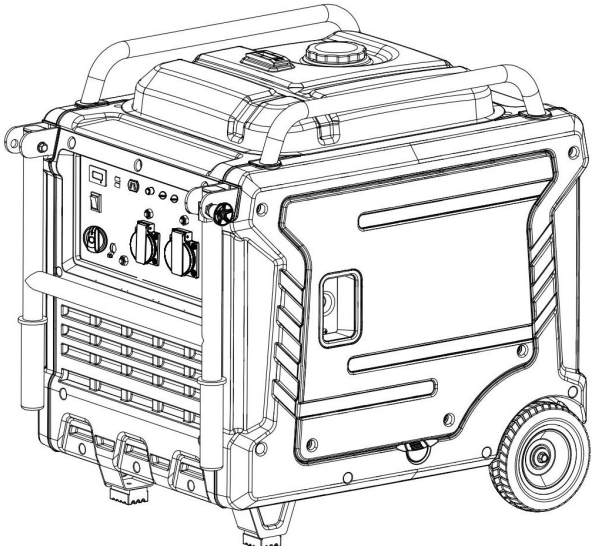
HARD GEAR

DAISHIN ダイシン

INVERTER PORTABLE GENERATOR

INSTRUCTION MANUAL

iGen.10500A-DF



WARNING: SAVE THIS MANUAL FOR FUTURE REFERENCE

This manual contains important information regarding safety. Operation, maintenance and storage of this product. Before use, read carefully and understand all cautions, warnings, instructions and product

Dear Customer:

We carefully manufactured to give you a dependable operation.

However, similar to all mechanical products, your machine will occasionally require adjustments and maintenance. This manual should be read carefully before operating or performing any adjustments on your machine. Please contact **DAISHIN** dealer if technical assistance is required.

Please be advised that unit was designed / manufactured for specific applications. So please do not modify and use the unit for any application other than which it was designed for. If you have any questions regarding any applications, please ask **DAISHIN** dealer before using.

Please read an instruction manual before use.

Safety Messages

Your safety and the safety of others are very important. We have provided important safety messages in this manual and on the generator. Please read these messages carefully.

Safety message alerts you to potential hazards that could hurt you or others. Each safety message is preceded by a safety alert symbol and one of three words; **DANGER**, **WARNING**, or **CAUTION**.

These words mean:

DANGER You will be killed or seriously hurt if you don't follow instructions.

WARNING You can be killed or seriously hurt if you don't follow instructions.

ATTENTION You can be hurt if you don't follow instructions.

Each message tells you what the hazard is, what can happen, and what you can do to avoid or reduce injury.

Damage Prevention Messages

You will also see other important messages that are preceded by the word.

NOTICE

This word means:

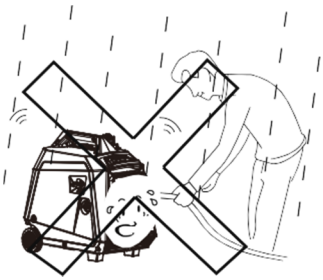
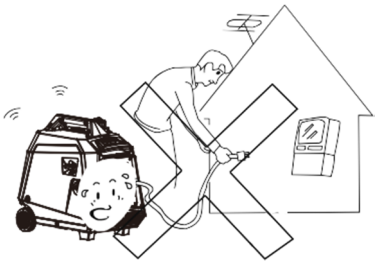
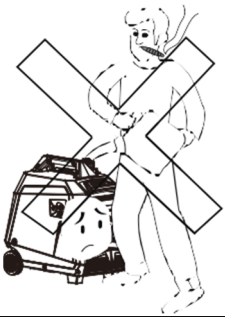
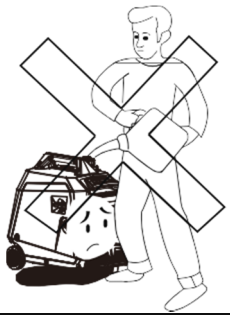
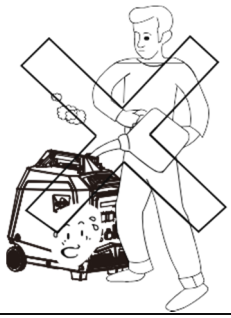
Note: Your generator or other property could be damaged if you don't follow instructions.

The purpose of these messages is to help prevent damage to your generator, other property, or the environment.

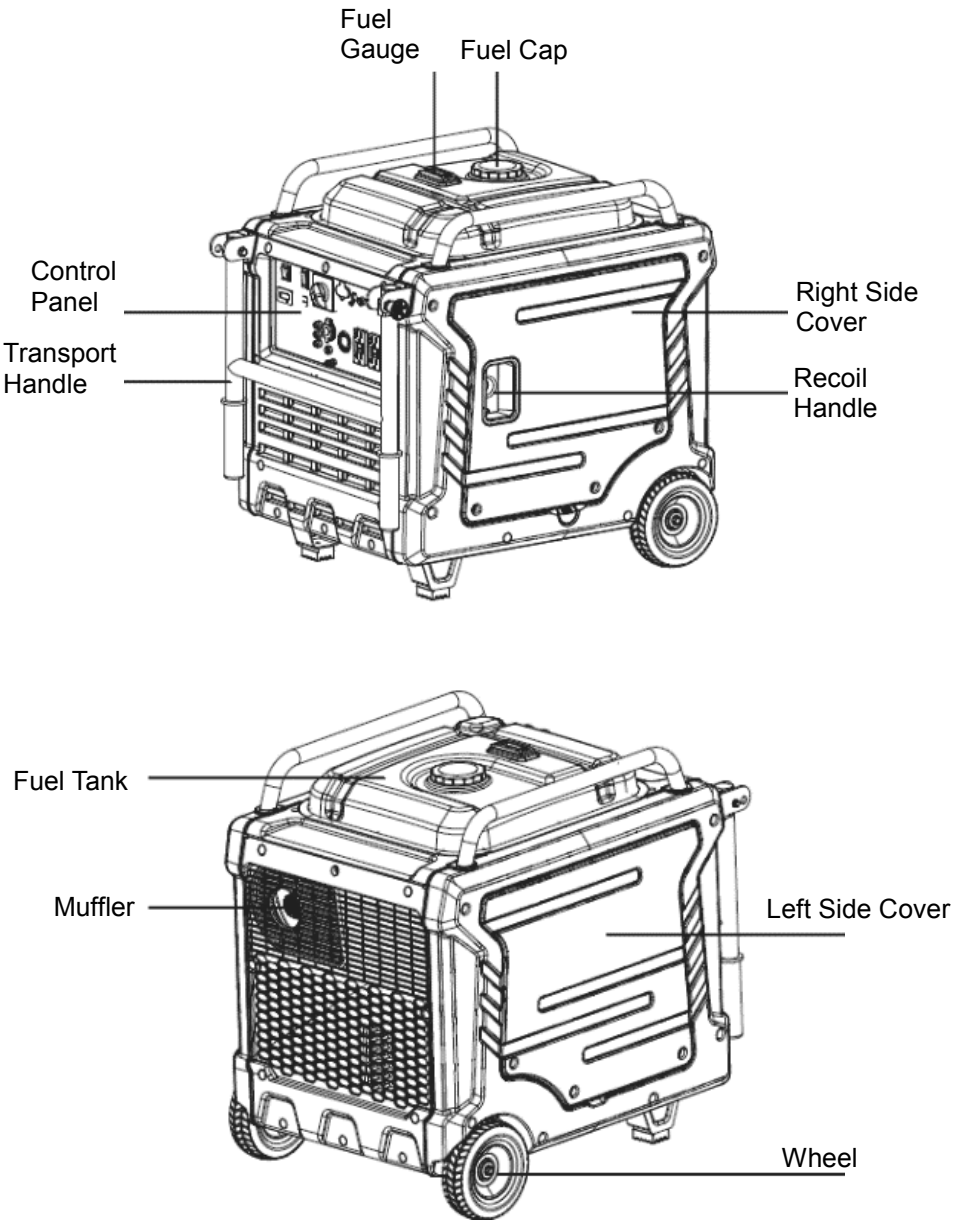
Table of Contents

1. Safety Instructions

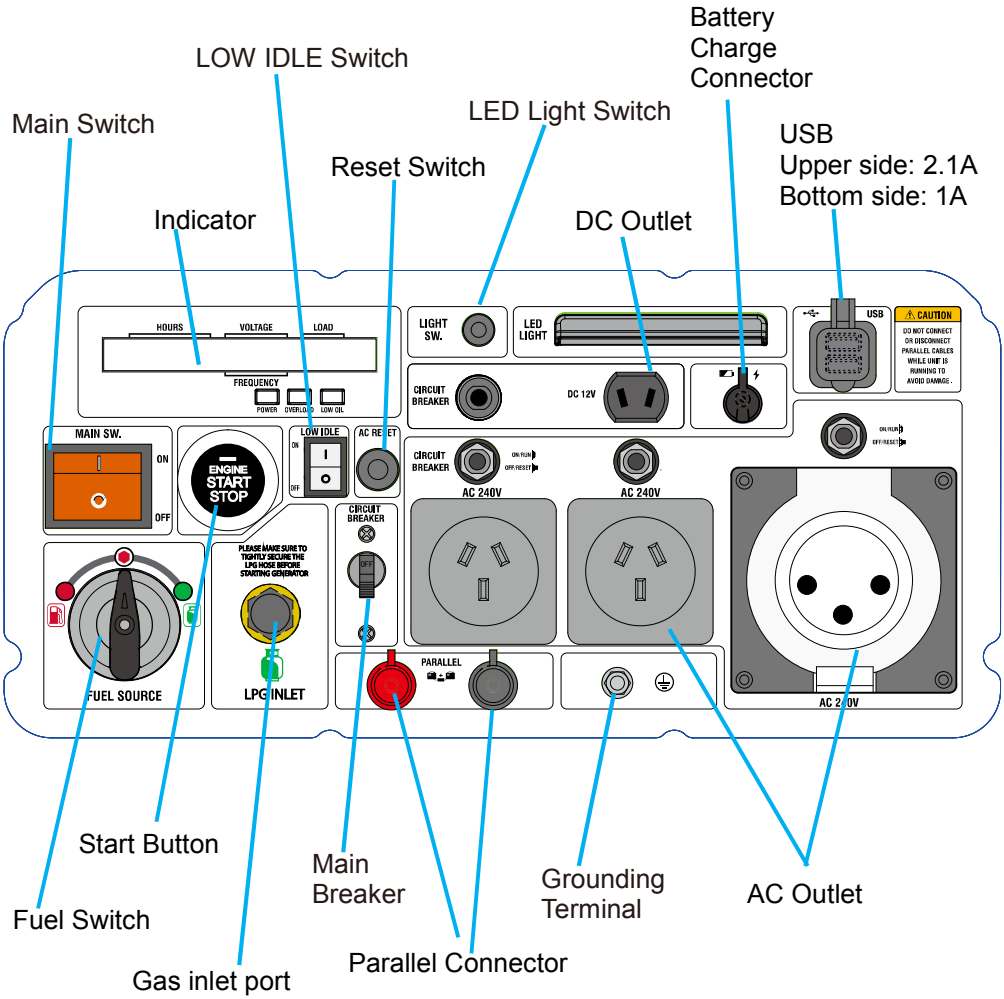
Before operating the generator, it will help you avoid accidents to read and understand the Manual and familiarize yourself with the safe operation procedures of the generator.

	
Please do not use indoors	Please do not use in humidenvironment
	
Please do not connect it to household appliances directly	Please do not smoke whenrefueling
	
Please do not spill when refueling	Please shut down the generatorbefore refueling

2. Components



Control Panel

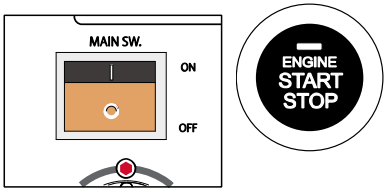


3. Control

Main Switch (Engine Switch)

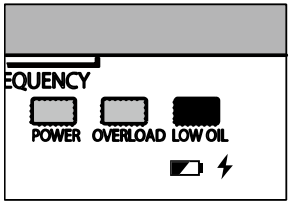
OFF - Ignition circuit is off, the engine stopped running.

ON - Ignition circuit is on, the start the engine.



Oil Indicator (red)

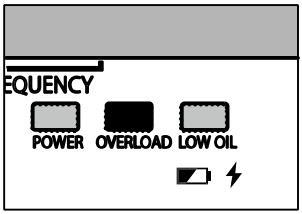
When the oil in the crankcase drops below safety line, oil protection system will automatically shut down the engine, and low oil indicator lights up; the engine can be restarted up only after the oil is filled to oil level.



Tip: In the case of flame-out of the engine or being unable to be started up, turn the combination switch to “RUN” position, and then pull startup handle. If low oil indicator flashes a few seconds, the oil volume is insufficient, fill oil and restart it.

Overload Indicator (red)

When the overload indicator lights up, the generator has detected that the output of connected electrical equipment has been overloaded, causing frequency converter to be overheated or AC voltage to rise. At this moment, AC protector works and stops generating, to protect the generator and connected electrical equipment. AC indicator (green) is off and overload indicator (red) lights up, but the engine will not stop running.



When overload indicator is on and the generator has no output, please take following counter measures:

① Switch off electrical equipment connected, and shut down the generator.

② Reduce total power of electrical equipment connected to the range of rated output.

③ Check whether there is any foreign matter blocking in cooling air inlet, and whether there is any abnormality in related control components. If there is any problem, eliminate it immediately.

④ After checking, restart the engine.

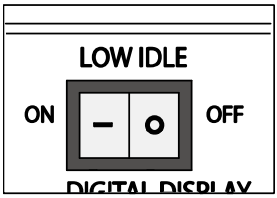
Output Indicator (green)

The AC indicator lights when the engine is started and output normally.

LOW IDLE Switch

"ON"

When energy saving switch is switched to "ON" position engine speed is reduced when the generator is under light load. This feature will reduce fuel consumption and noise.



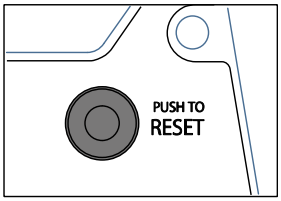
"OFF"

When the energy saving switch is set to the "OFF" position, the engine will run at rated speed, regardless of connected load.

Reset Switch

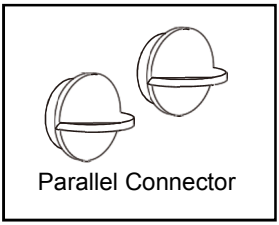
If the inverter is overloaded, the reset breaker will trip. The engine will continue to run, but there will be no output from the inverter.

Unplug the devices and reduce the load. Push in the reset breaker to reset it.



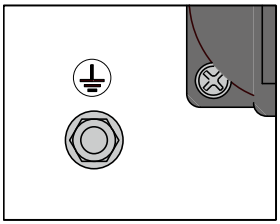
Parallel Connector

To increase AC power output, the connector sockets are used to connect the two same type generator with special paralleling cords. The connector sockets is only used to the communication between the inverters, they cannot used for AC power output. The special paralleling cords shall be purchase separately, and they shall be approved by certification body.


Parallel Connector

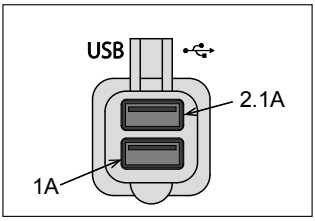
Ground Terminal

The ground terminal is used to externally ground the generator.



USB

5V 2.1A, 1A.



4. Before starting the engine

Fuel

DANGER

- Fuel is flammable and toxic, please read the Safety Instruction carefully before refueling.
- Do not fuel too full, otherwise fuel will spill after fuel tank is warmed.
- After refueling, confirm that the fuel tank cap has been tightened.

ATTENTION

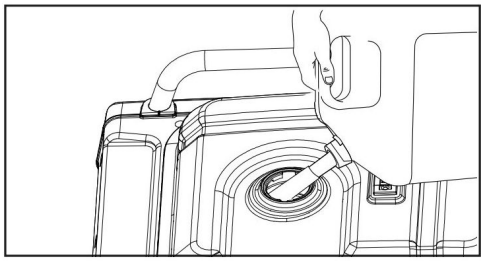
- After refueling, dry gasoline residue with a clean and soft cloth in time to avoid damaging plastic enclosure.
- Unleaded gasoline must be used, as leaded gasoline can seriously damage internal parts of the generator.
- Remove fuel tank cap, and add gasoline to red horizontal indicating line oil level.
- Fuel tank capacity: 26L

1. Make sure the generator is on a level surface.
2. Unscrew gas cap and set aside

NOTE:

The gas cap may be tight and hard to unscrew.

3. Slowly add unleaded gasoline to the fuel tank. Be careful not to overfill. The fuel gauge on the top of the gas tank indicates how much gasoline is in the generator gas tank.



4. Replace fuel cap and wipe up any spilled gasoline with a dry cloth.

Oil

No oil is filled into this generator when being delivered. Do not start up the generator without filing sufficient oil.

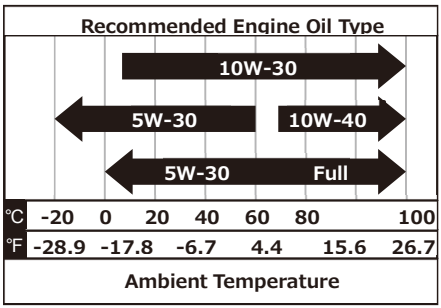
UNPACKING

1. Set the shipping carton on a solid, flat surface.
2. Remove everything from the carton except the generator.
3. Using the carrying handles of the unit, carefully remove the generator from the box (two people lifting is recommended).

ADD ENGINE OIL

ATTENTION

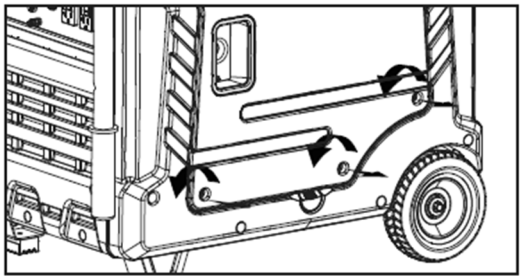
The recommended oil type for typical use is 10W-30 automotive oil. However, using the listed conventional oils shown in the "Recommended Engine Oil Type" chart may be used for typical use including the first 5 hours of the break-in run time period of the engine. If running generator in extreme temperatures, refer to the "Recommended Engine Oil Type" chart.



ATTENTION

Your generator was functionally tested in the factory and may contain minimum residual oil. Additional oil is required to operate the unit.
Do not overfill.

1. Place the generator on a flat, level surface.
2. On the left side of the Generator, loosen the Screw and remove the Oil Fill Access Door.

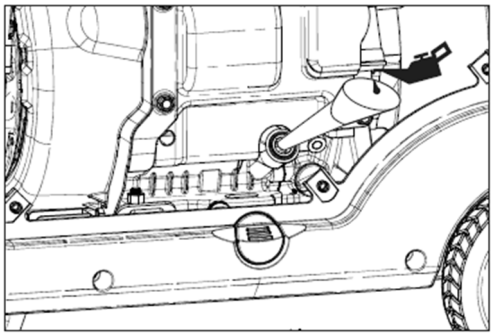


3. Remove oil fill cap/dipstick to add oil.

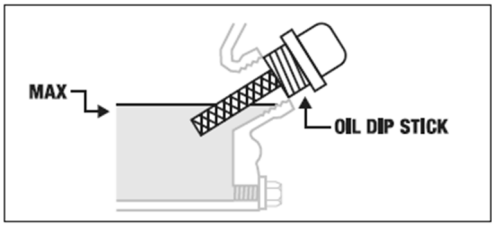
4. Using a funnel, as needed, add the appropriate type of oil until the oil level is at the proper level. SAE 10W-30 oil is recommended for general use.

   DO NOT OVERFILL.

OIL Capacity: 1.0L

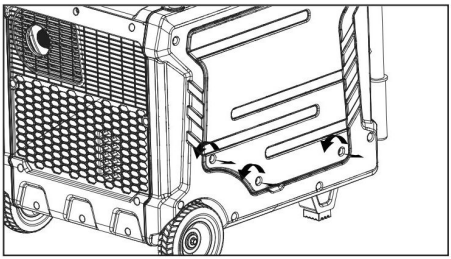


5. Check engine oil level daily and add as needed.

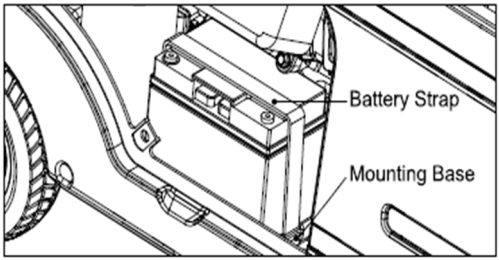


CONNECT THE BATTERY

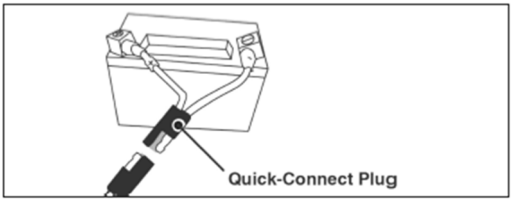
1. On the right side of the Generator, loosen the Screw and remove the Cover.



2. Verify that the rubber battery strap is firmly securing the battery in place. If loose, pull on the strap and hook it onto the mounting base.
   Note: If the strap is loose behind the battery, remove the battery, reconnect the strap, replace the battery, then thread the strap under the battery quick connect cables.



3. A quick-connect battery plug is pre-installed on the battery. Remove the cable tie securing the plugs then push firmly to connect them.



4. Align the tabs on the bottom of the battery access cover with the generator case then push to reinstall the cover.
   Note: The generator is equipped with a battery charging feature. Once the engine is running, a small charge will slowly recharge the battery.

Note:

The generator is equipped with a battery charging feature. Once the engine is running, a small current will slowly recharge the battery.

GROUNDING THE GENERATOR

Attach grounding wire

- Ground the generator by tightening the grounding nut against a grounding wire.
- Connect the other end to a copper or brass grounding rod that's driven into the earth.
  A generally acceptable grounding wire is a No. 12 AWG (American Wire Gauge) stranded copper wire.
  Grounding codes can vary by location. Please contact a local electrician to check the grounding regulations for your area.

WARNING

Failure to properly ground the generator can result in electrocution.

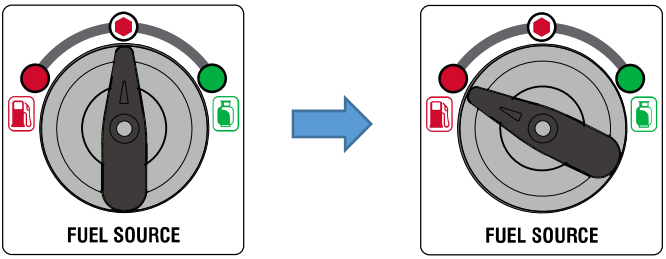
5. Operation

WARNING

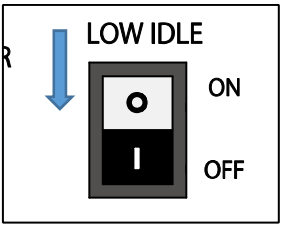
- NEVER operate the generator inside any building, garage, basement, crawlspace, shed, enclosure or compartment, including a generator compartment of a recreational vehicle.
- NEVER operate or start the generator in the back of an SUV, camper, trailer, truck bed (regular sides, flat or other configuration), under staircases, stairwells, next to walls or buildings or in any other location that will not allow for adequate cooling of the generator or for the proper exit of the exhaust flow from the muffler system.
- DO NOT operate or store the generator in wet weather conditions such as rain or snow. Using a generator in wet conditions could result in serious injury or death due to electrocution.
- Generators should always be operated on a flat, level surface at all times (even when not in operation).
- Generators must have a minimum of 5 feet (1.5 m) of clearance from all combustible material.
- Generators must also have a minimum of 3 feet (91.4 cm) of air flow clearance on all sides to allow for adequate performance cooling, maintenance and servicing.
- Always place the generator in a well-ventilated area.
- NEVER place the generator near air intake vents or where exhaust fumes could be drawn into occupied or confined spaces.
- Always carefully consider wind and air currents when positioning generator.
- Always allow generators to properly cool before transport or for storage purposes.
- Failure to follow proper safety precautions may result in personal injury, damage to the generator and void the manufacturer's warranty.
- During operation the muffler and exhaust fumes will become hot.
- If adequate cooling and breathing space are not supplied, or if the generator is blocked or enclosed, temperatures can become extremely heated and may lead to fire.

Gasoline start

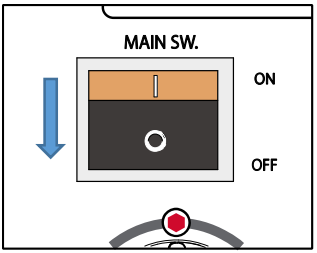
1. Make certain the generator is on a flat, level surface.
2. Disconnect all electrical loads from the generator. Never start or stop the generator with electrical devices plugged in or turned on.
3. Turn the fuel switch to the Gasoline.



4. Turn low idle off.
   Flip the switch down to disable low idle when starting the generator.



5. Turn main switch on.
   Press the main switch up to the start position to all the generator to start.



PROPANE (LP Gas) Start

DANGER

- Propane (LPG): This generator may emit highly flammable and explosive vapors, which can cause severe burns or even death.
  A nearby open flame can lead to an explosion even if not directly in contact the fuel.
- Before starting the generator, inspect your LPG cylinder valve for damage or leaks, attach only approved tanks that have been properly filled by an approved station.
- DO NOT light or smoke cigarettes.
- Always handle propane fuel and generator outdoors.
- NEVER place the LPG (liquefied petroleum gas) connector hose OR LPG cylinder tank in the path of the muffler exhaust gas stream of the generator during engine operation.

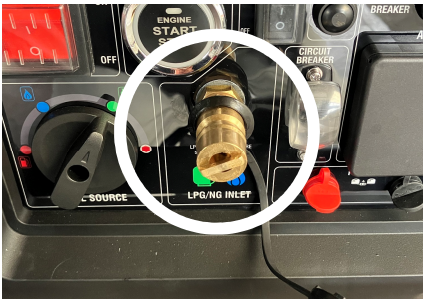
WARNING

If there is a strong smell of LPG: Close valve on the cylinder.
Check all connections for leaks by wetting the fittings with a solution of soap and water.
Bubbles which appear or bubbles which grow indicate that a leak exists.
Do not smoke or light a cigarette, or check for leaks using a match, open flame source or lighter.
Contact a qualified technician to inspect and repair an LPG system if a leak is found, before using the generator.

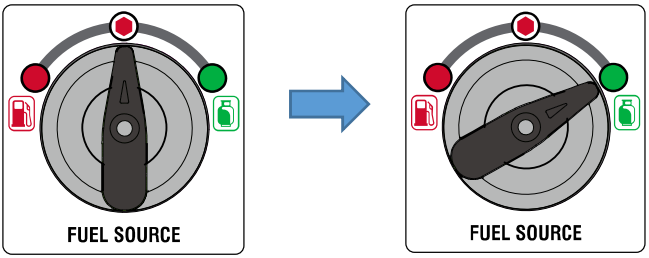
CONNECT THE PROPANE (LPG) CYLINDER

1. Check PROPANE (LPG) cylinder and appliance seals.
   Discard cylinder if dirt or rust particles are in valve area.
   Check condition of PROPANE (LPG) hose for cracks, abrasion, discoloration or other damage.

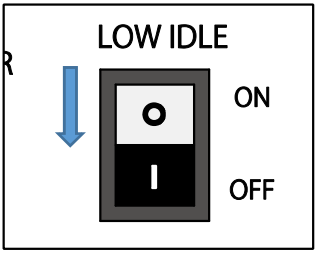
2. Connect the PROPANE (LPG) hose to the PROPANE (LPG) CYLINDER.
3. Tighten the other end of the PROPANE (LPG) hose to the intake of the generator.



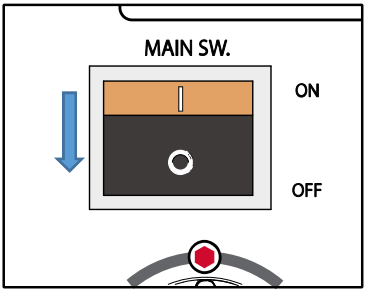
4. Turn the fuel switch to PROPANE (LPG).



5. Turn low idle off.
   Flip the switch down to disable low idle when starting the generator.

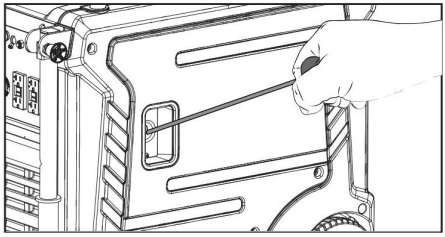


6. Turn main switch on.
   Press the main switch up to the start position to all the generator to start.

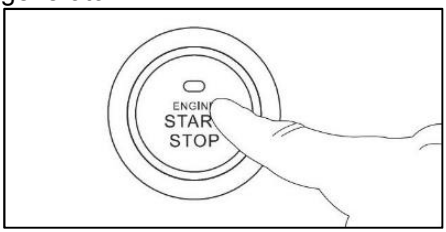


7. Choose the starting method

a. Recoil Start: Firmly grasp and pull the recoil handle slowly until you feel increased resistance, then pull rapidly.

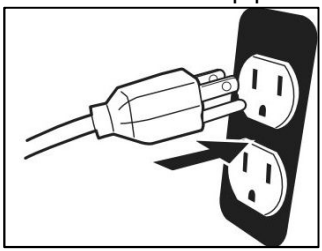


b. Start Button: Press the start up button down for 1 - 3 seconds to start the generator.



8. Plug in devices

Plug in devices to the appropriate receptacle. Placing more load on one side of the circuit will reduce the breaker trip period.



Note:

If engine does not start, check engine oil level. Engine will not start with low or no engine oil.

ATTENTION

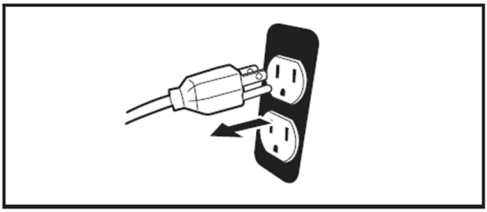
Disconnect all electrical loads from the generator before attempting to start.

WARNING

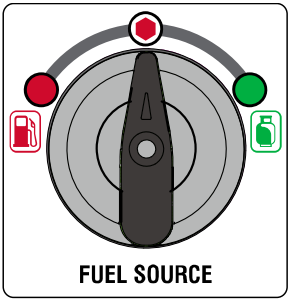
Operating the starter motor for more than 5 seconds can damage the motor.
If the engine fails to start, release the switch and wait 10 seconds before operating the starter again.

6. Stopping the Generator

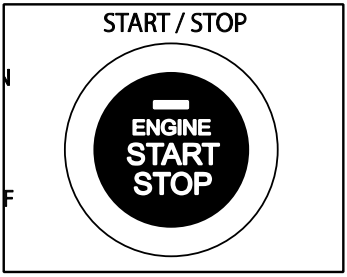
1. Turn off and unplug all connected electrical loads. Never start or stop the generator with electrical devices plugged in or turned on.



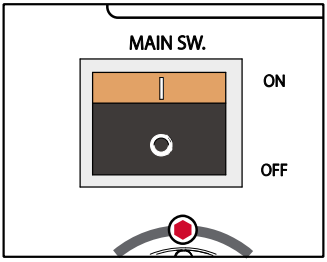
2. Turn the fuel switch to the off position.



3. Button Stop: Press the button to turn off the generator.



4. Turn the main switch up to the off position.



7. Using the Generator

Service environment of the generator

- Applicable temperature: -5℃ ~ 40℃
- Applicable humidity: below 95%
- Applicable altitude: regions below 1,500 m (It shall be used by reducing power in regions above 1,000 m)

Standard atmospheric condition

- Ambient temperature Tr: 298k (25°C)
- Relative air humidity Φr: 30%.
- Absolute atmospheric pressure Pr: 100kPa

When actual environmental condition is inconsistent with the condition of output power of the generator set:

- Every 5°C of increase in ambient temperature will reduce the power of generator by about 2%
- Every 30% of increase in relative humidity of air will reduce the power of generator by about 1.5%
- Every 300 m rising of ASL will reduce the power the generator by about 4.5%

Generator wiring

When the generator is connected to household power source as a backup power supply, the connection shall be carried out by a professional electrician or a person familiar with electricity.

After connecting the load to the generator, check carefully whether electrical connection is safe and reliable. Improper electrical connection may cause generator damage, burning or fire.

Avoid connecting this generator to commercial power outlet.

When extending the cable, be sure not to exceed its length.

① 60m cross-section area is 1 .5mm^2

② 100m cross-section area is 2.5mm^2

8. Wattage Information

To prolong the life of the generator and attached devices, use care when adding electrical loads to the generator. There should be nothing connected to the generator outlets before starting the engine. The correct and safe way to manage generator power is to sequentially add loads as follows:

1. With nothing connected to the generator, start the engine as described in this manual.
2. Plug in and turn on the first load, preferably the largest load you have.
3. Permit the generator output to stabilize (engine runs smoothly and attached device operates properly).
4. Plug in and turn on the next load.
5. Again, permit the generator to stabilize.
6. Repeat steps 4 and 5 for each additional load.

Tool or Appliance	Estimated Running Watts*	Estimated Starting Watts*
Incandescent Lights (4 Quantity x75 Watts)	300	0
TV(Tube Type)	300	0
Sump Pump(1/3 hp)	800	1300
Refrigerator or Freezer	700	2200
Well Pump(1/3 hp)	1000	2000
Furnace(1/2 hp)	800	2350
Radio	200	0
Drill(3/8",4 amps)	440	600
Circular Saw (Heavy Duty,7-1/4”)	1400	2300
Miter Saw(10”)	1800	1800
Table Saw(10”)	2000	2000

9. Service and Maintenance

Good maintenance and service is the best guarantee for safe, economical and reliable operation. It also contributes to environmental protection.

In order to keep the generator in good condition, you must inspect and maintain it regularly. The maintenance schedule is as follows:

Procedure	Before	Monthly or every 8 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
1. Brush off outside of engine	✓					
2. Check engine oil level						
3.Check air filter						
Change engine oil				✓		
Clean/replace air cleaner			✓*			
1. Check and clean spark plug				✓		
2. Check and clean spark arrestor						
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.

WARNING

TO PREVENT SERIOUS INJURY

ACCIDENTAL STARTING: Turn the Combination 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.

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. Add fuel stabilizer to the gasoline or the Warranty is VOID.

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.

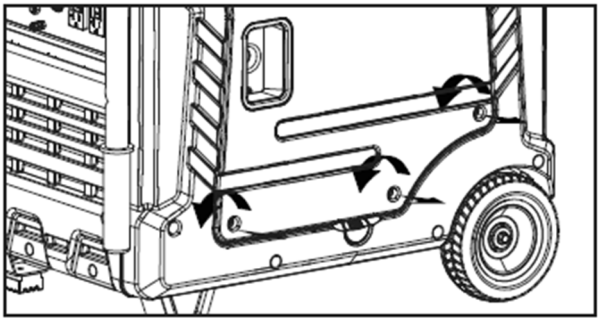
4. If needed, fill the Fuel Tank to about 1 inch under the fill neck of the Fuel Tank with 87 octane or higher unleaded gasoline that has been treated with a fuel stabilizer additive. Follow fuel stabilizer manufacturer's recommendations for use.
5. Replace the Fuel Cap.
6. Wipe up any spilled fuel and 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

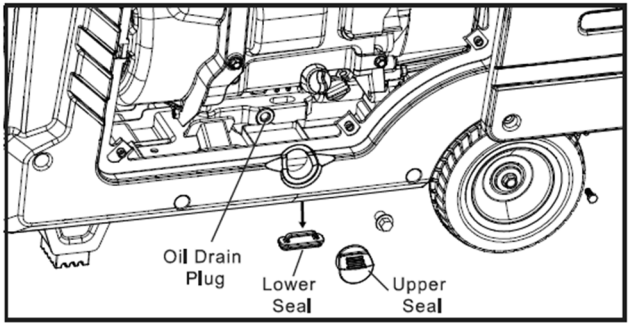
ATTENTION

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.
2. On the left side of the Generator, loosen the Screws and remove the Oil Fill access Door.



3. Remove the lower Rubber Seal from underneath the Generator.



4. Place an oil drain pan under the Generator and center under the Oil Drain Hose opening. Remove the Oil Drain Cap, tilt the Generator slightly to facilitate drainage and wait for oil to drain completely. Recycle used oil.
5. Clean the top of the Oil Fill Cap/Dipstick and the area around it. Remove the Cap/Dipstick, turning it counterclockwise.
6. Remove the upper Rubber Seal from just below the Oil Drain Plug.
7. Use a wrench (sold separately) to remove the Oil Drain Plug and allow the oil to drain completely.
8. Replace the Oil Drain Cap. Put the Oil Drain Hose back into the Generator.
9. Add the appropriate type of oil until the oil level is at the proper level. SAE 10W-30 oil is recommended for general use.

Note:

Make sure Generator is level when adding oil to prevent overfilling which could cause engine damage.

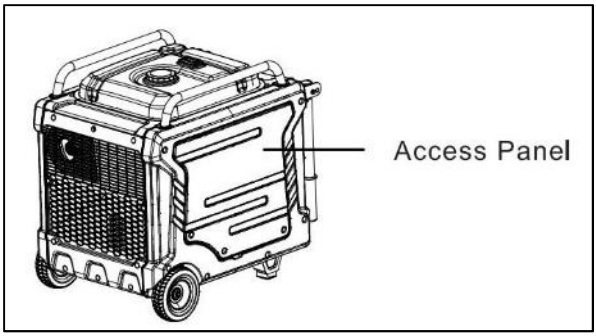
10. Check the oil level. The oil level should be up to the edge of the hole as shown.
11. Thread the Oil Fill Cap / Dipstick back in clockwise and replace the Oil Fill Access Door.

Note:

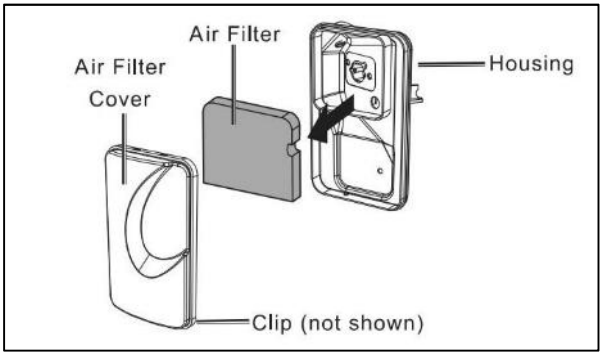
Do not run the engine with too little oil.
Engine will not start with low or no engine oil.

Air Filter Element Maintenance

1. Loosen screws and remove the Air Filter Access Panel on the right side of the Generator.



2. Unsnap the Air Filter Cover Clip and remove Air Filter Cover. See figure below.
3. Remove Air Filter.



Spark Arrestor Maintenance

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.

1. Allow the Generator to cool completely.
2. Remove the Screws from the back of the Generator.
3. Remove the Tail Pipe and Spark Arrestor.
4. Clean the Spark Arrestor using a wire brush (sold separately). Replace arrestor if damaged.

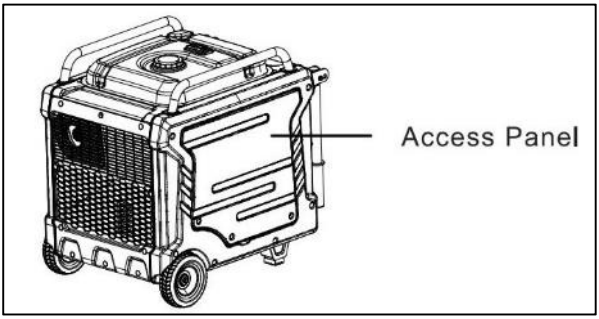
WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL BRUSH FIRE

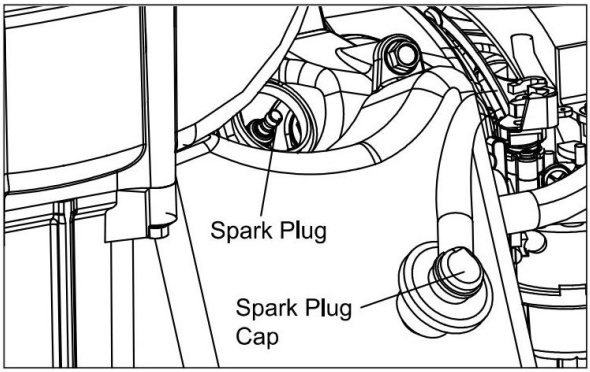
Secure Spark Arrestor back in place immediately after cleaning and before further operation.

Spark Plug Maintenance

1. Loosen two screws and remove the Access Panel on the left right of the Generator.



2. Disconnect Spark Plug Cap from end of plug. Clean out debris from around Spark Plug.



3. Using the 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.

Note:

Use only BPR6ES (NGK) type spark plug or equivalent. Using an incorrect spark plug may damage the engine.

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. Apply anti-seize material to Spark Plug threads. 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.

Note:
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.

7. Apply dielectric spark plug boot protector (not included) to the end of the spark plug and reattach the cap securely.
8. Replace Spark Plug Access Cover and Access Panel.

10. Storage and Transport

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

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 damage.

FUEL:

Gasoline Treatment/Draining the Fuel Tank.

To protect the fuel tank during storage, fill the tank with fresh gasoline that has been treated with a fuel stabilizer additive.

Follow fuel stabilizer manufacturer's recommendations for use.

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.

Draining the Carburetor

After closing the Fuel Valve, place an appropriate container under the Carburetor and care full remove the Drain Bolt from the bottom of the Carburetor Bowl, allowing the fuel to drain completely. Replace the Drain Bolt after draining Aged gasoline that has not been treated with stabilizer ahead of time must be safely drained away and not run through the engine.

WARNING

TO PREVENT SERIOUS INJURY FROM FIRE:

Close the Fuel Valve before draining the Carburetor.

LUBRICATION:

1. Change engine oil.
2. Clean out area around spark plug. Remove spark plug and pour one tablespoon of engine oil into cylinder through spark plug hole.
3. Replace spark plug, but leave spark plug cap disconnected.
4. 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).

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.

Note:

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.

AFTER STORAGE:

Before starting the engine 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.

11. Troubleshooting

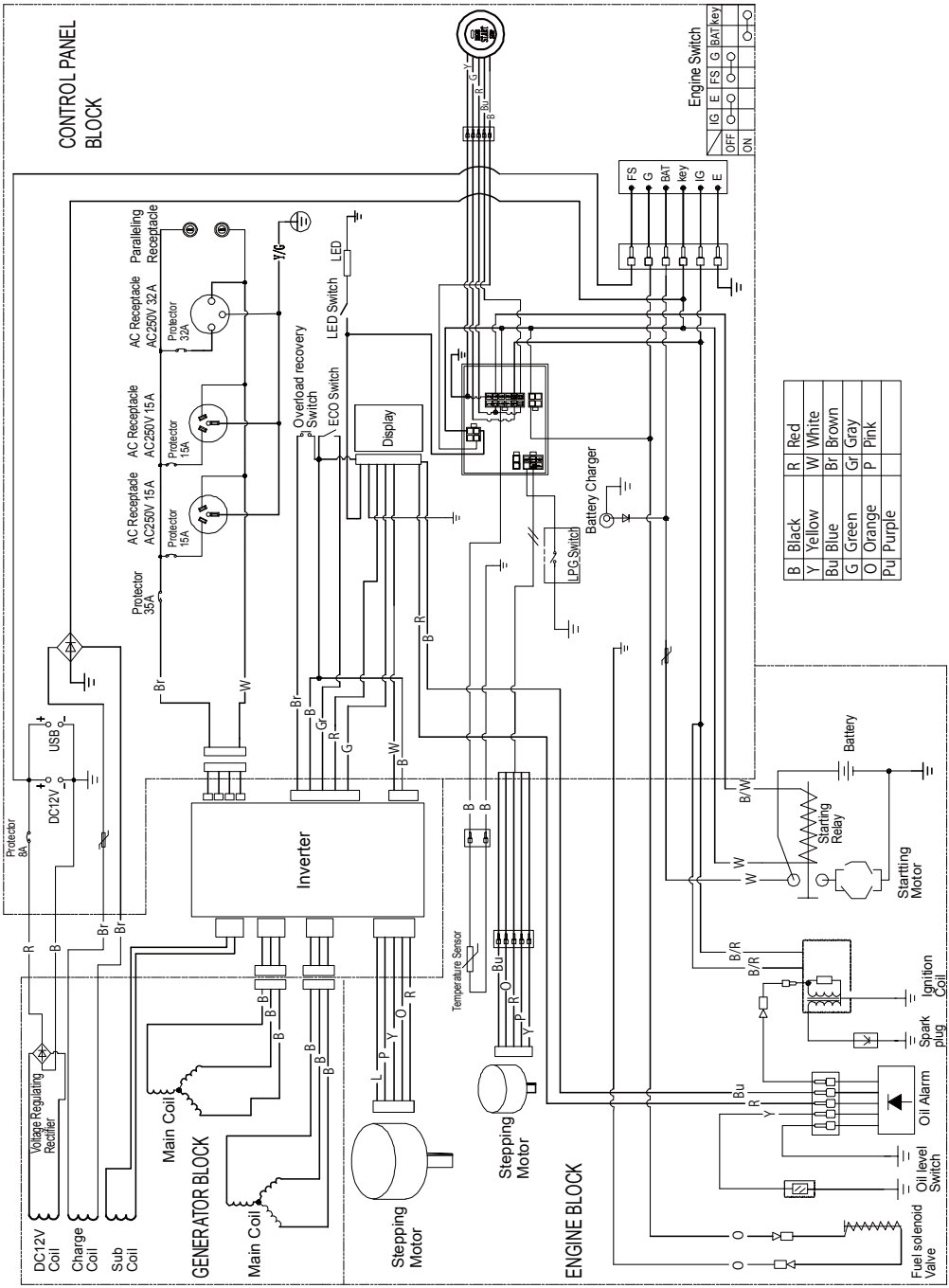
Problem	Possible Causes	Probable Solutions
Engine will not start	**FUEL RELATED** 1. No fuel in tank or fuel valve closed. 2. Choke not in START position, cold engine. 3. Carburetor not primed. 4. Dirty fuel passageways. 5. Too much fuel in chamber. This can be caused by the carburetor needle sticking.	**FUEL RELATED** 1. Fill fuel tank with fresh unleaded gasoline and open fuel valve. Do not use gasoline with more than 10% ethanol (E15, E20, E85, etc.) 2. Move Choke to START position. 3. Pull on Starter Handle to prime. 4. Clean out passageways using fuel additive Heavy deposits may require further cleaning. 5. 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.
	ENGINE OIL RELATED 1. Low engine oil. 2. Engine mounted on slope, triggering low oil shutdown.	**ENGINE OIL RELATED** 1. Fill engine oil to proper level. Check engine oil before EVERY use. 2. Operate engine on level surface. Check engine oil level.
	IGNITION (SPARK) RELATED 1. Spark plug cap not connected securely. 2. Spark plug electrode wet or dirty. 3. Incorrect spark plug gap. 4. Spark plug cap broken. 5. Incorrect spark timing or faulty ignition system.	**IGNITION (SPARK) RELATED** 1. Connect spark plug cap properly. 2. Clean spark plug. 3. Correct spark plug gap. 4. Replace spark plug cap. 5. Have qualified technician diagnose/ repair ignition system.

Problem	Possible Causes	Probable Solutions
Engine misfires	1. Spark plug cap loose. 2. Incorrect spark plug gap or damaged spark plug. 3. Defective spark plug cap.	1. Check cap and wire connections. 2. Re-gap or replace spark plug. 3. Replace spark plug cap.
Engine stops suddenly	1. Carbon Monoxide level high. Red light on Carbon Monoxide Sensor illuminates. 2. CO Sensor Alarm flashes yellow shortly after starting. 3. CO Sensor Alarm flashes yellow after longer period of operation. 4. Low oil shutdown. 5. Fuel tank empty or full of impure or low quality gasoline. 6. Disconnected or improperly connected spark plug cap.	1. Leave area immediately and allow area to ventilate thoroughly. Only operate generator outside. 2. Carbon monoxide Sensor needs. Do not use the Generator until the sensor is working properly. 3. Make sure to operate generator within rated temperature; maintain minimum ft. clearance from all sides. 4. Fill engine oil to proper level. Check engine oil before EVERY use. 5. Fill fuel tank with fresh unleaded gasoline. Do not use gasoline with more than 10% ethanol. (E15, E20, E85, etc.) 6. Secure spark plug cap.
Attached device doesn't have power	1. Device not plugged in properly. 2. Circuit Breaker tripped.	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.

12. Specification

Engine	Engine Model	HG460
	Engine Type	Single Cylinder, Four Stroke, Air Cooled, Overhead Valve,
	Displacement(cc)	458
	Gas Distribution Mode	OHV
	Cooling Mode	Forced Cold Air
	Output Power(kW/r/min)	10.5/3600
	Starting Mode	Manual Recoil Starting/Electric Starting
	Fuel Tank Capacity(L)	26.0
	Type And Grade Of Fuel	Unleaded Gasoline For Vehicles
	Lubricating Oil Capacity(L)	1.0
Generator	Noise dB(7m) 20% Load	69
	Rated Power(kW)	8.5(GASOLINE) / 8.0(LPG)
	Max Power(kW)	10.5(GASOLINE) / 9.5(LPG)
	Number of Phase	Single phase
	DC Output	12V/8.3A
Dimensions(mm)		835 x 625 x 810
Net Weight(kg)		107

13. Wiring Diagram



MEMO

DAISHIN INDUSTRIES LTD.

1520-1,FUNATSUKE,YORO – CHO,

YORO – GUN,GIFU 503-1382 JAPAN

PHONE: 81-(0)584-36-0501
FAX: 81-(0)584-36-0504
URL: http://www.daishin-japan.co.jp
MAIL: overseas@daishin-japan.co.jp

No.15750374000