GEN3500 i

3,000 MAX WATTS INVERTER GENERATOR

INSTRUCTION MANUAL

READ ALL INSTRUCTIONS AND WARNINGS BEFORE USING THIS PRODUCT.

This manual provides important information on proper operation & maintenance. Every effort has been made to ensure the accuracy of this manual. These instructions are not meant to cover every possible condition and situation that may occur. We reserve the right to change this product at any time without prior notice.

IF THERE IS ANY QUESTION ABOUT A CONDITION BEING SAFE OR UNSAFE,

DO NOT OPERATE THIS PRODUCT!

DO NOT RETURN THIS GENERATOR TO THE RETAILER!

If you experience a problem, have questions or need parts for this product, call Customer Service at **1-866-460-9436, Monday-Friday, 8 AM - 4 PM Central Time**. A copy of the sales receipt is required.

FOR CONSUMER USE ONLY – NOT FOR PROFESSIONAL USE.

KEEP THIS MANUAL, SALES RECEIPT & APPLICABLE WARRANTY FOR FUTURE REFERENCE.

CALIFORNIA PROPOSITION 65

WARNING: This product, or the exhaust from this generator, may contain chemicals, including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

2 YEAR LIMITED EMISSION-RELATED WARRANTY

THIS ENGINE MEETS U.S. EPA EMISSION STANDARDS UNDER 40 CFR 1054.625 .The emission-related limited warranty is valid for two (2) years. Keep the purchase receipt and mail in the product registration card for proof of purchase. Buffalo Corp limits emission-related warranty repairs to authorized service centers for owners located within 100 miles of an authorized service center. For owners located more than 100 miles from an authorized service center, Buffalo Corp will, in its sole discretion, either pay for shipping costs to and from an authorized service center, provide for a service technician to come to the owner to make the warranty repair, or pay for the repair to be made at a local non-authorized service center. The provisions of this paragraph apply only for the contiguous states, excluding the states with high-altitude areas identified in 40 CFR part 1068, Appendix III.

To exercise this warranty, DO NOT RETURN TO RETAILER. Instead, call Customer Service toll free at 1-866-460-9436 (email address info@buffalotools.com) and you will be instructed on where to take the engine for warranty service. Take the generator and proof of purchase (your receipt) to the repair facility recommended by the Customer Service Representative. The warranty does not extend to generators damaged or affected by fuel contamination, accidents, neglect, misuse, unauthorized alterations, use in an application for which the product was not designed and any other modifications or abuse.

1 YEAR LIMITED WARRANTY **(30 Day Limited Warranty for Commercial and Rental Purpose)**

Generators are warranted to be free from defects in materials and workmanship for a period of 1 YEAR from date of original purchase. Buffalo Corp. is not liable for any indirect, incidental or consequential damages from the sale or use of this product. Any implied warranties are limited to 1 YEAR as stated, or as otherwise stated, in this written limited warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages. Some states do not allow limitation on the length of an implied warranty. Buffalo Corp will repair or replace, at its discretion, any part that is proven to be defective in materials or workmanship under normal use during the 1 YEAR warranty period. Warranty repairs or replacements will be made without charge for parts or labor. Parts replaced during warranty repairs will be considered as part of the original product and will have the same warranty period as the original product. This warranty gives you specific legal rights, and you may have other rights that vary state to state.

Notice Regarding Emissions:

Engines certified to comply with California and U.S. EPA emission regulations for SORE (Small Off Road Equipment) are certified to operate on regular unleaded gasoline and may include the following emission control systems: Three-Way Catalyst (TWC) (if equipped), and Engine Modifications (EM).

Legal Requirements:

Federal and/or State Occupational Safety and Health Administration (OSHA) regulations, local codes, and/or ordinances may apply to the intended use of this generator. Consult a qualified electrician, electrical inspector, and/or the local agency having jurisdiction. Some areas require generators to be registered with local utility companies. Additional regulations may apply if this generator will be used at a construction site.

IMPORTANT SAFETY INSTRUCTIONS

STOP!

Before using this generator and if you have any questions regarding the hazard and safety notices listed in this manual and/or on this generator, call 1-866-460-9436, Monday - Friday, 8 AM - 4 PM Central Time.

⚠ DANGER

Carbon Monoxide Gas: When in operation, the exhaust from this generator contains poisonous carbon monoxide gas. Carbon monoxide gas is both odorless and colorless AND may be present even if you do not see or smell gas. Breathing this poison gas can lead to headaches, dizziness, drowsiness, loss of consciousness and eventually death.

• USE THIS GENERATOR ONLY OUTDOORS IN NON-CONFINED AREAS. DO NOT SECURE THE GENERATOR WITH A CHAIN OR ROPE, AS THIS WILL MAKE IT DIFFICULT TO MOVE IN AN EMERGENCY.

• Keep at least several feet of clearance on all sides to allow proper ventilation for this generator.

⚠WARNING

Chemicals: According to the State of California, the exhaust from this generator contains chemicals known to cause cancer, birth defects, or other reproductive harm.

⚠WARNING

Flammable Gasoline: This generator may emit highly flammable and explosive gasoline vapors, which can cause severe burns or even death. A nearby open flame can lead to an explosion even if not directly in contact with gasoline.

• Do not operate this generator near open flame.

• Do not smoke near this generator.

• Always operate this generator on a firm, level surface.

Gasoline is highly flammable and explosive. Handling fuel can result in serious injury or burns.

• Always shut down this generator before refueling. Refuel in a well-ventilated area. Keep heat, sparks and flame away while refueling and away from the location where gasoline is stored. Never refuel indoors where gasoline fumes may reach flames and/or sparks.

• Allow this generator to cool for at least 2 minutes before removing the fuel tank cap. Loosen the cap slowly to relieve pressure in the fuel tank. Avoid spilling fuel.

• Do not fill the fuel tank above the upper limit line. Gasoline may expand during operation. Do not fill to the top of the tank.

• Always check for spilled gasoline and immediately wipe it up before starting this generator.

• Empty the fuel tank before storing or transporting this generator.

• Always handle fuel outdoors.

• Before transporting, turn the fuel valve to the “OFF” position and disconnect the spark plug.

NOTE: DO NOT USE GASOLINE CONTAINING MORE THAN 10% ETHANOL (e10)

⚠ WARNING

Usage: Consult a physician(s) before using this generator if using a pacemaker. Electromagnetic fields in close proximity to a heart pacemaker could cause a pacemaker to malfunction or fail. Caution is necessary when near the engine's recoil starter.

⚠ CAUTION

Usage: Prolonged exposure to high noise levels can be hazardous to hearing. Always wear ANSI-approved hearing protection when operating or working around the generator when it is running.

⚠ DANGER

Powerful Voltage: This generator produces powerful voltage, which can result in electrocution.

• ALWAYS ground this generator before using it. (See "Ground the Generator" section in this manual).

• Only electrical devices should be plugged into this generator, either directly or with an extension cord. NEVER connect a building electrical system to this generator without a qualified electrician. *Doing so voids your warranty.* Such connections must isolate generator power from utility power and comply with local electrical laws and codes. Failure to comply can create a back feed into utility lines creating an electrocution hazard, which may result in serious injury or death to utility workers. Such a back feed may cause this generator to explode, burn and create fires when utility power is restored.

• Use a ground fault circuit interrupter (GFCI) in highly conductive areas such as metal decking or steel work. GFCIs are available in-line with some extension cords.

• Do not use this generator in wet conditions (rain, snow, active sprinkler system, wet hands, etc.). Always keep this generator dry and operate it with dry hands.

• Do not allow children or non-qualified persons to operate this generator.

⚠ WARNING

GASOLINE IS HIGHLY FLAMMABLE AND EXPLOSIVE. YOU COULD BE BURNED OR SERIOUSLY INJURED IF THE GASOLINE IS IGNITED. Before refueling, stop the engine and keep heat, sparks and flame away. Handle fuel only outdoors. Do not fill the fuel tank above the upper limit line. Wipe up spills immediately.

⚠ DANGER

High Temperatures: This generator produces heat when in operation. Temperatures near the exhaust can exceed 150 Degrees Fahrenheit (65 Degrees Celsius).

• Do not touch hot surfaces. Observe all warning placards on this generator denoting hot surfaces.

• Allow this generator to cool for several minutes after use before touching the engine, muffler or other areas that are hot during operation and before storing indoors.

• Hot exhaust may ignite some materials. Keep flammable materials away from this generator.

• Keep at least several feet of clearance on all sides of this generator during operation. Do not enclose this generator in any structure.

⚠ WARNING

IMPROPER CONNECTIONS TO A BUILDING CAN ALLOW ELECTRICAL CURRENT TO BACKFEED INTO UTILITY LINES, CREATING AN ELECTROCUTION HAZARD. Connections to a building must isolate generator power from utility power and comply with all applicable laws and electrical codes.

⚠ CAUTION

Usage: Misuse of this generator can damage it or shorten its life.

• Use this generator only for its intended purpose.

• Operate this generator only on a dry, level surface. Do not secure the generator with a chain or rope, which would prevent it from being moved in an emergency.

• Allow this generator to run for several minutes before connecting any electrical devices.

• Promptly turn off any malfunctioning devices and disconnect them.

• Do not operate an excessive number of electrical devices in excess of the wattage capacity of this generator.

• Do not turn on electrical devices until *after* they are connected to this generator.

• Turn off all connected electrical devices before stopping this generator.

⚠ CAUTION

Usage: Prolonged exposure to high noise levels can be hazardous to hearing. Always wear ANSI-approved hearing protection when operating or working around the generator when it is running.

⚠ WARNING

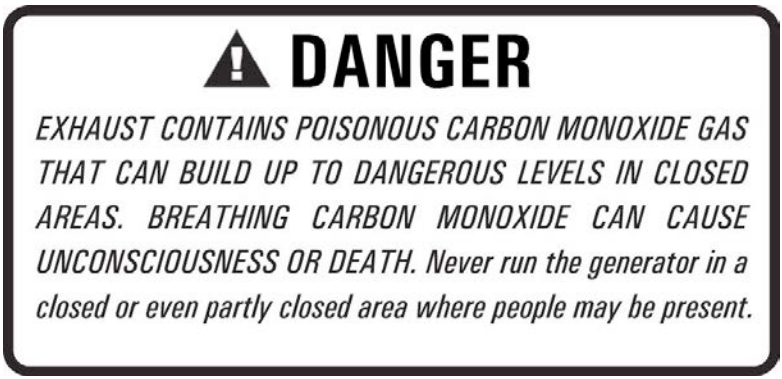
Usage: Avoid the use of extension cords if possible. If you choose to use them, be sure they are sized adequately to handle the flow of electricity. An undersized cord can overheat, short out and cause a fire.

Included with this Generator:

DC connector wires for connecting 12 Volt automotive-type batteries
Spark plug wrench
Screwdriver

⚠ WARNING

Usage: Avoid the use of extension cords if possible. If you choose to use them, be sure they are sized adequately to handle the flow of electricity. An undersized cord can overheat, short out and cause a fire.



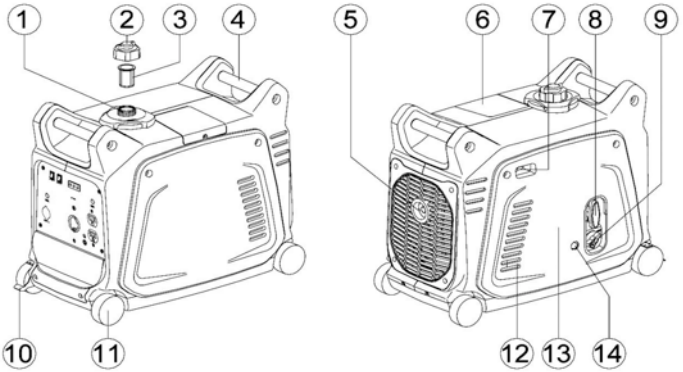
FEATURES:

•1.7 Gallon Fuel Tank •3,000 Watts Max AC output •5,000 RPM

•149cc, 4 stroke •Low oil shutdown •Recoil Start

•Run Time : 5 Hours at 50% load •Noise Level : 63db at 0% load @23 Ft

DC connector wires for connecting 12 Volt automotive-type batteries, Spark Plug wrench and Screwdriver



(1) Fuel tank

(2) Fuel tank cap

(3) Fuel filter

(4) Carrying handle

(5) Muffler

(6) Spark plug

(7) Choke lever

(8) Recoil starter

(9) Fuel cock

(10) Brake lever

(11) Wheel

(12) Oil filler cap

(13) Air filter

(14) Fuel primer

(15) Economy control switch

(16) Engine switch

(17) Oil warning light

(18) Overload indicator light

(19) Output indicator

(20) DC protector reset

(21) 12 Volt DC Outlet

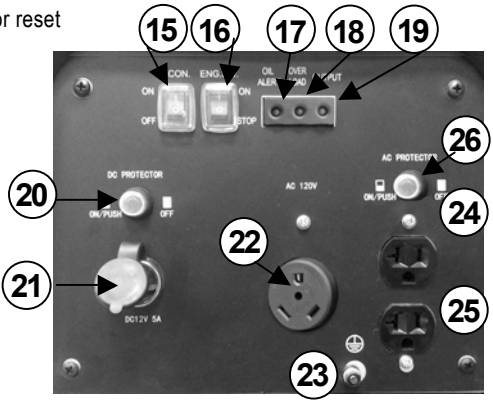
(22) 120V RV Outlet

(23) Ground terminal

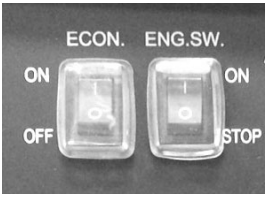
(24) AC 120V receptacle

(25) AC 120V receptacle

(26) AC protector reset



1） ENGINE SWITCH



The engine switch controls the ignition system.

To Start generator, turn ignition switch ON. Then the engine can be started by sliding Choke lever to CHOKE then pull Recoil. Allow engine to run for a few seconds then slide the Choke Lever to RUN.

To Stop generator, press ignition circuit to STOP. The engine will not run.

2） ECONOMY CONTROL SWITCH

When the economy control switch is turned “ON”, the economy control unit controls the engine speed according to the connected load. The results are better fuel connection and less noise. (Turn OFF when using less voltage.)

3） LOW OIL ALERT SENSOR

When the oil level falls below the acceptable level, the engine stops automatically. Unless you refill with oil, the engine will not start again.

4) OVERLOAD INDICATOR LIGHT

The overload indicator light comes on when an overload of a connected electrical device is detected, the inverter unit overheats, or the AC output voltage rises. The electronic breaker will then activate, stopping power to the generation in order to protect the generator and any connected electric devices. The output pilot light will flicker GREEN, the overload indicator light will turn RED, & the engine will stop.

(a) Turn off any connected electric devices and stop the engine

(b) Reduce the total wattage of connected electric.

(c) Check for blockages in the cooling air inlet and the control unit & restart engine.

- The generator AC output automatically resets when the engine is stopped and then restarted. The overload indicator light may come on for a few seconds at first when using electric devices that require a large starting current, such as a compressor or a submergible pump. However, this is not a malfunction.

5) DC CIRCUIT PROTECTOR

The DC circuit protector turns off automatically when the load exceeds the generator rated output. Reduce the load to within specified generator rated output if the DC circuit protector turns off.

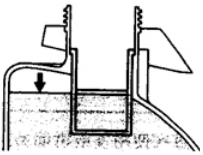
6) FUEL COCK

The fuel cock is used to supply fuel from the tank to the carburetor.

Turn ON when getting ready to start the generator. Turn OFF when finished using the generator.

CHECK ENGINE FUEL

- Make sure there is sufficient fuel in the tank.
- If fuel is low, refill with unleaded automotive gasoline.
- Be sure to use the fuel filter screen on the fuel filter neck.



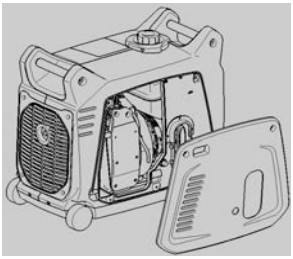
- Recommended fuel: Unleaded gasoline.
- Fuel tank capacity: 1.7 Gallon (6.3 Liters)
- Do not refill tank while engine is running or hot.

- Close fuel cock before refueling with fuel.
- Be careful not to admit dust, dirt, water or other foreign objects into fuel.
- Do not fill above the top of the fuel filter or it may overflow when the fuel heats up later and expands.
- Keep open flames away.

CHECK ENGINE OIL

Remove side panel, then remove oil filler cap and check the engine oil level. Make sure the engine oil is at the upper level of the oil filler hole. Add oil as necessary.

- **WARNING:** The generator has been shipped without engine oil. Fill with oil or it will not start.
- Do not tilt the generator when adding engine oil. This could result in overfilling and damage to the engine
- If oil level is below the lower level line, refill with suitable oil to upper level line. Do not screw in the oil filler cap when checking oil level.



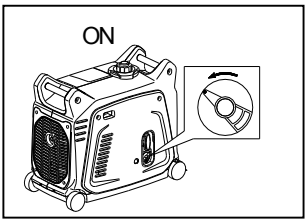
- Oil SAE 10W30
- Oil capacity: 30.42 oz.

GROUND

Make sure to ground the generator.

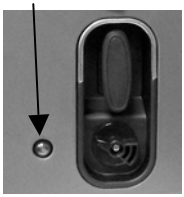
OPERATION

STARTING THE ENGINE



- Before starting the engine, do not connect electric apparatus.

1. Turn the fuel cock lever to the "**ON**" position.
2. Turn the engine switch to the "**ON**" position.
3. Turn the choke lever to the "CHOKE" position.
4. PUMP the PRIMER button until the glass bowl is full.



5. Pull the recoil starter handle slowly until resistance is felt. This is the "Compression" point. Return the handle to its original position and pull swiftly. Do not fully pull out the rope. After starting, allow the starter handle to return to its original position while still holding the handle. Grasp the carrying handle firmly to prevent the generator from falling over when pulling the recoil starter.
6. Warm up the engine without a load for a few minutes.
7. Turn the choke lever back to RUN position then plug in appliances.

USING ELECTRIC POWER

AC APPLICATION

(a) Turn off the switch(es) of the electrical appliance(s) before connecting to the generator.

(b) Insert the plug(s) of the electrical appliance(s) into the receptacle.

- Be sure the electric apparatus is turned off before plugging in.
- Be sure the total load is within generator rated output.
- Be sure the socket load current is within socket rated current.
- The economy control switch must be turned to "**OFF**" when using electric devices that require a large starting current, such as a compressor or a submergible pump.

DC APPLICATION

This usage is applicable to 12V battery charging.

Be sure the economy control switch is turned off while charging the battery.

STOPPING THE ENGINE

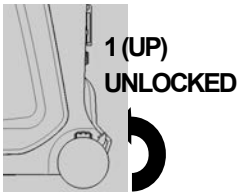
1. Turn off the power switch of the electric apparatus & disconnect electric devices.
2. Turn the engine switch to "**STOP**" position.
3. Turn the fuel cock lever to "**OFF**".

BRAKE LEVER

This generator includes locking wheels with a brake lever to prevent the generator from moving.

1) Brake lever is UP, wheels are unlocked.

2) Brake lever is DOWN, wheels are Locked.



PERIODIC MAINTENANCE

MAINTENANCE CHART

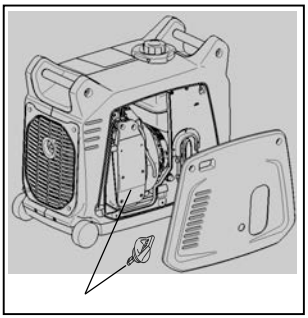
Regular maintenance is most important for the best performance and safe operation.

Item	Remarks	Pre-operation check (daily)	Initial 1 months or 20 Hr	Every 3 months or 50Hr	Every 6 months or100Hr	Every 12 months or 300Hr
Spark Plug	Check condition adjust gap and clean. Replace if necessary.			●		
Engine Oil	Check oil level	●				
	Replace		●		●	
Oil filter	Clean oil filter				●	
Air Filter	Clean. Replace if necessary.			●		
Fuel Filter	Clean fuel cock filter. Replace if necessary				●	
Choke	Check choke operation	●				
Valve Clearance	Check and adjust when engine is cold.					●
Fuel Line	Check fuel hose for crack or damage. Replace if necessary.	●				
Exhaust System	Check for leakage. Retighten or replace gasket if necessary	●				
	Check muffler screen. Clean / replace if necessary.					●
Carburetor	Check choke operation	●				

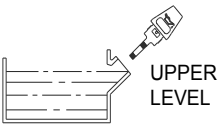
Cooling system	Check fan damage.					●
Starting system	Check recoil starter operation.	●				
Idle speed	Check and adjust engine idle speed					●
Fittings / Fasteners	Check all fittings and fasteners correct if necessary.				●	
Crankcase breather	Check breather hose for cracks or damage. Replace if necessary					●
Generator	Check the pilot light comes on	●				

ENGINE OIL REPLACEMENT

1. Place the machine on a level surface and warm up the engine for several minutes. Then stop the engine and turn the fuel cock knob to "**OFF**". Turn the fuel tank cap air vent knob clockwise.

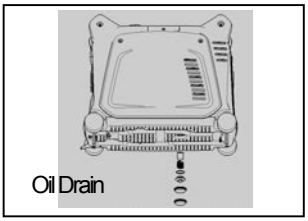


2. Loosen the screw and remove the cover.
3. Remove the oil filler cap
4. Place an oil pan under the engine.
   Tilt the generator to drain the oil completely
5. Replace the generator on a level surface.
6. Add engine oil to the upper level.
7. Install the oil filler cap
8. Install the cover and tighten the screw



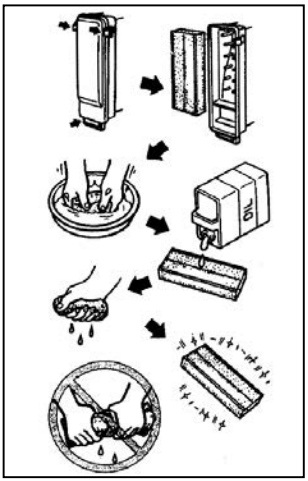
- Engine Oil SAE 10W30 Capacity: 30.43 oz.

- Be sure no foreign material enters the crankcase.
- Do not tilt the generator when adding engine oil. This could result in overfilling and damage to the engine
- Clean the oil filter every other 100 hr.



WASHABLE AIR FILTER

Maintaining an air cleaner in proper condition is very important. Dirt induced through improperly installed, improperly serviced, or inadequate elements damages and wears out engines. Keep the element always clean.



1. Remove the cover.
2. Remove the air filter cover and element.
3. Wash the element in solvent and dry.
4. Oil the element and squeeze out excess oil. The element should be wet but not dripping.
5. Insert the element into the air filter.
6. Install the cover.

The engine should never run without the Filter; excessive piston and/or cylinder wear may result.

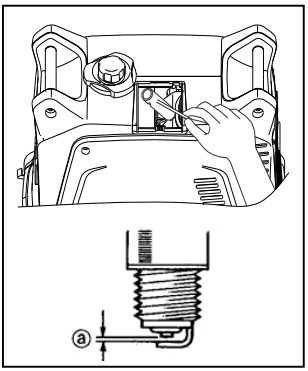
CLEANING AND ADJUSTING SPARK PLUG

1. Remove the cover.
2. Check for discoloration and remove the carbon.
3. Check the spark plug type and gap.

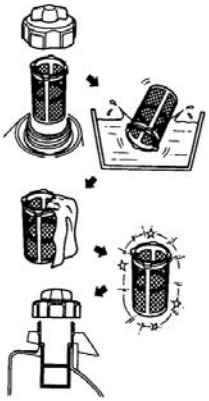
Standard Spark Plug: A7RTC

Spark Plug Gap: 0.6-0.7 mm (0.024-0.028 in)

4. Install the spark plug.
5. Install the cover



FUEL TANK FILTER



1. Remove the fuel tank cap and filter.

2. Clean the filter with solvent. If damaged, replace.

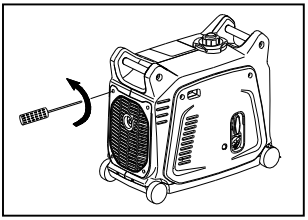
3. Wipe the filter and insert it.

Be sure the tank cap is tightened securely.

MUFFLER SCREEN

- The engine and muffler will be very hot after the engine has been run.

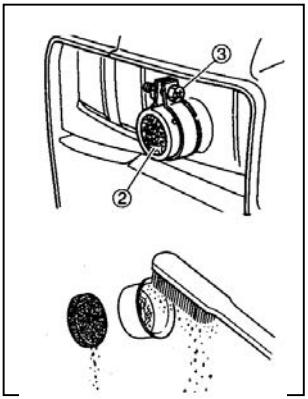
- Avoid touching the engine and muffler while they are still hot with any part of your body or clothing during inspection or repair.



1. Remove the cover.

2. Remove the muffler screen.

3. Use the flathead screw driver to pry the spark arrester out from the muffler



4. Remove the carbon deposits on the muffler screen and spark arrester using a wire brush.

5. Install the muffler screen.

6. Install the cover

TROUBLE SHOOTING

Engine won't start

1. Fuel systems

No fuel supplied to combustion chamber.

- No fuel in tank….Supply fuel.

- Clogged fuel line….Clean fuel line.

- Clogged carburetor….Clean carburetor.

Engine oil system

Insufficient

- Oil level is low….Add engine oil.

Electrical systems

Poor spark

- Spark plug dirty with carbon or wet….Remove carbon or wipe spark plug dry.
- Faulty ignition system….Consult dealer.

Compression insufficient

- Worn out piston and cylinder….Consult dealer.

Generator won't produce power

Safety device (AC) to "OFF" …Stop the engine, then restart.

Safety device (DC) to "OFF" …Press to reset the DC protector

STORAGE

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

1）DRAIN THE FUEL

1. Remove the fuel tank cap, drain the fuel from the fuel tank
2. Remove the cover, drain fuel from the carburetor by loosening the drain screw.

2）ENGINE

1. Remove the spark plug, pour in about one tablespoon of SAE 10W30 motor oil into the spark plug hole and reinstall the spark plug.
2. Use the recoil starter to turn the engine over several times (with ignition off).
3. Pull the recoil starter until you feel compression.

4. Stop pulling.

5. Clean exterior of the generator and apply a rust inhibitor.

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

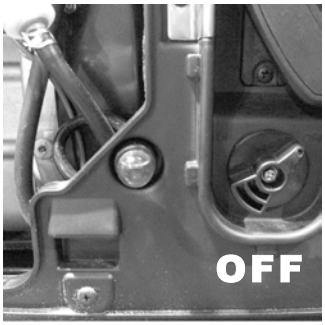
7. The generator must remain in a vertical position.

MODEL				**GEN3500i**
GENERATOR	Type		Inverter Generator	
	AC Voltage	60Hz	120V	
	Max. Output			3.0 kW
	Rated Output			2.8 kW
	Power Factor		1.0	
	DC Output		12V / 5.0A	
ENGINE	Model			XY157F-1
	Type		Air-cooled, 4 cycle, OHC, Gasoline Engine	
	Bore×Stroke mm×mm			57.4×57.8
	Displacement			149cc
	Max. Output			4.0KW / 5000rpm
	Fuel		Regular Automobile Gasoline	
	Fuel tank Capacity		1.7 Gallons (6.3 liters)	
	Rated Continuous Operation			5h （50% Load）

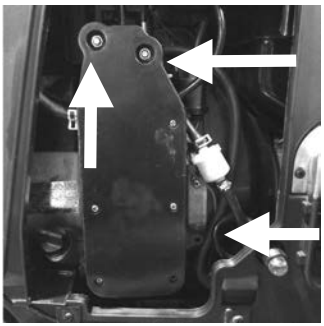
	Lubricating oil	SAE 10W30	
	Lubricating oil Capacity	30 oz	
	Starting System	Recoil Starter	
	Ignition system	C.D.I	
	Spark Plug: Type	A7RTC	
DIMENSION	Net dimension L×W×H	614 x 341 x 506mm	
	Overall dimension L×W×H	640 x 360 x 525mm	
	Net Weight		33.5 Kg
	Dry Weight		36.5Kg

- Specifications subject to change without prior notice.

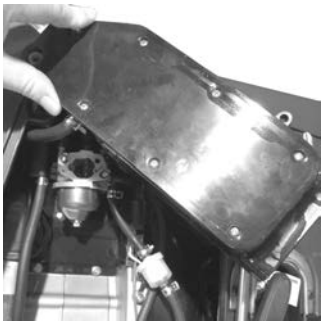
STORAGE INSTRUCTIONS



Rotate gas valve to “OFF” position.

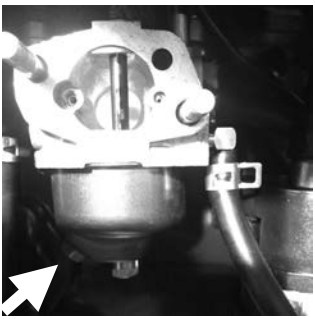


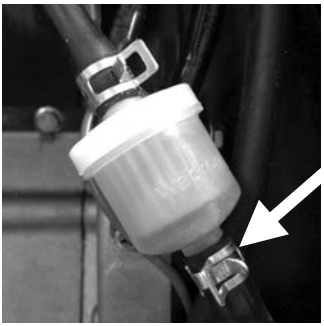
Remove three screws from engine air box



Rotate the engine air box
Locate carburetor.

Remove drain screw from side of carburetor
Fuel will begin to drain out of bowl

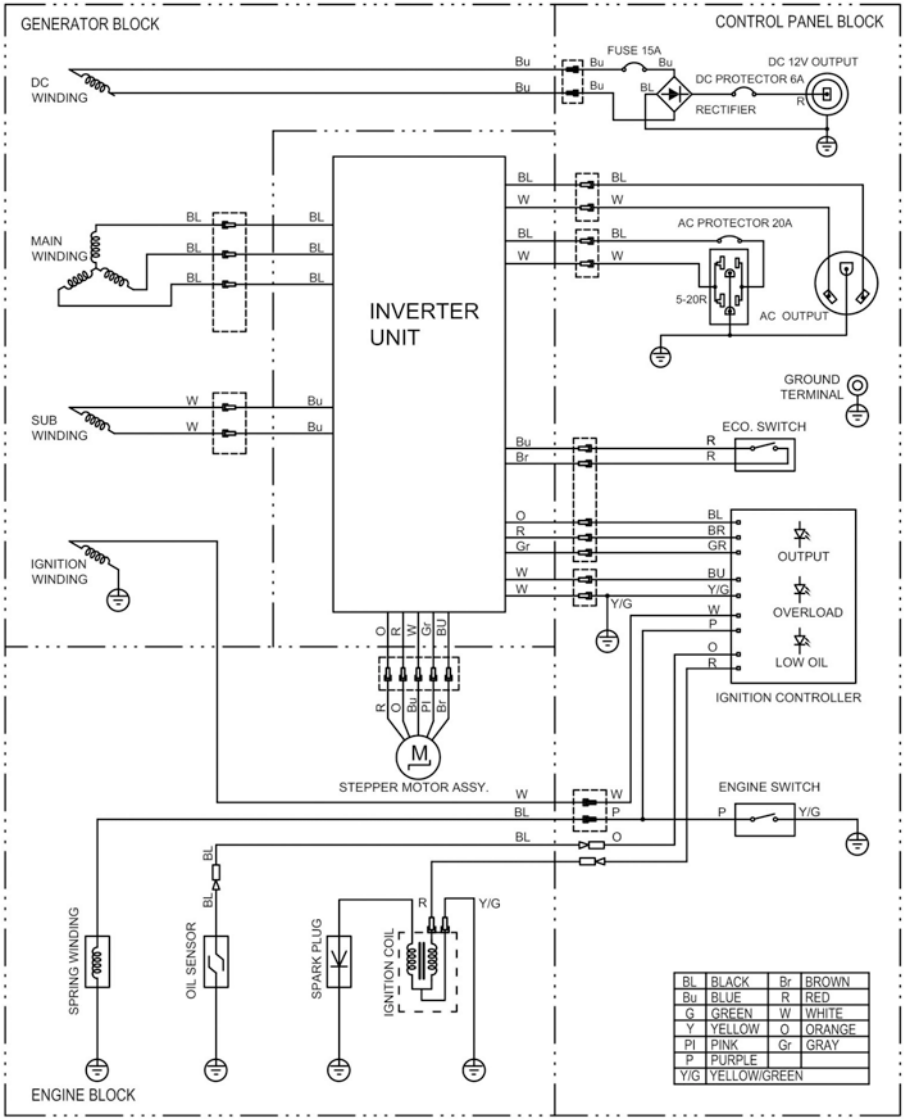




Remove fuel line from filter. Fuel will drain from both bowl and fuel line.

To remove remaining fuel from fuel line, open cap at top of generator.

WIRING DIAGRAM



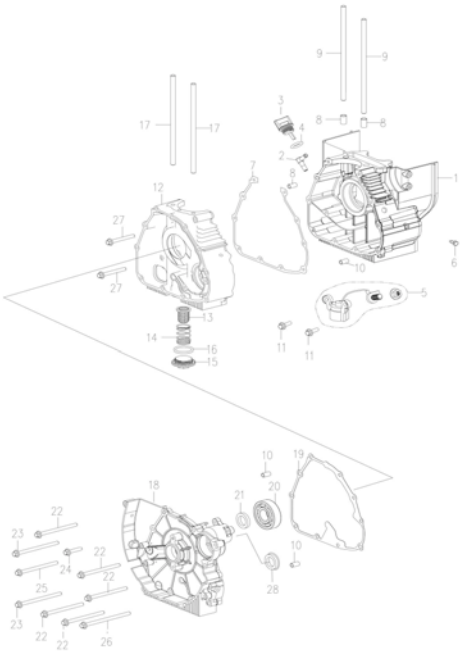


FIG.A CRANKCASE ASSY

No.	Part No.	Description	Qty
1*	15580101100001	Left Crankcase	1
2	11310104100001	Pipe Joint	1
3	15560101201002	Oil Plug Assembly	1
4	15560101202051	O ring 19*3.55	1
5	15560101300002	Oil Lever Sensor	1
6	00427014801001	Tapped Screw ST4.8×10	1
7	15570102001002	Crankcase Gasket	1
8	12210100002001	Dowel Pin 10x16	2
9	12210202004011	Long Stud 8x195	2
10	12210202001001	Dowel Pin 8x14	4
11	00033000601611	Bolt M6x18	2
12*	15580102100001	Right Crankase Component	1
13	12210203100002	Oil Filter	1
14	12210203002001	Oil Filter Spring	1
15	12210203004002	Oil Filter Cover	1
16	12210203003101	O-Ring 30.5x3	1
17	12210201001011	Long Stud 8x185.5	2
18	15580103001001	Right Cover	1
19	15560103002001	Right Cover Gasket	1
20	00810000620401	Bearing	1
21	15560103003001	Oil Seal 19.8×30×5	1
22	00033000608011	Hexagon Flange Bolts M6×80	5
23	00033000609011	Hexagon Flange Bolts M6×90	2
24	00033000602811	Hexagon Flange Bolts M6×28	1
25	00033000607011	Hexagon Flange Bolts M6×70	1
26	00033000610011	Hexagon Flange Bolts M6×100	1
27	00033000605011	Hexagon Flange Bolts M6×50	2
28	462403000130	Plug	1

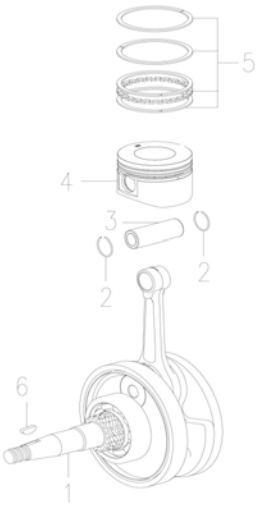


FIG C. CRANKSHAFT PISTON

No.	Part No.	Description	Qty
1	15580301000001	Cranshaft Connecting Rod Assy	1
2	12210300001003	Pistion Pin Clip	2
3*	12710300002003	Pistion Pin	1
4*	12710301001002	Pistion	1
5*	12710301006001	Oil Ring	1
6	15560300001001	Woodruff Key	1

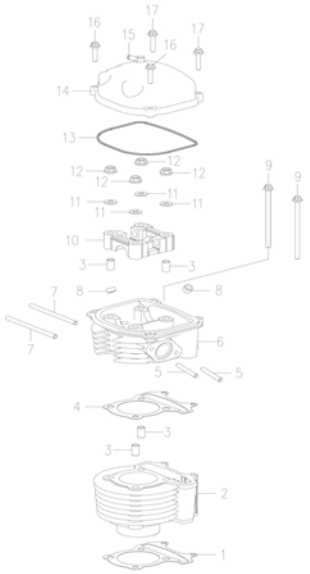


FIG.B CYLINDER HEAD

No.	Part No.	Description	Qty
1*	12800100004002	Cylinder Gasket	1
2*	12800102100002	Cylinder Component	1
3	12210100002001	Dowel Pin 10x116	4
4*	12800100005001	Cylinder Head Gasket	1
5	00074000603211	Stud Bolt M6x32	2
6*	15570201100001	Cylinder Head Component	1
7	15560201001011	Stud Bolt M6x118	2
8	12210101200010	Vavle Oil Seal Component	2
9	00033000610011	Hexagon Flange Bolts M6×100	2
10	12210100001001	Camshaft Holder Seat	1
11	12700100007031	Copper Washer 8	4
12	00129000800011	Hexagon Flange Nuts M8	4
13	12210104003022	Cyliner Head Cover Seal	1
14	12210104001201	Cyliner Head Cover	1
15	15560203100001	Pipe Joint	1
16	00033000602511	Hexagon Flange Bolts M6×25	2
17	00033000603511	Hexagon Flange Bolts M6×35	2

FIG E. OIL PUMP

No.	Part No.	Description	Qty
1	00033000601211	Bolt M6x12	2
2	12211200001002	Oil Pump Sprocket Cover	1
3	00128000600011	Hexagon Flange Nuts M6	1
4	12211201000001	Oil Pump Chain 6.35x44	1
5	12211202007002	Oil Pump Sprocket	1
6	00033000602511	Hexagon Flange Bolts M6×25	2
7	12211202000101	Oil Pump Assy	1

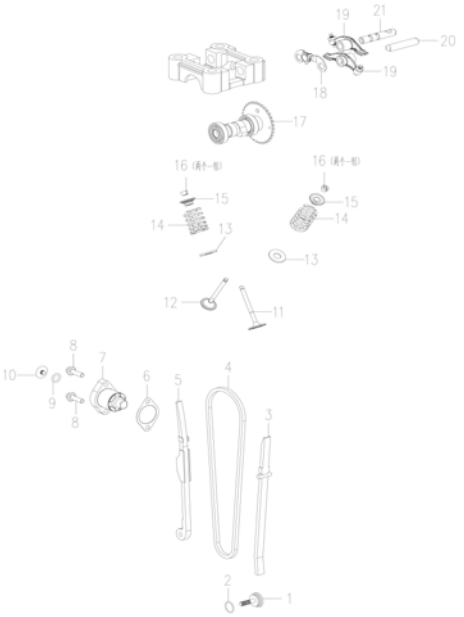


FIG D. CAMSHAFT

No.	Part No.	Description	Qty
1	12210402001011	Tension Rod Bolt	1
2	12210402002001	O-Ring 15.2x1.5	1
3	12210405000003	Camshaft Chain Guide Parts	1
4	12210406000001	Camshaft Chain 6.35×90	1
5	12210403000003	Tension Rod Assy	1
6	12210400008002	Regulator Gasket	1
7	12210404000002	Camshaft Chain Regulator	1
8	00033000602211	Hexagon Flange Bolts M6×22	2
9	00912009501501	O-Ring 9x1.5	1
10	12210404001011	Pan Head Screw	1
11	12800400003001	Exhaust Vavle	1
12	12800400007001	Intake Vavle	1
13	12210400006001	Vavle Spring Ring	2
14	12210400004001	Vavle Spring	2
15	12210400001003	Vavle Spring Seat	2
16	12210400002004	Vavle Lock Clip	2
17	15560401000001	Camshft Assy	1
18	15560407001011	Rocker Shaft Washer	1
19	12210400010001	Vavle Rocker Arm	2
20	12210400009001	Exhaust Vavle Rocker Arm Shaft	1
21	12210400009001	Intake Vavle Rocker Arm Shaft	1

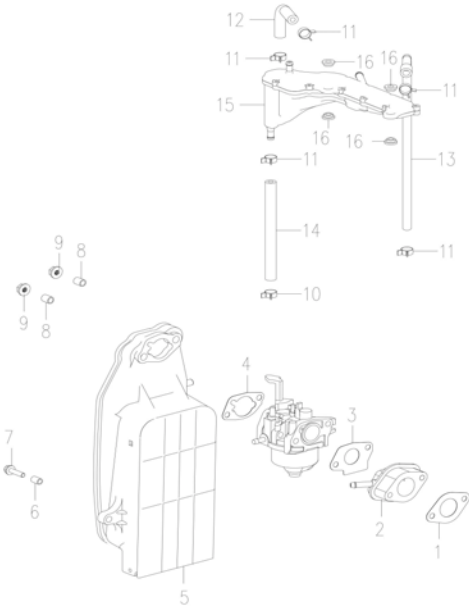


FIG F. AIR CLEANER

No.	Part No.	Description	Qty
1	15560800001001	Insulation Board Gasket	1
2	15560802001501	Insulation Board Components	1
3	15560800003001	Carburator Gasket	1
4	15560801006002	Air Cleaner Gasket	1
5	15560801001001	Air Cleaner Assy	1
	15560801002001	Cover of Air Cleaner Assy.	1
	15560801003001	Cover of Foam/sponge	1
	15560801004003	Foam/sponge	1
6	15561100004002	Fan Volute Bush	1
7	00033000502011	Hexagon Flange Bolts M5×20	1
8	15560801005002	Air Cleaner Bush	2
9	00128000600011	Hexagon Flange Nuts M6	2
10	12700100009002	Clamp 11.5	2
11	15560800006002	Clamp 10	4
12	15560800002001	Rubber Tube Ⅰ	1
13	15560800004001	Rubber Tube Ⅱ	1
14	15560800005001	Rubber Tube Ⅲ	1
15	15560801007003	Oil and Gas Separation Device	1
16	15560802000004	Insulation Gasket	4

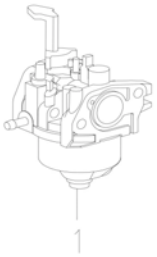


FIG.G CARBURETOR

No.	Part No.	Description	Qty
1*	15570900000501	Carburator Assy	1

FIG N. INVERTER

No.	Part No.	Description	Qty
1	002200006012	Pan Head Screw M6×12	2
2	007090005012	Screw M5×12	2
3	463019000010	Inverter Holder	1
4	463519010000	Inverter Assembly 2.3KW 120V 60Hz	1
5	462419000010	Inverter Gasket	2

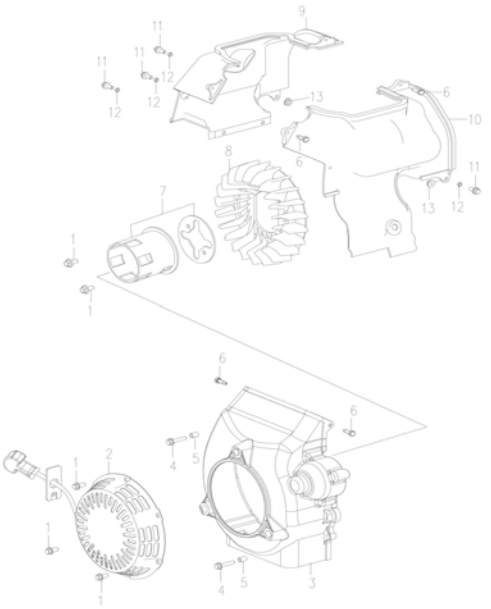


FIG H. RECOIL STARTER

No.	Part No.	Description	Qty
1	00033000601211	Hexagon Flange Bolts M6×12	5
2	15560602000002	Recoil Starter Parts	1
	15560602001101	Handle	1
	15560602003001	Fender	1
3	15581100001001	Fan Volute	1
4	00033000502011	Bolts M5×20	4
5	15561100004002	Fan Volute Bush	4
6	00427014801641	Tapping Screw ST4.8×16-F.H	4
7	15580600002001	Starting Hub	1
8	15561100001001	Cooling Fan	1
9	15561100006001	Air Guide B	1
10	15561100005001	Air Guide A	1
11	00033000501221	Hexagon Flange Bolts M5×12	4
12	15561100007003	Air Guide Bush	4
13	00129000500011	Hexagon Flange Nuts M5	2

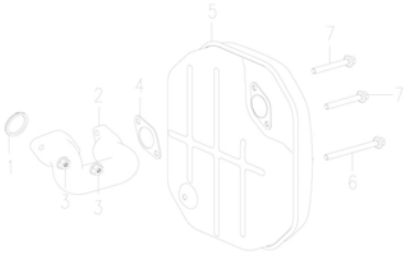


FIG I. MUFFLER (FOR EPA)

No.	Part No.	Description	Qty
1	15560702000001	Muffler Pipe Gasket	1
2	15560700001006	Muffler Pipe	1
3	00141000600011	Metal Hexagon Flange Nuts M6	2
4	15560700002001	Muffler Gasket	1
5	15570701000001	Muffler Assy（Catalyst）	1
6	00722000608011	Bolt M6×80	1
7	00033000605011	Bolt M6×50	2

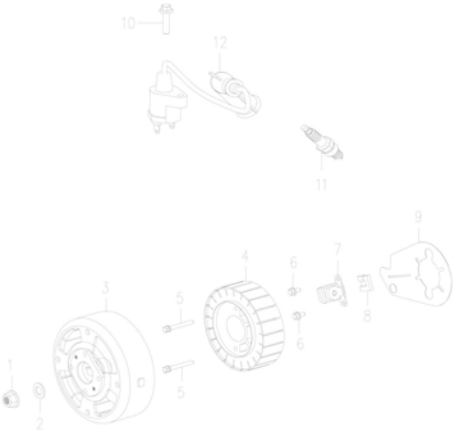


FIG J. GENERATOR

No.	Part No.	Description	Qty
1	00129021212511	Hexagon Flange Nuts M12x1.25	1
2	12210500006011	Gasket φ12.2*25*2	1
3*	15581001200002	Rotor 3.0KW	1
4*	15581001110002	Stator 3.0KW 230V	1
5	00722000605011	Bolts M5×50	2
6	00033000501221	Hexagon Flange Bolts M5×12	2
7	15561000001002	Trigger	1
8	15561000002002	Rubber Block	1
9	15561000005001	Insulative Gasket	1
10	00241006302541	Tapped Screw ST6.3×25-F.H	1
11	12211030000005	Spark Plug A7RTC	1
12	12211010000011	Ignition Coil	1

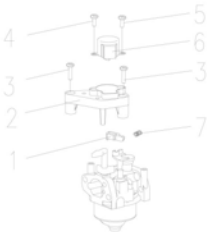


FIG M. GOVERNOR

No.	Part No.	Description	Qty
1	155609000020	Drive Arm	1
2	462420030000	Stepper Motor Holder	1
3	007090004016	Screw M4×16	2
4	007090003008	Screw M3×8	1
5	007090003005	Screw M3×5	1
6	462420020000	Stepper Motor Assy	1
7	155609000010	Drive Arm Spring	1

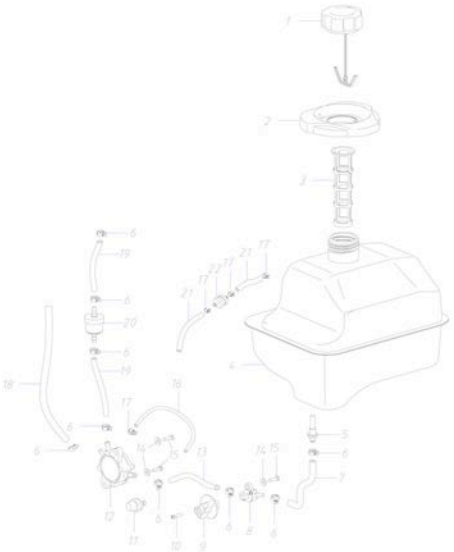


FIG K. FUEL TANK(EPA)

No.	Part No.	Description	Qty
1	462405130000	Fuel Tank Cap Assy.（EPA)	1
2	463003000080	Fuel Tank Port Rubber	1
3	462405020000	Fuel Tank Filter	1
4	463005010000	Fuel Tank (iron)	1
5	463005030000	Fuel Outlet Filter	1
6	480202010090	Clamp ⌀9	12
7	463005000030	Special Fuel Horse（EPA）	1
8	462405040000	Fuel Cock	1
9	462405000030	Fuel Cock Handle	1
10	007090004016	Screw GB/T9074.4 M4×16	1
11	463005050000	Fuel Lubricator	1
12	463005040000	Fuel Pump	1
13	461505000041	Fuel Horse（EPA）	1
14	003040004001	Gasket GB/T96 φ4	3
15	004210142019	Tapped Screw GB/T845 ST4.2×19	3
16	480201040801	Fuel Hose (4-8) -110（EPA）	1
17	480202010080	Clamp ⌀8	4
18	480201051000	Fuel Hose (5-10) -350	1
19	480201051001	Fuel Hose (5-10) -90（EPA）	2
20	462405050000	Fuel Filter	1
21	480201040801	Fuel Hose (4-8) -130（EPA）	2
22	462405120000	Balance Valve	1

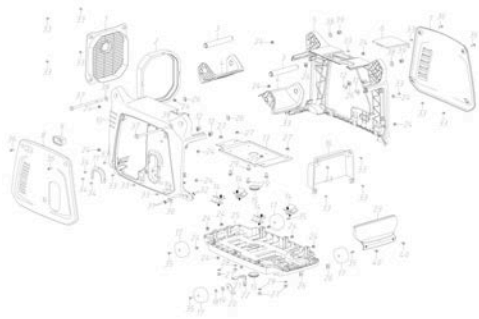


FIG L. SHELL

No.	Part No.	Description	Qty
1	463003000090	Muffler Cover	1
2	463003000100	Muffler Cover Seal	1
3	463003000190	Handle	2
4	463003000110	Handle board	2
5	463003000010	Left Cover of Shell	1
6	463003000030	Upper Cover	1
7	463003000020	Left Side Cover	1
8	463003000050	Right Side Cover	1
9	463003000130	Rubber of Choke	1
10	463003000040	Right Cover of Shell	1
11	463003000060	Edge Protection	1
12	463003000200	Fuel Tank Vibration Absorber	4
13	463003010000	Chassis	1
14	462403040000	Shock Pad 1525-2	4
15	463003000140	Chassis Rubber Cover	2
16	463003000070	Panel Box	1
17	480220207530	Wheels 3"	4
18	003020012001	Flat Washer GB/T97 φ12	1
19	463003000230	Rubber Flat Washer φ10×φ20×1.5	1
20	463003000150	Brake Part 1	1
21	463003000250	Brake Rubber	1
22	463003000160	Brake Part 2	1
23	463003000120	Battery Cover	1
24	460703000110	Fastener	18
25	463003010000	Chassis	1
26	463003000210	Fastening Nut	6
27	001280008001	Flange Nut GB/T6177 M8	8
28	003020008001	Flat Washer GB/T97 φ8	4
29	000310008016	Flange Bolt GB/T5789 M8×16	4
30	463003000170	Brake Part 3	1
31	002210004012	Countersunk Head Screw M4x12	2
32	001280004001	Flange Nut GB/T6177 M4	2
33	004210148013	Tapped Screw GB/T845 ST4.8×13	19
34	004210848095	Tapped Screw GB/T845 ST4.8×9.5	3
35	000310005010	Flange Bolt GB/T5789 M5×10	4
36	002200006016	Pan Head Screw M6×16	4
37	000310010230	Flange Bolt GB/T5789 M10×230	2
38	003020012001	Flat Washer GB/T97 φ10	4
39	001190010001	Nut GB/T923 M10	2
40	002200006012	Pan Head Screw M6×12	2

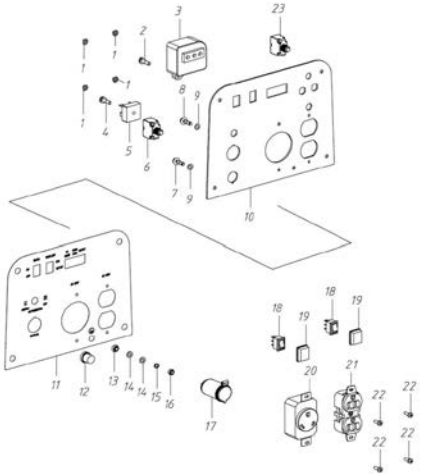


FIG O. CONTROL PANEL（FOR USA）

No.	Part No.	Description	Qty
1	001280004001	Flange Nut GB/T6177 M4	4
2	007090005016	Screw M5×16	1
3	462417013000	Ignition Controller IC-2500	1
4	007080005016	Screw M5×16	1
5	480110350200	Rectifier KBPC3502	1
6	480107880060	Overload Protector 6A	1
7	007090005008	Screw M5×8	4
8	000330005016	Flange Bolt GB/16674 M5×16	1
9	003210005001	Lock Gasket GB862.2 φ5	4
10	463017061000	Panel Components	1
11	463188000090	Panel Sticker	1
12	480107000020	Water-Proof Cap of Overload Protector	2
13	001280005001	Hexagon Flange Nut M5	1
14	003020005001	Flat Washer GB/T97 φ5	2
15	003000005001	Spring Washer GB/T93 φ5	1
16	001200005001	Hexagon Nut GB/T6170 M5	1
17	480101050050	Cigar Lighter Socket	1
18	480105010010	Boat Switch	2
19	480105090010	Water-Proof Cap of Boat Switch	2
20	480101020100	American Socket RV	1
21	480101020010	American Double Socket 5-20R	1
22	007090004012	Screw M4×12	4
23	480107740200	Overload Protector 20A	1
	463117060000	Control panel	1

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