Aeromotive 11108

Aeromotive A1000 Marine Inline Fuel Pump (Model 11108) User Manual

For EFI and Carbureted Marine Engines

1. Introduction

This manual provides essential information for the proper installation, operation, and maintenance of your Aeromotive A1000 Marine Inline Fuel Pump, Model 11108. This high-performance rotary vane fuel pump is designed for marine applications, compatible with both EFI (Electronic Fuel Injection) and carbureted engines, and supports gasoline and E85 fuel types.

The A1000 marine fuel pump is certified to ISO 8846, SAE J1171, and U.S. Coast Guard standards for ignition protection and fire resistance, ensuring reliable and safe operation in marine environments.



Figure 1: Aeromotive A1000 Marine Inline Fuel Pump (Model 11108).

2. Safety Information

- Always disconnect the battery before working on the fuel system.
- Ensure proper ventilation when working with fuel.
- Wear appropriate personal protective equipment (PPE), including eye protection and gloves.
- Fuel systems operate under pressure. Relieve fuel pressure before disconnecting any fuel lines.
- This product is not legal for sale or use on emission-controlled vehicles except when used as a direct replacement part matching OEM specifications.

3. Setup and Installation

The Aeromotive A1000 Marine Fuel Pump is designed for external inline mounting. Proper installation is crucial for performance and safety. Refer to the detailed installation manual (PDF) available on the product page for comprehensive

instructions.

3.1 Mounting

Mount the pump in a location that is protected from direct impact and excessive heat. Ensure the pump is mounted below the fuel tank's lowest level to facilitate gravity feeding and prevent cavitation. Use the provided mounting bracket and hardware. The pump features ORB-10 female inlet and outlet ports for secure, high-flow fuel line connections.



Figure 2: Aeromotive A1000 pump showing ORB-10 inlet/outlet ports.

3.2 Fuel Line Connections

Connect appropriate ORB-10 fittings and fuel lines to the pump. Ensure all connections are tight and leak-free. Use high-quality fuel hose suitable for marine applications and the fuel type (gasoline or E85).

3.3 Electrical Wiring

The pump operates on a 12V electrical system. Connect the pump to a fused, switched 12V power source capable of handling the pump's maximum current draw (18A @ 45 psi). Ensure proper grounding. Consult a qualified marine electrician if you are unsure about wiring procedures.

3.4 Fuel System Diagram Examples

Below are example diagrams for complete fuel system setups. These illustrate typical configurations for EFI and carbureted systems. A fuel pressure regulator is required and sold separately.

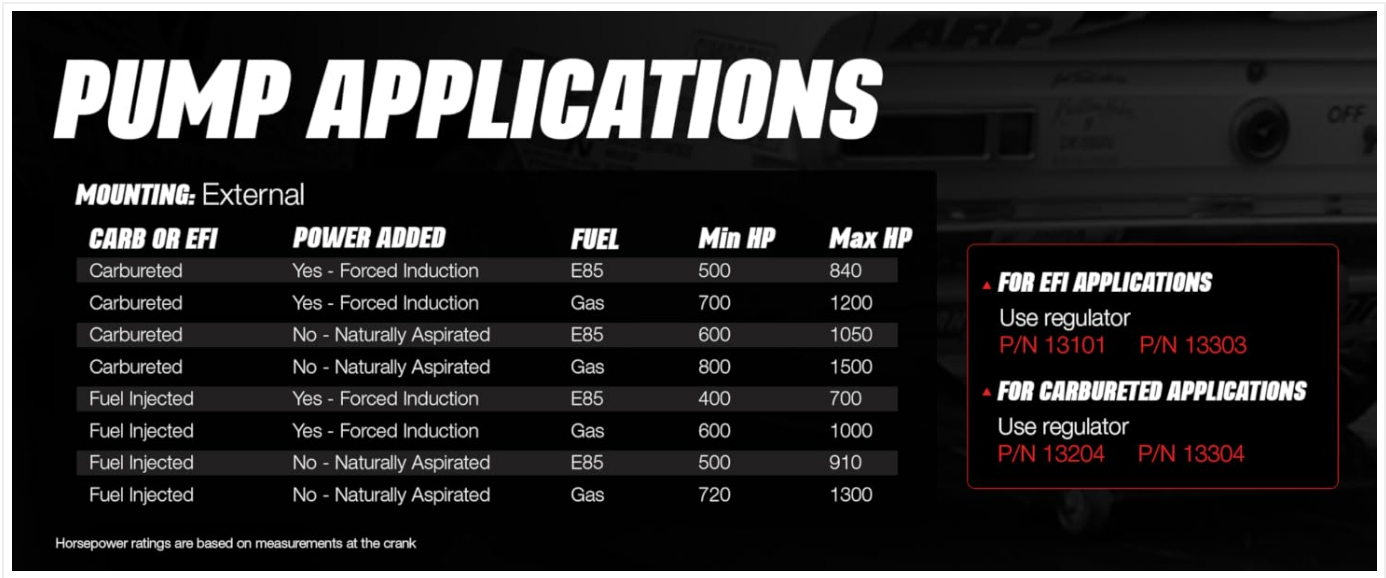


Figure 3: OEM Fuel Rail, Fuel Injected System Diagram.

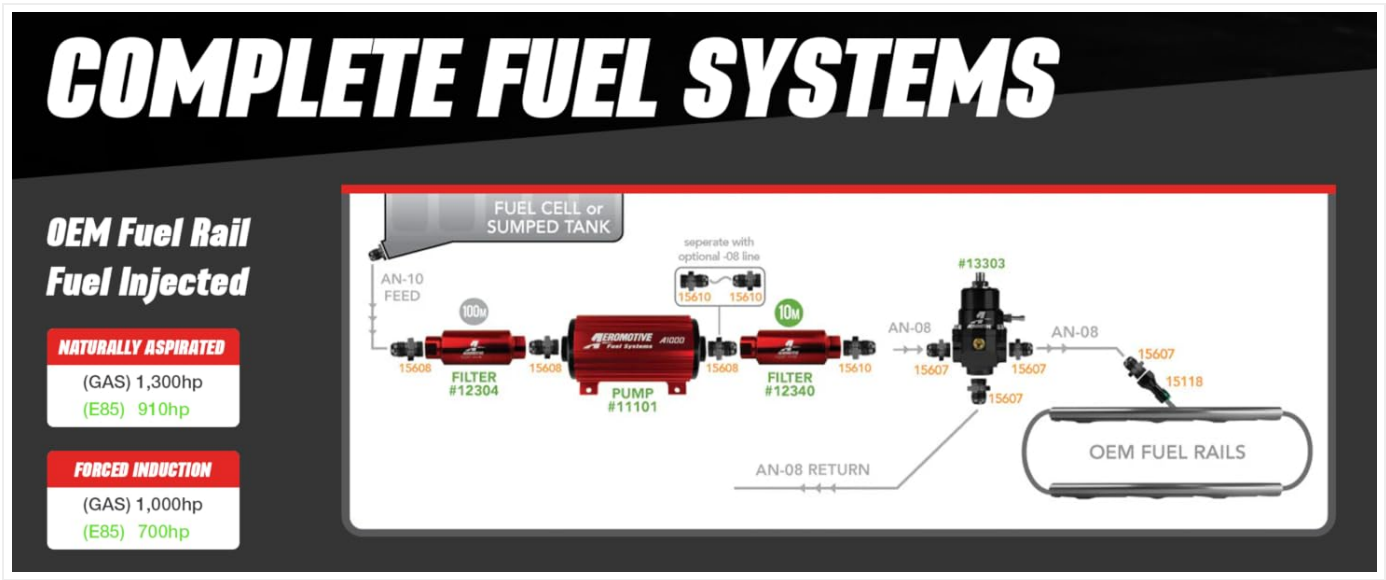


Figure 4: Dual Fuel Rail, Fuel Injected System Diagram.

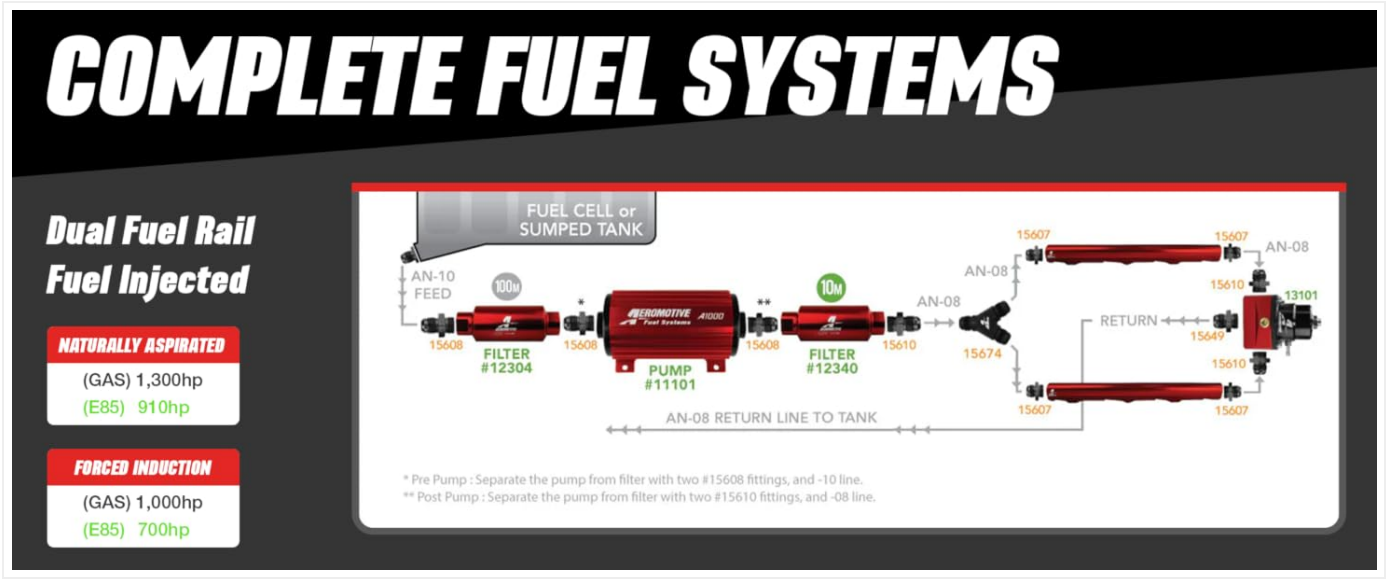


Figure 5: Dual Feed Carbureted System Diagram.

For EFI applications, use regulator P/N 13101 or P/N 13303. For carbureted applications, use regulator P/N 13204 or P/N 13304.

4. Operating Instructions

The Aeromotive A1000 fuel pump is designed for continuous operation. Once properly installed and wired, the pump will activate when the ignition is turned on, pressurizing the fuel system. Always ensure the fuel tank has an adequate supply of fuel before operating the pump.

- **Pre-Start Check:** Before starting the engine, visually inspect all fuel lines and connections for leaks.
- **Initial Start-up:** After installation, cycle the ignition key a few times without starting the engine to allow the pump to prime the system and build pressure. Check for leaks again.
- **Continuous Operation:** The pump is designed for long-term use, tested to run continuously for over 2,000 hours.
- **Fuel Compatibility:** This pump is compatible with gasoline and E85 fuel types. Do not use with diesel fuel.



Figure 6: Horsepower ratings for EFI and Carbureted Engines.

5. Maintenance

The Aeromotive A1000 fuel pump is designed for minimal maintenance. However, regular checks of the fuel system are recommended to ensure optimal performance and longevity.

- **Fuel Filter Inspection:** Regularly inspect and replace fuel filters as needed. Clogged filters can restrict fuel flow and reduce pump life. Aeromotive recommends using appropriate pre- and post-pump filters.
- **Hose and Fitting Inspection:** Periodically check all fuel hoses and fittings for signs of wear, cracking, or leaks. Replace any damaged components immediately.
- **Electrical Connections:** Ensure all electrical connections are clean, tight, and free from corrosion.
- **Mounting Security:** Verify that the pump remains securely mounted and that there is no excessive vibration.

6. Troubleshooting

If you experience issues with your Aeromotive A1000 fuel pump, consult the following troubleshooting guide. For complex issues, contact Aeromotive technical support or a qualified mechanic.

Problem	Possible Cause	Solution
Pump does not turn on	No power, blown fuse, faulty wiring, poor ground connection.	Check fuse, verify 12V power supply, inspect wiring and ground connections.
Low fuel pressure	Clogged fuel filter, restricted fuel line, faulty fuel pressure regulator, low fuel level, air in system.	Replace fuel filter, inspect fuel lines for kinks, check regulator function, ensure adequate fuel, bleed air from system.
Fuel leaks	Loose fittings, damaged fuel lines, faulty seals.	Tighten all fittings, replace damaged lines or seals.
Excessive noise from pump	Cavitation (air in fuel), restricted inlet, worn pump components.	Ensure pump is below fuel level, check inlet for obstructions, consider professional inspection if noise persists.

7. Specifications

Key specifications for the Aeromotive A1000 Marine Inline Fuel Pump (Model 11108):

Feature	Detail
Model Number	11108
Brand	Aeromotive
Series	A1000
Maximum Flow Rating	1000 lbs/hr (approximate, refer to flow chart)
Maximum Pressure	100 psi
Fuel Type Compatibility	Gasoline, E85
Fit Type	Universal Fit
Mounting Type	External, Inline
Pump Design	Rotary Vane
Motor Style	Brushed
Inlet Connection Type	ORB-10 Female Thread
Outlet Connection Type	ORB-10 Female Thread
Maximum Current Draw	18A @ 45 psi
Voltage	12V
Body Material	Aluminum
Item Dimensions (L x W x H)	8.5 x 4.75 x 4 inches
Item Weight	6 pounds
Certifications	ISO 8846, SAE J1171, U.S. Coast Guard (Ignition Protection & Fire Resistance)

COMPLETE FUEL SYSTEMS

Dual Feed Carbureted

NATURALLY ASPIRATED
(GAS) 1,300hp
(E85) 1050hp

FORCED INDUCTION
(GAS) 1,200hp
(E85) 840hp

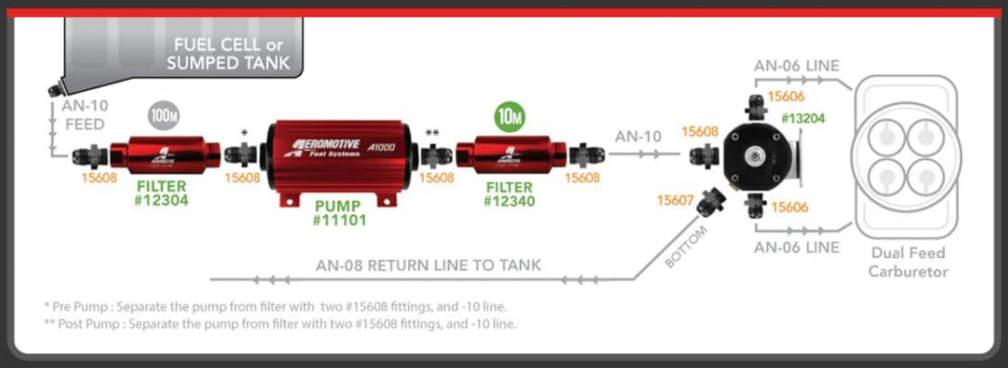


Figure 7: Detailed Specifications and Dimensions.

PAIR WITH AN AEROMOTIVE REGULATOR FOR EFI OR CARBURETED



- **FOR EFI APPLICATIONS:**
  USE REGULATOR P/N 13101 OR P/N 13303
- **FOR CARBURETED APPLICATIONS:**
  USE REGULATOR P/N 13204 OR P/N 13304

PUMP APPLICATIONS

MOUNTING: External

CARB OR EFI	POWER ADDED	FUEL	Min HP	Max HP
Carbureted	Yes - Forced Induction	E85	500	840
Carbureted	Yes - Forced Induction	Gas	700	1200
Carbureted	No - Naturally Aspirated	E85	600	1050
Carbureted	No - Naturally Aspirated	Gas	800	1500
Fuel Injected	Yes - Forced Induction	E85	400	700
Fuel Injected	Yes - Forced Induction	Gas	600	1000
Fuel Injected	No - Naturally Aspirated	E85	500	910
Fuel Injected	No - Naturally Aspirated	Gas	720	1300

Horsepower ratings are based on measurements at the crank

Figure 8: Flow Chart for Aeromotive A1000 Fuel Pump (Model 11101, similar performance).

8. Warranty Information

The Aeromotive A1000 Marine Inline Fuel Pump is covered by a manufacturer's warranty. For detailed terms and conditions, please refer to the official Warranty document available as a PDF on the product page or contact Aeromotive customer support.
A link to the Warranty document can be foundhere.

9. Customer Support

For technical assistance, questions regarding installation, operation, or warranty claims, please contact Aeromotive customer support. You can find contact information on the official Aeromotive website.
Additional resources, including the full Installation Manual and User Manual, are available in PDF format:

- Installation Manual (PDF)
- User Manual (PDF)

10. Product Videos

Watch official product videos for more information and visual guidance.

Aeromotive Brand Video

Your browser does not support the video tag.

This video provides an overview of the Aeromotive brand and its commitment to fuel system performance. It highlights the quality and engineering behind their products.

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Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question