



# 396-4478Y1

## QuickDraw ChemBlade® Plus Education System Instruction Manual

# CHEM-BLADE<sup>®</sup> PLUS



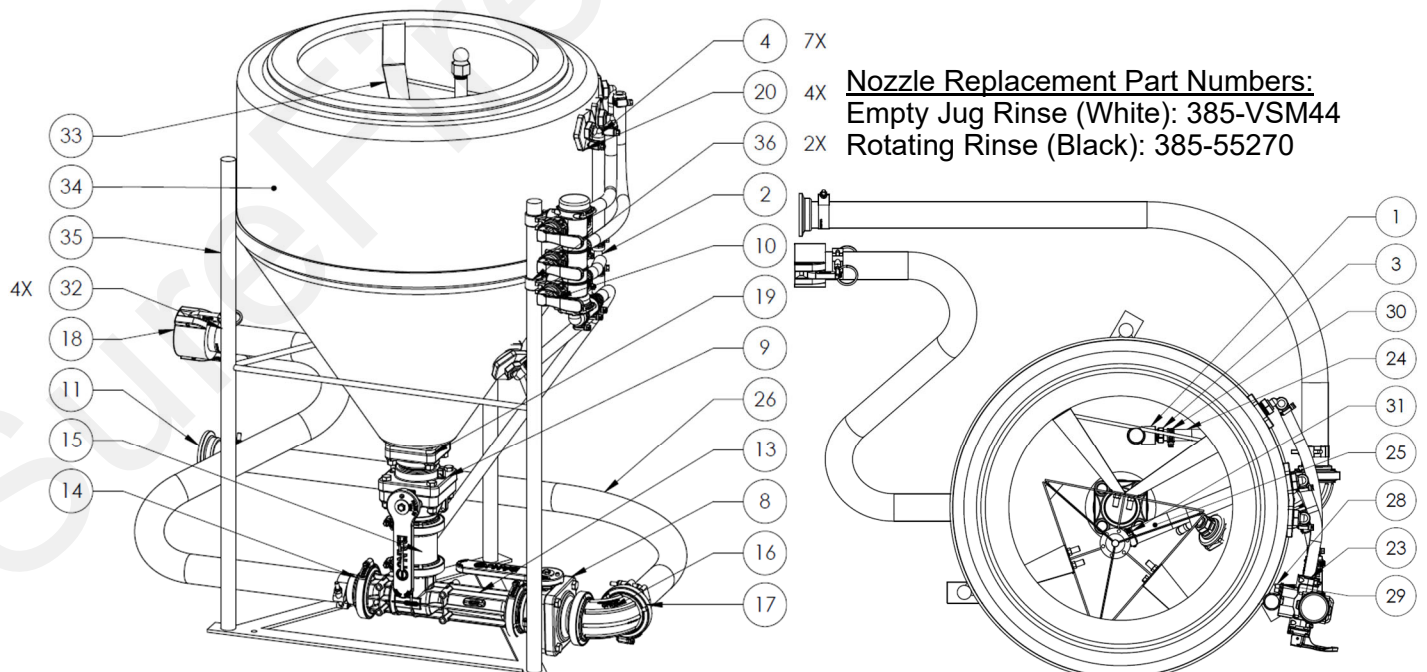
**QuickDraw ChemBlade PLUS  
Eductor Kit - No 3" Bypass  
Kit Number: 606-02-200400**

**QuickDraw ChemBlade PLUS  
Eductor Kit - w/ 3" Bypass  
Kit Number: 606-02-200500**



# 606-02-200400 Replacement Parts List

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	100-050EL-90	1/2" Pipe Elbow - 90 Degree	1
2	101-050050050-HB	1/2" x 1/2" x 1/2" HB Tee	1
3	101-050050-H	1/2" MPT x 1/2" HB	1
4	101-075050-90	3/4" MPT x 1/2" HB - 90 Degree	7
5	101-075050-HM	3/4" HB x 1/2" HB Mender	1
6	101-075075-90-H	3/4" MPT x 3/4" HB - 90 Degree	1
7	101-075075-F-90	3/4" FPT x 3/4" HB - 90 Degree	1
8	102-220MVCF	2" Manifold Full Port Poly Valve	1
9	102-220MVSMTFP	2" Full Port Manifold x 2" MPT Valve	1
10	102-V463T053	3-Port Manifold Valve (includes HB fittings)	1
11	105-200150BRB	2" Manifold x 1-1/2" HB	1
12	105-200G-H	2" EPDM Manifold Gasket for 220 Series Manifold Fittings	1
13	105-220-3371-0038	2" Full Port Manifold Venturi, 11mm Nozzle, RH	1
14	105-220150BRB	2" Full Port Manifold x 1-1/2" HB	2
15	105-220CPG	2" Full Port Manifold Coupling	1
16	105-FC220	2" Full Port Manifold Clamp	5
17	105-220SWP	2" Full Port Manifold Sweep - 90 Degree	1
18	106-200150C	2" Female Coupler x 1-1/2" HB	1
19	108-BF200BD	2" Bolted Tank Flange Bottom Drain	1
20	108-TF075	3/4" Tank Bung	4
21	113-01-050050	Stem to HB - 1/2" Stem x 1/2" HB	1
22	113-12-050050	Stem Elbow - 1/2" Stem x 1/2" QC	1
23	121-T3M050	T3 Male FC x 1/2" HB (requires G11058-V O Ring)	1
24	280-050-AG200	1/2" AG200 Bulk	96
25	280-075-AG200	3/4" AG200 Bulk	6
26	280-150-ENF	1-1/2" Enforcer Fertilizer Solution Hose	30
27	300-050012-SS	5/16" x 3/4" Hex Head Bolt - SS	2
28	321-05-SS	5/16" Nylock Nut - SS	2
29	330-05-SS	5/16" Flat Washer - SS	2
30	350-0605	SS Hose Clamp - Size 6 - 7/8" Diameter (fits 3/8" and 1/2" AG200)	14
31	350-1208	SS Hose Clamp - Size 12 - 1-1/4" Diameter (fits 3/4" AG200)	4
32	350-TC181	Pressure Seal HD Clamp, Size 238 (fits 1 1/2" Enforcer)	4
33	610-01-CBPLUS	ChemBlade Plus	1
34	727-05-IN0030-24	24" Wide 30 Gallon Full Drain Inductor Tank	1
35	727-29-INF30/55-ST	24" 30 gallon Full Drain Inductor Stand	1
36	757-8863T18	Vibration-Damping Loop Clamp, Zinc-Plated Steel, Vinyl Plastic Cushion, 1" ID, 2-3/16" Long	2



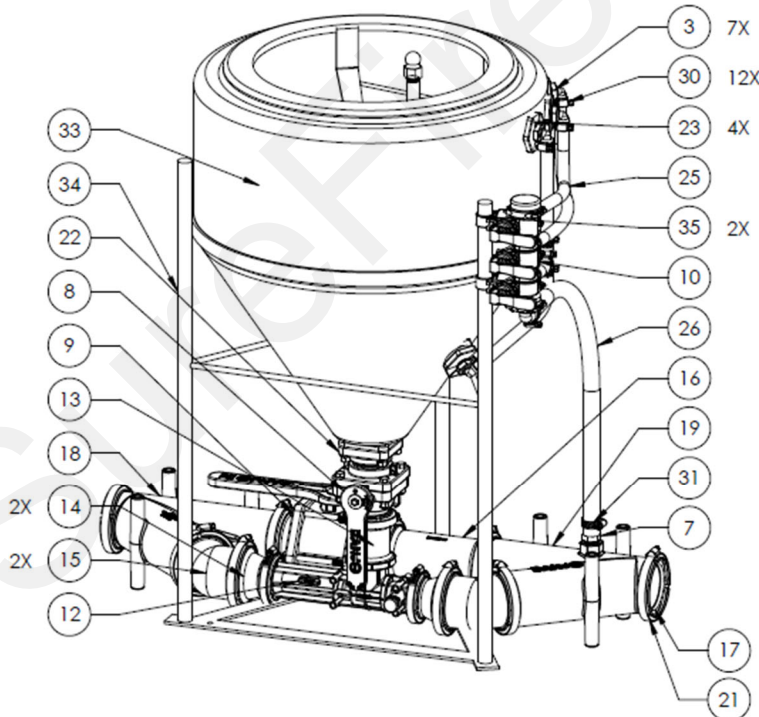


# 606-02-200500 Replacement Parts List

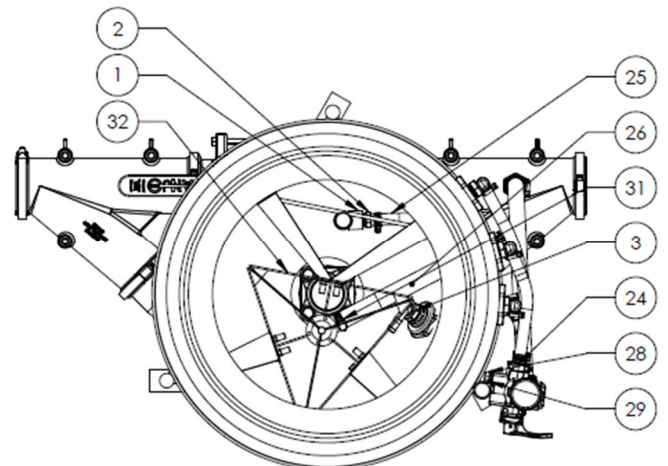
ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	100-050EL-90	1/2" Pipe Elbow - 90 Degree	1
2	101-050050-H	1/2" MPT x 1/2" HB	1
3	101-075050-90	3/4" MPT x 1/2" HB - 90 Degree	7
4	101-050050050-HB	1/2" x 1/2" x 1/2" HB Tee	1
5	101-075075-90-H	3/4" MPT x 3/4" HB - 90 Degree	1
6	101-075075-F-90	3/4" FPT x 3/4" HB - 90 Degree	1
7	101-075075-H	3/4" MPT x 3/4" HB	1
8	102-220MVSMTFP	2" Full Port Manifold x 2" MPT Valve	1
9	102-301MVCF	3" Manifold Full Port Poly Valve	1
10	102-V463T053	3-Port Manifold Valve (includes HB fittings)	1
11	105-200G-H	(FOR FC220s) 2" EPDM Manifold Gasket for 220 Series Manifold Fittings	2
12	105-220-3371-0038	2" Full Port Manifold Venturi, 11mm Nozzle, RH	1
13	105-220CPG	2" Full Port Manifold Coupling	1
14	105-300220CPG	3" Manifold x 2" Full Port Manifold - Reducer Coupling	2
15	105-300CPG45	3" Manifold Coupling - 45 Degree	2
16	105-300CPG7	3" Manifold Coupling - 7"	1
17	105-300G-H	3" EPDM Manifold Gasket	9
18	105-300Y45	3" Manifold - 45 Degree Y	1
19	105-300YG45	3" Manifold - 45 Degree Y with 3/4" Gauge Port	1
20	105-FC220	2" Full Port Manifold Clamp	4
21	105-FC300	3" Manifold Clamp	9
22	108-BF200BD	2" Bolted Tank Flange Bottom Drain	1
23	108-TF075	3/4" Tank Bung	4
24	121-T3M050	T3 Male FC x 1/2" HB (requires G11058-V O Ring)	2
25	280-050-AG200	1/2" AG200 Bulk	30
26	280-075-AG200	3/4" AG200 Bulk	84
27	300-050012-SS	5/16" x 3/4" Hex Head Bolt - SS	2
28	321-05-SS	5/16" Nylock Nut - SS	2
29	330-05-SS	5/16" Flat Washer - SS	2
30	350-0605	SS Hose Clamp - Size 6 - 7/8" Diameter (fits 3/8" and 1/2" AG200)	12
31	350-1208	SS Hose Clamp - Size 12 - 1-1/4" Diameter (fits 3/4" AG200)	4
32	610-01-CBPLUS	ChemBlade Plus	1
33	727-05-IN0030-24	24" Wide 30 Gallon Full Drain Inductor Tank	1
34	727-29-INF30/55-ST	24" 30 gallon Full Drain Inductor Stand	1
35	757-8863T18	Vibration-Damping Loop Clamp, Zinc-Plated Steel, Vinyl Plastic Cushion, 1" ID	2

**Suggested Items:**

- Qty (2) 3" Manifold x 3" HB (P/N 105-300BRB)
- Qty (2) 3" Manifold x 3" Quick Coupler Male Adapter (P/N 105-300A)

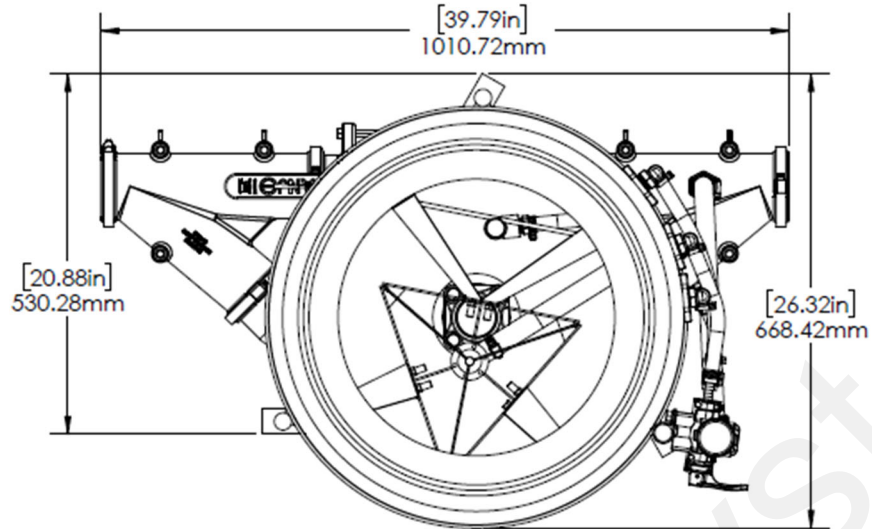


**Nozzle Replacement Part Numbers:**  
 Empty Jug Rinse (White): 385-VSM44  
 Rotating Rinse (Black): 385-55270

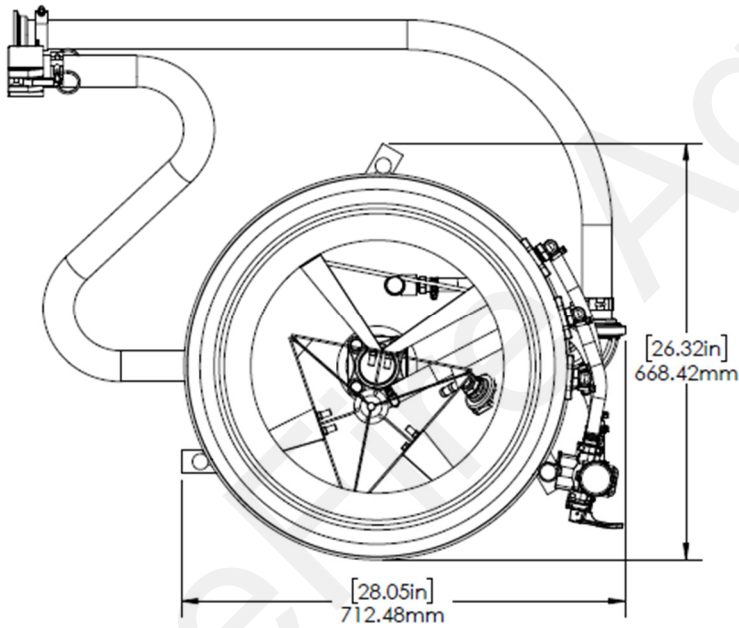




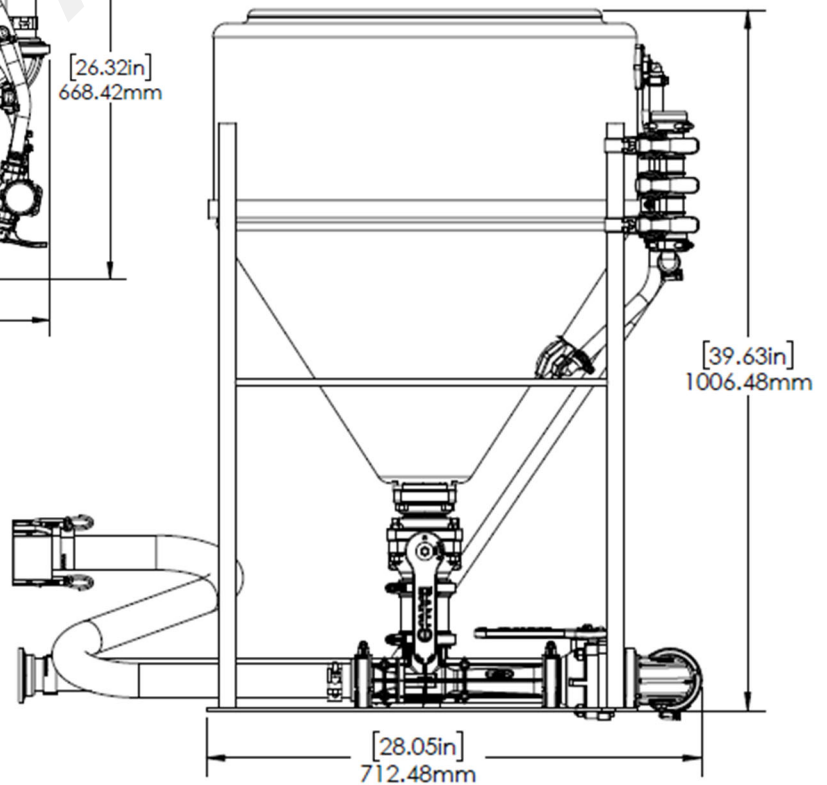
# Assembled Dimensions



**QuickDraw ChemBlade Eductor  
Kit - w/ 3" Bypass  
Kit Number: 606-02-200500**



**QuickDraw ChemBlade  
Eductor Kit - No 3" Bypass  
Kit Number: 606-02-200400**





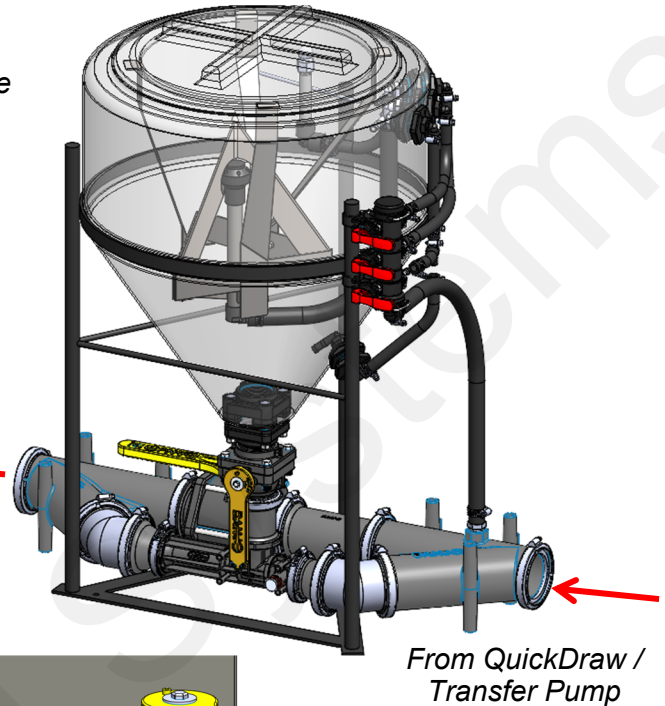
# Plumbing Instructions

## QuickDraw<sup>MAX</sup> 3000

### 3" Bypass System Kit Installation:

Eductor system kits must be plumbed to the outlet/discharge side of the transfer pump for proper venturi operation. Installation location on sprayer tender trailer may vary.

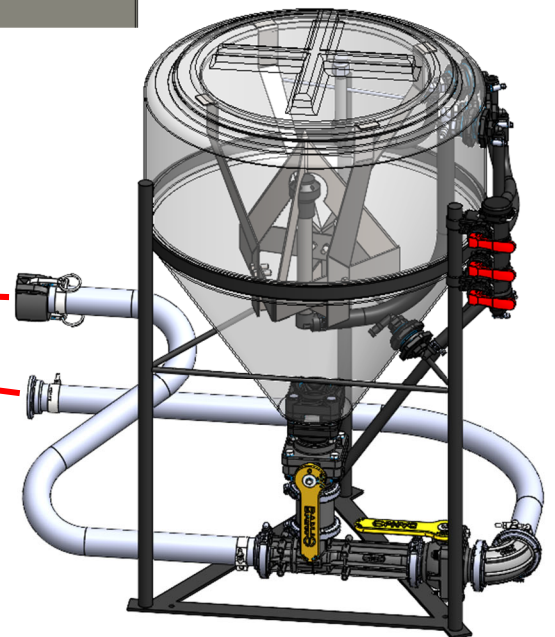
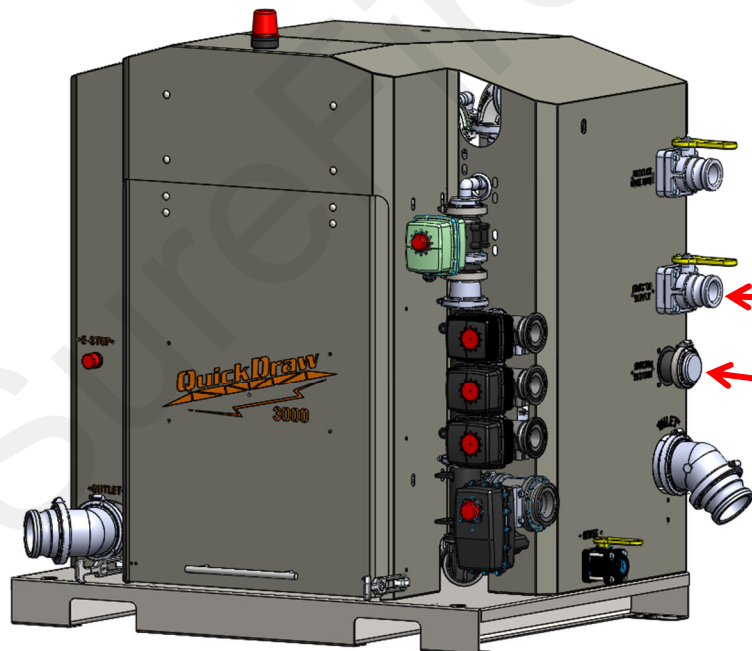
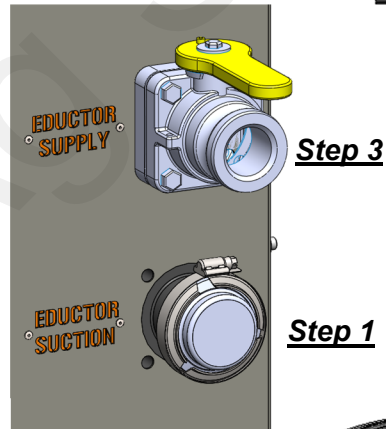
1. Connect 3" inlet port to the discharge side of the QuickDraw or transfer pump. Preferred installation location is downstream of the QuickDraw so water can be measured and to eliminate contamination in the QuickDraw.
2. Connect 3" outlet port of inductor to the sprayer.



### No 3" Bypass System Kit Installation:

Eductor system kits must be plumbed to the outlet/discharge side of the transfer pump for proper venturi operation. Installation location on sprayer tender trailer may vary.

1. Remove cap and connect 200 Series flange x 1-1/2" hose barb fitting to the "Eductor Suction" port in the side of the QuickDraw 3000.
2. Route 1-1/2" hose from the "Eductor Suction" port to the outlet of the inductor tank Venturi.
3. Connect 2" female cam lever fitting x 1-1/2" hose barb to the "Eductor Supply" valve on the QuickDraw 3000.
4. Route 1-1/2" hose from the "Eductor Supply" port to the inlet of the inductor tank Venturi.





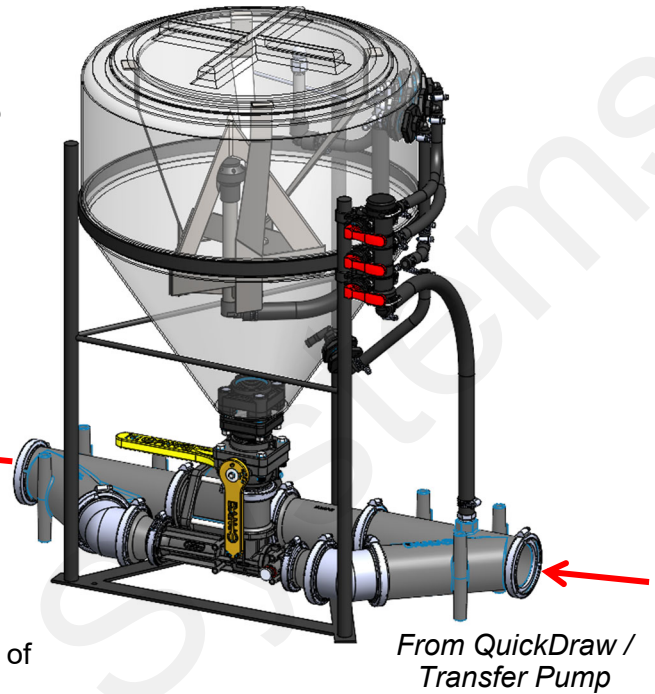
# Plumbing Instructions

## Gen 2 QuickDraw<sup>MAX</sup> Retrofit

### 3" Bypass System Kit Installation:

Eductor system kits must be plumbed to the outlet/discharge side of the transfer pump for proper venturi operation. Installation location on sprayer tender trailer may vary.

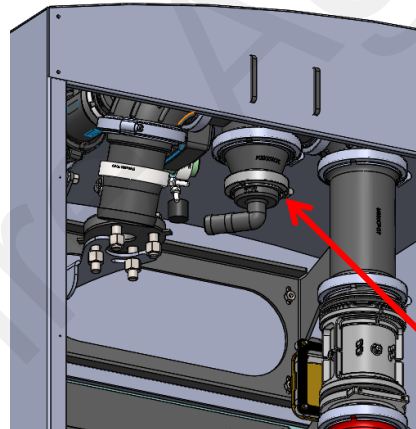
1. Connect 3" inlet port to the discharge side of the QuickDraw or transfer pump. Preferred installation location is downstream of the QuickDraw.
2. Connect 3" outlet port of inductor to the sprayer.



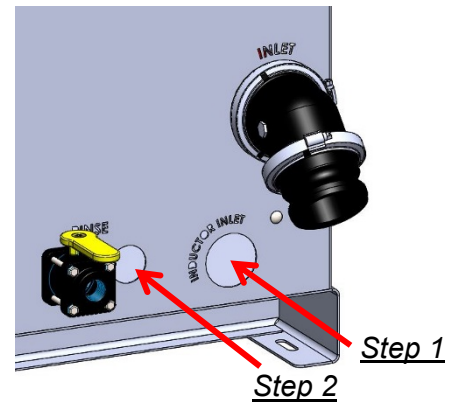
### No 3" Bypass System Kit Installation:

Eductor system kits must be plumbed to the outlet/discharge side of the transfer pump for proper venturi operation. Installation location on sprayer tender trailer may vary.

1. Route 1-1/2" eductor outlet hose through hole in the side of the QuickDraw<sup>MAX</sup> cabinet.
2. Route 1" eductor inlet hose through hole in the side of the QuickDraw<sup>MAX</sup> cabinet.
3. Remove cap and connect check valve to Y fitting inside QuickDraw<sup>MAX</sup>. *Note: Arrow should be pointing towards the tee.*
4. Remove QuickDraw manifold rinse (2" Manifold x 1" HB - 90°) from 3" reducer coupling inside the QuickDraw Cabinet.
5. Connect 2" Manifold x 1" HB to 2" tee and connect 2" tee to reducer coupling inside the QuickDraw Cabinet.
6. Reconnect rinse to side leg of tee.

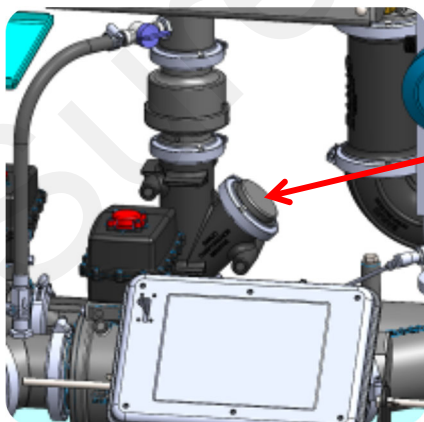


Step 4



Step 1

Step 2



Step 3



# No Bypass Kit Operation Instructions

Step 1

## **FULL** Chemical Jug Operation:

This process is typically executed during the "Manual Rinse Cycle" on QuickDraw<sup>MAX</sup> or at any time during loading with QuickDraw<sup>LITE</sup>.

1. Carefully bring the chemical jug down onto the ChemBlade Plus, splitting the jug.
2. Close the lid and open the Rotating Rinse Valve and water will flow through the rotary rinse head at the center of the blade to thoroughly rinse the inside of the jug.
3. Open Shutoff Valve and Tank Valve to pull product from the tank, through the venturi valve and into the QuickDraw or batch.  
*Note: Open the Shutoff Valve first to start flow through the venturi and begin to pull a suction before opening Tank Valve.*
4. With the Tank Valve open, close rinse valves, then close the tank lid and open Rotating Rinse Valve and Slurry Valve to clean the tank. After tank is evacuated, close all valves.
5. Discard chemical jug properly and resume QuickDraw operation.

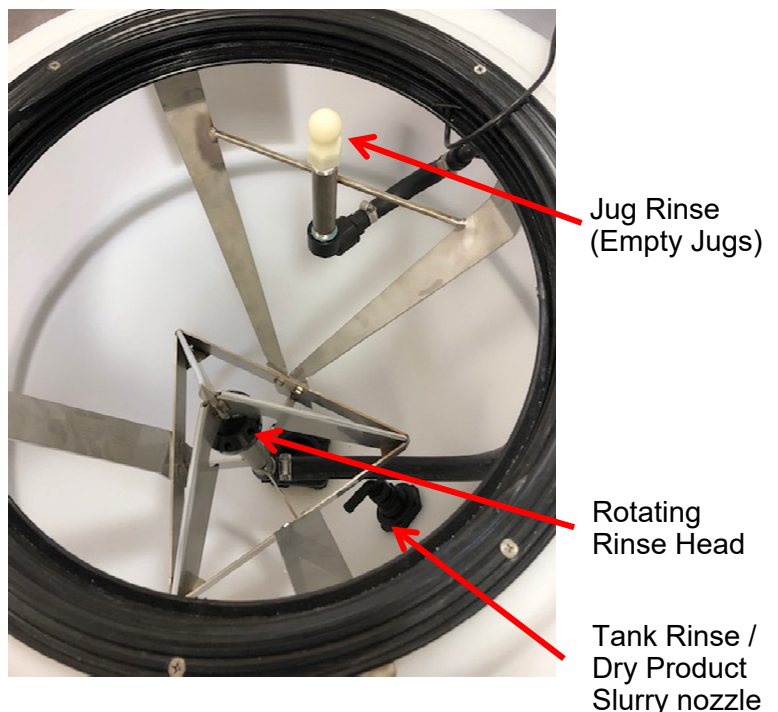
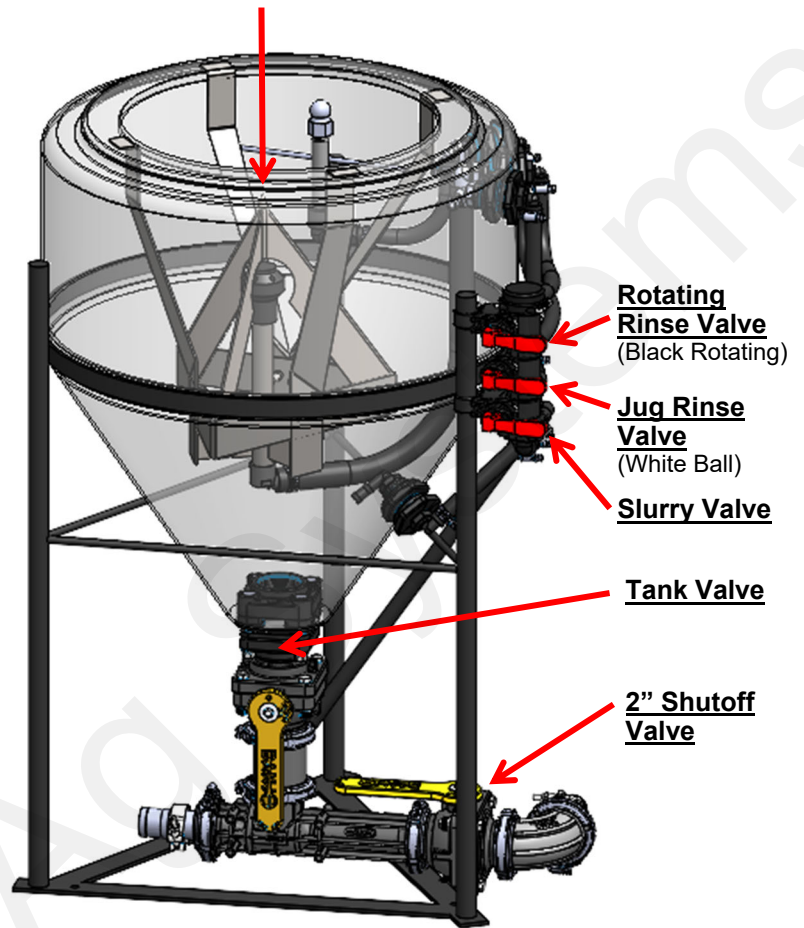
## **EMPTY** Chemical Jug Operation:

1. Turn the jug upside down over the white ball rinse nozzle. Open the middle red handled Jug Rinse Valve to rinse the empty jug.
2. Close middle Jug Rinse Valve and discard chemical jug properly.

## **DRY** Product Operation:

1. Unlike a chemical jug, a bag of dry product is not likely to need rinsed. Drop the bag(s) onto the ChemBlade and shake remaining contents into the tank.
2. Close the tank lid and open Slurry Valve and Rotating Rinse Valves to create a slurry of the dry product and water, to ease transport through the venturi valve. *Note: Slurry valve can be opened prior to Step 1.*
3. Open 2" Shutoff Valve and Tank Valve to pull product from the tank, through the venturi valve and into the QuickDraw.
4. After tank is evacuated, close rinse valves and tank valves.

*Note: All water used for rinsing and mixing is still being measured by the QuickDraw automated spray tender system.*





# 3" Bypass Kit Operation Instructions

## FULL Chemical Jug Operation:

This process is typically executed during the "Manual Rinse Cycle" on QuickDraw<sup>MAX</sup> or at any time during loading with QuickDraw<sup>LITE</sup>.

1. Carefully bring the chemical jug down onto the ChemBlade Plus, splitting the jug.
2. Close the lid and open the Rotating Rinse Valve and water will flow through the rotary rinse head at the center of the blade to thoroughly rinse the inside of the jug.
3. Close 3" Bypass Valve and open Tank Valve to pull product from the tank, through the venturi valve and into the QuickDraw or batch.
4. With the Tank Valve open, close rinse valves, then close the tank lid and open Rotating Rinse Valve and Slurry Valve to clean the tank. After tank is evacuated, close all valves, and re-open 3" Bypass Valve to top off sprayer.
5. Discard chemical jug properly and resume QuickDraw operation.

## EMPTY Chemical Jug Operation:

1. Turn the jug upside down over the white ball rinse nozzle. Open the middle red handled Jug Rinse Valve to rinse the empty jug.
2. Close middle Jug Rinse Valve and discard chemical jug properly.

## DRY Product Operation:

1. Unlike a chemical jug, a bag of dry product is not likely to need rinsed. Drop the bag(s) onto the ChemBlade and shake remaining contents into the tank.
2. Close the tank lid and open Slurry Valve and Rotating Rinse Valves to create a slurry of the dry product and water, to ease transport through the venturi valve. *Note: Slurry valve can be opened prior to Step 1.*
3. Close 3" Bypass Valve and open Tank Valve to pull product from the tank, through the venturi valve and into the QuickDraw.
4. After tank is evacuated, close rinse valves and tank valves.

*Note: All water used for rinsing and mixing is still being measured by the QuickDraw automated spray tender system.*

