ITEM# BF302

THE BOSS™ Foam Cannon Troubleshooting Guide

To ensure optimal performance and longevity of your THE BOSS Foam Cannon, regular maintenance is essential. We recommend keeping spare parts on hand for quick and easy replacements when needed. Stocking the following parts will help minimize downtime and keep your foam cannon operating at its best:

Description	Item#
THE BOSS Foam Cannon Rebuild Kit	BFKIT
Sure-Flow Metering Tips, Set of 6 | Pink	B3006PNKTIP
Sure-Flow Metering Tips, Set of 6 | Aqua	B3006AQATIP
Sure-Flow Metering Tips, Set of 6 | Purple	B3006PURTIP

CHALLENGE	DESCRIPTION	LIKELY SOURCE	SOLUTION
Poor Foam Output	**Thin, watery foam**	**Sure-Flow Metering Tip (17) Clogged**	**1.** Remove **Sure-Flow Metering Tip (17)** from **Stainless-Steel Pick-Up Ball (13)**, soak in hot water, then gently agitate insertion end with a soft bristle brush. Rinse clean then reinsert tip into pick-up ball. **2.** If issue persists, replace **Sure-Flow Metering Tip (17)** with new tip. Replacement tips available for purchase separately (Item# B3006 – Sure-Flow Metering Tips, Set of 6) in Pink, Aqua, and Purple.
		Stainless-Steel Mesh Pill (4) Clogged	**1.** Press **Nozzle Retainer Pin (1)** out of black **Nozzle Adjuster (2)** with pick or small flathead screwdriver and set in a secure location. It may require a light tap of a small mallet. **2.** Remove **Nozzle Adjuster (2)** from cannon barrel and set aside. **3.** Using a 22mm box wrench or adjustable wrench carefully remove the **Fan-Jet Assembly (3)** from the **Secondary Manifold (6)** by firmly turning counterclockwise. This may require additional torque. Should this present a challenge, soak manifold assembly in hot water for 5 minutes. Additional opposing force may be required, applying a 24mm wrench or suitable adjustable wrench on the **Secondary Manifold (6)**. **4.** Once the **Fan-Jet Assembly (3)** is removed, rest on workbench and carefully insert small flathead screwdriver through the **Fan-Jet (3a)** side and press out the **Stainless-Steel Mesh Pill (4)** from the barrel end. Another option is to insert a j-hook pick on the opposing side and remove the pill by pulling it out. **5.** Inspect the mesh pill for corrosion, soap scum, or other visible wear and clean or replace as necessary. Should foaming performance be diminished, the mesh pill will most certainly require replacement. Insert cleaned pill, or new **Stainless-Steel Mesh Pill (4)** from rebuild kit and firmly seat it into position by applying pressure with small flathead screwdriver. **6.** Reinstall in reverse order.

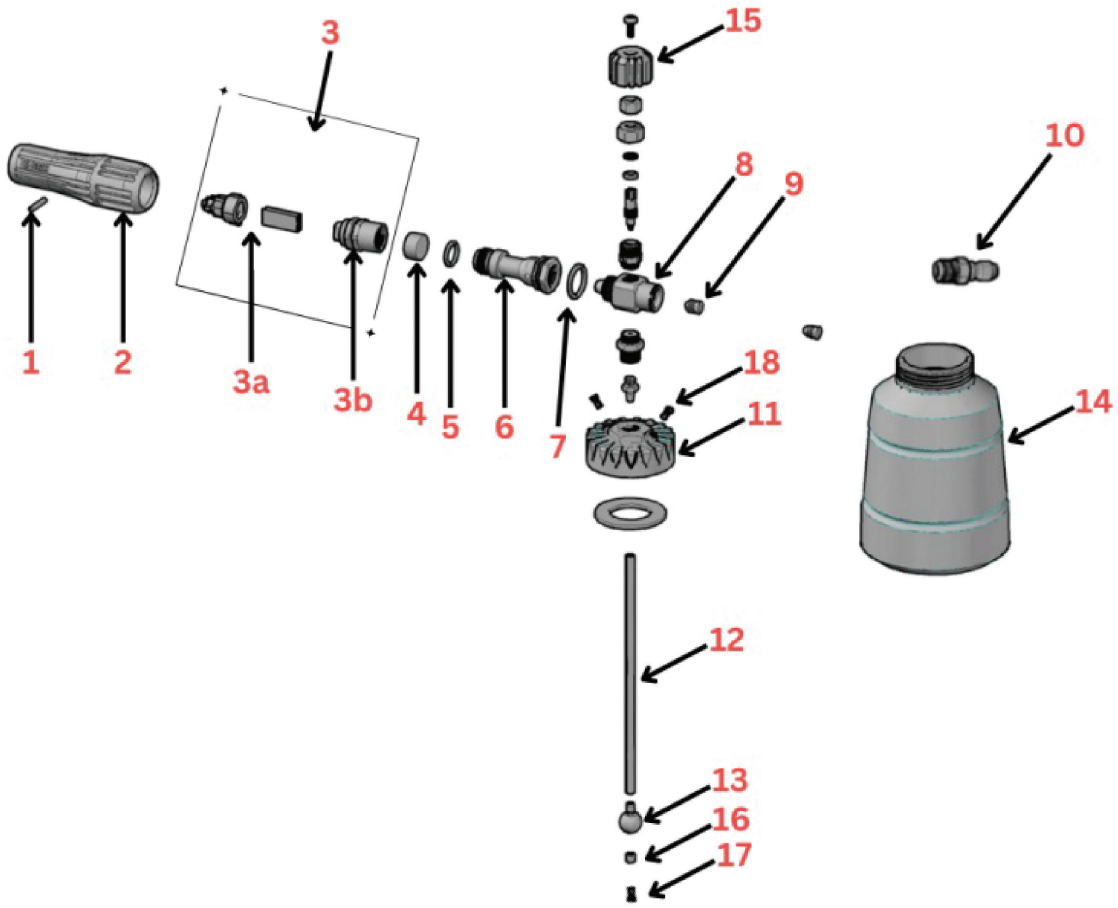
CHALLENGE	DESCRIPTION	LIKELY SOURCE	SOLUTION
		Poor water quality	**1.** Hard water not only reduces foam output but can clog, corrode, and permanently damage equipment over time. Rely on a soft water source or install a deionizing system in-line before the pressure washer.
		Foam Cannon Jet (9) Clogged or loose	**1.** Remove the **Stainless-Steel Quick Coupler Plug (10)** from the **Primary Manifold (8)** using a 14mm or 9/16" box wrench **2.** Using a flathead screwdriver, remove the **Foam Cannon Jet (9)**. **3.** Inspect the jet for corrosion, soap scum, or other visible wear and clean or replace as necessary.
		Low sudsing soap	**1.** Check that the car wash you are using is a high-sudsing soap – if not this can result in thin, watery foam.
		Product is over diluted due to use of Sure-Flow Metering Tip (17) with pre-diluted product	**1.** Determine whether the product you are using is straight concentrate of our BOSS Foaming soaps, or if it is pre-diluted. **2.** For pre-diluted product, do NOT use a **Sure-Flow Metering Tip (17)**. For undiluted product, ensure the **Sure-Flow Metering Tip (17)** is installed.
		Detergent Dial (15) turned down	**1.** Twist the **Detergent Dial (15)** clockwise until it stops to allow unrestricted draw from the reservoir.
Low Pressure Output		**Smaller Foam Cannon Jet (9) is required**	**1.** THE BOSS Foam Cannon comes with the **1.25 Foam Cannon Jet (9)** pre-installed. This is ideal for most gas-powered pressure washers or units exceeding 4000 CU (Cleaning Units = gpm x psi). Determine the CU of your pressure washer. If it is below 4000 CU proceed to the next step. **2.** Remove the **Stainless-Steel Quick Coupler Plug (10)** from the **Primary Manifold (8)** using a 14mm or 9/16" box wrench **3.** Using a flathead screwdriver, remove the **Foam Cannon Jet (9)**. **4.** Install the alternate **Foam Cannon Jet (9)** included with your cannon, ensuring it is secured snugly, then reinstall the **Stainless-Steel Quick Coupler Plug (10)**.
Inconsistent Output	**Spitting**	**Air in pressure washer system**	**1.** Bleed pressure washer pump and hose by running water through it with the unit powered off. Bleed it for 90 seconds or until there is no more sputtering which would indicate air bubbles still in the line. **2.** Power the pressure washer on and reattach the cannon. If spitting persists, check for leaks at all pressure washer hose connections.

CHALLENGE	DESCRIPTION	LIKELY SOURCE	SOLUTION
	Sudsy water leaking from Nozzle Adjuster (2)	**Secondary Nitrile O-Ring (5) failure**	**1.** Press **Nozzle Retainer Pin (1)** out of black **Nozzle Adjuster (2)** with pick or small flathead screwdriver and set in a secure location. It may require a light tap of a small mallet. **2.** Remove **Nozzle Adjuster (2)** from cannon barrel and set aside. **3.** Inspect the **Secondary Nitrile O-Ring (5)** to ensure it is present and in good condition. If it appears to be dried out or is missing, replace it with the O-Ring in the rebuild kit. Apply liberal amount of Silicone Grease included in rebuild kit directly to O-Ring.
Foam Cannon Jar (14) Collapsing	**Foam Cannon Jar (14) begins to collapse during use**	**Clogged One-Way Rubber Vents (18)**	**1.** Carefully pluck the **One-Way Rubber Vents (18)** from the top of the Dual-Threaded Cap (11). **2.** Knead rubber vents between fingers while running hot water through them for 30 seconds. **3.** Replace the vents into the cap.
Water Leakage	**Leak at connection to pressure washer gun**	**Loose Stainless-Steel Quick Coupler Plug (10)**	**1.** Using a 14mm or 9/16" box wrench, tighten the **Stainless-Steel Quick Coupler Plug (10)** into the **Primary Manifold (8)**. If the issue persists, see below.
		Thread tape/sealant issue	**1.** Remove **Stainless-Steel Quick Coupler Plug (10)** from the **Primary Manifold (8)** using a 14mm or 9/16" box wrench. **2.** Add a few rows of thread tape on the male threads of the **Stainless-Steel Quick Coupler Plug (10)** then reinstall into **Primary Manifold (8)**.
Pressure Washer Pulsing	**Nozzle or cannon is clogged**	**Debris that made its way through pressure washer or dried product causing clog**	**1.** Remove nozzle or cannon from pressure washer gun. **2.** If nozzle – rinse under warm water and gently agitate with a soft bristle brush. **3.** If cannon - Press Nozzle Retainer Pin (1) out of black **Nozzle Adjuster (2)** with pick or small flathead screwdriver and set in a secure location. It may require a light tap of a small mallet. **4.** Remove **Nozzle Adjuster (2)** from cannon barrel and set aside. **5.** Using a 22mm box wrench or adjustable wrench carefully remove the **Fan-Jet Assembly (3)** from the **Secondary Manifold (6)** by firmly turning counterclockwise. This may require additional torque. Should this present a challenge, soak manifold assembly in hot water for 5 minutes. Additional opposing force may be required, applying a 24mm wrench or suitable adjustable wrench on the **Secondary Manifold (6)**. **6.** Once the **Fan-Jet Assembly (3)** is removed, rest on workbench and carefully insert small flathead screwdriver through the Fan-Jet (3a) side and press out the **Stainless Steel Mesh Pill (4)** from the barrel end. Another option is to insert a j-hook pic on the opposing side and remove the pill by pulling it out. **7.** Inspect the mesh pill for corrosion, soap scum, or other visible wear and clean or replace as necessary. Should foaming performance be diminished, the mesh pill will most certainly require replacement. Insert cleaned pill, or new **Stainless-Steel Mesh Pill (4)** from rebuild kit and firmly seat it into position by applying pressure with small flathead screwdriver. **8.** Reinstall in reverse order.

CHALLENGE	DESCRIPTION	LIKELY SOURCE	SOLUTION
	Insufficient Foam Cannon Jet (9) orifice size causing backup	**Larger Foam Cannon Jet (9) is required**	**1.** THE BOSS Foam Cannon comes with the **1.25 Foam Cannon Jet (9)** pre-installed. This is ideal for most gas-powered pressure washers or units exceeding 4000 CU (Cleaning Units = gpm x psi). Determine the CU of your pressure washer. If it is below 4000 CU swap to the 1.1 Foam Cannon Jet (9) following the below instructions. If you have swapped to the 1.1 Jet and are now experiencing issues, follow the below instructions to swap back to the 1.25 Jet that comes pre-installed in this cannon. **2.** Remove the **Stainless-Steel Quick Coupler Plug (10)** from the **Primary Manifold (8)** using a 14mm or 9/16" box wrench. **3.** Using a flathead screwdriver, remove the **Foam Cannon Jet (9)**. **4.** Install the alternate **Foam Cannon Jet (9)** included with your cannon, ensuring it is secured snugly, then reinstall the **Stainless-Steel Quick Coupler Plug (10)**.
	Water leak	**Water source not securely attached**	**1.** Check connections where hose brings water in. Make sure it is securely connected. Ensure there are no leaks of water out the side that could be causing issues.
	Inadequate water supply	**Water source is not on all the way or hose is restricted**	**1.** Check spigot of water connection and ensure water is turned on all the way. **2.** Check for kinks or other blockages on hose.
		Debris stuck in inlet filter	**1.** Inspect inlet filter on pressure washer for debris which could be blocking water flow. **2.** If debris is present, remove the inlet filter and rinse thoroughly with warm water. A soft bristle brush may also be used to agitate and clean filter. Ensure you rinse thoroughly. **3.** Reinstall the filter onto pressure washer.
Pressure washer popping electrical circuit	**Insufficient Foam Cannon Jet (9) orifice size causing backup**	**Larger Foam Cannon Jet (9) is required**	**1.** THE BOSS Foam Cannon comes with the **1.25 Foam Cannon Jet (9)** pre-installed. This is ideal for most gas-powered pressure washers or units exceeding 4000 CU (Cleaning Units = gpm x psi). Determine the CU of your pressure washer. If it is below 4000 CU swap to the 1.1 Foam Cannon Jet (9) following the below instructions. If you have swapped to the 1.1 Jet and are now experiencing issues, follow the below instructions to swap back to the 1.25 Jet that comes pre-installed in this cannon. **2.** Remove the **Stainless-Steel Quick Coupler Plug (10)** from the **Primary Manifold (8)** using a 14mm or 9/16" box wrench. **3.** Using a flathead screwdriver, remove the **Foam Cannon Jet (9)**. **4.** Install the alternate **Foam Cannon Jet (9)** included with your cannon, ensuring it is secured snugly, then reinstall the **Stainless-Steel Quick Coupler Plug (10)**.
Heavy chemical consumption	**Going through product very quickly**	**No Sure-Flow Metering Tip (17)**	**1.** Ensure there is a **Sure-Flow Metering Tip (17)** installed in the Silicone Retainer Tube (16). **2.** If the **Sure-Flow Metering Tip (17)** is not present, install it. If it falls out or does not seat properly see the troubleshooting tips below.

CHALLENGE	DESCRIPTION	LIKELY SOURCE	SOLUTION
Sure-Flow Metering Tip Falls Out	**The Sure-Flow Metering Tip (17) has become dislodged from the Silicone Retainer Tube (16)**	**Silicone Retainer Tube (16) has become dislodged or damaged**	**1.** Attempt to reinsert **Sure-Flow Metering Tip (17)** until its fully seated into the **Silicone Retainer Tube (16)** at the end of the **Stainless-Steel Pick-Up Ball (13)**. **2.** If the issue persists, replace the **Silicone Retainer Tube (16)** by gently inserting a pick into the end of the **Stainless-Steel Pick-Up Ball (13)**. If the retainer tube is not present, proceed to next step. **3.** Insert new **Silicone Retainer Tube (16)** from rebuild kit into end of pick-up ball until properly seated. Reinsert **Sure-Flow Metering Tip (17)** until its fully seated into the **Silicone Retainer Tube (16)**.
Foam is not coming out in vertical fan	**Fan is angled – not vertical**	**Fan-Jet Assembly (3) is not vertically clocked**	**1.** Press **Nozzle Retainer Pin (1)** out of black **Nozzle Adjuster (2)** with pick or small flathead screwdriver and set in a secure location. It may require a light tap of a small mallet. **2.** Remove **Nozzle Adjuster (2)** from cannon barrel and set aside. **3.** Using a 22mm box wrench or adjustable wrench carefully remove the **Fan-Jet Assembly (3)** from the **Secondary Manifold (6)** by firmly turning counterclockwise. This may require additional torque. Should this present a challenge, soak manifold assembly in hot water for 5 minutes. Additional opposing force may be required, applying a 24mm wrench or suitable adjustable wrench on the **Secondary Manifold (6)**. **4.** Place a small drop of adhesive onto the threads located on the **Secondary Manifold (6)** and re-thread onto the Primary Manifold (8) ensuring to clock/position the nozzle fan vertically. Do not fully tighten or the nozzle end will not be oriented vertically. Adhesive will set and lock the barrel/nozzle end in place.
Nozzle Adjuster (2) is Loose	**Nozzle Adjuster (2) has some play**	**Primary Nitrile O-Ring (7) failure**	**1.** Press **Nozzle Retainer Pin (1)** out of black **Nozzle Adjuster (2)** with pick or small flathead screwdriver and set in a secure location. It may require a light tap of a small mallet. **2.** Remove **Nozzle Adjuster (2)** from cannon barrel and set aside. **3.** Using a 22mm box wrench or adjustable wrench carefully remove the **Fan-Jet Assembly (3)** from the **Secondary Manifold (6)** by firmly turning counterclockwise. This may require additional torque. Should this present a challenge, soak manifold assembly in hot water for 5 minutes. Additional opposing force may be required, applying a 24mm wrench or suitable adjustable wrench on the **Secondary Manifold (6)**. **4.** Inspect the **Primary Nitrile O-Ring (7)** to ensure it is present and in good condition. If it appears to be dried out or is missing, replace with the O-Ring in the rebuild kit.

PARTS BREAKOUT



No	Description	Qty
01	Nozzle Retainer Pin	1
02	Nozzle Adjuster	1
03	Fan-Jet Assembly	1
03a	Fan-Jet	1
03b	Fan-Jet Housing	1
04	Stainless-Steel Mesh Pill	1
05	Secondary Nitrile O-Ring	1
06	Secondary Manifold	1
07	Primary Nitrile O-Ring	1
08	Primary Manifold	1
09	Foam Cannon Jet, 1.1 or 1.25	1
10	Stainless-Steel Quick Connect Coupler Plug	1
11	Dual-Threaded Cap	1
12	Silicone Pick-Up Tube	1
13	Stainless-Steel Pick-Up Ball	1
14	Foam Cannon Jar	1
15	Detergent Dial	1
16	Silicone Retainer Tube	1
17	Sure Flow Metering Tip	1
18	One-Way Rubber Vents	2