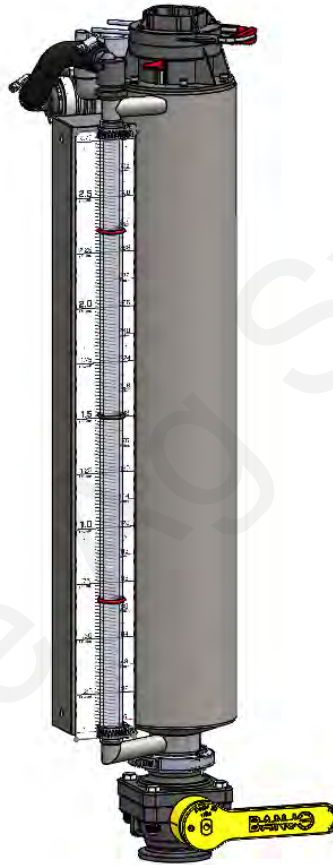


# 396-4397Y1

# CHEM-BLADE<sup>®</sup> Caddy

## Owner's Manual



**⚠ DANGER**

*Operator must read and understand this complete manual before installation or operation. System contains components that can cause serious injury or death.*

*In the march of progress, engineering and design changes are inevitable, therefore, we reserve the right to vary our designs and/or specifications without implying that they need to be installed on previous models. If you have occasion to order parts or request information about your Caddy, be sure to provide machine serial and model number.*





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2. Safety
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# 1. Warranty Policy

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SureFire Ag Systems, Inc. (hereinafter referred to as "SureFire") warrants the whole goods products it sells to be free from defects in material or workmanship for a period of one (1) year from the date of sale of the product(s) to the original user.

SureFire warrants the parts it sells to be free from defects in material or workmanship for a period of ninety (90) days from the date of delivery of the product(s) to the original user. This shall include replacement parts installed by SureFire.

Warranty of SureFire whole goods and/or parts applies only to material and workmanship. Misuse, misapplication, neglect, alteration, accident, normal wear, or acts of God affecting SureFire products are not eligible for warranty. Warranty shall apply only to the smallest reasonably serviced component (e.g. if a PWM solenoid fails on a hydraulic pump assembly, only the solenoid will be covered under warranty, not the entire pump assembly). In the event that multiple components are replaced, component warranty eligibility will be assessed once the parts are returned to SureFire for determination of failure (parts determined to still be in working order will be returned to the dealer and warranty will not apply to those components).

**WARRANTY CLAIMS:** A warranty claim and request to return defective product(s) must be presented to the SureFire Service Department, describing the defect in material or workmanship of the product(s). This claim may be made via phone, e-mail, fax, or written request. Claims for warranty of whole goods or parts must also include proof of date of sale of the product(s) to the original user.

The SureFire Service Department will proceed in making a preliminary decision as to the eligibility of the claim for warranty consideration. After the SureFire Service Department deems it necessary to proceed with warranty consideration, a determination will be made as to whether or not the original product needs to be returned to SureFire. In the event a return is deemed necessary, a Return Materials Authorization (RMA) will be generated by the SureFire Service Department. The defective product(s) in question must be sent, freight prepaid, within fourteen (14) days of the discovery of the product failure and initial warranty claim. Replacement product(s) may be sent to the selling dealer, directly to the customer, or picked up at the SureFire facility. At the discretion of the SureFire Service Department, replacement product(s) may be sent prior to, or after, the SureFire Returns Department receives the defective product(s).

*Any variation in the above procedure is at the sole discretion of the SureFire Service Department.*

SureFire agrees to handle all warranty claims in a timely manner and will inform dealers of any revisions or modifications to the SureFire Warranty Policy. Eligible warranty claims will be processed by SureFire within sixty (60) days of receiving failed product(s).

If a warranty claim is found to be ineligible for warranty coverage, the SureFire Service Department will be responsible to inform the dealer or end user in order to determine the course of action to be taken. SureFire reserves the right to make changes in specification and design without notice and without incurring any obligations to owners of products previously sold.

# 1. Warranty Information:

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SureFire Ag Systems takes no liability or responsibility for any crop, seed, property, or bodily damage or harm created by the ChemBlade ES System. Please operate with focus and care as the chemical products used can be very hazardous. Comply with all PPE requirements on container labels. Only persons licensed and properly trained in the application of chemicals should operate the ChemBlade Caddy System. Any person who undertakes the use of this system assumes the inherit risks associated with the handling and application of chemical products and should only do so in accordance with container labels and applicable local, state and federal laws and regulations. Any operator of the ChemBlade Caddy System agrees to defend and hold SureFire Ag Systems harmless from any damages, suits, claims or causes of actions due to improper use of its product.

One Year Warranty from date of purchase covering the Tank, Stand, and Caddy system from faulty components or defects in workmanship. This warranty does not apply to accessories or damage caused where repairs have been made or attempted by others. This warranty gives you specific legal rights and you may have other rights which vary in certain states or provinces. ChemBlade Caddy systems come with a 1-Year full warranty covering all components and systems. This is based off invoice purchase date.

## **Note!**

Any use of the ChemBlade Caddy, not explicitly indicated by this manual, is strictly prohibited.

Non-compliance will result in a partial or total loss of the product warranty.

Modifications or changes to the machine are only permitted after consultation with, and agreement from, the manufacturer. Original spare parts and accessories authorized by the manufacturer ensure safety. The use of other parts may exempt the manufacturer from liability for the resulting consequences.

SureFire Ag Systems assumes no liability for damages resulting from the improper use of the ChemBladeES or ChemBlade Caddy

**Product SIGHT GAUGE ACCURACY GUARANTEE:** We guarantee the factory installed Sight Gauge to an accuracy of +/- 2 US fl oz.

**FREE WARNING/INSTRUCTION LABEL REPLACEMENT:** If your warning or instruction labels become illegible or are missing, call for a free replacement.

## 2. Safety Instructions

**TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.**



Note the use of the signal words **DANGER**, **WARNING** and **CAUTION** with the safety messages. The appropriate signal word for each has been selected using the following guidelines:



**DANGER:** Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes, cannot be guarded.



**WARNING:** Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.



**CAUTION:** Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

**NOTICE** is used to address safety practices not related to personal safety.



## 2. Safety Instructions

The ChemBlade Caddy is a piece of equipment intended for use with a broad range of pesticide products. Please refer to product labels for intended materials before use for appropriate safety precautions. Always treat the system as if it had just previously handled a very hazardous product and could potentially still maintain some of its contents.



**⚠ WARNING** Residues of Plant Protection Products can cause the following:

- Breathing difficulties, poisoning, loss of consciousness or other life-threatening conditions due to inhalation or swallowing.
- Allergies and skin irritations due to skin contact.

**⚠ WARNING** When using the easyFlow with Plant Protection Products wear standard personal protective equipment that is recommended during mixing and loading of PPP, such as protective gloves, long sleeved shirts and trousers, shoes, face shield, and full respirator.

**⚠ WARNING** Read thoroughly the entire manual before servicing the system. Depressurize all hoses when conducting any service.

Label instructions and safety guides of (PPP) or chemical containers must be followed. Dispose of empty containers according to regulations.

Modifications or changes to the system are only permitted after consultation with, and agreement from, the manufacturer. Original spare parts and accessories authorized by the manufacturer ensure safety. The use of other parts may exempt the manufacturer from liability for the resulting consequences.

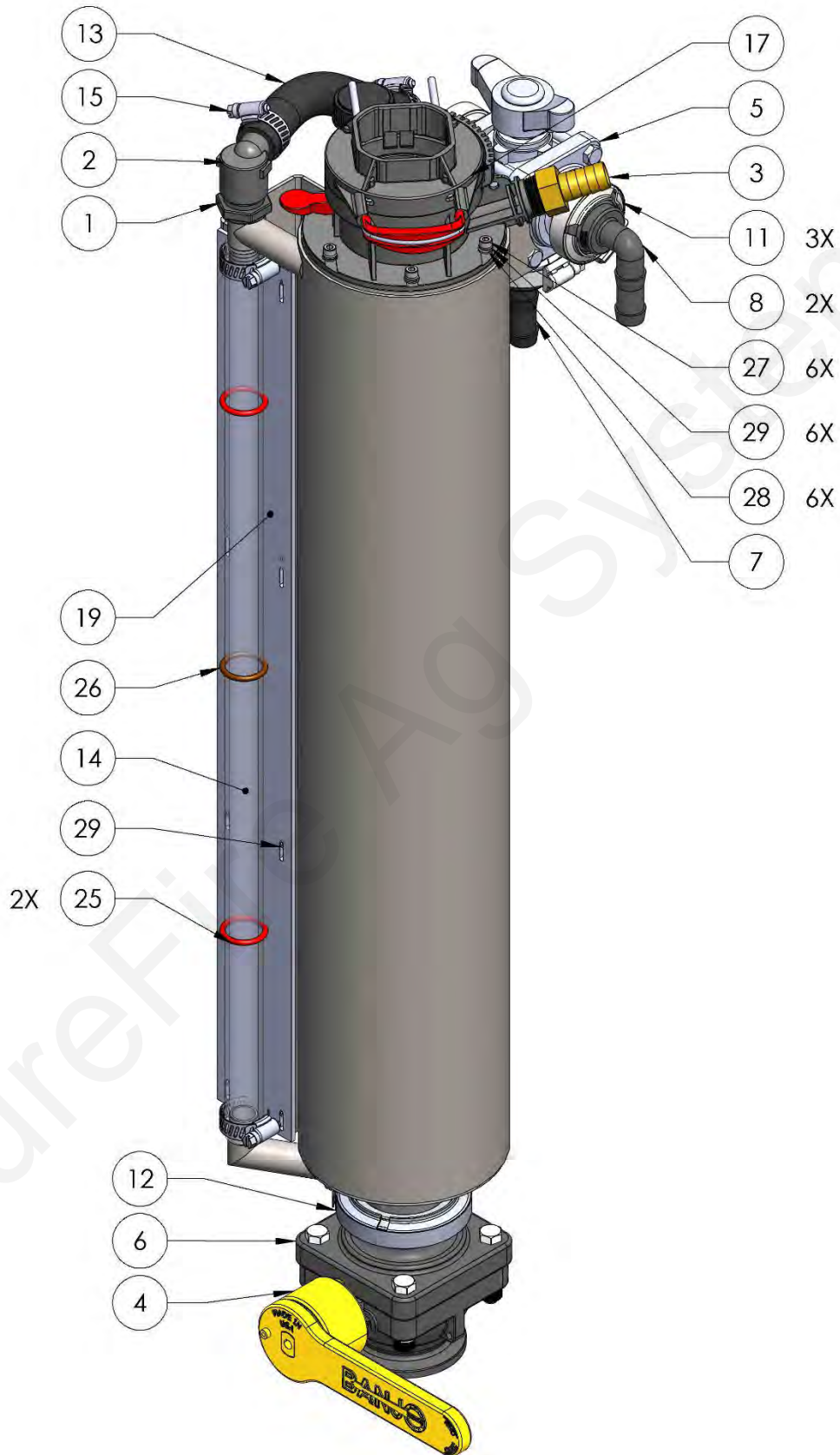
### 3. Main System Components - Parts List

The below list is for the common components of the main Caddy tank assembly.

ITEM NO	PART NUMBER	DESCRIPTION	QTY.
1	100-075050RB	3/4" MPT x 1/2" FPT Reducer Bushing	1
2	101-075075-F-90	3/4" FPT x 3/4" HB - 90 Degree	1
3	101-075BSPT075BRB	3/4" BSP Female Thread to 3/4" Hose Barb	1
4	102-01-220VHE	Stubby Valve Handle Extension	1
5	102-100MV-3BL	1" Manifold 3-Way Valve - Bottom Load	1
6	102-220MVSCF	2" Manifold Stubby Full Port Poly Valve	1
7	105-100075BRB	1" Manifold x 3/4" HB	1
8	105-100075BRB90	1" Manifold x 3/4" HB - 90 Degree	2
9	105-100G-H	1" EPDM Manifold Gasket	3
10	105-200G-H	2" EPDM Manifold Gasket for 220 Series Manifold Fittings	1
11	105-FC100	1" Manifold Clamp	3
12	105-FC220	2" Full Port Manifold Clamp	1
13	280-075-AG200	3/4" AG200 Hose	30
14	283-075-15007008	3/4" EVA Clear Tubing	28
15	350-1208	SS Hose Clamp - Size 12 - 1-1/4" Diameter (fits 3/4" AG200)	6
16	385-ASNY8	1/2" NPT Breather	1
17	385-EFEF02	EasyFlow Closed Coupler Tank Kit (Includes 2 Jug Adapters)	1
18	398-30-CC001	ChemBlade Caddy Tank Decal	1
19	398-30-CC002	ChemBlade Caddy Instruction Decal	1
20	398-30-CC003	ChemBlade Caddy Sight Gauge Decal	1
21	398-30-CSC32512-07	Danger label	1
22	398-30-USA	Made In USA Decal-Large	1
23	480-4351Y1-SS	ChemBlade Caddy Stainless Steel Tank	1
24	757-1283N86	Silicone O-Ring, 1/8 Fractional Width, Dash Number 214	2
25	757-5267T178	Viton O-Ring, Brown Dash Number 214	1
26	757-90128A244	5mm x 0.8mm x 16mm Socket Button Head/Zinc	6
27	757-91166A240	5mm Flat Washer	6
28	757-91202A230	5mm Lock Washer	6
29	757-97525A435	White POP Rivet 1/8 x .337" grip	8
30	385-GLEFJA64	easyFlow Jug Adapter	2



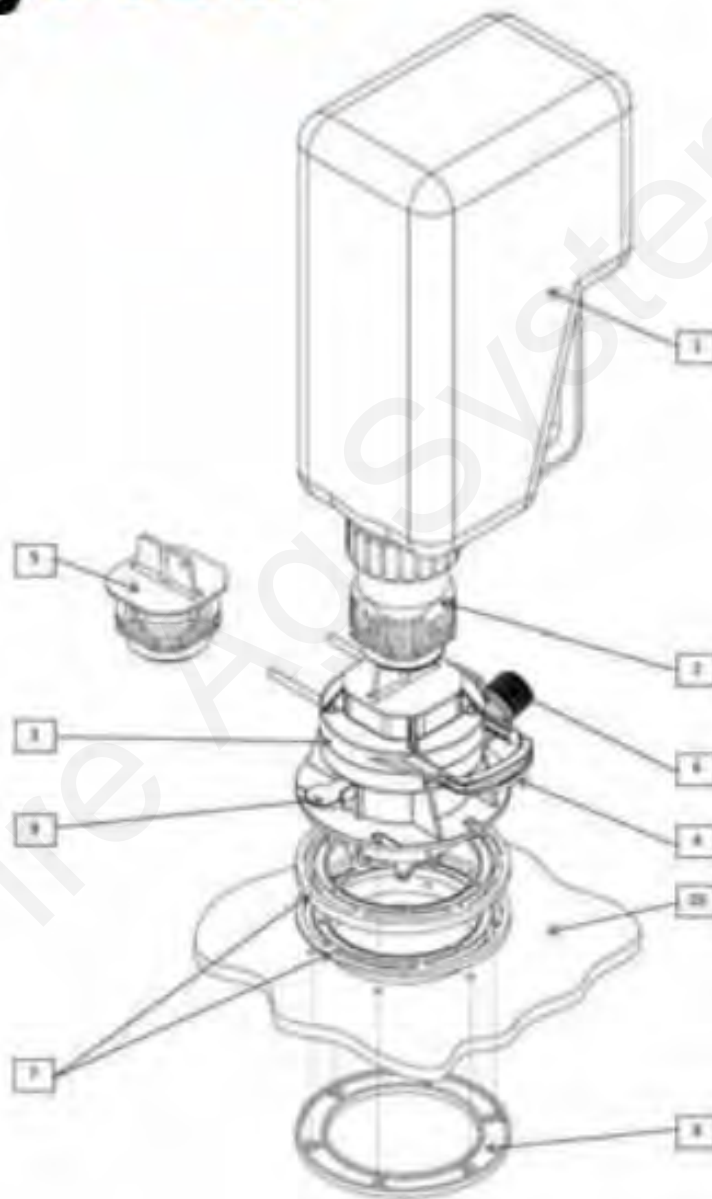
### 3. Main System Components - Diagram



### 3. Main System Components - easyFlow Closed system transfer system

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**easyFlow**



- |                                       |                                                  |
|---------------------------------------|--------------------------------------------------|
| 1. Plant Protection Product Container | 6. Thread for rinsing water connection, 3/4" BSP |
| 2. easyFlow container adapter         | 7. Wedge plates (optional, not used with Caddy)  |
| 3. easyFlow tank adapter              | 8. Drilling jig (1b)                             |
| 4. Hand Grip                          | 9. Rinsing Lever                                 |
| 5. Cap for tank adapter               | 10. Sprayer tank                                 |

\*Refer to easyFlow Quick Guide for full operation instructions and safety guides.

## 4. Installation Instructions

The first step of installing the ChemBlade Caddy is to confirm the overall layout of the entire mixing system, from carrier supply tank to application equipment solution tank.

### 610-03-100050 - Stand Alone Caddy

Part Number	Description	QTY
300-060100-5	3/8" x 1" Hex Head Bolt - G5	2
300-060208-5	3/8" x 2-1/2" Hex Head Bolt – G5	2
321-06	3/8" Nylock Nut	4
330-06	3/8" Flat Washer	6
477-4344Y1-RV	ChemBlade Caddy Stand Alone Stand	1
477-4455Y1-RV	ChemBlade Caddy Stand Alone Stand Base	1
480-4354Y1	ChemBlade Caddy Tank Assembly BOM	1

#### **Mounting and Assembly Instructions:**

1. Bolt the stand alone stand base to the stand alone stand using two (2) 3/8" x 2-1/2" hex head bolts, four (4) 3/8" flat washers, and two (2) nylon lock nuts.
2. Use 3/8" x 1" hex head bolts and nylon lock nuts to bolt the assembled ChemBlade Caddy tank to the stand alone stand.
3. Route 3/4" hose rinse water supply hose to the 3/4" hose barb on the bottom of the 3-way valve.
4. SureFire Ag systems recommends 2" outlet hose to the tank valve assembly for maximum performance.
5. Mount the Stand Alone Caddy system using the appropriate length 3/8" fasteners for the deck or surface the system is mounted to. Due to the varying thicknesses or mounting options, this hardware has not been provided.

*Note: Tank assembly valve can be rotated 90° counterclockwise for better accessibility if desired.*



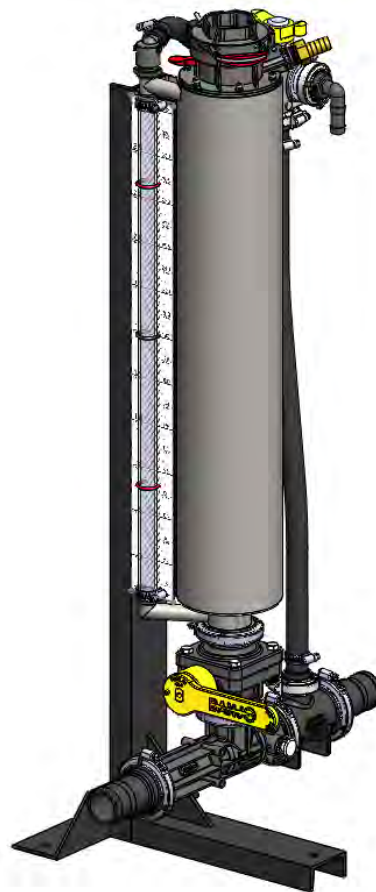
# 610-03-100100 - Stand Alone Caddy w/ Venturi

Part Number	Description	QTY
105-100075BRB	1" Manifold x 3/4" HB	1
105-100G-H	1" EPDM Manifold Gasket	1
105-220BRB	2" Full Port Manifold x 2" Hose Barb	2
105-200G-H	2" EPDM Manifold Gasket for 220 Series Manifold Fittings	7
105-220100TEE	2" Full Port Manifold x 1" Manifold Tee	1
105-220-3371-0038	2" Full Port Manifold Venturi, 11mm Nozzle, RH	1
105-FC100	1" Manifold Clamp	1
105-FC220	2" Full Port Manifold Clamp	7
280-075-AG200	3/4" AG200 Hose	30
300-060100-5	3/8" x 1" Hex Head Bolt - G5	2
300-060208-5	3/8" x 2-1/2" Hex Head Bolt - G5	2
321-06	3/8" Nylock Nut	4
330-06	3/8" Flat Washer	6
350-1208	SS Hose Clamp - Size 12 - 1-1/4" Diameter (fits 3/4" AG200)	2
477-4344Y1-RV	ChemBlade Caddy Stand Alone Stand	1
477-4455Y1-RV	ChemBlade Caddy Stand Alone Stand Base	1
480-4354Y1	ChemBlade Caddy Tank Assembly BOM	1

## **Mounting and Assembly Instructions:**

6. Bolt the stand alone stand base to the stand alone stand using two (2) 3/8" x 2-1/2" hex head bolts, four (4) 3/8" flat washers, and two (2) nylon lock nuts.
7. Use 3/8" x 1" hex head bolts and nylon lock nuts to bolt the assembled ChemBlade Caddy tank to the stand alone stand.
8. Connect the venturi and M220 x M100 tee to the bottom of the Caddy tank assembly as shown (right).
9. Connect 1" manifold x 3/4" hose barb fitting to the M220 x M100 tee fitting.
10. Route 3/4" hose from the venturi assembly to the 3/4" hose barb on the bottom of the 3-way valve.
11. SureFire Ag systems recommends 2" inlet and outlet hose to the venturi assembly for maximum performance.
12. Mount the Stand Alone Caddy system using the appropriate length 3/8" fasteners for the deck or surface the system is mounted to. Due to the varying thicknesses or mounting options, this hardware has not been provided.

*Note: Tank assembly valve can be rotated 90° counterclockwise for better accessibility if desired.*



# 610-03-100200 Stand Alone Caddy w/ Venturi Bypass

Part Number	Description	QTY
101-075075-H	3/4" MPT x 3/4" HB	1
102-220MVSCF	2" Manifold Stubby Full Port Poly Valve	1
105-200G-H	2" EPDM Manifold Gasket for 220 Series Manifold Fittings	4
105-220-3371-0038	2" Full Port Manifold Venturi, 11mm Nozzle, RH	1
105-220CPG45	2" Full Port Manifold Coupling - 45 Degree	2
105-220CPG45Y	2" Full Port Manifold Y Coupling - 45 Degree	1
105-220CPG6	2" Full Port Manifold Coupling - 6"	1
105-220YG45	2" Full Port Manifold - 45 Degree Y with 3/4" Gauge Port	1
105-FC220	2" Full Port Manifold Clamp	7
280-075-AG200	3/4" AG200 Hose	30
300-060100-5	3/8" x 1" Hex Head Bolt - G5	2
300-060208-5	3/8" x 2-1/2" Hex Head Bolt - G5	2
321-06	3/8" Nylock Nut	2
330-06	3/8" Flat Washer	2
350-1208	SS Hose Clamp - Size 12 - 1-1/4" Diameter (fits 3/4" AG200)	2
477-4344Y1-RV	ChemBlade Caddy Stand Alone Stand	1
477-4455Y1-RV	ChemBlade Caddy Stand Alone Stand Base	1
480-4354Y1	ChemBlade Caddy Tank Assembly	1

## **Mounting and Assembly Instructions:**

1. Bolt the stand alone stand base to the stand alone stand using two (2) 3/8" x 2-1/2" hex head bolts, four (4) 3/8" flat washers, and two (2) nylon lock nuts.
2. Use 3/8" x 1" hex head bolts and nylon lock nuts to bolt the assembled ChemBlade Caddy tank to the stand alone stand.
3. Assemble the venturi and bypass plumbing as shown below.
4. Thread 3/4" MPT x 3/4" hose barb into the M220Y45 with gauge port.
5. Route 3/4" hose from the venturi assembly to the 3/4" hose barb on the bottom of the 3-way valve.
6. SureFire Ag systems recommends 2" inlet and outlet hose to the venturi assembly for maximum performance.
7. Mount the Stand Alone Caddy system using the appropriate length 3/8" fasteners for the deck or surface the system is mounted to. Due to the varying thicknesses or mounting options, this hardware has not been provided.

## **Carrier Plumbing:**

For all 2" venturi with bypass models please confirm direction of flow before plumbing the system. The 2" plumbing models can be mounted with either a left to right or right to left (shown right) flow when standing in front of the system. Keep in mind during installation that venturi systems rely on the difference of pressure between the inlet and outlet of the venturi for the suction performance on the branch/tank outlet port. Try to keep plumbing direction changes of both inlet and discharge flow to a minimum and utilize appropriate grade and style of components. The 45 angle and "sweep" style 90 fittings permit the most flow for directional changes and should be used when feasible.

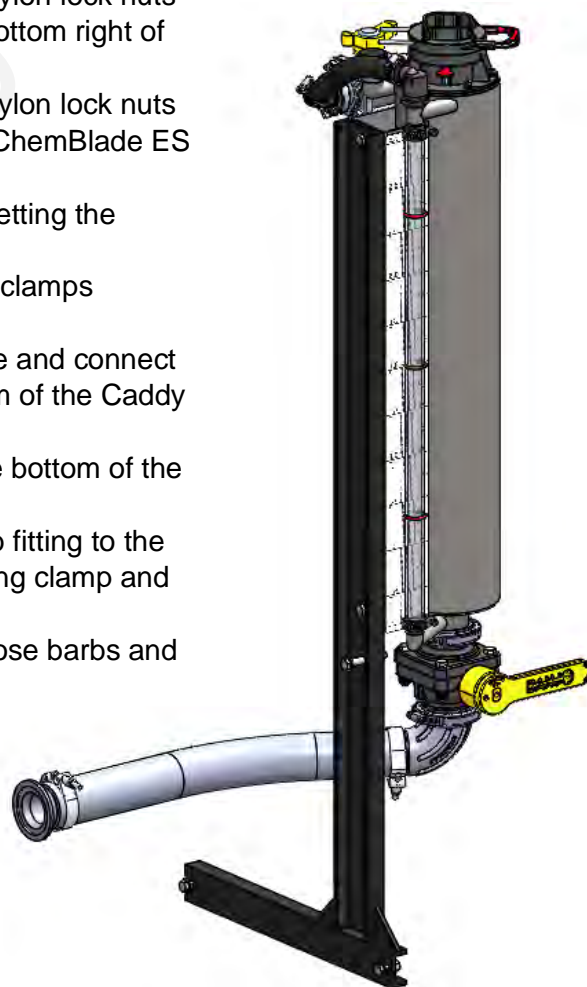


# 610-03-100300 - Caddy with ChemBlade ES

Part Number	Description	Qty
105-200G-H	2" EPDM Manifold Gasket for 220 Series Manifold Fittings	1
105-220BRB	2" Full Port Manifold x 2" HB	1
105-220BRBSWP90	2" Full Port Manifold x 2" HB - 90 Degree Sweep	1
105-FC220	2" Full Port Manifold Clamp	1
280-200-WBS	2" Wire Braided Suction Hose	18
300-060100-5	3/8" x 1" Hex Head Bolt - G5	2
300-060104-5	3/8" x 1-1/4" Hex Head Bolt - G5	2
300-060200-5	3/8" x 2" Hex Head Bolt - G5	3
321-06	3/8" Nylock Nut	2
323-06	3/8" Flange Nut	2
330-06	3/8" Flat Washer	4
350-1208	SS Hose Clamp - Size 12 - 1-1/4" Diameter (fits 3/4" AG200)	2
350-TC231	Pressure Seal HD Clamp, Size 288 (fits 2" Enforcer and Wire Braided)	2
477-4340Y1-RV	ChemBlade Caddy ES Stand	1
480-4354Y1	ChemBlade Caddy Tank Assembly BOM	1

## **Kit Number 610-03-100300 - Mounting to ChemBlade ES Tank:**

1. Use 3/8" x 1" hex head bolts and flanged nylon lock nuts to bolt the pre-assembled ChemBlade Caddy tank to the mounting bracket.
2. Use 3/8" x 1-1/4" hex head bolts, washers, and flanged nylon lock nuts on the bottom two holes of the mounting bracket to the bottom right of the ChemBlade ES tank stand.
3. Use 3/8" x 2-1/2" hex head bolts, washers, and flanged nylon lock nuts on the top hole of the mounting bracket to the top of the ChemBlade ES tank stand.
4. Remove the top clamp of the rinse wand service valve, setting the clamp and gasket aside to be re-used.
5. Install 1" manifold tee above the rinse valve and reinstall clamps and gaskets.
6. Add 1" manifold x 3/4" hose barb fitting to the leg of the tee and connect Rinse Supply plumbing to the 3/4" hose barb on the bottom of the Caddy 3-way valve. Fasten with hose clamps.
7. Connect M220BRBSWP90 hose barb sweep fitting to the bottom of the Caddy tank valve.
8. Remove the M220 cap and connect M220BRB hose barb fitting to the tee on the bottom of the ChemBlade ES, reuse the existing clamp and gasket.
9. Route 2" wire braided suction hose between these two hose barbs and tighten with hose clamps.



## 5. Operating Instructions:

- Max. Operating Pressure – 90 PSI (6 Bar)
- Min. Operating Pressure – 30 psi (2 Bar)
- Optimal Operating Pressure – 45-60 psi (3-4 Bar)
- Venturi Models – Min 40 GPM Carrier supply flow

### Steps for Successful Jug Contents; Measure, Transfer, and Clean:



*Operator must read and understand this complete manual before installation or operation. System contains components that can cause serious injury or death.*

1. Remove container Cap and install container Adapter (Adapter should be in the extended position, with the seal cutter protected inside the container adapter)
2. Ensure **TANK OUTLET VALVE** and **YELLOW VALVE** are closed.
3. Push in **RED HOOP HANDLE**, remove coupler plug on the lanyard.
4. Lower Jug Adapter down into Coupler, once seated pull **RED HOOP HANDLE**. (Lock mechanism will only engage will full seating of adapter.)
5. Apply downward pressure on Jug to collapse adaptor and thus cut the jug's foil seal open.



Jug Adapter Extended / Closed



Jug Adapter Compressed / Open

6. Rotate **RED HOOP HANDLE** clockwise to open valve and release contents into tank. Intermittently feather the valve open/closed to release finite amounts for precision measuring.
7. Fill tank to desired level. Roll O-Rings on sight gauge tube to set predetermined fill amounts. Wet and twist O-Rings for smaller adjustments.
8. Once desired tank fill level is met, rotate **RED HOOP HANDLE** counterclockwise to the closed position. With pump/supply flow pressurized, Open **TANK OUTLET VALVE** to allow venturi suction or pump suction to empty tank contents.
9. To perform JUG INTERIOR RINSE, Rotate **YELLOW VALVE** clockwise, then rotate **RED HOOP HANDLE**, allowing it to automatically press the **RED TAB**. Directional rinse will spray into container, rotate jug by hand to clean from various angles. Allow rinse to perform for at least 30 seconds for most effective clean. (Viscosity of chemical and water supply pressure/flow determine duration of rinse for complete cleaning action. Required time to clean may vary.)

10. To perform Adapter rinse at this time, Rotate **YELLOW VALVE** clockwise, with **RED HOOP HANDLE** closed, manually press **RED TAB** to perform Adapter Rinse. Hold for 10-20 seconds.
11. To perform TANK RINSE, **TANK OUTLET VALVE MUST BE FULLY OPEN!** Rotate **YELLOW VALVE** counterclockwise, use for short intervals, watching sight gauge to ensure tank does not overflow. (WARNING-Sight Gauge is purged with TANK RINSE, only with rinse OFF can operator see Tank Fill Level. 20-30 seconds of rinse time is recommended for standard rinse. WARNING, IT IS CRITICAL THAT THE TANK RINSE IS PERFORMED AFTER EACH APPLICATION TO AVOID CROSS CONTAMINATION OF CHEMICALS. Manufacturer is not responsible for cross contamination of chemicals that may cause damage to property, persons, crops or animals.
12. To achieve the fastest jug empty times by releasing contents without measuring and immediately inducting, the **YELLOW VALVE** must be clockwise. This allows air to travel through the Caddy's jug interior rinse system and help the pressurization equal. If the **YELLOW VALVE** is not open during direct release/induction of chemical the plastic jug's walls will collapse and the interior will vacuum lock thus greatly reducing flow.

**Cleanout Procedure for Switching Products/Cross Contamination Prevention:**

Under normal circumstances, follow step 11 and use plenty of water to clean the tank, sight gauge, and all rinse hoses.

If making a drastic switch between chemical products it is highly recommended to include an additional cleaning step to this process. Close the Tank Outlet valve, pour in tank cleaner product and fill the tank to the 2.5 gallon mark before allowing the product to exit. This process will flood the tank with the cleaner/water solution and will allow it to agitate into all areas.

*Refer to the next page for system operation,  
also located on the front of the ChemBlade Caddy tank.*



# Basic Operating Instructions

*(Please read and understand the OWNER'S MANUAL before operating. Do not transport system with liquid fill or container coupled.)*

**YELLOW VALVE** CENTERED = Closed and ready for Jug Content Release/Measure.

**YELLOW VALVE** CLOCKWISE = Jug Interior and Jug Coupler Rinse Supply - Must use **RED TAB** to activate.

**YELLOW VALVE** COUNTERCLOCKWISE = Tank Rinse & Sight Gauge ON. DO NOT OPERATE UNLESS **TANK OUTLET VALVE** IS OPEN!

## **RED HOOP HANDLE**

Pushed IN = Jug Coupler Unlocked.

Pulled OUT = Jug Coupler Locked.

COUNTERCLOCKWISE = Coupler Valve CLOSED.

CLOCKWISE = Coupler Valve OPEN.

## **RED TAB**

- Manually pressed with **RED HOOP HANDLE** closed, activates Jug Coupler Rinse.

- Automatically pressed with **RED HOOP HANDLE** opened, activates Jug Interior Rinse.

*[**YELLOW VALVE** must be clockwise/ON for both **RED TAB** functions.]*

## **JUG CONTENT DIRECT RELEASE**

For direct release of jug contents with **TANK**

**OUTLET VALVE** open and under suction; **YELLOW**

**VALVE** must be clockwise/Jug Interior Rinse ON to prevent Jug's interior from vacuum locking.



Please refer to Safety Instructions before Operation.  
Characteristics of operation can cause serious injury or death.

## 6. Troubleshooting:


### easyFlow Coupler:

- Optimal rinse pressure 45-60 psi to effectively clean and rinse the jug after the contents have been drained. If jugs still appear to be dirty, first check the rinse supply pressure or extend the time with the red hoop handle opened and valve in the clockwise rinse position.
- Check all ports and orifices for blockages or residue that would inhibit rinse supply pressure or content removal from the jug.
- If any portion of the container adapter or tank seal adapter begins to leak, contact your dealer for a seal replacement. Check the chemical compatibility of the chemical being used with EPDM and/or Viton rubber. Products not compatible with these materials should not be used.

### Tank Eduction:


- If a venturi is present on the bottom of the tank, an obstruction or poor plumbing can cause poor tank eduction rates. Venturi systems rely on the difference of pressure between the inlet and outlet of the venturi for the suction performance on the branch/tank outlet port. Try to keep plumbing direction changes of both inlet and discharge flow to a minimum and utilize appropriate grade and style of components. The 45 angle and “sweep” style 90 fittings permit the most flow for directional changes and should be used when feasible.

Input Pressure (PSI)	Eduction Rate (Gal/Sec)	Eduction Rate (Gal/Min)	Carrier Flow Rate (Gal/Min)
20	0.57	34.2	27.06
40	0.86	51.6	38.09
60	0.85	51	44.58
80	1.21	72.6	50.46

-  **WARNING** Under normal operation, opening the venturi supply valve and tank valve could cause water to flow up through the drain of the tank, pressurizing the vessel and ultimately, splashing the operator. Always use care when opening the venturi supply valve or induction valve. Typically, this happens if there is insufficient flow across the venturi and/or there is an obstruction in the outlet hose. Establishing full flow and pressure drop across the venturi before opening the tank induction valve should mitigate this risk.

## 7. Winterization/Storage Instructions:

The Caddy requires minimal but important maintenance every year, winterization, or storage period. To ensure no damage to plumbing system components from freezing, please follow the instructions below for proper winterization.

 **CAUTION** Please properly perform depressurization of all systems before performing any maintenance procedures. Line contents under pressure can cause severe injury.

**Winterization:** Recommend flushing the entire system with an adequate amount of RV antifreeze, ensuring that all components and hoses have been flushed. Even small amounts of water left in the system can cause damage to plumbing or pneumatic fittings. SureFire recommends storing the Caddy indoors during winter or for extended periods of non-use.

**UV Protection:** During the offseason UV protection benefits the system but is not required. All components are rated for outdoor use but shading or shedding will extend lifespan. Black polypropylene fittings, EPDM hose and clear sight gauge tube will fade and weaken over time in UV but if stored correctly can see a 100-200% increase in lifespan.



## Chemical to Seal Compatibility Chart

COMPOUND	EPDM	Viton	Silicone	COMPOUND	EPDM	Viton	Silicone
2,4-D Ester		△		Lexar® EZ	△		
Accord & Accord XRT	△	△	△	Liberty		△	
Atrazine	△	△		Lorsban 4E		△	
Balance Flexx	△	△		Lorsban Advanced		△	
Callisto® 480SC	△			Lumax® EZ	△	△	
Cappreno	△	△		Matador		△	
Degree Xtra®	△	△		Max-In® Ultra ZMB	△	△	
Dicamba/Xtendimax	△			MSO, Crop Oil, Oil Based		△	
DiFlexx Duo	△	△		Nitrogen based		△	
Duramax, Durango	△	△	△	N-Serve 24		△	
Engenia	△			Parity		△	
Enlist Duo	△	△	△	Prosaro	△	△	
EverGo	△	△		RAXILPro	△	△	
Foliars		△		Rely 280	△	△	
ForeFront	△			Resicore			△
FulTime® NXT		△		Roundup®	△	△	
Fungicides		△		Shredder™ E-99		△	
Garlon 3A	△		△	Stratego	△		
Gaucho 600	△	△		Stratego YLD	△		
Gramoxone/Paraquat		△		Stylet-Oil		△	
Grazon P+D	△			SureStart® & SureStart			△
GrazonNext	△			Surpass EC	△		△
Halex® GT	△			Tacoma		△	
Huskie		△		TopNotch	△		
Instinct®			△	Tordon 22K	△		
Keystone			△	Warrant/Paraquat		△	
Keystone LA			△	Wolverine AdvANCED		△	
Laudis	△	△					

The above AG Chemical Chart should be considered as a guide only due to the many variables which may affect the compatibility of materials. This guide is based on information obtained from a variety of sources and is believed to be accurate. Actual decisions on materials used need to be tested and evaluated by the customer for each specific application. The responsibility of proper chemical compatibility of equipment and material used is the full responsibility of the customer. SureFire Ag Systems does not warrant product damaged by non-compatibility.

The ChemBlade Caddy is Proudly Manufactured in the U.S.A. by



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