

## Exmark 109-4180

# Exmark 109-4180 Bi-Directional 25 Micron Filter User Manual

Official instructions for the Exmark 109-4180 Bi-Directional 25 Micron Filter, designed for various Exmark Lazer Z, Vantage, and Turf Tracer series equipment.

## 1. PRODUCT OVERVIEW

The Exmark 109-4180 is a genuine Exmark Toro factory part, a bi-directional 25 micron filter essential for maintaining the hydraulic system of compatible Exmark lawn and garden equipment. This filter is designed to capture fine particles, ensuring the longevity and optimal performance of your machinery's hydraulic components.



Figure 1: Front view of the Exmark 109-4180 Bi-Directional 25 Micron Filter, showing the Exmark Original Parts logo.

### Key Features:

- Genuine Exmark Toro Factory Part Number 109-4180.
- Replacement for Previous Part Numbers: 1-513211, 1-543811, 109-4180-S.
- Bi-directional 25 micron filtration for effective particle removal.
- Compatible with a wide range of Exmark models including: ARX440CKC24000, ARX440GKC24000, ARX481CKA30000, ARX541CKA30000, Staris E-Series, Explorer, Lazer AS, Lazer HP, Lazer Z, Lazer Z AC, Lazer Z AS, Lazer Z CT, Lazer Z HP, Lazer Z LC, Navigator, SAR481KA30, SAR481KA30CA, Staris S-Series, Turf Tracer S-Series, Vantage S-Series, Viking Hydro S-Series, Turf Ranger, Turf Tracer 1800, Turf Tracer HP, Turf Tracer Hydro, Turf Tracer Hydro ECS, Vantage, Viking Hydro, X-Series Hydro Turf Tracer, Turf Tracer X-Series, Vantage X-Series.

## 2. INSTALLATION AND SETUP

Proper installation of the hydraulic filter is crucial for the optimal performance and longevity of your Exmark equipment. Always refer to your specific equipment's service manual for detailed, model-specific instructions and safety precautions before proceeding.

## General Installation Steps:

1. **Preparation:** Ensure the equipment is turned off, cooled down, and on a level surface. Disconnect the battery if necessary. Prepare a drain pan for used hydraulic fluid.
2. **Locate the Filter:** Identify the existing hydraulic filter on your equipment.
3. **Remove Old Filter:** Carefully unscrew the old filter. Be prepared for some fluid to drain. Dispose of the old filter and fluid according to local regulations.
4. **Prepare New Filter:** Apply a thin film of clean hydraulic fluid to the new filter's gasket. This ensures a proper seal.
5. **Install New Filter:** Screw the new Exmark 109-4180 filter onto the filter head by hand until the gasket makes contact. Then, tighten an additional 3/4 to 1 full turn, or as specified in your equipment's manual. Do not overtighten.
6. **Refill Hydraulic System:** Top off the hydraulic fluid to the recommended level, if necessary, using the correct type of fluid specified by Exmark.
7. **Check for Leaks:** Start the equipment and allow it to run for a few minutes. Check for any leaks around the new filter.



Figure 2: Diagram illustrating the general steps for hydraulic filter installation, including preparing the gasket and tightening the filter.

### 3. OPERATING PRINCIPLES

The Exmark 109-4180 Bi-Directional 25 Micron Filter functions as a critical component in your equipment's hydraulic system. Its primary role is to remove contaminants from the hydraulic fluid, such as dirt, metal particles, and other debris, which can cause wear and damage to sensitive hydraulic components like pumps, motors, and valves.

Being bi-directional, this filter is designed to maintain its filtration efficiency regardless of the direction of fluid flow, which is common in hydraulic systems that experience fluctuating flow patterns. The 25-micron rating indicates that it can effectively capture particles 25 micrometers or larger, providing a good balance between filtration efficiency and flow restriction for the specified applications.

A clean hydraulic filter ensures that the hydraulic fluid remains pure, allowing the system to operate at peak efficiency, reduce friction, dissipate heat, and transmit power effectively. Regular replacement is key to

preventing costly repairs and extending the lifespan of your hydraulic system.

## 4. MAINTENANCE

Regular maintenance of your hydraulic filter is essential for the health of your Exmark equipment's hydraulic system. The 109-4180 filter is a consumable part that requires periodic replacement.

### Filter Replacement Schedule:

Refer to your specific Exmark equipment's operator's manual for the recommended hydraulic filter replacement intervals. These intervals are typically based on operating hours or seasonal usage. Adhering to the recommended schedule helps prevent premature wear of hydraulic components and maintains system efficiency.

### Signs of a Clogged Filter:

- Reduced hydraulic system performance (e.g., slower lift, steering issues).
- Increased operating temperature of hydraulic fluid.
- Unusual noises from hydraulic pump or components.
- Warning lights or indicators on the equipment dashboard (if applicable).

### Disposal:

Used hydraulic filters and fluid must be disposed of responsibly according to local environmental regulations. Many automotive or equipment service centers offer recycling programs for used oil and filters.



Figure 3: Exmark engine oil and filter kit, highlighting the importance of using genuine parts for maintenance.

### Official Exmark Parts Video:

Your browser does not support the video tag.

Video 1: An official video from Exmark Manufacturing showcasing genuine lawn and garden replacement parts, including filters, oils, and other maintenance items.

## 5. TROUBLESHOOTING

If you experience issues with your hydraulic system after filter replacement or during normal operation, consider the following troubleshooting steps:

- **Fluid Leaks:** Check the filter's seal and tightness. Ensure the gasket was properly lubricated and the filter is not cross-threaded.
- **Reduced Performance:** If performance issues persist after filter replacement, the problem may lie elsewhere in the hydraulic system (e.g., pump, valves, fluid level, or other components).
- **Incorrect Filter:** Verify that the correct filter (Exmark 109-4180 or equivalent) was installed. Using an

incorrect filter can lead to poor filtration or flow issues.

- **Contaminated Fluid:** If the hydraulic fluid appears discolored or contains visible particles shortly after replacement, the system may have significant internal contamination or a severe component failure.

For complex hydraulic system issues, it is recommended to consult a qualified Exmark service technician or refer to your equipment's comprehensive service manual.

## 6. SPECIFICATIONS

Detailed specifications for the Exmark 109-4180 Bi-Directional 25 Micron Filter:

Attribute	Value
Item Model Number	109-4180
Brand	Exmark
Product Grade	Replacement Part
Material	Plastic (likely referring to internal components or packaging, as the filter body is metal)
Product Dimensions (L x W x H)	16 x 10 x 1 inches
Item Weight	9.6 ounces
Filtration Rating	25 Micron
Service Type Compatibility	Exmark Lazer Z, Exmark Lazer Z AC, Exmark Lazer Z AS, Exmark Lazer Z CT, Exmark Lazer Z HP, Exmark Lazer Z LC, Exmark Navigator, Exmark Staris E-Series, Exmark Staris S-Series, Exmark Turf Ranger, Exmark Turf Tracer, Exmark Turf Tracer 1800, Exmark Turf Tracer ECS, Exmark Turf Tracer HP, Exmark Turf Tracer S-Series, Exmark Turf Tracer X-Series, Exmark Vantage, Exmark Vantage S-Series, Exmark Vantage X-Series, Exmark X-Series Hydro Turf Tracer, Toro Aerator 24, Toro Aerator 30, Toro Explorer, Toro Z-Spray 3624, Toro Z-Spray 4230, Toro Z-Spray 4630, Toro Z-Spray 5260, Toro Z-Spray 5260XL

Note: Dimensions and weight are for the packaged product. The "Material: Plastic" specification might refer to internal filter media or packaging, as the filter housing is typically metal.

## 7. WARRANTY AND SUPPORT

Specific warranty information for the Exmark 109-4180 Bi-Directional 25 Micron Filter is typically provided at the point of purchase or within the documentation accompanying your Exmark equipment. As a genuine replacement part, it is generally covered under the standard Exmark parts warranty, which protects against

defects in material and workmanship.





For detailed warranty terms, claims, or technical support, please contact Exmark customer service or an authorized Exmark dealer. You can find contact information and dealer locators on the official Exmark website:

**[Visit the Official Exmark Website](#)**

When contacting support, please have your equipment model and serial number, as well as the filter part number (109-4180), ready to assist them in providing the best possible service.

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## Related Documents - 109-4180

	<p><a href="#">Exmark ULTRAVAC® QUICK DUMP SYSTEM Parts Manual - Model LZUVQD11</a></p> <p>Official parts manual for the Exmark ULTRAVAC® QUICK DUMP SYSTEM, Model LZUVQD11. This document provides detailed part numbers, quantities, and descriptions for all assemblies and components, along with ordering information and accessory options.</p>
	<p><a href="#">Exmark ULTRAVAC® Collection System LZUVQD11 Parts Manual</a></p> <p>Official parts manual for the Exmark ULTRAVAC® Collection System, Model LZUVQD11. Includes detailed assembly diagrams, part numbers, quantities, and ordering information for replacement components and accessories.</p>
	<p><a href="#">Exmark Vertex E-Series Stand-On Lawn Mower Operator's Manual</a></p> <p>This manual provides operating, maintenance, adjustment, and safety instructions for the Exmark Vertex E-Series stand-on lawn mower. Learn about safety features, controls, specifications, and proper usage for professional lawn care.</p>
	<p><a href="#">Exmark RADIUS E-SERIES RAE708GEM60300 Parts Manual</a></p> <p>Detailed parts manual for the Exmark RADIUS E-SERIES RAE708GEM60300 zero-turn mower. Includes diagrams, part numbers, and assembly information for efficient maintenance and repair.</p>



### [Exmark METRO. 21 Operator's Manual](#)

Comprehensive operator's manual for the Exmark METRO. 21 lawn mower, covering safety, operation, maintenance, troubleshooting, and warranty information.



### [Exmark QUEST™ Operator's Manual](#)

This operator's manual provides essential information for the safe and effective operation and maintenance of the Exmark QUEST™ zero-turn mower. It includes safety precautions, operating instructions, maintenance schedules, and troubleshooting tips.