INDUSTRIAL
Fuel Air Separation System

INSTALLATION MANUAL

For Trucks Equipped with
Paccar MX-13 Diesel Engines
No Frame Mounted Fuel Water Separator





Revised 11/2/2026

NOW WITH DEMAND FLOW



PROUDLY MADE IN THE USA

www.airdogdiesel.com
1-573-635-0555 or
1-877-463-4373

Providing "Test Cell Performance" in "Real World Conditions" Since 1993

PATENT
www.AirDogDiesel.com/patents

AirDog® INDUSTRIAL Fuel Air Separation System

THE RIGHT CHOICE FOR YOUR DIESEL ENGINE

4G-HD Fuel Pump

Pump shaft, stabilized with bearings on each end, holds the gerotor in virtually perfect alignment for quiet running and extended longevity!



Low Fuel Pressure Switch and LED Indicator
Lets you know when to service the fuel filter and water separator before suffering power loss. NO MORE GUESSING!

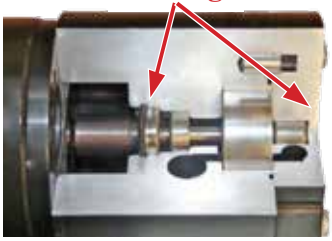


Positive Air Separation
with primary air discharge port.



Demand Flow System
Easy installation, only one small line connected to the engine return line to return air/vapor to the tank.

Bearings





Drain Valve



Protective Wire Screen
In water separator nipple.



LoveJoy Coupler System
The LoveJoy Coupler System is self-aligning and eliminates virtually all vibrations.



Dual Port Pump
Balances the gerotor for quiet operation and higher flows.



Adjustable Regulator
For just the right fuel pressure.

Particulate Filters Featuring Long-Lasting Synthetic Media

Water Separator/Pre-Filter with Drain Valve

CARB Executive Orders D-595-5 & D-595U-6 permit the advertisement, sales and installation of PureFlow Technologies AirDog® Diesel Fuel Systems in California on 2020 and older model year on-road diesel vehicles and off-road diesel vehicles/equipment.

HEAVY DUTY & INDUSTRIAL
Fuel Systems
PureFlow
TECHNOLOGIES, INC.

AirDog
HEAVY DUTY DIESEL FUEL SYSTEMS

SYSTEM OVERVIEW

Welcome to the **AirDog® Heavy Duty Industrial**
Fuel Air Separation System for Class 8 Trucks

The AirDog®, with ADVANCED FUEL AIR SEPARATION, DEMAND FLOW, ADJUSTABLE REGULATOR, LOW PRESSURE SENSOR with LED INDICATOR and the 4G-HD FUEL PUMP, is a premium fuel filtration and delivery system for the Paccar MX-13 Common Rail Diesel Engine.

Air & Vapor are compressible! When Air/Vapor is present in a fuel injection system the pressure buildup and injection of fuel is delayed while the Air/Vapor is being compressed. This delays the injection timing, causing a shorter power stroke and low power, increased fuel consumption and increased exhaust emissions. Preventing the formation of vapor from pump cavitation and removing entrained air from the fuel flow to the injectors restores Correct Injection Timing. Diesel engines equipped with the AirDog® can now perform as designed, delivering "test cell" performance while in "real world" use!

The AirDog® removes water, particulates and most importantly, the air that becomes entrained in diesel fuel, from the fuel flow to your engine. The entrained air and vapor that is separated from the fuel is returned to the fuel tank through a small return line. The fuel flow to the engine's transfer pump is at a NET POSITIVE PRESSURE, preventing cavitation and the formation of vapor, thus overcoming the performance related problems from plugged fuel filters, high altitude operation, and torque loss at higher engine RPM's.

All AirDog® products are manufactured with a personal touch, unsurpassed attention to detail, and the most stringent quality assurance!

TYPICAL INSTALLATION LAYOUT



The AirDog® requires only one small return line connected to the engine return line, for quick and easy installations.

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The installation of your **AirDog®** can be made relatively easy by following the steps outlined in this manual, and:

1. Inventory the package components. Immediately notify PureFlow® Technologies, Inc., of any missing or damaged parts.

2. Read the installation manual completely. Understand how the system operates and the installation recommendations before beginning.

3. Proper location of the AirDog® on the vehicle is essential. Consider hazards presented to the equipment by road debris and the elements.

4. The installation recommendations and guidelines contained herein are suggestions only. Individual installations may vary.

5. Use diesel compatible thread sealer when installing fittings with NPT threads. (Loctite® 545 Thread Sealer is diesel compatible.)

DO NOT REMOVE FACTORY INSTALLED SECONDARY FUEL FILTERS. REMOVAL OF A FACTORY INSTALLED SECONDARY FUEL FILTER MAY VOID YOUR ENGINE WARRANTY.

SAFETY GUIDELINES

CAUTION: Chock the vehicle's tires to prevent rolling.

CAUTION: Disconnect the battery cables before proceeding with the AirDog® installation.

CAUTION: Wear safety glasses when operating power tools such as drills and grinders or when using a punch or chisel.

CAUTION: Do not drill into or weld the top of the frame rail or within 1-½" of the frame rail flange on the side of the frame rail.

CAUTION: Route the fuel lines and electrical harnesses keeping them away from hot exhaust components and/or moving parts. Properly secure the fuel lines and electrical harnesses to prevent chafing using zip ties included in installation kit.

CAUTION: Do not subject the AirDog® system directly to high-pressure wash systems. Doing so may damage seals and electrical components, and such damage is NOT covered under warranty.

If you are uncertain of any installation procedure, please call: PureFlow® Technologies, Inc. at 573-635-0555 for technical assistance.

NOTE: The pictures used in this manual are for example only and may not depict the exact components as found on your truck.

Installation Parts List

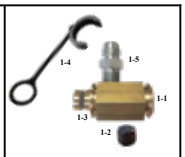
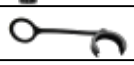
QTY	Description	Part Number	Image
1	**Manual Packet** - Installation Manual	206-1-0410	
1	**AirDog® Diesel Fuel System including:** Fuel Filter FF200 Water Separator WS200-WD	FPII-150-LP	
1	**Wire Harness w/ Indicator Light & Dash Plate** Includes: 1 ea Indicator Light 5G-1-1-47674 1 ea Dash Plate 201-3-0004-S-M716	5E-2-010 908-5G-1-1-47674	
1	**3/8" Low Pressure Hose - 7 FT Section**	4C-1-02-05-010-7FT	
1	**5/8" Fuel Tubing - 5 FT Section with QC Fitting Installed** QC Fitting Installed 001-4A-1-0054-PAC O-Ring on Fitting 1U-2-1-11.6	4C-1-02-10-5FT-A	
1	**One Piece Mounting Bracket-Black**	001-3C-0034	

ADFK-410 Installation Kit

1	**Fuel Pressure Sensor**	5C-9-007-SC-06	
15	**12" Zip Ties**	5H-2-1-12	
1	**908-5E-2-018/022 Add-A-Circuit Fuse Tap Adapters** 1 ea Add-A-Circuit Fuse Tap Adapter Mini 1 ea Add-A-Circuit Fuse Tap Adapter ATO	 5E-2-018 5E-2-022	

1	**901-08-0100-1 Bolt Kit** 4 ea 3/8-16 x 1-1/4 HHCS 4 ea 1/4-20 x 2 SHCS **908-08-0100-N Nut Packet** 4 ea 3/8-16 Hex Nut 4 ea 1/4-20 Hex Nut **908-08-0100-1-W Washer Packet** 4 ea 3/8 Split Lock Washer 4 ea 1/4 Split Lock Washer 4 ea 3/8 Flat Washer	 1J-1-C20SZ 1L-A32C 1S-1-CSZ 1S-1-AC 1R-6-CSZ 1R-6-AC 1P-2-CSZ	

908-01-0410-FK Paccar MX13 (No Frame Mount Water Separator)

1	**Quick Connect Return Adapter Sub-Assy** (1 ea) 1-1. **Quick Connect Return Adapter M x F** 001-4A-1-0051 (1 ea) 1-2. **1/4 NPT w/ Vibraseal Pipe Plug** 4A-3-01-A-S2 (1 ea) 1-3. **11.6 x 2.4 mm O-Ring** 1U-2-1-11.6 (1 ea) 1-4. **Quick Connect Retainer Clip** 4C-2-00-00 (1 ea) 1-5. **#6M JIC x 1/4 M NPTF Straight Connector** 4A-1-01-A-C-SZ	908-VM-QCRA	
1	**3/8 ID, 7/8 OD Grommet**	5J-1-1-04-2758	
2	**#6M JIC x 1/4 M NPTF Straight Connector**	4A-1-01-A-C-SZ	
2	**#6F JICX x 3/8 Push-lock Hose Barb**	4A-1-09-06-06-B	
2	**#6M JIC x #6F JICX 90° Swivel Nut Elbow**	4A-2-04-06-06-S	
1	**90° Elbow QC F x 1/2" NPT - Short - Paccar (Black)**	001-4A-1-0055-S-PAC	
1	**90° Elbow QC F x 1/2" NPT - Long - Paccar (Black)**	001-4A-1-0055-L-PAC	
1 1	**90° Elbow QC M x 1/2" Tube Hose Barb - Paccar (Black)** 11.6 x 2.4 mm O-Ring (On Fitting)	001-4A-1-0053-PAC 1U-2-1-11.6	
2	**Quick Connect Retainer Clip**	4C-2-00-00	

NDC-1000 Frame Mount Bracket Kit

1	**Front Clamp Plate, 4" with Flange**	010-3C-0010	
3	**Locking Clamp for Front Clamp Plate** With Screw Socket Set 3/8-24 x 3/4 (Installed)	010-3C-0010-LC 1K-CA12BB	
4	**2" Round Aluminum Spacer**	010-3C-0005-BK	
1	**Flat Washer Packet** 3 ea 1/2" Zinc Plated Flat	 1P-2-DSZ	
1 2 4	**Bolt 1/2-13 x 5 HHCS** **Bolt 1/2-13 x 3 1/2 HHCS** **Bolt 3/8-16 x 3 HHCS**	1J-1-D80SZ 1J-1-D56SZ 1J-1-C48SZ	

Selecting the Best Location to Mount the AirDog®

Installing the AirDog® at the proper location on the vehicle is most important. When deciding where to locate the AirDog®, the following points should be considered:

- Best relationship to the transfer pump and the original primary fuel filter location
- Protection from the elements and road debris
- Accessibility for service

CAUTION: Do NOT mount the AirDog® directly on the engine. Mounting the AirDog® directly on the engine will immediately VOID your AirDog® Warranty!

The picture below shows an example of the PACCAR MX-13 engine and frame space available for the AirDog® installation. There are many variations in the arrangements of the components on various trucks. With a little ingenuity, the AirDog® can be successfully installed on any commercial heavy-duty truck.



Mounting the AirDog®

CAUTION: Do NOT mount the AirDog® directly on the engine. Mounting the AirDog® directly on the engine will immediately VOID your AirDog® Warranty!

5-1. Using the supplied hardware, assemble the Flange Clamp Plate and 1-piece Mounting Bracket together for trial fitment to the truck frame. Here, you will use the 3/8”-16 x 1-1/4” bolts, with the appropriate nuts and washers, to assemble the two brackets. Do not fully tighten everything at this time. We want to test fit the mounting assembly and AirDog® pump to the frame, to confirm there is adequate clearance all around the system.

5-2. Hold the Mounting Bracket assembly to the frame, and hold in place with the Locking Clamps (2 on top, and 1 at the bottom) and 1/2”-13 Bolts with washers (shorter bolts on top, and longer bolt at bottom), as pictured:



5-3. Place the AirDog® Fuel System on top of the mounting bracket set, and check for clearance around the pump. Make sure the pump will not interfere with the steering shaft above, any obstructions below, and make sure there is room for inlet and outlet fittings at either side of the AirDog® pump. The AirDog® 1-piece Bracket is slotted to allow side-to-side positioning, and the Flange Plate includes multiple sets of holes to provide vertical positioning options for the 1-piece Bracket.







Mounting the AirDog®



5-4. When everything clears well, set the AirDog® pump aside, and tighten all mounting bracket hardware securely. We suggest beginning by tightening the set screws (3/16” hex socket head) in the Locking Clamps, which helps to hold the Clamps square to the frame.

Note:
If you find that the 1-piece AirDog® mounting bracket will not clear a bolt head, air or grease fitting, or another protrusion on the frame, please use the included 2” Spacers with 3/8”-16 x 3” bolts to step the 1-piece bracket away from the frame, as seen here:





5-5. Once the mounting brackets are secured, use the provided 1/4”-20 x 2” socket-head cap screws and appropriately sized split lock washers and hex nuts to loosely assemble the AirDog® onto the 1-piece Bracket. After mounting the AirDog® on the 1-piece Bracket, snug all fasteners to achieve a good relaxed fit.



FUEL LINE OVERVIEW

The AirDog® has been engineered to eliminate fuel related problems. It is important that the fuel lines are assembled and installed properly so as not to cause flow restriction.

When possible, use the fuel lines that are on the vehicle. This will reduce your installation costs and make the installation go much more quickly.

NOTE: On various class 8 trucks, the manufacturer may use other than traditional steel braid fuel lines. These lines require special fittings. The fittings used with the original primary fuel filter are specific to the fuel lines used on the truck. When possible, mount the AirDog® in the location that will allow the use of the original fuel lines and fittings.

Inspect the original fuel lines for size, length, and condition. If the fuel lines are in good condition and the correct size and length to adequately reach the AirDog®, you may want to go ahead and use them.

If any of the fuel lines need to be replaced, it is recommended that the fuel lines selected meet or exceed DOT requirements.

Fuel Supply Line: The fuel supply lines from the tank to the AirDog® and to the engine should be size 10 or, at the absolute minimum, size 8 (1/2" ID).

Air/Vapor Return Line: The AirDog® Air/Vapor return line can be connected to the engine's return line. A size 6 is adequate for the Air/Vapor return line.

Primary Fuel Filters: It is most important that there are no fuel filters between the fuel tank and the AirDog® or between the AirDog® and the engine's transfer pump to plug and cause restriction. These filters should be removed from the system as part of the AirDog® installation.

Secondary Fuel Filters: DO NOT REMOVE SECONDARY FUEL FILTERS. This is the filter between the transfer pump and the engine.

Installing the Fuel Fittings

IMPORTANT: Use diesel compatible thread sealer when installing NPT fittings

NOTE: Pictures below illustrate the installation of straight fittings. However, in some instances 90º fittings may be required to connect the fuel lines to the AirDog®. Two 90º fittings have been included in the kit for this purpose.

6A-1. Install the AirDog® custom 90° elbow fitting (LONG version) into the FUEL IN port on the AirDog® base. It will help to ensure that the Quick-Connect port is facing upwards when installed.



6A-2. Test fit the included Synflex fuel line between the AirDog® and fuel inlet at the Paccar filter housing; determine if it fits and clears best to run the fuel line above, or below, the truck frame. If there is extra length in the provided Synflex line, carefully cut it to the length required for your installation. Install the AirDog® custom 90° elbow fitting (SHORT version) into the ENGINE port on the AirDog® base, aligning the Quick-Connect port so that it faces the direction you require to attach the Synflex fuel line.





6A-3. Install the AirDog® return fitting (1/4”-NPT x #6 JIC) into the TANK port on the AirDog® base.



Installing the AirDog® Fuel Lines

6B-1A. Disconnect the factory fuel supply line from the factory filter housing inlet (circled in RED in the pictures).





6B-1B. Insert the factory fuel supply line into the Quick-Connect fitting at the FUEL IN port of the AirDog® system. Install the Quick-Connect Retainer Clip to secure the fuel line and fittings.



6B-2A. Assemble the fuel supply line from the AirDog® to the factory fuel filter housing inlet. We have pre-installed a Quick-Connect male fitting into one end of the Synflex line, and this end will install at the AirDog® ENGINE port. You will need to install the second fitting, after cutting the Synflex line to length, to complete the fuel supply line assembly.



Installing the AirDog® Fuel Lines

6B-2B. The Synflex line is semi-rigid, and becomes more pliable when warmed. We suggest placing the line in hot water for 10 minutes to warm it. BE CAREFUL to not overheat – don't use boiling water, a heat gun, or any other extreme measures – we just need to soften the line up a little to push a fitting in. Apply a small amount of grease, oil, or your other preferred lubricant, to the hose barb on the custom 90° elbow (Quick-Connect male x ½" hose barb) included in the AirDog® kit. Once the Synflex line is warmed, push the line onto the hose barb, fully seating the two together.



6B-2C. Install the assembled fuel line by inserting the 90º fitting end into the inlet of the factor fuel filter housing, and the straight end into the outlet (ENGINE port) of the AirDog® system. Secure at both ends with Quick-Connect Retainer Clips.





Installing the AirDog® Return Line

VERY IMPORTANT:

THE AIRDOG® AIR/VAPOR RETURN LINE IS CONNECTED DIRECTLY TO THE ENGINE FUEL RETURN LINE.

You will use the Quick Connect Return Adapter Sub-Assy (PN 908-VM-QCRA), which accommodates the AirDog® air/vapor return line on trucks equipped with plastic fuel lines.



6C-1A. Disconnect the factory fuel return line at the fuel filter housing (circled in red in the picture).



6C-1B. Lubricate the o-ring on the provided Quick-Connect Return Adapter and insert the adapter into the factory filter housing return fitting. Be sure the fitting is fully seated, and secure with the provided retainer clip.

6C-1C. Install the factory return line into the female end of the Quick-Connect Return Adapter. Ensure the two are fully seated, and secure with the factory-provided retainer clip.



Installing the AirDog® Return Line

6C-2A. Test fit the included 3/8” fuel line between the AirDog® TANK port and fuel return at the Paccar filter housing. If there is extra length in the provided line, carefully cut it to the length required for your installation.

6C-2B. Install a #6 JIC Swivel x 3/8” Push-Lock hose barb fitting into each end of the 3/8” fuel line.

6C-2C. Install the assembled fuel return line. One end will connect to the AirDog® TANK port, and the other will connect to the JIC fitting on the Quick-Connect Return Adapter installed in Step 6C-1B.

We have included two #6 JIC 90° elbows to ensure a proper fit for the return line. Use these as necessary.



←OR→



Install the AirDog® Fuel Pressure Sensor

6D-1. Remove the 1/8”-NPT plug from the end of the pre-installed 45° elbow fitting in the top of the AirDog® base. Remember – apply thread sealer – Install the fuel pressure sensor into the 45° elbow.



AirDog® Wire Harness

NOTE: The AirDog® wire harness includes a 15-amp fuse.

The AirDog® wire harness has a low pressure sensor and an amber LED indicator light as standard equipment. The indicator light will illuminate at start-up, remain on for a few seconds, then go off and should remain off unless pressure flow to the engine drops below minimum requirements.

Relay
(7-1)





AirDog® Pump Motor Lead (7-2)

Fuel Pressure Sensor Lead (7-3)

Indicator Light & Dash Plate (7-5 & 7-9)

Battery Positive Lead - Red (7-12)

Battery Negative Lead - Green (7-11)

Indicator Light Lead (7-5)

Relay Trigger Lead (No Connector/Plug) (7-6)

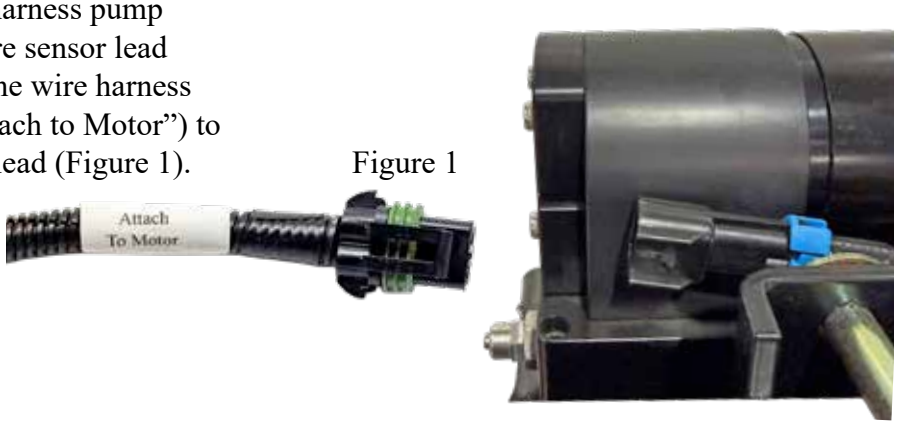
Securing the AirDog® Wire Harness Relay to the Vehicle

7-1. Secure the AirDog® wire harness relay to the vehicle. This picture shows the relay mounted on the firewall.



7-2. Route the AirDog® wire harness pump motor lead and the fuel pressure sensor lead to the AirDog® unit. Connect the wire harness pump motor lead (labeled “Attach to Motor”) to the AirDog® unit pump motor lead (Figure 1).

Figure 1



Securing the AirDog® Wire Harness Relay to the Vehicle

7-3. Connect the AirDog® wire harness fuel pressure sensor lead to the AirDog® unit fuel pressure sensor.



Relay Trigger Lead and Indicator Light Lead

The AirDog® Wire Harness Indicator Light lead must be routed through the firewall and to the dashboard. The Relay Trigger lead must be connected to a contact point that is electrically "HOT" when the key is in the "RUN" position. This could be either in a spare fuse holder in the fuse panel, using an Add-A-Fuse (included) to add the relay trigger lead to an existing circuit, or on the ignition switch itself.

Note: DO NOT connect the AirDog® wire harness relay trigger lead to a point that is "HOT" when the key is in the ACCESSORY position.

Routing the Indicator Light and Relay Trigger Lead through the firewall:

7-4. Many trucks have access holes through the firewall, located below or near the steering column. Remove the plug from one of those access holes, and route the wire leads through the hole. For trucks that do not have an existing hole in the firewall, you will need to drill a 5/8" hole in the firewall for entry of the leads into the cab. Use the provided grommet to seal around the wire loom.



Relay Trigger Lead and Indicator Light Lead

7-5. Route the AirDog® wire harness trigger lead (red wire with no connector/plug) and indicator light lead through the firewall.

By the Steering Column



Under the Dash



NOTE: Be sure to seal the opening or install a grommet around the wire loom to prevent water leakage and protection from chafing.

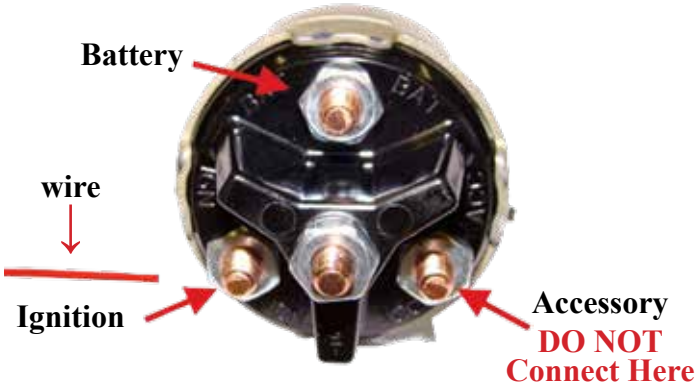


Relay Trigger Lead

This

There are several options for attaching the relay trigger wire:

7-6A. Connect the relay trigger lead to a terminal on the ignition switch that is "HOT" when the key is in the "RUN" position, as detailed in this picture:



Continued on next page

OR

Add-a-Fuse



That

7-6B. Using the appropriately sized Add-a-Fuse (included in your AirDog® installation kit), connect the relay trigger lead to a fuse holder in the fuse panel that is "HOT" when the key is in the "Run" position. An example is pictured here:



Installing the AirDog® Wire Harness Indicator Light

LED Indicator Light

7-7. Select a location on the dash that is easily visible to the driver. Remove the dash components as necessary to access the area behind the selected location.







7-8. Drill a 7/16" hole in the dash at the selected location. Be very careful when drilling. Do not damage components located behind the dash.

7-9. Remove the nut from the indicator light and insert the indicator light through the dash plate. To adhere the dash plate to the dashboard, peel off the paper backing from the back side of the plate to expose the adhesive. Install the dash plate with indicator light into the hole in the dash. Reinstall the nut to the indicator light at the back side of the dash, and tighten the nut until snug.

Installing the AirDog® Wire Harness Indicator Light

LED Indicator Light

Connect the positive (orange wire) lead of the wire harness to the positive quick-connect terminal (marked orange) on the indicator light (see image below).

Then connect the negative (blue wire) lead on the wire harness to the negative (unmarked) quick connect terminal on the indicator light.





7-10. Re-assemble the dash components back to their original position.

Connecting the Power Supply Leads

The power supply leads can be easily connected to the appropriate contacts on the battery. Another alternative option would be to connect the power supply leads to the appropriate contacts on the alternator. Any high amperage terminal that is always "HOT" is OK for the Positive + (RED) lead. Be sure the NEGATIVE - (GREEN) lead is connected to a reliable chassis ground.

IMPORTANT: On 24V systems, the power supply leads can be easily connected to the appropriate contacts on the ALTERNATOR. DO NOT connect directly to the 24V batteries.

7-11. Route the red & green power leads to the battery or an alternator. Connect the green (-) ground lead to the negative battery terminal post.

7-12. Connect the red (+) positive lead to the positive battery/alternator terminal post.



NOTE: Secure wire harness with zip ties included in installation kit.



Installing your filter restriction gauge into the AirDog® Gerotor Cap Sensor Port

Does your HD truck have a filter restriction gauge that you would like to continue using with the AirDog®?

8-1. Every AirDog® Heavy Duty Diesel Fuel System is now equipped with a port for your restriction sensor. On the inside surface of the gerotor pump cap, you will find a 1/8" NPT plug.



8-2. Remove that plug (3/16" Allen), and install your restriction sensor with the same 1/8" NPT thread, using an elbow if necessary, and you can now connect and use your original filter restriction gauge with the AirDog® system.



Initial Start Up Procedure

The AirDog® is a self priming system. However, to prevent damage to a dry seal and reduce the life expectancy of the system, it is suggested to pre-fill the water separator/pre-filter with diesel fuel to the bottom of the "NUT PLATE".

- ❒ 9-1. Rub CLEAN diesel fuel or oil on filter seals before installing to ensure a proper seal.
- ❒ 9-2. Pre-fill the water separator/pre-filter with diesel fuel up to the bottom of the nut plate.
- ❒ 9-3. Turn the starter key to the on/run position.
- ❒ 9-4. The AirDog® should now be running and pumping fuel, bleed the fuel line to the engine by loosening the fuel line connection at the engine fitting. As soon as the line is purged of air and pure fuel is observed, properly tighten the fuel fitting.

  NOTE: Put a rag or shop towel over and around the fitting to prevent fuel splatter or spray. Catch all spilled fuel and dispose of properly. Wear safety glasses.

- ❒ 9-5. Start the engine.

  Recheck all fuel fittings for leakage and proper torque. Be sure all fuel lines are properly routed to protect from excessive heat and secured to protect from chafing and abrasion. Recheck all electrical lines and secure as necessary.

Servicing the AirDog® Fuel Filter and Water Separator/Pre-Filter

It is highly recommended that you keep a replacement AirDog® fuel filter and water separator on-hand, ready for replacement when the AirDog® Indicator Light illuminates.

When the particulate fuel filter, water separator, mesh screen in the water separator nipple, or a combination of these, become plugged, the restriction will cause a loss in pressure and flow through the AirDog® system, which will cause the AirDog® Indicator Light to illuminate, and stay on. When the Indicator Light comes on, this indicates it is time for a filter change. It is strongly recommended that BOTH filters be changed at the same time. After changing filters, if the Indicator Light remains on, please check that the AirDog® fuel pump is running, with the key in the "RUN" position. If the pump is not running, check the fuse in the wire harness, located near the AirDog® wire harness terminals connected to the battery or alternator for power. It is possible for a restriction in flow to cause the pump to draw high amps for a short period of time, which could pop the 15A fuse in the harness. Replace the fuse, if blown. After replacing the fuse, if the Indicator Light remains on, please use the following procedure to check for debris in the water separator nipple:

- Remove the water separator from the AirDog® filter base.
- Using a 1-1/8" (29mm) deep-well socket, loosen and remove the threaded nipple that the water separator was installed on.
- Inspect the wire mesh screen inside the nipple, blow any debris out of the screen with compressed air.
- Reinstall the threaded nipple into the AirDog® filter base.
- Tighten the nipple securely with the socket and ratchet. Torque spec for the nipple installation is 35 FT-LBS.



FUEL FILTER: The AirDog® fuel filters have a typical lifespan of 25,000+ miles, and up to 40,000 miles, as they are manufactured with a high-quality and high-capacity synthetic media, as opposed to a paper element. Fuel filter life is affected by many variables. In any case, we do not recommend exceeding 40,000 miles of service with a fuel filter. When replacing the fuel filter, be sure to clean the underside of the AirDog® filter base. Rub clean diesel fuel or oil on filter seals before installing, to ensure a proper seal. It is not necessary to pre-fill the fuel filter with fuel; the AirDog® integrated fuel pump will fill the filter and prime the system automatically. Follow the instructions on the filter for proper tightening procedures.

WATER SEPARATOR: The AirDog® water separator/pre-filters have a typical lifespan of up to 40,000 miles. Servicing of the water separator simply requires draining at regular intervals. It is suggested to check/drain the water separator weekly or as needed should you experience excessive 'water in fuel' conditions. Replace the water separator when the AirDog® Indicator Light illuminates, if it becomes damaged or permanently plugged, and when changing the AirDog® fuel filter. Before installing a new water separator, be sure to clean the underside of the AirDog® filter base. Rub clean diesel fuel or oil on filter seals, to ensure a proper seal. It is suggested that you pre-fill the water separator (only) with clean diesel fuel when changing filters, to assist the system with priming. Follow the instructions printed on the water separator/pre-filter for proper tightening procedures.

When tightening filters with a filter wrench, DO NOT overtighten, as doing so may damage the filters.

Caution: Be careful to prevent any contaminants from entering the water separator when replacing. Although the water separator pre-filter has a protective wire screen, any debris passing through the system could cause the Gerotor fuel pump to lock up, which can cause the in-line fuse to blow. Such a pump lock-up is not covered under warranty.

DISPOSE OF WASTE FUEL AND USED FILTERS PROPERLY TO PROTECT OUR ENVIRONMENT!

AirDog®

HEAVY DUTY DIESEL FUEL SYSTEMS



DON'T FORGET...



Heating Kit

The AirDog® Heater Kit provides additional thermal protection for the AirDog® FPII-150 and FPII-200 4G fuel air separation systems, preventing fuel gelling in cold climates.



Replacement Filters

PureFlow Technologies, Inc. offters AirDog® replacement filters and water separators to maintain the efficiency and longevity of AirDog® and Champ™ diesel fuel systems.



Apparel

Get your AirDog® apparel today! Rep your favorite brand and unleash the power of the AirDog!

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www.airdogdiesel.com
1-877-463-4373 or
1-573-635-0555

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