



Liquid Rage™

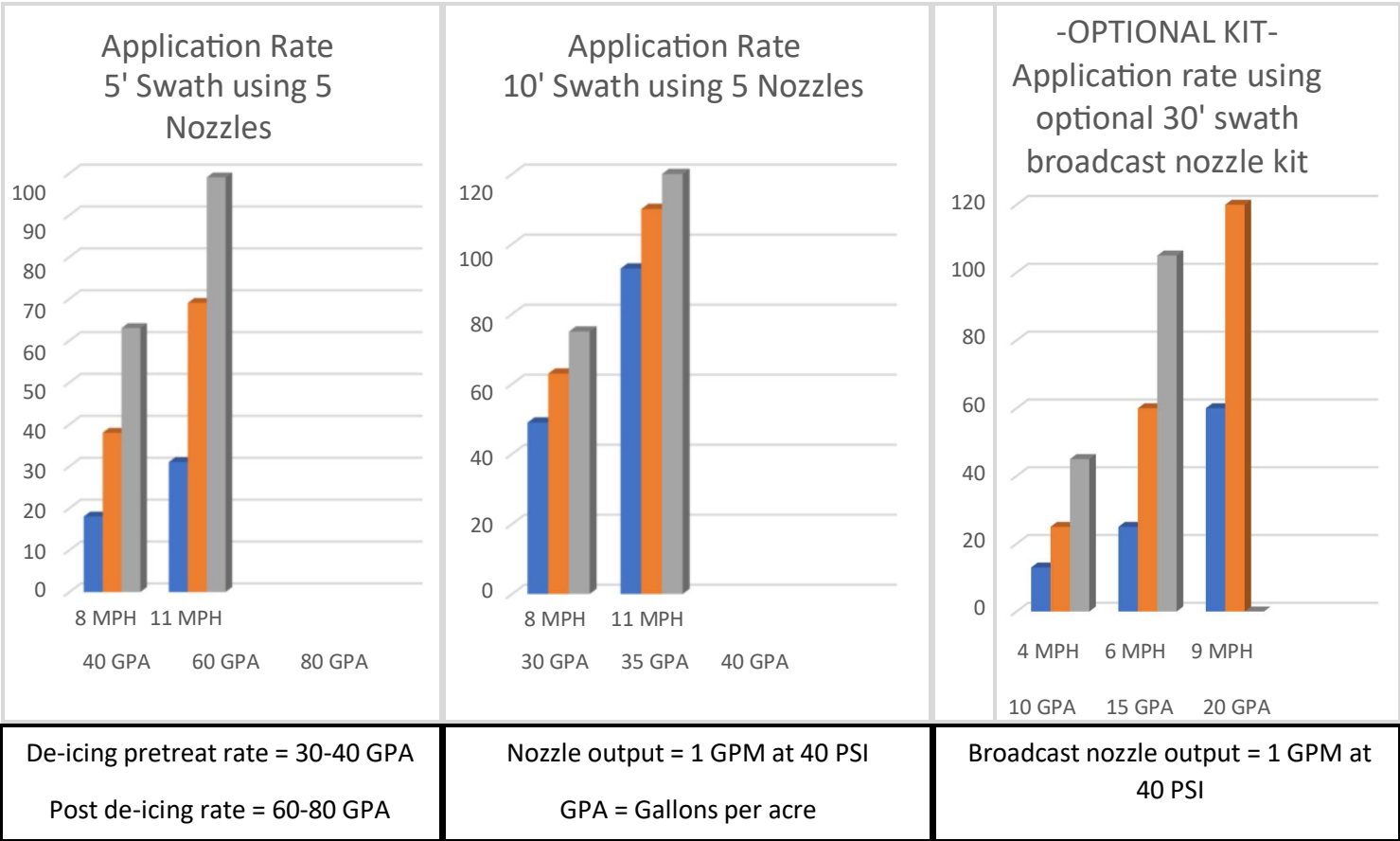
Owners Manual

REV: 2023.10.31



Liquid Rage Owners Manual

Rate Chart



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Attaching, adjusting and setting pressure

Attach to your Liquid Rage with either a skidsteer universal attachment, or a category II three point tractor hitch.

Then attach your hydraulic lines.



2

First fill the tank through the top by removing the large black cap and filling.

Next adjust the angle of the four outer nozzles to your preferred spray width.

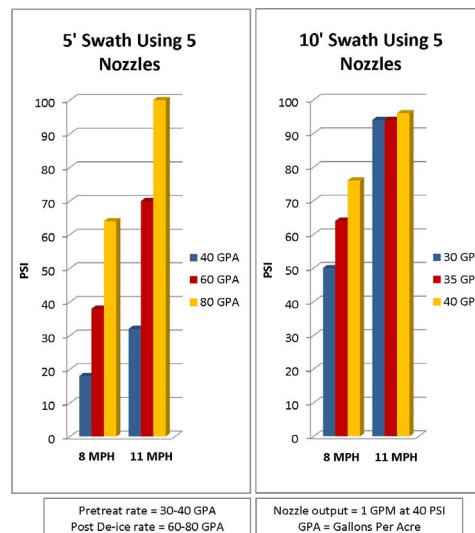
Shown here are positions for 5' and 10' sprayswathes respectively.



3

Adjust the pressure gauge depending on your swath width and intended travel speed.

Use graph on tank to determine PSI, then adjust by turning gray knob on gauge.



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Draining tank, and cleaning filter

IMPORTANT: Rinse periodically when using bring to avoid buildup. Storing brine for long periods of time may cause plugged nozzles.

1

To drain tank, first remove protectiveUpper Frame plate.



2

Next, rotate the valve handle 180 degrees clockwise. This will allow the tank to drain.



The filter should be cleaned when anynoticeable pressure drop is observed.

To clean filter, first remove fromhousing.



Clean any debris from filter andhousing. Then reinstall.



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Mixing Brine

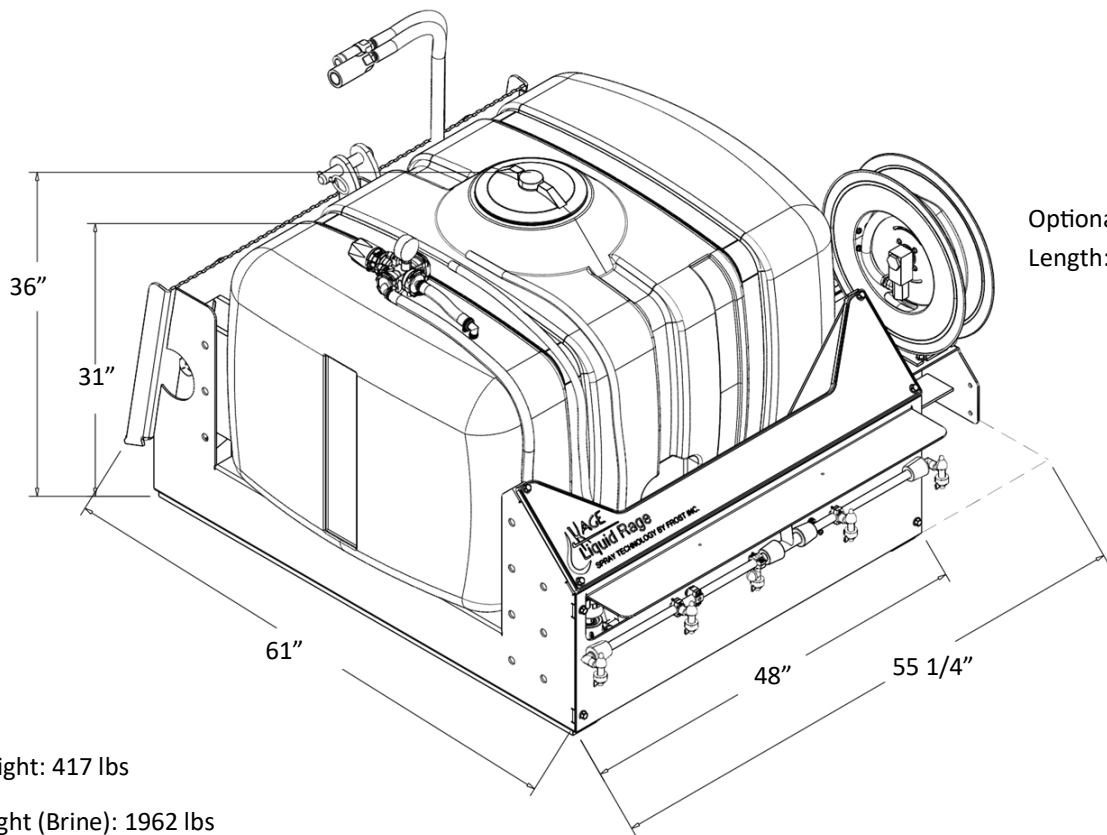
IMPORTANT: The ideal solution is 23.3% salt. Use the chart below to calculate the ratio of water to dowflake for to get this proper solution.

Brine Mixing Cheat Sheet		
Agitate for 8-11 minutes		
Gallons of Water	Lbs of DOWFLAKE™ Xtra	Resulting Gallons Of Brine Mix
31.87	100	36
63.73	200	72
100	314	113
120	378	136
127.47	400	144
132.78	417	150



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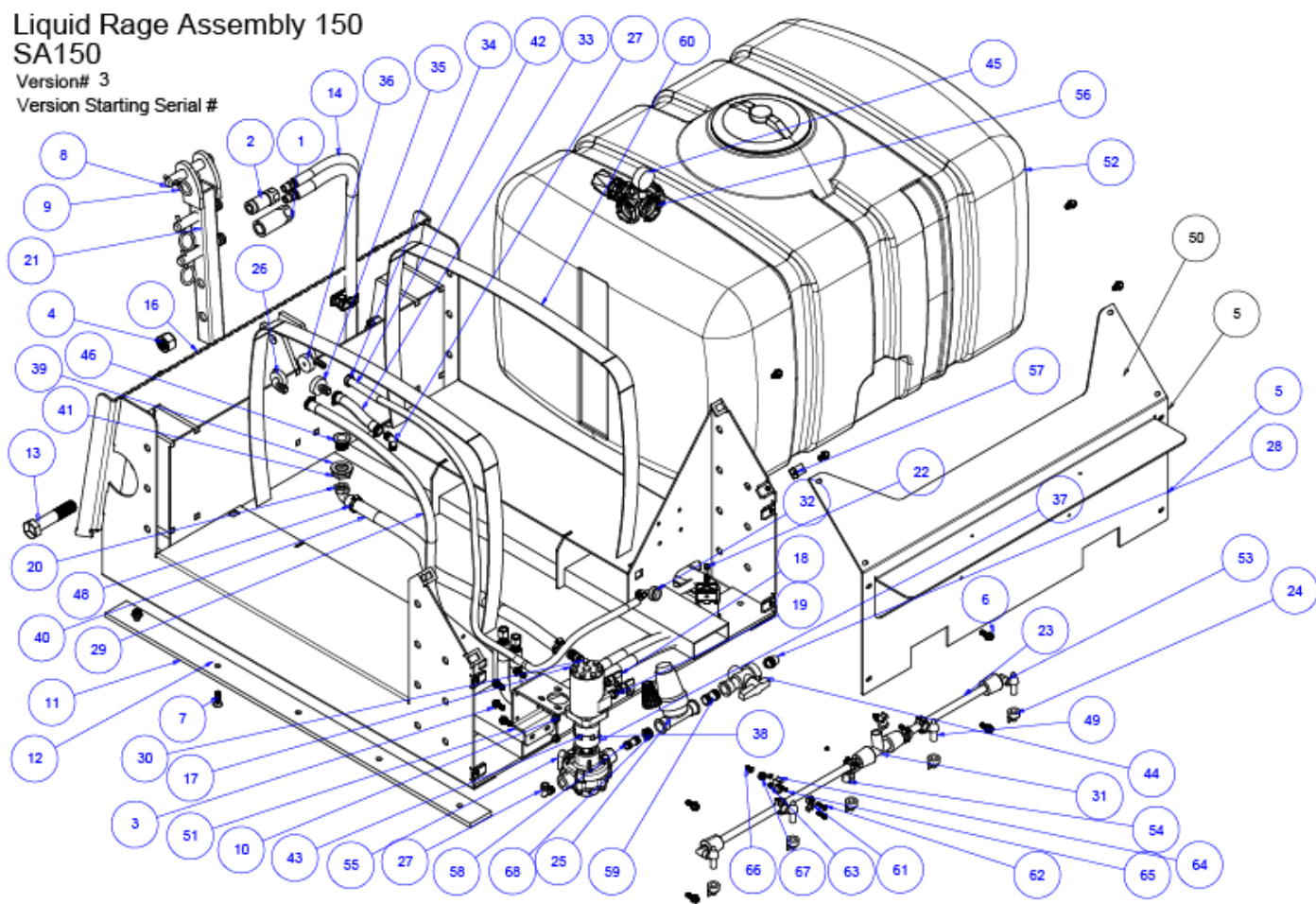
Specifications



Dry Weight: 417 lbs
Fill Weight (Brine): 1962 lbs

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Parts Breakdown—Main Assembly



Item	Part Name	Part Number	Qty	REV	Item	Part Name	Part Number	Qty	REV
1	Hydro Coupler, Female	FEM-501-8FP-NL	1	1	36	Fitting T5 M, 1/2" HB, 90	1191513	1	1
2	Hydro Coupler, Male	FEM-502-8FP	1	2	37	Love Joy Coupling, L095, 1"	2739-1005	1	1
3	Flange Hex Bolt 3/8 - 16 x 1	92979A344	6		38	Love Joy Coupling, L095, urethane disc	2729-1005	1	1
4	Hex Nylock Nut 1 1/8-7	95615A340	2	1	39	FLAT GASKET 33X45X3 EPDM	G40004	1	1
5	Front Frame	SA150-6	1	5	40	Hose 1 x 38	10031760	1	1
6	Flange SS Hex Bolt 3/8 - 16 x 1	97646A220	8		41	1-1/4 Nut	2052040	1	1
7	Hex Drive Flat head Screw 1/2 - 13 x 1.5	91263A605	1		42	Hose 1/2 x 60	10031630	1	1
8	Top Link Pin	21262	3		43	Love Joy Coupling, L095, 15/16	2739-1004	1	1
9	Lynch Pin	90170A226	3		44	3-WAY BALL VALVE 1"	45521114N	1	1
10	Flange Locknut, 3_8 -16	93298A130	4		45	2-1/2 LF SS 1/4BM 160PSI	GG160	1	1
11	Skid Bar	SA150-16	2	1	46	Drain Fitting	220040	1	1
12	Flange Locknut 1/2 - 13	RF1213OFZ	1		47	Hose Clamp 11/16-1 1/2 1/2	H16SS	4	1
13	Hex Bolt Gr5 1-1/8 - 7 x 5.5	91283A156	2	1	48	Hose Clamp 3/4-1 3/4 1/2	H12SS	2	1
14	Hydro Line Rear-Front	HY-800	2		49	ADJ. UNI-JET D1/2 F10, inner swivels	4063845C	2	1
15	Upper Frame	SA150-1	1	5	50	LiquidRage Decal	LRD-1	1	
16	Sprayer Weldment	SA150-40	1	2	51	Motor and Pump Bracket	MPBA1	1	4
17	Hydraulic Motor	PMM-4B-100	1	1	52	Tank 150 Gallon	SP0150-RT	1	1
18	JIC 90 Elbow	8/8/6500	2		53	BOOMLESS NOZZLE HOLDER 1/2', outer	4065845C	2	1
19	JIC x Pipe Adapter 08x08	8/8/2404	2		54	NOZZLE BODY-SINGLE ASSY 1/2' Pipe, cen-	4221N-B122	1	1
20	Elbow 1 x 1-1/4	FNAE-100100	1	1	55	Hypro 8-Roller pump, Silver cast, 3/4"	7560XL	1	1
21	Sprayer Hitch Weldment	SA150-30	1	1	56	Pressure Valve	475551	1	1
22	Beta Clamp	T3014T	2		57	Body Clip 3/8-16	94850A179	6	
23	Boom Pipe, Stainless Steel	SNC150	1	1	58	3/4 X 3/4 Stainless Steel Threaded Nipple	M34SS	1	1
24	FASTCAP 6 JET TIP-LTBLUE	FC-ESI-11010	5	1	59	1" X 1" THREADED NIPPLE Stainless Steel	4830K221	1	1
25	STRAINER PP 1'FNPT 50M	3350-0151N	1	1	60	Black Ratchet Strap 1.5 x 7	1428-K7-1	2	1
26	3/4 Barbed x gauge fitting	3EL34	1	1	61	Bracket Top	BRK-0006	2	1
27	3/4 MNPT X 3/4 HB Poly Elbow	3EL34	2	1	62	Pan Philips Screw 6 - 1.0 x 25mm Stainless	92005A430	4	1
28	Elbow MNPT x HB 1', poly	3EL100	1	1	63	Hex Nut 6mm - 1.0 Stainless	91828A251	4	1
29	Hose 3/4 x 45	10031750	1	1	64	Bracket Bottom	BRK-0005	2	1
30	1' MNPT x 1' HB Poly	3A100	1	1	65	Pan Head Screw 10-24 x 1.25 Stainless	91772A249	2	1
31	Tee 1/2	193213	1	1	66	Hex Locknut 10-24 Stainless	91831A011	2	1
32	HOSETAIL T3F D.13	1090313	1	1	67	Flat Washer 1/4 Stainless	90107A029	20	1
33	Hose 1 x 7-1/2	10031760	1	1	68	Fitting, reducer bushing 1" to 3/4"	3RB10034	1	1
34	Crimp Hose clamp 1-2"	5435K17	2	1					
35	ELBOW T5M D.20	1191520	1	1					

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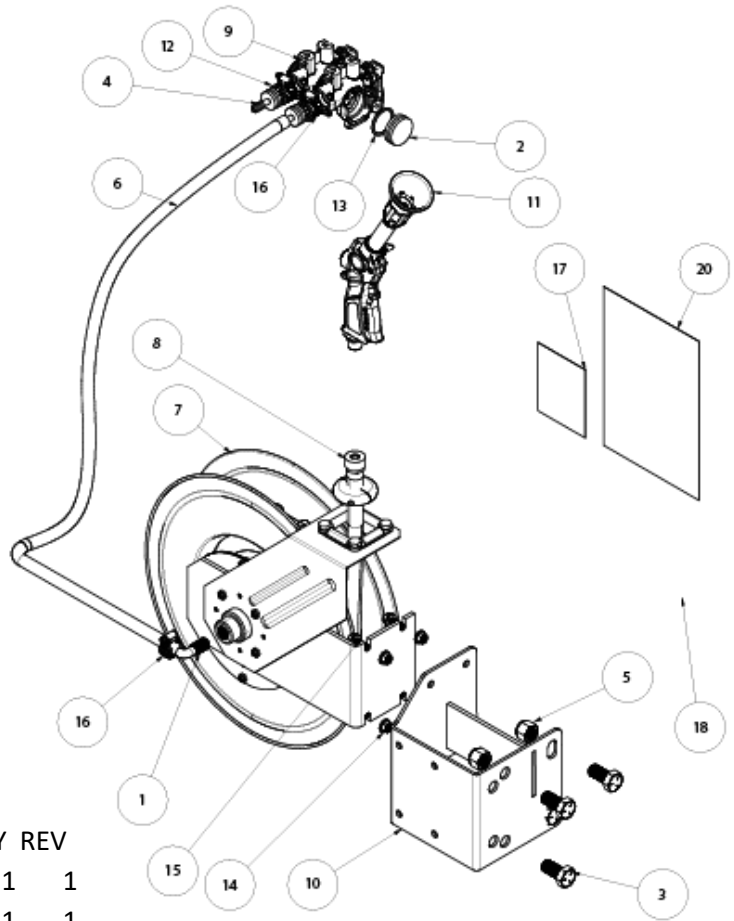
Parts Breakdown—Optional Hose Reel Kit

Hose Reel Kit HRK50

Version#

Version Starting Serial #

Optional kit, not included in SA150



Item	Part Name	Part Number	QTY	REV
	1 1/2' MNPT X 1/2' HB POLY PRO	3A12	1	1
	2 T5F cap	219150	1	1
	3 Hex Bolt 3/4-10 x 1.5	92865A839	4	
	4 Fitting HB T3, 1/2	1091313	2	1
	5 Hex Nylock Nut GR 5 3/4-10	95615A270	4	
	6 Hose 1/2 x 84	10031630-84	1	1
	7 Hose Reel Stainless	5132K31	1	1
	8 Hose 50ft	H550N	1	1
	9 Manual Valve T5	463T051	2	1
	10 Hose Reel Bracket Weldment	HRB10W	1	1
	11 Spray Gun Hydra plus nozzle	5062410F	1	1
	12 Gasket 36.1 x 3.5	G11063V	2	1
	13 O Ring 463 Valve Outlet	G10058V	1	1
	14 Flange Locknut SS 3/8 -16	94238A103	4	
	15 Flange SS Hex Bolt 3/8 - 16 x 1	97646A220	4	
	16 Hose Gear Clamp 1/2-1 1/4	CC16-10	3	1
	17 LiquidRage Decal Graph	LRD-G	1	2
	19 Hose Stop .75 ID	5585K23	1	1
	20 Hose Reel Installation Kit	HROM	1	1

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Parts Breakdown—Optional Broadcast Nozzle Kit

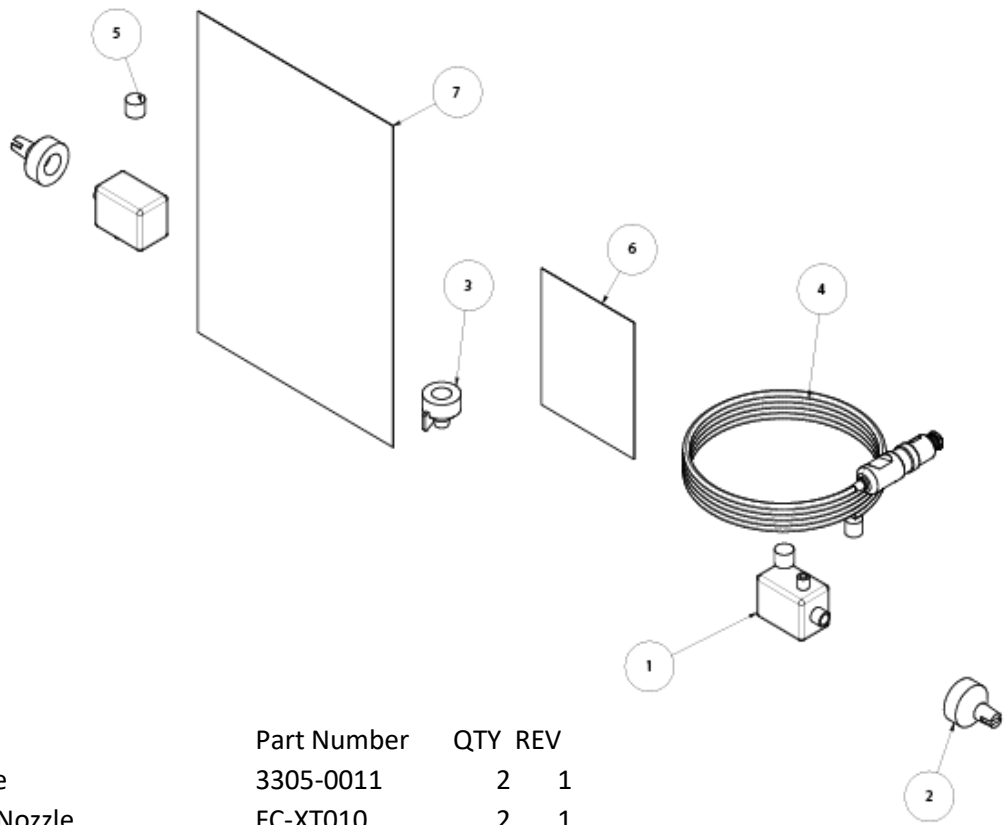
Broadcast Nozzle Kit

BNK10

Version#

Version Starting Serial #

Optional kit, not included in SA150

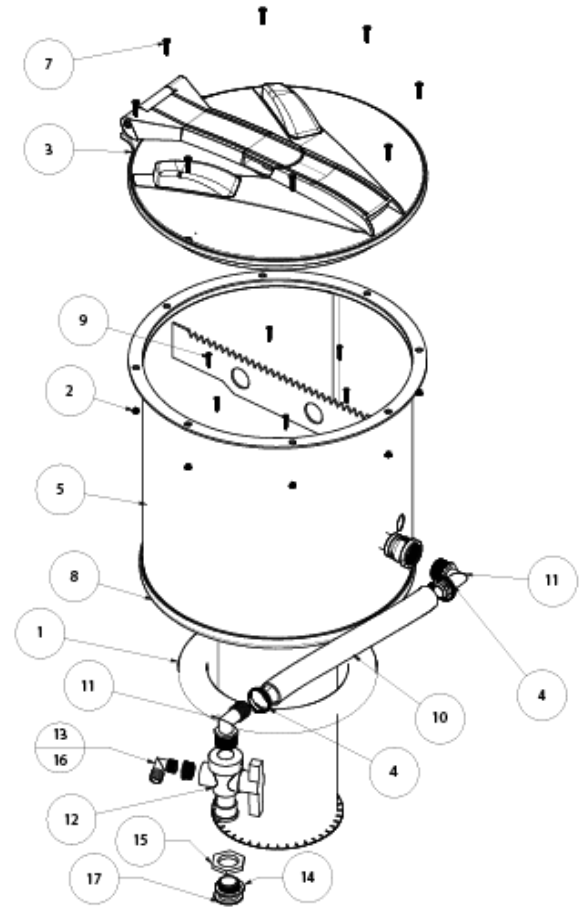


Item	Part Name	Part Number	QTY	REV
1	Pro Stop Valve	3305-0011	2	1
2	Broadcast XT Nozzle	FC-XT010	2	1
3	FASTCAP ULD 120 DEG LILAC	FC-ULD120-025	1	1
4	Spray Boom Wire Harness	WHSB10	1	1
5	Prostop Plug	2300-0067	2	1
6	LiquidRage Decal Graph	LRD-G	1	2
7	Broadcast Nozzle Kit Installation	BKOM	1	1

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Parts Breakdown—Optional Brine Mixer Kit

Brine Mixer Kit
SA150-B
 Version#
 Version Starting Serial #



Item	Part Name	Part Number	QTY	REV
1	EPDM Rubber Gasket	6032N41	1	1
2	Stainless Steel Nylon-Insert Locknut #10	91831A011	8	1
3	Brine Mixer Lid	356260	1	1
4	Hose Clamp 3/4-1 3/4 1/2	H12SS	2	1
5	Brine Mixer Weldment	SA150-B1	1	1
7	Stainless Steel Hex Drive Flat Head Screw #10 x 1	92210A247	8	1
8	Weather Seal	12335A27	1	1
9	Stainless Steel Phillips Flat Head Screws #8 x 1	90065A199	6	1
10	1x16 Rubber Hose	SA150-B10	1	1
11	1 Barbed x 1 MNPT 90 Elbow fitting	3EL100	2	1
12	3-WAY BALL VALVE 1"	45521114N	1	1
13	3/4 MNPT X 3/4 HB Poly Elbow	3EL34	1	1
14	G40004	G40004	1	
15	1-1/4 Nut	2052040	1	1
16	Fitting, reducer bushing 1" to 3/4"	3RB10034	1	1
17	Drain Fitting	220040	1	1

LIMITATIONS OF WARRANTY AND DAMAGES

KAGE INNOVATION MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AND MAKES NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE FACE HEREOF.

IN NO EVENT SHALL KAGE INNOVATION, BE HELD LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR FOR DAMAGES RESULTING FROM MISAPPLICATION, ABUSE, MISUSE, ACTS OF GOD, UNAUTHORIZED ALTERATION OF THE KAGE INNOVATION PRODUCT, OR SUBSTITUTION OF PARTS NOT AUTHORIZED IN WRITING BY KAGE INNOVATION.

Kage Limited Warranty

Kage Innovation will repair or, at the option of Kage Innovation, replace those parts which prove defective due to material or workmanship under normal use for a period of two (2) years from the date of retail sale or date of invoice from Kage Innovation, whichever is later. Expendable items, such as rubber, or polyurethane are excluded from this warranty.

Kage Innovation warrants that the products manufactured by us to be in accordance with our published specifications or those specifications agreed to by us in writing at the time of sale. The obligation of Kage Innovation is expressly limited to repairing or replacing, at its option, any product not meeting such specifications within the warranty period.

To obtain service under this warranty the consumer must return the defective Kage Innovation product to Kage Innovation directly, the dealer from which the product was purchased or to any authorized Kage Innovation dealer, transportation and freight charges prepaid. Only Kage Innovation dealers are authorized to perform the obligations under this warranty with pre-authorization from Kage Innovation.

No person is authorized to alter or amend this warranty or to create any warranty other than that set forth herein without the expressed written consent of Kage Innovation.

Kage Innovation reserves the right to make improvement changes on any of our products without prior notice.

Revision Comments

Date	Name	Description
10-31-2023	Mike	REV 3: Showing one piece front cover instead of two separate pieces
10-31-2023	Mike	Added parts breakdown for the Bine Mixer Kit