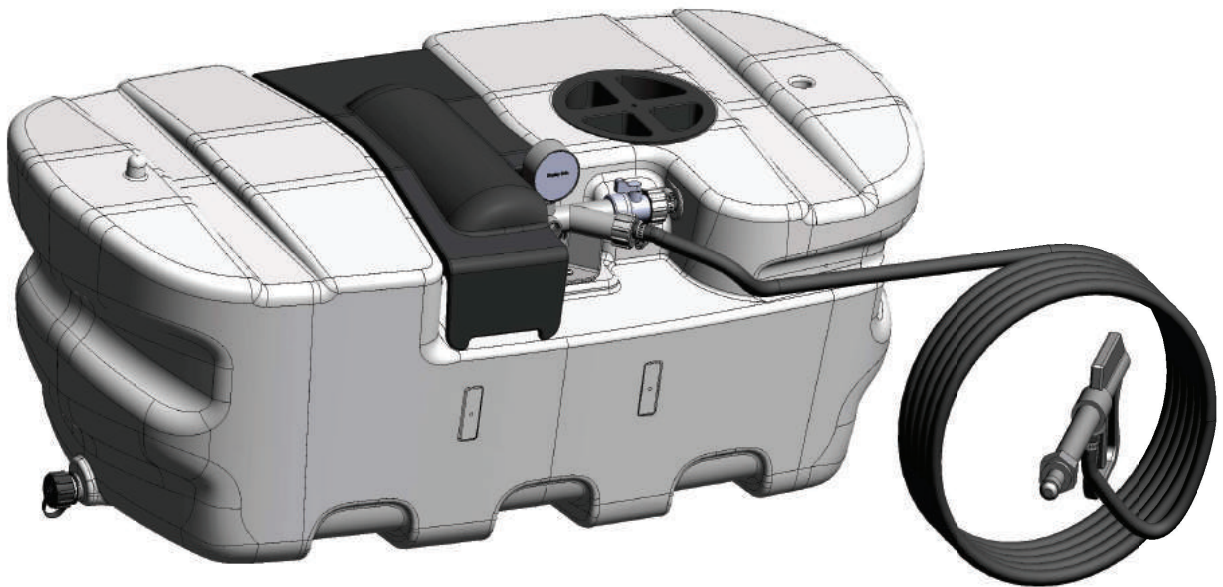




COUNTYLINE[®]

By **DELAN**



25 GALLON DELUXE SPOT SPRAYER

PN# 100057

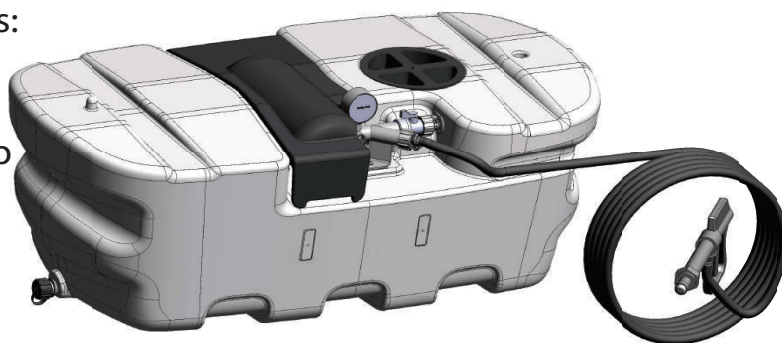
Technical Specifications

Delavan's all new PowerSPRAY™ and PowerSPRAY Pro™ has been engineered and customized to be the most reliable, longest lasting, spot and boom sprayers in the market. By producing a new line of sprayers with dependability, smooth even spray pattern and durability, Delavan is leading the charge in landscape excellence.

Please read through the manual prior to using your pump and sprayer. Safe operation and regular maintenance will ensure your sprayer works efficiently for years. Keep this manual in a safe and convenient place for future reference. If you have any issues please call 1-866-DELAVAN and have your model number ready.

25 Gallon Premium Pro + Spot Sprayer features:

- 25 Gallon Polyethylene Tank
- 12 VDC, 2.2 GPM, SmartFLO Diaphragm Pump
- 13" TeeJet Gunjet Spray Gun
- 25 ft. of 3/8" Flexible Hose
- Premium Manifold with Pressure Gauge
- 6" Recessed Tank Lid with Tether
- Reinforced Component Lid
- Wire Harness with Fuse & Switch.



Safe Operation

To ensure the safety of yourself and others, please read and understand the safety instructions. Delavan Fluid Power assumes no responsibility for the misuse of our products. This product has been tested and engineered in accordance with industry standards. Failure to follow the safety guidelines can result in personal injury.

This product is designed to be mounted on an ATV/UTV or other outdoor vehicle. Please understand your equipment's owner's manual, towing safety rules and how to operate your equipment before using any attachment.

This sprayer is made for residential yard use. Sprayer is meant for liquid products only. When tank is full the weight is approximately 190 lbs, please be aware of weight shifting while in use..

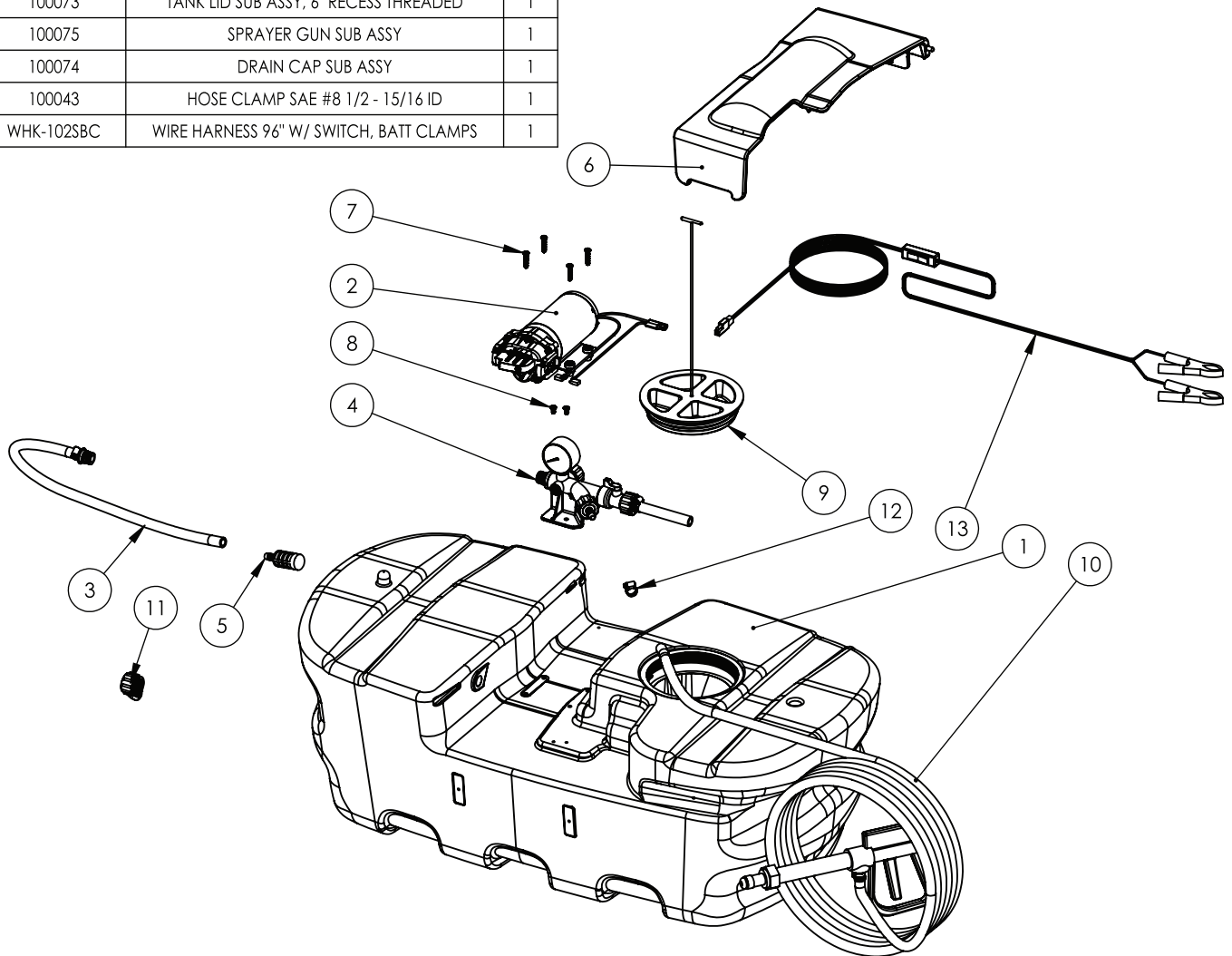
While spraying please be aware of hazards such as holes, uneven terrain, and obstacles. Equipment braking and stability may be affected with the attachment of this unit. Be aware of changing conditions. Refer to safety rules in your equipment owner's manual concerning safe operation with loads on slopes.

Always be aware of chemicals being used in sprayer for pump and sprayer compatibility. Refer to chemical Safety Data Sheets for safety information. Always wear proper PPE such as goggles, gloves and foot protection. Never spray flammable, caustic, acidic or other petroleum-based products.

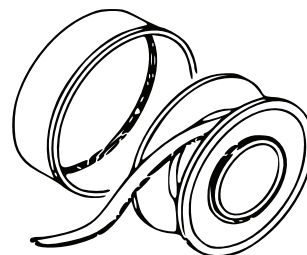
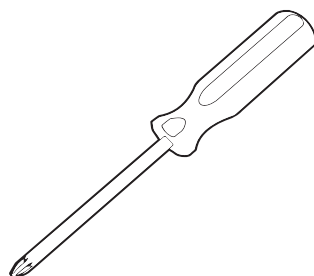
Do not leave tank in hot sun for extended periods. Heat can cause pressure build up result in unexpected release. Drain tank of any solutions after use and flush out entire system including tank, manifold and pump.

Parts List Breakdown

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	100038	MOLDED TANK 25 GAL PREM	1
2	3222-421F	3CH PUMP, 2.2GPM FLEX, BYPASS-DEMAND	1
3	100069	INTAKE LINE 25 GAL PREM/STD	1
4	100070-A	MANIFOLD SUB ASSY, TOP PORT GAGE	1
5	100015	INTAKE FILTER 3/8" BARB	1
6	100017	PUMP COVER 25 GAL PREM	1
7	100072	PAN-HD SCREW 10-24 X 1", ZN PLTD	4
8	100071	PAN-HD SCREW 10-24 X 3/8", ZN PLTD	2
9	100073	TANK LID SUB ASSY, 6" RECESS THREADED	1
10	100075	SPRAYER GUN SUB ASSY	1
11	100074	DRAIN CAP SUB ASSY	1
12	100043	HOSE CLAMP SAE #8 1/2 - 15/16 ID	1
13	WHK-102SBC	WIRE HARNESS 96" W/ SWITCH, BATT CLAMPS	1



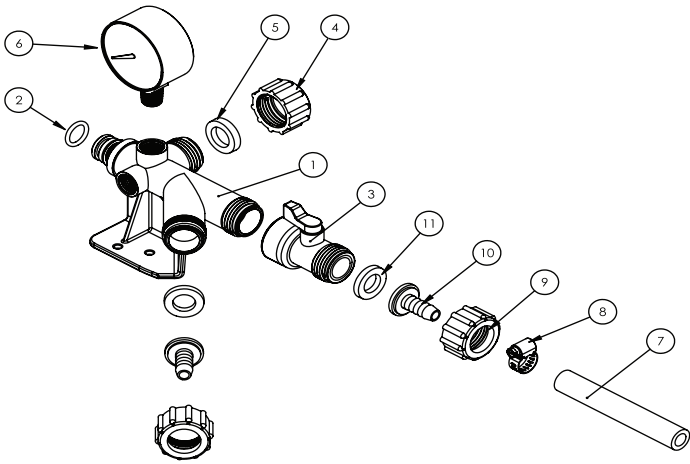
Tools Required for Assembly



Teflon Tape or other adequate thread sealant

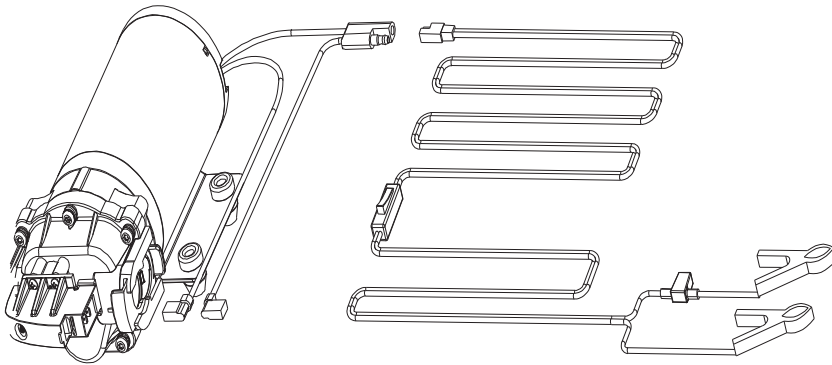
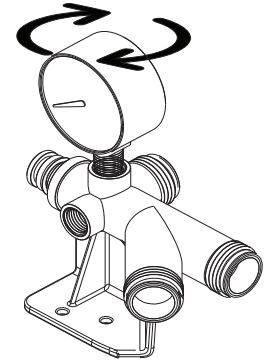
Pump and Manifold Assembly

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	100000-A	SPRAYER MANIFOLD, TOP PORT DRILLED	1
2	V75-113	O-RING #113, DURA 75A, VITON	1
3	100010	BALL VALVE 3/4 FGHT X 3/4 MGHT PLASTIC	1
4	100053	DRAIN CAP 3/4" FGHT	1
5	100055	SEAL, DRAIN CAP 3/4" FGHT	1
6	100012	2" PRESSURE GAGE 100 PSI 1/4 NPT	1
7	100056-A	3/8" EPDM HOSE - 4IN	1
8	100043	HOSE CLAMP SAE #8 1/2 - 15/16 ID	1
9	100067	3/4" MGHT HOSE BARB FASTENER	2
10	100066	3/8" HOSE BARB W/ FLANGE BASE	2
11	100068	3/4" HOSE FITTING GASKET	2



Manifold Assembly Instructions

Your new sprayer manifold will be fully assembled EXCEPT for the pressure gauge. To install the gauge use the thread sealant provided and wrap it around the gauge threading. Next, screw gauge into manifold top port as shown in diagram. Please note, over-tightening can cause damage to the manifold.



Pump, Wiring Harness and Battery Assembly

Connect your pump to the wiring harness using the two pinned electrical connectors.

Next, attach the red battery clamp to the positive (+) battery terminal and then the black battery clamp to the negative (-) battery terminal.

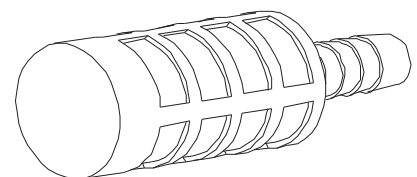
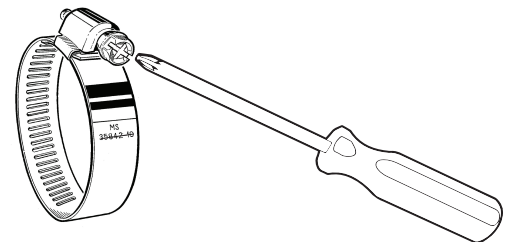
Hose Clamps

Before beginning operation, use a screwdriver to ensure all hose clamps have a water tight seal.

Intake Filter

Please ensure intake filter is functional and cleaned often. Running without a filter can cause debris or sediment to get into the system and cause obstruction.

A clogged filter will impact pump priming and system performance. To clean filter, back flush with water or compressed air.



Operation of Spot Sprayer

Delavan Fluid Power recommends that after the set-up of your sprayer a test is performed to ensure it is in proper working order. This will help identify any leaks in the system and save any unwanted waste of expensive chemicals.

When you are ready to spray, fill tank halfway full with water. Ensure the return to tank valve is in the open position and turn on the power using the switch on the wiring harness. At this time the pump will turn on and prime the system. Take the spot sprayer gun and begin spraying. If you see cycling or pulsating from your gun tip, you will need to adjust the return to tank. While holding the trigger of your gun, slowly open your return to tank valve until a steady stream and desired pressure is obtained. To set spraying pressure hold the trigger of the spray gun and adjust the return to tank valve, you will see the pressure change on the pressure gauge.

A helpful tip to ensure an even spray is to test over a solid concrete surface, such as a drive way and examine the spray pattern on the concrete and adjust if visible space between spray pattern.

Maintenance

Delavan Fluid Power has designed and built this sprayer to provide many years of dependable service when properly cared for. Please read and follow the directions.

After Spraying: Drain all the remaining chemical mixture from tank. Fill tank part way full with clean, clear water and allow the water to flow through all hoses, nozzles, booms and attachments for approximately 60 seconds. Be sure to use the manifold to control the direction of the flow. Refill the tank and use a chemical neutralizer and repeat. Refer to the chemical manufacturer's safe disposal instructions of excess chemicals.

Warning: Some chemicals will damage the pump valves and diaphragm if allowed to soak untreated for extended periods. Always flush pump after use.

Pump Winterizing and Storage

Before winterizing or storing pumps not in use for extended periods, Delavan Fluid Power recommends;

1. Run fresh water through pumps for 90 seconds to flush any residual chemicals from pump head.
2. Pump RV antifreeze through pump for 30 seconds.
3. Always store pumps indoors in a clean, dry, and vibration-free environment. Preferably in a cabinet or closed storage area that is free of insects and airborne debris.
4. Store pump in climate controlled environment above freezing temperature.
5. If in storage for longer than 3 months, turn pump on intermittently for 30 seconds. Periodically turning on pump prevents the grease in bearings from settling on one side and wear.

SmartFLO Diaphragm Pump

Specifications

Motor:

Type: 12 VDC permanent Magnet totally enclosed, non-ventilated.

Leads: 12 AWG, 6" long

Duty Cycle: See Heat Rise Graph - Continuous use.

Temperature Limits: Motor is not equipped with thermal protection. For user safety, optimal performance, and maximum motor life, the motor temperature should not exceed 180°F (66°C) (See heat Rise Graph).

Pump

Type: 3 Chamber positive displacement diaphragm pump, self priming, capable of being run dry, demand/bypass.

Liquid Temperature: 140°F (60°C) Max.

Priming Capabilities: 8 feet (2.5m)

Max Pressure: 85 PSI

Inlet/Outlet Ports: 5/8" Quick Attach

Materials of Construction

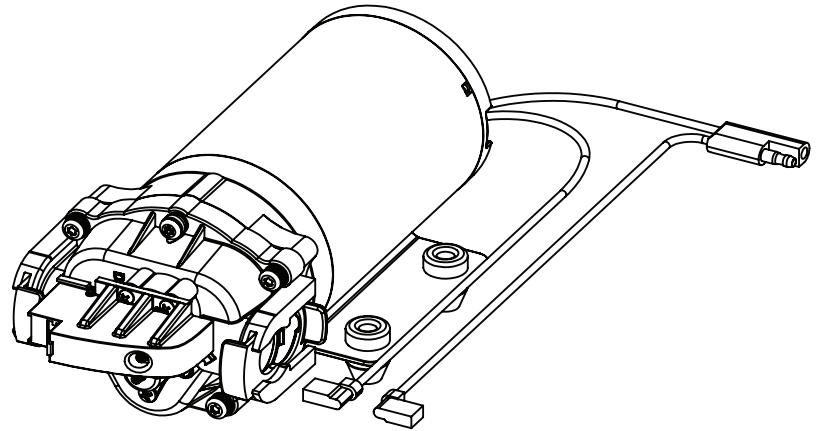
Housing: Polypropylene

Diaphragm: Santoprene

Valves: Viton

Fasteners: Stainless Steel

Weight: 3 Lbs



SMARTFLO Technology:

At Delavan Fluid Power, we're committed to succeeding in today's increasingly challenging marketplace by responding to each varied and dynamic individual customer requirement with an exclusive and custom tailored solution.

SmartFlo technology utilizes both a demand switch and an internal bypass to automatically adapt to your sprayer giving you optimal performance and eliminating pump cycling. You get an open flow of 2.0 GPM with a shut off pressure of 85 PSI. The high torque 12VDC motor provides powerful flow at spraying pressures ensuring smooth and even coverage. The Delavan SmartFLO series is the perfect plug and play replacement for anyone looking to upgrade their current sprayer pump.

Electrical:

Ensure Power supply used is adequate for the application.

Pump ratings are based on alternator charged battery which supplies 13.7 volts.

Voltage drop will result in reduced motor speed thus reducing performance. Higher operating flow and pressures increase amp draw.

SmartFLO Diaphragm Pump

Precautions:

Do not operate pump in an explosive environment. Arcing from the motor brushes, switch or excessive heat from an improperly cycled motor may cause an explosion.

Do not place the pump motor near low temperature plastics or combustible material. The surface temperature of the motor may exceed 250°F (120°C).

Do not pump gasoline or other flammable liquids. Pump head materials are designed for use with water only.

Pump head materials are designed for use with water based products only. NEVER use with petroleum based products.

To prevent electrical shock, disconnect power before initiating any work. In the case of pump failure, the motor housing and/or pump fluid may carry high voltage to components normally considered safe. Therefore, always consider electrical shock hazard when working with and handling electrical equipment. If uncertain, consult an Electrician. Electrical wiring should only be done by a qualified electrician per local and state electrical codes.

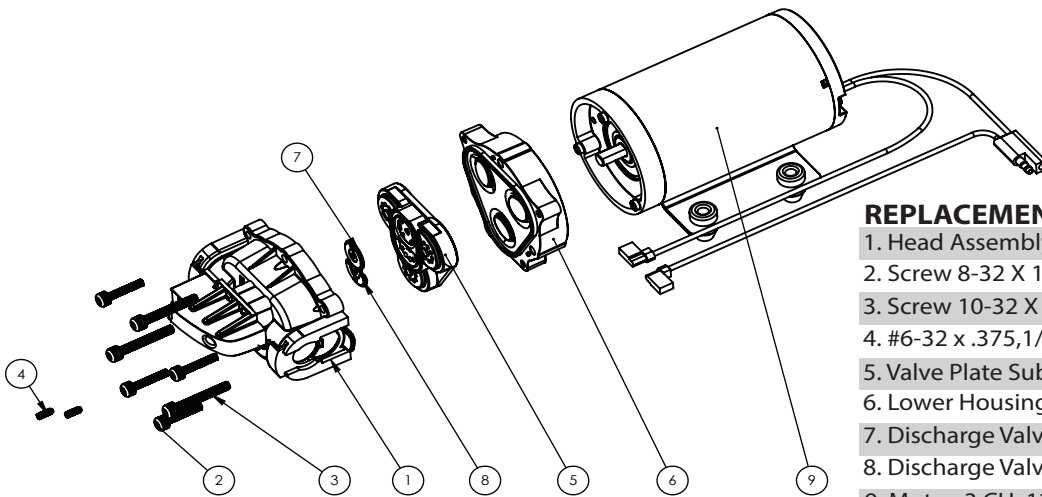
Service and Maintenance:

Once per year owners should check against operating standards.

Every 2-3 years inspect and/or replace lower housing (diaphragm).

Every 5 years inspect and/or replace valves.

Replacement Pump Parts



REPLACEMENT PARTS

	Part #
1. Head Assembly, Bypass Demand, FLEX, 3CH	J78-608
2. Screw 8-32 X 1 Torx S.S.	J78-051
3. Screw 10-32 X 1-1/2 Torx SS	J78-050
4. #6-32 x .375, 1/16 Hex, Set screw, Ext point	J78-053
5. Valve Plate Sub Assembly, 3CH	J78-305
6. Lower Housing Assembly	J78-022
7. Discharge Valve, Full, Viton	J78-030
8. Discharge Valve, Half, Viton	J78-032
9. Motor, 3 CH, 12 VDC, W/2 Pin Plug	M12-78B

For more information about this SmartFLO Series pump please scan the QR code with your smartphone or visit our website at www.delavanfluidpower.com and view the SmartFLO Product Brochure.

For more information about all Delavan Fluid Power products including dimensions, flow and pressure rates please visit our website at www.delavanfluidpower.com.



Diaphragm Pump Troubleshooting

My Pump will not start:

- Check all electrical connections, fuses, breakers and wires powering the pump. If you are unsure about how to check components contact a qualified technician.
- Check wire leads and connection located on the pressure switch.
- Test Pressure Switch: Instructions on how to test pressure switch can be found on our website and YouTube. If pressure switch failure please call 1-866-DELAVAN.
- Rectifier or Motor for open or ground circuit.

Pump will not Prime (no discharge with motor running):

- Most common reason for pump not priming is an air leak in your system. From the suction side of your pump ensure that all o-rings are in place and all clamps are air tight. Ensure there are no holes in your hoses.
- Examine all filters and strainers. Replace any that are clogged with debris.
- Remove hoses and check for clogs or obstructions by running water through.
- Increase suction hose size to slightly larger than the outlet or discharge side of pump.
- Check Pump Housing for cracks.

Pump will not shut off:

- Most common reason is air trapped in the outlet or discharge side or head of pump head. Disconnect hoses, drain lines and reconnect.
- Check for correct voltage to pump.
- Check for debris or blockages in hose and inlet/outlet valves.
- Check for loose drive assembly or pump head screws.
- Adjust set screw on top of pressure switch using a 1/16" Allen Key. Rotate clockwise to increase pressure and counter clockwise to decrease pressure.

Pump leaks from pump head or switch:

- Check for loose screws or bolts around pressure switch and pump head.
- Check for punctured or torn diaphragm.

Pump is Cycling (Rapidly turning on and off.)

- Pump cycling is always caused by more flow than the application allows. To fix;
- Add a bypass valve or 'return to tank' valve into your spraying system
- Increase the flow of your system with larger nozzles.
- Decrease pressure on pressure switch. Warning: Refer to ESR-001 on delavanfluidpower.com for instructions. Improper adjustments of pressure switch are not covered under Delavan's standard warranty for manufacturer's defect.

Warnings

Please read and follow operators manual before using and installing Delavan Fluid Power products.

- Do not use pump outside the parameters listed on the label.
- Never use the pump above 100 PSI at anytime.
- NEVER pump gasoline or other flammable liquids. Pump head materials are designed for use with water based products only. NEVER use with Petroleum based products.
- Do not use in an explosive environment. Arcing from the motor brushes, switch, or excessive heat from an improperly cycled motor may cause an explosion.
- Do not assume fluid compatibility. If the fluid is improperly matched to the pump head, internal damage may occur.
- Always consider electrical shock hazard when working with and handling electrical equipment. If uncertain, consult an Electrician. Electrical wiring should only be done by a qualified electrician per Local and State Electrical Codes.
- Pump to be run between 32°F (0°C) and 115°F (46°C) environmental conditions. Maximum fluid temperature run through pump is 140°F (60°C).
- To prevent electrical shock, disconnect power before initiating any work. In the case of a pump failure, the motor housing and/or pump fluid may carry high voltages to components normally considered safe. Therefore, always consider electrical shock hazard when working with and handling electric equipment. If uncertain consult an electrician. Electrical wiring should only be done by a qualified electrician per local state electrical codes.
- Do not locate the pump motor near low temperature plastics or combustible material. The surface temperature of the motor may exceed 250°F.
- The installation of a 50 mesh strainer is recommended to prevent debris or other foreign material from entering the pump and causing pump failure.
- Delavan Pumps are designed for intermittent duty, but may run continuously if the motor temperature does not exceed the recommended limit.
- Always inspect pump before each use as directed. Do not use pump if damaged and not in working condition.
- Always assess work area for any hazards before using pump.
- Always understand the hazards of any chemicals used in you pump. Proper personal protective equipment should be worn and Safety Data Sheet read.

If you are having any issues with your product please call 1-866-DELAVAN before returning to store. A Delavan Technician would be happy to assist you.



DELAVAN STANDARD WARRANTY

Delavan AG Pumps warrants its products for a period of two (2) years for consumer and 90 days for commercial users. The warranty period begins on the date of manufacture or the purchase date (with proof of purchase). The warranty period is not extended if Delavan repairs or replaces the equipment.

This Delavan AG Pumps warranty will not apply to any subsequent owner or other transferee of the Equipment. Delavan AG Pumps warrants that any new Equipment will be free from defects in workmanship or materials under normal use, maintenance and service (rental use excluded). The Warranty Period is not extended if Delavan AG Pumps repairs or replaces the Equipment. Delavan is not affiliated with and will not honor any 3rd party warranty.

This Limited Warranty does not apply to equipment that has been altered, changed, repaired or treated since its delivery, used equipment, damaged or depreciation due to normal wear and tear. This limited warranty does not apply to defects or damage due to failure to follow Delavan AG Pump's operator's manual, specifications or other written instructions, improper storage, operation, maintenance, application or installation of parts, defects or damage due to misuse, accident or neglect, "acts of God" or other events beyond Delavan AG Pump's reasonable control. Delavan AG Pump's warranty does not apply when damaged by accessories, attachments, tools or parts that were not manufactured by Delavan AG Pumps. If the returned product is found not to be defective under the conditions of this warranty, a charge will be made for repair or replacement. If the returned product is found not to be non-defective under the conditions of this warranty, customer is responsible for cost of labor and goods returned. Delavan AG Pumps reserves the right to charge \$90/hour labor on non-defective good.

The sole and exclusive obligation of Delavan AG Pumps under this or any implied warranty shall be to replace or, at its option, to repair, without charge, any product which is determined by Delavan AG Pumps to be defective in workmanship or materials after the product is returned to the Delavan AG Pumps factory, shipping costs prepaid. No credit shall be given for warrantable items.

In no event shall Delavan AG Pumps be liable to any person for indirect or consequential damages or for injury or commercial loss resulting from any use or inability to use any Delavan AG Pumps product.

Delavan AG Pumps expressly negates any other warranty, express or implied, including any warranty of merchantability or fitness for a particular purpose, or arising from any course of dealing or custom or usage of trade.

No person, including any dealer or representative of Delavan AG Pumps, is authorized to make any representation or warranty on behalf of Delavan AG Pumps in addition to or inconsistent with these provisions. Purchasers to whom these provisions apply agree to hold Delavan AG Pumps harmless from claims by their customers in excess of the obligations of Delavan AG Pumps expressly set forth herein.

Return Policy

For the safety of our employees and handlers, all pumps must be flushed with fresh water for 90 seconds prior to shipping. Delavan AG Pumps reserves the right to request (M)SDS for all chemicals used within. Delavan AG Pumps reserves the right to dispose as scrap any product returned with unknown fluids. Delavan AG Pumps reserves the right to charge returnee for any costs incurred for chemical testing and disposal of unknowns. Please Include complete description of operation problem, such as how pump was used, symptoms of malfunction, etc. to help pinpoint the reason of breakdown.

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- Find more helpful troubleshooting tips on our website at delavanfluidpower.com/FAQ
 - If you are still having trouble with your pump, speak to a technician Toll-Free 1-866-DELAVAN (335-2826)
 - Check out our Youtube Channel at youtube.com and search Delavan Fluid Power.
 - Follow us on Facebook to stay up to date on whats happening at Facebook.com/DelavanFluidPower