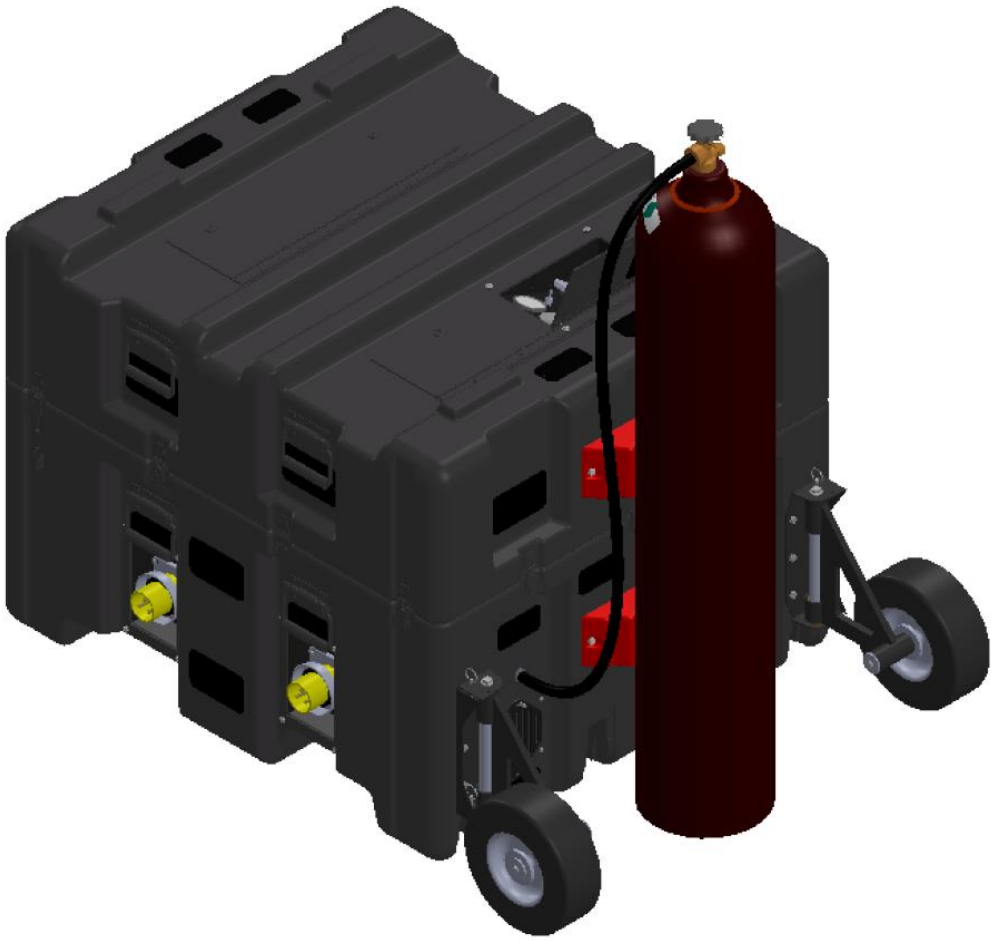
N2-GEN™ HIGH PRESSURE CYLINDER

DEPLOYABLE SERIES

O&M MANUAL

Revision 01

Date 03/04/19



VERSION HISTORY

Rev #	Revised By	Revision Date	Approved By	Approval Date	Reason
00	K. Mellott	08/29/2018	MRT	08/31/18	Initial Release
01	S. Andrews	03/04/19	K. Mellot	03/05/19	ADD FOR 240V / 1 PH CONNECTION

General Arrangement Drawing #: GA-B16-A-000 (R00)

Electrical Schematic Drawing #: ES-B16-A-000, R01 (110V model), ES-B16-A-000-240V, R00 (240V model)

Other Documentation:

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Contact Information:
South-Tek Systems Service Department
2940 Orville Wright Way, Wilmington, NC 28405
Phone: 1-(888)-526-6284
Email: info@southteksystems.com
Visit: www.southteksystems.com

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1 INTRODUCTION

1.1 PURPOSE

The N2-Gen™ HPC Deployable is a deployable nitrogen generator system capable of pressurizing high-pressure cylinders. A nitrogen generator and an electrical pressure booster is enclosed inside a hard case for protection and mobility. Simply, set the unit in place, power up the system, hookup the high-pressure hose to the high-pressure bottle and it is ready to boost up nitrogen pressure to the bottle.

At South-Tek Systems, we engineer simple, turn-key generators to provide cost-effective means of producing nitrogen gas. We have engineered our nitrogen generator with minimum maintenance and care requirements to provide our customers with years of confidence and reliability. The systems are turn-key with detailed installation drawings, instruction manual, and phone/text support. We have field service, commissioning, and other engineering services available to provide support any way we can!

1.2 ABOUT SOUTH-TEK SYSTEMS

South-Tek Systems, founded in 1997, is a nitrogen generator manufacturer, designing and producing nitrogen generating systems for worldwide distribution.

Why not generate nitrogen at your own facility for a fraction of the cost versus endlessly paying for bulk liquid or delivered gas cylinders? We manufacture a full line of nitrogen generating equipment including:

- The N2 GEN® Series with generators ranging from the compact 1 LPM table top lab generator on up to the 50,000 SCFH unit
- The BeerBlast™ Mixed Gas Dispense System for restaurants and bars seeking the perfect draft pour
- The TireBlast™ Nitrogen Tire Filling System for automotive and tire shops seeking optimal tire pressure maintenance and fuel economy
- The N2-Blast™ Corrosion Inhibiting Systems for Fire Protection Industries seeking solutions to preventing corrosion within the piping system

With purities ranging from 95% up to 99.999%, we provide nitrogen generators that are sure to suit your needs. For more information about our complete nitrogen generator capabilities, please visit www.southteksystems.com.

1.3 AUDIENCE

This manual is intended for Installer/Equipment Operator/Supervisory Staff and should be read in its entirety prior to operation. Please contact South-Tek Systems for any operation and maintenance questions.

1.4 LIMITS OF LIABILITY

Buyer's exclusive remedy for all claims shall be for damages, and seller's total liability for any and all losses and damages arising out of any cause whatsoever including, without limitation, defects in or defective performance of the system, (whether such claim be based in contract, negligence, strictly liability, other tort or otherwise) shall in no event exceed the purchase price of the system in respect of which such cause arises or, at seller's option, the repair or replacement of such; and in no event shall seller be liable for incidental, consequential or punitive damages resulting from any such cause.

Seller shall not be liable for, and Buyer assumes all liability for, the suitability and the results of using nitrogen by itself or in any manufacturing or other industrial process or procedure, all personal injury and property damages connected with the possession, operation, maintenance, other use or resale of the System. Transportation charges for the return of the System shall not be paid unless authorized in advance by Seller.

NOTE: Any MODIFICATIONS made by the customer without the written consent of South-Tek Systems will void the product's design specifications.

1.5 SERVICE RETURN POLICY

If the system cannot be repaired at the site, and it is necessary to return a system for service, the following procedures must be followed:

- The owner must obtain a written **Return Material Authorization** number**,** which references the model and serial number, from South-Tek Systems. No items will be accepted for service or credit unless prior written authorization has been issued by South-Tek Systems.
- All items are to be returned with the original packaging material if possible. Make sure that all items are packaged for safe return to South-Tek Systems. South-Tek Systems will not be responsible for damages, which occur in transit. Any damage that occurs to the system because of failure to adhere to this procedure will be the sole responsibility of the customer. Contact South-Tek Systems for a return shipping address.
- Shipping charges must be prepaid on all returns.

2 SAFETY GUIDELINES

The following section outlines the basic safety considerations regarding installation and operation of the N2-Gen™ HPC Deployable. For additional safety information regarding other equipment used in conjunction with the nitrogen generator, please refer to individual manufacturer recommendations and safety guidelines.

2.1 GENERAL SAFETY PRACTICES

Read carefully and act accordingly before installing, operating, or repairing the unit.

- Operator must use safe working practices and rules when operating the nitrogen generator.
- The owner is responsible for keeping the unit in safe operating condition at all times.
- Always use approved parts when performing maintenance and repairs. Make sure that replacement parts meet or exceed the original parts' specification.
- Only authorized, trained, and competent individuals are allowed to perform installation, operation, maintenance, and repair.
- Completely isolate incoming and outgoing pressures to the system, and make sure to depressurize the service/repair section prior to performing any mechanical work, including changing the filters.
- Safety gear such as gloves and glasses are recommended with doing service.

WARNING: Pressurized gases are contained within the system. Pressurized gases are dangerous and may cause injury or death if handled or used inappropriately.

- Never allow pressurized gas to exhaust from an unsecured hose. An unsecured hose may exhibit a whipping action, which can cause serious injury. If a hose should burst during use, immediately close all isolation valves if it is safe to do so and power down the unit.
- Never disable or bypass any safety relief valves.
- Always make certain that the N2-Gen™ HPC Deployable is disconnected from the supply power prior to performing any electrical work.
- Always use caution when opening or closing valves on high pressure plumbing, even when no pressure is assumed in the lines.

NOTE: Always following local and site safety regulations in conjunction with this manual.

Correct use of the N2-Gen™ HPC Deployable is important for your personal safety. Incorrect safety practices can cause damage to yourself and/or to the equipment.

2.2 ROOM VENTILATION RECOMMENDATION

The N2-Gen™ HPC Deployable produces nitrogen (N2) at a low flow rate, which quickly dissipates into the air. Nitrogen gas is not poisonous, but the gas should not be directly inhaled, in high concentrations, it can cause asphyxiation. **Ensure that the unit is operated within a well-ventilated room, one that is not sealed off from normal living space air changes.**

Normal ventilation is needed to ensure that the system does not over-heat.

2.3 SAFETY INFORMATION

All personnel involved with installation, operations, and maintenance of the nitrogen generator must follow safe working practices, OSHA, and local health/safety code regulations during the installation, operation, and maintenance of the unit.

Warnings:

- This manual shall be read in its entirety before installing and operating the nitrogen generator to prevent accidents and damage.
- Contact South-Tek Systems if there is a problem that you cannot solve with this manual.
- Use the nitrogen generator in accordance with its designed purpose.
- Qualified personnel are permitted to perform installation, maintenance, and repairs. Work performed by unqualified persons shall result in a voided warranty.
- Do not tamper with, experiment on, or exceed the technical specifications of the equipment.

3 RECEIVING, UNPACKING, AND STORAGE INSTRUCTIONS

3.1 RECEIVING EQUIPMENT

The N2-Gen™ HPC Deployable and all components are securely packed to minimize possibilities of damages during shipment. The contents of the shipment should be inspected upon delivery to assure that no damage has taken place during transit. Save the packaging material, as it may be necessary to return the generator in event of shipping damage. If any components are found to be damaged, the carrier should be notified immediately. The individual pieces should be checked against the packing list. If any discrepancy is found, contact your local distributor or South-Tek Systems at (888) 526-6284. Please include the model number and the serial number with all correspondence.

3.2 UNPACKING, MOVING, AND SECURING EQUIPMENT

The N2-Gen™ HPC Deployable will be shipped strapped down on a wooden pallet with plastic wrap around the hard case. Upon receipt, remove plastic and band wrap to inspect all parts for damage. Take pictures upon arrival of damages done during shipping. Identify and verify that all parts listed on the packing list are present and undamaged. South-Tek Systems (STS) is not responsible for damages that have occurred during the shipping and handling of the N2-Gen™ HPC Deployable. Any visual damages should be immediately documented and reported to the shipping company responsible. Contact STS at (888)526-6284 to assess the damages only after the shipping company has been notified.

The manual will be placed inside the hard case with the accessory package. Please read the manual in its entirety before operation.

Until Installation:

- The N2-Gen™ HPC Deployable can be stored on the wooden pallet until installation. For extended storage of over a month, open and insert desiccant bags as needed to prevent moisture buildup.
- Store the N2-Gen™ HPC Deployable in a dry, climate controlled (60-80°F) room.
- Do not connect the power cable until this manual has been read completely and all connections are made as stated within.
- Keep all gas lines dry to avoid moisture in the generator upon hookup.
- Never place/stack objects on top of the N2-Gen™ HPC Deployable.

3.3 STORAGE INSTRUCTIONS

If the unit is not to be installed until a later date, a safe dry storage location is needed, preferably inside a controlled environment. Place desiccant packets into the electrical cabinet to keep moisture from damaging the electronics. Do not store around moving objects that could fall or damage the unit. Never store the N2-Gen™ HPC Deployable on its side or lid, damage to internal components may occur.

4 SITE AND UTILITY REQUIREMENTS

The following requirements must be met to enable the N2-Gen™ HPC Deployable to perform at its design specifications. Deviation from these requirements may result in poor performance, injury to persons or machinery, and voiding of warranty.

4.1 ELECTRICAL REQUIREMENTS

The N2-Gen™ HPC Deployable, 110V model requires two (2) connections of 110 VAC/ 60 Hz / 1 Ph. The N2-Gen™ HPC Deployable, 220V model requires one (1) connection of 220 VAC/ 60 Hz / 1 Ph. Before connecting to power ensure that label applied to the product matches supply voltage that will be used. Incompatible voltage will damage the product design. Feeder power is required to be rated and have overcurrent protection of at least 25 amps (using longer extension cords may increase the required rating). Make sure to read the specification label to confirm the proper electrical requirement per the unit. It has built-in circuit breakers and power cable with unit specified power connection. Electrical schematic is available upon request.

4.2 SITE SPECIFICATIONS

Select a non-hazardous area which remains above 33 °F / 0.5°C and below 120 °F / 49 °C for operation. Ensure that there is enough space for hose connection, panel operation, and ventilation – recommended at least 2 feet of space all-around the hard case.

5 SYSTEM INSTALLATION

5.1 INSTALLATION INSTRUCTIONS

This section provides a step-by-step nitrogen generator installation procedure with consideration of other peripheral equipment.

1. Follow the instructions for unloading/unpacking the nitrogen generator as described in Section 3.2 Unpacking, Moving, and Securing Equipment.

2. Position the N2-Gen™ HPC Deployable in an area as described in **Section 4.2 Site Specifications**. Move the system around carefully to avoid damaging components.

3. Review the supplied customer "General Arrangement Drawing" (included in the documentation package) for detailed designed layout drawings.

4. Install other equipment/accessories such as high pressure hose to the high pressure cylinder.

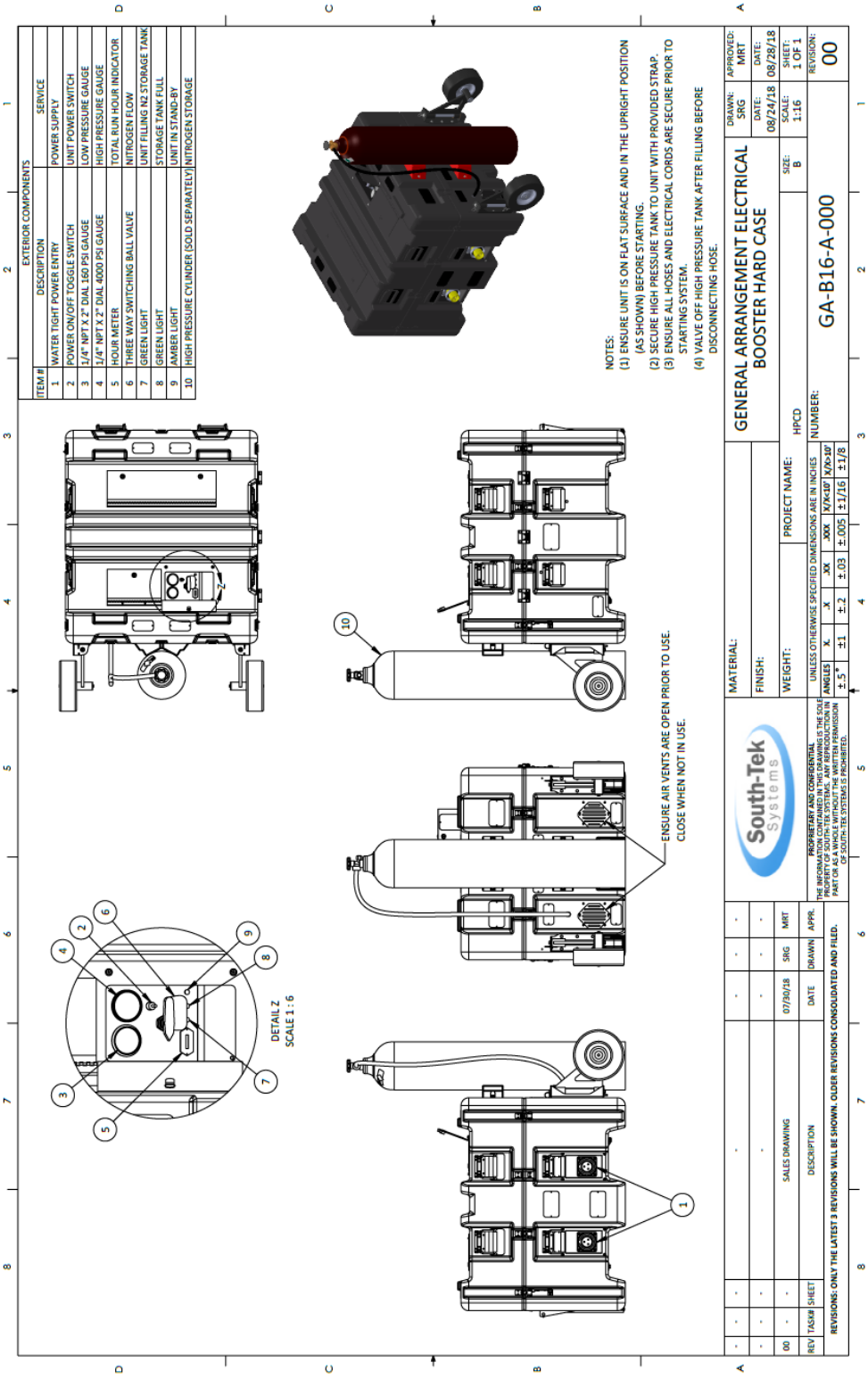
WARNING: Only use materials with compatible pressure rating on components on the product pipe lines.

5. Follow local codes when setting up this equipment.

6. A qualified electrician should ensure correct available power and complete all electrical connections to the equipment. Connect the N2-Gen™ HPC Deployable to the proper electrical connections. Connect any other electrical equipment in the package per the original equipment manufacturer's instructions.

7. Check all fittings and piping/hose connections for pressure leaks.

5.2 GENERAL ARRANGEMENT DRAWING



6 SYSTEM DESIGN

6.1 SPECIFICATIONS

The table below is a general specification for standard N2-Gen™ HPC Deployable. Refer to specification project documents for specific details of the unit. General specifications are based on standard testing conditions (60°F, 14.696 PSIA barometric pressure, 0% RH), specifications may differ when run outside of these parameters.

Table 1: Specification Table

General Specifications (see Unit Detail Drawing for Specific Design Data)	
Nitrogen Purity	99.0%
Installation	Free-Standing
Display	Status Light Indicators, Pressure Gauges, Hour Meter
N_2 Max Boosted Pressure	2200 & 3500 PSIG (contact STS for more options)
Bottle Connection	CGA 580 and CGA 680 (contact STS for more options)
Electrical (110V Model)	Two (2) 110V / 50-60Hz / 1Phase; 4.8kW
Electrical (220V Model)	One (1) 220V / 50-60Hz / 1Phase; 4.8kW
Ambient Temperature	40° to 104°F (4° to 40°C)
Noise Level (dB)	< 85 dB

6.2 STANDARD FEATURES

The N2-Gen™ HPC Deployable' s key features include the following:

- Filter Set
- Built-In Membrane Nitrogen Generator
- Low Pressure Nitrogen Storage Tank
- High Pressure Electric Gas Booster
- 2200 PSIG Pressure Switch (for Auto-Shut off when bottle is pressurized to 2200 PSIG)
- 3500 PSIG Adjustable Pressure Switch (for Auto-Shut off when bottle is pressurized to 3500 PSIG)
- Safety Relief Valves

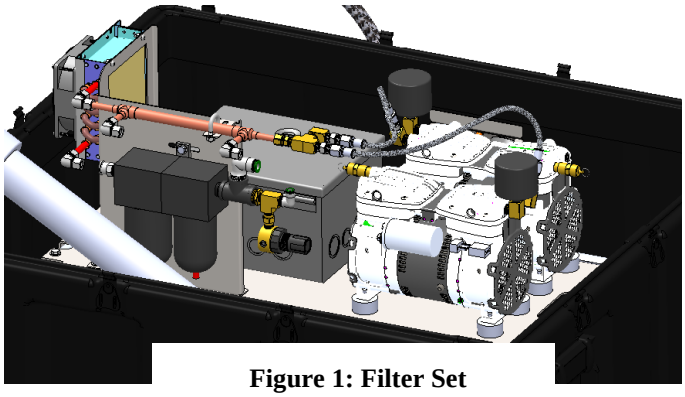


Figure 1: Filter Set

Filter Set:

The nitrogen generator includes four (4) air filters: two (2) air intake filters, a 5-micron particulate, 0.01-micron coalescing for the built-in dual oil-less air compressors. The particulate filter element meets or exceeds ISO Class 3 for maximum particle size and concentration of solid contaminants. The coalescing filter element exceeds ISO Class 1 for maximum particle size and concentration of solid contaminants. It also exceeds Class 1 on maximum oil content (**Table 2: ISO 8573-1 Air Quality Standards**).

Table 2: ISO 8573-1 Air Quality Standards

ISO Quality Class	Solid / Dirt Particle size in micron	Vapor Pressure Dew point		Oil (including Vapor)	
		°C	°F	Mg/m^3	PPM
0	As specified by the equipment supplier and more stringent than Class 1				
1	0.1	-70	-94	0.01	0.008
2	1	-40	-40	0.1	0.08
3	5	-20	-4	1	0.8
4	15	3	38	5	4
5	40	7	45	25	21
6	-	10	50	-	-

Built-in Membrane Type Nitrogen Generator:

The clean compressed air from the air filters is run through an O_2 membrane separator which allows N2 to pass through to the output. The low pressure N2 is then stored in a 3-gallon pressure vessel and fed to the electrical pressure booster.

Low Pressure Nitrogen Storage Tank:

There is an integrated low-pressure nitrogen storage tank built into the unit. It allows for a small buffer prior to feeding nitrogen to the electrical booster. The tank features a 115 PSIG pressure safety relief valve.

High-Pressure Electrical Booster:

The high-pressure electrical booster takes in the lower pressure nitrogen from the buffer tank and feeds it out to the high-pressure cylinder. The standard booster for the N2-Gen™ HPC Deployable can boost nitrogen pressures to fill bottles to both 2200 PSIG and 3500 PSIG. Please contact South-Tek systems for other special high-pressure considerations or applications outside this range.

Pressure Switch (for Auto-Shut off when bottle is pressurized):

An electronic pressure switch is installed in the control panel to determine when the high-pressure cylinder is full. It will automatically stop the system and illuminate the amber light on the pull out panel (indicating that the bottle is full). See instruction in the section below regarding high pressure bottle removal instructions.

Safety Relief Valves:

Safety relief valves are installed on all parts of the system for maximum safety. They are ASME approved. Follow local/site codes for safe venting requirements.

N2 Storage Tank:

A N2 Storage Tank, if supplied from South-Tek Systems, will come with an input and output ball valve, a safety relief valve, a pressure gauge, and a gas sample port.

Some of the connections may require installation on site. Refer to the “General Arrangement Drawing” and “Detailed Tank Drawing” for connection sizes and proper installation of external components.

7 SYSTEM OPERATIONS

This section describes the function of the N2-Gen™ HPC Deployable. Do not attempt to alter any settings or instrumentations; any changes without South-Tek Systems' consent will void the performance specifications unique to the system.

CONTROL PANEL COMPONENTS		
ITEM #	DESCRIPTION	SERVICE
1	1/4" NPT, 2" DIAL 0-4000 PSIG PRESSURE GAUGE	N_2 OUTLET PRESSURE (BOTTLE PRESSURE)
2	1/4" NPT, 2" DIAL 0-160 PSIG PRESSURE GAUGE	AIR INLET PRESSURE
3	TOGGLE SWITCH	MAIN POWER TOGGLE SWITCH
4	3-WAY FILL SELECTOR BALL VALVE	SELECTOR FOR FILL TYPE AND LINE DRAIN
5	HOUR METER	N_2 GENERATOR RUN HOUR COUNTER
6	INDICATOR LIGHT (GREEN)	OPERATE LIGHT (SYSTEM ON)
7	INDICATOR LIGHT (GREEN)	BOTTLE FILLED TO 2200 PSIG INDICATOR
8	INDICATOR LIGHT (AMBER)	STANDBY (SYSTEM DONE FILLING)
9	PUSH BUTTON W/ PLASTIC COVER	START 3500 PSIG FILL AFTER 2200 REACHED

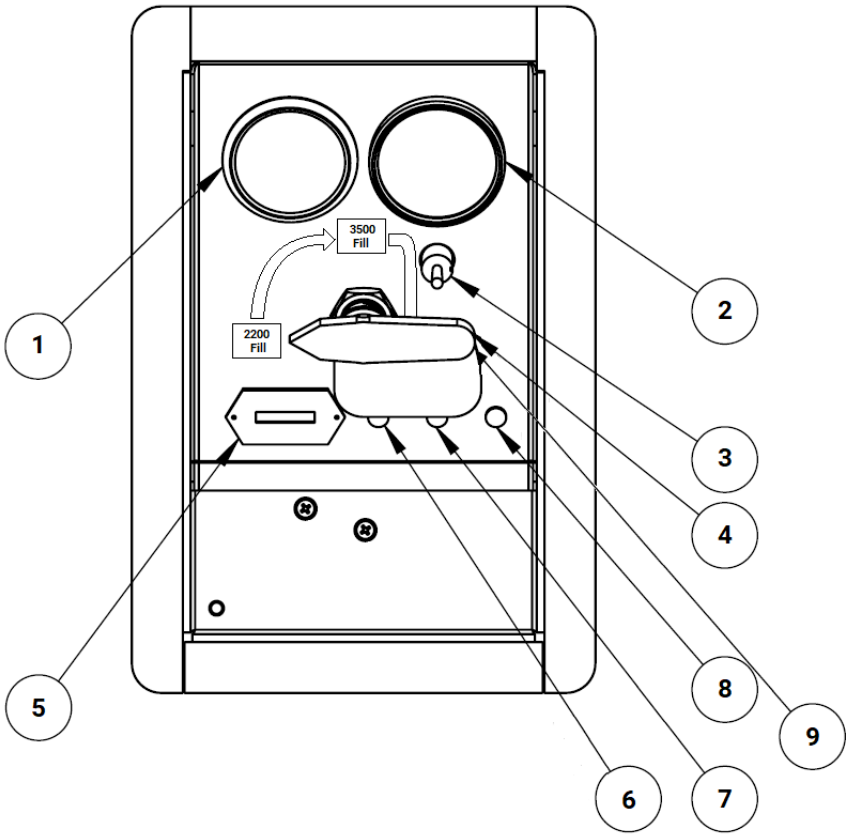


Figure 2: Control Panel Layout

7.1 SETUP

Make sure the N2-Gen™ HPC Deployable is set up in a suitable location following instructions detailed out in **Section 4 Site and Utility Requirements**. Install other equipment/accessories such as high-pressure hose to the high-pressure cylinder. Ensure all necessary valves are closed, even if the cylinder is assumed empty. Make sure all components including the external high-pressure cylinder bottle is safely secured. Follow all local and site codes/regulations regarding set-up of the high-pressure cylinder. Connect the high-pressure hose to the bottle and secure the hose to avoid potential "whipping" action in case of a line break.

Open all ventilation ports using the thumb screws prior to starting the system. Failure to do so can cause overheating of components which might result in damages and/or shorten the lifespan of certain equipment.

7.2 STARTING THE SYSTEM

Open the control panel on the hard case and select the desired fill pressure with the 3-way Fill Selector Ball Valve. Ensure the bottle is closed, all connections to the bottle being filled are secure, and all four ventilation ports are open before toggling the main power switch to the ON position. The air compressors inside the case will start up after a 1-minute start-up delay and start pressurizing the storage tank.

At this point, it is suggested to open the T-handled valve near the cylinder head for approximately two minutes to purge off higher concentrations of oxygen in the booster and high-pressure lines. Always use caution when opening valves on high-pressure components.

After all lines are purged, close the T-handled valve and open the high-pressure cylinder to start the filling process.

7.3 FILLING (2200 PSIG) AND STOPPING THE SYSTEM

The N2-Gen™ HPC Deployable can be started and stopped by toggling the main power switch on the control panel. When stopped, make sure to close the valve on the high-pressure cylinder and relieve the high-pressure line by slowly opening the 3-way Fill Selector Ball Valve to the drain position or the T-handled drain on the quick-connect high-pressure line.

When the N2-Gen™ HPC Deployable is in the "Operate" state, it will produce nitrogen and boost the pressure going to the high-pressure cylinder. Once the high-pressure cylinder reaches the cut-out pressure, it automatically goes into a "Standby" state, where it stops the system. The amber light on the control panel will illuminate indicating that the high-pressure bottle is full; the 2200 Filled indicator light will accompany this light when the cylinder is pressurized to 2200 PSIG. The booster will run for a short time after the 2200 Filled indicator light comes on until the N2 storage tank drops to a low enough pressure (~30 PSIG) to shut off the booster.

Always monitor cylinder pressures and operation of the system when filling. If any issues occur during the fill, shut the system down using the main power toggle switch immediately and close the cylinder valve.

7.4 3500 PSIG CYLINDER FILL

Start with the 3-way Fill Selector Ball Valve in the 3500 Fill position. After the fill to 2200 PSIG is complete, press the Start 3500 Fill button under the plastic cover to restart the system and start filling the cylinder to 3500 PSIG. At this point, the Operate indicator will turn on, the other two indicators will turn off, and there will be a 1-minute delay before the compressors will start back up.

When the 3500 PSIG fill is complete the system will enter the "Standby" state accompanied with an illuminated amber light.

Always monitor cylinder pressures and operation of the system when filling. If any issues occur during the fill, shut the system down using the main power toggle switch immediately and close the cylinder valve.

7.5 TOPPING OFF HIGH-PRESSURE CYLINDERS

A bottle that is already partially full can be topped off by setting up the unit according to **Setup**. Select the desired fill pressure with the 3-way Fill Selector Ball Valve. Start the N2-Gen™ HPC Deployable as normal and follow the standard starting and stopping procedure.

If the desired fill pressure is 3500 PSIG and the cylinder is already pressurized above 2200 PSIG, select the 3500 Fill with the 3-way Fill Selector Ball Valve and open the cylinder's valve to pressurize the unit. After the lines are pressurized, turn the system on with the toggle switch. At this point, the 2200 Filled and Standby light will come on requiring only the Start 3500 Fill button to be pressed to fill the high-pressure cylinder to 3500 PSIG.

If the 2200 Filled does not turn on when the bottle is hooked up, allow the bottle to fill until it reaches the 2200 PSIG mark.

7.6 SYSTEM RUN HOURS

On the control panel, there is an hour meter that displays the system's total run hours. The run hours are calculated when the system is actually producing nitrogen. The "standby hours" are not included.

7.7 CYLINDER FILL COMPLETE AND DISCONNECT CYLINDER

The N2 booster will automatically shut off once the cylinder pressure has reached each of the cut-out setpoints. When the desired fill pressure is reached, toggle the main power switch to the OFF position.

Close the cylinder valve and relieve the high-pressure lines by cautiously opening the 3-way Fill Selector Ball Valve to the drain position or the T-handled drain on the quick-connect high-pressure line. Wait until the pressure booster shuts down before disconnecting the high-pressure line from the cylinder.

If filling another bottle, follow the standard procedure for starting the fill according to **7.2**.

8 SYSTEM MAINTENANCE

8.1 INCOMING AIR FILTRATION

All units come equipped with a standard filter set that includes 2 inlet air pre-filters (one on each compressor), a particulate and coalescing filter **(Figure 1)**. Clean filter elements are important for good system performance. Factory recommendation on filter change out schedule are as follows:

- Inlet Air Pre-Filter every 500 hours
- Particulate every 500 hours
- Coalescing every 500 hours

See figures below for illustration of how to remove typical filter bowl and replacing the filter element.

WARNING: Do not try to remove filter bowls unless both the air supply gauge clearly read zero psig. Valve off the incoming air supply. Relieve system pressure by opening the wedge valve after the filters.

1. Disconnect the tubes from the bottom of the bowls (if tied into condensate drain system).
2. To remove the filter bowls, push the bowl latch down and rotate the bowl while pulling down. To remove the bowls from some CS and S Series models, remove the screws holding the bowl to the cover, and pull the bowl off.
3. Inspect the bowls. If the drain system is working properly, the bowls should not be full of water.
4. Remove the filter element by unscrewing it off. Take notice of how the element looks. If the element is excessively dirty, more frequent filter changes is recommended.

NOTE: A plugged drain system will cause water and oil to carry over into the adsorber, which will cause permanent damage to the media inside the nitrogen generator. Such damage is not covered by the manufacturer's warranty. Use of filters other than those specified by South-Tek Systems could result in damages not covered by the warranty.

5. Wash the bowls in soapy water and rinse thoroughly as needed. Use of light air gun to remove debris is also acceptable. Make sure to always clean and dry with a clean and dry cloth.
6. Install new filter element, then replace and lubricate O-rings as needed.
7. Put the filter bowl back on the system opposite of how it was removed making sure the bowl is seated in place correctly.
8. Reconnect the drain tubes.
9. Slowly open the air inlet valve to pressurize the bowls and examine for any leaks.

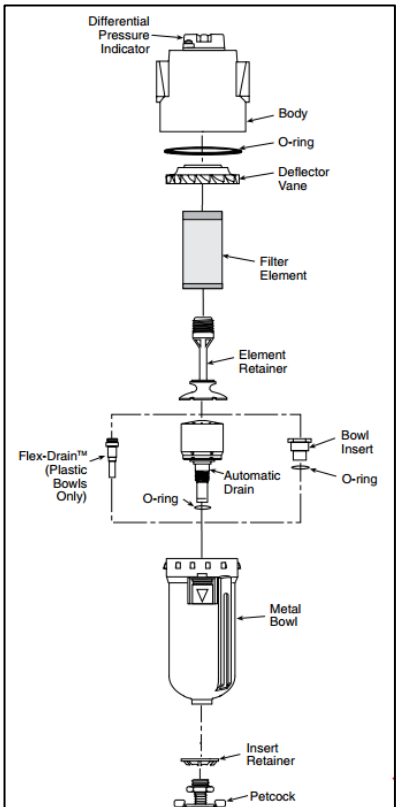


Figure 3: Particulate and Coalescing Filter

8.2 BOOSTER MAINTENANCE

Refer to the Electric Gas Booster OEM Operation and Maintenance Instructions Manual for Booster repair and maintenance.

Regular booster maintenance is required to keep the N2-Gen™ HPC Deployable in proper working order.

9 KEY CONTACTS

For any questions with the performance and/or maintenance of the system, contact:

South-Tek Systems

2940 Orville Wright Way, Wilmington, NC 28409

Phone: 1-(888)-526-6284

Email: info@southteksystems.com

Visit: www.southteksystems.com

10 FAQS

This section enables the operator to determine the cause of operation problems and suggests remedies for the problems. If there are several likely causes, investigate the simpler solutions first. If further assistance is required, contact your local distributor or South-Tek Systems.

Symptoms	Probable Cause	Corrective Action
System will not start	Low Voltage/Amperage	Check Electrical Source
	Circuit breaker tripped	Reset circuit breaker
	Fuse Blown	Replace fuses on electrical panel
	System is OFF	Toggle the green power button
	Bottle is full	Replace bottle
	Defective Wiring	Check all wiring connections
System Running over 10 hours	Gas Leakage	Correct leaks
	Defective pressure switch	Change out pressure switch
	Defective Air compressor	Change out air compressor
	Clogged up lines	Change out the lines
	Booster maintenance required	Change seals on

APPENDIX A: WARRANTY

The N2-Gen™ HPC Deployable is warrantied against any defects in workmanship and materials for 12 months from the date of shipment from South-Tek Systems. The purchaser has the liability to ensure that the system is fully inspected upon delivery and shall contact the appropriate shipping company to make any claims on damaged goods due to transit within that shipping company's policies. If the system is received with defects that are not due to shipping, a written claim should be submitted to South-Tek Systems within 1 week of receiving the shipment. South-Tek Systems can deny all other claims at their discretion.

All warranty work shall be done at a South-Tek System facility or at a N2-Gen™ HPC Deployable Authorized Service Center. Only factory trained and authorized personnel are covered under warranty. Any part that is returned / repaired / replaced under warranty may be remanufactured or changed to a different specification at the factory's option. Any work performed by an unauthorized person/company or usage of non-factory parts, may void all warranties to the product.

Any item not manufactured by South-Tek may carry its own warranty from its manufacturer and will be warrantied by that manufacturer. All parts that need to be returned should be announced. Any item(s) that is returned to South-Tek Systems without an RMA number (return authorization number) may be denied and returned to the sender. Contact the factory for RMA #'s, prior to return shipment.

South-Tek Systems is not liable for damages caused by normal wear and tear, water, fire, erosion, corrosion, explosion, misuse, oil/gas vapors or unauthorized modifications. South-Tek Systems is also not liable for any losses, damages, or cost of delays, including incidental or consequential damages. There are no warranties or guarantees, expressed or implied, including the warranties of merchantability or fitness for a particular purpose or use, other than those warranties expressed herein.

For Claims, contact South-Tek Systems LLC at:

Tel: (888)526-6284

Email: service@southteksystems.com

Or write to:

South-Tek Systems, Warranty Claims, 2940 Orville Wright Way, Wilmington, NC, 28405

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