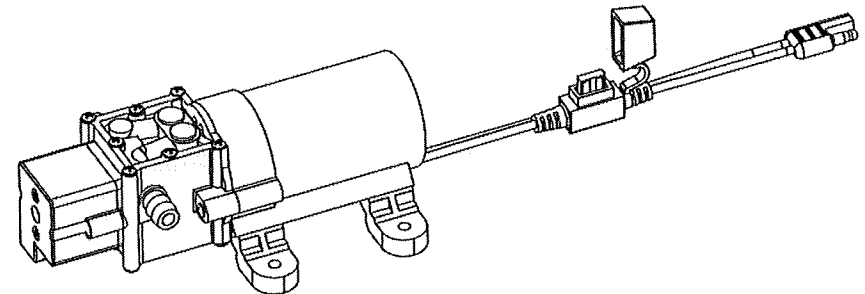


Owner's Manual




12V, 1.0 GPM, 60 PSI Diaphragm Pump
5151118/5281560



Instructions for Assembly, Testing, Operation, Servicing, and Storage

Pump: For use with non-potable liquids such as water-based agricultural pesticides and other liquids¹

 **Warning:** Cancer and Reproductive Harm
www.P65Warnings.ca.gov

WARNING

READ and UNDERSTAND the Owner's Manual completely before using this pump. Assemble, test with water, and use only in accordance with the Owner's Manual instructions. READ and FOLLOW chemical safety instructions. Pesticides are hazardous chemicals. KNOW emergency procedures BEFORE handling chemicals. Pump leaks, bodily chemical contact, poisoning, and spills require immediate response. AVOID inhaling, ingesting, or contacting any chemicals. WEAR personal protective gear when operating, cleaning, and servicing the pump. KEEP pump and spray materials away from children and pets. Pesticides are especially toxic to them. DO NOT TURN ON POWER to pump until ready to spray to avoid unintentional spray release. ALWAYS keep a fire extinguisher rated "ABC" nearby. Improper use of the pump or handling of chemicals could result in serious injury or illness to the operator or nearby persons/animals or could cause damage to environment.

¹This pump is recommended for use in spraying non-flammable liquids such as pesticides, water for plants/trees or dust control, and water-based dust control, and water-based non-flammable sealants or stains for outdoor wood surfaces. The pump will be damaged, and warranty voided if used to apply bleach, chlorine, ice control chemicals, or any petroleum-based products (gasoline,

www.fimcoindustries.com

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Toll Free Phone: 800-831-0027 Toll Free Fax: 800-494-040

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diesel, kerosene, oil). The pump should not be used to transfer any product intended for human consumption. WE RECOMMEND THAT THE PUMP NOT USED FOR OTHER PURPOSES ONCE IT HAS BEEN USED FOR SPRAYING PESTICIDES. Any chemical will leave some residual in the pump components, even after the pump has been properly cleaned. These residual chemicals can have unexpected effects on future uses. For example, spraying water or other liquids that are contaminated with residual pesticide may result in unforeseen hazards to plant or animal life. This pump should not be used by people with reduced physical, sensory, or mental capabilities or lack of experience and knowledge.

Warranty

LIMITED WARRANTY FOR NEW FIMCO EQUIPMENT

WHO MAY USE THIS LIMITED WARRANTY? This limited warranty (the "Limited Warranty") is provided by Fimco to the original purchaser ("you") of the Equipment (as defined below) from Fimco or one of Fimco's authorized dealers. This Limited Warranty does not apply to any subsequent owner or other transferee of the Equipment. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

WHAT THIS LIMITED WARRANTY COVERS AND FOR HOW LONG. Fimco warrants that any new Equipment will be free from defects in material and workmanship for a period of **two (2) years** (homeowner), **90 days** (commercial user), after delivery of the Equipment to you (the "Warranty Period"). The Warranty Period is not extended if Fimco repairs or replaces the Equipment.

WHAT IS NOT COVERED BY THIS LIMITED WARRANTY. This Limited Warranty does not apply to: (1) used Equipment; (2) any Equipment that has been altered, changed, repaired or treated since its delivery to you, other than by Fimco or its authorized dealers; (3) damage or depreciation due to normal wear and tear; (4) defects or damage due to failure to follow Fimco's operator's manual, specifications or other written instructions, or improper storage, operation, maintenance, application or installation of parts; (5) defects or damage due to misuse, accident or neglect, "acts of God" or other events beyond Fimco's reasonable control; (6) accessories, attachments, tools or parts that were not manufactured by Fimco, whether or not sold or operated with the Equipment; or (7) rubber parts, such as tires, hoses and grommets.

HOW TO OBTAIN WARRANTY SERVICE. To obtain warranty service under this Limited Warranty, you must (1) provide written notice to Fimco of the defect during the Warranty Period and within **thirty (30) days** after the defect becomes apparent or the repair becomes necessary, at the following address: Fimco, 1000 Fimco Lane, North Sioux City, SD 57049; and (2) make the Equipment available to Fimco or an authorized dealer within a reasonable period of time. For more information about this Limited Warranty, please call: **800-831-0027**

WHAT REMEDIES ARE AVAILABLE UNDER THIS LIMITED WARRANTY. If the conditions set forth above are fulfilled and the Equipment or any part thereof is found to be defective, Fimco shall, at its own cost, and at its option, either repair or replace the defective Equipment or part. Fimco will pay for shipping and handling fees to return the repaired or replacement Equipment or part to you.

LIMITATION OF IMPLIED WARRANTIES AND OTHER REMEDIES. THE REMEDIES DESCRIBED ABOVE ARE YOUR SOLE AND EXCLUSIVE REMEDIES, AND FIMCO'S SOLE LIABILITY, FOR ANY BREACH OF THIS LIMITED WARRANTY. TO THE EXTENT APPLICABLE, ANY IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED IN DURATION TO THE WARRANTY PERIOD, AND THE REMEDIES AVAILABLE FOR BREACH THEREOF SHALL BE LIMITED TO THE REMEDIES AVAILABLE UNDER THIS EXPRESS LIMITED WARRANTY. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. IN NO EVENT SHALL FIMCO'S LIABILITY UNDER THIS LIMITED WARRANTY EXCEED THE ACTUAL AMOUNT PAID BY YOU FOR THE DEFECTIVE EQUIPMENT, NOR SHALL FIMCO BE LIABLE, UNDER ANY CIRCUMSTANCES, FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL OR PUNITIVE DAMAGES OR LOSSES, WHETHER DIRECT OR INDIRECT. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Hazard Signal Word Definitions





	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
 DANGER	DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
 WARNING	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
 CAUTION	CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
CAUTION	CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

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Motor does not run:

- Check for loose wiring connection(s).
- Make sure the 'ON/OFF' switch in the lead wire assembly is in the 'ON' position. "I" is the 'ON' position and 'O' is the 'OFF' position.
- Check the fuse.
- Check for low voltage at the power supply.

Pump does not prime:

- Check for air leaks in supply line.
- Check for clogged strainer/filter.
- Check for cracks in the pump housing.
- Check for empty product supply.

Low Pressure/Low Flow:

- Check for leaks in the discharge line.
- Check for restriction in the discharge line.
- Check for debris in nozzle orifice.
- Check for clogged strainer.
- Check for proper voltage—try another 12-volt battery.

Pulsating flow (surging):

- Restricted flow may cause pump to surge.
- Spray wand is adjusted for a small or fine spray pattern.
- Check for defective pressure switch.
- Check for leaks in the discharge line.
- Check for restriction in the discharge line.
- Check for debris in nozzle orifice.
- Discharge hose may be too long.
- Check for clogged strainer.

Motor continues to run after discharge is shut off:

- Check for empty product supply.
- Check for low voltage.
- Check for leak in discharge line.
- System has leaks.

Fuse blows:

- Excessive voltage.
- Damaged or defective wiring harness.

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Intended Use

The pump is intended to be a replacement on Fimco spraying products. The pump is intended to be used spraying agricultural pesticides, herbicides, and other non-flammable liquids.

Spraying Pesticides:

Pesticides are hazardous chemicals that must be handled with caution as directed throughout this manual and on the pesticide label. Pesticides are regulated by the United States Environmental Protection Agency (EPA) and defined as:

Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest. Though often misunderstood to refer only to insecticides, the term pesticides is a comprehensive term that applies to insecticides, herbicides, fungicides, and various other substances used to control pests.

The pump is intended for use in spraying pesticides in liquid form only. The pump is NOT intended for use in spraying pesticides in dry or aerosolized form, for use with fumigants.

In addition to spraying pesticides, this pump may be used to spray other **non-flammable** liquids. Example uses include watering plants/trees or spraying water for dust control, or applying water-based, **non-flammable** sealant or stain to outdoor wood surfaces. **WE RECOMMEND THAT THE PUMP NOT BE USED FOR OTHER PURPOSES ONCE IT HAS ALREADY BEEN USED FOR SPRAYING PESTICIDES.** Any chemical will leave some residual in the pump components, even after the pump has been properly cleaned. These residual chemicals can have unexpected effects on future uses. For example, spraying water or other liquids that are contaminated with residual pesticide may result in unforeseen hazards to plant or animal life.

NOTE: The pump will be damaged, and warranty voided if used to apply bleach, chlorine, ice control chemicals, or any petroleum-based product (gasoline, diesel, kerosene, oil).

Summary of Important Information

WARNING

READ and UNDERSTAND **this Owner's Manual** completely before using the pump. Read each **chemical label's instructions** before handling the chemical. Improper use of the pump or handling of chemicals could result in serious injury or illness to the operator or nearby persons/animals or could cause damage to environment.

LISTED BELOW is a summary of safety information of particular importance. See individual sections of this owner's manual for more details.

During Assembly

- **EXERCISE CAUTION** when attaching remote switch to battery terminals. Follow steps listed in the Assembly section of this manual in *exact sequence* when connecting the pump to battery terminals. *Caution must be exercised to avoid contact with battery acid and to prevent sparking.*
- **CHECK and TEST** completed assembly as directed in this manual. *Serious injury could result from chemical leaks if pump is improperly assembled.*
- **DO NOT MODIFY** pump design.

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Call Fimco Customer Support 1-800-831-0027

3. Empty the pump system and flush the pump with clean water as directed in the 'Operation-Using the Pump' Step three. To avoid accidental exposure to chemicals, never attempt to service the pump until the pump system has been emptied and the pump flushed with water.
4. Disconnect power to the pump and relieve all system pressure.
5. Follow directions provided in the troubleshooting table to repair the pump.
After servicing, ALWAYS test the pump for leaks with clean water before adding chemical.

Troubleshooting the Pump

Any Questions, Comments, Problems, or Parts Orders
Call Fimco Customer Support 1-800-831-0027

- d. Add 5 gallons of the chemical manufacturer's recommended cleaning solution. Operate the pump system, collecting the discharged solution if recommended by the manufacturer.
 - e. After flushing, disconnect power to the pump and be sure all system pressure is relieved.
 - f. Dispose of cleaning solution discharge as recommended by the manufacturer of the solution.
4. Decontaminate yourself after you are finished handling chemicals
- a. Remove all clothing worn during spraying and chemical handling.
 - b. Wash all exposed parts of the body with soap and water.
 - c. Launder clothing separate from other wash.

Storage

When not in use, store the sprayer indoors.

For long term or winter storage, prepare the sprayer by running RV antifreeze through the system. This will keep internal parts lubricated, protect against corrosion, and keep the unit from freezing.

⚠CAUTION

The pump will be damaged if it freezes.
Protect the pump from freezing during storage by following the instructions below.

Preparing for storage

1. Pour RV antifreeze in the pump system.
2. RV antifreeze is non-toxic and biodegradable and generally safer for the environment than automotive grade antifreeze.
3. Turn on the pump and run the pump system briefly until RV antifreeze is through all discharge openings.

Removing from storage

1. Drain the antifreeze left in pump system into a suitable container.
2. Fill the pump system with fresh water and run through the system. Operate the pump system until the system is completely flushed. Be sure to set up container to capture the antifreeze flush water.
3. Dispose of the antifreeze and flush water properly.

Troubleshooting

⚠WARNING

Before trouble shooting or attempting to service, read the following safety rules to avoid accidental exposure to chemical and risk of electrical shock.

A reserve, clean container capable of holding at least the volume of the entire pump system should be kept for use when the pump system needs to be emptied temporarily for repairs. It is advisable to purchase a reserve tank suitable for pesticide storage from Fimco Industries for use in these circumstances. The container should be properly labeled as to its contents if it is used.

Before attempting to service the pump

1. Wear personal protective equipment as directed on the chemical label while servicing your pump.
2. Review the Troubleshooting Table for the type of problem you are experiencing. DO NOT attempt to repair until the steps listed below are followed.

Any Questions, Comments, Problems, or Parts Orders
Call Fimco Customer Support 1-800-831-0027

During Operation

General Chemical Safety

- **READ and FOLLOW** each chemical label's instructions and warnings.
- **AVOID** inhaling, ingesting, or contacting any chemicals.
- **KNOW** applicable licensing and regulatory requirements for the chemical you plan to use.
- **KNOW** emergency procedures before handling chemicals. Carefully review "Chemical Accident Procedures" listed below and later in this manual. Also see First Aid instructions on the chemical label.
- **WEAR** protective clothing, eye protection and chemical resistant gloves when operating the pump. Wear additional protective gear, such as face mask or apron, as recommended on the chemical label.
- **EXERCISE EXTRA CAUTION** around children and pets. Pesticides are especially toxic to them. Always keep pump and spray materials away from children and pets.
- **DO NOT MIX OR POUR** chemicals in an enclosed, unventilated area.
- **DO NOT USE** flammable or corrosive chemicals in the pump.
- **FLUSH** the pump before switching chemicals to prevent dangerous chemical interactions.
- **STORE** pesticides in a correctly labeled container and in a secure location.
- **MONITOR** the health of operators frequently exposed to pesticides, as recommended by the chemical label or local/federal regulations.

Chemical Application Safety

Before Spraying

- **INSPECT** and **PREPARE** pump before each use as directed in this manual
- **DO NOT TURN ON POWER** to pump until ready to spray to avoid unintentional spray release.
- **DO NOT SPRAY** when wind speed exceeds 4 MPH to minimize spray drift.
- **CLEAR** work area of people/pets and **POST** warning notices to restrict access for the period recommended on chemical label.
- **KEEP** pump and spray materials away from children/pets. Pesticides can be especially toxic to children and animals.
- **DO NOT ALLOW** anyone younger than 16 to operate the pump since pesticides are especially toxic to children.

During Spraying

- **DO NOT OVER-APPLY** pesticide. Apply at rate recommended by chemical manufacturer. Excess pesticide can be dangerous to humans/animals, damage desirable plants, and contaminate soil and water sources.
- **DO NOT EAT, DRINK, SMOKE, RUB YOUR EYES, or TOUCH YOUR BARE SKIN** while handling chemicals and spraying.
- **NEVER POINT A SPRAY GUN** at people or animals.
- **EXERCISE EXTRA CAUTION** when spraying near areas accessible to children and pets.
- **CLEAN UP** spills immediately per instructions on the chemical label.
- **TURN OFF** power to pump and **RELIEVE** system pressure before leaving pump unattended.
- **SEE** Troubleshooting section of this manual before attempting any repairs. Wear personal protective equipment and follow safety instructions.

Any Questions, Comments, Problems, or Parts Orders
Call Fimco Customer Support 1-800-831-0027

After Spraying

- **CLEAN pump immediately after use** according to the directions provided in this manual.
- **DECONTAMINATE yourself after you are done spraying** and have cleaned the pump. Wash all exposed areas of the body with soap and water and remove and launder clothing.
- **DISPOSE of or STORE remaining chemicals in a secure storage with correctly marked container.**

Chemical Accident Procedures

Immediate response is necessary in the event of pump leaks, bodily chemical contact, poisoning, or spills. See instructions below:

Pump Leak

- If the pump develops a leak, immediately stop spraying. Turn off power to the pump and follow directions below, as applicable.

Bodily Chemical Contact

- Personal contamination can occur when chemicals splash, spill, or spray directly onto a person.
- Immediately follow First Aid instructions chemical label. General procedures can include:
 - a. Eyes—immediately flush with water
 - b. Skin—wash all contaminated skin surfaces with soap and water.
 - c. Clothing—remove contaminated clothing. Dispose of heavily contaminated clothing per chemical label instructions.
- Seek medical advice if instructed on the label or the victim experiences symptoms of harmful effects. Bring the chemical label for reference.

Poisoning by ingestion or inhalation

- In case of poisoning from ingestion or inhalation:
- If the victim has collapse or is not breathing, call 911. Otherwise:
 - a. If you are the victim, immediately seek assistance from nearby personnel because you may become incapacitated.
 - b. Immediately follow first aid instructions on chemical label.
 - c. Call a poison control center for further advice. In the U.S., call 1-800-222-1222. Have the chemical label available for reference.

Chemical Spills

- Chemical spills must be quickly contained and properly cleaned up.
- Refer to the chemical label for any specific clean-up instructions.
- General procedures include:
 - a. **Controlling the spill** by stopping the source of the spill.
 - b. **Containing the spill** so that it does not spread and get into water sources.
 - c. **Cleaning up the spill** immediately.
 - d. Seeking additional advice from:
 - Chemical manufacturer: See chemical label for contact information.
 - State pesticide regulatory agency. In the U.S., call the National Pesticide Info. Ctr. At 800-858-7378 for assistance in contacting your states agency.

- Turn the power to the pump off and disconnect.
 - Relieve system pressure.
6. Discontinue use if clogged, inoperative, or the system develops a leak.
 - Discontinue use immediately.
 - DO NOT attempt to service while chemicals are in the pump, power is connected, and system pressure has not been relieved.
 - Return to service area to review instructions for troubleshooting before attempting to service.

⚠ CAUTION

DO NOT operate the pump at pressures which cause the motor to exceed the amperes rating indicated on the name plate.
Improper adjustment of the pressure switch setting may cause severe overload or premature failure. Failures due to improper adjustment of the pressure switch setting will not be covered under the warranty.

A reserve, clean container capable of holding at least the volume of the entire pump system should be kept for use when the pump system needs to be emptied temporarily for repairs. It is advisable to purchase a reserve tank suitable for pesticide storage from Fimco Industries for use in these circumstances. The container should be properly labeled as to its contents if it is used.

Step Three: Clean pump and decontaminate after use.

When done using the pump, it is important to clean the pump and decontaminate yourself. Do not store the pump when saturated with chemicals, as it is unsafe and could also result in damage to the equipment.

⚠ WARNING

Cleanup and decontamination procedures must be followed each use.
Improper equipment cleaning and disposal of chemicals can result in dangerous chemical exposure to humans and the environment, as well as equipment damage.
Personal decontamination is required after spraying to minimize unsafe exposure to chemicals and potential illness.

1. Drain the entire pump system
 - If there is excess pesticide left in the pump system, drain the entire pump system
 - a. Disconnect power to the pump and relieve system pressure.
 - b. Find a suitable container in which to drain the unused pesticide.
 - c. While wearing rubber gloves, eye protection, and all other required personal protective equipment, all pesticide to drain in a suitable container.
2. Properly store or dispose of unused chemical
 - If the unused pesticide is to be stored for future use, store all unused pesticide in its original, or a suitably marked, container in a secure location out of reach of children and animals.
 - If the remaining pesticide is to be disposed, **properly dispose of the remaining chemical and its contain per the chemical manufacturer's recommendations and according to local hazardous waste disposal regulations.**
3. Flush the pump per the chemical manufacturer's recommendations
 - a. Add clean water to the pump system.
 - b. Reconnect power to the pump.
 - c. Operate the pump system and discharge all ring water into an area that can accept diluted pesticide.

CAUTION

After any repair works has been done. Always test the entire system for leaks with clean water until all leaks are repaired before adding chemical.

Be certain the pump materials will be compatible with the chemicals being pumped. High-Flo pumps are intended for intermittent or continuous duty when the proper operating criteria are met. If unsure of the chemical compatibility with the High-Flo pump components or the motor's intended design, please call Fimco Customer support at 1-800-831-0027 for assistance.

Using the Pump

Step One: Assess wind conditions and clear work area.

Before deciding to spray, you must determine whether wind conditions are suitable. You must also restrict access to the work area to ensure the safety of bystanders.

WARNING

Do not spray if wind speeds are greater than 4 MPH or if there are bystanders in the intended spray area.

1. Assess Wind Speed
 - Assess weather conditions to ensure that it is not too windy to spray.
 - **DO NOT SPRAY** if wind speeds are greater than 4 MPH.
 - If leaves are in constant motion or there is any branch movement, **DO NOT SPRAY** because the wind is too strong.
2. Clear work area
 - Clear the works area of all bystanders and pets.
 - Restrict access by the public for the period recommended on chemical label.

Step Two: Operate the pump.

1. Review Safety Information
 - Review the "Operation –Important Safety Information" related to Chemical Application Safety provided in this manual.
2. Wear Personal Protective Equipment
 - Wear personal protective equipment as directed on the chemical label.
3. Turn On Power to the pump
 - The pump will start automatically when power is turned on. The pump will cycle on and off as needed to maintain system pressure.
4. Pressure Switch Operation
 - The pressure switch reacts to outlet pressure, and interrupts power at the preset shut-off pressure indicated on the pump label. When outlet pressure drops below a predetermined limit the switch will close and the pump operates until the shut-off pressure is achieved. The shut-off pressure is set to factory calibrated standards.
 - If the system is restrictive or the discharge rate is very low, the pump may re-pressurize the outlet faster than the fluid is being released, causing rapid cycling (pump turning on and off within 2 seconds). If the pump is subjected to rapid cycling during normal operation, or for infrequent periods, damage may occur. Applications which exhibit rapid cycling should have restrictions in the outlet reduced.
5. Leaving Unattended
 - If the pump must be left unattended at any time

Any Questions, Comments, Problems, or Parts Orders
Call Fimco Customer Support 1-800-831-0027

Warning Label Location

12V DIAPHRAGM PUMP

MODEL.....5281560
MAX FLOW.....1.0 GPM / 3.8 LPM
PRESSURE SETTING.....60 PSI / 4.1 BAR
VOLTAGE.....12 VDC
RECOMMENDED FUSE.....5 AMP



WARNING: DO NOT USE TO PUMP FLAMMABLE OR COMBUSTIBLE LIQUIDS
WARNING: CANCER AND REPRODUCTIVE HARM - WWW.P65WARNINGS.CA.GOV

FLUSH PUMP AFTER EACH USE
PROTECT FROM FREEZING
FOR ASSISTANCE CALL: 1-800-831-0027



Always make sure safety labels are in place and in good condition. If a safety label is missing or not legible, order new labels or unsafe operation could result.
To order replacement safety labels, call Fimco Customer Support at 1-800-831-0027.

Installation

Step One: Mounting

- The High-Flo High Performance pump is self-priming.
- The pump should be in an area that is dry and provides adequate ventilation.

Caution

DO NOT locate the motor near low temperature plastics or combustible material. The surface temperature of the motor may exceed 180°F(82°C).

- The pump may be mounted in any horizontal position. If mounting the pump vertically, the pump head should be in the down position so that in the unlikely event of a leak, fluid will not enter the motor.
- Secure the rubber feet with #10 fasteners. Do Not compress the feet, doing so will reduce their ability to isolate vibration and noise, fasteners are not included.

Any Questions, Comments, Problems, or Parts Orders
Call Fimco Customer Support 1-800-831-0027

Step Two: Plumbing

- Remove shipping plugs from hose barbs.
- Install 3/8" inside diameter flexible hose until fully seated and hose clamp tightened to manufacture specifications.
- Tubing should be compatible with the spraying fluid. Avoid tight bends that may kink or restrict flow.

⚠ Caution

Teflon tape can act as a lubricant causing cracked fittings or stripped threads due to over tightening. Care should be used when applying tape, if fragments enter the pump it may disrupt valve action, causing no prime or no shut-off. Failures due to foreign debris are not covered under the warranty.

- Installation of a 50-mesh strainer is recommended to prevent foreign debris from entering the pump.
- Recommended suction hose size is 3/8" inside diameter. Any flow restriction will decrease pump performance.

Step Three: Connect pump to 12V power supply

- Fimco High-Flo High Performance pumps are intended to be powered by 12V DC power supply connected via Fimco lead wires.

⚠ WARNING

Batteries are hazardous because they contain caustic acid, can emit explosive gases, and can cause electric shock.

Caution must be exercised when making connections to a battery to avoid shock and contact with the acid, and to prevent any sparking that could lead to an explosion.

ALWAYS follow the safety instructions and steps listed below in exact sequence when connecting the pump to the battery terminals.

- To connect a Fimco lead wire with the pump specific to this manual follow the instructions below.
 1. Preparatory Safety Steps
 - ALWAYS use eye protection.
 - NEVER smoke or work near sparks or other sources of ignition.
 - NEVER touch both battery terminals at the same time or with any non-insulated tools.
 - If battery acid contacts skin or clothing, flushing immediately with water and neutralize with baking soda.
 2. Electrical Requirements
 - The pump should be on a dedicated (individual) circuit with no other electrical loads, controlled with a switch rated at or above the recommended fuse indicated on the pump label.
 - The pump is protected by a fuse.
 - Use an approved lead wire selected from the list below.

- Refer to the chemical label for any specific clean-up instructions regarding the chemical spilled.
- General procedures include:
 - a. **Control** the spill by stopping the source of the spill. If the source of the spill is a container leak, place the leaking container in a larger, watertight container. Keep unprotected people away from the spill site.
 - b. **Contain** the spill so that it does not spread and get into water sources. Use a shovel or other tool to make a dike around the spill with soil, sod, or absorbent material.
 - c. **Clean up** the spill immediately. Absorbent materials like ground corncocks or pet litter should be spread on the spill area to soak up the pesticide. The contaminated material should then be shoveled into a leakproof container. Do not flush the spill area with water until you receive advice directed below.
 - d. **Seeking additional advice** from the chemical manufacturer and your state's pesticide regulatory agency regarding decontamination of the spill site:
 - Chemical manufacturer: The chemical label provides contact information for the chemical manufacture.
 - State pesticide regulatory agency. In the U.S., call the National Pesticide Info. Ctr. At 800-858-7378 for assistance in determining how to contact your state's pesticide regulatory agency.

Preparing the Pump for Each Use

If the pump has been used previously, it must be prepared BEFORE EACH SUBSEQUENT USE.

⚠ WARNING

Read instructions below carefully for inspecting and preparing the pump. Damaged or clogged equipment could result in leaks or uncontrolled spray. Leaks could result in injury to the operators or bystanders from chemical exposure, or cause damage to the environment.

Important safety rules:

- **Power off.** Make sure all power is OFF and system pressure is relieved before cleaning, inspecting, or servicing the pump.
 - **Guards/Shields.** Make sure all guards and shields are replaced after servicing the pump.
 - **Replacement parts.** If a part needs replacement, only use parts that meet the manufacture's specifications. Replacement parts that do not meet specifications may result in a safety hazard or poor operation of the sprayer.
1. **Ensure Clean System**
 - Ensure the pump has been thoroughly flushed and drained of all residual chemicals from prior uses.
 2. **Inspect and Repair**
 - Inspect and test the entire system supplied by the pump.
 - a. Inspect hoses/lines for exposed mesh and holes. Replace all worn or damaged hoses/lines.
 - b. Inspect fittings for cracks and leaks. Replace all damaged fittings with original Fimco Industries replacement parts.
 - c. Partially fill the system with clean water test the system as detailed in this manual.

- **Troubleshooting.** ALWAYS refer to the safety instructions in the Troubleshooting Section before attempting any repairs.

After Spraying

- **Clean pump.** ALWAYS clean the pump immediately after use according to the directions provided in this manual.
- **Decontaminate.** ALWAYS decontaminate yourself immediately after you are finished spraying and handling chemicals. Wash all exposed areas of the body with soap and water and remove and launder clothing.
- **Chemical disposal/storage.** ALWAYS dispose of or store remaining chemicals properly as recommended on the chemical label.

Chemical Accident Procedures

WARNING

Before using the pump, review the following information regarding handling accidents. Chemical spills, pump leaks, personal contamination, and poisoning are accident situations which you may encounter.

All require an immediate response—See instructions below.

Pump Leak

- If the pump develops a leak, immediately stop spraying. Turn off power to the pump and follow directions below, as applicable.

Bodily Chemical Contact

- Personal contamination can occur when chemicals splash, spill, or spray directly onto a person.
- Immediately follow First Aid instructions on the chemical label listed in the “First Aid” or “Statements of Practical Treatment” section.
- General procedures can include:
 - a. Eyes—immediately flush with water or follow other directions as specified on the chemical label.
 - b. Skin— immediately wash all contaminated skin surfaces with soap and water, or follow directions as specified on the chemical label.
 - c. Clothing— remove contaminated clothing immediately. Dispose of heavily contaminated clothing per the instructions on the chemical label for safe chemical/container disposal.
- Seek medical advice if instructed on the label or the victim experiences symptoms of harmful effects such as burning, swelling nausea, chest pain, difficulty breathing, dizziness or confusion. When seeking medical advice, be sure to bring the chemical label for reference.

Poisoning by ingesting or inhalation

- In case of poisoning from ingestion or inhalation:
- If the victim has collapse or is not breathing, call 911. Otherwise:
 - a. If you are the victim, immediately seek assistance from nearby personnel because you may become incapacitated.
 - b. Immediately follow first aid instructions on chemical label listed in the “First Aid” or “Statements of Practical Treatment” section.
- Call a poison control center for further advice. In the U.S., call 1-800-222-1222. Have the chemical label available for reference.

Chemical Spills

- Chemical spills must be quickly contained and properly cleaned up.

Any Questions, Comments, Problems, or Parts Orders
Call Fimco Customer Support 1-800-831-0027

Fimco Item #	Description
5278017	96" Lead Wire w/ Switch (5 Amp)
5278114	96" Lead Wire w/ Switch (15 Amp)
5275053	120" Lead Wire w/ Lighter Adapter & Switch (15 Amp)
5277040	120" Heavy Duty Wire w/ Switch (15 Amp)
5273212*	60" Extension Cable

60" Extension cable is intended to be used only in addition to a lead wire with a switch and fuse.

3. Connect pump to a 12V DC battery using the following procedure:
 - a. Disconnect the vehicle battery ground wire.
 - b. Connect the pump's two pin connector to the appropriate lead wire's two pin connector.
 - c. Verify the lead wire's switch is in the off position (O).
 - d. Connect the lead wire's *red* battery clamp to the [positive (+)] battery terminal.
 - e. Connect the lead wire's *black* battery clamp to the [negative (-)] battery terminal.
 - f. Reconnect the vehicle battery ground wire.

WARNING

Always connect in this sequence to avoid possible shock.

4. Disconnect power after each use with the following procedure:
 - a. Verify the lead wire's switch is in the off position (O).
 - b. Verify the system pressure has been relieved.
 - c. Disconnect the vehicle battery ground wire.
 - d. Disconnect the pump's two pin connector.
 - e. Disconnect the lead wire's *black* battery clamp from the [negative (-)] battery terminal.
 - f. Disconnect the lead wire's *red* battery clamp from the [positive (+)] battery terminal.
 - g. Reconnect the vehicle battery ground wire.

WARNING

Always connect in this sequence to avoid possible shock.

Step Four: Check and test completed assembly

- A complete inspection of the entire system supplied by the Fimco High-Flo High Performance pump is required before operation can begin.
 - The pump is a demand pump, once system pressure reaches 60 psi the pump will turn off until system pressure drops, and the pump will turn on again.
1. Check complete assembly to ensure the pump is properly assembled and in safe working conditions.

Any Questions, Comments, Problems, or Parts Orders
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⚠ WARNING

Check and test completed assembly.
Serious injury could result from chemical leaks if pump is improperly assembled or the design of the pump is modified.
Follow the steps to ensure the pump is properly assembled. Never modify the pump design.

2. Test the system with water
 - a. Fill the tank 50% full of clean water.
 - b. Check all tank connections for leaks and resolve all identified.
 - c. Verify the water has unrestricted access to the pump.
 - Ensure the filter screen, if present, is clean of debris.
 - Ensure the shut-off valve, if present, is open.
 - d. Open a discharge valve.
 - a) If the unit has a bypass open the valve completely allowing water to recycle back into the tank.
 - b) If the unit does not have a bypass valve open a handgun or discharge valve.
 - e. Turn the lead wire's switch to the on position (I). Allow water to flow out of the discharge until all air has been purged from the pump.
 - a) Then slowly close the discharge valve.
 - b) Individually open and close all remaining discharge valves purging the entire system of air.
 - f. Ensure all discharge valves are off and the pump will turn off. If the pump continues to run the system has a leak. Correct the leak before continuing.
 - g. Individually open each discharge verifying all system connections do not leak.
 - h. Turn the lead wire's switch to the off position (O) and relieve the system pressure by opening a discharge valve.

Operation

Important Safety Information

⚠ WARNING

Carefully read and make sure you understand the following safety information before using the pump.

General Chemical Safety

⚠ WARNING

Pesticides are hazardous chemicals.
Follow all warnings and instructions below carefully.
Improper handling of chemicals can result in serious injury or illness, or cause damage to the environment.

- **Chemical label.** ALWAYS READ and FOLLOW all chemical label instructions.
- **Licensing/regulation.** Refer to any applicable licensing restrictions or state/federal regulations regarding the application of the particular chemical you plan to use.
- **Emergency procedures.** Before handling chemicals, carefully review the "[Chemical Accident Procedures](#)" listed in this section, as well as the "Statement of Practical Treatment" on the chemical label.

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- **Inhalation/contact.** ALWAYS take precautions to avoid inhaling or contacting the chemical.
- **Personal protective equipment.** ALWAYS wear protective clothing, eye protection, and chemical-resistance gloves when operating and cleaning the pump. Wear additional protective gear (such as facemask or apron) as recommended on the chemical label.
- **Children/pets.** Pesticides can be especially toxic to children and animals. ALWAYS exercise extra caution around children. Keep pump and all spray materials away from children and animals.
- **Ventilation.** ALWAYS ensure there is adequate ventilation when mixing, pouring, or spraying.
- **Flammables.** NEVER use any flammable chemicals in the pump.
- **Corrosives.** DO NOT use corrosive chemicals in the pump. They can weaken the pump and its parts, resulting in leaks. Check with the chemical manufacture to ensure chemical is compatible with all components of the pump.
- **Chemical interaction.** ALWAYS flush the pump before switching chemicals. Different chemicals may interact dangerously with each other.
- **Chemical storage.** ALWAYS store pesticides in a properly labeled container and in a secure location per the manufacturer's recommendations.
- **Health monitoring.** Monitor the health of operators who are frequently exposed to pesticides, as recommended by the chemical label or local/federal regulations.

Chemical Application Safety

⚠ WARNING

Caution must be used when spraying chemicals to avoid unsafe exposure to humans and the environment. Follow all warnings and instructions carefully.

Before Spraying

- **Pump Prep.** ALWAYS inspect and prepare the pump before use according to the directions provided in this manual.
- **Keep pump off.** Do not turn on power to the pump until ready to spray to avoid unintentional spray release.
- **Wind speed.** NEVER spray when wind speed exceeds 4 MPH to minimize spray drift.
- **Clear area/post.** ALWAYS keep the work area clear of people and pets. POST warning notices to restrict access by the public for the period recommended on chemical label.
- **Operator age.** You must be 16 years of age or older to operate this pump. Pesticides are especially toxic to children.

During Spraying

- **Over-application.** DO NOT over-apply pesticide. Apply at a rate recommended by chemical manufacture. Excess pesticide can be dangerous to humans, damage desirable plants, and contaminate soil, and water sources.
- **Children/pets.** ALWAYS exercise extra caution when spraying near areas accessible to children and pets.
- **Eating/smoking.** DO NOT eat, drink, smoke, rub your eyes, or touch any part of your bare skin while handling chemicals and spraying.
- **Heat/flames.** DO NOT spray near open flames or sources of heat.
- **Spills.** ALWAYS turn off power to pump and relieve system pressure before leaving pump unattended.

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Call Fimco Customer Support 1-800-831-0027