

Owner's Manual & Safety Instructions

Save This Manual Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

REV 15a

PREDATOR™ GENERATORS

2500 WATT INVERTER GENERATOR

**2200 RUNNING WATTS
2500 PEAK WATTS**



⚠ DANGER

Using a generator indoors CAN KILL YOU IN MINUTES.

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



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

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

ITEM 61169

Visit our website at: <http://www.harborfreight.com>

Email our technical support at:
productsupport@harborfreight.com

Email our Engine support at: predator@harborfreight.com

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible.

Copyright© 2013 by Harbor Freight Tools®. All rights reserved.

No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools. Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein. Tools required for assembly and service may not be included.

⚠ WARNING

Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

Table of Contents

Specifications	2	Maintenance	13
Safety	3	Troubleshooting.....	17
Setup	7	Parts Lists and Diagrams	19
Operation.....	8	Warranties	27






Specifications

Generator	Output	120VAC, 60Hz, 1 Phase 12VDC, 8.3A (nominal) 2200W Running 2500W Peak
	Receptacles	2x NEMA #5-20 (3-prong, 120VAC) 1x 12VDC Two Pin Outlet
Displacement		125cc
Compression Ratio		8.5:1
Engine Type		Horizontal Single Cylinder 4-stroke, OHC
Cooling System		Forced air cooled
Fuel	Type	87+ octane stabilizer treated unleaded gasoline
	Capacity	1.35 Gallon
Engine Oil	Type SAE	10W-30
	Capacity	1 Quart
Run Time @ 50% Load with full tank		5-1/2 hr.
Sound Level at 23 feet, 50% load		64 dB
Bore x Stroke		52.4mm x 57.8mm
Spark Plug	Type	A7RTC
	Gap	0.7 - 0.8 mm
Valve Clearance	Intake	0.10 - 0.15 mm
	Exhaust	0.15 - 0.20 mm
Engine Speed		5500 RPM



The emissions control system for this Engine is warranted for standards set by the U.S. Environmental Protection Agency. For warranty information, refer to the last pages of this manual.





PREDATOR™ GENERATORS

WARNING SYMBOLS AND DEFINITIONS

	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
	Addresses practices not related to personal injury.

Symbol Definitions

Symbol	Property or Statement
RPM	Revolutions Per Minute
HP	Horsepower
AWG	American Wire Gauge
	WARNING marking concerning Risk of Eye Injury. Wear ANSI-approved safety goggles with side shields.
	Read the manual before set-up and/or use.

Symbol	Property or Statement
	WARNING marking concerning Risk of Hearing Loss. Wear hearing protection.
	WARNING marking concerning Risk of Respiratory Injury. Operate engine OUTSIDE and far away from windows, doors, and vents.
	WARNING marking concerning Risk of Fire while handling fuel. Do not smoke while handling fuel.
	WARNING marking concerning Risk of Fire. Do not refuel while operating. Keep flammable objects away from engine.

IMPORTANT SAFETY INSTRUCTIONS



WARNING! Read all instructions.

Failure to follow all instructions listed below may result in fire, serious injury and/or DEATH.


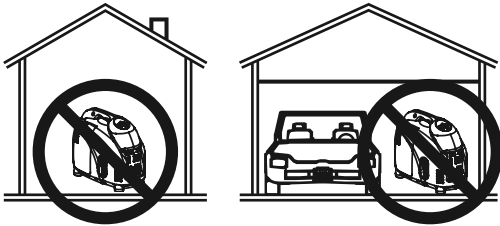
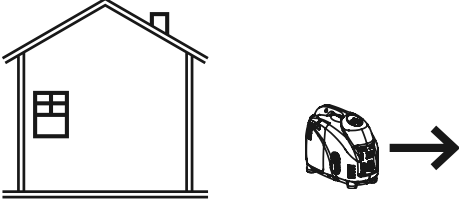
The warnings and precautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

SAVE THESE INSTRUCTIONS

Setup Precautions

1. Gasoline fuel and fumes are flammable, and potentially explosive. Use proper fuel storage and handling procedures. Do not store fuel or other flammable materials nearby.
2. Have multiple ABC class fire extinguishers nearby.
3. Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrestor may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.
4. Set up and use only on a flat, level, well-ventilated surface.
5. All connections and conduits from the generator to the load must only be installed by trained and licensed electricians, and in compliance with all relevant local, state, and federal electrical codes and standards, and other regulations where applicable.
6. Connections for standby power to a building electrical system must be made by a qualified electrician. The connection must isolate the generator power from utility power, and must comply with all applicable laws and electrical codes.
7. Wear ANSI-approved safety goggles, heavy-duty work gloves, and dust mask/respirator during set up.
8. Use only lubricants and fuel recommended in the Specifications chart of this manual.
9. Improper connections to a building electrical system can allow electrical current from the generator to backfeed into the utility lines. Such backfeed may electrocute utility company workers or others who contact the lines during a power outage, and the generator may explode, burn, or cause fires when utility power is restored. Consult the utility company and a qualified electrician if intending to use the generator for back up power.
10. Do not operate the generator before grounding. The generator must be earth-grounded in accordance with all relevant electrical codes and standards before operation.

Operating Precautions

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

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

Only use OUTSIDE and far away from windows, doors, and vents.
2. Never use a generator indoors, including in garages, basements, crawl spaces and sheds. Opening doors and windows or using fans will NOT prevent carbon monoxide build up in the home.
3. When using generators, keep them outdoors and far away from open doors, windows, and vents to avoid toxic levels of carbon monoxide from building up indoors.
4. If you start to feel sick, dizzy, or weak while using a generator, get to fresh air right away. The carbon monoxide from generators can quickly lead to full incapacitation and death.
5. Keep children away from the equipment, especially while it is operating.
6. Keep all spectators at least six feet from the engine during operation.
7. Fire Hazard! Do not fill gas tank while engine is running. Do not operate if gasoline has been spilled. Clean spilled gasoline before starting engine. Do not operate near pilot light or open flame.
8. Do not touch engine during use. Let engine cool down after use.
9. Never store fuel or other flammable materials near the engine.
10. If the plugged in product operates abnormally or unusually slow, immediately stop using the generator as a power source. Read and adhere to the instruction manual of the product to be powered to make sure that it can be safely and efficiently powered by a portable generator.
11. Before connecting an appliance or power cord to the generator: Make sure that it is in good working order. Faulty appliances or power cords can create a potential for electrical shock.

Operating Precautions (cont.)

12. Do not exceed the running wattage of the generator. Make sure that the total electrical rating of the all of the tools or appliances plugged into the generator at the same time does not exceed that of the generator. Check that the startup surge will not be beyond the limit of the generator.
13. Avoid substantially overloading which will trip the circuit breaker. Slightly overloading the generator may not trip the circuit breaker, but will lead to premature generator failure.
14. Do not attempt to connect or disconnect load connections while standing in water, or on wet or soggy ground.
15. Do not touch electrically energized parts of the generator and interconnecting cables or conductors with any part of the body, or with any non-insulated conductive object.
16. Connect the generator only to a load that is compatible with the electrical characteristics and running wattage of the generator.
17. Insulate all connections and disconnected wires.
18. Guard against electric shock. Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators.
19. Only use a suitable means of transport and lifting devices with sufficient weight bearing capacity when transporting the generator.
20. Secure the generator on transport vehicles to prevent it from rolling, slipping, and tilting.
21. Industrial applications must follow OSHA requirements.
22. Do not leave the generator unattended when it is running. Turn off the generator (and remove safety keys, if available) before leaving the work area.
23. The generator can produce high noise levels. Prolonged exposure to noise levels above 85 dBA is hazardous to hearing. Wear ear protection when operating the generator or when working nearby while it is operating.
24. Keep access doors on enclosures locked.
25. Wear ANSI-approved safety glasses and hearing protection during use.
26. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to a heart pacemaker could cause pacemaker interference or pacemaker failure. Caution is necessary when near the engine's magneto or recoil starter.
27. Use only accessories that are recommended by Harbor Freight Tools for your model. Accessories that may be suitable for one piece of equipment may become hazardous when used on another piece of equipment.
28. Do not operate in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Gasoline-powered engines may ignite the dust or fumes.
29. Stay alert, watch what you are doing and use common sense when operating this generator. Do not use while tired or under the influence of drugs, alcohol or medication.
30. Dress properly. Do not wear loose clothing or jewelry. Keep hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
31. Parts, especially exhaust system components, get very hot during use. Stay clear of hot parts.
32. Do not cover the generator during operation.
33. Keep the generator and surrounding area clean at all times.
34. Use the equipment, accessories, etc., in accordance with these instructions and in the manner intended for the particular type of equipment, taking into account the working conditions and the work to be performed. Use of the equipment for operations different from those intended could result in a hazardous situation.
35. Do not operate the equipment with known leaks in the engine's fuel system.
36. **WARNING:** This product contains or, when used, produces a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. (California Health & Safety Code § 25249.5, *et seq.*)
37. When spills of fuel or oil occur, they must be cleaned up immediately. Dispose of fluids and cleaning materials as per any local, state, or federal codes and regulations. Store oil rags in a bottom-ventilated, covered, metal container.
38. Keep hands and feet away from moving parts. Do not reach over or across equipment while operating.
39. Before use, check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the equipment's operation. **If damaged, have the equipment serviced before using.** Many accidents are caused by poorly maintained equipment.
40. Use the correct equipment for the application. Do not modify the equipment and do not use the equipment for a purpose for which it is not intended.

Service Precautions

SAFETY

1. **Before service, maintenance, or cleaning:**
 - a. **Unplug all devices from the generator.**
 - b. **Turn the engine switch to its “OFF” position.**
 - c. **Allow the engine to completely cool.**
 - d. **Then, remove the spark plug cap from the spark plug.**
2. Keep all safety guards in place and in proper working order. Safety guards include muffler, air cleaner, mechanical guards, and heat shields, among other guards.
3. **Keep all electrical equipment clean and dry.** Replace any wiring where the insulation is cracked, cut, abraded, or otherwise degraded. Replace terminals that are worn, discolored, or corroded. Keep terminals clean and tight.
4. **Do not alter or adjust any part of the equipment or its engine that is sealed by the manufacturer or distributor. Only a qualified service technician may adjust parts that may increase or decrease governed engine speed.**
5. Wear ANSI-approved safety goggles, heavy-duty work gloves, and dust mask/respirator during service.
6. Maintain labels and nameplates on the equipment. These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
7. Have the equipment serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the equipment is maintained. Do not attempt any service or maintenance procedures not explained in this manual or any procedures that you are uncertain about your ability to perform safely or correctly.
8. Store equipment out of the reach of children.
9. Follow scheduled engine and equipment maintenance.

Refueling:

1. Do not smoke, or allow sparks, flames, or other sources of ignition around the equipment, especially when refuelling.
2. Do not refill the fuel tank while the engine is running or hot.
3. **Do not fill fuel tank to the top.** Leave a little room for the fuel to expand as needed.
4. Refuel in a well-ventilated area only.
5. Wipe up any spilled fuel and allow excess to evaporate before starting engine.
To prevent FIRE, do not start the engine while the smell of fuel hangs in the air.



SAVE THESE INSTRUCTIONS.

SETUP

OPERATION

MAINTENANCE

Set Up



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

!WARNING

TO PREVENT SERIOUS INJURY AND FIRE: Operate only with proper spark arrestor installed.



Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrestor may be required.

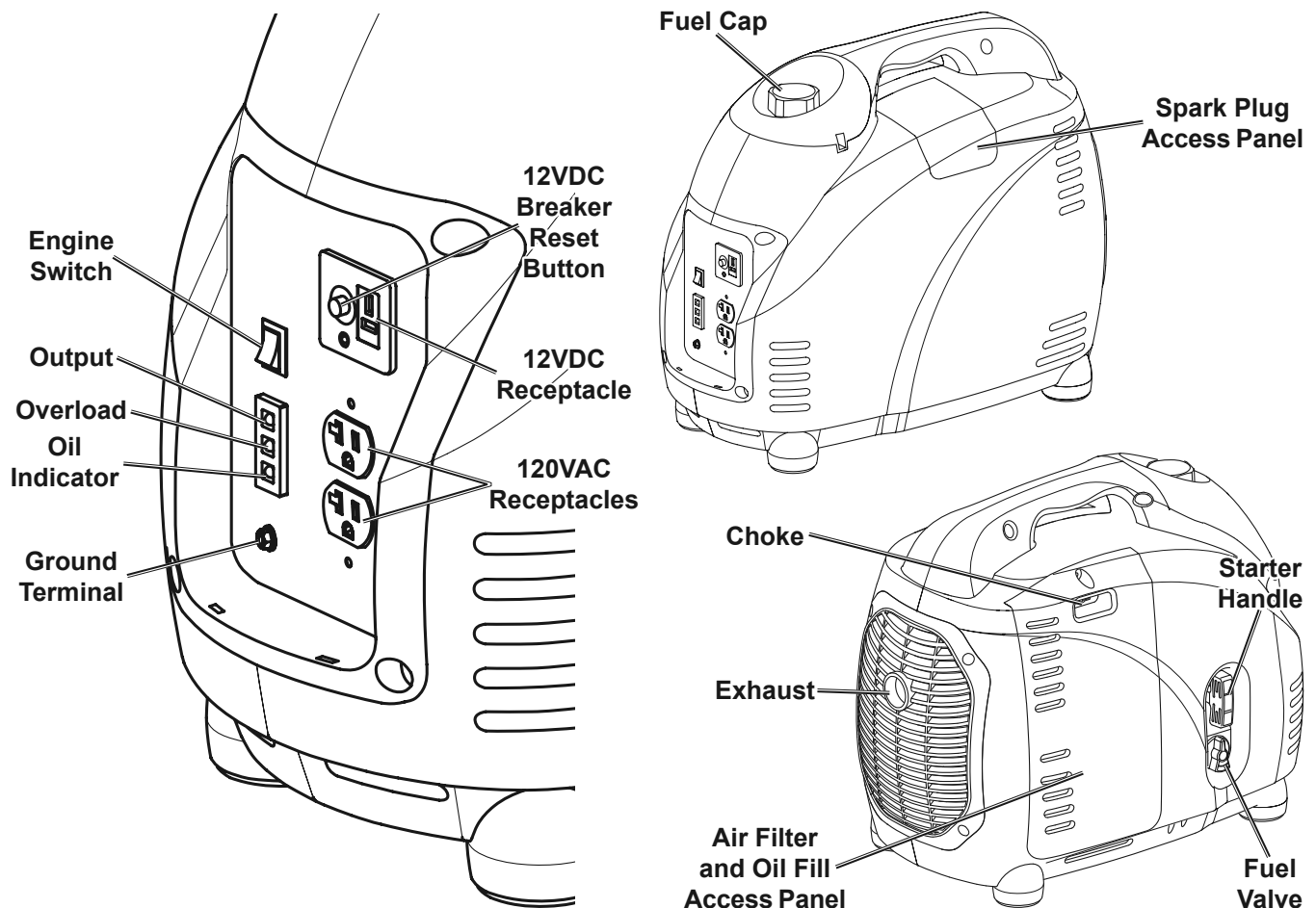
The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements.

At high altitudes, the engine's carburetor, governor, and any other parts that control the fuel-air ratio will need to be adjusted by a qualified mechanic to allow efficient high-altitude use and to prevent damage to the engine and any other devices used with this product.

Grounding

1. The Generator must be properly grounded in accordance with all relevant electrical codes and standards before operation. Have the unit grounded by a qualified electrician if you are not qualified to do so.
2. To ground the Generator, connect a #6 AWG grounding wire (not included) from the Grounding Terminal on the control panel to a grounding rod (not included). The grounding rod must be an earth-driven copper or brass rod (electrode) which can adequately ground the Generator.
3. Refer to local regulations for ground source information.

Components and Controls



Operation



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

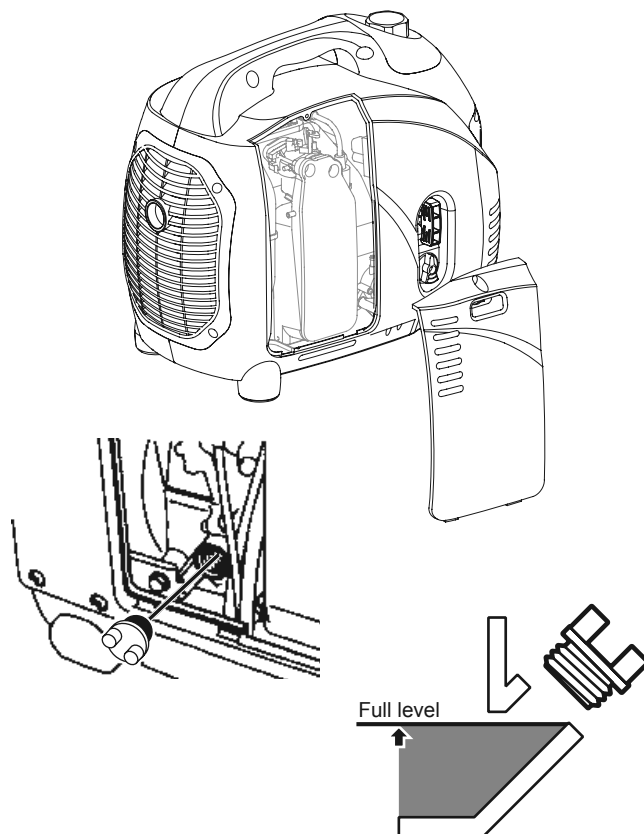
Pre-Start Checks

Inspect Engine and Generator looking for damaged, loose, and missing parts before set up and starting. If any problems are found, do not use equipment until fixed properly.

Checking and Filling Engine Oil

NOTICE: Your Warranty is VOID if the Engine's crankcase is not properly filled with oil before each use. Before each use, check the oil level. Do not run the Engine with low or no Engine oil. Running the Engine with no or low Engine oil WILL permanently damage the Engine.

1. Make sure the Engine is stopped and is level.
2. Close the Fuel Valve.
3. Remove the Access Panel on the side of the Generator.
4. Clean the top of the Dipstick and the area around it. Remove the Dipstick, turning it counterclockwise.
5. Check the oil level. The oil level should be up to the edge of the hole as shown.
6. As needed, add the appropriate type of oil until the oil level is at the proper level. SAE 10W-30 oil is recommended for general use.
7. Thread the Dipstick back in clockwise and replace the Access Panel.



Checking and Filling Fuel



WARNING! TO PREVENT SERIOUS INJURY FROM FIRE:

Fill the fuel tank in a well-ventilated area away from ignition sources. If the Engine is hot from use, shut the Engine off and wait for it to cool before adding fuel. Do not smoke.

1. Clean the Fuel Cap and the area around it.
2. Unscrew and remove the Fuel Cap.
3. Remove the Strainer and remove any dirt and debris. Then replace the Strainer.

Note: Do not use gasoline containing more than 10% ethanol (E10). Do not use E85 ethanol.

Note: Do not use gasoline that has been stored in a metal fuel container or a dirty fuel container. It can cause particles to enter the carburetor, affecting Engine performance and/or causing damage.

4. If needed, fill the Fuel Tank to about 1 inch under the fill neck of the Fuel Tank with 87 octane or higher unleaded gasoline that has been treated with a fuel stabilizer additive. Follow fuel stabilizer manufacturer's recommendations for use.
5. Then replace the Fuel Cap.
6. Wipe up any spilled fuel and allow excess to evaporate before starting Engine. To prevent FIRE, do not start the Engine while the smell of fuel hangs in the air.

Note: Fill Fuel Tank completely before first use.
Fuel Tank needs to be completely full to properly prime Carburetor.

Starting the Engine

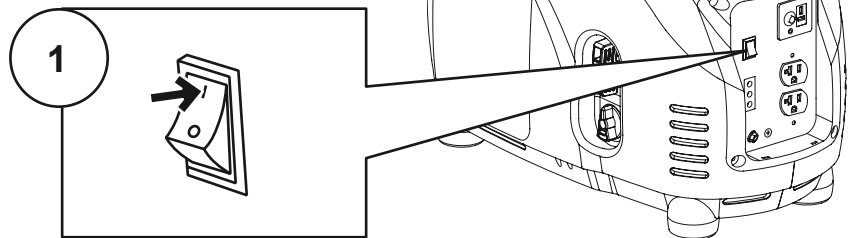
Before Starting the Engine



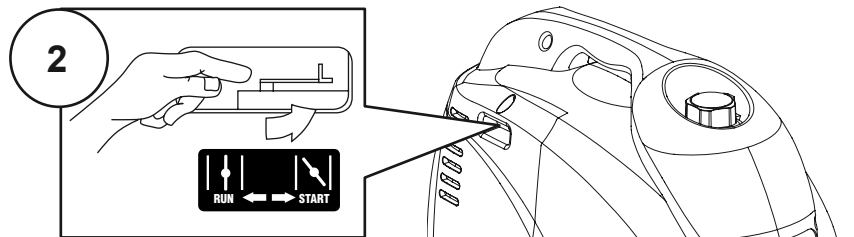
- Inspect the Generator and Engine.
- Disconnect all electrical loads from the Generator.
- Fill the Engine with the proper amount and type of both unleaded gasoline and oil.

Manual Start

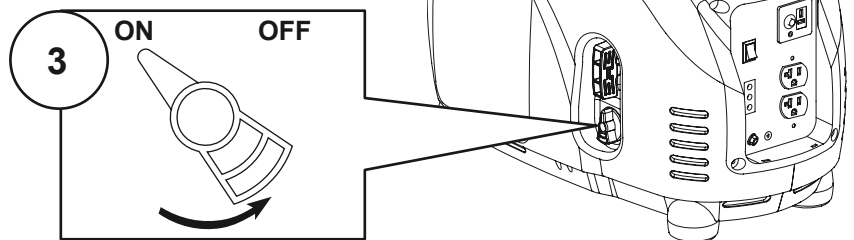
- Turn the Engine Switch on.



- Move the Choke to the START position.

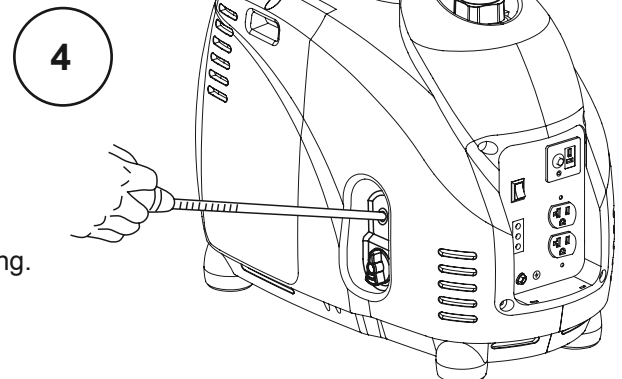


- Turn the Fuel Valve to the ON position.



Note: After unpacking, before first use, slowly pull recoil handle 20 times to prime the Engine.

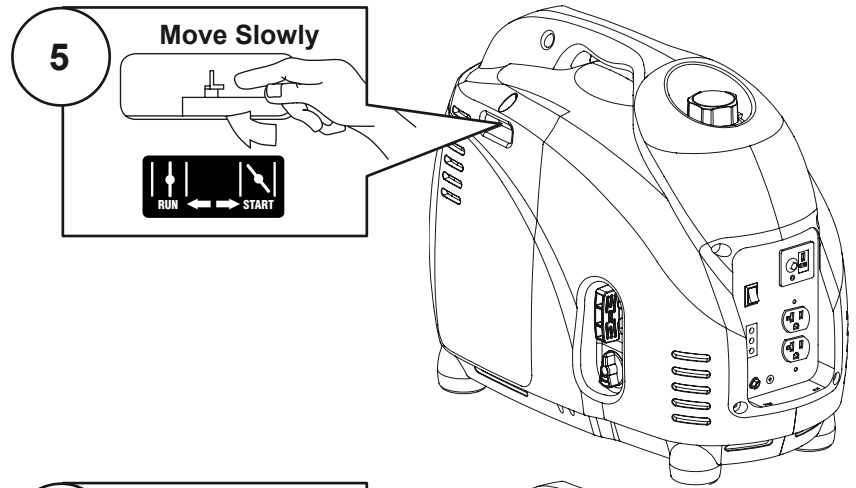
- Grip the Starter Handle of the Engine loosely and pull it slowly several times to allow the gasoline to flow into the Engine's carburetor. Then pull the Starter Handle gently until resistance is felt. Allow Cable to retract fully and then pull it quickly. Repeat until the Engine starts.



Note: Do not let the Starter Handle snap back against the housing. Hold it as it recoils so it doesn't hit the housing.

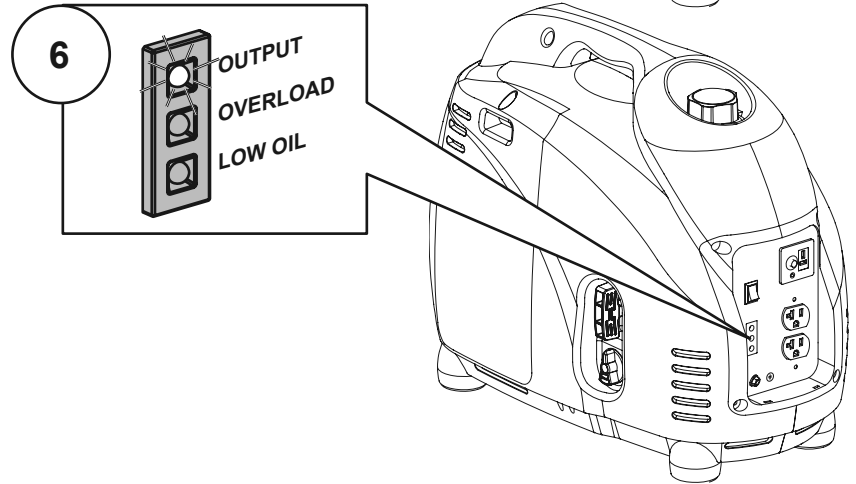
- Allow the Engine to run for several seconds. Then, move the Choke Lever very slowly to its RUN position.

Note: Moving the Choke Lever too fast could stall the Engine.



IMPORTANT: Allow the Engine to run at no load for five minutes with no load after each start-up so that the Engine can stabilize.

- Wait for the OUTPUT light to light up.



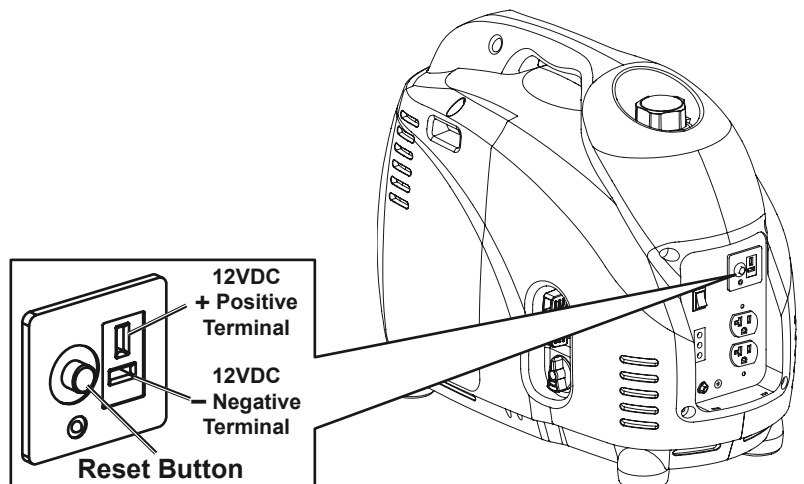
Break-in Period:

- Breaking-in the Engine will help to ensure proper equipment and Engine operation.
- The break-in period will last about 25 hours of use.
DO NOT exceed 75% of the Generator's running wattage during this period.
 - Change the Engine oil after this period.

Under normal operating conditions subsequent maintenance follows the schedule explained in the **MAINTENANCE** section.

Nominal 12VDC Output

- Do not use any 120VAC outlet while using the 12VDC outlet.
- Only use the 12VDC receptacle to charge a 12 volt lead-acid type battery using an appropriate charge controller. (Battery and controller not included.) The 12VDC output is not regulated.
- Do not connect any device to the 12VDC terminal that draws more than 8 amps.
- If this 12VDC circuit protection is tripped, reduce the load, and press the red Reset Button next to the outlet.



Connecting 120VAC Loads to the Generator

Calculate Power Draw:

Power draw can be calculated by multiplying *volts* and *amps*. The resulting number is *wattage*.

- Never exceed the running wattage for the Generator or any outlet amperage rating.
- Refer to appliance/tool owner's manuals to determine the wattage of electrical load devices.
- Long power cords and extension cords draw additional power. Keep cord length at a minimum.

Wattage Estimates

Wattages listed below are estimates for that type of equipment only. Check nameplate wattages on all loads before connecting to Generator.

This Unit Can Power Any One of the Following Items:	Running Watts	Start-up Watts
1/4 HP Air Compressor	600	900
1/6 HP Motor	500	800
3/8" Drill	400	600
Mini Refrigerator	400	700
Table/Box Fan	200	
15 Amp Battery Charger	380	
String Trimmer	350	
Hedge Trimmer	500	
Radio	50	
Ten 75 Watt Light Bulbs	750	

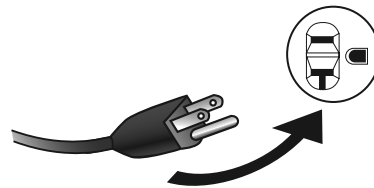


Figure A: Plug Load In

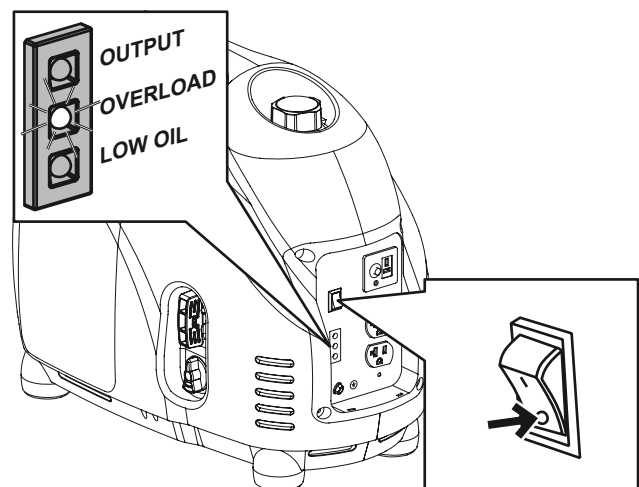
Plug the power cord of the 120 volt appliance/tool into the 120 volt AC Outlet on the Generator. Plug in appliances from largest to smallest load.

Note: Do not allow the Generator to completely run out of fuel with devices attached. A Generator's output may sharply spike as it runs out of fuel, causing damage to attached devices.

OVERLOAD Light

Note: The OVERLOAD light may turn on for a few seconds as a large device starts up. This is normal for loads approaching the capacity of this Generator.

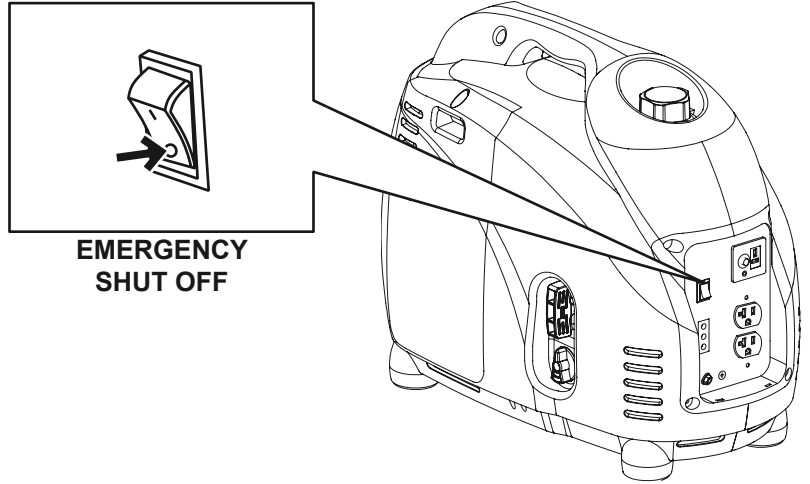
1. The total combined load through the outlet on the Generator must not exceed the running power of the unit.
2. If the OVERLOAD light turns on and the Generator stops producing power, it has been overloaded.
3. Turn Engine switch off, disconnect all electrical devices, and compare device requirements to Generator rating. Move anything that may be limiting Generator ventilation away.
4. Restart Generator (the OVERLOAD device will automatically reset), and reconnect devices while being careful to not overload Generator.



Stopping the Engine

SAFETY

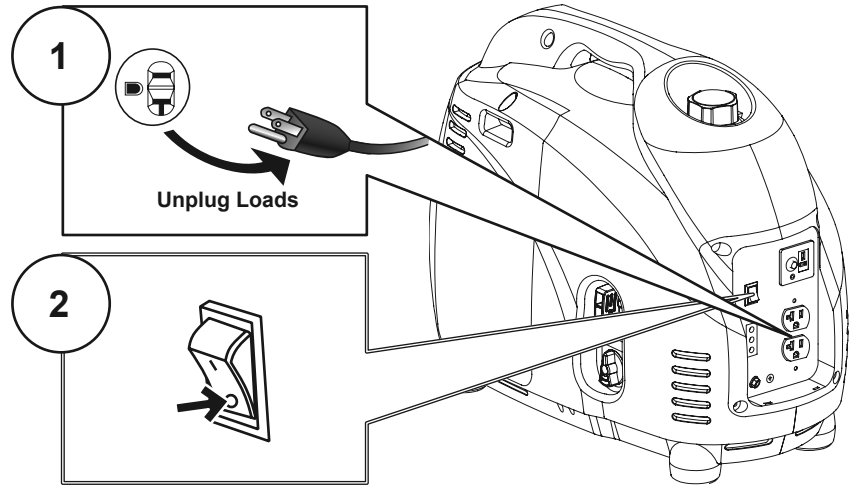
To stop the Engine in an emergency, turn the Engine Switch off.



SETUP

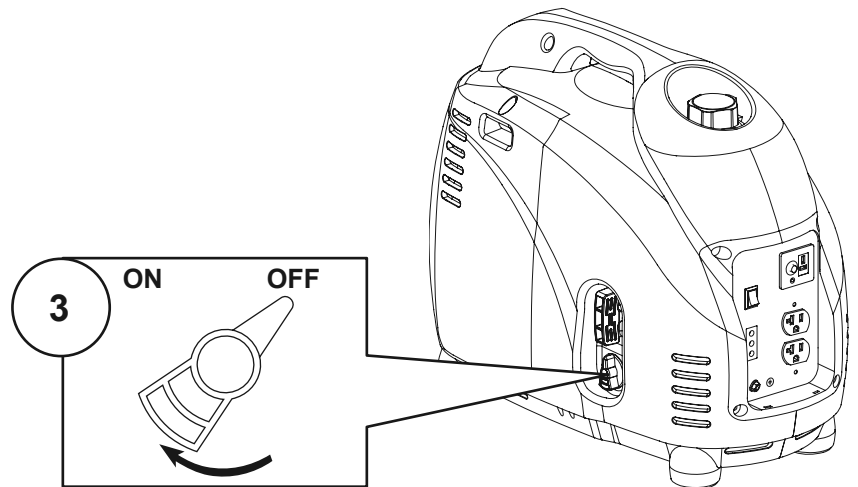
Under normal conditions, use the following procedure to shut off the Generator:

1. Unplug all electrical load devices from the Generator.



2. Turn the Engine Switch off.

3. Close the Fuel Valve.



OPERATION

MAINTENANCE

NOTICE

Drain fuel at end of season or warranty is void.
See Storage on page 16 for complete storage instructions.

⚠ WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL STARTING:

Turn the Engine Switch of the equipment to its “OFF” position, wait for the engine to cool, and disconnect the spark plug cap before performing any inspection, maintenance, or cleaning procedures.

TO PREVENT SERIOUS INJURY FROM EQUIPMENT FAILURE:

Do not use damaged equipment. If abnormal noise, vibration, or excess smoking occurs, have the problem corrected before further use.

Follow all service instructions in this manual. The engine may fail critically if not serviced properly.



Many maintenance procedures, including any not detailed in this manual, will need to be performed by a qualified technician for safety. If you have any doubts about your ability to safely service the equipment or engine, have a qualified technician service the equipment instead.

Cleaning, Maintenance, and Lubrication Schedule

Note: This maintenance schedule is intended solely as a general guide. If performance decreases or if equipment operates unusually, check systems immediately. The maintenance needs of each piece of equipment will differ depending on factors such as duty cycle, temperature, air quality, fuel quality, and other factors.

Note: The following procedures are in addition to the regular checks and maintenance explained as part of the regular operation of the engine and equipment.

Procedure	Before Each Use	Monthly or every 20 hr. of use	Every 3 mo. or 50 hr. of use	Every 6 mo. or 100 hr. of use	Yearly or every 300 hr. of use	Every 2 Years
Brush off outside of engine	✓	✓	✓	✓	✓	✓
Check engine oil level	✓	✓	✓	✓	✓	✓
Check air cleaner	✓		✓	✓	✓	✓
Change engine oil		✓		✓	✓	✓
Clean/replace air cleaner			✓*	✓	✓	✓
Check and clean spark plug				✓	✓	✓
1. Check/adjust idle speed 2. Check/adjust valve clearance 3. Clean fuel tank, strainer and carburetor 4. Clean carbon build-up from combustion chamber					✓**	✓**
Replace fuel line if necessary						✓**

*Service more frequently when used in dusty areas.

**These items should be serviced by a qualified technician.

**PREDATOR™
GENERATORS**

Checking and Filling Fuel**⚠️WARNING! TO PREVENT SERIOUS INJURY FROM FIRE:**

Fill the fuel tank in a well-ventilated area away from ignition sources. If the engine is hot from use, shut the engine off and wait for it to cool before adding fuel. Do not smoke.

1. Clean the Fuel Cap and the area around it.
2. Unscrew and remove the Fuel Cap.
3. Remove the Strainer and remove any dirt and debris. Then replace the Strainer.

Note: Do not use gasoline containing more than 10% ethanol (E10). Do not use E85 ethanol.

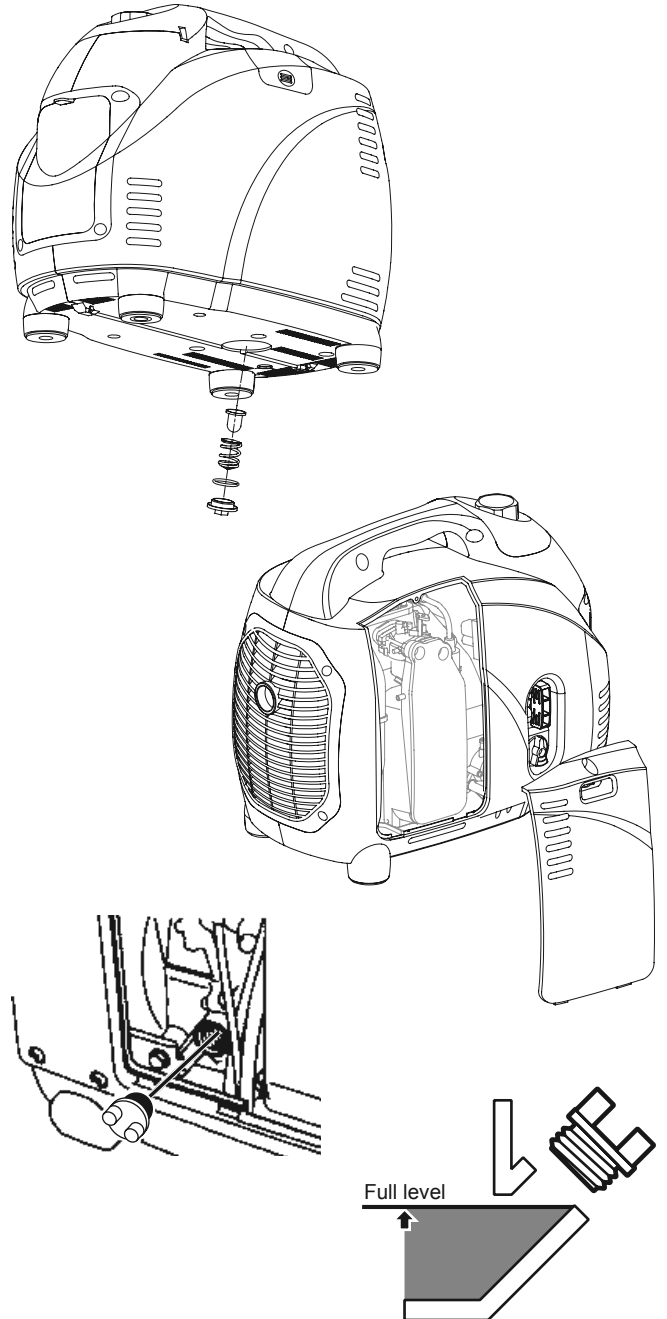
Note: Do not use gasoline that has been stored in a metal fuel container or a dirty fuel container. It can cause particles to enter the carburetor, affecting engine performance and/or causing damage.

4. If needed, fill the Fuel Tank to about 1 inch under the fill neck of the Fuel Tank with 87 octane or higher unleaded gasoline that has been treated with a fuel stabilizer additive. Follow fuel stabilizer manufacturer's recommendations for use.
5. Then replace the Fuel Cap.
6. Wipe up any spilled fuel and allow excess to evaporate before starting engine. To prevent FIRE, do not start the engine while the smell of fuel hangs in the air.

Engine Oil Change

⚠️CAUTION! Oil is very hot during operation and can cause burns. Wait for engine to cool before changing oil.

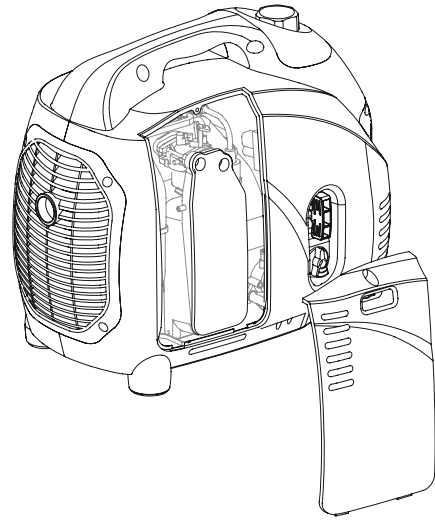
1. Make sure the engine is stopped and is level. Place the Generator on stands with the drain centered over a proper oil drain pan.
2. Close the Fuel Valve.
3. Remove the Drain Plug and wait for oil to drain completely. Recycle used oil.
4. Replace the Drain Plug and tighten it.
5. Remove the Access Panel on the side of the Generator.
6. Clean the top of the Dipstick and the area around it. Remove the Dipstick, turning it counterclockwise.
7. Add the appropriate type of oil until the oil level is at the proper level. SAE 10W-30 oil is recommended for general use.
8. Check the oil level. The oil level should be up to the edge of the hole as shown.
9. Thread the Dipstick back in clockwise and replace the Access Panel.



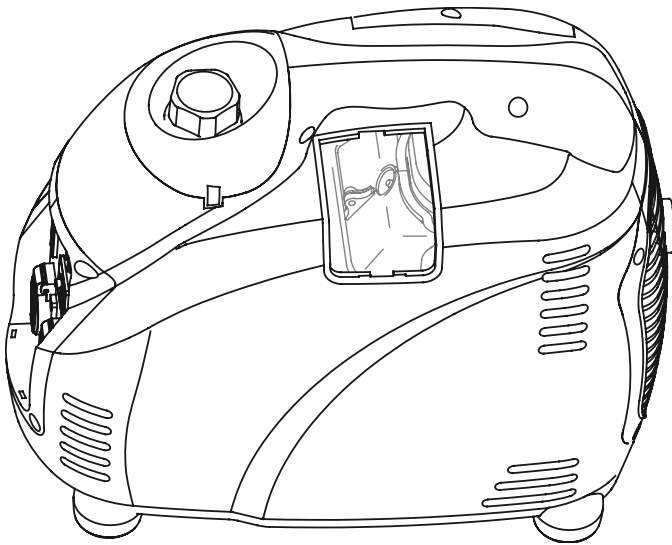
NOTICE: Do not run the engine with too little oil. The engine will be permanently damaged.

Air Filter Element Maintenance

1. Remove the Access Panel on the side of the Generator.
2. Remove the Air Cleaner Cover and the air filter elements and check for dirt. Clean as described below.
3. **Cleaning:**
 - For “paper” filter elements:
To prevent injury from dust and debris, wear ANSI-approved safety goggles, NIOSH-approved dust mask/respirator, and heavy-duty work gloves. In a well-ventilated area away from bystanders, use pressurized air to blow dust out of the air filter. If this does not get the filter clean, replace it.
 - For foam filter elements:
Wash the element in warm water and mild detergent several times. Rinse. Squeeze out excess water and allow it to dry completely. Soak the filter in lightweight oil briefly, then squeeze out the excess oil.
4. Install the cleaned filter.
5. Secure the Air Cleaner Cover and replace the Access Panel before use.



Spark Plug Maintenance



1. Remove Access Panel from top of Generator, see above.
2. Disconnect spark plug cap from end of plug. Clean out debris from around spark plug.
3. Using a spark plug wrench, remove the spark plug.
4. Inspect the spark plug:
If the electrode is oily, clean it using a clean, dry rag. If the electrode has deposits on it, polish it using emery paper. If the white insulator is cracked or chipped, the spark plug needs to be replaced.
5. When installing a new spark plug, adjust the plug's gap to the specification on the Specifications chart. Do not pry against the electrode, the spark plug can be damaged.
6. Install the new spark plug or the cleaned spark plug into the engine.
 - **Gasket-style:**
Finger-tighten until the gasket contacts the cylinder head, then tighten about 1/2-2/3 turn more.
 - **Non-gasket-style:**
Finger-tighten until the plug contacts the cylinder head, then tighten about 1/16 turn more.
7. Apply dielectric spark plug boot protector (not included) to the end of the spark plug and reattach the wire securely.
8. Replace Access Panel.

NOTICE: Use only A7RTC type spark plug. Using an incorrect spark plug may damage the engine.

NOTICE: Tighten the spark plug properly.

If loose, the spark plug will cause the engine to overheat.

If overtightened, the threads in the engine block will be damaged.

Storage

When the equipment is to remain idle for longer than 20 days, prepare the Engine for storage as follows:

1. **CLEANING:**

Wait for Engine to cool, then clean Engine with dry cloth. **NOTICE: Do not clean using water.** The water will gradually enter the Engine and cause rust damage. Apply a thin coat of rust preventive oil to all metal parts.

2. **FUEL:**

To protect the fuel tank during storage, fill the tank with gasoline that has been treated with a fuel stabilizer additive. Follow fuel stabilizer manufacturer's recommendations for use. Refer to *Checking and Filling Fuel* on page Checking and Filling Fuel on page 8.

 **WARNING! TO PREVENT SERIOUS INJURY FROM FIRE:**

Fill tank in a well-ventilated area away from ignition sources. If the engine is hot from use, shut the engine off and wait for it to cool before adding fuel. Do not smoke.

3. **LUBRICATION:**

- a. Change engine oil.

- b. Clean out area around spark plug.
Remove spark plug and pour one tablespoon of engine oil into cylinder through spark plug hole.
- c. Replace spark plug, but leave spark plug cap disconnected.
- d. Pull Starter Handle to distribute oil in cylinder. Stop after one or two revolutions when you feel the piston start the compression stroke (when you start to feel resistance).

4. **STORAGE AREA:**

Cover and store in a dry, level, well-ventilated area out of reach of children. Storage area should also be away from ignition sources, such as water heaters, clothes dryers, and furnaces.

NOTICE: During extended storage periods the Engine must be started every 3 months and allowed to run for 15–20 minutes or the Warranty is VOID.

5. **AFTER STORAGE:**

Before starting the Engine during or after storage, keep in mind that untreated gasoline will deteriorate quickly. Drain the fuel tank and change to fresh fuel if untreated gasoline has been sitting for a month, if treated gasoline has been sitting beyond the fuel stabilizer's recommended time period, or if the Engine does not start.

PREDATOR™
GENERATORS

Troubleshooting

Problem	Possible Causes	Probable Solutions
Engine will not start	<p>FUEL RELATED:</p> <ol style="list-style-type: none"> No fuel in tank or fuel valve closed. Choke not in START position, cold engine. Gasoline with more than 10% ethanol used. (E15, E20, E85, etc.) Low quality or deteriorated, old gasoline. Carburetor not primed. Dirty fuel passageways. Carburetor needle stuck. Fuel can be smelled in the air. Too much fuel in chamber. This can be caused by the carburetor needle sticking. Clogged Fuel Filter. 	<p>FUEL RELATED:</p> <ol style="list-style-type: none"> Fill fuel tank with fresh 87+ octane stabilizer-treated unleaded gasoline and open fuel valve. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.). Move Choke to START position. Clean out ethanol-rich gasoline from fuel system. Replace components damaged by ethanol. Use fresh 87+ octane stabilizer-treated unleaded gasoline only. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.). Use fresh 87+ octane stabilizer-treated unleaded gasoline. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.). Pull on Starter Handle to prime. Clean out passageways using fuel additive. Heavy deposits may require further cleaning. Gently tap side of carburetor float chamber with screwdriver handle. Turn Choke to RUN position. Remove spark plug and pull the start handle several times to air out the chamber. Reinstall spark plug and set Choke to START position. Replace Fuel Filter.
	<p>IGNITION (SPARK) RELATED:</p> <ol style="list-style-type: none"> Spark plug cap not connected securely. Spark plug electrode wet or dirty. Incorrect spark plug gap. Spark plug cap broken. Incorrect spark timing or faulty ignition system. 	<p>IGNITION (SPARK) RELATED:</p> <ol style="list-style-type: none"> Connect spark plug cap properly. Clean spark plug. Correct spark plug gap. Replace spark plug cap. Have qualified technician diagnose/repair ignition system.
	<p>COMPRESSION RELATED:</p> <ol style="list-style-type: none"> Cylinder not lubricated. Problem after long storage periods. Loose or broken spark plug. (Hissing noise will occur when trying to start.) Loose cylinder head or damaged head gasket. (Hissing noise will occur when trying to start.) Engine valves or tappets mis-adjusted or stuck. 	<p>COMPRESSION RELATED:</p> <ol style="list-style-type: none"> Pour tablespoon of oil into spark plug hole. Crank engine a few times and try to start again. Tighten spark plug. If that does not work, replace spark plug. If problem persists, may have head gasket problem, see #3. Tighten head. If that does not remedy problem, replace head gasket. Have qualified technician adjust/repair valves and tappets.



Follow all safety precautions whenever diagnosing or servicing the generator or engine.

SAFETY

SETUP

OPERATION

MAINTENANCE

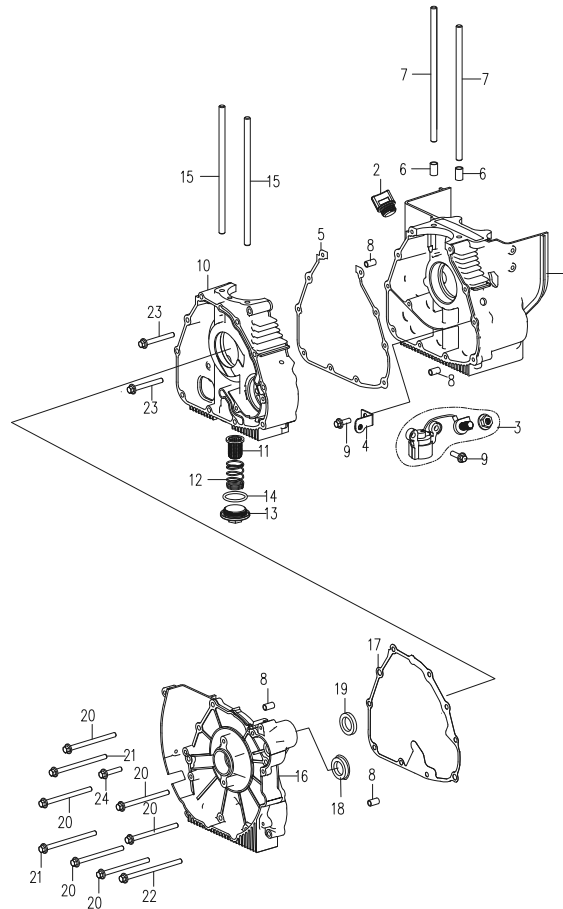
Problem	Possible Causes	Probable Solutions
Engine misfires	<ol style="list-style-type: none"> 1. Spark plug cap loose. 2. Incorrect spark plug gap or damaged spark plug. 3. Defective spark plug cap. 4. Old or low quality gasoline. 5. Incorrect compression. 	<ol style="list-style-type: none"> 1. Check wire connections. 2. Re-gap or replace spark plug. 3. Replace spark plug cap. 4. Use only fresh 87+ octane stabilizer-treated unleaded gasoline. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.). 5. Diagnose and repair compression. (Use Engine will not start: COMPRESSION RELATED section.)
Engine stops suddenly	<ol style="list-style-type: none"> 1. Fuel tank empty or full of impure or low quality gasoline. 2. Low oil shutdown. 3. Defective fuel tank cap creating vacuum, preventing proper fuel flow. 4. Faulty magneto. 5. Disconnected or improperly connected spark plug cap. 	<ol style="list-style-type: none"> 1. Fill fuel tank with fresh 87+ octane stabilizer-treated unleaded gasoline. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.). 2. Fill engine oil to proper level. Check engine oil before EVERY use. 3. Test/replace fuel tank cap. 4. Have qualified technician service magneto. 5. Secure spark plug cap.
Engine stops when under heavy load	<ol style="list-style-type: none"> 1. Dirty air filter 2. Engine running cold. 	<ol style="list-style-type: none"> 1. Clean or replace element. 2. Allow engine to warm up prior to operating equipment.
Engine knocks	<ol style="list-style-type: none"> 1. Old or low quality gasoline. 2. Engine overloaded. 3. Incorrect spark timing, deposit buildup, worn engine, or other mechanical problems. 	<ol style="list-style-type: none"> 1. Fill fuel tank with fresh 87+ octane stabilizer-treated unleaded gasoline. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.). 2. Do not exceed equipment's load rating. 3. Have qualified technician diagnose and service engine.
Engine backfires	<ol style="list-style-type: none"> 1. Impure or low quality gasoline. 2. Engine too cold. 3. Intake valve stuck or overheated engine. 4. Incorrect timing. 	<ol style="list-style-type: none"> 1. Fill fuel tank with fresh 87+ octane stabilizer-treated unleaded gasoline. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.). 2. Use cold weather fuel and oil additives to prevent backfiring. 3. Have qualified technician diagnose and service engine. 4. Check engine timing.
Attached device doesn't have power	<ol style="list-style-type: none"> 1. Device not plugged in properly. 2. Circuit Breaker tripped. 3. Product needs service. 	<ol style="list-style-type: none"> 1. Turn off and unplug the device, then plug it back in again and turn on. 2. Turn off and unplug device, reset Circuit Breaker, plug in device and turn on. 3. Have product repaired.
Attached device begins to operate abnormally	<ol style="list-style-type: none"> 1. Problem with device. 2. Running wattage exceeded. 	<ol style="list-style-type: none"> 1. Immediately unplug device. Have device repaired by a qualified technician, or replace device. 2. Lower the number of items plugged into the generator to stay within the running wattage, or use a more powerful generator.



Follow all safety precautions whenever diagnosing or servicing the generator or engine.

Parts List and Diagram A - Crankcase

Part	Description	Qty
1a	Left Crankcase Asm.	1
2a	Oil Cork	1
3a	Oil Sensor	1
4a	Stand of Oil Sensor	1
5a	Paper Washer	1
6a	Dowel Pin 10×15.7	2
7a	Stud	2
8a	Dowel Axis	4
9a	Bolt M6×17	2
10a	Right Crankcase Asm.	1
11a	Fuel Filter Asm.	1
12a	Spring	1
13a	Cap	1
14a	O-Ring	1
15a	Stud	2
16a	Right Cover	1
17a	Right Crankcase Gasket	1
18a	Drain Plug	1
19a	Oil Seal 19.8X30x5	1
20a	Bolt M6×80	6
21a	Bolt M6×90	2
22a	Bolt M6×100	1
23a	Bolt M6×50	2

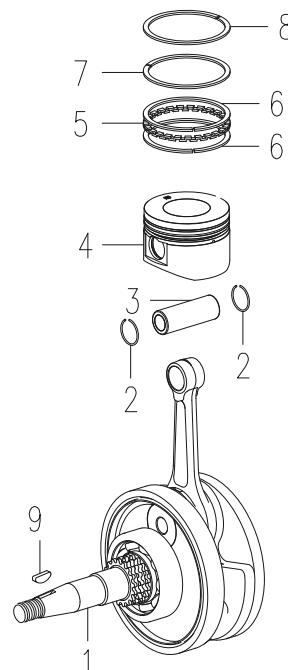


Note: When ordering parts from this diagram add an -a suffix.

Parts List and Diagram B - Piston

Part	Description	Qty
1b	Crankshaft Asm.	1
2b	Piston Pin Clip	2
3b	Piston Pin	1
4b	Piston	1
5b	Piston Spacer Ring	1
6b	Spacer Rails	2
7b	Second Piston Ring	1
8b	Top Piston Ring	1
9b	Semicircle Key	1

Note: When ordering parts from this diagram add a -b suffix.

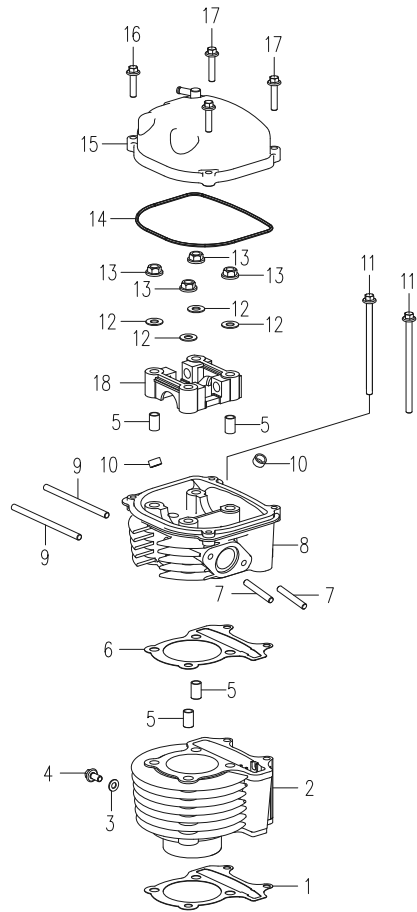


Parts List and Diagram C - Cylinder Head

SAFETY

SETUP

Part	Description	Qty
1c	Cylinder Base Gasket	1
2c	Cylinder	1
3c	Plate Washer 6	1
4c	Flange Bolt M6×12	1
5c	Dowel Pin 10×15.7	4
6c	Cylinder Head Gasket	1
7c	Bolt M6×32	2
8c	Cylinder Head Asm.	1
9c	Bolt M6×118	2
10c	Valve	1
11c	Flange Bolt M6×100	1
12c	Copper Plate Washer 8	4
13c	Nut M8	4
14c	Valve Cover Seal	1
15c	Valve Cover	1
16c	Flange Bolt M6×25	2
17c	Flange Bolt M6×36	2
18c	Cam Journal	1



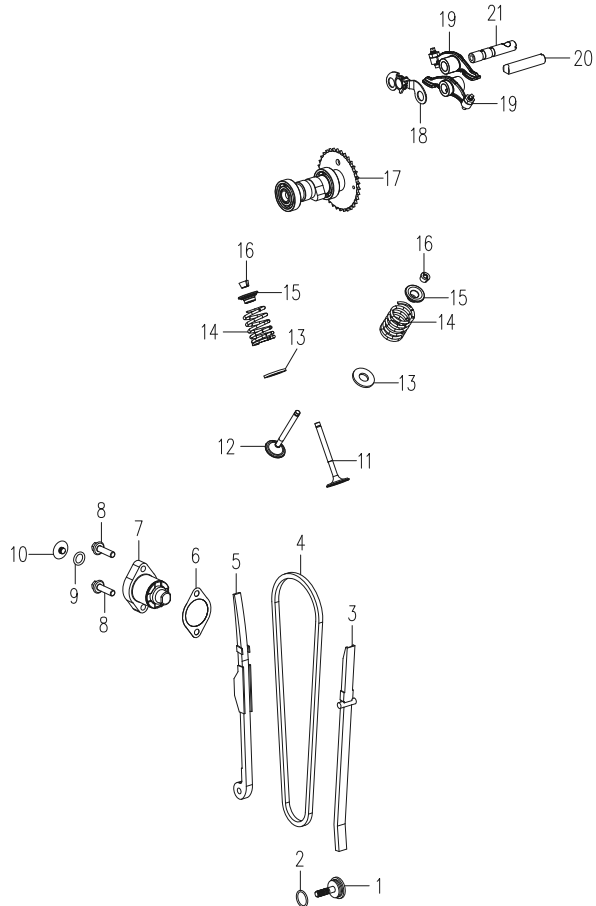
Note: When ordering parts from this diagram add a -c suffix.

OPERATION

MAINTENANCE

Parts List and Diagram D - Camshaft

Part	Description	Qty
1d	Screw, Pan Head	1
2d	Oil Seal 15.2×1.5	1
3d	Chain Guide	1
4d	Chain 6.35×90	1
5d	Tension Bar	1
6d	Gasket	1
7d	Camshaft Chain Regulator	1
8d	Flange Bolt M6×22	2
9d	Oil Ring 9×1.9	1
10d	Pin	1
11d	Exhaust Valve	1
12d	Intake Valve	1
13d	Valve Spring Seat	2
14d	Valve Spring	2
15d	Oil Seal For Valve	2
16d	Valve	2
17d	Camshaft Asm.	1
18d	Check Plate	1
19d	Valve Rocker	2
20d	Intake Valve Spring Rocker	1
21d	Intake Valve Rocker Shaft	1

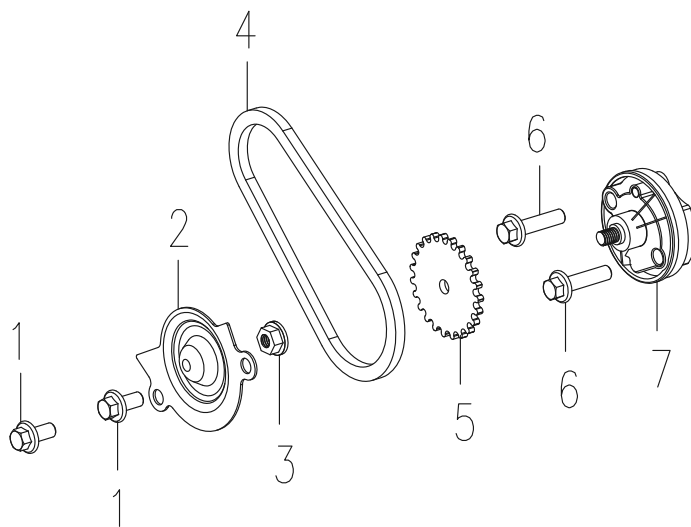


Note: When ordering parts from this diagram add a -d suffix.

Parts List and Diagram E - Oil Pump

Part	Description	Qty
1e	Bolt M6×12	2
2e	Oil Pump Gear Cap	1
3e	Nut M6	1
4e	Chain 6.35×44	1
5e	Gear	1
6e	Bolt	2
7e	Oil Pump Asm.	1

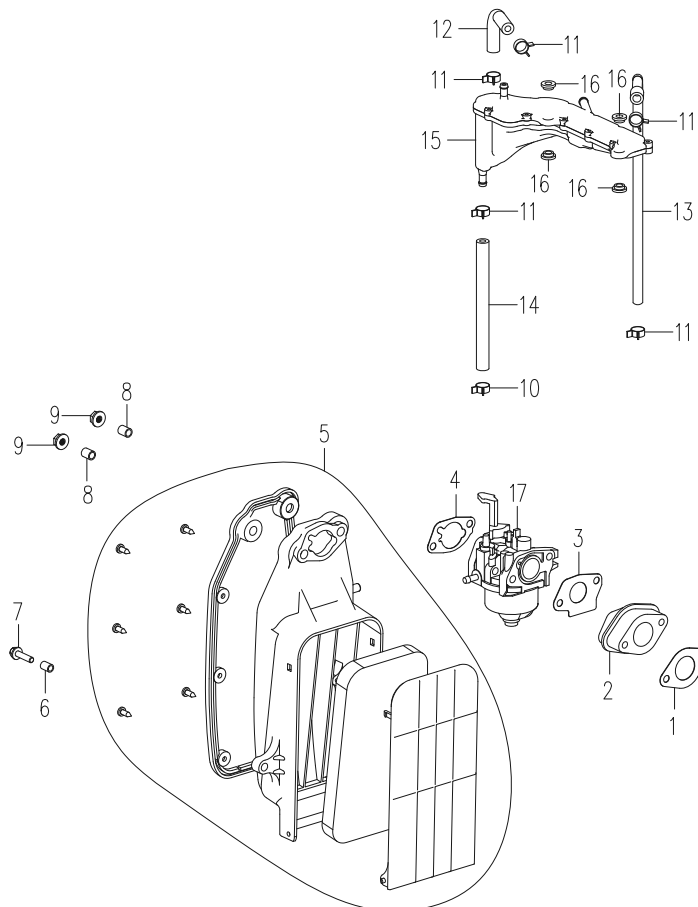
Note: When ordering parts from this diagram add an -e suffix.



Parts List and Diagram F - Air Cleaner and Carburetor

Part	Description	Qty
1f	Carburetor Gasket A	1
2f	Carburetor Asm.	1
3f	Carburetor Gasket B	1
4f	Air Cleaner Gasket	1
5f	Air Cleaner Asm.	1
6f	Fan Volute Bushing	1
7f	Bolt M5×20	1
8f	Air Cleaner Bushing	2
9f	Nut M6	2
10f	Clip Ø11	1
11f	Clip Ø10	5
12f	Rubber Tube	1
13f	Rubber Tube	1
14f	Rubber Tube	1
15f	Oil Separator Asm.	1
16f	Spacer	4
17f	Carburetor Asm.	1

Note: When ordering parts from this diagram add a -f suffix.



SAFETY

SETUP

OPERATION

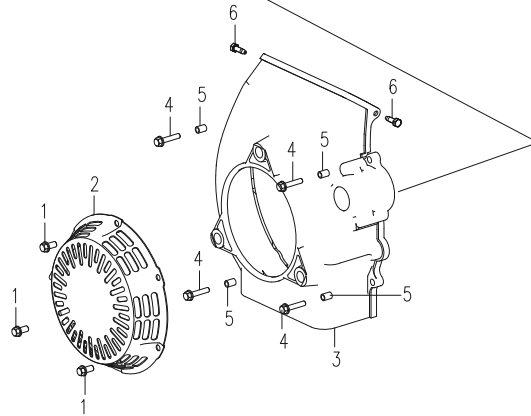
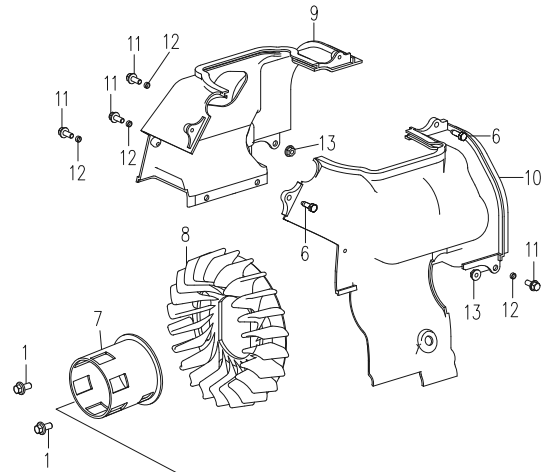
MAINTENANCE

Parts List and Diagram G - Recoil Starter

SAFETY

Part	Description	Qty
1g	Bolt M6×12	5
2g	Recoil Starter	1
3g	Fan Cover	1
4g	Bolt M5×20	4
5g	Fan Cover Bushing	4
6g	Screw ST4.8×16-F.H	4
7g	Recoil Cage	1
8g	Cooling Fan	1
9g	Shroud B	1
10g	Shroud	1
11g	Bolt M5×12	4
12g	Shroud Bushing	4
13g	Nut M5	2

Note: When ordering parts from this diagram add a -g suffix.



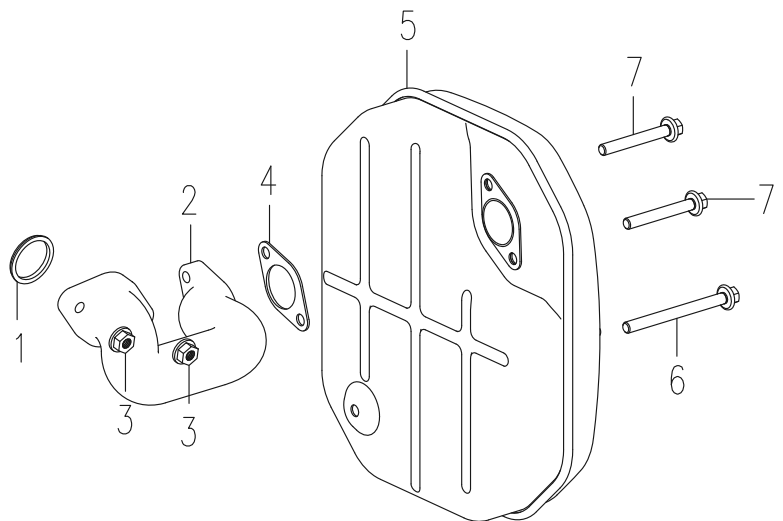
SETUP

Parts List and Diagram H - Muffler

OPERATION

Part	Description	Qty
1h	Gasket	1
2h	Elbow	1
3h	Nut M6	2
4h	Gasket	1
5h	Muffler Asm.	1
6h	Bolt M6×80	1
7h	Bolt M6×50	2

Note: When ordering parts from this diagram add a -h suffix.

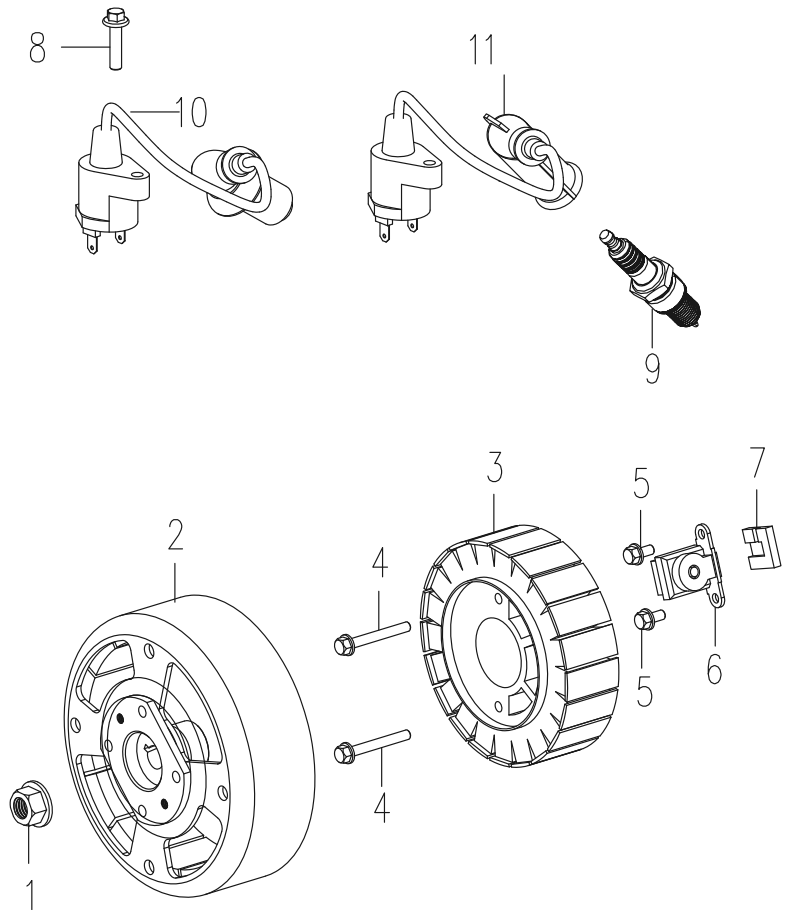


MAINTENANCE

Parts List and Diagram I - Generator Head

Part	Description	Qty
1i	Nut M12×1.25	1
2i	Stator	1
3i	Rotor	1
4i	Bolt M5×40	2
5i	Bolt M5×15	2
6i	Trigger	1
7i	Rubber Block	1
8i	Bolt M6×25	1
9i	Spark Plug	1
10i	Ignition Asm.	1
11i	Ignition Cap	1

Note: When ordering parts from this diagram add an -i suffix.



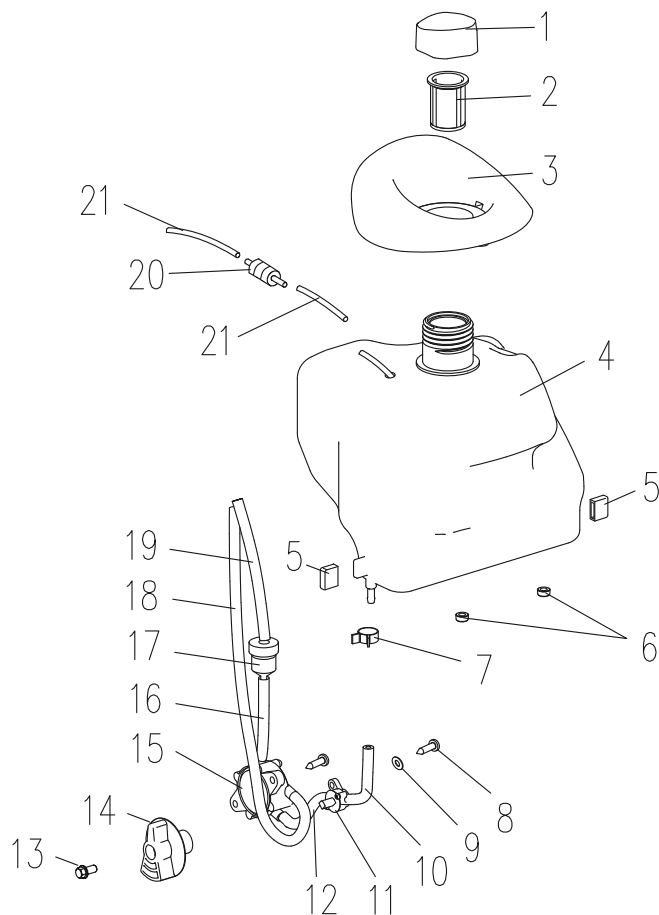
SAFETY

SETUP

Parts List and Diagram J - Fuel Tank

Part	Description	Qty
1j	Fuel Cap Asm.	1
2j	Fuel Filter	1
3j	Rubber Tank Fitting	1
4j	Fuel Tank	1
5j	Rubber Bumper	2
6j	Rubber Foot	2
7j	Clamp Ø9	1
8j	Screw ST4.2×19	1
9j	Washer	1
10j	Fuel Hose	1
11j	Fuel Cock	1
12j	Hose	1
13j	Bolt M4×16	1
14j	Fuel Valve	1
15j	Fuel Pump Asm.	1
16j	Fuel Hose	1
17j	Fuel Filter Asm.	1
18j	Fuel Hose	1
19j	Fuel Hose	1
20j	Dump Valve	1
21j	Tube	2

Note: When ordering parts from this diagram add a -j suffix.



OPERATION

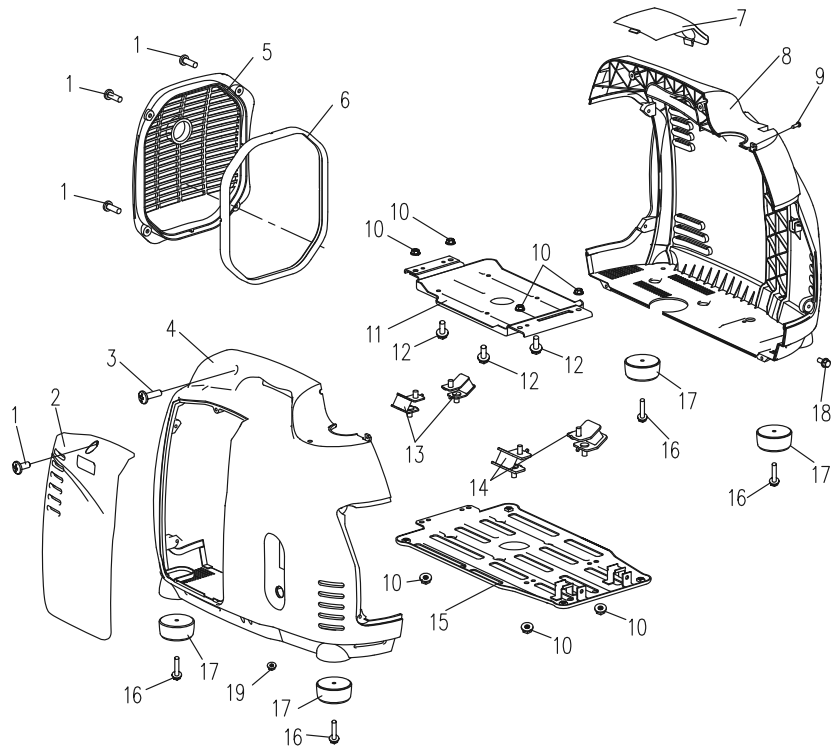
MAINTENANCE

Parts List and Diagram K - Housing

SAFETY

Part	Description	Qty
1k	Screw M6×12	5
2k	Side Cover	1
3k	Screw M6×20	2
4k	Lift Cover	1
5k	Protector Asm.	1
6k	Protector Asm. Seal	1
7k	Top Cover	1
8k	Right Cover	1
9k	Bolt ST4.2×13	1
10k	Nut M8	8
11k	Cover Plate	1
12k	Bolt M8×12	4
13k	Rear Damping Pad	2
14k	Front Damping Pad	2
15k	Chassis Asm.	1
16k	Bolt M6×16	4
17k	Foot	4
18k	Screw M5×16	2
19k	Nut M5	2

Note: When ordering parts from this diagram add a -k suffix.



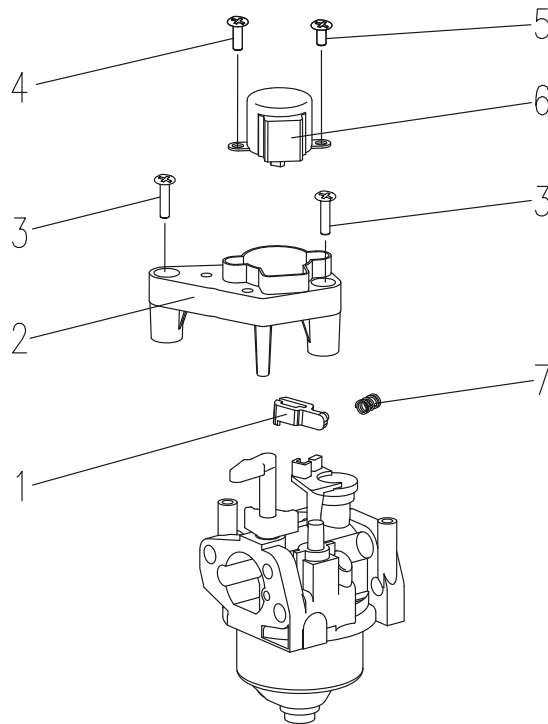
SETUP

Parts List and Diagram M - Governor

OPERATION

Part	Description	Qty
1m	Governor Arm	1
2m	Stepper Motor Stand	1
3m	Bolt M4×16	2
4m	Bolt M4×10	1
5m	Bolt M4×6	1
6m	Stepper Motor Asm.	1
7m	Governor Spring	1

Note: When ordering parts from this diagram add a -m suffix.

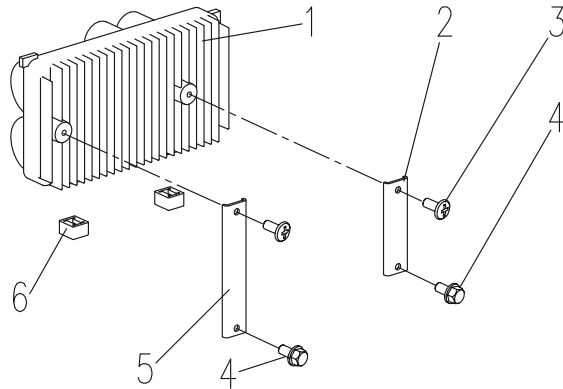


MAINTENANCE

Parts List and Diagram N - Inverter

Part	Description	Qty
1n	Inverter Asm.	1
2n	U Rack	1
3n	Screw M6×12	2
4n	Bolt M6×13	2
5n	U Rack	1
6n	Rubber Foot	2

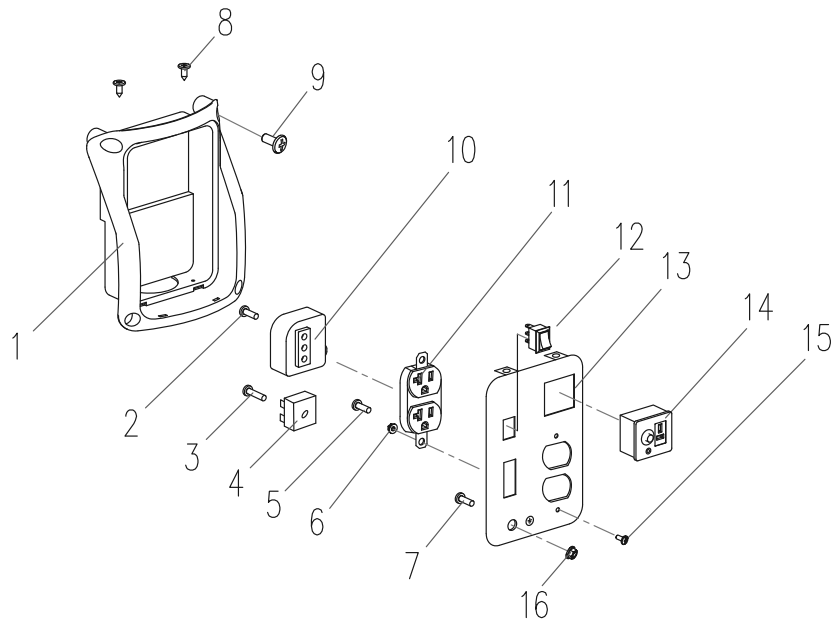
Note: When ordering parts from this diagram add a -n suffix.



Parts List and Diagram P - Control Panel

Part	Description	Qty
1p	Box	1
2p	Screw M5×16	1
3p	Screw M5×20	1
4p	Rectifier Bridge KBPC 3502	1
5p	Screw M5×10	4
6p	Nut M4	2
7p	Screw M5×16	8
8p	Screw ST4.2×13	4
9p	Screw M6×12	4
10	Ignition Controller	1
11	AC Outlet	1
12	Engine Switch	1
13	Panel Asm.	1
14	DC Outlet	1
15	Screw M4×12	2
16	Nut M5	1

Note: When ordering parts from this diagram add a -p suffix.



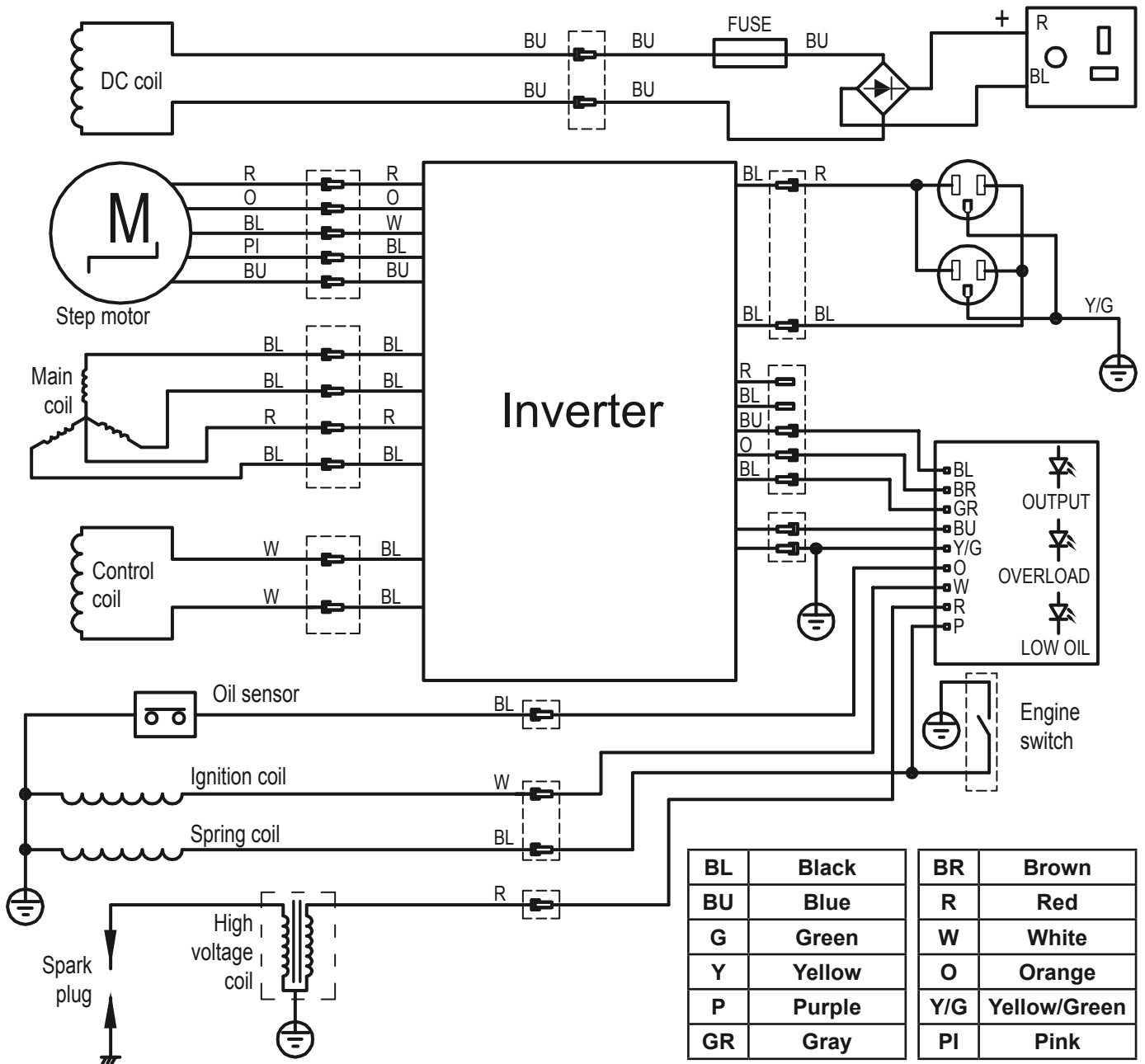
Wiring Diagram

SAFETY

SETUP

OPERATION

MAINTENANCE



PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Record Product's Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Emissions Control System Warranty

United States Emissions Control Defects Warranty Statement

The United States Environmental Protection Agency (herein EPA) and Harbor Freight Tools (herein HFT) are pleased to explain the emissions control system warranty on your 2014-2015 Small Off-Road Engine (herein engine). Within the United States, new off-road, spark-ignition engines certified for model year 2014-2015, must meet similar standards set forth by the EPA. HFT must warrant the emissions control system on your engine for the periods of time described below, provided there has been no abuse, neglect or improper maintenance of your engine.

Your emissions control system may include parts such as the carburetor or fuel-injection system, and the ignition system. Also included may be hoses, belts, connectors and other emissions-related assemblies.

Where a warrantable condition exists, HFT will repair your engine at no cost to you including diagnosis, parts and labor.

Manufacturer's Warranty Coverage

The 2014-2015 engines are warranted for two (2) years. If any emissions-related part on your engine is defective, the part will be repaired or replaced by HFT.

Harbor Freight Tools Emissions Control Defects Warranty Coverage

Engines are warranted for a period of two (2) years relative to emissions control parts defects, subject to the provisions set forth below. If any emissions related part on your engine is defective, the part will be repaired or replaced by HFT.

Owner's Warranty Responsibilities

- As the engine owner, you are responsible for the performance of the required maintenance listed in your Owner's Manual. HFT recommends that you retain all receipts covering maintenance on your engine, but HFT cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.
- As the engine owner, you should, however, be aware that HFT may deny you warranty coverage if your engine or a part has failed due to abuse, neglect, improper maintenance, or unapproved modifications.
- You are responsible for shipping your engine to a HFT warranty station as soon as a problem exists. Contact the HFT Customer Service department at the number below to make shipping arrangements. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty rights and responsibilities, you should contact the Harbor Freight Tools Customer Service Department at 1-888-866-5797.

Harbor Freight Tools Emissions Control Defects Warranty Provisions

1. Length of Coverage

HFT warrants to a first retail purchaser and each subsequent purchaser that the engine is free from defects in materials and workmanship that cause the failure of warranted parts for a period of two (2) years after the date of delivery to the first retail purchaser.

2. No Charge Repair or Replacement

Repair or replacement of any warranted part will be performed at no charge to the owner if the work is performed through a warranty station authorized by HFT. For emissions warranty service, contact the HFT Customer Service Department at 1-888-866-5797.

3. Consequential Damages Coverage

Coverage under this warranty shall also extend to the failure of any engine components caused by the failure of any warranted part while it is still covered under this warranty.

4. Coverage Exclusions

Warranty claims shall be filed in accordance with the provisions of the HFT warranty policy explained in the box at the top of the previous page. HFT shall not be liable for any loss of use of the engine, for any alternative usage, for any damage to goods, loss of time, or inconvenience. Warranty coverage shall also be excluded for any part which fails, malfunctions, or is damaged due to failure to follow the maintenance and operating instructions set forth in the Owner's Manual including, but not limited to:

- a) Use of parts which are not authorized by HFT
- b) Improper installation, adjustment or repair of the engine or of any warranted part unless performed by an authorized warranty center
- c) Failure to follow recommendations on fuel use contained in the Owner's Manual
- d) Improper or inadequate maintenance of any warranted parts
- e) Repairs performed outside of the authorized warranty service dealers
- f) Alterations by changing, adding to or removing parts from the engine.

5. Service and Maintenance

Component parts which are not scheduled for replacement as required maintenance or are scheduled only for regular inspection to the effect of "repair or replace as necessary" are warranted for the warranty period. Any warranted part which is scheduled for replacement as required maintenance is warranted for the period of time up to the first scheduled replacement point for that part. Any replacement part, provided it is equivalent in durability and performance, may be used in performance of maintenance or repairs. The owner is responsible for commissioning a qualified technician/mechanic to perform all required maintenance, as outlined in the Maintenance section in this manual.

6. Warranted Parts

1) Fuel Metering System

- i) Carburetor and its internal parts.
- ii) Fuel pump (if so equipped).
- iii) Cold start enrichment system.

2) Air Induction System

- i) Intake pipe/manifold.
- ii) Air cleaner.

3) Ignition System

- i) Spark plug.
- ii) Magneto ignition system.

4) Catalyst System (if so equipped)

- i) Exhaust pipe stud.
- ii) Muffler.
- iii) Catalytic converter (if so equipped).

5) Miscellaneous Items Used in Above Systems

- i) Vacuum, temperature and time sensitive valves and switches.
- ii) Hoses, belts, connectors, and assemblies.

PREDATOR™ GENERATORS

3491 Mission Oaks Blvd. • PO Box 6009 • Camarillo, CA 93011 • 1-888-866-5797