

ASSEMBLY & OPERATIONS MANUAL-FRONT MOUNTED SPRAYER & ADAPTER

MODEL:

73-70675 DRIFTLESS SPRAYER DS312



WARNING: If incorrectly used this machine can cause severe injury. Those who use and maintain this machine should be trained in its proper use, warned of its dangers and should read the entire manual before attempting to set up, operate, adjust or service the machine.



4128423 REV A

CALIFORNIA
Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.



WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Californie Proposition 65
Avertissement

Les échappements des moteurs diesel et certains de leurs composés sont reconnus par l'Etat de Californie pour être cancérigènes, provoquer des défauts congénitaux et d'autres dangers en matière de reproduction.



AVERTISSEMENT

L'émission du moteur de ce matériel contient des produits chimiques que l'Etat de Californie considère être cancérigènes, provoquer des défauts congénitaux et d'autres dangers en matière de reproduction.

California Advertencia
de la Proposicion 65

El estado de California hace saber que los gases de escape de los motores diesel y algunos de sus componentes producen cáncer, defectos de nacimiento y otros daños en el proceso de reproducción humana.



ADVERTENCIA

El estado de California hace saber que los gases de escape de este producto contienen productos químicos que producen cáncer, defectos de nacimiento y otros daños en el proceso de reproducción humana.

DRIFTLESS SPRAYER

IMPORTANT MESSAGE

Thank you for purchasing this Jacobsen product. You have purchased a world class product, one of the best designed and built anywhere.

This product comes with an Owner/Operator's Manual. The useful life and good service you receive from this product depends to a large extent on how well you read and understand this manual. Treat this product properly and adjust it as instructed, and it will give you many years of reliable service.

See a Jacobsen dealer for any service or parts needed. Jacobsen service ensures that you continue to receive the best results possible from Jacobsen products. You can trust Jacobsen replacement parts because they are manufactured with the same high precision and quality as the original parts.

Jacobsen designs and builds its equipment to serve many years in a safe and productive manner. For longest life, use this product only as directed in the manual, keep it in good repair and follow safety warnings and instructions. You'll always be glad you did.

Jacobsen, a Textron Company
One Bob Cat Lane
Johnson Creek, WI 53038-0469

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GENERAL SAFETY

Many people die or suffer serious injury in job related accidents every year due to carelessness. Know your machinery and be aware of potential hazards. Put safety first in all your operations.

Review all instructions and procedures outlined in this manual annually. Every operator must familiarize themselves with the operating instructions of the sprayer.

Operational Safety

- Shut down sprayer and power unit and wait for all parts to stop before adjusting, cleaning, or lubricating the power unit or sprayer.
- Before spraying a field, familiarize yourself with any rocks, debris, trees, ditches or gullies that may be potentially dangerous. Plan the spraying route to avoid these hazards. When spraying, use individual section controls to reduce the amount of double spraying.
- Keep sprayer boom width in mind at all times. When turning, exercise caution and avoid any obstacles or other persons.

Assembly Safety

- Clear large area to fold booms out in field position.
- A minimum of two people should be available for assembly of large equipment, especially when lifting or exertion is required.
- Always use clean tools of the proper size and specification to match the hardware and specific job.

Transport Safety

- Never transport sprayers with castor wheels on the ground faster than 16 km/h (10 mph).
- Reduce speed on rough terrain.
- For all sprayers ensure that booms are folded and/or locked securely for transport.

Minimize Chemical Drift

The **Windfoil** sprayer has been designed in wind tunnels to control air flow around and behind the sprayer to minimize drift, allowing safe spraying in windy conditions.

Drift can blow off a field after it has been sprayed, especially in high winds. Reasonable caution should be taken, in order to spray effectively and safely.

For maximum drift control, keep curtain in contact with the canopy to ensure a seal to it. Drift control of the *Windfoil* is less effective when the wind blows the curtain off the turf canopy, breaking the seal between the curtain and the turf.

DRIFTLESS SPRAYER

GENERAL SPRAYING INFORMATION

Application Tips

Always use clean, filtered water in the sprayer tank.

Check the flow rate from all nozzles using the capacity calibration technique. See Calibration section for tables and instructions. Adjust the sprayer pressure to get the proper flow rate.

Wilger Hose Connector Bodies

Diaphragm check valves close at 15 psi to prevent excessive dripping.

Table 1: Application rate for Spraying Systems TP Nozzle at 10 inch spacing

	Liquid	Capacity	U.S. GALLONS PER ACRE					U.S. GALLONS/1000 SQ. FT.					
Tip Number	Press psi	1 nozzle gpm	2.5 mph	3 mph	4 mph	5 mph	7 mph	2.5 mph	3 mph	4 mph	5 mph	7 mph	Press bars
800067	30	0.06	14.3	11.9	8.9	7.1	5.1	0.33	0.27	0.20	0.16	0.12	2.07
	40	0.07	15.9	13.3	9.9	8.0	5.7	0.37	0.30	0.23	0.18	0.13	2.76
	60	0.08	19.0	15.8	11.9	9.5	6.8	0.44	0.36	0.27	0.22	0.16	4.14
8001	30	0.09	21.4	17.8	13.4	10.7	7.6	0.49	0.41	0.31	0.25	0.18	2.07
	40	0.10	23.8	19.8	14.9	11.9	8.5	0.55	0.45	0.34	0.27	0.19	2.76
	60	0.12	28.5	23.8	17.8	14.3	10.2	0.65	0.55	0.41	0.33	0.23	4.14
80015	30	0.13	30.9	25.7	19.3	15.4	11.0	0.71	0.59	0.44	0.35	0.25	2.07
	40	0.15	35.6	29.7	22.3	17.8	12.7	0.82	0.68	0.51	0.41	0.29	2.76
	60	0.18	42.8	35.6	26.7	21.4	15.3	0.98	0.82	0.61	0.49	0.35	4.14
8002	30	0.17	40.4	33.7	25.2	20.2	14.4	0.93	0.77	0.58	0.46	0.33	2.07
	40	0.20	47.5	39.6	29.7	23.8	17.0	1.09	0.91	0.68	0.55	0.39	2.76
	60	0.25	59.4	49.5	37.1	29.7	21.2	1.36	1.14	0.85	0.68	0.49	4.14
8003	30	0.26	61.8	51.5	38.6	30.9	22.1	1.42	1.18	0.89	0.71	0.51	2.07
	40	0.30	71.3	59.4	44.6	35.6	25.5	1.64	1.36	1.02	0.82	0.58	2.76
	60	0.37	87.9	73.3	54.9	44.0	31.4	2.02	1.68	1.26	1.01	0.72	4.14
8004	30	0.35	83.2	69.3	52.0	41.6	29.7	1.91	1.59	1.19	0.95	0.68	2.07
	40	0.40	95.0	79.2	59.4	47.5	33.9	2.18	1.82	1.36	1.09	0.78	2.76
	60	0.49	116	97	73	58	42	2.67	2.23	1.67	1.34	0.95	4.14
8005	30	0.43	102	85	64	51	36	2.35	1.95	1.47	1.17	0.84	2.07
	40	0.50	119	99	74	59	42	2.73	2.27	1.70	1.36	0.97	2.76
	60	0.61	145	121	91	72	52	3.33	2.77	2.08	1.66	1.19	4.14
8006	30	0.52	124	103	77	62	44	2.84	2.36	1.77	1.42	1.01	2.07
	40	0.60	143	119	89	71	51	3.27	2.73	2.05	1.64	1.17	2.76
	60	0.74	176	147	110	88	63	4.04	3.36	2.52	2.02	1.44	4.14
8008	30	0.69	164	137	102	82	59	3.76	3.14	2.35	1.88	1.34	2.07
	40	0.80	190	158	119	95	68	4.36	3.64	2.73	2.18	1.56	2.76
	60	0.98	233	194	146	116	83	5.35	4.45	3.34	2.67	1.91	4.14

Calibration

As a tip wears, the spray pattern distorts, output volumes usually increase, and the droplet characteristics change. Recalibration may correct for output changes, but cannot correct for spray pattern changes or the drop size generated. To calibrate and operate the sprayer at the desired pressure. Collect the output from each nozzle for 60 seconds, using an accurate measuring cup. Record the output from each nozzle. Replace nozzles that are more than 5% above or below the average reading, or have a visibly distorted pattern.

Actual sprayer speed, as determined from the following tables, will differ from the sprayer speedometer readings because of wheel slippage. Run a speed test in the field to be sprayed, and have the sprayer tank half full. The sprayer must be at full speed before starting the test run. To determine the speed discrepancy, mark off a distance as found on one of the tables. Run the power unit over this distance, carefully noting the speedometer reading and recording the time to cover the distance. The actual speed traveled can be found for the specific distance and time to travel, using the table.

GENERAL SPRAYING INFORMATION

DRIFTLESS SPRAYER

Table 2: Time in Seconds to Travel Distance of:

mph	10 (ft)	25 (ft)	50 (ft)	100 (ft)	200 (ft)
1	6.8	17.0	34.1	68.2	136
1.5	4.5	11.4	22.7	45.5	90.9
2	3.4	8.5	17.0	34.1	68.2
2.5	2.7	6.8	13.6	27.3	54.5
3	2.3	5.7	11.4	22.7	45.5
4	1.7	4.3	8.5	17.0	34.1
5	1.4	3.4	6.8	13.6	27.3
6	1.1	2.8	5.7	11.4	22.7

Table 3: Time in Seconds to Travel a Distance of:

mph	10 (m)	25 (m)	50 (m)	100 (m)	200 (m)
1	36.0	90.0	180	360	720
1.5	24.0	60.0	120	240	480
2	18.0	45.0	90.0	180	360
2.5	14.4	36.0	72.0	144	288
3	12.0	30.0	60.0	120	240
4	9.0	22.5	45.0	90.0	180
5	7.2	18.0	36.0	72.0	144
6	6.0	15.0	30.0	60.0	120

After the nozzles have been individually checked and matched, the sprayer should be calibrated to determine the correct speed for the desired application volume. Refer to Table 1, for typical application rates for different nozzles. Note nozzles listed are Spraying Systems nozzles.

Note: Tip pressure is usually less than the pressure at the pump. Losses occur in valves, hoses, etc. Always check the flow by the above calibration method.

Cleaning

Sprayers need to be cleaned to prevent corrosion, cross contamination of chemicals and crop injury. Trace amounts of one chemical can react with another or carry over to the next spraying and cause crop damage, especially with pesticides. Long exposures with even small amounts of some chemicals can damage sprayer components either by corrosion or deposits of gums, etc. If you spray crops that are very susceptible to injury from the last chemical used, such as vegetables, turf, and ornamentals clean the unit especially well.

Always try to end the day with an empty tank; avoid contamination of water supplies and injury to plants or animals. Do not make puddles that might be accessible to children, pets, farm animals, or wildlife. Flush with clean water, preferably after each day's operation. However, if you plan to use the same material over several days, most chemicals may be kept in the tank overnight; the label usually indicates which may not. Rinse the outside of the sprayer. Surfactants combined with chemicals, when they are compatible, will provide some cleaning action in the sprayer. Spray the rinse over the application area.

Some chemical combinations (especially if oil is used) may produce a putty type paste (buttering out) in the sprayer tank and components; flushing with water after each load may prevent an accumulation. If water alone does not dissolve and remove the buildup, add a low flammable solvent. Allow paste to dissolve, then agitate and flush. Flush with detergent and finally with clean water. Check with your chemical agent.

Whenever pesticides are changed, or before sprayer storage, clean sprayers thoroughly with a cleaning solution. The solution used depends on the chemical to be removed from the sprayer. Check the chemical label for cleaning instructions.

First, flush with water, then add the cleaning solution to the tank and thoroughly agitate before flushing. Always flush with clean water to remove the cleaning solution. Remove nozzle tips and screens; clean them in a strong detergent solution or kerosene, using a soft brush such as an old toothbrush. Never use a metal probe to clean the orifice of a spray tip!

Follow the same safety precautions during cleaning as for applications. Use respirator, rubber gloves, or other protective gear as may be directed by label instructions.

Sunshine

Many plastic sprayer parts are degraded by ultra violet light, especially the nozzle flow indicators. Store the sprayer in the shade to extend the length of service.

Winterizing

After the sprayer is thoroughly cleaned, put 2 to 5 gallons of rust inhibitor or antifreeze in the tank prior to the final flushing to help prevent corrosion. As the water is pumped from the sprayer, the antifreeze will leave a protective coating on the inside of the tank, pump, and plumbing. Remove nozzle tips, screens and no drip valves and store them in a can of light oil such as diesel fuel or kerosene to prevent corrosion. Close nozzle openings with tape to prevent dirt, insects, mice, or other contaminants from entering.

During the final cleaning, completely check the sprayer. Look at the hoses, clamps, connections, nozzle tips, and screens for needed replacements. Store the sprayer in a reasonably clean and dry building.

Description of Parts

Throughout this manual, parts or assemblies that perform a specific function carry an identifying name. The following lists names used in this manual, along with a description of their appearance and function. For further detail please refer to the general and plumbing assemblies located in the appendix.

Airfoil:

The white plastic piece mounted above the spray boom that runs the entire length of the boom. The airfoil stabilizes air flow over the spray boom.

Shroud:

The large plastic body covering the sprayer. This enclosure houses the air cavity in which the actual spraying is accomplished.

Curtain:

The curtain is composed of fabric hanging down from the shroud edge. The curtain seals the air inside the shroud.

Wing:

The movable ends of the boom. The wing section breaks away from the center boom section when the spray boom hits a large object. The wings break away to protect the object being contacted, and the sprayer itself.

Center Frame:

The Center Frame supports the solution tank, supply pump, line strainer. The FM3500ST model also includes the wing breakaway mechanisms and lift supports. The Center Frame attaches to each spray boom section via float mechanisms.

Mount Adapter:

Adapts the Center Frame to fit your specific power unit.

First Checks

Your Front Mounted sprayer comes complete in one crate. The crate should include the following items:

1. Center spray section
2. Left and Right wing spray boom sections
3. Center castor frame
4. Center frame
5. Two Castor Wheel Assemblies
6. Assorted parts bag
7. Mount adapter

Look for the factory packing list attached to the shipping crate. Double check that this list has been completely filled out and that you have all the items indicated by the list. If there are any problems encountered please contact your dealer or the factory via the number indicated on the packing list.

Mount Adapter Attachment

Remove the Mount Adapter and associated hardware from the crate. Refer to Mount Adapter Drawing (#12285) in the Appendix for help in identifying these parts.

1. Remove appropriate accessories from your power unit to allow your Rogers mount adapter to be attached.
2. Refer to Specific Mount Adapter instructions for directions.
3. Refer to Mount Adapter drawing for proper orientation of Mount Adapter and attaching hardware.
4. Attach Mount Adapter to power unit.
5. Double check installation to ensure all connections are solid and that any float mechanisms are free to operate through the entire operating range.

Tank and Boom Pull Attachment

1. Using the 1½" square u-bolts supplied attach the tank mount to the back of the 1½" tubing farthest away from the power unit with the tank numbers facing away from the power unit. Attach the ¾" hose with the supplied gear clamp.
2. Using the 1½" square u-bolts supplied attach the boom pull upright tubes on the appropriate sides (refer to part 48 on drawing 12686).
3. On the right boom pull upright tube attach the eyebolt with two pulleys using the ¼" nut supplied in the parts bag. On the left boom pull upright tube attach the eyebolt with one pulley.
4. The boom pull upright tubes contain the stand legs and a d-ring necessary for storage purposes.

Center Frame Attachment

1. Remove Center Frame from crate.
2. Place Center Frame in front of Mount Adapter. The pump and line strainer face away from the power unit.
3. The Center Frame attaches to the Mount Adapter with 1 1/2" square U-bolts and 3/8" nylock nuts. Refer to Mount Adapter drawing where appropriate.

Center Caster Frame Attachment

1. Remove Center Caster Frame from the crate. The Center Caster Frame includes the center boom section.
2. Locate the two Caster Wheel Assemblies.
3. Place a Caster Wheel Assembly in each of the wheel bushings of the Center Caster Frame placing the caster wheel spacers on the top of the bushings. The bushings are located to the extreme left and right of the front of the Caster Frame.
4. Place the Lynch Pin into end of the caster wheel shaft.
5. Attach the Center Caster Frame to the Center frame via a 1" diameter by 6" long pin. A cotter pin is provided to hold the 6" long pin in place.

Wing Attachment

1. Place the left and right wings to the sides of the Center Frame. The wheels of the wings will locate to the outer rear of the sprayer and face toward the power unit.
2. Release the breakaway mechanism of the Center Frame. You may find it beneficial to strike the end of the Breakaway Arm with a rubber mallet.
3. Loosen the Guide ring that is on the Breakaway Arm.
4. Remove the 1/4" bolts holding the Wing Pivot U-Clamp to the wing.
5. Remove the Wing Pivot U-Clamps from the wing.
6. Place the Wing Pivot U-Clamps onto the Breakaway Arm.
7. Reattach the Wing to the U-Clamps.
8. Ensure that the U-Clamp is pressed up against the inside of the Breakaway Arm.
9. Tighten the 1/4" bolts holding the Wing Pivot U-Clamp to the Breakaway Arm.
10. Lock the Guide Ring into position tight against the Wing Pivot U-Clamp closest to the power unit. Lock with the Guide Ring set screw.
11. Locate the two ropes and handles. Run the longest rope through the left wing rope cleat and the shorter rope through the right rope cleat and then both ropes through the half moon ring located on the Three Valve Mount.
12. Run the longest rope to the right upright tube that has two pulley's on it and place the rope through one of the pulleys, then run the rope directly across to the left upright tube, through the pulley and down to the left wing rope pull tab. Run the shortest rope to the right upright tube, through the pulley and down to the right wing rope pull tab.
13. Tie a tight knot in the very end of the rope. Pull rope back out of the Rope Tab until the knot is tight against the Rope Tab.

Plumbing Hookup

1. Locate the Three Valve Mount that holds the On/Off control valves for each spray section and the pressure regulating valve. Attach the cross plate supplied in the parts bag to the Three Valve Mount with 1/4" square u-bolts. Attach Mount to upright on the Center frame with 1 1/2" square U-bolts.
2. Adjust height of controls to suit your power unit and user preference. Use the supplied tie straps to secure the hoses in the appropriate place.
3. Attach the Universal Mount Bracket and Nozzle Flow Indicator for the Center Boom Section using the 1/4" x 2" lg bolts supplied to the support on the solution tank.
4. Locate the three 1/2" hoses from the Center Boom Section. Cut to desired length and hook the end of each hose to the hose barbs on the nozzle flow indicator. To avoid confusion, ensure that the position that each hose exits the shroud of the spray boom corresponds with the position it is installed on the nozzle flow indicator. Plastic, crimp type hose clamps are located in the parts box.
5. Attach wing supply hoses to the appropriate wings placing the supply hose underneath the breakaway arm. Attach the center nozzle flow indicator supply hose and also the bypass hose to the top of the solution tank. Use the plastic crimp type hose clamps to secure to hose barbs.

Electrical Hookup

1. Route electrical harness along power unit frame. Avoid all pivot points and moving parts to avoid pinching or wearing into cable.
2. Plug cable into auxiliary 12V power outlet on power unit.
3. Tie cable securely to power unit.
4. Clean terminals of battery to ensure good connections.

Last Check

1. Double check all fasteners, nuts and bolts adjusted during installation for tightness.
2. Grease all grease nipples. There are two nipples at each wing pivot, one nipple for the Center Castor Frame pivot and one nipple for each castor wheel pivot.
3. Operate the front mount sprayer through its entire float range. Check for interference between the frame, fenders, floor boards and attachments. Check also for pinching of hoses and electrical power wire for pump.
4. Place water in solution tank. Operate pump and spray through each boom section. Check all plumbing for any possible leaks.
5. Operate sprayer over concrete pad. Examine spray pattern on concrete to ensure all spray tips are operating.

First Checks

During sprayer setup, test the operation of the spray tips, hoses and plumbing system with clear water. Refer to the sprayer maintenance and operation section found in this manual.

Clean sprayer tank and flush plumbing system with clean water.

Check line strainer and nozzle screens for residue and debris. Clean screens with clear water. Replace any screens that remain clogged after cleaning or are torn.

Check and clean nozzle tips. To ensure best performance calibrate spray tips. Refer to Calibration found in the General Spraying Information section of this manual. The frequency that you should perform calibration will vary based on the volume and type of spraying that is done.

Determine proper chemical mixture based on the specific chemical and spray tip size. Different size spray tips and nozzle screens are available through your Jacobsen dealer.

Using the Sprayer

Prepare to spray by turning on the power switch for the pump. Observe the pressure gauge on the 3 Valve Mount. The pressure should rise slightly above the spray pressure desired for the specific tip type and chemical. The exact difference between the set pressure with no booms spraying and the spray pressure will depend on the size of tips and number of spray booms engaged.

Adjust the pressure regulator located on the 3 Valve Mount to obtain the desired pressure.

Begin moving at the desired spray speed.

Turn on the appropriate sections of the spray boom with the specific On/Off valve located on the 3 Valve Mount.

Boom Operation

If you wish to lift a boom, switch off the pressure to the boom. Wait a couple of seconds so the mist under the boom can settle before lifting the boom.

Each wing can be lifted with the rope and secured in place by pulling the rope through the cleat on the top of the 3 valve mount.

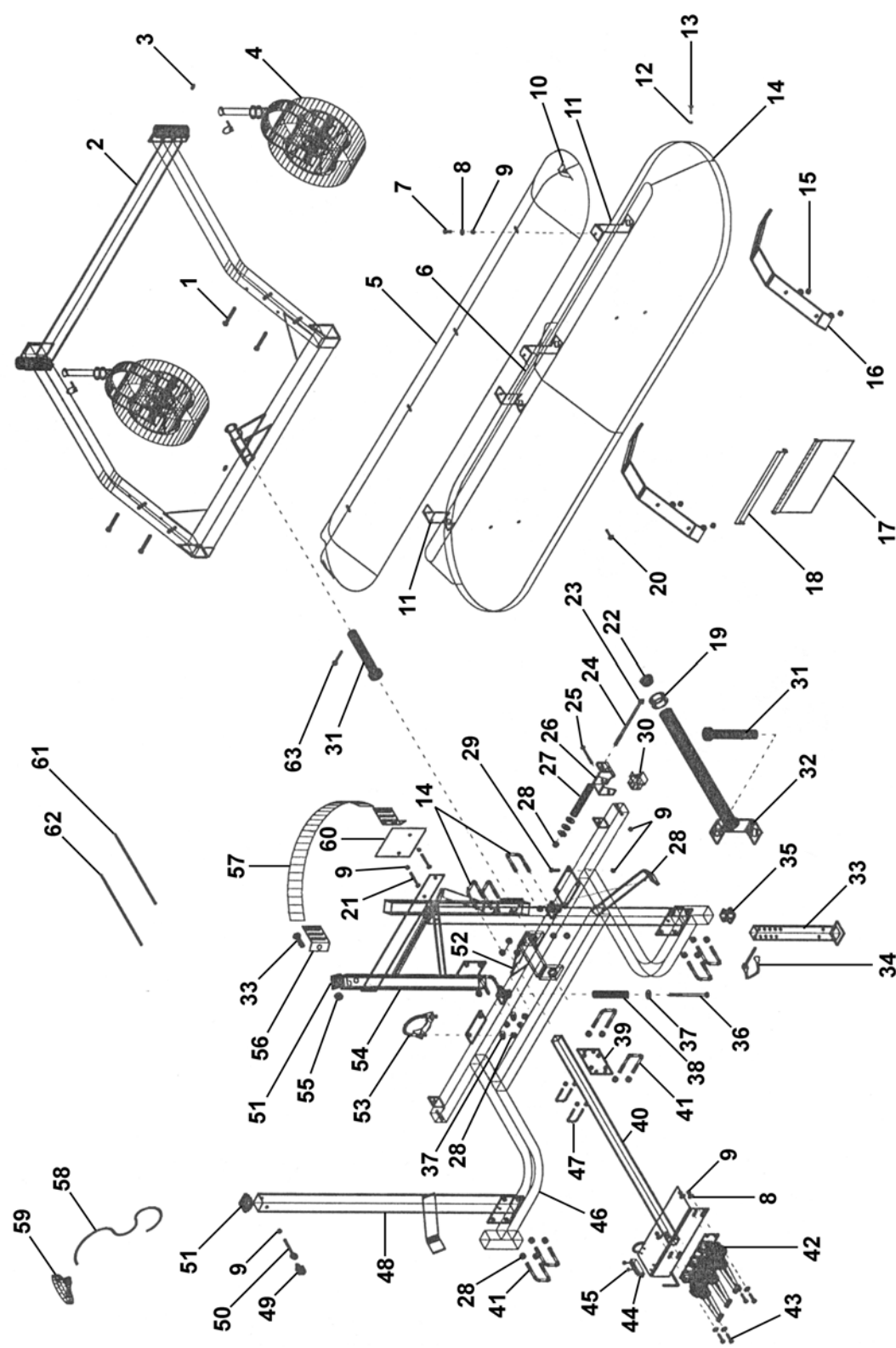
To disengage simply lift the rope to pull it out of the cleat. Store the excessive rope with the handle on the hook.

The wings are attached to your boom via the breakaway pin and pivot. If you strike an object with a wing that wing should breakaway as a protection against damage.

After striking an object return the wing to position. Grasp boom at outer edge. Move end of boom forward until Breakaway Pin contacts the breakaway mechanism. With sharp forward motion, lock boom into Breakaway catch.

PARTS SECTION

FIGURE 1



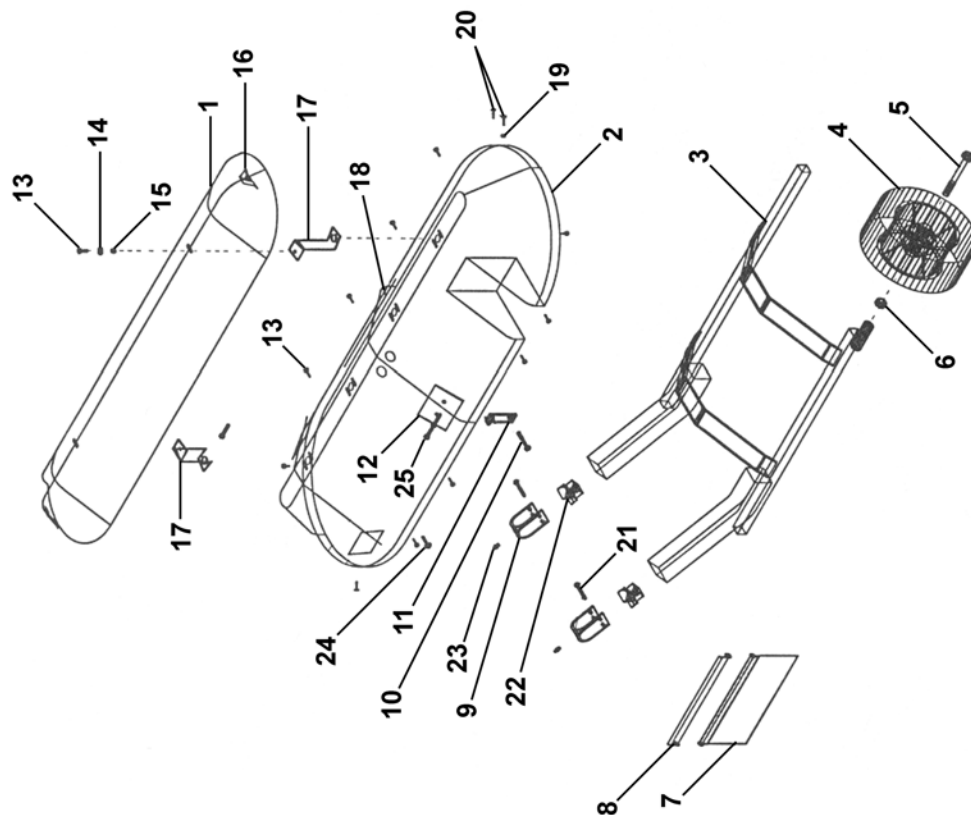
DRIFTLESS SPRAYER

CASTER FRAME PARTS

FIGURE 1

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1-1	01395	BOLT-5/16 X 3 1/2	4	1-49	12681	PULLEY	3
1-2	00400	FRAME-CASTER	1	1-50	12684	EYEBOLT	2
1-3	00972	FITTING	5	1-51	01057	PLUG	4
1-4	00921	CASTER WHL ASSY	2	1-52	01398	SERIAL PLATE	1
1-5	01499	AIRFOIL	1	1-53	01172	CLAMP-SADDLE	1
1-6	01397	DECAL	3	1-54	12570	TANK	1
1-7	01154	BOLT-1/4 X 3/4	2	1-55	00963	NUT-1/2	2
1-8	01157	WASHER-FLAT	14	1-56	05103	STRAP-HOLDER	2
1-9	00968	NUT-1/4	36	1-57	01701	STRAPPING	1
1-10	01396	DECAL	6	1-58	12811	ROPE	1
1-11	00721L	AIRFOIL STANDOFF	4		12812	ROPE	1
	00721R	AIRFOIL STANDOFF	4				
1-12	01153	NUT-#10	10	1-59	06318	HANDLE-PLASTIC	2
1-13	01152	SCREW-#10-24 X 3/4	10	1-60	12045	PL,AL,BACKING	1
1-14	01502	SHROUD	1	1-61	01310	TIE	2
1-15	00969	NUT-5/16	6	1-62	01306	TIE	10
1-16	12653	FLAT-AL,SPAR LP SPRAYER	2	1-63	00965	PIN-3/16 X 1-1/2	3
1-17	01387	CURTAIN	1				
1-18	01385	CURTAIN-HANGER	1				
1-19	00805	COLLAR	2				
1-20	01156	Scr, TEK, #12 x 1 1/4	14				
1-21	01070	BOLT-1/4 X 2	4				
1-22	00961	PLUG-TUBE	2				
1-23	01073	SCREW-SET	2				
1-24	00954	BOLT-3/8 X 7	2				
1-25	00966	BOLT-1/4 X 2-1/2	8				
1-26	00814	BREAKAWAY CATCH	2				
1-27	00955	SPRING	2				
1-28	00956	NUT-3/8	30				
1-29	12272	SCREW-1/4 X 1-1/4	4				
1-30	00130	BUSHING	4				
1-31	00804	PIN-1 X 6	3				
1-32	00470	BREAKAWAY ARM	2				
1-33	12717	LEG-STEINER FM	2				
1-34	01319	PIN-1/4 X 2-1/2	2				
1-35	00128	BUSHING	4				
1-36	06521	BOLT-3/8 X 5	2				
1-37	00957	WASHER-FLAT 3/8	8				
1-38	00690	SPRING	2				
1-39	12713	PL,STL,DBL CROSS,1-1/2 X 11					
1-40	12740	MT, 3 VLV / ROPE	1				
1-41	01050	UBLT-3/8 X 1-1/2 X 2-1/2	10				
1-42	01209	VALVE	1				
1-43	01164	BOLT-1/4 X 1	4				
1-44	12723	CLEAT-CLAMP	2				
1-45	05388	SCREW-#10-24 X 1/2	4				
1-46	00425	FRAME-CENTER	1				
1-47	01049	UBLT-1/4 X 1 X 2	2				
1-48	12683L	BOOM-PULL LEFT	1				
	12683R	BOOM-PULL RIGHT	1				

FIGURE 2



DRIFTLESS SPRAYER

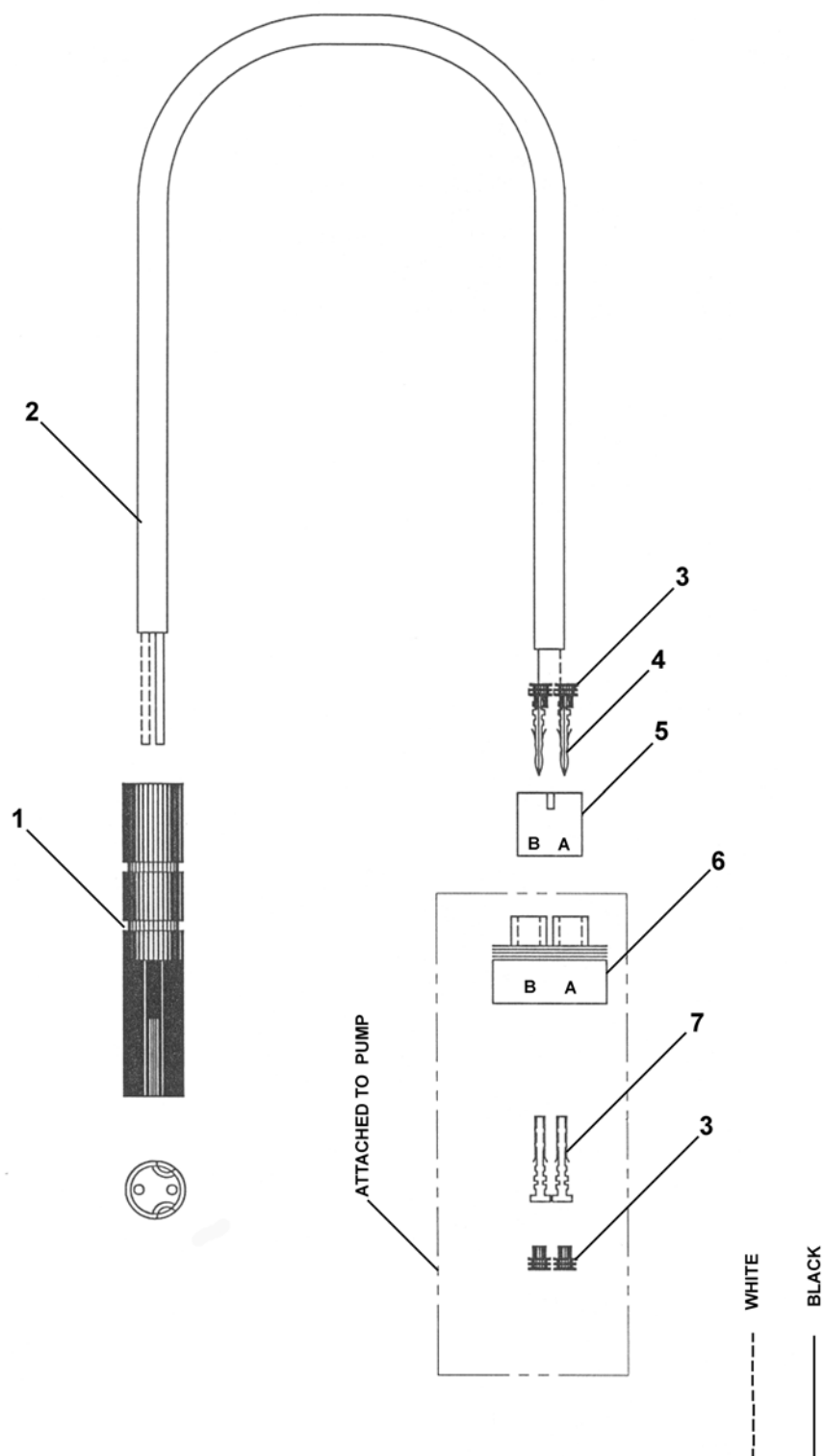
WING FRAME PARTS

FIGURE 2

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
2-1	01500	AIRFOIL-40" / 50"	2				
2-2	01503L	SHROUD-LFT	1				
	01503R	SHROUD-RT	1				
2-3	01381L	FRAME-40" SERIES LFT	1				
	01381R	FRAME-40" SERIES RT	1				
2-4	00920	WHL ASSY	2				
2-5	12387	BOLT-5/8 X 5	2				
2-6	01313	NUT-5/8	2				
2-7	01505	CURTAIN	2				
2-8	01504	CURTAIN HANGER	2				
2-9	00951	U-CLAMP	4				
2-10	05447	BOLT-5/16 X 2	2				
2-11	06307	ROPE	2				
2-12	12057	BACKING-WING	2				
2-13	01154	BOLT-1/4 X 3/4	6				
2-14	01157	WASHER-FLAT 1/4	2				
2-15	00968	NUT-1/4	2				
2-16	01396	DECAL	2				
2-17	00721L	AIRFOIL STANDOFF	4				
	00721R	AIRFOIL STANDOFF	4				
2-18	01397	DECAL	3				
2-19	01153	NUT-#10	4				
2-20	01152	SCREW-#10-24 X 3/4	4				
2-21	00966	BOLT-1/4 X 2-1/2	2				
2-22	00130	BUSHING	2				
2-23	00972	FITTING	2				
2-24	01156	Scr, TEK, #12 x 1 1/4	14				
2-25	01070	BOLT-1/4 X 2	2				

FIGURE 3

DRIFTLESS
SPRAYER



DRIFTLESS SPRAYER

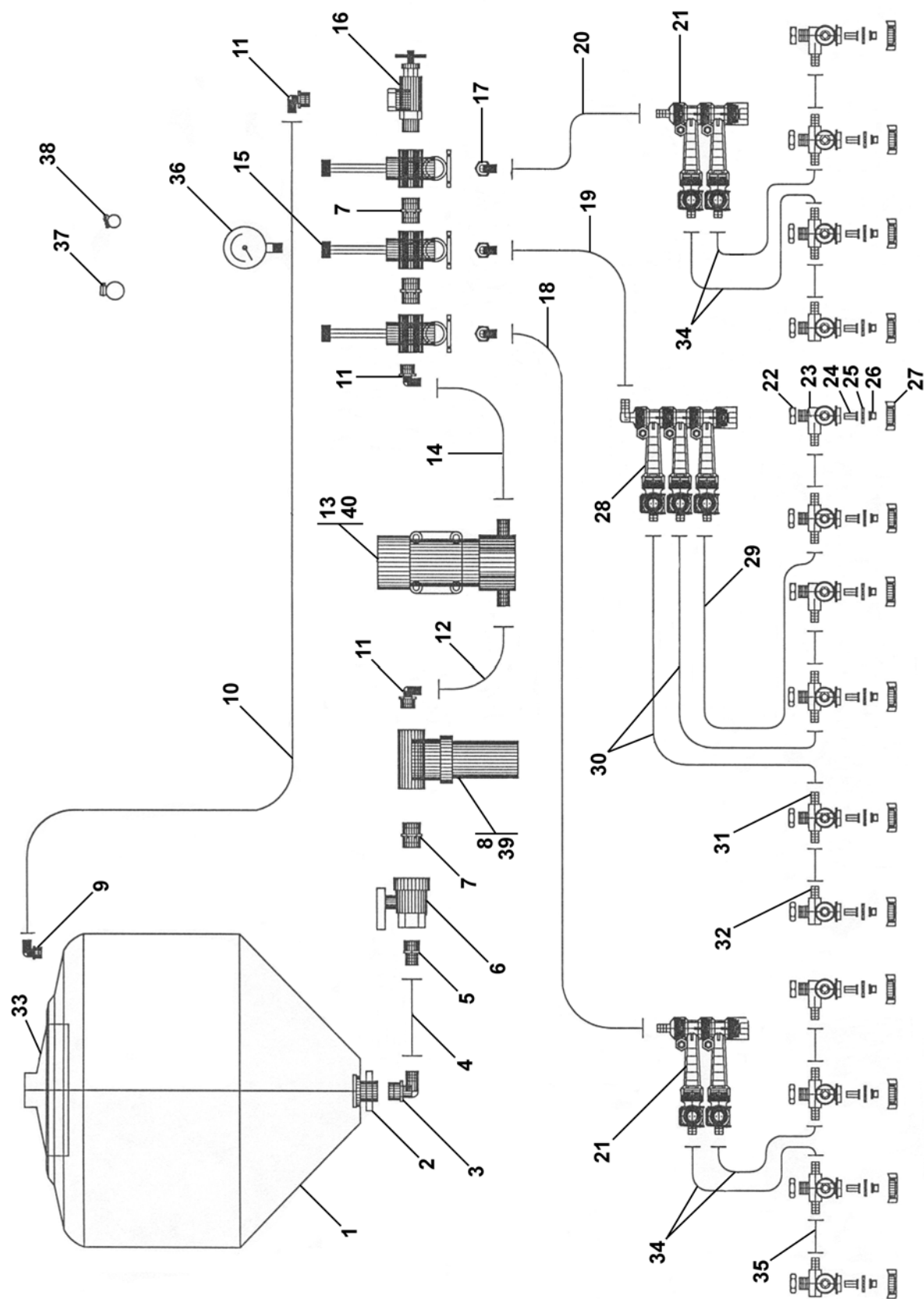
ELECTRICAL

FIGURE 3

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
3-1	12724	ELEC CON-MALE	1				
3-2	12813	CABLE-14/2 X 60	1				
3-3	01216	SEAL	4				
3-4	01215	TERMINAL	2				
3-5	01274	CONN,WEA-PAK,2M,06L	1				
3-6	01276	CONN,WEA-PAK,2F,07L	1				
3-7	01219	TERMINAL	1				

FIGURE 4

DRIFTLESS
SPRAYER



DRIFTLESS SPRAYER

PLUMBING

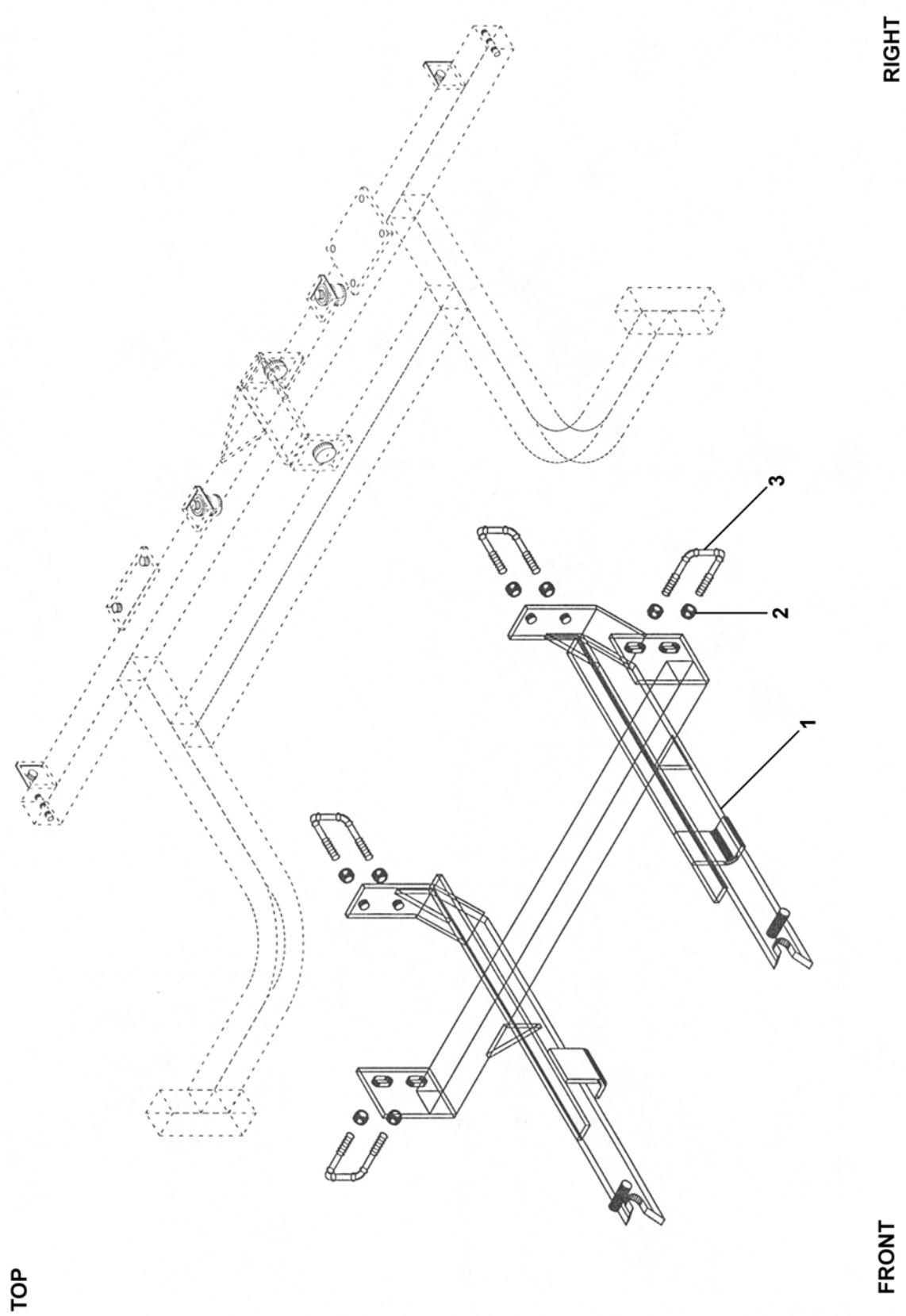
FIGURE 4

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
4-1	12384	TANK-CONE	1				
4-2	00302	FITTING-BULKHEAD	1				
4-3	01245	FITTING-ELBOW	1				
4-4	01448	HOSE-3/4 X 8, 250PSI	1				
4-5	01349	FITTING	1				
4-6	01250	VALVE BALL	1				
4-7	01193	FITTING	3				
4-8	01252	STRAINER-LINE	1				
4-9	01239	FITTING-ELBOW	1				
4-10	12690	HOSE-1/2 X 111, 300PSI	1				
4-11	01243	FITTING-ELBOW	3				
4-12	07200	HOSE-1/2 X 34, 300PSI	1				
4-13	01280	PUMP	1				
4-14	12688	HOSE-1/2 X 79, 300PSI	1				
4-15	01209	VLV-MAN BOOM CNTRL	3				
4-16	01279	PRESSURE REGULATOR	1				
4-17	01235	FITTING-ELBOW	3				
4-18	12820	HOSE-1/2 X 148, 300PSI	1				
4-19	12689	HOSE-1/2 X 91, 300PSI	1				
4-20	12687	HOSE-1/2 X 88, 300PSI	1				
4-21	11983	ROTOMETER ASSY	2				
4-22	12362	NUT	14				
4-23	00831	NOZZLE BODY ASSY	4				
4-24	00829	SCREEN-TIP	14				
4-25	01521	SEAL-NOZZLE CAP	14				
4-26	01369	TIP-SPRAY	14				
4-27	01531	FITTING	14				
4-28	11982	ROTOMETER ASSY	1				
4-29	12821	HOSE-1/2 X 58, 300PSI	1				
4-30	12822	HOSE-1/2 X 38, 300PSI	2				
4-31	01341	NOZZLE BODY ASSY	7				
4-32	00830	NOZZLE BODY ASSY	3				
4-33	01350	LID-TANK	1				
4-34	07751	HOSE-1/2 X 4-1/2, 300PSI	4				
4-35	05350	HOSE-1/2 X 8-1/4, 300PSI	7				
4-36	01281	GAUGE-PRESSURE	1				
4-37	01091	CLAMP-HOSE	2				
4-38	01092	CLAMP-HOSE	40				
4-39	08171	SCREEN-STRAINER	1				
4-40	12375	REPAIR KIT-FLOJET	1				
4-41	*12611	DECAL	1				
4-42	*12043	PLATE-BACKING, CTR	1				
4-43	*12057	PLATE-BACKING, WING	2				

* NOT ILLUSTRATED

FIGURE 5

DRIFTLESS
SPRAYER



**DRIFTLESS
SPRAYER**

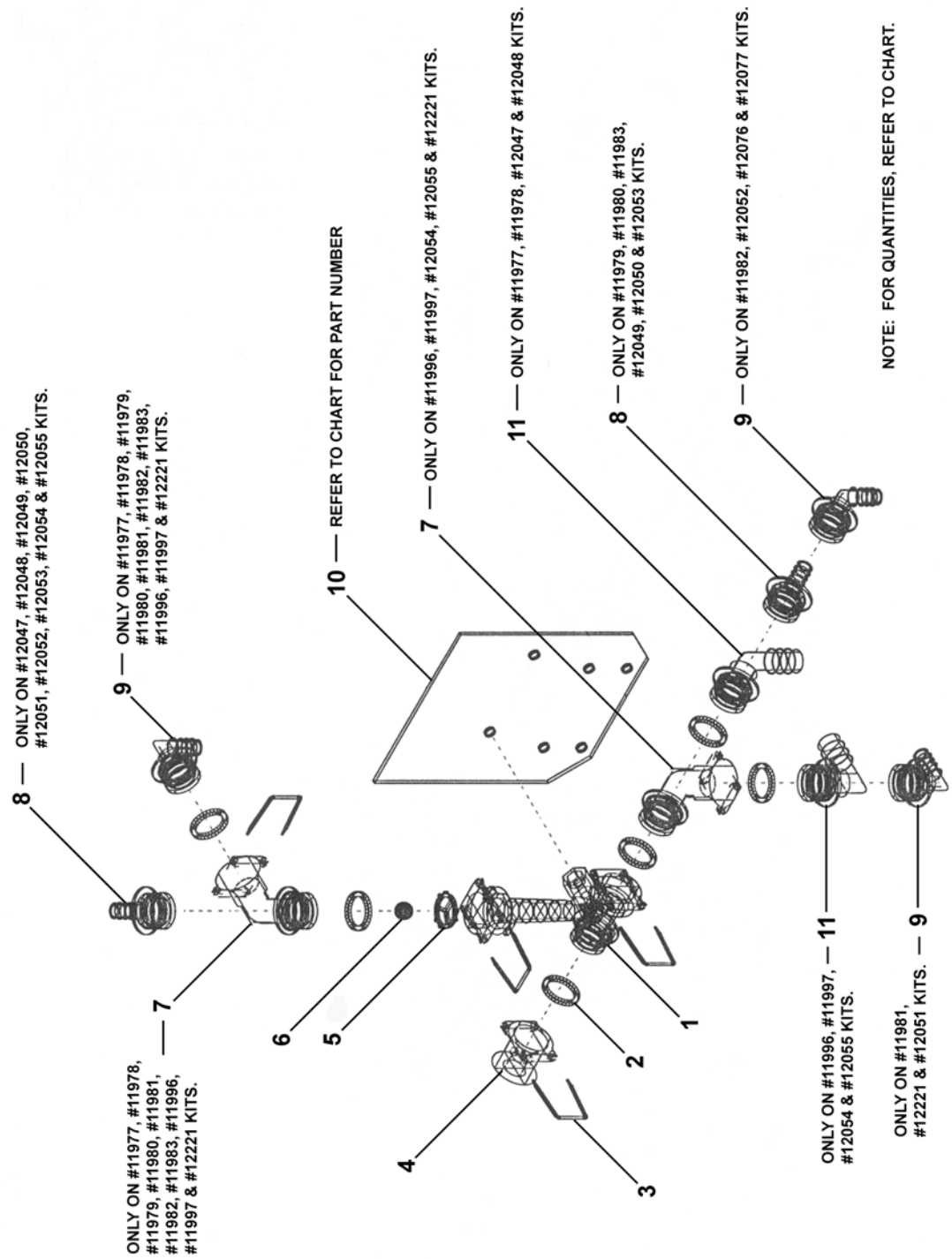
ASSEMBLY-FM MOUNT

FIGURE 5

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
5-1	00013	FM ADT	1				
5-2	00956	NUT-3/8	8				
5-3	01050	U-BOLT-3/8 X 1-1/2	4				

FIGURE 6

DRIFTLESS
SPRAYER



NOTE: FOR QUANTITIES, REFER TO CHART.

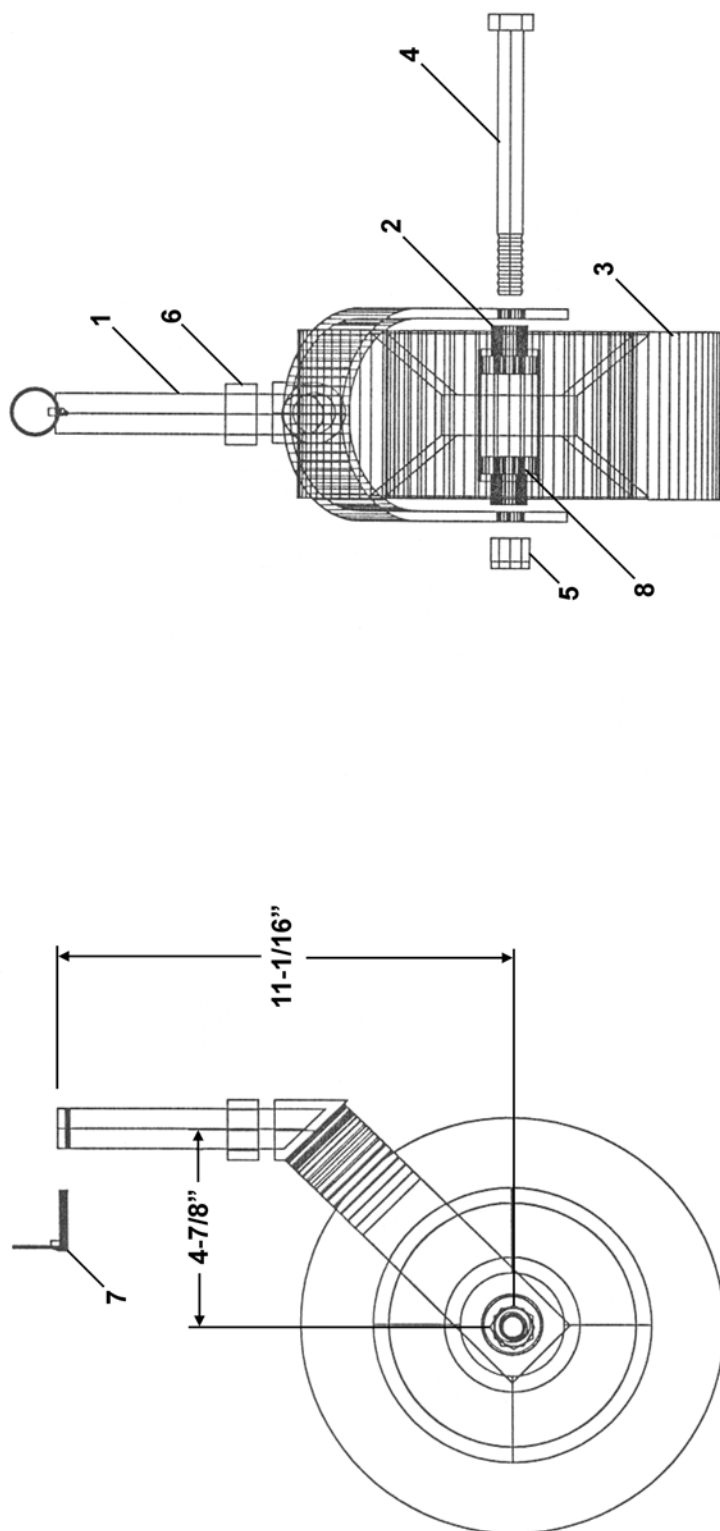
DRIFTLESS SPRAYER

INSTALLATION SHEET

FIGURE 6

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
6-1	00889	ROTOMETER BODY	1				
6-2	11984	O-RING	6				
6-3	11976	CLIPS	4				
6-4	00909	END CAP	1				
6-5	11989	BALL RETAINER	1				
6-6	11990	BALL-RED	1				
6-7	01115	3/4" STREET ELBOW	2				
6-8	11975	1/2" H.B.	2				
6-9	00906	1/2" H.B. ELBOW	3				
6-10		BACKING PLATE	1				
6-11	00905	3/4" H.B. ELBOW	2				

FIGURE 7



DRIFTLESS SPRAYER

CASTER WHEEL ASSEMBLY

FIGURE 7

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
7-1	00865	CASTER BRACKET	1				
7-2	00159	SPACER-CASTER WHL	2				
7-3	00920	WHEEL ASSY	1				
7-4	01166	BOLT-5/8" X 6-1/2"	1				
7-5	01051	NUT-5/8"	1				
7-6	00853	SPACER-CASTER BRKT	1				
7-7	05116	LYNCH PIN-3/16" X 1-1/2"	1				
7-8	00857	BEARING	2				

NOZZLE BODIES

DRIFTLESS SPRAYER

FIGURE 8

“T” & “L” NOZZLE BODIES

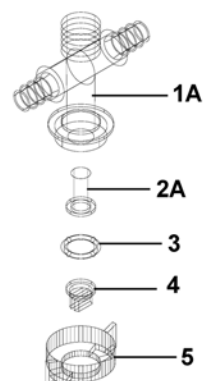
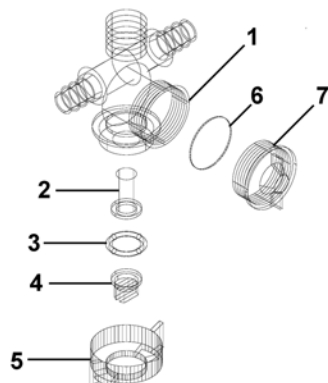


Table 1

#	Delavan Part No.	Wilger Part No.	Description
1	11197	01341	Nozzle Body, Diaphragm Check Valve, 1/2" HB, Tee
	11198	00830	Nozzle Body, Diaphragm Check Valve, 1/2" HB, Right
	11199	00831	Nozzle Body, Diaphragm Check Valve, 1/2" HB, Left
1A	07086	-----	Nozzle Body, "T" Type, 3/8" HB, Tee
	04898	-----	Nozzle Body, "T" Type, 1/2" HB, Tee
	07084	-----	Nozzle Body, "L" Type, 3/8" HB
	04897	-----	Nozzle Body, "L" Type, 1/2" HB
2	04722	04722	Screen, 200 Mesh
2	00829	00829	Screen, 100 Mesh
2	04720	04720	Screen, 50 Mesh
2A	05969	05969	Screen, Check Valve, 100 Mesh
3	00828	01521	Seal
5	00826	01532	Nozzle Cap
	-----	11833	Nozzle Cap for Hardi Spray Tips
6	04833	01537	Diaphragm
7	04896	11988	Diaphragm Module Assembly

We supply two different types of Nozzle Bodies.
Please check to see if you have Delavan or Wilger Nozzle Bodies!
API are high quality aluminum oxide tips.

Table 2

#	Part No.	Description
4	05881	Tip (8008VS)
4	05880	Tip (8006VS)
4	05879	Tip (8005VS)
4	05878	Tip (8004VS)
4	05877	Tip (8003VS)
4	05876	Tip (8002VS)
4	01369	Tip (8001)
4	05862	Tip (11001VS)
4	12422	Tip (8002API)
4	12423	Tip (8004API)
4	12424	Tip (8005API)
4	12425	Tip (8006API)

Note: See Application Tables
for Application Rates

World Class Quality, Performance And Support



Equipment from Jacobsen, a Textron company, is built to exacting standards ensured by ISO 9001 and ISO 14001 registration at all our manufacturing locations.

A worldwide dealer network and factory-trained technicians backed by Textron Parts Xpress provide reliable, high-quality product support.



BOB-CAT BROWER BUNTON CUSHMAN RYAN STEINER