

Filling Machine—Packing List

Components

- Inlet valve with CAP--with large oring and large stainless steel washer
- Dual-Level Controller
- Pump with filter

Or

- Float Assembly--with large oring and large stainless steel washer

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- 20 Allen bolts
 - Knob for tank lid. Knob has nut and nylon locking nut.
 - Drain Valve with TC fitting
 - Brackets for Bottle Tray--Put hanging supports on brackets.
 - 1/4" Drain valve for bottle tray
 - 4 Casters (floor) or Feet (bench)

- Tank
- Tank Lid
- Side Panels
- Bottle tray
- Bottom Tray (Base)
- Back Support panel

- 3 Dual Nozzle Sets
- 7 Return fittings
- 6 soft tubing
- ULPA+ filter with tubing

- Instructions



Fig 2a. Float Assembly

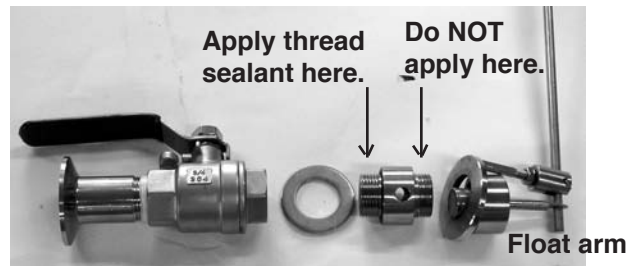
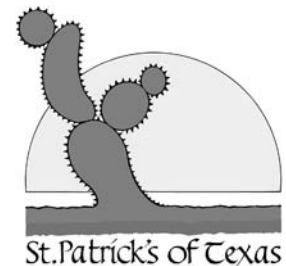


Fig 2b. Float assembly components.

Tools and Supplies

- No. 3 and 4 metric allen wrenches
- Thread Sealant
- Teflon Tape



Filling Machine—Assembly

Tools and Supplies

Large and small crescent wrenches
No. 3 and 4 metric allen wrenches
Screwdriver
Thread Sealant
Teflon Tape

Components

20 Allen bolts
Tank
Tank lid with knob.
Float Assembly (or CAP with Pump/dual level units)
Drain Valve with TC fitting
3 Dual Nozzle Sets
7 Return fittings
Soft tubing and ULPA+ filter
Side Panels
Bottom tray
4 Casters (floor model) or Feet (bench model)
Back Support panel
Bottle tray with brackets
Drain valve for bottle tray

Assembly

1. Install float assembly in tank.
 - (a) Place tank on back. (Fig 1).
 - (b) Separate the components of float assembly or CAP (Fig 2b). Set float arm (or top of CAP) aside (this will be attached in step 9).
 - (c) Apply thread sealant to lower threads (Fig 2b). Do NOT apply thread sealant to upper threads. Tighten float assembly (or CAP) into tank. Note the washer is placed on outside of tank. See Figure 3a—use screwdriver to firmly hold top fitting and large crescent wrench to tighten valve. The screwdriver must be positioned with the hole facing in the direction shown in Figure 3a.



Apply thread sealant here. Do NOT apply here.

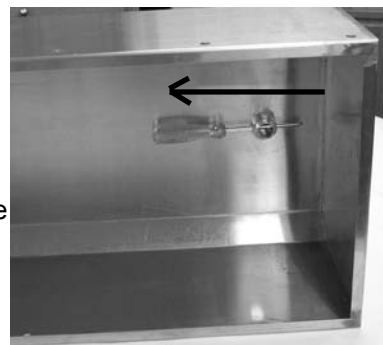


Fig 3a. Use screwdriver to tighten float assembly. Position in direction of arrow.



Fig 3b. Float assembly installed.

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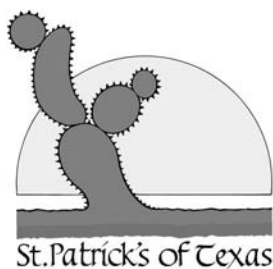




Fig 4. Drain Valve.

2. Apply teflon tape to drain nipple. Use crescent wrench to snug up drain valve.

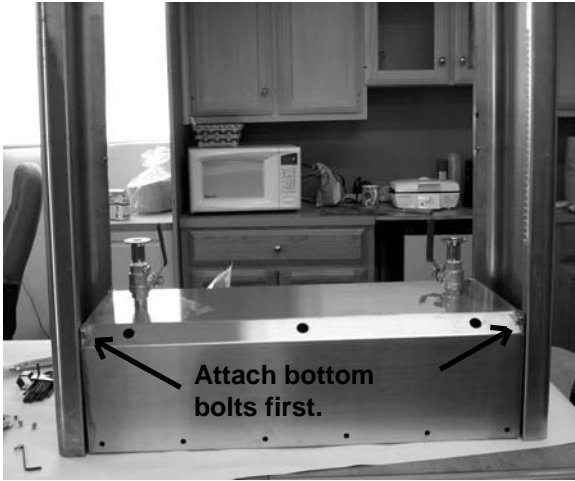


Fig 5.

3. Install Side Panels

- (a) Place tank upside down with front of tank facing you as in Fig 5.
- (b) Identify Left and Right panels. Top of panel is closed. Front of each panel has notches for bottle tray.
- (c) Connect left panel to tank with 2 allen bolts (bottom of tank). See Figure 5. Repeat for right panel. Do not tighten bolts.
- (d) See Figure 6. Carefully place upright. Connect 2 allen bolts through inside of tank to top of left panel. Repeat for right panel.
- (e) Firmly tighten the 8 allen bolts holding the panels to the tank.

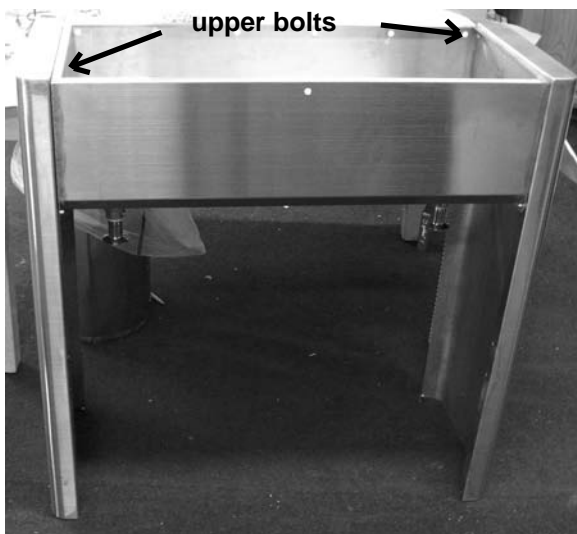


Fig 6.

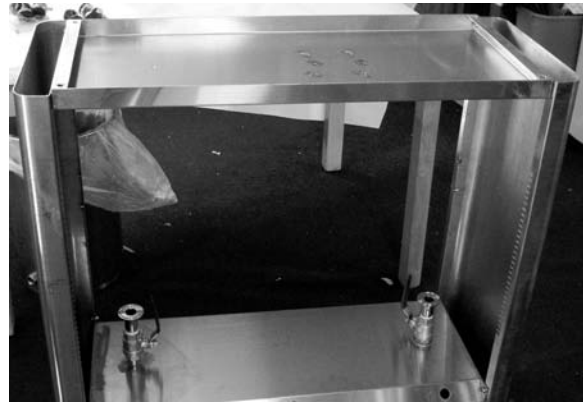


Fig 7. Base.

4. Install Base

- (a) Place tank with side panels upside down.
- (b) Use 4 allen bolts to attach base. Insert all 4 bolts loosely. Tighten firmly after all are in position.



Fig 9. Leveling Feet

5. Attach leveling feet (bench model) or casters (floor model).



Fig 10. Back Support.

6. Install Back Support. Use 4 allen bolts to connect back support to side panels.



Fig 11. Nozzles and Returns are connected by soft tubing

7. Install Nozzles and Returns

- (a) Place unit upright.
- (b) Insert and tighten nozzle sets. *Stainless Washer is on Inside of tank.*
- (c) Insert the Returns into the holes at top of tank. *Stainless Washer is on Inside of tank.*
- (d) Connect each nozzle to Return with soft tubing.
- (e) Connect ULPA filter to Return on back of tank.



Fig 13. Right Bracket

8. Install Bottle Tray

- (a) Connect right bracket to the Bottle Tray using 2 allen bolts. Note the bolts are on the inside of the bracket as shown in Figure 13. Repeat with left bracket.
- (b) Apply teflon tape to nipple on bottom of bottle tray and attach drain valve. See Figure 14.
- (c) Hang bottle tray from notches on side panels. Precise position depends on bottle and fill level. See details in manual.



Fig 14. Drain for Bottle Tray

- 9. Install Float--See Figure 2. Attach float arm into float assembly. Tighten by hand. Do not overtighten.



Fig 16. Float installed.

- 10. Attach knob onto tank lid.

Quick Setup of Filling Machine

1. Adjust the fill level first.

Do not use the Bottle Tray for this!

Fill a bottle by holding the bottle firmly and pushing onto the nozzle---the spring will retract.

Loosen set screw on stainless steel collar (Part 4). Move collar higher if you want a lower fill level (or move collar lower if you want a higher fill level).

Snug up set screw. ATTENTION---DO NOT OVERTIGHTEN SET SCREW. IT TAKES ONLY A LITTLE SNUGNESS TO HOLD IN POSITION.

Push rubber cone (Part 3) up against stainless collar. Fill another bottle and find correct fill level.

2. Place Bottle Tray in position. The filler will often operate with the Bottle Tray in two positions. The best is the higher Bottle Tray position.

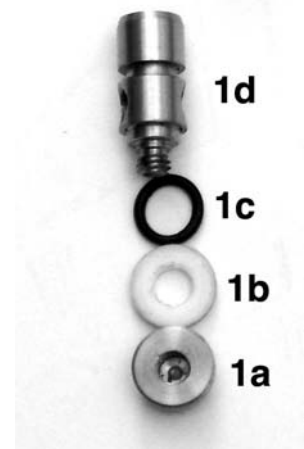
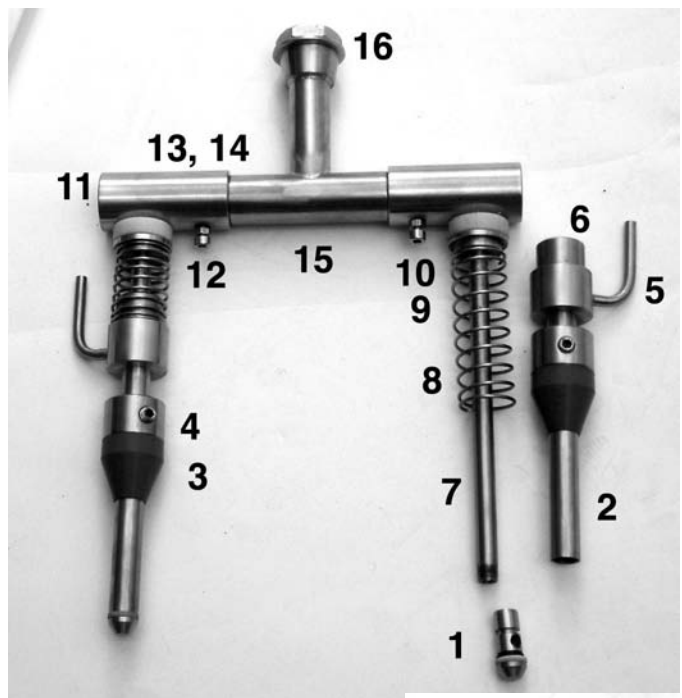
Lubrication: Orings should be lubricated routinely. Food grade silicone spray works very well but any food grade lubricant is fine.

The most important lubrication points are:

Vent Collar Orings (Part 6): The Inner Tube (Part 7) is sealed against the Vent Collar (Part 5) by 2 orings (Part 6). It is usually sufficient to spray lubricant at the top of Part 5 and open and close nozzle several times.

You should also routinely lubricate the tip (Part 1).

The Union Orings (Part 13) do not need to be lubricated as often as the other orings.



Nozzle Components

1. Tip
 - 1a. Lower Tip
 - 1b. Teflon gasket
 - 1c. Oring 1
 - 1d. Upper Tip
2. Outer Tube
3. Rubber Cone
4. Fill Level Collar with set screw
5. Vent Collar
6. Vent Collar Orings (2)
7. Inner Tube
8. Spring
9. Stainless Spacer
10. Plastic Spacer
11. Union
12. Union Set Screw with nut
13. Union Orings (2)
14. Union teflon gasket
15. Tee
- 16a. Tee Nut
- 16b. Tee Washer--stainless steel
- 16c. Tee Oring

Filling Machine—Vent Tube Orings

Changing the Vent Tube orings.

Use a small jewelers screwdriver to remove the old orings.

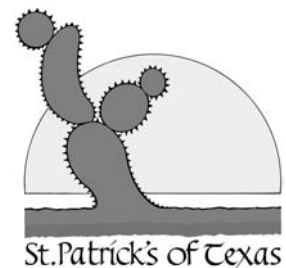
1. Cover the end of the inner tube with masking tape. Figure 1.
2. Slide the outer tube over the inner tube (Figure 2). The inner tube with masking tape should be just below the lowest oring groove.
3. Push the orings into the grooves. A large allen wrench works well for this. The upper oring will go in first. The inner tube with masking tape acts as a backstop for the second oring.



Figure 1. Inner tube with masking tape.



Figure 2.



Dual-Level Controller Instructions

1. Place the two sensors in the tank. Plug pump into the controller. Plug controller into wall outlet.
2. Sensor #1 must be the upper level. Switch must be on “B”.

The pump shuts off when the wine reaches the upper sensor. The pump remains off until the wine level reaches the lower sensor.

Pump Notes

Flow Direction is denoted by Arrow on outlet of pump.

Attach filter to inlet of pump.

Use lubricant (silicone spray) to connect hose barbs and filter.

Use 3/4” Pliovic hose with pump.

Pump has a pressure switch. It will shut off when valve on outlet side is closed.