

INDUSTRIAL & DOMESTIC SMALL GENERATOR USER'S GUIDE



Translated from the Korean User's Manual – February 2014

February 2014

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1. ACKNOWLEDGEMENT

The generators were manufactured based on South Korean rigorous standards to meet international quality and design. Strict quality tests have also been made on temperature, shock, vibration & noise.

This user manual should always be kept next to the generator.

2. IMPORTANT INFO

The generator rated output is 220V AC or 28V DC voltage and has to be used as designed. Therefore, depending on the output selected, connect the plug to the generator in the correct terminal.

Further, the generator is fueled by petrol. Industrial bioethanol (E5 ~ E100) can also be used (purity: 99%) when available.

3. INSTALLATION SITE

- The generator must be used in a well-ventilated and dry place.
- When used outdoors, the generator should not be placed under direct sunlight. It can only be used when effectively protected from it.
- It should be placed far from flammable materials or fire, stove or heater.
- The floor should be flat.
- It should be placed at least 50 cm or more from the wall.

NOTE

- The generator's engine is air-cooled through a cooling system. Therefore, the cooling fan should always be checked as, in case of failure, the engine can get damaged.
- The engine oil's level should be checked at all times. It is recommended to replace it every 250 hours.
- You should avoid making work the generator for a long time; avoid direct sunlight; Use it at ambient temperatures (below 30 °C) and in well-ventilated areas.

4. GENERATOR'S GENERAL CHARACTERISTICS

- Lightweight, portable generator, convenient and efficient
- 4 stroke air-cooled petrol engine, long life with easy maintenance

5. GENERATOR'S ELECTRICAL CHARACTERISTICS

- Rated output : 1,000 W [Maximum output : 1,200 W]
- Rated voltage : AC 220 V \pm 10%
- Operating Temperature : -32 °C ~ +50 °C
- Noise : 65 dB (7m distance)
- Engine : 4-stroke, air-cooled petrol engine
- Cooling : Air-cooled by 220 V fan
- Phase : Single
- Fuel Tank Capacity : 3.2 Liter
- Direct Current : 28 V (battery charging)

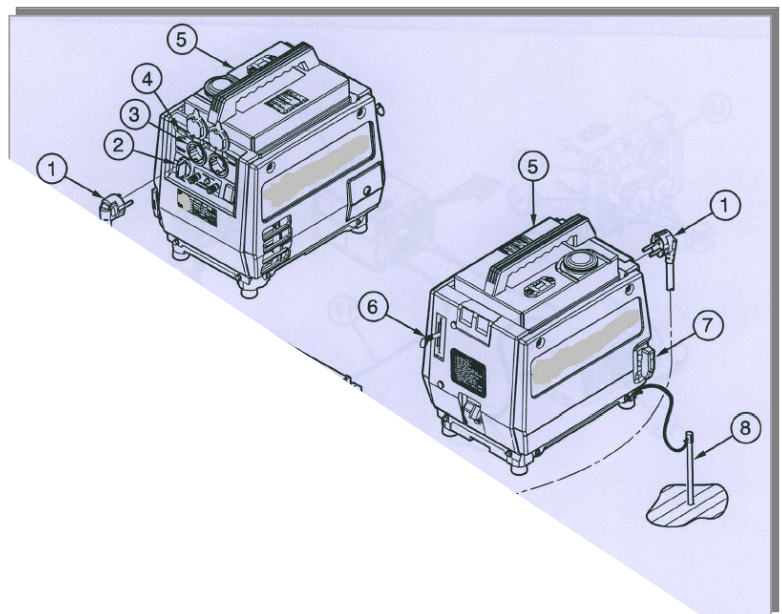
- Hours of Continuous Operation : 4 Hours
- Engine TM-120
 - 1) Number of cylinders : 1
 - 2) Cylinder diameter : 53 mm
 - 3) Cylinder stroke : 42 mm
 - 4) Exhaust amount : 92 cc
 - 5) Lubricated Oil Capacity : 0.35 Liter
 - 6) Lubrication System : Forced Lubrication System
 - 7) Fuel : Bio-Ethanol or petrol (unleaded)
 - 8) Fuel Consumption : 0.7 Liter

6. DIMENSIONS & WEIGHT

- Dimensions (mm) : L 368, W 264, H 385
- Weight (kg) : 22.0

7. NOMENCLATURE

- ① Input power cable (Optional)
- ② Start Switch
- ③ Output Terminal
- ④ Power Lamp
- ⑤ Generator GU-1000K
- ⑥ Choke Lever
- ⑦ Starting Rope
- ⑧ Ground Rod

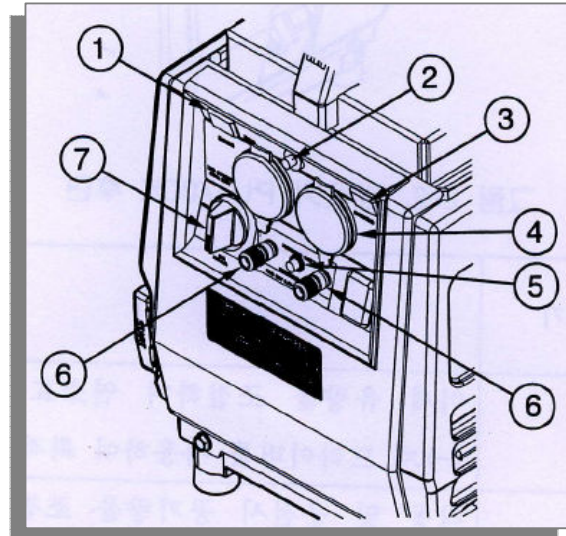


8. DESCRIPTION & USE OF PARTS

FRONT

Figure 8-1 Front of Generator

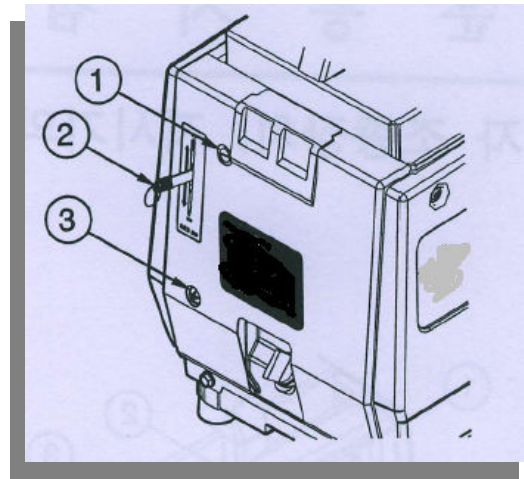
LABELS ARE WRITTEN IN KOREAN ON THE GENERATOR;
TRANSLATION IS IN RED HERE BELOW



No	Regulators & indicators	FUNCTION
1	전원 램프 Power Lamp	Green light is on in operation mode
2	교류과전류차단기 AC Surge Protector	Protects against power surge, circuit overload. To restore, press on the button.
3	엔진오일경고등 Engine oil warning light	Lights up to indicate low or empty level. It is recommended to check level before using the generator and change oil every 250 hours.
4	교류출력단자 AC Output Terminal	Connect the cable.
5	직류과전류차단기 DC Surge Protector	Protects against power surge, circuit overload. To restore, press on the button.
6	직류출력단자 DC Output Terminal	Connect the generator to charge the battery
7	기동스위치 Start Switch	Up position = ON, fuel is supplied to engine Down position = STOP, fuel is blocked

BACK

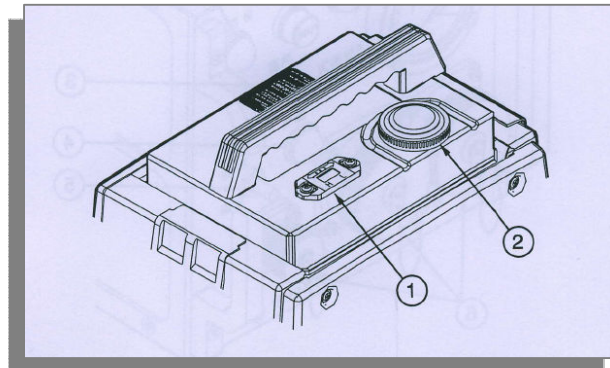
Figure 8-2 Generator Back



No	Regulators & Indicators	FUNCTION
1	유량조절밸브 Flow Control Valve	Fine adjustment of the flow rate for the control of combustion efficiency. Use a screwdriver to place it in the best conditions.
2	초크 레버 Choke Lever	To operate and regulate the amount of air temperature during operation. "START" position, pull lever up.
3	속도조절기 Speed Control	Adjusting the voltage of the rotational speed of the engine. To adjust the frequency use the screwdriver (+) to turn right to increase & left to decrease.

TOP SIDE

Figure 8-3 Top Side of Generator



No	Regulators & Indicators	FUNCTION
1	유량계 Fuel Level	Fuel Level Indicator L to H
2	연료주입구 Fuel Injection	Open the lid for injecting fuel

LEFT & RIGHT SIDES

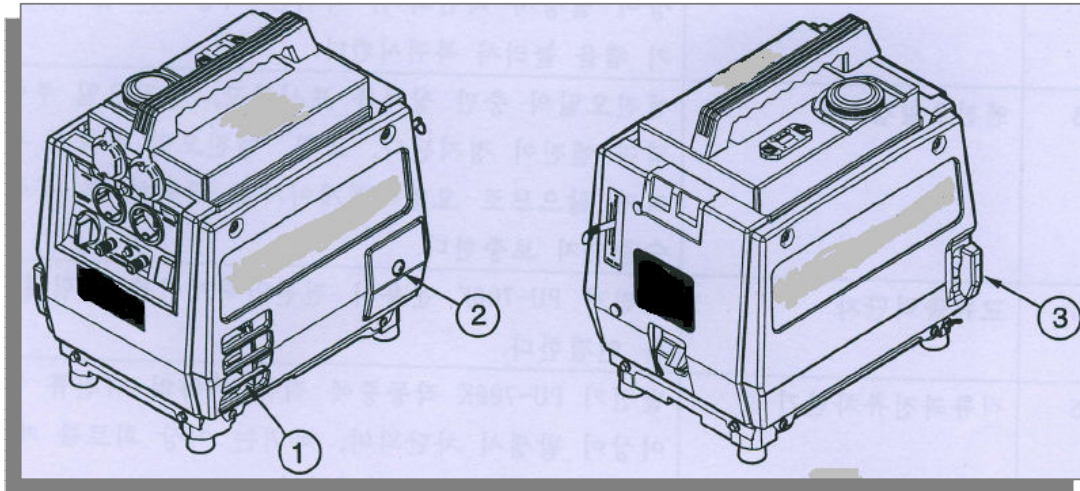


Figure 8-4 - Right & Left Side of the Generator

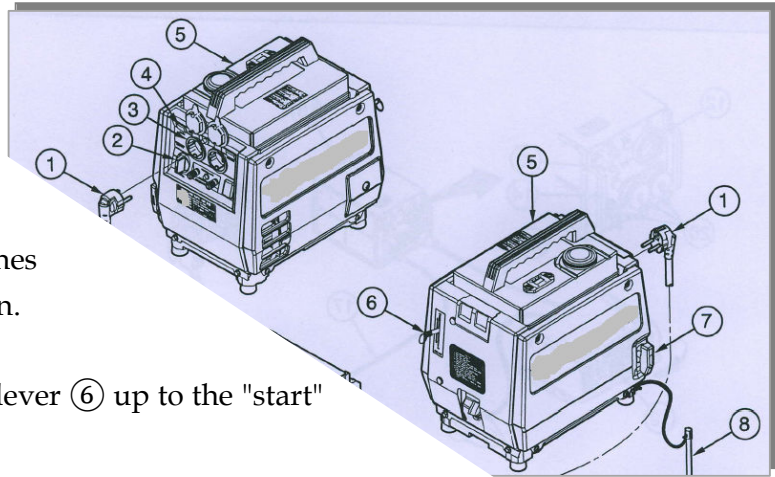
No	Regulators & Indicators	FUNCTION
1	소음기 Silencer	Exhaust gas is discharged to decrease the noise generation
2	에어 필터 Air Filter	To purify the air entering the engine
3	시동기 Starter	Engine starter

09. TROUBLESHOOTER

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTIONS
Generator does not start	1. Fuel Malfunction 2. Bad starter 3. Spark Plug	① Check that the start switch is in ON position ② Check that the choke lever is in ON position ③ Check that there is enough fuel ① Check the engine oil and refill if low level ① To check if good condition
Starts and then stops does not continue to work	1. Tank filter is bad 2. Air filter failure 3. Bad spark plug	① Check the filter and if bad change it ① Open the cover, check the air filter and replace with new one if dirty ① Replace if does not work
Engine stopped suddenly	1. Lack of fuel 2. Lack of engine oil	① Check the level and replenish with fuel. ① Check the gauge, if level low, fill up to level and restart engine
Engine output decreases	1. Air filter failure 2. Defective silencer	① Open the cover, check the air filter and replace with new one if dirty ① Check the silencer, check for debris or dirt and replace if necessary

10. OPERATION SEQUENCE OF THE GENERATOR

STARTING SEQUENCE



- (1) When all operation switches are at "stop", "off" position.
- (2) Pull the generator choke lever ⑥ up to the "start" position.
- (3) Turn the start switch ② up, from "STOP" position to the "on" position.
- (4) Pull the starting rope ⑦ to start. If this does not help to start-up the generator, try again 2-3 times at 5-10 seconds interval after checking again that the choke lever ⑥ is in ON position.
- (5) When the choke lever ⑥ start to "driving" position three minutes left and no load operation, fuel, oil leaks, excessive vibration and grinding noise, etc. and check it.

STOP OPERATION

- (1) Do not restart the generator for 3 minutes after the start switch ② was put in the "off" position.
- (2) Do not use the generator until it has cooled completely. Place it in a well-ventilated place.