



POLARIS®

Polaris Power™ P1000i P2000i



WARNING

Failure to properly follow the instructions and precautions in this manual can result in property damage, serious injury or DEATH!

For your nearest Polaris dealer, call 1-800-POLARIS or visit www.polaris.com
Polaris Sales Inc., 2100 Hwy 55, Medina, MN 55340
Phone 1-888-704-5290

Part No. 9924212 Rev 01



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INTRODUCTION

Welcome

Thank you for purchasing a Polaris Power™ Generator, and welcome to our world-wide family of Polaris owners. Be sure to visit us on-line at www.polaris.com for the latest news, new product introductions, upcoming events, career opportunities, and more.

Here at Polaris we proudly produce an exciting line of utility and recreational products.

- Snowmobiles
- All-terrain vehicles (ATVs)
- *RANGER*® utility vehicles
- *RANGER*® *RZR* utility vehicles
- Low emission vehicles (LEVs)
- Victory® Motorcycles
- Polaris Power™ Generator

We believe Polaris sets a standard of excellence for all utility vehicles, recreational vehicles, and power equipment manufactured in the world today. Many years of experience have gone into the engineering, design, and development of your Polaris machine.

For safe and enjoyable operation of your generator, be sure to follow the instructions and recommendations in this owner's manual. Your manual contains instructions for minor maintenance, but information about major repairs is outlined in the Polaris Service Manual and should be performed only by a factory certified Master Service Dealer® (MSD) Technician.

Your Polaris dealer knows your generator best and is interested in your total satisfaction. Be sure to return to your dealership for all of your service needs during and after the warranty period.

We also take great pride in our complete line of apparel, parts, and accessories, available through our on-line store at www.purepolaris.com. Have your accessories and clothing delivered right to your door!

WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Intended Use

The Polaris Power™ Generator is intended to supply power for appliances. Such items include, but are not limited to:

- Furnace fans
- Sump pumps
- Dishwashers
- Hotplates / Stoves
- Lamps
- Fans
- Washing machines
- Garage door openers
- Water heaters
- Televisions
- Refrigerators
- Computers

Appliances that use more than the recommended amount (see Specifications Page) of combined power consumption should not be connected to this generator.

INTRODUCTION

Safety Precautions

⚠ WARNING

Failure to follow recommended precautions and procedures could result in severe injury or death. Always heed all safety precautions and follow all operation, inspection, and maintenance procedures outlined in this manual.

Please read the *Polaris P1000i/P2000i Generator™ Owner's Manual*. This manual contains information essential to safe operation and proper maintenance of the generator. Anyone who operates the generator must read the owner's manual before operating the generator.

Read and understand the information found in the safety section, and have manual on hand when operating the generator. Following the safety precautions and procedures will ensure a safe operating experience.

Understand and follow all inspection and maintenance procedures outlined in this manual. Following these procedures will ensure that the generator remains in safe operating conditions at all times.

Warnings, Cautions, and Notices

Signal Words and Safety Terms

The following signal words and symbols appear throughout this manual. Your safety, and the safety of others, is involved when these words and symbols are used. Become familiar with their meaning before reading the manual.

⚠ WARNING

A safety alert warning indicates a hazardous situation which, if not avoided, may result in death or serious injury.

⚠ CAUTION

A safety alert caution indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE

A notice is used to address practices not related to physical injury.

IMPORTANT: Key reminders during assembly, disassembly, and inspection of components.

NOTE: Key information to clarify instructions.

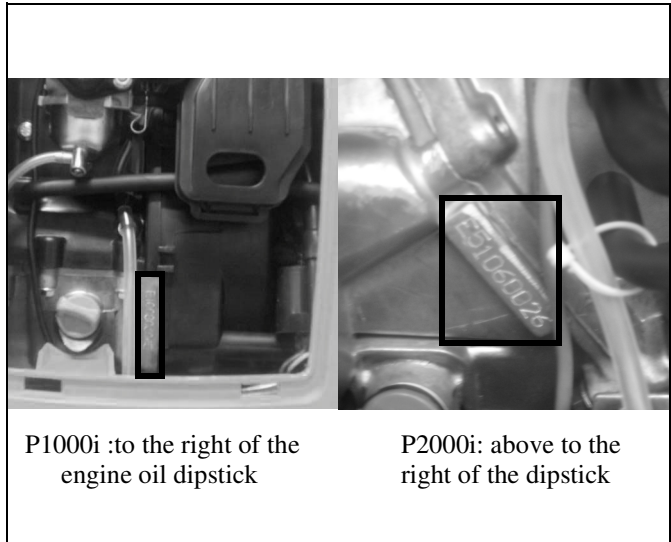
⚠ WARNING

ALCOHOL OR DRUG USE

Operating the generator after consuming alcohol or drugs could adversely affect operator judgment. Never consume alcohol or drugs before or while operating the generator.

Identification Numbers and Locations

Record your generator's identification numbers in the space provided. The model and serial number decal is located on the bottom of the side panel.



MODEL NUMBER: _____

SERIAL NUMBER: _____

PURCHASE DATE: _____

PURCHASE LOCATION: _____

SAFETY

Safety Warnings and Precautions

IMPORTANT SAFETY INSTRUCTIONS. SAVE THESE INSTRUCTIONS.

WARNING

Failure to follow recommended precautions and procedures could result in severe injury or death. Always read all safety precautions and follow all operation, inspection, and maintenance procedures outlined in this manual.

General

- Read and understand all of the safety and operating information in this manual and on the product before using the machine. Use the generator only as described in this manual.
- Understand and follow all inspection and maintenance procedures outlined in this manual. Following these procedures will ensure that the generator remains in safe operating condition.
- Turn off the gasoline valve and close the fuel cap vent when the generator is not in use.

WARNING

It is the responsibility of the owner to ensure that all users of this generator are fully informed of the safety and operating information prior to use.

Before and During Operation

- Perform all Pre-Inspection activities as shown on page 15 of this manual. Inspect and tighten all parts regularly. Ensure the generator does not have any damaged, loose, or missing parts before use. All defects should be corrected before use. Do not operate the generator if it has been dropped or damaged until all defective parts have been repaired.
- Do not place any flammable materials near the generator.
- Never start the generator or let it run in an enclosed area. Exhaust vapors are poisonous and can cause loss of consciousness or death in a short time. Keep the generator away from buildings and other equipment during operation.
- Do not operate the generator in exposed locations where it will be subjected to wet conditions.
- Do not touch the generator with wet hands, as this may cause severe electric shocks.
- Do not pour water directly over the generator or wash it.
- Do not use or store the generator in the rain or snow.
- Do not cover the generator when in use.
- Always operate the generator on a firm, flat, and level surface, as the generator will vibrate on an irregular surface. If the generator is tilted, fuel may spill or the generator may tip over, causing a hazardous situation.
- Do not connect the generator to another power supply source.
- The engine becomes extremely hot during and immediately after it has been in use. Be careful not to touch any parts of the hot engine, especially the muffler or muffler cover, or serious burns may result.
- Do not connect external equipment to the generator before starting the engine.
- Do not use for life support, or life sustaining systems.

SAFETY

Operator Safety

WARNING

Operating the generator with worn, damaged, or malfunctioning components could result in serious injury or death. Never start the engine without checking all of the generator components to be sure of proper operation.

- Read and understand all of the safety and operating information in this manual and on all warning labels before using the generator. Use the generator only as described in this manual.
- Know how to stop the generator quickly in case of emergency, see page 19 for information on stopping the unit quickly.
- Keep children, pets, and bystanders at a safe distance from the generator.
- Review and understand the use of all generator controls.
- Be sure that anyone who operates the generator receives proper instruction. Do not let children operate the generator.
- Use the generator only for intended purposes.
- Turn off the generator immediately if the unit begins to operate abnormally. After the generator has cooled, disconnect the generator and take to your authorized Polaris dealer.
- While operating the generator, if you experience headache, fatigue, nausea / vomiting, confusion, or seizures, immediately get to fresh air. Do not delay and do not attempt to shut down the unit.

Fuel Safety

WARNING

Gasoline is highly flammable and explosive under certain conditions. Always use caution when handling gasoline.

- Gasoline is extremely flammable, and gasoline vapor can explode. Before refueling allow the engine to cool completely if the generator has been in operation.
- Always store gasoline in an approved container.
- Always refuel outdoors or in a well-ventilated area away from any combustible materials.
- Do not smoke or allow open flames or sparks in or near the area where refueling is performed or where gasoline is stored.
- Never permit children to handle gasoline.
- Never refuel around bystanders, pets, and flammable objects.
- Loosen the fuel cap slowly to relieve pressure in the tank.
- Take care not to overfull or spill any fuel on the generator or muffler when refueling.
- If gasoline spills on skin or clothing, immediately wash it off with soap and water and change clothing.
- Do not use the generator if you observe leaking gasoline. Have the generator serviced immediately and before using it again.
- When operating or transporting the generator, be sure it is kept upright. If it tilts, fuel may leak. Be sure the fuel tank cap is tightened when transporting the generator.
- Do not refuel using gas station pumps.
- Remove fuel from the generator before transporting in a vehicle.

WARNING

Do not swallow gasoline, inhale gasoline vapors, or spill gasoline. If you swallow gasoline, inhale more than a few breaths of gasoline vapor, or splash gasoline in your eyes, see a physician immediately. If gasoline spills on skin or clothing, immediately wash it off with soap and water and change clothing.

Carbon Monoxide Safety

WARNING

Generator exhaust contains Carbon Monoxide (CO) vapors. Exposure to Carbon Monoxide by people or pets can result in SEVERE INJURY or DEATH. ALWAYS operate generate according to guidelines in labels and this manual.

- This portable generator runs on gasoline. The generator exhaust vapor contains carbon monoxide (CO).
- Carbon monoxide is odorless. You cannot smell it.
- Carbon monoxide is colorless. You cannot see it.
- Never run an engine in an enclosed area. Exhaust contains poisonous carbon monoxide vapor that can cause loss of consciousness or death. Operate the engine in an open area, and well ventilated. The generator is for outdoor use only.
- Do not use the generator indoors in garages, basements, crawl spaces, sheds, portable buildings, or similar areas even if doors and / or windows are open or if ventilating fans are used to circulate air.
- Do not use the generator near windows, doors, vents or any other building openings even if they are closed. Poor seals on a door, as just one example, could still permit high levels of carbon monoxide to infiltrate the living area of a home.
- Be sure to install approved carbon monoxide detectors in your home that have battery back-up systems that will continue to detect the presence of carbon monoxide during electric-power outages. Test these devices and replace batteries as recommended by their respective manufacturers.
- If you experience headache, fatigue, nausea / vomiting, confusion, or seizures, immediately get to fresh air and away from the unit. Do not delay for any reason.

Electrical Safety

WARNING

This generator produces high voltage electricity.

- The generator produces enough electric power to cause serious shock or electrocution if misused.
- Always connect the generator to a suitable ground circuit.
- When servicing the generator, disconnect the spark plug wire and place it where it cannot contact the plug. Turn the engine switch to the OFF position.
- Do not check for a spark with the plug removed. Use only approved spark plug testers.
- Using a generator or electrical appliance in wet conditions, such as rain or snow, or near a pool or sprinkler system, or when your hands are wet, could result in electrocution. Keep the generator dry and away from all sources of moisture.
- Do not store the generator outdoors unprotected from the weather.
- If the Generator has been subjected to water, moisture, or ice check all of the electrical components on the control panel before each use. Moisture or ice can cause a malfunction or short circuit in electrical components that could result in electrocution.
- Do not connect the generator to a building's electrical system unless an isolation switch has been installed that meets applicable electrical codes and regulations.
- To avoid overloading the generator, ensure that the load is kept within the rating stated on the generator. Overloading will damage the unit and / or shorten its operating lifespan.
- P1000i or P2000i can be paralleled with another P1000i or P2000i using the Polaris parallel kits.
- Do not over charge a battery with the DC receptacle, over charging the battery may result in battery damage and potential ignite if a spark is introduced.

SAFETY

Fire Safety

WARNING

Generator exhaust system gets hot enough to ignite some materials and burn skin if touched.

- Keep the generator away from buildings, other equipment, and combustible materials during operation.
- Do not enclose the generator in any structure.
- Keep children and pets away from generator.
- Exhaust system components are very hot during and after use. Hot components can cause burns and fire. Do not touch the hot exhaust system components. Always keep combustible materials away from the exhaust system.
- Ensure that any spilled fuel is properly wiped up prior to using the generator as fuel vapors are flammable.

Extension Cord Information

- Read the manufacturer starting and running wattage details and operating instructions for the device(s) and appliance(s) that will be used. Often this information can be found in the owner's manual or on specification decals on the device or appliance.
- Polaris recommends using only U.L. (Underwriters Laboratories, Inc.) approved extension cords labeled with the use, size, and wattage rating. Only use heavy-duty extension cords with a three-prong (grounded) plug for your safety. Decide on what length extension cord is required as cord length determines the extension cord gauge. Remember, as the cord gets longer, the current capacity of the cord decreases.
- Never use an extension cord designated as "indoor use only" outdoors.
- Store all extension cords indoors when not in use. Outdoor conditions can deteriorate a cord over time.
- Never keep an extension cord plugged in when not in use. The cord will still conduct electricity until it is unplugged from the outlet.
- Before plugging an extension cord or power cord into the generator, check the cord for any signs of damage.

Equipment Modifications

Modifying the generator by adding or removing any equipment not approved by Polaris may void the warranty. Such modifications may make the generator unsafe to operate and could result in severe injury to operators and / or bystanders, as well as damage to the generator. Some modifications may not be legal in your area. If in doubt, contact your authorized Polaris dealer.

Safety Labels and Locations

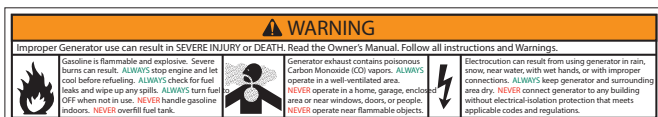
Safety and warning decals have been placed on the generator for your protection. Read and follow the instructions of the decals and warnings on the generator carefully. If any of the decals depicted in this manual differ from the decals on your generator, always read and follow the instructions of the decals on the generator.

Carbon Monoxide Warning



Using a generator indoors CAN KILL YOU IN MINUTES.

The carbon monoxide warning is located on top of the generator.

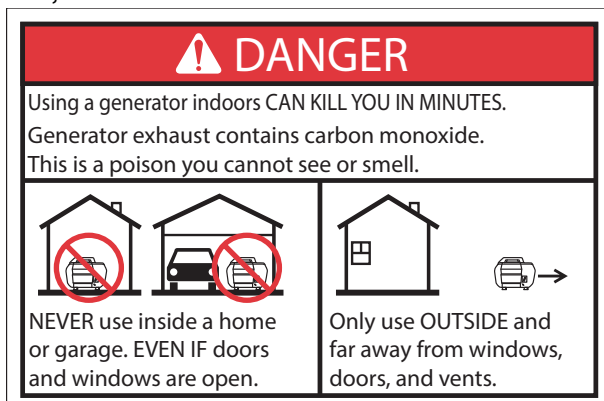


Outdoor Use ONLY Danger Label

Generator Exhaust contains carbon monoxide. This is a poison you cannot see or smell.

NEVER use inside a home or garage, EVEN IF doors and windows are open.

Only use OUTSIDE and far away from windows, doors, and vents.



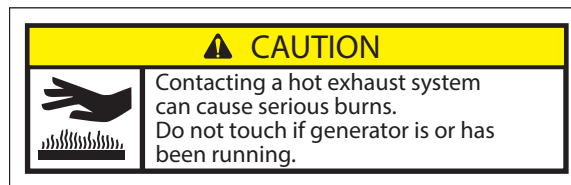
Hot Exhaust Caution



The hot exhaust caution is located on the muffler cover.

Contacting a hot exhaust system can cause serious burns.

Do not touch if generator is or has been running.



Improper Generator use can result in SEVERE INJURY or DEATH. Read the OWNER'S MANUAL. Follow all Instructions and Warnings.

Gasoline is flammable and explosive. Severe burns can result. ALWAYS stop the engine and let cool down before refueling. ALWAYS check for fuel leaks and wipe up any spills. ALWAYS turn the fuel to OFF when not in use. NEVER handle gasoline indoors. NEVER overfill the fuel tank.

Generator exhaust contains poisonous Carbon Monoxide (CO) vapors. ALWAYS operate in a well-ventilated area. NEVER operate in a home, garage, enclosed area or near windows, doors, or people. NEVER operate near flammable objects.

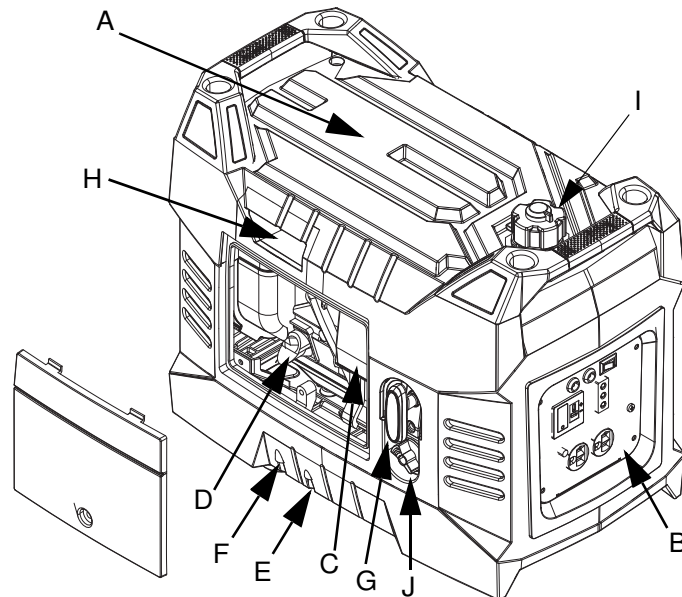
Electrocutation can result from using generator in rain, snow, near water, with wet hands, or with improper connections. ALWAYS keep generator and surrounding area dry. NEVER connect generator to any building without electrical-isolation protection that meets applicable codes and regulations.

SAFETY

NOTES

CONTROLS AND FEATURES

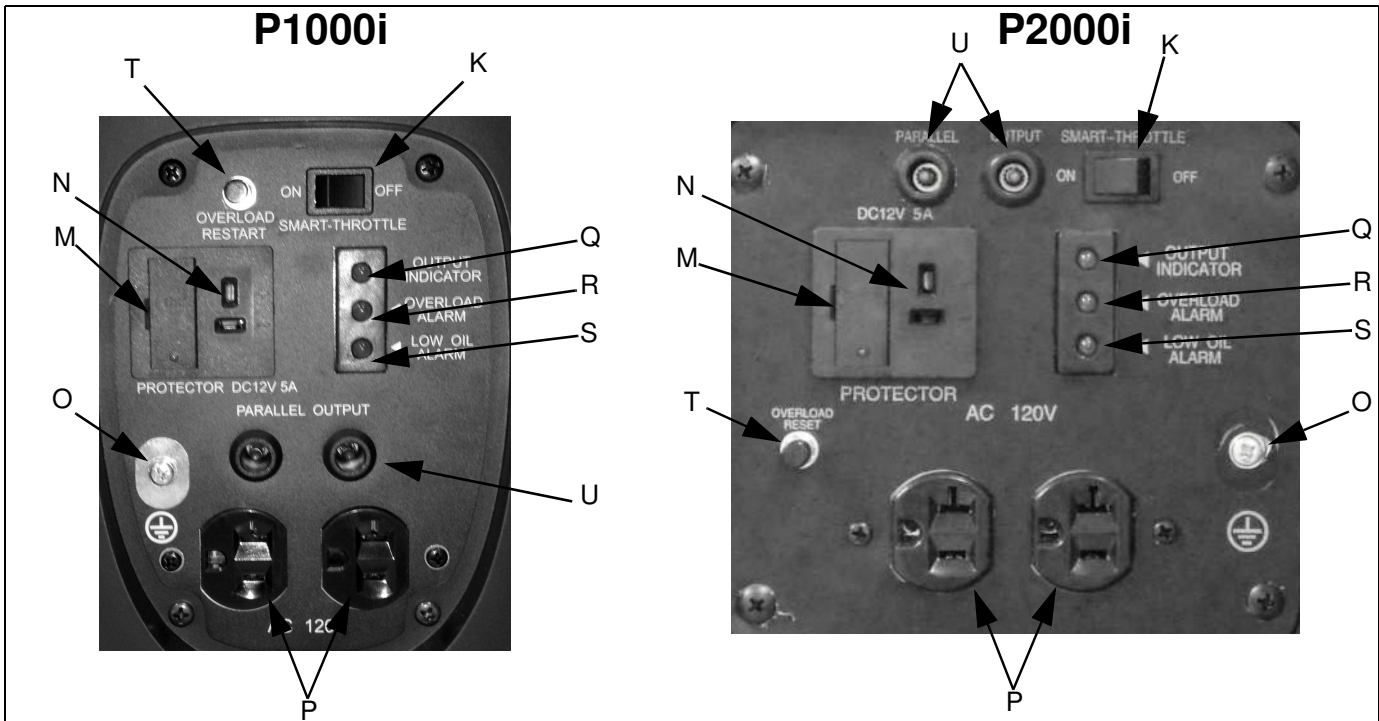
Generator Components:



ITEM	NOMENCLATURE	DESCRIPTION
A	Spark Plug Cap	Remove the top to access the spark plug
B	Control Panel	Generator controls
C	Air Filter	Protects the air flow to the carburetor from becoming obstructed with debris
D	Oil Dipstick	Measures oil level in the engine
E	Carburetor Vent Hose	Atmospheric vent
F	Carburetor Drain Hose	Drains fuel from the carburetor
G	Starter Recoil Grip	Causes the recoil starter to crank the engine when pulled
H	Choke Lever	Provides proper starting mixture when engine is cold
I	Fuel Tank Cap	Accesses fuel tank
J	Engine / Fuel Switch	Controls the ignition system and the fuel valve

CONTROLS AND FEATURES

Control Panel Components:

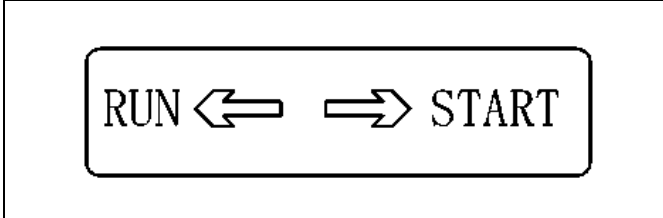


ITEM	NOMENCLATURE	DESCRIPTION
K	Parallel Receptacles	For use with proper Polaris Parallel kits
L	SMART Throttle Switch	Automatically reduces engine speed when loads are shut off or disconnected
M	DC Fuse Protector	Protects DC charging circuit from overloads
N	12V DC Receptacle	Charges 12 Vdc batteries
O	Ground Terminal	Provides ground for non-conductive metal parts and receptacle ground terminals
P	120V AC Receptacles	Provides two connections for properly rated AC appliances
Q	Output Indicator	Illuminates GREEN when the generator is operating normally
R	Overload Indicator	Illuminates RED for appliance short circuits or overloads
S	Low Oil Indicator	Illuminates RED prior to the oil level falling below a safe limit
T	Overload Reset Switch	Resets the circuit after an AC overload

Controls and Features

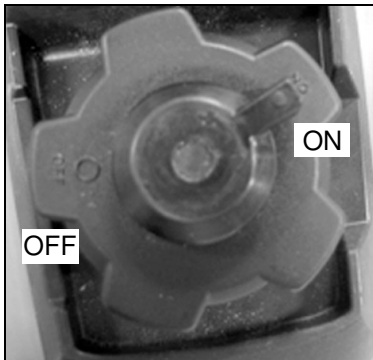
Choke Lever

Move the choke lever (H) to the START position when starting a cold engine. Slowly move the choke lever to the RUN position as the engine RPM stabilizes.



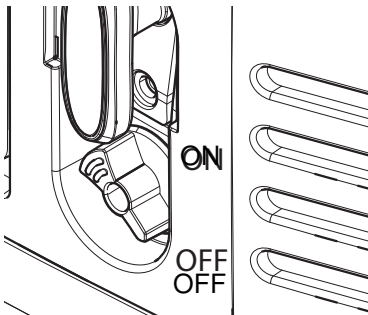
Fuel Tank Cap Vent Lever (if equipped)

When the engine is well-cooled and not in use, the fuel tank cap vent lever (I) must be placed in the OFF position to reduce the possibility of fuel leakage. The vent lever must be in the ON position to allow the engine to operate.



Engine Fuel Switch

The engine switch (J) controls the ignition system and the fuel valve. ON: opens the fuel valve and allows the engine to be started. OFF: closes the fuel valve and shuts off the engine.



Starter Recoil Grip

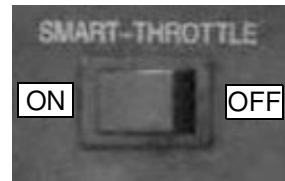
NOTICE

Do not allow starter grip to snap back against the generator. Return it gently to prevent damage to the starter.

The starter recoil grip (G) causes the recoil starter to crank the engine when pulled.

SMART Throttle Switch

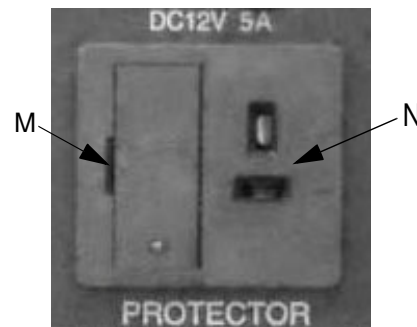
The SMART throttle switch (L) automatically reduces engine speed when loads are shut off or disconnected. The engine returns to the proper speed to power the electrical load when appliances are turned ON or reconnected. Press the SMART throttle switch to the OFF position to reduce voltage changes when high electrical loads are simultaneously connected or when using the DC output.



DC Receptacle and Fuse

The DC receptacle (N) is protected from an overload with a fuse. If the DC circuit is overloaded, the 5 amp fuse (M) will blow and power to the DC receptacle will cease. The red light on the DC panel will illuminate. The fuse is located to the left of the receptacle and is accessed by snapping open the access door. Replace the fuse with one of the same capacity. Using a higher rated fuse may cause damage to the generator alternator.

The DC receptacle charges 12 Vdc automotive-type batteries. The DC charging output is not regulated.



CONTROLS AND FEATURES

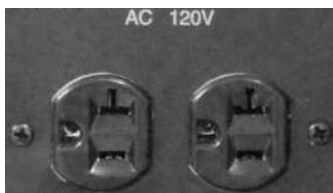
Ground Terminal

The ground terminal (O) connects to the frame of the generator, metal parts that do not conduct current, and ground terminals of each receptacle. Consult a qualified electrician, electrical inspector, or local agency having jurisdiction for local codes or ordinances for the intended use of the generator before using the ground terminal.

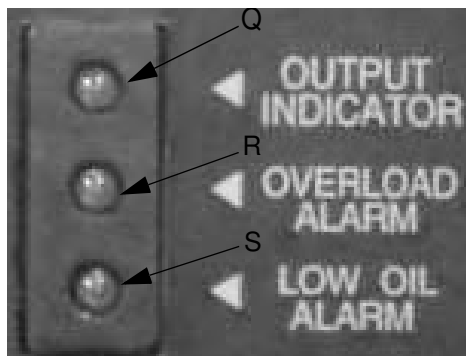


AC Receptacles

The AC receptacles (P) provide two connections for properly rated AC appliances, see page 38 for specifications. .



Indicator Panel



Output Indicator

The output indicator (Q) illuminates GREEN when the generator is in normal operation and producing electrical power at the receptacles.

Overload Indicator

The overload indicator (R) illuminates RED if there is a short circuit in the connected appliance(s), or if the generator is overloaded. The light remains illuminated for 5 seconds, then the current to the connected appliance is shut off and the output indicator light (GREEN) extinguishes.

Low Oil Indicator

The low oil indicator (S) illuminates RED before the oil level falls below a safe limit and the detection system automatically stops the engine. When there is a low engine oil level at startup, the engine will be prevented from starting.

Overload Protector Reset Switch

Should the generator overload, AC power will be cut off but the engine will stay running. Correct the overload condition and then press the overload reset switch (T) on the front panel. AC power will be restored immediately.



Parallel Receptacles

Two Polaris parallel ready generators can be connected together to increase the total power available to a load, using the parallel receptacles (K). The system seamlessly matches frequency and automatically evenly distributes the load to each generator so one is not overloaded. Contact your dealer for the proper kit for your particular application.



FIRST USE INSTRUCTIONS

Adding Engine Oil

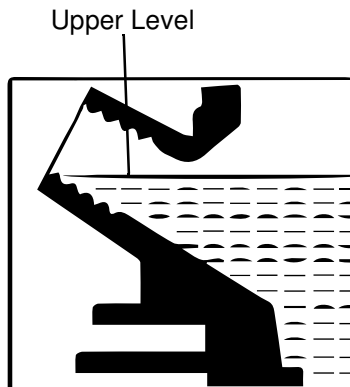
NOTICE

Failure to use the recommended 4-stroke engine oil may result in engine damage, see page 38 for recommended oil and capacity.

1. Place generator on flat, level surface. Remove the maintenance cover (see "Maintenance, Removing the Maintenance Cover").
2. Remove the oil filler cap / dipstick (A).

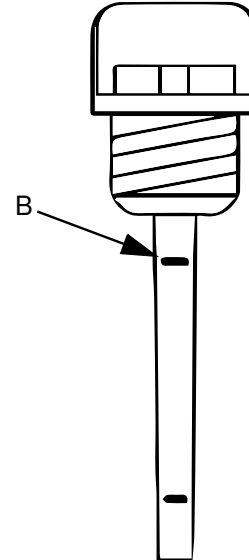


3. Fill the engine crankcase with the specified amount (see Specifications section) of engine oil.



4. Insert the dipstick into the filler neck, without screwing it in.

5. Remove the dipstick and verify that the oil level is at the upper limit (B). Add additional oil and inspect the level as needed until the upper limit has been reached.



6. Re-install the dipstick (A). Use a clean shop rag to clean any spilled oil.
7. Re-install the maintenance cover.

FIRST USE INSTRUCTIONS

Fuel Recommendation

Polaris recommends the use of 87 octane fuel or higher. *Do not use fuel containing more than 10% ethanol. Do not use gasoline containing methanol.*

IMPORTANT: Operating the generator with an obstructed fuel system will result in serious engine damage. Perform maintenance as recommended.

IMPORTANT: Thoroughly read “Safety” section and all safety information when handling fuel.

IMPORTANT: In order to insure the optimum output and the maximum service life of the generator, the generator should run at a 50% load for the first 20 hours

⚠ WARNING

Gasoline is highly flammable and explosive and can cause serious injury. Stop the engine and keep heat, sparks, and flame away. Handle fuel only outdoors. Wipe up spills immediately.

⚠ CAUTION

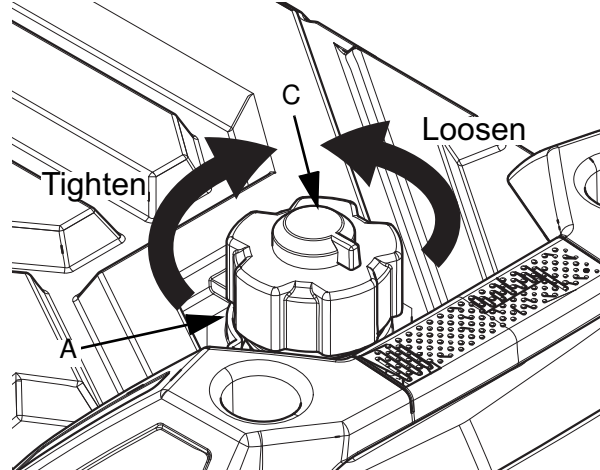
Do not spill fuel when filling the fuel tank. Damage caused by spilled fuel is not covered under warranty. Spilled fuel is a fire hazard, causes environmental damage, and can damage paint and plastic. Wipe up spills immediately. Don fill above bottom of strainer.

Refuel in a well ventilated area before starting the engine. If the engine has been running, allow it to cool.

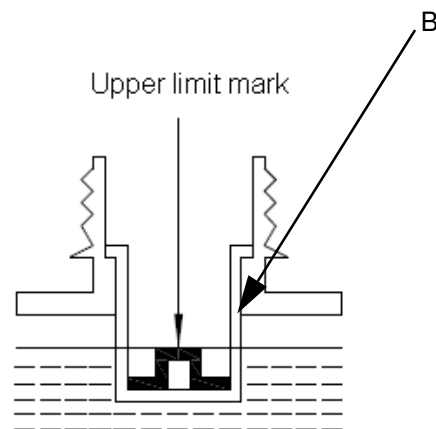
Never refuel the engine inside a building where vapors may reach flames or sparks. Keep fuel vapors away from electrical appliances.

Adding Fuel

1. Remove the fuel tank cap (A).



2. Fill carefully to avoid spilling fuel on the fuel tank strainer (B). Do not overfill the fuel tank (there should be no fuel above the upper limit mark).



3. Securely tighten the fuel tank cap (A).
4. Position the fuel tank vent lever (C) OFF for storage or transport, or ON to operate the generator, if equipped.
5. Move generator away from the fueling source and site before starting the engine.

After refueling, securely reinstall the fuel tank cap (A).

PRE-OPERATION INSPECTION

NOTE: Always perform the recommended pre-operation inspections before each use. Always perform the inspections at the beginning of a project and when removing the generator from storage.

CAUTION

Failure to perform the recommended pre-operation inspections could result in minor or moderate injury or property damage. When inspection reveals the need for adjustment, replacement, or repair, perform service promptly.

Pre-Operation Checklist

Remove the maintenance cover (see “Maintenance, Removing the Maintenance Cover”) to expose the generator inner components.

Engine Oil

Perform “Oil Level Inspection” (see “Maintenance, Engine Oil”). Add oil as needed.

Fuel Line

WARNING

Gasoline is highly flammable and explosive and can cause serious injury. Stop the engine and keep heat, sparks, and flame away. Handle fuel only outdoors. Wipe up spills immediately.

Inspect the fuel hose for cracks or damage. Replace as needed.

Fuel Level

Check the fuel level and refuel as needed (see “Operation, Refueling”).

Exhaust System

CAUTION

If the engine has been running, the muffler will be very hot. Allow the muffler to cool before servicing.

Inspect the exhaust system for leakage. Tighten or replace the gasket as needed.

Carburetor

Inspect the choke lever operation.

Starting System

Inspect the recoil starter operation. Verify the starter recoil grip functions properly.

Air Filters

Inspect the air filters (see “Maintenance, Air Filters”). Clean or replace as needed.

PRE-OPERATION INSPECTION

NOTES

Safe Operating Precautions

Fuel Recommendations

The generator engine is certified to operate on regular unleaded gasoline with a pump octane rating of 87 or higher.

Never use stale or contaminated gasoline or an oil / gasoline mixture. Avoid getting dirt or water in the fuel tank.

The use of regular unleaded gasoline containing no more than 10% ethanol (E10) by volume is permitted. Do not use gasoline containing methanol. If the content of ethanol or methanol exceeds the specified limits, it may cause starting or performance problems. It may also damage metal, rubber, and plastic parts of the fuel system. Damage due to ethanol or methanol is not covered under warranty.

Refueling

IMPORTANT: Thoroughly read the “Safety” chapter and all warnings and cautions when handling fuel.

⚠ WARNING

Gasoline is highly flammable and explosive and can cause serious injury. Stop the engine and keep heat, sparks, and flame away. Handle fuel only outdoors. Wipe up spills immediately.

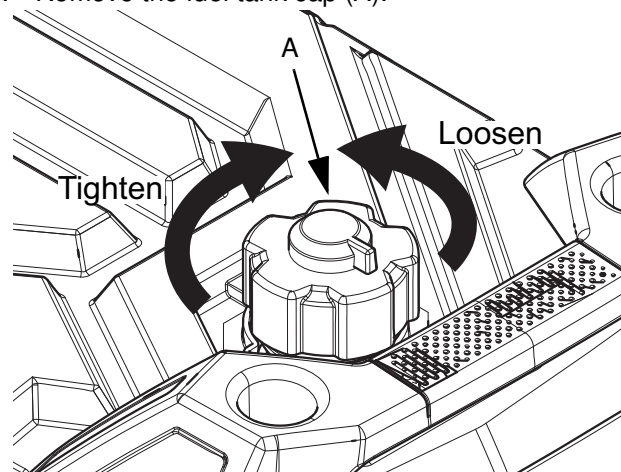
⚠ CAUTION

Do not spill fuel when filling the fuel tank. Damage caused by spilled fuel is not covered under warranty. Spilled fuel is a fire hazard, caused environmental damage, and can damage paint and plastic. Wipe up spills immediately. Don fill above bottom of strainer.

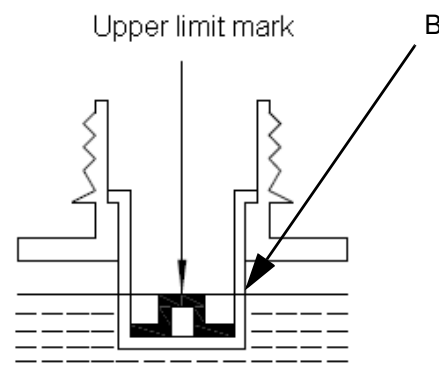
Refuel in a well ventilated area before starting the engine. If the engine has been running, allow it to cool.

Never refuel the engine inside a building where vapors may reach flames or sparks. Keep fuel vapors away from electrical appliances.

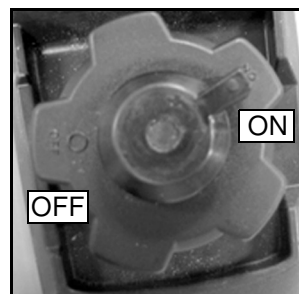
1. Remove the fuel tank cap (A).



2. Fill carefully to avoid spilling fuel or exceeding the bottom of the fuel tank strainer (B).



3. Securely tighten the fuel tank cap (A) until it clicks.
4. Position the fuel tank vent lever OFF for storage or transport, or ON to operate the generator, if equipped.



5. Move generator at least 10 feet (3 meters) away from the fueling source and site before starting the engine.


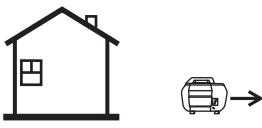
OPERATION

Before Starting the Engine

Read, understand, and follow the Safety Section of this manual.

⚠ DANGER

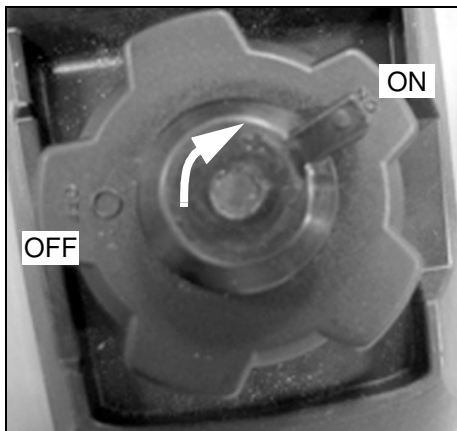
Using a generator indoors **CAN KILL YOU IN MINUTES**.
Generator exhaust contains carbon monoxide.
This is a poison you cannot see or smell.

	
NEVER use inside a home or garage. EVEN IF doors and windows are open.	Only use OUTSIDE and far away from windows, doors, and vents.

1. Ensure the generator is away from the fueling source.
2. The generator will vibrate during operation. Place the generator in a dry location and on a flat, level surface.
3. Unplug all power cords and extension cords from the generator.

Starting the Engine

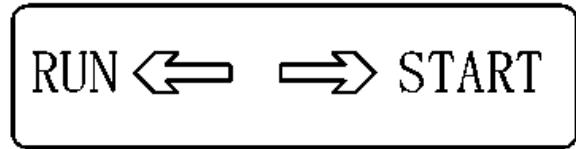
1. Position the fuel tank cap vent lever to ON, if equipped.



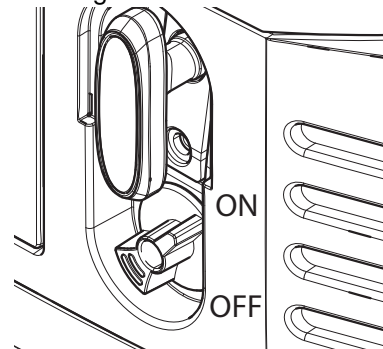
2. Position the SMART throttle switch to OFF.



3. For a cold engine start, position the choke lever to START. To restart a warm engine, leave the choke lever in the RUN position.



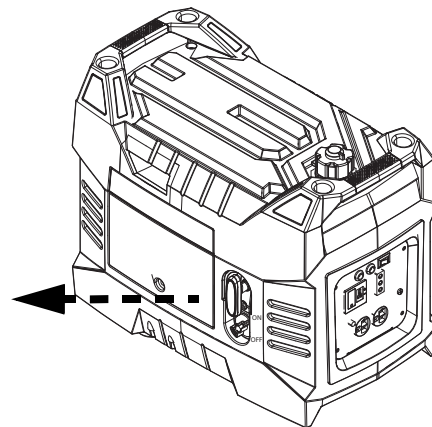
4. Position the engine switch to ON.



5. Lightly pull the starter recoil grip until resistance is felt. Then, firmly pull straight out.

NOTICE

Do not allow starter grip to snap back against the generator. Return it gently to prevent damage to the starter.

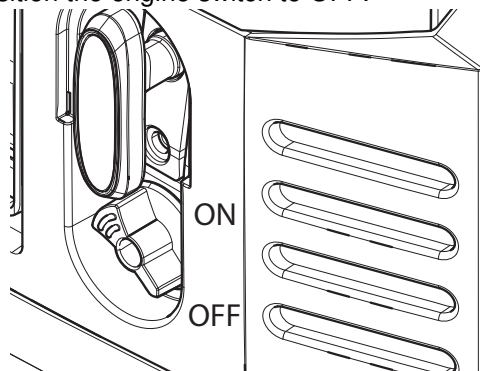


6. If the choke lever was positioned to START to start the engine, gradually move it to RUN as the engine warms up.
7. After a 2 to 3-minute warm up, select ON or OFF on the SMART throttle switch as desired.
8. If connecting loads to generator, reference "AC Operation" or "DC Operation" as outlined later in this chapter.

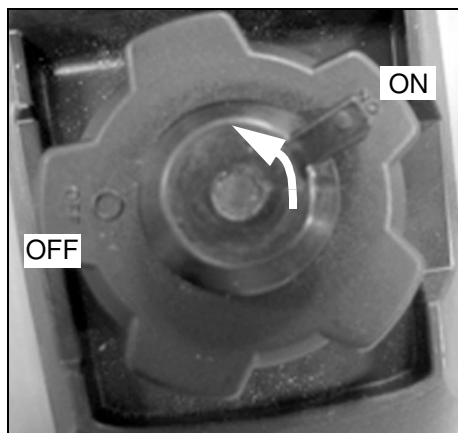
Stopping the Engine

In case of emergency, position the engine switch to OFF to stop the engine. Under normal conditions, perform the following procedure.

1. Shut off or disconnect all appliances connected to the generator.
2. Position the engine switch to OFF.



3. Allow the engine to cool and position the fuel tank cap vent lever to OFF.



AC Operation

⚠ WARNING

Before connecting a device or power cord to the generator, ensure it is in good condition. Faulty appliances or power cords can create a potential for electrical shock.

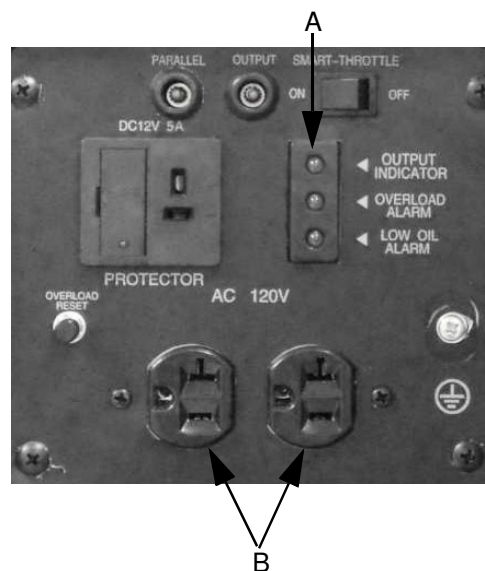
If an appliance begins to operate abnormally, becomes sluggish, or suddenly stops, immediately shut it off. Disconnect the appliance and determine whether the problem is the appliance or if the rated load capacity of the generator has been exceeded.

Ensure the combined electrical rating of the device or appliance does not exceed the maximum allowed by the generator. Never exceed the maximum power rating of the generator. Power levels between rated and maximum may be used for no more than 30 minutes.

NOTE: When the electric motor starts, the overload indicator (middle light) may illuminate (RED) and extinguish within 4 seconds. If the overload indicator remains illuminated, consult the generator dealer.

NOTE: In order to insure the optimum output and the maximum service life of the generator, the generator should run at a 50% load for the first 20 hours

1. Start the engine and ensure that the output indicator (A) illuminates (GREEN).



2. Plug the device or extension cord into one of the AC receptacles (B).

OPERATION

3. Turn on the device.

NOTE: If the generator is overloaded or if there is a short circuit in a connected appliance, the overload indicator (RED) will illuminate. The overload indicator will remain illuminated and, after about 4 seconds, current to the connected appliance(s) will shut off but the engine will stay running. The output indicator (GREEN) will extinguish.

4. If overloaded or short circuit in a connected device occurs, stop the engine and refer to the "Troubleshooting" chapter. Determine if the cause is a short circuit in the connected device or an overload. Correct the problem and restart the generator.
5. After determining the cause of the overload and when it is safe to resume using the AC power in order to correct the overload condition and then press the overload reset switch on the front panel. AC power will be restored immediately.

AC Capacity

NOTICE

In case of substantial overloading, the electronic circuit protector will activate. Slightly overloading the generator or running at maximum power operation (30 minutes) may not switch the circuit ON, but will shorten the service life of the generator.

Maximum power is:

(see "Specifications" page)

For continuous operation, do not exceed rated power:

(see "Specifications" page)

Consider the total power requirements of all connected devices. Appliance and power-tool manufacturers usually list the rating information near the model or serial number. After plugging in a device, allow the generator to stabilize before plugging in additional items. Always consider the generator capacity before plugging in any device.

NOTE: Typical wattages are listed in the table below. Before plugging any device into the generator, verify the manufacturer-listed wattage on the device.

Wattage Reference Table

DEVICE	RUNNING (RATED) WATTS	ADDITIONAL STARTING (SURGE) WATTS
Circular Saw - 7 1/4"	1400	2300
Coffee Maker	1000	0
Dehumidifier	650	800
Electric Drill - 3/8", 4 Amps	440	600
Hair Dryer	300 - 1200	0
Light Bulb (75-Watt)	75	0
Microwave Oven 1000-Watt	1000	1400
Paint Sprayer	360	1080
Heat Pump	4700	4500
Personal Computer with 17" Monitor	800	0
Radio	300	300
Refrigerator	400 - 800	2200
Space / Wall Heater	1800	0
Table Saw / Radial Arm Saw - 10"	2000	2000
Do not use or only use with the Polaris Parallel Kit, see page 23 for more information		
High-Pressure Washer- 1 HP	1200	3600
Garage Door Opener 1/2 HP	875	2350
Sump Pump - 1/2 HP	1050	2200
Central AC Unit 48,000 BTU	6000	7800
Television (Color) - 27"	500	0
Air Compressor - 1 HP	1600	4500

Power Management

DEVICE	RUNNING (RATED) WATTS	ADDITIONAL STARTING (SURGE) WATTS
Paint Sprayer	360	1080
Radio	300	300

Total Running (Rated) Watts = 660

Additional Starting Surge Watts = 1380

Total Generator Output Required = 2040

⚠ CAUTION

Ensure the combined electrical rating of the powered device(s) do not exceed the maximum allowed by the generator. Never exceed the maximum power rating of the generator. Power levels between rated and maximum may be used for no more than 30 minutes.

DC Operation

Connecting the Battery Charging Cable:

⚠ WARNING

The battery emits explosive hydrogen gas during normal operation. A spark or flame can cause the battery to explode with enough force to kill or cause serious injury. Wear protective clothing and eye protection when charging a battery.

Battery posts, terminals, and related accessories contain lead and lead components. Wash hands after handling.

⚠ CAUTION

The DC charging output is not regulated. The DC receptacle should only be used for charging 12Vdc batteries.

NOTICE

When using the DC output, position the SMART throttle switch to OFF.

The DC receptacle may be used while the AC power is in use.

1. Position the SMART throttle switch to OFF.



2. Disconnect the vehicle ground cable from the negative (-) battery terminal.
3. Plug the battery charging cable into the DC receptacle (see "Controls and Features, Control Panel").
4. Connect the red lead of the battery charging cable to the positive (+) battery terminal and then the black lead to negative (-) battery terminal.

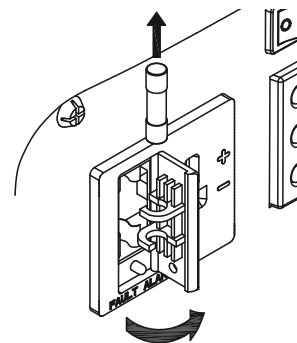
Start the generator.

⚠ CAUTION

Do not start the vehicle while the battery charging cable is connected and the generator is running. The vehicle's charging system or the generator may be damaged.

An overloaded DC circuit, excessive current draw by the battery, or a wiring problem will trip the DC circuit fuse. If this happens, The fuse must be replaced before the DC receptacle is operative. Replace the fuse with one of the same size and rating (5 amp). Exceeding the current rating may lead to alternator damage. If the DC circuit protector fuse continues to trip, discontinue charging and see your authorized Polaris generator dealer.

The circuit protector does not prevent overcharging the battery. Over charging the battery may result in battery damage and potential ignite if a spark is introduced.



Disconnecting the Battery Charging Cable:

1. Stop the generator.
2. Disconnect the black lead of the battery charging cable from the negative (-) battery terminal and then the lead from the positive (+) battery terminal.

OPERATION

3. Unplug the battery charging cable from the DC receptacle (see “Controls and Features, Control Panel”).
4. Connect the vehicle battery ground cable to the negative (-) battery terminal.

SMART Throttle System

With the SMART throttle switch in the ON position, engine speed is automatically lowered when loads are reduced, turned off, or disconnected. When devices are turned on or connected, the engine returns to the proper speed to power the electrical load. When the smart throttle is in the OFF position, the engine runs at rated load RPM

Appliances with large start-up power demands may not allow the engine to reach normal operating RPM when they are connected to the generator. Position the SMART throttle switch to OFF and connect the device to the generator. If the engine still will not reach normal operating speed, ensure the device does not exceed the rated load capacity of the generator.

If high electrical loads are simultaneously connected, position the SMART throttle switch to OFF to reduce voltage changes.

The SMART throttle system is not effective for use with devices or appliances requiring only momentary power. If the device or appliance will be quickly turned on and off, the SMART throttle switch should be in the OFF position. When using the DC output, position the SMART throttle switch to OFF.



Standby Power

⚠ WARNING

Improper connection to a building electrical system can allow current from the generator to back feed into the utility lines. Such back feed may electrocute utility company workers or others who contact the lines during a power outage. Additionally, the generator may explode, burn, or cause fires when utility power is restored. Consult the utility company or a qualified electrician prior to making any power connections.

Connections to a Building Electrical System

Connections for standby power to a building's electrical system must be made by a qualified electrician and must comply with all applicable laws and electrical codes. Improper connections can allow electrical current from the generator to back feed into the utility lines. Such back feed may electrocute utility company workers or others who contact the lines during a power outage; when utility power is restored, the generator may explode, burn, or cause fires in the building's electrical system. Do not connect this generator to an automatic transfer switch. Serious damage to the engine and inverter module may result.

In some areas, generators are lawfully required to be registered with local utility companies. Check local regulations for proper registration and usage procedures.

System Ground

To prevent electrical shock from faulty appliances, the generator should be grounded. Connect a length of heavy cable between the generator's ground terminal and an external ground source.

System Requirements

There may be federal or state Occupational Safety and Health Administration (OSHA) regulations, local codes, or ordinances that apply to the intended use of the generator. Please consult a qualified electrician, electrical inspector, or the local agency having jurisdiction.

If the generator is used at a construction site, there may be additional regulatory requirements.

PARALLEL GENERATOR OPERATION

Parallel operation features, kits sold separately.

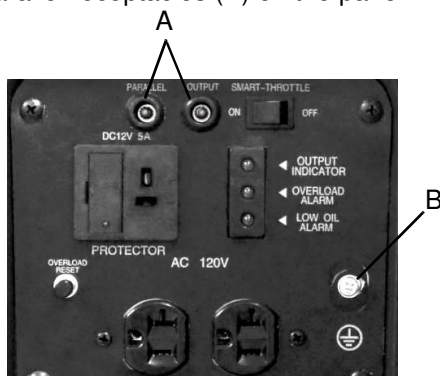
Two Polaris parallel ready generators can be connected together to increase the total power available to a load. The system seamlessly matches frequency and automatically evenly distributes the load to each generator so one is not overloaded.

Operating the generators in parallel has 0.9 power de-rate factor. For example, connecting a 1kw and 2kw together in parallel operation, the continuous rated combined output will equal 0.9x (900w + 1600w) = 2250W.

Any combination of two Polaris parallel ready generators can be connected such as a P2000i and a P1000i, two P2000i models, etc. There are two different parallel connection kits. One kit has a 30A receptacle ideal for connecting two P2000i models or a P2000i and a P1000i.

Parallel operation procedure.

1. Turn off both generators and disconnect all the electrical devices from the generators
2. Prepare two parallel ready generators for operation. Place them on a hard and level surface.
3. Connect the parallel kit to each generator by inserting one pair of leads from the parallel box to the parallel receptacles (A) on the panel



4. Ground the generators (B).
5. Start both generators and confirm that both green "RUN" lights are illuminated. The Smart throttle system may be used as long as the Smart throttle setting of both generators is the same.
6. Securely plug the electrical appliance plug into parallel cable receptacle and switch on the electrical appliance power supply

While operating in parallel, the only AC output is through the receptacle on the parallel cable box.

NOTICE

Do not use the receptacles on the control panel of the generator.

The required output of the electrical appliance cannot exceed the rated output of parallel generators.

Shutting off the generators

1. Turn off the power of electrical appliance then, pull out the receptacle plug.
2. Turn off the two generators.
3. Disconnect the parallel kits from the generators.

CAUTION

- "The parallel cable connectors can only be used with Polaris parallel ready generators.
- "While connecting the generator and electrical appliance with the parallel output cable, do so carefully and safely insert the plug into the receptacle.
- "While operating in parallel, the only AC output is through the receptacle on the parallel cable box. Do not use the receptacles on the control panel of either generator.
- "Do not disconnect the parallel cables during operation

OPERATION

High Altitude Use

Carburetor Modification

NOTICE

When carburetor has been modified for high altitude operation, the air-fuel mixture will be too lean for low altitude use and may cause engine damage.

At high altitude, the standard carburetor air-fuel mixture will be excessively rich. Performance will decrease and fuel consumption will increase. A very rich mixture will also foul the spark plug and cause hard starting. Operation at an altitude different than that which this engine was certified, for extended periods of time, may increase emissions.

High altitude operation can be improved by specific modifications to the carburetor. If always operating the generator at altitudes above 5000 feet (1500 meters), have an authorized Polaris servicing dealer perform the carburetor modification. The engine will meet each emission standard throughout its life when operated at high altitude with the carburetor modifications for high altitude operation.

With the carburetor modification, engine horsepower will decrease by about 3.5% for every 1000 feet (300 meters) increase in altitude. The effect of altitude on horsepower will be greater if no carburetor modification is made.

⚠ CAUTION

Operation of the generator at an altitude lower than the carburetor is jetted for may result in reduced performance, overheating, and serious engine damage caused by an excessively lean air/fuel mixture. Be sure to have any modification reversed at lower altitudes.

Emission Control System Information

Source of Emissions

Exhaust gas contains carbon monoxide, nitrous oxide (NO_x), and hydrocarbons. It is very important to control the emissions of NO_x and hydrocarbons as they are a major contributor to air pollution. Carbon monoxide is a poisonous gas. The emission of fuel vapors is a source of pollution as well. The generator engine utilizes a precise air-fuel ratio and emission control system to reduce the emissions of carbon monoxide, NO_x, hydrocarbons, and evaporative fuel emissions

Polaris utilizes appropriate air-fuel ratios and other emissions control systems to reduce the emissions of

carbon monoxide, oxides of nitrogen, and hydrocarbons. In addition, Polaris fuel systems utilize components and control technologies to reduce evaporative emissions.

The U.S. and California Clean Air Acts

Your engine has been designed to meet current Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) clean air standards. The regulations dictate that the manufacturers provide operation and maintenance standards regarding the emission control system. Tune up specifications are provided in the Maintenance section. Adherence to the following instructions will ensure your engine meets the emission control standards.

To keep the engine emissions within the emission standards, the following procedures must be followed:

Alterations

Altering the emission control system may increase emissions beyond the legal limit. Some possible alterations are as follows:

- Removal or alteration of any part of the intake, fuel, or exhaust systems
- Altering or defeating the governor linkage or speed-adjusting mechanism to cause the engine to operate outside its design parameters

Problems Affecting Emissions

If aware of any of the following, have the engine inspected and repaired by an authorized Polaris dealer:

- Hard starting or stalling after starting
- Rough idle
- Shut down or backfire after applying an electrical load
- Afterburning (backfiring)
- Black exhaust smoke or high fuel consumption

Replacement Parts

The emission control system on the engine was designed, built, and certified to conform to applicable emission regulations. We recommend the use of Polaris Genuine parts whenever maintenance is performed. These original-design replacement parts are manufactured to the same standards as the original parts. The use of replacement parts that are not of the original design and quality may impair the effectiveness of the emission control system.

Aftermarket part manufacturers assume the responsibility that the part will not adversely affect emission performance. The manufacturer or re-builder of the part must certify that use of the part will not result in a failure of the engine to comply with emission regulations

MAINTENANCE

Importance of Maintenance

NOTE: Maintenance, replacement, or repair of the emission components must be performed by a qualified engine repair technician using parts certified to EPA standards.

Good maintenance is essential for safe and economical operation. Proper maintenance will also help reduce air pollution.

To ensure the longevity of the generator, the following pages include a periodic maintenance schedule and inspection and maintenance procedures. Other, more difficult tasks, require special tools and expertise provided by a Polaris technician or other qualified mechanic.

The maintenance schedule applies to normal operating conditions. If the generator is operated under unusual conditions, such as sustained high load or high temperature, or dusty conditions, consult the servicing dealer for applicable recommendations.

To ensure the best quality and reliability, use only new, Polaris Genuine parts or their equivalents for repair and replacement.

All necessary replacement parts and labor incurred, with the exception of authorized warranty repairs, become the responsibility of the registered owner. If, during the course of the warranty period, part failures occur as a result of owner neglect in performing recommended regular maintenance, the cost of repairs are the responsibility of the owner.

Maintenance Safety

⚠ WARNING

Personal safety is critical when attempting to service the generator. Improperly installed or adjusted components can make the generator unstable or dangerous. Improperly installed electrical components can cause engine or electrical systems failure. In either event, damage or serious injury could result. If you do not have the time, tools, and/or expertise necessary to complete a procedure properly, please see your Polaris dealer for service.

Failure to correct a problem before operation and improper maintenance can cause a malfunction resulting in injury or death. Always follow the inspection and maintenance schedules and requirements in this manual.

The following important safety precautions cannot warn of every possible hazard from maintenance. The decision to perform a given task must be evaluated by the individual performing it.

Safety Precautions

Read the safety section of this manual.

Ensure the engine is off before performing any maintenance or repairs. This should minimize the potential for exposure to the following hazards:

- **Fuel and fire** - Avoid flames, sparks, and smoking during service.
- **Carbon monoxide poisoning** - Avoid indoor operation of engine and stay away from open windows and doors.
- **Burns** - Allow the engine and exhaust system to cool before touching. Exercise caution when working around hazardous materials.
- **Injury from moving parts** - Avoid running the engine unless specifically instructed.

Follow the instructions and ensure the required tools are used.

Exercise caution when working around gasoline to reduce the possibility of fire or explosion. Use only non-flammable solvents to clean parts. Keep cigarettes, sparks, and flames away from all fuel-related components.

MAINTENANCE

Periodic Maintenance

- Always stop the engine before servicing. Disconnect all devices and extension cords to avoid receiving an electrical shock.
- Periodic checks and maintenance are very important for keeping the generator in good condition.
- Inspect, clean, lubricate, adjust, and replace parts as necessary. When inspection reveals the need for replacement parts, use Polaris Genuine parts available from your Polaris dealer.
- Before beginning any maintenance procedure, read the instructions for the entire procedure. During some procedures, potentially hazardous products may be used. Always follow the instructions and warnings on the product packaging.

Periodic Maintenance Chart

Item	Remarks	Pre-Operation Check (daily)	Initial 1 month or 20 hrs	Every 3 months or 50 hrs	Every 6 months or 100 hrs	Every 12 months or 200 hrs
Spark plug	Check condition. Adjust gap and clean.				X	
	Replace					X
Spark arrester	Clean the carbon deposits.				X	
Engine oil	Check the oil level.	X				
	Replace		X		X	
Air filter	Check	X				
	Clean. Replace as needed.			X ₍₂₎		
Combustion chamber	Clean	Every 300 Hours ₍₂₎				
Fuel tank and filter	Clean					X ₍₃₎
Valve clearance	Check and adjust when engine is cold.					X ₍₃₎
Fuel line	Check fuel line for twists, cracks, or damage. Replace as needed.	Every 2 years (Replace as necessary) ₍₃₎				

(1) Log hours of operation to determine proper maintenance.

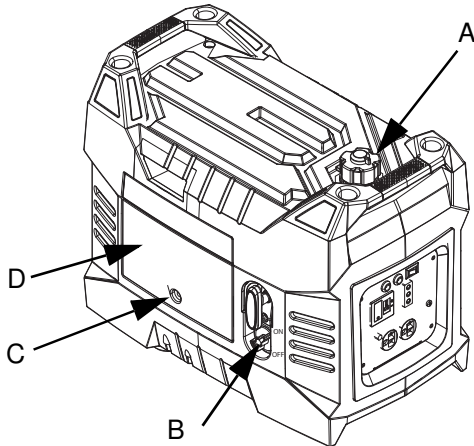
(2) Service more frequently when used in dusty conditions.

(3) These items should be serviced by an authorized Polaris dealer unless the owner has the proper tools and is mechanically proficient. Refer to the Polaris Service manuals.

Removing the Maintenance Cover

Use the following steps to remove the generator maintenance cover and gain access to the inner components. Before performing any maintenance, the fuel tank cap vent lever and engine switch should be positioned to OFF (see “Controls and Features, Fuel Tank Cap Vent Lever and Engine Switch”).

1. Position the fuel tank cap vent lever (A) to OFF, if equipped, (see “Controls and Features, Fuel Tank Cap Vent Lever”).



2. Position the engine switch (B) to OFF (see “Controls and Features, Engine Switch”).
3. Loosen the maintenance cover screw (C).
4. Remove the maintenance cover (D).
5. Expose the generator inner components.
6. Upon completion of maintenance, return the fuel tank cap vent lever (A), if equipped, and the engine switch (B) to the ON position to allow engine operation.

Initial Maintenance

20-Hour Initial Break-In

NOTICE

In order to insure the optimum output and the maximum service life of the generator, the generator should run at a 50% load for the first 20 hours

1. Perform “Oil Change”.
2. Perform “Air Filter Inspection”. Replace as needed.

Fuel System

⚠ WARNING

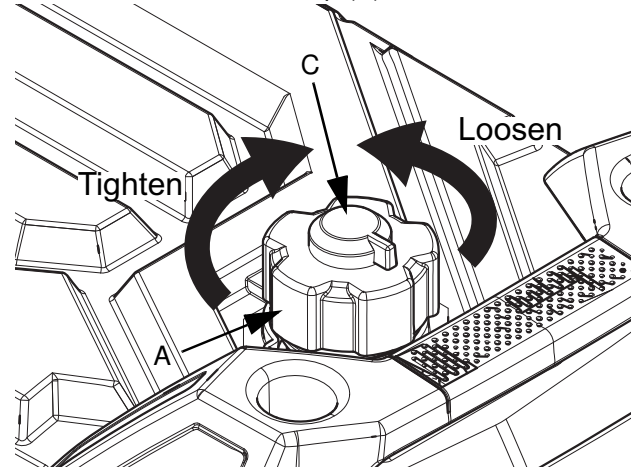
Gasoline is highly flammable and explosive, and can cause serious injury or death. Stop the engine and keep heat, sparks, and flame away. Handle fuel only outdoors. Wipe up spills immediately.

Fuel Line Inspection

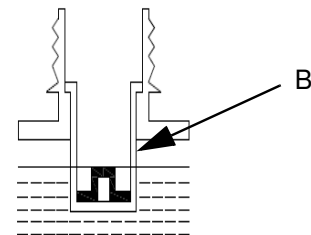
Inspect the fuel line to ensure absence of twists, cracks, and / or damage. Replace as needed.

Fuel Tank Strainer Inspection

1. Remove the fuel tank cap (A).



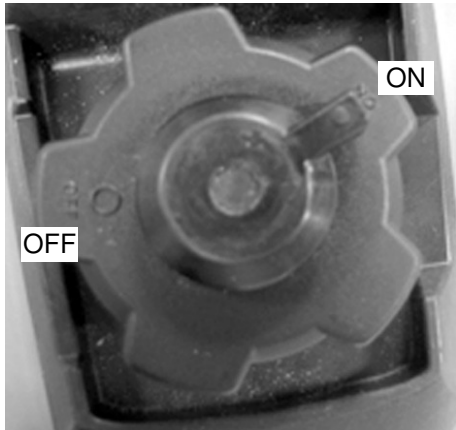
2. Remove the fuel tank strainer (B) from the fuel tank.



3. Remove any foreign objects or debris from the fuel tank strainer (B).
4. Inspect the fuel tank strainer (B) for damage. Replace as needed.
5. Install the fuel tank strainer (B) into the fuel tank.
6. Securely tighten the fuel tank cap (A) until it clicks.
7. Position the fuel tank cap vent lever (C) OFF for

MAINTENANCE

storage or transport, or ON to run the generator.



Engine Oil

Oil Recommendation

Oil directly affects performance and service life. Use a 4-stroke automotive detergent oil. Polaris 5W-30 Engine Oil is recommended for this generator.

The SAE oil viscosity and service category are in the API label on the oil container. Polaris recommends the use of API service category "SJ" or later, equivalent oil.

Oil Level Inspection

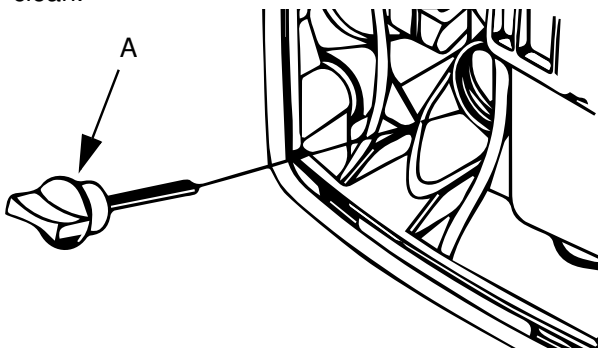
NOTICE

Failure to use the proper 4-stroke engine oil may result in engine damage.

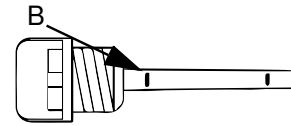
Using non-recommended oil may cause serious engine damage. Never substitute or mix oil brands.

NOTE: Inspect the oil level *before each use* with the engine stopped and the generator on a level surface.

1. Remove the maintenance cover.
2. Remove the oil filler cap / dipstick (A) and wipe it clean.



3. Insert the dipstick (A) into filler neck, without screwing it in, to inspect the oil level.
4. Remove the dipstick and verify that the oil is at the upper limit (B). Add additional oil and inspect the level as needed until the upper limit has been reached.



5. Re-install the dipstick (A).
6. Re-install the maintenance cover.

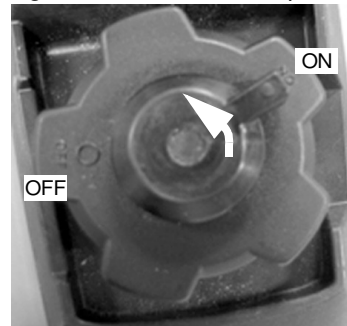
Oil Change Procedure

! WARNING

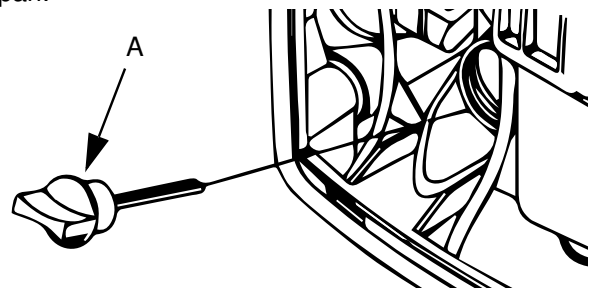
Oil may be hot. Do not allow hot oil to come into contact with skin, as serious burns may result.

NOTE: Drain the oil while the engine is warm to assure rapid and complete draining.

1. Start the engine and allow it to run for a few minutes. Stop the engine.
2. Position engine switch and fuel cap vent lever to OFF.

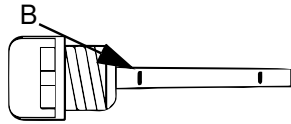


3. Remove the maintenance cover (Page 29).
4. Place a drain pan beneath the generator for used oil.
5. Remove the oil filler cap / dipstick (A), tip the generator toward the oil filler neck, and drain the oil into a drain pan.



NOTE: Improper disposal of engine oil can be harmful to the environment and is unlawful. Properly dispose of used oil.

6. Drain the used oil into a sealed container and take it to a recycling center. **Do not discard the oil in a trash can, dump it on the ground, or pour it down the drain.**
7. Fill the oil to the high limit mark (B) on the dipstick (A).



8. Start the engine and let it run for 1 or 2 minutes. Stop the engine and look for leaks.
9. Re-check the oil level on the dipstick (A) and add oil as needed to bring the level to the upper mark (B) on the dipstick.
10. Re-install the dipstick (A).
11. Re-install the maintenance cover.
12. Wash hands with soap and water after handling used oil.

Air Filters

NOTICE

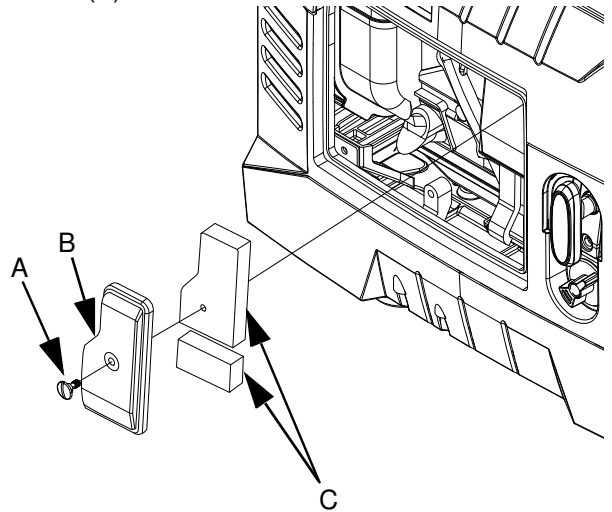
Operating the engine without air filters or with a damaged air filters will allow debris to enter the engine, causing rapid wear.

Air Filter Inspection

NOTE: An obstructed air filter restricts air flow to the carburetor. To prevent carburetor malfunction, regularly service the air filter. Service more frequently when operating the generator in extremely dusty areas.

1. Remove the maintenance cover.

2. Loosen the cover screw (A) and remove the air filter cover (B).



3. Remove the two air filters (C).
4. Inspect the air filters (C) to ensure both are clean and in good condition. If obstructed, perform "Air Filter Cleaning". If damaged, perform "Air Filter Replacement".
5. Ensure the rubber seal is set in to the groove of air filter cover (B).
6. When the maintenance complete, re-install the air filter cover and maintenance cover.

Air Filter Cleaning

NOTE: If operating the generator in a very dust area, clean the air filters more frequently than specified in the Periodic Maintenance Chart.

1. Wash the air filters (C) in warm water and detergent, rinse, and allow to completely dry; or clean with a high flash point solvent and allow to completely dry.
2. Soak the elements in clean engine oil and squeeze out the excess oil.
3. Wipe debris from the air filter housing and air filter cover (B) using a moist towel.
4. Re-install the cleaned filter(s) (C).

Air Filter Replacement

1. Remove the air filters (C).
2. Install new air filters.

MAINTENANCE

Spark Plug

Spark Plug Inspection and Replacement

NOTICE

Using a non-recommended spark plug can result in serious engine damage. Always use recommended spark plugs.

NOTE: In order to service the spark plug, a commercially available spark plug wrench is required.

Refer to the "Specification" chapter (page 38) for the recommended spark plug type. Always torque the spark plug to specification.

NOTE: To ensure proper engine operation, the spark plug must be free of deposits and properly gapped. If the engine has been running, allow it to cool before servicing.

Normal Spark Plug

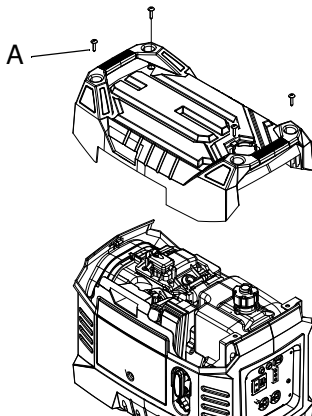
The normal insulator tip is gray, tan, or light brown. There will be few combustion deposits. The electrodes are not burned or eroded. This indicates the proper type and heat range for the engine and the service.

NOTE: The tip should not be white. A white insulator tip indicates overheating, caused by use of an improper spark plug, fuel, or incorrect carburetor adjustments.

Wet Fouled Spark Plug

The wet fouled insulator tip is black. A damp oil film covers the firing end. There may be a carbon layer over the entire nose. Generally, the electrodes are not worn. Fouling may be caused by excessive oil or by frequent short trips, especially in cold weather.

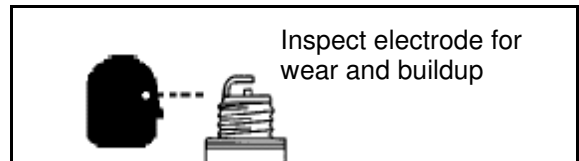
1. Remove the top of the generator by removing the 4 bolts (A) in the top through the handles.



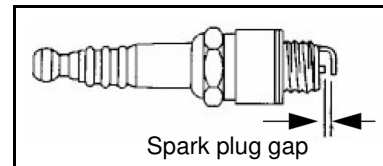
2. Remove the spark plug cap (B).



3. Clean any dirt from around the base of the spark plug.
4. Using a spark plug wrench, remove the spark plug.
5. Inspect the electrode for wear and carbon buildup. Look for a sharp outer edge with no rounding or erosion of the electrode.



6. Inspect spark plug. Replace if electrode is worn or if the insulator is cracked, chipped, or fouled.
7. Using a wire-type feeler gauge, measure the spark plug electrode gap. If necessary, correct the gap by carefully bending the side electrode. The gap should be 0.024 - 0.028 in (0.6 - 0.7 mm).



8. Ensure the spark plug sealing washer is in good condition and thread the spark plug in by hand to prevent cross-threading.

NOTICE

A loose spark plug can overheat and damage the engine. Over tightening the spark plug can damage the plug threads.

9. After a new spark plug has been seated by hand, it should be tightened 1/2 turn with a wrench to compress its washer. If a used plug is being reinstalled, it should only require 1/8 to 1/4 turn after being seated.

10. Re-install the spark plug cap (B) and the maintenance cover (A).

TRANSPORTATION AND STORAGE

Transportation

Transporting the Generator

⚠ WARNING

A hot engine or exhaust system can cause severe burns and ignite flammable material. Ensure adequate time for cooling before storage or transportation.

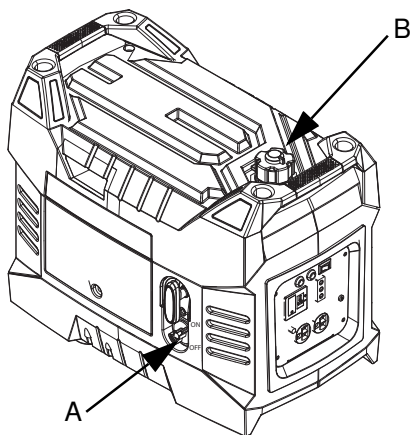
When operating or transporting the generator, be sure it is kept upright. If the generator tilts, fuel may leak. Be sure the fuel tank cap is tight during transportation.

Do not operate the generator while transporting or while it is in a vehicle.

Do not transport the generator with fuel in the fuel tank.

IMPORTANT: Take care not to drop or strike the generator when transporting. Do not place heavy objects on the generator.

1. If the generator has been used, allow it to cool for at least 15 minutes before loading it on the transport vehicle.
2. Drain the fuel prior to transportation, see page 34.
3. Position the engine switch (A) and the fuel tank vent lever (B) to OFF (see “Control and Features, Engine Switch and Fuel Tank Vent Lever”), and keep generator level to reduce possibility of fuel leakage.



Storage

Storage Preparation

⚠ WARNING

Gasoline is highly flammable and explosive and can cause serious injury. Stop the engine and keep heat, sparks, and flame away. Handle fuel only outdoors. Wipe up spills immediately.

NOTE: Long-term storage of the generator will require some additional preventative measures to guard against deterioration. If fuel is kept in the generator, ensure that the engine is run for at least 30 minutes per month in order to ensure an easy start in emergencies.

1. If the generator will be stored with fuel, perform “Adding Fuel Stabilizer”.
2. If the generator will be stored dry of fuel, perform the “Draining Fuel” and “Fogging the Engine procedures.”
3. Perform “Oil Change” (see “Maintenance, Oil Change”).
4. Clean the exterior of the generator with a clean cloth and apply a rust inhibitor.

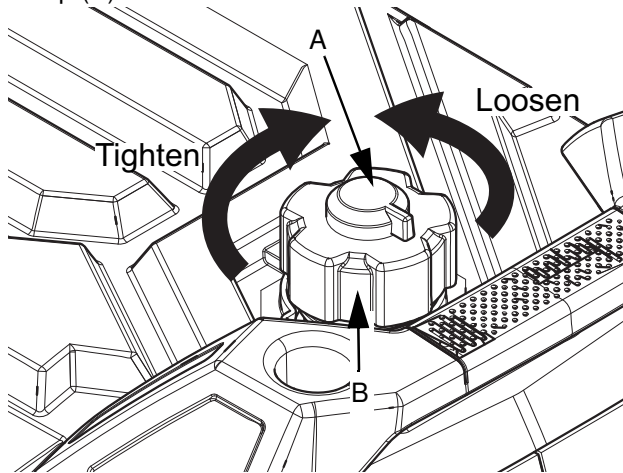
⚠ WARNING

Do not pour water directly on to the generator or wash it with water.

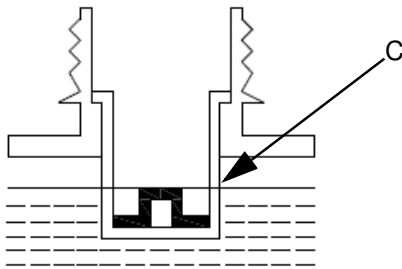
TRANSPORTATION AND STORAGE

Accessing the Fuel Tank

1. Position the fuel tank vent lever (A) to OFF (see “Controls and Features, Fuel Tank Vent Lever”) to reduce leakage possibilities. Remove the fuel tank cap (B).



2. Remove the fuel tank strainer (C) from the fuel tank. Remove debris as needed.



3. When maintenance is complete, re-install the fuel tank strainer (C) into the fuel tank.
4. Securely tighten the fuel tank cap (B) until it clicks.

Adding Fuel Stabilizer

⚠ WARNING

A hot engine or exhaust system can cause severe burns and ignite flammable material. Ensure adequate time for cooling before storage or transportation.

NOTE: This procedure applies if keeping gasoline in fuel tank during storage.

1. Access the fuel tank.

2. Add a suitable fuel stabilizer.

Premium Carbon Clean / Fuel Stabilizer:
P/N 2871326

Draining Fuel from the Fuel Tank and Carburetor

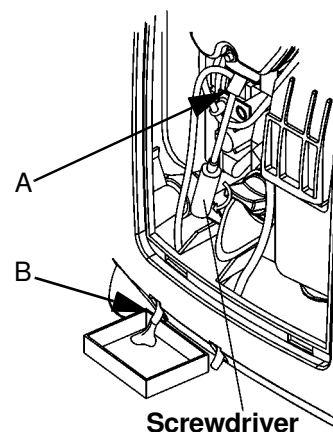
⚠ WARNING

Gasoline is highly flammable and explosive and can cause serious injury. Stop the engine and keep heat, sparks, and flame away. Handle fuel only outdoors. Wipe up spills immediately.

Do not spill fuel when draining the fuel tank. Spilled fuel is a fire hazard, causes environmental damage, and can cause damage to paint and plastic. Wipe up spills immediately.

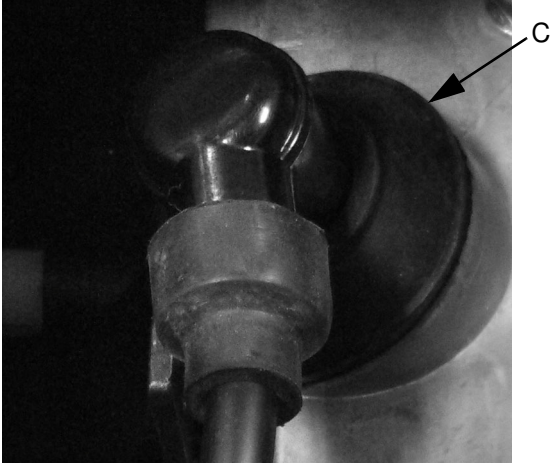
NOTE: This procedure applies if fuel will NOT be kept in the fuel tank during storage.

1. Access the fuel tank (see “Accessing the Fuel Tank”).
2. Empty the fuel tank into an approved gasoline container. Polaris recommends using a commercially available gasoline hand pump to empty the tank. **Do not use an electric pump.**
3. Re-install the fuel tank strainer into the fuel tank.
4. Securely tighten fuel tank cap until it clicks.
5. Remove the maintenance cover (see “Maintenance, Removing the Maintenance Cover”).
6. Position engine switch to ON (see “Controls and Features, Engine Switch”). Loosen the carburetor drain screw (A).

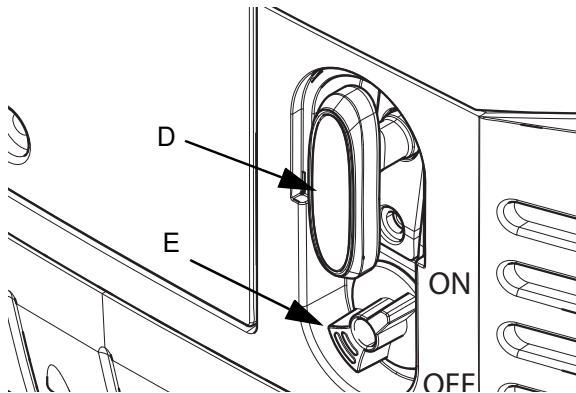


TRANSPORTATION AND STORAGE

7. Drain the gasoline from the carburetor through the attached drain hose (B) and into a suitable container.
8. Remove the top of the unit to access the spark plug, see Page 32.
9. Remove spark plug cap (C).



10. Pull starter grip (D) three to four times to drain the gasoline from the fuel pump and into a suitable container.

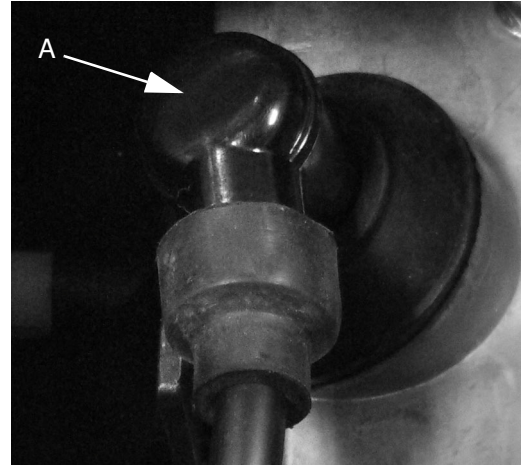


11. Position engine switch (E) to OFF (see “Controls and Features, Engine Switch”) and tighten the carburetor drain screw.
12. Re-install spark plug cap on the spark plug securely.
13. Re-install the top of the unit and the maintenance cover.

Fogging the Engine

1. Remove the top of the unit to access the spark plug, see Page 32.

2. Remove the spark plug cap (A).



3. Using a spark plug wrench, remove spark plug.
4. Pour about a tablespoon of clean engine oil into the cylinder. Crank the engine several revolutions to distribute the oil and then reinstall the spark plug.
5. Ensure that the spark plug sealing washer is in good condition and hand-tighten the spark plug to prevent cross-threading. Torque to specification on page 32.
6. Re-install the spark plug cap (A) and the top of the unit.

Storage Precautions

NOTICE

Do not store the generator outdoors in the cold weather when not in use.

- Select a well-ventilated storage area away from any flame-operated appliance (i.e., furnace, water heater, or clothes dryer). Also avoid any area with a spark-producing electric motor, or where power tools are operated.
- If possible, avoid storage areas with high humidity to prevent rust and corrosion.
- Place the generator on a level surface. Tilting can cause fuel or oil leakage.
- With the engine and exhaust system cool, cover the generator to prevent dust contamination. Do not use a sheet plastic as a dust cover. Nonporous covers trap moisture around the generator, promoting rust and corrosion.
- Unless fuel tank has been completely drained, position fuel tank cap vent lever to OFF to reduce leakage possibilities.

TRANSPORTATION AND STORAGE

Removing from Storage

NOTE: If the cylinder was coated with oil during storage preparation, the engine may smoke briefly at startup. This is normal.

1. Perform "Pre-Operation Checklist" (see "Pre-Operation Inspection" chapter).
2. If fuel was drained during storage preparation, fill tank with fresh gasoline (see "Operation, Refueling"). If gasoline is stored in a container, ensure the gasoline is fresh. Gasoline oxidizes and deteriorates over time, causing hard starting.

NOTES

SPECIFICATIONS

General Specifications

ALTERNATOR		
Model	P1000i	P2000i
Rated Frequency (Hz)	60	
Rated Voltage (V)	120	
Rated Current (A)	7.5	13.3
Max Current (A)	8.3	16.6
DC Output Voltage	12V (5A)	
Rated Output	900 W(1600 W
Maximum Output	1000 W	2000 W
Phase	Single	
ENGINE		
Model	KG144	KG158
Type	Single cylinder, 4 stroke, vertical shaft, air-cooled, OHV	
Displacement (cc)	58	106
<i>Engine Oil</i>	<i>Polaris 5W-30 Generator Oil</i>	
Engine Oil Capacity qt(L)	(0.2 Liters)	.42(.4)
Intake Valve Clearance	0.0031-0.0039 in (0.18-0.10 mm)	
Exhaust Valve Clearance	0.0039-0.0059 in (0.10-0.15 mm)	
Spark Plug-Gap	UR5 - 0.024 - 0.028 in (0.6 - 0.7 mm)	
GENERAL		
Fuel	87 Octane (Up to 10% Oxygenated)	
Fuel Tank Capacity	0.7 gallons (2.6 L)	1 gallon (3.8L)
Starting System	Recoil	
<i>Dimensions (L x W x H)</i>	21.4"x13"x17.6"	
	545mm×330mm×448mm	
<i>Weight</i>	54.45lbs.(24.7kg)	
Full Tank Run Time Hours at Rated Load	4 Hours	3.5 Hours
AC Circuit Breaker	Electronic	
DC Fuse	5 Amp	
DC Charging Cord	Standard	

Polaris Lubricants and Maintenance Products

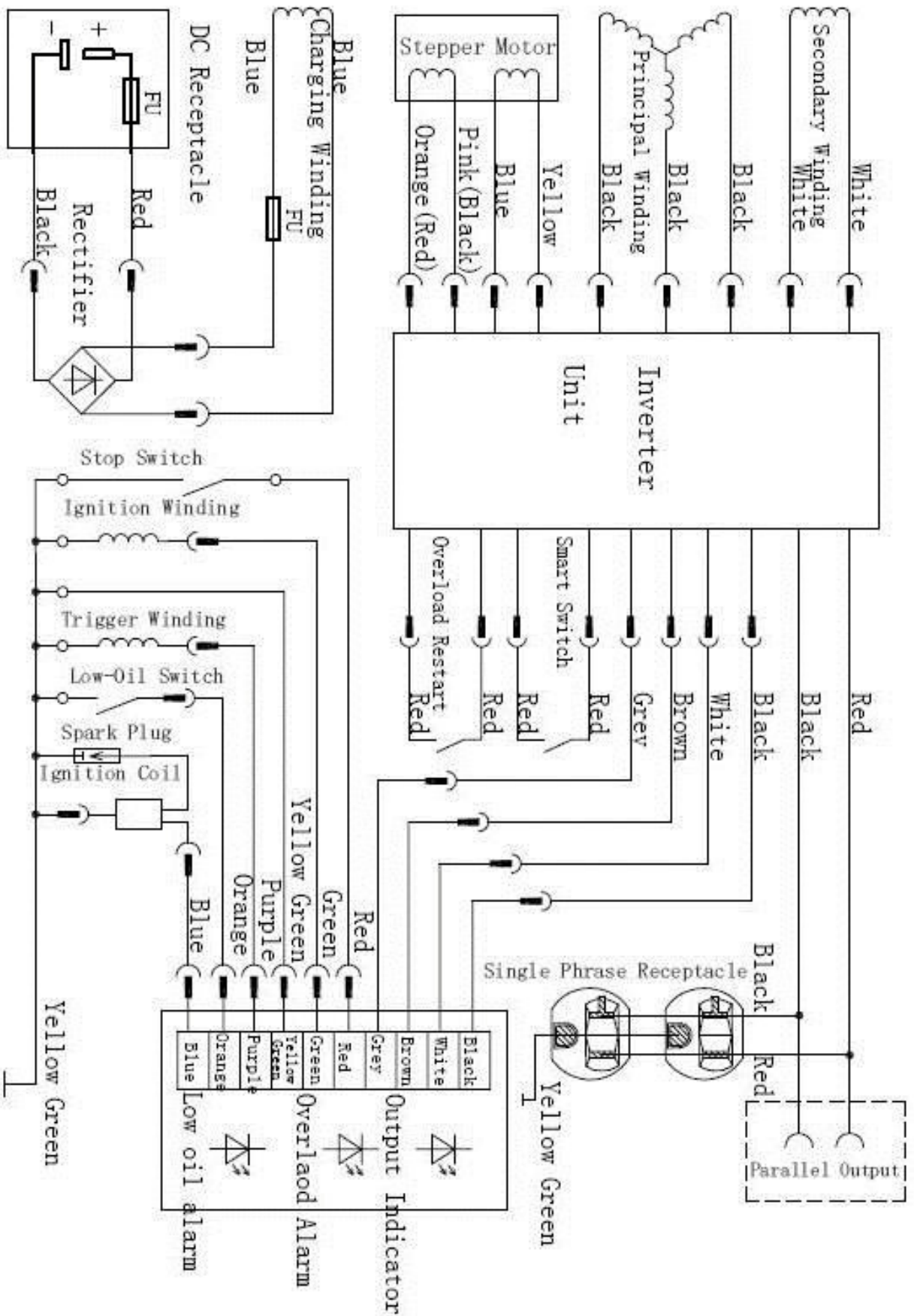
ENGINE OIL	
PART NUMBER	DESCRIPTION
<u>2879383</u>	<i>Polaris 5W-30 Generator Oil (1 Quart) (32 oz.)</i>
GREASE / SPECIALIZED LUBRICANTS	
2871329	Dielectric Grease (Nyogel™)
ADDITIVES	
2871326	Premium Carbon Clean / Fuel Stabilizer (12 oz.) (12 count)

SPECIFICATIONS

Modified coefficient table of ambient condition power

The conditions of generator rated output:					
Altitude: 0 m Ambient temperature: 25°C Relative humidity: 30%					
Ambient modified coefficient: C (Relative humidity 30%)					
Altitude (m)	Ambient temperature (°C)				
	25	30	35	40	45
0	1	.98	.96	.93	.90
500	.93	.91	.89	.87	.84
1000	.87	.85	.82	.80	.78
2000	.75	.73	.71	.69	.66
3000	.64	.62	.6	.58	.56
4000	.54	.52	.5	.48	.46
<p>Note: When the relative humidity is 60%, the modified coefficient is C-0.01 When the relative humidity is 80%, the modified coefficient is C-0.02 When the relative humidity is 90%, the modified coefficient is C-0.03 When the relative humidity is 100%, the modified coefficient is C-0.04</p> <p>Counting example: When the rated power of generator is $P_N = 5\text{KW}$, altitude is 1000m, ambient N temperature is 35°C relative humidity is 80%, the rated power of generator is: $P = P_N \times (C - 0.02) = 5 \times (0.82 - 0.02) = 4\text{KW}$</p>					

WIRE DIAGRAM



TROUBLESHOOTING

Troubleshooting Symptoms

Engine Will Not Turn Over

POSSIBLE CAUSE	SOLUTION
Starter recoil damage	Take the generator to an authorized Polaris servicing dealer or refer to the service manual
Internal engine damage	Take the generator to an authorized Polaris servicing dealer or refer to the service manual

Engine Turns Over, but Will Not Start

POSSIBLE CAUSE	SOLUTION
Out of fuel	Refuel
Water is present in the fuel	Drain the fuel system and refuel
Old or non-recommended fuel	Drain the fuel system and refuel
Fouled or defective spark plug	Inspect spark plug and replace as needed
No spark to spark plug	Inspect spark plug, verify engine switch is ON
Water or fuel in crankcase	Take the generator to an authorized Polaris servicing dealer or refer to the service manual
Mechanical failure	Take the generator to an authorized Polaris servicing dealer or refer to the service manual
Low Oil	Repeat Pre-operation inspection

Engine Lacks Power

POSSIBLE CAUSE	SOLUTION
Air filter restricted	Clean or replace air filter(s)
Bad fuel; generator stored without treating or draining gasoline, or refueled with bad gasoline	Drain the fuel system and refuel
Mechanical failure	Take the generator to an authorized Polaris servicing dealer or refer to the service manual

TROUBLESHOOTING

Engine Backfires

POSSIBLE CAUSE	SOLUTION
Weak spark from spark plug	Inspect, clean, and / or replace spark plug
Incorrect spark plug gap or heat range	Set gap to specification or replace plug
Old or non-recommended fuel	Drain the fuel system and refuel
Incorrectly installed spark plug wires	Take the generator to an authorized Polaris servicing dealer or refer to the service manual
Incorrect ignition timing	Take the generator to an authorized Polaris servicing dealer or refer to the service manual
Mechanical failure	Take the generator to an authorized Polaris servicing dealer or refer to the service manual
Loose ignition connections	Check all connections and tighten
Water present in fuel	Drain the fuel system and refuel

Engine Pings or Knocks

POSSIBLE CAUSE	SOLUTION
Poor quality or low octane fuel	Replace with recommended fuel
Incorrect ignition timing	Take the generator to an authorized Polaris servicing dealer or refer to the service manual
Incorrect spark plug gap or heat range	Set gap to specification or replace spark plug

Engine Runs Irregularly, Stalls, or Misfires

POSSIBLE CAUSE	SOLUTION
Fouled or defective spark plug	Inspect, clean, and / or replace spark plug
Worn or defective spark plug	Take the generator to an authorized Polaris servicing dealer or refer to the service manual
Incorrect spark plug gap or heat range	Set gap to specification or replace spark plug
Loose ignition connections	Check all connections and tighten
Water present in fuel	Drain the fuel system and refuel
Kinked or plugged fuel tank vent line	Inspect and replace
Incorrect fuel	Drain the fuel system and refuel
SMART throttle control malfunction	Take the generator to an authorized Polaris servicing dealer or refer to the service manual
Mechanical failure	Take the generator to an authorized Polaris servicing dealer or refer to the service manual

POSSIBLE LEAN FUEL CAUSE	SOLUTION
Low or contaminated fuel	Add fuel or drain the fuel system and refuel
Kinked or plugged fuel tank vent	Inspect and replace
Low octane fuel	Drain the fuel system and refuel
Carburetor jetting incorrect	Take the generator to an authorized Polaris servicing dealer or refer to the service manual

POSSIBLE RICH FUEL CAUSE	SOLUTION
Incorrect fuel / fuel is very high octane	Drain the fuel system and refuel
Stopping / starting without adequate warm-up	Allow the engine to warm up before operating and / or stopping
Incorrect spark plug	Inspect and replace with correct spark plug
Clogged air cleaner filter	Inspect and clean or replace

Engine Stops or Loses Power

POSSIBLE CAUSE	SOLUTION
Out of fuel	Refuel
Fouled, worn, incorrect, or defective spark plug; incorrect spark plug gap or heat range	Inspect, clean, and / or replace the spark plug, set the spark plug gap to specification
Loose ignition connections	Check all connections and tighten
Water present in fuel / incorrect fuel	Drain the fuel system and refuel
Kinked or plugged fuel tank vent line	Inspect and replace
SMART throttle control malfunction	Take the generator to an authorized Polaris servicing dealer or refer to the service manual
No / low oil in the engine	Check / replace oil
Clogged air filter	Clean or replace the air filter(s)
Overheated engine	Clean cover screens
Mechanical failure	Take the generator to an authorized Polaris servicing dealer or refer to the service manual

TROUBLESHOOTING

No Power at AC Receptacles

POSSIBLE CAUSE	SOLUTION
Output indicator is OFF, and overload indicator is ON	Check the AC load; stop and restart the engine
	Check the cooling air inlet; stop and restart the engine
AC circuit protector tripped	Check the AC load and reset circuit protector
Faulty power tool or appliance	Replace or repair the power tool or appliance; stop and restart the engine
Faulty generator	Take the generator to an authorized Polaris servicing dealer or refer to the service manual

No Power at DC Receptacle

POSSIBLE CAUSE	SOLUTION
DC circuit protector blown	Replace the fuse
Faulty generator	Take the generator to an authorized Polaris servicing dealer or refer to the service manual

WARRANTY

Limited Warranty

POLARIS Sales Inc., 2100 Highway 55, Medina, MN 55340 gives a THREE YEAR LIMITED WARRANTY for consumer use and a ONE YEAR LIMITED WARRANTY for commercial use on all components of your POLARIS generator against defects in material or workmanship. This warranty covers parts and labor charges for repair or replacement of defective parts and begins on the date of purchase.

This warranty is transferable to another owner during the warranty period through a POLARIS dealer, but any such transfer will not extend the original term of the warranty.

Registration

At the time of sale, the Warranty Registration Form must be completed by your dealer and submitted to POLARIS within ten days of purchase. Upon receipt of this registration, POLARIS will record the registration for warranty. No verification of registration will be sent to the purchaser as the copy of the Warranty Registration Form will be your proof of warranty coverage. If you have not signed the original registration and received the customer copy, please contact your dealer immediately. **NO WARRANTY COVERAGE WILL BE ALLOWED UNLESS YOUR GENERATOR IS REGISTERED WITH POLARIS.**

Warranty Coverage and Exclusions:

Limitation of Warranties and Remedies

This POLARIS limited warranty excludes any failures that are not caused by a defect in material or workmanship. **This warranty does not cover claims of defective design.** This warranty also does not cover accidental damage, normal wear and tear, abuse or improper handling. This warranty also does not cover any unit that has been altered structurally, modified, neglected, improperly maintained, or used for purposes other than for which it was designed.

This warranty excludes damages or failures resulting from improper lubrication; improper engine timing; improper fuel; surface imperfections caused by external stress, heat, cold or contamination; operator error or abuse; improper component alignment, tension, adjustment or altitude compensation; failure due to snow, water, dirt or other foreign substance ingestion/contamination; improper maintenance; modified components; use of aftermarket components resulting in failure; unauthorized repairs; repairs made after the warranty period expires or by an unauthorized repair center. This warranty will not apply to any product which has been damaged by abuse, accident, fire, or any other casualty not determined to be a defect or materials or workmanship.

LUBRICANTS

1. Mixing oil brands or using non-recommended oil may cause engine damage. We recommend the use of POLARIS engine oil.
2. Damage resulting from the use of non-recommended lubricants is not covered by this warranty.

Some items are considered “consumable” meaning they are considered part of normal maintenance or part of completing an effective repair. The following items are excluded from warranty coverage in the event of a warranty claim: spark plugs, filters, sealants, and lubricants.

This warranty not allow for coverage of personal loss and provides no coverage for mileage, transportation costs, shipping or handling fees, product pick-up or delivery, replacement rentals, loss of product use or profits, or loss of vacation or personal time.

WARRANTY

The exclusive remedy for breach of this warranty shall be, at POLARIS' exclusive option, repair or replacement of any defective materials, components, or products. THE REMEDIES SET FORTH IN THIS WARRANTY ARE THE ONLY REMEDIES AVAILABLE TO ANY PERSON FOR BREACH OF THIS WARRANTY. POLARIS SHALL HAVE NO LIABILITY TO ANY PERSON FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY DESCRIPTION, WHETHER ARISING OUT OF EXPRESS OR IMPLIED WARRANTY OR ANY OTHER CONTRACT, NEGLIGENCE, OR OTHER TORT OR OTHERWISE. THIS EXCLUSION OF CONSEQUENTIAL, INCIDENTAL, AND SPECIAL DAMAGES IS INDEPENDENT FROM AND SHALL SURVIVE ANY FINDING THAT THE EXCLUSIVE REMEDY FAILED OF ITS ESSENTIAL PURPOSE.

THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS EXCLUDED FROM THIS LIMITED WARRANTY. ALL OTHER IMPLIED WARRANTIES (INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTY OF MERCHANTABILITY) ARE LIMITED IN DURATION TO THE ABOVE THREE YEAR CONSUMER AND ONE YEAR COMMERCIAL WARRANTY PERIOD. POLARIS FURTHER DISCLAIMS ALL EXPRESS WARRANTIES NOT STATED IN THIS WARRANTY.

Some states do not permit the exclusion or limitation of incidental or consequential damages or allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you if inconsistent with controlling state law.

How to Obtain Warranty Service

If your generator requires warranty service, you must take it to a POLARIS Servicing Dealer. When requesting warranty service you must present your copy of the Warranty Registration from the dealer. (THE COST OF TRANSPORTATION TO AND FROM THE DEALER IS YOUR RESPONSIBILITY). POLARIS suggests that you use your original selling dealer; however, you may use any POLARIS Servicing Dealer to perform warranty service.

In the Country where your product was purchased:

Warranty or service Bulletin repairs must be done by an authorized POLARIS dealer. If you move or are traveling within the country where your product was purchased, Warranty and Service Bulletin repairs may be requested from any authorized POLARIS dealer who sells the same line as your product.

Outside the Country where your product was purchased:

If you are traveling temporarily outside the country where your product was purchased, you should take your product to an authorized POLARIS dealer. You must show the dealer photo identification from the country of the selling dealer's authorized location as proof of residence. Upon residence verification, the servicing dealer will be authorized to reform the warranty repair.

If you move:

If you move to another country, be sure to contact POLARIS Customer Assistance and the customs department of the destination country before you move. Product importation rules vary considerably from country to country. You may be required to present documentation of your move to POLARIS in order to continue your warranty coverage. You may also be required to obtain documentation from POLARIS in order to register your product in your new country. You should warranty register your product at a local POLARIS dealer in your new country immediately after you move to continue your warranty coverage and to ensure that you receive information and notices regarding your vehicle.

If you purchase from a private party:

If you purchase a POLARIS product from a private party, to be kept and used outside of the country in which the product was originally purchased, all warranty coverage will be denied. You must nonetheless register your product under your name and address with a local POLARIS dealer in your country to ensure that you receive safety information and notices regarding your product.

Exported Products

EXCEPT WHERE SPECIFICALLY REQUIRED BY LAW, THERE IS NO WARRANTY OR SERVICE BULLETIN COVERAGE ON THIS PRODUCT IF IT IS SOLD OUTSIDE THE COUNTRY OF THE SELLING DEALERS AUTHORIZED LOCATION.

This policy does not apply to products that have received authorization for export from Polaris Industries. Dealers may not give authorization for export. You should consult an authorized dealer to determine this product's warranty or service coverage if you have any questions.

This policy does not apply to products registered to government officials or military personnel on assignment outside the country of the selling dealer's authorized location.

This policy does not apply to Safety Bulletins.

Notice

If your product is registered outside of the country where it was purchased and you have not followed the procedure set above, your product will no longer be eligible for warranty or service bulletin coverage of any kind, other than safety bulletins. (Products registered to Government officials or military personnel on assignment outside of the country where the product was purchased will continue to be covered by the basic warranty.)

Please work with your dealer to resolve any warranty issues. Should your dealer require any additional assistance they will contact the appropriate person at POLARIS.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. If any of the above terms are void because of state or federal law, all other warranty terms will remain in effect.

For questions call POLARIS Customer Assistance:

United States: 1-888-704-5290

Canada: 1-204-925-7100

U.S.A. EPA Emissions Limited Warranty

This emissions limited warranty is in addition to the POLARIS standard limited warranty for your product. POLARIS Industries Inc. warrants that at the time it is first purchased, this emissions-certified product is designed, built and equipped so it conforms with applicable U.S. Environmental Protection Agency emission regulations. POLARIS warrants that the product is free from defects in materials or workmanship that would cause it to fail to meet these regulations.

The warranty period for this emission-certified product starts on the date the vehicle is first purchased and continues for a period of 125 hours of engine operation, or 36 calendar months from the date of purchase, whichever comes first.

This emissions limited warranty covers components whose failure increases the products regulated emissions, and it covers components of systems whose only purpose is to control emissions. Repairing or replacing other components not covered by this warranty is the responsibility of the product owner. This emissions limited warranty does not cover components whose failure does not increase the products regulated emissions.

For exhaust emissions, emission-related components include any engine parts related to the following systems:

- Air-induction system
- Fuel system
- Ignition system
- Exhaust gas recirculation system

The following parts are also considered emission-related components for exhaust emissions:

- Aftertreatment devices
- Crankcase ventilation valves
- Sensors
- Electronic control units

The following parts are considered emission-related components for evaporation emissions:

- Fuel Tank
- Fuel Cap
- Fuel Line
- Fuel Line Fittings
- Clamps*
- Pressure Relief Valves*
- Control Valves*
- Control Solenoids*
- Electronic Controls*
- Vacuum Control Diaphragms*
- Control Cables*
- Control Linkages*
- Purge Valves
- Vapor Hoses
- Liquid/Vapor Separator
- Carbon Canister
- Canister Mounting Brackets
- Carburetor Purge Port Connector

*As related to the evaporative emission control system

WARRANTY

U.S.A. EPA Emissions Limited Warranty

THE EXCLUSIVE REMEDY FOR BREACH OF THIS LIMITED WARRANTY SHALL BE, AT THE EXCLUSIVE OPTION OF POLARIS, REPAIR OR REPLACEMENT OF ANY DEFECTIVE MATERIALS, COMPONENTS OR PRODUCTS. THE REMEDIES SET FORTH IN THIS LIMITED WARRANTY ARE THE ONLY REMEDIES AVAILABLE TO ANY PERSON FOR BREACH OF THIS WARRANTY. POLARIS SHALL HAVE NO LIABILITY TO ANY PERSON FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY DESCRIPTION WHETHER ARISING OUT OF EXPRESS OR IMPLIED WARRANTY OR ANY OTHER CONTRACT, NEGLIGENCE OR OTHER TORT OR OTHERWISE. THIS EXCLUSION OF CONSEQUENTIAL, INCIDENTAL, AND SPECIAL DAMAGES IS INDEPENDENT FROM AND SHALL SURVIVE ANY FINDING THAT THE EXCLUSIVE REMEDY FAILED OF ITS ESSENTIAL PURPOSE.

THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS EXCLUDED FROM THIS LIMITED WARRANTY. ALL OTHER IMPLIED WARRANTIES (INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTY OF MERCHANTABILITY) ARE LIMITED IN DURATION TO THE ABOVE THREE YEAR CONSUMER AND ONE YEAR COMMERCIAL WARRANTY PERIOD. POLARIS FURTHER DISCLAIMS ALL EXPRESS WARRANTIES NOT STATED IN THIS WARRANTY. Some states do not permit the exclusion or limitation of incidental or consequential damages or allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you if inconsistent with controlling state law.

This limited warranty excludes failures not caused by a defect in material or workmanship. This limited warranty does not cover damage due to accidents, abuse or improper handling, maintenance or use. This limited warranty also does not cover any engine that has been structurally altered. This limited warranty also does not cover physical damage, corrosion or defects caused by fire, explosions or other similar causes beyond the control of POLARIS.

Owners are responsible for performing the scheduled maintenance identified in the owner's manual. POLARIS may deny warranty claims for failures that have been caused by the owner's or operator's improper maintenance or use, by accidents for which POLARIS has not responsibility, or by acts of God.

Any qualified repair shop or person may maintain, replace, or repair emission control devices or systems on your vehicle. POLARIS recommends that you contact an authorized POLARIS dealer to perform any service that may be necessary for your product. POLARIS also recommends that you use only Pure POLARIS parts. It is a potential violation of the Clean Air act if a part supplied by an aftermarket parts manufacturer reduces the effectiveness of the products emission controls. Tampering with emission controls is prohibited by federal law.

If you have any questions regarding your warranty rights and responsibilities, please contact the POLARIS Warranty Department at 1-888-704-5290.

Maintenance Log

Present this section of your manual to your dealer each time your generator is serviced. This will provide you and future owners with an accurate log of maintenances and services performed.

DATE / HOURS	SERVICE PERFORMED	COMMENTS	DEALER / TECHNICIAN
Initial / 20 hrs			
3 months / 50 hr			
6 months / 100 hr			
9 months / 150 hr			

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