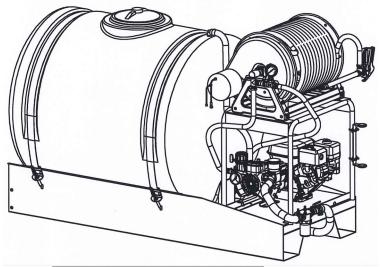
OWNER'S MANUAL

Model: LSS-235 (5301070)

(200 Gallon Lawn Service Skid-Mounted High Pressure Sprayer)



Technical Specifications

- 200 Gallon Polyethylene Tank
- Maximum Flow = 10.6 GPM
- Maximum Pressure = 580 PSI
- Maximum Temperature = 140°F
- GunJet Spray Gun w/1/2" x 300' of Hose
- Delta Jet Agitator

Caution: When fully filled with water, this sprayer will weigh approx. 2,070 lbs..

Consult the owner's manual for your vehicle to verify that you are within it's load carrying capacity.

BEFORE RETURNING THIS PRODUCT FOR ANY REASON, PLEASE CALL 1-800-831-0027

IF YOU SHOULD HAVE A QUESTION OR EXPERIENCE A PROBLEM WITH YOUR FIMCO INDUSTRIES PRODUCT:

1-800-831-0027

BEFORE YOU CALL, PLEASE HAVE THE FOLLOWING INFORMATION AVAILABLE: SALES RECEIPT & MODEL NUMBER. IN MOST CASES, A FIMCO INDUSTRIES EMPLOYEE CAN RESOLVE THE PROBLEM OVER THE PHONE.

General Information

Thank you for purchasing this product. The purpose of this manual is to assist you in operating and maintaining your Skid 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

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

Products are warranted against manufacturer or workmanship
defects for one year from date of purchase for home owner
usage and 90 days for commercial usage.

For technical assistance, visit our website @ www.fimcoindustries.com or call: TOLL FREE @ 1-800-831-0027

Our Technical Support Representatives will be happy to help you.

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

- Correct Part Description and/or part number
 - Model #/Serial # of your sprayer

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

Before Operating the Sprayer

- Add proper oil to the engine crankcase and gasoline to the gas tank. Always check the oil in the gear box. Refer to engine manual for correct oil type. Add SAE 30 to the sight level in the diaphragm pump. Fill the gear case with 90W gear lube until the gear lube runs out the side plug hole.
- Add plain water to the tank and check the system for leaks. Open the suction line valve. Open the lever valves by the pressure regulator that are connected to the handgun line and jet agitator line.
- 3. The pumping system includes an agitator, which will help keep the solution in suspension. Pressure to the agitator should never exceed 100 PSI. When spraying at pressures over 100 PSI, use the valve (in the agitator line) to throttle the pressure to the agitator by closing the valve. The valve may be opened slowly until the gauge reaches 100 PSI.

Do not exceed recommended pressure on pump or sprayer, as it may cause hoses to burst and will shorten pump life.

WARNING

This product when used can be dangerous and can cause bodily harm, only if not properly used or guarded.

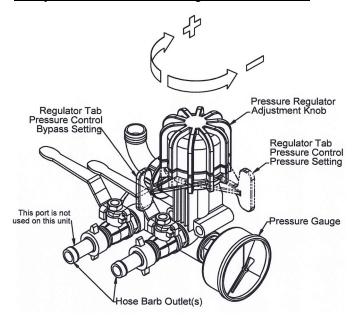
* STAY AWAY FROM EQUIPMENT WHEN IT IS IN OPERATION *

Read information and the full instructions furnished with the product before installing and operating.



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 [5004505 (12/18)] **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, without the possibility of losing any expensive chemicals.

Operating the Sprayer

- Rotate the regulator tab clockwise as far as possible (0 PSI). This aids in the starting of the engine.
- 2. Make sure handgun is in the "off" position and start the engine.
- Open the handgun. Water should start to flow from the handgun immediately. Leave the regulator tab in position (0 PSI) for about 1 minute. Allow any air in the system to be worked out before attempting to spray. Rotate the tab in the opposite direction to increase the pressure.
- 4. The pressure regulator (red knob on top) may now be rotated to get the desired operating pressure. Operate the sprayer for a short time with plain water and inspect the system again for any leakage. The sprayer is ready to use.
- The valve in the agitator line may be used to limit flow and pressure to the agitator.

NOTICE

- Be sure all guards covering exposed moving parts, such as shafts, are in place at all times. DO NOT USE the sprayer unless all guards are in place.
- Test the sprayer with plain water before adding chemicals to the tank
- DO NOT EXCEED recommended speed, pressure and temperature for the sprayer and pump.
- High pressure spray can cause serious bodily injury. Handle with care. Grasp gun firmly before starting to spray. During spraying operation, hold gun firmly.
- DO NOT put hands or fingers in front of the gun or point the gun at your body or anyone else.
- Before working on, servicing or making adjustments to equipment, disengage power, shut off engine, make sure all moving parts have stopped and all pressure in the system is relieved.
- Perform periodic cleaning, maintenance and inspection of fittings and hoses for operator safety. Replace any fittings or hoses that are shown to have defects.
- DO NOT use sprayer for pumping water or other liquid for human or animal consumption.
- If equipment is used in freezing or near freezing conditions, protect pump and plumbing on sprayer from freezing. Drain liquid from system and add RV antifreeze.

Maintenance During/After Spraying

Periodically close the suction line valve and check the line strainer and clean the screen. Stop the engine and shut off the valve near the strainer. Remove the bowl and screen portions of the strainer and wash them free from all impurities. You may also drain the tank by uncoupling the suction line near the strainer. Open the valve and pour the contents into another container. Read the chemical label for disposal instructions.

Proper care and maintenance will keep your pump wear at a minimum and will keep it running smoothly and trouble-free for a long time and prolong the life of your sprayer.

Change the engine oil per the engine manufacturer's specifications. Oil changes in the pump should be done after each 200 hours of use or at least once a season. To fill the pump with oil, pour oil slowly into the sight tube while slowly turning the pump shaft. Turning the pump shaft purges all of the air from the crankcase. Use SAE 30 motor oil.

Refer to the pump and motor owners manuals for their respective replacement parts and service recommendations.

After use, fill the sprayer tank part way with water. Start the sprayer and allow the water to pump through the entire plumbing system and nozzles. Drain and then refill half full with plain water, add the recommended amount of good quality tank cleaner such as FIMCO Sprayer 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 sprayer on and circulate through system for 15 minutes and then spray out through handgun nozzle (and boom nozzles if applicable). Refill tank half way with clean water and repeat. Follow the chemical manufacturer's disposal instructions of all wash or rinsing water.

For the boom (if applicable) remove the tips and screens from the nozzle assemblies. Wash these items out thoroughly. Blow the orifice clean and dry. If the orifice remains clogged, clean it with a fine bristle (NOT WIRE) brush or with a toothpick. Do not damage the orifice. Water rinse and dry the tips before storing.

WARNING: Never pump corrosive or abrasive liquids as these will cause rapid wear or deterioration of body, rotor, shaft and seals in the pump. Never run pump dry. 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. Failure to follow this warning will void the product warranty.

Follow the chemical manufacturer's instructions on disposal of all waste water from the sprayer.

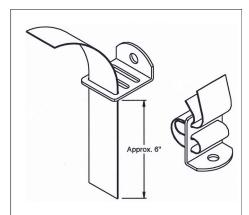
Winter Storage

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 boom (if applicable) and handgun until you see pink fluid spraying from the nozzles. 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.

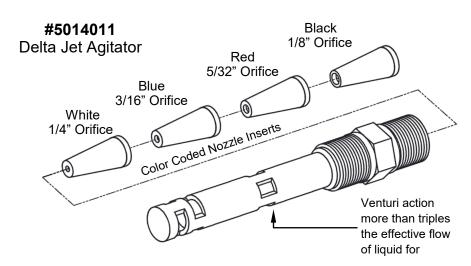
Removing from storage: drain the antifreeze. Fill the tank with fresh water and run through the system. Dispose of antifreeze and flush water properly.

Removing the pump from the sprayer and storing it in a heated area will also prevent costly damage to the pump. This should be done AFTER the pump has been neutralized and flushed out with RV antifreeze. Plug the inlet and outlet ports if storing inside.



Strap/Buckle Detail
Strap Attachment
to a "Bent" Buckle

The nylon straps are to be inserted in and out of the slots in the buckle, as shown. Be sure the straps are snug before tightening the hook bolts. In most cases, it will be necessary to retighten the straps after filling the tank with liquid.

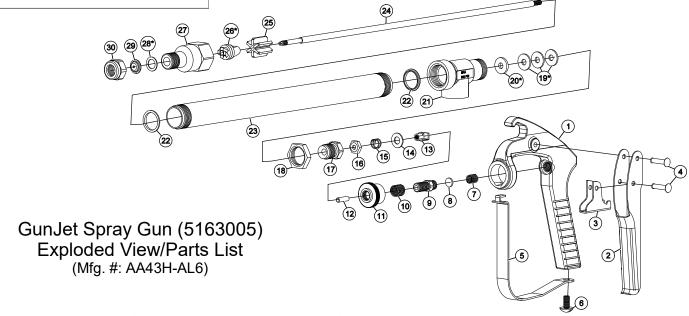


Operation

As solution is forced through the agitator, the venturi action triples the flow through the agitator.

The valve in the line may shut off the agitation completely when not needed or it can throttle the amount of solution going to the agitator if too much agitation occurs.

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Orifice Color	Orifice	P.S.I.	Inlet Flow (G.P.M.)	Outlet Flow (G.P.M.)
Black	1/8"	30.0	2.9	9.5
Red	5/32"	30.0	4.1	13.2
Blue	3/16"	30.0	5.3	15.4
White	1/4"	30.0	6.5	19.5

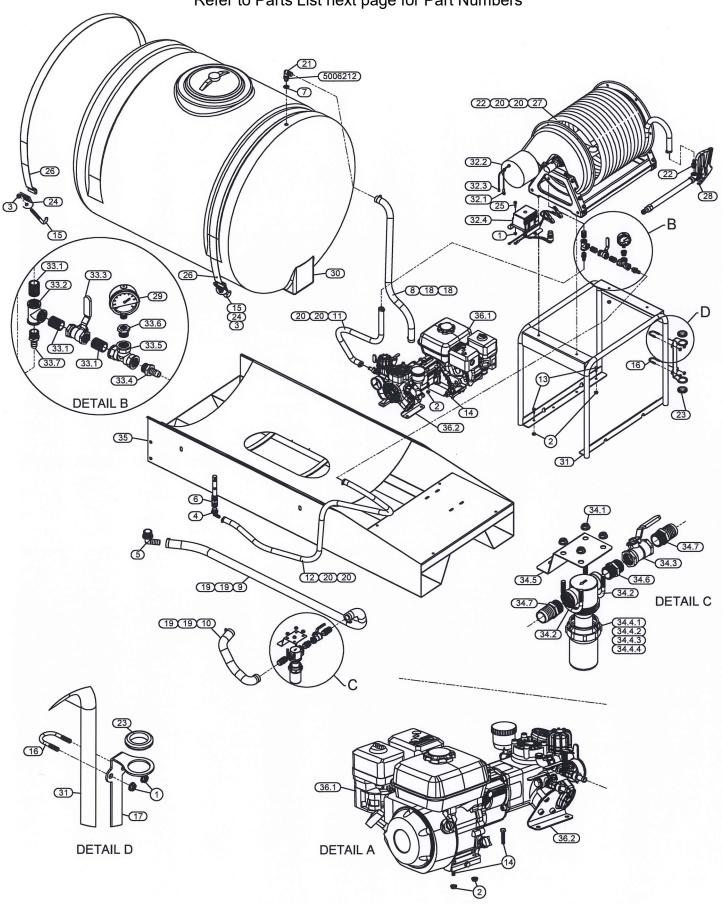


Ref. #	Part #	Mfg. Part #	Description	Qty
1	5002205	CP14477-1-AL	Handle Body, Aluminum	1
2	5166026	CP6509-INP	Trigger, Steel - Nickel Plated	1
3	**	CP6510-INP	Trigger Stop, Steel - Nickel Plated	1
4	**	CP7623-IZP	Rivet, Steel - Zinc Plated	2
5	**	CP13798-INP	Trigger Guard, Steel - Nickel Plated	1
6	**	CP11757-INP	Screw, Stainless Steel	1
7	5019107	CP6593-2-SS	Main Spring, Stainless Steel	1
8	5016071	CP6592-302SS	Spring Guide Washer, Type 302 S.S.	1
9	5117070	CP6588-IZP	Spring Screw, Steel - Zinc Plated	1
10	5019069	CP6594-SS	Spring for Stop Adjustment Nut, S.S.	1
11	5006072	CP6589-IZP	Stop Adjustment Nut, Steel - Zinc Plated	1
12	5134010	CP6591-SS	Spring Stud, Stainless Steel	1
13	5166017	CP6597-INP	Trigger Guide, Steel - Nickel Plated	1
14	5016061	CP7991-IZP	Washer	1
15	5019083	CP6595-SS	Trigger Stop Spring, Stainless Steel	1
16	5006244	CP9641-INP	Stem Nut, Steel - Nickel Plated	1

Ref. #	Part #	Mfg. Part #	Description	Qty
17	5117165	CP19237-AL	Packing Screw, Aluminum	1
18	* *	CP6599-NP	Locknut, Steel - Plated	1
19*	5097021	CP6602-LEA	Packing, Leather	3
20*	5016063	CP6601-302SS	Packing Washer, Type 302 Stainless Steel	1
21	5002203	CP6492-AL	Inlet Body, Aluminum	1
22	CP45196-NYB	CP45196-NYB	Gasket, Nylon	2
23	5009080	CP6604-AL	Tubing, Aluminum	1
24	5132039	CP19238-416SS	Stem, Type 416 Stainless Steel	1
25	++	CP10571-AL	Guide Vane	1
26*	10565-1-NY-AL	10565-1-NY-AL	Seat Plug, Plate, Washer, & Core Sub-Assy.	1
27	5084016	CP10566-AL	Nozzle Housing, Aluminum	1
28*	5072105	CP4743-NY	Gasket, Nylon	1
29	5063071	D6	Orifice Disc, Stainless Steel (D6)	1
30	5046033	CP1325-AL	Cap, Aluminum	1

- *: Available in Spare Parts Kit ONLY #5168190 (Mfg. #: PK-AB43-AL-KIT)
- ♦ ♦: Only Available in Complete Handgun Assembly

Exploded View: LSS-235 (5301070) Refer to Parts List next page for Part Numbers



Parts List: LSS-235 (5301070)

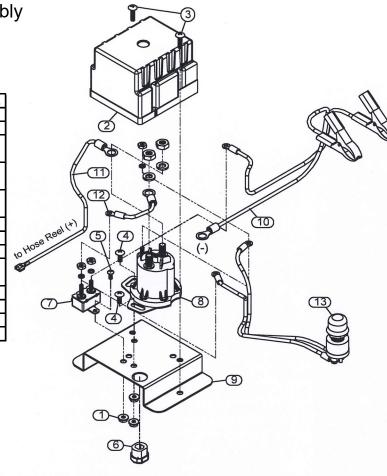
Ref.#	Part #	Description	Qty.
1	5006306	1/4"-20nc Hex Flanged Whiz Nut, Grade 5	6
2	5006307	5/16"-18nc Hex Flanged Whiz Nut, Grade 5	12
3	5006337	1/2-13 Hex Whiz (Flange) Locknut	4
4	5010207	Poly Elbow, 3/4" MPT x 1/2" HB	1
5	5010215	Poly Elbow, 1-1/4" MPT x 1" HB	1
6	5014011	Delta Jet Agitator	1
7	5016066	Garden Hose Washer	1
8	5020076	Hose, 3/4"-2 Brd. x 38"	1
9	5020314	Hose, 1"-2 Brd. x 60"	1
10	5020315	Hose, 1"-2 Brd. x 24"	1
11	5020372	Hose, 1/2" Yellow PVC x 36"	1
12	5020498	Hose, 1"-2 Brd. x 64"	1
13	5117323	5/16"-18nc x 3/4" Fing Hex Bolt	8
14	5034638	5/16-18 x 1-1/2" Flng Hex Bolt	4
15	5034111	1/2" x 6" J-Hook Bolt	4
16	5034197	Round U-Bolt, 1/4"-20 x 1" x 3/4"	2
17	5038637	Handgun Holder Bracket	1
18	5051024	Hose Clamp, 3/4"	2
19	5051025	Hose Clamp, 1"	4
20	5051114	Hose Clamp, 1/2"	6
21	5056097	Poly Elbow, 11/16" MPS x 3/4" HB	1
22	5067052	Steel Fitting, 1/2" MPT x 1/2" HB	2
23	5075014	Rubber Grommet (Black)	2
24	5108041	Tank Strap Buckle, Bent	4
25	5117301	1/4-20 x 1" Hex Flange Screw	2
26	5133103	Nylon Strap, 2" x 96"	2
27	5153097	Hose, 1/2" PVC 600# (Yellow) x 300'	1
28	5163005	GunJet Spray Gun (AA43H-AL6)	1
29	5167034	Gauge, 0-400 PSI (Liquid Filled)	1
30	5169004	200 Gallon Tank (38" x 50" x 42")	1
30.1	63480	8" Lid w/Blue Snap-In Vent	1

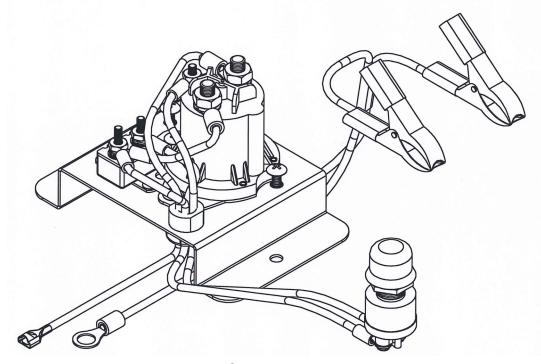
Ref. #	Part #	Description	Qty.
31	5274195	Reel Mount Weldment	1
32	5274309	Electric Hose Reel Assembly	1
32.1	5157063	Ring Terminal Lug, 3/8" (10-12 Ga.)	1
32.2	5272183	Electric Hose Reel	1
32.3	5157065	1/4" Female Push-On Terminal (10-12 Ga.)	1
32.4	5275416	Electric Components Assembly	1
33	5275335	Hose Reel/Agitator Plumbing Assembly	1
33.1	5011046	1/2" Galvanized Close Nipple	3
33.2	5010086	1/2" NPT Galvanized Tee	1
33.3	5143197	1/2" "T-800" Brass Ball Valve	1
33.4	5067131	Poly Fitting, 1/2" MPT x 1/2" HB	1
33.5	5010230	Poly Tee, 1/2" FPT	1
33.6	5041073	Poly Reducing Bushing, 1/2" MPT x 1/4" FPT	1
33.7	5067052	Steel Fitting, 1/2" MPT x 1/2" HB	1
34	5275463	Strainer Assembly	1
34.1	5006307	5/16"-18nc Hex Flanged Whiz Nut, Grade 5	4
34.2	5034065	Round U-Bolt, 5/16"-18 x 1-1/2" x 2-3/16"	2
34.3	5143190	3/4" "T-800" Brass Ball Valve	1
34.4	5116213	Strainer	1
34.4.1	3351-0039	Strainer Bowl	1
34.4.2	5116131	Strainer Screen (40 Mesh)	1
34.4.3	5072299	Strainer EPDM Gasket	1
34.4.4	3351-0038	Strainer Cap	1
34.5	5038258	Strainer Bracket	1
34.6	5011140	Poly Close Nipple, 3/4" MNPT	1
34.7	5067128	Poly Fitting, 3/4" MPT x 1" HB	2
35	5275672	Diaphragm Pump/Engine Assembly	1
35.1	5152105	PowerPro Engine (Less Gear Reduction)	1
35.2	5274358	3-Diaphragm Pump (9910-D403GRGI)	1
36	5272229	200 Gallon Skid Weldment (Red)	1

Troubleshooting Guide				
Symptom	Probable Cause(s)	Corrective Action		
The pump does not draw water	One or more valves are seating improperly. Suction line is plugged or collapsed. Clogged strainer.	Examine the valve seatings and clean them. Examine suction line. Clean Strainer.		
Pressure gauge fluctuates excessively	The pump is sucking in air through the suction line or air has not entirely evacuated from the pump.	Examine the suction hose and make sure it is firmly secured. Run the pump with the outlet line open to purge air from pump.		
The liquid flow is irregular	One or more valves are seating improperly.	Examine the valve seatings and clean them.		
Output drops and the pump is noisy	Oil level is too low.	Add oil to the proper level.		
Oil comes out of the discharge port	One or more diaphragms are split.	Drain the pump of oil. Dismantle the heads and fit new diaphragms. Fill to correct oil level with motor oil (SAE 30)		

Electrical Components Assembly (5275416)

Ref.#	Part #	Description	
1	5006186	#10-24 Serrated Fing Hex Nut	
2	5058101	Switch Box Cover	1
3	5117176	#10-24 x 3/4" Phillips Truss Head	2
		Mach. Screw	
4	5117234	#10-24 x 1/2" Phillips Truss Head	2
7	3117234	Mach. Screw	
5	5117334	#10-24 x 1/2" Phillips Round Head	1
J	5117334	Mach. Screw	-
6	5157025	Strain Relief	1
7	5157057	Auto-Reset Circuit Breaker (40 Amp)	1
8	5157075	Solenoid (12 Volt)	1
9 527	5272286	Electrical Components	1
	3212200	Base Weldment	-
10	5272287	Battery Wire Assembly	1
11	5272288	Lead Wire Assembly (Positive)	1
12	5272289	Jumper Wire Assembly	1
13	5272290	Push-Button Switch Assembly	1





Assembled Switchbox (Cover not shown)

NOTES:

Warranty Info

LIMITED WARRANTY FOR NEW FIMCO, INC.

WHO MAY USE THIS LIMITED WARRANTY. This limited warranty (the "Limited Warranty") is provided by Fimco, Inc. to the original purchaser ("you") of the Equipment (as defined below) from Fimco, Inc. or one of Fimco, Inc.'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, Inc. warrants that any registered new Equipment will be free from defects in material and workmanship for a period of **one (1) year** (homeowner), **90 days** (commercial user), after delivery of the Equipment to you (the "Warranty Period"). The Warranty Period is not extended if Fimco, Inc. 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, Inc. or its authorized dealers; (3) damage or depreciation due to normal wear and tear; (4) defects or damage due to failure to follow Fimco, Inc.'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, Inc.'s reasonable control; (6) accessories, attachments, tools or parts that were not manufactured by Fimco, Inc., 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, Inc. 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, Inc., 1000 Fimco Lane, North Sioux City, SD 57049; and (2) make the Equipment available to Fimco, Inc. 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, Inc. shall, at its own cost, and at its option, either repair or replace the defective Equipment or part. Fimco, Inc. 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, INC.'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, INC.'S LIABILITY UNDER THIS LIMITED WARRANTY EXCEED THE ACTUAL AMOUNT PAID BY YOU FOR THE DEFECTIVE EQUIPMENT, NOR SHALL FIMCO, INC. 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.