# Air Pump Foam Brush System - Demand

## DUFB_A-D




| Owner's Manual #0838 122915 | |
|---|---|
| **Customer Number:** | **Serial Number:** |
| **Model Number:** | **Installation Date:** |

**IMPORTANT**



**Please read and understand this manual. Store in safe location for future reference.**

**Everyone who operates this unit should understand basic operations and safety precautions!** The time you take to fully understand the proper installation, maintenance and use of the machine will prolong its service life, and assure you of trouble free operation.

When unpacking, check to make sure all the parts shown on the Parts Breakdown near the end of this manual are included. If any parts are missing or broken, please call Dultmeier Sales as soon as possible.

Consumers should notice that this manual may differ slightly from the actual product as more improvements are made to our products. Some of the pictures in this manual may differ slightly from the actual product as well. Dultmeier Sales reserves the right to update designs and / or change the specifications at any time without incurring any obligation to install them on units previously sold.

***If you have any questions or suggestions about this manual, please contact us at:***

800-228-9666
dultmeier@dultmeier.com
www.dultmeier.com

## Table of Contents

Safety Information ..... 1
Specifications ..... 2
Installation & Operating Instructions ..... 3-6
Parts Breakdown ..... 7-8
Warranty Information ..... 9
Checklist ..... 10

**To avoid serious or fatal personal injury or major property damage, read and follow all safety and operation instructions in the manual.**

This is a **Safety Alert Symbol** -
When you see this symbol in the manual, look for the following signal words & be alert to the potential for personal injury or property damage.

**DANGER** Warns of potential hazards that **WILL** cause serious personal injury, death or property damage.

**WARNING** Warns of potential hazards that **CAN** cause serious personal injury, death or property damage.

**CAUTION** Warns of potential hazards that **WILL** or **CAN** cause minor personal injury, death or property damage.

**IMPORTANT** Indicates special instructions that **MUST** be followed but not related to hazards.

**This manual is intended to assist in the installation and operation of this unit.**
**Do not attempt to operate this unit without reading and understanding this manual.**

## General Safety

*To avoid the risk of serious bodily injury and property damage, read safety instructions carefully before installing this system. Follow all local and/or national plumbing and electrical codes when installing.*

**IMPORTANT**

**Do Not Allow System or Components to Freeze.**
To do so may damage the system and will void the warranty.

**WARNING**

**Never Run the System Dry.**
Running the unit dry (without fluid) can damage internal parts, overheat pump (which can cause burns to people handling or servicing the pump), and will void the warranty.

**WARNING**



Hazardous voltage can shock, burn or cause death.

**Risk of Electric Shock.**
Keep the unit dry at all times -
Do not wash the motor or electrical panel or allow the unit to sit in standing water.

Use only Ground Fault Circuit Interrupter (GFCI) protected grounded outlet for the cord plug.
If you must use an extension cord, use only UL approved indoor/outdoor, 3-wire, grounding type cords. The cord must be rated to support amp draw. Do not allow any part of cord or receptacle ends to sit in water.

*To avoid fatal shocks, proceed as follows if service is needed:*

A. Turn off water to the system.
B. Disconnect the power at main electrical service before unplugging the unit.
C. Ground the electrical outlet box.
D. Take extreme care when changing fuses.




Do not run the unit with discharge shut off, as hose may burst or damage may occur.

## DUFB_A-D Specifications

| | |
|---|---|
| Model(s) | **DUFB_A-D** |
| Style | Air Driven Diaphragm Pump |
| Pump | FJ5100-040 |
| Capacity | 2.5 GPM |
| Max. Pressure | 80 PSI |
| Dimensions | Approx. 12” x 28” |
| Shipping Weight | Approx. 40 lbs. |

## System Features

Air Driven Diaphragm Pump

Foamer Modules for each Bay

Stainless Steel Automatic Mixing Tank with Hydrominder Valve

Brass Manifold with Metering Screws

Brush Handle Assemblies with Hoses and Fittings

Aluminum Mounting Plate

Turtle Wax® Foaming Brush Soap (Red)

Stainless Steel Wall Booms

Hogs Hair Brushes

Brush Buckets to Help Keep Brushes Clean

Supply Hoses, Run Tubing & Fittings



## Equipment Placement

1. Select a mounting location on a wall at a height where the unit can be easily serviced. Hold the board level and mark spots on the wall for each mounting hole on the board.

2. Use 5/16” bit to drill 1-1/2” deep holes into the wall. Hold board on wall and insert 1/4” x 1-7/8” sleeve anchors (provided) into drilled holes. Tighten anchor nuts. **(Fig. 1)**

3. Install boom bumper on end of boom. **(Fig. 2-D)**

4. To mount boom(s), in bay(s) use the boom bracket holes for a template. Place the boom bracket with the single hole on top level against the wall and mark a spot for each mounting hole. Since all applications are different, be sure to use the proper fasteners to secure boom bracket(s) to bay wall(s). **(Fig. 2-E)**

5. Slide the top pivot shaft on the boom up into the top hole of the boom bracket. Slide the bottom pivot shaft into the right or left hole of the boom bracket, depending on swing.

6. Place the foam brush manifold as close as possible to foam brush boom. Run the 3/8” braided hose from the boom **(Fig. 2-H)** to the discharge of manifold. **(Fig. 3-H)** Secure with clamps.

7. Run 1/4” tubing (provided), from air and chemical manifolds on Foam Brush System **(Fig. 4)** to the foam brush manifold. **(Fig. 3-I)** Repeat this step per bay.

8. If you purchased the optional brush holder part number D627SS, mount the brush holder approx. 60” above floor level. Skip ahead to Step 11.

9. Mount the brush bucket at floor level. The weep and floor heat system should ensure that the brush does not freeze. The water will flow over the bucket and will help keep the brush clean and free of debris.

10. Position the hose hook on the wall directly above the center of the foam brush bucket approx. 72” from floor level. **(Fig. 2-F)**

11. Connect brush handle to foam brush head. **(Fig. 2-I)**

12. Connect hose from boom to brush assembly. **(Fig. 2-G)**

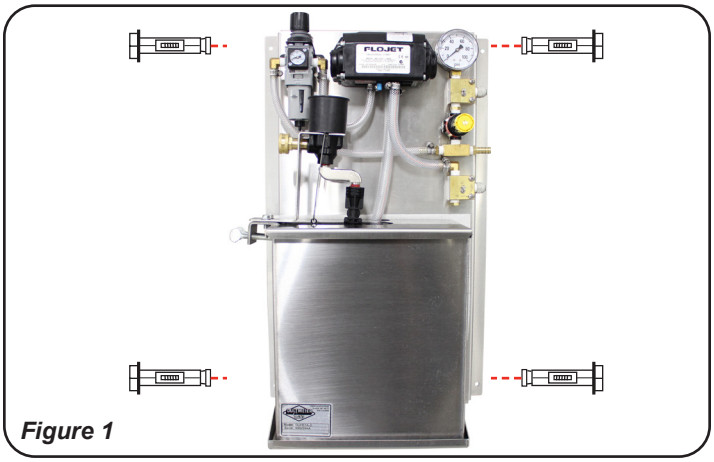



*Figure 1*

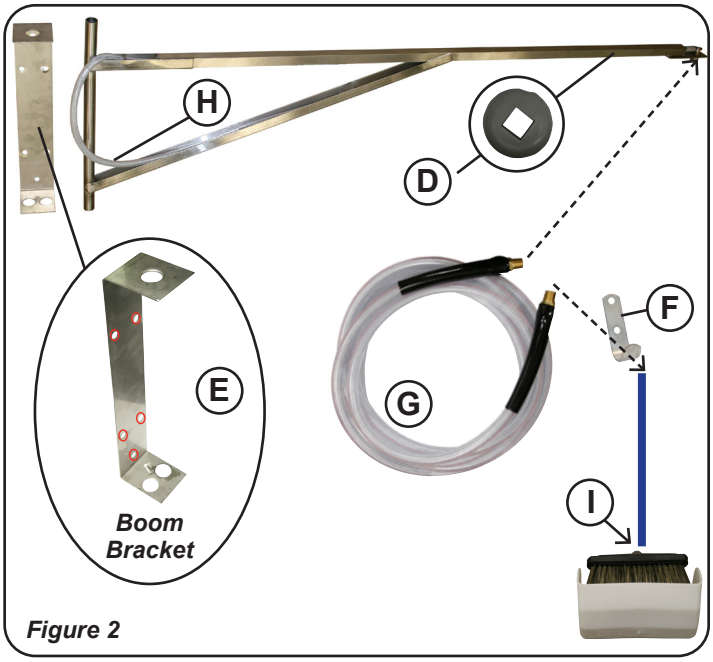



*Figure 2*

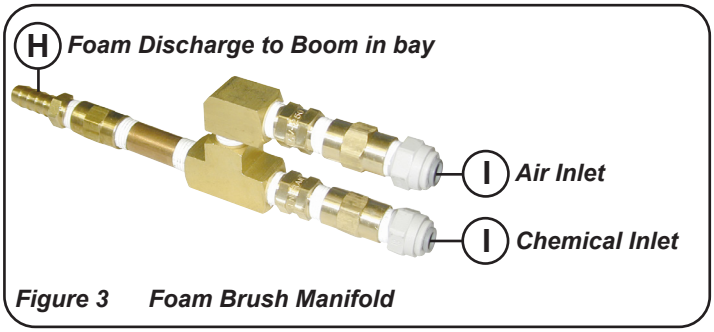



*Figure 3 Foam Brush Manifold*

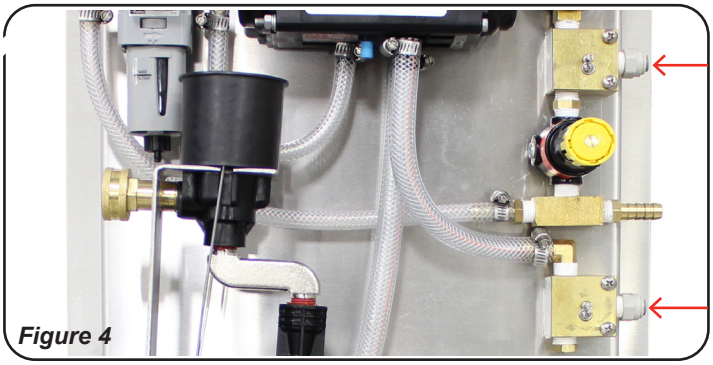


*Figure 4*

## Plumbing

1. Run a 3/4” soft water city pressure line to female garden hose connector on the Hydrominder. **(Fig. 5-A)**

**IMPORTANT** **Do not turn on the water at this time.**

**IMPORTANT** **It is recommended that soft water supply is used if available.**

**IMPORTANT** **Water supply pressure should not exceed 60 PSI. Plumber to supply pressure regulator if required.**

2. Run a 3/8” air supply hose from the air regulator to the air compressor (not supplied) outlet. Fasten with hose clamps. **(Fig. 5-B)**

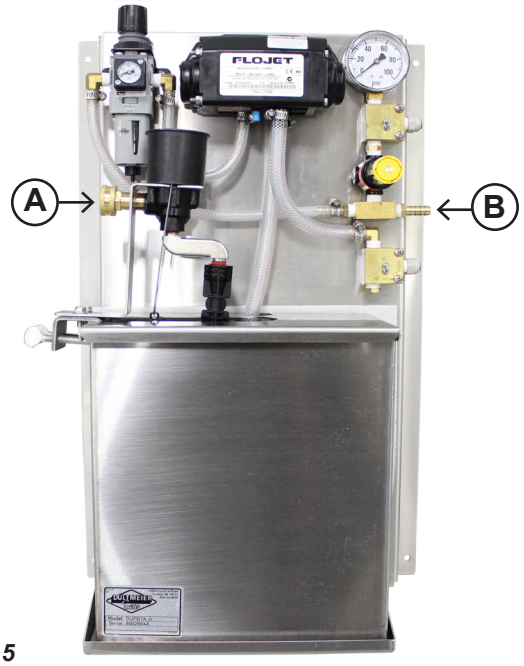



*Figure 5*

## Notes

## Chemical Set Up

1. Select proper mix tip (provided) for soap and set aside for future installation.

   *Consult Hydrominder instructions and chemical product label for further dilution information.*

2. Attach chemical suction tube to inlet port on eductor and place other end with foot valve strainer and weight into bulk soap container.

3. Attach discharge tube assembly with orifice side up to eductor outlet. **(Fig. 7)**

4. Run beaded chain on float assembly through eyelet of yoke. (Approx. 6” of chain) **(Fig. 7-A)**

***Purging Air out of the Chemical Suction Tube***

5. Turn the water on slowly until the chemical suction tube fills with soap.

6. Remove the chemical suction tube.

7. Now, install the mixing tip set aside earlier.

8. Reinstall the chemical suction tube.

9. Fill tank to 2/3 capacity. The level is set by changing the length of the beaded chain on the float assembly. **(Fig. 7)**

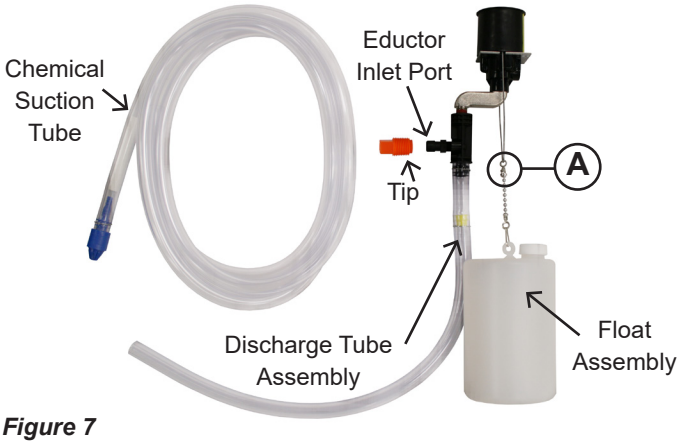



***Figure 7***

***Purging Air out of the Chemical Suction Tube***

*After the air is purged, remove any water left in the tank or add a higher concentrate of chemical to adjust for the water level. This will ensure you get a more consistent foam.*

**Helpful Hint !**



## Chemical Adjustment Notes

## Testing & Operation

1. With the chemical tank 2/3 full, turn on the air compressor.

**IMPORTANT** **Make certain that your compressor comes up to final pressure.**

2. The Foam Brush System is factory tested and set. The gauges should read Approx. 30 PSI for Chemical **(Fig. 7-A)** and 20 PSI for Air **(Fig 7-B)**. These settings are a good starting point and will produce a nice, thick foam. Further adjustment may be required depending on your preferences.

**IMPORTANT** **Air pressure must be lower than pump pressure or air will override the chemical causing inconsistent spitting foam.**

*To save time, having an assistant is recommended for these next steps.*



**Helpful Hint !**

3. Open the ball valve on the foam brush handle.

4. The Foam Brush pump should turn on, start cycling, and deliver chemical to the brush. This may take some time depending on the length of tube/hose to your bay.

5. Check for proper flow and foam consistency. Repeat this step if you purchased a multi-bay system.

6. Adjust flow by turning the metering screw on the chemical solenoids. **(Fig. 9)**

7. Close the ball valve on the foam brush handle.

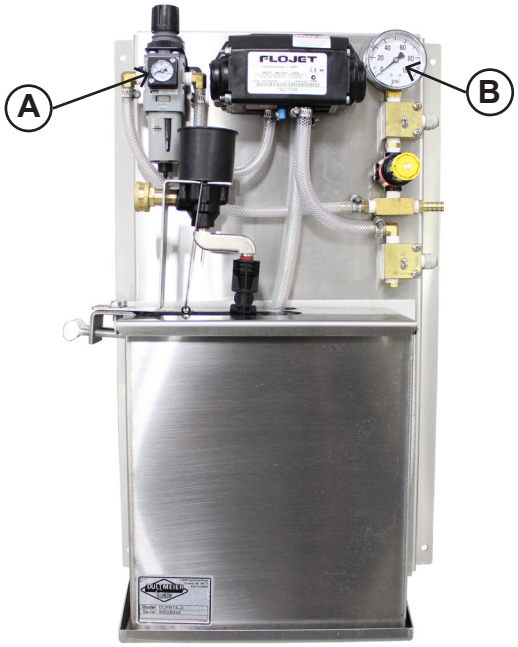



***Figure 7***



***Figure 8***

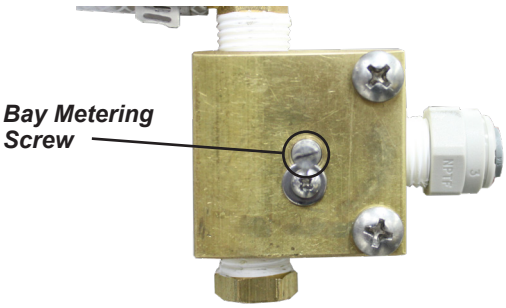
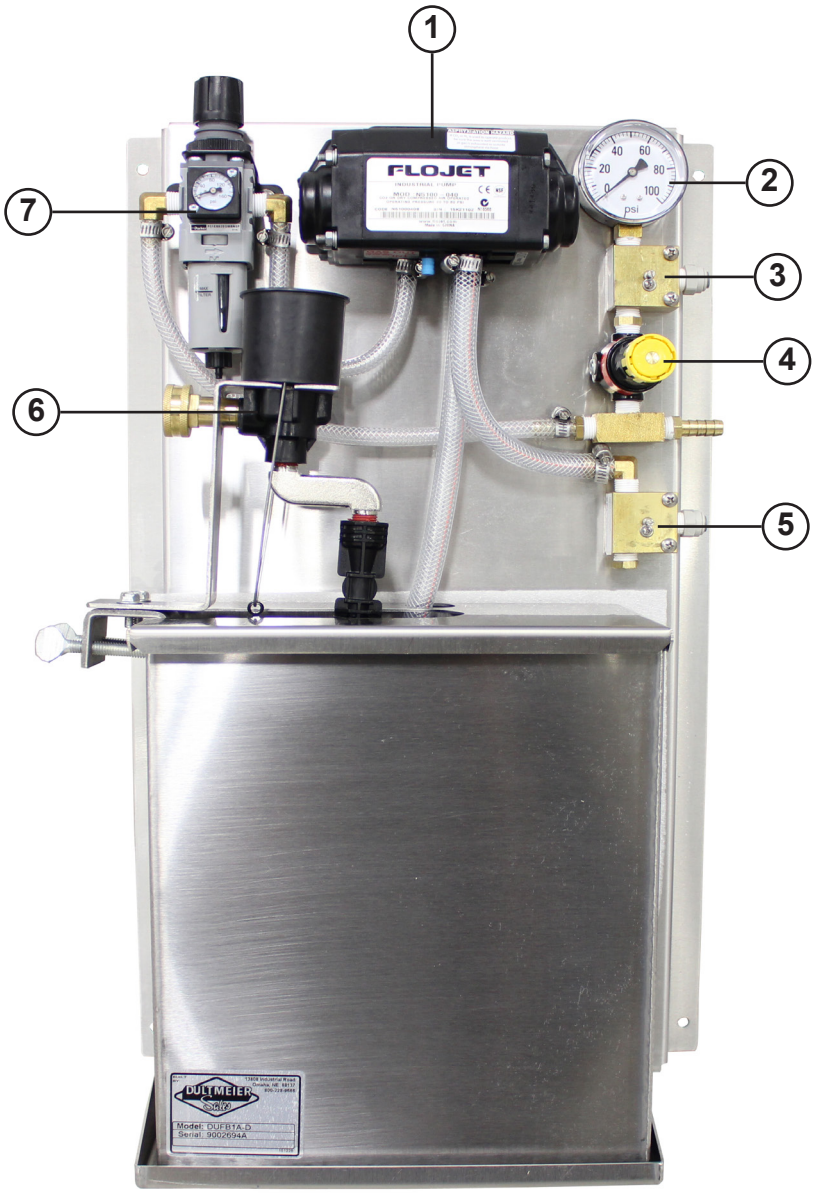



***Figure 9***

## Parts Breakdown: DUFB_A-D




| Item | Part Number | Description |
|---|---|---|
| 1 | FJ5100-040 | Air Driven Diaphragm Pump |
| 2 | AH1DP100 | 100# Dry Gauge |
| 3 | GC9_-000-21M | _-Bank Brass Manifold w/ Metering Screws[1] |
| 4 | PA14R113FC | 1/4” Mini Air Regualtor |
| 5 | GC9_-000-21M | Brass Manifold with Metering Screws, _ Bay [2] |
| 6 | HR506 | Hydrominder * |
| 7 | PAP31EA92EGM | Air Filter/Regulator |

*[1]Part Number Varies Per Model. Simply replace the _ with the number of bays included in your system, up to 8.*

*[2]Part Number Varies Per Model. Simply replace the _ with the number of bays included in your system, up to 6.*
*(If you purchased a 7 Bay Unit, you will need one 6 Bay part + one 1 Bay part.)*
*(If you purchased an 8 Bay Unit, you will need one 6 Bay part + one 2 Bay part.)*

**Hydrominder comes with: Chemical Suction Tube, Discharge Tube Assembly, Float Assembly, & Metering Tips.*

## Parts Breakdown: DUFB_A-D




| Item | Part Number | Description |
|---|---|---|
| 9 | DD27234 | Stainless Steel Wall Boom with Bracket |
| 10 | DU4B-7 | Low Pressure Boom Hose, 3/8” x 10’ |
| 11 | DDA8401 | Wall Boom Bumper, Grey |
| 12 | TE20145 | Foam Brush Hose, 3/8” x 15’ |
| 13 | BC919 | Stainless Steel Hose Hook |
| 14 | DU50FBM | In Bay Foam Manifold |
| 15 | FB570 | Economy Foam Brush Head |
| 16 | BCB911B | Foam Brush Bucket, 11” x 6” |
| 17 | TS320CF | Cherry Foam Soap, 5 Gal |
| | *TUHP74-5* | *Turtle Wax Foam Brush Soap, 5 Gallon Box (Optional)* |
| | *SM900-3/8* | *Straight Swivel (Not Shown)* |
| | *BC5BH* | *Brush Handle, Royal Blue (Not Shown)* |
| | *FCUP44-100N* | *Tubing, 1/4” (Not Shown - Models DU FB(1-2)A-D Only)* |
| | *LMPE08N* | *Tubing, 1/4” (Not Shown - Models DU FB(3-8)A-D Only)* |

# Notice Regarding Manufacturer's Limited Warranty

Dultmeier Sales Limited Liability Company (hereinafter Dultmeier), notifies you that component part(s) carry a manufacturer's limited warranty provided by the manufacturer of said component part(s). These warranties do not pertain to normal wear of component part(s) that may occur within any specified period. While Dultmeier is not the manufacturer of any of the component part(s), Dultmeier will assist you in processing any and all manufacturer's warranty claim if applicable and available. Any and all manufacturer's claims must be submitted in writing to the manufacturer within the warranty periods provided by the manufacturer.

Defective component part(s) that are to be considered for manufacturer's limited warranty must be returned to the manufacturer by prepaid shipment with the applicable manufacturer's limited warranty period. If the component part(s) are deemed to be defective under the manufacturer's warranty, Dultmeier will assist in obtaining a replacement or repair of the component part(s). Said component part(s) will be returned F.O.B. Omaha, Nebraska. Replacement or repair shall be the exclusive remedy for any breach of warranty. Labor for installation, either with respect to original or replacement part or components, is not covered under the manufacturer's limited warranty.

Neither the manufacturer nor Dultmeier warrants loss of income or consequential damages for injury or commercial loss resulting from any breach of warranty or warranties stated above.

The manufacturer's limited warranty as stated does not apply to component part(s) which have been improperly installed, misused, altered, neglected, abused or not installed, adjusted, maintained, or used in accordance with applicable codes and ordinances and in accordance with the manufacturer's specifications as to such factors.

Notwithstanding Dultmeier's willingness to assist in the processing of the manufacturer's limited warranty, Dultmeier makes no warranty against infringement of the like, makes no warranty of merchantability, makes no warranty of fitness for a particular purpose, and makes no other warranty, express or implied, including implied warranty arising from the course of dealing or usage of trade.

Compliance with all local, state and federal codes regarding the installation and operation of said equipment, parts and components shall be the responsibility of the purchaser. The rights and obligations of the parties shall be governed by the laws of the State of Nebraska.

**Dultmeier Sales • 1-800-228-9666 Omaha, NE • 1-800-553-6975 Davenport, IA**

## Production Checklist

- OK NA Air set to _____PSI
- OK NA Pump set to _____PSI
- OK NA Check Valves
- OK NA Hydrominder
- OK NA Electrical Connections
- OK NA Fittings Straight
- OK NA Wall Anchors
- OK NA Clamps Tight
- OK NA Bolts Tight & Anti-Seized
- OK NA Tested
- OK NA Winterized
- OK NA _____
- OK NA _____

**Accessories for _____Bay(s)**

- OK NA Boom *
- OK NA Boom Mounting Bracket
- OK NA Boom Wall Bumper
- OK NA Bay Hose
- OK NA Bay Hose Hook
- OK NA Foam Brush Head
- OK NA Foam Brush Handle *
- OK NA Foam Brush Bay Sign
- OK NA In Bay Foam Manifold
- OK NA Tubing
- OK NA _____
- OK NA _____

** Packaged Together*

Built By _____ Checked By _____

## Customer Checklist

- OK NA Accessories Included
- OK NA Shipping Container Arrived In Good Shape
- OK NA Overall Condition

***If you have any questions or concerns about condition of this unit, please contact us before operating.***