Operating Instructions

Generator

PG-E 30 SRA, PG-E 40 SRA

PG-E 60 SEA, PG-E 90 SEA

PG-E 80 TEA, PG-E 100 TEA

PG-E 80 TEA

PG-E-SERIES

Imprint

Product identification

Generator	Item number
PG-E 30 SRA	6706030
PG-E 40 SRA	6706040
PG-E 60 SEA	6706060
PG-E 80 TEA	6706080
PG-E 90 SEA	6706090
PG-E 100 TEA	6706100

Manufacturer

Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Str. 26
D-96103 Hallstadt

Fax: 0049 (0) 951 96555 - 55

E-Mail: info@unicraft.de
Internet: www.unicraft.de

Indications regarding the operating instructions

Original instructions
according to DIN EN ISO 20607:2019

Edition: 30.08.2021
Version: 2.08
Language: English
Author: MS/RL

Indications regarding the copyright

Content

1 Introduction

You have made a good choice by purchasing the UNI-CRAFT generator

Read the operating manual thoroughly before commissioning the machine.

It gives you information about the proper commissioning, intended use and safe and efficient operation and maintenance of your generator

The operating manual is part of the generator package. Always keep this operating manual in the location where your generator is being operated. All local accident prevention regulations and general safety instructions for the operating range of your generator must also be complied with.

1.1 Copyright

The contents of these instructions are copyright. They may be used in conjunction with the operation of the generator. Any application beyond those described is not permitted without the written approval of Stürmer Maschinen GmbH. For the protection of our products, we shall register trademark, patent and design rights, as this is possible in individual cases. We strongly oppose any infringement of our intellectual property

1.2 Customer service

Please contact your dealer if you have questions concerning your generator or if you need technical advice. They will help you with specialist information and expert advice.

Germany:
Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Str. 26
D-96103 Hallstadt

Repair service:
Fax: 0049 (0) 951 96555-111
E-Mail: service@stuermer-maschinen.de
Internet: www.unicraft.de

Spare part orders:
Fax: 0049 (0) 951 96555-119
E-Mail: ersatzteile@stuermer-maschinen.de

We are always interested in valuable experience and knowledge gained from using the application which then could be shared and be valuable to develop our products even further.

1.3 Limitation of liability

All information and notes in these operating instructions were summarised while taking applicable standards and rules, the state-of-the-art technology and our long-term knowledge and experiences into consideration.

In the following cases the manufacturer is not liable for damages:

- Non-observance of the operating instructions,
- Inappropriate use
- Use of untrained staff,
- unauthorised modifications
- technical changes,
- Use of not allowed spare parts.

The actual scope of delivery may deviate from the explanations and presentations described here in case of special models, when using additional ordering options or due to latest technical modifications.

The obligations agreed in the delivery contract, the general terms and conditions as well as the delivery conditions of the manufacturer and the legal regulations at the time of the conclusion of the contract are applicable.

2 Safety

This section provides an overview of all important safety packages for the protection of the operating personnel as well as for safe and fault-free operation. Other task based safety notes are included in the paragraphs of the individual phases of life.

2.1 Symbol explanation

Safety instructions

The safety notes in these operating instructions are highlighted by symbols. The safety notes are introduced by signal words which express the concern of the risk.

DANGER!

This combination of symbol and signal words indicates an imminently dangerous situation which may lead to death or severe injuries if they are not avoided.

WARNING!

This combination of symbols and signal words indicates a possibly dangerous situation which may lead to death or severe injuries if they are not avoided.

CAUTION!

This combination of symbol and signal words indicates a possibly dangerous situation which may lead to minor or light injuries if they are not avoided

ATTENTION!

This combination of symbol and signal words indicates a possibly dangerous situation which may lead to property and environmental damages if they are not avoided.

NOTE!

This combination of symbol and signal words indicates a possibly dangerous situation which may lead to property and environmental damages if they are not avoided.

Tips and recommendation

Tips and recommendation

This symbol highlights useful tips and recommendation as well as information for all efficient and trouble-free operation.

It is necessary to observe the safety notes written in these operating instructions in order to reduce the risk of personal injuries and damages to property.

2.2 Obligations of the operating company

Of the operator

The operating company is the person who operates the generator for business or commercial reasons by herself, or leaves it to a third party for use or application, and who bears the legal product responsibility for the protection of the user, the staff or for third parties.

Obligations of the operating company

If the generator is used for commercial purposes, the operating company of the generator must comply with the legal working safety regulations. Therefore, the safety notes in this operating manual, as well as the safety, accident prevention and environment protection regulations applying for the area of application of the generator must be met. The following applies in particular:

- The operator must inform himself about the applicable occupational health and safety regulations and determine additional hazards in a hazard assessment which are caused by the special working conditions at the place of use of the machine. These must be implemented in the form of operating instructions for the operation of the machine.
- During the entire period of use of the machine, the operator must check whether the operating instructions issued by him correspond to the current state of the rules and regulations and, if necessary, adapt them.
- The operator must clearly regulate and define the responsibilities for installation, operation, troubleshooting, maintenance and cleaning.
- The operator must ensure that all persons handling the machine have read and understood these instructions. In addition, he must train the personnel at regular intervals and inform them about the dangers.
- The operator must provide the personnel with the necessary protective equipment and instruct them to wear the required protective equipment in a binding manner.

Furthermore, the operator is responsible for ensuring that the machine is always in perfect technical condition. The following therefore applies:

- The operator must ensure that the maintenance intervals described in these instructions are observed.
- The operator must have all safety devices regularly checked for operability and completeness.

2.3 Requirements to staff

The different tasks described in this manual represent different requirements to the qualification of the persons entrusted with these tasks.

WARNING!

Danger in case of insufficient qualification of the staff!

Insufficiently qualified persons cannot estimate the risks while using the generator and expose themselves and others to the danger of severe or lethal injuries.

- Have all works only performed by qualified persons.
- Keep insufficiently qualified persons out of the working area.

Only persons reliable working procedures can be expected from, are allowed to perform all works. Persons the responsiveness of which is affected by e. g. drugs, alcohol or medication, are not allowed to work with the machine.

The qualifications of the personnel for the different tasks are mentioned below:

Operator:

The operator is instructed by the operating company about the assigned tasks and possible risks in case of improper behaviour. Any tasks which need to be performed beyond the operation if it is indicated in these instructions and if the operating company expressively commissioned the operator.

Qualified personnel

Due to their professional training, knowledge and experience as well as their knowledge of relevant regulations the specialist staff is able to perform the assigned tasks and to recognise and avoid any possible dangers themselves.

Manufacturer

Certain works may only be performed by specialist personnel of the manufacturer. Other personnel is not authorized to perform these works. Please contact our customer service for the execution of all arising work.

2.4 Personal protective equipment

The personal protective equipment serves to protect persons against impairments of safety and health while working. The staff member has to wear personal protective equipment while performing different tasks on and with the machine which are indicated in the individual paragraphs of these instructions.

The personal protective equipment is explained in the following paragraph:

Protective goggles

The protective goggles serve to protect the eyes against parts flying off.

Protective gloves

The protective gloves serve to protect the hands against sharp components as well as against friction, abrasions or deep injuries.

Safety boots

Safety boots protect the feet from being crushed, falling parts and slipping over on slippery ground

Protective clothes

Protective clothes are made of a tightly fitted fabric without the protruding parts of low tear strength.

2.5 General safety regulations

- Operate the generator ONLY outdoors, sufficiently distant from windows, doors and fume cupboards.
- Never operate the generator in enclosed spaces that do not have adequate ventilation. The motor produces carbon monoxide and other harmful gases that are harmful to the health of persons in contact with it. For this reason, adequate ventilation should be ensured. The combustion exhaust gases are led out of the motor room or the work area of the personnel via pipes and extraction systems. Install a carbon monoxide alarm device!
- Operate the generator only on horizontal surfaces to ensure optimum flow of oil and fuel to the motor. If operation on horizontal surfaces is not possible, the user must install suitable mounting and levelling devices to ensure safe stand the generator.
- If the generator is to be used in rain or snow, provide adequate protection and stability.
- Keep children away from the running generator at all times and in any case; ensure that the motor remains hot for about one hour when switched off. The exhaust pipes, exhaust pipes and motor are the areas where the elevated temperatures last the longest. Touching them can cause severe burns.
- Do not carry out any checks or maintenance work on the generator in operation; switch off the motor in any case.
- Filling with fuel and refilling with oil must be carried out with the motor switched off. It is important that the motor maintains its high temperature for about 1 hour after it has been switched off.
- The functions and circuits of the generator should be known: Unexperienced persons should not be allowed to use the generator.
- Do not misuse the machine for other purposes, such as: heating a room with the heat emitted by the motor, etc.
- If the machine is not in use, do not allow unauthorised persons to use it; therefore, equip the emergency generator with blocking systems (remove the ignition key, lock the protective cover with appropriate locks, etc.).
- The machine does not need to be equipped with its own headlights. In any case, the workplace should be equipped with lighting complying with the applicable standards.
- Do not remove any guards and do not leave the machine running without suitable protection (sides and housing) so as not to expose the user to danger.
- If these guards have to be removed (for maintenance or inspection), it is essential to switch off the generator beforehand. This work may only be carried out by qualified personnel.

- Do not run the machine in rooms with a potentially explosive atmosphere.
- In an emergency, do not use water to extinguish fires, only special safety systems (powder fire extinguishers, etc.).
- If it is necessary to work next to the machine, it is necessary to use hearing protection (headphones, ear protectors, etc.).

ATTENTION!

Avoid direct body contact with fuel, motor oil and battery acid. In case of skin contact, wash with water and soap and rinse thoroughly: do not use organic solvents. In case of eye contact, wash with water and soap and rinse thoroughly. If these liquids are inhaled or swallowed, consult a doctor.

2.6 Safety labels on the generator

The following safety labels and instructions are attached to the generator (Fig. 1) and must be observed.

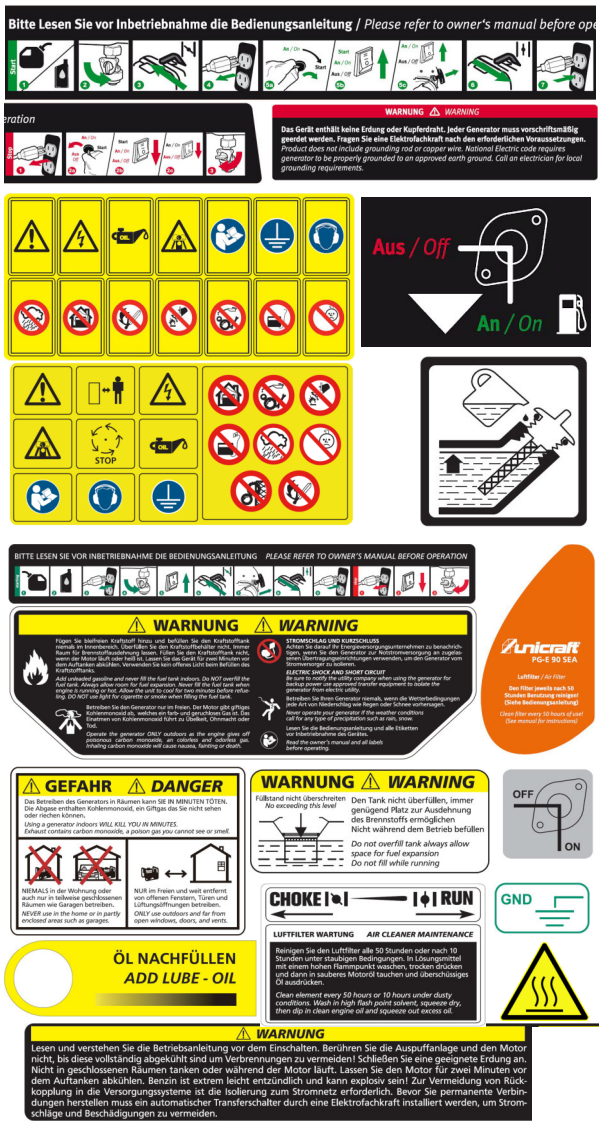


Fig. 1: Safety labels

Fig. 1: Safety labels

If safety labels on the machine are damaged or missing, this can cause errors, personal injury and material damage. The safety symbols attached to the machine must not be removed. Damaged safety symbols must be replaced immediately.

As soon as the signs are not clearly visible and comprehensible at first glance, the machine must be stopped until new signs have been attached.

2.7 Safety data sheets

You can obtain safety data sheets for dangerous goods from your specialist dealer or by calling +49 (0) 951 / 96555-0.

Specialist dealers can find safety data sheets in the download area of the partner portal.

3 Intended Use

The generator is used exclusively to generate electricity. The generator can be used universally for 230V and 400V (only model PG-E 80 TEA).

The generator may only be operated by persons who have been instructed on the machine.

Intended use also includes compliance with all information in these instructions. Any use exceeding the intended use or any other use is considered misuse.

Stürmer Maschinen GmbH accepts no liability for design and technical modifications to the generator. Claims of any kind for damage due to improper use are excluded.

4 Technical Data

4.1 Table

Model	PG-E 30 SRA	PG-E 40 SRA
Voltage	230 V	230 V
Emergency output LTP	2,8 kW	3,8 kW
Continuous output COP	2,5 kW	3,3 kW
Fuel	Petrol	Petrol
Starter	Manual start	Manual start
Running time at 50% load	12,5 hours	14 hours
Running time at 100% load	9,5 hours	9,5 hours
Tank capacity	15 Liter	15 Liter
Sound pressure level	75 dB(A)	75 dB(A)
Weighted sound power level (L_{WA})	95 dB(A)	95 dB(A)
Socket type	2x 230V shockproof	2x 230V shockproof
Generator IP degree of protection	IP 23	IP 23
Socket IP degree of protection	IP 44	IP 44
Dimensions (LxWxH) [mm]	595x460x 500	595x460x 527
Weight	45 kg	50 kg
Motor oil volume min./max.	0,25 - 0,6 liter	0,25 - 0,6 liter

Model	PG-E 60 SEA	PG-E 80 TEA
Voltage	230 V	230V/400 V
Emergency output LTP 230V	5,5 kW	2,5 kW
Continuous output COP 230V	5,0 kW	2,3 kW
Emergency output LTP 400V		7,0 kW
Continuous output COP 400V		6,5 kW
Fuel	Petrol	Petrol
Starter	Manual start	Manual start/ Electric starter
Running time at 50% load	16 hours	13 hours
Running time at 100% load	8,2 hours	8,5 hours
Tank capacity	25 Liter	25 Liter
Sound pressure level	76 dB(A)	76 dB(A)
Weighted sound power level (L_{WA})	96 dB(A)	96 dB(A)
Socket type	2x 230 V shockproof/ 1x 230V CEE 32A	2x 230 V shockproof/ 1x 400V CEE 16A
Generator IP degree of protection	IP 23	IP 23
Socket IP degree of protection	IP 44	IP 44
Dimensions (LxWxH) [mm]	700x526x 580	700x526x 580
Weight	81 kg	88 kg
Motorö oil volume min./max.	0,55 - 1,1 liter	0,6 - 1,2 liter

Model	PG-E 90 SEA
Voltage	230 V
Apparent power LTP 230V	8,5 VA
Active power LTP 230V	8,2 kW
Apparent power COP 230V	8,0 VA
Active power COP 230V	7,5 kW
Voltage deviation max.	+/- 3%
Drive motor power max.	11,7 kW
Motor speed	3600 rpm
Fuel	Petrol
Starter	Manual start / Electric starter
Running time at 50% load	12 hours
Running time at 100% load	8 hours
Tank capacity	25 Liter
Consumption at 75% load	2,5 l/h
Sound pressure level	75 dB(A)
Weighted sound power level (L_{WA})	97 dB(A)
Socket type	2x 230V shockproof / 1x 230V CEE 32A
Generator IP degree of protection	IP 23 M
Socket IP degree of protection	IP 44
Dimensions (LxWxH)	700 x 526 x 580 mm
Weight	97 kg
Motor oil volume min./max.	0,6 - 1,2 Liter

4.2 Type plate

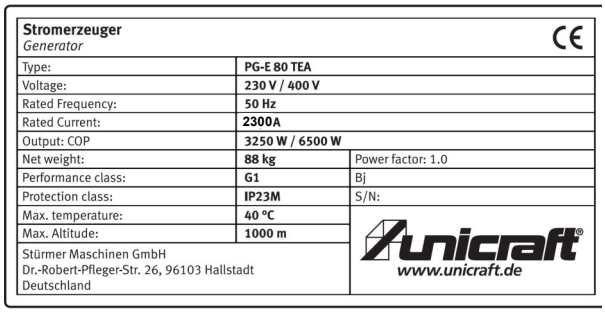


Fig. 2: Type plate Generator PG-E 80 TEA

5 Transport, packaging, storage

Delivery

Check the generator on delivery for any visible transportation damage. If you notice any damage to the device please report this immediately to the carrier or dealer.

Transport

ATTENTION!

Only transport the generator with an empty fuel tank!
The spark plug connector must be disconnected.
The generator may only be transported in an upright position!

NOTE!

Observe the weight of the machine when transporting and lifting. The transport and lifting equipment must be able to carry the load.

NOTE!

The generator should be protected from humidity.

During transport, the generator must be well secured so that it cannot fall; drain the fuel and ensure that no acid or vapours leaking from the battery (if available). For transport on road vehicles, check the entire mass of the machine. Never start the generator inside a vehicle.

Tips and recommendation

For longer transports, make sure that the corrosion protection is intact or renewed if necessary.

Transport with a forklift/lift truck:

For transport with a sufficiently dimensioned lift truck or forklift truck, the generator must be secured with bolts on a flat, firm surface (e.g. on a pallet).

Packaging

All used packaging materials and packaging aids are recyclable and should be taken to a materials recycling depot to be disposed of.

The delivery packaging is made of cardboard, so please dispose carefully by having it chopped up and given to the recycling collection.

The film is made of polyethylene (PE) and the cushioned parts of polystyrene (PS). These materials should be taken to a collection point for recyclable materials or to the local waste disposal company.

Storage

Store the generator thoroughly cleaned in a dry, clean and frost-free environment. Generators must not be stacked on top of each other. Also no other objects may be placed on them.

ATTENTION!

The generator should be started every seven days at the latest and run for approx. 30 minutes. If this is not possible and the generator is out of service for more than 30 days, appropriate measures should be taken to ensure proper storage.

ATTENTION!

It is important to avoid deposits from forming in essential fuel system parts such as the carburetor, fuel hose or tank during storage. Also, experience indicates that alcohol-blended fuels (called gasohol, ethanol or methanol) can attract moisture, which leads to separation and formation of acids storage. Acidic gas can damage the fuel system of a motor while in storage.

To avoid motor problems, the fuel system should be emptied before storage of 30 days or longer. For the petrol motor it is important to empty the carburetor pan: older petrol residues damage the parts that come into contact with them through deposits.

ATTENTION!

Petrol is highly flammable and explosive under certain conditions. Do not smoke or produce sparks in the immediate environs.

Step 1: Remove all gasoline from the fuel tank. Start and run ethe motor until motor stops from lack of fuel.

Step 2: While motor is still warm, drain oil from crankcase. Refill with recommended grade.

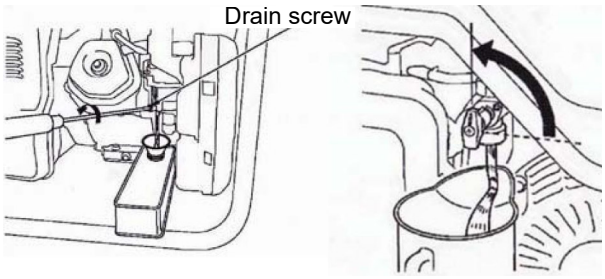


Fig. 3: Drain oil and petrol

Step 3: Remove spark plugs and pour about 1/2 ounce (15 ml) of motor oil the cylinders. Cover spark plug hole with rag. Pull the recoil starter a couple times to lubricate the piston rings and cylinder bore.

Step 4: Install and tighten spark plugs. Do not connect spark plug wires.

Step 5: Clean the generator outer surfaces. Check that cooling air slots and openings on generator are open and unobstructed.

Step 6: Store the unit in clean, dry place.

6 Description of the device

Illustrations in these operating instructions may deviate from the original.

Fig. 4: Generator

1 Fuel tank cap
2 400 V supply connection (Model PG-E 80 TEA)
3 Petrol tap
4 Battery
5 Oil fill cap/Dipstick
6 Tank indicator
7 Petrol tank
8 Choke
9 Spark plug
10 Silencer
11 Starter
12 Air filter
13 Ground terminal
14 ONN/OFF switch; Motor START switch

Fig. 5: Control panel PG-E 40 SRA (top) and PG-E 80 TEA (down)

1 ONN/OFF switch; Motor START switch
2 Display voltage, frequency, operating hours
3 Fuse switch
4 Oil control lamp
5 Ground connection
6 230 V-Consumer socket
7 230 V-Consumer socket
8 400 V-Consumer socket

Fig. 6: Fold-away transport handle

7 Mounting and Set-up

Use protective gloves!

Wear safety boots!

Wear protective clothes!

CAUTION!

Risk of crushing!

Injuries to hands and fingers may result from improper use of the generator.
- Note the weight of the generator. Ensure stable supports and support devices.

7.1 Unpacking

Step 1: Set the carton on the rigid, flat surface.

Step 2: Open the carton completely by cutting each corner from top to bottom.

Step 3: Leave the generator on carton to instal wheel kit.

Scope of delivery

- Wheels
- Handle
- Wheel axle
- Hardware bag; Including

  1 - spark plug socket
  1 - extension housing
- Instructions manual

7.2 Mounting

Mounting the wheels on:

- PG-E 30 SRA
- PG-E 40 SRA
- PG-E 60 SEA
- PG-E 80 TEA

Step 1: Slide the axle through the frame brackets.

Step 2: Slide on the hub, wheel and flat washer, then insert the cotter pin through the wheel axle hole. Bend the cotter pin tabs outward to lock the pin in place. (Fig. 7).

Mount the bumpers as shown in Fig. 7:

Step 3: Insert an M6 bolt through the rubber bumper and insert an M8 bolt through the bottom of the bumper bracket. Secure the bolt with an M8 flange nut.

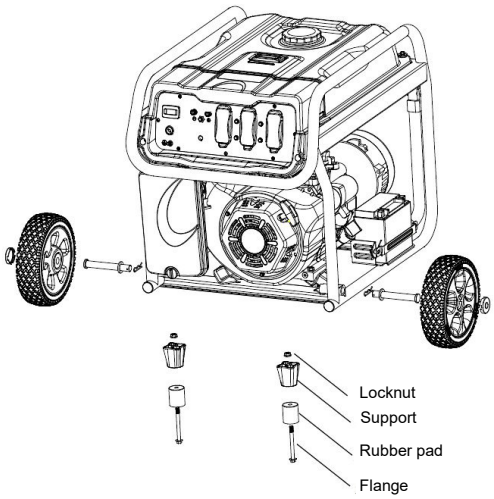


Fig. 7: Mounting of the wheels and bumpers

Mounting the wheels on:

- PG-E 90 SEA

Step 1: Slide the axle through the frame brackets.

Step 1: Slide the axle through the frame brackets.

Step 2: Slide on the hub, wheel and flat washer

Step 3: Insert the cotter pin through the wheel axle hole.

Step 4: Bend the cotter pin tabs outward to lock the pin in place.

Mount the bumpers as shown in Fig. 8:

Step 5: Insert an M6 bolt through the rubber bumper and insert an M8 bolt through the bottom of the bumper bracket. Secure the bolt with an M8 flange nut.

Step 6: Install an M8 bolt through the generator frame and through top of the bumper bracket.

Step 7: Secure the bolt with an M8 flange nut.

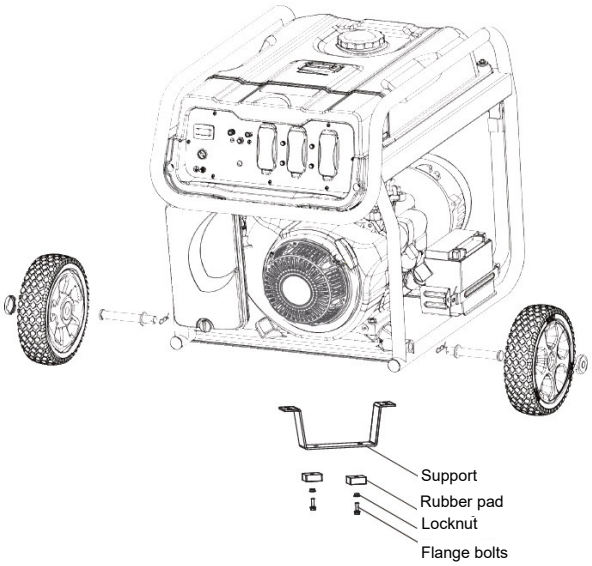


Fig. 8: Mounting of the wheels and bumpers

Install the handle assembly

Step 1: Insert the handle bracket onto the generator frame and secure with two M8 bolts and two M8 flange nuts (Fig. 9).

Step 2: Align the handle assembly holes with the handle bracket holes and secure with one bolt and one M8 flange nut.

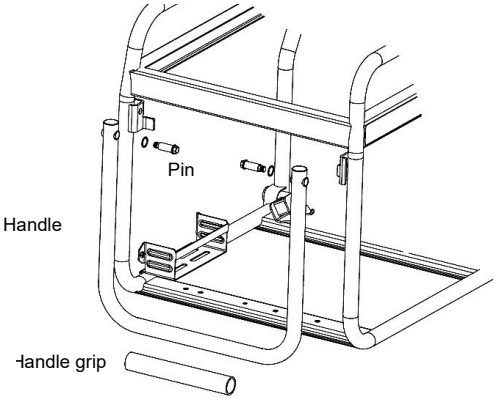


Fig. 9: Install the handle assembly

Mounting of the battery

Insert the battery into the holder and screw on the retaining clip (Fig. 10).

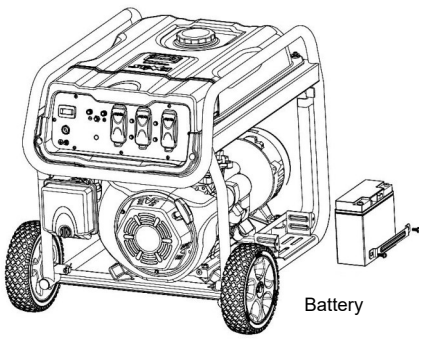


Fig. 10: Mounting of the battery

8 Start-up

WARNING!

Danger of life!

Failure to observe the following rules entails a risk of injury for the operator and other persons.

- The operator must not work under the influence of drugs, alcohol or medication and in case of tiredness or if suffering from an illness that impairs concentration.
- The generator must be operated by one person only. Additional persons must keep out of the work area during operation.

DANGER!

Risk of crushing!

Improper work on the generator may result in injury to fingers and hands.

- Never reach into the generator during operation.

ATTENTION!

Starting the motor when the oil level is insufficient can cause serious damage!

Check the fuel level: use only clean and warer-free fuel.

The fuel is highly flammable and explosive under certain conditions. Refuel in a well-ventilated environment with the motor switched off. Do not smoke during refuelling and do not use an open fire.

Never work with the generator before the air filter has been inserted, otherwise the service life of the motor and generator will be reduce.

NOTE!

- Operate the generator in a clean, dry environment. Do not expose the generator to excessive dust, dirt, moisture or vapors.
- The cooling fins must not be clogged by foreign objects.

Use protective goggles!

Wear safety boots!

Wear protective clothes!

NOTE!

Before you put the generator into operation for the first time, observe the following points.

- Make sure that the generator stands on a level, horizontal and stable surface.
- Make sure that no power consumer is connected to the generator.
- The oil has a large influence on the performance and service life of the motor. The motor's Operation and Maintenance Manual lists the characteristics of the oil and the ideal oil level for this generator.
- For petrol motor versions, the cold start choke must be switched on.
- For generators with electric ignition, turn the ignition key to the "START" position and release it as soon as the motor has started.
- To start generators with pull starter, slowly pull out the starting device until you feel resistance, then pull jerkily.

8.1 Before starting

CAUTION!

Never fill tank indoors.

Never fill fuel tank when the motor is running or hot.

Do not not overfill the tank (do not fill to the top of the filling device), fuel may leak due to motor vibrations.

Take care that no petrol drips to the ground during refuelling.

Make sure that the fuel filler cap has been closed correctly after refilling. If petrol has dripped on the floor, make sure that the environment is dry before starting the motor.

Avoid direct physical contact with the fuel and do not inhale vapours; keep out of the reach of children.

The petrol vapours are flammable. Never light cigarettes or smoke when refuelling. Avoid open fires.

Step 1: Check that no power consumer is connected to the generator.

Step 2: Check grounding. Proper grounding of the generator will prevent electric shock in the generator or connected electrical equipment. Proper grounding also prevents static electricity, which often builds up in ungrounded equipment.

Step 3: Check the air filter: make sure it is in good condition and free of dust or dirt. Refer to the motor manual for access to the filter.

Step 4: Put the battery into operation (if available): fill the compartments with a solution of 30/40% sulphuric acid to the maximum level and wait at least 2 hours before putting into operation.

CAUTION!

Do not come into contact with the acid and do not smoke or use open fire: the vapours emitted by the battery are highly flammable! Keep the battery acid out of the reach of children.

Step 5: Check motor oil level, top up if necessary. Select the suitable motor oil depending on the temperature.

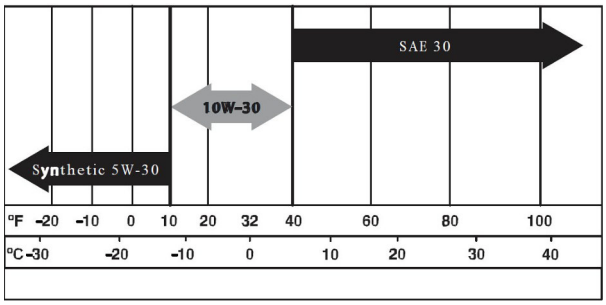


Fig. 11: Viscosity grade of the oil according to the temperature

Place the generator on a flat surface.
Clean the area around the filling opening. Remove the cap, pull out the dipstick and wipe it off. Slowly pour the oil through the oil filter into the motor until the level reaches the mark on the dipstick. In the meantime, check the level several times. Never exceed the maximum filling level! Close the filling opening tightly with the cap. Check the oil level before each motor start!

Step 5: Fill the tank with petrol. Use always unleaded regular petrol. Never use petrol containing more than 10% ethanol.

ATTENTION!

Never fill the tank while the motoris running! The generator must cool down for at least 2 minutes before opening the filler cap.

Slowly open the fuel filler cap to equalize the pressure.

Never mix oil with petrol!

Never overfill the fuel tank. Leave room for the petrol to expand.

Regularly check the lines, tank and cap for leaks or damage. Replace if necessary.

If the generator is operated at an altitude of more than 1500 m above sea level, petrol with at least 85 octane must be used.

Close tightly the filler hole with the cap. Wipe up the spilled petrol!

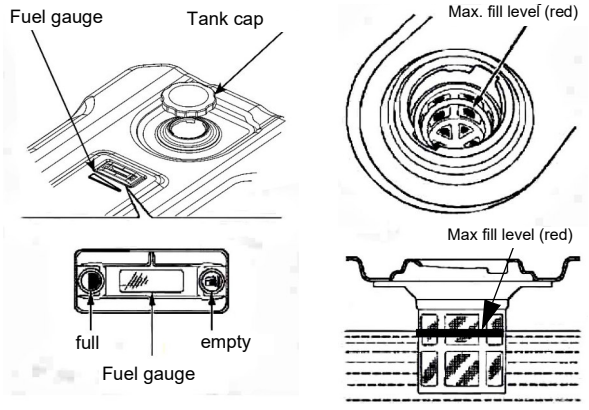


Fig. 12: Petrol fill level

8.2 Starting the generator

The motor is equipped with a low oil level sensor that automatically shuts down the motor when the oil level drops below a certain level. If the motor shuts itself off and the fuel tank contains enough petrol, the motor oil level must be checked.

ATTENTION!

Never start or stop the motor when electrical devices are connected.

Disconnect all electrical devices from the generator before starting.

Check that the generator is positioned horizontally.

ATTENTION!

Make sure that the starter handle puller does not wind up at high speed. To prevent damage to the starter device, slowly return the starter handle drawbar.

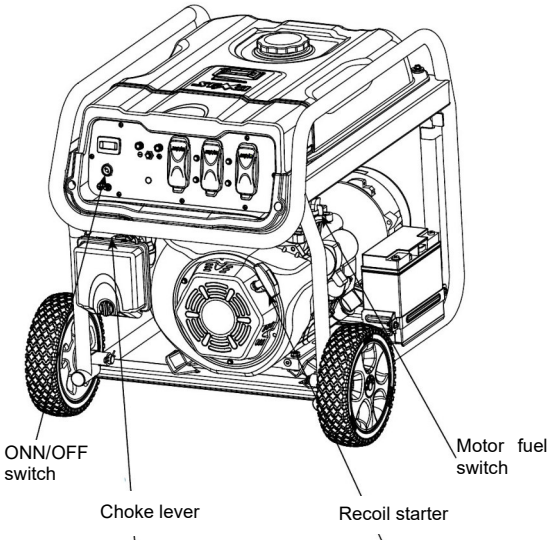


Fig. 13: Starting the generator

Step 1: Turn the ON/OFF switch to „ON“ position.

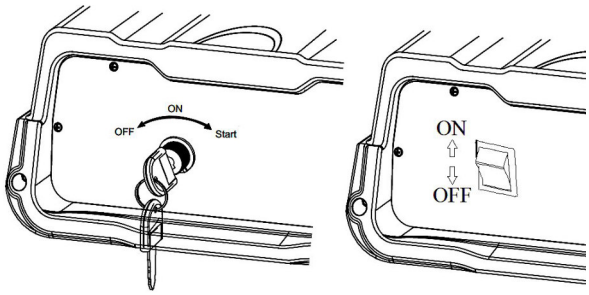


Fig. 14: ONN/OFF switch

Step 2: Turn fuel switch to “ON” position.

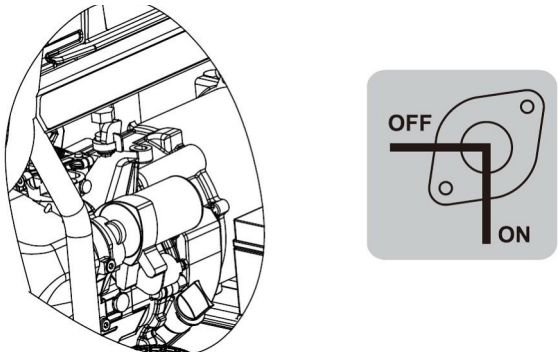


Fig. 15: Open of the motor fuel switch

Step 3: Pull the choke lever to position CHOKE.

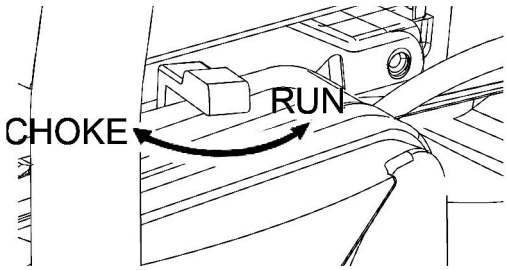


Fig. 16: Choke lever

Step 4: For Recoil start, firmly grasp the recoil handle and pull slowly until increased resistance is felt. Pull rapidly up and away.

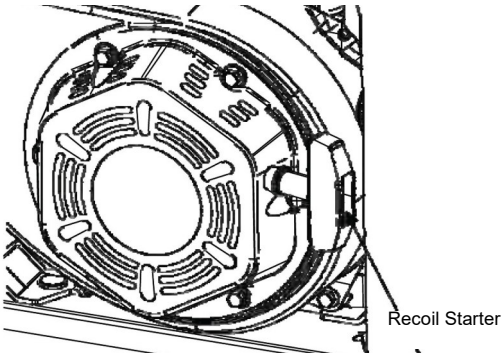


Fig. 17: Recoil starter

For electric start, turn and hold key in start switch to “start” position until generator starts.To prolong the life of starter components, DO NOT hold key in “start” position for more than 15 seconds, and pause for at least 1 minute between starting attempts.

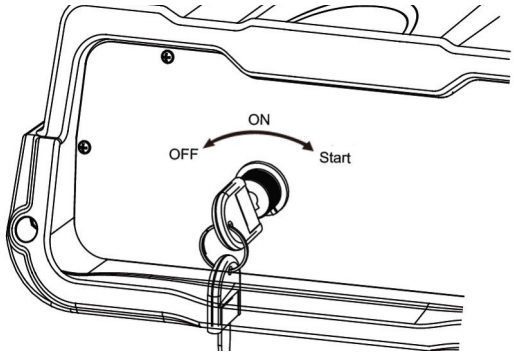


Fig. 18: Electric-Starter

Schritt 5: When motor starts, move choke lever to 1/2-CHOKE position till motor runs smoothly and then fully into ON position. If motor flalters, move choke back to 1/2- CHOKE position till motor running smoothly and then fully into ON position again.

ATTENTION!

If motor fails to start after 3 pulls, or if unit shut down during operation, make sure unit is on a level surface and check for proper oil level in crankcase (Low oil shut-off).

8.3 Operation

ATTENTION!

- Do not connect electricity consumers to the generator whose electrical characteristics are unknown or whose characteristics differ from those of the generator (e.g. different voltages and/or frequencies).
- The generator electric circuit is protected by a circuit breaker: Any overloads and/or short circuits will interrupt the circuit. To reactivate the circuit, remove the excess electricity consumers, determine the cause of the short-circuit and/or overload and switch on the switch again.
- Do not place any objects on the frame or directly on the motor during commissioning of the generator: any foreign objects could iwith proper operation.
- Do not obstruct the normal vibrations of the alternator during operation. The silent blocks are dimensioned for proper operation.

The motor is equipped with a low oil level sensor that shuts down the motor automatically when the oil level drops below a specified level. If the motor shuts down by itself and the fuel tank has enough gasoline, check motor oil level.

Step 1: Let motor runs stable and warm up for a few minutes after starting.

Step 2: Add up the rated watts (or amps) of all loads to be connected at one time. This total should not be greater than the rated wattage/amperage capacity of the generator or circuit breaker rating of the receptacle supplying the power.

Step 3: Plug in the electrical consumer(s). The consumers must be switched off.

Step 4: Switch on the electrical consumer(s).

ATTENTION!

If the connected consumers overheat, switch them off and disconnect them from the generator.

ATTENTION!

The generator should be started at least once every seven days and be allowed to run at least 30 minutes. If this cannot be done and the unit must be stored for more than 30 days, use the following information as a guide to prepare it for storage.

- Empty the fuel tank, start the generator and let it run until all fuel is used up and the generator stops.
- Cover the cooled generator and protect it from moisture.
- See chapter "Storage" for further measures

8.4 Switching off the generator

ATTENTION!

After the motor has been switched off, it still emits heat, so sufficient ventilation should be provided even after the generator has been switched off.

Step 1: Disconnect or interrupt all electricity consumers supplied by the generator.

Step 2: Disconnect the mains plug(s) of the electrical loads from the generator.

Step 3: Let the motor run unloaded for 2-3 minutes and then switch off directly on the motor by actuating the switch-off device. This guarantees good cooling.

For generators with electric start, set the starter switch to "OFF".

Step 4: Close the fuel tap.

9 Care, maintenance and repair

ATTENTION!

- All cleaning, care, maintenance and repair work may only be carried out with the generator switched off.
- Always disconnect the spark plug connector from the spark plug.
- No electricity consumer may be connected to the generator.
- Wait until the hot parts have cooled down.
- Never clean the machine with a water jet or flammable products!
- Before putting the generator back into operation, make sure that it is completely dry.

NOTE!

The warranty does not cover parts of the generator that have been misused or negligently handled by the operator. For full warranty coverage, the operator must operate the generator as described in the manual.
Regular adjustments must be made to ensure proper operation of the generator. Follow the instructions in the "Maintenance schedule"

9.1 Care by cleaning

The generator must always be kept in a clean condition.

ATTENTION!

Never use strong cleaning agents to clean of the plastic parts or painted surfaces. The surface may be loosened and consequential damage may occur.

Use protective gloves!

NOTE!

Never use strong cleaning agents for any cleaning-work. This can damage or destroy the device

All plastic parts and painted surfaces should be cleaned with a soft, damp cloth and some neutral cleaner.

Remove excess grease or leaked oil with a dry, lint-free cloth.

Always keep the cooling fins clean and free.

9.2 Maintenance and repair

CAUTION!

Maintenance and repair works must only be performed by specialists.

If the generator does not function properly, contact a specialised dealer or our customer service. Please find the contact data on chapter 1.2 Customer service.

Immediately reassemble all protective and safety equipment after completing the repair and maintenance of the device.

Lubricate the battery terminals well and fill the battery with distilled water when the elements are exposed.

9.3 Maintenance plan

Maintenance intervals	Maintenance tasks
after the first 5 hours	Change the motor oil
Every 8 hours or daily	Check motor oil level. Clean from the debris.
Every 25 hours or yearly	Clean the motor air filter
Every 50 hours or yearly	Change the motor oiln
Yearly	Replace the the motor air filter Service fuel valve Service spark plug, change if necessary Check muffler and spark arrester Clean the cooling system

9.4 Changing the motor oil

Change the oil after the first five hours of operation, then every 25 hours thereafter.

If running this unit under dirty or dusty conditions, or in extremely hot weather, change the oil more often..

Model	PG-E 30 SRA	PG-E 40 SRA	PG-E 60 SEA	PG-E 80 TEA	PG-E 90 SEA
Motor oil volume min./max.	0,25 - 0,6 liter	0,25 - 0,6 liter	0,55 - 1,1 liter	0,6 - 1,2 liter	0,6 - 1,2 liter

ATTENTION!

- Hot oil may cause burns. Allow motor to cool before draining oil.
- Avoid skin contact with used oil

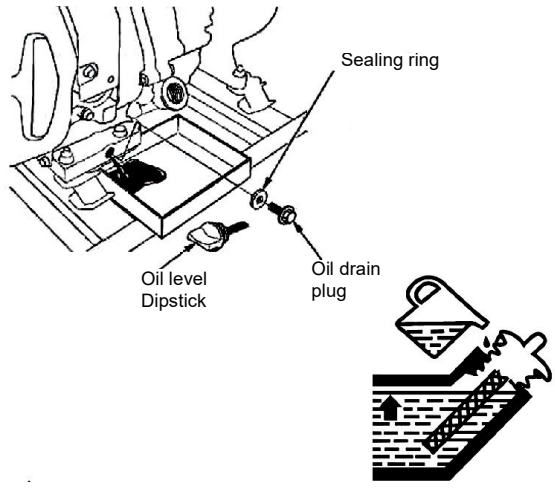


Fig. 19: Changing the motor oil

Step 1: Clean area around oil drain plug.

Step 2: Remove oil drain plug from motor to drain oil completely into a suitable container.

Step 3: When oil has completely drained, install oil drain plug and fasten securely.

Step 4: Slowly pour the new oil through the oil filter into the motor until the level reaches the mark on the dipstick. In the meantime, check the level several times. Never exceed the max. level!

Step 5: Close the filling opening tightly with the cap.

Step 6: Wipe up spilled oil. Check the oil level before each motor start!

Step 7: Dispose of the used oil properly.

9.5 Replacing the spark plug

Use spark plug F6TC, BPR4ES or Champioin RN14YC.Replace the plug once each year. This will help the motor start easier and run better.

Step 1: Switch off the generator and leave to cool.

Step 2: Unplug the spark plug connector.

Step 3: Clean the area around the spark plug and remove it from the cylinder head

Step 4: Set the spark plug's gap to 0.70-0.80 mm

Step 5: Install the correctly gapped spark plug into the cylinder head (Torque 20 Nm).

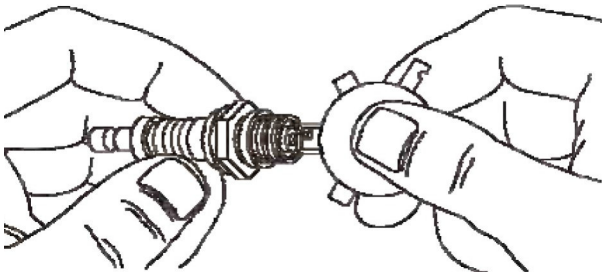


Fig. 20: Check the electrode spacing

9.6 Spark arrester

Step 1: Shut off generator and allow the motor and muffler to cool down completely before servicing spark arrestor (located on the back of the muffler).

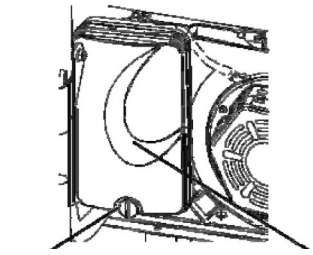
Step 2: Remove the clamp and spark arrestor screen. Clean the spark arrestor screen with a small wire brush.

Step 3: Replace the spark arrestor if it is damaged. Install the Spark arrestor reversely.

9.7 Air filter

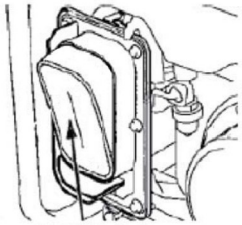
The motor will not run properly and may be damaged if using a dirty air filter. Replace the air filter once a year. Clean or replace more often if operating under dusty conditions.

Step 1: Remove the air filter cover.



Bolt

Air filter cover



Air filter cartridge

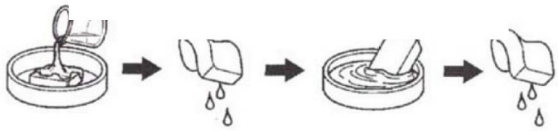


Fig. 21: Cleaning air filter

Step 2: Wash in soapy water. Squeeze filter dry in clean cloth. DO NOT TWIST!

Step 3: Clean air filter cover before re-installing it. May drop a bit of motor oil to avoid ice blocked during winter season.

9.8 Valve clearance

After the first 50 operating hours, check the valve clearance in the motor and have it adjusted by customer service if necessary. This is very important for a long service life of the generator!

Model PG-E	**30 SRA, 40 SRA, 60 SEA, 80 TEA, 90 SEA**
Valve clearance on inlet valve	0,1 - 0,15 mm
Valve clearance at outlet valve	0,15 - 0,2 mm

10 Disposal, recycling of used devices

Please take care in your own interest and in the interest of the environment that all component parts of the machine are only disposed of in the intended and permitted way.

10.1 Decommissioning

Immediately decommission used machines in order to avoid later misuse and endangering of the environment or of persons.

Step 1: Eliminate all environmentally hazardous operating materials from the used device.

Step 2: If required, disassemble the machine into easy-to-handle and usable components and parts.

Step 3: Dispose of machine components and operating materials by the disposal channels provided.

10.2 Disposal of lubricants

Remove any leaking, used or excessive grease at the lubricating points.

Disposal notes for used lubricants are available from the manufacturer of the lubricants. If necessary, request the product-specific data sheets.

11 Spare parts

DANGER!

Risk of injury due to the use of wrong spare parts!

Dangers may result for the user and damages as well as malfunctions may be caused by using wrong or damaged spare parts.

- Only use original spare parts of the manufacturer or spare parts admitted by the manufacturer.
- Always contact the manufacturer in case of uncertainties.

Tips and recommendations

The manufacturer's warranty will become null and void if non-permissible spare parts are being used

11.1 Ordering spare parts

The spare parts may be purchased with the authorised dealer.

Indicate the following basic information for requests or orders of spare parts:

- Type of device
- Item No.
- Position No.
- Year of construction:
- Quantity
- Required mode of dispatch (mail, freight, sea, air, express)
- Address of dispatch

Spare part orders which do not include the above indications may not be taken into consideration. If the indications regarding the mode of dispatch are missing, the product is dispatched at the discretion of the supplier.

You will find information regarding the device type, item No. and year of construction on the type plate which is fixed on the device.

Example

The air filter for the generator PG-E 80 TEA must be ordered. The air filter is indicated in the spare parts drawing 5 with item number 37.

For order of spare parts please send a copy of the spare parts drawing 5 with marked spare part (air filter) and marked position number (37) to your dealer and provide the following information:

Type of device: Generator **PG-E 80 TEA**

Item number: **6706080**

Spare parts drawing: **5**

Position number: **37**

Item number of your device:

PG-E 30 SRA	6706030
PG-E 40 SRA	6706040
PG-E 60 SEA	6706060
PG-E 80 TEA	6706080
PG-E 90 SEA	6706090
PG-E 100 TEA	6706100

13 EC Declaration of Conformity

According to machine directive 2006/42/EC Annex II 1.A

Manufacturer/distributing company: Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Str. 26
D-96103 Hallstadt

herewith declares that the following product

Product group: Unicraft® Werkstatttechnik

Machine type: Generator

Designation of the machine *:	**Item number:**
☐ PG-E 30 SRA	6706030
☐ PG-E 40 SRA	6706040
☐ PG-E 60 SEA	6706060
☐ PG-E 80 TEA	6706080
☐ PG-E 90 SEA	6706090
☐ PG-E 100 TEA	6706100

Serial number *: _____

Year of manufacture *: 20___

* please fill in according to the information on the type plate

complies with all relevant provisions of the above mentioned directive as well as the other applied directives (below) - including their applicable modifications at the time of the declaration.

Relevant EU Directives:		
	2014/30/EU	EMC directive
	2012/19/EU	WEEE directive
	2000/14/EG	Outdoor directive

The following harmonized standards have been applied:

DIN EN ISO 8528-13:2017-03	Reciprocating internal combustion engine driven alternating current generating sets - Part 13: Safety (ISO 8528-13:2016, Corrected version 2016-10-15)
DIN EN 60204-1:2019-06	Safety of machinery - Electrical equipment of machines - Part 1: General requirements
DIN EN 55012:2010-04	Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of off-board receivers

Responsible for the documentation: Kilian Stürmer, Stürmer Maschinen GmbH,
Dr.-Robert-Pfleger-Str. 26, D-96103 Hallstadt

Hallstadt, 01.03.2021

_____
Kilian Stürmer
Managing Director

CE