



# SP1® BACKPACK SPRAYER



### State-Of-The-Art Operation & Comfort

By integrating a convenient size sprayer with a knapsack, the SP1® Sprayer offers you the most comfortable way possible to perform professional spraying projects.

The pumping handle has been designed to fold against the side of the sprayer for easy storage. In addition, the spray wand clips onto the handle, freeing your hands to perform other tasks while still wearing the sprayer on your back. This innovation also keeps the wand from falling to the ground and being lost or damaged.

### The Diaphragm Pump – The heart of the SP1

The diaphragm pump is the working heart of the SP1 Sprayer. It has been skillfully engineered so there is no friction between moving parts. There are no nuts or bolts to tighten or adjust, thus eliminating leaks from worn out O-rings, gaskets or loose nuts and bolts.

### Designed For Safety

SP Systems™ SP1 Sprayer offers unique features for increased safety and ease of operation. We've integrated a check valve on the cap to prevent possible leaks caused by tipping. We've also enlarged the mouth and cap to 6" for easier filling and cleaning. Next we added a convenient carrying handle to make the unit easier to transport and use.

### Made To Last

The SP1 Sprayer has been designed to virtually eliminate repairs. We have avoided the use of all corrosive metal parts in the internal mechanism of the sprayer, thus eliminating rust and related problems. The polyethylene tank has been treated with UV inhibitors that protect it against harmful ultraviolet rays.

The unit also features polyester straps (as opposed to leather or plastic) that will not absorb chemicals and can be easily washed. Another benefit of the straps is that they won't become brittle and crack.

### More Advantages Of The SP1

The SP1 features an adjustable nozzle that goes from a stream to a cone (mist). The unit will accept TeeJet® nozzles, as well as most common spray nozzles.

Furthermore, the SP1 diaphragm pump can maintain a higher pressure than any other diaphragm pump on the market. It reaches as much as 70 PSI while other units are limited to a maximum of 40 PSI.

### Specifications

- Body: Polyethylene plastic*
- Capacity: 4 gallons*
- Maximum working pressure: 70 PSI*
- Weight (empty): 9.92 lbs.*
- Weight (full): 41.92 lbs.*

## MOTORIZED BACKPACK



### Model SP 818

- 4 Cycle air cooled gas motor
- Double piston pump
- 6.2 Gallon capacity
- Maximum pressure 300 PSI
- Ship weight 22 lbs.

## SPRAY BOOMS

Dramatically reduce the time needed to do the job by doubling or tripling the width of your spray path. Helps ensure uniform coverage and reduce chemical use. Can use with any of our nozzles.

**Two Nozzle Boom** - covers approximately 40"  
*Kit W098-EB* (supplied without nozzles)



**Three Nozzle Boom** - covers approximately 60"  
*Kit W0420-EB* (supplied without nozzles).

## SPRAY SHIELDS



Effectively protect surrounding plants from wind-borne mist, confine spray within a 110° or 80° area.

*Kit W099-SD (16")*  
*Kit W117-SD (9")*

## Shop Talk

### Calibrating Backpack Sprayers

Maintaining a constant walking speed is the most important objective when using a backpack or knapsack sprayer. When spraying, either hold the nozzle steady at a constant height and walk back and forth or swing the nozzle in a sweeping, overlapping motion. When making multiple passes in a turf area, overlap the area between the passes for a uniform application.

Calibration of a backpack sprayer for applying chemicals per 1000 FT<sup>2</sup> may be determined in the following manner. Measure an amount of water and pour it into the sprayer. Next, spray a measured area of exactly 1000 FT<sup>2</sup> (for example: 20 ft. x 50 ft.). After spraying the area, measure the amount of water remaining in the tank. Subtract the amount of water remaining in the sprayer from the amount with which you started; this difference is the application volume.

- Example:
- 4 gallons of water are poured into the backpack sprayer.
  - 2 gallons are left in the sprayer after spraying a measured 1000 FT<sup>2</sup> area.
  - 4 gallons – 2 gallons = 2GAL/1000FT<sup>2</sup>



# TEEJET® - LOW-PRESSURE FLAT SPRAY TIPS



## 65°, 80° & 110° LP Series Stainless Steel and Brass

- Less clogging
- Longer wear life
- Larger droplets to reduce drift

How to order:

Example: TP8002LP-SS (Stainless Steel)  
TP6505LP (Brass)

The LP TeeJet® spray tips are designed specifically to operate as low as 15 PSI, providing the same spray performance, spray angle, flow rate and liquid distribution at 15 PSI, as the standard TeeJet® tips at 40 PSI. Lower operating pressures and larger orifices increase wear life of tips. This helps to diminish clogging problems and provides larger spray droplets than those from the standard tips. Patented orifice inlet design provides good tapered edge liquid distribution at lower pressures.

See capacity chart on page 106

# CONEJET® - #5500 ADJUSTABLE SPRAY TIP

Adj. ConeJet Tip No.	Performance	Liquid Pressure in PSI											
		20 PSI		30 PSI		40 PSI		60 PSI		100 PSI		150 PSI	
		A	B	A	B	A	B	A	B	A	B	A	B
5500-X1	Capacity-GPM	—	.049	.015	.061	.017	.07	.02	.086	.025	.11	.028	.14
	Spray Angle	—	38°	—	54°	—	71°	—	80°	—	83°	—	—
	Max. Throw-Ft.	—	19	1	22	1.5	24	1.5	26	1.5	26	1.5	26
5500-X2	Capacity-GPM	.025	.091	.03	.11	.033	.13	.04	.16	.05	.20	.058	.25
	Spray Angle	40°	—	60°	—	68°	—	75°	—	80°	—	83°	—
	Max. Throw-Ft.	1.5	23	1.5	26	2	27	2	28	2	28	2	28
5500-X3 5500-PPB-X3	Capacity-GPM	.037	.13	.045	.17	.05	.19	.058	.23	.073	.30	.088	.37
	Spray Angle	57°	—	68°	—	72°	—	76°	—	80°	—	82°	—
	Max. Throw-Ft.	2	27	2	30	2	31	2	31	3	31	3	31
5500-X4	Capacity-GPM	.05	.18	.058	.22	.067	.25	.08	.31	.10	.40	.12	.49
	Spray Angle	61°	—	70°	—	73°	—	77°	—	80°	—	81°	—
	Max. Throw-Ft.	2.5	30	2.5	33	3	34	3	34	3	34	3	34
5500-X5 5500-PPB-X5	Capacity-GPM	.061	.21	.076	.26	.082	.30	.10	.37	.13	.48	.15	.58
	Spray Angle	61°	—	70°	—	74°	—	77°	—	80°	—	81°	—
	Max. Throw-Ft.	2.5	31	2.5	34	3	35	3	35	3	35	3	35
5500-X6	Capacity-GPM	.073	.26	.087	.32	.10	.37	.12	.45	.15	.58	.19	.71
	Spray Angle	65°	—	71°	—	74°	—	77°	—	80°	—	80°	—
	Max. Throw-Ft.	2.5	32	3	35	3	36	3.5	36	3.5	36	3.4	36
5500-X8 5500-PPB-X8	Capacity-GPM	.097	.33	.12	.40	.13	.47	.16	.57	.21	.74	.25	.90
	Spray Angle	66°	—	71°	—	74°	—	77°	—	80°	—	80°	—
	Max. Throw-Ft.	3	34	3	37	3	38	3	38	4	38	4	38
5500-X10	Capacity-GPM	.12	.42	.15	.52	.17	.60	.21	.73	.26	.94	.31	1.2
	Spray Angle	68°	—	72°	—	75°	—	78°	—	80°	—	80°	—
	Max. Throw-Ft.	3	35	3.5	38	3.5	39	4	40	4	40	4	40
5500-X12 5500-PPB-X12	Capacity-GPM	.15	.49	.18	.60	.20	.69	.24	.84	.31	1.1	.38	1.3
	Spray Angle	69°	—	73°	—	76°	—	78°	—	80°	—	80°	—
	Max. Throw-Ft.	3.5	36	4	39	4	40	4	41	4	41	4	41
5500-X14	Capacity-GPM	.17	.55	.20	.67	.23	.78	.29	.95	.37	1.2	.45	1.5
	Spray Angle	70°	—	74°	—	76°	—	78°	—	80°	—	80°	—
	Max. Throw-Ft.	3.5	37	4	40	4	41	4	41	4.5	41	4.5	41
5500-X18 5500-PPB-X18	Capacity-GPM	.21	.69	.26	.84	.30	.97	.37	1.2	.47	1.5	.58	1.9
	Spray Angle	71°	—	75°	—	77°	—	78°	—	80°	—	79°	—
	Max. Throw-Ft.	4	38	4	41	4	42	4	42	5	42	5	42
5500-X22	Capacity-GPM	.26	.83	.32	1.0	.37	1.2	.45	1.4	.58	1.9	.70	2.3
	Spray Angle	71°	—	75°	—	78°	—	79°	—	80°	—	78°	—
	Max. Throw-Ft.	4	39	4.5	41	5	42	5	42	5	42	5	42
5500-X26	Capacity-GPM	.31	.98	.37	1.2	.43	1.4	.53	1.7	.68	2.2	.83	2.7
	Spray Angle	72°	—	76°	—	78°	—	79°	—	80°	—	78°	—
	Max. Throw-Ft.	4.5	40	5	42	5	43	5.5	43	5.5	43	5.5	43



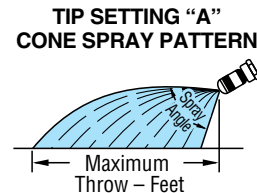
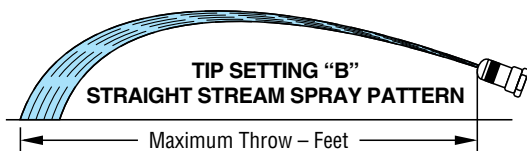
#5500-PP

The 5500 Adjustable ConeJet® tip is also available in a polypropylene version. The polypropylene tip has the same performance characteristics as the brass tip and provides excellent chemical resistance. This tip's light weight makes it well-suited for use on hand held and backpack type sprayers.



#5500 for  
Capacities from  
0.071 to 1.9 GPM

Knurled body of tip rotates through a half turn to provide spray selection from wide angle, finely atomized cone spray to a straight stream spray. Tip settings "A" and "B" represent two extreme points of rotation in tip adjustment.





## CONEJET® - #5500 ADJUSTABLE SPRAY TIP



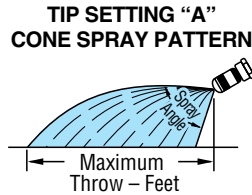
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Refer to Capacity Chart on Page 147

## TEEJET® - LOW-PRESSURE FLAT SPRAY TIPS

Tip No. (strainer screen size)	Liquid Pressure in PSI	Capacity 1 Nozzle in GPM	Gallons Per Acre - 20" Spacing			
			4 MPH	5 MPH	6 MPH	7 MPH
8001LP-SS (100 Mesh)	15	.10	7.4	5.9	5.0	4.2
	20	.12	8.9	7.1	5.9	5.1
	30	.14	10.4	8.3	6.9	5.9
	40	.16	11.9	9.5	7.9	6.8
80015LP-SS 110015LP-SS (50 Mesh)	15	.15	11.1	8.9	7.4	6.4
	20	.17	12.6	10.1	8.4	7.2
	30	.21	15.6	12.5	10.4	8.9
	40	.24	17.8	14.3	11.9	10.2
8002LP-SS 11002LP-SS (50 Mesh)	15	.20	14.9	11.9	9.9	8.5
	20	.23	17.1	13.7	11.4	9.8
	30	.28	21	16.6	13.9	11.9
	40	.33	25	19.6	16.3	14.0
8003LP-SS 11003LP-SS (50 Mesh)	15	.30	22	17.8	14.9	12.7
	20	.35	26	21	17.3	14.9
	30	.42	31	25	21	17.8
	40	.49	36	29	24	21
8004LP-SS 11004LP-SS (50 Mesh)	15	.40	30	24	19.8	17.0
	20	.46	34	27	23	19.5
	30	.57	42	34	28	24
	40	.65	48	39	32	28
8005LP-SS 11005LP-SS (50 Mesh)	15	.50	37	30	25	21
	20	.58	43	34	29	25
	30	.71	53	42	35	30
	40	.82	61	49	41	35
8006LP-SS 11006LP-SS (No Strainer)	15	.60	45	36	30	25
	20	.69	51	41	34	29
	30	.85	63	50	42	36
	40	.98	73	58	49	42
8008LP-SS 11008LP-SS (No Strainer)	15	.80	59	58	50	34
	20	.92	68	55	46	39
	30	1.1	84	67	56	48
	40	1.3	97	78	65	56
8010LP-SS 11010LP-SS (No Strainer)	15	1.0	74	59	50	42
	20	1.2	85	68	57	49
	30	1.4	105	84	70	60
	40	1.6	121	97	81	69



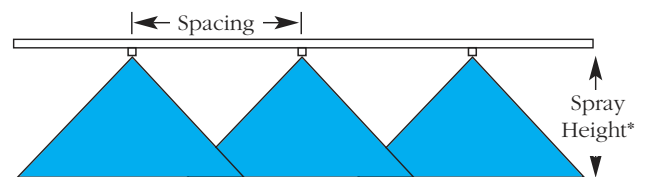
**80° & 110° LP Series  
Stainless Steel and  
Brass**

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- Larger droplets to reduce drift
- Longer wear life

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**How to order:**

Example: **TP8002LP-SS** Stainless Steel  
**TP8002LP** Brass



- Adjust spray height in the field to overlap approximately 30% of each edge of pattern.