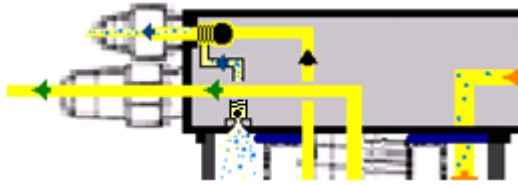
The AirDog®II, designed with the capability to provide flows and pressures beyond the maximum requirements of the engine, receives fuel under vacuum from the fuel tank containing entrained air/vapor, particulate contaminants and unknown quantities of water (). The fuel passes through the water separator which removes the water and the large particulate contaminants that could damage or jam the gerotor fuel pump. The fuel, with only entrained air/vapor and tiny particulate contaminants remaining (), enters the fuel pump.

The fuel under positive pressure flow (), enters the fuel filter. As the fuel passes through the filter media and the remaining particulate contaminants are caught and contained, the entrained air/vapor is also separated. Through the POSITIVE FUEL AIR SEPARATION FEATURES of the PATENTED FUEL PREPARATOR® the separated air/vapor () is discharged from the filter and sent back to the fuel tank through the Primary Air/Vapor Discharge Port.

The fuel passing through the filter media {free of contaminants & power robbing air/vapor and at pressures and flows to meet the needs of the engine} exits the fuel filter through two passageways. The fuel for the engine (), passes into the pickup tube and out to the engine. The excess fuel () not needed by the engine recycles internally through the pressure regulator back to the water separator.

New Technology of the *AirDog®II*

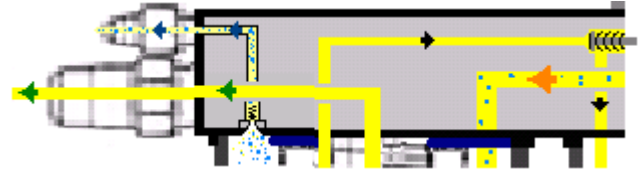
Original AirDog®



Original AirDog®

with “Positive Air/Vapor separation” returns the excess fuel to the fuel tank. The separated air/vapor, exits the filter through the “Primary Air/Vapor” discharge port, entering the “return to tank” passageway after the regulator for positive air/vapor removal!

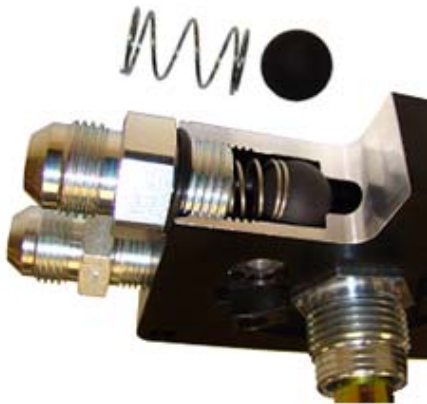
AirDog®II



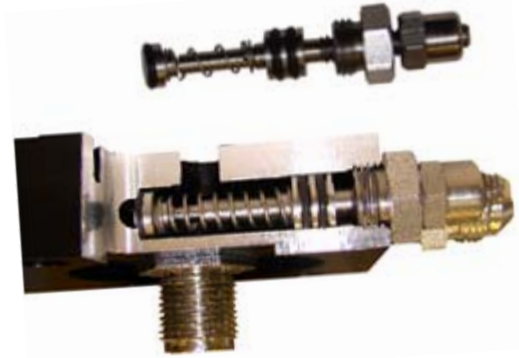
AirDog®II Demand Flow

with “Positive Air/Vapor Separation” draws only the fuel needed by the engine, minimizing the fuel draw from the fuel tank. Fuel recycles internally for additional “multi-pass” filtration. The separated Air/Vapor & Foam return to the fuel tank via the “Primary Air/Vapor” discharge port.

Pressure Regulator



Original Ball and Spring Regulator Design. This regulator design has been used in the Fuel Preparator® successfully since 1994!



NEW ADJUSTABLE STAINLESS STEEL REGULATOR with Guaranteed “No Leak” Double O’ring Seal System, and Soft Seat Positive Seal Piston!

Gerotor Fuel Pump



Single Vacuum & Pressure Port Gerotor Pump Design for lower pressure systems!

Maximum efficiency with minimum wear, for long life and quiet operation!



Dual Port Gerotor Pump Design for High Pressure and High Flow Systems!

Feeds the gerotor from both sides for maximum flow and efficiency. Discharges from both sides on, balancing the gerotor, eliminating gear clash, noise, & wear for smooth, quiet, long lasting performance!



Extra Features of the **AirDog®II**

Dodge Cummins



Original AirDog®

AirDog®II

Model	*Max Flow	*Operating Pressure
FP-100	100 GPH	Preset-15/17 PSI
FP-150	150 GPH	Preset-15/17 PSI

Model	*Max Flow	*Operating Pressure
DF-100	100 GPH	Preset-15/17 PSI
DF-150	150 GPH	Preset-15/17 PSI
DF-165	150 GPH	ADJUSTABLE
DF-200	200 GPH	ADJUSTABLE



Original AirDog®

Air/Vapor & Fuel Return



The Original AirDog® returns excess fuel and air/vapor through the fuel return manifold installed in the filler tube.



The Original AirDog® 150 and the 100, when installed on a vehicle with an in-tank fuel pump, require installing a "Draw Straw".



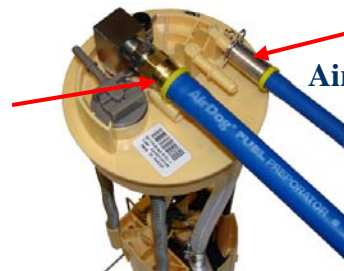
AirDog®II Limited Edition

Air/Vapor & Foam Return



The AirDog®II includes a Fuel Module Up-Grade Kit in all DF-100's installed on trucks with an in-tank fuel pump and all DF-150, DF-165, and DF-200 systems.

AirDog®II Suction Line



AirDog®II Air/Vapor Return

All Dodge AirDog®II DF-150's, DF-165's, and DF-200's installation kits include the Fuel Module Up-Grade Kit. The DF-100 also includes the up-grade kit when installed on a Dodge with an In-Tank fuel pump.

**AIRDOG®II DEMAND FLOW TECHNOLOGY Draws Fuel Straight From the Module!
NO MORE Quarter Tank Fuel Problems!
NO MORE Drilling Holes in Your Fuel Tank to Install an Aftermarket Draw Straw!**

*Max Flows decrease as pressures increase!



Extra Features of the **AirDog®II**

Chevy DuraMax



Original AirDog®

AirDog®II

Model	*Max Flow	*Operating Pressure
FP-100	100 GPH	Preset -8/10 PSI
FP-150	150 GPH	Preset -8/10 PSI

Model	*Max Flow	*Operating Pressure
DF-100	100 GPH	Preset -8/10 PSI
DF-150	150 GPH	Preset -8/10 PSI
DF-165	150 GPH	ADJUSTABLE
DF-200	200 GPH	ADJUSTABLE

Chevy DuraMax Installation Features

AirDog®

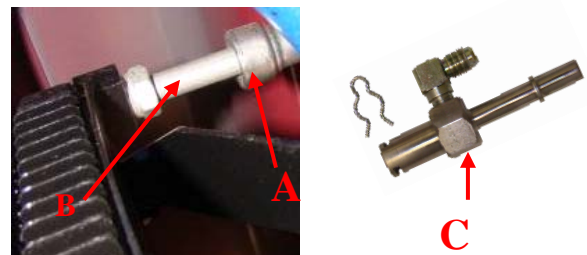
Air/Vapor & Fuel Return



To install the Original AirDog® return line, cut out a section of the flexible filler tube coupler, then insert and clamp the Fuel Return Manifold. Connect the fuel return line to the manifold.

AirDog®II

Air/Vapor & Foam Return



To install the AirDog®II, simply remove the OE quick connect fitting (A) from the fuel return cooler (B), push and clip the special AirDog® return fitting (C) onto the cooler tube, reconnect the OE quick connect. Connect the AirDog®II air/vapor return line to the -4 JIC fitting.

Fuel Suction Line



Pull back the aluminum cover, disconnect the original fuel suction line and connect the AirDog® quick connect to the suction tube.



Fuel from the AirDog® & AirDog®II to the engine connect with the vehicle's fuel system through a quick connect fitting that attaches to the 1/2" fuel line located at the front/top of the fuel tank.

Fuel Suction Line



Disconnect the fuel tank suction line from the steel line at the front of the fuel tank and plug in the PureFlow® AirDog®II male quick coupler fitting. Makes installation quick and easy!



*Max Flows decrease as pressures increase!



Extra Features of the *AirDog®II* Ford PowerStroke



Original AirDog®

AirDog®II

Supplies Fuel to Ford's High Pressure Pump

Alternative for the PowerStroke High Pressure Pump

Model	*Max Flow	*Operating Pressure
FP-100	100 GPH	Preset-10 PSI
FP-150	150 GPH	Preset-10 PSI

Model	*Max Flow	*Operating Pressure
DF-90/55	90 GPH	Preset-55 PSI
DF-130/55	130 GPH	Preset-55PSI
DF-130/75	130 GPH	ADJ. 45/75 PSI

Ford PowerStroke Installation Features



Original AirDog®

AirDog®II
Limited Edition



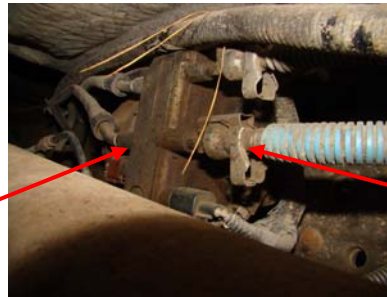
The AirDog® connects to the inlet port of the *HIGH PRESSURE PUMP* on Ford's 7.3L PowerStroke engine with a 5/16" quick connect.



The AirDog®II connects to the *HIGH PRESSURE* line to the 7.3L PowerStroke engine with a PureFlow® Brand 1/2" Hose Barb x 5/16" Male Quick Coupler.



The AirDog® connects to the inlet port of the *HIGH PRESSURE PUMP* on Ford's 6.0L PowerStroke engine with a 3/8" quick connect.



The AirDog®II connects to Ford's 6.0L PowerStroke diesel with the PureFlow 1/2" x 3/8th inch Male Quick Coupler that plugs directly into the *HIGH PRESSURE* line to the engine.



Original AirDog® connects to fuel inlet port with a 1/2" quick connect fitting.



AirDog®II High Pressure system connects to the fuel line to the engine with a PureFlow® 1/2" hose barb x 1/2" Male Quick Coupler.



*Max Flows decrease as pressures increase!