

# Fuel Line Upgrade Kit

# INSTALLATION MANUAL

For Trucks Equipped with Cummins N-14 Diesel Engines with Pump **Mount Primary Fuel Filter** 



PLEASE READ THESE INSTRUCTIONS **THOROUGHLY BEFORE BEGINNING INSTALLATION** 







Revised 5/08/2024

Part No. PMFC-CUN14





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.

## **Cummins N-14 Pump Mount Filter**

#### **Guidelines & Parts List**

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

- 1. Inventory the package components. Notify PureFlow® Technologies immediately if any parts are missing or damaged.
- 2. Read the installation manual completely. Understand the installation recommendations before beginning.
- 3. The installation recommendations and guidelines contained herein are suggestions only. Individual installations may vary.

### SAFETY GUIDELINES

**CAUTION:** Chock the vehicle's tire to prevent from rolling.

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

**CAUTION:** Route the fuel lines keeping them away from hot exhaust components and/or moving parts. Properly secure the fuel lines to prevent chaffing.

# If you are uncertain of any installation procedure, contact: *PureFlow® Technologies, Inc.* for technical assistance.

# Field Serviceable Hose End Assembly Instructions:

- 1. Lubricate insert threads and I.D. of hose.
- 2. Screw hose into socket (left-hand thread) until hose bottoms. Back out 1/4 turn.
- 3. Screw insert into socket until insert touches socket.

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# **Fuel Line Kit Parts List**

1	Installation Manual	206-9-CNUPG	
1	#10 (1/2 ID x 59/64 OD) Braided Fuel Line - 9 ft Section	4C-1-10-10-9FT	O

# 905-02-0200-FK PMFC-CUN14 Fitting Kit

2	1/2 ID Hose F JICX x 5/8 Tube Hose End 90° Elbow	4A-2-13-10-10-S	6
2	1/2 ID Hose F JICX x 5/8 Tube Hose End Fitting	4A-1-13-10-10-S	
15	12" Zip Tie	5H-2-1-12	

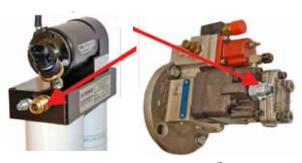
#### **Installation Instructions**

- 1. Measure and cut a length of fuel line necessary to reach from the AirDog® out to "ENGINE" port to the fuel inlet fitting on the transfer pump.
- 2. Assemble the fuel line with the proper end fittings.



NOTE: This assembled fuel line is for illustration only, use the proper end fittings that apply to your application.

3. Route and connect the fuel line to the proper fittings on the AirDog® and the engine transfer pump. Use a 90° swivel fitting if necessary. Properly tighten the fittings. Secure the fuel line as necessary with included zip ties to prevent abrasion and chaffing.





# Connecting the AirDog® Fuel Supply Line to the ECM Cooler Plate

- 4. Measure and cut a length of fuel line necessary to reach from the AirDog® "FUEL IN" port to the fuel outlet fitting on the ECM Cooler Plate.
- 5. Assemble the fuel line with the proper end fittings.
- 6. Route and connect the fuel line to the proper fittings on the AirDog® and the ECM Cooler Plate. Use a 90° swivel fitting if necessary.
- 7. Properly tighten the fittings. Secure the fuel line as necessary with included zip ties to prevent abrasion and chaffing.

**VERY IMPORTANT:** The N-14 ECM Cooler Plate has directional flow. There is a designated inlet and outlet port. Should the fuel lines be connected in reverse when installing the AirDog<sup>®</sup>, a flow issue may develop that will cause the Indicator Light to come on when backing off the throttle. Should this happen, simply connect the fuel lines going in and out of the ECM Cooler to the correct port.

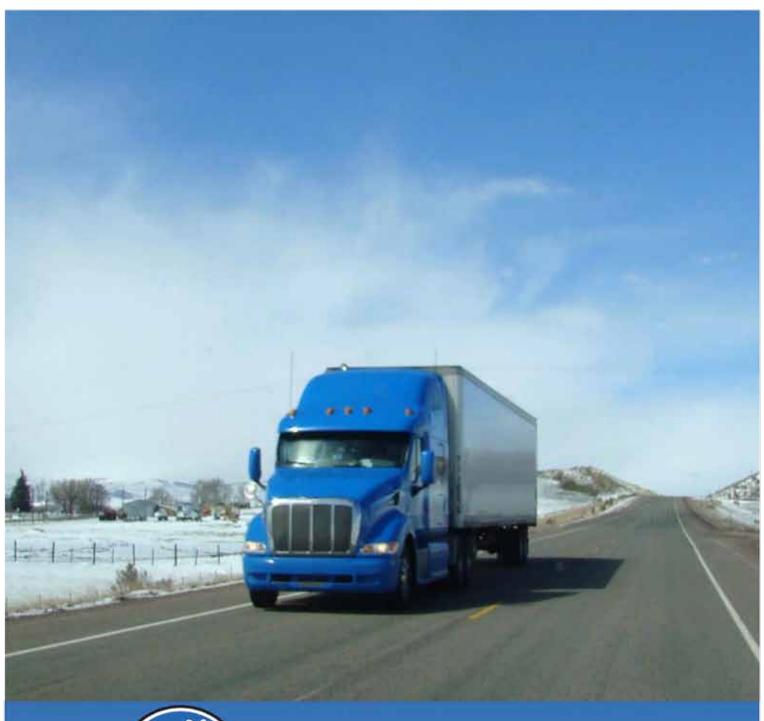


RECHECK ALL FUEL FITTINGS FOR LEAKAGE AND PROPERLY TORQUE. BE SURE ALL LINES ARE PROPERLY ROUTED TO PROTECT FROM EXCESSIVE HEAT AND SECURED TO PROTECT FROM CHAFFING AND ABRASION.

**Check the fuel rail pressure!** To ensure peak engine efficiency for maximum fuel economy, the fuel rail pressure must be within Cummins published specifications for the N-14 engine. For best performance, it is recommended to have the pressure closest to the maximum limit.

RPM	GPH	Fuel Rail Pressure
1,200	74.25	130-160
2,100	92.8	150-180

Connect pressure gauge here





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