

110,150,200,&300 LIFT TYPE with KLC,BOOMINATOR,or HAND GUN

Since VAN'S EQUIPMENT'S beginnings we have used a generic owners manual.It was just to costly to have printed and keep on hand owner manuals specific to each size and type sprayer we manufacture.

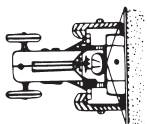
We now have the technology in house to create sprayer specific manuals and to print them only as needed. We think we have made a good beginning,but these manuals are still in the development stage.At this point we would appreciate the input of our end user customer and our dealers as to how we can make these manuals more usefull and user friendly.

This is the prototype manual . Please look over the manual and give us your input.

CALL VANS EQUIPMENT AT 1-800-765-1101 AND ASK FOR CRAIG

We appreciate your input on these manuals.

Thanks Vans Equipment



van's

EQUIPMENT COMPANY

P.O. BOX 3157 • 2169 SYLVESTER HIGHWAY • MOULTRIE, GEORGIA 31776-3157

We Appreciate You and Your Business!

(229) 985-1101

VAN'S EQUIPMENT
BUILT FOR FARMING INTEGRITY

WHEN SELECTING EQUIPMENT FOR FARMING THE NAME VAN'S means availability, reliability, and proven superiority. Maintaining a close association with farming customers has resulted in equipment design and manufacturing philosophy that reflects the exacting requirements of our customers.

Van's Equipment Company, Inc. appreciates your purchase of a new spray unit. This unit, is designed to give years of service with proper care. The following pages will be helpful in set-up and maintenance of your new unit.

PLEASE READ THIS MANUAL CAREFULLY BEFORE INITIAL START-UP IS ATTEMPTED.

WE APPRECIATE YOU
AND YOUR BUSINESS

INDEX

PAGE NO.....	DESCRIPTION
2.....	Model Description and Overview
3.....	Plumbing Breakdown
4-5.....	Plumbing Parts List
5.....	Main Breakdown with Parts List
6.....	Roller Pump Breakdown and Parts List
7.....	AA17L Control Valve Breakdown and Parts List
8.....	AA6B Control Valve Breakdown and Parts List
9.....	AA43LA-AL6 Spray Gun Breakdown and Parts List
10-12.....	Mounting and Assembly Instructions
12-13.....	Maintanance and Precautions
13.....	Trouble Shooting
14-16.....	Tip Charts
17.....	Tip and Mount Breakdown

110,150,200,&300 GALLON 3-Point Hitch KLC and BOOMINATOR SPRAYERS

Tip bracket is shown in transport position.
Tip should point to rear. See page # 5



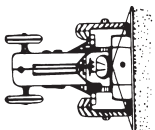
The Van's KLC and Boominator Tip Sprayers Offer an Excellent Way to Spray in Areas With Tight Clearance. The KLC Tip Comes As a Single Tip Mounted In Line With The Center Of The Sprayer, and Covers a 20 Ft. Swath. The Boominators Come As a Right and Left Set and Cover a 17 FT. Swath to Each Side for 34 Ft. Total Coverage.

Boomless Nozzle All With 8 Roller Pump (7560C)

Boomless Nozzle	L110KLC	L150KLC	L200KLC
Boomless Nozzle w/Hand Gun	L110KLCB	L150KLCB	L200KLCB
LEFT & RIGHT Boominator Nozzle	L11024	L15024	L200B
LEFT & RIGHT Boominator / HG	L11024B	L15024B	L200BHG

Standard Features include:

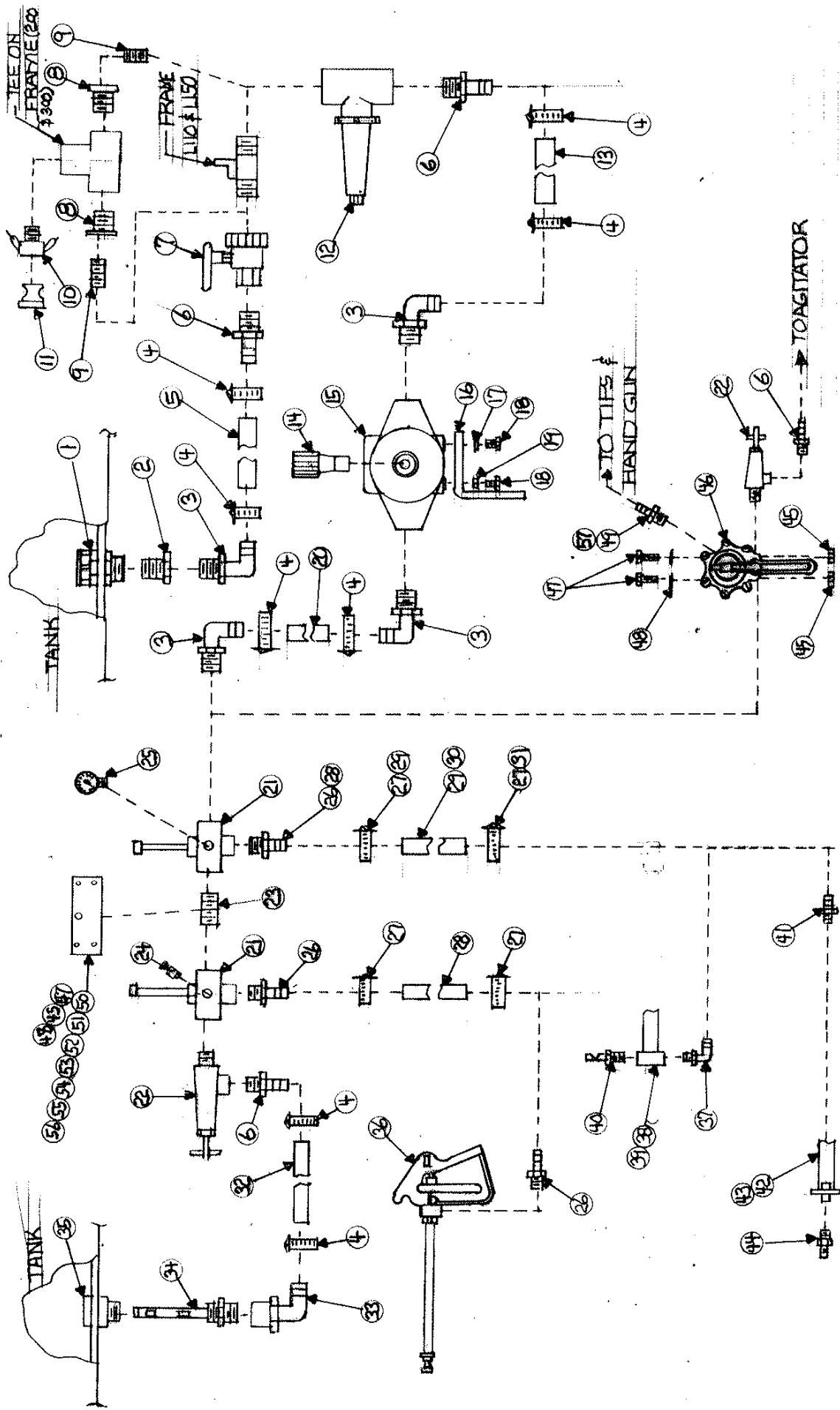
- 1) 200 or 300 Gallon Polyethylene Tank
- 2) Full Five Year Structural Warranty
- 3) Fully Assembled & Factory Tested
- 4) Continuous Jet Agitation
- 5) Manual Control Valve



van's

EQUIPMENT COMPANY

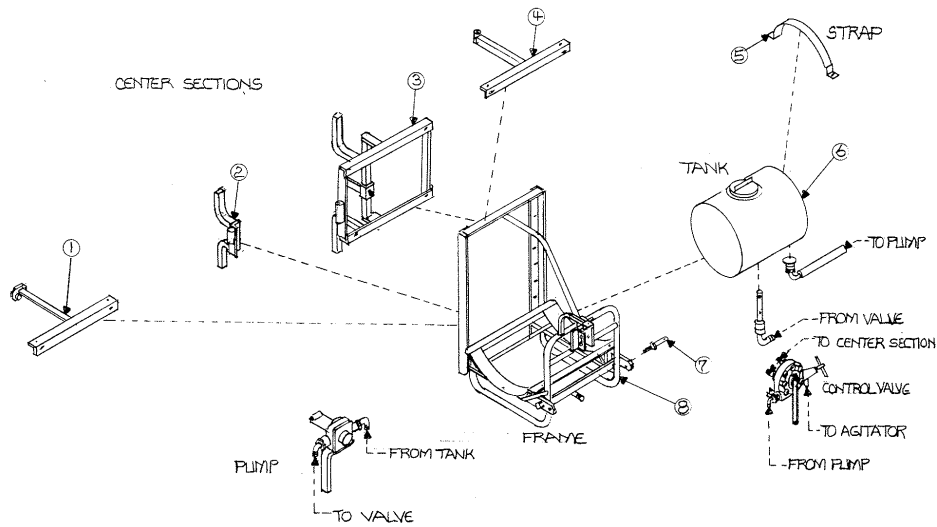
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USE THIS VALVE WITH BOOMINATOR TIPS & HAND GUN

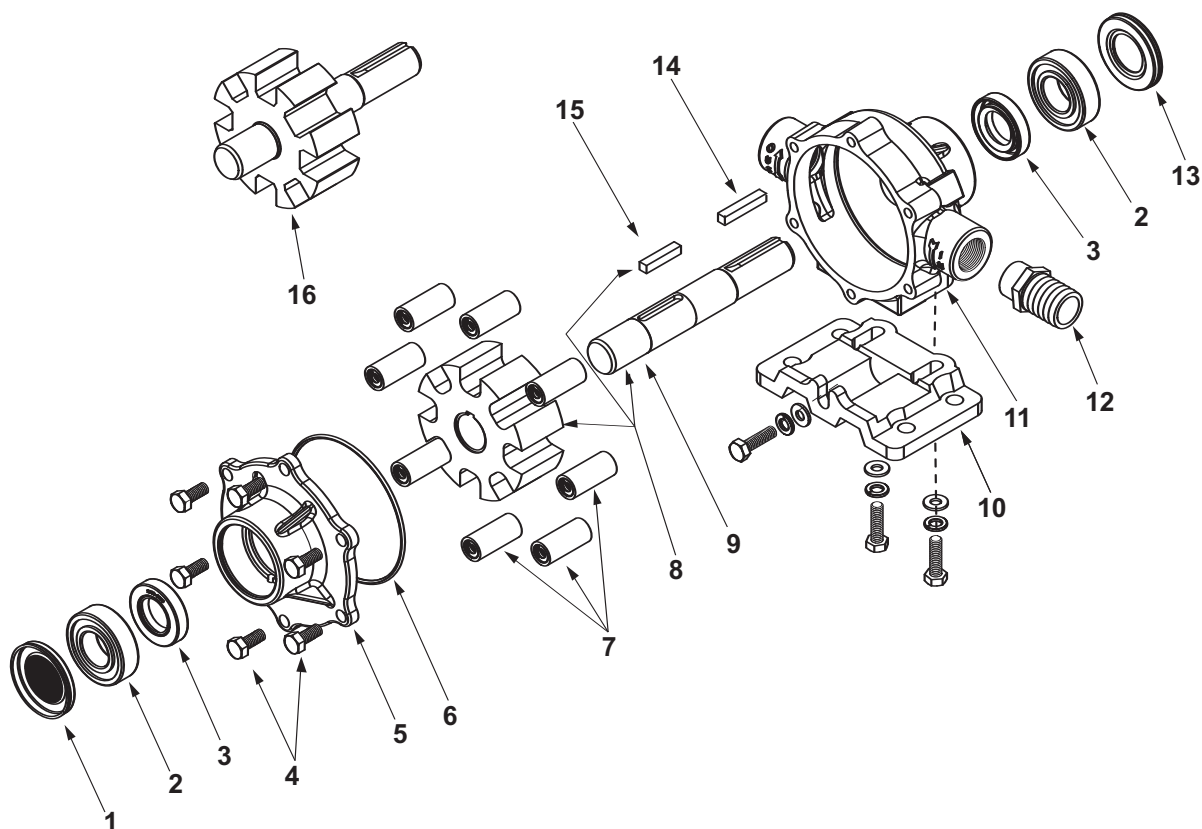
ITEM NO.	DESCRIPTION	PART NO.
1	Tank fitting 1 1/4" anti-vortex poly	63065
2	Reducer bushing 1 1/4"mpt x 3/4"fpt nylon	RB11434
3	Elbow 3/4"mpt x barb 90 nylon	EL34
4	Hose clamp 3/4"	12H
5	Hose black ag 3/4"	10031750
6	Hose shank 3/4"mpt x barb nylon	EL34
7	Ball valve 3/4" fpt poly	UV-075FP
8	Reducer bushing 1 1/2"mpt x 3/4"fpt galvanized	GB11234
9	Nipple 3/4" x close galvanized	GN341.5
10	Cam lock coupling 1 1/2" x MPT	150-B
11	Cam lock plug1 1/2"	150-PL
12	Strainer 3/4" fpt 50 mesh nylon	AA126-ML-3-50
13	Hose black ag 3/4"	10031750
14	Pump coupler 540 rpm 15/16"	1321-0007
15	Pump	7560C
16	Pump stabilizer	PS
17	Flat washer 5/16"	FW516
18	Bolt 5/16" x 3/4"	CS51634C
19	Lock washer 5/16"	LW516
20	Hose black ag 3/4"	10031750
21	Shutoff valve	AA6B
22	Pressure relief valve	13895-6
23	Nipple 3/4" x close nylon	M34
24	Plug 1/4" nylon	F14
25	Pressure gauge 0-160 psi dry	SG-160
26	Hose shank 1/2"mpt x 3/8" barb nylon	A1238
27	Hose clamp 3/8"	6H
28	Hose black ag 3/8"	10031720
29	Hose clamp1/2"	8H
30	Hose black ag 3/8"	10031720
31	Hose clamp 1/2"	8H
32	Hose red ag 3/4"	3204-0420
33	Elbow 3/4"mpt x barb 90 nylon	EL34
34	Jet agitator	3371-0019
35	Tank fitting 3/4" poly	60401
36	Hand gun	AA43LA-AL6
37	Elbow 1/4"mpt x 3/8" barb 90 nylon	EL1438
38	Center Section KLC tip (L110 and up)	H15A
39	Gun rack	H11R
40	KLC tip (standard size 18)	1/4KLC-18
41	Hose shank 3/8"mpt x 1/2" barb nylon	A3812
42	Center Section Boominator tip (L110 and up)	H15
43	Center Section hand gun	H11R
44	Boominator nozzle	BN1400L/R
45	Nut 3/8"	HN38C
46	Control valve	AA17L

47	Bolt 3/8" x 1 1/4"	CS38114C
48	Lock washer 3/8"	LW38
49	Hose shank 3/4"mpt x 1/2" barb nylon	A3412
50	Valve stand (1)	VS6B
51	Valve stand (2)	VS6B2
52	Bolt 1/4" x1"	CS14100C
53	Bolt 1/4" x 1 1/4"	CS14114C
54	Lock washer 1/4"	LW14
55	Flat washer 1/4"	FW14
56	Nut 1/4"	HN14C
57	Hose shank 3/4"mpt x 3/8" barb nylon	A3438



ITEM NO.	DESCRIPTION	PART NO.
1	Center Section boominator	H15
2	Hand gun hose rack	H11R
2A	Boominator with hand gun	H11R/H15
3	KLC tip and hand gun	H7
4	KLC tip and hand gun	H15A
5	Tank strap	SP60
6	110 Gallon tank	47368
6A	150 Gallon tank	47082
6B	200 Gallon tank	47068
7	Catergory pin (L110 & l150)	300
7A	Catergory pin (L200)	IC-49
8	Frame L110	L110
8A	Frame L150	L150
8B	Frame l200	L200A

Series 7560

**IMPORTANT:**

When ordering parts, give PART NUMBER and PART DESCRIPTION. Reference Numbers are used ONLY to point out parts in the drawing and are NOT to be used as ordering numbers.

Repair Parts Kits:

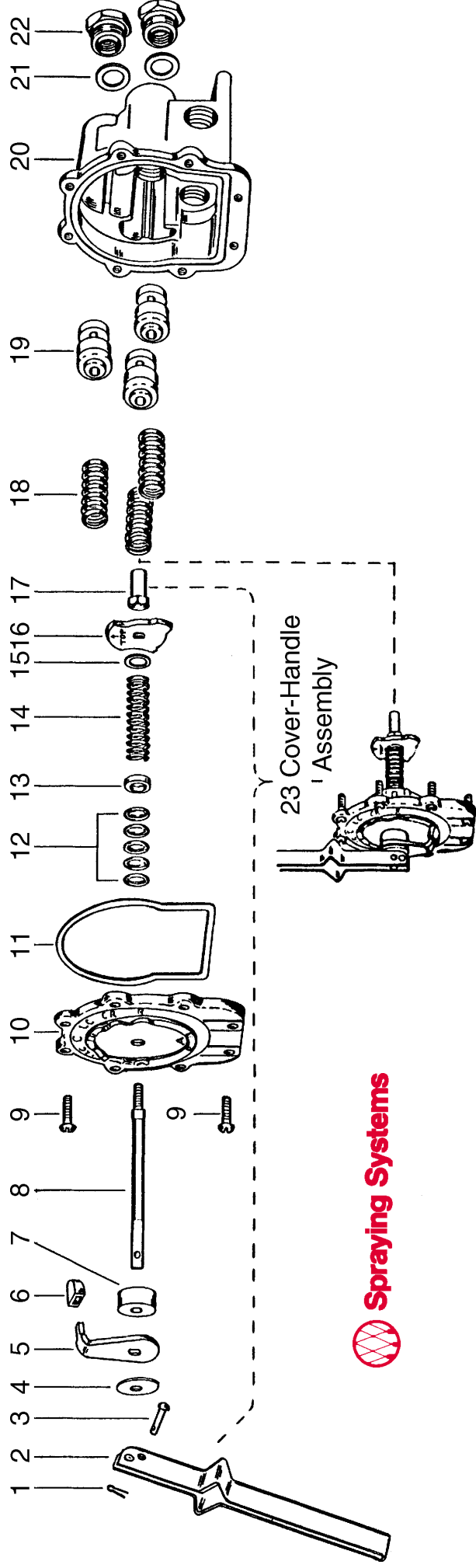
No. 3430-0381 Consists of (8) Ref. 7 Super Rollers, (1) Ref. 6 O-ring, and (2) Ref. 3 Viton seals

No. 3430-0167 Consists of (8) Ref. 7 Polypropylene Rollers, (1) Ref. 6 O-ring, and (2) Ref. 3 Viton seals

Ref. No.	Qty. Req'd.	Part Number	Description
1	1	2300-0020	Bearing Cover
2	2	2008-0001	Sealed Ball Bearing
3	2	2112-0003	Viton Seal (Standard)
3	2	2112-0001	Buna-N Seal (Optional)
4	6	2210-0004	Bolts
5	1	0204-7500C	Endplate (Cast Iron) with Seal
5	1	0204-7500N	Endplate (Ni-Resist) with Seal
5	1	0204-7500X	Endplate (SilverCast) with Seal
6	1	1720-0014	O-ring Gasket for Endplate
7	8	1005-0004	Super Roller (Standard)
7	8	1002-0004	Polypropylene Roller (Optional)
7	8	1052-0004	Buna-N Roller (Optional)
7	8	1055-0004	Teflon Roller (Optional)

Ref. No.	Qty. Req'd.	Part Number	Description
8	1	3430-0745	Rotor Assembly (Std. N & XL)
9	1	0510-7500	Shaft (416 Stainless)
10	1 kit	3420-0003	Base Kit - Sold Separately Includes: (1) Base, (3) Bolts and (3) Washers
11	1	0104-7500C	Body (Cast Iron) with Seal
11	1	0104-7500N	Body (Ni-Resist) with Seal
11	1	0104-7500X	Body (SilverCast) with Seal
12	1	2404-0052	1" Hose Barb
13	1	2300-0022	Shaft Bearing Cover
14	1	1610-0005	Key
15	1	1610-0059	Key (Stainless Steel)
16	1	0308-7560C	Rotor Assembly (Cast Iron only)

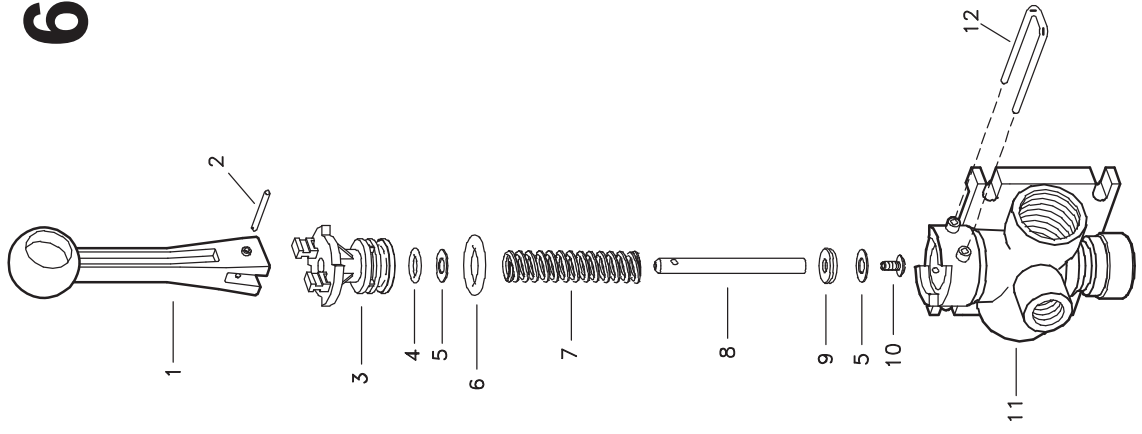
NO. AA17 - TEEVALVE



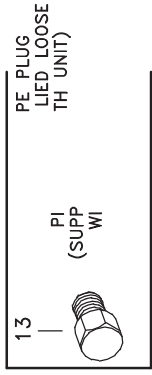
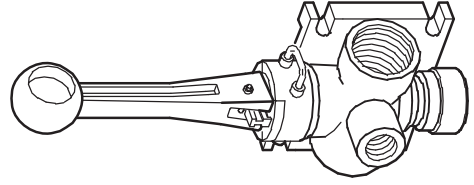
Item	Part No.	Description
*1	CP8012-1/2-SS	1/16" x 1/2" Cotter Pin, Stainless Steel
2	CP6849-1-IZP	Handle, Steel, Zinc Plated
*3	CP7206-IZP	Rivet, Steel, Zinc Plated
*4	CP6976-IZP	Handle Washer, Steel, Zinc Plated
5	CP12128-IZP	Selector Shield, Steel, Zinc Plated
*6	CP12127-CE	Selector Shield Tip, Celcon (Gray)
7	CP12129-CE	Spacer, Celcon (Gray)
8	CP6972-SS	Main Stem, Stainless Steel
*9	CP7980-IZP	Screws, Steel, Zinc Plated (8 Req'd)
10	CP12126-AL	Cover Plate, Aluminum
*11	CP6975-BU	Gasket, Buna-N
*12	CP5809-LEA	Packing, Thermo-Leather (5 Req'd)
13	CP12130-SS	Packing Gland, Stainless Steel
14	CP7254-SS	Main Spring, Stainless Steel
15	CP7987-SS	Washer, Stainless Steel
16	CP6971-AL	Selector Cam, Aluminum
17	CP6973-SS	Guide Nut, Stainless Steel

Item	Part No.	Description
18	CP6959-SS	Valve Spring, Stainless Steel (3 Req'd)
19	CP6956-CE	Valve Stem, Celcon (3 Req'd)
20	CP6934-1/2-AL	Body, Aluminum (For Models 17A thru 17F)
	CP6934-3/4-AL	Body, Aluminum (For Models 17G thru 17L)
	CP6934-1 1/2-AL	Body, Aluminum (For Models M thru S)
	CP6934-1 3/4-AL	Body, Aluminum (For Models T thru Y)
*21	CP6958-POL	Seat Plate, Polyethylene (3 Req'd)
22	CP7261-AL	Outlet Adapters, Aluminum (3 Req'd.) (For #17A, G, M, T)
	CP6957-AL	Outlet Adapters, Aluminum (3 Req'd.) (For #17B, H, N, U)
	CP7262-AL	Outlet Adapters, Aluminum (3 Req'd.) (For #17C, I, P, V)
	CP7350-AL	Outlet Adapters, Aluminum (3 Req'd.) (For #17D, J, Q, W)
	CP7735-AL	Outlet Adapters, Aluminum (3 Req'd.) (For #17E, K, R, X)
	CP7902-AL	Outlet Adapters, Aluminum (3 Req'd.) (For #17F, L, S, Y)
23	AB17-KIT	Cover Handle Assembly (Includes all items 1 thru 17)
	AB17.1-KIT	Spare Parts Kit (Includes all items with *)
	AB17.1-KIT	Spare Parts Kit (Includes #AB17 - Kit plus item #10 cover plate)

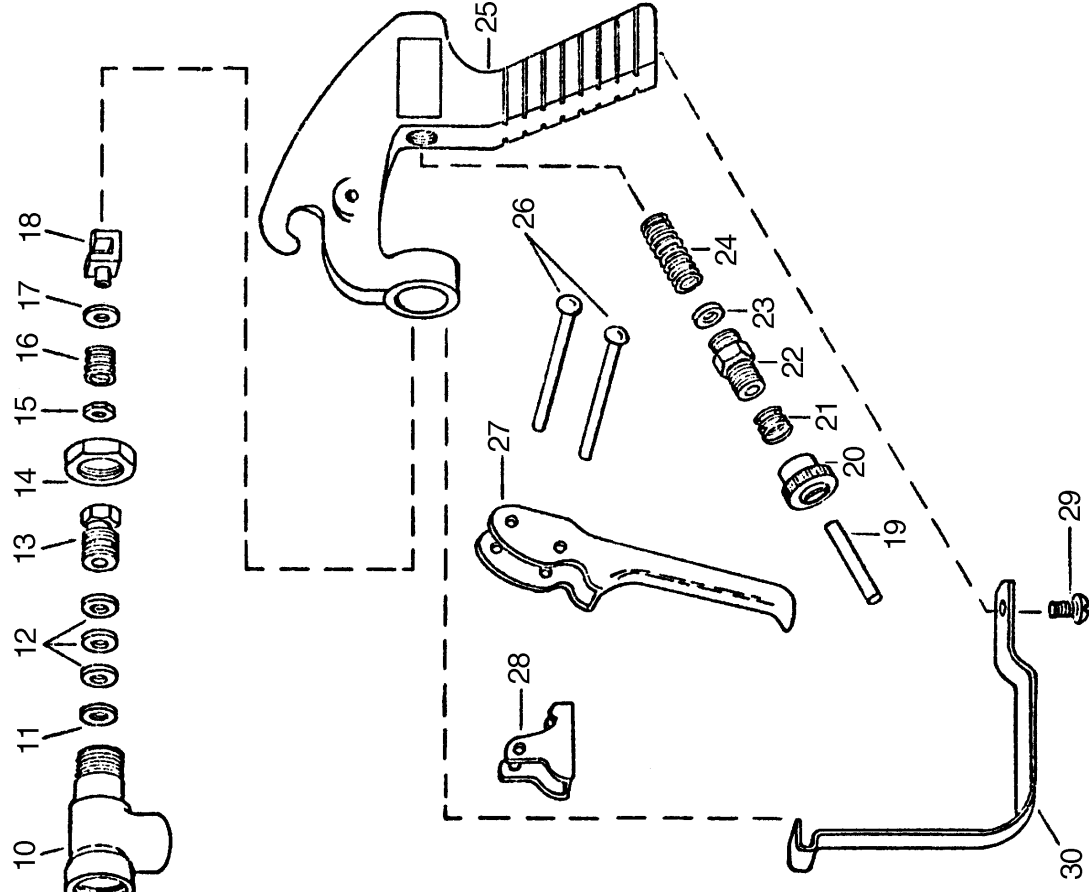
6B Directo Valve



ITEM	PART NO.	DESCRIPTION	
1	CP36301-NY	HANDLE, NYLON (GRAY)	
2	CP36308-SS	GROOVE PIN, TYPE 303 STAINLESS STEEL	
3	CP36302-PP	BODY INSERT, POLYPROPYLENE (BLACK)	
*	4	CP7717-2/108-VI	O-RING, VITON
*	5	CP36307-PPB	WASHER, POLYPROPYLENE (BLACK) 2 RFQ'D
*	6	CP7717-2/209-VI	O-RING, VITON
	7	CP36306-302SS	SPRING, TYPE 302 STAINLESS STEEL
	8	CP36304-SS	STEM, TYPE 303 STAINLESS STEEL
	9	CP38726-VI	SHUT-OFF WASHER, VITON
10	CP38725-SS	PHILLIPS HEAD SCREW, TYPE 302 STAINLESS STEEL	
11	CP36303-PP	BODY (NPT), POLYPROPYLENE (BLACK) (FOR MODEL AA6B)	
12	CP36309-302SS	RETAINING CLIP, TYPE 302 STAINLESS STEEL	
13	8400-1/4-PPB	PIPE PLUG (NPT), POLYPROPYLENE (BLACK) (FOR MODEL AA6B)	
		No. AA6B Directo Valve Manual Control Valve (NPT Threads)	
		PK-AB6B-KIT Spare Parts Kit (Includes all items marked with *)	



No. 43L & No. 43H GUNJETS (13" Extension)



Item	Part No.	Description
1	Brass (#43-)	
2	Aluminum (#43-AL)	
3	1325-AL	Cap, Brass or Aluminum
4	D-**	Orifice disc, hardened stainless steel
5	4743-NY	Gasket, nylon
6	10566-AL	Nozzle housing, brass or aluminum
7	10565-AL	Seat plug, seat plate, washer & core subassy.
8	10571-AL	Guide vane, brass or aluminum
9	6943-AL	Gasket, aluminum (2 Req'd)
10	19238-416SS	Stem, type 416 stainless steel
11	6604-AL	Tubing, brass or aluminum
12	6492-AL	Inlet body, brass or aluminum
13	6601-302SS	Packing washer, type 302 stainless steel
14	6602-LEA	Packing, leather (3 Req'd) (Standard)
15	6602-TEF	Packing, teflon (3 Req'd) (Optional)
16	19237-AL	Packing screw, brass or aluminum
17	6599-IZP	Locknut, brass or steel-zinc plated
18	9641-INP	Stem nut, steel-nickel plated
19	6595-SS	Trigger stop spring, stainless steel
20	7991-IZP	Washer, steel-zinc plated
21	6597-INP	Trigger guide, steel-nickel plated
22	6591-SS	Spring stud, stainless steel
23	6589-IZP	Stop adj nut, steel-zinc plated
24	6594-SS	Spring for Stop adj nut, stainless steel
25	6588-IZP	Spring screw, steel-zinc plated
26	6592-302SS	Spring guide washer, type 302 stainless steel
27	6593-1-SS	Main spring, stainless steel (For #43L-)
28	6593-2-SS	Main spring, stainless steel (For #43H-)
29	14477-1-AL	Handle body, aluminum
30	7623-IZP	Rivet, steel-zinc plated (2 Req'd)
31	6509-INP	Trigger, steel-nickel plated
32	6510-INP	Trigger stop, steel-nickel plated
33	11757-INP	Screw, steel-nickel plated
34	13798-INP	Trigger Guard, steel-nickel plated
35	Gunjet No. 43L- Brass, complete, for pressures up to 200 PSI	
36	Gunjet No. 43L-AL- Aluminum, complete, for pressures up to 200 PSI	
37	Gunjet No. 43H- Brass, complete, for pressures from 200 to 800 PSI	
38	Gunjet No. 43H-AL- Aluminum, complete, for pressures from 200 to 800 PSI	
39	AB43-KIT Spare Parts Kit (Includes all items marked with *)	
40	AB43-AL-KIT Spare Parts Kit (Includes all items marked with *)	
41	ABCK43-KIT (Conversion kit for Adj. stem) - items 8, 13 & 15	
42	ABCK43-AL-KIT (Conversion Kit for Adj. Stem) - Items 8, 13 & 15	

**Specify Orifice Disk Size

MOUNTING AND ASSEMBLY INSTRUCTIONS

FOR 3 POINT HITCH SPRAYERS 30 and 50 GALLON

Mount sprayer on tractor and use your top link to level frame. Use the lift arm adjustments to level tank and frame laterally. Install lift arm stabilizer to eliminate side sway while operating.

PUMP....

1. Install pump on tractor PTO shaft and make sure that the pump you are using is recommended for the PTO speed which you intend to use. When in doubt ask your dealer for assistance. Make sure the quick coupler is locked onto tractor PTO. Make sure pump stabilizer, (the L shaped bracket attached to pump), is placed so the pump will not rotate with PTO shaft.
2. Be sure to check arrows on the pump that indicate proper rotation of the pump.
3. Be sure the suction hose from tank to pump is not kinked or collapsed, and run it as straight as possible. Be sure all clamps are tight and in place.
4. Never operate any sprayer pump dry. When starting a new pump and every time it is operated thereafter, the pump should start displacing liquid within 15 seconds. If it does not, stop the pump and check all hoses, valves, and strainer between the pump and tank.
5. After use, flush pump and the rest of system with clean water.
6. For winter storage or if freezing conditions will be encountered flush pump and rest of system with 50/50 mixture of water and antifreeze.

BEFORE GOING TO THE FIELD....

1. Look inside your new sprayer tank and make sure it is clean.
2. Fill tank about half full with clean water –DO NOT ADD ANY CHEMICALS AT THIS TIME.
3. Make sure the valve in the suction line on the bottom of the tank is full open.
4. Turn adjusting screw on the pressure regulator valve counter-clockwise until it is almost all the way out.

5. Start the pump slowly and increase speed of tractor PTO to about 1200 rpm while checking to make sure liquid is passing through pump and back into tank.
6. Turn the adjusting screw on pressure regulator valve clockwise and increase pressure to approximately 10 PSI above the pressure you expect to use in the field.
7. Open boom control valve and check all fittings for possible leaks. Check all hose connections make sure all clamps are tight.
8. Make very sure that at no time will pressure exceed the capacity of the gauge. This should be checked with the booms shut off and with pto at speed.
9. AT ALL TIME BE SURE YOU HAVE A RETURN WATER FLOW TO TANK. NEVER SHUT REGULATOR VALVE ALL THE WAY OFF.
10. Inspect the inside of the tank again for good agitation while the pump is running. Your VAN'S SPRAYER gives full time agitation while pump is running. If for some reason you do not have good agitation, it is possible some type foreign material is in return line or agitator. Recheck return line and agitator and clean as needed.
11. If the preceding steps have been followed and all corrective action necessary has been taken, you are now ready to calibrate your unit for field operation.

CALIBRATION....

It is necessary to calibrate your sprayer before beginning the spraying job. We will not attempt here to give you a calibration procedure, however we suggest the section in the Spraying Systems catalog on calibration, you can also refer to page 14 of this manual for calibration chart.

No matter what method you use, or what you use, please remember the following points:

1. Always calibrate with clean water only.
2. Always calibrate under field conditions.
3. Never rely on a tractor speedometer for accuracy.

CAUTIONS AND PRE-CAUTIONS(PLEASE READ CAREFULLY)

If you have followed all the instructions up to this point, your new VAN'S SPRAYER is ready to go to work and do a good job. These last instructions can and will make your spraying job more pleasant.

- A. **NEVER OPERATE SPRAYER WITHOUT PROPER SAFETY PRECAUTIONS.**

- B. **ALWAYS FILL TANK A LEAST HALF FULL AND HAVE PUMP OPERATING BEFORE ADDING CHEMICALS. IF YOU ARE USING A WETTABLE POWDER, PRE-MIX IN A BUCKET OF WATER BEFORE ADDING TO TANK.**
- C. **NEVER OPERATE PUMP AFTER TANK IS EMPTY –DO NOT OPERATE DRY.**
- D. **ALWAYS ADJUST PRESSURE REGULATOR WITH SPRAYER IN OPERATION AND NEVER EXCEED THE CAPACITY OF THE GAUGE.**
- E. **NEVER USE A METAL OBJECT TO CLEAN A NOZZLE, A TOOTHPICK, TOOTHBRUSH, MATCH, OR AIR WILL DO A BETTER AND SAFER JOB.**
- F. **WHEN TRANSPORTING YOUR SPRAYER ON A ROAD OR HIGHWAY, BE SURE TO SECURE THE BOOMS IN THE BRACKETS PROVIDED FOR THIS PURPOSE. ALWAYS USE FLASHER LIGHTS OR OTHER DEVICES TO GIVE ADEQUATE WARNING TO OTHER VEHICLES.**
- G. **REMEMBER—NOZZLE DO WEAR CAUSING SPRA PATTERN DISTORTION AND VARYING SPRAY VOLUME RATES. REPLACE NOZZLES AS OFTEN AS NEEDED TO ASSURE PROPER, UNIFORM SPRAY COVERAGE AND RATES. CALIBRATE DAILY. STAINLESS STEEL NOZZLES PROVIDE THE MOST WEAR RESISTANCE WHEN COMPARED TO OTHER TIP MATERIALS.**
- H. **ALWAYS USE CLEAN WATER AND CHECK STRAINER DAILY.**
- I. **CHECK AGITATION IN TANK FREQUENTLY—AT LEAST TWICE DAILY.**
- J. **KEEP ALL HOSES IN GOOD SHAPE –REPLACE WORN OR DAMAGED HOSE WHEN NEEDED—BE SURE SUCTION HOES IS IN GOOD CONDITION.**
- K. **CLEAN UP WHEN JOB IS COMPLETED. ALWAYS CLEAN SPRAYER AFTER EACH USE.**
- L. **NEVER CHANGE FROM ONE CHEMICAL TO ANOTHER WITHOUT THOROUGHLY CLEANING SPRAYER.**

CLEANING—STORING—MAINTENANCE

The least expensive thing you can do to prolong the life of your new VAN'S SPRAYER is to keep it clean. Please follow these simple instructions after the spraying job is done.

1. Clean thoroughly –Remove any chemical residues from tank, pump, hoses, boom strainers and nozzles by flushing completely the entire system with clean water and follow with a solution of approximately ONE QUART of household AMMONIA to 25 Gallons of water.
2. Remove all nozzle tips and strainers from booms and clean thoroughly with a toothbrush or toothpick. Leave nozzle tips to soak in can of light oil or diesel fuel.
3. DRAIN TANK COMPLETELY and leave it to dry outside. Make sure all chemical has been removed. THIS IS VERY IMPORTANT WITH WETTABLE POWDERS.
4. Remove pump and make sure no liquid is left inside. Fill pump with radiator rust inhibitor and plug outlets to keep inside during storage.
5. Drain complete system and fill with antifreeze during winter storage to prevent freezing.

6. STORE COMPLETE SPRAYER IN DRY PLACE OUT OF THE WEATHER.
7. CAUTION : NEVER CHANGE FROM ONE TYPE ONE CHEMICAL TO ANOTHER WITHOUT THOROUGHLY CLEANING SPRAYER.

TROUBLE SHOOTING THE SPRAYER

PROBLEM	PROBABLE CAUSE	POSSIBLE REMEDY
Erratic pressure indication on pressure gauge	air leaking into suction line	Tighten all fittings and hoses between pump and tank
	Trash in control valve or pressure gauge	Remove and clean parts
Pressure gauge fluctuates excessively	Suction line kinked or clogged	Remove suction line and clean-check tank and strainer
	Air leak in suction hose	Replace hose
	Suction hose collapsed	Replace hose
	Pump is sucking in air through the suction line or air has not been entirely evacuated from strainer	Examine the suction hose and make sure it is firmly secured. Run the pump with outlet hose open to evacuate air from pump
Pump loses suction	Suction strainer clogged	Clean strainer and tank
	Air leak in suction hose	Replace hose
	Suction hose collapsed	Replace hose
	Pump air locked	Remove discharge line and pump liquid through pump
	Pump worn and clearances too great	Replace or repair pump
Pump does not draw water	Seals worn out or deteriorated	Replace pump seals
	One or more valves are seated improperly	Examine the valve seatings and clean them
	Suction line is plugged or collapsed clogged strainer	Examine suction line Clean strained
Noisy pump	Excessive pump speed	Slow the pump
	Air leak in suction line	Replace suction hose
	Partially clogged strainer	Clean strainer
Pump shows decreased capacity	Suction strainer clogged	Clean strainer
	Air leak in suction hose	Rplace suction hose
	Moving parts worn	Replce worn parts
	Worn seal	Replace seal
	Pump roller stuck	Clean pump inside
	Pump operating too slow	Speed up pump
	Nozzles too large for capacity of pump	Use smaller nozzles or reduce number of nozzles on boom
Pump leaks	Worn out seal	Replace seal

BOOMINATOR®

All Regular Pattern Spray Nozzles were tested at a height of 36 inches. (Recommended operating height is between 18 & 48 inches.)

SPRAY NOZZLES REGULAR PATTERN

* Water was used for all calculations listed.

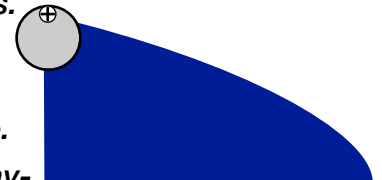
1400 RIGHT or LEFT	(1/4" MNPT)		SPEED (MPH)											
	PSI	GPM	SPRAY PATTERN	2	3	4	5	6	7	8	9	10	11	12
				GALLONS PER ACRE										
	20	1.7	17 ft.	25	17	12	10	8	7	6	5.5	5	4.5	4
	30	2.0	17 ft.	30	19	15	12	10	8	7	6.5	6	5	4.5
	40	2.5	17 ft.	36	24	18	15	12	10	9	8	7	6.5	6

Roadside Spray Nozzles

All Roadside Spray Nozzles were tested at a height of 36 inches. (Recommended operating height is between 18 & 48 inches.)

These nozzles are designed for right-hand mounting ONLY and provide a wide spray pattern without kickback under the nozzle.

These nozzles are designed for road-side and right-of-way spraying.

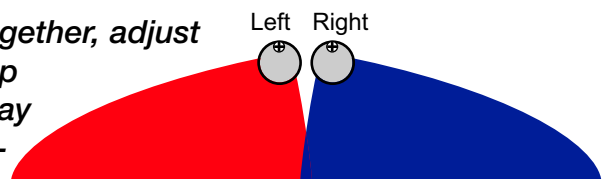
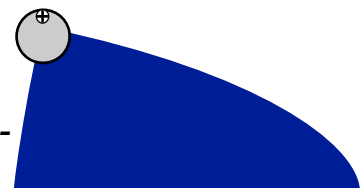


Regular Pattern Spray Nozzles

All Regular Pattern Spray Nozzles were tested at a height of 36 inches. (Recommended operating height is between 18 & 48 inches.)

These nozzles are designed for left-hand or right-hand mounting and provide a wide spray pattern with approximately 15° of kickback under the nozzle.

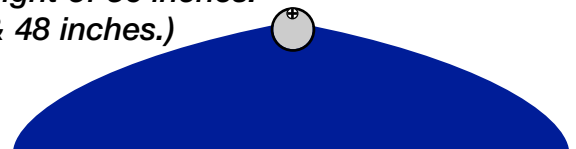
When using left-hand and right-hand nozzles together, adjust the nozzles to allow for enough kickback overlap between the nozzles to prevent streaking in spray coverage. Nozzles can be rotated to adjust distance of spray pattern outward or amount of kickback under the nozzle.



Full Pattern Spray Nozzles

All Full Pattern Spray Nozzles were tested at a height of 36 inches. (Recommended operating height is between 18 & 48 inches.)

These nozzles are designed to provide a full left-hand to right-hand spray pattern from a single centrally mounted nozzle.



Spraying Safety

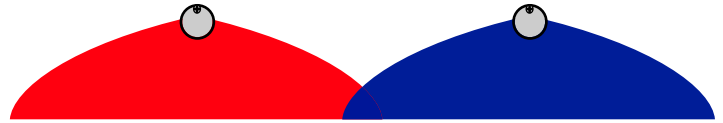
ALWAYS WEAR PROTECTIVE CLOTHING WHEN SPRAYING AND / OR HANDLING ANY AND ALL CHEMICALS.

Nozzle Height Adjustment

Nozzles can be used at various heights within the recommended range. However, this will affect the spray pattern width and the gallons per acre (GPA) applied. Refer to conversion formulas on page 11.

Multi-Pass Spraying

When multi-pass spraying, be sure to overlap the ends of spray patterns 12 - 16 inches to ensure even coverage.



Adverse Wind Conditions

With boomless spray nozzles, as with other spraying methods, high or gusty wind conditions can cause drifting or pattern movements, adversely affecting spray coverage. If this occurs, wait for more favorable conditions before continuing.

BOOMINATOR®

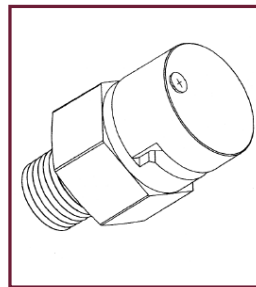
CONVERSION FORMULAS

Gallons per 1000 sq. ft. = $\frac{\text{GPM} \times 136}{\text{MPH} \times \text{Spray Width in Inches}}$

Gallons per Acre = $\frac{\text{GPM} \times 5940}{\text{MPH} \times \text{Spray width in Inches}}$



TOW BEHIND SPRAYER WITH FULL PATTERN BOOMINATOR® SPRAY NOZZLE



**YOU CAN TELL
It's A
BOOMINATOR®
NOZZLE ON SIGHT**

Boominator's® unique round head shape lets you know it is a genuine Boominator® nozzle. It is also patented and with patents pending. Boominator®.



ATV MOUNTED SPRAYER WITH 2 REGULAR PATTERN BOOMINATOR® NOZZLES



TRUCK MOUNTED SHORT PATTERN BOOMINATOR® SPRAY NOZZLES

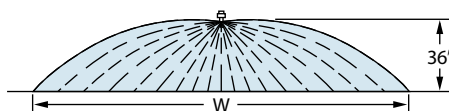


Type 1/4-KLC and Type 3/4-KLC
 1/4" NPT male and 3/4" NPT male
 pipe connections



The KLC FieldJet nozzle is typically used to spray areas not accessible with a boom sprayer. Its one-piece nozzle design projects spray to both sides to form a wide swath flat spray. The round orifice minimizes clogging. Uniformity across the swath is not as good as with a properly operated boom sprayer.* Available in brass or stainless steel.

*Uniformity can be optimized by double overlapping spray swaths on successive sprayer passes. Remember, this also doubles the application volume.



How to order:

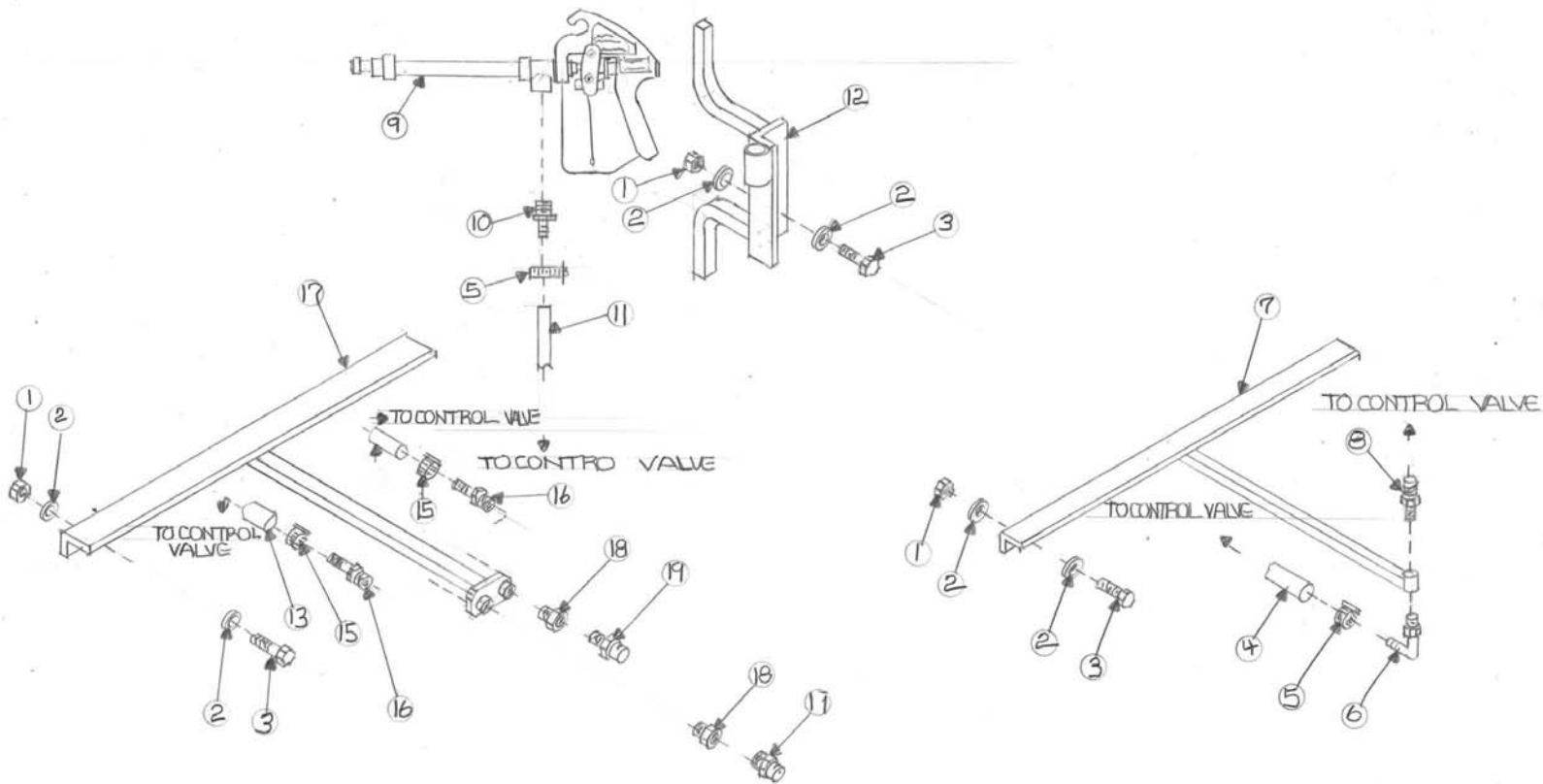
Specify part number and material.

Example: 1/4KLC-SS18 – Stainless Steel

NOZZLE	PIPE CONNECTION	PSI	CAPACITY ONE NOZZLE IN GPM	"W" IN FEET	GPA				GALLONS PER 1000 SQ. FT.			
					3 MPH	4 MPH	5 MPH	8 MPH	3 MPH	4 MPH	5 MPH	8 MPH
1/4-KLC-5	1/4"	20	0.71	17	6.9	5.2	4.1	2.6	.16	.12	.09	.06
		30	0.87	18	8.0	6.0	4.8	3.0	.18	.14	.11	.07
		40	1.00	21	7.9	5.9	4.7	2.9	.18	.13	.11	.07
1/4-KLC-9	1/4"	20	1.27	18	11.6	8.7	7.0	4.4	.27	.20	.16	.10
		30	1.56	19	13.5	10.2	8.1	5.1	.31	.23	.19	.12
		40	1.80	21	14.1	10.6	8.5	5.3	.32	.24	.19	.12
1/4-KLC-18	1/4"	20	2.55	20	21	15.8	12.6	7.9	.48	.36	.29	.18
		30	3.12	21	25	18.4	14.7	9.2	.56	.42	.34	.21
		40	3.60	22	27	20	16.2	10.1	.62	.46	.37	.23
1/4-KLC-36	1/4"	20	5.09	22	38	29	23	14.3	.87	.66	.52	.33
		30	6.24	24	43	32	26	16.1	.98	.74	.59	.37
		40	7.20	26	46	34	27	17.1	1.0	.78	.63	.39
3/4-KLC-50	3/4"	20	7.07	23	51	38	30	19.0	1.2	.87	.70	.44
		30	8.66	26	55	41	33	21	1.3	.94	.75	.47
		40	10.0	28	59	44	35	22	1.3	1.0	.81	.51
3/4-KLC-72	3/4"	20	10.2	25	67	50	40	25	1.5	1.2	.92	.58
		30	12.5	29	71	53	43	27	1.6	1.2	.98	.61
		40	14.4	31	77	57	46	29	1.8	1.3	1.1	.66
3/4-KLC-108	3/4"	20	15.3	28	90	68	54	34	2.1	1.5	1.2	.77
		30	18.7	33	94	70	56	35	2.1	1.6	1.3	.80
		40	21.6	36	99	74	59	37	2.3	1.7	1.4	.85

Note: Always double check your application rates. Tabulations are based on spraying water at 70°F (21°C). See pages 173–187 for useful formulas and information.

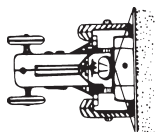
ITEM	DESCRIPTION	PART NO.
1	Nut 1/2"	HN12C
2	Flat washer 1/2"	FW12
3	Bolt 1/2" 1 1/2"	CS12112C
4	Hose black ag 3/8"	10031720
5	Hose clamp 3/8"	6H
6	Elbow 1/4" mpt x 3/8" barb 90 nylon	EL1438
7	KLC tip mount 110 gallon and up	H15A
8	KLC tip size 18	1/4KLC-18
9	Hand gun	AA43LA-AL6
10	Hose shank 1/2"mpt x 3/8"barb nylon	A1238
11	Hose black ag 3/8"	10031720
12	Gun hose rack	H11R
13	Hose black ag 1/2"	10031730
14	Hose black ag 1/2"	10031730
15	Hose clamp 1/2"	8H
16	Hose shank 3/8"mpt x 1/2"barb nylon	A3812
17	Boominator tip mount 110 and up	H15
18	Reducer bushing 3/8"mpt x 1/4"fpt galvanized	GB3814
19	Boominator tip	BN1400L/R



Tip bracket is shown in transport position.
Tip should point to rear. See previous page .



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