NOVUS®

OPERATOR'S MANUAL

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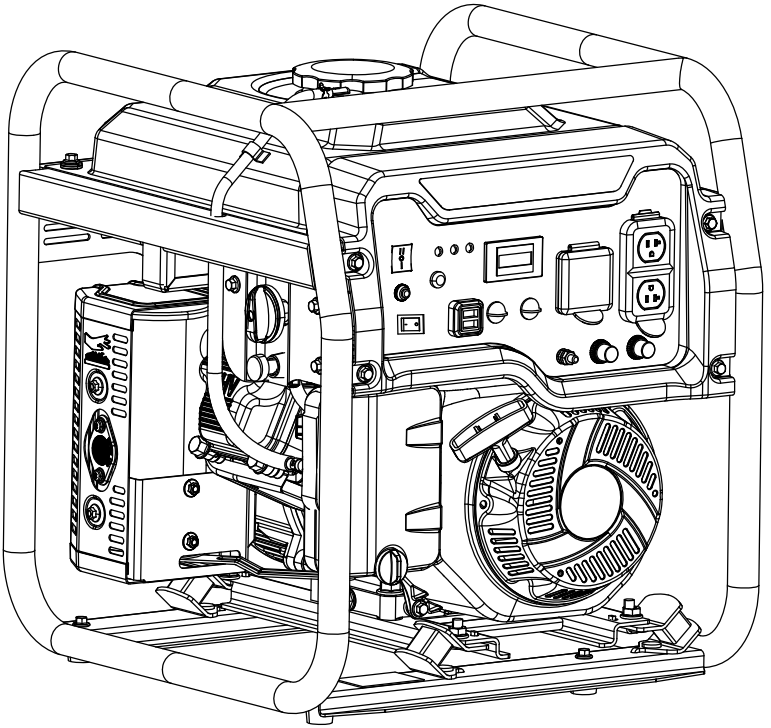
MODEL
NV4000i
4000W Inverter Generator



Have a product question or need technical support?
Contact Us:

- Website: www.novuspowerequipment.com
- Toll free: 1-800-409-7802 Mon-Fri 8-4 CST
- Email: support@novuspowerequipment.com

EN Vol. 2025-01

CONTENTS

SPECIFICATIONS

Generator

Generator Type	Inverter
Running Wattage	3500 Watts
Surge Wattage	4000 Watts
Rated Voltage	AC: 120V
	DC: 5V
Rated Amperage	AC: 29.2A
	DC: 2.1A / 1.0A
Frequency	60Hz
Phase	Single
Grounding Type	Neutral Floating
Operating Altitude	Under 6562 ft.
Rated Run Time (max)	8 hours @ 25% load
Weight	77 lb.
Dimensions	Length: 18.5"
	Width: 17.3"
	Height: 20.1"

Engine

Engine Model	W230Fi
Engine Displacement	223cc
Engine Type	4-Stroke, Air Cooled, Overhead Valve (OHV)
Fuel Type	Fresh, clean regular unleaded gasoline with a minimum octane rating of 87 and ethanol content of no more than 10% by volume.
Fuel Capacity	2.1 gal.
Spark Plug	F7RTC/F7TC - Torch
Spark Plug Gap	0.028-0.031 in (0.7-0.8mm)
Oil Type	SAE 10W-30
Oil Capacity	20 fl oz (0.6 L)

INTRODUCTION

Congratulations on your purchase of a Novus branded product. This model is the result of Novus's vast experience in the production of high-quality, cost-effective equipment.

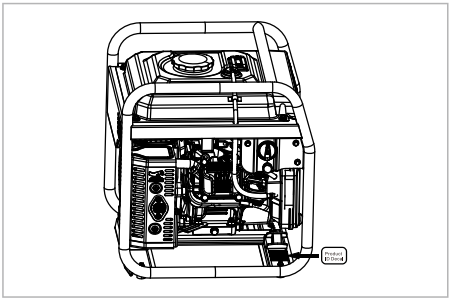
It represents the high degree of reliability and innovation that Novus has dedicated itself to.

This manual will give you an understanding of the assembly, operation and basic maintenance of this unit. If you have any questions concerning the operation or maintenance, please contact us at support@novuspowerequipment.com or 800-409-7802.

We want you to continue to use and be satisfied with your Novus® product for years to come, therefore please fully familiarize yourself, and others who plan on operating the product, with the proper safety and operation procedures before each use

Novus® continually seeks advancements in product design and quality. Therefore, while this manual contains the most current product information available at the time of printing, there may be minor discrepancies between your product and this manual.

When contacting Novus® about parts and/or service, you will need to supply the complete model and serial numbers of your product.



MODEL NUMBER
SERIAL NUMBER
DATE OF PURCHASE

REGISTER YOUR PRODUCT

To ensure you receive important service information in the event of a product update or recall, please register your product. Your information will remain confidential. It will not be released to any other company or organization. Failure to register your product does not diminish your warranty rights.

REGISTER HERE

SAFETY DEFINITIONS

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and their explanations, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.

IMPORTANT SAFETY INSTRUCTIONS

⚠ DANGER

Engine exhaust contains carbon monoxide, a colorless, odorless, poisonous gas. Breathing carbon monoxide can headaches, nausea, dizziness, drowsiness, confusion, fainting or death. If you start to feel dizzy or weak, leave the area immediately, get fresh air and Seek Medical Treatment.

ALWAYS OPERATE EQUIPMENT OUTDOORS ONLY, IN A WELL VENTILATED AREA.

Using an engine indoors **CAN KILL YOU IN** MINUTES. Engine exhaust contains carbon monoxide. This is a poison you cannot see or smell. Never start or operate gasoline powered equipment inside any building, including garages, basements, crawlspaces, sheds or other partially enclosed or confined areas.

DO NOT allow exhaust fumes to enter a confined area through windows, doors, vents or other openings while operating the product.

⚠ WARNING

Before operating your machine, carefully read and understand all safety, controls and operating instructions in this Operator's Manual. Save these instructions. Refer to them frequently and use them to instruct others who may use this product.

DO NOT allow untrained individuals or children to operate this equipment.

Failure to follow these instructions could result in property damage, serious personal injury or death.

⚠ DANGER

Generators produce Strong Voltage.

DO NOT touch bare wires or receptacles.

DO NOT use electrical cords that are worn, damaged or frayed.

DO NOT operate the or expose the generator to wet or rainy conditions. Never handle a generator, electrical cord or electronic devices if standing in water, barefoot or when hands or feet are wet as this significantly increases the risk of electrical shock.

DO NOT connect the generator to a building's electrical system, without the use of a certified / listed transfer switch which isolates the generator from the utility power, being installed by a licensed electrician and approved to comply with all applicable laws and electrical codes

⚠ CAUTION

DO NOT exceed the wattage capacity of the generator. Damage to the generator and/or electrical device can result.

DO NOT overload the generator.

DO NOT tamper with the governor.

DO NOT modify the generator in any way.

⚠ WARNING

DO NOT use the generator for medical or life support uses.

NEVER use this product to power life support devices or life support appliances.

NEVER use this product to provide power for medical devices or medical appliances.

⚠ WARNING

Always Operate equipment with guards in place.

Rotating parts can entangle hands, feet, hair, clothing and/or accessories. Amputation or severe laceration can result.

Keep hands and feet away from rotating parts.

Tie up long hair and remove jewelry.

DO NOT wear loose-fitting clothing, dangling drawstrings or items that could become caught.

⚠ WARNING

The generator should have a minimum of 5 feet clearance on all sides of buildings or other equipment during operation.

Always ground the generator before using to maximize safety.

Always operate the unit on dry, level ground.

DO NOT attempt to start or run a damaged unit

Do not operate this unit when you are tired, ill, or under the influence of alcohol, drugs, or medication.

Always inspect the unit before each use for loose fasteners, fuel leaks, etc. Replace damaged parts.

Maintain the equipment per maintenance instructions located in this Operator's Manual.

When transporting the unit, always check that the fuel valve is in the OFF position.

⚠ WARNING

Before performing any service to the unit: The engine switch must be in the OFF position and the engine completely stopped. Allow the engine to cool down, remove and ground the spark plug wire.

⚠ WARNING

Running engines produce heat. Severe burns can occur on contact. Combustible material can catch fire on contact.

DO NOT touch hot surfaces.

Avoid contact with hot exhaust gases.

Allow equipment to cool before touching.

When operating maintain at least 3 ft. (91.4 cm) of clearance on all sides to ensure adequate cooling.

Maintain at least 5 ft. (1.5 m) of clearance from combustible materials.

⚠ WARNING

Rapid retraction of the recoil cord will pull hand and arm towards the engine faster than you can let go. Broken bones, fractures, bruises or sprains could result. Unintentional startups can result in entanglement, traumatic amputation or laceration.

When starting the engine, pull the recoil cord slowly until resistance is felt and then pull rapidly to avoid kickback.

Fuel Safety

⚠ DANGER

GASOLINE AND GASOLINE VAPORS ARE HIGHLY FLAMMABLE AND EXPLOSIVE.

Fire or explosion can cause property damage, severe burns or death.

Gasoline and gasoline vapors:

Gasoline is highly flammable and explosive.

Gasoline can cause a fire or explosion if ignited.

Gasoline is a liquid fuel, but its vapors can ignite.

Gasoline is a skin irritant and needs to be cleaned up immediately if spilled on skin or clothes.

Gasoline has a distinctive odor; prolonged exposure to gasoline fumes could cause serious long-term consequences. Seek fresh air if exposed more than a few minutes.

Gasoline expands or contracts with ambient temperatures. Never fill the gasoline tank to full capacity, as gasoline needs room to expand when temperatures rise.

When adding or removing gasoline:

DO NOT light or smoke cigarettes while handling gasoline.

Always stop the engine and allow it to cool for a minimum of five minutes before refueling.

Never pump gasoline directly into the products fuel tank at the gas station.

Always fill or drain gasoline outdoors in a well-ventilated area.

Always loosen fuel cap slowly to release any vapor pressure and to keep fuel from escaping around the fuel cap.

Always replace and tighten the fuel cap securely after fueling.

Never remove the fuel cap or add fuel while the engine is running or when the engine is hot.

DO NOT overfill the gasoline tank.

DO NOT tip the product allowing fuel or oil to spill.

In the event of spilled fuel, allow the fuel to evaporate fully, then move the product 10 ft. (3m) away from the refueling site before starting the engine to avoid potential ignition of fuel vapors.

Safety Symbols

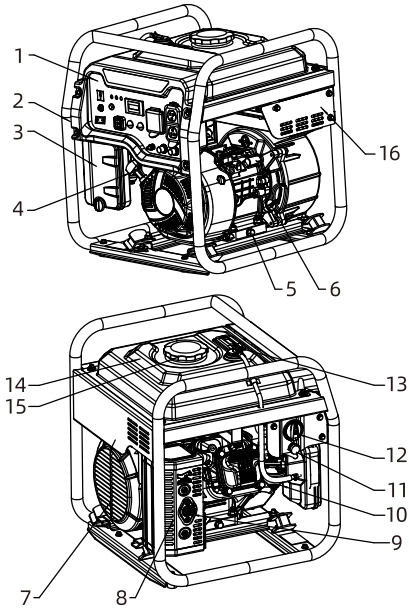
Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to safely operate the product.

SYMBOL	MEANING
	**Read Operator's Manual.** To reduce the risk of injury, user must read and understand operator's manual before using this product.
	**Clearance.** Keep all objects at least 5 feet (1.5m) from the generator. Heat from the muffler and exhaust gas can ignite combustible objects.
	**Ground.** Consult local electricians to determine grounding requirements before operation.
	**Electric Shock.** Failure to use in dry conditions and to observe safe practices can result in electric shock. Improper connections to a building can allow current to back feed into utility lines, creating an electrocution hazard. A transfer switch must be used when connecting to a building.
	**Fire/Explosion.** Fuel and its vapors are extremely flammable and explosive. Fire or explosion can cause severe burns or death. Keep generator at least 5 feet (1.5m) from all objects to prevent combustion.
	**Hot Surface.** To reduce the risk of injury or damage, avoid contact with any hot surface.
	**Open Flame Alert.** Fuel and its vapors are extremely flammable and explosive. Keep fuel away from smoking, open flames, sparks, pilot lights, heat, and other ignition sources.
	**Wet Conditions Alert.** Do not expose to rain or use in damp locations.

KNOW YOUR PRODUCT

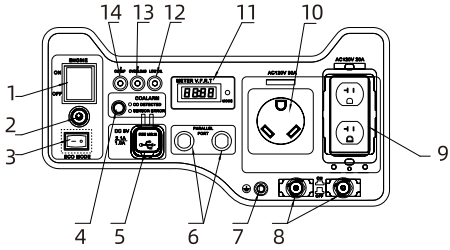
Please read this manual thoroughly before operating your product. Familiarize yourself with the location and function of all controls and features. Failure to follow instructions could result in property damage, serious injury or death. Save this manual for future reference.

Generator



1	Control Panel
2	Frame
3	Air Cleaner
4	Hand Grip
5	Drain Bolt
6	Oil Dipstick
7	Magnetar Cover
8	Muffler
9	Spark Arrestor
10	Carburetor
11	Valve Cable
12	Fuel Valve
13	Fuel Meter
14	Fuel Tank
15	Fuel Tank Cap
16	Defender

Control Panel



1	Engine ON/OFF Switch
2	Reset Button
3	ECO Mode Switch
4	CO Alarm Light
5	USB Ports
6	Parallel Ports
7	Ground Terminal Post
8	Breaker
9	120V 20A Duplex 5-20R
10	120V 30A NEMA TT-30R
11	Intelligauge
12	Oil Alarm Indicator
13	Fault Indicator Light
14	Power Indicator Light

1.Reset Button

If the generator has an active protection fault, (Overload, Short Circuit, Overheat, Low Engine Speed) and the red light is flashing or remains on, unplug all electrical devices, determine and correct the cause of the fault based on the flashing pattern, then press the reset button to restore the generator's output voltage. If the reset button does not reset, unplug all electrical loads and restart the generator. The issue is considered resolved only when the green light is constantly on without the red light flashing or remaining on.

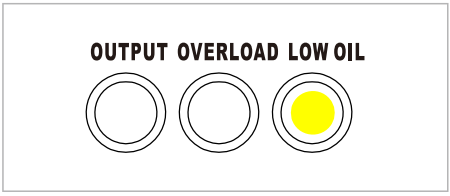
Fault Indicator Lights

2 Oil Alarm Indicator (Yellow)

When the oil in the crankcase drops below the safety line, the oil protection system will automatically shut down the engine, and the oil alarm indicator will be on. The engine can be restarted only after adding oil to the proper oil level.

NOTE

If the engine is stalled or cannot be started, set the Engine Switch to "ON" position, and then pull the recoil handle. If the oil alarm indicator flashes for a few seconds, the oil capacity is insufficient. Please add oil and restart.



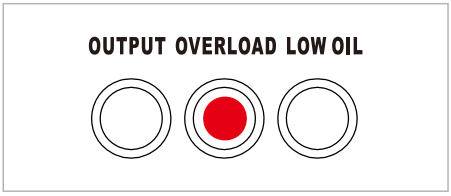
3. Fault Indicator (RED)

When the overload indicator light is on or flashing, it means that the generator has detected the connected electrical equipment's output has been overloaded or other failures such as controller overheating, engine is over-speeding, or the generator is short-circuited.

At this time, the controller warns you or stops the generator from working to protect the generator and connected electrical equipment.

NOTE

When the overload indicator (red) is on and the Power Indicator (Green is off, the engine will not stop.



To reset after a fault indicator is presented:

Press the reset button; the red light will stop flashing if the fault is resolved.

If the overload indicator (RED) stays on and the unit has no output, please take the following countermeasures:

1. Turn off the connected electrical equipment and stop the engine.
2. Reduce the total power of the connected electrical equipment to be within the rated output range.
3. Make sure nothing blocks the air inlet, and the related control parts are working normally.

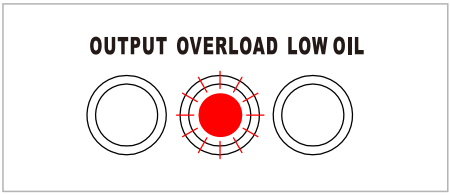
If there is any problem, resolve it immediately.

4. After checking, restart the engine. If the fault indicator either flashes or remains on, indicating that the generator has either an output or no output, please discontinue usage until the issue can be resolved.

If you have any questions concerning the operation or maintenance, please contact our Support Team at **support@novuspowerequipment.com or 800-409-7802**

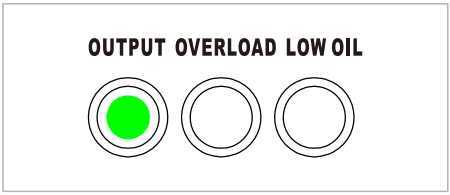
3.1 Diagnostics Fault Indicator (RED)

1. If the green light is on, it indicates normal operation with output voltage. If both the green light is on and the red light is flashing, it indicates slight overload but there is still output voltage.
2. If the green light is off and the red-light flashes once every 2.5 seconds, this indicates overload protection and interrupts the output.
3. If the green light is off and the red light flashes twice at interval of 2.5 seconds, it indicates a short circuit, and the output is interrupted.
4. If the green light is off and the red-light flashes three times at intervals of 2.5 seconds, it indicates an excessively high temperature of the controller, and the output is interrupted.
5. If the green light is off and the red-light flashes four times at intervals of 2.5 seconds, it indicates low engine speed, and the output is interrupted.
6. If the green light is off and the red light remains on, it indicates insufficient power for the load or other failures, interrupting the output.



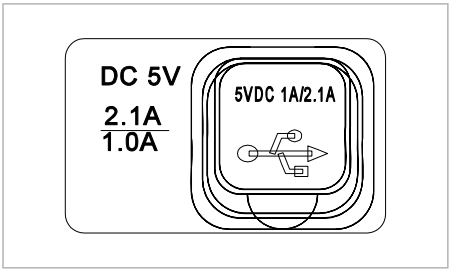
4. Running Indicator (GREEN)

The green light is always on, indicating that the generator is working normally. If the red light is flashing or always on, determine the cause of the fault according to the flashing pattern.



5. DC 5V USB Outlet

5V1A & 5V2.1A outlet ports for charging electronic devices.



6. ECO (Economy) Mode Switch

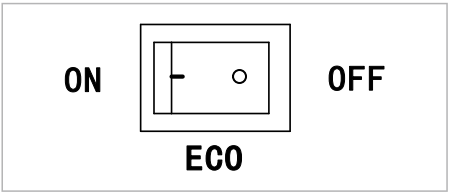
ECO Mode minimizes fuel consumption and noise by allowing the engine to automatically adjust its speed to match the required load.

ECO OFF = "O" side of switch is depressed

ECO ON = "-" side of switch is depressed

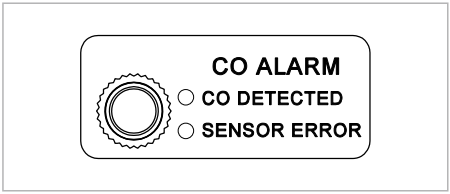
NOTE

ECO Mode should only be used when the power load is Less than 75% of rated power. (2625 Watts). When the output power needed is above 75% of the rated load, the ECO Mode switch should be OFF.



7. CO ALARM Indicator

The CO sensor monitors for the accumulation of poisonous carbon monoxide gas around the generator when the engine is running. If increasing levels of CO gas are detected, the CO Sensor automatically shuts down the engine. The CO Sensor will also detect the accumulation of carbon monoxide from other fuel burning sources used in the area of operation. For example, if the exhaust of fuel burning tools are pointed at a CO Sensor-equipped generator, a shut-off may be initiated due to rising CO levels. This is not an error. Hazardous carbon monoxide has been detected. Move and redirect any additional fuel burning sources to dissipate carbon monoxide away from personnel and occupied buildings.



7.1 RED - Light

Carbon monoxide accumulated around the generator. After shut-off, the RED indicator light in the CO Sensor area of the control panel will flash to provide notification that the generator was shut off due to an accumulating CO hazard. The RED light will flash for at least five minutes after a CO shut-off.

Move the generator to an open, outdoor area far away from occupied spaces withexhaust pointed away. Once relocated to a safe area, the generator can be restarted.

Introduce fresh air and ventilate the area where the generator had shut down.

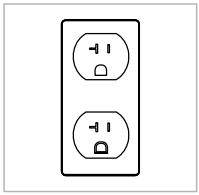
7.2 YELLOW - Light

A CO sensor system fault occurred. When a system fault occurs, the generator is automatically shut down and the YELLOW indicator light in the CO auto-shutoff area of the control panel will flash to provide notification that a fault has occurred.

The YELLOW light will flash for at least five minutes after a fault. When the yellow light turns on, the generator cannot be started and must be repaired by an Authorized agent.

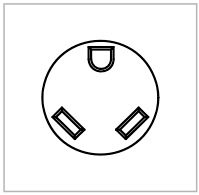
8. 120V 20A Duplex 5-20R Receptacle

May be used to supply electrical power for operation of 120V AC, 20 Amp, single phase, 60 Hz electrical loads.



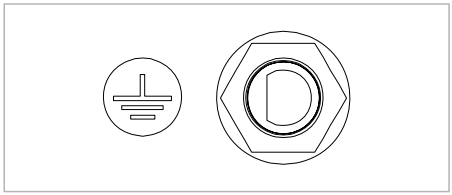
9. 120V 30A NEMA TT-30R Receptacle

May be used to supply electrical power for operation of 120V AC, 30 Amp, Single phase, 60 Hz electrical loads.



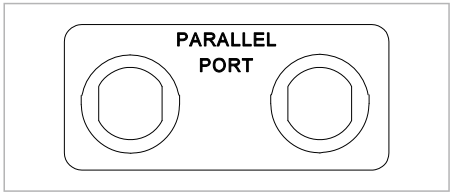
10. Ground Terminal Post

Use to reduce the risk of electric shock and to maximize safety, the generator should be properly grounded. Consult an electrician for local grounding regulations. See Grounding the Generator in the Operations section for more information.



11. Parallel Ports.

Used to share the wattage of two inverter generators together for increased power output.



UNPACKING

Carefully lift the generator out from the carton/box and place the unit on the ground or other solid surface. Do not discard the packaging until you have confirmed a 20 oz (0.6L) Bottle of 10W-30 engine oil, Funnel with tube and the Operator's Manual and Quick Start Guide are present.

Please contact our technical support team at 1-800-409-7802 if any of the above loose parts are missing from the carton.

ASSEMBLY

Your Generator requires limited assembly prior to use. If you have any questions regarding the assembly of this product, call our Technical Support Team at 1-800-409-7802 M-F 8an-4pm CST or by email at support@novuspowerequipment.com Please have your model and serial number available at the time of the call.

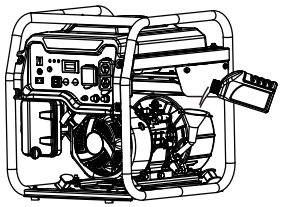
Add Engine Oil

⚠ CAUTION

This unit ships from our factory without oil. DO NOT attempt to crank or start the engine before it has been properly filled with the recommended type and amount of oil. Running an engine with a low oil level can quickly cause engine damage. Damage to the engine resulting from failing to follow these instructions will void your warranty.

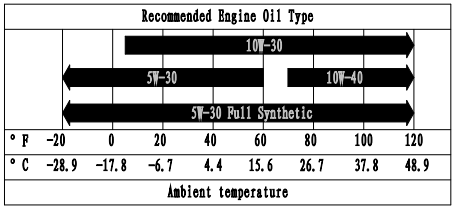
NOTE

SAE 10W-30 with a API service category of SJ or higher is recommended for general use. Other viscosities may be used when the average temperature is within the recommended range.

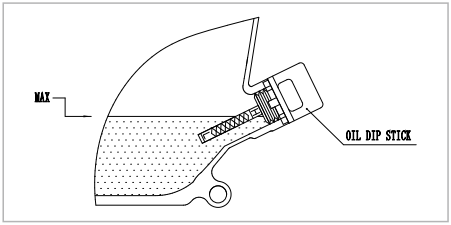


1. Place the unit on a flat, level surface.
2. Remove the oil dipstick by turning counterclockwise.
3. Using a funnel, add up to 20 fl. oz. (0.6 L) of oil to the engine. The oil should be near the top of the filler neck.
4. Check the oil level using the dipstick. DO NOT screw in when checking.
5. When finished screw in the dipstick securely.

Recommended Engine Oil Type



Engine / Dipstick Oil Level



IMPORTANT NOTE

Synthetic Oil may be used after the initial 20hr oil change. The use of synthetic oil does not change the recommended oil change intervals.

Add Fuel

The engine was designed to operate on unleaded gasoline with a octane rating of 87 or higher and a maximum ethanol content of 10% by volume.

The use of fuels with a content of ethanol greater than 10% can cause starting and/or performance problems, damage to metal, rubber and plastic parts of the fuel system. Engine performance problems or damage caused by using fuel with a higher ethanol content will not be considered for warranty.

⚠ DANGER

Gasoline and gasoline vapors are highly flammable and extremely explosive.

Always keep fuel away from sparks, open flames, pilot lights, heat and other sources of ignition.

Always Stop the engine and allow it to cool before refueling.

Only fill or drain fuel outdoors in a well-ventilated area.

DO NOT pump gasoline directly into the engine. Use an approved container to transfer the fuel to the engine.

Never use a gasoline container, gasoline tank, or any other fuel item that is broken, cut, torn or damaged.

DO NOT overfill the gasoline tank Wipe up spills immediately.

⚠ IMPORTANT

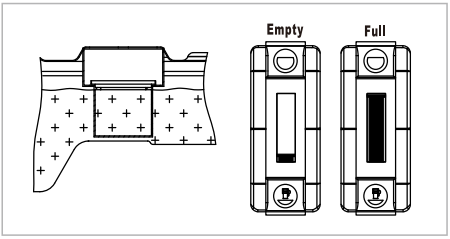
Important: Use fresh, clean unleaded fuel with a minimum octane rating of 87 and a ethanol content of 10% or less by volume.

⚠ WARNING

Pouring gasoline too fast through the fuel screen may result in blow back of gasoline at the operator while filling.

Filling The Fuel Tank

1. Remove the fuel tank cap.
2. Slowly add gasoline to the tank until it reaches the red fuel level indicator of the fuel screen. DO NOT overfill. A minimum of ¼ in. (6.4 mm) of space left in the tank is required for gasoline expansion.
3. Tighten the fuel tank cap.
4. Immediately wipe up any spills.
5. The approximate fuel level is shown on the fuel gauge on top of the fuel tank.



Notice: The engine works well with 10% or less ethanol blended gasoline. When using ethanol-gasoline blends there are some issues worth noting:

Ethanol-gasoline blends can absorb more water than gasoline alone.

These ethanol blends can eventually separate, leaving water or a watery goo in the tank, fuel valve and carburetor. The compromised gasoline can be drawn into the carburetor and cause a hard / no-start condition as well as damage to the carburetor and the entire fuel system. Creating potential hazards.

If a fuel stabilizer is used, confirm that it is formulated to work with ethanol-gasoline blends.

Any damages or hazards caused by using ethanol blended gasoline higher than 10% by volume, improperly stored gasoline, and/or improperly formulated stabilizers, are not covered by manufacturer's warranty.

OPERATION

⚠ WARNING

Before operating your machine, carefully read and understand all safety, controls and operating instructions in this Operator's Manual. Failure to follow these instructions can result in serious personal injury. Take the time to review all safety information and familiarize yourself with the controls and operation of the entire unit before use.

Ground the Generator

⚠ WARNING

To reduce the risk of electric shock and to maximize safety, the generator should be properly grounded.

This generator is Neutral Floating, which means:

The Neutral circuit IS NOT electrically connected to the frame of the generator.

There is a permanent conductor between the inverter and the engine

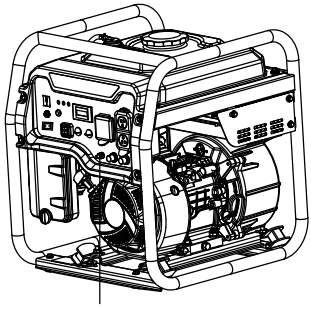
The generator stator winding is isolated from the frame and from the AC receptacle ground pin.

Devices that require a grounded receptacle pin connection will not function.

A ground terminal connection is available on the Control Panel. The generator may be grounded by connecting a 12 AWG minimum, copper wire between the generator ground terminal and a copper, brass or steel rod, driven into the ground. (Wire or grounding rod are not included with the generator).

NOTICE

We strongly recommend for you to consult with a qualified electrician to ensure compliance with local requirements, codes and laws.



Grounding Nut

Generator Location

Choosing a location is critical to your AND others' safety. Please read, understand and consider the following warnings when choosing the location.

⚠ DANGER! CARBON MONOXIDE

Using a generator indoors CAN KILL YOU IN MINUTES. Generator exhaust contains carbon monoxide (CO). This is a poison gas you cannot see or smell.

⚠ WARNING

NEVER operate the generator inside any building, garage, basement, crawlspace, shed, enclosure or compartment.

NEVER operate or start the generator under staircases, stairwells, next to walls or buildings or in any other location that will not allow for adequate cooling of the generator or for the proper exit of the exhaust flow from the muffler system.

DO NOT operate the generator near open flames or flammable gases or materials. Do not smoke near the generator.

DO NOT operate or store the generator in wet weather conditions such as rain or snow.

Using a generator in wet conditions could result in serious injury or death due to electrocution.

Some state's require generators to be registered with the local utility company when used at construction sites and may be subject to additional rules and regulations, consult your local municipal authority.

Generators should always be operated and stored on a flat, level surface at all times.

Generators must have a minimum of 5 feet (1.5 m) of clearance from all combustible material

Generators must also have a minimum of 3 feet (91.4 cm) of air flow clearance on all sides to allow for adequate cooling performance.

Always place the generator in a well-ventilated area. NEVER place the generator near air intake vents, windows, doors or where exhaust fumes could be drawn into an occupied or confined space.

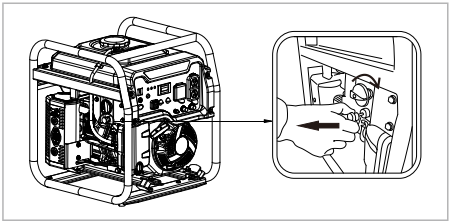
Always carefully consider wind and air currents when positioning generator.

Always allow generators to properly cool before transport or for storage purposes.

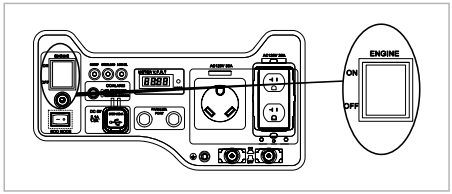
Failure to follow proper safety precautions may result in personal injury, damage to the generator and void the manufacturer's warranty.

Starting the Engine

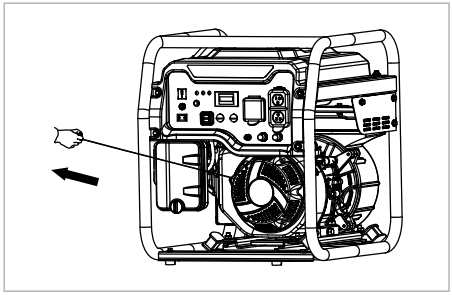
1. Place the generator on a flat, level and dry surface.
2. Ensure there are no loads connected to the generator
3. Rotate the fuel valve 90° clockwise into the open position.
4. Pull out the choke knob to START position to close the choke.



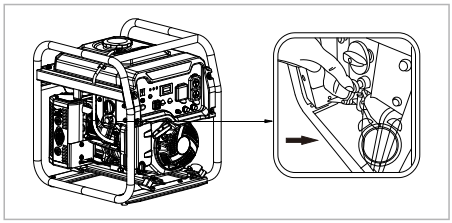
5. Press the engine switch into the "ON" position.



6. Slowly pull on the starter handle until resistance is felt, then pull rapidly. Note return the starter handle slowly back to the engine to prevent damage to the starter.



7. Once the engine starts, slowly push in on the choke knob to the "RUN" position.



NOTICE

Allow the generator to run for 30 seconds with the engine running smoothly, before connecting an electrical load.

If after several attempts the engine still does not start, contact our Technical Support Team at **1-800-409-7802 Mon-Fri 8-4 CST or Email: support@novuspowerequipment.com**

Connecting Electrical Devices / Loads

⚠ WARNING

Always plug your electrical devices directly into the generator. DO NOT plug the generator cord into any electrical outlet or connect to a circuit breaker panel of a home.

If the generator is connected to a buildings electrical system, the connection must isolate the generator power from the utility power. You are responsible for ensuring your generator's electricity does not back feed into the electric utility power lines. These connections must comply with all applicable laws and codes. If you are considering this type of connection, consult with your local utility company or a qualified electrician to ensure a proper, legal and safe installation.

1. Before connecting an electrical device, allow the generator to run for a few minutes to stabilize the engine speed and voltage output.

2. Make sure all electrical devices are turned off. Begin by plugging in and turning on each device starting with the highest wattage to the lowest wattage.

3. Do Not overload the generator or receptacles. If the RED Fault Indicator light begins flashing, (Overload) immediately turn off the device and unplug the device. If the RED Fault Indicator Light stay on solid, the generator will go into protection mode and shut down. If this occurs, unplug all devices. Prior to restarting the generator check the total wattage of the devices and reduce the load if it exceeds the capacity of the generator. Restart the generator, press the reset button and begin plugging in and turning on each device.

NOTICE

If the problem continues to persist, please call Support at 800-409-7802.

Stopping the Engine

1. Turn Off all electrical appliances connected to the generator.
2. Remove all plugs / cords from the generator.
3. Press the Engine Switch into the "OFF" position.
4. Rotate the fuel valve 90° counterclockwise into the "CLOSE" position.

NOTE

Allow the generator to cool down prior to moving it to any enclosed area.

MAINTENANCE

Proper maintenance of your unit is important for maximum performance and a long service life.

To help you properly care for your unit, the following section includes a maintenance schedule and simple maintenance procedures. We suggest working with an Authorized Dealer, professional or qualified mechanic for any service which you are unfamiliar with, not mechanically proficient with or possessing the proper tools.

The maintenance schedule provided applies to normal operating conditions. If your unit is operated under more severe conditions such as high-temperatures, sustained high-load or operation in dusty or unusually wet conditions, please inspect and service your unit more frequently.

⚠ DANGER

DO NOT use gasoline or low flash point solvents to clean the engine or any of its components. The possibility exists of fire or explosion which can damage the equipment and cause severe bodily harm or even DEATH.

⚠ WARNING

Some maintenance operations may require a running engine. ALWAYS make sure the maintenance area is well ventilated. Gasoline engine exhaust contains poisonous carbon monoxide gas that can result in unconsciousness and/or DEATH when inhaled.

⚠ CAUTION

ALWAYS allow the engine to cool before servicing. NEVER attempt to service a hot engine.

⚠ CAUTION

ALWAYS disconnect the spark plug wire from the spark plug and secure it away from the engine before performing maintenance or adjustments.

Failure to follow these instructions can result in serious personal injury or property damage.

NOTE

Maintenance, replacement, or repair of emission control devices and systems may be performed by any non-road engine repair establishment or individual.

Maintenance Schedule

Recommended Maintenance Schedule		Each Use	First 20 Hours or 1 Month	Every 50 Hours or 3 Months	Every 100 Hours or Every Season	Every 300 Hours	Before Storage
Engine Oil	Check	X					
	Replace		X		X (1)		
Air Filter	Check		X	X	X		
	Clean			X(1)	X (1)		
Spark Plug	Check		X		X		
	Replace				X	X	
Fuel	Check Level	X					
	Drain						X
Fuel Lines	Check				X		X
	Replace					X	
Hardware-Bolts/Nuts	Check		X		X		
Carburetor	Drain						X
Air Cooling System	Clean				X		
Spark Arrestor	Check	X					
	Clean				X		
Valve Clearance	Check-Adjust					X (2)	

1. Service more frequently when used in dusty conditions - Replace if worn or damaged.
2. These items should be maintained and repaired by an authorized dealer, unless the owner has appropriate tools and is proficient with mechanical maintenance.

Oil Change

NOTICE

Used oil is a hazardous waste product and must be disposed of properly. Check your local regulations for proper disposal/recycling facilities.

Change the engine oil after the first 20 hours of use. Thereafter, change the oil every 100 hours of use or every season. Change the oil more often if used in dusty conditions.

If possible, drain the oil while the engine is warm. Warm oil drains more quickly and completely. Refer to the adding engine oil section for the recommended oil for your operating environment.

1.Place the generator on a level surface and allow the engine to cool for several minutes.

2.With a damp rag, clean around the oil fill cap / dipstick. Remove the oil fill cap / dipstick.

3.Place an oil pan (or suitable container) under the oil drain.

4.Remove oil drain bolt and allow the oil to drain.

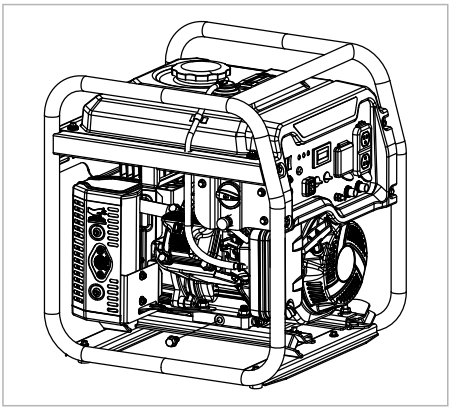
5.Reinstalling and tightening the oil drain bolt.

6.Remove the oil dipstick by turning counterclockwise.

7.Using a funnel, add up to 20 fl. oz. (0.6 L) of oil to the engine. The oil should be near the top of the filler neck.

8.Check the oil level using the dipstick. DO NOT screw in when checking.

9.When finished screw in the dipstick securely.



NOTICE

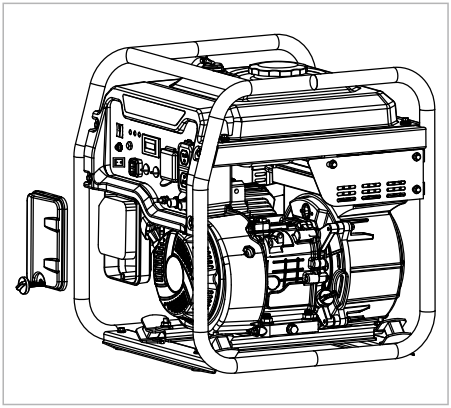
Dispose of the used oil in accordance with local laws and regulations.

Air Filter

Check the air filter after the first 20 hours of use and clean the filter every 50 hours of use. Clean the filter more often when operating in a dusty environment. Replacement of the air filter is highly recommended at the first sign of excessive dirt build-up, element breakdown, wear or damage.

Inspection & Cleaning

1. Remove the Air Filter cover.
2. Remove the foam element air filter.
3. Clean the air filter element by washing with warm soapy water and rinsing out.
4. Squeeze out excess detergent/water (Do Not Twist) and allow it to thoroughly dry.
5. Once dry place a small amount of clean oil onto the filter element and squeeze to distribute. (The foam filter should be wet but not dripping oil). Squeeze out any excess oil.
6. Place the filter element back into the air filter assembly.
7. Reinstall the air filter cover ensuring the tabs are locked into place.



Spark Plug

The spark plug is an important part of the engine and its operation and should be checked regularly.

Check the spark plug after the first 20 hours and every 100 hours of operation thereafter. Replace the spark plug after 300 hours of operation.

Recommended Spark Plug: Torch F7RTC/F7TC or Equivalent

Spark Plug Gap: .028 - .031 in. (0.7-0.8mm)

⚠ CAUTION

Always allow the engine to cool before performing maintenance, adjustments or service.

NOTICE

A loose spark plug can overheat and damage the engine.

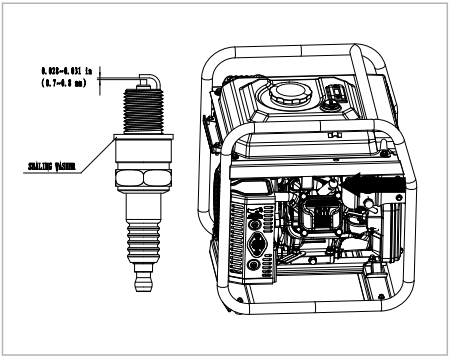
Spark Plug Cleaning / Adjusting / Replacement

1. Remove the spark plug cap and wire from the plug.
2. Using a spark plug wrench, remove the spark plug.
3. Visually check the spark plug. Clean with a steel brush. If the insulator is damaged, replace the spark plug.
4. Measure the spark plug gap with a suitable gauge. Adjust the spark plug gap as necessary by carefully bending the ground electrode.
5. To prevent cross threading, thread the spark plug in by hand until it seats, then tighten with a spark plug wrench as follows.

New Spark Plug – Tighten ½ turn after the plug seats to the cylinder head.

Used Spark Plug – Tighten ⅛ to ¼ turn after the plug seats to the cylinder head.

6. Reconnect the spark plug cap and wire.



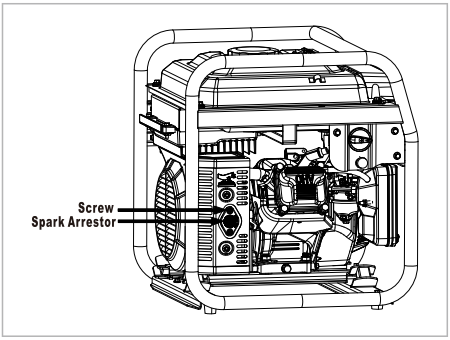
Spark Arrestor Screen

The spark arrestor should be inspected before each use and cleaned every 100 hours of operation. Failure to clean the spark arrestor will result in poor engine performance.

⚠ CAUTION

The muffler and spark arrestor become very hot during operation. Always allow the engine to cool before performing maintenance, adjustments or service.

1. Remove the screws that secure the spark arrestor to the muffler.
2. With a wire brush, carefully clean the spark arrestor screen to remove the carbon deposits.
3. Reinstall the spark arrestor screen and secure it in place with the screws.



TRANSPORTATION AND STORAGE

Transporting

⚠ CAUTION

If the unit has been running, allow it to cool before transporting. A hot muffler can cause burns and/or ignite nearby materials. To prevent fuel spills, always transport the generator in an upright position.

1. Turn the Fuel Valve to CLOSE position.
2. Turn the Engine Switch to OFF position.
3. Strap or tie the unit down to prevent any sliding or tipping.

Off-Season Storage

Storage preparation is important for keeping your unit running trouble free, easier to start after storage and the overall service life of your unit.

When the unit will not be used for more than 30 days, prepare it for storage as follows:

⚠ DANGER

GASOLINE AND GASOLINE VAPORS ARE HIGHLY FLAMMABLE AND EXPLOSIVE.

Fire or explosion can cause property damage, severe burns or death.

Only fill or drain fuel outdoors in a well-ventilated area.

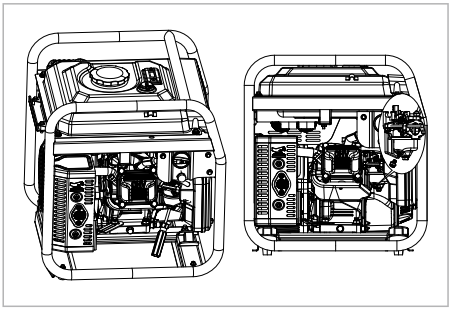
⚠ CAUTION

Always shut down the engine and allow the unit to completely cool down before performing maintenance, adjustments or service.

Engine

Drain the fuel tank and carburetor

1. Place the generator on blocks to allow an appropriate container to slide underneath and past the carburetor.
2. Using a Phillips screwdriver, loosen the carburetor bowl drain screw (counterclockwise) approximately 3 full turns. Gasoline will begin to flow out of the carburetor.
3. Rotate the fuel valve into the "OPEN" position, allowing the fuel from the fuel tank to completely drain out.
4. Once draining is complete, rotate the fuel valve to the "CLOSE" position and tighten the carburetor bowl drain screw by rotating it counterclockwise.
5. Properly handle and dispose of drained fuel.



Oil

1. Change the engine oil. (See "Oil Change" in the Maintenance section)
2. Remove the Spark Plug.
3. Pour approximately one teaspoon of clean engine oil (5 cc) into the spark plug hole.
4. Slowly pull the starter rope several times to lubricate the cylinder walls of the engine.
5. Replace the spark plug and tighten 1/8 to ¼ turn after the spark plug seats to the cylinder head.

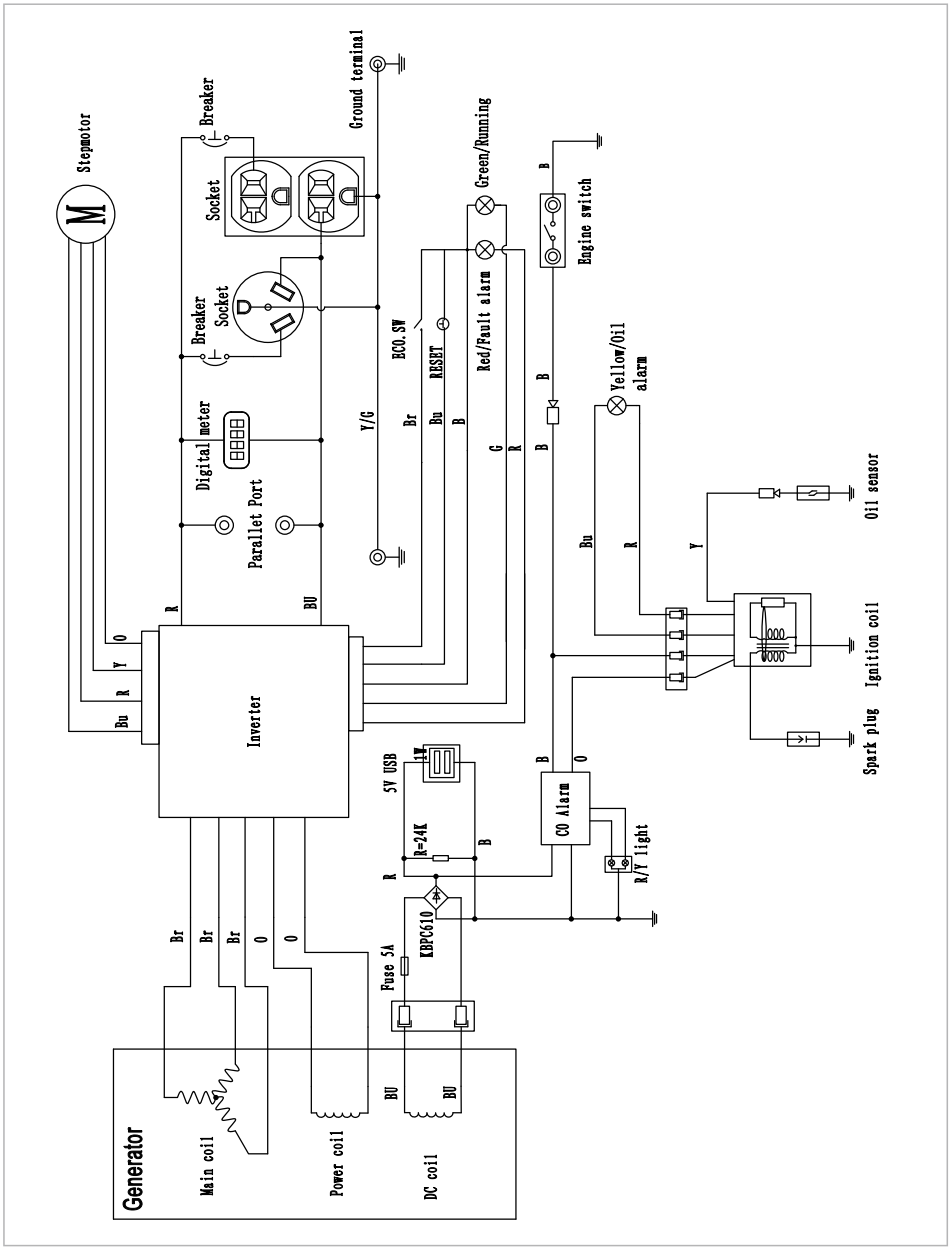
Storage Location

Store your unit in a dry, well-ventilated place out of direct sunlight. Place a fabric cover over the unit. Do not use a plastic or vinyl cover as condensation could be trapped underneath which could increase the chances of moisture collection and rusting.

TROUBLESHOOTING

Problem	Cause	Solution
Engine does not start	Dirty or Faulty Spark Plug.	Clean and adjust or replace spark plug.
	Spark plug wire loose.	Reconnect wire.
	Fuel tank is empty.	Refuel.
	Choke control in incorrect position.	Move switch to CHOKE position.
	Old fuel or water in fuel.	Drain the fuel tank and carburetor. Refuel with fresh gasoline.
	Dirty air filter.	Clean or replace filter.
	Switch is in "OFF" position.	Turn switch to "ON" position.
	Low Oil Level.	Fill to proper level, place on flat, level surface.
	No spark.	Check engine switch is in ON position, Check oil level, Check / replace spark plug.
Engine runs poorly	Defective or incorrectly gapped spark plug.	Inspect spark plug gap or replace spark plug.
	Plugged spark arrestor screen.	Clean spark arrestor.
	Dirty air filter.	Clean or replace the air filter.
	Stale gasoline.	Drain the fuel tank and carburetor. Refuel with fresh gasoline.
The engine starts, then shuts down after a short period	Low fuel level.	Refuel.
	Low oil level.	Add engine oil.
	Float in carburetor is damaged or sticking.	Have the carburetor cleaned or rebuilt.
	Fuel is contaminated or deteriorated.	Drain & replace the fuel in the fuel tank and carburetor bowl.
	There is water in the fuel.	Drain & replace the fuel in the fuel tank and carburetor bowl.
	Carbon deposit and buildup on spark plug electrode.	Clean and re-gap or replace spark plug.
Engine runs but no AC output	AC Overload.	Unplug all electrical devices, press the reset button until the green power light illuminates. Reduce the load plugged back in.
	Bad extension / connecting cords.	Inspect the cords / wires. Replace damaged cords immediately.
	Issue with connected electrical device.	Attempt to connect a different electrical device.
Generator runs but does not support power to all electrical devices connected	Generator is overloaded.	Unplug all electrical devices, press the reset button until the green power light illuminates. Reduce the load plugged back in.
	Short circuit in one of the devices.	Individually disconnect devices to identify short-circuit. Discontinue its use if found.
	Spark arrestor screen is plugged.	Clean spark arrestor.
	Air filter is dirty.	Clean or replace air filter.

WIRING DIAGRAM



BASIC SERVICE PARTS LIST

For additional service or parts assistance, Contact Us at 1-800-409-7802 or visit the support page of our website at www.novuspowerequipment.com.

Basic Common Service Parts

Service Part	Part Number
Spark Plug	2204700003-0001
Air Filter	1901100167-0001
Oil Dipstick / Cap	1101500002-0003
Fuel Cap	1800900039-0001
Fuel Filter	1804300014-0001
Fuel Line - Valve to Carb	1816200038-0001
Fuel Line - Tank to Valve	1816300143-0001
Rubber Foot Pad	2434100004-0001
Spark Arrestor Screen	1908300005-0001

WARRANTY STATEMENT

2-Year Limited Warranty
Terms and Conditions

Novus products are warranted for two (2) years against defects in materials or workmanship when put to ordinary and normal consumer use; ninety (90) days for any other use.

For the purposes of all the above warranties, "ordinary and normal consumer use" refers to non-commercial residential use and does not include misuse, accidents or damage due to inadequate maintenance. Novus Performance Products LLC certifies that Novus Products are fit for ordinary purposes for which a product of this type is used. Novus Performance Products LLC, however, limits the implied warranties of merchantability and fitness in duration to a period of two (2) years in consumer use, ninety (90) days for any other use.

The 2-Year Limited Warranty on Novus Products starts on the purchase date. The 2-Year Limited Warranty is applicable only to the original owner.

The warranty holder is responsible for the performance of the required maintenance as defined by the manufacturer's owner's manuals. The warranty holder is responsible for replacement of normally wearing parts such as the Belt, Shear Pins, Spark Plug and Air Filter. Accessories to the machine are not covered by this warranty.

During the warranty period, the warranty holder is responsible for the machine transportation charges, if required.

During the warranty period, warranty parts will be shipped by standard method at no charge to the warranty holder. Expedited shipping of warranty parts is the responsibility of the warranty holder.

SOME STATES DO NOT ALLOW LIMITATIONS ON THE LENGTH OF IMPLIED WARRANTIES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

Novus Performance Products LLC shall not be liable under any circumstances for any incidental or consequential damages or expenses of any kind, including, but not limited to, cost of equipment rentals, loss of profit, or cost of hiring services to perform tasks normally performed by Novus Products.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

Technical Support:
Toll free: 1-800-409-7802 Mon-Fri 8-4 CST
Email: support@novuspowerequipment.com

U.S. FEDERAL EMISSION CONTROL WARRANTY STATEMENT

YOUR WARRANTY RIGHTS AND OBLIGATIONS

The United States Environmental Protection Agency and Novus Performance Products LLC (Novus) are pleased to explain the emissions control system warranty on your 2024-2025 small off-road engine/equipment (SORE). In the United States, new equipment that use small off-road engines must be designed, built, and equipped to meet the State's stringent anti-smog standards. Novus must warrant the emissions control system on your small off-road engine/equipment for the periods of time listed below there has been no abuse, neglect or improper maintenance of your small off-road engine or equipment leading to the failure of the emissions control system.

Your emissions control system may include parts such as the carburetor or fuel-injection system, the ignition system, catalytic converter, fuel tanks, fuel lines (for liquid fuel and fuel vapors), fuel caps, valves, canisters, filters, clamps and other associated components. Also included may be hoses, belts, connectors, and other emission-related assemblies.

Where a warrantable condition exists, Novus will repair your small off-road engine/equipment at no cost to you including diagnosis, parts and labor.

MANUFACTURER'S WARRANTY COVERAGE:

This emissions control system on your small off-road engine/equipment is warranted for two years. If any emission-related part on your small off-road engine/equipment is defective, the part will be repaired or replaced by Novus.

OWNER'S WARRANTY RESPONSIBILITIES:

As the small off-road engine/equipment owner, you are responsible for the performance of the required maintenance listed in your owner's manual. Novus recommends that you retain all receipts covering maintenance on your small off-road engine/equipment, but Novus cannot deny warranty coverage solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the small off-road engine/equipment owner, you should however be aware that Novus may deny you warranty coverage if your small off-road engine/equipment or a part has failed due to abuse, neglect, or improper maintenance or unapproved modifications.

You are responsible for presenting your small off-road engine/equipment to a Novus distribution center or service center as soon as the problem exists. The warranty repairs shall be completed in a reasonable amount of time, not to exceed 30 days. If you have any questions regarding your warranty rights and responsibilities, you should contact:

Novus Performance Products LLC
customer service representative
1-800-409-7802
Email: Support@novuspowerequipment.com

DEFECTS WARRANTY REQUIREMENTS

(a) Applicability. This section applies to emissions control systems on small off-road engines or equipment that use small off- road engines subject to the emission standards in this Article. The warranty period begins on the date the engine or equipment is delivered to an ultimate purchaser and extends for a period of two years.

(b) General Emissions Warranty Coverage. The engine or equipment must be warranted to the ultimate purchaser and any subsequent owner that the emissions control system when installed was:

(1) Designed, built, and equipped so as to conform with all applicable regulations; and

(2) Free from defects in materials and workmanship that causes the failure of a warranted part for a period of two years.

(c) The warranty on emissions-related parts will be interpreted as follows:

(1) Any warranted part that is not scheduled for replacement as required maintenance in the written instructions required by subsection (e) must be warranted for the warranty period defined in subsection (b)(2). If any such part fail during the period of warranty coverage, it must be repaired or replaced by Novus or it's contracted warranty provider according to subsection (4) below. Any such part repaired or replaced under the warranty must be warranted for a time not less than the remaining warranty period.

(2) Any warranted part that is scheduled only for regular inspection in the written instructions required by subsection (e) must be warranted for the warranty period defined in subsection (b)(2). A statement in such written instructions to the effect of "repair or replace as necessary" shall advise owners of the warranty coverage for emissions related parts. Replacement within the warranty period is covered by the warranty and will not reduce the period of warranty coverage. Any such part repaired or replaced under warranty must be warranted for a time not less than the remaining warranty period.

(3) Any warranted part that is scheduled for replacement as required maintenance in the written instructions required by subsection (e) must be warranted for the period of time prior to the first scheduled replacement point for that part. If the part fails prior to the first scheduled replacement, the part must be repaired or replaced by Novus according to Subsection (4) below. Any such part repaired or replaced under warranty must be warranted for a time not less than the remainder of the period prior to the first scheduled replacement point for the part.

(4) Repair or replacement of any warranted part under the warranty provisions of this article must be performed at no charge to the owner at a warranty station.

(5) Notwithstanding the provisions of subsection (4) above, warranty services or repairs must be provided at distribution centers that are franchised to service the subject small off-road engine/equipment.

(6) The small off-road engine/equipment owner must not be charged for diagnostic labor that leads to the determination that a warranted part is in fact defective, provided that such diagnostic work is performed at a warranty station.

(7) Throughout the emissions control system's warranty period set out in subsection (b)(2), Novus or it's contracted warranty provider must maintain a supply of warranted parts sufficient to meet the expected demand for such parts and must obtain additional parts if that supply is exhausted.

(8) Manufacturer-approved replacement parts that do not increase the exhaust or emissions of the engine or emissions control system must be used in the performance of any warranty maintenance or repairs and must be provided without charge to the owner. Such use will not reduce the warranty obligations of Novus or it's contracted warranty provider.

(9) The use of add-on or modified parts may be grounds for disallowing a warranty claim made in accordance with this Article. Novus or it's contracted warranty provider will not be liable under this Article to warrant failures of warranted parts caused by the use of an add-on or modified part.

(10) Novus shall provide any documents that describe that it's warranty procedures or policies within five working days of request by the Executive Officer.

(d) A list of all emissions warranty parts must be included with each new engine or equipment subject to this Article. The emissions warranty parts list shall include all parts whose failure would increase exhaust and evaporative emissions, and contains the following parts:

EMISSIONS PARTS LIST

Exhaust Emission

(1) Fuel Metering System.

(A) Carburetor and internal parts (and/or pressure regulator or fuel injection system).

(B) Air/fuel ratio feedback and control system.

(C) Cold start enrichment system.

(2) Air Induction System.

(A) Controlled hot air intake system.

(B) Intake manifold.

(C) Air filter.

(3) Ignition System.

(A) Spark Plugs.

(B) Magneto or electronic ignition system.

(C) Spark advance/retard system.

(4) Exhaust Gas Recirculation (EGR) System.

(A) EGR valve body, and carburetor spacer if applicable.

(B) EGR rate feedback and control system.

(5) Air injection System.

(A) Air pump or pulse valve.

(B) Valves affecting distribution of flow.

(C) Distribution manifold.

(6) Catalyst or Thermal Reactor System.

(A) Catalytic converter.

(B) Thermal reactor.

(C) Exhaust manifold.

(7) Particulate Controls.

(A) Traps, filters, precipitators, and any other device used to capture particulate emissions.

(8) Miscellaneous items Used in Above Systems.

(A) Vacuum, temperature, and time sensitive valves and switches.

(B) Electronic controls.

(C) Hoses, belts, connectors, and assemblies.

Evaporative Emission.

(1) Fuel Tank.

(2) Fuel Cap.

(3) Fuel lines(for liquid fuel and fuel vapors)

(4) Fuel Line Fittings.

(5) Clamps.

(6) Pressure Relief Valves.

(7) Control Valves.

(8) Control Solenoids.

(9) Electronic Controls.

(10) Vacuum Control Diaphragms.

(11) Control Cables.

(12) Control Linkages.

(13) Purge Valves.

(14) Gaskets.

(15) Liquid/Vapor Separator.

(16) Carbon Canister.

(17) Canister Mounting Brackets.

(18) Carburetor Purge Port Connector.

Note: As they relate to the emissions control system.

(e)Written instructions for the maintenance and use of the emissions control system by the owner shall be furnished with each new engine or equipment subject to this Article. The instructions must be consistent with this Article and applicable regulations contained herein.

(f)The documents required by subsections (d) and (e) must be submitted with the application for emissions control system certification for approval by the Executive Officer. Approval by the Executive Officer of the documents required by subsections (d) and (e) is a condition of certification. The Executive Officer will approve or disapprove the documents required by subsections (d) and (e) within 90 days of the date such documents are received.

(g)The application for emissions control system certification must also include a statement regarding the maintenance of the emissions control system. The statement must include, but not be limited to, information on emissions control system maintenance, and a maintenance schedule.

(h)Any other warranty statements applicable to engines or equipment units must not imply a limitation on the emissions warranty period or its applicability to subsequent owners after the ultimate purchaser. If the warranty period for any warranty other than the emissions warranty is less than two years, the statement of such warranty must specifically state that it does not limit the emissions warranty period of two years from purchase. If any warranty other than the emissions warranty does not extend to subsequent owners after the ultimate purchaser, the statement of such warranty must specifically state that it does not affect the applicability of the emissions warranty to subsequent owners after the ultimate purchaser.