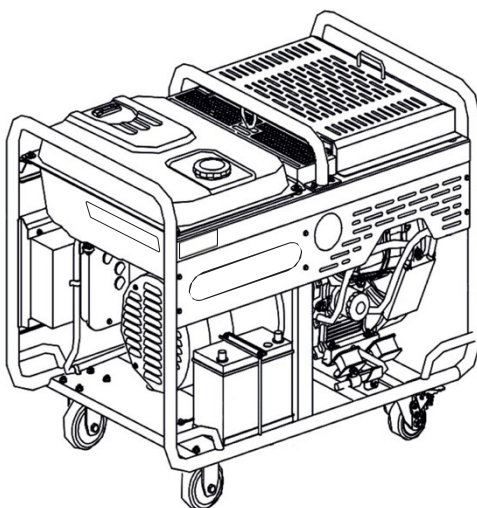




INSTRUCTIONS
WARRANTY CARD

HGG22000E3A



OPERATING INSTRUCTIONS FOR THE POWER UNIT

HGG22000E3A

Home

Thank you for your trust and congratulations on making the right choice.

The power unit has been manufactured in accordance with the safety regulations of the European Union, but its improper use or non-compliance with these instructions may cause serious danger to the health or life of the operator, other persons or animals. The safety of the operator and other persons or animals is our priority. Please familiarise yourself thoroughly with the contents of this manual. In case of any doubts, the operator must contact Hahn & Sohn GmbH or his authorized regional representative for information before putting the equipment into operation.

Please also read the Warranty Card. The Warranty Card describes the basic scope of the user's obligations to ensure the proper condition of the equipment and to prevent loss of warranty. If the user does not comply with these operating instructions, Hahn & Sohn GmbH will not be liable (under warranty) for any resulting damage. In this case, Hahn & Sohn GmbH is also not liable for injury or death to the operator, other persons or animals. A number of warnings, e.g. in the form of warning labels, are provided both in the instructions and on the equipment. Failure to observe any of these warnings can be the direct cause of a serious accident.

The manual contains information current as of the date of printing. It may vary slightly from the appearance of the device and its parameters due to the continuous development of the product and the introduction of improvements. The user is obliged to draw attention to these differences. Hahn & Sohn GmbH reserves the right to introduce changes to the contents of the manual without the need to notify and supply written explanations to purchasers of the equipment.

INITIAL GUIDE

revision 2.0

dated 22.07.2021

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1. Safety instructions



WARNING



- Read the operating instructions carefully. Follow the instructions contained therein and use the equipment correctly. This will ensure the correct functioning of the power pack and prevent damage to it.



WARNING



- The exhaust contains compounds that are toxic to humans and animals. Never use the unit in enclosed rooms without proper ventilation.



WARNING



- The power pack damper heats up to a high temperature while the machine is running and stays hot for a long time after the machine is stopped. Allow to cool completely before storing or moving. To prevent burns, do not touch the muffler or the motor while the motor is running or shortly after it has stopped.



WARNING

- Only plug in handbags compatible with the sockets of the power centres. Plugging in a different cord may cause electric shock.



WARNING

- Use only diesel fuel (MN - Diesel). only in a well-ventilated area with the engine stopped.
- Do not use an open flame during refuelling.
- Be careful not to spill fuel while filling the tank. If fuel is spilled during refuelling, immediately wipe dry any splashed elements.



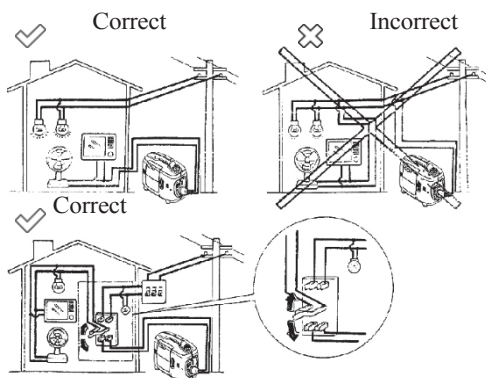
WARNING

- The use of the power generator must be in accordance with the instructions in the operating manual, safety regulations and relevant local regulations.
- Ground the power pack. Before commissioning, connect the power pack terminal to earth.



WARNING

- Do not connect the power pack directly to the domestic mains. Such wiring may cause an explosion of the power pack, burning or fire of the wiring. The power generator can only supply power to the domestic mains if it is adapted and the power generator is connected to the switchboard in such a way that when the mains voltage is restored, the power generator is immediately disconnected from the domestic mains. Such adaptation of the home network may only be carried out by a professional company. Such modification cannot be carried out independently.

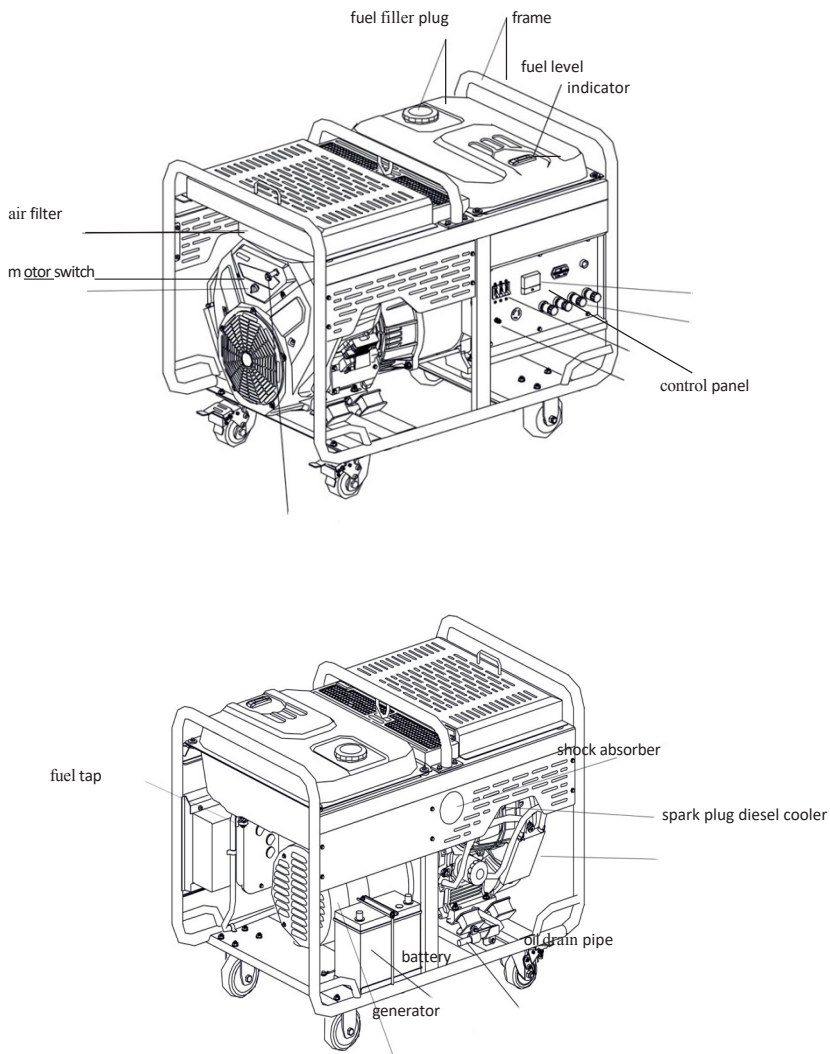


WARNING

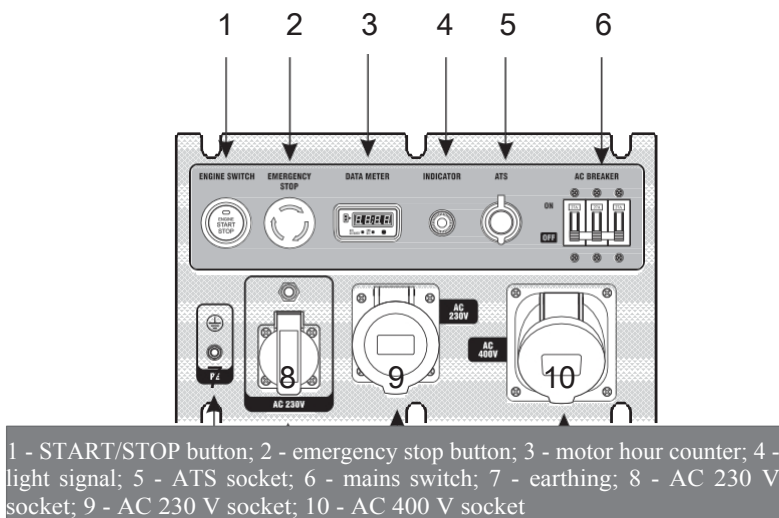
- Always carry out the activities (described in the instructions) to prevent accidents and damage to the equipment.
- Place the power unit at least 1 metre away from walls and other equipment. Operate the power unit with the control panel.
- If the power pack is tilted, fuel may leak. Read the instructions on how to switch off the power pack quickly in an emergency.
- Do not allow a person who is not familiar with the operating instructions to use the power pack.
- Keep the power unit out of the reach of children and animals while working.
- Store the power pack out of reach of children and animals.
- Keep your hands away from the moving parts of the device - this will prevent accidents.
- The power unit is a potential source of electric shock - do not touch the unit with wet hands. Do not use the power pack in rain or snow. Secure the equipment against getting wet.

2. Structural elements of power plant

2.1. Electric generator with manual start engine

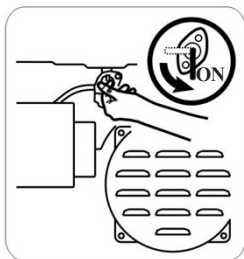


2.2. Control panel



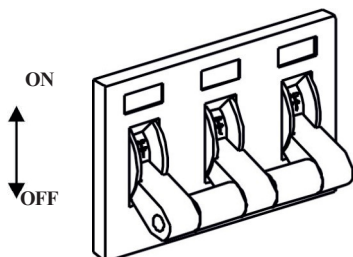
3. Operation and control

3.1 Fuel tap



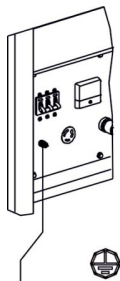
The fuel tap is used to control the fuel flowing from the tank to the carburettor. Turn the fuel tap to the OFF position after switching off the device.

3.2 Main switch



Main switch - protection against overload-short circuit.

3.3 Earthing



grounding clamp

Earthing is used to protect the user against electric shock.

3.4 Security against oil shortage

The oil shortage protection protects the engine from damage caused by insufficient oil in the crankcase. If the oil level in the crankcase is below the recommended level, the safety system automatically stops the engine (even if the engine switch is in the RUN position).

3.5 Auto start button

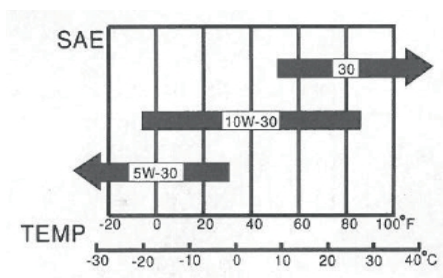
The button enables electric start of the engine.

4. Before commissioning

4.1 Engine oil

WARNING!

Place the engine on a level surface before each commissioning. Check the oil level with the machine stopped. Using contaminated engine oil or oil for two-stroke engines will cause engine damage.

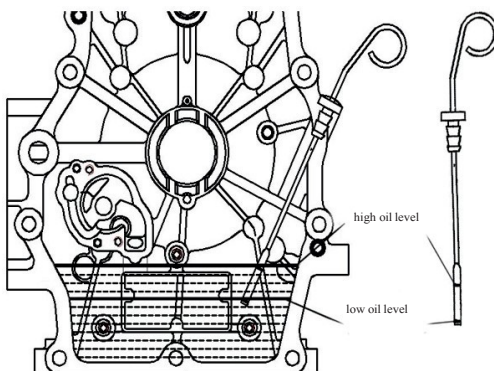


Recommended oil: SAE15W40 or SAE10W-30 corresponding to the SG class of the API classification.

To check the oil level:

Switch off the device if it is working. Remove the oil fill plug with dipstick and wipe the dipstick dry. Reinsert the dipstick back into the oil fill plug, remove and check the oil level on the dipstick. If the oil level is low, add oil to the correct level. If the oil level is high, drain the excess using a syringe with a rubber hose.

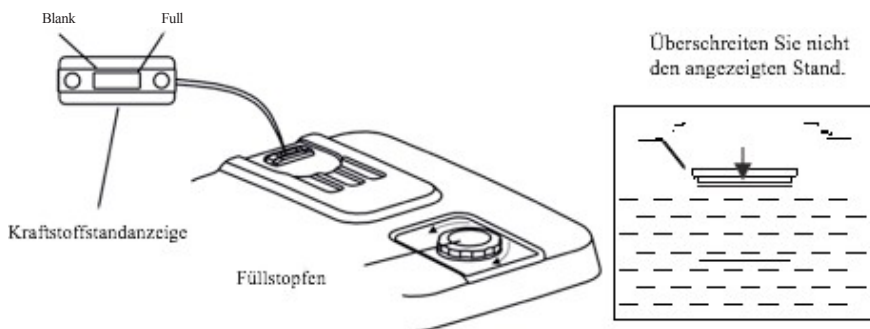
Engine oil quantity: 2.5 L



4.2 Fuel

1. Check the fuel level on the fuel gauge.
2. If the fuel level is too low, unscrew the fuel filler plug and refuel to the level shown in the figure below.
3. After refuelling, screw in the filler plug.

quantity: 40L



**ATTENTION**

Gasoline is a flammable and explosive substance. Gasoline is a product with a very low ignition temperature. Fuel vapours form an explosive mixture with air. Refuel only in a well-ventilated area with the engine stopped. Do not smoke or create sparks near the fuel tank. Do not use gases mixed with fuel. Take care to prevent dust and water from entering the tank. Take care not to overfill the tank during refuelling - there should be no fuel in the filler neck. Tighten the filler plug carefully after refuelling. Take care not to spill fuel during refuelling. If you do spill fuel on the central unit, wipe all wet parts dry before putting the unit into operation. Avoid contact of fuel with skin, do not inhale fumes. Store fuel out of reach of children and animals.

4.3 Accumulator

Use a 12V battery with a capacity of at least 45Ah.

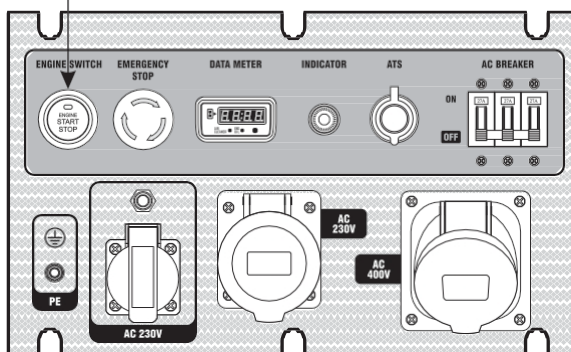
**ATTENTION**

Connect the battery to the external battery, red wire to the positive terminal, green wire to the negative terminal. Make sure the wires are properly connected. Do not connect the positive terminal of the battery to the negative terminal, there is a risk of short circuit.

5. Work equipment**5.1 Commissioning**

1. Check the oil level - top up if necessary. Be careful not to spill the oil. In the event of a spillage, clean the splashed areas thoroughly.
2. Plug in the battery
Avoid reversing the positive and negative poles. Replace the terminal caps after wiring.
3. Check level, top up to the shown if necessary.
4. Switch the mains switch to the OFF position.
5. Press and hold the START/STOP button located on the control panel for 3-5 seconds.

START/STOP button



6. Connect the three-phase or single-phase wire according to the load conditions; pay attention to the phase sequence.
7. Switch the mains switch to the ON position. To apply power to tapping terminals

5.2 Stopping the engine

1. Switch the mains switch to the OFF position.
2. After 30 seconds of no-load operation, press the START/STOP button; the power unit stops within 5 seconds.
3. When the machine has come to a complete stop, turn the fuel tap OFF.

6. Inspections and maintenance

The aim of regular inspections and adjustments is to keep the power plant in the best possible condition.



NEBEZPEČÍ

Vypněte motor před provedením servisu.

The following table lists the mandatory checks and inspections of the power unit. Compliance with these recommendations will extend the life of the equipment and protect against loss of warranty. Failure to follow the recommendations in the table may result in loss of warranty.

In the following table, the following designations are used:

X - means the obligation to carry out the activities within the specified timeframe,

X(1) - indicates that the activity needs to be performed more frequently than recommended if the equipment operates in conditions with increased dust,

X(2) - means that the activity must be carried out at the Guarantee Provider's registered office

Činnost Czynność		Jak často provádět?			
		Interval Co. użycie	Jak často provádět?		Každých dvanáct měsíců nebo 300 Co dwanaście miesięcy
			První měsíc nebo 20 mth měsíce	Každých šest měsíců nebo 100 mth měsíce	
Motorový olej	Kontrola	X	lub 20Rh	lub 100Rh	lub 300Rh
olej	Výměna		X	X	
Vzduchový filtr	Kontrola	X			
	Výměna		X(1)	X(1)	
Zapalovací svíčka	Kontrola			X	
	Výměna				X
Oláčky	Kontrola	↓			X(2)
Motorový silníka	Seřízení				X(2)
	Regulacja				
Vše ventilů	Kontrola				X(2)
Luzy	Seřízení				X(2)
zaworów	Regulacja			X(2)	
Palivové vedení	Kontrola			X(2)	
Przewody paliwowe	Výměna		Každý rok zkontrolujte, v případě potřeby vyměňte. Co roku sprawdz, wymień na nowe jeżeli potrzeba.		
Palivová nádrž	Kontrola			X(2)	
biomnik	Seřízení			X(2)	
palniwa	Výměna		Každý rok zkontrolujte, v případě potřeby vyměňte. Co roku sprawdz, wymień na nowe jeżeli potrzeba.		

6.1 Changing engine oil

Change the oil after the engine has warmed up to ensure that the engine oil drains quickly.

1. Place a suitable container under the engine to hold the used engine oil, unscrew the drain plug and remove it.
2. After the oil has been completely drained, screw in the drain plug again.

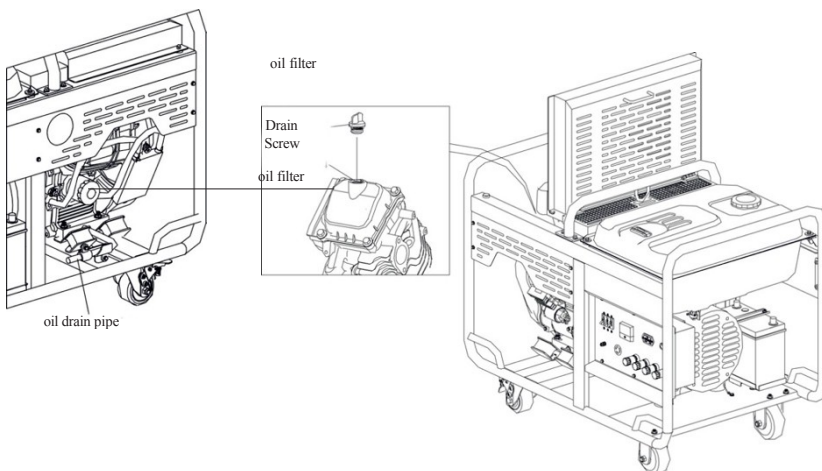
From an environmental point of view, used engine oil must be disposed of correctly. It is recommended to store used engine oil in a sealed container and hand it over to a local service station or used oil recycling centre. Do not dispose of in municipal waste or landfill or in the countryside.

3. Change the air filter.

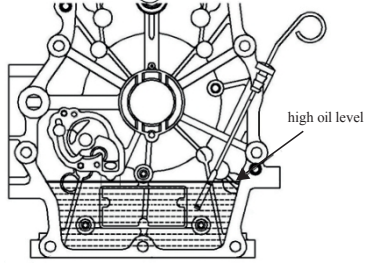
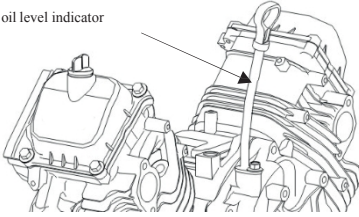
4. Place the engine in a horizontal position and pour in the recommended engine oil up to the upper oil level limit.

Recommended oil: SAE10W-30 and SAE15W-40 Oil
quantity: 2.5 L

5. Fit the oil level gauge and screw in the oil plug.



oil level indicator



⚠ ATTENTION

Be sure to check that the fuel tap lever is in the OFF position before changing the oil.

⚠ HELP

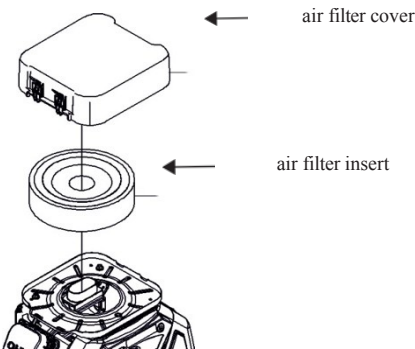
Drain the oil while the engine is still warm. This will allow the used oil to drain out of the engine better. Be careful not to hurt yourself. Do not drain the oil immediately after stopping the engine.

⚠ ATTENTION

Do not tilt the machine when refilling the oil, you may overfill the engine, which will lead to engine damage.

6.2 Replacing the air filter

1. Loosen the air filter cover clips and remove the cover.
2. Remove the air filter insert, check its condition and replace if necessary.



3. Clean the bottom of the air filter and the filter cover to prevent dust from entering the air inlet available to the carburetor.
4. Reinsert the filter cartridge.
5. Fit the air filter cover and clamp the clips.

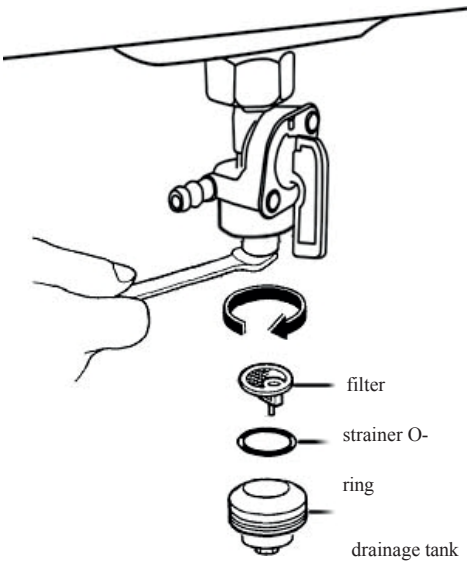


ATTENTION

Using gasoline or flammable solvent to clean the filter cartridge will cause a fire or explosion. Use soapy water or non-flammable solvent.

6.3 Fuel tap with drip tray

1. Close the fuel tap, remove the drain tank and remove the O-ring and filter screen.
2. Place the drip tank, O-ring and filter strainer in a non-flammable or high flash point solvent for proper cleaning.



3. Reinstall the O-ring and filter strainer, tighten the drain plug.
4. Open the fuel tap and check for fuel leaks.

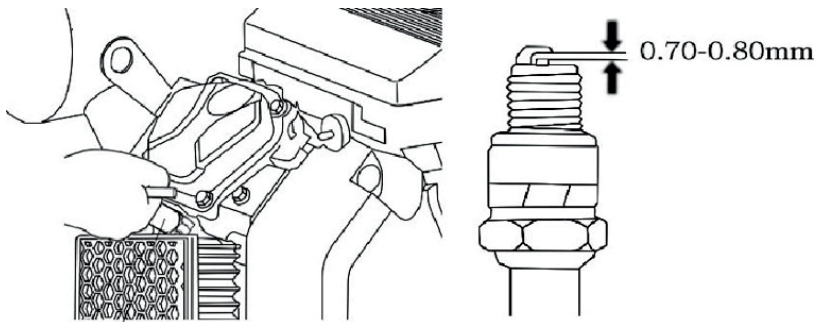
6.4 Spark plug Recommended

spark plug: K7RTC

1. Remove the spark plug end cap.
2. Clean the area around the spark plug.
3. Unscrew the spark plug with the spark plug wrench.
4. Check the spark plug. Replace if the electrode or insulator is damaged; observe a spark plug electrode distance of 0.70 to 0.80 mm; adjust the distance if necessary.
5. Carefully screw in the spark plug by hand.
6. Tighten and press the washer with the wrench.

In the case of a new spark plug: tighten the spark plug wrench another 1/2 turn
In the case of a used spark plug: tighten the spark plug 1/8- 1/4 turn with a spark plug wrench.

7. Insert the spark plug end cap.



key for spark plug



ATTENTION

Use a spark plug with an appropriate heat value.

7. Storage

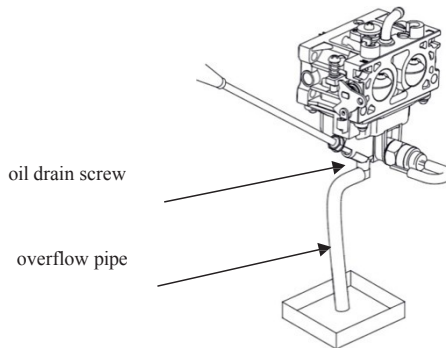


WARNING

The engine cannot be packed and stored until the engine has cooled down to prevent fire due to contact with high temperature engine parts.

If long-term storage is required, adequate room ventilation and humidity in the storage area must be ensured.

1. Open the fuel tap, empty the tank completely, clean the fuel filter screen, O-ring and the drip tray. Reinstall all parts. Push the bolt over the fuel drain pipe and drain the residue from the carburettor.



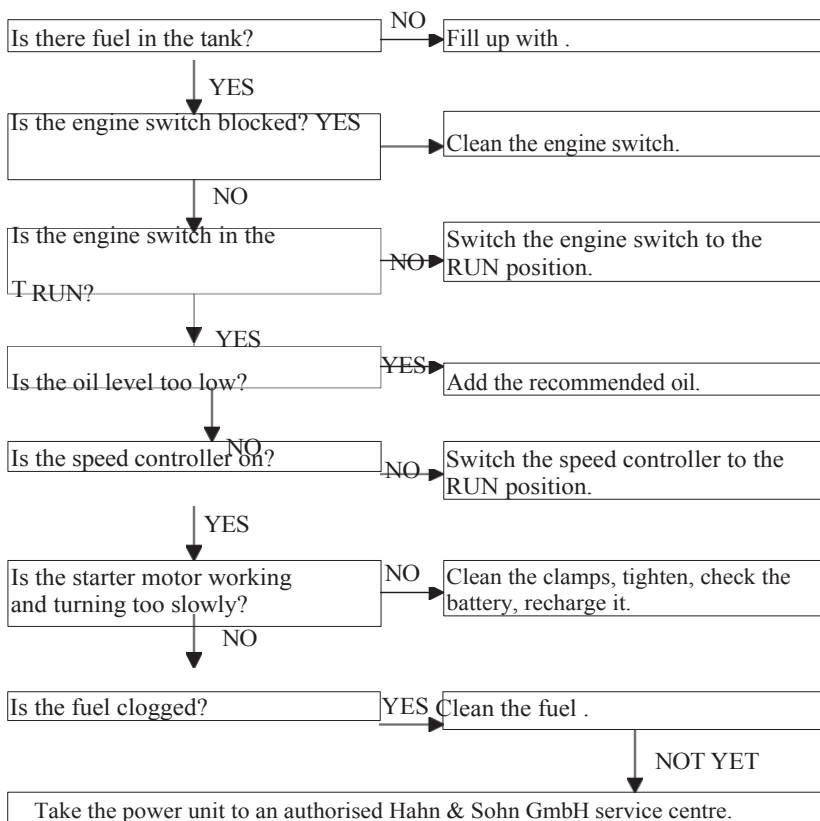
WARNING

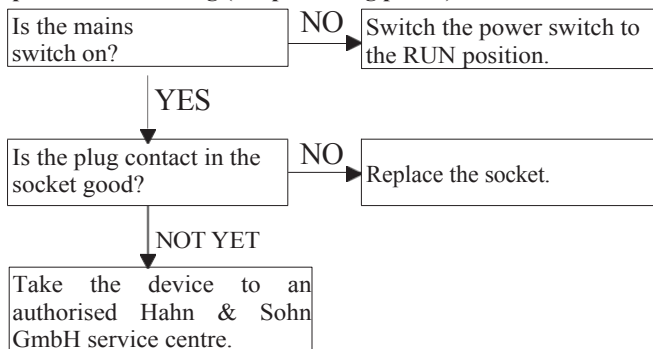
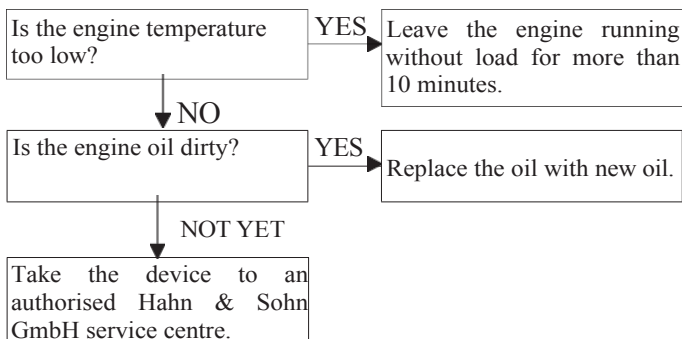
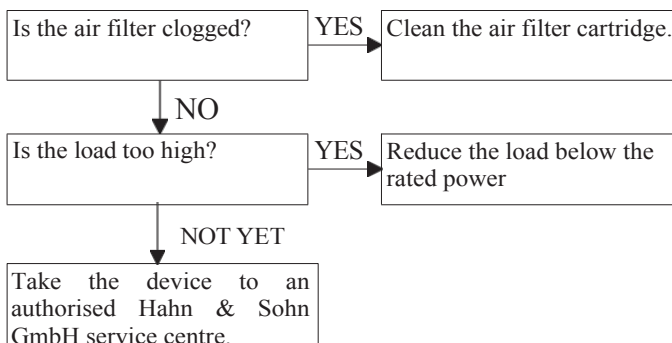
Gasoline is a flammable and explosive material. Drain the oil in a well-ventilated area after shutdown. Extinguish sources of fire or flame during draining.

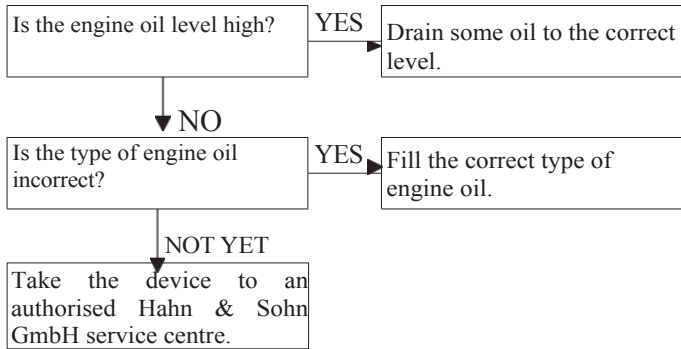
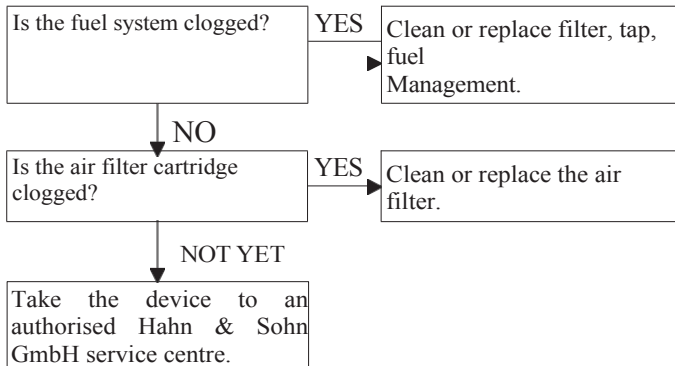
2. Close the fuel tap, turn the mains switch to OFF, switch the engine switch to OFF.
3. Leave the power pack in a dry and well-ventilated place.

8. Solving problems

Engine won't start



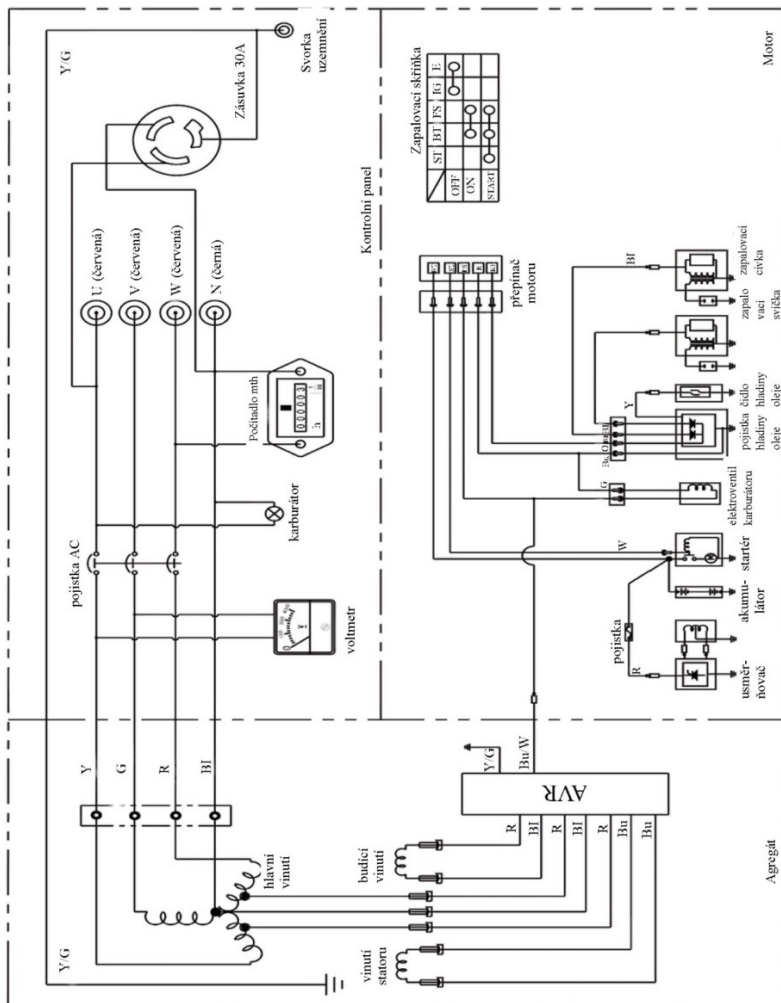
The power plant is not working (not producing power)**Power plant emits white smoke****Power plant emits black smoke**

Power plant emits blue smoke**A reduction in delivered power occurs**

9. Technical parameters

Model		HGG22000E3A
Generator	Type	Open on the frame
	Frequency	50 Hz
	Voltage	400 V
	Rated current	27 A
	Maximum performance	17 kW/21.25 kVA
	Rated power	15 kW/18.75 kVA
	Effect	0.8
	RPM	3000 rpm.
	Number of phases	3
Engine		
	Type	2-cylinder, 4-stroke, cooled
	Rated power	20 kW/3600 rpm.
	Stroke volume	999 cm3
	Diameter x stroke	90 x 78,5
	Compression ratio	8;5;1
	Fuel	Pb95/E5
	Fuel tank volume	40 L
	Duration of continuous operation	7 h
	Fuel consumption	100% ≤ 374 g/kWh
	Fuel tank volume	2,5 L
	Type of oil	Higher than CD grade or SAE10W-30 or 15W-40
	Lubrication system	Pressure
	Starting	Electric 12V
	Accumulator	12V
Dimensions / weight	Dimensions	1040x680x858 (with stakes)
	Net weight (for purposes only)	213 kg

10. Electrical diagram



ES prohlášení o shodě

Číslo prohlášení o shodě:
01/105408/2019



Aktualizováno dne:
10/05/2019

Prohlášení o shodě vydal: Adresa vydavatele prohlášení o shodě:	Hahn & Sohn GmbH Auf der Schanze 20 93413 Cham
Notifikovaná osoba: Adresa notifikované osoby: Číslo notifikované osoby:	TUV Rheinland LGA Products GmbH S.Á.R.L. (Tillystraße 2, 90431 Nürnberg, Germany 0197

Druh zařízení

Electric generator

Model/Typ:

HGG22000E3A

Změřená hladina akustického výkonu:	96 dB/A
Garantovaná hladina akustického výkonu:	96 dB/A

Hahn & Sohn GmbH, Auf der Schanze 20 93413 Cham na vlastní odpovědnost prohlašuje, že zařízení, kterého se týká toto prohlášení, splňuje požadavky uvedené ve Sbírce Zákonů:

- ze dne 21.12.2005 (č. 263 Sb. poz. 2202)
- ze dne 21.10.2008 (č. 199 Sb. poz. 1228)
- ze dne 02.06.2016 (č. 2016 Sb. poz. 806)
- ze dne 13.04.2016 (č. 2016 Sb. poz. 542)
- Směrnice o emisích hluku 2000/14/ES, se změnami 2005/88/ES (hodnocení shody dle přílohy č. VI)
- Směrnice o strojních zařízeních 2006/42/ES
- Nízkonapětová směrnice 2014/35/EU
- Směrnice o elektromagnetické kompatibilitě 2014/30/EU

Díky výše uvedené shodě výrobky byly uvedeny do obrotu

na trhu Evropské Unie
Ing. Richard Janovský

Osoba oprávněná k přípravě a zhotovení
technické dokumentace:

Andrzej Bogdanowicz
ul. Miałki Szlak 52, 80-717 Gdańsk,

**ES prohlášení o shodě pozbývá platnosti, pokud zařízení bude upraveno, přestavěno,
nebo bude použito v rozporu s Návodem k obsluze.**

In Cham on 10.05.2019

Podpis dne 10.05.2019

VEDOUcí ODDĚLENÍ
TECHNICKÉ DOKUMENTACE

.....
Ing. Richard Janovský
VEDOUcí ODDĚLENÍ
TECHNICKÉ DOKUMENTACE



WARRANTY LETTER

The equipment is subject to warranty if purchased from Hahn & Sohn GmbH or an authorized regional representative of Hahn & Sohn GmbH. The warranty is for 1 year or 500 motor hours from the time of purchase. The warranty applies exclusively to manufacturing and material defects. The warranty does not include:

- *mechanical damage due to improper operation,*
- *unprofessional repairs using non-original spare parts,*
- *such as: switches, capacitors, fuses, wedge belts, etc.,*
- *use in contravention of the Operating Instructions.*

Have the power unit and ATS connected to the grid by a professional company or persons with a current SEP certificate. Missing date, stamp, signature including SEP authorization number in the Warranty Certificate deprives the purchaser of warranty rights on the equipment.

Claims will not be accepted if unsuitable engine oils and fuels are used. Overloading the power unit may damage it. It is not permitted to overload the power unit by more than 75% of its output power in continuous operation. This is unacceptable and will invalidate the warranty.

In the event of a malfunction, the equipment must be delivered to the **place of purchase or to the Warrantor's service center**. The cost of delivery of the equipment to the place of purchase or service centre shall be borne by the Customer. The claim will not be accepted in case of damage caused by reasons independent of the manufacturer.

**Service centre of the provider: Hahn & Sohn
GmbH**

Auf der Schanze 20 93413

Cham

Tel. +490 9944 890 9 896

Mob. +490 163 02 44 737

E-Mail info@hahn-profis.de Web

www.hahn-profis.de

Regular checks and inspections, including engine oil and air filter changes as recommended by the Warrantor, are a condition of the warranty validity:

- *oil checks and top-ups daily or max. every 8 hours of operation,*
- *oil and filter changes: first after 50 mth or 3 months from the date of purchase, comes first, further changes within the warranty period after 100 mth or 3 months of operation from the date of the last service, whichever comes first, documented in the authorized service network of the Warrantor (in case of intensive use of the power generator or operation in an environment with increased dust levels after 50 mth, max. 1 month). If the motor is equipped with a timing belt, replacement is required after 700 hours of operation of the equipment. The warranty provider reserves the right to refuse claims within the warranty period in the case of use of oils other than Castrol, Shell, Mobil, Aral, Quake, SAE15W-40.*

- *Changing the air filter and oil filter in the same timeframe as the engine oil change,*

-oil service during the warranty period is paid by the user.

Failure to document the above activities will void the warranty. Documentation of the above inspections, including a record of the types of oils, filters, service stamp and date of service, must be made each time in the "Warranty Repairs and Out-of-Warranty Service" section of the Warrantor's Operator's Manual or the Machine Manufacturer's 's Manual.

NO SILICONE OR OTHER ADDITIVES IN FUELS AND OILS!

Our services and supplies do not include:

- installation, commissioning,
- training in the range of operation and service.

Performing any repairs during the warranty period outside of an authorized service will void the warranty.

In the case of an accepted claim, the warranty is extended by the repair period. Claims without presentation of this warranty certificate including proof of purchase will not be accepted.

The warranty provider undertakes to rectify the fault reported under warranty within 30 days from the date of delivery of the equipment.

Failure to collect the equipment from the warranty provider's service department within a period of more than three months from the date of notification of acceptance will entitle the customer to storage charges.

The guarantee does not exclude, limit or suspend the rights of the buyer under the regulations on liability for defects in the sold item.

.....
Type of device

.....
Device ID No.

.....
Panel model

.....
Panel identification number

.....
Quality control

.....
Date of sale (signature, date and seller's stamp)

.....
Date of installation

.....
SEP authorisation number and
stamp of the person carrying
out the connection

.....
Name of the company/name and
surname of the person carrying out
the installation

Description of the fault Scope of repair activities, adjustment	Number of working hours	Date and signature of the Authorized Service

Description of the fault Scope of repair activities, adjustment	Number of working hours	Date and signature of the Authorized Service



**Central distributor and warranty provider Hahn
& Sohn GmbH**

Auf der Schanze 20
93413 Cham

Tel: +490 9944 890 9 896

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