AirDog® INDUSTRIAL
HEAVY DUTY DIESEL FUEL SYSTEMS
Fuel Air Separation System

INSTALLATION MANUAL

For Trucks Equipped with

VOLVO® & MACK® Engines with Cartridge Secondary Filter Housing
12V NO Frame Mounted Water Separator Model Years < 2024.5
AND 24V NO Frame Mounted Water Separator Model Years 2024.5+



Part No. A3SPBT412-CRT
Part No. A3SPBT412-24



Revised 11/2/2026

NOW WITH DEMAND FLOW

AirDog®
HEAVY DUTY DIESEL FUEL SYSTEMS
By PureFlow TECHNOLOGIES, INC.



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!

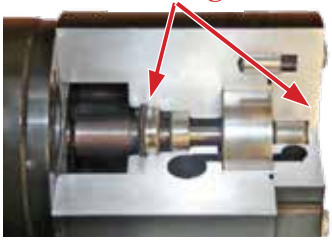


Positive Air Separation
with primary air discharge port.



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

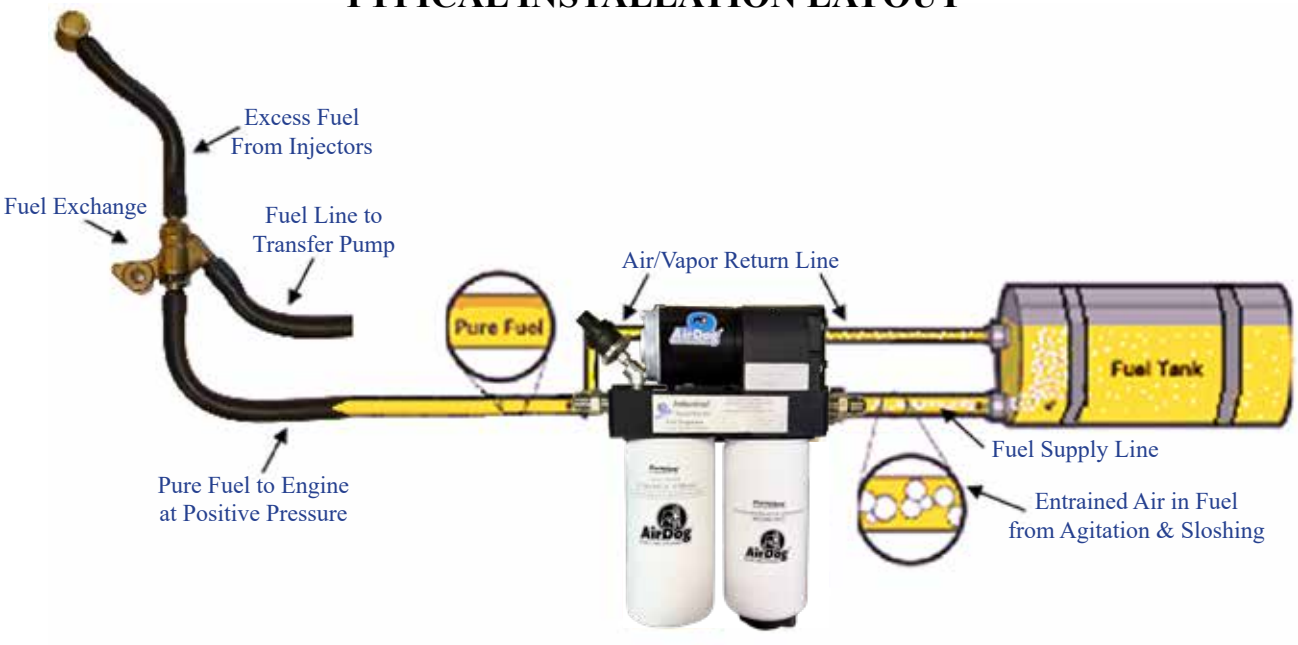
The AirDog®, with ADVANCED FUEL AIR SEPARATION, DEMAND FLOW, ADJUSTABLE REGULATOR, LOW PRESSURE SENSOR with LED INDICATOR and the 4G-HD FUEL PUMP, is a premium fuel filtration and delivery system for the Volvo® & Mack® Diesel Engines.

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

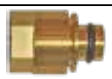
QTY	Description	Part Number	Image
1	**Installation Manual**	206-1-0412-CRT-24	
1	**AirDog® Diesel Fuel System including:** Fuel Filter FF200 Water Separator WS200-WD	FPII-150-LP or FPII-150-LP-24	
1	**Wire Harness w/ Indicator Light & Dash Plate** 1 ea Indicator Light 5G-1-1-47674 1 ea Dash Plate 201-3-0004-S-M716	5E-2-010 908-5G-1-1-47674	
1	**3/8" Low Pressure Hose (Air/Vapor Return Line) - 10 ft Section**	4C-1-02-05-010-10FT	
1	**5/8" Diesel Fuel Line Tubing - 10 ft Section** *with Adapter installed (PN 4A-1-29-08-08-A)*	4C-1-02-10-10FT-A	
1	**5/8" Diesel Fuel Line Tubing - 10 ft Section** *with Quick Connect x Hose Adapter installed* *(PN 001-4A-1-0050) & (PN 4A-1-08-08-08-B)*	4C-1-02-10-10FT-B	
1	**1- PC Mounting Bracket**	001-3C-0034	

ADFK-412-BP Volvo/Mack Installation Kit

1	**Fuel Pressure Sensor**	5C-9-007-SC-06	
15	**12" Zip Tie**	5H-2-1-12	
1	**Add-A-Circuit Fuse Tap Adapter Mini**	908-5E-2-018	
1	**Volvo/Mack Secondary Block-Off Primer Plate**	001-4G-9-0016	
1	**136 Square Cut Buna O-Ring**	1U-1-1-136-S	

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	

908-01-0412-FK Volvo/Mack Fitting Kit

2	**# 6 F JICX x 3/8 Push-Lock Hose Barb**	4A-1-09-06-06-B	
2	**# 6 F JICX x #6 M JIC 90° Elbow**	4A-2-04-06-06-S	
1	**Adapter for 1/2" plastic line**	001-4A-1-0050	
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	
2	**#8 M JIC x 1/2 M NPTF Straight Connector**	4A-1-01-08-08-S	
1	**#6 M JIC x 1/4 M NPTF Straight Connector**	4A-1-01-A-C-SZ	
3	**Quick Connect Retainer Clip**	4C-2-00-00	
1	**3/8 ID, 7/8 OD Rubber Grommet**	5J-1-1-04-2758	
2 *2*	**QC x 1/2" HB PACCAR Adapter** *11.6 x 2.4 mm O-Ring (On fitting) 1U-2-1-11.6*	001-4A-1-0054-PAC	
2	**QCF x 1/2" NPT Elbow**	001-4A-1-0055-S-PAC	
1	**#8 M JIC x 3/8 M NPTF**	4A-1-02-08-06-SZ	
1 *1*	**AirDog/Champ PAC Fitting** *11.6 x 2.4 mm O-Ring (On fitting) 1U-2-1-11.6*	006-00-PA-001	

Identify the AirDog® Mounting Location and Mount the System

Installing the AirDog® at the proper location on the vehicle is most important. This installation kit has been developed with a few important considerations:

- Best relationship between the transfer pump and the AirDog® 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 Volvo/Mack primary fuel filter is found mounted on the passenger side frame rail, just to the rear of the bumper brackets, on trucks equipped with the factory primary.





This AirDog® installation kit is designed to mount the AirDog® in the same location as a factory-equipped OE primary fuel filter on Volvo/Mack trucks.

4-1. Center the AirDog® One-Piece Mounting Bracket on the truck frame in the open location, with the top of the bracket approximately 2” below the top of the frame. Mark two locations for the mounting bolts, and drill two 3/8” diameter holes.

VERY IMPORTANT: Before drilling, ensure there are no wires, air lines, or other components inside the frame that could be damaged by drilling through the frame.

Secure the mounting bracket to the frame with the 3/8” bolts, nuts, and washers included in your kit.



4-2. Mounting the AirDog® on the Truck’s Frame at the OE Primary Filter Location

Position the AirDog® on the One-Piece Mounting Bracket and loosely assemble the AirDog® to the bracket. Sung all fasteners to achieve a good relaxed fit and then properly torque all the fasteners.

Note: These steps are necessary to prevent stress cracks from forming in the mounting brackets due to vibration.



Pressure Sensor and Fuel Fittings

IMPORTANT: Use diesel compatible thread sealer when installing NPT fittings.

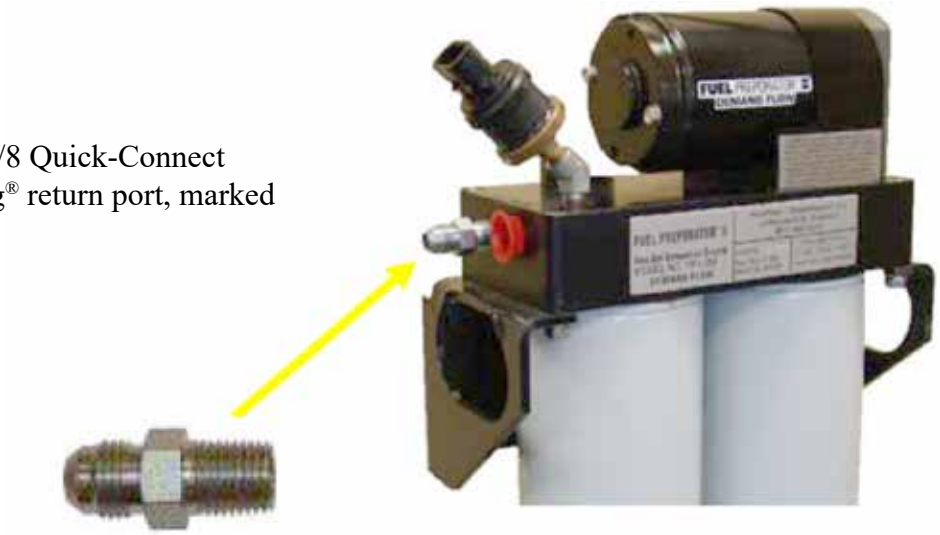
5-1. Remove the 1/8 NPT plug located in the end of the 45’ elbow. Install the pressure sensor into the elbow.



5-2. Install one 1/2 NPT x Female Quick-Connect 90’ elbow fitting (BLACK colored) into the AirDog® outlet port marked “**ENGINE**.” Ensure the female port faces downward when tightened.



5-3. Install the 1/4 NPT x 3/8 Quick-Connect Male fitting into the AirDog® return port, marked "**TANK**."



5-4. Install the second 1/2 NPT x Female Quick-Connect 90˚ elbow fitting (BLACK colored) into the AirDog® port marked "**INLET**." Ensure the female port faces downward when tightened.



Fuel Line from AirDog® to Engine

Route the three (3) fuel lines supplied with the AirDog® kit from the driver's side of the engine to the AirDog® system. We have found it most practical to run these lines to the back side of the crossmember below the front of the engine. The bare line ends will come up under the frame at the passenger side, ideally ending in line with the pre-installed fittings on the driver's side.

6-1. Disconnect the fuel supply line from the tank to the engine, a quick-connect fitting located at the driver's side of the engine.



6-1.1. Insert the ½" Male Quick Connect x #8 JIC Male fitting assembly into the female side of the fuel supply to the engine. Apply a little grease or oil to the o-ring to ease the assembly.



6-1.2. Install a Quick-Connect Retainer Clip onto the supply line assembly.

6-1.3. Connect the AirDog® provided black 180˚ JIC swivel fitting and line (tagged #1) to the #8 JIC side of the supply connection just installed. Tighten the black swivel fitting securely.

Thread the #8 M JIC x 3/8 M NPTF to the AirDog® PAC Fitting to make the combined piece required in this step.







6-2. To the male quick-connect fitting on the original fuel supply line, connect the AirDog® female Quick-Connect fitting and line (tagged #2).





6-3. Disconnect the factory return fuel line at the quick-disconnect fitting, also located at the driver's side of the engine, directly below the supply line. This is the smaller and lower of the two lines that are installed in this location.



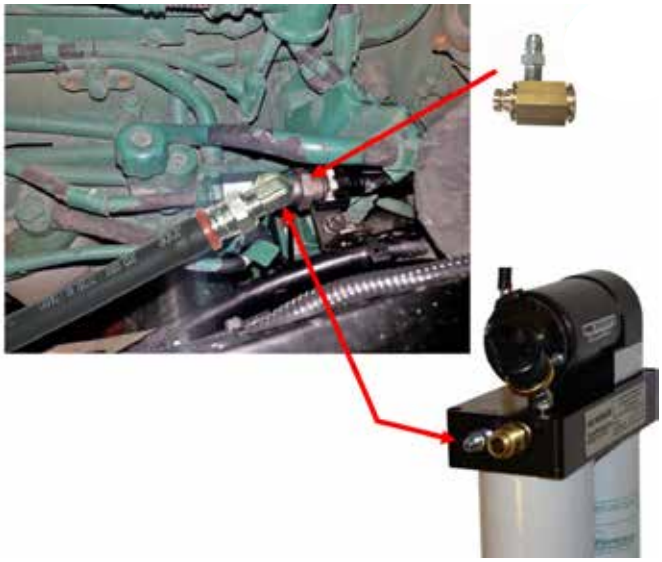
Installing the AirDog® Air/Vapor Return Line

6-4.1. On the older Volvo/Mack trucks the return lines are located on top of the fuel filter housing, and will be the smaller of the two fuel lines (3/8). On the newer Volvo/Mack trucks the return fuel lines are located underneath the rear of the fuel filter housing, and will be the smaller of the two fuel lines (3/8).

6-4.2. Remove the factory quick connect fuel line, and install the provided quick connect return adapter into the factory fitting. **Be sure to lubricate the o-ring on the adapter and ensure the fitting is fully seated.** Then secure the fitting with the provided retainer clip. Install factory fuel line into the female side of quick connect return fitting. Once line is fully seated, secure with factory retainer clip.

6-4.3. Measure and cut provided return hose. Install a #6 JICX x 3/8" Push-Lock Hose Barb fitting on each end. Route return hose to the AirDog® and connect to port that says "**TANK**" (use provided 90˚ elbows, if needed).





Fuel Line from Fuel Tank to AirDog®

We will now move over to the passenger side, to the mounted AirDog® system on the frame, where we will connect the other ends of the fuel lines. The INLET and OUTLET lines will use the 1/2" rigid Synflex tubing, and the RETURN to tank will use the low-pressure 3/8" fuel line. You will need to allow enough extra length to adequately secure the fuel lines with zip ties, as pictured here:



7-1. You will need to test fit and cut the Synflex lines. Beginning with the inlet line (tagged #2), test fit the line to the elbow in the FUEL IN port in the AirDog® base. Carefully cut off any excess length.

The Synflex line is semi-rigid, and becomes more pliable when warmed. We suggest placing the line in hot water for 2-3 minutes to warm it. BE CAREFUL to not overheat – don't use boiling water, a heat gun, or other extreme measures – we just want to soften the line 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 included custom Quick-Connect fitting from the AirDog® kit. Once the Synflex line is warmed, push the line onto the hose barb, fully seating the two together.





7-2. Repeat this line assembly process for the second Synflex line (tagged #1), which will connect to the ENGINE port in the AirDog® base.

7-3. Measure and cut the length of #6 fuel line required, when properly routed, to connect the AirDog® return line to the quick connect adapter installed in the fuel tank.

7-4. To assemble the fuel line, cut hose line to length. Apply oil to the fitting, then push the fitting into the line until seated.



The OEM primer assembly

The OEM primer assembly on the Volvo and Mack secondary fuel filter housing has shown the tendency to fail at random, developing a leak, which can become troublesome under pressure. AirDog® Heavy Duty is providing a solution to this; the AirDog® Block-Off Plate Assembly for Manual Primers on Volvo/Mack Secondary Fuel Filter Housings (2024.5 and up model years).

This 5-minute swap can save hours of aggravation, and many dollars, as it will prevent the potential failure of the OEM primer assembly. Only two basic tools are required: 8mm socket with ratchet, and an Inch-Lb. torque wrench.

Instructions for replacement of this assembly are as follows:

8-1. Remove the original primer assembly* by removing the (3) M6 bolts using a 8-mm socket.

IMPORTANT – retain these bolts, as you will reuse them.

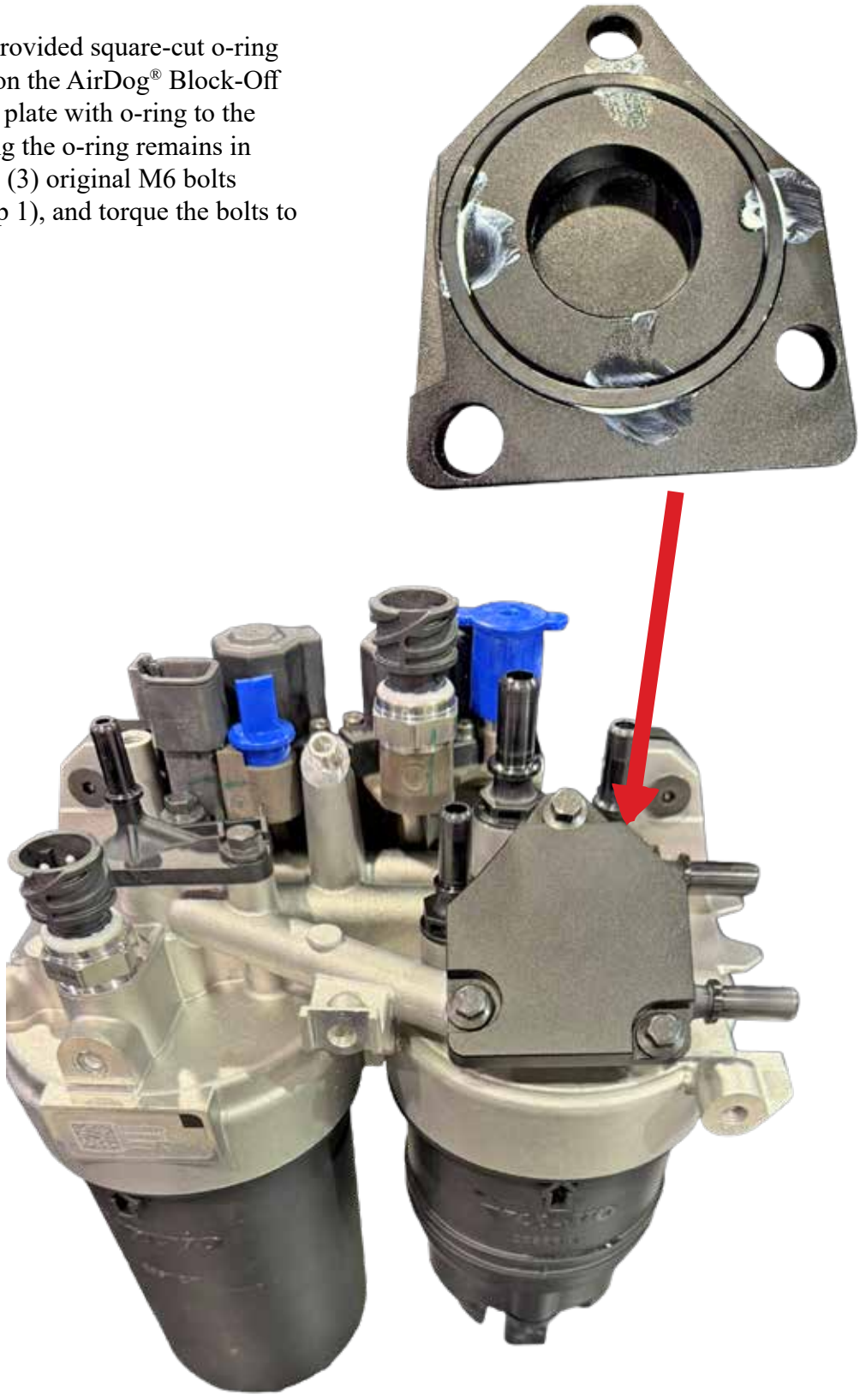
***Keep original primer assembly with truck in event that it is needed.**



8-2. Apply a small amount of grease to the o-ring groove of the AirDog® Block-Off Plate to hold the square-cut o-ring in place.



8-3. Install the provided square-cut o-ring into the groove on the AirDog® Block-Off Plate. Install the plate with o-ring to the housing, ensuring the o-ring remains in place. Install the (3) original M6 bolts (removed in Step 1), and torque the bolts to 50 in-lbs.



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 (9-1)





AirDog® Pump Motor Lead (9-2)

Fuel Pressure Sensor Lead (9-3)

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

Battery Positive Lead - Red (9-12)

Battery Negative Lead - Green (9-11)

Indicator Light Lead (9-5)

Relay Trigger Lead (No Connector/Plug) (9-6)

Securing the AirDog® Wire Harness Relay to the Vehicle

9-1. Secure the AirDog® wire harness relay to the vehicle. This picture shows the relay mounted on the firewall.



9-2. 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

9-3. 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:

9-4. Most Volvo/Mack trucks have an access plate located on the firewall. Remove the access plate and drill a 5/8" hole to allow entry of the indicator light lead into the cab. If not equipped with access plate or suitable entry location, a 5/8" hole will need to be drilled into the firewall. Use the grommet to seal around the loom cover.

9-5. Route the AirDog® indicator light lead through the access plate.



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

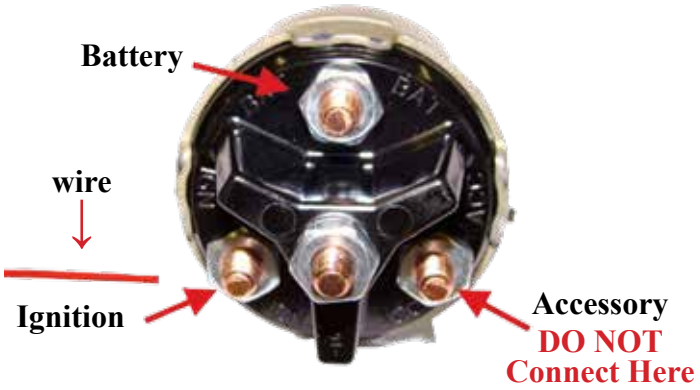


Relay Trigger Lead

This

There are several options for attaching the relay trigger wire:

9-6A. 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:



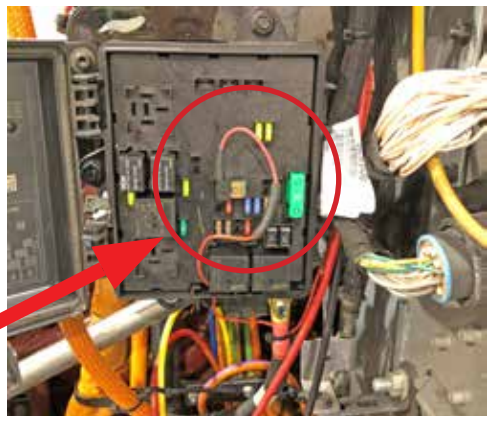
OR

Add-a-Fuse



That

9-6B. Using the 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

9-7. 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.



9-8. 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.

9-9. 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.



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.



9-10. 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.

9-11. Route the red & green power leads to the battery or an alternator. Connect the green (-) ground lead to the negative battery terminal post.

9-12. 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®?

10-1. 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.



10-2. 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".

- ❒ 11-1. Rub CLEAN diesel fuel or oil on filter seals before installing to ensure a proper seal.
- ❒ 11-2. Pre-fill the water separator/pre-filter with diesel fuel up to the bottom of the nut plate.
- ❒ 11-3. Turn the starter key to the on/run position.
- ❒ 11-4. 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.

- ❒ 11-5. 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!

NOTES

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AirDog®
HEAVY DUTY DIESEL FUEL SYSTEMS

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