

RAMSOND®

Digital Inverter Generator

SINEMATE 3500



OPERATING INSTRUCTIONS
PLEASE READ THIS MANUAL CAREFULLY
BEFORE USING MACHINE

PREFACE

Thank you for using our generator.

This manual includes the operation and maintenance of Ramsond Sinemate 3500. All information in this publication is based on the latest product information available at the time of approval for printing. We reserve the right to make changes at any time without notice and without incurring and obligation. The copyright of this manual belongs to our company. No parts of this publication may be reproduced without written permission. This manual should be considered a permanent part of the generator and should remain with it if it is resold.

Pay special attention to statements preceded by the following words:

WARNING

It indicates a strong possibility of severe personal injury or death if instruction is not followed.

CAUTION

It indicates a strong possibility of severe personal injury or death if instruction is not followed. If a problem should arise, or if you have any questions about the generator, consult an authorized dealer.

BECAREFUL

The generator are designed to give safe and dependable service if operated according to instructions, read and understand the Owner's manual before operating the generator. Failure to do so could result in personal injury or equipment damage.

I. Safety Instruction



⚠ WARNING

- ◆ The generator is designed to give safe and dependable service if operated according to instructions. Read and understand this manual carefully before operating the generator or it may cause serious injury and equipment damage.



⚠ WARNING

- ◆ Exhaust contains poisonous carbon monoxide. Do not operate generator in confined environment or with an aerator. Only use outdoors and far from open windows doors and vents.



⚠ WARNING

- ◆ The muffler becomes very hot during operating and remains hot for a while after stopping the engine. Be careful not to touch the muffler while it is hot. Let the engine cool before storing the generator indoor.
- ◆ The engine exhaust system will be heated during operation and remain hot immediately after stopping the engine. To prevent scalding, pay more attention to the warning marks attached to the generator.



⚠ BE CAREFUL

- ◆ Do not parallel connect other cables to receptacles, use special jack, or it may cause an electrical shock.



⚠ WARNING

- ◆ Gasoline is extremely flammable and is explosive under certain conditions. Refuel in a ventilated area with engine stopped.
- ◆ Keep away from cigarette, smoke and sparks when refueling the generator.
- ◆ Always refuel in a well-ventilated location.



⚠ WARNING

- ◆ Connection for standby power to a building electrical system must be made by a qualified electrician. The connection must isolate the generator from utility power, and must comply with all applicable laws and electrical codes. Improper connections to a building electrical system can allow electrical current from the generator to backfeed into the utility lines. Such backfeed may electrocute utility company workers or others who contact lines during a power outage and the generator may explode, or cause fires when utility power is restored.



⚠ WARNING

- ◆ To avoid accidents and equipment damage, check generation system every time before starting engine.
- ◆ Keep the generator a distance at least 1 meter from other equipment or other equipment during operation.
- ◆ Keep the generator horizontal when running. If generator tilted, it may cause fuel spillage.
- ◆ Generator operators must be trained, must know how to stop the generator quickly and understand the operation of all controllable parts. Untrained operators should not be allowed to use this equipment.
- ◆ Keep children and pet away from operation area.
- ◆ Keep away from rotating parts during operation.
- ◆ The generator is a potential source of electrical shock when misused. Do not operate it with wet hands or in any wet location.
- ◆ Do not operate the generator in rain or snow.

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RAMSOND SINEMATE 3500 DIGITAL INVERTER GENERATOR

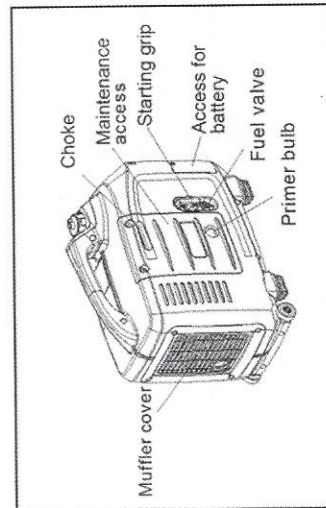
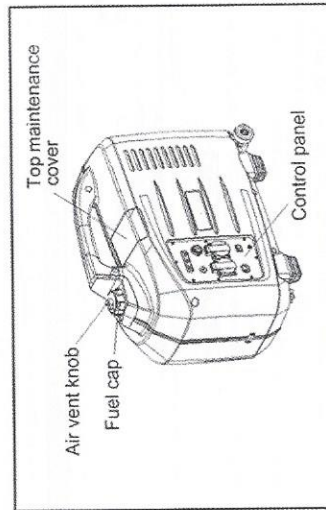


Warning

Read this manual carefully before using the machine, for your own safety.
Your power tool should only be passed on with these instructions.

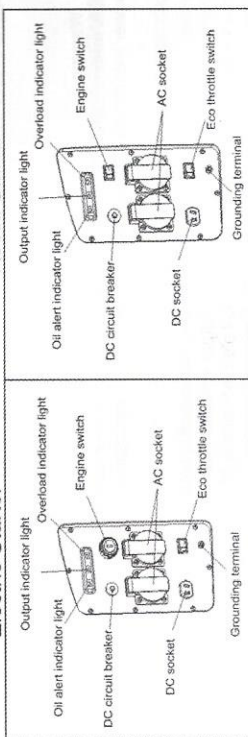
1 COMPONENT IDENTIFICATION

1. Fuel cap
2. Air vent knob
3. Choke knob
4. Control panel
5. Starting grip
6. Fuel valve grip
7. Maintenance covers
8. AC socket
9. Overload indicator light
10. Output indicator light
11. Oil alert indicator light
12. Eco throttle switch
13. Engine switch
14. DC socket
15. DC circuit breaker
16. Grounding terminal

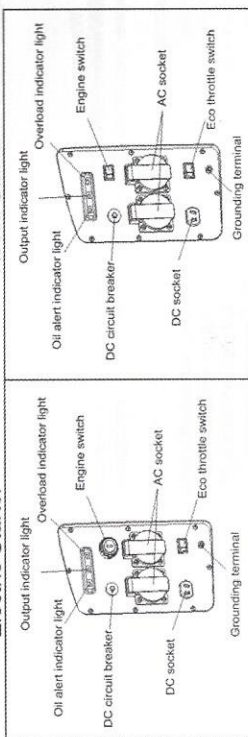


CONTROL PANEL

Electric Starter



Recoil Starter



Smart Throttle

Engine speed is kept at idle automatically when the electrical appliance is disconnected and it returns to the proper speed to power of the electrical load when electrical appliance is connected. This position is recommended to minimize the fuel consumption while in operation.

Caution

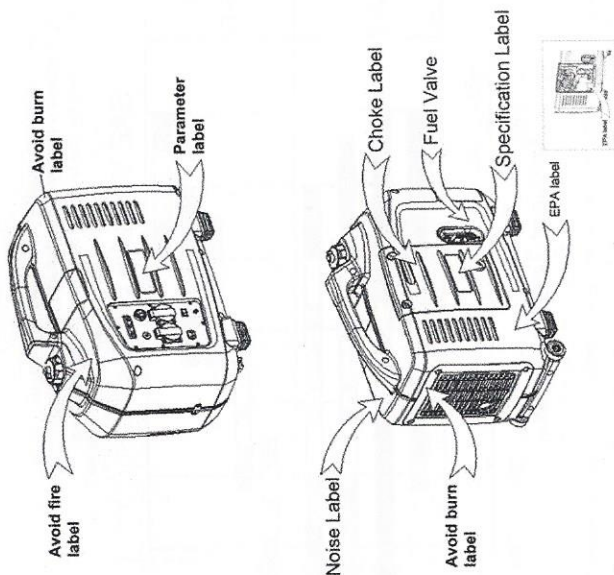
- Smart throttle system does not operate effectively, if the electrical appliance requires the momentary electric power.
- When high electrical loads are connected simultaneously, turn the Smart throttle switch to the OFF position to reduce voltage vibration.
- In DC operation, turn the Smart throttle switch to the OFF position.

SAFETY INSTRUCTIONS

- The generator is designed to give safe and dependable service if operated according to instructions.
- Read and understand the Owner's Manual before operating the generator. Failure to do so could result in personal injury or equipment damage.
- Exhaust gas contains poisonous carbon monoxide. Never run the generator in an enclosed area. Be sure to provide adequate ventilation.
- The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Be careful not to touch the muffler while it is hot. Let the engine cool before storing the generator indoors.
- The engine exhaust system will be heated during operation and remain hot immediately after stopping the engine. To prevent scalding, pay attention to the warning marks.
- Gasoline is extremely flammable and explosive under certain conditions. Refuel in a well-ventilated area with the engine stopped.
- Keep away from cigarette, smoke and sparks when re-fueling the generator. Always refuel in a well ventilated location.
- Wipe up spilled gasoline at once.
- Connections for standby power to a building's electrical system must be made by a qualified electrician and comply with all applicable laws and electrical codes. Improper connections can allow electrical current from the generator to back feed into the utility lines.

3. SAFETY LABEL LOCATIONS

These labels warn you for potential hazards that can cause serious injury. Read the labels and safety notes and precautions described in the manual carefully. If a label comes off or becomes hard to read, contact your dealer for a replacement.



4. PRE-OPERATION CHECK



Be sure to check the generator on a level surface with the engine stopped.

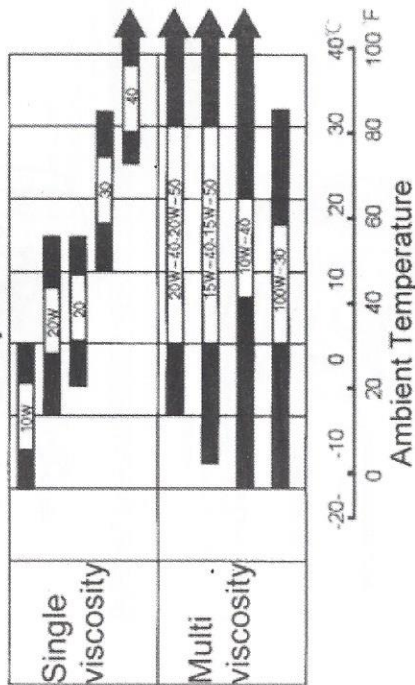


4.1 Check the engine oil level

Using non-detergent oil or 2-stroke engine oil could shorten the engine's service life.

Use high-detergent, premium quality 4 -stroke engine oil, certified to meet or exceed U.S. automobile manufacturer's requirements for API Service Classification SG, SF (15W40). Select the appropriate viscosity for the average temperature in your area.

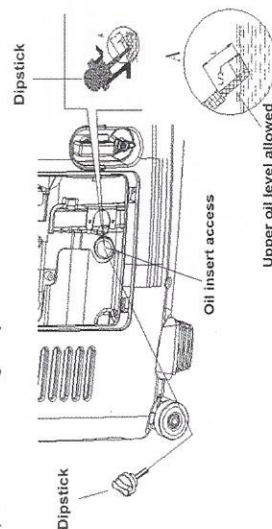
SAE Viscosity Grades



Loosen the cover screw and remove the left side maintenance cover. Remove the oil filler cap, and wipe the dipstick with a clean rag. Check the oil level by inserting the dipstick in the filler hole without screwing it in. If the oil level is below the end of the dipstick, refill the recommended oil up to the top of the oil filler neck.



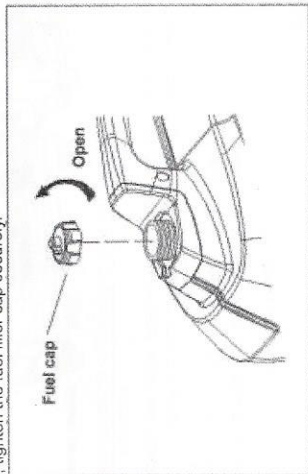
The Oil Alert System will automatically stop the engine before the oil level falls below the safe limit. However, to avoid the inconvenience of an unexpected shutdown, it is still advisable to visually inspect the oil level regularly.



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4.2 Check the fuel level

- Turn the fuel cap lever to "OFF" position before transporting.
- Use automotive fuel (Unleaded or low leaded is preferred to minimize combustion chamber deposits).
- Don't use fuel-containing alcohol: Fuel system damage or engine performance problems resulting from the use of fuels that contain alcohol are not covered under the warranty.
- Never use an oil/gasoline mixture or dirty gasoline.
- Avoid getting dirt, dust or water in the fuel tank.
- After refueling, tighten the fuel filler cap securely.



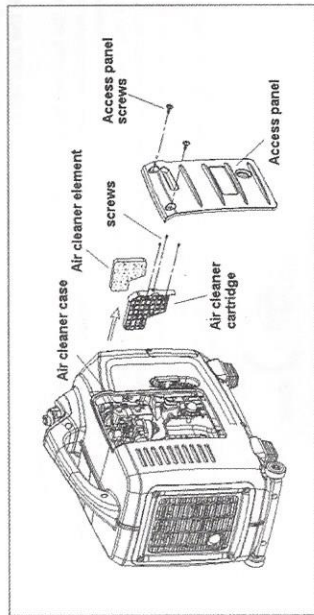
- Gasoline is extremely flammable and is explosive under certain conditions.
- Refuel in a well-ventilated area with the engine stopped.
- Do not smoke or allow flames or sparks in the area where the engine is refueled or where gasoline is stored.
- Do not overfill the fuel tank. After refueling, make sure the tank cap is closed properly and securely.
- Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.
- Avoid repeated or prolonged contact with skin or breathing of vapor. **KEEP OUT OF REACH OF CHILDREN**

4.3 Check the air cleaner.

Check the air cleaner element to be sure it is clean and in good condition.

1. Loosen the cover screw and remove the left side maintenance cover.
2. Press the latch tab on the top of the air cleaner body, remove the air cleaner cartridge, and check the element.
3. Clean or replace the element if necessary.

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Never run the engine without the air cleaner. Rapid engine wear will result from contaminants. Such as dust and dirt, being drawn through the carburetor, into the engine.

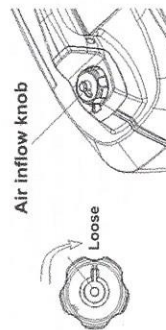
It is normal for a little oil to appear under the air filter box if the generator is running for a long period of time, or a lot of oil is in the engine. Wipe up excess oil after each use and after stopping the generator.

5. GENERATOR USE

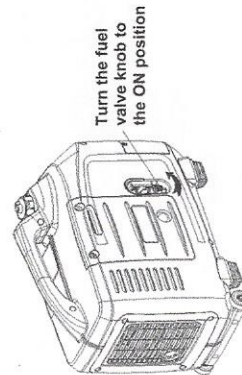
5.1 Starting the engine

⚠ Before starting the engine, disconnect any load from the DC receptacle.

Turn the fuel cap lever fully clockwise to the ON position.

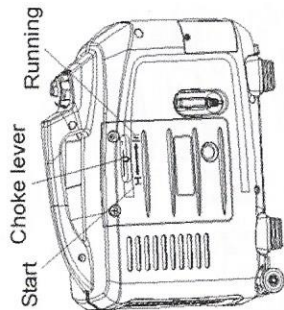


2. Set the fuel valve in the "ON" position.



3. To start a cold motor shove the choke lever all the way to the left. To restart a hot motor set the choke lever halfway.

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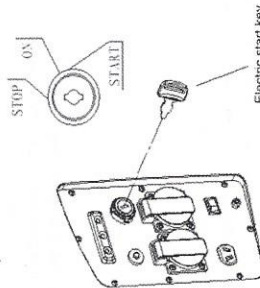
Choosing the right choke position is the key to starting the motor. You may have to practice a few times to use the choke correctly.



Shove the choke completely to the right to restart a hot motor.
Shove the choke to about halfway to restart a warm motor.

⚠ A hot motor will not start if there is too much fuel in the cylinder. If this happens, wait five to ten minutes before trying again. Shove the choke completely to the right and the motor should start.

4. Set the motor switch in the "ON" position.

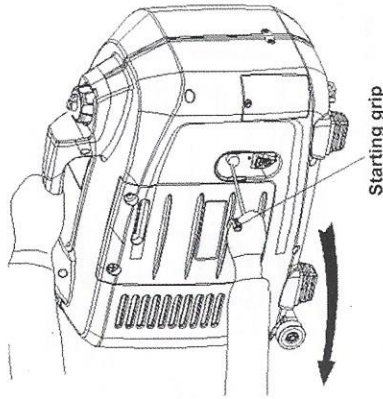


5. Pull slightly on the start cord until you feel resistance and then yank hard and swiftly.

⚠ Do not let the start cord retract by itself: guide it back by hand.

⚠ Hold the carrying handle firmly to prevent the generator from falling over when you pull the start cord.

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6. After the engine starts, allow the engine to run continuously and warm up.
7. Press the choke in completely after the engine is started.



If the engine stops and will not restart, check the engine oil level before troubleshooting in other areas.



Before using the device once it is connected, switch off the ECO switch.

5.2 High altitude operation

At high altitude, the standard carburetor air-fuel mixture will be excessively rich. Performance will decrease, and fuel consumption will increase. High altitude performance can be improved by installing a smaller diameter main fuel jet in the carburetor and readjusting the slow tempo screws. If you always operate the generator at altitudes higher than 1,500 m (5,000 feet) above sea level, have your dealer perform these carburetor modifications. Even with suitable carburetor jetting, engine horsepower will decrease approximately 3.5% for each 300m (1,000 feet) increase in altitude. The effect of altitude on the horsepower will be greater than this if no carburetor modification is made.



Operation of the generator at an altitude lower than the carburetor is jetted for may result in reduced performance, overheating, and serious engine damage caused by an excessively lean air/fuel mixture.

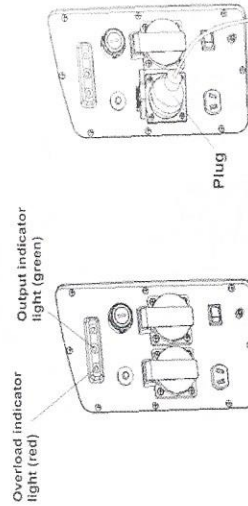
5.3 Generator use

5.3.1 Warning!

- To prevent electrical shock from faulty appliances, the generator should be grounded. Connect an electric conductor (cable) of at least 1.5mm² between the generator's ground terminal and an external ground source.
- Connections for standby power to a building's electrical system must be made by a qualified electrician and must comply with all applicable laws and electrical codes. Improper connections can allow electrical current from the generator to back feed into the utility lines. Such back feed may electrocute utility power is restored; the generator may explode, burn, or cause fires in the building's electrical system.
- Do not exceed the current limit specified for any one receptacle
- Do not connect the generator to a household circuit. This could cause the damage to the generator or to electrical appliances in the house.
- Do not modify or use the generator for other purpose than it is intended for. Also observe the following when using the generator.
- Do not connect generators in parallel.
- Do not connect an extension to exhaust pipe.
- When an extension cable is required, be sure to use a rubber sheathed flexible cable.
- Limit length of extension cables; 60m for cables of 1.5mm² and 100m for cables of 2.5mm².
- Keep the generator away from other electric cables or wires such as distribution network.
- The DC receptacle can be used while the AC power is in use. If you use both at the same time, be sure not to exceed the total power for AC and DC.
- Most appliance motors require more than their rated wattage for start-up.

5.4 AC applications

1. Start the engine and make sure the output indicator light (green) illuminates.
2. Confirm that the appliance to be used is switched off, and plug in the appliance.



- Substantial overloading that continuously lights the overload indicator light (red) may damage the generator. Marginal overloading that temporarily lights the overload indicator light (red) may shorten the service life of the generator.
- Be sure that all appliances are in good working order before connecting them to the generator, if an appliance begins to operate abnormally, becomes sluggish, or stops suddenly, turn off the generator engine switch immediately. Then disconnect the appliance, and examine it for signs of malfunction.

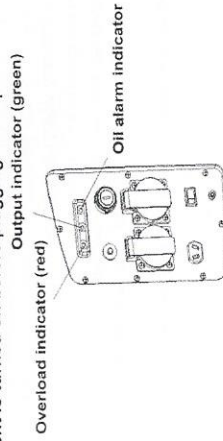
5.5 Output and Overload indicators.

- The output indicator light (green) will remain lighted during normal operating conditions.
- If the generator is overloaded or if there is a short in the connected appliance, the output indicator light (green) will go OFF, the overload indicator light (red) will go ON and current to the connected appliance will be shut off.
- Stop the engine if the overload indicator light (red) switches ON and investigate the overload source.



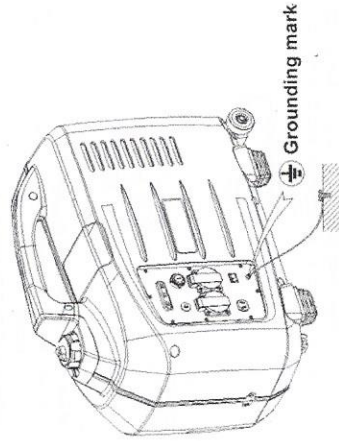
Before connecting an appliance to the generator, check that it is in good order, and that its electrical rating does not exceed that of the generator. Then connect the power cord of the appliance, and start the engine.

Be sure all equipment is turned off before plugging in the power cord.



- When an electric motor is started, both the overload indicator lights (red) and the output indicator light (green) may go on simultaneously. This is normal if the overload indicator light (red) goes off after about four seconds.
- If the overload indicator light (red) stays on, **consult your dealer.**

1. Connect the ground terminal.



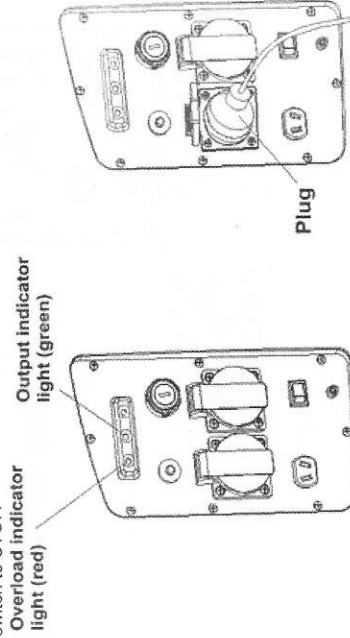
2. Start engine according to "STARTING THE ENGINE"

⚠ When the output indicator light (green) does not light and the overload indicator light (red) lights instead, set the engine switch to STOP, stop the engine at once and then start the engine again.

3. Confirm that the equipment to be used is switched off, and insert the plug of the equipment to be used into the AC receptacle unit A.

⚠ Check that the equipment to be connected is switch off. When the equipment to be used is switched on, it will operate suddenly, and injuries or accidents may be caused.

4. Switch on the equipment output indicator light will glitter (light). In case of overload operation or when trouble occurs for the equipment being used, the output indicator light (green) will go out, the overload indicator light (red) will light continuously, and no power will be put out. At this time, the engine will not stop, so that the engine must be stopped by setting the respective engine switch to STOP.



⚠ When equipment requires a large starting power, the overload indicator lights (red) and the output indicator light (green) may light together for a short time, but this is no abnormality. After start of the equipment, the overload indicator light (red) will go out and the output indicator light (green) will stay lit.

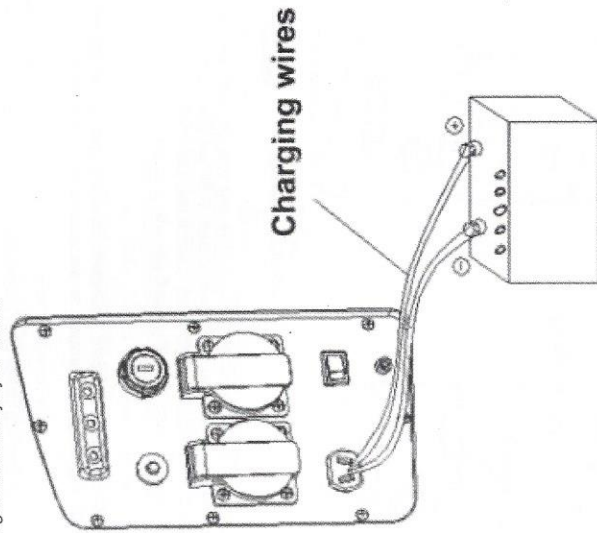
5.6 DC applications

For charging 12V automotive batteries:

	Loading voltage (V)	Loading voltage (V)	Loading current (A)
Opening the smart throttle	22	12	6
Closing the smart throttle	27	13	8.5
DC Max. Output power	37	13.5	8.5

The generator cannot sense a sensibility load with the same power which the manual indicates. It only can sense 40%-70% power which the manual indicates.

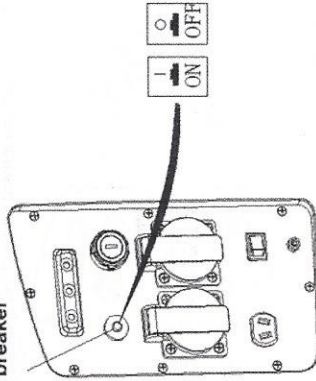
- When using the DC output, turn Smart Throttle to the OFF position. The DC current will be below 5A if turning on the Smart Throttle without AC current output.
- When charging batteries, person must be present to monitor the voltage. Stop charging when the voltage of the batteries is above 16V. Or it may cause battery explosion, resulting in serious injury or death.



5.7 Start the engine

- The DC receptacle may be used while the AC power is in use.
- An overloaded DC circuit will trip the DC circuit protector. If this happens, dislodge the DC load before pushing in the circuit protector to resume operation.

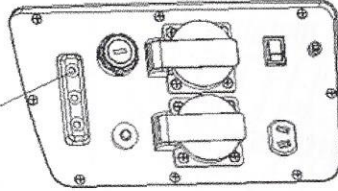
DC circuit breaker



5.8 Oil alert system

- The oil alert system is designed to prevent engine damage caused by an insufficient amount of oil in alert system will automatically shut down the engine (the engine switch will remain in the ON position).
- If the oil alert system shuts down the engine, the oil alert indicator light (red) will come on when you operate the starter, and the engine will not run. If this occurs, add engine oil.

Oil alarm indicator (red)



- To prevent the possibility of creating a spark near the battery, connect charging cable first to the generator, then to the battery. Disconnect cable first at the battery.
- Before connecting charging cables to a battery that is installed in a vehicle, disconnect the vehicle's grounded battery cable. Reconnect the vehicle's grounded battery cable after the charging cables are removed. This procedure will prevent the possibility of short circuit and sparks if you make accidental contact between a battery terminal and the vehicle's frame or body.
- Do not attempt to start an automobile engine while the generator still connected to the battery. The generator may be damaged.
- Connect the positive battery terminal to the positive charging cord. Do not re-verse the charging cables, or serious damage to the generator and/or the battery may occur.
- The battery gives off explosive gases; Keep spark, flames and cigarettes away. Provide adequate ventilation when charging.
- The battery contains sulphuric acid (electrolyte). Contact with skin or eyes may cause severe burns. Wear protective clothing and a face shield.
- If electrolyte gets on your skin, flush with water.
- If electrolyte gets in your eyes, flush with water for at least 15 minutes and call a physician.
- If swallowed, drink large quantities of water or milk and follow with milk or magnesia or vegetable oil and call a physician.
- KEEP OUT OF THE REACH OF CHILDREN, PETS AND UNTRAINED PEOPLE.

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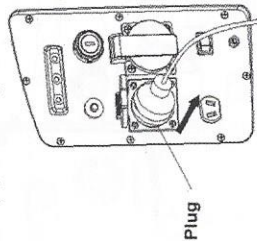
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5.9 Stopping the engine

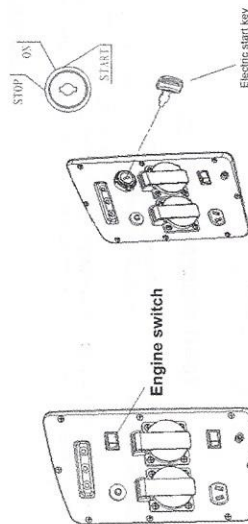
To stop the engine in an emergency, turn the engine switch to the OFF position.

In normal use:

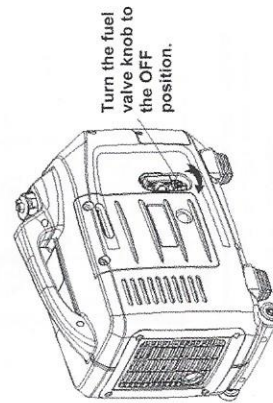
1. Switch off the connected equipment and pull the inserted plug out.



2. Turn the engine switch to the OFF position

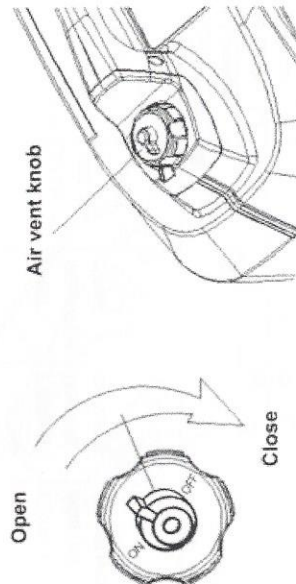


3. Turn the cap lever fully counter clockwise to the "OFF" position.



- ⚠** Be sure both the fuel cap lever and the engine switch are in "OFF" position when stopping, transporting and/or storing the generator.

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6 MAINTENANCE

- The purpose of the maintenance and adjustment schedule is to keep the generator in the best operating condition.
- Inspect or service as scheduled in the table below.



Shut off the engine before performing any maintenance, if the engine must be run, make sure the area is well ventilated, if the engine must be run, make sure the area is well ventilated, The exhaust contains poisonous carbon monoxide gas.



Use authorized Ramsmond parts or their equivalent. The use of replacement parts which are not of equivalent quality may damage the generator and shall void the Warranty.

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REGULAR SERVICE PERIOD(1)	ITEM Perform at every indicated month or operating hour interval, whichever comes first	EACH USE	FIRST MONTH OR 20HRS	EVERY 3 MONTHS OR 50HRS	EVERY 6 MONTHS OR 100 HRS	EVERY YEAR OR 200 HRS
	Engine oil	●	●		●	
	Air cleaner	Check level				
		Change	●		●	
	Spark plug	Check		●		
		Clean		●(2)		
	Spark arrester	Check- adjust			●	
		Clean			●	
	Valve	Check- adjust				●(3)
	Fuel tank and filter	Clean				●(3)
	Fuel line	Check	Every 2 years (Replace if necessary) (3)			

- (1) Log hours of operation to determine proper maintenance.
- (2) Service more frequently when used in dusty areas.
- (3) These items should be serviced by an authorized dealer, unless the owner has the proper tools and is mechanically proficient. See the Shop Manual.

Temperature (°F)	Time for changing oil (hour)	Recommended power factor
25	Normal	100%
30	18	95%
35	15	85%
40	12	71%

Drain the oil while the engine is still warm to assure rapid and complete draining.

 Make sure to turn the engine switch and the fuel cap vent lever OFF before draining.

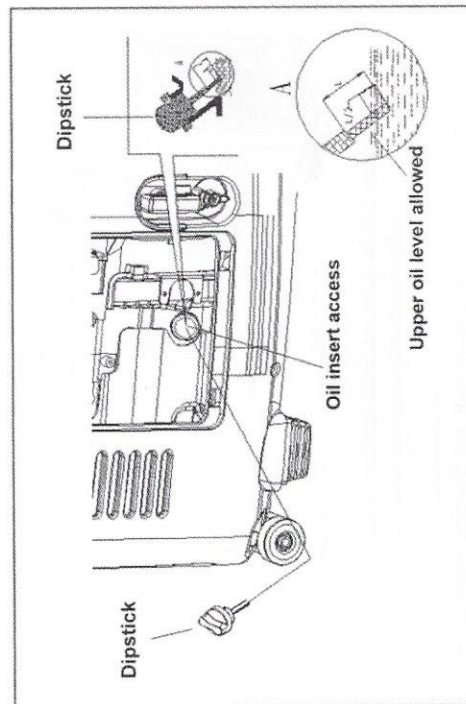
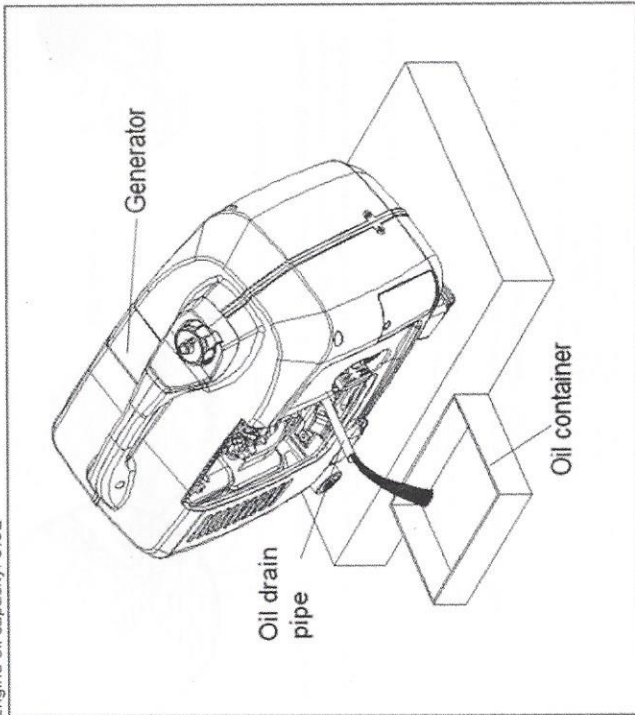
1. Lean the generator.
2. Fasten the oil lead pipe on the oil exhaust as the picture. Then spill out the oil.
3. Refill the new oil and check the oil position in the crankcase.
4. After refill the new oil into the crankcase, shake the generator left to right a few times and make sure the bobber of the oil alarm system is floating.

RAMSOND SINEMATE 3500

OPERATION AND SERVICE MANUAL

RAMSOND SINEMATE 3500

OPERATION AND SERVICE MANUAL





Wash your hands with soap and water after handling used oil.

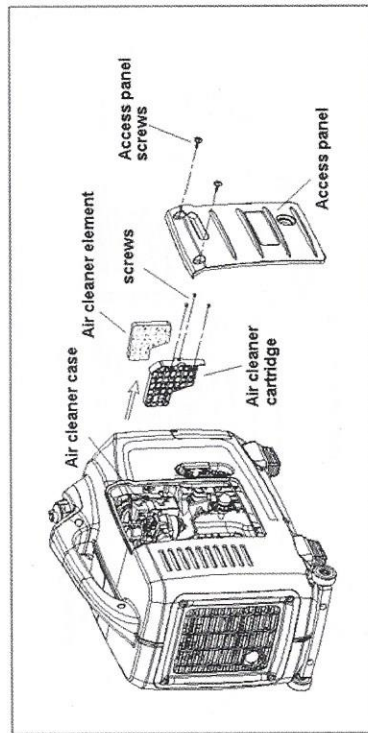
⚠ Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local service station for reclamation. Do not throw it in the trash or pour it on the ground.

6.2 Air cleaner service

A dirty air cleaner will restrict airflow to carburetor. To prevent carburetor malfunction, Service the air cleaner regularly. Service more frequently when operating the generator in extremely dirty areas.

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

1. Loosen the cover screw and remove the access panel.
2. Remove the screw under the air filter case.
3. Pull the air filter cartridge down 30mm and remove the air filter cartridge.
4. Remove the air filter iron clip and check the air filter element. Clean or replace the element if necessary.
5. Reinstall the air filter parts after cleaning or replacing air filter element.

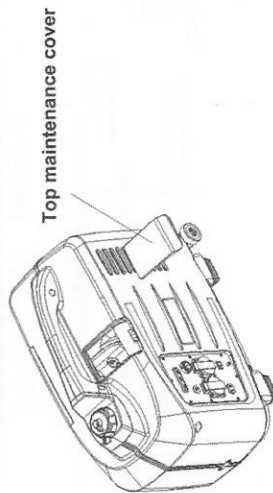


6.3 Spark plug servicing

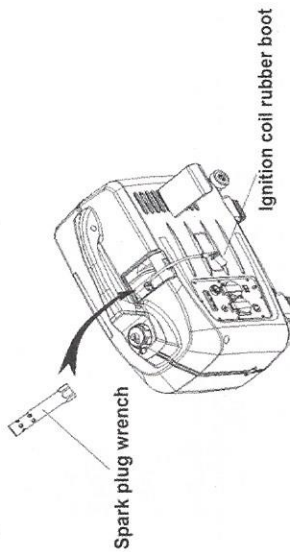
Please use high quality authentic Ramsond spark plugs and to ensure proper engine operation, the spark plug must be properly gapped and free of deposits.

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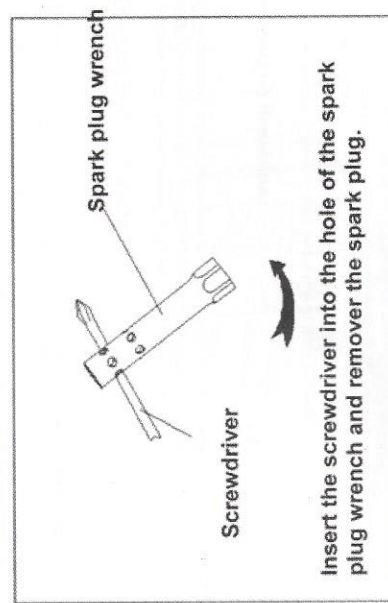
1. Remove the bolts on the top maintenance cover and the cover.



2. Take out the ignition coil rubber boot.

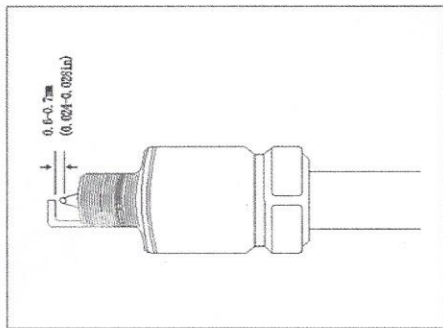


3. Remove the spark plug with spark plug wrench.



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4. Visually inspect the spark plug. Discard it if the insulator is cracked or chipped. Clean spark plug with a wire brush if it is to be reused.



5. Install the spark plug carefully by hand, to avoid cross threading.
6. After a new spark plug has been seated by hand, it should be tightened 1/2 turn with a wrench to compress its washer. If a used plug is being reinstalled, it should only require 1/8 to 1/4 turns after being seated.
7. Reinstall the ignition coil rubber boot on the spark plug securely.
8. Reinstall the controlling panel.

- The spark plug must be securely tightened. An improperly tightened plug can become very hot and possibly damage the generator.
- Never use a spark plug with an improper heat range.
- Never use a spark plug without damping resistance, or it will cause no AC output.



7. TRANSPORTING AND STORAGE

To prevent fuel spillage when transporting or during temporary storage, the generator should be secured upright in its normal operating position, with the engine switch OFF. The fuel cap vent lever is turned counter clockwise to the OFF position. Allow the engine to cool well before turning the fuel cap vent lever to the OFF position.

7.1 When transporting generator:

- Do not overfill the tank. (There should be no fuel in the filler neck).
- Do not operate generators while it is on a vehicle. Take the generator off the vehicle and use it in a well-ventilated place.
- Avoid a place exposed to direct sunlight when putting the generator on a vehicle. If the generator is left in an enclosed vehicle for many hours, high temperature inside the vehicle could cause fuel to vaporize resulting in a possible explosion.
- Do not drive on a rough road for an extended period with the generator on board. If you must transport the generator on board and must transport the generator on a rough road, drain the fuel from the generator beforehand.

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7.2 Before storing the unit for an extended period:

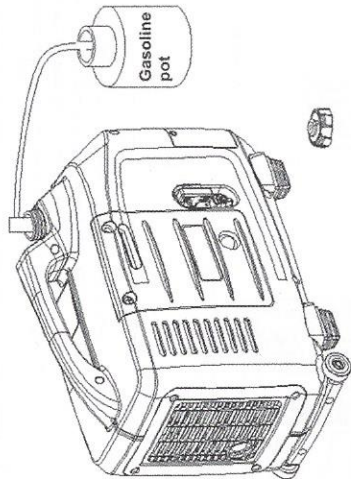
1. Be sure the storage area is free of excessive humidity and dust.
2. Drain the fuel.



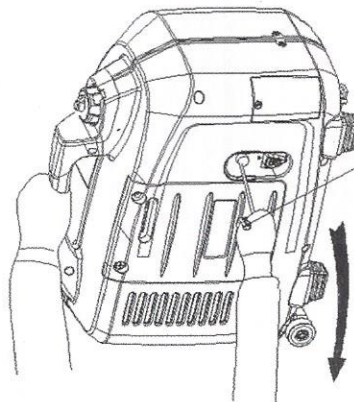
Gasoline is extremely flammable and explosive under certain conditions.

Do not smoke or allow flames or sparks in the area.

3. Completely drain the fuel from the tank. Open the fuel valve, start the engine and operate it in the idle position until all remaining fuel is gone and the engine stops automatically.



4. Discharge oil.
5. Remove spark plug and fill cylinder with 2cc's fresh oil. Pull start motor 3-4 times to discharge the remaining oil. Then reinstall the spark plug.
6. Pull the starting cord slowly until resistance is strong. At this time, the piston is moving to the top of the compression stroke and the valves will be closed.



Starting grip

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Fire net of muffler service

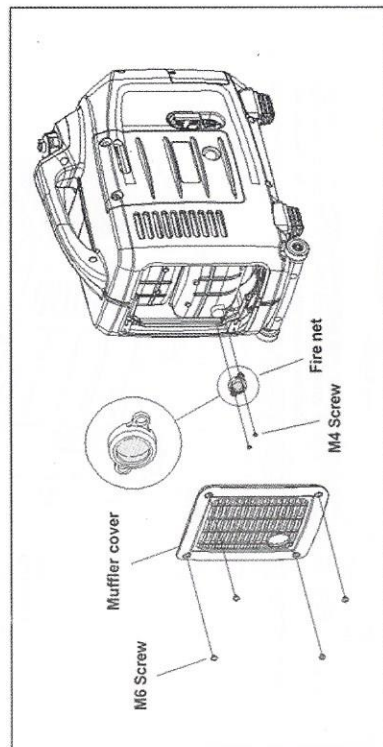
- A dirty muffler fire net will cause a great deal of noise and affect the engine's operation and performance.
- Clean and maintain the fire net timely, make sure the generator works normally.
- The fire net of muffler needs cleaning frequently if you use the generator in very dirty conditions, or replace the fire net if necessary.



Careful

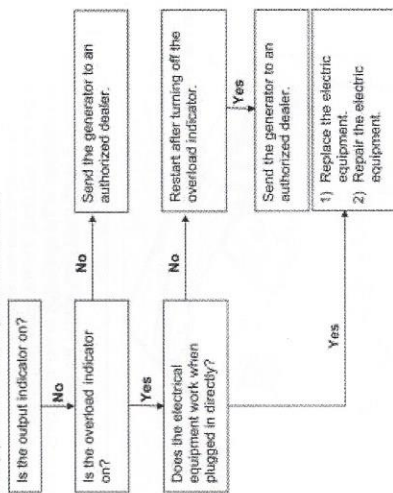
- Before cleaning the fire net of muffler make sure the generator is stopped.
- Before check and maintenance the fire net of muffler, make sure the machine is cool, otherwise, it will cause scald by the hot muffler.

1. Remove the M6 screws and open the muffler cover.
2. Remove two M4 screws on the fire net.
3. Take down the fire net as per the following figure.
4. Check the fire net, clean or replace it if necessary.

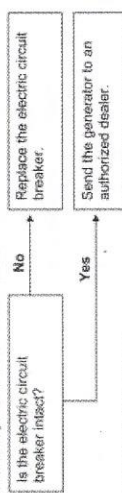


8. TROUBLESHOOTING

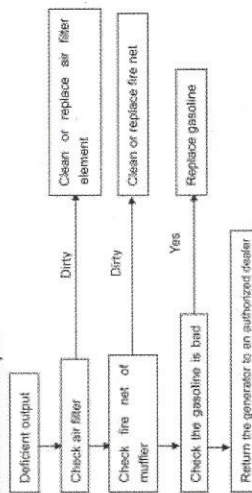
• The equipment that connects generator doesn't start:



• There is no power in the DC electric outlet:



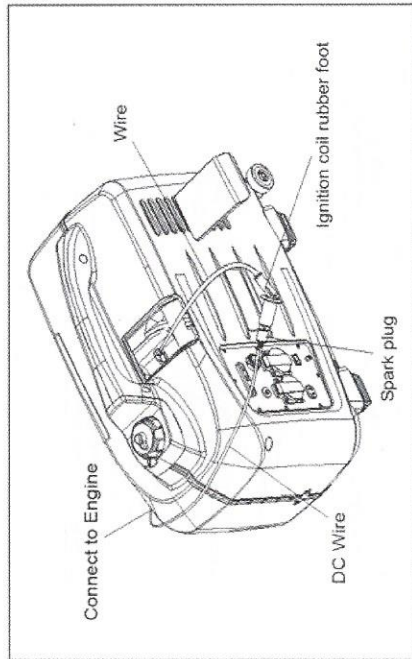
• Deficient AC output



- Shake the generator several times to make the float rise if the generator cannot start after adding oil for the first time and the oil alarm indicator stays on when pulling the starting grip.
- Make sure there is no spilled fuel around the spark plug. Spilled fuel may ignite.
- If the engine still doesn't start, have the generator repaired by a licensed repair person.

INSPECTION:

1. Remove the spark plug rubber boot and clean any dirt from around the spark plug.
2. Remove the spark plug and place it in the spark plug rubber boot.
3. Connect the side electrode of the spark plug to the metal parts of the engine.
4. Pull the starting cord. A spark could jump across the gap.



Specification

9.1 Size and weight

Item	SINEMATE 3500
L x W x H (mm)	580×310×500
Net weight (kg)	27

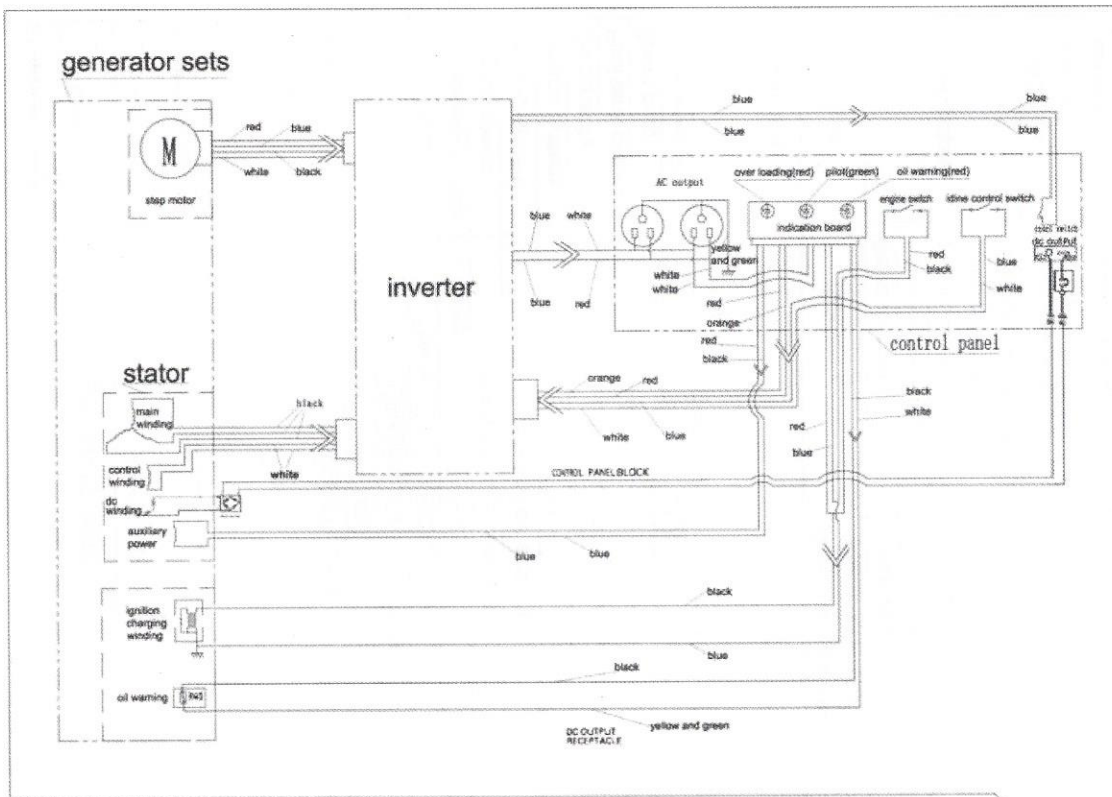
9.2 Engine

Item	SINEMATE 3500
Model	157F
Type	4-stroke, OHV, 1-cylinder
Displacement	150CC
Compression ratio	9.2
Engine speed	5000rpm (ECO switch is off)
Cooling system	Forced air cooling
Ignition system	T.D.I
Oil capacity	0.9L
Fuel tank capacity	7L
Spark plug	A7 RTC
Noise level (4m)	59db

9.3 Generator

Type	Item	Generator Model No.
AC output	Rated voltage (V)	SINEMATE 3500
	Rated frequency (HZ)	110/120/230/240
	Rated current (A)	50/60
	Rated output (KVA)	24/22/11.3/10.8
	Maximum output (KVA)	2.6
DC output (For 12V automotive batteries only)	Rated voltage (V)	2.8
	Rated current (A)	12
	Rated current (A)	8.3

WIRING DIAGRAM



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RAMSOND SINEMATE 3500

OPERATION AND SERVICE MANUAL

PARTS LIST

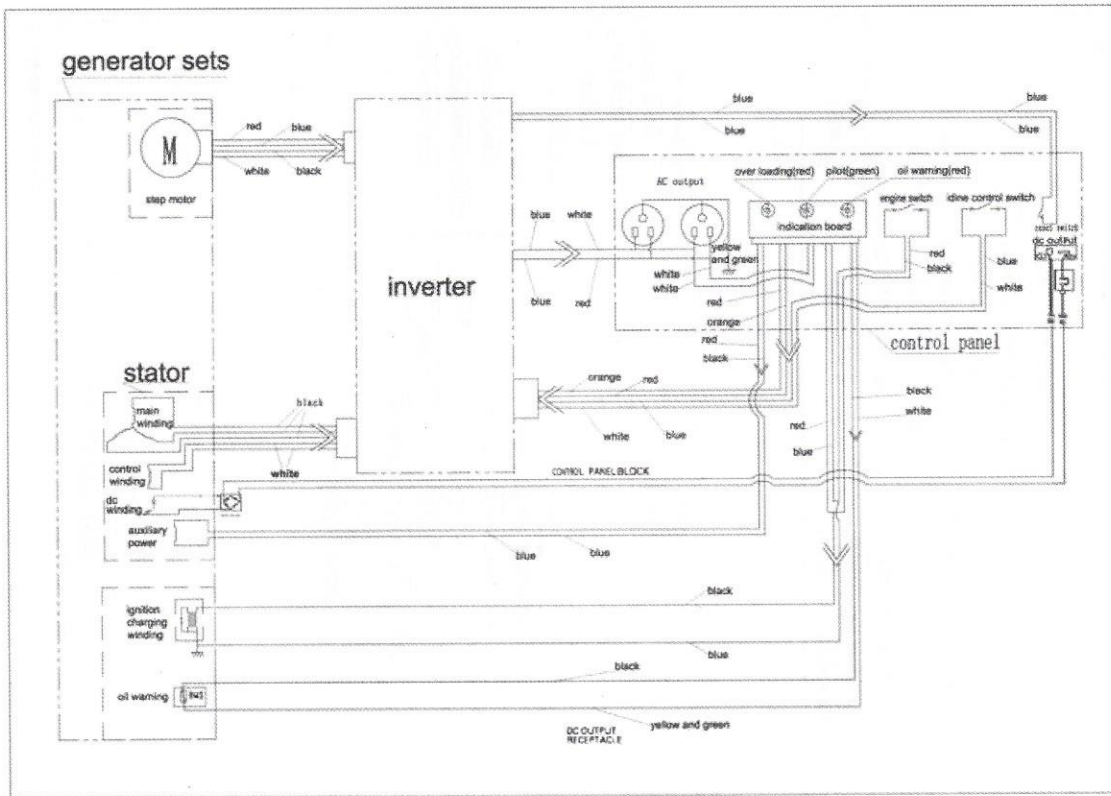
No.	Name	No.	Name
1	Gasoline engine	40	Carburetor
2	Stator assembly	41	Air cleaner case
3	Flywheel assembly	42	Air cleaner oil keeper plate
4	Motor wind cover	43	M6 x 70 flange bolt
5	M5 x 20 flange bolt	44	Air cleaner sponge
6	Fan	45	Air cleaner cover
7	Starter cup	46	Fuel switch
8	M5 x 12 flange bolt	47	Carburetor gasket, plastic
9	Recoil starter assembly	48	Carburetor connecting flange
10	M5 x 12 flange bolt	49	M6 x 30 flange bolt
11	Fuel cap	50	carburetor gasket, asbestos
12	Fuel tank sleeve	51	Carburetor bent joint
13	Fuel tank	52	M6 x 15 flange bolt
14	Fuel connecting tube	53	Left shroud
15	Battery	54	M5 x 25 round head screw
16	Battery bracket	55	Access panel
17	Inverter assembly	56	M6 x 12 large head screw
18	Hand pump connecting tube	57	Primer bulb
19	Spring clasp	58	Breathing tube
20	Vacuum pump connector tube	59	Fuel valve knob
21	Vacuum pump	60	Fuel valve control panel
22	Carburetor connecting flange	61	Control panel
23	Sheet iron clasp	62	M4 x 10 self-taping screw
24	Hand gripe	63	Access panel
25	Foot outer shroud	64	Right shroud
26	Wheel	65	Air cleaner breathing tube
27	Wheel frame	66	Wind shield
28	Chassis	67	Muffler bracket
29	Shock absorption foot	68	Interplayer
30	M6 x 20 flange bolt	69	Right shroud
31	Ignition Coil	70	Exhaust bent tube
32	M6 x 15 flange bolt	71	Muffler gasket
33	Ignition Coil bracket	72	Muffler
34	Low oil sensor	73	Fan's cover
35	Step motor	74	Exhaust fan
36	Fuel valve bushing	75	Fan Cover
37	Step motor chassis	76	Left shroud
38	Air cleaner bent joint	77	Rear cover junction plate
39	Air cleaner cartridge	78	M5 x 20 round head screw

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RAMSOND SINEMATE 3500

OPERATION AND SERVICE MANUAL

WIRING DIAGRAM



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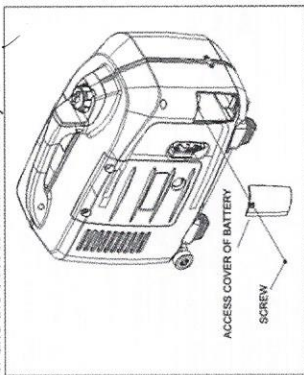
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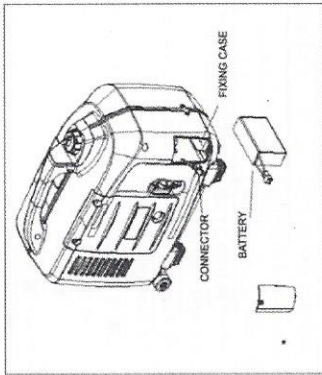
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13. BATTERY (FOR MODELS EQUIPPED WITH ELECTRIC STARTER) FIX THE BATTERY AND MAINTENANCE (ONLY FOR THE MODEL WITH ELECTRIC STARTER)

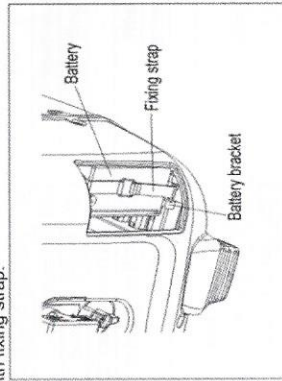
1. Remove the screw and the access cover of battery



2. Making the battery into the fixing case, and insert the connectors with the battery.



3. Fix the battery with fixing strap.



1. Fix the access cover of the battery well.
2. Replacing or maintenance battery can follow these steps as above.

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14. WARRANTY

LIMITED WARRANTY

Applicable Products: RAMSOND SINEMATE SERIES GENERATORS

Ramsond Corporation warrant the above referenced product to be free from defect or workmanship for a period of 1 year from the date of purchase, subject to the limitations contained herein. In the event of product failure or malfunction, return the product in person or by courier to:

Ramsond Corporation
WPC Service Department
4051 Haggerty Road
West Bloomfield, Michigan 48323
Tel: (248) 363-8302
Fax: (248) 363-7834

You must include the following to receive warranty service:

1. Proof of purchase.
2. Detailed description of the fault or problem
3. Visible Serial Number of the unit
4. \$35 Handling fee (check, money order)
5. Return Shipping Label (prepaid) for returning to you the repaired/replaced product.

The faulty/defective product will then be repaired or replaced (at our option). The repaired/replaced component/product shall then be returned to the purchaser. The purchaser shall be responsible for all shipping and handling costs of sending the defective/faulty item to us, as well as all shipping and handling costs of returning the repaired/replaced to the customer. Any import/export costs associated with shipping of repaired product outside the United States, such as brokerage fees, taxes, customs or duties are the responsibility of the customer. Certain items which are subject to normal wear and tear are specifically excluded from this warranty (e.g. consumables, tips, etc). Please allow up to 30 days from date that we receive the unit for repair/replacement. In the event that we are not able to repair the product, we will replace the product with same or similar unit. In the event that the model is not available, we will replace the machine with an existing model with same or better characteristics, functionality and quality. We reserve the right to replace a defective unit with an identical refurbished unit that has been subjected to testing, which will similarly be warranted against defect or workmanship. Faulty installation, operation or maintenance of the product or attempted repair and maintenance by persons not expressly certified by Ramsond shall render the limited warranty void. Damage resulting from failure to use the product in a manner consistent with our recommendations shall render the limited warranty void. This limited warranty specifically excludes any consequential and/or incidental damages. Although we may provide technical assistance via telephone or email to the customer, it is virtually impossible to troubleshoot all matters via telephone or remote assistance. As such, the offering by us of any technical assistance is made without any warranty or guarantee and provided on "as is" basis. It is the responsibility of each purchaser to determine whether any particular product is compliant with and permissible for use pursuant to the applicable rules, codes and/or regulations, if any, and suitable for particular use and operation. We make no representations or warranties whatsoever concerning the suitability of any merchandise for a particular use or purpose and any such warranty is expressly excluded from the terms of this limited warranty. We reserve the right to make slight modifications necessary to the merchandise for product improvement. This limited warranty shall be subject to the laws of the State of Michigan and any claiming arising therefrom shall be interpreted in accordance to the laws of the State of Michigan and subject to the exclusive jurisdiction of the Courts of State of Michigan.

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