TeeJet AI11005-VS

TeeJet AI11005-VS Air Induction Flat Spray Tip User Manual

Model: AI11005-VS

Introduction

This manual provides essential information for the proper use, setup, operation, and maintenance of your TeeJet AI11005-VS Air Induction Flat Spray Tip. Please read this manual thoroughly before using the product to ensure safe and efficient operation.

The TeeJet AI11005-VS is designed for precision and efficiency in agricultural spraying. It features a durable stainless steel insert and polymer insert holder, crafted to deliver a uniform tapered edge flat spray pattern for consistent coverage.

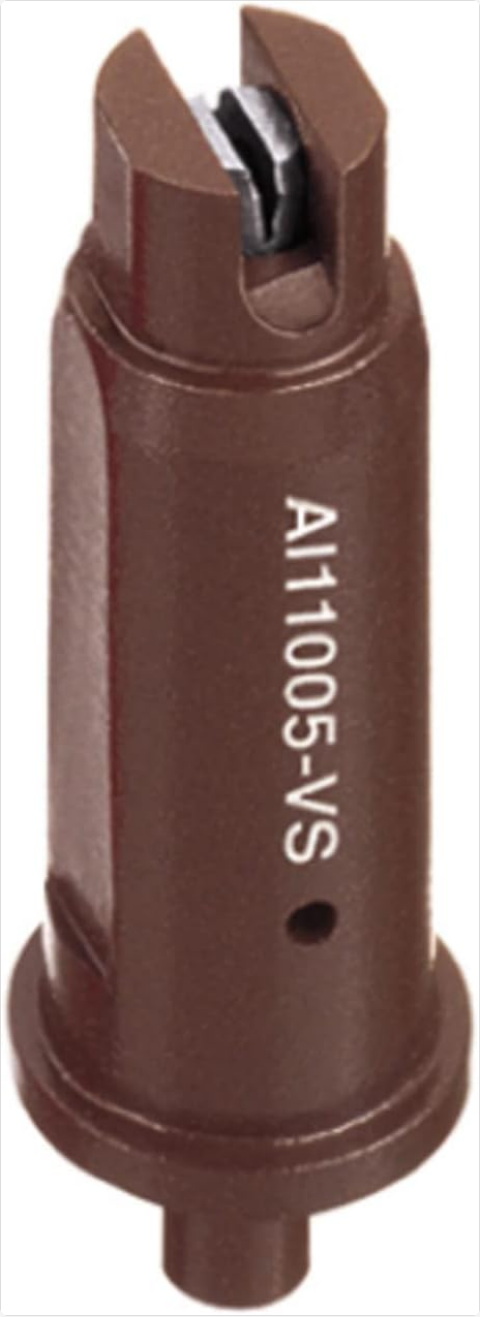

Image: TeeJet AI11005-VS Air Induction Flat Spray Tip. This image shows the brown-colored spray tip with the model number "AI11005-VS" printed on its side. The tip features a narrow opening at the top for spray dispersion.

Setup

Before installation, ensure your spraying equipment is clean and free of debris. Verify that the spray tip is compatible with your existing nozzle body and cap.

1. **Inspect the Tip:** Carefully examine the AI11005-VS spray tip for any signs of damage or manufacturing defects.
2. **Prepare Nozzle Body:** Ensure the nozzle body on your sprayer is clean and the gasket or O-ring is in good condition.
3. **Install Tip:** Insert the AI11005-VS spray tip into the nozzle body. The tip is designed for a 1/4-inch NPT Female inlet connection.
4. **Secure with Cap:** Place the appropriate nozzle cap over the tip and tighten it securely by hand. Avoid over-tightening, which can damage the tip or cap.
5. **Check for Leaks:** After installation, pressurize the system with water and check for any leaks around the nozzle assembly.

For optimal performance, ensure all components are properly seated and sealed.

Operating Instructions

The TeeJet AI11005-VS is an air induction flat spray tip, designed to produce larger, air-filled droplets for reduced drift while maintaining excellent spray coverage.

Application Rate Chart

Refer to the application rate chart below to determine the appropriate pressure (PSI) and speed (MPH) for your desired flow rate (GPM) and coverage. This chart is crucial for achieving accurate and effective spray applications.

AI TeeJet Flat Application Rate Chart

	PSI	DROP SIZE		CAPACITY ONE NOZZLE IN GPM	CAPACITY ONE NOZZLE IN OZ./MIN.	20" GPA								GALLONS PER 1000 SQ. FT.			
		80°	110°			4 MPH	5 MPH	6 MPH	8 MPH	10 MPH	12 MPH	15 MPH	20 MPH	2 MPH	3 MPH	4 MPH	5 MPH
AI80015 AI110015 (100)	30	UC	UC	0.13	17	9.7	7.7	6.4	4.8	3.9	3.2	2.6	1.9	0.44	0.29	0.22	0.18
	40	XC	XC	0.15	19	11.1	8.9	7.4	5.6	4.5	3.7	3.0	2.2	0.51	0.34	0.26	0.20
	50	XC	XC	0.17	22	12.6	10.1	8.4	6.3	5.0	4.2	3.4	2.5	0.58	0.39	0.29	0.23
	60	XC	VC	0.18	23	13.4	10.7	8.9	6.7	5.3	4.5	3.6	2.7	0.61	0.41	0.31	0.24
	70	VC	VC	0.20	26	14.9	11.9	9.9	7.4	5.9	5.0	4.0	3.0	0.68	0.45	0.34	0.27
	80	VC	VC	0.21	27	15.6	12.5	10.4	7.8	6.2	5.2	4.2	3.1	0.71	0.48	0.36	0.29
	90	VC	C	0.23	29	17.1	13.7	11.4	8.5	6.8	5.7	4.6	3.4	0.78	0.52	0.39	0.31
	100	C	C	0.24	31	17.8	14.3	11.9	8.9	7.1	5.9	4.8	3.6	0.82	0.54	0.41	0.33
AI8002 AI11002 (50)	30	UC	UC	0.17	22	12.6	10.1	8.4	6.3	5.0	4.2	3.4	2.5	0.58	0.39	0.29	0.23
	40	XC	XC	0.20	26	14.9	11.9	9.9	7.4	5.9	5.0	4.0	3.0	0.68	0.45	0.34	0.27
	50	XC	XC	0.22	28	16.3	13.1	10.9	8.2	6.5	5.4	4.4	3.3	0.75	0.50	0.37	0.30
	60	XC	VC	0.24	31	17.8	14.3	11.9	8.9	7.1	5.9	4.8	3.6	0.82	0.54	0.41	0.33
	70	VC	VC	0.26	33	19.3	15.4	12.9	9.7	7.7	6.4	5.1	3.9	0.88	0.59	0.44	0.35
	80	VC	VC	0.28	36	21	16.6	13.9	10.4	8.3	6.9	5.5	4.2	0.95	0.63	0.48	0.38
	90	VC	VC	0.30	38	22	17.8	14.9	11.1	8.9	7.4	5.9	4.5	1.0	0.68	0.51	0.41
	100	C	C	0.32	41	24	19.0	15.8	11.9	9.5	7.9	6.3	4.8	1.1	0.73	0.54	0.44
AI80025 AI110025 (50)	30	UC	UC	0.22	28	16.3	13.1	10.9	8.2	6.5	5.4	4.4	3.3	0.75	0.50	0.37	0.30
	40	XC	XC	0.25	32	18.6	14.9	12.4	9.3	7.4	6.2	5.0	3.7	0.85	0.57	0.43	0.34
	50	XC	XC	0.28	36	21	16.6	13.9	10.4	8.3	6.9	5.5	4.2	0.95	0.63	0.48	0.38
	60	XC	XC	0.31	40	23	18.4	15.3	11.5	9.2	7.7	6.1	4.6	1.1	0.70	0.53	0.42
	70	VC	VC	0.33	42	25	19.6	16.3	12.3	9.8	8.2	6.5	4.9	1.1	0.75	0.56	0.45
	80	VC	VC	0.35	45	26	21	17.3	13.0	10.4	8.7	6.9	5.2	1.2	0.79	0.60	0.48
	90	VC	VC	0.38	49	28	23	18.8	14.1	11.3	9.4	7.5	5.6	1.3	0.86	0.65	0.52
	100	VC	C	0.40	51	30	24	19.8	14.9	11.9	9.9	7.9	5.9	1.4	0.91	0.68	0.54
AI8003 AI11003 (50)	30	UC	UC	0.26	33	19.3	15.4	12.9	9.7	7.7	6.4	5.1	3.9	0.88	0.59	0.44	0.35
	40	XC	XC	0.30	38	22	17.8	14.9	11.1	8.9	7.4	5.9	4.5	1.0	0.68	0.51	0.41
	50	XC	XC	0.34	44	25	20	16.8	12.6	10.1	8.4	6.7	5.0	1.2	0.77	0.58	0.46
	60	XC	XC	0.37	47	27	22	18.3	13.7	11.0	9.2	7.3	5.5	1.3	0.84	0.63	0.50
	70	VC	VC	0.40	51	30	24	19.8	14.9	11.9	9.9	7.9	5.9	1.4	0.91	0.68	0.54
	80	VC	VC	0.42	54	31	25	21	15.6	12.5	10.4	8.3	6.2	1.4	0.95	0.71	0.57
	90	VC	VC	0.45	58	33	27	22	16.7	13.4	11.1	8.9	6.7	1.5	1.0	0.77	0.61
	100	VC	C	0.47	60	35	28	23	17.4	14.0	11.6	9.3	7.0	1.6	1.1	0.80	0.64
AI8004 AI11004 (50)	30	UC	UC	0.35	45	26	21	17.3	13.0	10.4	8.7	6.9	5.2	1.2	0.79	0.60	0.48
	40	XC	XC	0.40	51	30	24	19.8	14.9	11.9	9.9	7.9	5.9	1.4	0.91	0.68	0.54
	50	XC	XC	0.45	58	33	27	22	16.7	13.4	11.1	8.9	6.7	1.5	1.0	0.77	0.61
	60	XC	XC	0.49	63	36	29	24	18.2	14.6	12.1	9.7	7.3	1.7	1.1	0.83	0.67
	70	VC	VC	0.53	68	39	31	26	19.7	15.7	13.1	10.5	7.9	1.8	1.2	0.90	0.72
	80	VC	VC	0.57	73	42	34	28	21	16.9	14.1	11.3	8.5	1.9	1.3	0.97	0.78
	90	VC	VC	0.60	77	45	36	30	22	17.8	14.9	11.9	8.9	2.0	1.4	1.0	0.82
	100	C	C	0.63	81	47	37	31	23	18.7	15.6	12.5	9.4	2.1	1.4	1.1	0.86
AI8005 AI11005 (50)	30	UC	UC	0.43	55	32	26	21	16.0	12.8	10.6	8.5	6.4	1.5	0.97	0.73	0.58
	40	UC	XC	0.50	64	37	30	25	18.6	14.9	12.4	9.9	7.4	1.7	1.1	0.85	0.68
	50	XC	XC	0.56	72	42	33	28	21	16.6	13.9	11.1	8.3	1.9	1.3	0.95	0.76
	60	XC	XC	0.61	78	45	36	30	23	18.1	15.1	12.1	9.1	2.1	1.4	1.0	0.83
	70	XC	VC	0.66	84	49	39	33	25	19.6	16.3	13.1	9.8	2.2	1.5	1.1	0.90
	80	VC	VC	0.71	91	53	42	35	26	21	17.6	14.1	10.5	2.4	1.6	1.2	0.97
	90	VC	VC	0.75	96	56	45	37	28	22	18.6	14.9	11.1	2.6	1.7	1.3	1.0
	100	VC	VC	0.79	101	59	47	39	29	23	19.6	15.6	11.7	2.7	1.8	1.3	1.1
AI8006 AI11006 (50)	30	UC	UC	0.52	67	39	31	26	19.3	15.4	12.9	10.3	7.7	1.8	1.2	0.88	0.71
	40	UC	UC	0.60	77	45	36	30	22	17.8	14.9	11.9	8.9	2.0	1.4	1.0	0.82
	50	UC	XC	0.67	86	50	40	33	25	19.9	16.6	13.3	9.9	2.3	1.5	1.1	0.91
	60	XC	XC	0.73	93	54	43	36	27	22	18.1	14.5	10.8	2.5	1.7	1.2	0.99
	70	XC	XC	0.79	101	59	47	39	29	23	19.6	15.6	11.7	2.7	1.8	1.3	1.1
	80	XC	VC	0.85	109	63	50	42	32	25	21	16.8	12.6	2.9	1.9	1.4	1.2
	90	XC	VC	0.90	115	67	53	45	33	27	22	17.8	13.4	3.1	2.0	1.5	1.2
	100	XC	VC	0.95	122	71	56	47	35	28	24	18.8	14.1	3.2	2.2	1.6	1.3
AI11008 (50)	30		UC	0.69	88	51	41	34	26	20	17.1	13.7	10.2	2.3	1.6	1.2	0.94
	40		UC	0.80	102	59	48	40	30	24	19.8	15.8	11.9	2.7	1.8	1.4	1.1
	50		XC	0.89	114	66	53	44	33	26	22	17.6	13.2	3.0	2.0	1.5	1.2
	60		XC	0.98	125	73	58	49	36	29	24	19.4	14.6	3.3	2.2	1.7	1.3
	70		XC	1.06	136	79	63	52	39	31	26	21	15.7	3.6	2.4	1.8	1.4
	80		VC	1.13	145	84	67	56	42	34	28	22	16.8	3.8	2.6	1.9	1.5
	90		VC	1.20	154	89	71	59	45	36	30	24	17.8	4.1	2.7	2.0	1.6
	100		VC	1.26	161	94	75	62	47	37	31	25	18.7	4.3	2.9	2.1	1.7

Note: Always double check your application rates. Tabulations are based on spraying water at 70°F (21°C).

Image: TeeJet Flat Application Rate Chart. This chart provides detailed data for various TeeJet nozzle models, including the AI11005-VS, showing flow rates in Gallons Per Minute (GPM) and Gallons Per Acre (GPA) at different pressures (PSI) and speeds (MPH). It helps users calibrate their sprayers for precise application.

General Operation Guidelines:

- **Pressure Range:** Operate within the recommended pressure range for the AI11005-VS tip, which is up to 115 PSI, to ensure proper spray pattern and droplet size.
- **Spray Height:** Maintain the correct boom height to ensure uniform spray overlap and coverage.

- **Speed:** Adjust your ground speed according to the application rate chart to achieve the desired GPA.
- **Chemical Compatibility:** Ensure the spray tip material (Stainless Steel, Polymer) is compatible with the chemicals being sprayed.
- **Drift Reduction:** The air induction design helps reduce drift, but always consider environmental conditions like wind speed and direction.

Maintenance

Regular maintenance will extend the life of your TeeJet AI11005-VS spray tip and ensure consistent performance.

- **Cleaning:** After each use, thoroughly flush the sprayer system with clean water. If chemicals were used, follow the chemical manufacturer's recommendations for cleaning.
- **Nozzle Cleaning:** If the spray tip becomes clogged, remove it from the nozzle body. Use a soft brush or compressed air to clear any obstructions. **Do not use metal objects** like wires or pins, as this can damage the orifice and alter the spray pattern.
- **Inspection:** Periodically inspect the spray tip for wear, damage, or excessive abrasion, especially the orifice. A worn orifice will result in an altered spray pattern and increased flow rate.
- **Storage:** Store spray tips in a clean, dry place away from direct sunlight and extreme temperatures when not in use.

Troubleshooting

Problem	Possible Cause	Solution
Uneven Spray Pattern	Clogged orifice; Worn tip; Incorrect pressure; Incorrect boom height.	Clean the tip; Replace worn tip; Adjust pressure to recommended range; Adjust boom height.
Reduced Flow Rate	Partial clog; Insufficient pump pressure.	Clean the tip; Check pump and pressure regulator.
Excessive Drift	Too high pressure; Too small droplet size; High wind conditions.	Reduce pressure (if possible); Use larger droplet size tips (if applicable); Avoid spraying in high winds.
Leaking at Nozzle Body	Damaged or missing gasket/O-ring; Loose cap.	Replace gasket/O-ring; Tighten cap securely.

Specifications

Feature	Detail
Model Number	AI11005-VS
Brand	TeeJet
Material	Stainless Steel, Polymer
Exterior Finish	Stainless Steel

Feature	Detail
Inlet Connection Type	1/4-inch NPT Female
Outlet Connection Type	1/4-inch NPT Female
Maximum Operating Pressure	115 Pound per Square Inch
Number of Ports	2
Item Weight	0.16 ounces
UPC	736354001249

Warranty and Support

Specific warranty information for the TeeJet AI11005-VS Air Induction Flat Spray Tip is not provided in the product data. For detailed warranty terms and conditions, please refer to the official TeeJet website or contact TeeJet customer support directly.

For technical support, replacement parts, or further inquiries, please contact TeeJet customer service through their official channels. Always provide your product model number (AI11005-VS) when seeking support.

You can find more information and contact details on the official TeeJet website:www.teejet.com

Related Documents - AI11005-VS

	TeeJet IC45 Sprayer Software Release Notes: Features, Fixes, and Updates Detailed release notes for TeeJet IC45 Sprayer software, covering new features, bug fixes, and improvements across versions v2.10, v2.02, v2.01, v2.00, v1.96, v1.07, v1.03, v1.02, and v1.01. Includes information on DynaJet, TrackMatic, and ISOBUS integration.
	TeeJet 834 Sprayer Control User Guide Comprehensive user guide for the TeeJet 834 Sprayer Control, covering programming, setup, operation, and troubleshooting for efficient agricultural spraying.

	[TeeJet 834 Sprayer Control Programming and Operating Manual] Comprehensive programming and operating manual for the TeeJet 834 Sprayer Control system, covering setup, calibration, normal working modes, and troubleshooting alarms. Learn to optimize your agricultural spraying operations.
	[TeeJet Matrix 430 User Guide] Comprehensive user guide for the TeeJet Matrix 430 guidance system, covering console setup, machine configuration, and guidance options. Includes detailed instructions and visual explanations.
	[TeeJet IC45 Sprayer Software Release Notes and Update History] Detailed release notes for the TeeJet IC45 Sprayer, covering software versions v2.10 down to v1.01. Includes new features, bug fixes, and important update information for agricultural spray control systems.
	[TeeJet MATRIX 430 User Manual] Comprehensive user manual for the TeeJet MATRIX 430 agricultural guidance system, covering setup, configuration, guidance modes, job data management, console settings, and software updates.