

Airdog FF100-2 & WS100

AirDog Pre-Filter WS100 and Fuel Filter FF100-2 Combo Pack Instruction Manual

Model: FF100-2 & WS100 | Brand: Airdog

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your AirDog Pre-Filter WS100 and Fuel Filter FF100-2 Combo Pack. These replacement filters are designed to maintain optimal performance of your AirDog, AirDog II, and AirDog II-4G diesel fuel filtration systems by effectively removing contaminants and moisture from your diesel fuel.

A plugged fuel filter can lead to reduced fuel pressure and flow to your diesel engine, impacting performance and potentially causing damage. Regular replacement of these filters is crucial for the longevity and efficiency of your fuel system.



Figure 1: AirDog Pre-Filter WS100 and Fuel Filter FF100-2 Combo Pack.

2. SPECIFICATIONS

Feature	Detail
Brand	Airdog
Model Numbers	FF100-2 (Fuel Filter), WS100 (Water Separator)
Fuel Type	Diesel
Fuel Filter Micron Rating	2 micron (FF100-2)
Product Grade	Replacement Part
Outer Material	Plastic
Vehicle Service Type	Passenger Car, SUV, Truck, Van
Item Weight	1.8 Pounds
Product Dimensions	22.25 x 13.75 x 9 inches (packaging)
Manufacturer	PureFlow AirDog
Automotive Fit Type	Universal Fit

3. INSTALLATION AND SETUP

This section outlines the general procedure for replacing the AirDog fuel filter and water separator. Always refer to your specific AirDog system's manual for detailed, model-specific instructions and safety precautions.

Safety Precautions:

- Ensure the vehicle is turned off and the engine is cool.
- Wear appropriate personal protective equipment, including gloves and eye protection.
- Have a suitable container ready to catch any spilled diesel fuel.
- Work in a well-ventilated area.

Procedure:

1. **Locate Filters:** Identify the existing AirDog fuel filter (FF100-2 equivalent) and water separator (WS100 equivalent) on your vehicle's fuel system. These are typically mounted on the frame rail.
2. **Prepare for Drainage:** Place a drain pan or suitable container directly beneath the filters to collect diesel fuel.
3. **Remove Old Filters:**
 - Carefully loosen and remove the old water separator (WS100) first. Expect some fuel to drain.
 - Next, loosen and remove the old fuel filter (FF100-2).
 - Dispose of the old filters and drained fuel according to local environmental regulations.
4. **Install New Filters:**
 - Ensure the new filters are clean and free of debris.
 - Apply a thin film of clean diesel fuel to the new filter gaskets to ensure a proper seal.
 - Thread the new water separator (WS100) onto its housing. Hand-tighten until snug, then use a filter wrench to tighten an additional 1/4 to 1/2 turn, or as specified by your AirDog system manual.
 - Thread the new fuel filter (FF100-2) onto its housing. Hand-tighten until snug, then use a filter wrench to tighten an additional 1/4 to 1/2 turn, or as specified by your AirDog system manual.
5. **Prime the Fuel System:**
 - After installing new filters, the fuel system must be primed to remove air.
 - Turn the ignition key to the "ON" position (without starting the engine) for approximately 30 seconds. This activates the fuel pump to fill the filters.
 - Repeat this "ON" cycle several times until the fuel pump's sound changes, indicating that the filters are full and the system is primed.
 - Check for any leaks around the newly installed filters.
6. **Start Engine:** Once the system is primed and no leaks are detected, start the engine. Allow it to idle for a few minutes and re-check for leaks.



Figure 2: AirDog WS100 Water Separator, ready for installation.

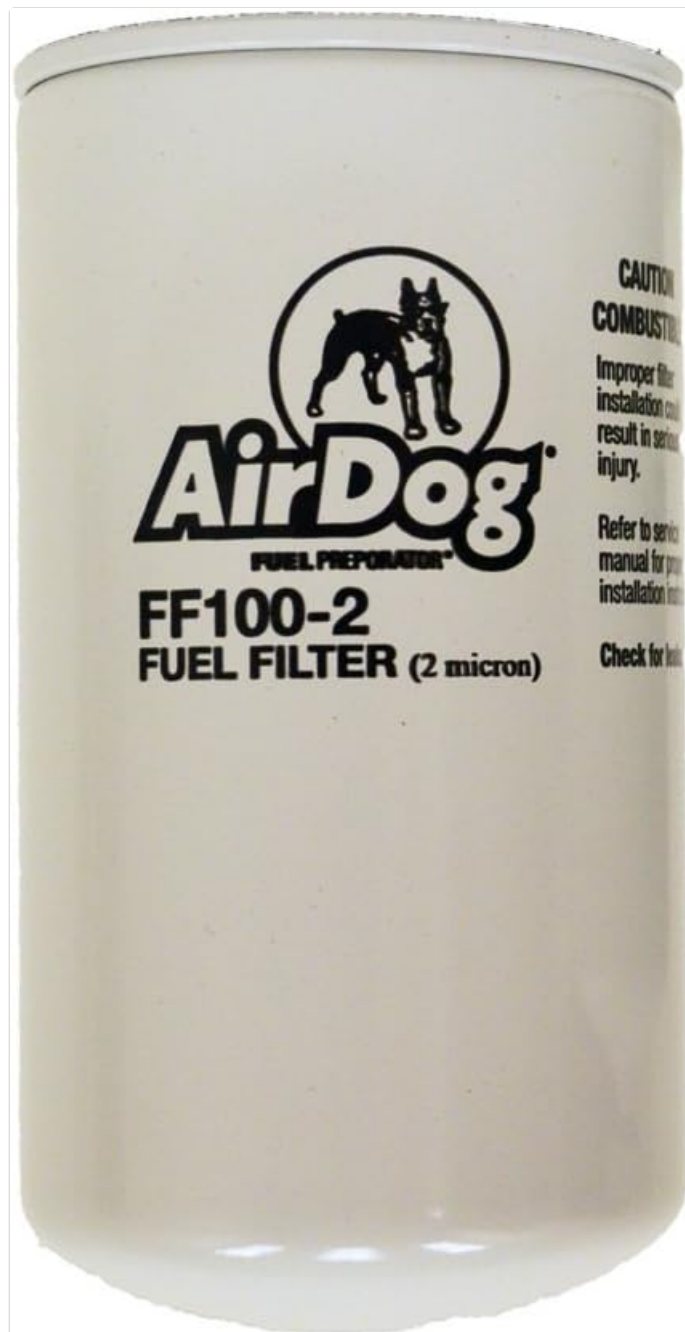


Figure 3: AirDog FF100-2 Fuel Filter, a 2-micron filter for optimal fuel cleanliness.

4. OPERATING INSTRUCTIONS

Once properly installed and the fuel system is primed, the AirDog Pre-Filter and Fuel Filter operate automatically as part of your vehicle's fuel delivery system. No further user interaction is required during normal operation.

The system continuously filters diesel fuel, removing contaminants and separating water to protect your engine's sensitive components.

5. MAINTENANCE

Regular maintenance, specifically the timely replacement of the WS100 Water Separator and FF100-2 Fuel Filter, is critical for the optimal performance and longevity of your AirDog fuel system and your vehicle's engine.

Replacement Schedule:

- Consult your AirDog system's specific manual for recommended service intervals.
- General recommendations often suggest replacement every 15,000 to 30,000 miles, or annually, whichever comes first. However, operating conditions (e.g., fuel quality, heavy usage) may necessitate more frequent changes.
- The video content showed filters that had been on the truck for approximately 30,000 miles and were overdue for replacement, indicating significant contamination.

Signs of a Clogged Filter:

- Reduced engine power or acceleration.
- Rough idling or engine hesitation.
- Difficulty starting the engine.
- Decreased fuel efficiency.
- Illumination of a "Check Engine" light or fuel system warning indicator.

If you experience any of these symptoms, inspect your filters and replace them if necessary, even if they haven't reached the recommended service interval.

6. TROUBLESHOOTING

Most issues related to the AirDog filtration system can be resolved by ensuring proper installation and timely filter replacement.

Common Issues and Solutions:

- **Low Fuel Pressure/Flow:** This is a primary indicator of a clogged fuel filter or water separator.
 - **Solution:** Replace both the FF100-2 Fuel Filter and WS100 Water Separator. Ensure the system is properly primed after replacement.
- **Fuel Leaks After Installation:**
 - **Solution:** Check that filters are tightened correctly (hand-tight plus 1/4 to 1/2 turn with a wrench). Ensure gaskets are properly seated and not pinched or damaged.
- **Engine Cranks but Won't Start (After Filter Change):**
 - **Solution:** The fuel system may not be fully primed. Repeat the priming procedure (turning ignition to "ON" several times without starting the engine) until the fuel pump sound stabilizes.

If issues persist after following these troubleshooting steps, it is recommended to consult a qualified diesel mechanic or contact AirDog customer support.

7. WARRANTY AND SUPPORT

For specific warranty information regarding your AirDog Pre-Filter WS100 and Fuel Filter FF100-2 Combo Pack, please refer to the documentation included with your original AirDog fuel system or contact PureFlow AirDog directly. Warranty terms and conditions may vary.

For technical support, installation assistance, or further inquiries, please visit the official Airdog website or contact their customer service department. Always provide your product model numbers (FF100-2, WS100) and any relevant system details when seeking support.



Figure 4: Official AirDog Fuel Preparator logo.

Related Documents - FF100-2 & WS100

	<p>Airdog X Series Air Purifiers FAQ - Maintenance, Cleaning, and Troubleshooting</p> <p>Frequently Asked Questions (FAQ) for Airdog X series air purifiers, covering topics like particle expulsion, cleaning frequency, filter replacement, troubleshooting noises, and Wi-Fi connectivity. Get answers to common questions about maintaining and operating your Airdog air purifier.</p>
	<p>Airdog X8S Air Purifier User Manual: Setup, Operation, Cleaning, and Troubleshooting</p> <p>Detailed user manual for the Airdog X8S air purifier. Covers purification theory, components, installation, operation instructions, app connectivity, maintenance, cleaning procedures for collecting plates and filters, and a comprehensive Q&A section.</p>
	<p>EdenPURE Airdog X3 Air Purifier User Manual</p> <p>User manual for the EdenPURE Airdog X3 air purifier, covering installation, operation, cleaning, maintenance, troubleshooting, and specifications.</p>
	<p>Airdog X5 User Manual: Advanced Air Purification Guide</p> <p>Comprehensive user manual for the Airdog X5 air purifier. Learn about its features, installation, operation, cleaning, and troubleshooting for optimal indoor air quality. Features washable filters and energy-efficient design.</p>
	<p>Airdog X8 Air Purifier User Guide</p> <p>Comprehensive user guide for the Airdog X8 air purifier, covering purification theory, installation, operation, maintenance, cleaning, app setup, and technical specifications. Learn how to use and care for your Airdog X8 for optimal air quality.</p>
	<p>Airdog X5 User Manual - Advanced Air Purification System</p> <p>Comprehensive user manual for the Airdog X5 air purifier, detailing features, installation, operation, cleaning, maintenance, and technical specifications. Learn how to achieve cleaner air without HEPA filters.</p>