

# INSTALLATION AND OPERATION INSTRUCTIONS

PERLICK NITRO BEVERAGE DISPENSING KIT (SINGLE AND DUAL INFUSERS)



#### **PRODUCT NUMBERS**

RS-NDK 1030849 (Single) 1030850 (Dual)

### **GENERAL INFORMATION**

#### Introduction

Congratulations on your purchase of a Perlick Nitro Beverage Dispensing Kit. This manual has been prepared to assist you in the setup of your kit and to acquaint you with its operation and maintenance.

We dedicate considerable time to ensure that our products provide the highest level of customer satisfaction. If service is required, your dealer or customer support at <a href="mailto:techservice@partstown.com">techservice@partstown.com</a> or (800)438-8898 can provide you with a list of qualified service agents. For your own protection, never return merchandise for credit without our approval.

We thank you for selecting a Perlick product and assure you of our continuing interest in your satisfaction.

#### Warranty

To register your product, visit our web site at <a href="www.perlick.com">www.perlick.com</a>. Click on "Commercial", then "Service". Click on the link "Warranty Registration Form". You must complete and submit this form or the installation date will revert back to the ship date.

Please record the purchase date and the dealer's name, address and telephone number below.

Model Number:	
Order Number:	
Purchase Date:	
Phone Number	

Form No. Z2751 Rev. 05.26.21

Operation/Installation Manual

# **TABLE OF CONTENTS**

General Information	
Safety	2
Infuser Warranty Information	3
Tool & Time Requirements	3
Preparing For Use	4
Parts List	5
Infuser Assembly Instructions	
Installation Operations	
Filling The Keg	19
Line Setup Check	
System Cleaning	22
Troubleshooting	24
Service Parts List	26

## **SAFETY**

PLEASE READ all instructions completely before attempting to install or operate the unit. Take particular note of the DANGER, WARNING and CAUTION information in the manual. The information is important for the safe and efficient installation, operation and care of your Perlick unit.

**DANGER** Indicates a hazard that WILL result in serious injury or death if precautions are not followed.

**WARNING** Indicates a hazard MAY cause serious injury or death if precautions are not followed.

**CAUTION** Indicates a hazard where minor or moderate injury may occur if precautions are not followed.

NOTICE Indicates that property damage may occur if warnings or instructions are not followed.

#### IMPORTANT!

Read and understand all information in this manual before attempting the installation.

All plumbing and electrical work must be performed by a qualified technician and conform to all applicable state and local codes.

Operation/Installation Manual



# ADDITIONAL INFUSER WARRANTY INFORMATION

#### **NITROGEN INFUSER WARRANTY:**

WARRANTY: Perlick warrants that for a period of one (1) year following delivery, if the nitrogen infuser belonging to kit(s) 1030849, 1030850, or RS-NDK you have purchased will (a) perform in accordance with published specifications, and (b) will be free from defects in materials or workmanship. In the event a nitrogen infuser from any of the aforementioned kit(s) does not meet this warranty, subject to the conditions set forth in these terms and conditions, Perlick's sole obligation will be, at its election, to repair or replace the nitrogen infuser in question.

PERLICK MAKES NO OTHER WARRANTIES
REGARDING THE NITROGEN INFUSERS, EXPRESS
OR IMPLIED, AND ALL IMPLIED WARRANTIES OF
MERCHANTABILITY, NON-INFRINGEMENT AND
FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY
DISCLAIMED. IN NO EVENT WILL PERLICK BE LIABLE
FOR PUNITIVE, SPECIAL OR CONSEQUENTIAL
DAMAGES, OR FOR AN AMOUNT IN EXCESS OF
THE PURCHASE PRICE OF THE DEFECTIVE PERLICK
PRODUCT.

#### NITRO INFUSER REPLACEMENT PARTS WARRANTY:

Perlick Corporation provides the following limited warranty for Perlick genuine service parts (Product) only if originally purchased by you for use (not resale) from, a Perlick Master Parts Distributor (original purchase).

Perlick warrants that on the date of original purchase and for the immediately following 90-day period, this Product will be free from defects in material or workmanship. If, during the warranty period, this product is found to be defective in material or workmanship, it will be exchanged with no additional charge. Warranty replacement does not include exchange when the problem results from accident, disaster, misuse, abuse, improper installation, non-Perlick modification (remanufacturing), using apart from customer or reseller dismantle & salvage, improper storage, malfunctioning equipment or normal wear and tear.

# **TOOL & TIME REQUIREMENTS**

ALLOCATE 1.5 TO 2 HOURS PER INSTALL	1/4" HEX-NUT DRIVER	
TEFLON TAPE	5/16" HEX-DRIVE BIT	
SAFETY GLASSES	5/32" DRILL BIT	
MALLET OR HAMMER FOR KNOCKOUT	CENTER PUNCH	
LARGE ADJUSTABLE WRENCH	TORPEDO LEVEL	
HAND DRILL/DRIVER	MEASURING TAPE OR RULER	
GLOVES	OPTIONAL: NEEDLE-NOSE PLIERS	

# Perlick

# PERLICK NITRO BEVERAGE DISPENSING KIT

Operation/Installation Manual

# **Preparing For Use**

#### **UNCRATING AND INSPECTION**

Remove all crating material before operating. Carefully inspect product for hidden damage. If damage is discovered, file your claim immediately with the transport company. Perlick is not responsible for damage in transit.

**DANGER** 

**Deviations from the intended** components listed in the Nitro Kits

1030849, 1030850, and RS-NDK are not authorized and may result in injury or death.

DANGER

Any tubing installed to a hose barb must be properly and firmly

affixed by a worm-drive clamp from the Nitro Kit. A proper installation must compress a worm-drive clamp to the tubing and hose barb. All three components must be overlapping, otherwise there will be a reduced oxygen supply which can lead to injury or death.

**DANGER** 

Ensure unused gas valves and lines on the air distributor are set to

their off position (lever arm perpendicular to the gas line), otherwise there will be a reduced oxygen supply which can result in injury or death.

**DANGER** Any gas tank that provides an inlet pressure more than 4,000 PSI is

not recommended, otherwise there will be a reduced oxygen supply which can result in injury, death, and property damage to the regulator.

Any threaded connection has a risk of leakage if Teflon tape is not

applied resulting in a reduced oxygen supply which can lead to injury or death.

DANGER

Any threaded connection needs to be properly affixed by a wrench

according to the installation instructions, otherwise there will be a reduced oxygen supply which can lead to injury or death.

A DANGER

When removing and replacing kegs, ensure the gas is properly

shut off by setting the regulator or gas tank to a closed position, otherwise there will be a reduced oxygen supply which can lead to injury or death.

**Ensure safety chain is properly** mounted to the refrigeration unit

per the installation instructions, otherwise property damage may occur to the nitrogen tank if toppled. Personal damage may ensue if the nitrogen tank leaks from being damaged resulting in injury or death.

**A WARNING** 

When removing and replacing kegs, ensure they are properly

vented by pulling upwards on the ring for safety release valve for ten seconds, otherwise personal injury may occur when removing the its lid.

A refrigeration unit must not be drilled into unless the specified area

is safe to drill by a mounting template or no-drill-zone drawing, otherwise there may be electrical or refrigerant damage.

**A** CAUTION

Ensure the keg lid rests flush and an even seal is produced, otherwise the

keg will not hold its pressure and the beverage will not dispense properly.

CAUTION

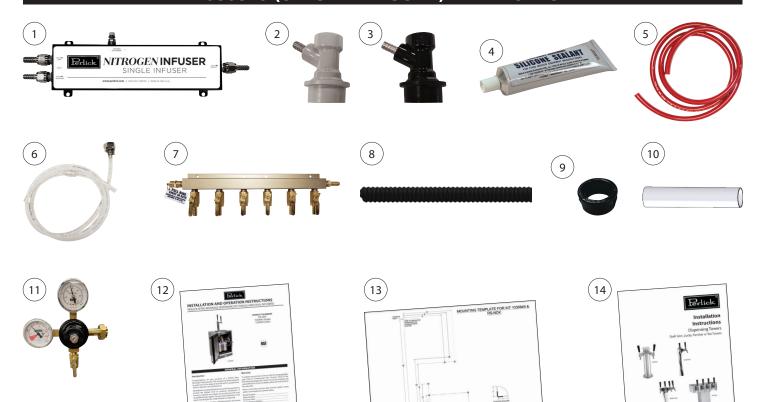
When removing or replacing kegs, avoid any unnecessary contact to

the air distributor and nitrogen infuser to avoid property damage.

Operation/Installation Manual



# 1030849 (SINGLE INFUSER) - PARTS LIST

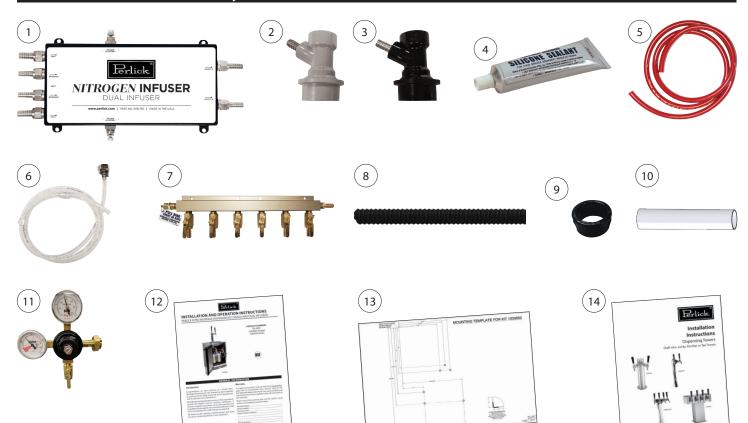


ITEM NO.	DESCRIPTION	QTY.
1	INFUSER, SINGLE NITROGEN	1 EA
2	DISCONNECT, BALL-LOCK, FOR GAS (GRAY)	4 EA
3	DISCONNECT, BALL-LOCK, FOR LIQUID (BLACK)	4 EA
4	SILICONE	1 EA
5	RED GAS LINE	30 FT
6	BEVERAGE TUBING	5 EA
7	DISTRIBUTOR, AIR 6-WAY	1 EA
8	TUBING, SNORKEL	5 FT
9	BUSHING	1 EA
10	SLEEVE, AIR	1 EA
11	REGULATOR, NITROGEN TWIN-GAUGE	1 EA
12	NITRO INSTALLATION INSTRUCTIONS	1 EA
13	MOUNTING TEMPLATE, 1031011	1 EA
14	DISPENSING TOWER INSTALLATION INSTRUCTIONS	1 EA
Page 7	BAG, TAPPING PARTS	1 EA



Operation/Installation Manual

# 1030850, RS-NDK (DUAL INFUSER) - PARTS LIST

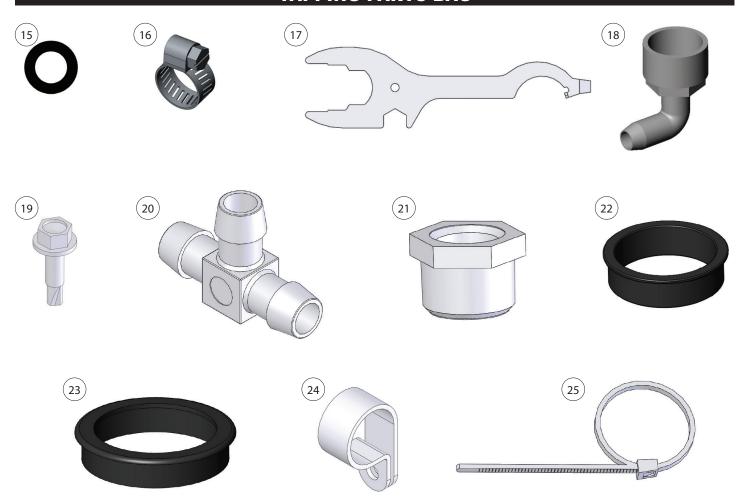


ITEM NO.	DESCRIPTION	QTY.
1	INFUSER, DUAL NITROGEN	1 EA
2	DISCONNECT, BALL-LOCK, FOR GAS (GRAY)	4 EA
3	DISCONNECT, BALL-LOCK, FOR LIQUID (BLACK)	4 EA
4	SILICONE	1 EA
5	RED GAS LINE	30 FT
6	BEVERAGE TUBING	5 EA
7	DISTRIBUTOR, AIR 6-WAY	1 EA
8	TUBING, SNORKEL	5 FT
9	BUSHING	1 EA
10	SLEEVE, AIR	1 EA
11	REGULATOR, NITROGEN TWIN-GAUGE	1 EA
12	NITRO INSTALLATION INSTRUCTIONS	1 EA
13	MOUNTING TEMPLATE, 1031023	1 EA
14	DISPENSING TOWER INSTALLATION INSTRUCTIONS	1 EA
Page 7	BAG, TAPPING PARTS	1 EA

Operation/Installation Manual



# **TAPPING PARTS BAG**

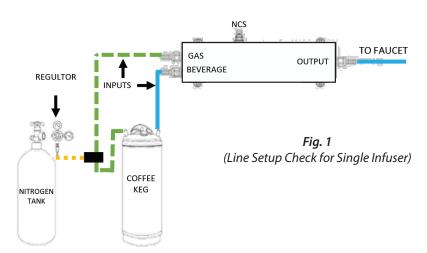


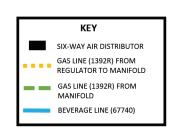
ITEM NO.	DESCRIPTION	QTY.
15	GASKET, COUPLING	10
16	CLAMP, STAINLESS STEEL WORM DRIVE	19
17	WRENCH, COMBINATION	1
18	ELBOW, NYLON, 3/4" FPT X 1/2" HOSE BARB	1
19	SCREW, SELF-DRILLING, #10 X 3/4", HEX WASHER HEAD WITH SERRATIONS	8
20	TEE, 1/2" INSERT, THREE HOSE BARB	1
21	BUSHING, REDUCER, NYLON, 3/4" NPT, 1/2" NPT	1
22	BUSHING, SNAP, 1.5", NYLON	4
23	BUSHING, SNAP, 2", NYLON	2
24	CLAMP, CABLE, 3/4" DIA X 1/2", PLASTIC	3
25	TIE, CABLE	1



Operation/Installation Manual

# ASSEMBLY INSTRUCTIONS FOR SINGLE NITROGEN INFUSER KIT (1030849, RS-NDK)





All Components shown are reference only

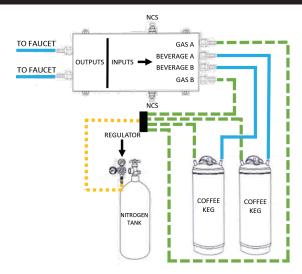
- I. Drill six mounting holes according to **Operation 1** via an electric drill and a 5/32" drill bit.
- 2. Determine how many nitrogen lines are needed for you application. Cut to length (leave room for error) and mount the gas lines to the air distributor with worm-drive clamps and a 1/4" hex-nut driver (**Reference Operation 2**).
- Mount the 6-way air distributor by aligning its holes with the drilled holes in Operation 1. Install two self-tapping screws from the parts bag with a drill and 5/16" hex bit according to Operation 2.
- 4. Install the nitrogen source inside or outside the refrigeration unit according to **Operation 3**.
- Connect a red gas line to the regulator (Fig. 5) and to the inlet of the 6-way air distributor (Fig. 4). Use a worm drive clamp for each gas line and a 1/4" nut driver (Reference Operation 3).
- 6. Install the regulator to the nitrogen source using a large adjustable wrench and teflon tape for the threaded connection (**Reference Operation 3**). Ensure the tank and regulator are set to their closed positions (figure 17).
- 7. Install one gas line from the 6-way air distributor and one new beverage line to the nitro infuser's inputs with a worm drive clamp and cut off threaded connector for the beverage line according to **Operation 4**.
- Install one beverage line to the output beverage connection on the infuser via a worm drive clamp (Reference Operation 4).
- Mount the nitrogen infuser to holes drilled in Step 1 above using the small black screws from the infuser and a phillips bit and drill.
- Attach the beverage line from the input of nitro infuser to a black quick disconnect with a worm drive clamp and 1/4" hex-nut driver (Reference Operation 5).

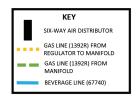
- 11. Repeat Step 8 but attach a red gas line from the air distributor to the gray quick disconnect with a worm drive clamp and 1/4" hex-nut driver (Reference Operation 5).
- 12. Connect the quick disconnects to the keg(s) by lifting up on the outer ring (**Reference Operation 6**).
  - a) Black quick disconnect attaches to out.
  - b) Gray quick disconnect attaches to in.
- 13. Connect the output beverage line from the infuser (and any other beverage lines) to the tower (**Operation 7**). Cut off connectors if the tower has a hose barb, and not a threaded connection.
- 14. Mount the faucets to the tower and the tower to refrigeration cabinet (**Reference Operation 8**).
- 15. Install the air scoop according to **Operation 9**.
- 16. If a nitrogen tank is being used inside the refrigeration unit, connect both ends of the safety chain and wrap the chain around the tank. Drive a self-taping screw through the
- 17. Ensure that the tank, regulator and all non-used gas lines are set to a closed position (*Fig. 18*).
- 18. Using the adjustable screw on the front of the regulator, adjust the pressure to 28 PSI for optimal dispensing.
- 19. Adjust the NCS dial on the infuser to the desirable output for coffee and froth.
- 20. Open the gas tank and set the regulator to an open position.
- 21. Allow the beverage 1-2 minutes to pressurize and serve!

Operation/Installation Manual



### ASSEMBLY INSTRUCTIONS FOR DUAL NITROGEN INFUSER KIT (1030850, RS-NDK)





**Fig.16** (Line Setup Check for Dual Infuser)

All Components shown are reference only

- Drill six mounting holes according to Operation 1 via an electric drill and a 5/32" drill bit.
- 2. Determine how many nitrogen lines are needed for you application. Cut to length (leave room for error) and mount the gas lines to the air distributor with worm-drive clamps and a 1/4" hex-nut driver (**Reference Operation 2**).
- Mount the 6-way air distributor by aligning its holes with the drilled holes in Step 1 above. Install two self-tapping screws from the parts bag with a drill and 5/16" hex bit according to Step 2.
- 4. Install the nitrogen source inside or outside the refrigeration unit according to **Operation 3**.
- Connect a red gas line to the regulator (Fig. 5) and to the inlet of the 6-way air distributor (Fig. 4). Use a worm drive clamp for each gas line and a 1/4" nut driver (Reference Operation 3).
- Install the regulator to the nitrogen source using a large adjustable wrench and teflon tape for the threaded connection (Reference Operation 3). Ensure the tank and regulator are set to their closed positions (figure 17).
- Install two gas lines from the 6-way air distributor and two new beverage lines to the nitro infuser's inputs with a worm drive clamp and cut off threaded connector for the beverage line according to **Operation 4**.
- Install two beverage lines to the output beverage connection on the infuser via a worm drive clamp. (Reference Operation 4)
- Mount the nitrogen infuser to holes drilled in Step 1 using the small black screws from the infuser and a phillips bit and drill.
- Attach the two beverage lines from the input of nitro infuser to a black quick disconnect with a worm drive clamp and 1/4" hex-nut driver (Reference Operation 5).

- 11. Repeat Step 8 but attach two gas lines from the air distributor to the gray quick disconnect with a worm drive clamp and 1/4" hex-nut driver (Reference Operation 5)
- 12. Connect the quick disconnects to the keg(s) by lifting up on the outer ring (**Reference Operation 6**).
  - a) Black quick disconnect attaches to out.
  - b) Gray quick disconnect attaches to in.
- 13. Connect the two output beverage lines from the infuser (and any other beverage lines) to the tower **Operation 7**. Cut off connectors if the tower has a hose barb, and not a threaded connection.
- 14. Mount the faucets to the tower and the tower to refrigeration cabinet (**Reference Operation 8**).
- 15. Install the air scoop according to Operation 9.
- 16. If a nitrogen tank is being used inside the refrigeration unit, connect both ends of the safety chain and wrap the chain around the tank. Drive a self-taping screw through the chain.
- 17. Ensure that the tank, regulator and all non-used gas lines are set to a closed position. (*Fig. 18*)
- 18. Using the adjustable screw on the front of the regulator, adjust the pressure to 28 PSI for optimal dispensing.
- 19. Adjust the NCS dial on the infuser to the desirable output for coffee and froth.
- 20. Open the gas tank and set the regulator to an open position.
- 21. Allow the beverage 1-2 minutes to pressurize and serve!

Operation/Installation Manual

# **OPERATION #1 - MOUNTING LOCATIONS FOR SINGLE INFUSER**

- Mark holes according to the drill sites below with a hammer and center punch. Place the mounting template in the corner of the refrigeration unit according to the direction below. The mounting template (1031011) can be found in the kit and on perlick.com.
- 2. Drill the six mounting holes shown on this page with a 5/32" drill bit.

**NOTICE** Any deviation from this pattern more than a 1/2" from it's original location can result in electrical or refrigerant damage.

# Side Condensing

BACK

For side condensing units, the upper corner, opposite of the condensing unit that is also a part of the back wall, should be used.

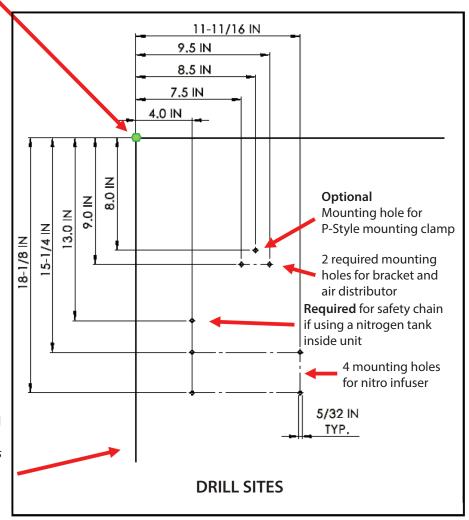
#### KEY

 Indicates reference point in the
 corner where measurements must be taken from

For units without side condensing (HC, HP, and Remote Refrigeration Units), measure from the reference point in the upper-left corner of the right wall.

**Back or Remote Condensing** 

BACK WALL



Border represents an internal refrigerator side wall (Always drill on right wall unless there is a condensing unit

there is a condensing unit next to it, then drill on the left/ opposite wall).

Operation/Installation Manual



# **OPERATION #1 - MOUNTING LOCATIONS FOR DUAL INFUSER**

- Mark holes according to the drill sites below with a hammer and center punch. Place the mounting template in the corner of the refrigeration unit according to the direction below. The mounting template (1031023) can be found in the kit and on perlick.com.
- 2. Drill the six mounting holes shown on this page with a 5/32" drill bit.

**NOTICE** Any deviation from this pattern more than a 1/2" from it's original location can result in electrical or refrigerant damage.

# Side Condensing

BACK WALL

For side condensing units, the upper corner, opposite of the condensing unit that is also a part of the back wall, should be used.

#### **KEY**

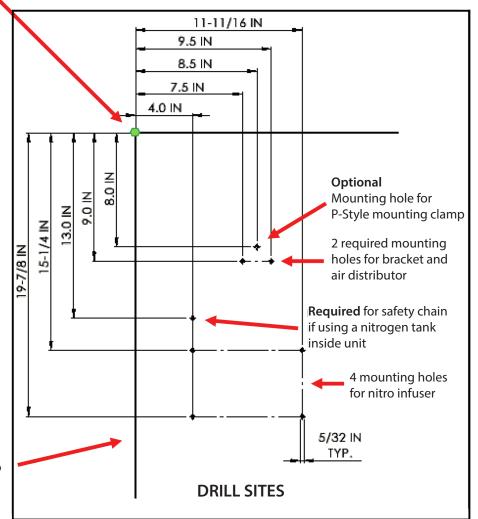
Indicates reference point in the corner where measurements must be taken from

For units without side condensing (HC, HP, and Remote Refrigeration Units), measure from the reference point in the upper-left corner

of the right wall.

**Back or Remote Condensing** 

BACK WALL

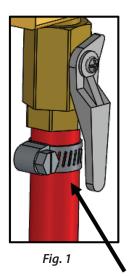


Border represents an internal refrigerator side wall

(Always drill on right wall unless there is a condensing unit next to it, then drill on the left/opposite wall).

# **OPERATION #2 - AIR DISTRIBUTOR INSTALLATION**

- 1. Determine how many gas lines are needed
  - a) Two nitrogen lines are needed for nitro-brew coffee.
  - b) One nitrogen line is needed for cold brew.
- Attach the required amount of red gas tubing to the air distributor for the application. Compress a worm drive clamp onto each gas tube. Ensure the tubing is being compressed to the hose barb.
  - a) Ensure worm drive clamp doesn't interfere with opening/closing valve (*Fig. 1*).
- Drive two self-taping screws with a 5/16" hex bit from the tapping parts bag provided in the kit to attach the air distributor to the cabinet.



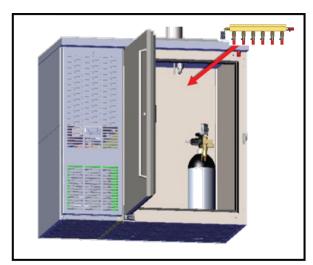


Fig. 2

Ensure worm drive clamp does not interfere with opening and closing of valve.

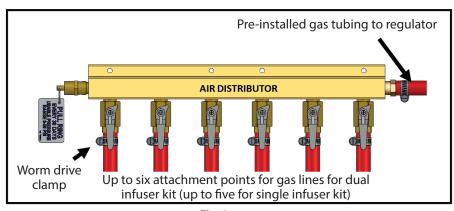


Fig. 3

Operation/Installation Manual



# **OPERATION #3 - NITROGEN TANK INSTALLATION**

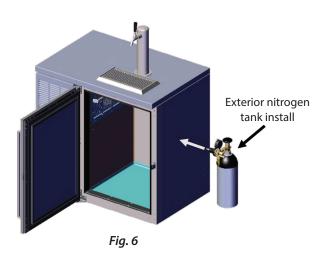
#### INTERNAL NITROGEN TANK MOUNTING

- 1. Place the tank, regulator, and air distributor inside the refrigeration unit (*Fig. 4*) to determine length of gas tubing in Step 2.
- 2. Cut the red gas tubing to the desired length based on where the components will be located.
- 3. Route the red gas tubing to the regulator (*Fig. 5*) and to the air distributor (*Fig. 4*). Attach the tubing to the hose barb with a hose-drive clamp via a 1/4" hex nut. Ensure it is compressing the tube and hose barb.
- 4. Attach the regulator to nitrogen tank via an adjustable wrench. Rotate the hex fitting (*Fig. 5*) until the it can no longer be rotated.
  - a) Make sure to use teflon tape on all pressurized, threaded connections.

#### EXTERNAL NITROGEN TANK MOUNTING

- For an external nitrogen source, identify the knockout's location and remove it.
- 2. Cut the red gas tubing to the desired length based off of where the external nitrogen tank is located.
- 3. Place the air distributor inside the refrigeration unit and route the red gas tubing through the knockout hole.
- Attach the routed red gas tubing to the air distributor (*Fig. 1*) and regulator (*Fig. 5*) to barbed fittings and secure the tubing in place with worm-drive clamps and a 1/4" hex nut driver or nut driver (Reference *Fig. 5* to observe installed components).
- Ensure the knockout hole is sealed (with the provided sealant).
- 6. Attach regulator to nitrogen tank via an adjustable wrench. Rotate the hex fitting (*Fig. 5*) until the it can no longer be rotated.
  - a) Make sure to use teflon tape on all pressurized, threaded connections.





All Components shown are reference only





Fig. 7

# **OPERATION #4 - NITROGEN INFUSER INSTALLATION**

- Attach a new beverage line and a red gas line from the air distributor to the input hose barbs on the nitrogen infuser. The inputs will say gas & beverage. (Fig. 9)
  - a) If the dual infuser is being used, repeat **Step 1** for the other two inputs.
  - b) Place a worm drive clamp around the tubing before connecting to the hose barb.
  - c) Ensure to never have a smaller bend radius than 2 inches during installation.
  - d) Remove the connector on the beverage lines connected to the input.

- 2. Repeat Step 1, however attach new beverage lines to output(s). One output for single and two for dual. These lines will later be connected to the tower (*Fig. 8*).
  - a) If the tower does not have a threaded connection, remove the connector.



Never apply more than a two-inch bend radius to beverage tubing.

3. Attach the infuser to the cabinet via a phillips screwdriver and the four black screws provided in the nitrogen infuser's packaging to the mounting holes drilled in **Operation 1**.

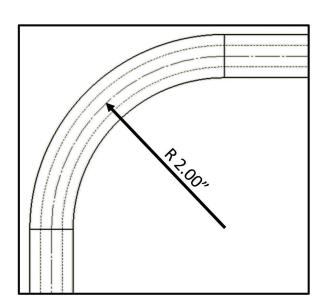
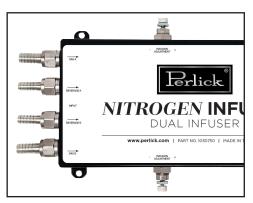


Fig. 8



Single infuser inputs



**Dual infuser inputs** 

Operation/Installation Manual



# **OPERATION #5 - CONNECTING TO QUICK DISCONNECTS**

- 1. Place worm drive clamps around tubing that will attach to the quick disconnects.
- Use the beverage tubing from the nitrogen infuser's inputs (one line for single infuser and two lines for the dual infuser) in **Operation 4** and attach it to the hose barb on the black quick disconnect(s) (*Fig. 10*).

Black quick disconnect for liquid



Fig. 10

- 3. Slide the worm-drive clamp over the hose barb and tubing and tighten the clamp with a 1/4" nut driver to compress the beverage line to the hose barb.
- 4. Repeat Steps 1 through 3 for the red gas lines from the air distributor but ensure the gas line is connected to the gray quick disconnect. There must be one gas line per beverage input line from the nitro infuser (*Fig. 11*).



Gray quick disconnect for gas

Fia. 11

### OPERATION #6 - CONNECTING TO KEG

- 1. Place quick disconnects onto tank (*Fig. 11*).
  - a) It is critical that the gray or gas quick disconnect(s) are placed where the tank has the word in embossed into its surface (*Fig. 11 and 12*).
  - b) It is critical that the black or liquid quick disconnect(s) is placed where the tank has out embossed into its surface (*Fig. 10 and 12*).
- 2. Make sure a good connection is made and the connectors are seated properly.
  - a) Pull up on the plastic ring to unlock the quick disconnect. This will allow the quick disconnect to be easily secured or removed.
  - b) A noticeable clicking sound & positional shift will be made when the disconnect is secured.

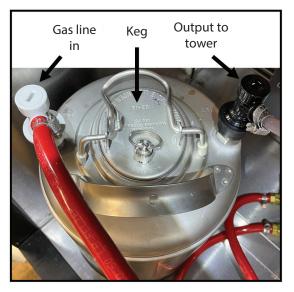


Fig. 12

# **OPERATION #7 - CONNECTING BEVERAGE LINES TO TOWER**

- 1. If the connection point sticking out from the tower is threaded, simply screw on the beverage lines. Otherwise, follow Steps 2-6.
- 2. Cut off threaded connector from beverage tubing.
- 3. Place a worm-drive clamp, from the tapping parts bag, around the beverage tubing that comes from the output of the nitrogen infuser.
- 4. Connect the tubing to the hose barb sticking out from the tower's base.
- 5. Position and tighten the worm-drive clamp(s) using a 1/4" hex drive bit or nut driver to compress beverage lines onto the hose barb (*Fig. 13*).
- Ensure the newly installed beverage lines are properly routed through the refrigeration unit before mounting the tower.

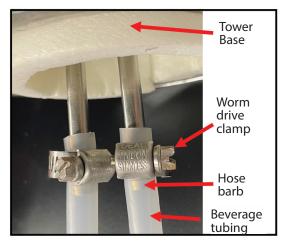


Fig. 13

# **OPERATION #8 - CONNECTING TOWER TO REFRIGERATION UNIT**

- Install the tower and drainer or drip pans per dispensing tower installation instructions (included with this kit and may also be found at perlick.com)
  - a) Ensure the appropriate type/model/design. Refer to the Tower Installation Manual.



The Sexy/Adara Towers' installation mirror's the Lucky and Panther Towers'

installation instructions.

2. Attach the faucets to the tower via the faucet wrench located in the tapping parts bag.

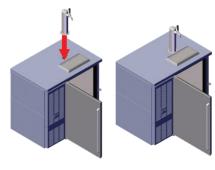


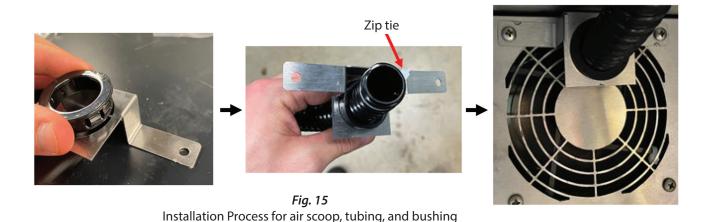
Fig. 14

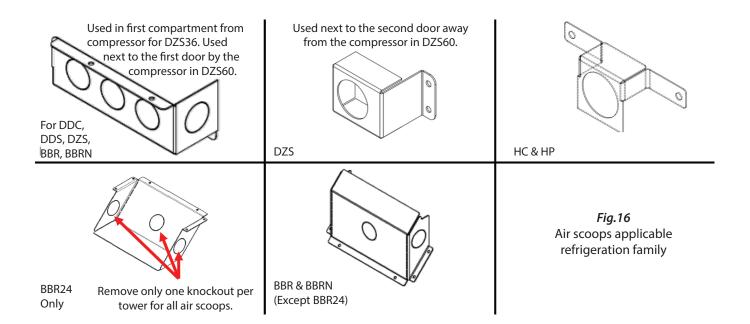
Operation/Installation Manual



# OPERATION #9 - INSTALLING AIR SCOOP & TUBING TO COOL TOWER

- Refer to the Tower Installation Manual in Operation 8 for additional material on air scoop installation.
- 2. Identify the air scoop and how many attachment points are needed (varies based on refrigeration model).
- 3. Find the evaporator fan's cover in the refrigeration unit and remove the necessary screws via a philips screwdriver for the air scoop's attachment points.
- 4. Replace the screws on the evaporator fan's cover with the air scoop installed.
- Place the accordian-style (black) tubing into the bushing.
   a) Place a zip tie on the side of the tubing nearest to the evaporator fan. This will ensure the tubing does not slip out.
- 6. Snap in bushing with the tubing and zip tie installed.
- Gauge how much tubing needs to be routed into the tower and cut.
  - a) Ensure there is at least a couple inches of tubing routed up into the tower for sufficient air flow.



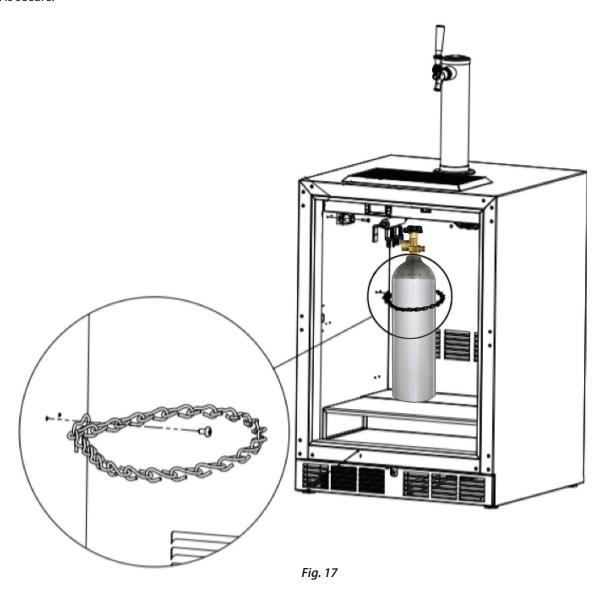




Operation/Installation Manual

# OPERATION #10 - SECURING NITROGEN KEG TO REFRIGERATION UNIT

- 1. Locate the mounting hole in **Operation 1** designated for the safety chain.
- 2. Connect both ends of the safety chain together and with pliers, close the open loop (*Fig. 17*).
- 3. Drive a self-tapping screw from the parts bag through the S-hook (*Fig. 17*).
- 4. Give the chain a slight tug to ensure it is properly affixed.
- 5. Install nitrogen tank by sliding safety chain up the tank until it is secure.



Operation/Installation Manual



# **FILLING KEG WITH NITRO BREW**

- 1. Before opening the keg, ensure the system is depressurized.
  - a) Close all valves on the nitrogen tank & air distributor(s). Refer to *Fig. 18* if unsure on what a closed/open valve looks like.
  - b) Pull upwards on the pressure relief on the keg for 10 seconds (*Fig. 19*).
- 2. Open the keg cover and remove lid from keg.
- 3. Place the funnel into the top of the keg, then place strainer into funnel.
  - a) The strainer will improve the integrity of the system by disallowing coffee grounds to build up.

- 4. Make sure the keg, funnel, and stainer are clean prior to use.
- 5. Slowly pour coffee into the stainer.
- 6. Clean the strainer as needed so that clogging is kept to a minimum. Repeat these steps with as many tanks as desired.
- After the beverage is in the keg and the cover is replaced, move tank into position and using **Operation 6**, attach lines





Fig. 19

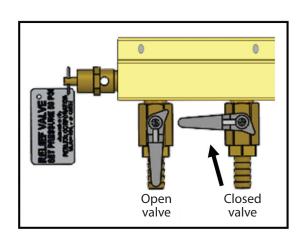


Fig. 18

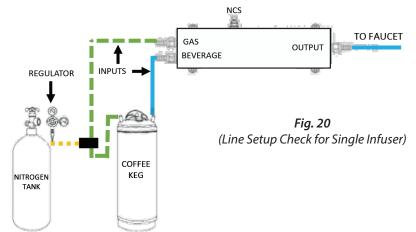


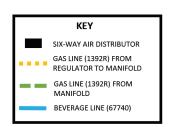
Operation/Installation Manual

# LINE SETUP CHECK SINGLE INFUSER (FOR POST-INSTALLATION & CLEANING)

- 1. Ensure there is a nitrogen line connected to the input of the nitrogen infuser and the air distributor.
- Make sure the beverage tubing is connected to the input of the nitrogen infuser and attached to a BLACK quick disconnect.
- 3. Check that there is a gray quick disconnect attached to a air distributor line.
- 4. See if quick disconnects are properly placed on the tank according to **Operation 7**.
- 5. Confirm the connection is made from the regulator to the air distributor.
  - a) If two air distributors are used, check the connections to the barbed tee fitting, air distributors, and regulator.

- 6. Ensure the regulator is tightly affixed to the tank.
- 7. Tug each line installed to ensure a secure connection is made between the hose barb and the line.
  - a) If the line makes any indication that its slipping out of the worm drive clamp, uninstall the clamp and redo this connection.
- 8. Before opening regulator and setting pressure, fill kegs with desired beverage.
- 9. Set the regulator to 28 PSI.
- 10. Wait 1-2 minutes for the system to pressurize.
- 11. The system is ready dispense!





All Components shown are reference only

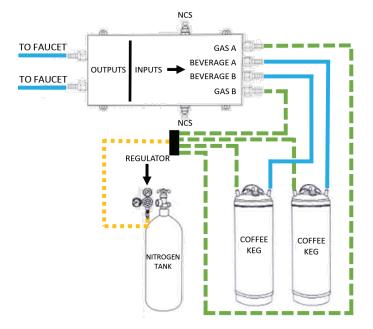
Operation/Installation Manual

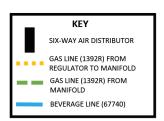


### LINE SETUP CHECK DUAL INFUSER (FOR POST-INSTALLATION & CLEANING)

- Ensure there are two nitrogen lines connected to the inputs of the nitrogen infuser and an air distributor.
- 2. Make sure two beverage tubes are connected to the input of the nitrogen infuser (Beverage A & B) and are attached to a black quick disconnect.
- 3. Check that there are two gray quick disconnects attached to two different lines on the air distributor.
- 4. See if quick disconnects are in properly installed on the tank according to **Operation 7**.
- 5. Check the connections between the barbed tee fitting, air distributors, and regulator (*Fig. 21*).
- 6. Ensure the regulator is tightly affixed to the tank.

- 7. Tug each and beverage tube installed in this operation to ensure a secure connection is made.
  - a) If the line makes any indication that its slipping out of the worm drive clamp, uninstall the clamp and redo this connection.
- Before opening regulator and setting pressure, fill kegs with desired beverage.
- 9. Set the regulator to 28 PSI.
- 10. Wait 1-2 minutes for the system to pressurize.
- 11. The system is ready to dispense.





**Fig. 21** (Line Setup Check for Dual Infuser)

All Components shown are reference only



Operation/Installation Manual

### SYSTEM CLEANING OVERVIEW

Regardless of what type of cleaning chemical you are using, you should follow three simple steps when cleaning your nitro beverage dispensing system.

You need to start by flushing any remaining coffee within your beverage lines. Do this by pushing clean water through your lines and opening the faucet on the service side. At first, you will see a mixture of coffee and water flowing through the faucet. Continue to run the faucet until the water runs clear.

Removing coffee from the lines will ensure the chemicals will be able to contact the surface of your lines and clean the residue that remains.

2. Next, you want to introduce the chemicals to the line. Using pressurized cleaning, you need to keep the faucets closed and allow the chemicals to remain in the lines while pressurized for 15 minutes.

Before using any cleaning CAUTION chemicals, food products and

packaging materials must be removed from the room or carefully protected.

**CAUTION** 

Always use proper protective wear including gloves and eye

protection.

**Use only cleaning chemicals** CAUTION that are designed for cold

beverage equipment and dispensing systems that rinse clean and do not leave behind any residue or odor.

NOTICE

When adding the chemicals, you need to strictly adhere to

the concentration recommendations as stated by the chemicals' manufacturer. Failure to do so could either make the concentration dangerously high —risking damage to both you and your system or it could make the solution too diluted, thus making it ineffective.

Further, most manufacturers have a recommended solution temperature. Follow these instructions as well, as certain chemical solutions may be less effective at certain temperatures.

- 3. Finally, you want to flush the lines with water again, this time to remove the chemical solution. Because cleaning chemicals may not look much different than water, we recommend using a pH tester to ensure no chemicals remain. Regardless of what chemical you are using, the water flowing out of the faucet should return to a neutral pH before reusing the system.
- 4. Once you have cleared out the cleaning solution, reattach your keg lines and run beverage through the faucets until any remaining water has been eliminated.

Operation/Installation Manual



# STEP BY STEP CLEANING INSTRUCTIONS

#### **FLUSH KEGS OF REMAINING BEVERAGE**

- 1. Empty kegs of all product.
- 2. Turn Nitrogen Gas off and vent keg pressure.
- 3. Remove stout faucet nozzles and soak in carbonated water. Clean nozzles with brush.
- Close Faucets.

#### **CHEMICALLY CLEAN SYSTEM**

- 1. Remove keg lid.
- 2. Pour a specialized cleaning agent designed for cold coffee dispensing systems into rinsed empty keg.



Strictly adhere to the concentration

recommendations as stated by the chemicals' manufacturer. Failure to do so could either make the concentration dangerously high —risking damage to both you and your system — or it could make the solution too diluted, thus making it ineffective.

- 3. Reattach keg lid. Pressurize with Nitrogen.
- 4. Place an empty bucket under the faucet.
- 5. Flush out product from all beverage lines until all you see is cleaning solution.
- 6. Close the faucet and allow lines to soak for 15 minutes.
- 7. Open faucets and empty until cleaning solution is completely flushed from lines.
- 8. Close faucets.
- 9. Turn Nitrogen Gas off and vent keg pressure.
- 10. Remove keg lid and rinse keg thoroughly with fresh water.

#### **FLUSH SYSTEM WITH RINSE WATER**

- 1. Fill tank with a minimum of 2 gallons of warm (80° 95°F) rinse water.
- 2. Reattach Keg lid and pressurize with Nitrogen.
- 3. Place an empty bucket under the faucet.
- 4. Open faucets and thoroughly flush cleaner from all beverage lines with rinse water.
- 5. Check rinse water with PH paper to ensure all cleaning solution is rinsed from lines.
- 6. If rinse water does not test PH neutral, continue rinsing and retest until PH neutral is obtained.
- 7. Replace nozzle on stout faucets.
- 8. Recouple your coffee keg and pressurize with Nitrogen.
- 9. Flush out remaining water in system from both beverage lines until a minimum of 12 ounces of coffee is flushed through the lines and discard.
- 10. Close faucets.

#### **DAILY MAINTENANCE**

- 1. Remove stout faucet nozzles and soak in carbonated water.
- 2. Clean nozzles with brush.



Operation/Installation Manual

# **TROUBLESHOOTING GUIDE**

ISSUE	PROBABLE CAUSE	REMEDY
Why is my cold brew running slower than usual?	Clogged Stout Faucet	If your cold brew is running slowly, unscrew the spout and soak it in warm water with your cleaner of choice. Another tip is to soak the stout nozzle in carbonated water. The rising bubbles should help loosen anything that may be clogging it. To ensure the stout nozzle is clean, shine a flashlight (your phone is great for this) through the bottom of the nozzle and monitor if any openings are clogged.
	Nitrogen Gas System	Double check your gas tank is full and wide open. Assure there are no leaks in the gas line by spraying connections with soapy water and looking for bubbles. Double check lines for kinks. If you are using a Corny Keg, check the lid seal and bar lock connectors for leaks as well.
	Beverage Line is Frozen	You can thaw these lines by leaving your refrigerator door open for a few minutes, or by grabbing the frozen line with your bare hands until the liquid starts flowing at a normal rate again. Use a commercial grade thermometer to double check your system is running to expectations.
Why is my beverage sputtering?	Infusion Level Too High	Adjust infusion level by turning your Nitrogen Control System (NCS) valve to a closed position. Open NCS valve to add nitrogen as desired. You can lock your infusion level by tightening the hex nut against the NCS. If the NCS valve will not turn, ensure the hex nut is loose and not already locked against the body. Refer to the Nitrogen Adjustment Video on the first page of the installation instructions.
	Nitrogen Gas Pressure is Too High	We recommend setting your nitrogen regulator between 28-32 PSI as a starting point. If you find the beverage is not flowing as expected, adjust as necessary.
	Clogged Stout Faucet	If your cold brew is running slowly, unscrew the spout and soak it in warm water with your cleaner of choice. Another tip is to soak the stout nozzle in carbonated water. The rising bubbles should help loosen anything that may be clogging it. To ensure the stout nozzle is clean, shine a flashlight (your phone is great for this) through the bottom of the nozzle and monitor if any openings are clogged.
	Beverage Line is Frozen	You can thaw these lines by leaving your refrigerator door open for a few minutes, or by grabbing the frozen line with your bare hands until the liquid starts flowing at a normal rate again. Use a commercial grade thermometer to double check your system is running to expectations.
The infusion level is too little or too much	Nitrogen Gas System	Double check your gas tank is full and wide open. Assure there are no leaks in the gas line by spraying connections with soapy water and looking for bubbles. Double check lines for kinks. If you are using a Corny Keg, check the lid seal and bar lock connectors for leaks as well.
	Nitrogen Control System (NCS) Valve	Begin with the NCS valve all the way closed. Open the valve to add nitrogen as desired. You can lock your infusion level by tightening the hex nut against the body. If the NCS valve will not turn, ensure the hex nut is loose and not already locked against the body. Refer to the Nitrogen Adjustment Video on the first page of the installation instructions.
Issues with installation	N/A	Refer to the troubleshooting installation guide ( <b>Operation 16</b> ).

Operation/Installation Manual



# TROUBLESHOOTING INSTALLATION & CUSTOMER SERVICE INFORMATION

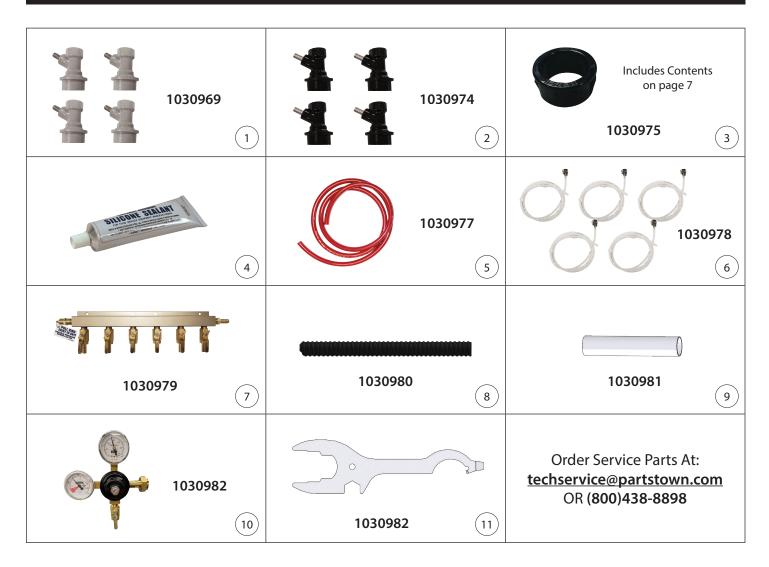
#### Is your beverage not dispensing?

- a) Before ordering a service components (found at the end of this guide) for a nitro system, please check bullet points "b)" "k)" and confirm your lines are properly setup according to **Operation 12**.
- b) Check if beverage kegs are empty.
- c) Ensure the beverage keg's lid is properly shut. The lid should be parallel to the ground if installed properly (should not be angled).
- d) Check the regulator to see if the nitrogen tank is empty.
- e) Ensure nitrogen tank and all necessary gas lines are set to an open position. Unused, open gas lines will cause the beverage to dispense improperly and cause a safety hazard since nitrogen is being released.
- f) Tug each beverage and gas line by its connection to ensure a secure connection.
  - If the tubing is sliding off the hose barb during the check, cut the tubing and reapply it to the hose barb. Ensure a hose drive clamp is firmly affixed and compressing the tubing to the barb.
- g) Remove and reapply the quick disconnects to ensure they are properly attached.
- h) Using an adjustable wrench, ensure the hex nut that attaches the regulator to the tank is firmly attached.
- i) Ensure there are no beverage leaks by checking inside the refrigeration unit. Also, listen for any hissing or high-pitched noises to confirm there are no gas leaks.
- j) Check to see if fluid is flowing in and out of the nitrogen infuser.
  - If fluid flow can not be resolved through this troubleshooting process, proceed to the last step.
- k) Reach out to customer support at techservice@partstown.com or (800)438-8898 for any additional questions.



Operation/Installation Manual

# **SERVICE PARTS**



ITEM	DESCRIPTION	PART#
1	GREY QUICK DISCONNECTS FOR GAS LINES (4 EA)	1030969
2	BLACK QUICK DISCONNECTS FOR BEVERAGE LINES (4 EA)	1030974
3	PARTS BAG PLUS AIR SCOOP BUSHING (1 EA)	1030975
4	SILICONE (1 EA)	1030976
5	RED GAS TUBING (30 FT)	1030977
6	BEVERAGE TUBE WITH CONNECTOR (5 EA)	1030978
7	6-WAY AIR DISTRIBUTOR (1 EA)	1030979
8	5 FEET OF SNORKEL TUBING (5 EA)	1030980
9	AIR SLEEVE (1 EA)	1030981
10	REGULATOR (1 EA)	1030982
11	WRENCH, COMBINATION (1 EA)	1030986

Operation/Installation Manual



# **NOTES**





Form No. Z2751 Rev. 05.26.21