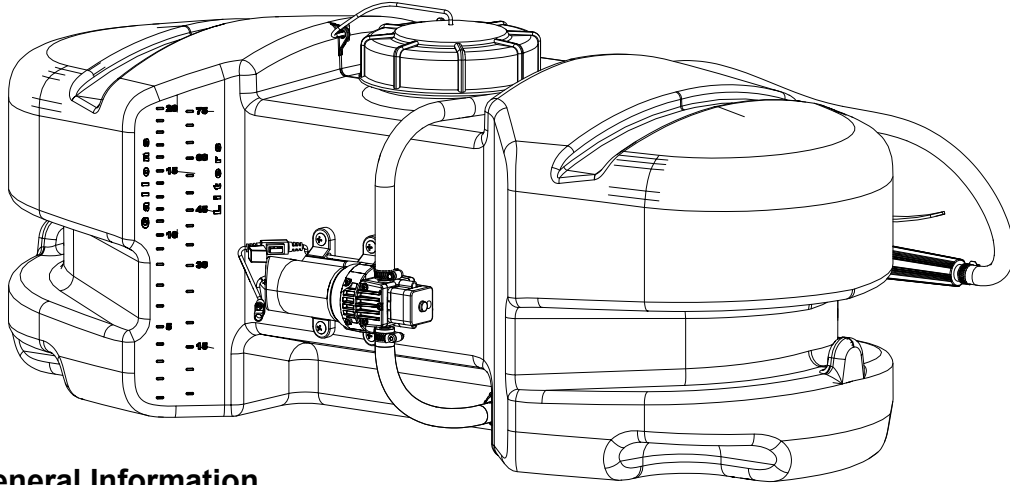


OWNER'S MANUAL

Model: LG-20-EC (5301548)

(20 Gallon Lawn & Garden Spot Sprayer)



General Information

Thank you for purchasing this product. The purpose of this manual is to assist you in operating and maintaining your lawn & garden Spot sprayer.



WARNING: To reduce the risk of injury, the user must read and understand the operator's manual before using this product.



WARNING: Cancer and Reproductive Harm
www.P65Warnings.ca.gov

Technical Specifications

- 20 Gallon Corrosion-Resistant Polyethylene Tank
- 12 Volt Diaphragm Pump, 1.2 GPM - 60 PSI
- Lever Handgun with 15 Ft. Handgun Hose (3/8" I.D.)
- 12 Ft. max. vertical throw, 25 Ft. horizontal throw

Assembly Instructions

Your sprayer has been mostly assembled at the factory. The only requirement will be for you to attach the wand clips and hook up your battery leads to a fully charged 12 Volt battery.

- After assembly is complete and before testing your sprayer, make sure you connect the electrical hook-up to the end of your pump and clip the clips to a fully charged battery.
- The drain plug assembly should already be attached to the tank

BEFORE RETURNING THIS PRODUCT
FOR ANY REASON, PLEASE CALL

1-800-831-0027

MONDAY-FRIDAY, 8:00 AM TO 5:00 PM CST

If you should have a question or experience a problem with your Fimco Industries Product: Visit our website @ www.fimcoindustries.com or call the Toll free number above. Our technical support representatives will be happy to help you. In most cases a customer service rep. can resolve the problem over the phone.

To obtain prompt, efficient service, always remember to give the following information....

- Correct Part Description and/or part number
- Model number and Serial Number

Part descriptions and numbers can be obtained from the illustrated parts list section(s) of this manual.

Retain a copy of your receipt for your unit, as it will be required to validate any warranty service.

Warranted against manufacturer or workmanship defects from date of purchase with copy of receipt:

Homeowner Usage: Sprayer-One Year and Pump-Two Years.

Commercial Usage: Sprayer and Pump-90 Days.



www.fimcoindustries.com

1000 FIMCO Lane, P.O. Box 1700, North Sioux City, SD 57049

Toll Free Phone: 800-831-0027 : Toll Free Fax: 800-494-0440

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IMPORTANT: Remove tank lid and be sure the tank is clean and free of any foreign material. Rinse tank out of any tank residue before filling with water to test.

Testing the Sprayer

NOTE:

It is important that you test your sprayer for leakage and proper spray patterns with plain water before chemical application is attempted. This will also give you the opportunity to familiarize yourself with the operation of the sprayer.

Conditions of weather and terrain must be considered when setting the sprayer. Do not spray on windy days. Protective clothing must be worn in some cases

Be sure to read the chemical label(s) before application!

Operation

The pumping system draws solution from the tank, through the strainer and to the pump. The pump forces the solution under pressure to the handgun.

Connect the lead wire to a fully charged 12 volt battery. You may use either a stand-alone battery or the battery on your towing vehicle. The lead wire has an On/Off switch to activate the pump. "-" is on and "O" is off.

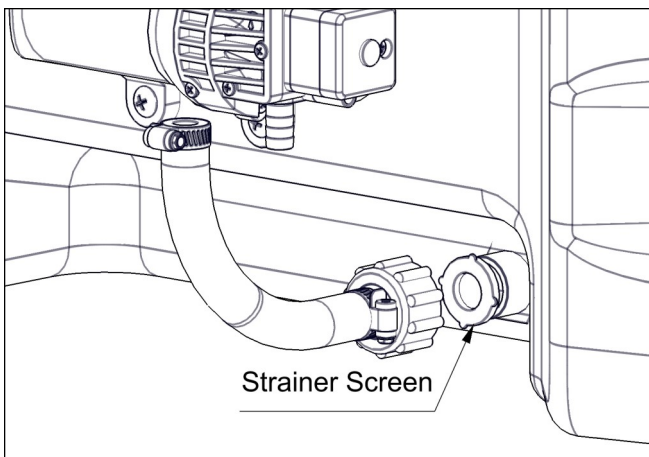
Fill the tank part way with water and then add the desired amount of chemical to be sprayed. Finish filling tank to proper level. Turn the pump on and by depressing the "-" side of the rocker switch. The pump is equipped with a pressure switch that is pre-set at the factory to shut the pump off when all discharges are closed.

The pump will turn back on when the handgun lever is squeezed to spray.

- Activate the handgun by squeezing the handle lever
- Rotating the adjustable nozzle tip on the handgun will change the tip pattern from a straight stream to a cone pattern (finer mist)

Maintenance During/After Spraying

Periodically check the strainer and clean the screen on your intake line.



Checking/Cleaning the sprayer's filter/screen:

- ◆ Empty the tank
- ◆ Unscrew the knurled nut from the tank.
- ◆ Swing (swivel) the intake assembly towards you. Look in the nut you JUST unscrewed. There is a screen/washer there.
- ◆ Remove the screen and clean as necessary. Replace when done and reassemble the entire assembly.

Proper care and maintenance will prolong the life of your sprayer.

After use, drain the tank and store or dispose of chemical properly. Fill the sprayer half way with clean water. Start the pump and allow the water to pump through the entire plumbing system and nozzles. Drain and then refill half full, add the recommended amount of a good quality tank cleaner, such as FIMCO Tank Neutralizer and Cleaner. (If no tank cleaner is available, you may substitute dish soap for this step, about 1-2 oz. per gallon). Turn pump on and circulate through system for 15 minutes and then spray out through handgun nozzle. Refill sprayer half way with clean water and repeat. Follow the chemical manufacturer's disposal instructions of all wash or rinsing water.

If handgun nozzle needs cleaning, remove from the sprayer and soak in warm soapy water. Clean with a soft bristled brush or toothpick if necessary. Never use a metal object. Even the slightest damage can change the flow rate and spray distribution. Water rinse and dry the tips before storing.

WARNING: Some chemicals will damage the pump valves if allowed to soak untreated for a length of time! ALWAYS flush the pump as instructed after each use. DO NOT allow chemicals to sit in the pump for extended times of idleness. Follow the chemical manufacturer's instructions on disposal of all waste water from the sprayer.

Winter Storage

Prepare the sprayer for end-of-season storage by running RV antifreeze through the system. This will keep internal parts lubricated, protect against corrosion and keep the unit from freezing. *Note: RV antifreeze is non-toxic and biodegradable and generally safer for the environment than automotive antifreeze.*

Before storing your sprayer for winter or long term storage, thoroughly clean and drain it as much as possible. Then pour enough pink RV antifreeze into the tank so that when the pump is turned on you can pump the antifreeze throughout the entire plumbing system, including the bypass. Make sure to operate the handgun until you see pink fluid spraying from the nozzle. Leave any remaining antifreeze in the tank. Before your next usage, rinse the antifreeze from the sprayer with clean water.

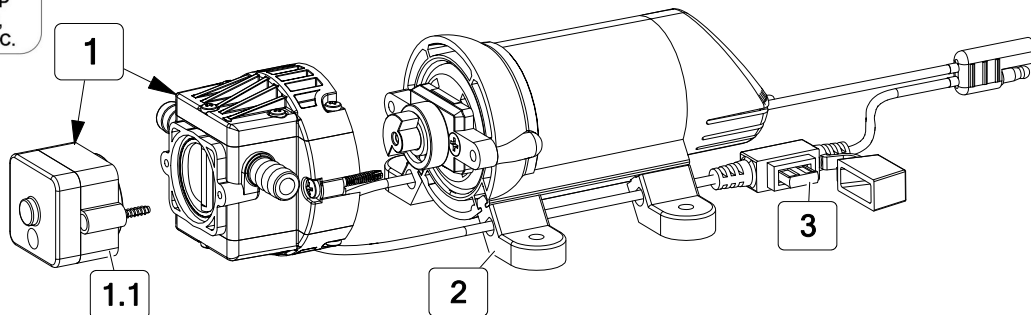
It is nearly impossible to drain all of the water from the sprayer and any trapped water can freeze in cold weather and damage parts of the sprayer. Pumping the antifreeze through the system will displace the water and help prevent this damage.

Removing from storage: drain the antifreeze. Fill the tank with fresh water and run through the system. Dispose of antifreeze and flush water properly.

STOP WARNING STOP

DO NOT USE PUMP IN AN EXPLOSIVE ENVIRONMENT. DO NOT USE TO PUMP FLAMMABLE/COMBUSTIBLE FLUIDS, GASOLINE, KEROSENE, FUEL, OIL, ETC.

HIGHFLO
HIGH PERFORMANCE



Pump Model: 5281370
1.2 GPM - 60 PSI
Available Replacement Parts
Replacement Pump: 5151086

Ref. #	Part #	Description	Qty
1	5164272	1.2 GPM Pump Head	1
1.1	5164271	60 PSI Pressure Switch Assembly	1
2	5095202	Pump Mount Feet (4 Pack)	1
3	5157204	5 Amp 'Mini Blade' Fuse	1

DO

- Clean and rinse your pump after each use with Fimco Tank Neutralizer
- Winterize your pump or sprayer by rinsing, draining and running RV Antifreeze through it before storing for the winter.
- Use clean water for your spray mixture
- Store inside a building when not in use.

DON'T

- Use to pump bleach.
- Use to pump petroleum products such as diesel fuel, gasoline or kerosene
- Leave your pump sit with spray mixture in it for extended periods
- Use dirty or unfiltered water for spraying

CAUTION

PRESSURE SWITCH OPERATION

Pressure switch is pre-set at the factory. Improper adjustment of the pressure switch, may cause severe overload or premature failure. If the pump is subjected to rapid cycling during normal operation, or infrequent periods, damage may occur.

Troubleshooting the Pump:

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 for defective pressure switch. Make sure you are connected to a good 12 volt power source. Make sure any on/off switches are in the 'on' position. Remove the cap to the pressure switch. Pull both red wires off of their terminals, and touch the two ends together. If your pump runs when you do this, your pressure switch will need to be replaced.
- Check the fuse.
- Check for low voltage at the power supply.

Pump does not prime:

- Check for air leaks in supply line.
- Check for debris in the check valve assembly.
- Check for defective check valve.
- 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):

- Low flow may cause pump to surge.
- Spray wand is adjusted for a small or fine spray pattern.
- Slightly open bypass (if applicable) to overcome.
- If needed, pressure switch may need to be adjusted—adjust a quarter turn at a time clockwise until surging stops.
- 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 open bypass valve. (if equipped)
- Check for low voltage.
- Check for leak in discharge line.
- Check for defective pressure switch.
- System has leaks.

Fuse blows:

- Excessive voltage.
- Improper adjustment of pressure switch.
- Damaged or defective wiring harness.
- Half-moon & counterweight are sticking.
- Defective pressure switch.

Checking the Pressure Switch:

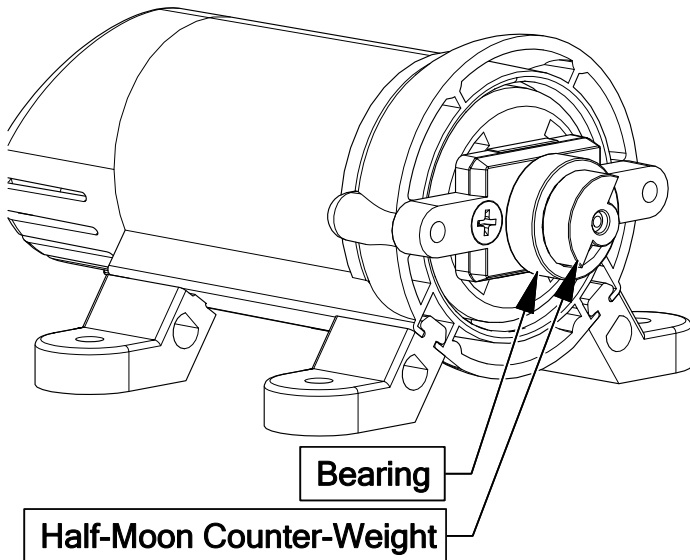
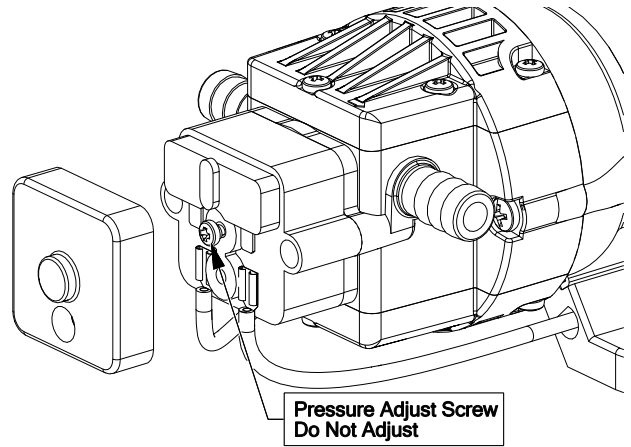
If your motor is not running and you've checked the following: for loose wiring connections, fuse, the switch on the lead wire was "ON" and made sure you were connected to a fully charged battery and everything is fine, but the motor won't run, then it's time to check to see if the pressure switch is bad.

- Remove the cover off the 1" square box (pressure switch) on the head of the pump, the cover is held on by one phillips-head screw. This will expose the two red wires.
- With the pump connected to a good 12 volt power source and everything on.
- Slip the two red wires off the terminals and touch them together.

If the motor runs, it means the pressure switch is bad and needs to be replaced. If it still doesn't run, try bypassing the switch in the lead wire or using another lead wire. Even if a tester shows power to the pressure switch, it still could be the switch in the wire that is causing the problem.

If still not responsive, use a voltmeter or electrical tester to make sure you are getting power to the head of the pump, as it could possibly be something in one of the wires or even the lead wire assembly may need to be replaced.

Warning: It is NOT recommended to run the pump this way, as the pump will continue to run and not shut off. This could result in blown hoses when all discharges are closed. Also, this could result in premature failure of the pump completely.

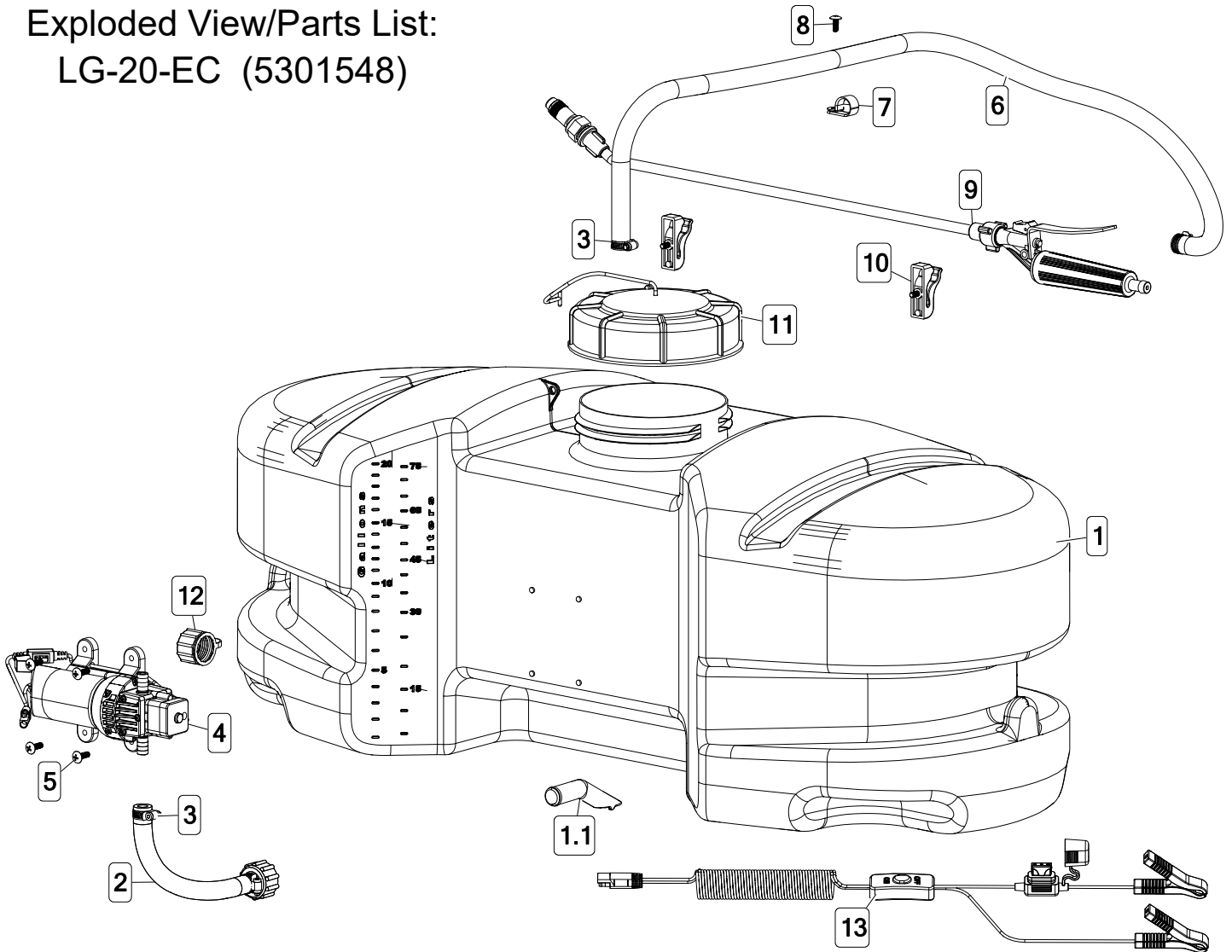


Motor runs, but no pressure:

CHECK:

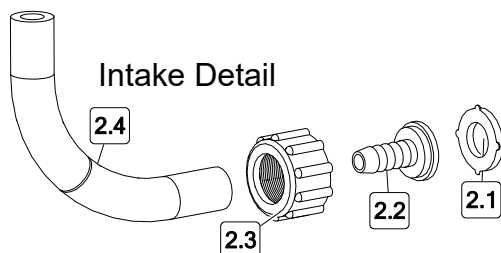
Both the counterweight and the bearing need to spin freely and both need to spin INDEPENDENTLY of each other. If these 2 pieces are 'stuck' together, you will need to break them free and whether or not they are sticking, spray some good quality lubricant or something similar on them and let it soak in and this should restore most of your prime.

Exploded View/Parts List: LG-20-EC (5301548)



Ref. #	Part #	Description	Qty
1	5169241	20 Gallon Tank (White)	1
1.1	5100452	Siphon Tube	1
2	5275526	Intake Sub Assembly	1
2.1	5116242	Strainer, 1" Filter Washer	1
2.2	5149034	Poly Swivel, 3/8" Hose Barb	1
2.3	5006209	Poly Knurled Swivel Nut, 3/4" FGHT	1
2.4	5020532	Hose, 3/8"-1 Brd. x 7 1/4"	1
3	5051144	Hose Clamp, 3/8"	4
4	5281370	1.2 GPM, 60 PSI Pump	1
5	5117167	#10-24 x 0.625 PH Truss Head Mach Screw	4
6	5020524	Hose, 3/8"-1 Brd. x 15 Ft.	1

Ref. #	Part #	Description	Qty
7	5051122	5/8" Black Nylon Loom Cable Clamp	1
8	5117234	#10-24 x 1/2" Phillips Round Head Mach Screw	1
9	5163100	Low-Flow Spray Wand w/X-26 Tip	1
9.1	5018330	Handgun Tip (X-26)	1
10	5274880	Wand Clips & Screws (Pkg/2)	1
11	5058188	Tank Lid w/Lanyard	1
12	5274373	Drain Plug Assembly	1
13	5278017	Lead Wire Assembly w/5A Fuse (96" Long)	1
13.1	5157237	5 Amp Regular Blade Fuse	1



Warranty

LIMITED WARRANTY FOR NEW FIMCO, IND. EQUIPMENT

WHO MAY USE THIS LIMITED WARRANTY. This limited warranty (the "Limited Warranty") is provided by Fimco, Ind. to the original purchaser ("you") of the Equipment (as defined below) from Fimco, Ind. or one of Fimco, Ind.'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, Ind. warrants that any new Equipment will be free from defects in material and workmanship for a period of **one (1) year** for sprayer and **two (2) years** for High-Flo High Performance pump (homeowner), **90 days** for sprayer and pump (commercial user), after delivery of the Equipment to you (the "Warranty Period"). The Warranty Period is not extended if Fimco, Ind. 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, Ind. or its authorized dealers; (3) damage or depreciation due to normal wear and tear; (4) defects or damage due to failure to follow Fimco, Ind.'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, Ind.'s reasonable control; (6) accessories, attachments, tools or parts that were not manufactured by Fimco, Ind., 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, Ind. shall, at its own cost, and at its option, either repair or replace the defective Equipment or part. Fimco, Ind. 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, IND.'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, IND.'S LIABILITY UNDER THIS LIMITED WARRANTY EXCEED THE ACTUAL AMOUNT PAID BY YOU FOR THE DEFECTIVE EQUIPMENT, NOR SHALL FIMCO, IND. 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.