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# **DRAMM<sup>®</sup>** **FERTICART<sup>™</sup>**

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Owners Manual

FCST100

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# **DRAMM**<sup>®</sup>

## **FertiCart SprayTrax**

### **Model: FCST100**

120 Volt 60 HZ  
11.4 AMPS

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Serial Number

### **Limited Warranty**

Dramm Corporation warrants, to the extent of the purchase price, that the Hydra Sprayer will be free from defects in materials and workmanship to the original purchaser for a period of six months. Parts subject to wear are not covered under this limited warranty. Defects or damages due to the misuse, non-observance of safety standards, or non-observance of EPA chemical guidelines are not covered under this limited warranty. Please read and follow the instructions and heed warnings stated in the operating manual and on the Hydra Sprayer.

Dramm Corporation makes no other further warranty, expressed or implied, and all other or further warranties, including any warranties of merchantability or fitness for a particular purpose are expressly excluded.

In no event shall the manufacturer(s) or Dramm Corporation be liable for loss of product, profit or any other special, incidental or consequential damages including, but not limited to, plant damage, property, or persons.

Dramm Corporation makes no warranty, expressed or implied, in regard to the efficacy of any pesticide or other chemical which may be applied using the Hydra Sprayer.

This warranty begins on the date of original purchase. This warranty is void if there is no proof of purchase or warranty registration on file. Mail the warranty registration card to the Dramm Corporation and keep the bill of sale or invoice. If warranty service is required, please include a written description of the equipment malfunction, a return address and telephone number. The Hydra Sprayer, model HYDRA, must be thoroughly cleaned of all chemical residue and sent prepaid to:

FertiCart Sprayer Service  
c/o Dramm Corporation  
2000 North 18th Street  
Manitowoc, WI 54220

For quicker service, please visit [www.dramm.com/service](http://www.dramm.com/service) to schedule a service for your Dramm product. This will let us know your equipment is coming in for repair, gather information we'll need to service your product and provide a shipping label for you to use when sending in your Dramm equipment.

920.684.0227  
[information@dramm.com](mailto:information@dramm.com) • [www.dramm.com](http://www.dramm.com)

# WARNING

## FertiCart SprayTrax Model: FCST100

- Use only 120 volt electrical outlets when charging.
- Use only 3-pronged grounded extension cords and receptacle boxes.
- Keep all electrical connections away from liquids.
- Keep battery compartment clean and dry. **WARNING: Battery is a sealed AGM, Excessive draining of the battery will reduce quality and life of battery.**
- Clean after every use with warm soapy water and then rinse with clean water.
- Wear protective clothing; respirator, hood, gloves and boots when mixing and spraying chemicals.
- Be certain all hoses and connections are secure prior to using.
- Apply all chemicals according to EPA Guidelines.
- Store in a clean, dry location– away from children and unauthorized personnel.
- Remove all hoses and drain the pump prior to storage.
- Do not drag the hoses over sharp objects or bend excessively.
- Do not store mixed chemicals. Use all of the chemical mixture immediately.

## Introduction

The Damm FCST100 Ferticart is a cart for use with larger Dosatron injectors. The cart design includes articulating axles for rugged terrain and a tight turn-radius. A 100 gallon stock tank includes battery-powered agitation to keep solution in suspension.

## Specifications

Tank size:	100 gallons
Battery size:	100 ah
Charger size:	10 amp
Pump Amperage Load:	8.5 amp max load. Standard operation 4-5 amps.
Pump Agitation Capacity:	2-3 gpm depending on viscosity.
Run time:	8-12 hours on a full battery. <b><i>DO NOT DRAIN BATTERY FULLY</i></b>
Charge time:	8-12 hours when nearly empty.

## Assembly and Preparation

The FCST100 comes assembled in a crate for shipping protection. Remove the cart from the crate to get started.

The FCST100 does not include the injector. This can be purchased separately. All of the plumbing for the cart is included, but the injector needs to be installed before use.

Attach the Dosatron mounting bracket to the upright on the upper frame using the included bolts.

Disconnect the unions on the upper plumbing arm below the threaded elbows and connect to the injector. Be sure to use Teflon® tape to ensure a tight seal.



Re-seat the unions into the plumbing with the injector mounted to the mounting bracket and tighten the unions.

The FCST100 comes with 1.5" female threaded plumbing inlets and outlets. Use these to connect to your incoming water and outgoing plumbing.

Feed the solution suction line through the hole on the top of the tank below the injector from inside the tank and attach to the injector stem following Dosatron guidelines.



Place the weighted filter end in the bottom of the tank.

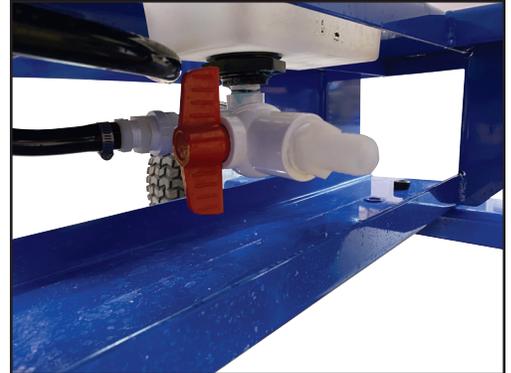
Use the included battery charger to charge the battery fully. An empty battery will need 8-12 hours to charge fully. **DO NOT FULLY DRAIN THE BATTERY TO ENSURE LONGER LIFE.** The charger is a maintainer and will not damage or over-charge the battery when complete.

## Operation

Once the Ferticart and injector are assembled and the external plumbing is connected, you can use the injector cart.

Make sure that the drain valve on the bottom of the tank is closed.

Fill the tank to the desired level with water.



Turn on the Agitation pump to start recirculating water. Water is pulled from the intake drain on the bottom of the tank and returned through three nozzles designed to spray across the bottom of the tank, rotating the liquid vertically in the tank.

Add your chemical or fertilizer to the already agitating tank following instructions from Dosatron.



## Mixing Slurry

BE SURE TO MIX INTO A SLURRY ***BEFORE*** ADDING TO THE TANK.

The Ferticart will keep chemicals in solution but may have difficulty dissolving and mixing chemicals that are not already dissolved. You may need to aid mixing with a stick.

Ensure that the ratio on the injector is set properly for the stock solution that you have mixed.

The FCST100 includes a 200 mesh filter on the inlet to the injector. This must be used to maintain the injector warranty.



The FCST100 includes a check valve to prevent water hammer from damaging the injector. This must be used to maintain the injector warranty.

This check valve may prevent reverse siphoning from the solution tank. However, it is not sufficient for most water source regulations.



**Ensure that you follow all guidelines for backflow prevention for your water source.**

To dispense finished solution from the injector, open the ball valve on the outlet to allow to flow to the irrigation system.



## Maintenance and Cleaning

Once fertigation is complete, rinse the tank well and collect the waste-water in a bucket using the drain at the bottom of the tank.

Place the solution siphon line into a bucket of plain water and run some water through the injector to flush out the system.

Clean the 200 mesh filter by unscrewing the outer cap and removing the screen and rinsing to remove any debris.



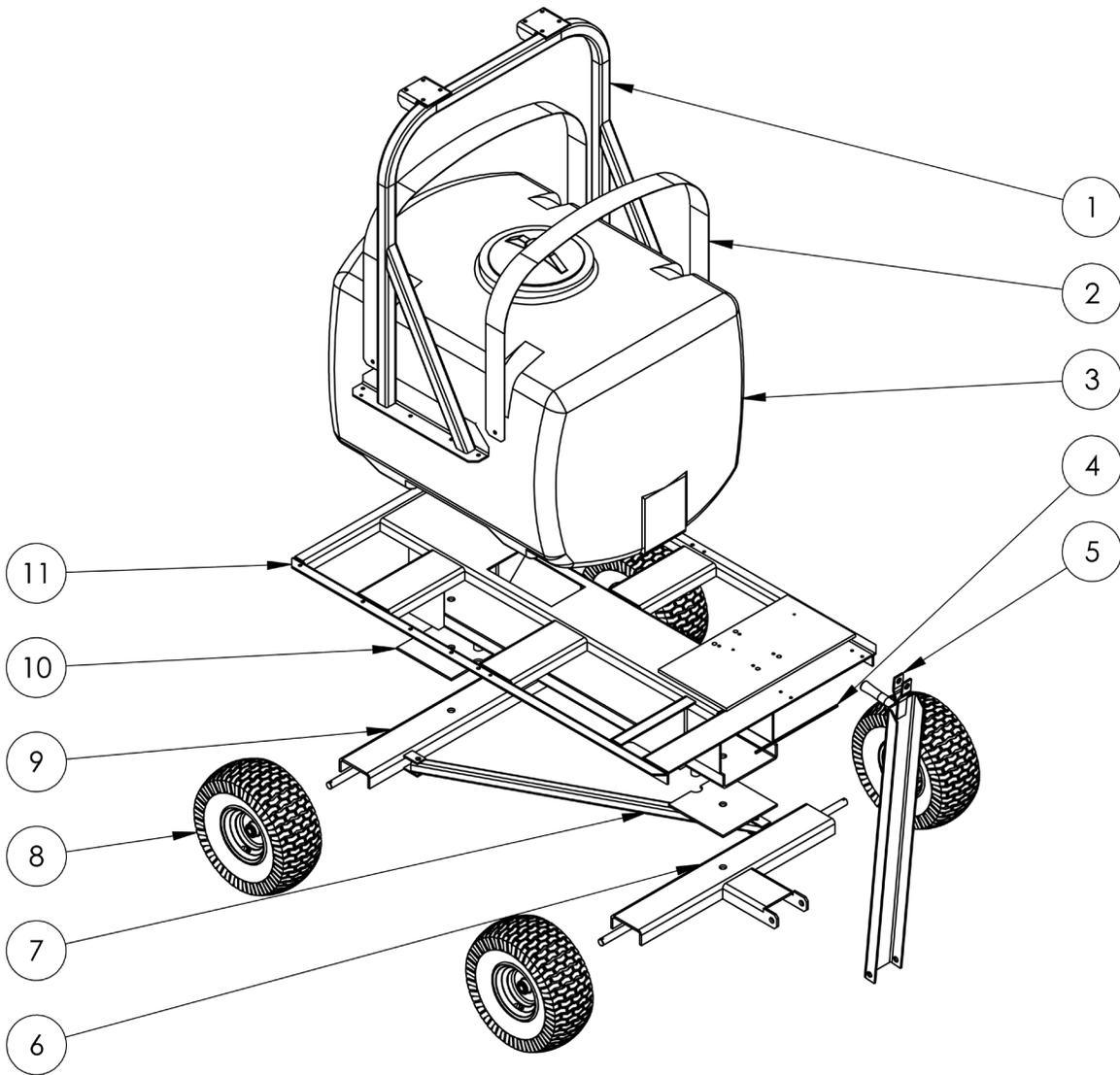
Clean the intake stand-filter by unscrewing the top cap and removing the screen and rinsing to remove any debris.



Charge the battery by connecting to the included charger.

Follow any maintenance guidelines from Dosatron for the specific injector being used.

# FCST100 Cart Assembly Diagram



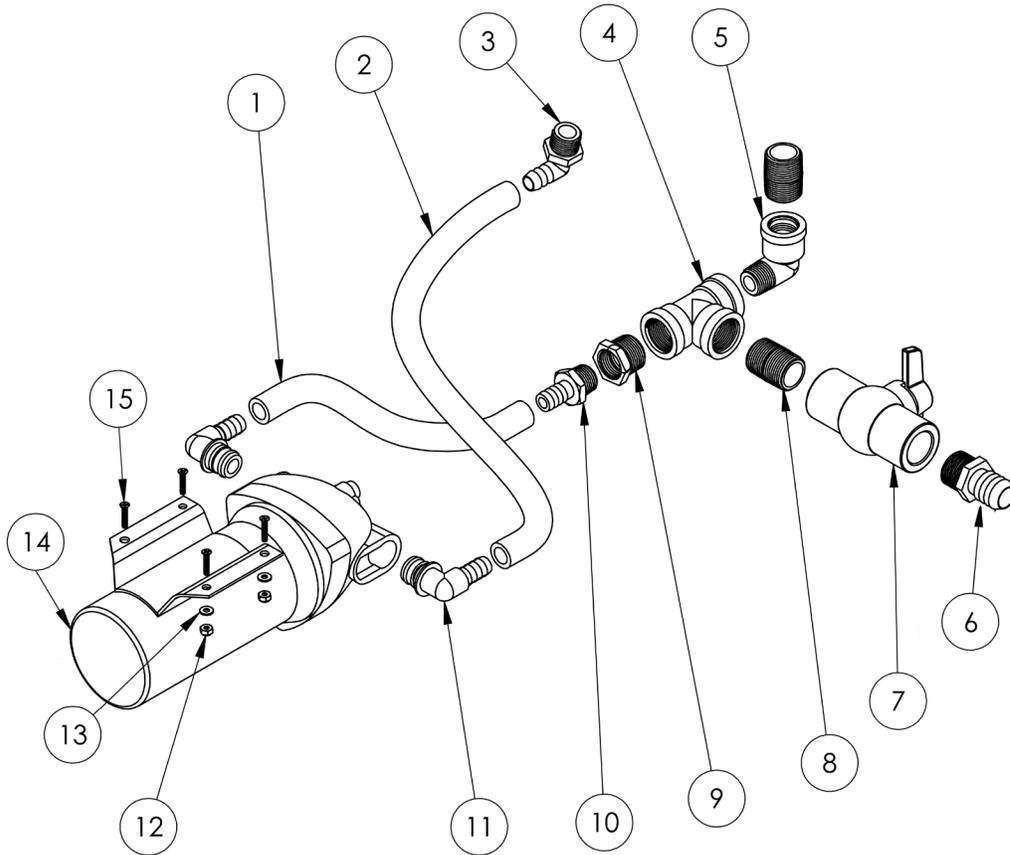
## FCST100 Cart Assembly List

\*NO HARDWARE

ITEM NO.	DRAMMNO.	TITLE	
1	D11549A	REEL BRACKET-DOUBLE ST100	1
2	D11415	STRAP TANK - ST100	2
3	610100	TANK 100 GAL W/SUMP	1
4	100100	EDGE TRIM BLACK VINYL	1'
5	D11556	TONGUE - ST100	1
6	D11532	AXLE FRONT - ST100	1
7	D11558	TIE BAR - ST100	1
8	500000	TIRE TURF, 6.00 X 15 - 3/4 AXLE	4
9	D11534	AXLE REAR - ST100	1
10	D11594	PIVOT PLATE - ST100	2
11	D11539	FRAME ST100	1

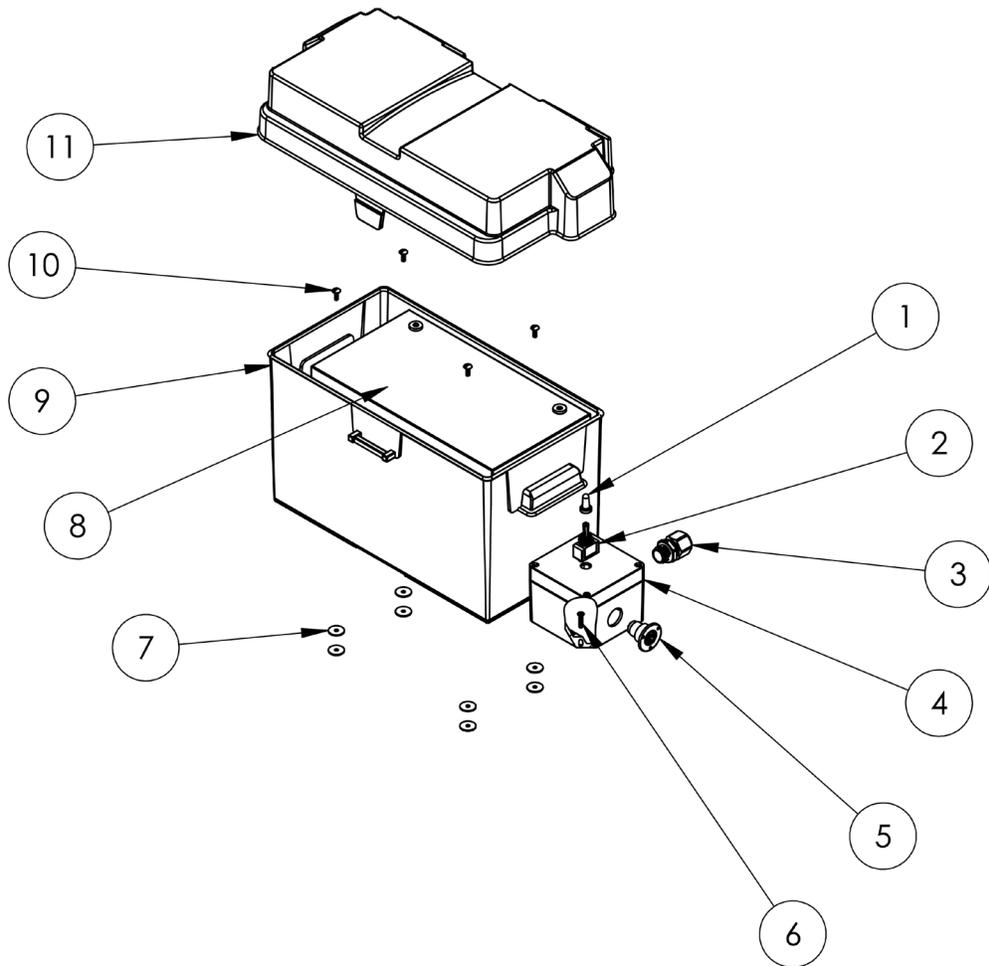
DRAMMNO.	TITLE	
D11539	FRAME ST100	1
D11549A	REEL BRACKET-DOUBLE ST100	1
D11594	PIVOT PLATE - ST100	2
D11532	AXLE FRONT - ST100	1
D11534	AXLE REAR - ST100	1
D11558	TIE BAR - ST100	1
610100	TANK 100 GAL W/SUMP	1
500000	TIRE TURF, 6.00 X 15 - 3/4 AXLE	4
118100	HAIRPIN 1/8 X 2 9/16, 3/4SFT	7
110400	BOLT SHOULDER 3/4 X 3/4	2
110325	WASHER LOCK 5/8, SSTL	2
110260	NUT LOCK 5/8 - 11, STL-INS	2
118002	CLEVIS PIN 1/2DIA X 2 LG	2
D11415	STRAP TANK - ST100	2
110301	WASHER FLAT 5/16 STL	20
110022	HHCS 5/16 - 18 X 1, GR 5	10
110276	NUT NYLOC, 5/16 - 18	10
114000	BOLT - J, 1/4 - 20 X 6 IN	4
110300	WASHER FLAT 1/4 SAE, Z	4
110275	NUT NYLOC, 1/4 - 20	4
D11556	TONGUE - ST100	1
118004	CLEVIS PIN 5/8 DIA X 5 LG	1
100100	EDGE TRIM BLACK VINYL	1

## FCST100 Agitation Assembly Diagram & Parts List



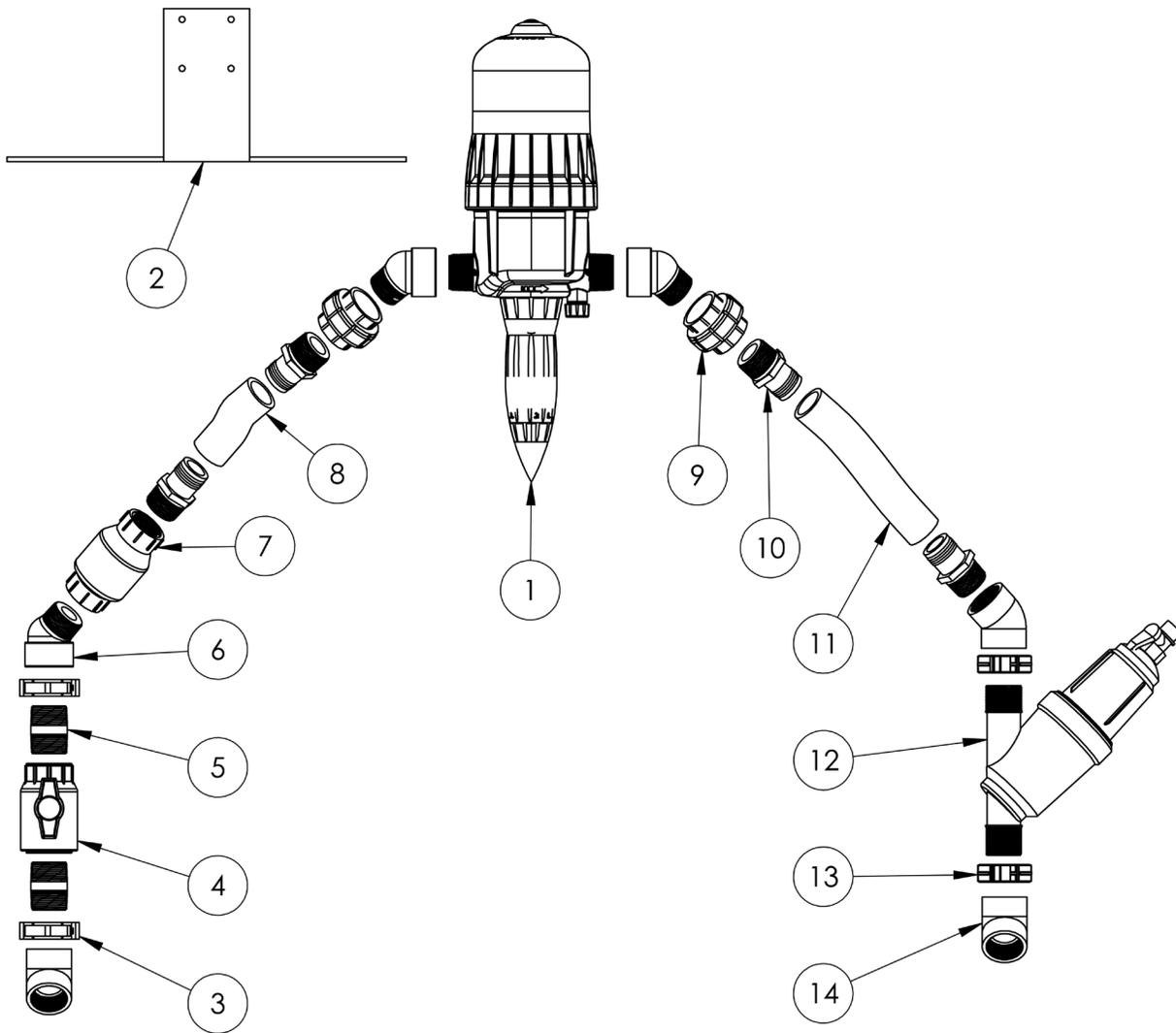
ITEM NO.	DRAMMNO.	TITLE	
1	250040	HOSE 1/2ID BLACK, PVC	9"
2	250040	HOSE 1/2ID BLACK, PVC	18"
3	220201	BARB ELL 1/2 X 1/2MPT NY	1
4	220606	TEE 3/4FPT PVC	1
5	220127	ELBOW ST 1/2 PT NY	1
6	220203	BARB 3/4 ID X 3/4MPT, NY	1
7	230026	VALVE BALL 3/4 THRD PVC	1
8	220012	NIPPLE CLOSE 3/4 PVC	2
9	220019	BUSHING 1/2FPTX3/4MPT NYLON	1
10	220211	BARB 1/2 X 1/2MPT, NY	1
11	220256	BARB ELL 1/2 X PORT O-RING	2
12	110278	NUT NYLON 6-32	4
13	110710	WASHER FLAT #6, Z	4
14	200047	PUMP 12V-2.3GPM CONT 8.5A	1
15	110610	MS PFH 6-32 X 3/4 Z	4

## FCST100 Electrical Assembly Diagram & Parts List



ITEM NO.	DRAMMNO.	TITLE	QTY.
1	310102	TOGGLE SWITCH BOOT	1
2	310005	TOGGLE SWITCH SPDT	1
3	300507	STRAIN RELIEF 9/32 - 1/2	1
4	300111	BOX, SWITCH ST100	1
5	300600	3-PIN FEMALE CONECTOR	1
6	110620	PFH MS 8-32 X 3/4 Z	4
7	110740	WASHER FENDER #8 Z	12
8	330003	BATTERY - 12VDC 100AH	1
9	300110-1	BOX, BATTERY ST100 - BOTTOM	1
10	110621	MS STH 8-32 X 1/2 Z	4
11	300110-2	BOX, BATTERY ST100 - TOP	1

# FCST100 DOSATRON® Plumbing Assembly Diagram



**FCST100 DOSATRON Plumbing Assembly List**

ITEM NO.	DRAMMNO.	TITLE	QTY.
1	D8RE2VFII	DOSATRON INJ 40GPM 1:500-1:50	1
2	D12126 P	40 GAL DOSATRON MOUNT	1
3	KK150	KWIK KLAMP 1 1/2 IN	2
4	230033	VALVE BALL 1 1/2 THRD PVC	1
5	220074	NIPPLE 1 1/2 X 2 1/2 SCH80 PVC	2
6	220137	ELBOW ST 1 1/2 SCH80	3
7	230230	VALVE CHECK 1 1/2 PVC	1
8	251008	TUBING 1 1/2 ID PVC	4.5"
9	220710	UNION 1-1/2FPT PVC	2
10	220254	BARB 1 1/2 X 1 1/2 MPT PVC	4
11	251008	TUBING 1 1/2 ID PVC	9.5"
12	290005	SCREEN FILTER, 1 1/2 PL	1
13	114222	CLIP, PIPE 1 1/2IN	2
14	220238	ELBOW 1 1/2 FPT - 45 DEG, SCH80	3

