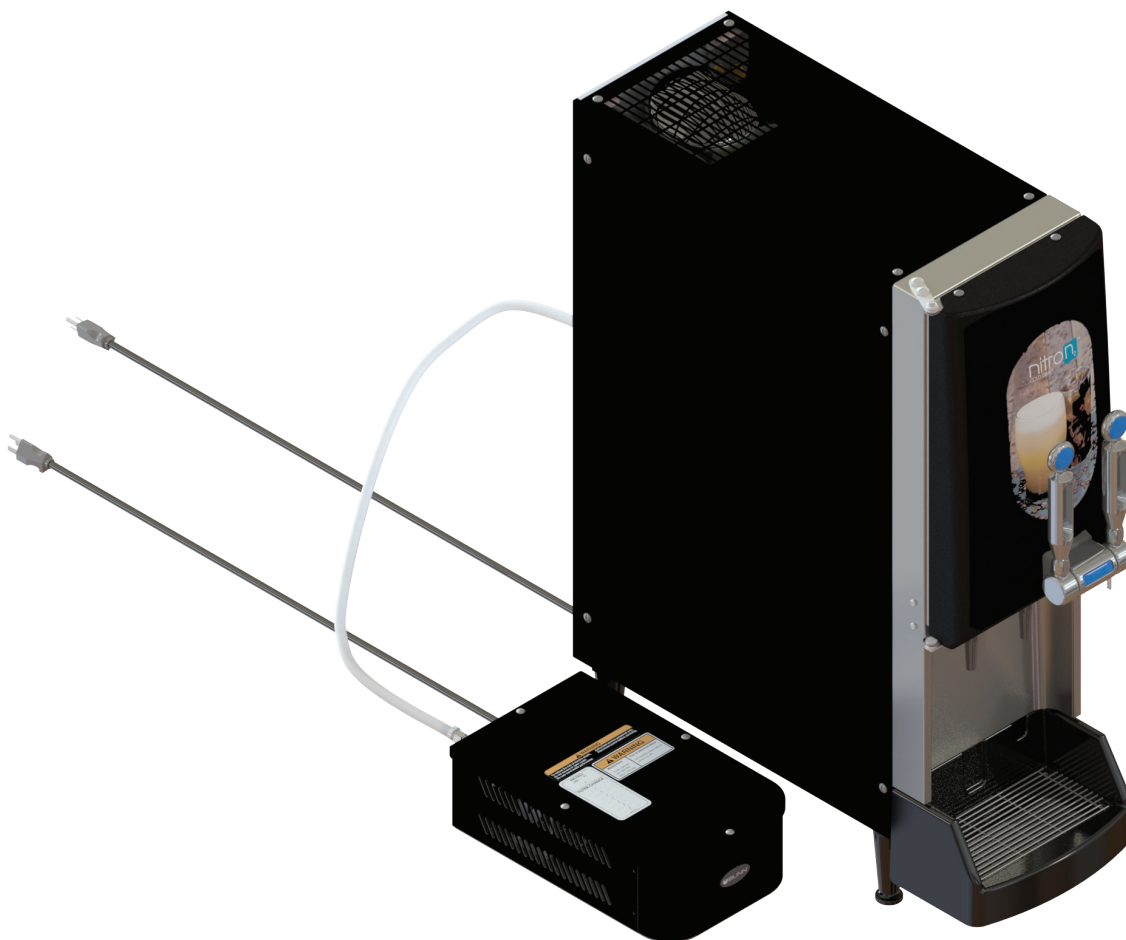


Nitron Gas Module



NGM

INSTALLATION & OPERATING GUIDE

Bunn-O-Matic Corporation
Post Office Box 3227, Springfield, Illinois 62708-3227
Phone (217) 529-6601 | Fax (217) 529-6644

BUNN-O-MATIC COMMERCIAL PRODUCT WARRANTY

Bunn-O-Matic Corp. ("BUNN") warrants equipment manufactured by it as follows:

- 1) Airpots, thermal carafes, decanters, GPR servers, iced tea/coffee dispensers, MCR/MCP/MCA single cup brewers, thermal servers and ThermoFresh® servers (mechanical and digital) 1 year parts and 1 year labor.
- 2) All other equipment - 2 years parts and 1 year labor plus added warranties as specified below:
 - a) Electronic circuit and/or control boards - parts and labor for 3 years.
 - b) Compressors on refrigeration equipment - 5 years parts and 1 year labor.
 - c) Grinding burrs on coffee grinding equipment for 4 years or 40,000 pounds of coffee, whichever comes first.

These warranty periods run from the date of installation BUNN warrants that the equipment manufactured by it will be commercially free of defects in material and workmanship existing at the time of manufacture and appearing within the applicable warranty period. This warranty does not apply to any equipment, component or part that was not manufactured by BUNN or that, in BUNN's judgment, has been affected by misuse, neglect, alteration, improper installation or operation, improper maintenance or repair, non periodic cleaning and descaling, equipment failures related to poor water quality, damage or casualty. In addition, the warranty does not apply to replacement of items subject to normal use including but not limited to user replaceable parts such as seals and gaskets. This warranty is conditioned on the Buyer 1) giving BUNN prompt notice of any claim to be made under this warranty by telephone at (217) 529-6601 or by writing to Post Office Box 3227, Springfield, Illinois 62708-3227; 2) if requested by BUNN, shipping the defective equipment prepaid to an authorized BUNN service location; and 3) receiving prior authorization from BUNN that the defective equipment is under warranty.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY OTHER WARRANTY, WRITTEN OR ORAL, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF EITHER MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. The agents, dealers or employees of BUNN are not authorized to make modifications to this warranty or to make additional warranties that are binding on BUNN. Accordingly, statements by such individuals, whether oral or written, do not constitute warranties and should not be relied upon.

If BUNN determines in its sole discretion that the equipment does not conform to the warranty, BUNN, at its exclusive option while the equipment is under warranty, shall either 1) provide at no charge replacement parts and/or labor (during the applicable parts and labor warranty periods specified above) to repair the defective components, provided that this repair is done by a BUNN Authorized Service Representative; or 2) shall replace the equipment or refund the purchase price for the equipment.

THE BUYER'S REMEDY AGAINST BUNN FOR THE BREACH OF ANY OBLIGATION ARISING OUT OF THE SALE OF THIS EQUIPMENT, WHETHER DERIVED FROM WARRANTY OR OTHERWISE, SHALL BE LIMITED, AT BUNN'S SOLE OPTION AS SPECIFIED HEREIN, TO REPAIR, REPLACEMENT OR REFUND.

In no event shall BUNN be liable for any other damage or loss, including, but not limited to, lost profits, lost sales, loss of use of equipment, claims of Buyer's customers, cost of capital, cost of down time, cost of substitute equipment, facilities or services, or any other special, incidental or consequential damages.

392, A Partner You Can Count On, Air Infusion, AutoPOD, AXIOM, BrewLOGIC, BrewMETER, Brew Better Not Bitter, BrewWISE, BrewWIZARD, BUNN Espresso, BUNN Family Gourmet, BUNN Gourmet, BUNN Pour-O-Matic, BUNN, BUNN with the stylized red line, BUNNlink, Bunn-O-Matic, Bunn-O-Matic, BUNNserve, BUNNSERVE with the stylized wrench design, Cool Froth, DBC, Dr. Brew stylized Dr. design, Dual, Easy Pour, EasyClear, EasyGard, FlavorGard, Gourmet Ice, Gourmet Juice, High Intensity, iMIX, Infusion Series, Intellisteam, My Café, Phase Brew, PowerLogic, Quality Beverage Equipment Worldwide, Respect Earth, Respect Earth with the stylized leaf and coffee cherry design, Safety-Fresh, savemycoffee.com, Scale-Pro, Silver Series, Single, Smart Funnel, Smart Hopper, SmartWAVE, Soft Heat, SplashGard, The Mark of Quality in Beverage Equipment Worldwide, ThermoFresh, Titan, trifecta, TRIFECTA (stylized logo), Velocity Brew, Air Brew, Beverage Bar Creator, Beverage Profit Calculator, Brew better, not bitter., Build-A-Drink, BUNNSource, Coffee At Its Best, Cyclonic Heating System, Daypart, Digital Brewer Control, Element, Milk Texturing Fusion, Nothing Brews Like a BUNN, Picture Prompted Cleaning, Pouring Profits, Signature Series, Sure Tamp, Tea At Its Best, The Horizontal Red Line, Ultra are either trademarks or registered trademarks of Bunn-O-Matic Corporation. The commercial trifecta® brewer housing configuration is a trademark of Bunn-O-Matic Corporation.

CONTENTS

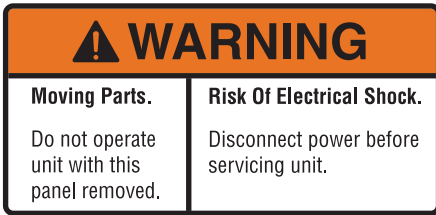
Warranty	2
Introduction	3
User Notices	4
North American Requirements.....	5
Site Requirements	6
Electrical Requirements	6
Initial Set Up Instructions	7
N ₂ Gas Cylinder Removal Instruction	7
Preventive Maintenance	8
Troubleshooting	9
Wiring Schematic	11

INTRODUCTION

The Nitron Gas Module (NGM) is specifically designed to work with Nitron Cold Draft dispensers. It supplies an unlimited amount of gas without the need to change-out or refill a nitrogen gas cylinder to support the nitrogenation process, resulting in a Nitro Cold Brew beverage that's crowned with a smooth, silky stout-like collar/foamy head.

USER NOTICES

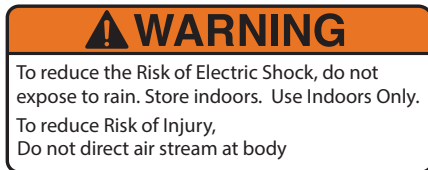
Carefully read and follow all notices on the equipment and in this manual. They were written for your protection. All notices are to be kept in good condition. Replace any unreadable or damaged labels.



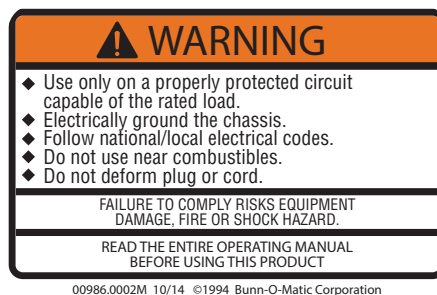
27442.0000



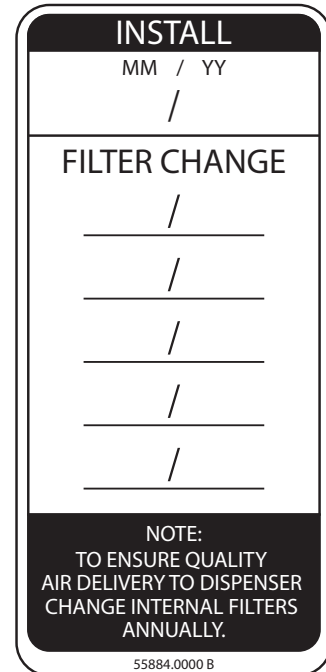
37881.0002



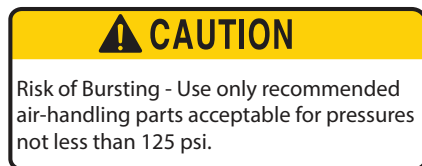
56362.0000



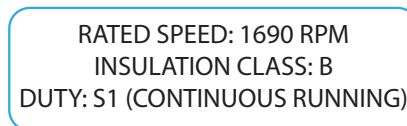
00986.0002



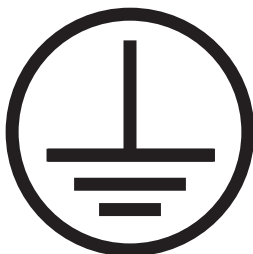
55884.0000



56361.0000



56363.0000



00824.0002

NORTH AMERICAN REQUIREMENTS

- This appliance must be installed in locations where it can be overseen by trained personnel.
- For proper operation, this appliance must be installed where the temperature is between 41°F to 90°F (5°C to 32°C) and 50% humidity.
- Appliance shall not be tilted more than 10° for safe operation.
- An electrician must provide electrical service as specified in conformance with all local and national codes.
- This appliance must not be cleaned by pressure washer.
- This appliance can be used by persons aged from 18 years and above if they have been given supervision or instruction concerning use of the appliance in a safe way and if they understand the hazards involved.
- Keep the appliance and its cord out of reach of children aged less than 18 years.
- Appliances can be used by persons 18 years and above with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children under the age of 18 years should be supervised to ensure they do not play with the appliance.
- If the power cord is ever damaged, it must be replaced by the manufacturer or authorized service personnel with a special cord available from the manufacturer or its authorized service personnel in order to avoid a hazard.
- Machine must not be immersed for cleaning.
- Cleaning and user maintenance shall not be made by children unless they are older than 18 years and supervised.
- This appliance is intended for commercial use in applications such as:
 - staff kitchen areas in shops, offices and other working environments;
 - by clients in hotel and motel lobbies and other similar types of environments;
- Access to the service areas permitted by Authorized Service personnel only.

SITE REQUIREMENTS

The Nitron Gas Module dimensions are 8.3"W x 13.8"D x 4.7"H. The NGM should be placed in a upright position on a solid surface nearest or directly underneath the Nitron Cold Draft Dispenser. Environment must be below 90 Degrees F, 50% or lower humidity, such as in a cafe, convenience store, or restaurant and not near other appliances that may emit gasses, oils, or other fluids. **Do Not** allow vents on the sides of the NGM to get blocked.

CAUTION: To reduce the risk of Electric Shock or Injury, use and store indoors only. Adapter plugs or extension cords may **not** be used to facilitate electrical hook-up to the equipment power cord.

APPLICATION: The NGM is not to be used with a Keg style dispense systems. The output pressure of the NGM will be around 100-112psig.

ELECTRICAL REQUIREMENTS

The 120V rated Nitron Gas Module has an attached cord set and requires a 2-wire, grounded, individual branch circuit rated 120 volts ac, 15 amp, single phase, 60Hz. The mating connector is NEMA 5-15R.

Refer to the data plate for exact electrical requirements.



**120 Volt
Plug**

CAUTION: To reduce the risk of Electric Shock or Injury, use and store indoors only. Adapter plugs or extension cords may **not** be used to facilitate electrical hook-up to the equipment power cord.

GROUNDING INSTRUCTIONS

This product must be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This product is equipped with a cord having a grounding wire with an appropriate grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

WARNING: Improper installation of the grounding plug is able to result in a risk of electric shock. When repair or replacement of the cord or plug is required, do not connect the grounding wire to either flat blade terminal. The wire with insulation having an outer surface that is green with or without yellow stripes is the grounding wire. Contact a qualified electrician or serviceman when the grounding instructions are not completely understood, or when in doubt as to whether the product is properly grounded. Do not modify the plug provided; if it does not fit the outlet, have the proper outlet installed by a qualified electrician.

NGM Initial Set Up Instruction

Step 1: Determine if the Nitron Gas Module (NGM) is going to be installed to an existing installed Nitron₂ Cold Draft dispenser using N₂ gas supply from a cylinder or along side a new dispenser installation.

Existing Nitron₂ Cold Draft Installation - Go to "N₂ Gas Cylinder Removal Instruction" before continuing with Step 2.

Step 2: Place the Nitron Gas Module (NGM) near or under the Nitron dispenser. Adjust to extend the feet of the Nitron dispenser approximately 1.0 inch to accommodate NGM placement underneath the Nitron dispenser.

Note: The Nitron dispenser must be disconnected from the power source until specified in the instruction to power up dispenser.

Step 3: Locate the hose and sealing washers that came with the Nitron Gas Module, install the flare washers upon connecting the hose from the NGM to the Nitron dispenser flare fitting for proper seal at the flare connections.

Step 4: Plug-in the NGM power cord into a dedicated 120Volt, 15Amp rated outlet.

Step 5: Wait a few seconds for the NGM to pressurize the line between the NGM and Nitron dispenser and shut off. Check for leaks.

Step 6: Before installing a door cover or an existing door cover on a Nitron dispenser, disable the red LED indicator light (for an empty N₂ tank) mounted on the inner door by disconnecting the connectors. Locate the black and red wire coming from the red LED going to a 2-pin connector junction (Fig.1). Disconnect the 2 pin connector (Fig.2). Next, follow the Door Cover Installation instruction outlined in the Nitron₂ Installation & Operating Guide.

Fig.1

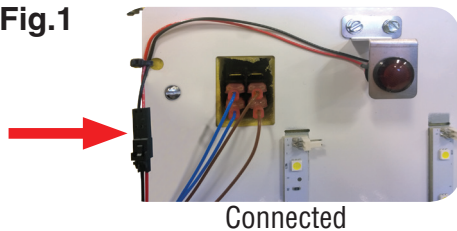
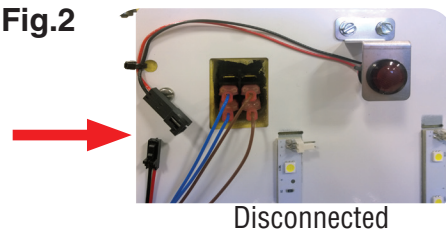


Fig.2



Step 7: After completion of disconnecting Nitron dispenser's red N₂ Empty LED and Nitron Door Cover Installation, the dispenser can be connected to a power source. The NGM is now ready for use. As the pressure is depleted by dispensing drinks from the Nitron dispenser, the NGM will automatically turn on to re-pressurize the line.

N₂ GAS CYLINDER REMOVAL INSTRUCTION

A nitrogen gas cylinder is under extremely high vapor pressure which will need to be handled with care during disconnect from the dispenser. Nitrogen cylinders will have a DOT label identifying the gas and hazards.

Step 1: Locate the N₂ supply cylinder and verify it only supplies nitrogen to the BUNN nitron₂ Cold Draft dispenser only.

Step 2: Turn the main cylinder On/Off valve to the Off position.

Step 3: Place an empty container under the dispenser nozzles. Pull the "Nitro Coffee" tap handle to relieve the pressure.

Step 4: Disconnect the nitrogen supply line to the dispenser.

Step 5: Disconnect the nitrogen pressure regulator from the cylinder.

Step 6: Inform the location manager or owner that the Nitrogen cylinder is disconnected and should be properly stored until gas supplier can pick up.

NOTE: During removal, if the cylinder is empty, tag the cylinder as "Empty".

Step 7: Disconnect or unplug the Nitron₂ Cold Draft dispenser from the power source.

Step 8: Proceed onto Step 2 under NGM Initial Set Up Instruction.

PREVENTIVE MAINTENANCE

In order to maintain proper operation and long service life, BUNN requires an annual PM if the NGM is placed in an ideal environment as laid out in the Site Requirements. The PM should take place in conjunction with the Nitron dispenser's PM schedule. If the NGM is placed in a less than ideal environment, more frequent PM's may be required.

NOTICE: To ensure quality air delivery to dispenser, change internal filters annually.

Value of Preventive Maintenance:

- Reducing unexpected amount of equipment failures throughout a year.
- Extend the equipment life expectancy.
- Reducing the amount of energy consumption.
- Providing the best quality of finished product for the consumer.
- Assures uptime.
- Eliminate premature replacing of equipment.
- Reduce problematic repairs & return service trips.

NGM Annual PM

For optimal performance, all four internal filters should be replaced annually. Use the included Filter Change sticker to keep track of PM events.

Warning - The annual preventive maintenance of electrical equipment should be performed only by qualified service personnel.

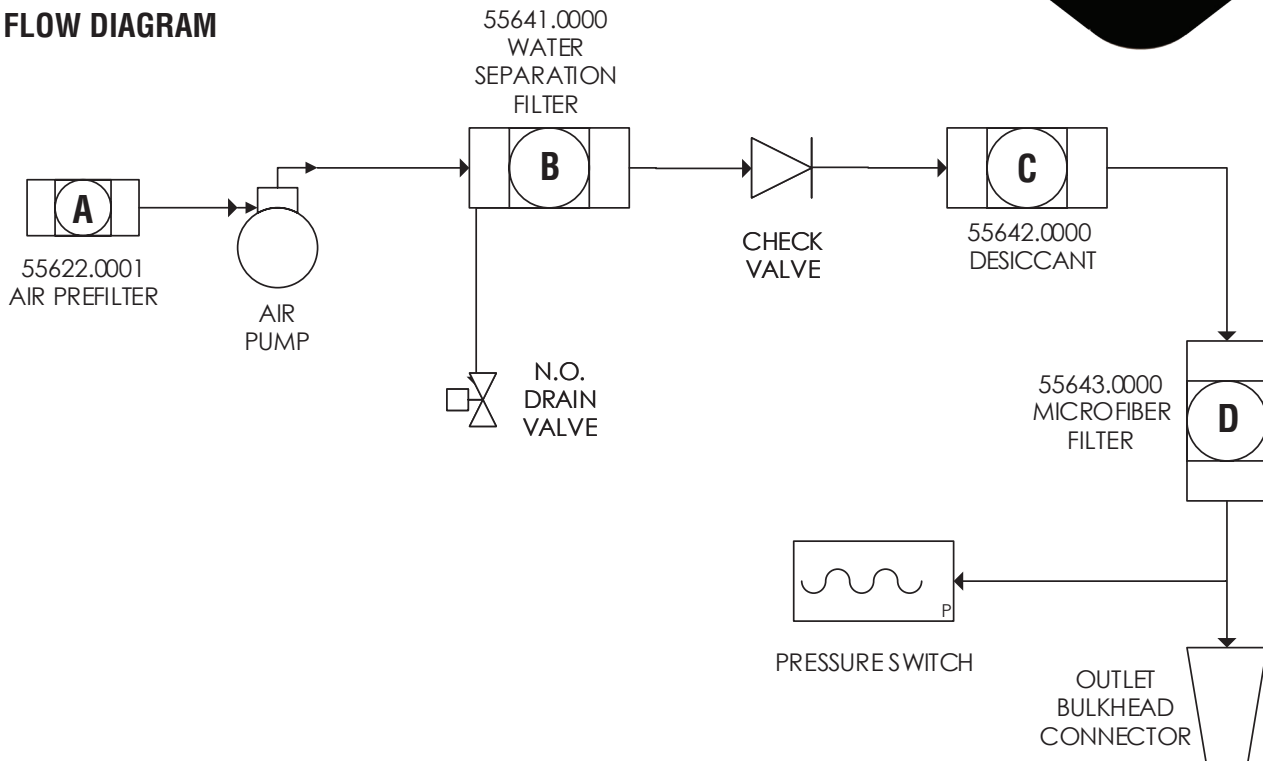
A) Air Prefilter

B) Water Separation Filter

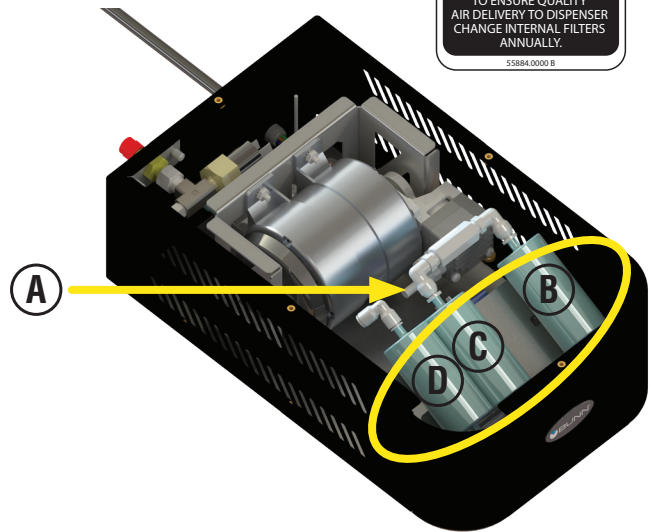
C) Desiccant

D) Microfiber Filter

AIR FLOW DIAGRAM



INSTALL	
MM	YY
/	
FILTER CHANGE	
	/
	/
	/
	/
	/
NOTE: TO ENSURE QUALITY AIR DELIVERY TO DISPENSER CHANGE INTERNAL FILTERS ANNUALLY.	
55884.0000 B	



TROUBLESHOOTING

A troubleshooting guide is provided to suggest probable causes and remedies for the most likely problems encountered. If the problem remains after exhausting the troubleshooting steps, contact the Bunn-O-Matic Technical Service Department.

- Inspection, testing, and repair of electrical equipment should be performed only by qualified service personnel.
- All electronic components have 120-240 volt ac and low voltage dc potential on their terminals. Shorting of terminals or the application of external voltages may result in board failure.
- Intermittent operation of electronic circuit boards is unlikely. Board failure will normally be permanent. If an intermittent condition is encountered, the cause will likely be a switch contact or a loose connection at a terminal or crimp.
- Solenoid removal requires interrupting the water supply to the valve. Damage may result if solenoids are energized for more than ten minutes without a supply of water.
- The use of two wrenches is recommended whenever plumbing fittings are tightened or loosened. This will help to avoid twists and kinks in the tubing.
- Make certain that all plumbing connections are sealed and electrical connections tight and isolated.

WARNING –

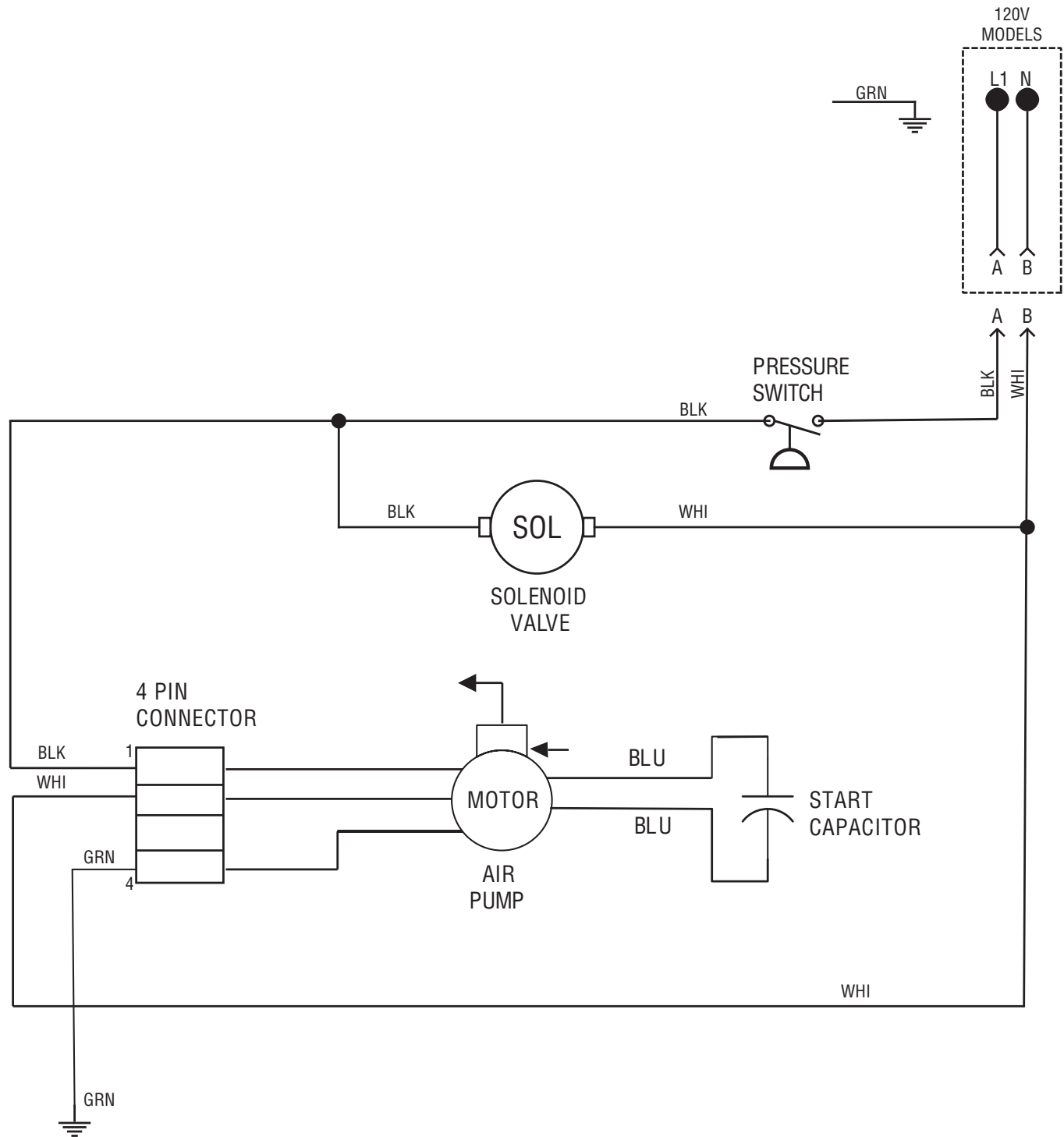
- Exercise extreme caution when servicing electrical equipment.
- Unplug the dispenser when servicing, except when electrical tests are specified.
- Follow recommended service procedures.
- Replace all protective shields or safety notices.

<u>PROBLEM</u>	<u>PROBABLE CAUSE</u>	<u>REMEDY</u>
No collar/foam created during a Nitro Coffee Brew dispense.	1. No power to Nitron Gas Module.	Check outlet for power and within acceptable voltage range.
	2. Thermal overload tripped in Nitron Gas Module.	a) Wait for thermal overload to cool down and reset. b) Relocate or correct environment conditions around Nitron Gas Module.
	3. Nitron Gas Module start capacitor.	Replace start capacitor. Rating: 250VAC, 50/60Hz 7.0μF (-5/+10%)
Weak or inconsistent collar/foam on the Nitro Coffee Brew.	1. Leak in gas line or continuous Nitron Gas Module operation.	Inspect pressurized line (tubing) between the Nitron Gas Module and Nitron dispenser for a leak. Inspect the Nitron dispenser internal tubing for a leak.
	2. Nitron Gas Module prefilter dirty.	Replace prefilter.
	3. Nitron Gas Module desiccant filter absorption capability depleted.	Replace desiccant filter.
	4. nitron ₂ Cold Draft Dispenser: a) Cleanliness of nitro dispense nozzle. b) Stout insert missing in nitro nozzle.	a) Clean Nitro Coffee dispense nozzle assembly. b) Install new Stout Insert into the Nitro Coffee dispense nozzle.

TROUBLESHOOTING CONTINUED

<u>PROBLEM</u>	<u>PROBABLE CAUSE</u>	<u>REMEDY</u>
Excess noise from the Nitron Gas Module.	1. Hose connection leaking.	Inspect entire pressurized line from Nitron Gas Module to the nitron ₂ Cold Draft dispenser.
	2. Improper placement on a unstable surface.	Ensure proper Nitron Gas Module placement according to Site requirements.
	3. Nitron Gas Module missing or defective rubber foot.	Replace missing or defective rubber foot.
Nitron Gas Module won't start.	1. Check main power supply for power and/or low voltage.	Ensure main power is on and within 120VAC +/-10%.
	2. Defective start capacitor.	Replace start capacitor. Rating: 250VAC, 50/60Hz 7.0μF (-5/+10%)
	3. Thermal overload tripped in Nitron Gas Module.	a) Wait for thermal overload to cool down and reset. b) Relocate or correct environment conditions around Nitron Gas Module.
	4. Plugged pressure line.	Inspect and repair.
Unusual air pump longer run times.	1. A restricted Nitron Gas Module filter.	Perform PM and record annual PM event on Filter Change sticker.

SCHEMATIC WIRING DIAGRAM NITRON GAS MODULE



**120 VOLTS AC
2 WIRE
SINGLE PHASE
60hZ**