# XpressFill xF4400 / XF2200







#### Congratulations on the purchase of your XpressFill Can filling machine.

Thank you for choosing our handcrafted can filler as the technology to can your passion. We look forward to assisting you in experiencing the best performance from your filler.

This manual is written with your safety and convenience in mind. We highly recommend reading the manual before using your filler for the first time.

If you have any questions or comments, please do not hesitate to contact us.

XpressFill Systems LLC 265 Prado Road, Suite 1 San Luis Obispo, CA 93401 US

> 805.541.0100 Toll free 844.361.2750 sales@xpressfill.com www.xpressfill.com

#### **Important Safety Instructions**

Misuse of the can-filling machine can result in serious injury or death. Do not use the machine in any way not covered in this manual or for any purpose other than those explained in the following pages.

Severe product damage and/or injury could result from the use of unqualified Service Technicians or non-original replacement parts. All repairs must be performed by a qualified Service Technician or with the approval from an XpressFill Technician. Only original factory replacement parts should be used.

Electrical shock or fire could result if the electrical supply for the can filler covered in this manual is not correctly installed or if the can filler has been improperly grounded. Do not use the can filler covered in this manual unless you are certain the electrical supply has been correctly installed and the can filler has been properly grounded.

# Safety Warnings







# Table of Contents

- 1 Introduction
- 2 Set Up Your Filler
- 3 Troubleshooting
- 4 Cleaning Your Filler
- **5** Additional Information

# **1** Introduction

## **XpressFill Product Guarantee**

We guarantee our products to be free of defects in materials and workmanship. The filler will be repaired or replaced if, upon inspection at the factory, the filler is found to be defective in materials or workmanship.

This guarantee does not apply to damage resulting from normal wear and tear, accident, abuse, negligence or shipping. The guarantee may be rendered invalid if the customer has made repairs or alteration to the machine without first consulting XpressFill Systems LLC.

# **2** Set Up Your Filler

1. Unpack the filler from the box. Place the filler on the flat surface where you plan to can.

*Tip:* To get familiar with your filler, you may want to initially test it with water.

- 2. Unscrew the adjustment knobs holding the shelf to the machine.
- 3. Place a can on the shelf and raise it into position to a point where the level sensor (smaller of the two spouts) is where you want the level of the liquid to be in the can. Screw in the adjustment knobs to hold the shelf in place.
- 4. Connect a CO2 source to the 1/4" tube-to-stem connector provided. This is to purge your cans before filling. The purge cycle is factory set to approximately 3 seconds. To change the purge time, see Additional Information section page 12.
- 5. Connect your carbonated beverage to the 3/8" tubeto-stem connector also provided. This connection is from your keg or brite tank.
- 6. Open the CO2 and beverage lines to the filler. Check for leaks before you continue.





*Note:* The XF2200 Two-spout can filler will only have 1 top-off button per side and 1 fill-cycle switch on the right side of filler.

- 7. Connect the power cord to the IPC inlet on the lower right side of the filler.
- 8. The power switch is located on the lower right side of the filler. Turn the power switch on, it should illuminate.

*Tip:* You can, if desired, use the surgical tubing provided to allow filling from the bottom of the can. This will help reduce the amount of foam. Hold the can along side of the spout and cut the tubing to a length just above the bottom of the can. This tubing can also be used to make minor adjustments in the filling level by moving the surgical tubing higher or lower on the larger liquid fill spout. The fill will not stop until the fluid has reached the point where the exposed metal of both the CO2 and beverage spouts are contacted by the liquid simultaneously. (This is referred to as "Level Sensor" in section 2, page 6, step 3.)

- 9. With an XF4400, place the cans, two at a time, on the shelf, centered under the right two or left two spouts. For spouts 1 and 2, turn on the Fill Switch located on the left side of the filler. This will begin the fill cycle for spouts 1 and 2. The fill cycle has two steps, first the purge with CO2 (about 3 seconds, which can be adjusted) and then the fill with your product For spouts 2 and 4, turn on the Fill Switch located on the right side of the filler. This will begin the fill cycle for spouts 3 and 4. First purge and then fill. The fill cycle will end independently per spout when the liquid reaches the sensor. Turn off the Fill Switch per side.
- 10. When the cans are full, check the level and make any adjustments as needed (raise/lower shelf or raise lower surgical tubing). If the level is satisfactory, cap, and remove the cans to your seamer.

#### Pressure Recommendations

Fluid pressure should be set to 2 - 4 psi to avoid foaming.

CO2 pressure for gas purge may be set up to 10 psi if you are using a separate source.

#### **Top-Off Buttons**

With an XF4400 pictured, on the left- and right-hand sides of the filler there are two or four Top-Off buttons. Once your product has stopped filling due to the level sensor you may top off each can individually by pressing the Top-Off button. The order of the buttons are as follows:

Spout one: Top-Off button is on the left side, upper button Spout two: Top-Off button is on the left side, lower button

Spout Three: Top-Off button is on the fight side, upper button Spout Four: Top-Off button is on the right side, lower button

*Note:* Top Off is an option that may be used to increase the level of foam so that your lid can be placed on the foam before seaming to reduce oxidation.





# **3** Troubleshooting

If at any time you have issues with the setup or adjustment of your XF4400/XF2200 can filling machine, or any questions about filling your product, please contact XpressFill at the number listed in this manual. We are always happy to assist you.

### **Excessive Foaming**

If your fill tends to foam excessively, you have a number of options:

- 1. Reduce the pressure (psi) of the liquid input vessel to slow the rate of flow.
- 2. Use the surgical tubing provided to fill from the bottom of the can.
- 3. Reduce the temperature of the liquid. This can be the most critical factor in maintaining a higher level of CO2 in your product and minimizing the amount of foam. We recommend no higher than 34 35°F.

### Dripping or Failure to Stop Filling and / or Purging

Either of these issues are caused by product or particulates caught in a solenoid valve. Please refer to the solenoid cleaning instructions on pages 13 and 14.

#### **Premature Shut-Off**

The XF4400/2200 is a Level Fill machine, meaning that the flow of product will automatically shut off when liquid touches the exposed metal of the Level Sensor / CO2 spout and beverage-fill spouts simultaneously. If moisture is allowed to collect between the two spouts, the filler will prematurely shut off, stopping the fill or not allowing the fill to begin at all; the machine senses that it has a full can at the point there is contact between the spouts.

To correct this problem, dry the spouts thoroughly. Once completely dry, filling should resume.



# **4** Cleaning & Sanitizing

### **Cleaning the Liquid Flow Path**

Attach the cleaning hose as pictured right. The connectors are provided in the accessory kit. Connect the hose to your cleaning/sanitizing solution in a pressurized container. Place an empty can under each spout and activate the fill switch. As the cans become full, turn off the switch and empty the cans. Repeat this operation several times until the flow path has been sufficiently cleaned.



### **Cleaning the CO2 Flow Path**

Attach the cleaning hose as pictured right. The connectors are provided in the accessory kit. Connect the hose to your cleaning/sanitizing solution in a pressurized container. Place an empty can under each spout and activate the fill until the purge cycle stops and repeat this step until cans are full. Repeat this operation several times until you feel the flow path has been sufficiently cleaned.

After you have finished the cleaning cycles noted, you may further flush your filler with air or CO2 to dry it out. Just hook up as pictured and run the cycles as previously described.



# **5** Additional Information

### **Collet Release Tool**

Our fillers use "Push-to-Connect" type connectors which are standard in the beverage industry. Installation simply requires pushing a tube into the fitting and pulling lightly to check that the connection is secure. Removal requires using the collet release tool to firmly push the collet and remove the tube. A tool is provided and can be found in the accessory kit.



#### **Spare Fuse**

There is a spare fuse in the power cord receptacle. Unplug the machine and set a screwdriver on the notch (do not remove screws) and pop the spare fuse holder toward you, then replace the fuse. XpressFill Part No. 200002 – Bussmann Series by Eaton, Model BK/GDB-2A, 250V Fast Acting, 5mm x 20mm.

The exposed fuse in the clip is the active fuse. The fuse stored in the box holder is the spare.



#### **Delay-Timer Adjustment**





The XF2200 has one timer that operates the purge cycle for both spouts.

The duration of a timer is .1 seconds to 10 seconds.



The XF4400 has two timers, one for each pair of spouts. They operate the purge cycle for spouts #1 & 2 and #3 & 4 respectively.

The small blue dial on each timer adjusts the purge time. Turn counter clockwise to reduce the timer, clockwise to increase time.

# Fluid Solenoid Valve Deep-Cleaning – Stainless steel

*Note:* This maintenance is needed only when the filler is not performing properly.

Remove the solenoid valve from the filler. Use the release tool provided to disconnect fittings. If you disconnect the two wires, it does not matter which wire goes back onto which terminal.





Remove the hex nut at the top of the coil. Slide the coil cover, coil, and base washer off of the center shaft. Use a pair of channel lock pliers on the shaft and carefully unscrew it from the body with the push to connect fittings. This may take extra force; you may use a vice to secure the body while using the channel lock pliers. Carefully remove the center shaft, the insert may want to pop out, don't lose it or the spring with it.

Now clean out all the openings inside and out of the solenoid body, remove any particulates, check for stickiness that may have accumulated. After cleaning reassemble in reverse order, make sure O-ring is in place. The coil tabs should be facing the 'IN' push to connect fitting.



### Fluid Solenoid Valve Deep-Cleaning Instructions – Black and white body

*Note:* This maintenance is needed only when the filler is not performing properly.

Remove the solenoid valve from the filler. Use the release tool provided to disconnect the push-to-connect fittings. If you disconnect the two wires, it does not matter which wire goes back into which terminal.

Loosen the hex nut at the top of the coil assembly. Unscrew the base from the coil assembly. Use a screwdriver as needed. Remove the center shaft. Note and keep track of the flat O-ring. A pair of pliers may be needed to grip the metal shaft to "crack" open for unscrewing the shaft.

Now clean out all openings inside and outside of the solenoid valve, removing any particulates and stickiness that may have accumulated.

Reassemble and replace in the filler.

The white plastic body is marked #1 for output and #2 for input. The valve may leak if installed backwards.







## CO2 Purge Solenoid Valve Deep-Cleaning Instructions

*Note:* This maintenance is needed only when the filler is not performing properly.

Remove the solenoid valve from the filler. Use the release tool provided to disconnect the push-to-connect fittings from the tubes.

Slide off the clip from the top of the coil assembly. Remove the coil assembly off the center shaft. Unscrew the shaft from the stainless steel base. It is not necessary to unscrew the tubing adaptors from the stainless steel base.

Now rinse out all the openings inside and outside of the solenoid valve, removing any particulates and stickiness that may have accumulated.

Reassemble and replace in the filler.

Stainless steel valve body is marked #1 for input, #2 for output. *Note:* Valve may leak if installed backwards.







#### **Accessory Kit**



Part Number Key

- 300051 1/4" Union
- 300081 3/8" Hose barb to push to connect adapter
- 300090 3/16" ID surgical tubing for level sensor / CO2 spout
- 300091 3/8" Union
- 300095 5/16" ID surgical tubing for fill spout
- 900003 1/4" Hose barb to push to connect adapter