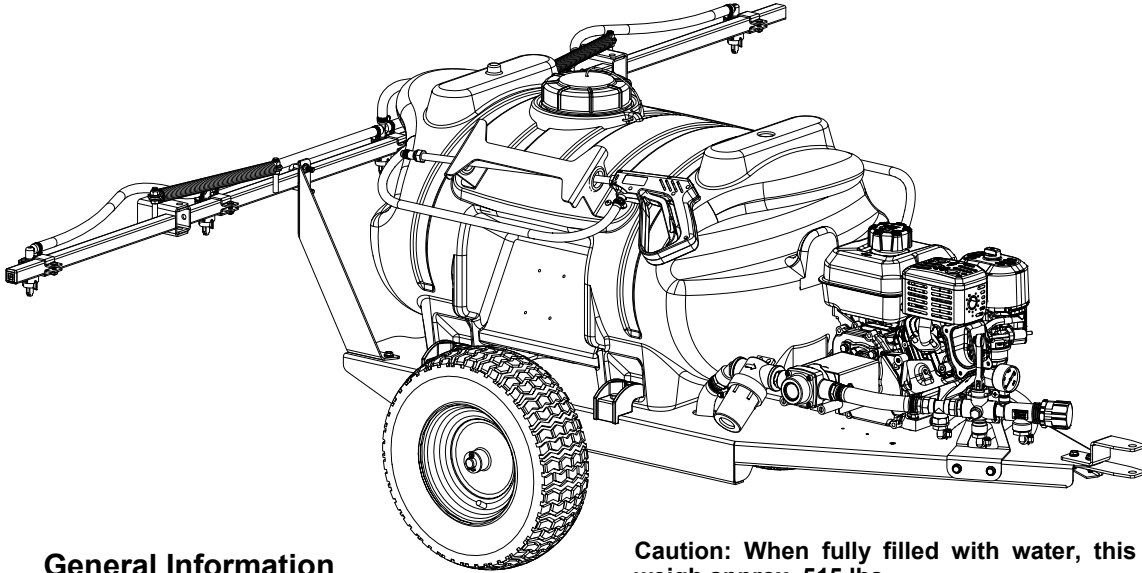


# OWNER'S MANUAL

## Model: TR-40-GAS (5301339)

(40 Gallon Lawn & Garden Trailer Sprayer w/5-Nozzle Boom Assembly)



### General Information

Thank you for purchasing this product. The purpose of this manual is to assist you in operating and maintaining your lawn & garden Trailer 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](http://www.P65Warnings.ca.gov)

**Caution:** When fully filled with water, this sprayer will weigh approx. 515 lbs..  
**Consult the owner's manual for your vehicle to verify that you are within its load carrying capacity.**



### NOTE:

Maximum Speed (Empty) - 10 MPH  
Maximum Speed (Filled) - 5 MPH  
Refer to vehicle's manual for towing instructions

### Technical Specifications

- 40 Gal. Corrosion-Resistant Polyethylene Tank
- 127cc Briggs & Stratton Engine
- 4-Roller Pump - 6 GPM
- Deluxe Pistol-Grip Handgun w/25' Handgun Hose
- 16 x 6.50 - 8 Pneumatic Turf-Tread Tires
- Pressure Gauge and Pressure Relief Valve
- 5-Nozzle Boom Assembly (100" Spray Coverage)
- Corrosion-Resistant Nylon Nozzles
- Check Valve Strainers, 50 Mesh, 5 PSI
- Breakaway Outer Boom Members

### Assembly Instructions

Follow the steps on pages 2 & 3 to properly assemble the sprayer.



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](http://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: One Year.**

**Commercial Usage: 90 Days.**

[www.fimcoindustries.com](http://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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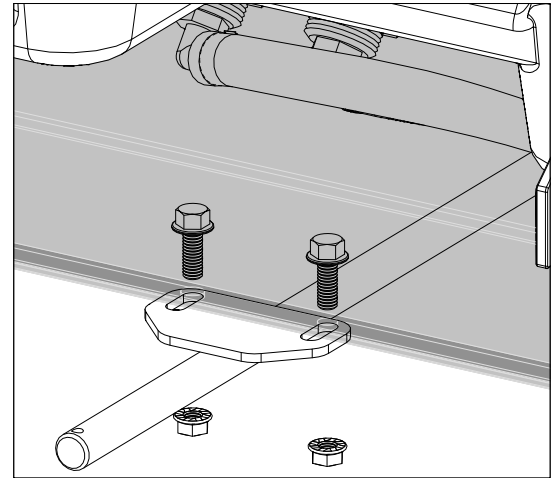
# Assembly Procedure (TR-40-GAS)

## Step 1

Your tank comes mostly pre-assembled from the factory,

To assemble the axle weldment to the frame: locate the (4) 3/8"-16 x 1" flanged bolts, (4) 3/8"-16 flanged whiz nuts and the axle weldment.

Secure the axle weldment to the frame. Tighten bolts and nuts.



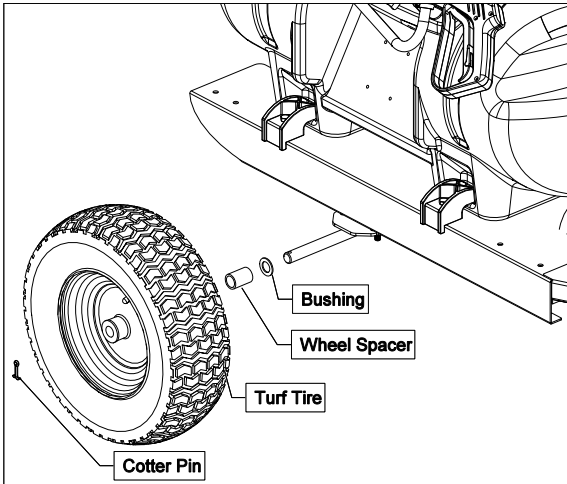
## Step 2

Locate the (2) wheels, (2) machine bushings, (2) wheel spacers and (2) cotter pins from the carton.

Slide the machine bushing, and wheel spacer on to the axle. Slide the wheel on to the axle, making sure the valve stem is facing outward.

Retain the wheel on the axle with the cotter pin. Place the pins through the holes at the end of the axle.

Repeat for opposite side.



### NOTE:

Maximum Speed (Empty) - 10 MPH

Maximum Speed (Filled) - 5 MPH

Refer to vehicle's manual for towing instructions

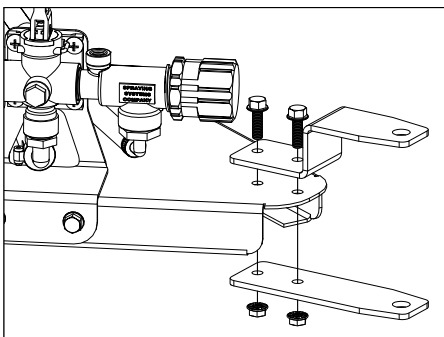
## Step 3

Remove the hitch brackets, both flat and formed from the parts bag. The flat one is to be placed under the frame and the formed one gets placed on top of the frame.

Bolt them together, 'sandwiching' the frame between both of the brackets.

Use the (2) 5/16"-18 x 1" bolts and (2) 5/16"-18 hex whiz nuts.

They should grab tightly against the frame as you tighten the bolts down.



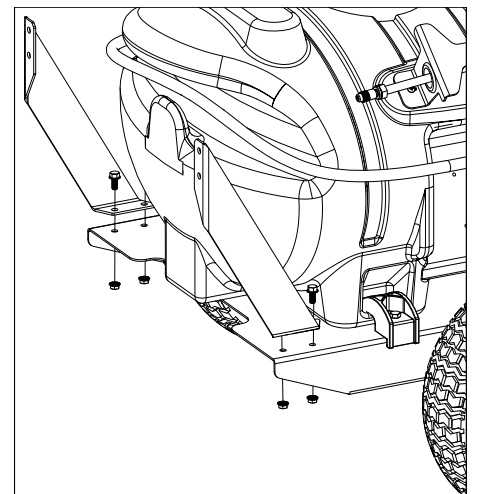
## Step 4

Left Hand (LH) and Right Hand (RH) sides of the sprayer are determined as if you are standing behind the sprayer, looking at it (facing forward)

Mount the (LH) and (RH) boom mounts to the back of the frame (If not already done).

Locate both the (LH) & (RH) boom mounts, (4) 5/16"-18 x 3/4" bolt and (4) 5/16"-18 flanged whiz nuts.

Attach the boom mounts to the frame. Make sure the brackets are parallel with each other before tightening down the bolts.

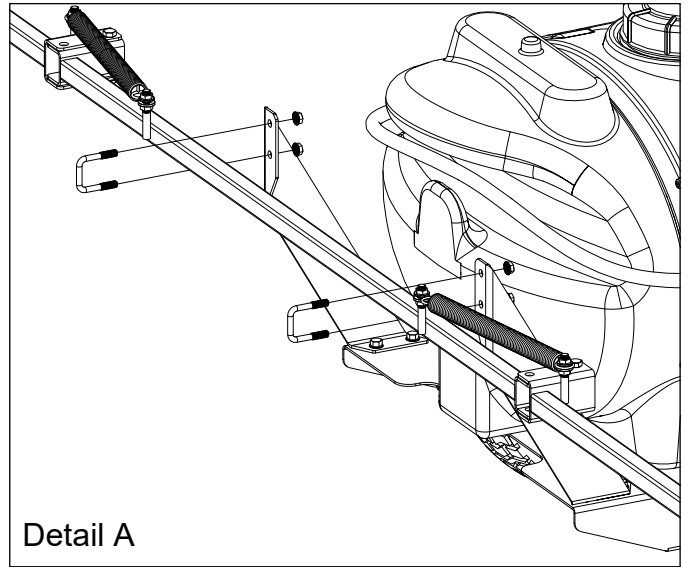


# Assembly Procedure (TR-40-GAS)

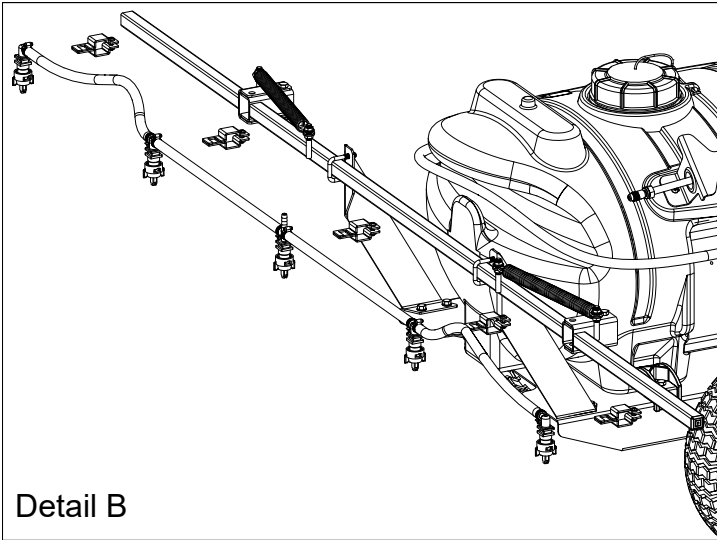
## Step 5

After your boom mounts are secured, bolt the 5-nozzle boom in place with (2) Square U-Bolts and (4)whiz nuts. (Detail a)

Before tightening the u-bolts in place, center the boom.



Detail A

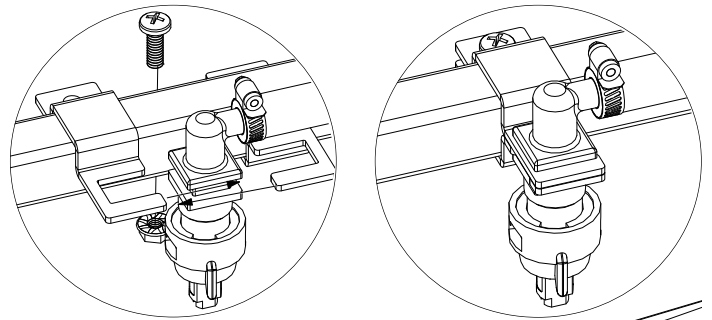


Detail B

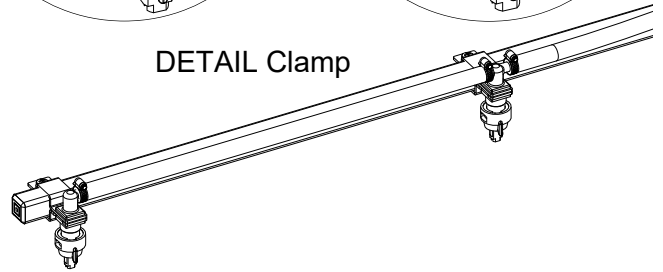
## Step 6

With the boom secured to the boom mounts, the nozzle harness can now be attached. (Detail B)

Attach the nozzle harness to the boom. Starting with the center nozzle, center the harness on the boom and using the nozzle clamps, attach the nozzle harness to the boom as shown in DETAIL Clamp.

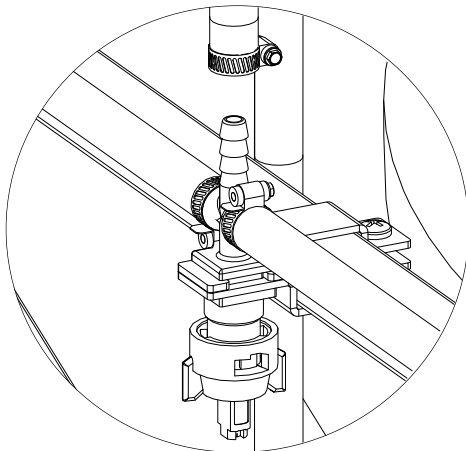


DETAIL Clamp



Detail D

Detail C



## Step 7

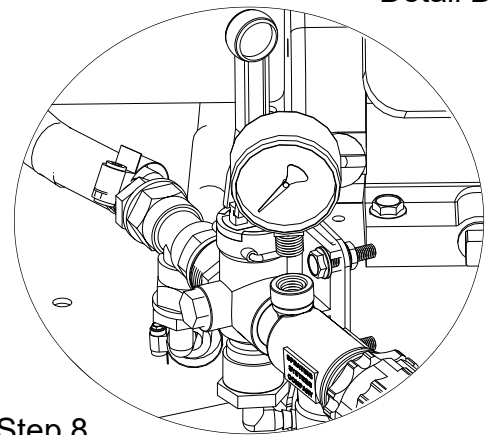
After your nozzle harness is attached to the boom, locate the feeder hose and the (2) hose clamps.

Place the hose clamps over each end of the hose loosely. Slip the ends of the hose over the hose barbs on both the valve assembly and the 'CROSS' fitting on the nozzle harness (Detail C). 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.

## Step 8

Install the pressure gauge (Detail D). Hand tighten securely.

**\*\* DO NOT OVER-TIGHTEN \*\***



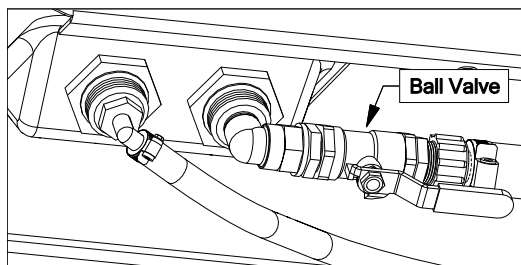
**IMPORTANT:** Remove tank lid and be sure the tank is clean and free of any foreign material. Rinse tank out of any tank residue before filling with water to test.

### Testing the Sprayer

**Note:** add proper oil to the engine crankcase and gasoline to the gas tank. Refer to the engine manual for the correct type and amount.

**NOTE:** It is important to test the sprayer with plain water before actual spraying is attempted. This will enable you to check the sprayer for leaks in the plumbing system, without the possibility of losing any Expensive chemicals.

1. Open the valve in the suction line and allow water to flow to the pump. The valve is located at this point to enable the strainer to be taken apart for cleaning.



**CAUTION:** Always be sure that water has reached the roller pump before starting your sprayer. If the pump is run dry, serious damage to the pump will result

2. It is always best to start the sprayer at little or no pressure. This sprayer is equipped with a spring loaded relief valve. Turn the valve knob out to decrease pressure and in to increase pressure.
3. You may now start the engine following the engine manufacturers instructions. Let the sprayer run at low pressure until water has reached the handgun and all air has been purged from the system.

The pressure should now be increased to 30-125 P.S.I. Operate the sprayer at this increased pressure for 3-5 minutes, thoroughly testing the unit before adding chemicals.

Add water to the tank and drive to the starting place for spraying. When you are ready to spray, position booms out for spraying and turn the boom valve to the "on" position. 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 twisting the gray twist knob on the bypass (pressure relief) valve. Twist 'clockwise' to increase pressure , 'counter-clockwise' to decrease pressure.

Read the operating instructions and initially begin spraying by closing the 'bypass' valve and opening the boom line valve. 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

Always fill tank 1/2 full with water first and then add the chemical slowly, mixing as you pour the chemical into the tank and fill the rest of the way. You may use the bypass in order to mix the chemical and water. The pumping system draws solution from the tank, through the strainer/ filter and to the pump. The pump forces the solution under pressure to the handgun and/or boom nozzles.

- 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 (fine mist)

This sprayer is designed to be towed behind a garden tractor. Check the nozzle pattern by spraying water on a concrete surface. Raise the boom to a higher mounting position to get more spray pattern overlap, if desired.

### 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.

### After Spraying

After use, fill the sprayer tank part way with water. Start the sprayer and allow the clear water to be pumped through the plumbing system and out through the spray nozzles. Refill the tank about half full with plain water and use FIMCO Tank Neutralizer and Cleaner and repeat cleaning instructions above. Flush the entire sprayer with the neutralizing/cleaning agent, then flush out one more time with plain water. 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:** 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

Drain all water out of your sprayer, paying special attention to the pump, handgun and valve(s). These items are especially prone to damage from chemicals and freezing weather.

The sprayer should be winterized before storage by pumping a solution of automotive antifreeze (containing a rust inhibitor) through the entire plumbing system. This antifreeze solution should remain in the plumbing system during the winter months. When spring time comes and you are preparing your sprayer for the spray season, rinse the entire plumbing system out, clearing the lines of the antifreeze solution. Proper care and maintenance will prolong the life of your sprayer.

### 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	205
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

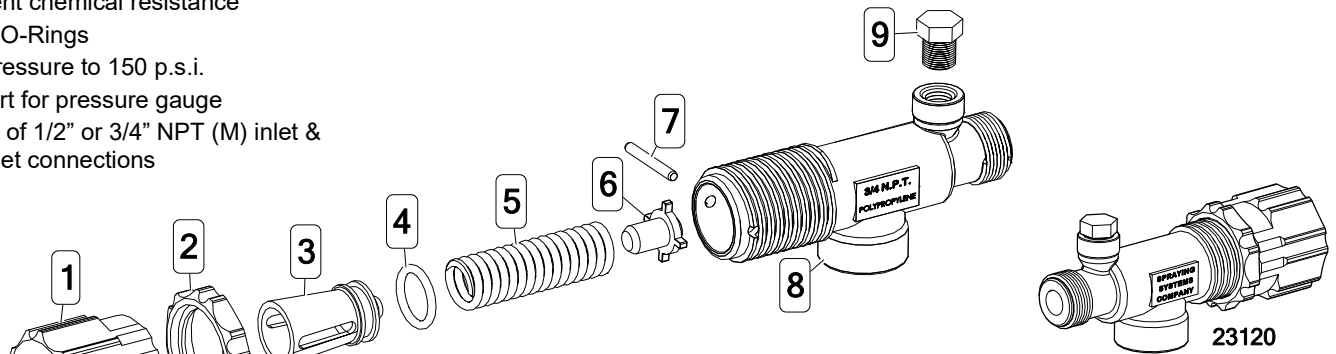
### Spray Tip Rate Chart (20" Spacing)

Tip No.	Pressure (psi)	Capacity (GPM)	Gal. Per Acre - Based on Water				
			1 MPH	2 MPH	3 MPH	4 MPH	5 MPH
AIXR11002VP	15	.12	35.6	17.8	11.8	8.9	7.1
	20	.14	41.6	20.8	13.8	10.4	8.3
	30	.17	50.4	25.2	16.8	12.6	10.1
	40	.20	59.6	29.8	19.8	14.9	11.9
Tip No.	Pressure (psi)	Capacity (GPM)	Gal. Per 1000 Sq. Ft. - Based on Water				
			1 MPH	2 MPH	3 MPH	4 MPH	5 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

# Piston Type Pressure Relief/Regulating Valves

Bypasses excess fluid. Adjustable to maintain control of line pressure at any pressure within the valve operating range. Selected pressure setting firmly held in place by locknut. Extra large passages to handle large flows.

- Polypropylene with stainless steel spring
- Excellent chemical resistance
- EPDM O-Rings
- Fore pressure to 150 p.s.i.
- 1/4" port for pressure gauge
- Choice of 1/2" or 3/4" NPT (M) inlet & (F) outlet connections



Ref. #	Part #	Mfg. Part #	Description
1	5143199	23120-3/4-PP	Pressure Relief Valve, (3/4" NPT)
2	5168717	PK-AB23120-KIT	Repair Kit, Items Marked **

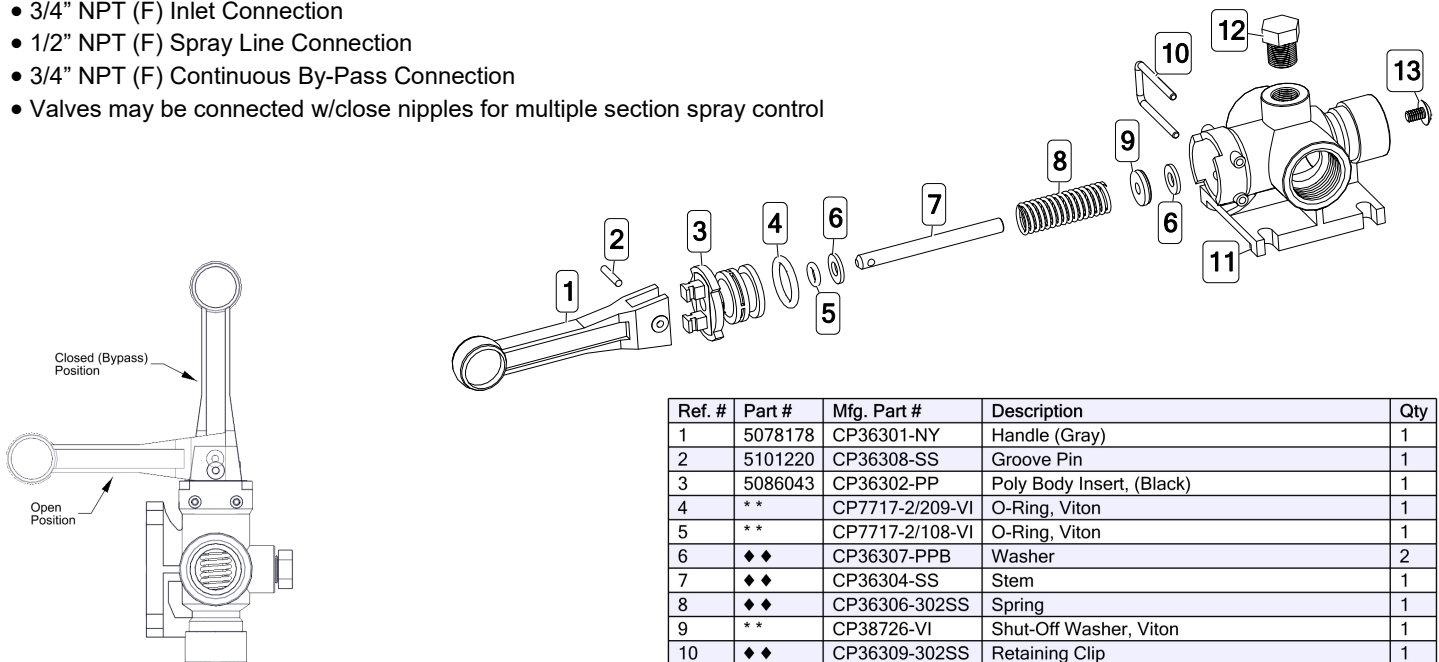
Ref. #	Part #	Mfg. Part #	Description
1	5046270	CP23122-NY	Adjusting Cap, Nylon (Gray)
2	5110266	CP23123-PP	Lock Ring
3	◆◆	CP23124-PP	Spring Retainer
4	**	CP7717-15-EPR	O-Ring, EPDM Rubber
5	**	CP23127-302SS	Spring
6	◆◆	CP23125-PP	Guide Seat
7	**	CP23126-302SS	Retaining Pin
8	CP23121-PP	CP23121-PP	Poly Body (3/4" NPT)
9	5102022	F14	Pipe Plug, 1/4" MNPT

\*\* Available only in Repair Kit

◆◆: Only Available in Complete Assembly

## 'Directo Valve' - Manually Operated Control Valve

- Corrosion Resistant Materials: Wetted Parts Polypropylene, 316SS and Polyethylene
- Maximum Pressure = 150 p.s.i.
- Large Capacity - 12.5 G.P.M. @ 5 p.s.i. Pressure Drop
- 3/4" NPT (F) Inlet Connection
- 1/2" NPT (F) Spray Line Connection
- 3/4" NPT (F) Continuous By-Pass Connection
- Valves may be connected w/close nipples for multiple section spray control

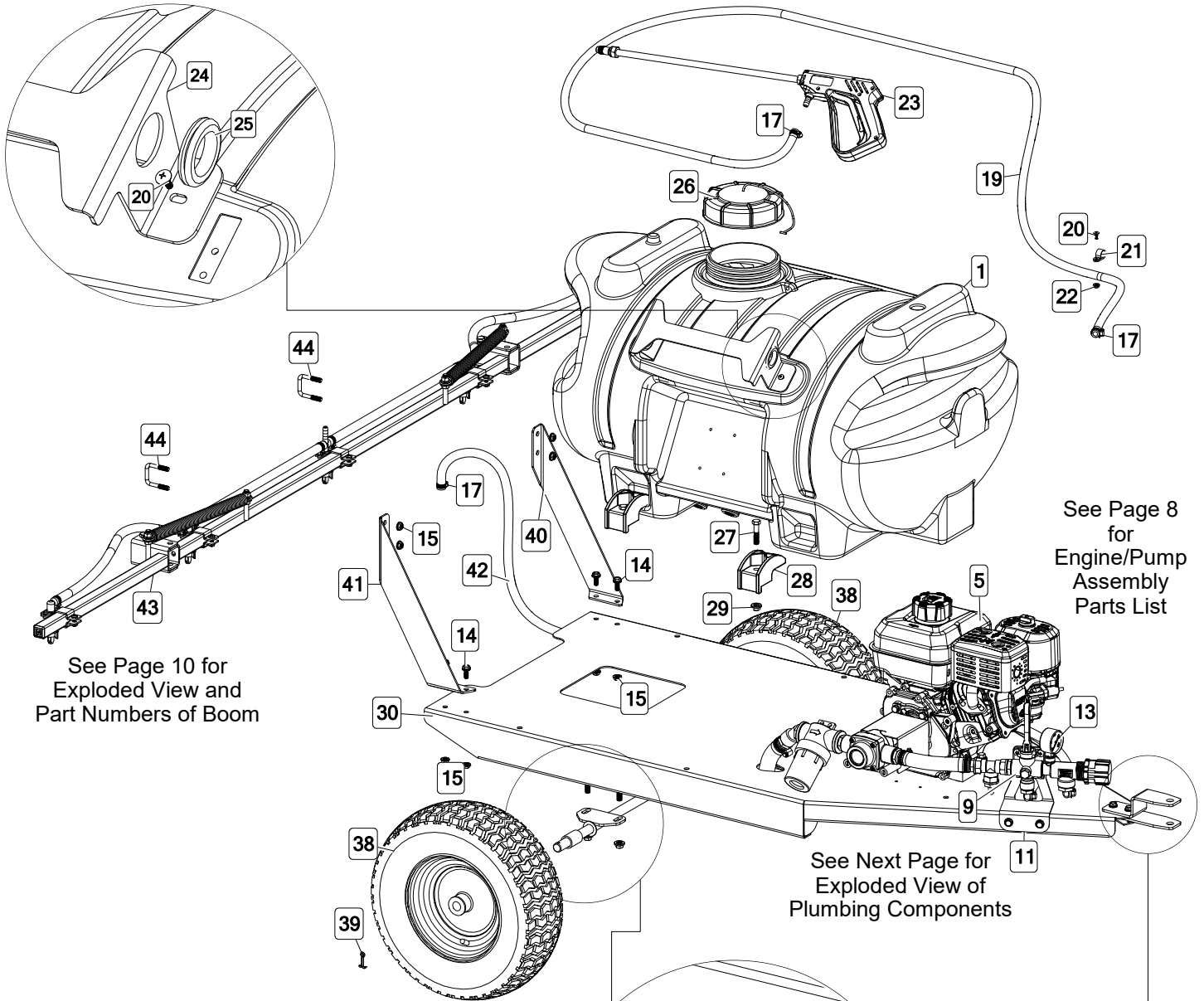


Ref. #	Part #	Mfg. Part #	Description	Qty
1	5078178	CP36301-NY	Handle (Gray)	1
2	5101220	CP36308-SS	Groove Pin	1
3	5086043	CP36302-PP	Poly Body Insert, (Black)	1
4	**	CP7717-2/209-VI	O-Ring, Viton	1
5	**	CP7717-2/108-VI	O-Ring, Viton	1
6	◆◆	CP36307-PPB	Washer	2
7	◆◆	CP36304-SS	Stem	1
8	◆◆	CP36306-302SS	Spring	1
9	**	CP38726-VI	Shut-Off Washer, Viton	1
10	◆◆	CP36309-302SS	Retaining Clip	1
11	5002476	CP36303-PP	Poly Body (AA6B)	1
12	5102022	F14	Pipe Plug, 1/4" MNPT	1
13	5117281	CP38725-SS	#10-24 x 5/16" Phillips Truss Head Mach. Screw	1

\*\* Available only in Repair Kit

◆◆: Only Available in Complete Assembly

Fimco #	Mfg. Part #	Description
5143316	AA6B	Directo-Valve (AA6B)
5168718	PK-AB6B-KIT	Repair Kit, Items Marked **



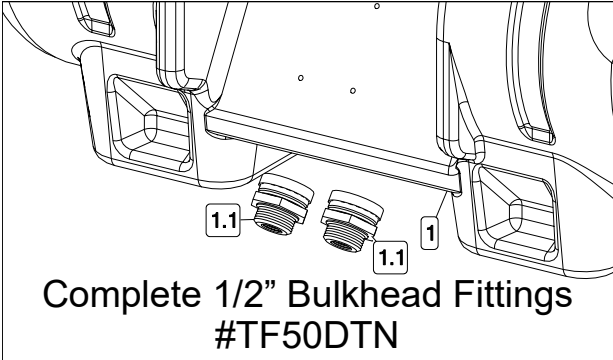
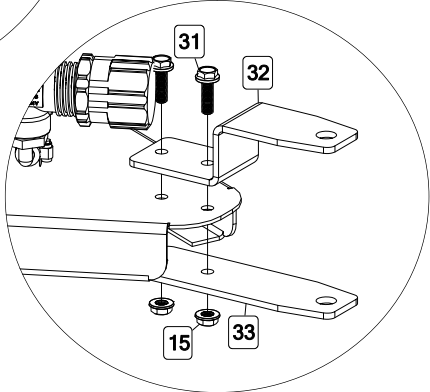
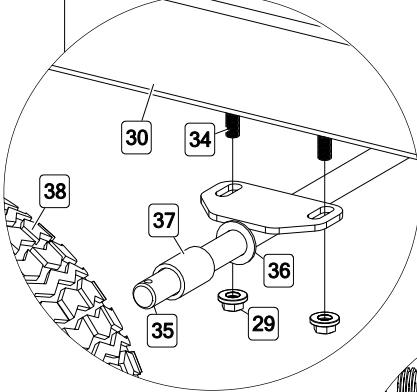
See Page 8  
for  
Engine/Pump  
Assembly  
Parts List

See Page 10 for  
Exploded View and  
Part Numbers of Boom

See Next Page for  
Exploded View of  
Plumbing Components

**Exploded View:  
TR-40-GAS (5301339)**

Refer to Parts List  
Next Page for Part Numbers



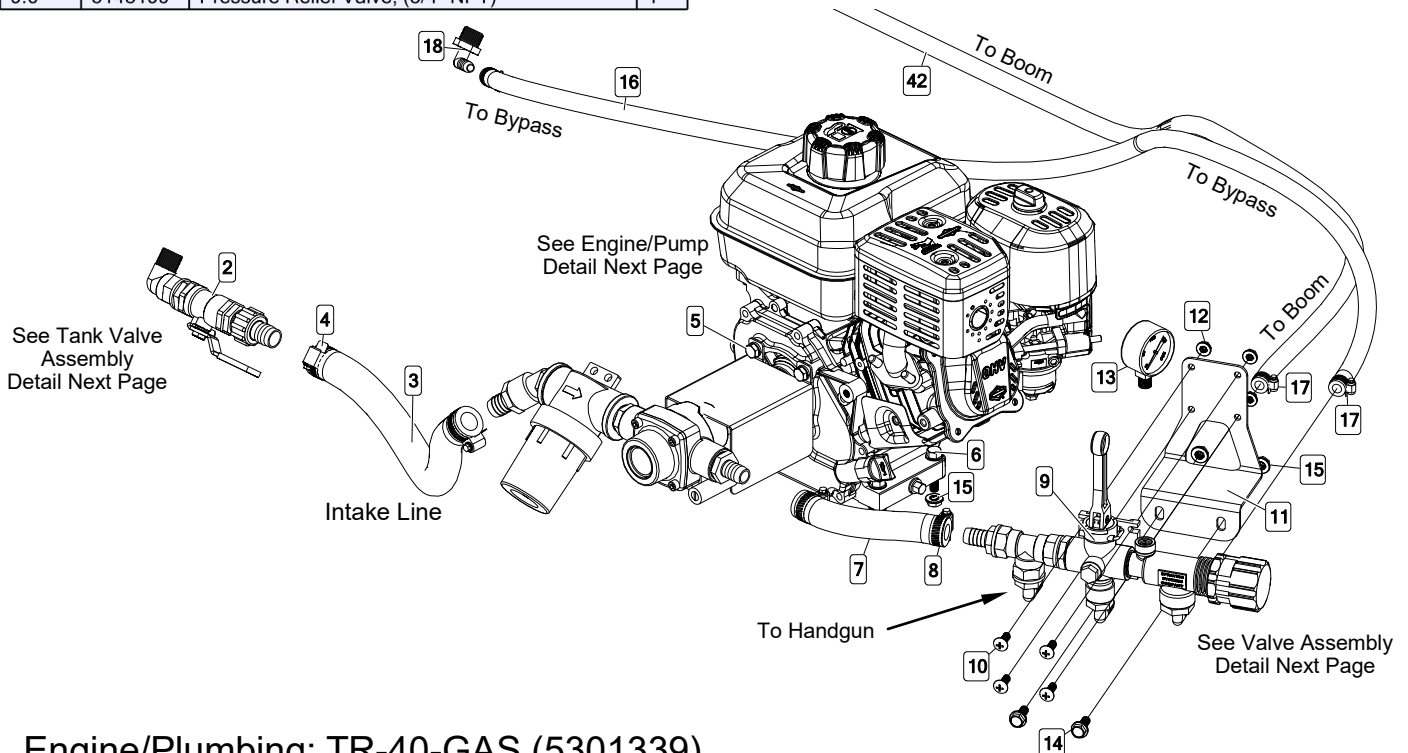
**Complete 1/2" Bulkhead Fittings  
#TF50DTN**



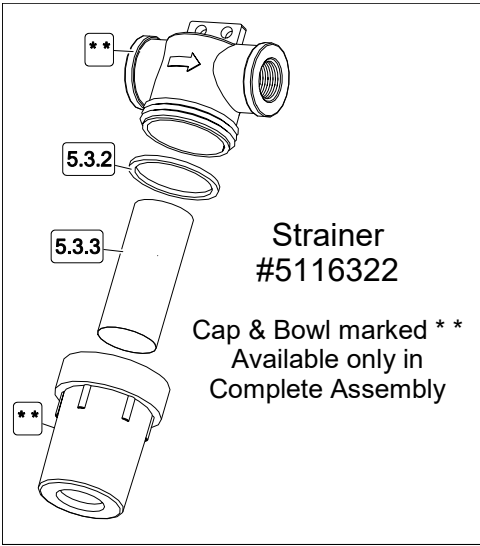
# Parts List: TR-40-GAS (5301339)

Ref. #	Part #	Description	Qty
1	5169245	40 Gallon Elliptical Tank (White)	1
1.1	TF50DTN	1/2" Bulkhead Fitting Assembly	2
2	5274939	Tank Valve Assembly	1
2.1	5010243	Poly Street Elbow, (90°) 1/2" MNPT x 1/2" FNPT	1
2.2	5011147	Poly Reducing Nipple, 3/4" MNPT x 1/2" MNPT	1
2.3	5143190	3/4" "T-800" Brass Ball Valve	1
2.4	5005196	Poly Adapter, 3/4" MNPT x 3/4" MGHT	1
2.5	5016066	1" Rubber Washer	1
2.6	5149037	Poly Knurled 3/4" Flat Seat Hose Barb	1
2.7	5006209	Poly Knurled Swivel Nut, 3/4" FGHT	1
3	5020300	Hose, 3/4"-2 Brd. x 18 1/2"	1
4	5051024	Hose Clamp (3/4")	2
5	5278061	Engine/Pump Assembly	1
5.1	5067127	Poly Fitting, 3/4" MNPT x 3/4" HB	1
5.2	5010249	45° Poly Street Elbow, 3/4" NPT	1
5.3	5116322	3/4" Black Poly Strainer	1
5.3.1	**	Strainer Cap (Available ONLY in Comp. Assy)	1
5.3.2	5072229	EPDM Gasket	1
5.3.3	5116323	40 Mesh Screen	1
5.3.4	**	Strainer Bowl (Available ONLY in Comp. Assy)	1
5.4	5011140	Poly Close Nipple, 3/4" MNPT	1
5.5	5277100	Engine/Pump [5.5-4R]	1
5.5.1	5273020	4-Roller Pump w/ 5/8 to 5/8 Coupler (4101C-01)	1
5.5.1.1	5271757	4-Roller Cast Iron Pump	1
5.5.1.2	5005175	Adapter & Kit (Coupler)	1
5.5.2	5274705	Shield Assembly	1
5.5.3	5034108	H.H.C.S., 5/16"-24 x 5/8"	2
5.5.4	5016026	Lockwasher, 5/16"	2
5.5.5	5152107	127cc Briggs & Stratton, 5.50 TQ Engine	1
5.6	5067126	Poly Fitting, 3/4" MNPT x 5/8" HB	1
6	5034638	5/16-18 x 1.50 Flanged Hex Bolt (Full Thread)	4
7	5020540	Hose, 5/8"-1 Brd. x 7"	1
8	5051023	Hose Clamp (5/8")	2
9	5278024	Valve Assembly (TR-40-GAS)	1
9.1	5067132	Poly Fitting, 1/2" MNPT x 5/8" HB	1
9.2	5010230	Poly Tee, 1/2" FNPT	1
9.3	5010202	Poly Elbow, 1/2" MNPT x 3/8" HB	2
9.4	5011147	Poly Reducing Nipple, 3/4" MNPT x 1/2" MNPT	1
9.5	5143316	Directo-Valve (AA6B)	1
9.6	5143199	Pressure Relief Valve, (3/4" NPT)	1

Ref. #	Part #	Description	Qty
9.7	5010206	Poly Elbow, 3/4" MNPT x 3/8" HB	1
10	5117287	1/4-20 x 0.75 Phillips Truss Head Mach Screw	4
11	5095350	Manifold Mount	1
12	5006306	1/4-20 Serrated Flanged Hex Nut	4
13	5167004	Gauge, 0-200 p.s.i. (Dry)	1
14	5117323	5/16-18 x 0.75 Flanged Hex Bolt	6
15	5006307	5/16-18 Serrated Flanged Hex Nut	16
16	5020530	Hose, 3/8"-1 Brd. x 51"	1
17	5051144	Hose Clamp (3/8")	6
18	5010202	Poly Elbow, 1/2" MNPT x 3/8" HB	1
19	5020527	Hose, 3/8"-1 Brd. x 25 Ft.	1
20	5117234	#10-24 x 1/2" Phillips Round Head Mach Screw	3
21	5051122	5/8" Black Nylon Loom Cable Clamp	1
22	5006186	#10-24 Serrated Flanged Hex Nut	1
23	5273959	Deluxe Pistol-Grip Handgun w/X-26 Tip	1
23.1	5018331	Brass Handgun Tip (X-26)	1
24	5038775	Handgun Bracket	1
25	5075014	Rubber Grommet (Black)	2
26	5058188	Tank Lid w/Lanyard	1
27	5034101	3/8-16 x 1.75 Hex Bolt	4
28	5038698	Plastic Tank Hold-Down Leg Clip	4
29	5006259	3/8-16 Serrated Flanged Hex Nut	8
30	5278035	TR-40 Frame Weldment	1
31	5117300	5/16-18 x 1.00 Flanged Hex Bolt	2
32	5038517	Hitch Bracket (Formed)	1
33	5038518	Hitch Bracket (Flat)	1
34	5117307	3/8-16 x 1.00 Flanged Hex Bolt	4
35	5274972	Axle Weldment (40 Gallon)	1
36	5041094	Machinery Bushing, 3/4" ID x 1-1/4" OD	2
37	5127213	3/4" Dia. Axle Spacer x 1 1/2" Long	2
38	5021089	Wheel, 16 x 6.50-8, Turf Tread	2
38.1	5031141	3/4" Ball Bearing	2
39	5101207	Cotter Pin, 5/32 x 1.75	2
40	5038834	Boom Mount L.H.	1
41	5038833	Boom Mount R.H.	1
42	5020516	Hose, 3/8"-1 Brd. x 84"	1
43	5301966	5-Nozzle Generic Boom Assembly	1
44	5034159	5/16-18 x 1.3125 x 1.875 Square U-Bolt	2



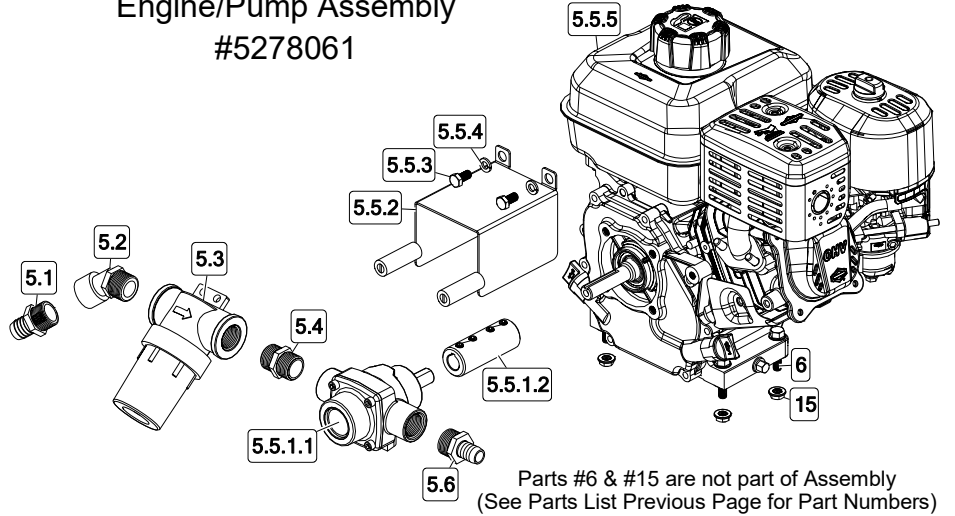
## Engine/Plumbing: TR-40-GAS (5301339)



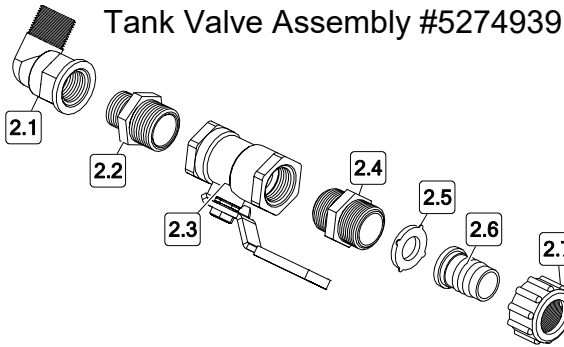
**Strainer  
#5116322**

Cap & Bowl marked \*\*  
Available only in  
Complete Assembly

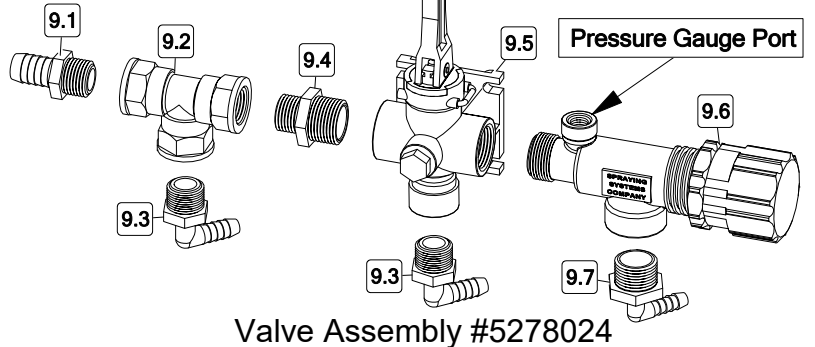
**Engine/Pump Assembly  
#5278061**



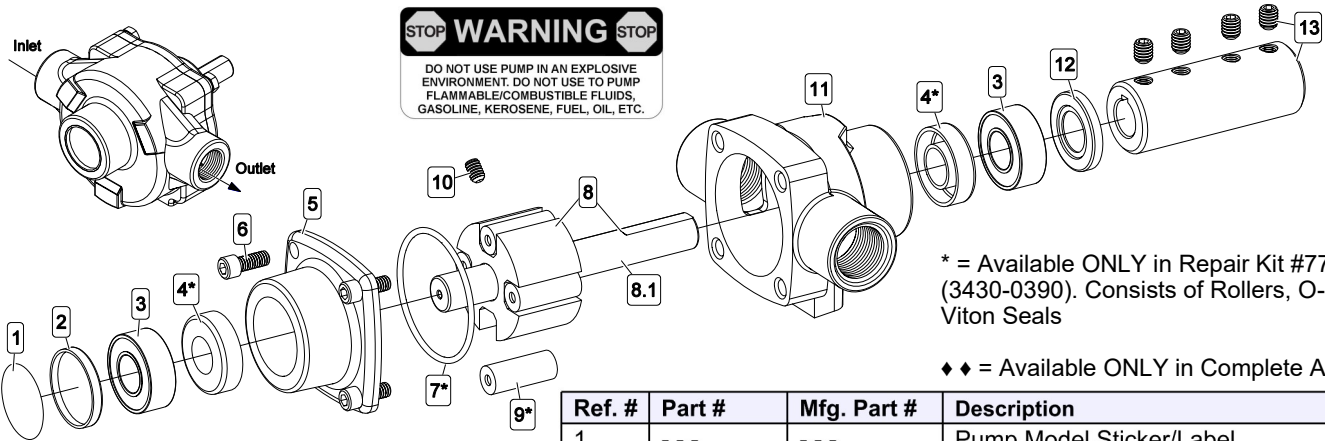
Parts #6 & #15 are not part of Assembly  
(See Parts List Previous Page for Part Numbers)



**Tank Valve Assembly #5274939**



**Valve Assembly #5278024**



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

\* = Available ONLY in Repair Kit #7771796 (3430-0390). Consists of Rollers, O-Rings & Viton Seals

◆ ◆ = Available ONLY in Complete Assembly

**Cast Iron  
4-Roller Pump Assembly  
#5273020 (Hypro Mfg. Part #: 4101C-01)**

For electric motor drive:  
Output to 9 GPM, Pressure to 150 psi,  
Speed to 1800 RPM, Temperature to 140°F.

For gas engine drive:  
Output to 7 GPM, Pressure to 150 psi,  
Speed to 2600 RPM, Temperature to 140°F

Ref. #	Part #	Mfg. Part #	Description	Qty
1	---	---	Pump Model Sticker/Label	1
2	5017481	2300-0021	Bearing Cover	1
3	5031113	2000-0010	Ball Bearing (Sealed)	2
4*	**	2107-0002	Seal (Viton)	2
5	◆ ◆	0200-4101C	Endplate (Cast Iron) w/Seal	1
6	◆ ◆	2220-0018	1/4"-20 x 5/8" Socket Head Cap Screw	4
7*	**	1720-0104	O-Ring Gasket for Endplate	1
8	5172127	0300-4101C	Rotor & Shaft Assembly	1
8.1	0500-6600	0500-6600	Shaft (Only)	1
9*	5112029	1005-0002	Super Roller (Standard)	4
10	◆ ◆	2230-0002	1/4"-20 x 3/8" Set Screw	1
11	◆ ◆	0100-4101C	Body (Cast Iron) w/Seal	1
12	5017480	2300-0023	Shaft Bearing Cover	1
13	5005175	1320-0016	Adapter & Kit (Coupler)	1



# Roller Pump General Safety Information

1. Use a pressure relief device on the discharge side of the pump to prevent damage from pressure buildup when the pump discharge is blocked or otherwise closed and the power source is still running.
2. **WARNING:** Never pump flammable or explosive fluids such as gasoline, fuel oil, kerosene, etc. Never use in explosive atmospheres. The pump should be used only with liquids compatible with the pump component materials. Failure to follow this warning can result in personal injury and/or property damage and will void the product warranty.
3. Never pump acids (i.e. acid fertilizer) with Super Rollers!
4. Never run the pump faster than maximum recommended speed.
5. Never pump at pressures higher than the maximum recommended pressure.
6. Never pump liquids at temperatures higher than the recommended maximum temperatures (140°F/60°C).
7. Make certain that the power source conforms to the requirements of your equipment.
8. Provide adequate protection in guarding around the moving parts such as the shaft and pulleys.
9. Disconnect power before servicing.
10. Release all pressure within the system before servicing any component.
11. Drain all liquids from the system before servicing any component.
12. Check all hoses for weak or worn condition before each use. Make certain that all connections are tight and secure.
13. Periodically inspect the pump and the system components. Perform routine maintenance as required.
14. Never operate a gasoline engine in an enclosed area. Be sure the area is well ventilated.
15. Use only pipe, hose and fittings rated for the maximum psi rating of the pump.
16. Never use pump for pumping water or other liquids for human or animal consumption.

## Roller Pump Operation & Maintenance

**WARNING:** Never pump corrosive or abrasive liquids as these will cause rapid wear or deterioration of the body, rotor, shaft and seals in the pump. The pump should be used on with liquids compatible with pump component materials. Never exceed maximum specified rpm and pressure. Never run pump dry. Failure to follow this warning will void the product warranty.

### Priming the Pump:

To help prime the pump, keep the inlet or suction line as short as possible with a minimum of bends, elbows and kinks. Make sure all connections are tight and do not leak air. Make sure line strainer is free of debris. If pump does not self-prime, disconnect suction hose, fill with water and reconnect to liquid source. Often a squirt of oil into the ports of the pump will seal clearance and help priming.

### Care of the Pump:

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.

### Flush the Pump After Each Use

**One of the common causes of faulty pump performance is “gumming” or corrosion inside the pump. This prevents rollers from moving freely in their rotor slots. Flush the pump with a solution that will neutralize liquid pumped, mixed according to manufacturer’s directions.**

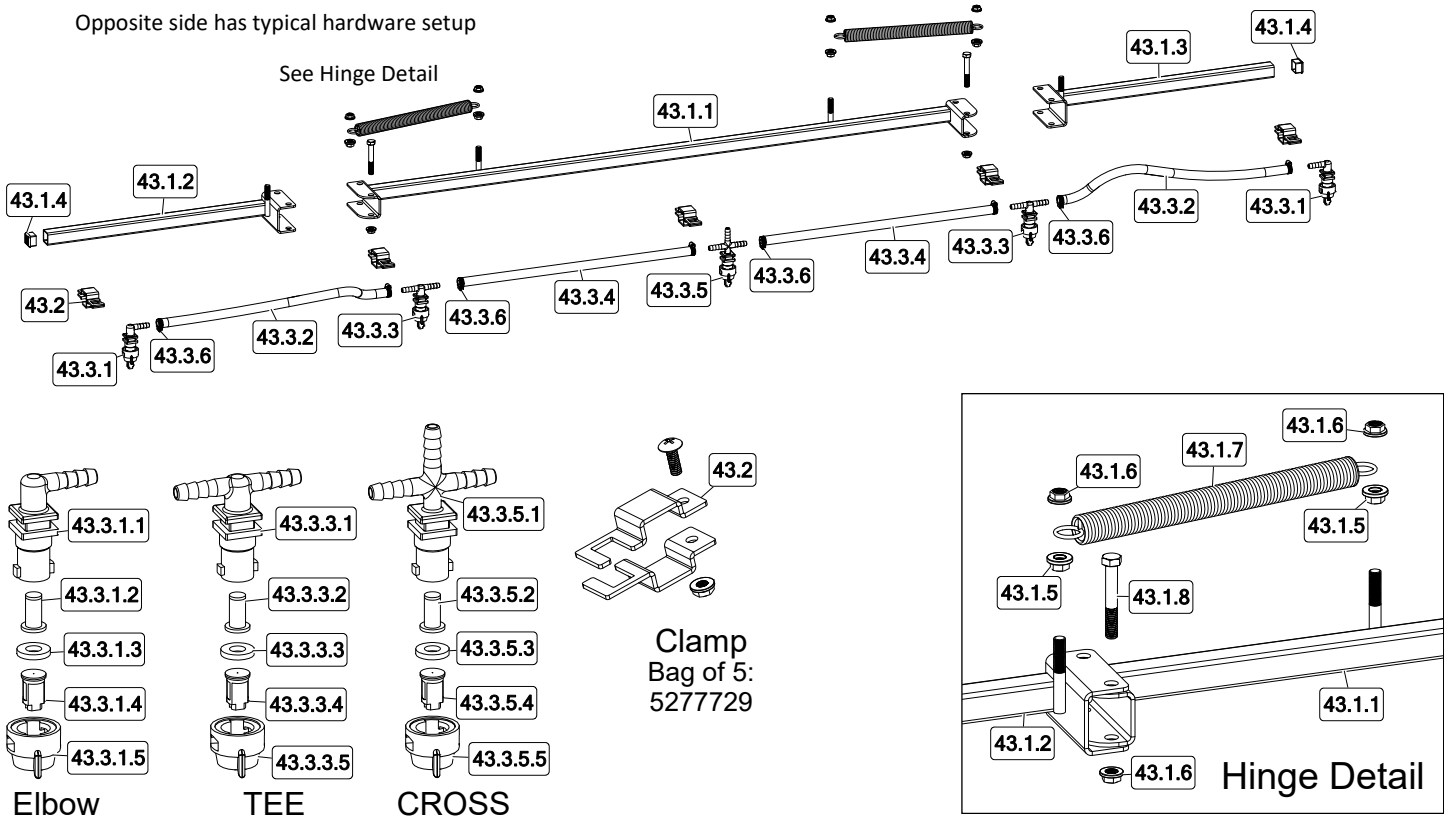
### To Prevent Corrosion:

After cleaning pump as above, flush it with a 50-50 solution of permanent-type automotive antifreeze (containing a rust inhibitor) and water. A rust inhibitor can also be squirted into the ports of the pump. Turn shaft several times to draw protective liquid through pump and coat entire inner surface. Drain pump and plug ports to keep out air during storage. For short periods of idleness, noncorrosive liquids may be left in the pump, but air must be kept out. Plug ports or seal port connections.

Troubleshooting		
Symptom	Probable Cause(s)	Corrective Action
Pump Does Not Prime	Leak in suction line	Check hose and fittings for leaks and correct
	Obstruction in suction line	Inspect hose for debris or loose inner liner in hose
	Suction hose sucked to bottom or side of tank	Cut a notch or "V" in end of suction hose
	Rollers stuck in pump	Disassemble pump and inspect rollers
	Pump seals leaking air	Replace seals
Loss of Pressure	Clogged suction strainer	Check strainer and clean it regularly
	Kinked or blocked suction hose	Inspect suction hose and repair as necessary
	Air leak in inlet side plumbing	Check hose and connections for leaks Use pipe joint sealant and retighten connections
	Relief valve setting too low or weakened spring	Check relief valve and correct setting
	Faulty Gauge	Replace gauge
	Pump seals leak air	Replace seals
	Nozzle orifices worn	Replace nozzles
Pump worn	Repair pump	
Pump will not turn	Corrosion (rust), scale or residue	Loosen endplate bolts. Squirt oil into ports to help free rotor. Retighten bolts.
	Solid object lodged in pump.	Disassemble pump and remove objects

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

Opposite side has typical hardware setup

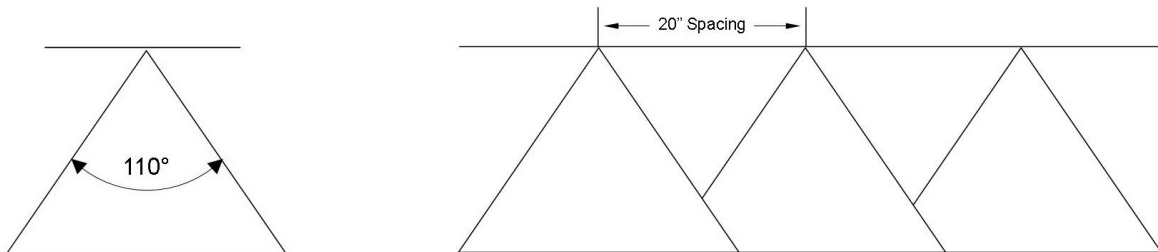


Ref. #	Part #	Description	Qty
43	5301966	Generic 5-Nozzle Boom Kit	1
43.1	5277779	Boom Sub-Assembly (1" Sq. Tube)	1
43.1.1	5277838	Center Boom Weldment 1" Sq. Tube	1
43.1.2	5277834	Outer Boom Weldment 1" Sq. Tube L.H.	1
43.1.3	5277835	Outer Boom Weldment 1" Sq. Tube R.H.	1
43.1.4	5046106	Square Cap, Black (1" Square Tube)	2
43.1.5	5006259	3/8-16 Serrated Flng Hex Nut, Grade A	4
43.1.6	5006345	3/8"-16 Flange Locknut (Grade F)	6
43.1.7	5019228	Extension Spring	2
43.1.8	5034169	H.H.C.S., 3/8"-16 x 2 1/2"	2
43.2	5277923	Boom Clamp Assembly (1in Sq.)	5
43.3	5277695	5-Nozzle Harness (3/8" & 1" Sq Tube)	1
43.3.1	5281304	Elbow Nozzle Assembly - 3/8"	2
43.3.1.1	5056113	Nozzle Body - QJ - Elbow - 3/8"	1
43.3.1.2	5143543	Nozzle Check Strainer, Blue (50 Mesh)	1
43.3.1.3	5016157	Seat Washer - EPDM - QJ Caps	1
43.3.1.4	5018371	Air-Induction XR Flat Spray Tip - AIXR11002VP	1

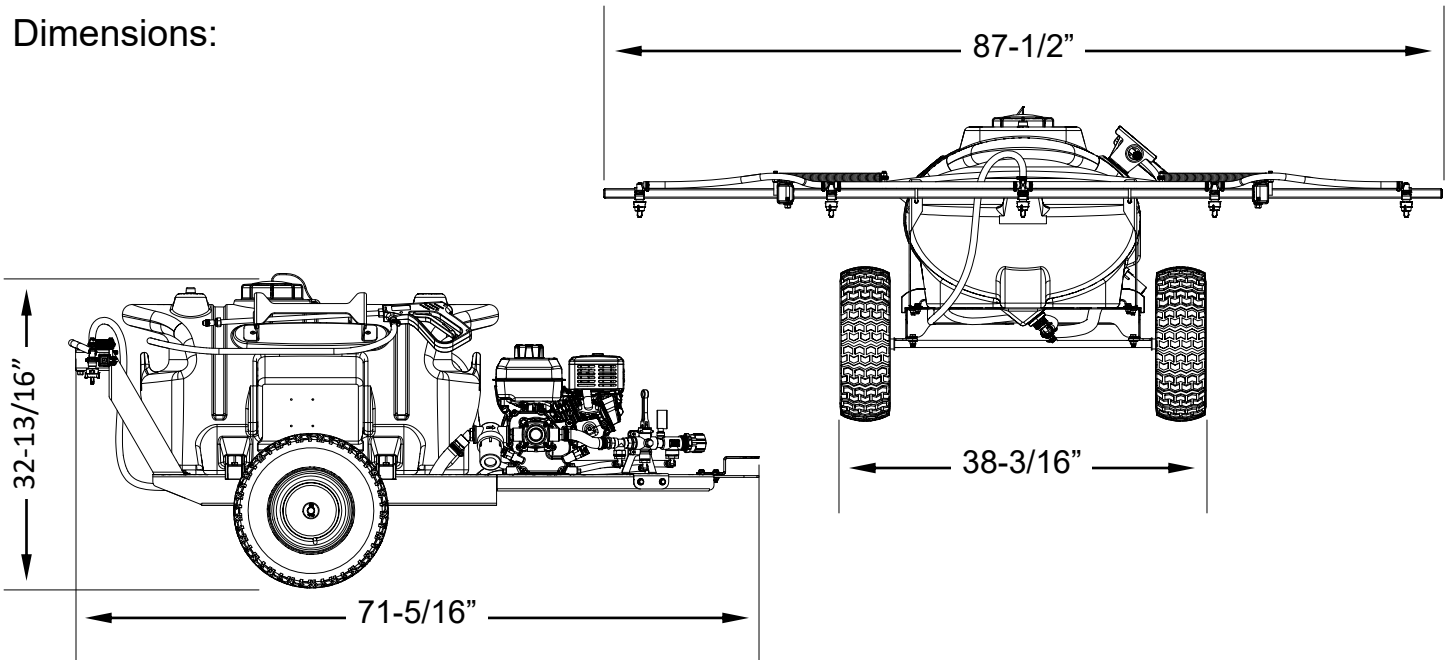
Ref. #	Part #	Description	Qty
43.3.1.5	5046219	Quick Cap - Yellow	1
43.3.2	5020347	Hose, 3/8"-1 Brd. x 21"	2
43.3.3	5281307	Tee Nozzle Assembly - 3/8"	2
43.3.3.1	5056114	Nozzle Body - QJ - Tee - 3/8"	1
43.3.3.2	5143543	Nozzle Check Strainer, Blue (50 Mesh)	1
43.3.3.3	5016157	Seat Washer - EPDM - QJ Caps	1
43.3.3.4	5018371	Air-Induction XR Flat Spray Tip - AIXR11002VP	1
43.3.3.5	5046219	Quick Cap - Yellow	1
43.3.4	5020510	Hose, 3/8"-1 Brd. x 19-3/8"	2
43.3.5	5281308	Cross Nozzle Assembly - 3/8"	1
43.3.5.1	5056115	Nozzle Body - QJ - Cross - 3/8"	1
43.3.5.2	5143543	Nozzle Check Strainer, Blue (50 Mesh)	1
43.3.5.3	5016157	Seat Washer - EPDM - QJ Caps	1
43.3.5.4	5018371	Air-Induction XR Flat Spray Tip - AIXR11002VP	1
43.3.5.5	5046219	Quick Cap - Yellow	1
43.3.6	5051144	Hose Clamp, 3/8"	8

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"

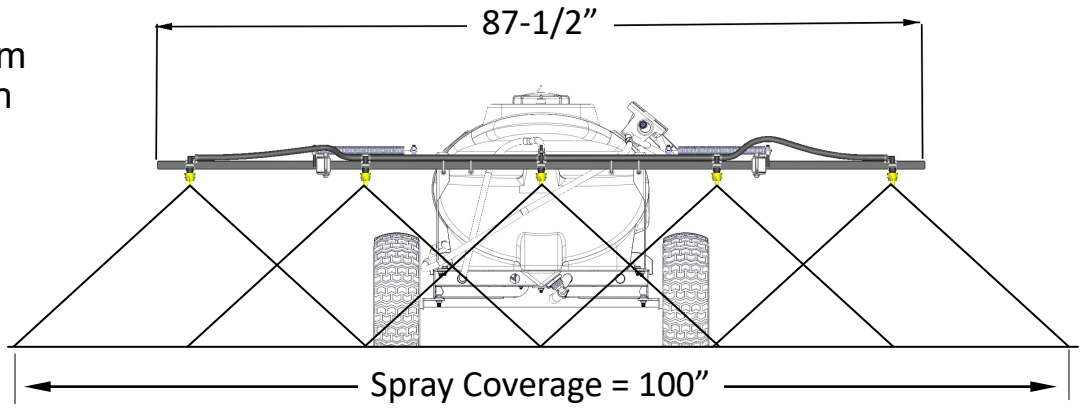
- 110° wide, tapered flat spray angle with air induction technology for better drift management
- Made of 2-piece UHMWPE polymer construction which provides excellent chemical resistance, including acids, as well as exceptional wear life
- Compact size to prevent tip damage
- Removable pre-orifice
- Excellent for systemic products and drift management



Dimensions:



5-Nozzle Boom  
Spray Pattern



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.