Saved from manuals.plus.
Open the live page for links to other documents and user manuals.

NorthStar 2683061

NorthStar NSQ Series 12V On-Demand Sprayer Diaphragm Pump (3 GPM) User Manual

Model: 2683061

1. Introduction

This manual provides essential instructions for the safe and efficient operation, setup, and maintenance of your NorthStar NSQ Series 12V On-Demand Sprayer Diaphragm Pump, Model 2683061. This pump is designed for various spraying applications, delivering reliable performance with a 3 GPM flow rate and 60 PSI pressure.

2. Safety Information

Read and understand all safety warnings and instructions before operating the pump. Failure to do so may result in injury or equipment damage.

- **Electrical Safety:** Ensure the 12V power source is properly fused and connected according to local electrical codes. Avoid contact with water during electrical connections.
- **Chemical Handling:** Always wear appropriate personal protective equipment (PPE) when handling chemicals. Do not pump flammable fluids. Refer to chemical manufacturer's instructions for safe handling and disposal.
- **Pressure Safety:** The pump operates at 60 PSI. Ensure all connections are secure to prevent leaks and accidental spray. Relieve system pressure before performing maintenance.
- **Ventilation:** Operate in a well-ventilated area.

3. Setup

Follow these steps to set up your NorthStar NSQ Series pump:

1. **Mounting:** Securely mount the pump to a stable surface using appropriate hardware.
2. **Inlet Connection:** Connect the inlet hose to the pump's inlet port. Ensure a tight, leak-free connection. The pump features 1/2 inch NPT connections.
3. **Outlet Connection:** Connect the outlet hose to the pump's outlet port. Ensure a tight, leak-free connection.
4. **Electrical Connection:** Connect the pump to a 12V DC power source. Ensure correct polarity (red wire to positive, black wire to negative). The pump includes a fused connection for safety.
5. **Priming:** The pump is self-priming. Ensure the inlet hose is submerged in the liquid to be pumped.



Figure 3.1: NorthStar NSQ Series 12V On-Demand Sprayer Diaphragm Pump. This image shows the overall view of the pump with its electrical connections and ports.

4. Operation

Once the pump is set up and connected:

1. **Power On:** Activate the 12V power supply to the pump.
2. **Spraying:** The pump is an on-demand unit, meaning it will automatically turn on when flow is required (e.g., when the spray gun trigger is pressed) and turn off when no flow is needed. This conserves battery power and reduces wear.
3. **Pressure:** The pump delivers 60 PSI of spraying power. The unique pressure switch design slowly cycles the pump for reduced switch and motor wear.
4. **Flow Rate:** This model provides a flow rate of 3 Gallons Per Minute (GPM).

Your browser does not support the video tag.

Video 4.1: NorthStar NSQ Series 12V On-Demand Sprayer Diaphragm Pump Overview. This video demonstrates the features and operation of the NorthStar NSQ

Series pumps, including their on-demand functionality and various flow rates.



Figure 4.1: Self-Priming Feature. The pump's self-priming capability allows for ease of use even when positioned above the liquid level.



Figure 4.2: Approved for Agricultural Herbicides. This pump is suitable for use with agricultural herbicides, including Roundup, due to its chemical-resistant components.

5. Maintenance

Regular maintenance ensures optimal performance and extends the life of your pump.

- **Cleaning:** After each use, especially with chemicals, flush the pump with clean water to prevent residue buildup.
- **Inspection:** Periodically inspect hoses, connections, and the pump body for any signs of wear, damage, or leaks.
- **Winterization:** In freezing conditions, drain all liquids from the pump and hoses. Run RV antifreeze through the pump to protect internal components.
- **Diaphragm and Valves:** The pump features Santoprene diaphragm for reliability and DXS-3 valves made with chemical-resistant Viton for longer life. While durable, inspect these components if performance degrades.



Figure 5.1: Chemical Resistant Components. The DXS-3 valves and Santoprene diaphragm are designed for chemical resistance, ensuring durability and performance with various spraying solutions.

6. Troubleshooting

Problem	Possible Cause	Solution
Pump does not run	No power, loose connection, blown fuse	Check 12V power supply, ensure connections are secure, replace fuse if necessary.
Low flow or pressure	Clogged inlet filter, air leak in inlet, restricted hose, worn diaphragm/valves	Clean inlet filter, check all connections for air leaks, clear any hose obstructions, inspect and replace diaphragm/valves if worn.

Problem	Possible Cause	Solution
Pump runs continuously when not spraying	Leak in system, faulty pressure switch, air in system	Check for leaks in hoses, fittings, or spray gun. Ensure all air is purged from the system. Contact support if pressure switch is suspected faulty.
Leaking from pump head	Loose screws, damaged diaphragm	Tighten pump head screws. If leaking persists, inspect and replace diaphragm.

7. Specifications

Feature	Detail
Brand	NorthStar
Model Number	2683061
Power Source	12 Volts DC (Corded Electric)
Maximum Flow Rate	3 Gallons Per Minute (GPM)
Maximum Pressure	60 PSI
Maximum Lifting Height	12 Feet
Item Weight	6.37 Pounds
Material	Polypropylene (PP)
Diaphragm Material	Santoprene
Valve Material	Viton (DXS-3 valves)
UPC	840321700346

8. Warranty

This NorthStar NSQ Series pump typically comes with a 2-year limited warranty from the date of purchase, covering defects in materials and workmanship. Please retain your proof of purchase for warranty claims. For specific warranty terms and conditions, refer to the documentation included with your product or contact NorthStar customer support.

9. Customer Support

For technical assistance, replacement parts, or warranty inquiries, please contact NorthStar customer support. Have your model number (2683061) and purchase date available when contacting support.
Website: www.northerntool.com/shop/tools/northstar
Phone: Refer to the product packaging or NorthStar's official website for the most current contact information.

© 2024 NorthStar. All rights reserved.

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.

Name

Anonymous

Email

you@example.com

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

Open the live page

https://manuals.plus/asin/B00BJ2H0WY

More documents and user manuals: **https://manuals.plus/**