



**POLARIS®**

# Polaris Power™ P3000iE



**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](http://www.polaris.com)  
Polaris Sales Inc., 2100 Hwy 55, Medina, MN 55340  
Phone 1-888-704-5290

Part No. 9924213 Rev 02





INTRODUCTION .....	1
SAFETY .....	3
CONTROLS AND FEATURES.....	9
FIRST USE INSTRUCTIONS .....	13
PRE-OPERATION INSPECTION .....	15
OPERATION .....	17
MAINTENANCE .....	25
TRANSPORTATION AND STORAGE ..	35
SPECIFICATIONS .....	39
WIRING DIAGRAM .....	41
TROUBLESHOOTING .....	43
WARRANTY .....	47
MAINTENANCE LOG .....	51



## 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](http://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
- Digital Inverter Generators

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](http://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.

Appliances that use more than 2800 Watts 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 warnings on the product, and follow all operation, inspection, and maintenance procedures outlined in this manual.

Please read the entire 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 starting on page 3 of this manual, and have the 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 starting on page 15. 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.

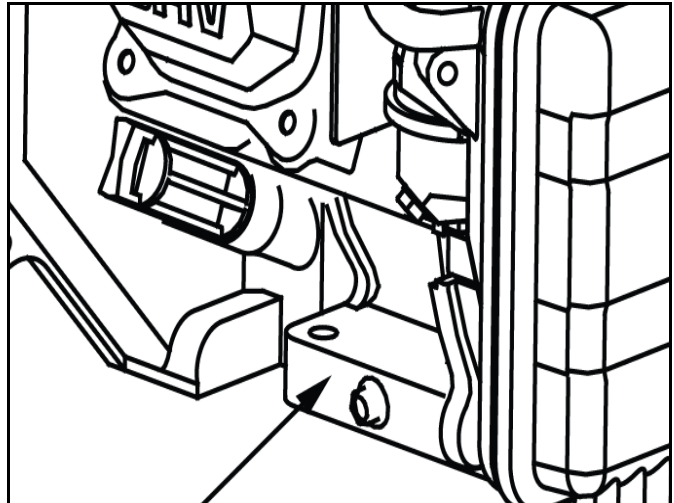
### **⚠ WARNING**

#### 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 the Engine switch to the OFF position. Turn off the gasoline valve and close the fuel cap vent when the generator is not in use for a long time.

#### **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-Operation Inspection activities as shown on page 15 of this manual. Inspect and tighten all parts before each use. 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. Lock the wheels before using.
- 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 and reads this manual completely. 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 generator 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, and well ventilated area. 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.
- If the generator is stored outdoors, unprotected from the weather, 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 rated power range stated on the generator. Overloading will damage the unit and / or shorten its operating lifespan.
- Do not attempt to connect generators in parallel.

# 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 parts, components, or any modifications 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

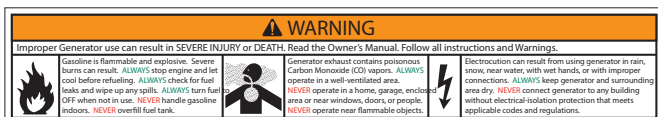
Safety and warning decals have been placed on the generator for your protection. Read and follow the instructions of the decals and warnings on the generator carefully. If any of the decals depicted in this manual differ from the decals on your generator, always read and follow the instructions of the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

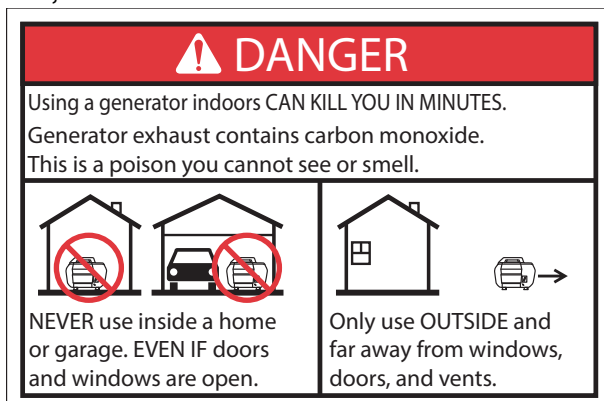


### Outdoor Use ONLY Danger Label

**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.**



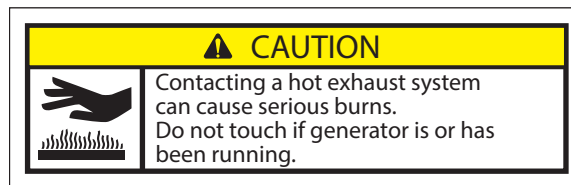
### Hot Exhaust Caution



**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.**

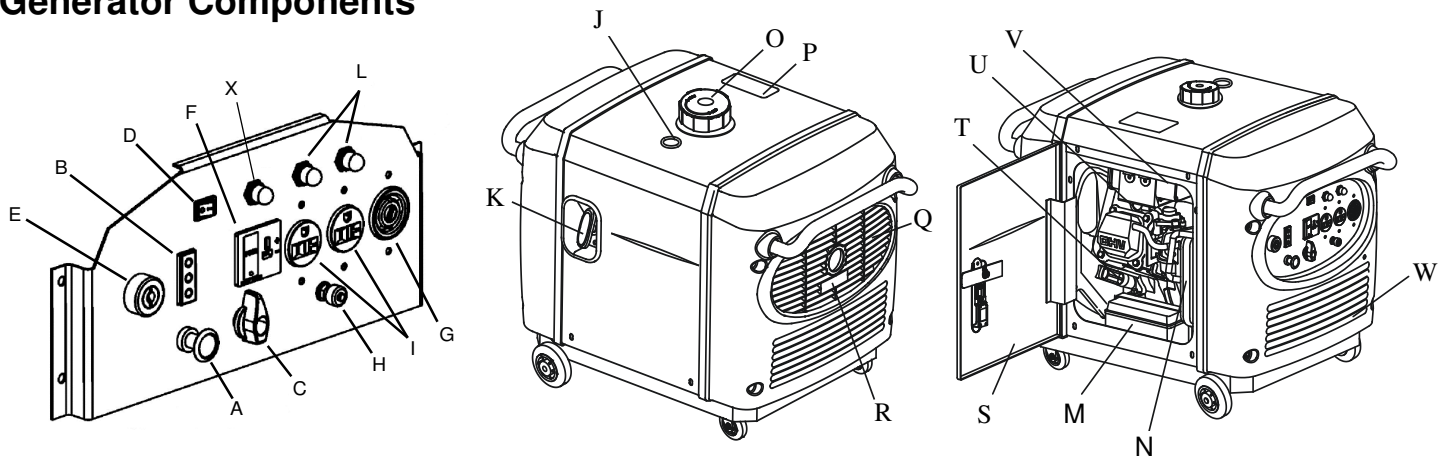
**Generator exhaust contains poisonous Carbon Monoxide (CO) vapors. ALWAYS operate in a well-ventilated area. NEVER operate in a home, garage, enclosed area or near windows, doors, or people. NEVER operate near flammable objects.**

**Electrocution 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.**



## CONTROLS AND FEATURES

### Generator Components



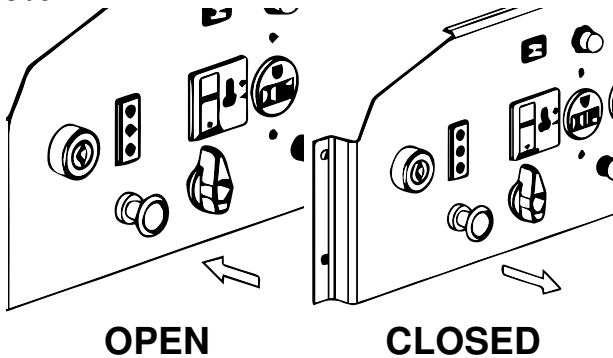
ITEM	NOMENCLATURE	DESCRIPTION
A	Choke Knob	Provides proper starting mixture when engine is cold.
B	Indicator Panel	Low Oil, Overload, and Output LEDs
C	Fuel Valve Lever	Turns fuel supply to carburetor on and off.
D	SMART Throttle Switch	Automatically reduces engine speed when loads are shut off or disconnected.
E	Ignition Switch	Controls the ignition system functions On, Off and operates electric start
F	DC Receptacle DC Circuit Breaker	Charges 12 Vdc automotive-type batteries.
G	120V AC Twist Lock Receptacle	Provides connection for properly rated, 120V AC appliances.
H	Ground Terminal	Provides ground for non-conductive metal parts and receptacle ground terminals.
I	120V AC Receptacle	Provide two connections for properly rated, AC appliances.
J	Fuel Level Indicator	Provides indication of fuel level.
K	Starter Grip	Causes the recoil starter to crank the engine when pulled.
L	Overload Protection	Resets the circuit protector by pushing in the button
M	Battery	Provides electricity for the starting system
N	Air Filter	Cleans the air going into the engine to reduce ware on internal components
O	Fuel Filler Cap	Provides access to the fuel tank
P	Air Quality Index	Label attached to every certified engine showing the engine emissions
Q	Air Exhaust	Dispels exhaust air from cooling the engine
R	Muffler	Reduces noise and emissions from engine combustion
S	Service Door	Provides access to the working components of the generator
T	Oil Dipstick	Accesses oil fill and measures amount of oil in engine
U	Spark Plug	Provides ignition of fuels in the combustion chamber
V	Carbon Canister	Emissions control device
W	Air Intake	Provides air to cool the engine
X	Overload Restart	Resets an overload condition

# CONTROLS AND FEATURES

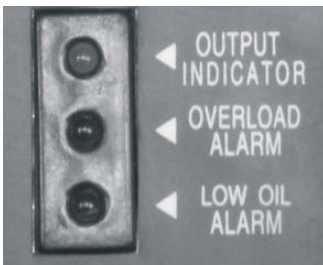
## Controls and Features

### Choke Knob

By moving to the CLOSE position, the choke knob (A) provides proper starting mixture when the engine is cold. Operates by being placed in the OPEN or CLOSE position.



### Indicator Panel



### Low Oil Indicator

The low oil alarm system is designed to prevent engine damage caused by an insufficient amount of oil in the crankcase. Before the oil level in the crankcase falls below a safe limit, the low oil alarm system will automatically shut down the engine (the engine switch will remain in the ON position).

If the low oil alarm system shuts down the engine the red low oil alarm indicator light will come on when you operate the starter, and the engine will not run. If this occurs, search for any oil leaks. Add engine oil to resume normal operation.

### Overload Indicator

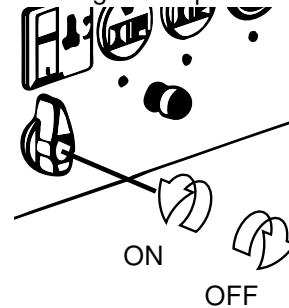
If the generator is overloaded to the point that the max power rating of 25 amps is exceeded or if there is a short in the connected appliance the output indicator will go out and the overload indicator will go on and current to the connected appliance will be shut off. Stop the engine if the overload indicator light comes ON and investigate the overload source.

### Output Indicator

The green output indicator light will remain on during normal operating conditions. If the generator is overloaded to the point that the max power rating of 25 amps is exceeded or if there is a short in the connected appliance the output indicator will go out

### Fuel Valve Lever

When the engine is well-cooled and not in use, the fuel valve (C) must be placed in the OFF position to reduce the possibility of fuel leakage. It must be in the ON position to allow the engine to operate.



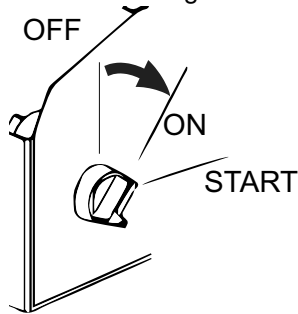
### SMART Throttle Switch

When the SMART throttle is placed in the on position, engine speed is kept at idle automatically when the electrical load is disconnected and returns to the proper speed required by the electrical load when the load is reconnected. The engine speed varies according to the amount of load applied to the generator. Placing the smart throttle in the on position is recommended to minimize fuel consumption and engine noise while in operation. When high electrical load appliances are connected simultaneously, turn the SMART throttle switch to the OFF position to reduce voltage fluctuation. The SMART throttle system does not operate efficiently if the electrical appliance will be used in a rapid on-off or low to high rpm mode. When the smart throttle is in the off position, the engine runs at rated load RPM.



## Ignition Switch

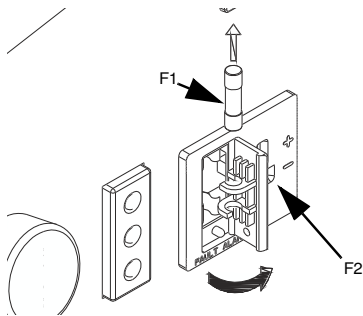
The ignition switch (F) must be in the ON / RUN position for the generator to operate. Turn the switch to the START position to start the engine.



## DC Receptacle and Fuse

The DC receptacle is protected from an overload with a fuse. If the DC circuit is overloaded, the 5 amp fuse (F1) 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.

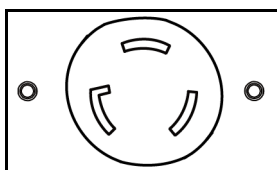
The DC receptacle (F2) may be used for charging 12 volt automotive-type batteries only. It is not designed to operate DC motors. Output voltage is 15-30V. DC output will vary according to the position of the Smart throttle switch.



## 120V AC Twist Lock Receptacle

120V AC receptacle (G) provides connection for properly rated, 120V AC appliances.

120V / 30 Amp



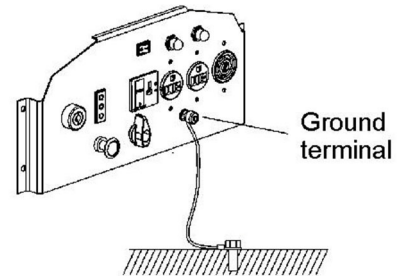
## AC Receptacles

Two AC receptacles (I) provide two connections for properly rated AC appliances. The two AC receptacles are rated at 20 amps.



## Ground Terminal

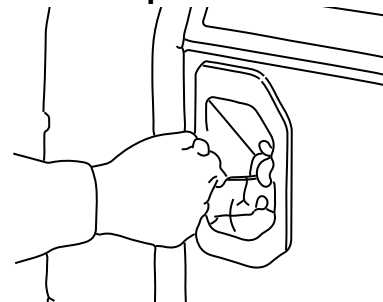
Ground terminal (H) connects to the frame of the generator metal parts that do not conduct current, and grounds terminals of each receptacle. Consult a qualified electrician, electrical inspector, or local agency having jurisdiction for local codes or ordinances for the intended use of the generator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



## Fuel Volume Indicator

Fuel Volume Indicator (J) provides an indication of fuel quantity.

## Starter Recoil Grip



## NOTICE

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

Starter grip (K) causes the recoil starter to crank the engine when pulled.





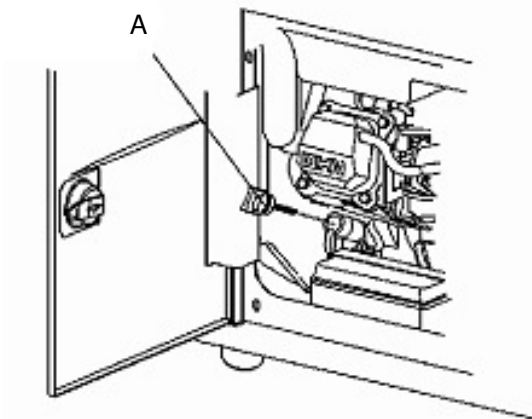
## FIRST USE INSTRUCTIONS

### Adding Engine Oil

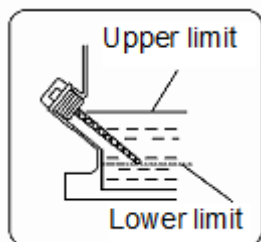
#### NOTICE

Failure to use the recommended 4-stroke engine oil may result in engine damage, see page 39 for recommended engine oil.

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

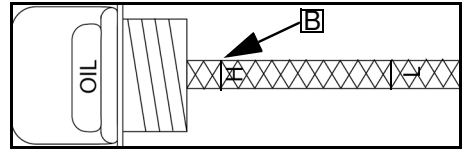


3. Fill the engine crankcase with the specified amount (20.3 ounces / 0.6 liters) of engine oil.



4. Insert the dipstick in the filler hole and tighten the dipstick.
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.

### Fuel Recommendation

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

**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.

#### ⚠ 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't fill above bottom of strainer.

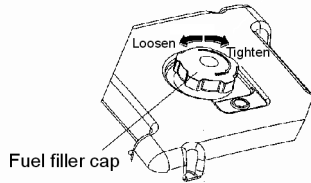
Refuel in a well ventilated area before starting the engine. If the engine has been running, allow it to cool.

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

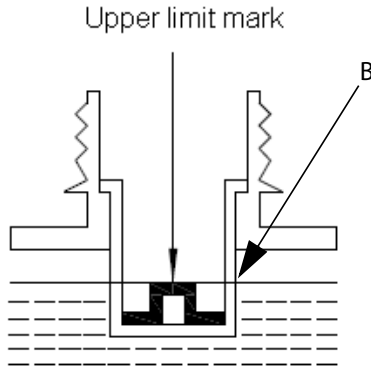
# FIRST USE INSTRUCTIONS

## Adding Fuel

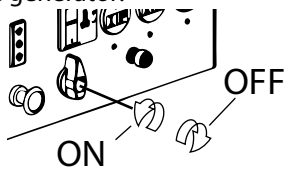
1. Remove the fuel tank cap (A).



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).



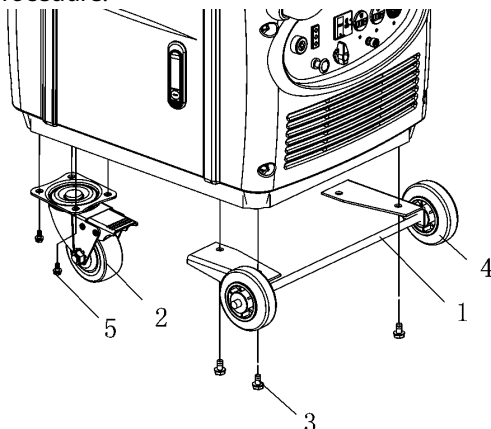
3. Tighten fuel tank cap (A) securely until it clicks.
4. Position fuel valve lever OFF for storage or ON to operate the generator.



5. Move generator away from fueling source and site before starting engine.

## WHEEL KIT Installation

The unit comes with the rubber mounting feet installed. If you wish to install the wheel kit, please perform the following procedure.

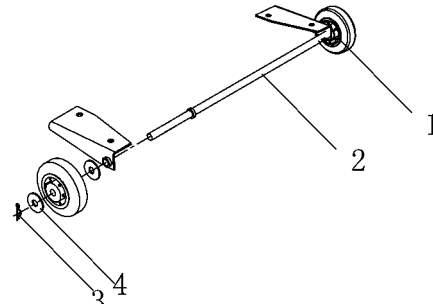


1. Axle assembly (1)
2. Locking swivel wheel (2)
3. Bolt M8X16 (4)
4. Wheel (2)
5. Bolt M6X16 (8)

## Wheel assembly

First remove all four rubber mounting feet.

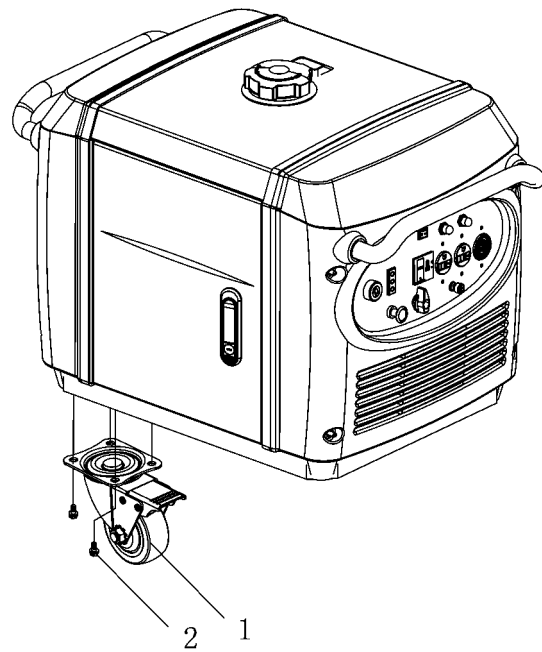
Put a washer on each side of the wheel then slide them on the axle securing with a lock pin.



1. Wheel (2)
2. Axle (1)
3. Lock pin (2)
4. Washer (4)

## Locking swivel wheel.

Secure each locking swivel wheel with 4 M6X16 bolts.



1. Locking swivel wheel
2. Bolt M6X16

## 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 or visit your authorized Polaris dealer for assistance.

### 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 knob operation.

#### Air Filters

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



## OPERATION

### Safe Operating Precautions

#### Fuel Recommendations

The P3000iE 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). If the content of ethanol exceeds the specified limits, it may cause starting or performance problems. It may also damage metal, rubber, and plastic parts of the fuel system. Do not use any gasoline containing methanol. 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**

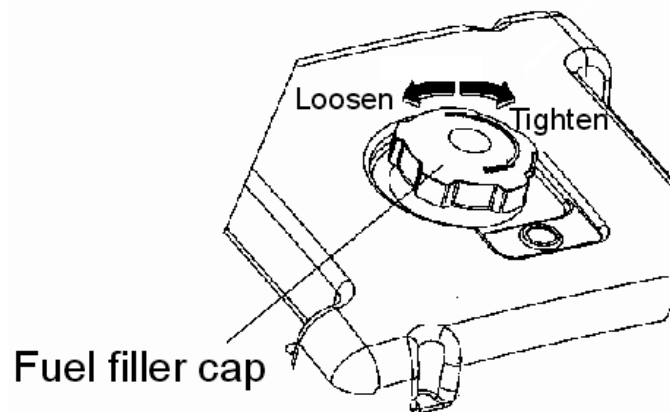
Do not spill fuel when filling the fuel tank. Damage caused by spilled fuel is not covered under warranty. Spilled fuel is a fire hazard, caused environmental damage, and can damage paint and plastic. Wipe up spills immediately. Don't fill above bottom of strainer.

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

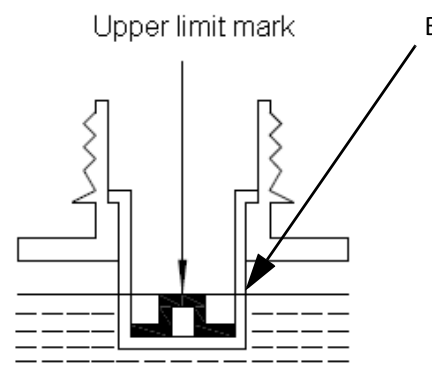
Never refuel the engine inside a building where vapors may reach flames or sparks. Keep fuel vapors away from electrical appliances.

Do not overfill the fuel tank (there should be no fuel in the filler neck). After refueling, make sure the fuel filler cap is closed properly and securely.

1. Remove the fuel tank cap (A).



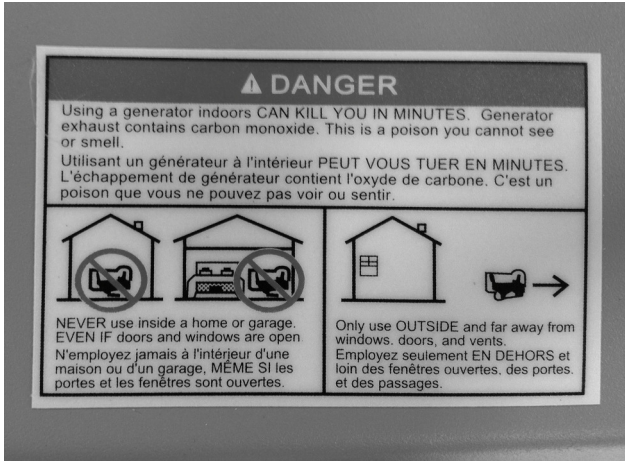
2. Fill carefully to avoid spilling fuel or exceeding the bottom of the fuel tank strainer (B).



3. Securely tighten the fuel tank cap (A) until it clicks.
4. Move generator away from the fueling source and site before starting the engine.

# OPERATION

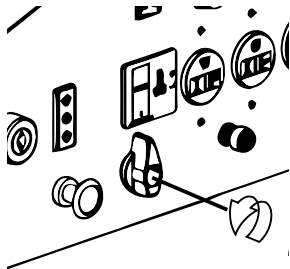
## Before Starting the Engine



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.
4. Engage the wheel locks if they are installed.

## Starting the Engine

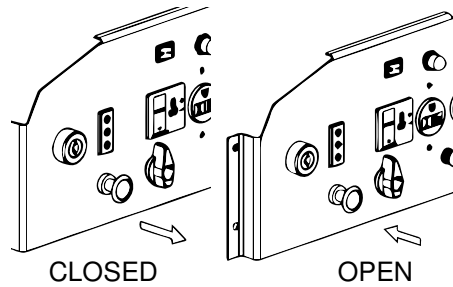
1. Ensure the generator is away from the fueling source.
2. Unplug all power cords and extension cords from the generator.
3. Position the fuel valve lever to ON.



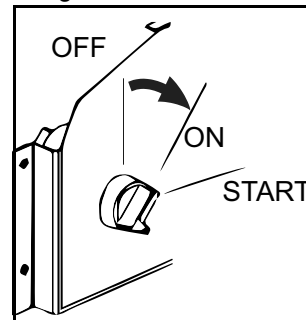
4. Position the SMART throttle switch to OFF.



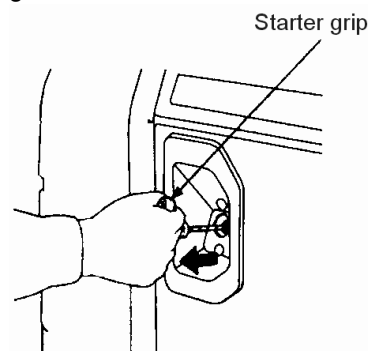
5. For a cold engine start, position the choke knob to CLOSE. To restart a warm engine, leave the choke knob in OPEN.



6. To start the generator using the ignition key, turn the ignition switch to the START position. When the engine starts, release the key. Do not operate the starter for more than 10 second intervals. If it doesn't start turn the key to the OFF position for 5 seconds before repeating until it starts.



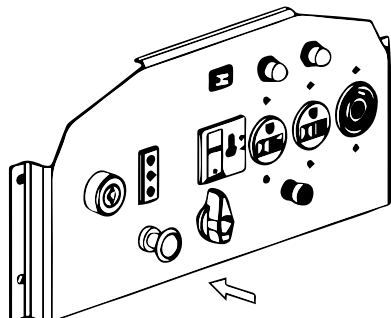
7. To start the generator, using the recoil, lightly pull the starter recoil grip until resistance is felt. Then, firmly pull straight out.



## NOTICE

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

- If the choke knob was positioned to CLOSE to start the engine, move it to OPEN as the engine warms up.



- After a 2 to 3-minute warm up, select ON or OFF on the SMART throttle switch as desired.



- If connecting loads to generator, reference "AC Operation" or "DC Operation" as outlined later in this chapter.

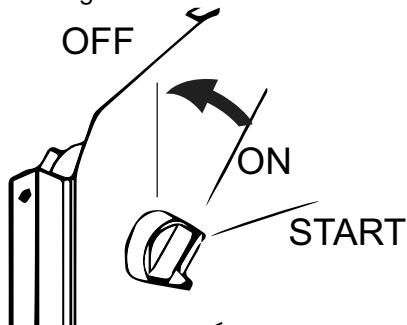
## Stopping the Engine

### CAUTION

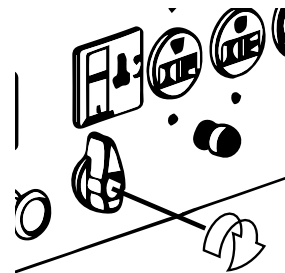
Continually stopping the generator with a load applied can lead to damage of the control module.

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

- Shut off or disconnect all appliances connected to the generator.
- Position the ignition switch to OFF.



- Shut off the fuel.



## 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.

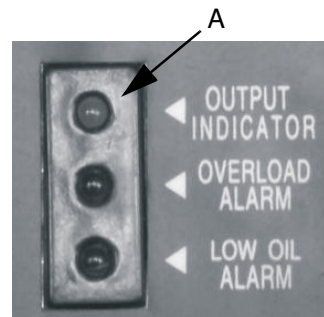
If an appliance begins to operate abnormally, becomes sluggish, or suddenly stops, immediately shut it off. Disconnect the appliance and determine whether the problem is the appliance or if the rated load capacity of the generator has been exceeded.

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. Do not exceed the current limit specified for any one receptacle. Power levels between rated and maximum may be used for no more than 30 minutes.

**IMPORTANT:** Before connecting a device or power cord to the generator, ensure the device is in good condition and its electrical rating does not exceed the maximum allowed by the generator.

**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 your Polaris dealer.

- Perform "Starting the Engine" (page 18) and ensure that the output indicator (A) illuminates (GREEN).



# OPERATION

- Confirm that the appliance to be used is switched off then plug the device or extension cord into one of the AC receptacles.



- Turn on the device.

**NOTE: Should this current be exceeded, the circuit protection device will activate and cut all current to the receptacle. This will be indicated by the push button popping out. Unplug everything that is plugged into the receptacle and reset the circuit protector by pushing in the button and then push in the Overload Reset switch.**

Should the generator's maximum load of 25 amps be exceeded, AC power will be cut off but the engine will stay running, This will be indicated by the push button popping out. Correct the overload condition Reduce the load to the receptacle and reset the circuit protector by pushing in the button. 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:

3.0 kW

For continuous operation, do not exceed rated power:

2.8 kW

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
Garage Door Opener 1/2 HP	875	2350
Hair Dryer	300 - 1200	0
Light Bulb (75-Watt)	75	0
Microwave Oven 1000-Watt	1000	1400
Paint Sprayer	360	1080
Personal Computer with 17" Monitor	800	0
Radio	300	300
Refrigerator	400 - 800	2200
Space / Wall Heater	1800	0
Sump Pump - 1/2 HP	1050	2200
Table Saw / Radial Arm Saw - 10"	2000	2000
Television (Color) - 27"	500	0



## Power Management Example

DEVICE	RUNNING (RATED) WATTS	ADDITIONAL STARTING (SURGE) WATTS
Microwave oven	1000	1400
Coffee maker	1000	0

Total Running (Rated) Watts = 2000

Additional Starting Surge Watts = 1400

Total Generator Output Required = 3400

### ⚠ 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.

To prevent the possibility of creating sparks near the battery, connect the charging cable first to the generator then to the battery. Disconnect the cable first at the battery.

The battery contains sulfuric acid (electrolyte). Contact with skin or eyes may cause severe burns. Wear protective clothing and a face shield. If electrolyte gets on your skin, flush with water. If electrolytes get in your eyes, flush with water for at least 15 minutes and call a physician.

Electrolyte is poisonous. If swallowed, drink large quantities of water or milk and follow with milk of magnesia or vegetable oil and call a physician. Keep out of reach of children.

### ⚠ CAUTION

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

The DC output is to be used to charge batteries only. Serious damage to the stator windings can occur if connected to a DC motor or transformer.

### NOTICE

This generator is not designed to operate DC motors. Output voltage is 15-30V. DC output will vary according to the position of the Smart throttle switch.

1. Disconnect the vehicle ground cable from the negative (-) battery terminal.
2. Plug the battery charging cable into the DC receptacle (A).
3. Connect the red lead of the battery charging cable to the positive (+) battery terminal and then the black lead to negative (-) battery terminal. Do not reverse the charging cables or serious damage to the generator and/or battery may occur.



4. Start the generator.

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

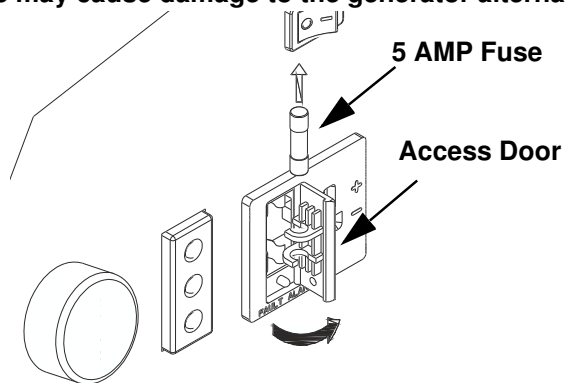
### ⚠ CAUTION

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.

NOTE: The DC receptacle is protected from an overload with a fuse. If the DC circuit is overloaded, the 5 amp fuse will blow and power to the DC

# OPERATION

receptacle will cease. The red light on the DC panel will illuminate. If the DC overload fuse continues to blow, discontinue charging and see your authorized Polaris generator dealer. The overload fuse *does not* prevent overcharging the battery. 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.



## 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.
3. Unplug the battery charging cable from the DC receptacle (A).
4. Connect the vehicle battery ground cable to the negative (-) battery terminal.

## Air Conditioning Operation

For best results, the SMART throttle switch should be in the off position. Bring the generator to a normal operating temperature before applying the air conditioning load. Always allow a 2 minute wait period when manually cycling an air conditioner off and on. A longer wait period may be required under unusually hot weather conditions. Additionally, all other loads should be turned off until the air conditioner has started and is performing normally. It is also important to follow the air conditioner manufacturer's instructions for starting and restarting for proper operation. Some air conditioner manufacturers offer a start capacitor as an extra cost option. The lack of a start capacitor can cause the air conditioner to draw too high a starting current and overload the generator. Contact your air conditioner dealer if you consistently have problems starting your air conditioner with the generator. This generator is not generally recommended for air conditioners exceeding 13,500 BTUs

## 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.

## 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<sub>x</sub>), and hydrocarbons. It is very important to control the emissions of NO<sub>x</sub> 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<sub>x</sub>, 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.

# OPERATION

---

## 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 rebuilder 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

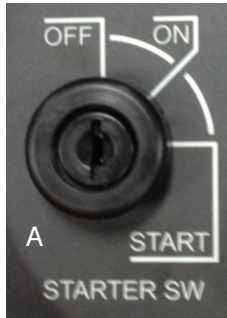
Item	Remarks	Pre-Operation Check (daily)	Initial 1 month or 20 hrs	Every 3 months or 50 hrs	Every 6 months or 100 hrs	Every 12 months or 300 hrs
Spark plug	Check condition. Adjust gap and clean. Replace as needed.				X	
Spark arrester	Clean the carbon deposits.				X	
Engine oil	Check the oil level.	X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

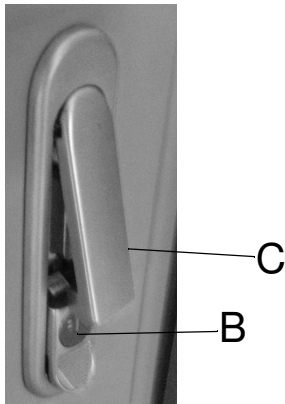
Use the following steps to remove the generator maintenance cover and gain access to the inner components. Before performing any maintenance, the ignition switch should be positioned to OFF (see “Controls and Features, Engine Switch”).

**NOTE: Use this procedure to remove the maintenance cover on either side of the generator.**

1. Position the ignition switch (A) and fuel valve lever to OFF.



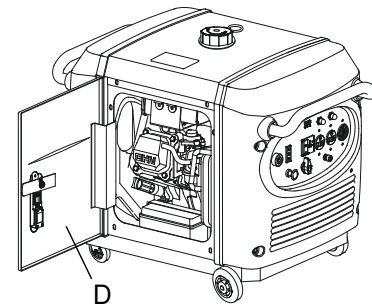
2. Unlock the access panel latch (B), slide the lock down to have the latch handle (C) pop out .



3. Turn the latch handle (C) clockwise to disengage the latch.



4. Expose the generator inner components by swinging open the service cover (D). Perform maintenance as needed.



5. Upon completion of maintenance, close the maintenance cover (D), engage the latch (C) by turning counter clock wise and pushing in securing with the lock slider (B), and position the ignition switch (A) to the ON position to allow generator operation.

## 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

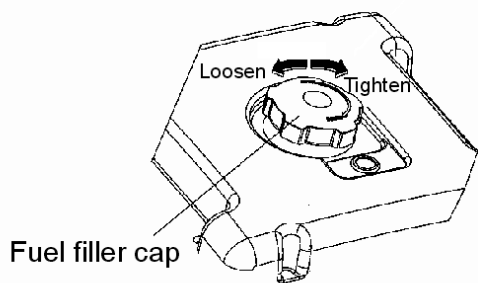
Inspect the fuel line to ensure absence of twists, cracks, and / or damage. Replace as needed.



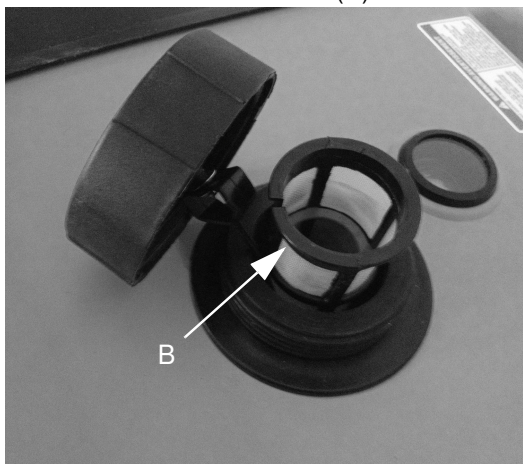
# MAINTENANCE

## Gas Tank Strainer

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).
7. Position the fuel valve lever OFF for 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, see page 39 for recommended oil. Other viscosities may be used when the applicable average temperature is within the recommended range.

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

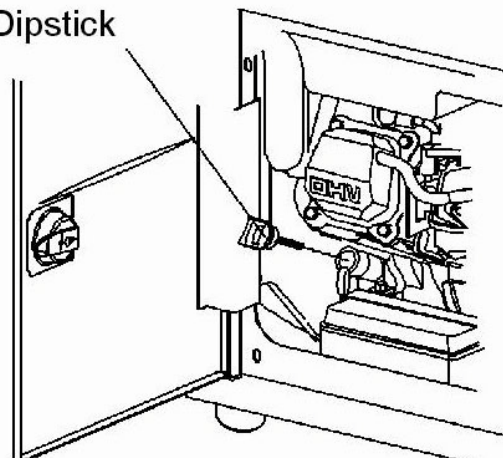
Failure to use the proper 4-stroke engine oil may result in engine damage.

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.

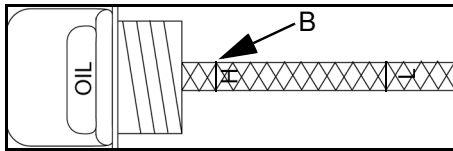
#### Dipstick



3. Insert the dipstick (A) into filler neck, 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). Use a clean shop rag to clean any spilled oil.
6. Re-install the maintenance cover.

## Oil Change

### ⚠ WARNING

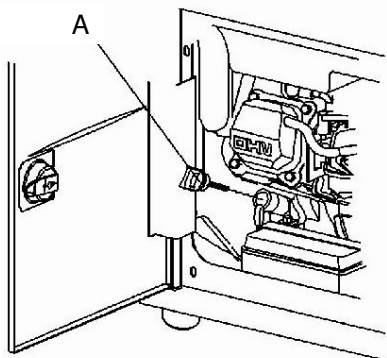
Oil may be hot. Do not allow hot oil to come into contact with skin, as serious burns may result.

**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 the fuel valve lever to OFF.

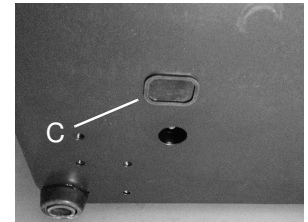
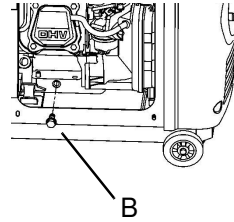


3. Open the maintenance cover.
4. Remove the oil filler cap / dipstick (A).



5. Remove the drain bolt (B) and drain the oil. There is a rubber plug (C) in the bottom of the generator pan that can be removed to facilitate draining the oil. The generator will have to be raised off the ground and

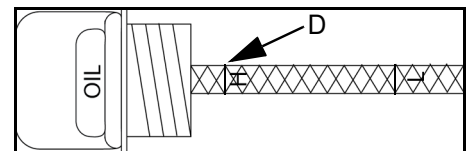
supported while the oil drains.



**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. Re-install the oil drain bolt (B) and replace the rubber plug (C).

Fill oil to the high limit mark (D) on the dipstick.



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 (D) on the dipstick.
10. Re-install the dipstick (A).
11. Close maintenance cover.
12. Wash hands with soap and water after handling used oil.

# MAINTENANCE

## Air Filters

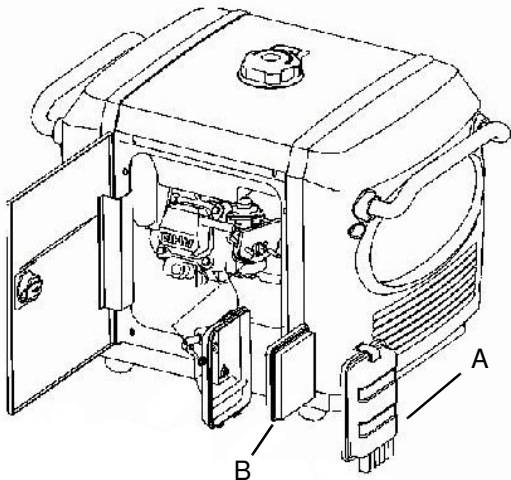
### Air Filter Inspection

#### **⚠ WARNING**

Do not use gasoline or low flash point solvents for cleaning. They are flammable and explosive under certain conditions.

**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. Unsnap the clips and remove the air cleaner cover (A).



3. Remove the air filter (B).
4. If the paper element (B) is dirty or torn, replace it with a new one. Do not attempt to clean the element.
5. Reinstall the air cleaner cover.
6. Close and latch the service door.

## 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, the provided spark plug wrench is required.

Refer to the Specification section (Page 41) for the recommended spark plug type. Always torque spark plugs to the 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.

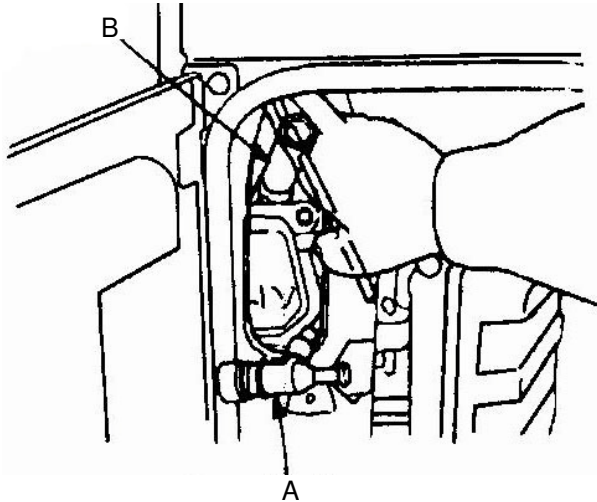
**NOTE:** The tip should not be white. A white insulator tip indicates overheating, caused by use of an improper spark plug, fuel, or incorrect carburetor adjustments.

#### **Wet Fouled Spark Plug**

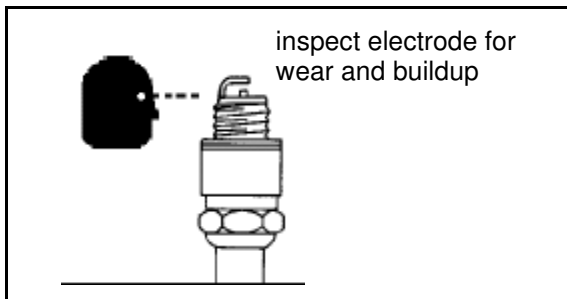
The wet fouled insulator tip is black. A damp oil film covers the firing end. There may be a carbon layer over the entire nose. Generally, the electrodes are not worn. Fouling may be caused by excessive oil or by frequent short trips, especially in cold weather.

1. Open the maintenance cover.

2. Remove the spark plug cap (A).

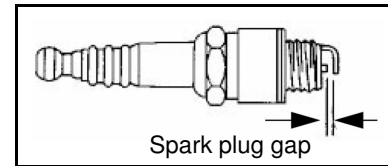


3. Clean any dirt from around the base of the spark plug.
4. Using the provided spark plug wrench (B), remove the spark plug.
5. Inspect the electrode for wear and carbon buildup. Look for a sharp outer edge with no rounding or erosion of the electrode.



6. Inspect spark plug. Replace if electrodes are worn or if insulator is cracked, chipped, or fouled.
7. Clean the spark plug with a wire brush if it is to be reused.

8. 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 0.028-0.031 in (0.7-0.8mm). Correct as necessary by carefully bending the side electrode.



9. Ensure the spark plug sealing washer is in good condition and thread the spark plug in by hand to prevent cross-threading.
10. After a new spark plug has been seated by hand, it should be tightened 1/2 turn with a wrench to compress the sealing washer. If a used plug is being reinstalled, it should only require 1/8 to 1/4 turn after being seated.

## NOTICE

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

**Never use a spark plug with an improper heat range.**

11. Re-install the spark plug cap and close the maintenance cover.

# MAINTENANCE

## Battery

### Battery Safety

#### **⚠ WARNING**

Always disconnect the negative (black) cable first when removing the battery. Always connect the negative (black) cable last during installation. Failure to properly connect/disconnect battery cables may result in an explosion and cause serious injury or death.

Battery electrolyte contains sulfuric acid which is poisonous and can cause serious burns. Avoid contact with eyes, skin, and clothing. Ensure proper protective gloves, goggles, and clothing are worn. If eyes are exposed, flush with water for 15 minutes and seek medical attention. If external contact, flush with water. If ingested, drink large quantities of water or milk. Follow with milk of magnesia, beaten egg, or vegetable oil. Seek immediate attention.

Overheating of battery may cause an explosion, and severe injury or death. Stop charging if the battery becomes very warm to the touch. Allow battery to completely cool before resuming charging.

#### **NOTICE**

Avoid spilling of electrolyte. Damage to equipment may result. Immediately wash off any electrolyte spills with a solution of one tablespoon baking soda and one cup water.

### Accessing the Battery

Open the maintenance cover to gain access to the battery, see page 9 for location. Before performing any inspection or maintenance on the battery, ignition switch and fuel valve lever should be positioned to OFF

### Battery Cleaning

1. Using a stiff wire brush, remove corrosion from the battery terminals and electrical connections.
2. Wash with a solution of one tablespoon baking soda and one cup water.

### Battery Charging (Sealed Only)

**NOTE: This procedure applies only to the sealed battery (recommended).**

1. Using a voltmeter or multi-meter, check the battery to ensure a minimum 12.8 Vdc or higher.
2. If the voltage is less than 12.8 Vdc, recharge the battery at 1.2 amps or less until the battery voltage is 12.8 Vdc or greater.
3. When using automatic charger, refer to charger manufacturer instructions. When using constant current charger, refer to for recharging as follows:

Polaris Battery Tender Charger:  
2859044

STATE OF CHARGE	VOLTAGE	ACTION	CHARGE TIME <small>(Using constant current charger @ standard amps specified on top of battery)</small>
100%	12.8 - 13.0 Volts	None. Check at 3 months from manufacture date.	None required
75% - 99%	12.5 - 12.7 Volts	May need slight charge, if no charge given, check in 3 months.	3 - 6 hours
50% - 74%	12.0 - 12.4 Volts	Needs charge	5 - 11 hours
25% - 49%	11.5 - 11.9 Volts	Needs charge	At least 13 hours, verify state of charge
0% - 24%	11.4 volts or less	Needs charge with de-sulfating charger	At least 20 hours

## Spark Arrestor

### Spark Arrestor Maintenance

#### **⚠ WARNING**

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

Allow generator and exhaust to cool before performing spark arrestor maintenance.

#### **⚠ CAUTION**

The spark arrestor must be serviced every 100 hours to maintain its efficiency.

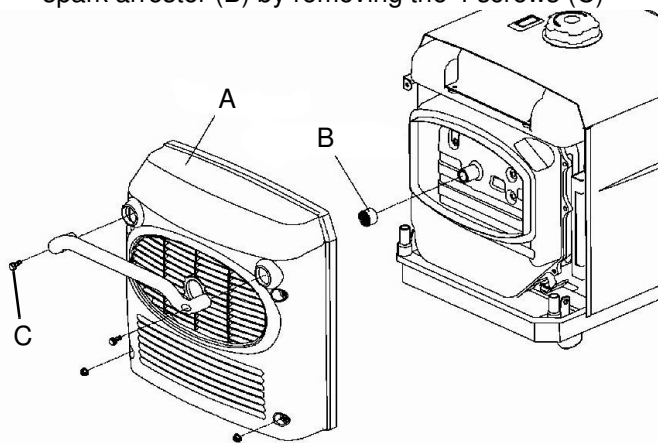
Use the following steps to remove the generator handle and exhaust cover to gain access to the spark arrestor.

Before performing any inspection or maintenance on the battery, ignition switch should be positioned to OFF.



5. Reinstall screen and clamp. Tighten clamp and verify screen is secured to exhaust outlet.
6. Reinstall exhaust cover.

1. Remove the generator rear cover (A) to access the spark arrestor (B) by removing the 4 screws (C)



2. Remove the spark arrestor from the muffler by unscrewing the clamp.
3. Clean the spark arrestor with a stiff wire brush.
4. Replace if the wire mesh is perforated or torn.



## TRANSPORTATION AND STORAGE

### Transportation

#### Transporting the Generator

#### **⚠ WARNING**

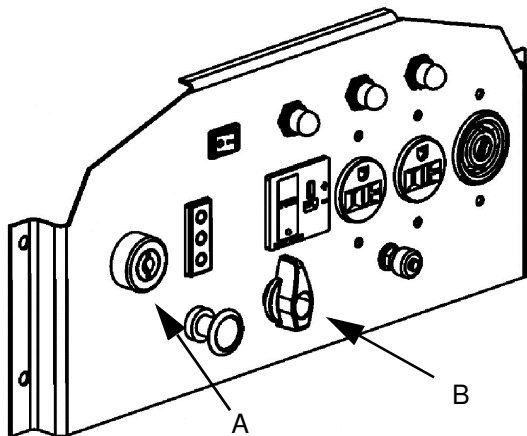
A hot engine or exhaust system can cause severe burns and ignite flammable material. Ensure adequate time for cooling before storage or transportation.

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.

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

**IMPORTANT:** When transporting firmly secure the generator to the transport vehicle.

1. If the generator has been used, allow it to cool for at least 15 minutes before loading it on the transport vehicle.
2. Position the ignition switch (A) and the fuel valve lever (B) to OFF (see “Control and Features, Ignition Switch and Fuel Valve Lever”), and keep generator level to reduce possibility of fuel leakage.
3. Transporting the generator with gasoline in the fuel tank is prohibited (see “Draining Fuel from the Fuel Tank and Carburetor”).



### 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.

**Be sure the storage area is free of excessive humidity and dust.**

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. Remove the battery and store in cool, dry location. Use a battery tender to maintain battery charge.
5. Clean the exterior of the generator with a clean cloth and apply a rust inhibitor.
6. Turn fuel valve lever to OFF.

#### **⚠ WARNING**

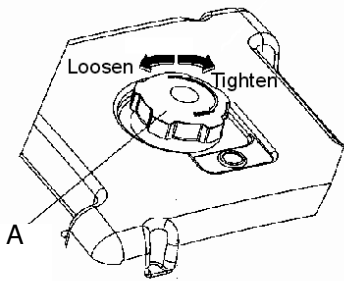
Do not pour water directly on to the generator or wash it with water.



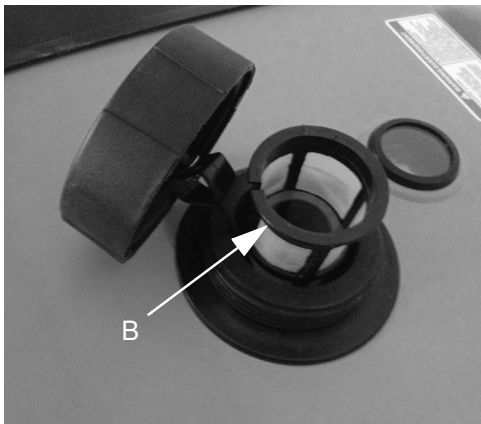
# TRANSPORTATION AND STORAGE

## Accessing the Fuel Tank

1. Remove the fuel tank cap (A).



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



3. When maintenance is complete, re-install the fuel tank strainer (B) into the fuel tank.
4. Securely tighten the fuel tank cap 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. Drain the carburetor bowl prior to any storage period longer than 30 days.

1. Access the fuel tank (see "Accessing 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

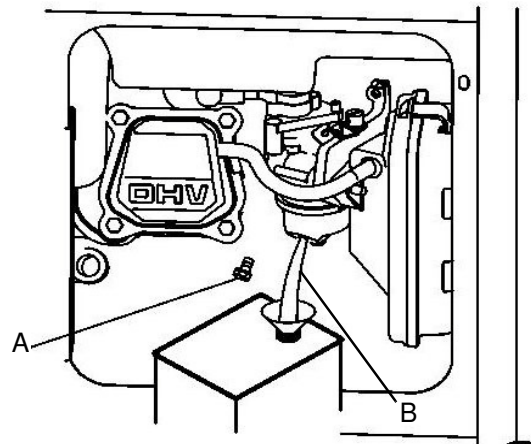
### ⚠ WARNING

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 or before transportation.

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. Open the maintenance cover (see "Maintenance, Opening the Maintenance Cover").
6. Turn fuel valve lever to ON and then loosen the carburetor drain screw (A).

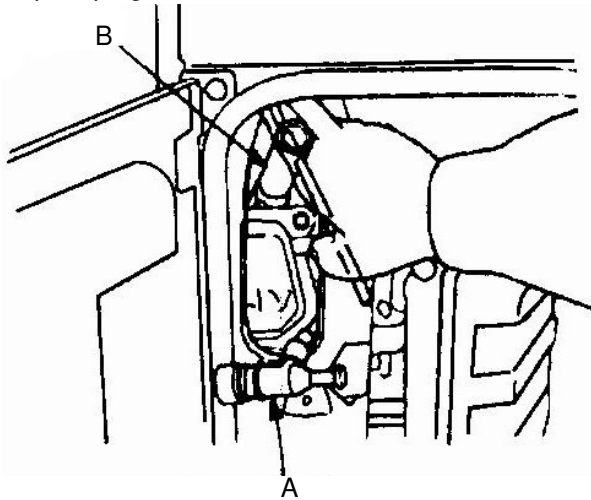


7. Drain the gasoline from the carburetor (B) and into a suitable container.

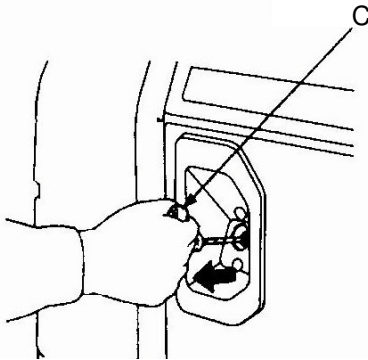


## Fogging the Engine

1. Turn the ignition key to the OFF position.
2. Open the maintenance cover (see "Maintenance, Opening the Maintenance Cover").
3. Remove the spark plug cap (A).
4. Using the provided spark plug wrench (B), remove the spark plug.



5. Pour a tablespoon of clean engine oil into the cylinder. Crank the engine several revolutions to distribute the oil and then reinstall the spark plug.



6. Ensure that the spark plug sealing washer is in good condition and hand-tighten the spark plug to prevent cross-threading.
7. Using a spark plug wrench, carefully tighten the spark plug. Torque the spark plug to specification, see Page 31.
8. Slowly pull the starter grip until resistance is felt. At this point, the piston is coming up on its compression stroke and both the intake and exhaust valves are closed. Storing the engine in this position will help protect it from internal corrosion.

9. Re-install the spark plug cap (A) and maintenance cover.
10. Cover the generator and store it indoors, in a dry, well-ventilated area, such as a tool shed.

## Battery Storage

Once a month, recharge the battery.

## 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.
- Be sure the storage area is free of excessive humidity and dust.
- 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.
- Position fuel tank cap vent lever to OFF to reduce leakage possibilities.

# TRANSPORTATION AND STORAGE

---

## Generator Exercise

**NOTE:** . Exercise the generator by running it at a 50% load for two hours every month. This insures fresh fuel is run through the fuel system and prevents varnishing. In addition, seals and engine components are lubricated and the chance of carbon buildup in the upper cylinder head is lessened. Any moisture that has accumulated in the generator windings is baked out as well as keeping the battery charged.

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.

## 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.

**SPECIFICATIONS**

**Polaris Lubricants and Maintenance Products**

**General Specifications**

Model Number: P20GG20CA

**Polaris Power™ Generator**

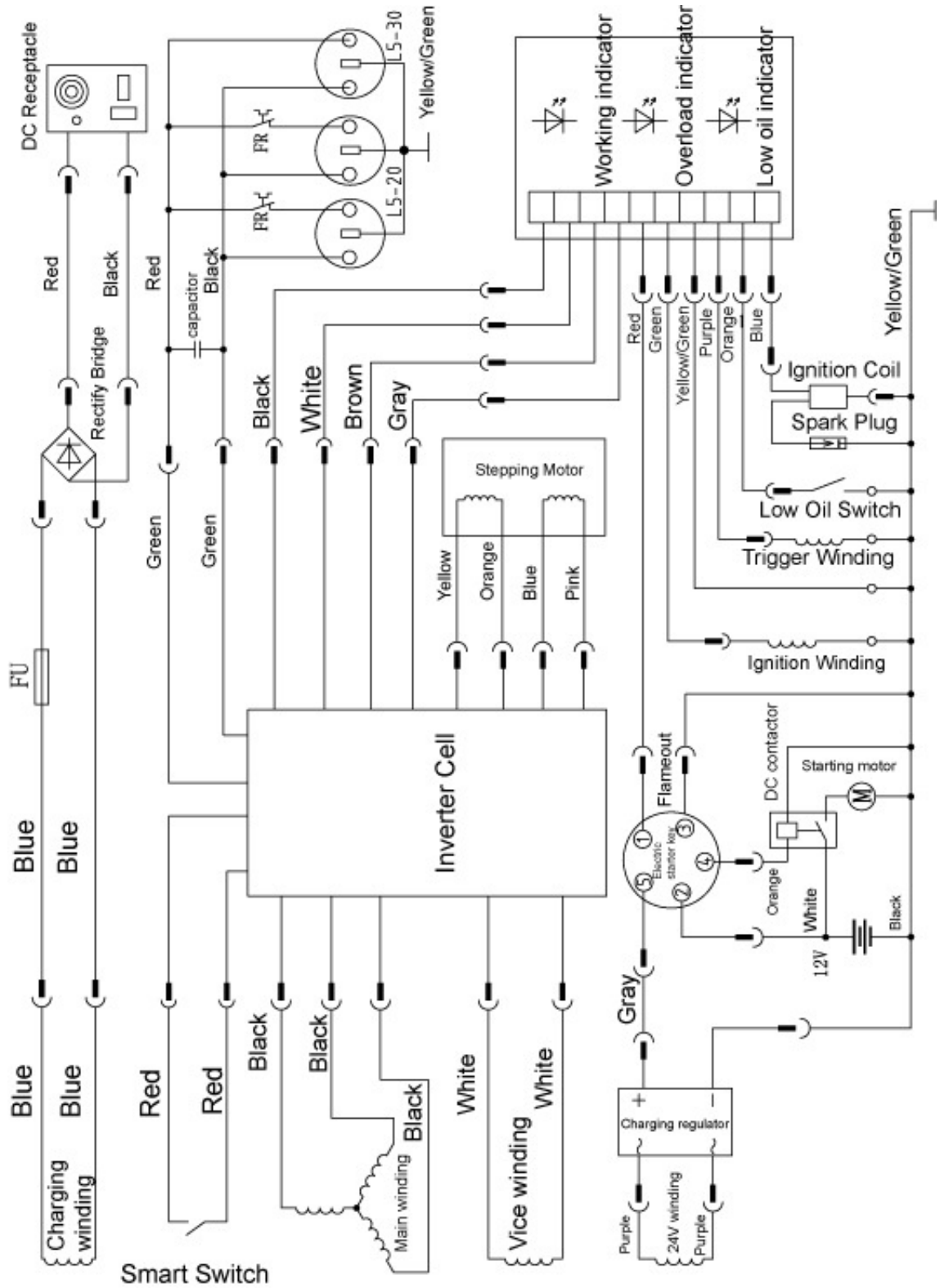
<b>ALTERNATOR</b>	
AC Output Voltage	120V
DC Output Voltage	12V (5.0A)
Rated Output	2.8 kW (23.3A)
Maximum Output	3.0 kW (25A)
Frequency	60 HZ
Type	Inverter
<b>ENGINE</b>	
Model	KG205
Type	4-stroke, OHV Air-cooled, Single Cylinder
Displacement	196cc(12.0 cu in)
Compression Ratio	8.5:1
Engine Speed	3600 rpm with smart throttle off
Cooling System	Forced Air
Ignition System	Transistorized
Engine Oil	Polaris 5W-30 Generator Oil
Engine Oil Capacity	0.63 qt (0.6 Liters)
Intake Valve Clearance-Cold	.004 inches (0.10 mm)
Exhaust Valve Clearance-Cold	.006 inches (0.15 mm)
Spark Plug Gap	WR7DC .024 - .028in. (0.6 - 0.7mm)
<b>GENERATOR</b>	
Fuel	87 Octane (Up to 10% Oxygenated)
Fuel Tank Capacity	3.1 gallons (11.6 L)
Noise Level dB(A)* No Load (Full Load)	62 (67dB) *dB(A) measured outdoors at 23 feet (7 meters) from control panel side
Starting System	Electric with recoil backup

**Polaris Power™ Generator**

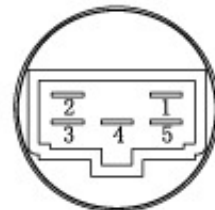
Dimensions (L x W x H)	27.0 in (686 mm)
	16.7 in (425 mm)
	19.9 in (505 mm)
Weight	132 lbs (60 kg)
Full Tank Run Time Hours Rated Load	6.25 hours
AC/DC Simultaneously Usage	Yes

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





	①	③	②	⑤	④
OFF	●	●			
ON			●	●	
START			●	●	●





## 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
Low battery voltage	Recharge the battery to 12.8 Vdc
Starter motor damaged	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
Low Oil	Repeat Pre-operation Inspection
Water is present in 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 if 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
Low battery voltage	Recharge the battery to 12.8 Vdc
Mechanical failure	Take the generator to an authorized Polaris servicing dealer or refer to the service manual
Is the fuel valve on	Turn the fuel valve on.

### Engine Lacks Power

POSSIBLE CAUSE	SOLUTION
Air filter restricted	Clean or replace air filter
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 spark 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	Drain the fuel system and refuel
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 plugs

## 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
Low battery voltage	Recharge battery to 12.8 Vdc
Kinked or plugged fuel tank vent line	Inspect and replace
Incorrect fuel	Drain the fuel system and refuel
Economy throttle control malfunction	Take the generator to an authorized Polaris servicing dealer or refer to the service manual
Other 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	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 plug
Clogged air 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
Economy 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
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	Take the generator to a Polaris servicing dealer or refer to the service manual
AC circuit protector tripped	Check AC load and reset circuit protector
Overload protector tripped	Push the Overload Restart switch
Faulty power tool or appliance	Replace or repair 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
Is the fuse 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.

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

# WARRANTY

---

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 to conform with the requirements of the U.S. Environmental Protection Agency regulations and the California Air Resources Board regulations applicable to its emissions. 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 24 calendar months from the date of purchase.

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

## 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**

# WARRANTY

---

**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.**

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

**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.







---

A  
AC Capacity 20  
AC Operation 19  
AC Receptacle 11  
Accessing the Battery 32  
Accessing the Fuel Tank 36  
Adding Engine Oil 13  
Adding Fuel 14  
Additives / Sealants / Thread Locking Agents / Misc. Maintenance Products 39  
Air Filter Cover, View 30  
Air Filter Inspection 30  
Air Filter, View 30  
Air Filters 30  
Alternator Specifications 39  
C  
Choke Knob 10  
Clean Air Acts 24  
Connections to a Building Electrical System 23  
D  
DC Fuse 11  
DC Operation 21  
Dipstick, Photo 13  
E  
Electrical Safety 5  
Emission Control Alterations 24  
Emission Control Replacement Parts 24  
Emission Control System Information 23  
Emissions Source 23  
Engine Lubricants 39  
Engine Specifications 39  
EPA Emissions Limited Warranty 49  
Equipment Modifications 6  
Exhaust and Carbon Monoxide Safety 5  
Extension Cord Information 6  
F  
Fire Safety 6  
Fuel Line 27  
Fuel Recommendation 13, 17  
Fuel Safety 4  
Fuel Strainer 14  
Fuel System 27  
Fuel Tank Cap 14  
Fuel Tank Capacity 39  
Fuel Tank Strainer 28  
Fuel Valve Lever 10  
Fuel Volume Indicator 11  
G  
Generator Components, View 9  
Generator Specifications 39  
Grease / Specialized Lubricants 39  
Ground Terminal 11  
H  
High-Altitude Operation 23  
I  
Ignition Switch 11  
Important, Definition 2  
Intended Use 1  
L  
Low Oil Indicator 10  
Lubricants and Maintenance Products 39  
M  
Maintenance Log 51  
Maintenance Safety 25  
N  
Note, Definition 2  
O  
Obtaining Warranty Service 48  
Oil Change Procedure 29  
Oil Level Inspection 28  
Oil Recommendation 28  
Operator Safety 4  
Output Indicator 10  
Overload Indicator 10  
Overload Protection Device 20  
P  
Periodic Maintenance Chart 26  
Pre-Operation Checklist 15  
Pre-Operation Inspection 15  
Problems Affecting Emissions 24  
R  
Refueling 17  
Registration 47  
Removing Generator from Storage 38  
Removing the Maintenance Cover 27  
S  
Safe Operating Precautions 17  
Safety Labels and Locations 7  
Safety Precautions 2, 3, 25  
Signal Words and Safety Terms 2  
SMART Throttle Switch 10  
SMART Throttle System 22  
Spark Arrestor Maintenance 33  
Spark Plug Inspection and Replacement 30

---

Spark Plugs	30
Specifications	39
Standby Power	23
Starter Recoil Grip	11
Starting the Engine	18
Stopping the Engine	19
Storage Precautions	37
Storage Preparation	35
System Ground	23
System Requirements	23
T	
Transporting the Generator	35
W	
Warranty	47
Warranty Coverage and Exclusions	47