



BN Products-USA™

A DIVISION OF BENNER-NAWMAN, INC.

WWW.BNPRODUCTS.COM

OPERATOR MANUAL

BN Products-USA™ Customer Service
(800) 992-3833 | mail@bnproducts.com

Inverter Generator | 3800 Running / Max 4600 Watts | 120V - 20A

BNG3800iAEFIC



BNG3800iAEFIC INVERTER GENERATOR | SERIAL NUMBER

S/N #

**MODEL
INFO**

BNPRODUCTS.COM



SAVE THIS MANUAL - KEEP IN A SAFE PLACE

This manual contains important details regarding safety and operation of this Inverter Generator. Before using this product, read all warnings, instructions, and labels. Serious personal injury and/or property damage may occur if cautions and recommendations are not followed.



BN Products-USA™

3450 N Sabin Brown Road
Wickenburg, AZ 85390

(800) 992-3833
BNProducts.com

Table of Contents

GENERATOR PACKAGE CONTENTS	3	Using Extension Cords	14
Accessory Descriptions	3	Connections & Grounding	15
Notices	3	Parallel Operation	16
CARBON MONOXIDE SAFETY	4	Auto Gen Start Interface (Two-Wire)	17
CO Labels on BNG3800iAEFIC Inverter	4	SERVICE & MAINTENANCE	18
GENERAL SAFETY WARNINGS	6	Spark Plug Inspection & Replacement	18
OPERATOR PARTS & SERIAL NUMBER	7	Air Cleaner Inspection & Replacement	19
CONTROL PANEL FUNCTIONS	8	Change Engine Oil	20
PREPARATION FOR USE	10	Sediment Cup - Fuel Filter Screen	21
Adding Engine Oil (First Use)	10	Spark Arrestor	22
Adding Fuel to the Generator	11	Maintenance Schedule	23
Pre-Inspection and Engine "Break In"	11	TRANSPORTATION & STORAGE	23
Remote Control Pairing	12	TROUBLESHOOTING	27
Operating Environment	12	TECHNICAL SPECIFICATIONS	28
USING THE GENERATOR	13	OPERATION & MAINTENANCE LOGS	29
Starting the Generator/Methods	13	LIMITED WARRANTY	31
Shut Down	14	MODEL/COMPANY INFORMATION	32

GENERATOR PRODUCT SAFETY

OPERATOR MANUAL



This manual contains important details regarding safety and operation of this Inverter Generator. Before using, read this manual in its entirety before operating this machine. Serious injury or damage, including death, are possible if warnings and instructions are not properly followed.

CALIFORNIA PROPOSITION 65

WARNINGS & DISCLOSURES



- Components of this product and its related accessories may contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. Wash hands after handling this product and related accessories.
- The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm



CAUTION

When opening or moving the generator or packaging, use assistance and proper lifting techniques. The generator is heavy and may cause injury in lifting. Use care when opening packaging. The box contains staples that may cause harm when opening or cutting the box.

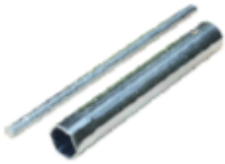







BNG3800iAEFIC Inverter Generator Package - Contents

Tool Required - Removing Box Contents

Box Cutter or similar tool

- 1) Carefully cut the packing tape on the top of the box
- 2) Remove socket wrench and funnel; store in a secure place
- 3) Carefully cut two sides of the carton to remove the Inverter Generator unit

Accessories & Descriptions

Socket Wrench  Use for Spark Plug inspection and replacement	Dual Screwdriver  Flathead & Phillips combo; for generator maintenance	Funnel  Use for safe gasoline-fill when using this generator	USB Adapter (DC)  Use the 12V 8.3A DC socket to power USB Type-A and USB Type-C electronics
Engine Oil 450 ML  SAE 10W-30 Oil *Must fill for first use	Remote Control/Fob  Wireless Remote for Start/Stop control of this generator	Battery Charger Kit  120V AC Charger used for charging generator battery	Auto Start/Stop Interface Cable  Use to connect automatic start/stop devices

*This Generator is not shipped with engine oil. You MUST add approximately 0.48 quarts (0.45L) of SAE 10W-30 motor oil before starting this generator. The engine oil dipstick provides the exact measurement for reference.

The actual appearance of tools or accessories may vary from the images displayed. BN Products-USA™ reserves the right to modify included accessories and package contents, with or without prior notification.

Notices

All information, diagrams, and product attributes in this manual are based on the latest information available at the time of publication. The illustrations in this guide are reference images only. Product improvements and supporting materials are in continual development.

BN Products-USA™ reserves the right to modify and/or update the product and its corresponding manual at any time. Some product images may vary as product updates are implemented.

Carbon Monoxide Safety

This Inverter Generator set is equipped with Carbon Monoxide Shutdown Detect technology that monitors the accumulation of carbon monoxide, a poisonous gas produced by engine exhaust. If the on-board CO sensor detects unsafe or elevated CO gas, the inverter generator's engine will shut down automatically.



Carbon Monoxide Shutdown Detect is NOT a substitute for an indoor carbon monoxide alarm or for assumed safe operation. DO NOT allow engine exhaust fumes to enter a confined space through doors, windows, or other possible vents. Generators must always be used outdoors, and away from buildings with engine exhaust directed away for people and structures.

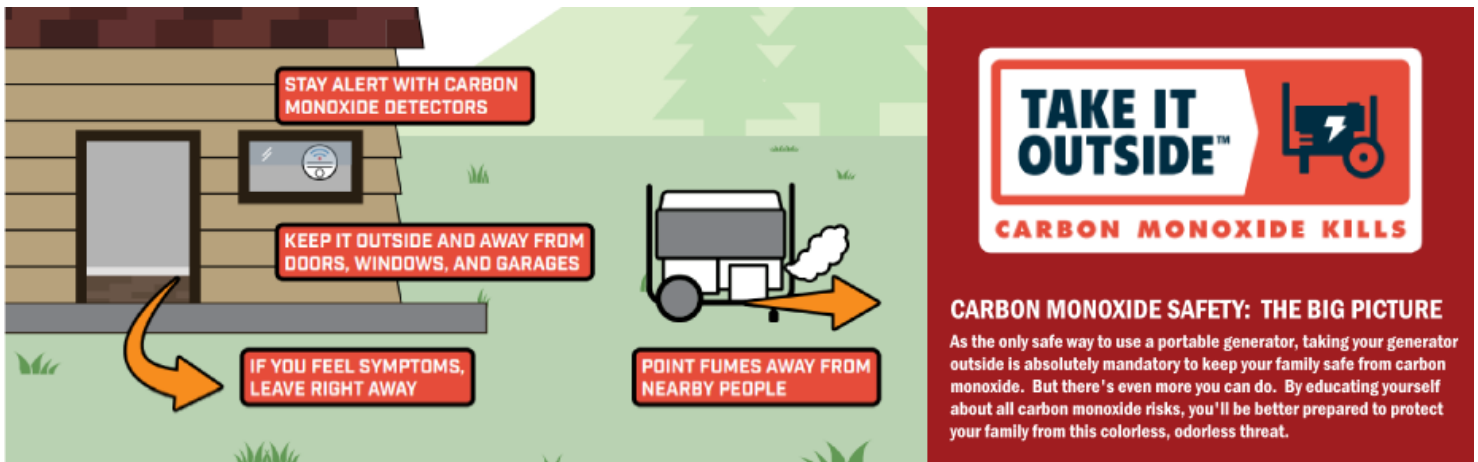
This product meets the requirements of ANSI/PGMA G300-2018.

ANSI/PGMA G300-2018 is a safety standard for portable generators, particularly focusing on the prevention of carbon monoxide (CO) poisoning. It requires generators to have CO sensors that automatically shut off the machine if CO levels become dangerously high.

Carbon Monoxide-Specific Warnings

Engine exhaust contains carbon monoxide, a poisonous gas that could kill you in minutes. You CANNOT smell it, see it, or taste it. Even if you do not smell exhaust fumes, you could still be exposed to carbon monoxide gas.

- Operate this product ONLY outside, away from windows, doors and vents to reduce the risk of carbon monoxide gas from accumulating and potentially being drawn towards occupied spaces.
- Install battery-operated carbon monoxide alarms or plug-in carbon monoxide alarms with battery back-up according to the manufacturer's instructions. Smoke alarms cannot substitute for CO detection.
- DO NOT run this product inside homes, garages, basements, crawlspaces, sheds, or other partially-enclosed spaces even if using fans or opening doors and windows for ventilation. Carbon monoxide can quickly build up in these spaces and can linger for hours, even after this generator set has been shut off.
- ALWAYS place this product downwind, and point the engine exhaust away from occupied spaces. If you start to feel sick, dizzy, or weak while using this product, shut it off and get to fresh air RIGHT AWAY. Seek immediate medical attention if carbon monoxide poisoning is suspected.
- If you start to feel sick, dizzy, or weak while using the portable generator, you may have carbon monoxide poisoning. Move outside into fresh air immediately, and seek emergency medical assistance. Very high levels of CO can rapidly cause victims to lose consciousness before they can rescue themselves. DO NOT attempt to shut off the generator before moving to fresh air. Entering an enclosed space where a generator is or has been running may put you at greater risk of CO poisoning.



MORE CO SAFETY RESOURCES

VISIT

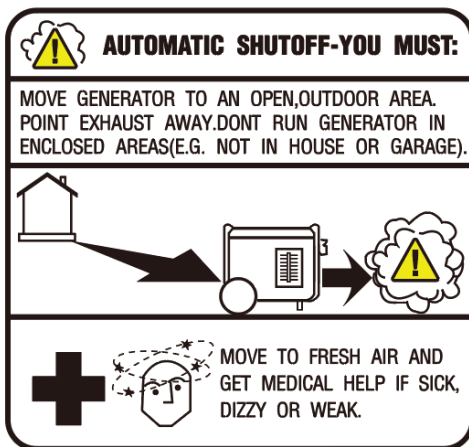
<https://www.takeyourgeneratoroutside.com/>



Never operate this generator in any of the following locations:

- Near a door, vent, or window
- Garage
- Basement
- Temporary Structure or Tent
- Living Area / Home
- Attic
- Entry Way or Foyer
- Porch, Shed, or Crawl Space

Carbon Monoxide (CO) Labels on the BNG3800iAEFIC Inverter Generator



It is extremely important to know and understand the procedure to follow should this generator shut down automatically due to detection of unacceptable levels of carbon monoxide. This label is included for emergency reference on the product, in addition to general warnings about the danger of carbon monoxide exposure.

READ WARNINGS | HAVE AN EMERGENCY PLAN



General Safety Warnings

- Familiarize yourself with the operation of the various components, and learn how to effectively shut down the generator quickly.
- Know the environment where you intend to use the Inverter Generator;
 - DO NOT USE** the generator:
 - **Indoors**
 - **In rainy or wet conditions**
 - **Near buildings or close to people**
- Safety practices are vital to protecting the operator of this generator, other people, and property. Read all safety notices in this manual.
- Read all Decals, Labels, and Maintenance Instructions. Instructions in this manual and on safety decals secured on the generator unit are generally categorized as a DANGER, WARNING, or requires the operator to be CAREFUL or give special ATTENTION to the instruction:

DANGER	Failure to follow the instruction will result in being in peril of your life or extremely serious injury.
WARNING	
CAREFUL	Injury or material damage is possible if instructions or recommendations are not followed
ATTENTION	Damage to this inverter generator may result of recommended action or directions are not followed

Safety Instructions: Follow at All Times

- Do NOT use the inverter generator indoors at any time
- Do NOT use the inverter generator in a wet or rainy environment, or in a thunderstorm
- This inverter generator may NOT be directly connected to a household power supply system
- ALWAYS shut the inverter generator OFF when adding gasoline, refueling, or adding oil
- NEVER smoke when adding gasoline, or any time when the fuel cap is opened
- NEVER connect a generator to a wall outlet; this is extremely dangerous, causing a reverse flow of power into the electrical grid or home wiring system known as backfeed. This practice is extremely dangerous, is illegal in most jurisdictions, and must be avoided.
- Use the provided funnel when adding gasoline to the inverter generator; avoid fuel spills at all times
- Do NOT touch any surface that may be hot during or after using the inverter generator, indicated by a warning label. Serious burns and injuries may result from touching generator parts.



Operator Parts - BNG3800iAEFIC Inverter Generator



- 1 - Fuel Tank Cap
- 2 - Starter Pull Handle
- 3 - Right Side Cover Bolt (Hand-bolt; Right side only)
- 4 - Left Side Cover
- 5 - Control Panel: See Control Panel Function (next page)
- 6 - Engine Cooling Vents
- 7 - Right Side Cover
- 8 - Muffler: Avoid Contact during and after running
- 9 - Spark Plug Access Cover
- 10 - Telescoping Handle
- 11 - Transportation Wheels
- 12 - Oil Dipstick (Magnetic): Absorb ferrous particles in oil; periodically clean each 50 hours of use

Read all safety decals

LOCATE AND RECORD SERIAL NUMBER

Locate the generator serial number and **record that number in the space provided on the front of this manual**, and keep the manual in a safe place for reference, as it is helpful for product support and identification. The serial number is found in two locations on this unit:

1. Bar-code decal applied to the top of the generator housing, near Fuel Cap - **Figure 1A**
2. Stamped onto the motor housing inside the frame - directly above the oil dipstick (remove right side cover panel to locate) - **Figure 1B**

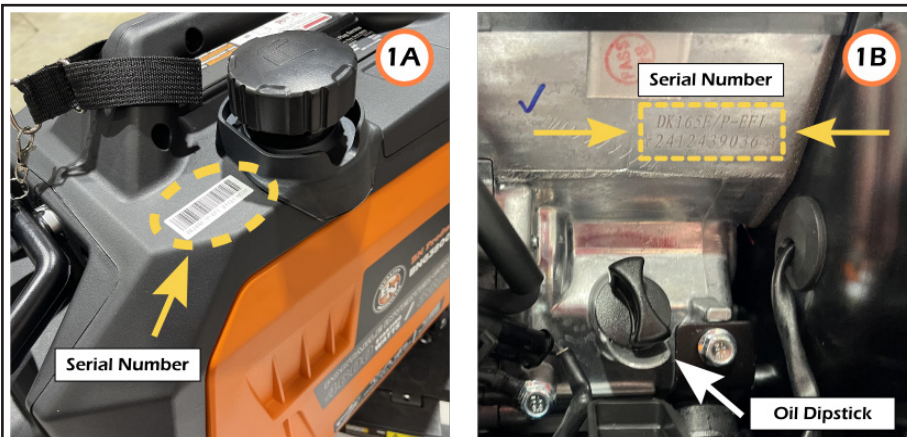
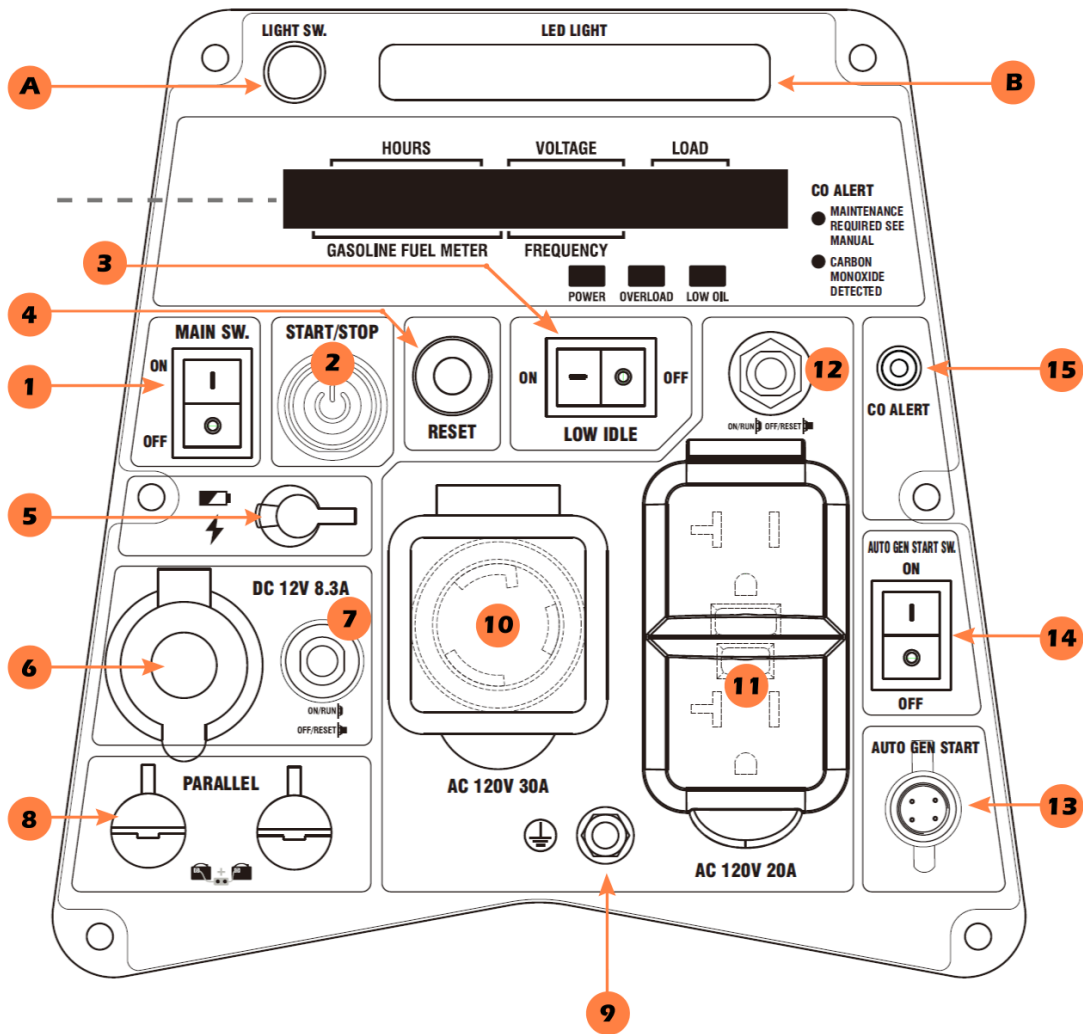


FIGURE 1A/1B:

Serial Number locations on the BNG3800iAEFIC Inverter Generator

- **Ensure Both Numbers Match**
- **Write Down Serial Number on Front Page of this Manual**

Control Panel Functions



A - LED Light Switch: Toggles LED light ON/OFF (Operates only when generator is running)

B - LED Light

1 - Main Switch: Activates battery power when ON; turn to OFF position when in storage to avoid battery power drainage

2 - START/STOP Switch: With Main Switch ON, starts and shuts down generator engine

3 - Low Idle Switch: When in the ON position, engine will detect load and run at a lower RPM to optimize fuel consumption

4 - Reset: The Reset breaker will “trip” if the generator reaches an overload condition. Engine remains running, but power output is disabled; push button in to reset the breaker.

5 - Battery Charge Port: Use the included AC battery charger to plug into this port for battery charging

6 - 12V DC 8.3A Outlet

7 - DC Reset: Breaker for DC circuit; if overloaded, breaker will “trip” and disable DC output. Press in to reset breaker.

8 - Parallel Connection Ports

9 - Ground Terminal: Used for externally grounding the inverter generator; See “Generator Grounding”

10 - 120V AC 30A TT-30R Outlet: Maximum 30A output

11 - 120V AC 20A 5-20R Outlet: Maximum 20A output using duplex outlet set

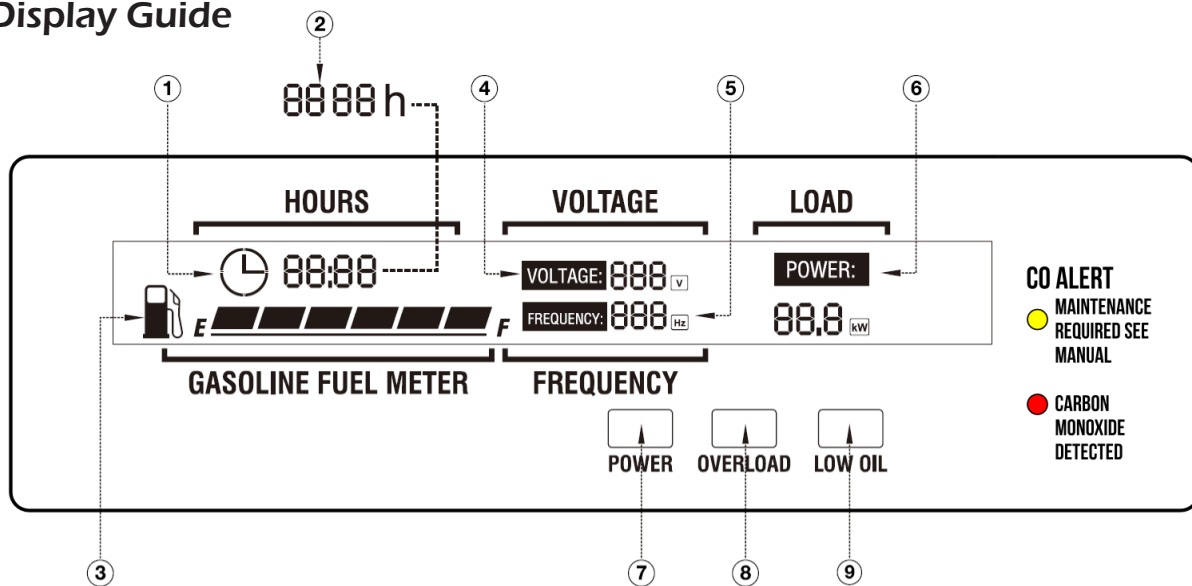
12 - AC Reset: Breaker for AC circuit; if overloaded, breaker will “trip” and disable AC output. Press in to reset breaker.

13 - Auto Generator Start Port: This interface communication port is connected to allow automatic start/stop features when connected to equipment with automatic start/stop control functionality

14 - Auto Generator Start Switch: When ON, this control disables wireless remote and push-button Start/Stop functions, and enables starting from a connected external device through the communication interface.

15 - CO Alarm: Flashing RED light: dangerous levels of carbon monoxide gas have built up. If this occurs - immediately until area has aired out. Move generator to well-ventilated area before operation. A flashing YELLOW light indicates a sensor malfunction (this malfunction requires generator service).

Digital Display Guide



1 - Displays single run time, starting from 0:00 at each start-up

2 - Displays total operation time of generator, in hours

3 - Gasoline fuel meter, showing current fill level

4 - Voltage: displays current output

5 - Frequency: displays current output

6 - Load: displays current output

7 - Power: A GREEN light indicates output during normal operation

8 - Overload: A RED light indicates an overload condition under current conditions

9 - Low Oil: A RED light indicates a low oil condition; the generator should be shut down immediately to avoid engine damage, and filled to proper oil level before use

ADDING FUEL (GASOLINE ONLY) TO THE GENERATOR



DANGER

- Gasoline is highly flammable and toxic, follow all safety procedures and instructions
- Do not overfill the fuel tank; avoid fuel spills
- Secure fuel tank cap after fueling before attempting to start the generator



ATTENTION

- After adding fuel, clean any gasoline residue using a clean, soft cloth to avoid damage to the plastic exterior parts of the generator.
- Use only unleaded gasoline with this generator to avoid damage to engine or engine parts; Use 87-91 octane, **do NOT use gasoline containing greater than 10% ethanol.**
- This inverter generator is strictly a gasoline-powered generator. Alternative fuels can not be used with this generator.

1. Remove the fuel tank cap by twisting in a counter-clockwise direction
2. Use the included funnel when adding gasoline to the generator
3. Carefully fill the fuel tank; do not exceed the indicated fuel maximum fill line. The maximum fill line is indicated by the red insert in the fuel filter under the fuel cap. **See Figure E.**

- **Fuel capacity for the BNG3800iAEFIC Inverter Generator is 1.7 gallons (6.5 Liters)**
- **Do NOT use gasoline that contains more than 10% ethanol (i.e.E85)**

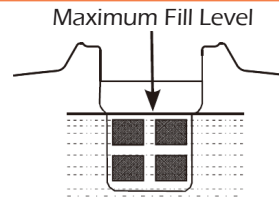


FIGURE E
Maximum Fuel Fill

Generator “Break-In”

The first five hours of usage is commonly referred to as the break-in period. The purpose of the break-in period is to seat the rings of the piston. During the break in period, it is recommended to operate the generator below 50% of the running wattage rating. It is also recommended to vary the load occasionally to allow stator windings to heat and cool. It is not necessary to run the generator for five hours straight to do the break-in period. The generator can run for five hours over any period up until they reach those five hours.

INSPECTION: Prior to Each Use



WARNING

Inspect all components prior to each use. System parts and components may be damaged even when the generator is not in-service.

Fuel

- Check fuel level before each use, add gasoline as needed

Oil

- Check the oil level by removing the right side cover, and using the dipstick. Oil level must be in the safe operating range as indicated by the hash marks in Figure B.
- While checking the oil level, inspect for any oil leaks in the bottom of the casing or under the generator

During Operation

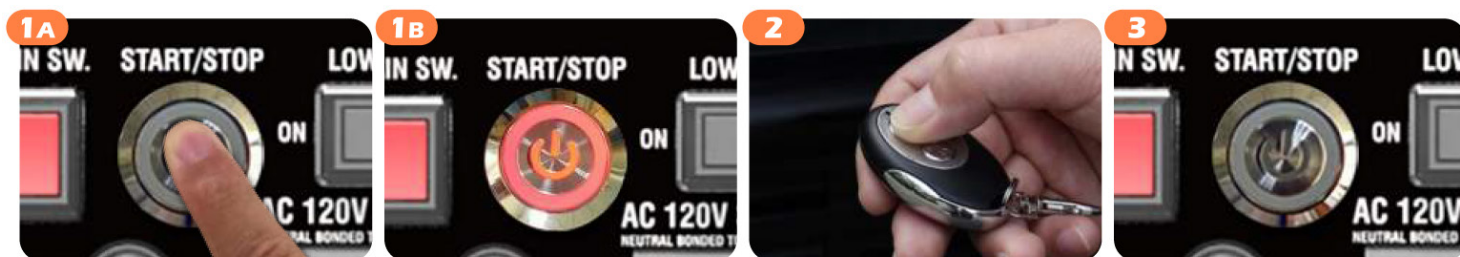
- Observe the running condition of the generator; abnormal conditions or running speed may indicate a maintenance issue; contact BN Products-USA™ Customer Service at (800) 992-3833 when you have questions or need assistance.

REMOTE CONTROL PAIRING (Optional)

This generator is equipped with a wireless remote key (included) for remote starting or shutdown of the generator. To use this feature, it is necessary to pair the remote to the generator unit.

Pair Remote Control to BNG3800iAEFIC Inverter Generator

1. Press and hold down the START/STOP button on the control panel of the generator for approximately 5 seconds, until the START/STOP button LED lights turn on (button lighting will be RED).
2. Press any button on the remote control.
3. The red LED on the START/STOP button will blink 2-3 times and will turn off.
 - When the blinking light disables, this indicates that the generator and the remote control have been successfully paired.



Remote Control Dormant Mode

If the BNG3800iAEFIC inverter generator is not started for a period of 120 hours (5 days), with the Main Switch in the “ON” position, the remote control feature is temporarily disabled.

To re-activate the remote control feature, you may perform either of the following steps:

- Turn the Main Switch to the OFF position, then turn the switch back to the ON position to reset the remote feature, which re-activates the remote control key
- Start the generator using the push-button START/STOP button, or start the generator using the Recoil (pull) starter - which will re-activate the remote control features for use with the remote control key.

OPERATING ENVIRONMENT

Generators, like all electrical appliances, operate optimally under specific conditions. Standard temperature and pressure (“STP”, near sea level) provide the ideal environment for best efficiency. Deviations from these conditions—such as high altitude, extreme temperatures, or humidity—can reduce generator output and, in severe cases, cause performance failures

Optimal Use Conditions

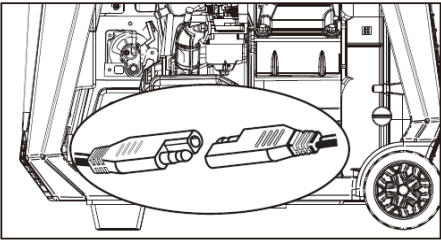

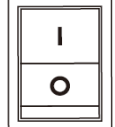
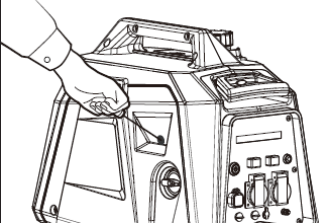

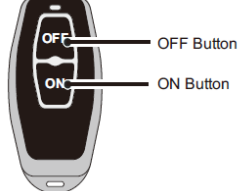
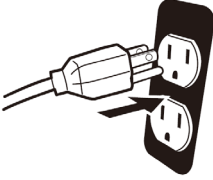
- Temperature Range: **23° F ~ 104° F** (-5° C ~ 40° C)
- Humidity: Below 95% relative humidity
- Elevation: Ideal range is below 4,900 ft (1500 M) above sea level

Additional Information: Studies indicate that increases in ambient temperature, humidity, and elevation will cause a portable generator to operate with less efficiency.

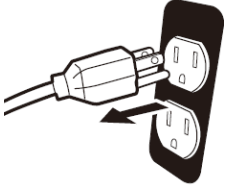

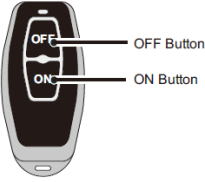
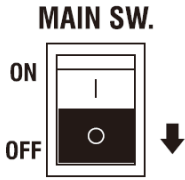
If you have questions or concerns related to the operating environment for your inverter generator, the Customer Service team at BN Products-USA™ may be able to help; contact our representatives at (800) 992-3833.

Using the Inverter Generator


STARTING

1	<ul style="list-style-type: none"> Remove all devices (load) from outlet plugs No electrical devices should be connected to the generator Connect battery wire before starting: <ul style="list-style-type: none"> -Loosen bolt and remove the right side cover -Connect wiring: A quick-connect plug is preinstalled to easily connect the battery. Remove cable tie, align connection, and press firmly to connect. 	
2	<ul style="list-style-type: none"> Switch the Low Idle Switch to "OFF" 	<p>LOW IDLE</p> <p>➔</p> <p>ON  OFF</p>
3	<ul style="list-style-type: none"> Turn the Main Switch to the "ON" position 	<p>MAIN.SW</p> <p>⬆</p> <p>ON  OFF</p>
Choose Starting Method		
4a	<p>Recoil:</p> <ul style="list-style-type: none"> Gently pull the starter cord handle until the cord stops without additional effort. Hold the generator carrying handle firmly to stabilize the generator (prevent accidents or overturning the generator) Use a firm and controlled pull to start the engine 	
4b	<p>Push Button:</p> <ul style="list-style-type: none"> Press the Start/Stop button in for 1-3 seconds, then release to start the generator If the generator fails to start, verify steps 1-3 are correctly set 	
4c	<p>Remote Start:</p> <ul style="list-style-type: none"> Press the "ON" button on the remote control to start the generator If the generator fails to start, verify steps 1-3 are correctly set 	
6	<ul style="list-style-type: none"> Once the generator is running, it is safe to plug in devices. Ensure that devices do not require watts or amperage beyond the generator's running power capacity. 	

SHUT DOWN

1	<ul style="list-style-type: none"> • Turn off, then unplug / remove all devices (load) from outlet plugs • No electrical devices should be connected to the generator 	
Choose Stop Method		
2a	Button Stop: <ul style="list-style-type: none"> • Press the Start/Stop Button in to turn off the generator 	
2b	Remote Stop: <ul style="list-style-type: none"> • Hold down the "OFF" button on the remote control for one second to stop the generator 	
3	<ul style="list-style-type: none"> • Move the Main Switch to the "OFF" position 	

USING EXTENSION CORDS

	<p>ATTENTION</p> <p>Extension cords are commonly used with portable generators to ensure safe working distances from a running generator. When using an extension cord - always follow these requirements to ensure safety, and prevent damage to your generator and connected devices:</p>
---	--

- **Use only heavy-duty, outdoor-rated extension cords.**
 - Indoor extension cords should never be used with a portable generator.
- **Ensure the cord's wattage rating exceeds the total wattage of all connected appliances.**
- **Choose cords long enough to keep the generator outdoors, far from windows, doors, and vents.**
- **Inspect cords for cuts, tears, and missing prongs before use.**
- **Prevent cords from being pinched or crushed; follow all safety labels, including length limits.**
- **DO NOT ATTEMPT to connect a generator as a household backup power source. Backup power wiring must be installed by a licensed, professional electrician.**

CONNECTING DEVICES TO YOUR INVERTER GENERATOR



ATTENTION

- Make sure that all electrical equipment, including wires and plugs, are in good condition before connecting to the generator
- All loads powered by the generator must be within rated load (watts, amperage) range of the generator, and connected electrical equipment

1	START the generator engine following the instructions contained in this Operator Manual
2	Turn the Low-Idle control switch to the "ON" position* if desired
3	Insert the plug of a corded device into the AC outlet; or if applicable, you may also power or charge USB-powered devices using adapter provided with your generator for the DC 8.3 A socket. The adapter will safely power to USB Type-A and USB Type-C devices.
4	Ensure that the generator is able to generate output (Output LED indicator)
5	It is safe to turn on your electrical device or equipment if all safety and preparation steps are followed

*Turning the Low-Idle switch to the "OFF" position will allow engine speed to increase for maximum output. When this is "ON," engine speed is determined by load demand. If powering multiple loads, power on the device with the largest load demand first, then power on devices or equipment with the smaller load requirement.

Generator Grounding

The need to ground a portable generator depends on its intended use. If using extension cords alone, grounding with a ground rod is not necessary.

However, when connecting the generator to an electrical panel, building electrical system, manual transfer switch, RV, or similar applications, grounding with a ground rod is required. For proper grounding, the rod should be earth-grounded and connected to the ground terminal on the front of generator, using a ground cable. Custom installations to building electrical systems or home power sources should be performed by a qualified and licensed electrician.

It is important to note that an operator must adhere to all applicable federal, state, and local regulations regarding generator grounding. Please consult all appropriate guidelines to ensure that all relevant regulations are met.

This inverter generator features a grounding post designed to secure a ground wire with a 1/4" (6.35 mm) ring terminal. (See Figure F)

Consult local regulations and professional assistance if you need help understanding gauged copper and ground rod requirements in your area.

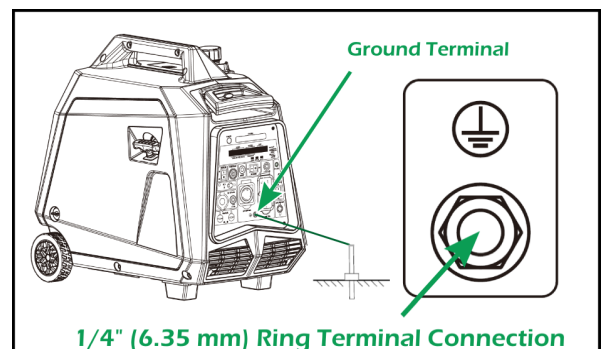


FIGURE F

PARALLEL OPERATION - BNG3800iAEFIC Inverter

The parallel connection ports allow you to connect two generators to increase the total available electrical power. Parallel kits (not included with generator) may only be used with two **identical** generators (make and model) that provide the same power flow at the same frequency. Follow the instructions included with your parallel connection kit for proper installation and operation.

Parallel Connectors (120V OUTPUT): To increase AC power output, the connector sockets are used to connect the two identical inverter generators with paired (+/-) terminal connections and ground on each generator. A parallel power outlet included with a parallel kit is then used as the combined power source from two generators running in parallel. (See illustration in Figure G to indicate parallel kit connections)

The BNG3800iAEFIC Inverter Generator supports 120V AC parallel output only when a parallel kit is attached to two BNG3800iAEFIC generators. This generator set does **not** include a 240V connector.

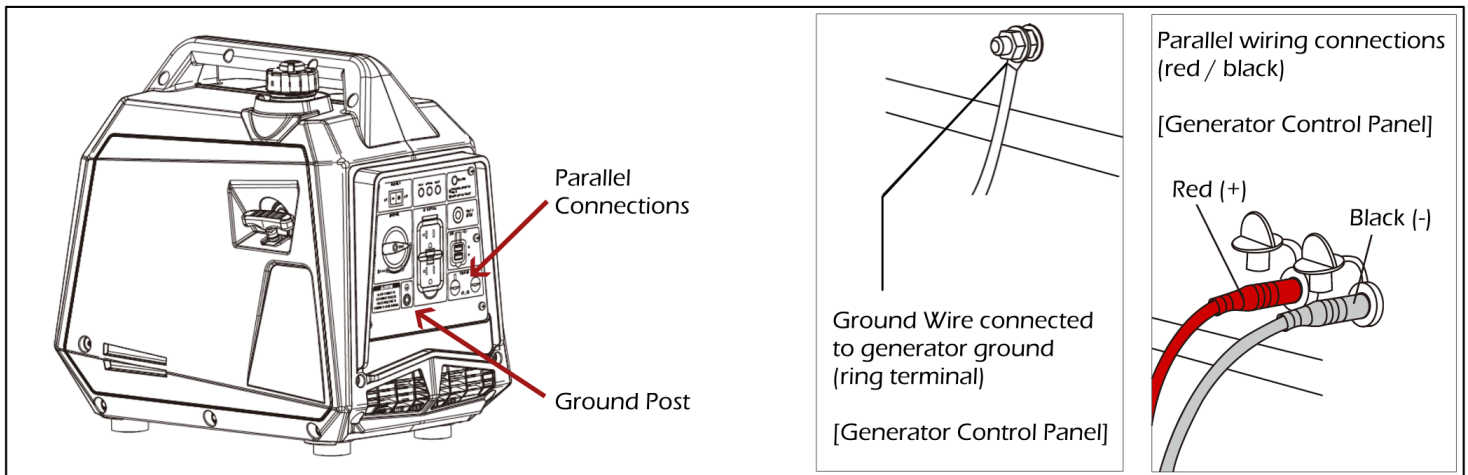


FIGURE G

Parallel Kits +/- cabling and ground connections - Generator control panel (front)

If you purchase a parallel kit for use with the BNG3800iAEFIC inverter generator, follow all manufacturer instructions included, and follow all recommendations and warnings, to avoid damage to the generator set and avoid critical safety hazards.



WARNING

TO PREVENT SERIOUS INJURY, DEATH, OR GENERATOR AND/OR EQUIPMENT DAMAGE FROM ELECTRIC SHOCK:

1. Follow Parallel Kit instructions provided with Kit for connection and use of a Parallel Kit.
2. Only connect two identical Inverter Generators together using a Parallel Kit.
3. Connect Parallel Kit only to terminals marked "Parallel Outlets" on the front of the Generator.
4. Do not remove or connect a Parallel Kit while the Generator is running.
5. Do not use a Parallel Kit that is attached to only one Generator

AUTO GENERATOR START/STOP INTERFACE

The BNG3800iAEFIC inverter offers an Auto Start/Stop interface, which is appropriate for most applications where your generator is required to stop and start using a 2 wire signal. An Auto Start/Stop interface port (AUTO GEN START) is located on the generator control panel (Figure G2 on this page). An interface cable is included with your generator for use with this feature.

How it works

The interface uses two wires that, when connected (closed circuit), initiate a start sequence on the generator. Disconnecting the wires (open circuit) signals the generator to stop. This system is commonly used for backup power, off-grid solar systems, and remote monitoring applications where automatic generator control is beneficial.

By starting only when needed, the generator can operate more efficiently, saving fuel. The two-wire system offers a simple and convenient way to integrate a generator into an automated power system.

Connecting Automatic Start/Stop Devices

- Turn off all electrical equipment, unplug them, and turn off the generator Main Switch.
- Connect the device using the Automatic Start/Stop Cable
 - The cable is configured with one end to plug into the AUTO GEN START receptacle on the generator control panel. The opposite end is configured with a standardized adapter. Consult qualified assistance if help is required to establish a cable connection to an external device.
- Turn the Main Switch to the "ON" position.
- Press the AUTO GEN START Switch to the "ON" position.
- Some interfaced devices may incorporate connections to be powered by the generator when running. These devices may be plugged into the appropriate socket on the generator.
 - Follow all manufacturer instructions for successfully setting up a device interface for charging and auto start/stop functions with this generator.
 - **When the Auto Generator Start/Stop interface is enabled, the push start button, and remote control start features are disabled.**

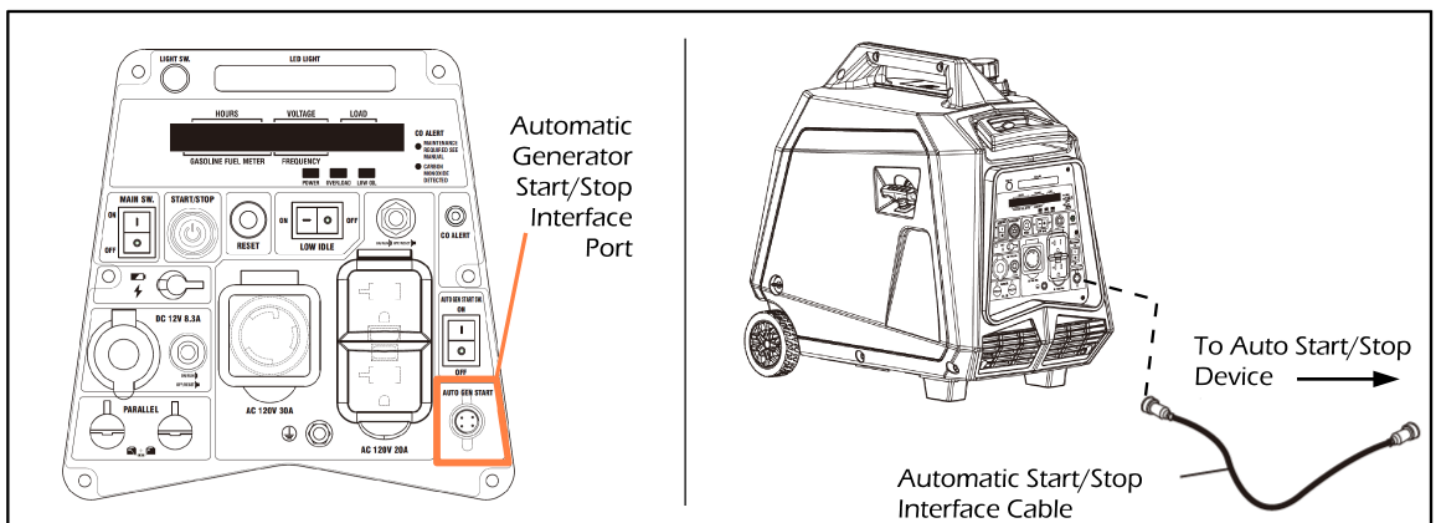


FIGURE G2

Automatic Start/Stop Interface connection

Service and Maintenance

Spark Plug Inspection & Replacement

The generator's spark plug should be inspected regularly to ensure consistent starting performance.

- Make sure the generator is not running and cool; remove the Spark Plug Service cover on the top of the generator, then remove the spark plug cap covering the spark plug. (See Figure H)

Visual Inspection

- Use the spark plug socket wrench to insert into the spark plug housing, and turn counterclockwise to remove the spark plug. (See Figure I)
- Examine the spark plug for signs of wear, including cracks, damage, debris, or discoloration.
- A good spark plug will have a light brown or gray-tan color
- Look for excessive deposits, like black/carbon soot or oily residue

Gap Test

- Measure the gap between the electrodes using a wire gauge or feeler gauge.
- Adjust the gap if necessary, using a small tool to gently bend the side electrode. (See Figure J)

Replacement - Consider replacing the spark plug if there are signs of wear, damage, deposits, or if the generator fails to start if spark plug is suspected. Spark plug ignition may also be tested with a spark tester; follow instructions from the manufacturer of any spark tester used.

- If replacing or re-installing the spark plug, use the socket wrench to thread the spark plug clockwise into the threaded socket. Optimal torque is 12.5 N.m if a torque wrench is used in place of the socket tool.

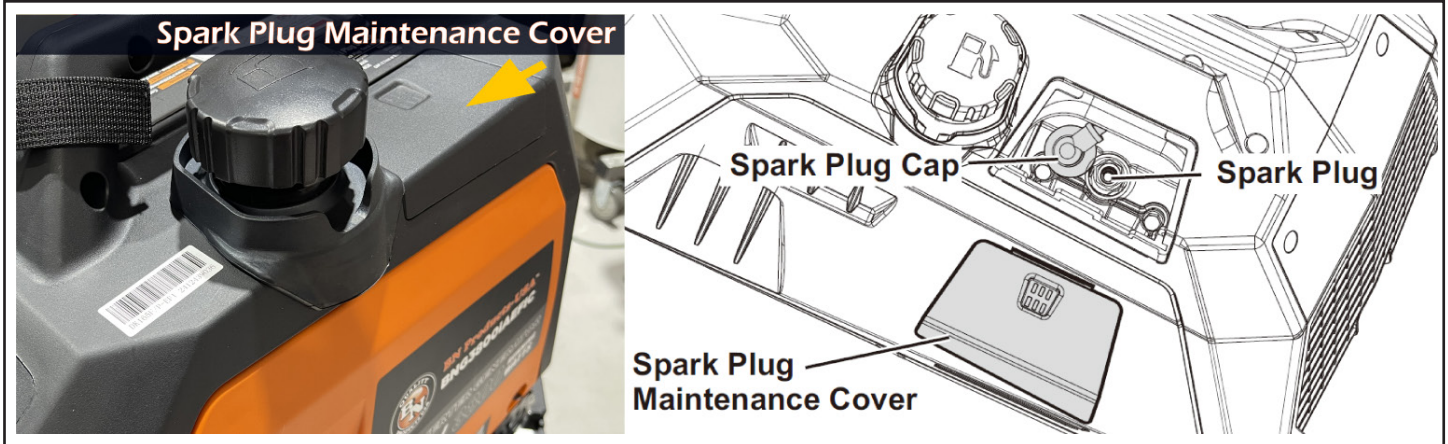


FIGURE H

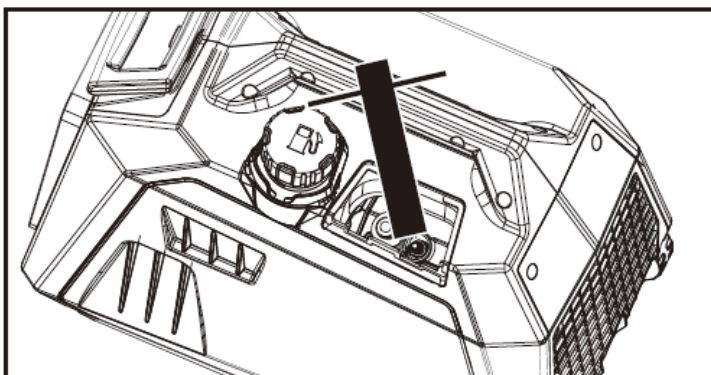


FIGURE I

Spark Plug gap: 0.7 ~ 0.8 mm

Standard spark plug type:
A5RTC

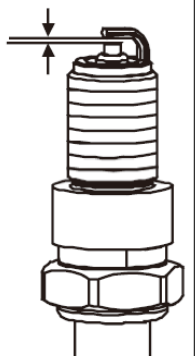


FIGURE J

AIR CLEANER MAINTENANCE & REPLACEMENT

Clean the air filter after the first 25 hours of use. Following that point, clean or replace the air filter every 6 months or after each 50 hours of use. Clean or replace the filter more often when used in dusty conditions - always replace the air filter foam element every two years or 100 hours of use.

Clean the Foam Filter Element

Wash the foam air filter in a solution of household detergent and warm water, rinsing completely and thoroughly. Allow the foam element to dry completely before re-installing.

Replace Air Filter

A dirty air filter will affect engine performance if not replaced on a regular basis.

- Loosen the right side cover bolt to remove the right side cover of the generator (**See Figure K**)
- Locate the air filter enclosure, and remove the screws and the cover (**See Figure L**)
- Remove the foam air filter.
 - (Recommended) If replacing the foam air filter, insert the new filter; be sure to use a damp cloth to clean any residue from the air filter cover when re-installing.
 - There can be some benefit from cleaning a dirty foam filter element; if you chose to clean the filter - inspect the filter frequently and replace as soon as possible
- Re-assemble the air filter cover back into its original position, firmly securing with screws.
- Re-attach the right side cover on to the generator frame; tighten the bolt firmly to secure the side cover

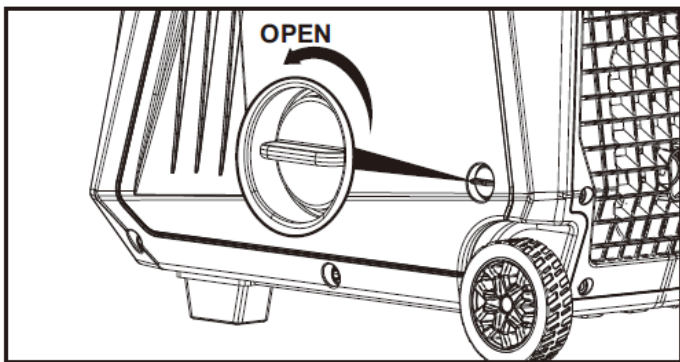


FIGURE K - Right Side Cover/Bolt

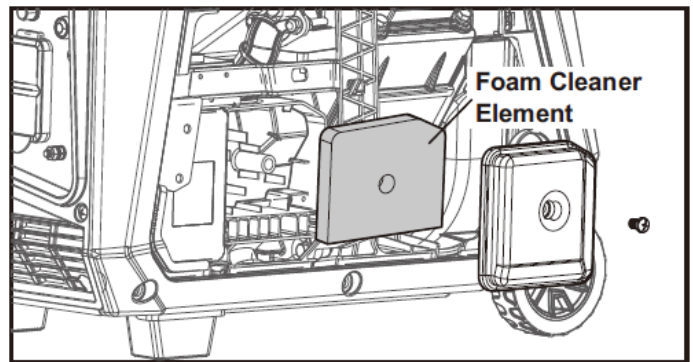


FIGURE L - Air Filter Cover/Element



ATTENTION

Never start the generator engine without an air filter installed, or before a filter has been replaced, if one has been removed. Serious engine damage or buildup of toxic fumes may occur.

CHANGE ENGINE OIL



WARNING

Use extreme caution when draining the oil after turning off the generator. During operation, the oil is very hot after the generator has been running. Direct exposure to hot engine oil may cause serious burns.

- Place the generator on a stable and flat surface outdoors. It is recommended that the generator is started and run for several minutes to warm the oil temperature (never run the generator indoors or where exhaust can build up).
- Stop the generator.
- Loosen the right side cover bolt, and remove the exterior cover plate. Be careful to avoid contact with engine parts that may remain very hot.
- Remove the oil plug/dipstick by un-screwing in a counter-clockwise direction
- Place an oil pan under the engine, then tilt the generator to pour the used oil out of the generator. Tilt the generator at a steep enough angle, and make sure that all of the used oil is drained from the engine. (See Figure M)

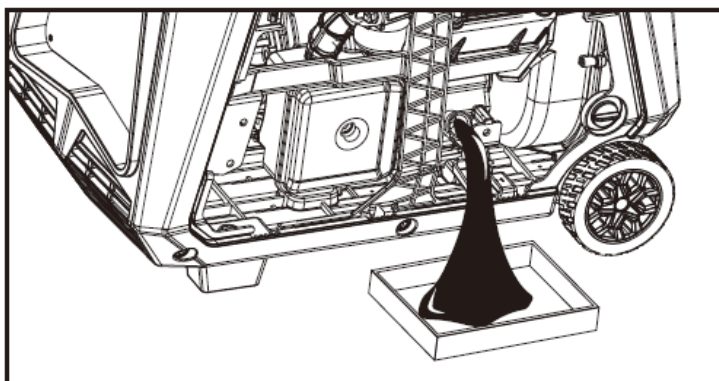
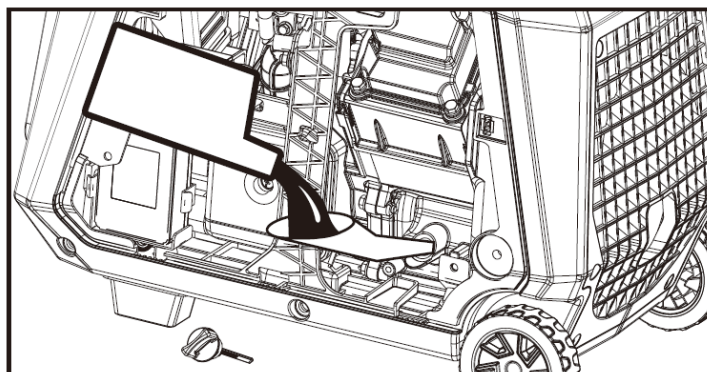


FIGURE M (Left)

Tilt the generator in the direction of the oil drain and fill opening, emptying oil into an oil pan to drain used oil from the generator engine

FIGURE N (Right)

Fill engine oil using SAE-10W-30 motor oil for general use. Be careful to NOT overfill the engine beyond the maximum fill level marked on the dipstick



- Use a funnel to add new oil until the oil level is at the proper level, as indicated by the hashed marks on the dipstick. The safe operating oil fill range is indicated in **Figure B** under “Preparing for Use.”
- SAE 10W-30 motor oil is recommended for general use
- Do NOT overfill engine oil; if the oil reservoir is overfilled, internal damage to the engine may occur if the engine is started. (See **Figure N**)
- Replace the dipstick by firmly twisting into place in a clockwise direction.
- Re-assemble the right side cover, and secure the side cover bolt.

Sediment Cup (Fuel Tank Filter Screen) - Maintenance



WARNING

Be aware of the environment around your generator before opening the fuel tank cap. Never open the fuel tank cap near a heat source, or where sparks or flames could be present, including smoking.

- Check the Main Switch to make sure that it is in the “OFF” position
- Open the fuel fill cap by twisting in a counter-clockwise direction
- Remove the fuel tank filter screen by lifting from the fuel inlet
- Look for signs of trapped debris or particles
- If necessary, you may clean the sediment cup using a non-flammable or high flash-point solvent (**See Figure O**)
- Rinse thoroughly with the solvent to remove any remaining sediment and then allow all components to dry completely.
- Re-assemble by re-installing the sediment cup filter, ensuring that it is properly seated in the fuel tank inlet (**See Figure P**)
- Add gasoline if necessary, and re-install the fuel tank cap firmly
- Use a soft cloth to wipe down any external parts of the generator that may have residues or contaminants from cleaning generator parts

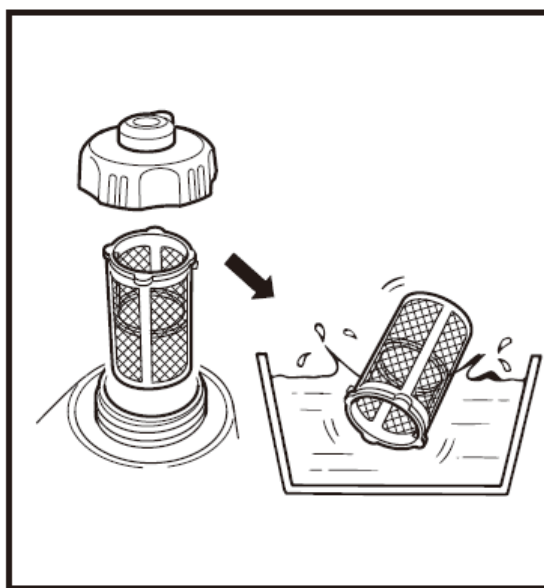


FIGURE O

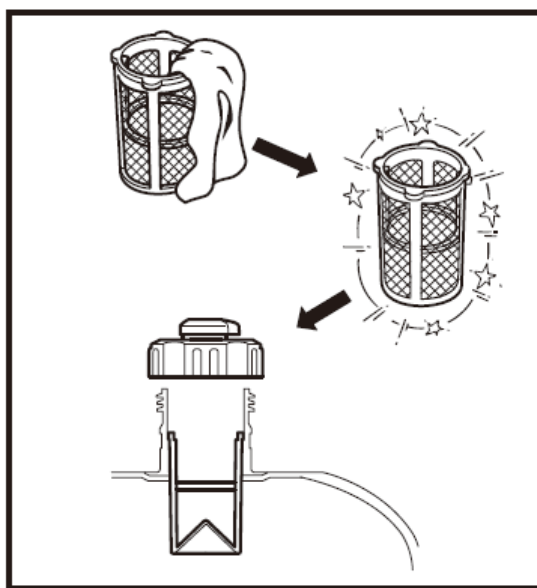


FIGURE P

Fuel Inlet - Sediment Cup (Screen Filter)

Spark Arrestor - Inspection and Cleaning

This inverter generator is equipped with a muffler attachment known as a spark arrestor. This is a device that traps or destroys hot exhaust particles to prevent fires. It's crucial for safety, especially in areas with dry vegetation or where regulations require their use.

Carbon deposits may build up on the spark arrestor, which may inhibit exhaust flow or overall performance of the generator. Service the spark arrestor every 100 hours of use to keep the device functioning as designed, and operating the generator at peak performance and safety:

- Allow the engine to cool; disconnect the spark plug cap
- Remove the plastic rear grille panel using a Phillips head screwdriver; remove the eight (8) screws securing the panel, and place the panel and 8 screws in a safe location.
- The spark arrestor (**See Figure Q**) is secured to the muffler with a hose clamp style brace. After the grille panel has been removed, use the Phillips head screwdriver to loosen the clamp screw sufficiently, so that the spark arrestor may be slide off of the unit in the direction away from the generator.
- Inspect the spark arrestor and exhaust port. Use a small brush to remove any carbon deposits from the screen; replace the spark arrestor if torn or damaged. (**See Figure R**)
- Once the spark arrestor and exhaust port are clean and free of debris and damage, replace the spark arrestor back onto the exhaust port, and firmly tighten the clamp screw. Do not over tighten.
- Replace the grille panel, securing it with the eight screws that were removed to remove the panel.

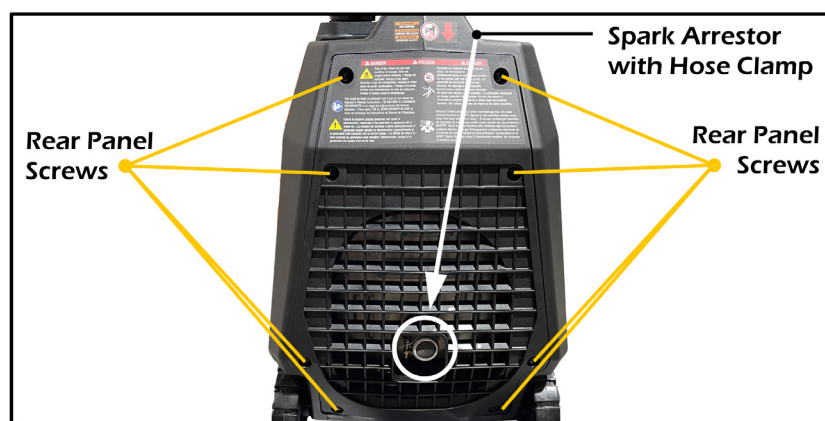


FIGURE Q

Generator rear grille panel, mounting screws, and spark arrestor (Q);

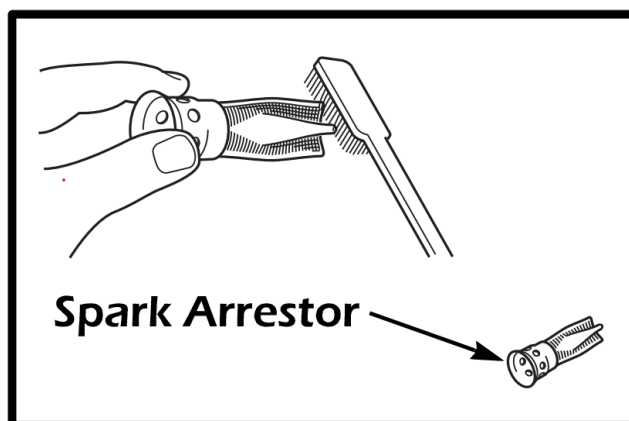


FIGURE R

Clean carbon deposits from spark arrestor device and exhaust port (R)

MAINTENANCE SCHEDULE

Refer to the Maintenance Schedule table in Figure S. Use this table as a general guide to inspect and maintain the working condition of this generator; perform additional inspection and service as needed, or if you suspect servicing is necessary between scheduled maintenance intervals.

Maintenance Item	Maintenance Task	Each Use	First 25 Hours of Use	Every 3 Months or 50 Hours of Use	Every year or 100 Hours of Use
Engine Oil	Check - Fill	X			
	Replace		X	X	
Air Cleaner Element	Inspect	X			
	Clean		X		
	Replace			X	
Sediment Cup (Fuel Fill Inlet)	Clean				X
Spark Arrestor	Inspection/Clean				X

FIGURE S

Transportation and Storage

TRANSPORTATION

- Allow the generator to cool before transporting or loading into a vehicle. Avoid contact with exhaust system or hot engine components.
- Inspect the fuel fill cap to ensure that it is firmly secured, and make sure that no excess fuel is able to spill or leak outside of the generator.
- Gently pull the starter cord handle until you feel resistance, allowing the intake and exhaust valve to be closed.
- Turn the Main Switch to the "OFF" position.
- Use proper lifting techniques when lifting or moving the generator at all times.
- When transporting - ensure that the generator is placed on a level surface in the bed of a vehicle. Secure the generator to avoid excess movement; use tie-downs or straps as needed, avoiding contact with the control panel components.
- Never operate the generator during transportation.

GENERATOR STORAGE

Proper storage is essential for readiness, for the next time that you plan to use the generator. Follow each storage recommendation to avoid starting problems, breakdown of old gasoline, and rust or corrosion of generator or engine parts. This section of the operator manual will cover:

- Drain or Treat remaining fuel
- Change Oil and coat engine cylinder
- Generator cleaning
- Proper choice of storage location

Fuel

The Manufacturer Limited Warranty will not cover fuel system damage or engine performance problems that are a direct result of neglected storage preparation, or problems stemming from aged gasoline.

During Normal Usage	More Info:
Never use gasoline containing more than 10% ethanol.	Not all automotive fuel is safe for your generator. Higher levels of ethanol in fuel may attract moisture, which can create solids in the fuel or fuel lines, corrosion, or cause other engine performance problems.
Store gasoline in a clean, plastic, sealed container approved for gasoline storage. Always store fuel away from direct sunlight; if the container is vented, keep the container airtight with the vent closed.	Plastic storage containers remove the risk of rust particles and other metallic elements from entering your fuel tank. Gasoline will break down more quickly when exposed to sunlight, temperature change, and air.
Use fuel stabilizer if you expect gasoline to remain in the fuel tank or in storage for more than 60 days.	Follow manufacturer directions when adding a fuel stabilizer. Remember stabilizer will extend the life of gasoline, and will not reconstitute stale or broken down fuel.
Keep your generator's tank full of fresh fuel when not in use; make sure that the Main Switch is in the OFF position to avoid leakage into or fuel system.	If a fuel tank is only partially filled, air in the tank may cause the fuel to break down more rapidly.
Keep the air filter clean at all times, and check before every use.	Clean air filtration will prevent dirt or other contaminants from entering engine parts. When this occurs, small lines and passages within the fuel system could become blocked or constricted.
1 Month Before Next Use	More Info:
Keep the generator fuel tank full of fresh fuel when not in use; ensure that the Main Switch is in the OFF position	If a fuel tank is only partially filled, air in the tank may cause the fuel to break down more rapidly.
1 to 3 Months before Next Use	More Info:
If you did not add fuel stabilizer to your fuel storage container, fill your generator tank with fresh gasoline.	If a fuel tank is only partially filled, air in the tank may cause the fuel to break down more rapidly.
Add fuel stabilizer to the generator's fuel tank according to manufacturer instructions.	Fuel stabilizer will extend the life of gasoline, and will not reconstitute stale or broken down fuel.
Run the engine outdoors for 10 minutes	This will help treated gasoline replace older fuel throughout the fuel system.
More than 3 Months Before Next Use	More Info:
Avoid leaving fuel in the tank. Do not allow gasoline to remain unused for more than 90 days of inactivity.	Fuel stabilizers have a shelf life, meaning that they are only helpful for a limited period. If your generator is going to be inactive for more than 90 days, it is best to store with an empty fuel tank.

Long-Term Storage - Fuel Drainage, Battery Disconnect

The following are recommended procedures for long term storage (> 90 days) of the generator.

- With the generator not running, make sure that the Main Switch is moved to the “OFF” position.
- Open the fuel tank cap, remove the fuel sediment cup screen. Use a pump to empty remaining fuel into a storage tank for storage or proper disposal. (See Figure T)
- Gently pull the startup handle until you feel resistance, allowing the inlet valve and exhaust valve to be closed.
- Loosen the bolt on the right side cover, removing the cover panel.
- Disconnect the battery cable (Figure U).
- Replace the right side cover
- Store the generator in a clean, dry place free of temperature extremes.

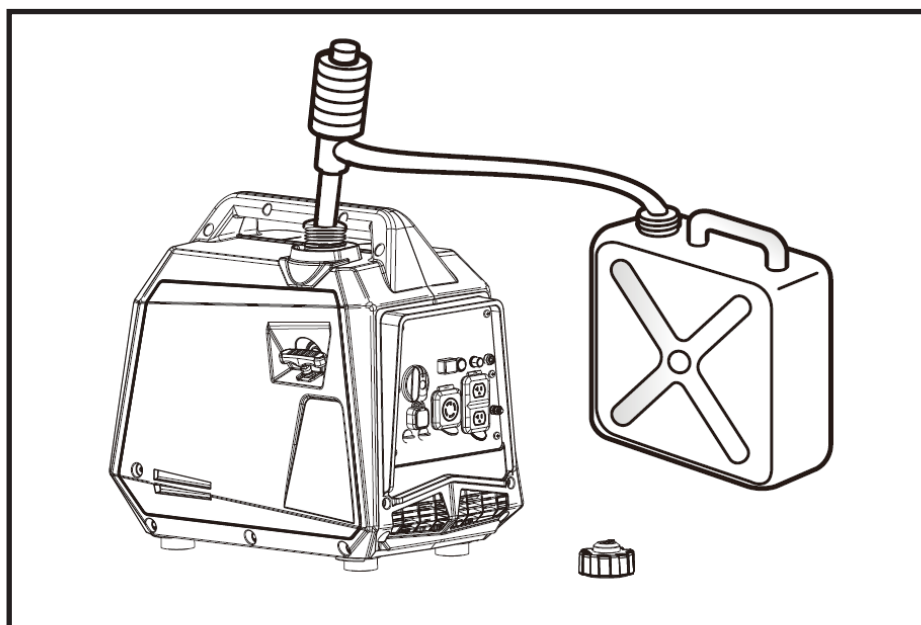


FIGURE T

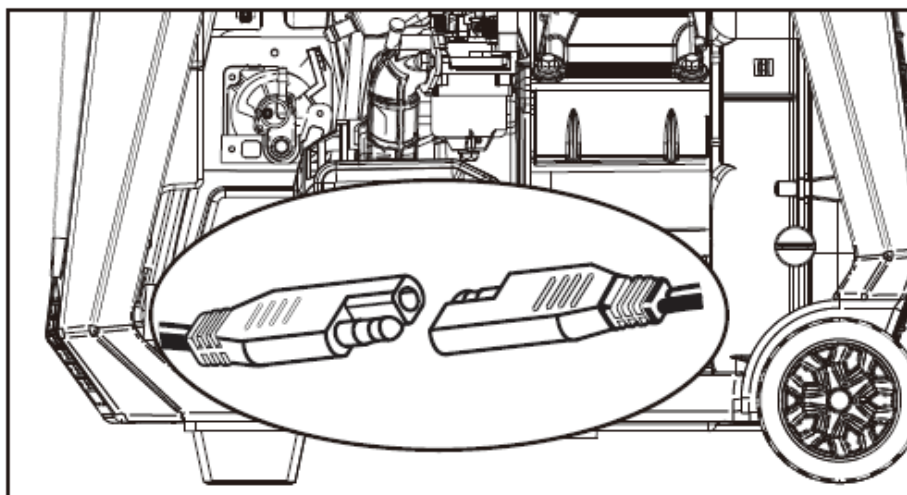


FIGURE U

Long-Term Storage - Engine/Oil Maintenance

With the right side cover removed from the generator:

- Locate the engine oil dipstick. Unscrew the dipstick, and drain the engine oil.
- Add new engine oil as explained in the 'Change Engine Oil' procedure in this manual.
- Insert and secure the dipstick by threading firmly into place, being careful not to over-tighten.
- Remove the spark plug cap and the spark plug.
- Pour a small amount of clean oil into the combustion chamber. Turn the crankshaft several times to distribute the oil, then re-install the spark plug and the spark plug cap. **(See Figure V)**
- Gently pull the starter handle until you feel resistance, which allows the intake valve and the exhaust valve to be properly closed.
- Place the generator set in a clean and dry area, free from excessive moisture, heat, or cold conditions.

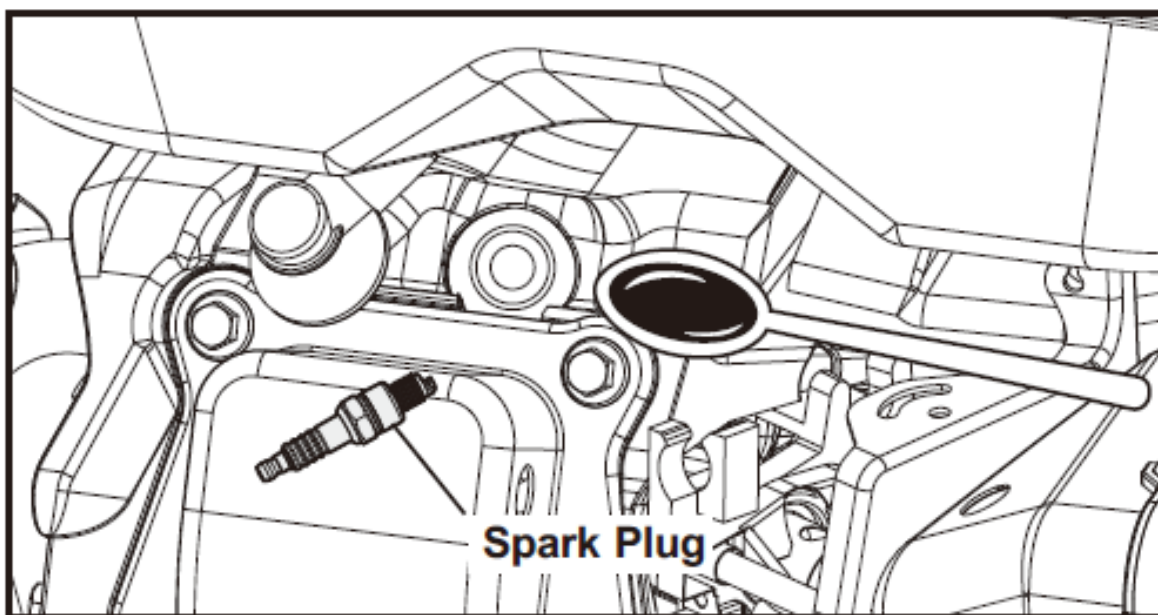


FIGURE V

Remove Spark Plug, add a small amount of clean oil into the combustion chamber; turn the crankcase several times to distribute oil; replace spark plug and spark plug cap.

Troubleshooting

Problem	Possible Causes	Possible Solutions
Engine Fails to Start	1 - Spark plug cap is loose 2 - Incorrect spark plug gap or damaged spark plug 3 - Defective spark plug cap 4 - Old or low quality gasoline, or fuel tank low 5 - Circuit breaker tripped 6 - Dirty or clogged fuel lines, nozzle, or injector 7 - Low engine oil 8 - Generator set on uneven surface or slope, triggering a low-oil shut down by the generator 9 - Spark arrestor clogged with soot and	1 - Check cap and wire connections 2 - Re-gap or replace spark plug 3 - Replace spark plug cap. 4 - Use only fresh 87+ octane stabilizer-treated unleaded gasoline. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.) 5 - Reset circuit breaker; if breaker continues to trip, seek generator service by contacting Customer Service 6 - Fuel additive such as injector cleaner may help; heavier buildup may require professional service 7 - Fill to proper level; check engine oil level prior to each use 8 - Operate engine on a level surface at all times; check engine oil level
Engine Stalls or Stops Unexpectedly, and/or fails to restart	1 - Carbon Monoxide level high. Red light on Carbon Monoxide Sensor illuminates. 2 - CO Sensor Alarm flashes yellow continually shortly after starting 3 - Low oil shutdown 4 - Fuel tank empty or full of impure or low quality gasoline 5 - Faulty fuel cap preventing proper fuel supply (vacuum) 6 - Disconnected or poor connection of spark plug	1 - Leave area Immediately to allow the area to ventilate 2 - Carbon monoxide sensor malfunction Sensor needs service; Do not use the Generator until the sensor is working properly 3 - Make sure to operate generator within rated ambient temperature; maintain minimum 5 ft. clearance from all sides 4 - Fill engine oil to proper level. Check engine oil before EVERY use. Fill fuel tank with fresh 87+ octane stabilizer treated unleaded gasoline Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.)
Engine Stalls or Stops Under Heavy Load	1 - Dirty Air Filter 2 - Engine running cold	1 - Clean or replace foam air cleaner 2 - All proper warm up time for engine prior to operating equipment or adding load
Engine Knocks or Backfires	1 - Old gasoline 2 - Engine overload 3 - Incorrect timing, deposit buildup, worn engine, or mechanical problem 4 - Engine too cold	1 - Use only fresh 87+ octane stabilizer-treated unleaded gasoline. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.) 2 - Do not exceed the rated load rating for the generator 3 - Consult a qualified small engine mechanic to review potential problems, including engine timing 4 - Allow engine to warm sufficiently; consider cold
Attached Device Does not have Power	1 - Device is not plugged into proper outlet or connection is loose 2 - Circuit Breaker is tripped 3 - Connected device is damaged or requires service	1 - Turn off and unplug device; securely plug in and start the device 2 - Turn off and unplug device, reset Circuit using the circuit reset, plug in device and turn it back on 3 - Repair or have device repaired
Attached Device operates abnormally	1 - Rated load capacity exceeded 2 - Problem with device	1 - Reduce the generator load by removing connected devices plugged in to the generator 2 - Immediately unplug device and seek repair from a qualified technician



Follow all safety precautions whenever diagnosing a problem or servicing the generator

BNG3800iAEFIC Inverter Generator

Power (Max)	4600 Watts
Power (Rated)	3800 Watts
Engine Displacement	160 cc
Rated Speed	4850 RPM
Cooling	Air-Cooled
Voltage & Frequency	120V 60Hz single-phase
Outlets & Receptacles	(1) 120V GFCI (20A) NEMA 5-20R (1) 120V (30A) (1) DC 12V
Parallel Connection	Yes
Runtime	9 Hours (25% Load)
Fuel Requirements	87 or greater octane; LESS THAN 10% ethanol
Fuel Capacity	1.5 Gallons (5.8 L)
Engine Oil Weight/Type	SAE 10W/30
Oil Capacity	0.12 G (0.45 L)
Dimensions	[LxWxH] 21.2" x 12.2" x 19.9"
Unit Weight	58.5 lbs. (27 kg)
EPA/CARB Certified	Yes
Safety	CO Shutoff / Electronic Device-safe
Fire Protection	Spark Arrestor Included
Sound Level	62.0 dBA @ 23' (7m)
Starter Type	Electric / Remote / Recoil

[illegible]

Generator Model: BNG3800iAEFIC

Power: 4600W (Start/Max); 3800W (Rated)

[illegible]

LIMITED MANUFACTURER WARRANTY

BN Products-USA™ ("Company") warrants this product to the original purchaser to be free of defects in materials and workmanship under normal and appropriate use and service, **for one year or 750 hours of use from the date of purchase.**

The Company responsibility under this warranty is limited to the replacement or repair, at a designated facility, of only the part or parts evaluated by BN Products-USA™ upon inspection to be defective in materials and quality. Any related part/parts determined by BN Products-USA™ to be defective will be either repaired or replaced free of charge. This warranty does not apply to parts considered "wear components" or tools or parts subject to abuse or unauthorized repairs.

Liability of the Company hereunder shall be limited to repair or replacement of the defective part/parts, including labor. It shall not, under any circumstances, include special, incidental, or consequential damages whether or not known by or disclosed by BN Products-USA™. Such repair or replacement shall constitute a fulfillment of the full warranty.

This warranty does not extend to any costs or loss arising from or due to inconvenience, transportation damage, misuse, abuse, accident, theft, vandalism, or a similar incident. This warranty is exclusive and supersedes all other warranties, including any guarantee of quality, expressed or implied.

BN Products-USA™ will not be responsible for a replacement unit given to a customer without prior authorization.

BN Products-USA™ has Authorized Warranty Repair Centers throughout the United States. Repairs by an unauthorized warranty repair center may void this Warranty policy.

Warranty Repair Procedure

Customers owning items purchased from BN Products-USA™ that need repair during the warranty period must follow the following procedure:

- The Customer or Distributor must fill out a Warranty Repair Request Form complete with the customer's name, copy of an invoice, date of purchase, serial number, and contact information. This form is an on-line form available at the URL below; you may also scan the QR Code on this page:

<https://www.bnproducts.com/warranty-request/>

- Proof of Purchase and Serial Number are required to submit a Warranty claim
- Contact BN Products-USA™ Customer Service at (800) 992-3833 if you need assistance.

Inquiries

BN Products-USA™ Customer Service

Telephone **(800) 992-3833**

Email **mail@bnproducts.com**

Warranty Request

SCAN QR CODE



BNG3800iAEFIC INVERTER GENERATOR

FROM

BN Products-USA™



The **BNG3800iAEFIC** is a 4600 Watt (Max) / 3800 Watt (Rated), gasoline-powered inverter generator that is a great addition to our line of BN Products USA™ generators. The compact design and enclosed case make this unit a convenient and lightweight power plant that quietly produces stable power for your job site or recreational needs.

- GFCI protected, offering stable power; Safe for electronics; Recoil, Push-button, or remote start
- Speed Regulation Switch, Fuel Gauge, Low Oil Indicator, and Automatic Shut-off
- Covered receptacles, Carbon Monoxide (CO) Protection with auto-shutoff
- Parallel connection port; Automatic Generator Start/Stop Interface-ready
- EPA & CARB Certified, Fuel-Injected

Company Information

BN Products-USA™

A DIVISION OF BENNER-NAWMAN, INC.

Address

3450 N Sabin Brown Road
Wickenburg, AZ 85390
United States of America

Telephone

(928) 684-2813
(800) 992-3833

Website

BNProducts.com

Email

mail@bnproducts.com



*Quality
Since
1925*