



INVERTER GENERATOR

Owner's Manual



SAVE THIS MANUAL FOR FUTURE REFERENCE

IMPORTANT SAFETY INSTRUCTIONS ARE INCLUDED IN THIS MANUAL

CUSTOMER SERVICE

SERVICE CLIENTELE

SERVICIO AL CLIENTE

1-855-888-3598

A-iPOWER Corp.

10887 Commerce

Way Unit A Fontana

CA 92337

www.a-ipower.com

Specifications

Model	SUA2000iD
Engine Type	4-Stroke OHV Air Cooled Single Cylinder EPA Certified
Engine Displacement (cc)	79cc
Running Watts	1600W-GAS / 1500W-LPG
Starting Watts	2000W-GAS / 1800W-LPG
Rated Frequency	60Hz
Rated Voltage	120V
Rated Current	13.3A
Run Time	7hrs at 1/2 load
Receptacles (qty.)	120V AC (2);12V DC (1)
Net Weight	48.4 lbs
Noise Level (dB)	52dB @ 1/4 Load
Fuel Type	Unleaded gasoline
Gallon	1.1
Oil Type	SAE 10W-30
Start Type	Recoil
Product Dimension: L x W x H	19.7×11.4×18.3inch
Packing Dimension: L x W x H	21.7×13.0×20.0inch

We Appreciate Your Business.

Thank you and congratulations on choosing A-IPOWER.

This Operating Manual has been designed to instruct you on the correct use and operation of your A-IPOWER product. Your satisfaction with this product and its safe operation is our ultimate concern. Therefore please take the time to read the entire manual, especially the Safety Precautions. They will help you to avoid potential hazards that may exist when working with this product.



WARNING!

READ AND UNDERSTAND ALL SAFETY PRECAUTIONS IN THIS MANUAL BEFORE OPERATING. FAILURE TO COMPLY WITH INSTRUCTIONS IN THIS MANUAL COULD RESULT IN PERSONAL INJURY, PROPERTY DAMAGE, AND/ OR VOIDING OF YOUR WARRANTY. A-IPOWER WILL NOT BE LIABLE FOR ANY DAMAGES DUE TO THE FAILURE OF FOLLOWING THESE INSTRUCTIONS.

CUSTOMER SERVICE:1-855-888-3598,WWW.A-IPOWER.COM

Table of Contents

SECTION 1: SAFETY INSTRUCTIONS AND WARNINGS	1
SECTION 2: CONTROLS AND FEATURES	9
2.1 Generator	9
2.2 Control Panel.....	10
2.3 Control Functions	11
SECTION 3: GETTING STARTED	15
3.1 Unpacking the Generator.....	15
3.2 Adding Engine Oil.....	15
3.3 Adding Fuel	17
3.4 Starting the Engine.....	18
3.5 Stopping the Engine	20
SECTION 4: ELECTRICAL CONNECTION	21
4.1 Capacity	21
4.2 Power Maintenance	21
4.3 Connecting Electrical Loads.....	21
4.4 Parallel Connection with 2 generator	22
4.5 Battery Charging.....	25
4.6 Wattage Reference Guide.....	26
SECTION 5: MAINTENANCE	28
5.1 Periodic Maintenance.....	28
5.2 Spark Plug Maintenance	29
5.3 Engine Oil Replacement.....	30
5.4 Air Filter Maintenance.....	31
5.5 Muffler Screen & Spark Arrestor Maintenance	32
5.6 Fuel Filter Maintenance	33
SECTION 6: STORAGE	34
6.1 Long Term Storage.....	34
SECTION 7: TROUBLESHOOTING	36
7.1 Troubleshooting Diagram	36
7.2 Fuel Filter Maintenance	37

SECTION 1: SAFETY INSTRUCTIONS AND WARNINGS

⚠ WARNING	⚠ ADVERTENCIA
This product can expose you to chemicals including arsenic, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov	Este producto puede exponerlo a productos químicos incluso el arsénico que en el Estado de California es cancerígeno. Para mas información revisar página www.P65Warnings.ca.gov

Rev. 5 31 2018

⚠ Read this manual carefully before operating this generator. This manual should stay with this generator if it is sold.

INTRODUCTION




This Operating Manual has been designed to instruct you on the correct operation of your A-IPOWER product. Your satisfaction with this product and the safe operation is our ultimate concern. Therefore please take the time to read the entire manual, especially the Safety Precautions. They will help you to avoid potential hazards that may exist when working with this product.

IMPORTANT SAFETY INSTRUCTIONS

SAFETY PRECAUTIONS

⚠ 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.

Avoid other generator hazards. READ MANUAL BEFORE USE.



POISONOUS GAS HAZARD.



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

- Operate this product **ONLY** outside far away from windows, doors and vents to reduce the risk of carbon monoxide gas from accumulating and potentially being drawn towards occupied spaces.
- Install battery-operated carbon monoxide alarms or plug-in carbon monoxide alarms with battery back-up according to the manufacturer's instructions. Smoke alarms cannot detect carbon monoxide gas.
- **DO NOT** run this product inside homes, garages, basements, crawlspaces, sheds, or other partially-enclosed spaces even if using fans or opening doors and windows for ventilation. Carbon monoxide can quickly build up in these spaces and can linger for hours, even after this product has shut off.
- **ALWAYS** place this product downwind and point the engine exhaust away from occupied spaces. If you start to feel sick, dizzy, or weak while using this product, shut it off and get to fresh air **RIGHT AWAY**. See a doctor. You may have carbon monoxide poisoning.



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



Certain components in this product and related accessories contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Wash hands after handling.

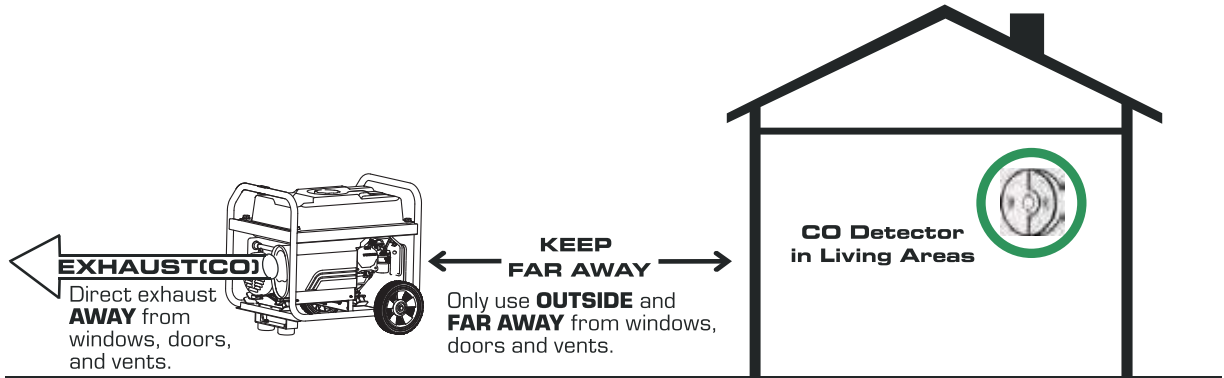
- If you start to feel sick, dizzy or weak while using the portable generator, you may have carbon monoxide poisoning. Get outside to fresh air immediately and call 911 for emergency medical attention. Very high levels of CO can rapidly cause victims to lose consciousness before they can rescue themselves. **DO NOT** attempt to shut off the generator before moving to fresh air. Entering an enclosed space where a generator is or has been running may put you at greater risk of CO poisoning.

IMPORTANT SAFETY INSTRUCTIONS

CORRECT USAGE WARNING

Example location to reduce risk of carbon monoxide poisoning

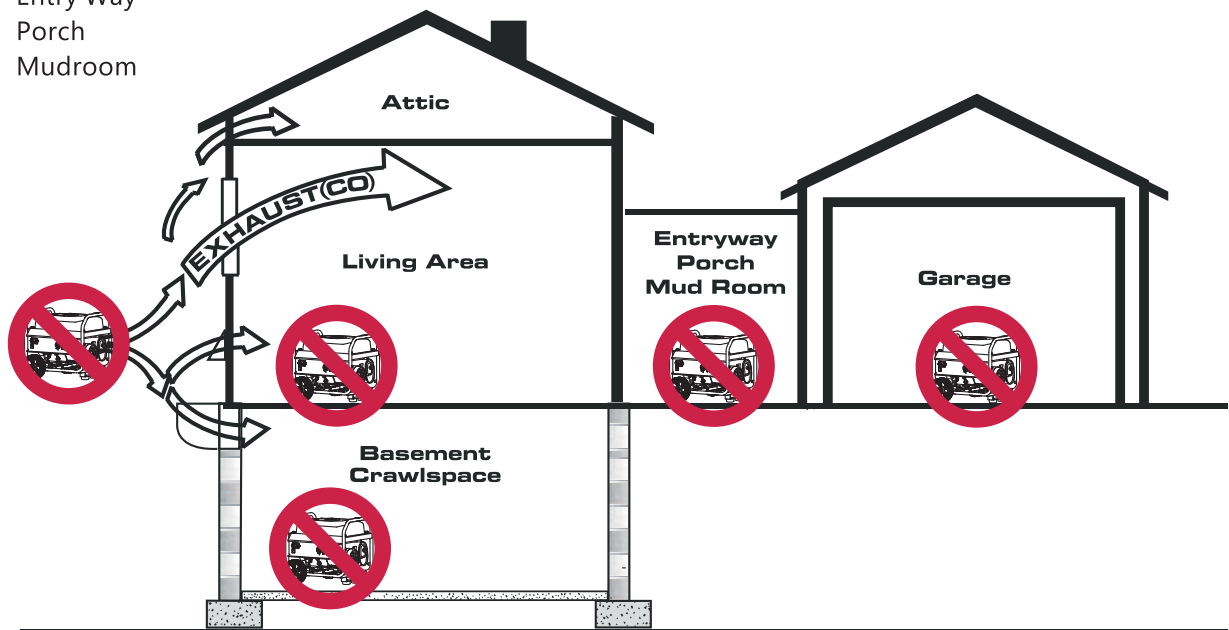
- ONLY use outside and downwind, far away from windows, doors and vents.
- Direct exhaust away from occupied spaces.



INCORRECT USAGE WARNING

Do not operate in any of the following locations:

- Near any door, window or vent
- Garage
- Basement
- Crawl Space
- Living Area
- Attic
- Entry Way
- Porch
- Mudroom



IMPORTANT SAFETY INSTRUCTIONS

WARNING



Starter cord kickback (rapid retraction) will pull hand and arm toward engine faster than you can let go which could cause broken bones, fractures, bruises, or sprains resulting in serious injury.

- When starting engine, pull cord slowly until resistance is felt and then pull rapidly to avoid kickback.
- **NEVER** start or stop engine with electrical devices plugged in and turned on.

WARNING



Fuel and its vapors are extremely flammable and explosive which could cause burns, fire, or explosion resulting in death or serious injury and/or property damage.

WHEN ADDING OR DRAINING FUEL

- Turn generator engine OFF and let it cool at least 2 minutes before removing fuel cap. Loosen cap slowly to relieve pressure in tank.
- Fill or drain fuel tank outdoors.
- **DO NOT** overfill tank. Allow space for fuel expansion.
- If fuel spills, wait until it evaporates before starting engine.
- Keep fuel away from sparks, open flames, pilot lights, heat, and other ignition sources.
- Check fuel lines, tank, cap, and fittings frequently for cracks or leaks. Replace if necessary.
- **DO NOT** light a cigarette or smoke.

WHEN STARTING EQUIPMENT

- Ensure spark plug, muffler, fuel cap, and air cleaner are in place.
- **DO NOT** crank engine with spark plug removed.

WHEN OPERATING EQUIPMENT

- **DO NOT** operate this product inside any building, carport, porch, mobile equipment, marine applications, or enclosure.
- **DO NOT** tip engine or equipment at angle which causes fuel to spill.
- **DO NOT** stop engine by moving choke control to "Start" position.

WHEN TRANSPORTING, MOVING OR REPAIRING EQUIPMENT

- Transport/move/repair with fuel tank EMPTY or with fuel shutoff valve OFF.
- **DO NOT** tip engine or equipment at angle which causes fuel to spill.
- Disconnect spark plug wire.

WHEN STORING FUEL OR EQUIPMENT WITH FUEL IN TANK

- Store away from furnaces, stoves, water heaters, clothes dryers, or other appliances that have pilot light or other ignition source because they could ignite fuel vapors.

WARNING

- This generator does not meet U. S. Coast Guard Regulation 33CFR-183 and should not be used on marine applications.
- Failure to use the appropriate U. S. Coast Guard approved generator could result in death or serious injury and/or property damage.

WARNING



Generator voltage could cause electrical shock or burn resulting in death or serious injury.

- Use approved transfer equipment, suitable for the intended use, to prevent backfeed by isolating generator from electric utility workers.

IMPORTANT SAFETY INSTRUCTIONS

- When using generator for backup power, notify utility company.
- Use a ground fault circuit interrupter (GFCI) in any damp or highly conductive area, such as metal decking or steel work.
- **DO NOT** touch bare wires or receptacles.
- **DO NOT** use generator with electrical cords which are worn, frayed, bare or otherwise damaged.
- **DO NOT** operate generator in the rain or wet weather.
- **DO NOT** handle generator or electrical cords while standing in water, while barefoot, or while hands or feet are wet.
- **DO NOT** allow unqualified persons or children to operate or service generator.



Exhaust heat/gases could ignite combustibles, structures or damage fuel tank causing a fire, resulting in death or serious injury and/or property damage.

Contact with muffler area could cause burns resulting in serious injury.

- **DO NOT** touch hot parts and **AVOID** hot exhaust gases.
- Allow equipment to cool before touching.
- It is a violation of California Public Resource Code, Section 4442, to use or operate the engine on any forest-covered, brush-covered, or grass-covered land unless the exhaust system is equipped with a spark arrester, as defined in Section 4442, maintained in effective working order. Other states or federal jurisdictions may have similar laws. Contact the original equipment manufacturer, retailer, or dealer to obtain a spark arrester designed for the exhaust system installed on this engine.
- Replacement parts must be the same and installed in the same position as the original parts.



Unintentional sparking could cause fire or electric shock resulting in death or serious injury.

WHEN ADJUSTING OR MAKING REPAIRS TO YOUR GENERATOR

- Disconnect the spark plug wire from the spark plug and place the wire where it cannot contact spark plug.

WHEN TESTING FOR ENGINE SPARK

- Use approved spark plug tester.
- **DO NOT** check for spark with spark plug removed.



Starter and other rotating parts could entangle hands, hair, clothing, or accessories resulting in serious injury.

- **NEVER** operate generator without protective housing or covers.
- **DO NOT** wear loose clothing, jewelry or anything that could be caught in the starter or other rotating parts.
- Tie up long hair and remove jewelry.



Excessively high operating speeds could result in minor injury. Excessively low operating speeds impose a heavy load.

- **DO NOT** tamper with governor spring, links or other parts to increase engine speed. Generator supplies correct rated frequency and voltage when running at governed speed.
- **DO NOT** modify generator in any way.

NOTE:

Exceeding generators wattage/amperage capacity could damage generator and/or electrical devices connected to it.

- **DO NOT** exceed the generator's wattage amperage capacity.
- Start generator and let engine stabilize before connecting electrical loads.
- Connect electrical loads in OFF position, then turn ON for operation.
- Turn electrical loads OFF and disconnect from generator before stopping generator.

IMPORTANT SAFETY INSTRUCTIONS

NOTE:

Improper treatment of generator could damage it and shorten its life.

- Use generator only for intended uses.
- If you have questions about intended use, ask dealer or contact local service center.
- Operate generator only on level surfaces.
- DO NOT expose generator to excessive moisture, dust, dirt, or corrosive vapors.
- DO NOT insert any objects through cooling slots.
- If connected devices overheat, turn them off and disconnect them from generator.
- Shut off generator if:
 - Electrical output is lost.
 - Equipment sparks, smokes, or emits flames.
 - Unit vibrates excessively.



Medical and Life Support Uses.

- In case of emergency, call 911 immediately.
- NEVER use this product to power life support devices or life support appliances.
- NEVER use this product to power medical devices or medical appliances.
- Inform your electricity provider immediately if you or anyone in your household depends on electrical equipment to live.
- Inform your electrical provider immediately if a loss of power would cause you or anyone in your household to experience a medical emergency.

IMPORTANT MANUAL INFORMATION

Important information is identified in this manual by the following notes.



Symbol Usage

This manual contains important information that you need to know and understand in order to assure **YOUR SAFE and PROPER OPERATION OF EQUIPMENT**. The following symbols help you recognize this information. Please read the manual and pay attention to these sections.



WARNING INDICATE A CERTAINTY OR STRONG POSSIBILITY OF PERSONAL INJURY OR DEATH IF INSTRUCTIONS ARE NOT FOLLOWED.

NOTICE

CAUTION INDICATES A POSSIBILITY DAMAGE TO THE PRODUCTS IF INSTRUCTIONS ARE NOT FOLLOWED PROPERLY.

TIPS

TIPS GIVE HELPFUL INFORMATION



PLEASE READ AND UNDERSTAND THIS MANUAL COMPLETELY BEFORE OPERATING THE MACHINE

TIPS

A-IPOWER continually seeks advancements in product design and quality.

Therefore, wherein this manual contains the most current product information available at the time of printing, there may be minor variances between your product and this manual. If there are any questions concerning this manual, please consult a A-IPOWER dealer.

This manual should be considered a permanent part of this product and should remain with this product when resold.

Product and specifications are subject to change without notice.

SAFETY INFORMATION

FUEL IS HIGHLY FLAMMABLE AND POISONOUS

- Always turn off the engine when refueling.
- Never refuel while smoking or in the vicinity of an open flame.
- Take care not to spill any fuel on the engine or muffler when refueling.
- If you swallow any fuel, inhale fuel vapor, or allow any to get in your eye(s), see your doctor immediately. If any fuel spills on your skin or clothing, immediately wash with soap and water and change your clothes.
- When operating or transporting the machine, be sure it is kept upright. if it tilts, fuel may leak from the carburetor or fuel tank.

EXHAUST FUMES ARE POISONOUS

- Never operate this product in an enclosed area or it may cause unconsciousness and death within a short time. Always operate this product in a well ventilated outdoor area.

ENGINE AND MUFFLER MAY BE HOT

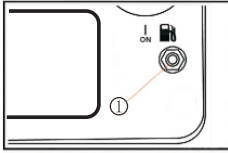
- When operating the generator place in a safe area away from pedestrians or children.
- Avoid placing any flammable materials near the exhaust outlet during operation.

- Keep the generator at least 1m(3 ft)from buildings or other equipment, or the product may overheat.
- Do not operate the product with a dust cover, or other objects covering it.
- When covering the generator, be sure to do so only after the engine and muffler have completely cooled down.
- Be sure to carry the generator only by its carrying handles.
- Do not place any obstacles on the generator.

TO PREVENT ELECTRIC SHOCK

- Never operate the product in rain or snow.
- Never touch the generator with wet hands or electrical shock can occur.

GROUNDING



- Properly ground generator to prevent electric shock.
- Connect the ground terminal of the generator to the ground electrode buried in the ground.

WARNING NOTES

- Failure to properly ground the generator can result in electric shock.
- Be sure to always comply with electric loads.

CONNECTION



Before the generator can be connected to a building's electrical system, a licensed electrician must install an isolation (transfer) switch in the building's main fuse box. The switch is the connection point for generator power and allows selection of generator or main line power to the building. This will prevent the generator from charging the main power line (back feeding) when the main power supply has failed or has been turned off for line repair. backfeeding can electrocute or injure line maintenance personnel. Also, generator and building electrical system damage can occur when normal operating power returns if unit is used without an auto-switch.



Always use properly approved electrical cords. Be sure to comply with all electric codes.

Do not use electrical cords that are worn or damaged. Always use GFCI (ground fault circuit interruptor) for damp locations.

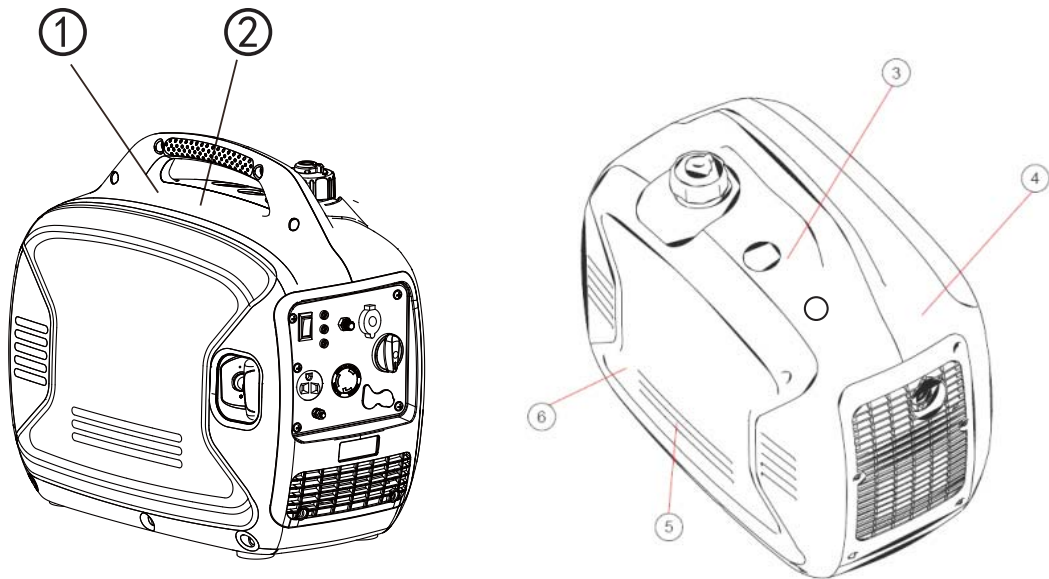
Always use properly approved transfer switch to isolate generator from the electric panel.

LOCATION OF IMPORTANT LABELS

Please read the following labels carefully before operating this product.

TIP

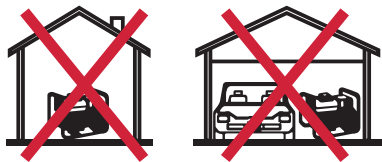
Maintain or replace safety and instruction labels, as necessary. For customer service, call 1-855-888-3598.



①

⚠ DANGER

Using an engine indoors WILL KILL YOU IN MINUTES. Exhaust contains carbon monoxide, a poison gas you cannot see or smell.



NEVER use in the home or in partly enclosed areas such as garages.



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

Avoid other engine hazards.
READ MANUAL BEFORE USE.

②

⚠️ WARNING

- Read the owner's manual and all labels before operating.
- Only operate in well-ventilated areas. Exhaust gas contains poisonous carbon monoxide.
- Stop engine before refueling. Check for spilled fuel or fuel leaks.
- Electrocutation can occur if generator is used in rain, snow, or near water. Keep this unit dry at all times
- Do not place a partition or other barrier around the generator while running.
- Do not cover the generator with a box while running.
- Do not place any objects on the generator.
- Do not connect this generator to any building's electrical system.
- Do not operate near flammable materials.

③

SPARK PLUG CROSS REFERENCE AREA

COVERS MODELS:

SUA2000iD

with 79cc OHV Yamaha Engine



AutoLite	275
Champion	L95YC
NGK	BP4H
Torch <small>Stock Plug</small>	E5T

GAP: .028 in or .7mm
TORQUE: 14.8 ft·lbf or 20.0 N·m

④

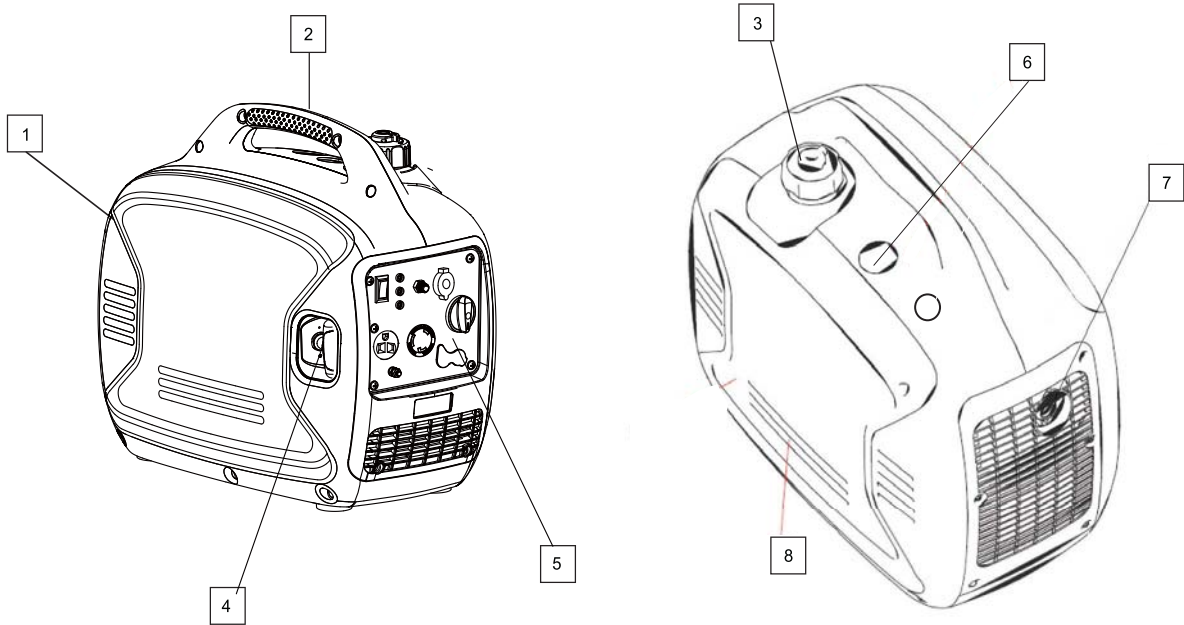


HOT EXHAUST

SECTION 2:

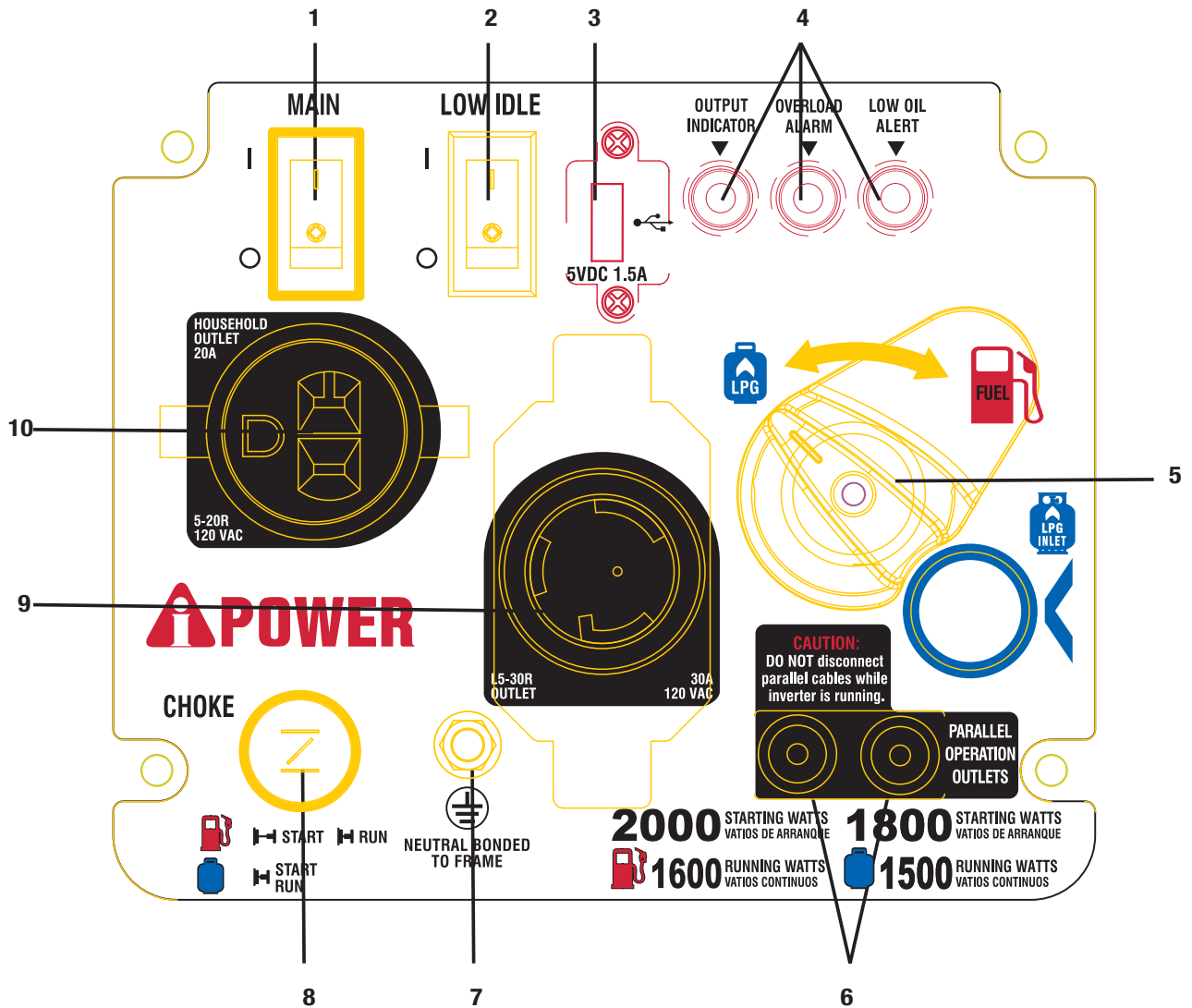
Controls and Features

2.1 Generator



1. Muffler
2. Carrying handle
3. Vented Gas Cap
4. Recoil Starter
5. Control Panel
6. Fuel Gauge
7. Exhaust and Spark Arrestor
8. Oil filler cap

2.2 Control Panel



1. MAIN

2. LOW IDLE

Turn ON to increase fuel economy and runtime when the load is below 75% load

3. DC 5V USB Outlets (1.5A)

4. Low Oil Alarm Overload Alarm Output Indicator

5. FUEL SOURCE switch

6. Parallel Operation Outlets

Connect two AIPOWER inverter generators through a parallel connection kit for a higher output

7. Grounding Nut

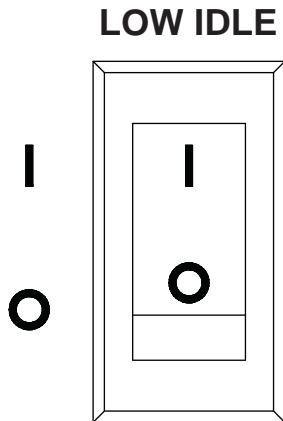
Ground generator to reduce risk of electric shock

8. CHOKE

9. AC 120V Receptacle (30A)

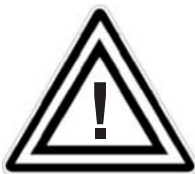
10. AC 120V Receptacle (20A)

2.3 Control Functions



LOW IDLE

When the throttle switch is in the “ON” position the throttle controls the engine speed according to the connected electrical load. The results are better fuel consumption and less noise. When the switch is in the “OFF” position the engine runs at 4,500 rpm regardless of the electrical load.

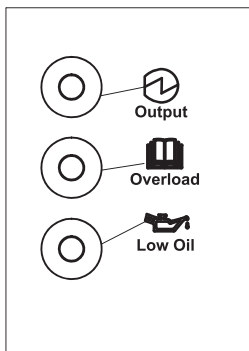


Note:

The Throttle must be “OFF” when using electrical devices that require a large starting current, such as a compressor, pump, or refrigerator.

LED Indicators

The LED Indicators assist in communicating status and functions of the unit .



Output Indicator (Green)

The Output Indicator comes on when the engine starts and produces power.

Overload Alarm (Red)

The Overload Alarm comes on when a connected device requires more power than the generator is able to produce,

The Output Indicator (Green) will go off and the Overload Alarm (Red) will stay on, but the engine will continue to run

CAUTION: Do not overload the generator

Low Oil Alarm (Red)

When the engine oil falls below the required level the Low Oil Alarm will come on and the engine will stop automatically. The engine will not restart until oil is added to the unit to bring it up to the appropriate level.

To Reset the Generator

1. Turn off any connected electric devices and stop the engine.
2. Reduce the total wattage of connected electric devices within the rated output.
3. Use in proper ventilated areas. Maintain at least 3ft of clearance on all sides for adequate cooling.
4. After checking, restart the engine. (refer to part 3.4 in this manual for how to start).



Note:

The Overload Alarm may come on for a few seconds when first using electrical devices that require a large starting current, such as a compressor, pump, or refrigerator. This is normal and not a malfunction.



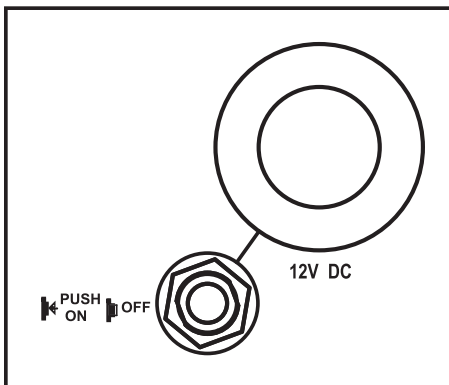
Note:

When starting the unit, if the Low Oil Alarm light flickers and the engine will not start, you will need to add engine oil before attempting to restart the engine.



Note:

Generator should only be operated on a level surface. DO NOT operate the generator on loose ground or obvious inclines. The low oil shutdown feature may be prematurely activated in these cases causing the engine to not start.

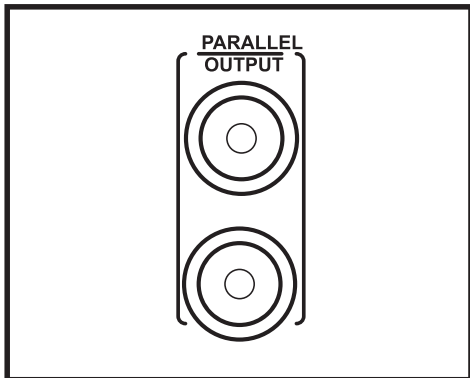


12V 8A DC

The 12V 8A DC Output is provided for battery charging. Follow instructions in the owner's manual for the battery for charging procedures.

8A DC Circuit Breaker

The 8A DC Circuit Breaker turns off automatically if the current exceeds 8A. If the circuit breaker turns "OFF" you will need to push it "in" to turn it "ON" again.

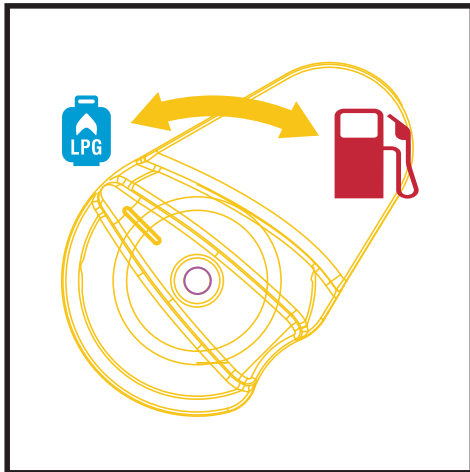


Parallel Output

Two generators can be connected to increase output.

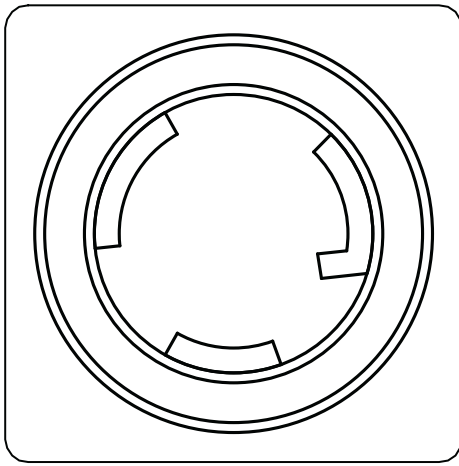
Connect the Parallel Cables first, then start the greater wattage unit first if different from the other.

Note: put the connection wire into the right Sockets (Please refer to 4.4 for how to connect properly) .



Fuel Selector Switch

The Fuel Selector Switch controls the desired fuel source. When switch is turned left, gasoline is selected. When switch is turned right, LPG is selected and hose inlet is exposed for hook up.



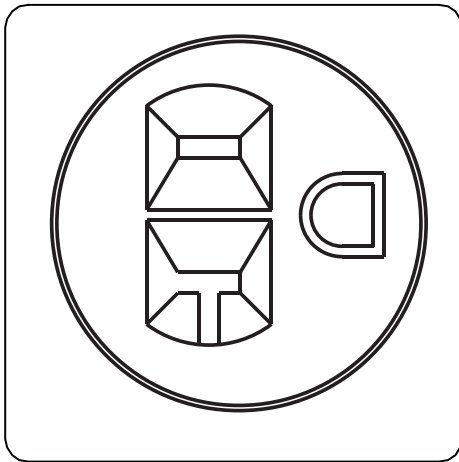
120V AC Outlet

The Outlet is used to power 120V Single Phase 60Hz loads requiring up to 1600W continuous power.

120V AC twist lock receptacle(NEMA LR-30R) may be used to supply electrical power when parallel connection.

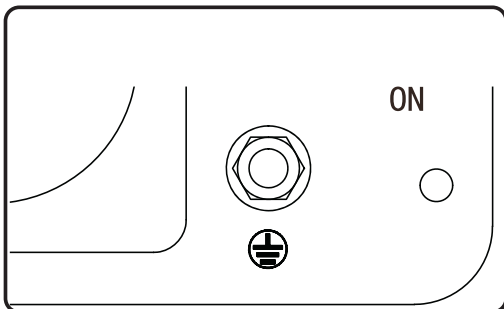
NOTE:

When two generators are connected in parallel for greater wattage loads, an RV(NEMA TT-30) adaptor is provided.



120 Volt 5-20R

The Outlet is used to power 120V Single Phase 60Hz loads requiring up to 1600W continuous power.



Ground Terminal

Properly ground generator to prevent electrical shock.

Connect the ground terminal of generator to ground electrode buried in the ground.

**NEUTRAL BONDED TO FRAME
NEUTRE MIS À LA MASSE À LA
CARCASSE DU MOTEUR**

SECTION 3:

Getting Started

3.1 Unpack the Generator

Remove the generator from its packaging.



WARNING!
PACKAGING IS FLAMMABLE!
DO NOT ATTEMPT TO ADD FUEL TO THIS UNIT
BEFORE REMOVING IT FROM PACKAGING.

Inspect the generator to ensure that no damage has occurred in shipping or handling. If the unit appears to be damaged, DO NOT add fuel or attempt to start the generator. Please call A-IPOWER customer service at 1-855-888-3598

Check to ensure that you received the following items:

- Generator
- 12V Charging Cables
- Parallel output wire
- Oil Funnel
- RV Adaptor

If you did not receive any of the above items, please contact A-IPOWER customer service at 1-855-888-3598

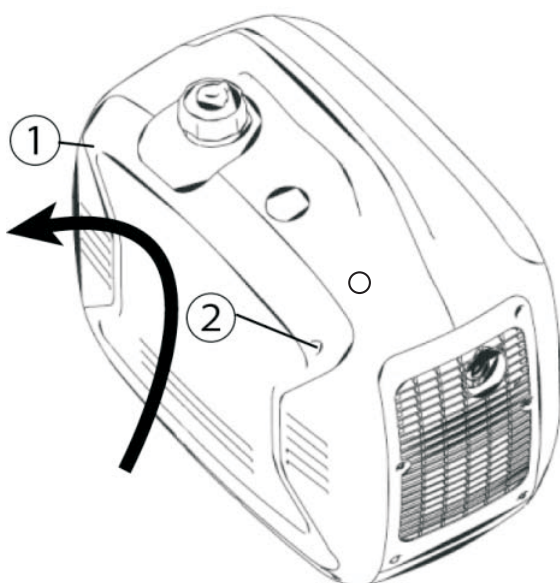


Figure 1

3.2 Adding Engine Oil

The generator has been shipped without engine oil.
DO NOT add fuel or start the engine before adding engine oil.

IN ORDER TO ADD MOTOR OIL YOU WILL NEED TO REMOVE THE SIDE PANEL FROM THE UNIT(Figure1).

Using a #2 Phillips-head screwdriver remove screws ① and ② (seen in figure 1) and lift up and away to remove the side panel.

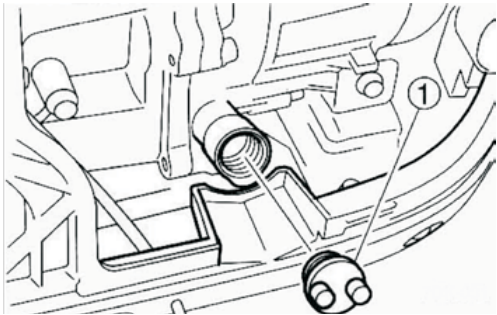


Figure 2

Place the generator on a level surface. DO NOT tilt the generator while adding oil. It can cause you to overfill the oil and/or cause the oil to leak into areas in which it is not intended. Remove the oil filler cap ① (seen in figure 2)

Using the funnel (provided) fill with 0.42 quart of SAE 10W-30 or 10W-40 (provided) (see figure 3). See figure 4 for proper oil level ①.

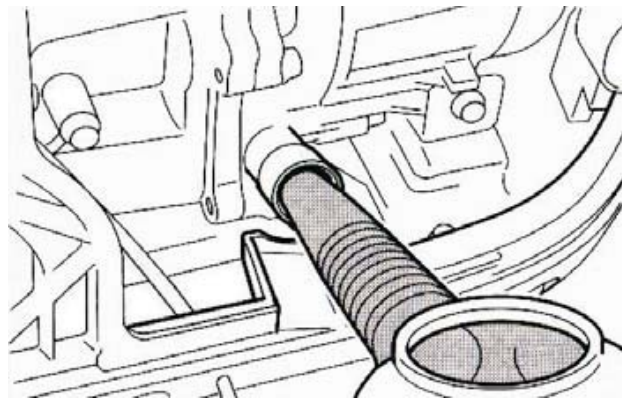


Figure 3

Replace oil filler cap and secure side panel with screws.

Recommended engine oil:

- A. YAMALUBE 4 (10W-40)
SAE 10W-30 or 10W-40
- B. SAE #30
- C. SAE #20
- D. SAE #10W

Recommended engine oil grade:

API Service SE type or higher

Engine oil quantity:

0.4L (0.42 US qt , 0.35 Imp qt)

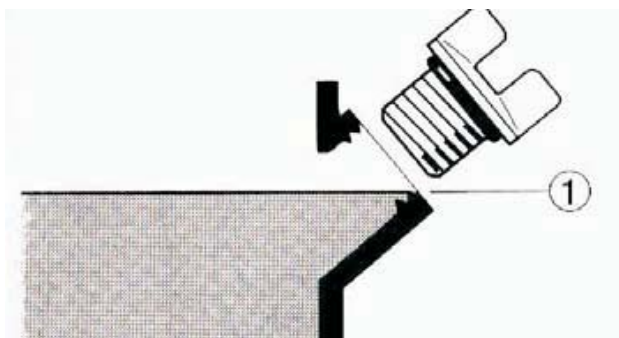


Figure 4

3.3 Adding Fuel

The fuel tank capacity 1.1 GAL.

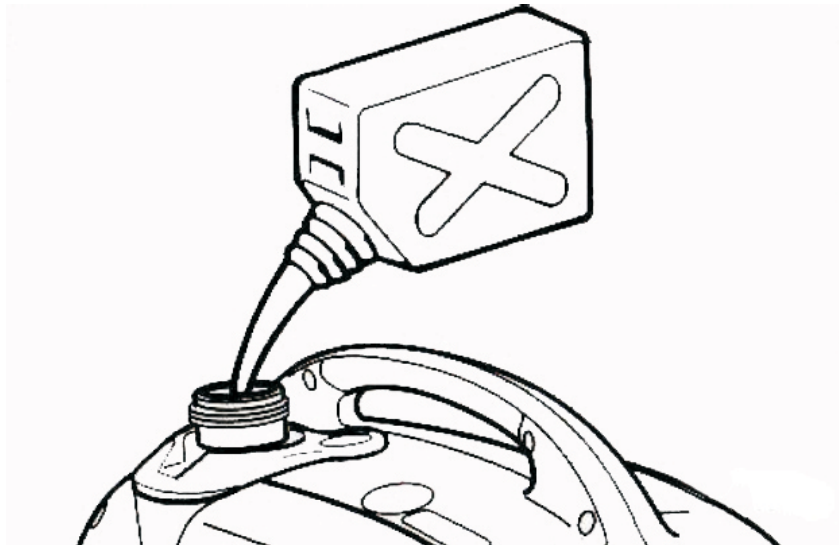
DO NOT overfill the tank, otherwise it may overflow when the fuel warms up and expands.



Note:

For safety reasons, once fuel has been added to this unit it cannot be returned to the place of purchase.

1. Use clean, fresh, regular unleaded fuel with a minimum octane rating of 85.
2. DO NOT mix oil with fuel.
3. Clean area around the fuel cap.
4. Remove the fuel cap.
5. Be sure that the fuel strainer is in place.
6. Slowly add fuel to the tank.
7. Do not exceed the red marker position of the fuel filter.
8. Screw on the fuel cap and wipe away any spilled fuel.



Note:

Use only unleaded gasoline.

The use of leaded gasoline will cause severe damage to internal engine parts.

After filling with fuel, make sure the fuel tank cap is tightened securely.

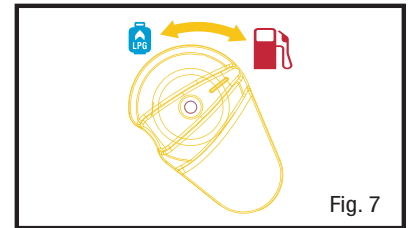
3.4 Starting the Engine

OPERATE THE ENGINE IN A WELL VENTILATED AREA.

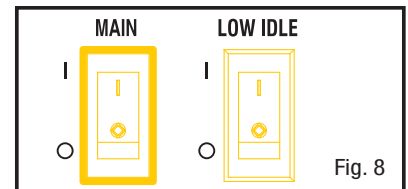
DO NOT connect any electrical devices to the outlets on the generator before starting the engine.

3.4.1

1. Turn the FUEL SOURCE switch (Fig. 7) to the “GAS” position.

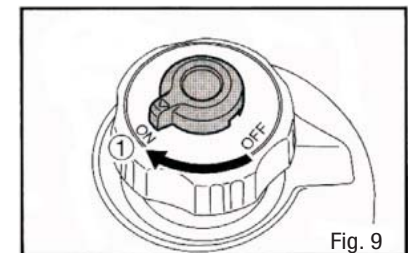


2. Turn the LOW IDLE switch (Fig. 8) to “OFF”.



3. Turn the MAIN switch (Fig. 8) to the “ON” position.

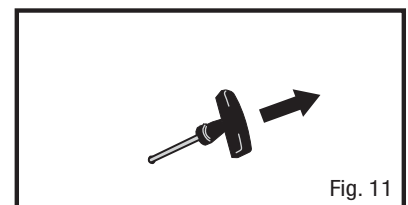
4. While holding the fuel tank cap so that it will not move turn the air vent knob to “ON” (Fig. 9)



5. Pull the CHOKE LEVER (Fig. 10) out to the “START” position. (NOTE: Skip this if starting the generator with a warm engine.)



6. Place one hand on the generator to hold it in place, and pull on the recoil starter handle slowly until a slight resistance is felt (Fig. 11). Then pull quickly to start the engine. Return cord gently into the machine. Never allow the cord to snap back.



NOTE: If you have repeated failed attempts to start the engine, please consult the troubleshooting guide.

7. Allow the generator to run for several minutes before attempting to connect any electrical devices. This allows the generator to stabilize its speed and temperature.

- FOR LPG -

1. Turn the FUEL SOURCE switch (Fig. 11) to the "LPG" position.
2. Connect the LPG gas hose to the propane fuel source (Fig. 12).
3. Connect the small end of the LPG gas hose to the LPG regulator on the generator and then snug with a wrench to prevent leakage (Fig. 13).
4. Turn the LOW IDLE switch (Fig. 8) to "OFF".
5. Turn the MAIN switch (Fig. 8) to the "ON" position.
6. Rotate the LPG valve to open the LPG (Fig. 14).
7. With the choke at "RUN" (Fig. 10), press and hold the pressure-reducing valve button to store air for 3.5 seconds. (NOTE: Skip this if starting the generator with a warm engine.)
8. Place one hand on the generator to hold it in place, and pull on the recoil starter handle slowly until a slight resistance is felt (Fig. 11). Then pull quickly to start the engine. Return cord gently into the machine. Never allow the cord to snap back.

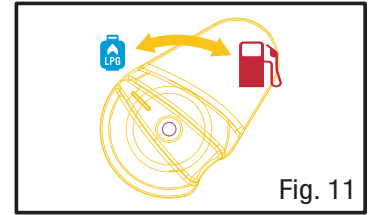


Fig. 11

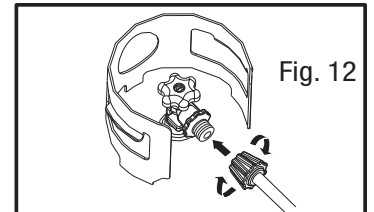


Fig. 12

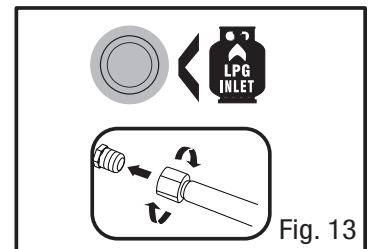


Fig. 13

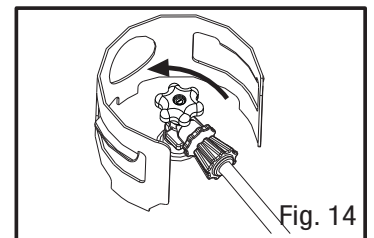
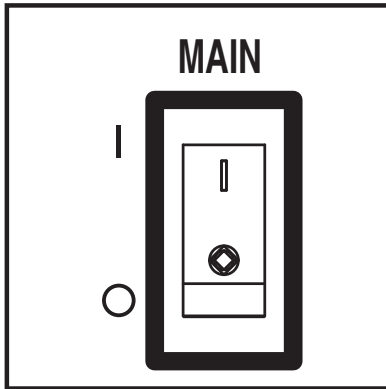


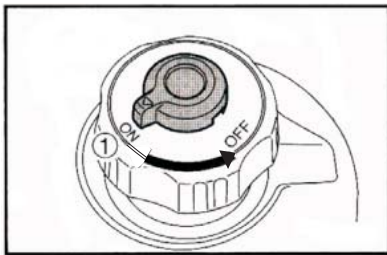
Fig. 14

3.5 Stopping the Engine

Before stopping the engine turn off and disconnect any electronic devices attached to the generator.



1. Turn the MAIN switch (Fig. 12) to the "OFF" position.



2. While holding the fuel tank cap so that it will not move, turn the air vent knob to "OFF".

SECTION 4:

Electrical Connection

4.1 Capacity

Follow these simple steps to calculate the running and starting watts necessary for your purposes.

See Section 4.5 for Wattage Reference Guide.

1. Select the electrical devices you plan on running at the same time.
2. Total the running watts of these items. This is the amount of power you need to keep your items running.
3. Identify the highest starting wattage of all devices identified in step 1
 - a. Add this number to the number calculated in step 2
 - b. Surge wattage is the extra burst of power needed to start some electric driven equipment. Following the steps listed under "Power Management" will guarantee that only one device will be starting at a time.

4.2 Power Management

Use the following formula to convert voltage and amperage to watts:

Volts x Amps = Watts

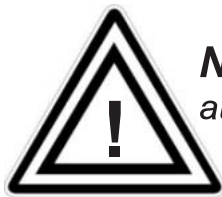
To prolong the life of your generator and attached devices, follow these steps to add electrical load:

1. Start the generator with no electrical load attached.
2. Allow the engine to run for several minutes to stabilize.
3. Plug in and turn on the first item. It is best to attach the item with the largest load first.
4. Allow the engine to stabilize.
5. Plug in and turn on the next item.
6. Allow the engine to stabilize.
7. Repeat steps 5-6 for each additional

4.3 Connecting Electrical Loads

1. Let the engine stabilize and warm up a few minutes after starting.

2. Prior to powering tools and equipment, make sure the generator's rated voltage, and amperage capacity (120V AC @ 7 AMPs, 12V DC @ 8 AMPs) is adequate to supply all electrical loads that the unit will power. If powering exceeds the generator's capacity, it may be necessary to group one or more of the tools and/or equipment for connection to a separate generator.
3. Once the generator is running, simply connect the power cords of 120 volt AC powered tools and equipment into the 120 volt AC dual outlets and/or the power cord of a 12V DC powered tool to the DC terminals..
4. DO NOT connect 3-phase loads to the generator.
5. DO NOT connect 50Hz loads to the generator.
6. DO NOT overload the generator.



Note: The DC terminals may be used for charging 12 volt automotive type batteries only.

4.4 Parallel Connection within 2 Generators

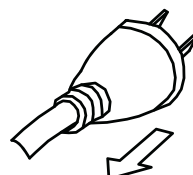
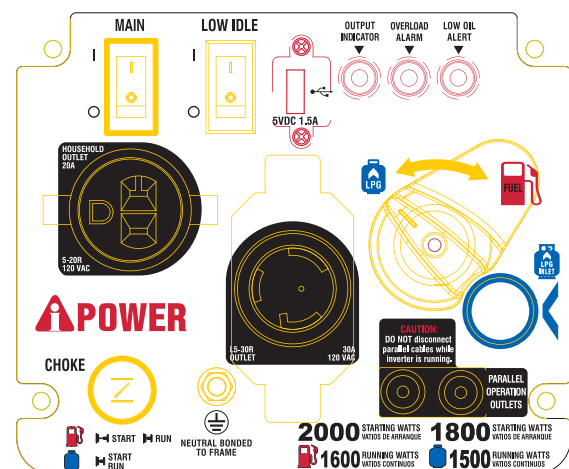
Performance : Allows you to increase the output by connecting two generators together. By using the parallel connection wires provided.

INSTANT INCREASED POWER ONCE CONNECTED:

Parallel RUNNING WATTS = 3000 WATTS / 25 AMPs

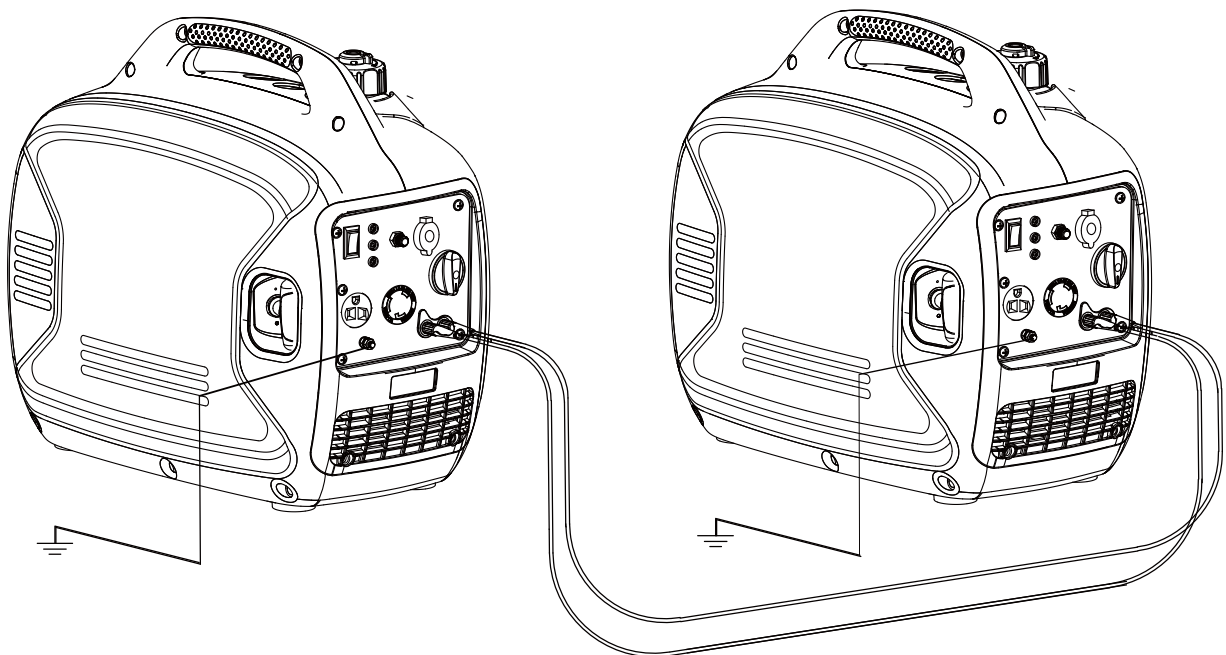
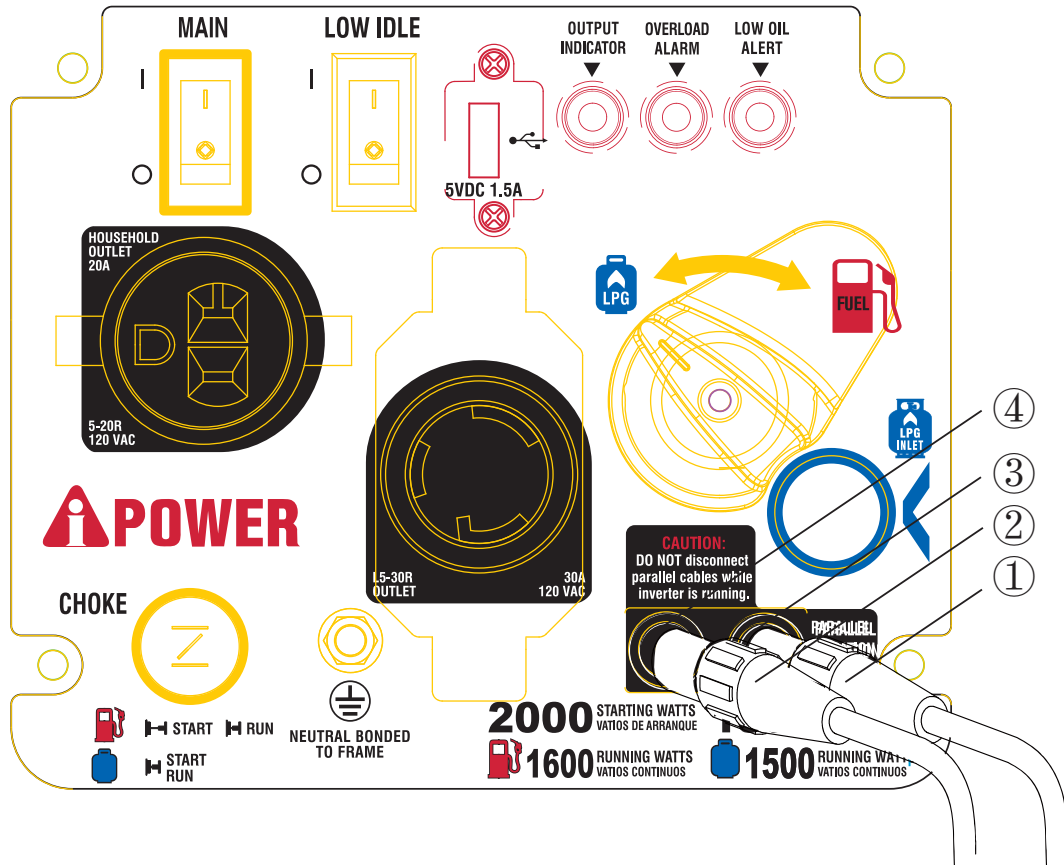
1.2 SUA2000iD inverter generators needed

Attention: Be sure generators are powered off and without load when connecting the parallel wires.

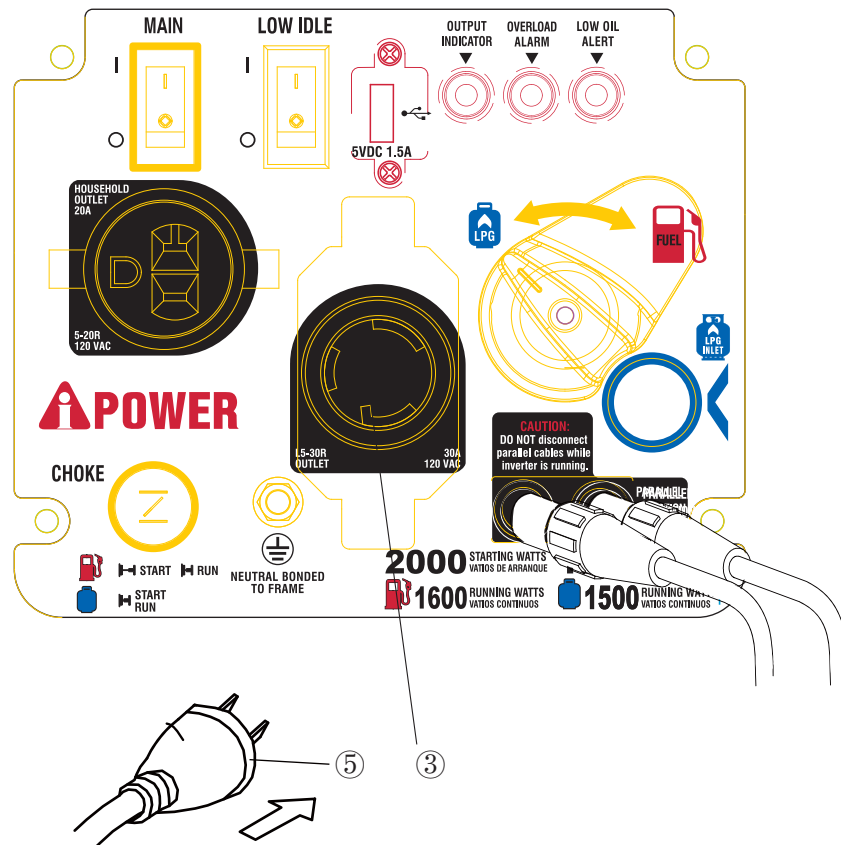


2. put the parallel connection wire 1 and 2 into the parallel connection sockets 3 and 4.

Attention: Grounding Wire must be properly connected.



3. Start 2 sets of inverter generators. The starting operation is the same as the normal process(Refer to the "Starting" section of the manual)
- Attention:** Please make sure the parallel connection wires have been put into the parallel connection sockets properly. If not connected properly, starting inverter generator could cause damage.
4. The outlets now can be used.



Warning:

Only 2 sets of A-IPOWER inverter generators can be parallel connected.
 Only use A-IPOWER parallel connecting wire.
 Make sure to connect the correct parallel wire into the correct socket.
 Connect the parallel wires when generator is off.
 Parallel wires are not necessary when only one generator is being used.
 Read manual book carefully before operation.

4.5 Battery Charging

Start the engine first and allow it to reach idle before connecting the generator to the battery. Battery Charging is performed using the 12V DC outlet only.

1. Be sure the **LOW IDLE** is turned “**OFF**” while charging batteries.
2. **Connect the Negative (Black) cable first. Then connect the Positive (Red) cable. Do not reverse these cables and take care as to not let the cables touch each other or other items.**
3. Connect the battery charger leads to the battery terminals securely so that they do not disconnect due do engine vibration or other disturbances.
4. Charge the battery by following the instructions in the owner’s manual for the battery.
5. The DC Circuit Breaker will turn “**OFF**” automatically if the current exceeds rated output.
6. To restart charging the battery, turn the DC protector on by pressing its button to “**ON**”
7. Refer to the owner’s manual for the battery to determine charging times.



Note: *Never start or stop the generator with electrical devices plugged in or turned on.*

4.6 Wattage Reference Guide

Item	Running Watts	Starting Watts
Essentials		
Light Bulb	100	100
Refrigerator/Freezer	1200	2400
Sump Pump	600	1800
Well Pump 1HP	2000	4000
Water Heater	4000	
Security System	180	
AM/FM Radio	300	
Garage Door Opener ½ HP	500	600
Battery Charger 12V	110	
Heating and Cooling		
Air Conditioner 12000 BTU	1700	2500
Fan	300	600
Furnace Fan 1/3 HP	1200	2000
Home Appliances		
Microwave	1000	
Electric Range – One Element	1500	
Electric Skillet	1250	
Coffee Maker	1500	
Clothes Washer	1200	
Entertainment		
CD/DVD Player	100	
Stereo Receiver	450	
Television 27"	500	
PC with 15" Monitor	800	
Job Site		
Belt Sander 3"	1000	1500
Bench Grinder 6"	700	1500
Circular Saw	1500	1500
Compressor 1 ½ HP	1000	1000
Edge Trimmer	500	500
Hand Drill ½"	1000	1000
Paint Sprayer	600	1200
Table Saw	2000	2000

These are estimates only. Check your tool or appliance for exact wattage requirements. The wattages listed are based on estimated wattage requirements.

For exact wattages, check the data plate or owner's manual on the item you wish to power using the generator.

Operating voltage and frequency requirement of all electronic equipment should be checked prior to plugging to plugging them into this generator. Damage may result if the equipment is not designed to operate within a +/- 10% voltage variation, and +/- 3 Hz frequency variation from the generator specification ratings.

SECTION 5:

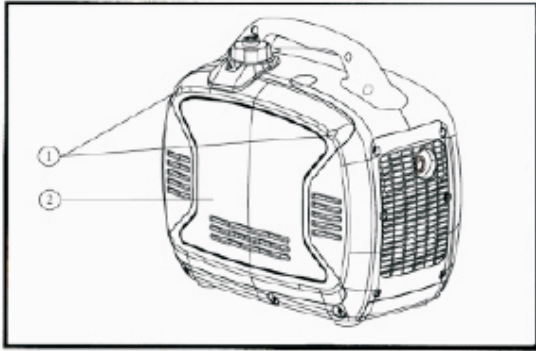
Maintenance

5.1 Periodic Maintenance

Periodic inspection, adjustment and lubrication will keep your generator in the safest and most efficient condition possible.

Item	Routine	Prior to use	Every	
			6mos. or 100hrs.	12mos. or 300hrs.
Spark Plug	<ul style="list-style-type: none"> • Check condition • Clean and replace if necessary 		•	
Fuel	<ul style="list-style-type: none"> • Check fuel level and leakage. 	•		
Fuel hose	<ul style="list-style-type: none"> • Check fuel hose for cracks or damage • Replace if necessary. 	•		
Engine oil	<ul style="list-style-type: none"> • Check oil level in engine. 	•		
	<ul style="list-style-type: none"> • Replace* 		•*	
Air Filter Element	<ul style="list-style-type: none"> • Check condition • Clean 		•	
Muffler Screen	<ul style="list-style-type: none"> • Check Condition • Clean or replace if necessary 		•	
Spark Arrestor	<ul style="list-style-type: none"> • Check Condition • Clean or replace if necessary 		•	
Fuel Filter	<ul style="list-style-type: none"> • Check Condition • Clean or replace if necessary 			•

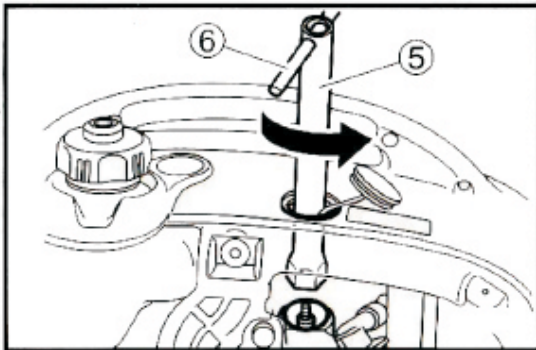
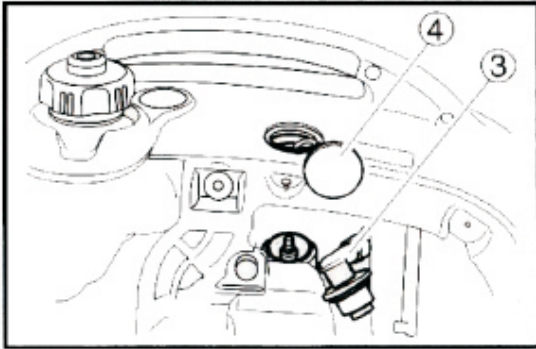
* Initial replacement of the engine oil is after one month or 20 hours of operation.



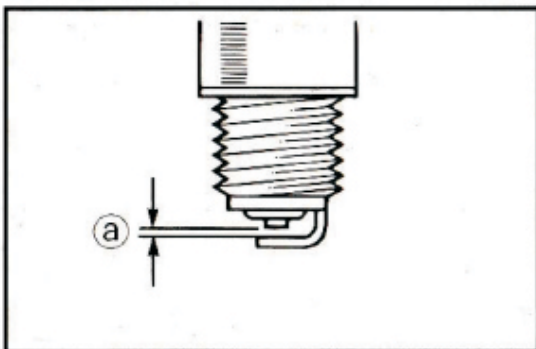
5.2 Spark Plug Maintenance

Spark plug inspection

The spark plug is an important engine component and should be checked periodically.



1. Remove the screws ① and then remove the cover ②.
2. Remove the spark plug cap ③ and access cap ④
3. Insert the tool ⑤ through the hole in the outside of the cover.
4. Insert the handlebar ⑥ into the tool ⑤ and turn it counterclockwise to remove the spark plug.
5. Check for discoloration. The carbon porcelain insulator around the center electrode of spark plug should be a Medium-to-light tan color.
6. Check the spark plug type and gap. The spark plug gap should be measured with a wire thickness gauge and, if necessary, adjusted to specification.



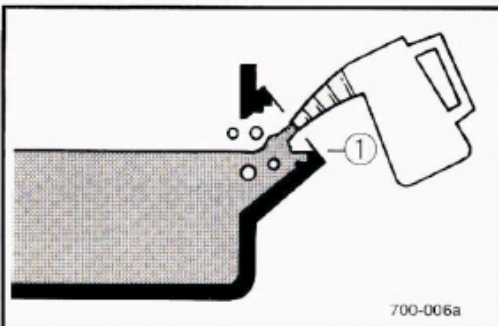
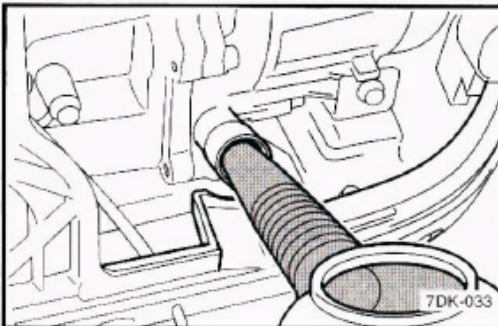
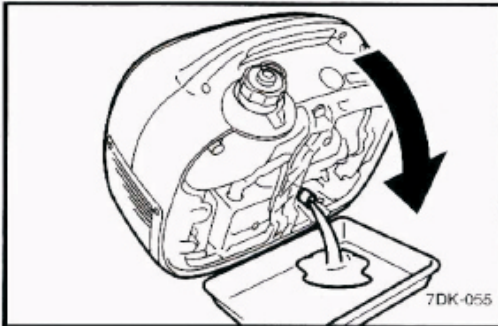
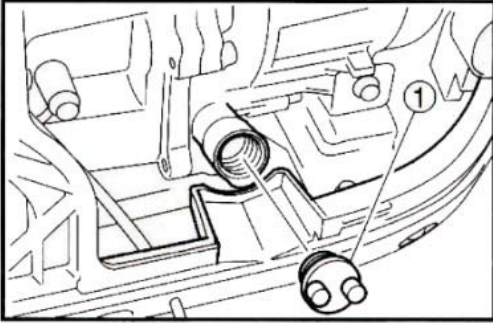
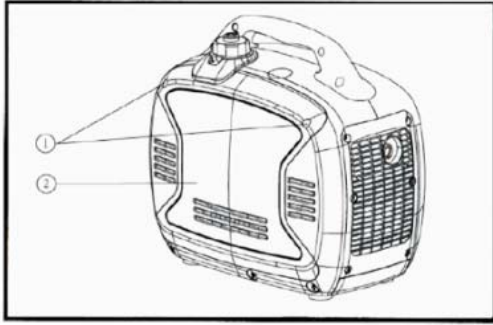
SPARK PLUG CROSS REFERENCE AREA

COVERS MODELS:
SUA2000iD
with 79cc OHV Yamaha Engine

AutoLite	275
Champion	L95YC
NGK	BP4H
Torch <small>Stock Plug</small>	E5T

GAP: .028 in or .7mm
TORQUE: 14.8 ft-lbf or 20.0 N·m

7. Install spark plug, spark plug cap, cover and screws.



5.3 Engine Oil Replacement

Initial replacement of the engine oil is after one month or 20 hours of operation.

1. Place the generator on a level surface and warm up the engine for several minutes. Then stop the engine and turn the Fuel Petcock knob to “OFF” and the Fuel Tank Cap Air Vent knob to “OFF”.
2. Remove the screws ① and then remove the cover ②.
3. Remove the oil filler cap.
4. Place an oil pan under the engine. Tilt the generator to drain the oil completely.
5. Return the generator to a level surface.

Note: DO NOT tilt the generator when adding engine oil. This could result in overfilling and damage to the engine.

6. Add engine oil to the upper level as seen in the diagram ①.

Recommended engine oil:

- YAMALUBE 4 (10W-40), SAE 10W-30 or 10W-40
- SAE#30
- SAE#20
- SAE10W

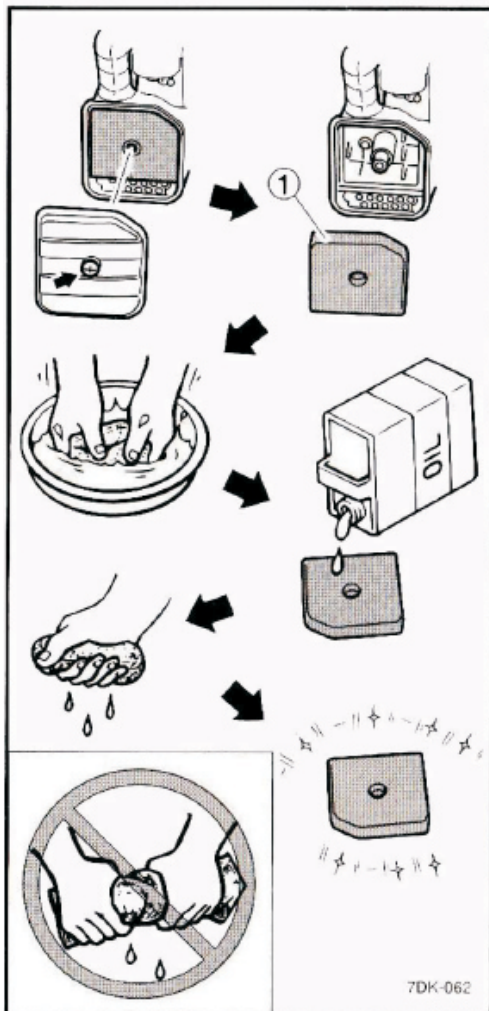
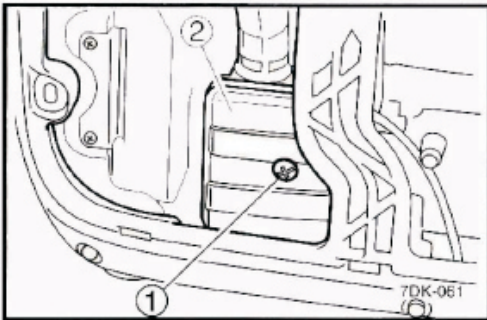
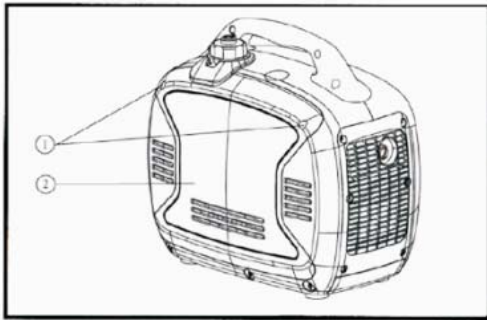
Recommended engine oil grade:

API Service SE type or higher

Engine oil quantity:

0.4L (0.42US qt, 0.035 Imp qt)

7. Install oil filler cap, cover, and screws.



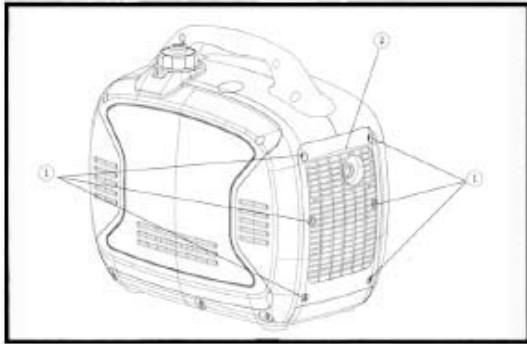
5.4 Air Filter Maintenance

Should be performed every 6 months or 100 hours. The air filter may need to be cleaned more frequently when using in unusually wet or dusty areas.

1. Remove the screws ① and then remove the cover ②.
 2. Remove the screws ① and then remove the air filter case cover ②.
 3. Remove the foam element ①.
 4. Wash the foam element in solvent and dry it.
 5. Oil the foam element and squeeze out excess oil. The foam element should be wet but not dripping.
- NOTE:** Do not wring out the foam element when squeezing it. This could cause it to tear.
6. Insert the foam element into the air filter case. Be sure the foam element sealing surface matches the air filter so there is no air leak.

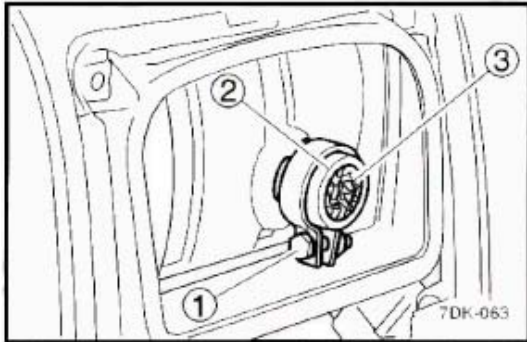
NOTE: Never operate the engine without foam element.

7. Install air filter case cover, cover, and screws.

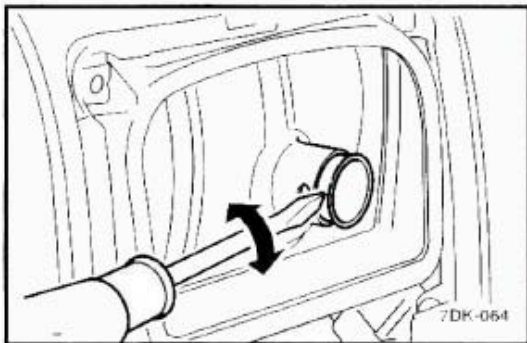


5.5 Muffler Screen and Spark Arrestor Maintenance

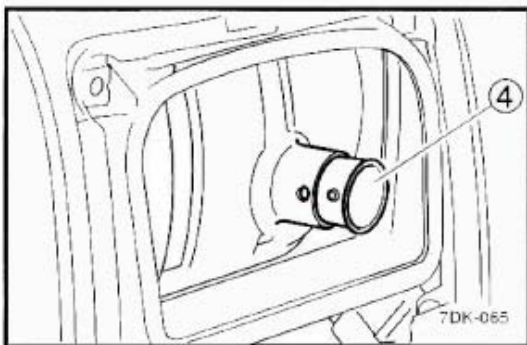
Should be performed every 6 months or 100 hours. The air filter may need to be cleaned more frequently when using in unusually wet or dusty areas.



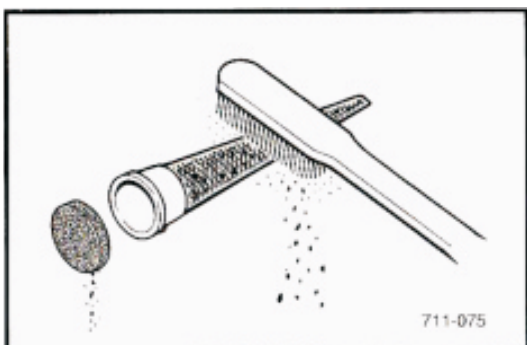
1. Remove the screws ① and then remove the cover ②.
2. Loosen the bolt ① and the remove the muffler cap ②, the muffler screen ③ and spark arrester ④

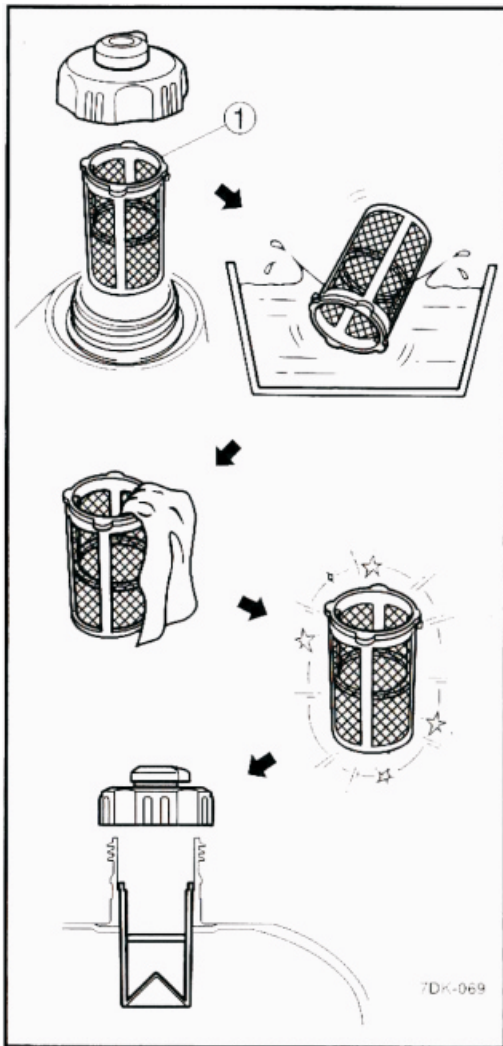


3. Remove the carbon deposits on the muffler screen and spark arrester using a wire brush. Use wire brush lightly to avoid damaging the muffler screen or spark arrester.
4. Check the muffler screen and spark arrester replace them if damaged.



5. Install the spark arrester.
6. Install the muffler cap.
7. Install the cover and tighten the screws.





5.6 Fuel Filter Maintenance

Should be performed every 12 months or 300 hours.

1. Remove the fuel tank cap and filter ①.
2. Clean the filter with gasoline.
3. If damaged, replace it.
4. Wipe the filter and install it.
5. Install the fuel tank cap.

WARNING!

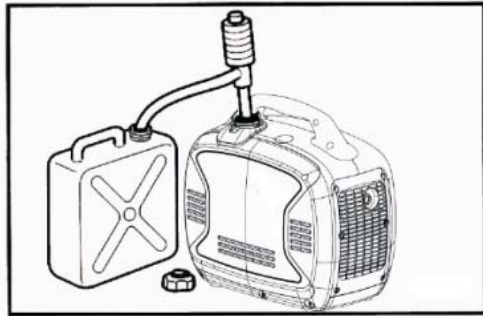
GASOLINE IS FLAMMABLE. DO NOT perform this maintenance while smoking or near an open flame.

SECTION 6:

Storage

6.1 Long Term Storage

Long term storage of your generator will require some preventive procedures to guard against deterioration.



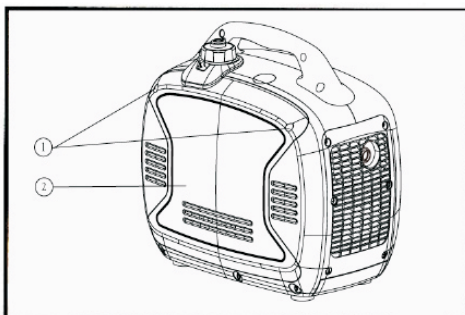
1. Drain the fuel

Remove the fuel tank cap. Extract the fuel tank into an approved gasoline container using a commercially available hand siphon. Then install the fuel tank cap.

WARNING!

GASOLINE IS FLAMMABLE. DO NOT perform this maintenance while smoking or near an open flame.

Immediately wipe off spilled fuel with a clean, dry, soft cloth, since fuel may deteriorate painted surfaces or plastic parts.



2. Start the engine and let it run until it stops. Duration of the running engine depends on the amount of the fuel left in the tank.

3. Remove the screws ①, and then remove the cover ②.

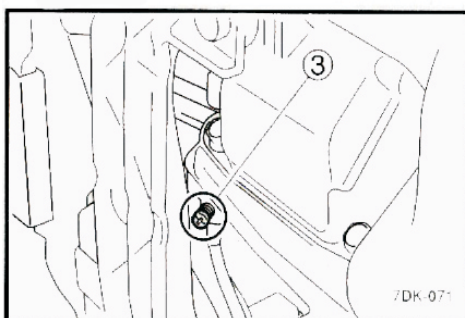
4. Drain the fuel from the carburetor by loosening the drain screw ③ on the carburetor float chamber. Tighten the drain screw.

5. Remove the dipstick and drain the engine oil. Then tighten the dipstick.

6. Install the cover and tighten the screws.

7. Turn the fuel tank cap air vent knob to "OFF"

8. Store the generator in a dry, well-ventilated place, with the cover placed over it.



Engine

Perform the following steps to protect the cylinder, piston ring, etc. from corrosion.

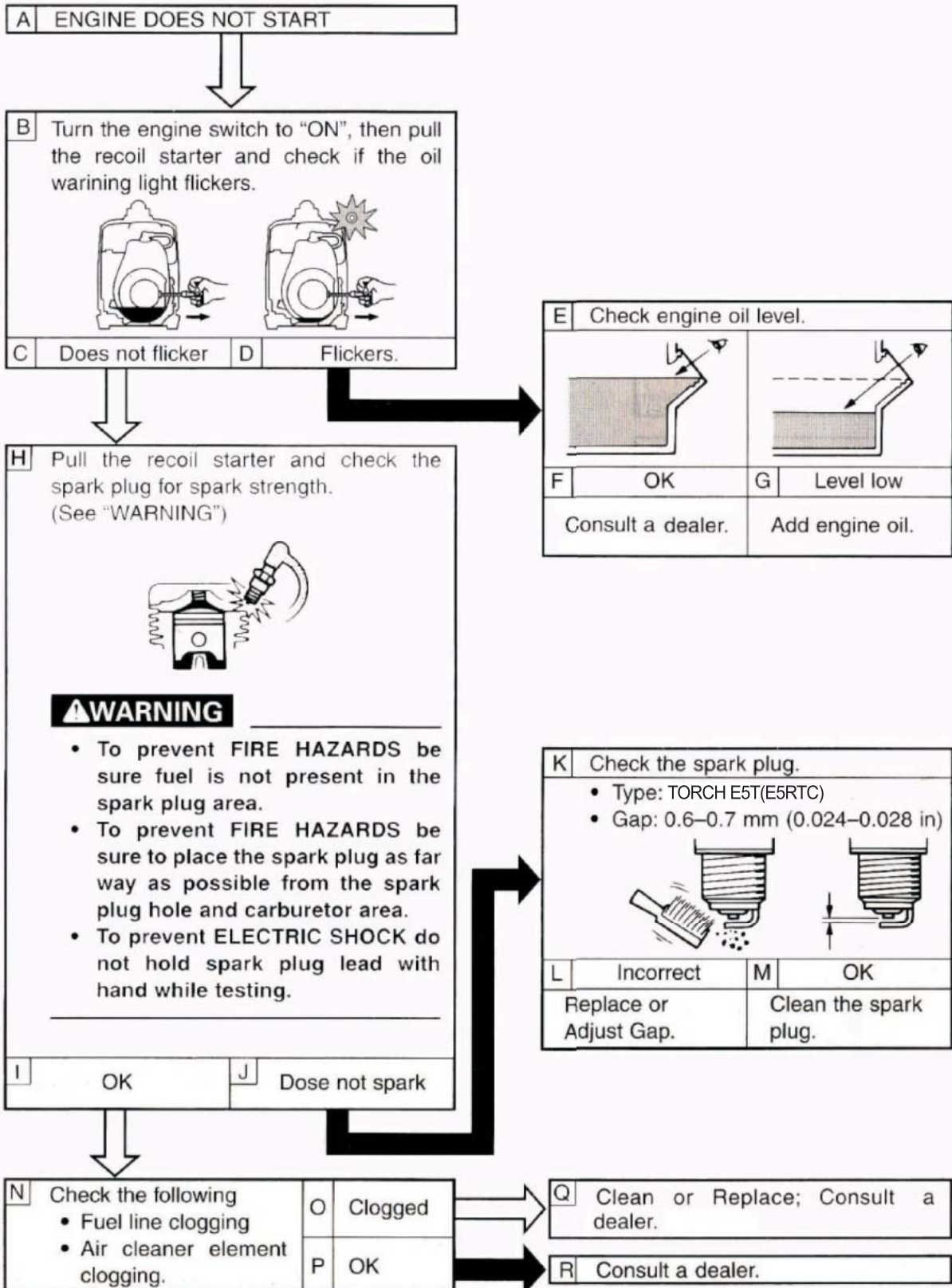
1. Remove the spark plug, pour about one table-spoon of SAE 10W-30 or 20W-40 motor oil into the spark plug hole and reinstall the spark plug. Recoil start the engine by turning over several times (with ignition off) to coat the cylinder walls with oil.
2. Pull the recoil starter until you feel compression. Then stop pulling. (this prevents the cylinder and valves from rusting).
3. Clean exterior of the generator and apply a rust inhibitor.
4. Store the generator in a dry, well-ventilated place, with the cover placed over it.
5. The generator must remain in a vertical position when stored, carried, or operated.

SECTION 7:

Troubleshooting and Specifications

7.1 Troubleshooting Diagram

AE00515



Please call our customer service @ 1-855-888-3598 for help.

SENCO

7.2 Fuel Filter Maintenance

Use this section to troubleshoot common errors.

Engine won't start

Fuel systems: No fuel supplied to combustion chamber

- No fuel in tank.....supply fuel.
- Fuel in tank.....Fuel tank cap air vent knob and fuel cock knob to “ON”.
- Clogged fuel line.....clean fuel line.
- Clogged carburetor....clean carburetor.

Engine oil system insufficient

- Oil level is low....add engine oil.

Electrical systems

- Engine switch to “ON” and pull the recoil starter. Poor spark
- Spark plug dirty with carbon or wet...Remove carbon or wipe spark plug dry.
- Faulty ignition system....Consult a service center.

Generator won't produce power

- Safety device (DC protector) to ”OFF”press the DC protector to “ON”
- Safety device (AC) to “OFF”stop the engine, then restart.

A-iPOWER WARRANTY REGISTRATION FORM

Register your product by mailing this form to support@a-ipower.com or register online at www.a-ipower.com.

Registering your product is important, it provides protection:

- 1) You have record of product purchased.
- 2) Customer Service can Better serve you for Warranty related issues.
- 3) We can contact you in the unlikely event should notification is necessary.
- 4) Always keep copy of your original receipt.

<p>Primary Information</p> <p>Name: _____</p> <p>Phone: _____</p> <p>E-mail: _____</p> <p>Address: _____</p> <p>City, State, Zip code: _____</p> <p>Date of purchase: _____</p> <p>Where: _____</p>	<p>Generator Information</p> <p>Serial # _____</p> <p>Model # _____</p> <p><i>The serial No. can be found on the engine.</i></p> <p>PLEASE NOTE: Your generator cannot be registered without model & serial numbers.</p>
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1. THE PRODUCT WAS PURCHASED FOR:

- | | |
|---|---|
| <p>A. <input type="checkbox"/> Businessback-up</p> <p>B. <input type="checkbox"/> Camping</p> <p>C. <input type="checkbox"/> Tailgating</p> <p>D. <input type="checkbox"/> Rental</p> <p>E. <input type="checkbox"/> Farming/Agriculture</p> | <p>F. <input type="checkbox"/> Jobsite/construction</p> <p>G. <input type="checkbox"/> Outdoor activities (Hunting)</p> <p>H. <input type="checkbox"/> Special Events</p> <p>I. <input type="checkbox"/> Battery Charging</p> <p>J. <input type="checkbox"/> Other _____</p> |
|---|---|

2. THIS PRODUCT IS A: (select one)

- | | |
|---|---|
| <p>A. <input type="checkbox"/> First Time Purchase</p> | <p>B. <input type="checkbox"/> Replacement</p> |
|---|---|

3. HOW DID YOU FIRST LEARN OF THIS PRODUCT: (select one)

- | | |
|---|---|
| <p>A. <input type="checkbox"/> Magazine Ad</p> <p>B. <input type="checkbox"/> Newspaper</p> <p>C. <input type="checkbox"/> Radio</p> <p>D. <input type="checkbox"/> TV</p> <p>E. <input type="checkbox"/> Store Display</p> <p>F. <input type="checkbox"/> Contractor</p> | <p>G. <input type="checkbox"/> Trade Show</p> <p>H. <input type="checkbox"/> Direct Mail</p> <p>I. <input type="checkbox"/> From Friend/Relative/Neighbor</p> <p>J. <input type="checkbox"/> Catalog</p> <p>K. <input type="checkbox"/> Internet</p> <p>L. <input type="checkbox"/> Other _____</p> |
|---|---|

4. PLEASE RATE YOUR SATISFACTION LEVEL WITH THE FOLLOWING:

	Completely Satisfied	5	4	3	2	1	Not at all Satisfied
Product Value for Price Paid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Features	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Product Appearance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Warranty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease of Maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Noise Level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. HOW LIKELY ARE YOU TO RECOMMEND A-iPOWER TO FAMILY OR FRIENDS?

	Extremely Likely	5	4	3	2	1	Not likely at all
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Privacy Statement: A-ipower is committed to respecting your privacy and to complying with the regulations regarding the protection of personal data.

The survey data we collect is for the purposes of marketing or product support and demographic information about the entire audience registering their products.

YOUR POWER SOLUTION!



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