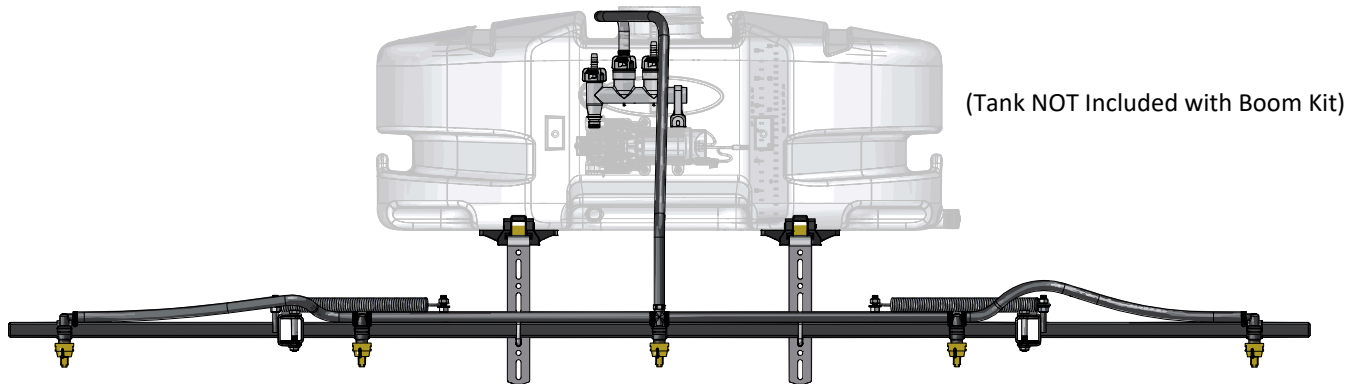


OWNER'S MANUAL

Model: ATVBK-500-QR (5302338)
(5-Nozzle Boom Assembly w/Connecting Fittings)



(Tank NOT Included with Boom Kit)

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 boom kit assembly.



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, 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.

Technical Specifications

- 5-Nozzle Boom Assembly
- 100" Spray Coverage
- Break-Away Outer Booms
- AIXR11002VP, #2 (Yellow) 110° tips (**)
- Check Valve Strainers, 50 Mesh, 5 PSI

(**) These tips provide excellent chemical and acid resistance with an exceptionally long wear life. 110° wide tapered, flat spray angle with air induction technology for better drift management. Compact size prevents tip damage.

Assembly Instructions

Remove the parts to the boom assembly from the carton. Refer to the parts list/exploded view drawing to help identify all the components.

- Make sure the contents of the sprayer's carton match the items shown on page 2 of the manual.
- Follow the steps on pages 3, 4 & 5 to properly assemble the boom kit to your sprayer.



www.fimcoindustries.com

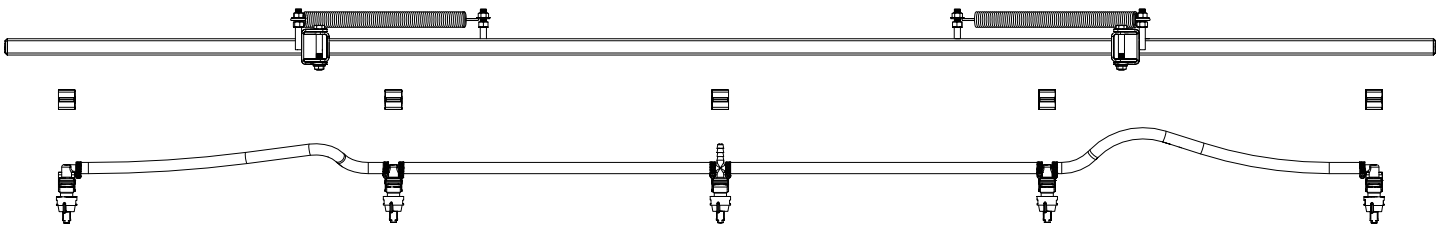
1000 FIMCO Lane, P.O. Box 1700, North Sioux City, SD 57049

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

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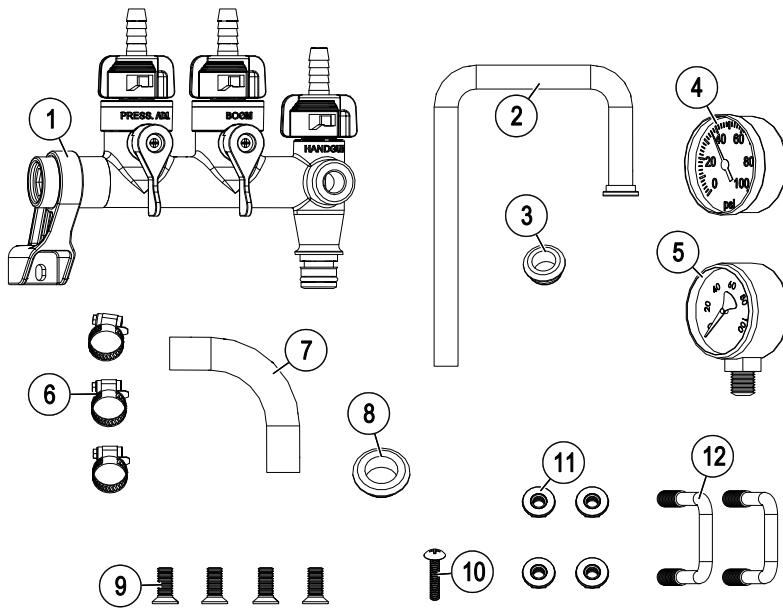
(11/18)]

Contents of your sprayer's carton (ATVBK-500-QR - 5302338):



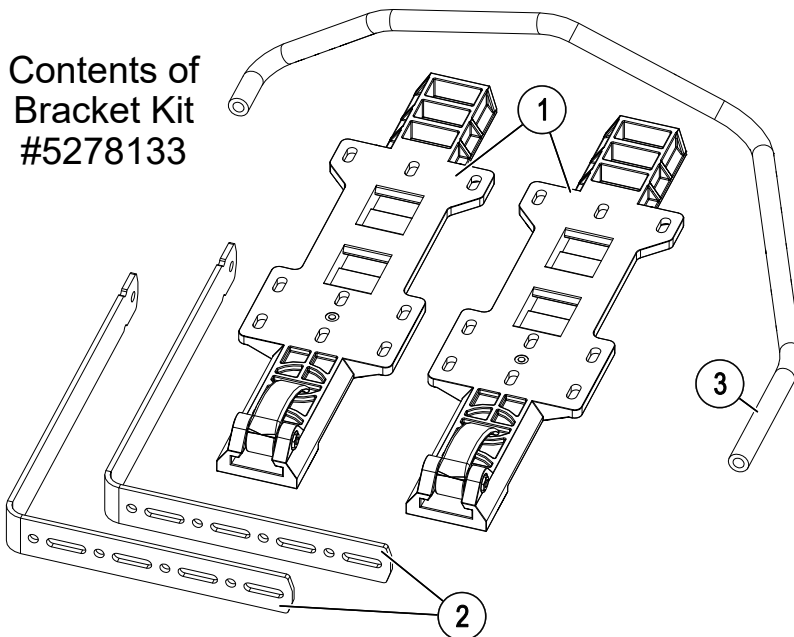
5-Nozzle Boom (5277779), 5-Nozzle Harness (#5277695)
& Pkg. of 5 Nozzle Clamps (5277729)

Contents of Parts Bag #5278224

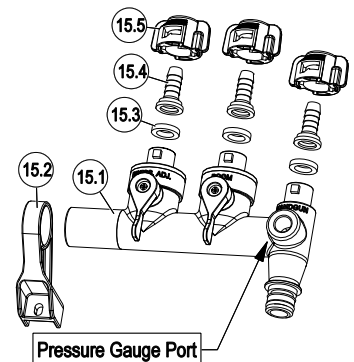


Ref. #	Part #	Description	Qty
1	5302791	Quick Connect Manifold Assembly	1
2	5100803	Rigid By-Pass Tube	1
3	5075018	Grommet, 1/2" I.D.	1
4	5167097	2" Dry 100# Back Mount Gauge	1
5	5167007	Pressure Gauge, 0-100 p.s.i.	1
6	5051144	Hose Clamp, 3/8"	3
7	5020532	Hose, 3/8"-1 Brd. x 7 1/4"	1
8	5075022	Grommet, 5/8" I.D.	1
9	5034149	5/16-18nc x 3/4" Flat Head Screw	4
10	5117168	#10-24 x 1" Phillips Head Screw	1
11	5006307	5/16"-18 Hex Whiz (Flange) Locknut	4
12	5034159	Square U-Bolt, 5/16" x 1 5/16" x 1 7/8"	2

Contents of Bracket Kit #5278133



Ref. #	Part #	Description	Qty
1	5278222	ATV Quick Release Bracket	2
1.1	5078223	Cam Handle Assembly	1
2	5038872	Bracket - Bent Adjustable Height	2
3	5020161	Hose, 3/8"-1 Brd. x 48"	1



Manifold Detail #5302791

See Page 7 for the Manifold Assembly Part Numbers

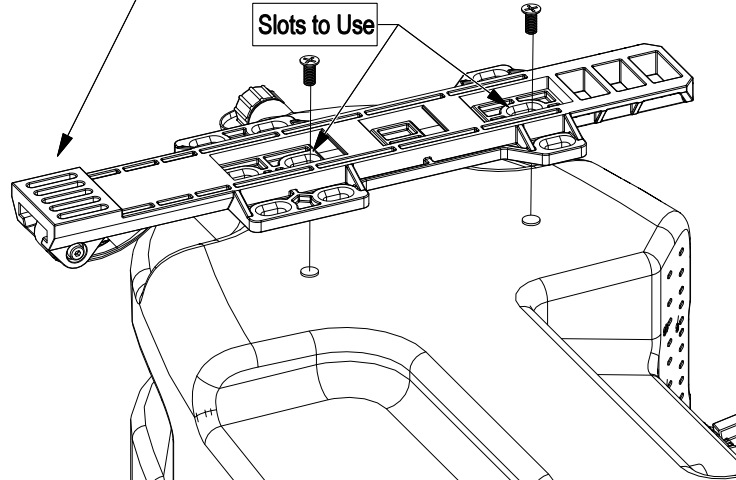
Owner's Manual



Step 1

(**) 'Long' portion of the brackets should be facing towards the 'back' side of the tank

Slots to Use



Assembling the ATVBK-500-QR To your Sprayer Tank

Normally, the sprayer will be mounted on an ATV with the pump assembly at the operator's back and the spray wand will be at the rear of the unit. Right Hand (RH) and Left Hand (LH) sides of the sprayer are determined as if you are standing behind the sprayer, looking at it (facing forward)

NOTE: the spray gun will already be attached to the spray line hose

Start the assembly procedure by turning the tank upside down on a stable, flat surface.

A phillips head screwdriver is required for this step.

(**) Mount tank brackets to the underside of the tank as shown in Step 1. Use (4) flat head screws to secure it to the tank. The tank will rest on the surface of the brackets. Make sure the brackets are parallel with each other before tightening down the bolts. Do not over-tighten.

After your tank brackets are securely attached, turn the tank assembly over and position it so that the cam handles which extend beyond the back of the tank are facing you and just hanging over the edge of the table or flat surface you are assembling this on.

Secure the boom mounting brackets to the tank mounting brackets with Cam handles as shown in Detail A. You can position them as needed within the slot on the bracket. Just be sure that the surfaces of both brackets are even with each other.

You are now ready to mount this unit to an ATV, using ratchet straps (NOT INCLUDED)

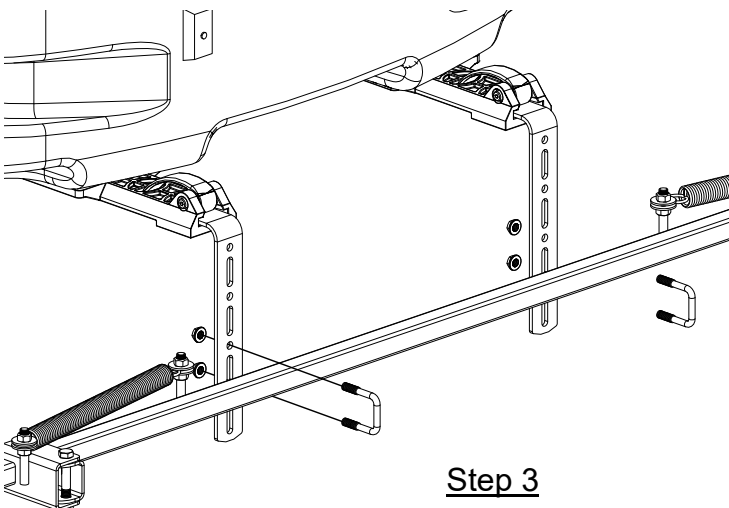
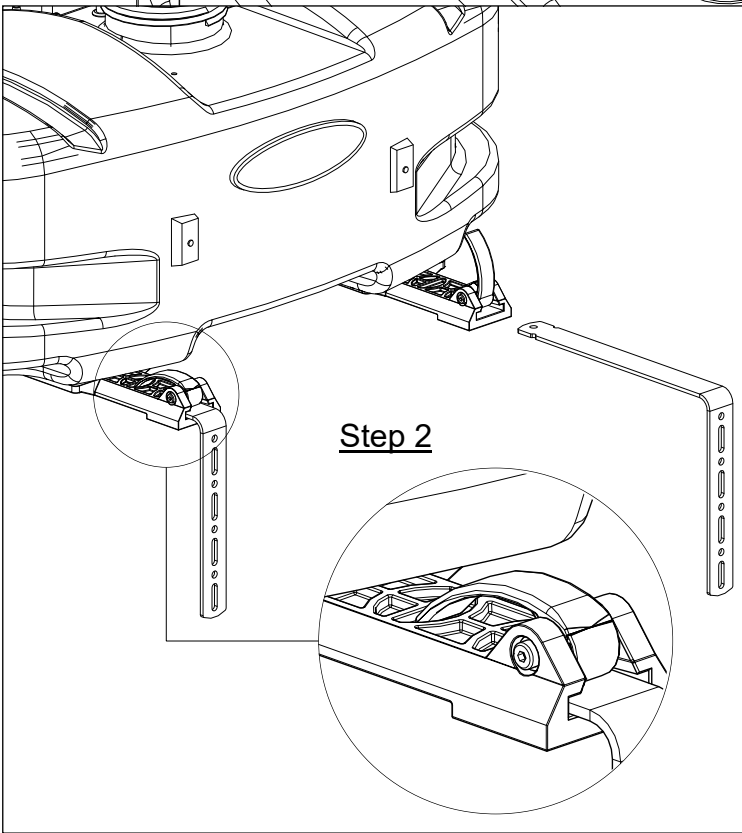
After your boom mounting brackets are secured in place and the unit secured on your ATV, bolt the 5-nozzle boom in place with (2) Square U-Bolts and whiz nuts.

A 1/2" socket or wrench is required for this step.

This boom can be positioned as shown or in a few alternate positions.

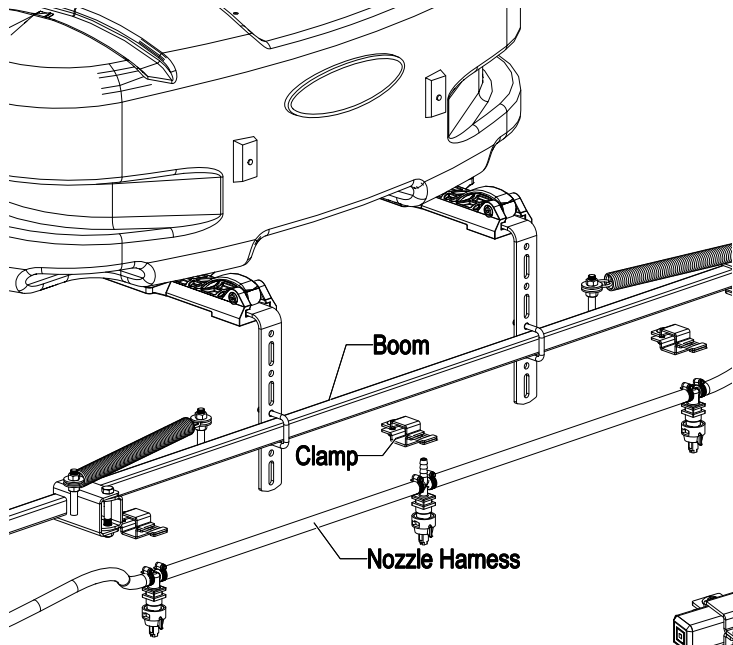
Try to maintain approximately 18-22 inches above the items being sprayed, for optimal coverage.

Step 2



Step 3

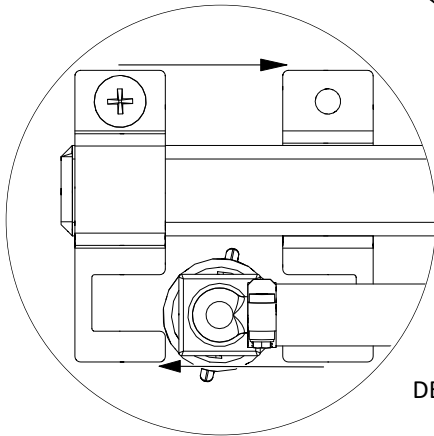
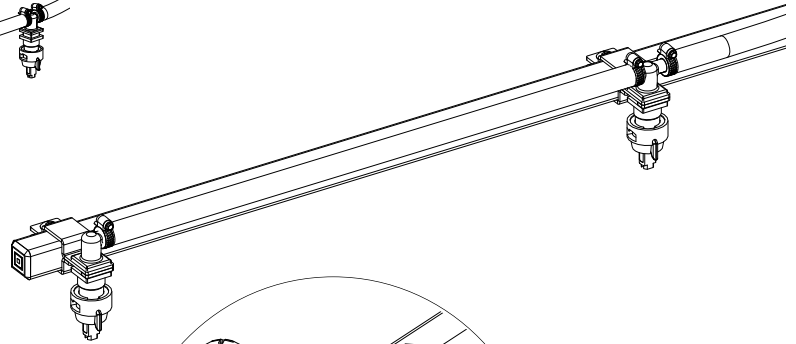
Step 4



Assembling the ATVBK-500-QR To your Sprayer Tank

With the boom secured to the boom mounting brackets, the nozzle harness can now be attached.

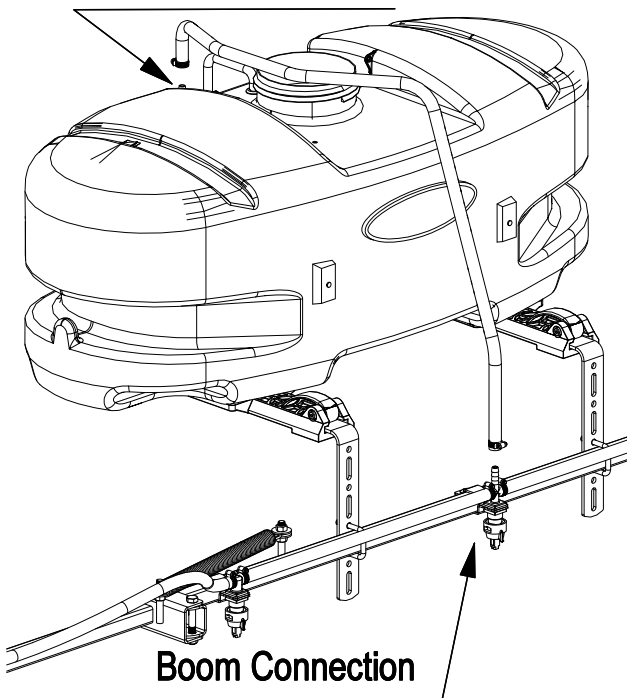
Attach the nozzle harness to the boom. Using the nozzle clamps, attach the nozzle harness to the boom as shown in **DETAIL Clamp**. Starting with the center (CROSS) nozzle, center on the boom. Then work your way out to both ends of the boom with the remaining nozzles.



DETAIL Clamp

Step 5

Manifold Connection

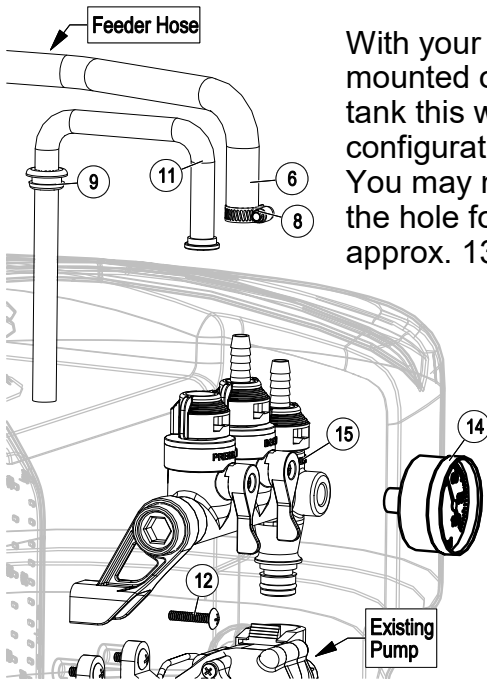


After your nozzle harness is attached to the boom, locate the 48" hose and the (2) hose clamps from the parts bag.

Place the hose clamps over each end of the hose loosely. Slip the ends of the hose over the hose bars on both the manifold and the 'CROSS' fitting on the nozzle harness. Use a twisting motion, if necessary, to get the hose fully onto each barb. Bring the hose clamps to the connection point and tighten securely.

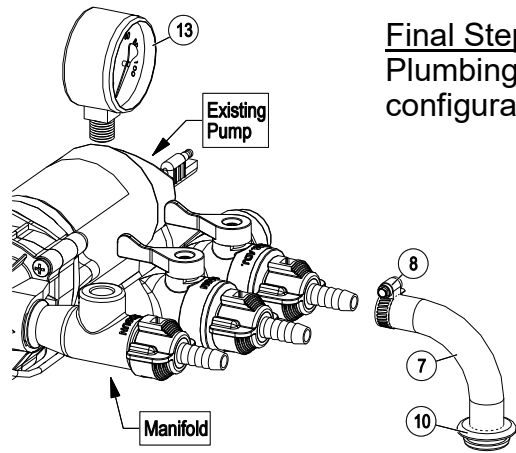
NOTE:

Make sure this boom feeder hose does not end up on the 'outside' of the spray wand hose, otherwise unwrapping the spray wand hose from around the tank may be difficult.



With your pump (Not Included) mounted on the 'side' of your tank this will be your plumbing configuration/setup. You may need to punch or drill the hole for your return line, approx. 13/16".

See Page 7 for the Parts List and Part Numbers



Final Step:
Plumbing configuration.

With your pump (Not Included) mounted on the 'top' of your tank this is how your bypass line will be configured. You may need to punch or drill the hole for your return line, approx. 7/8".

Testing the Sprayer

NOTE:

It is VERY important for you to test your sprayer with plain water before actual spraying is attempted. This will enable you to check the sprayer for leaks without the possibility of losing any expensive chemicals.

Fill the tank about 1/2 full with plain water and drive to the starting place for spraying.

When you are ready to spray, turn the boom valve to the "on" position (Detail A). This will start solution spraying from the tips of the boom. The pressure will decrease slightly when the boom is spraying.

Adjust the pressure by turning the "ON/OFF" valve lever on the bypass line valve (Detail B). Make sure your pattern is sufficient. You may down-pressure the system by 'bypassing' solution back into the tank. This is achieved by opening the bypass valve. Regulating pressure is done in this manner.

Read the operating instructions and initially begin spraying by closing the 'Pressure Adjust' valve and opening the boom line valve (Detail A). This will enable the air in the line to be eliminated (purged) through all the tips, while building pressure. When everything tests all right (no leaks and good pressure), add the desired chemicals to the mixture and water combination and start your spraying operation. Adjust the pressure and spray as you did in the testing procedure.

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

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.

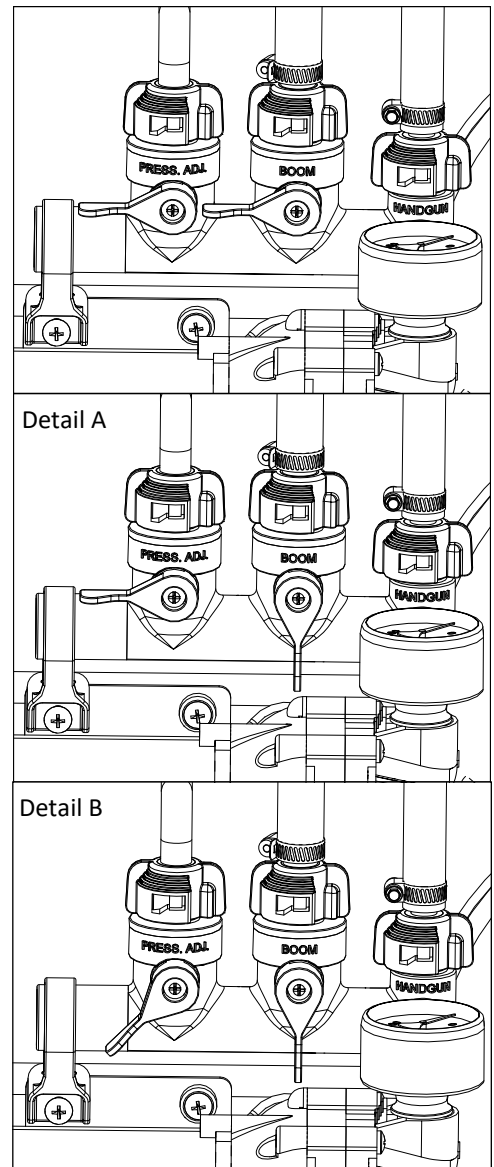
The pump will turn back on when one of the following actions occurs:

- ◆ Boom valve is opened to broadcast spray with the boom.
- ◆ Bypass valve is opened to re-circulate solution back into the tank.

When spraying with the boom, pressure may be reduced by slowly opening the bypass valve until desired pressure is achieved. Opening the valve decreases pressure, closing the valve increases pressure. When spraying with the boom, the proper method to set the pressure is to open the boom valve completely and if a lower pressure is desired, then slowly open the bypass valve until that pressure is obtained.

For the safest and most efficient chemical application, you will need to calibrate your sprayer using the tip and speed charts. Once you have determined the proper speed and pressure settings, you will need to consult your chemical label for the amount of chemical to be added to the tank. Read the entire label. Use only according to label directions.

Manifold Valves CLOSED



Speed Chart			
Speed in M.P.H. (Miles Per Hour)	Time Required in seconds to travel a distance of		
	100 Ft.	200 Ft.	300 Ft.
1.0	68 sec.	136 sec.	205 sec.
2.0	34	68	102
3.0	23	45	68
4.0	17	34	51
5.0	14	27	41
6.0	11	23	34
7.0	9.7	19	29
8.0	8.5	17	26
9.0	7.6	15	23
10.0	6.8	14	20

Spray Tip Rate Chart (20" Spacing)										
Tip No.	Pressure (psi)	Capacity (GPM)	Gallons Per Acre - Based on Water							
			1 MPH	2 MPH	3 MPH	4 MPH	5 MPH	6 MPH	8 MPH	
AIXR11002VP	15	.12	35.6	17.8	11.8	8.9	7.1	5.9	4.5	
	20	.14	41.6	20.8	13.8	10.4	8.3	6.9	5.2	
	30	.17	50.4	25.2	16.8	12.6	10.1	8.4	6.3	
	40	.20	59.6	29.8	19.8	14.9	11.9	9.9	7.4	
Tip No.	Pressure (psi)	Capacity (GPM)	Gallons Per 1000 Sq. Ft. - Based on Water							
			1 MPH	2 MPH	3 MPH	4 MPH	5 MPH	6 MPH	8 MPH	
AIXR11002VP	15	.12		.41	.27	.20	.16			
	20	.14		.48	.32	.24	.19			
	30	.17		.58	.39	.29	.23			
	40	.20		.68	.45	.34	.27			

Calibration

Chemical labels may show application rates in gallons per acre, gallons per 1000 square feet or gallons per 100 square feet. You will note that the tip chart shows 2 of these rating systems. Once you know how much you are going to spray, then determine (from the tip chart) the spraying pressure (PSI), and the spraying speed (MPH). Determining the proper speed of the pulling vehicle can be done by marking off 100, 200 & 300 feet. The speed chart indicates the number of seconds it takes to travel the distances. Set the throttle and with a running start, travel the distances. Adjust the throttle until you travel the distances in the number of seconds indicated by the speed chart. Once you have reached the throttle setting needed, mark the throttle location so you can stop and go again, returning to the same speed.

Add water and proper amount of chemical to the tank and drive to the starting place for spraying.

Using the Boom Nozzles

Four things must be considered before spraying with the boom.

1. How much chemical must be mixed in the tank.
 2. Rate of spray (gallons per acre to be sprayed).
 3. What pressure (p.s.i.) will be used.
 4. Speed traveled (mph) while spraying.
- * Refer to the chemical label to determine your chemical mixture
 - * See the tip chart to determine the pressure to be used. The chart will also show the speed used when spraying.
 - * Start the pump and open the valve to the boom nozzles.
 - * Check the spray pattern. Usually you can see the coverage better on a solid concrete surface, such as a driveway.
 - * Raise or lower the nozzles so that you will have a good coverage pattern. Generally the proper height will be about 18 inches from the object(s) being sprayed.

Maintenance During/After Spraying

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

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 boom and handgun nozzles. Refill sprayer half way with clean water and repeat. Follow the chemical manufacturer's disposal instructions of all wash or rinsing water. If boom or handgun nozzles need cleaning, remove them 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.

Storing Sprayer

When sprayer is not in use, release Cam Lock Handles. This is to prevent deforming of Cam Lock Mechanism. Do not use QR bracket Cams to hold and store boom in vertical position.

Winter Storage

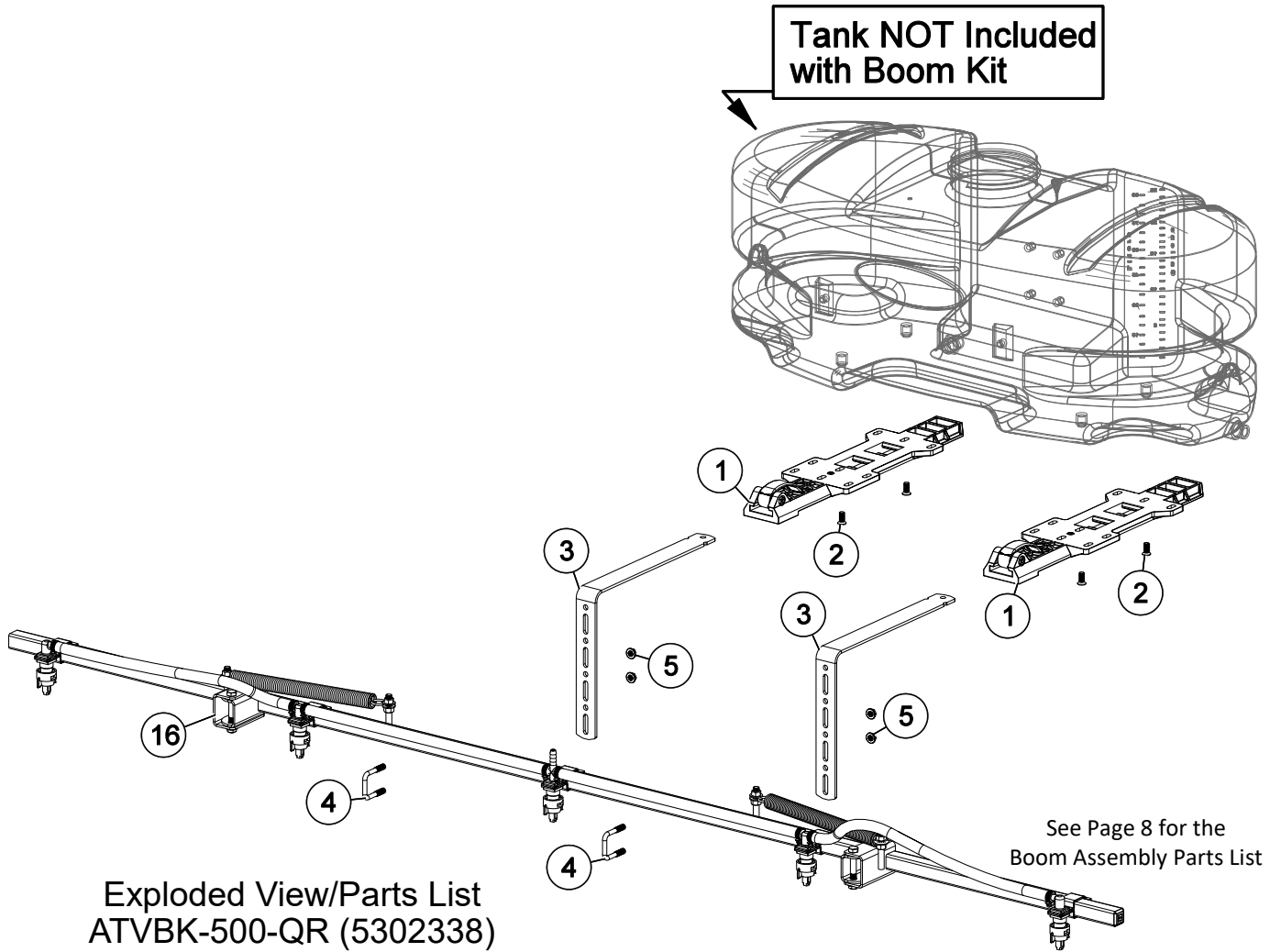
Prepare the sprayer for end-of-season storage by running RV antifreeze through the system. This will keep internal parts lubricated, protect against corrosion and keep the unit from freezing. *Note: RV antifreeze is non-toxic and biodegradable and generally safer for the environment than automotive antifreeze.*

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 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.

**Tank NOT Included
with Boom Kit**

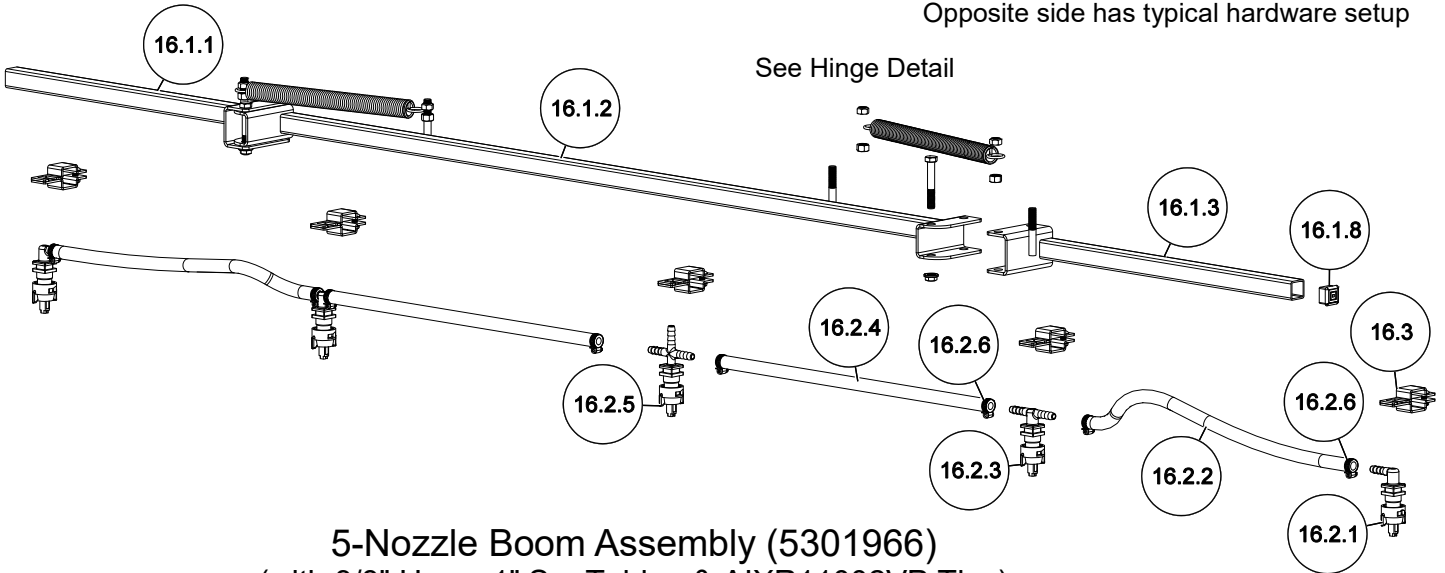


**Exploded View/Parts List
ATVBK-500-QR (5302338)**

Ref. #	Part #	Description	Qty
1	5278222	ATV Quick Release Bracket Assembly	2
2	5034149	5/16-18nc x 3/4" lg Flat Head Screw W/Locking Patch	4
3	5038872	Quick Release Bracket - Bent Adjustable Height	2
4	5034159	Square U-Bolt, 5/16" x 1 5/16" x 1 7/8"	2
5	5006307	5/16"-18 Hex Whiz (Flange) Locknut	4
6	5020161	Hose, 3/8"-1 Brd. x 48"	1
7	5020532	Hose, 3/8"-1 Brd. x 7 1/4"	1
8	5051144	Hose Clamp, 3/8"	3
9	5075018	Grommet, 1/2" I.D.	1
10	5075022	Grommet, 5/8" I.D.	1
11	5100803	Rigid By-Pass Tube	1
12	5117168	#10-24 x 1" Phillips Truss Head Machine Screw	1
13	5167007	Pressure Gauge, 0-100 p.s.i.	1
14	5167097	2" Dry 100# Back Mount Gauge	1
15	5302791	Quick Connect Manifold Assembly	1
15.1	5302347	Quick Connect Manifold	1
15.2	5143422	QC Manifold - Support Bracket	1
15.3	5143430	Flat Washer - Hose Barb Seal	3
15.4	5143431	QC Manifold - 3/8" Hose Straight Barb	3
15.5	5143429	QC Quarter Turn Cap	3
16	5301966	5-Nozzle Boom Assembly	1

Opposite side has typical hardware setup

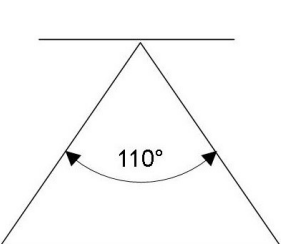
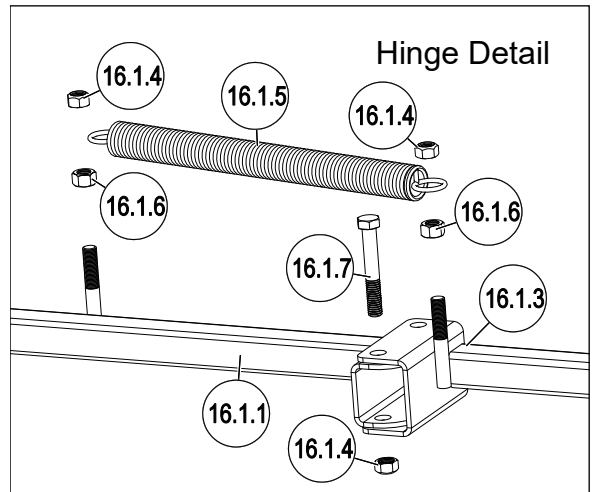
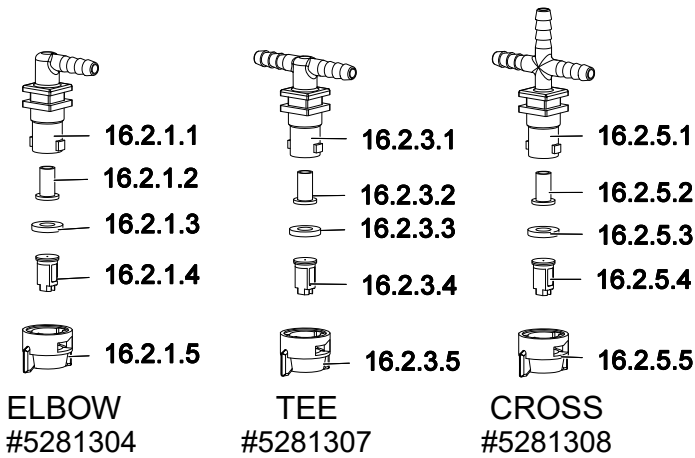
See Hinge Detail



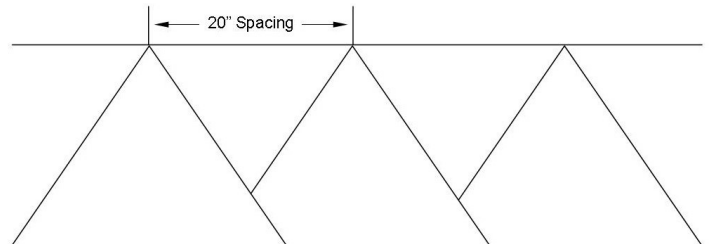
5-Nozzle Boom Assembly (5301966)
(with 3/8" Hose, 1" Sq. Tubing & AIXR11002VP Tips)

Ref. #	Part #	Description	Qty
16	5301966	5-Nozzle Boom Assembly	1
16.1	5277779	Boom Sub-Assembly (1" Sq. Tube)	1
16.1.1	5277834	Outer Boom Weldment 1" Sq. Tube L.H.	1
16.1.2	5277838	Center Boom Weldment 1" Sq. Tube	1
16.1.3	5277835	Outer Boom Weldment 1" Sq. Tube R.H.	1
16.1.4	5006345	3/8"-16 Flange Locknut (Grade F)	6
16.1.5	5019228	Extension Spring	2
16.1.6	5006259	3/8"-16 Hex Nut	4
16.1.7	5034169	H.H.C.S., 3/8"-16 x 2 1/2"	2
16.1.8	5046106	Square Cap, Black (1" Square Tube)	2
16.2	5277695	5-Nozzle Harness (3/8" & 1" Sq Tube)	1
16.2.1	5281304	"ELL" Nozzle Sub-Assembly (3/8")	2
16.2.1.1	5056113	Single Hose Shank (3/8" Hose)	1
16.2.1.2	5143543	Check Valve Strainer, 50 Mesh, 5 PSI	1
16.2.1.3	5016157	Seat Washer (QJ Caps)	1
16.2.1.4	5018371	Air-Induction XR Flat Spray Tip (AIXR11002VP)	1
16.2.1.5	5046219	Quick TeeJet Cap ONLY (Yellow)	1

Ref. #	Part #	Description	Qty
16.2.2	5020534	Hose, 3/8"-1 Brd. x 21"	2
16.2.3	5281307	"TEE" Nozzle Sub-Assembly (3/8")	2
16.2.3.1	5056114	Double Hose Shank (3/8" Hose)	1
16.2.3.2	5143543	Check Valve Strainer, 50 Mesh, 5 PSI	1
16.2.3.3	5016157	Seat Washer (QJ Caps)	1
16.2.3.4	5018371	Air-Induction XR Flat Spray Tip (AIXR11002VP)	1
16.2.3.5	5046219	Quick TeeJet Cap ONLY (Yellow)	1
16.2.4	5020531	Hose, 3/8"-1 Brd. x 19-3/8"	2
16.2.5	5281308	"Cross" Nozzle Sub-Assembly (3/8")	1
16.2.5.1	5056115	Triple Hose Shank (3/8" Hose)	1
16.2.5.2	5143543	Check Valve Strainer, 50 Mesh, 5 PSI	1
16.2.5.3	5016157	Seat Washer (QJ Caps)	1
16.2.5.4	5018371	Air-Induction XR Flat Spray Tip (AIXR11002VP)	1
16.2.5.5	5046219	Quick TeeJet Cap ONLY (Yellow)	1
16.2.6	5051144	Hose Clamp, 3/8"	8
16.3	5277923	Boom Clamp Assembly (1in Sq.)	5



Based on the minimum overlap required to obtain uniform distribution with 110° tips and 20" spacing.
Suggested Minimum Spray Height: 16"-18" above what is being sprayed (to plant, not ground).
Optimum Spray Height: 20"



NOTES:

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** (homeowner), **90 days** (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, Ind. 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, Ind., 1000 Fimco Lane, North Sioux City, SD 57049; and (2) make the Equipment available to Fimco, Ind. 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.