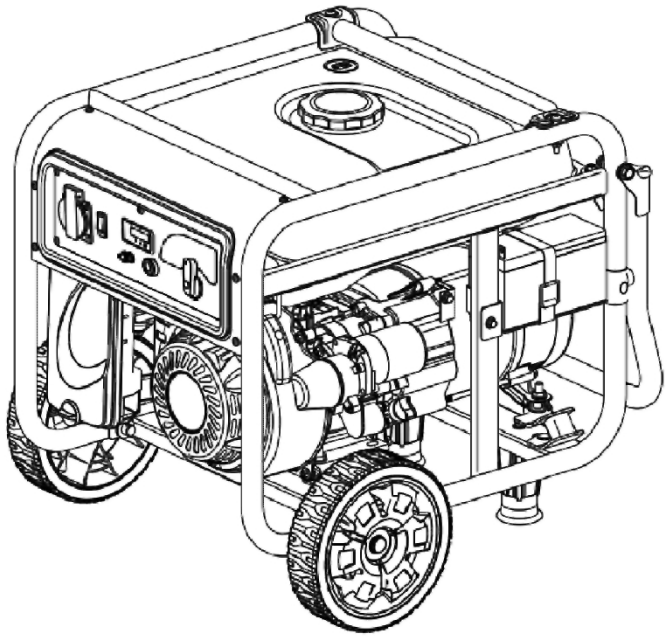
HAHN & SOHN

WARRANTY
CARD OPERATING
INSTRUCTIONS

HGG3100E
HGG3100X



Home

Thank you for your trust and congratulations on making the right choice. The power plant you have purchased has a modern petrol engine and an aesthetic, robust design.

The power unit has been designed and manufactured in accordance with the safety regulations of the European Union. Use it according to the instructions in the Operating Instructions and H&S regulations and other local regulations relating to the operation of this type of equipment. Failure to follow the above instructions will cause serious danger to health or life and damage to the equipment.

Safety is our priority. Familiarize yourself in detail with this manual. In case of any doubts, please contact Hahn & Sohn GmbH or your authorized regional representative for information.

Please also read the Warranty Card in detail. The Warranty Card describes the most important scope of the user's obligations, compliance with which will allow the equipment to be maintained in proper condition and protect against loss of warranty.

If the user does not follow the instructions in this operating manual, Hahn & Sohn GmbH is not liable (under warranty) for any defects that may occur. In such a case, Hahn & Sohn GmbH shall also not be liable for injury or death due to the above mentioned reasons.

Both the instructions and the device carry warnings, e.g. in the form of warning labels. 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. These may differ from the appearance of the machine and its parameters due to continuous development and improvement. The user is obliged to draw attention to these differences.

INITIAL GUIDE

revision 40.2

25.01.2022

Table of Contents

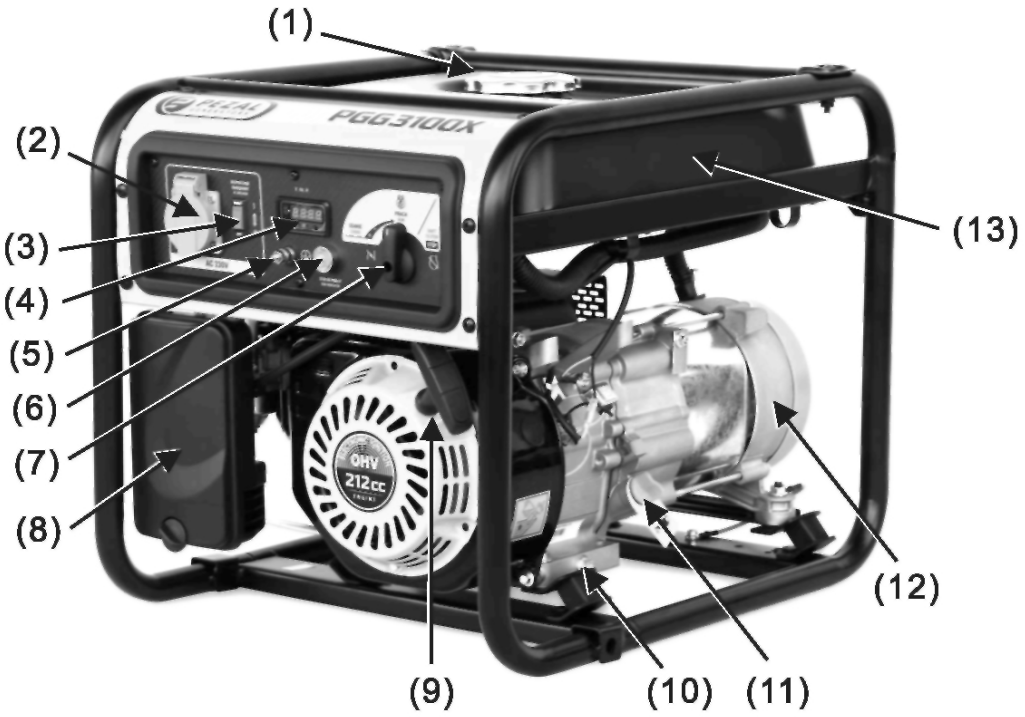
1. Safety instructions

Before starting work or carrying out any inspections, it is essential to read the operating instructions and the equipment purchased.

The use of the power generator must comply with the instructions in this manual and the OHS and other local regulations applicable to the use of the equipment. This is a condition for any comments, claims and warranty claims. Use contrary to the instructions may lead to damage or destruction of the equipment and seriously endanger health or life. In such cases, Hahn & Sohn GmbH, including its subsidiaries, shall not be held liable for damage and accidents.

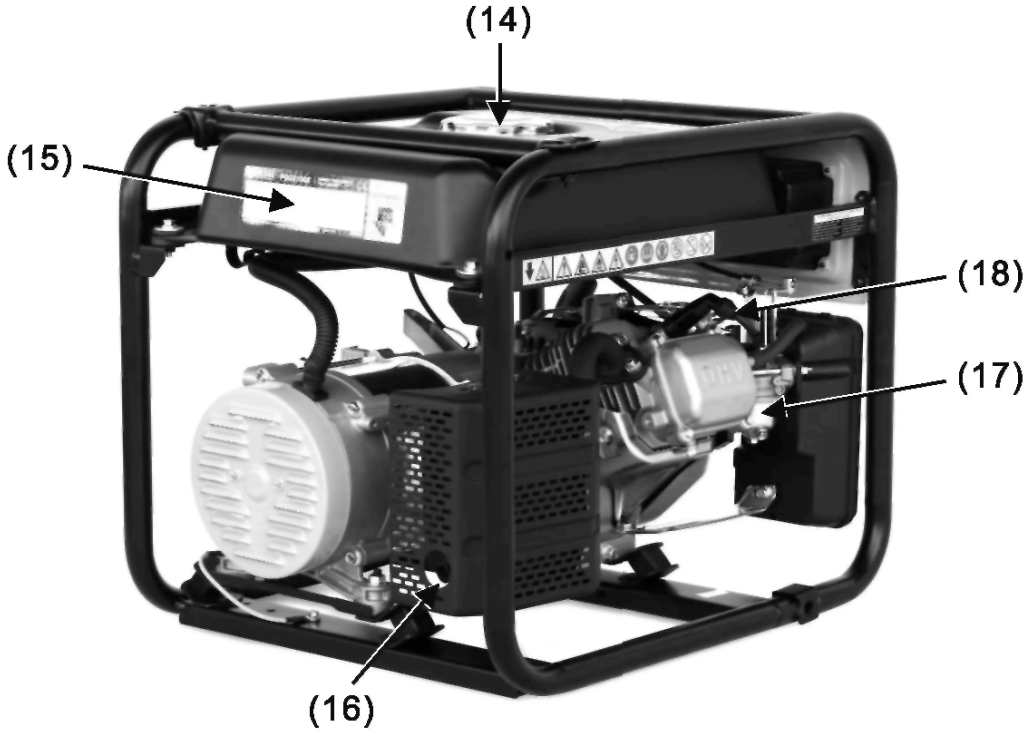
1. Use the power plant in well-ventilated areas, as the exhaust fumes are toxic to humans and animals. Do not use the unit in enclosed rooms without proper ventilation.
2. Using the power tool in high humidity conditions such as snow or rain, near water tanks or sprinklers, and operating the power tool with wet hands can cause electric shock.
3. Do not connect the power unit to the domestic mains without earthing. Do not connect the power unit to the domestic mains without first disconnecting the external mains.
4. Keep the power unit at least 1 metre away from walls and 2 metres away from combustible materials.
5. Never refuel or refill the fuel or oil while the power pack is in operation. Refueling and oil refilling is only allowed after the power unit has been switched off.
6. Be careful when refuelling, avoid sparks, do not smoke, take care not to spill fuel.
7. In case of fuel spillage, wipe them carefully.
8. It is mandatory to check the technical condition of the power unit before using it. Neglecting or overlooking damage caused by improper operation of the equipment can cause serious accidents or damage to the equipment, for which Hahn & Sohn GmbH including its subsidiaries cannot be held responsible.

9. During the operation of the power plant, the OHS regulations and other local regulations applicable to the operation of such equipment must be observed.



1	Fuel level indicator	8	Air filter
2	AC socket 23GW16A	9	Manual starter
3	AC circuit fuse	10	Oil drain screw
4	Motor hours counter	11	Oil filler plug
5	Earthing	12	Generator
6	Power indicator	13	Fuel tank
7	ON/OFF switch		

Optional
Model: **105491-17017**
Set of running wheels with handle



14	Fuel filler plug	17	Carburetor
15	Production label	18	Spark plug
16	Silencer with cover		

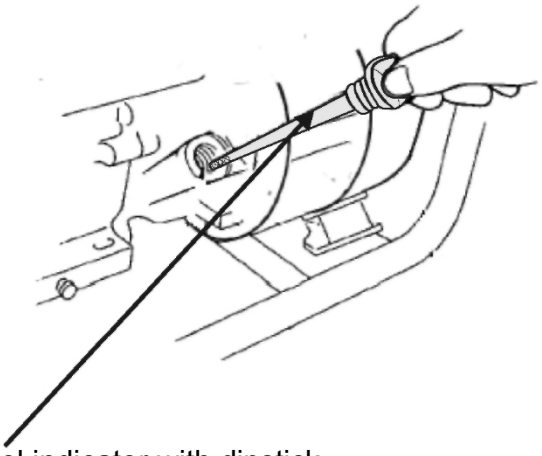
3. Before commissioning

3.1. Check that the power pack is standing on a level surface (horizontal).

3.2. Check the oil level in the engine:

1) Unscrew the oil filler plug with dipstick.
2) Wipe the dipstick.
3) Insert the gauge back in without screwing it in. If the oil level is below the minimum, add oil to the correct level.
4) Screw the oil filler plug with dipstick all the way in.

Correct oil level



Oil level indicator with dipstick

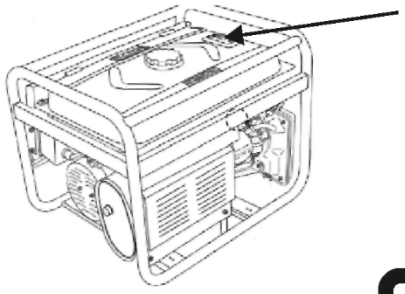
Recommended engine : SAE15W40 Oil pan

capacity: 0.6L

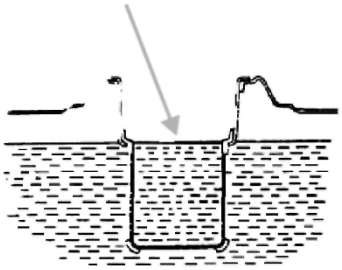
3.3. Check the fuel level in the tank

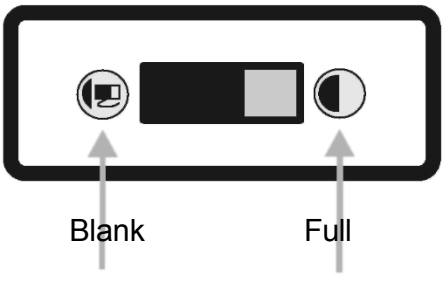
Check the fuel level in the tank using the gauge located on the tank at the filler neck. If fuel is low, top up to the correct level. Beware of overfilling the tank. After refuelling the tank, screw in the fuel filler plug firmly.

Fuel level indicator



Max. fuel level





Blank Full

Recommended fuel: unleaded petrol Pb95 (E5) Fuel tank

capacity: 9 L

3.4 Check the air filter

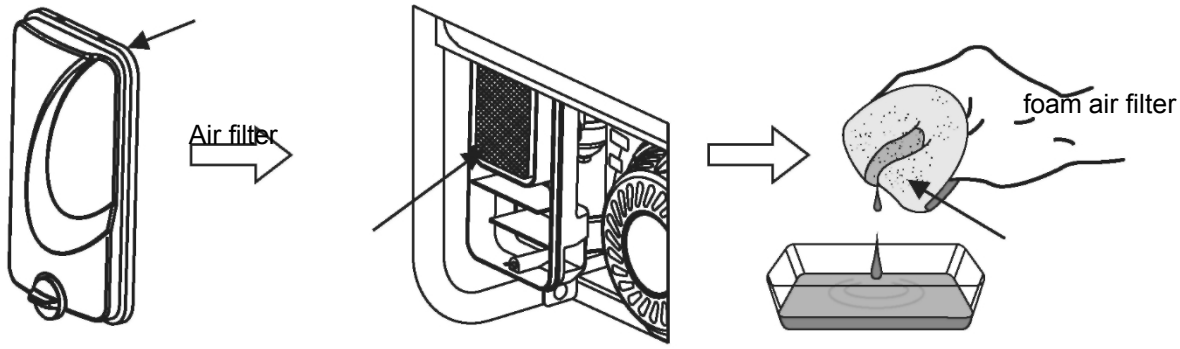
Check the condition of the air filter before each use of the power pack. Carry out maintenance according to the information on the label on the power unit. If , replace the filter with a new one.

1) Unscrew the air filter cover screw and remove the cover
2) Remove the filter and check that it is clean and undamaged
3) If the filter is clean and undamaged, it, otherwise replace the filter element with a new one
4) Replace the filter cover and screw in the screw.

Never use the device without a working air filter, as there is a risk of damage (choking) of the motor. Never clean the filter with compressed air, the filter may be destroyed.

If working in dusty areas, clean the air filter in technical gasoline and dry it every 50 hours of operation. Gently dampen the dried filter with oil to make it greasy - wring out the excess oil and place the filter back in the filter housing.

Air filter cover

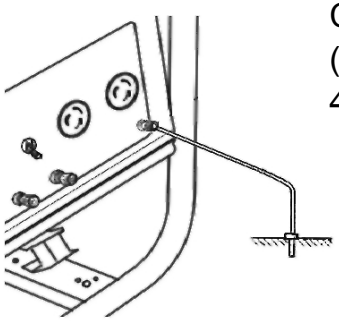


3.5 Tightening all bolts and connections

Check all bolted connections before commissioning the equipment. Tighten any loose bolts and nuts. Failure to do so may cause damage to the equipment and an accident. In such a case, the Warrantor and the Dealer are not responsible for accidents that occur and damaged equipment is not covered by warranty.

3.6. Earthing

To protect against electric shock, the power unit must be earthed. Connect the wire from the earth terminal to a special earth rod driven into the ground. Grounding in AC outlets, elements of the power center that must not be energized are connected to the grounding terminal. The grounding is not connected to the AC protective conductor.

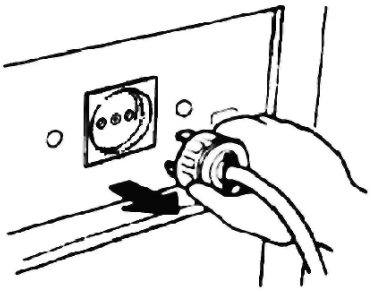


Check the output parameters of the power generator (230V+/-5% (50Hz) single phase generator and 400V+/-5% (50Hz) three phase generator)

⚠ The connection of the generator to the domestic network must be carried out by a person with the appropriate authorisation.

4. Commissioning of the power plant

4.1. Commissioning of the HGG3100X



1. Disconnect all load devices from the AC outlets and switch the AC circuit breaker to the O 'OFF' position.
2. Move the switch lever to the left to the ON position.
3. Slowly pull the hand starter handle to the first resistance. Only now pull hard. Do not let go of the handle loosely, so as not to hit anyone or damage the power pack on return.
4. At the moment of starting the power unit, switch the switch lever from the ON position to the OPERATION position.
5. Plug the unit into an AC outlet, then switch the AC circuit breaker to the I 'ON' position.

4.2. Commissioning of the HGG3100E

1. Disconnect all load devices from the AC outlets and switch the AC circuit breaker to the O 'OFF' position.
2. Move the switch lever to the left to the ON position.
3. Press the silver START button next to the lever.
4. After starting, switch the choke lever to operation mode.
5. Plug the unit into an AC outlet, then switch the AC circuit breaker to the I 'ON' position.

5. Shutting down aggregate

1) Switch the AC circuit breaker to the O 'OFF' position.
2) Unplug appliances from the AC outlet
3) Switch the switch lever to the right from the 'OPERATION' position to 'STOP'.

6. Proper operation of power plant

To keep the power pack in good condition and to prolong its reliable operation, please observe the following instructions:

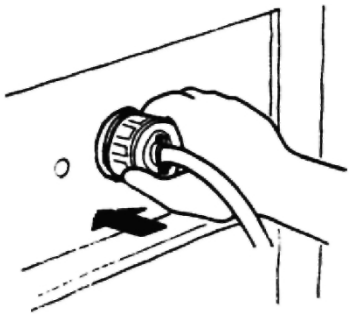
6.1. During operation, the power unit must be earthed

Connect the ground from the output on the control panel as described in section 3.6 on the previous page.

6.2. AC sockets

1) Start the power unit and warm up as described in the commissioning section 4. on the previous page.

2) Connect the load equipment to the AC outlets



Plug in devices according to power consumption: the device with the higher power consumption first, followed by devices with lower power consumption.

Devices with electric motors draw 3 to 9 times more current when starting (unless they are equipped with frequency converters). Keep this in mind when connecting appliances.

Make sure the power pack is running at the correct speed, otherwise the AVR (Automatic Voltage Regulator) will be overloaded. The AVR may be damaged (burned) if the power pack is operated in this condition for a long time.

If you connect the appliances in reverse order, the power pack will be overloaded, reduce the speed or suddenly stop completely. This can lead to a burnt AVR on the generator, the warranty does not cover this fault. In this case, the AC voltage switch should be immediately turned to the OFF position, the engine shut down and service contacted.

6.3. Direct Current - Applications

1) The DC socket (if the device is equipped with one) is used exclusively for charging the rechargeable batteries.

2. To charge the batteries, turn the AC power switch to OFF. An ON/OFF switch may be retrofitted on the control panel near the 12V DC output.

3) When charging lead-acid batteries, remember to keep the "+" and "-" terminals thoroughly connected (not sparking), do not disconnect the terminals while charging the batteries. Check the electrolyte level in the batteries being charged and unscrew the battery cell plugs before starting to charge. Failure to follow the above instructions may result in battery explosion and electrolyte burns to the operator.

Measures:

- connect the "+" (plus) and "-" (minus) terminals of the battery to the plus and minus terminals on the control panel. Wiring the other way around may damage the power pack and battery;
- do not connect the plus of the battery to the minus of another battery (in series), the charging result will not be correct, do not connect the plus of the power pack to the minus of another power pack, the power packs may be damaged;
- if you connect too large a battery for charging, excessive current draw can damage the fuse;
- Do not use the AC sockets of the power pack if you still have a battery connected to the DC socket (never use the power pack to draw AC and DC power at the same time);
- remember that the battery can explode from an accidental spark near the battery during and after charging - do not check spark plugs near the battery, do not use open flames, do not smoke. If you need to check the spark plug, for example, make sure that the battery cables are disconnected from the power pack, the power pack is stopped, the battery is at a safe distance from the power pack. Only charge batteries if you are sure the room is well ventilated. Make sure the battery cell plugs are unscrewed before charging. Stop charging if you find that the temperature of the electrolyte in the battery has exceeded 45°C.

7. Service and inspections

Regular inspections and replacement of consumable components are very important to keep the power plant in good condition. The power pack must be switched off while the replacement and inspection is being carried out. The use of non-original spare parts may cause damage to the power pack. Installation of non-genuine parts will void the warranty.

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 following table may result in loss of warranty.

Replacement and inspection table

Activities		Daily (Max every 8 h)	First month or 20 mth	Every 6 months or 100 mth	Every 12 months or 300 mth
Engine oil		**X**			
	Replace		**X**	**X**	
Air filter	Check	**X**			
	Replace			**X(1)**	
Spark plug	Check			**X**	
	Replace				**X**
Valve clearances	Sort				**X(2)**
Fuel tank	Clean up				**X(2)**
Fuel lines	Clean up				**X(2)**
	Replace				**X(2)**

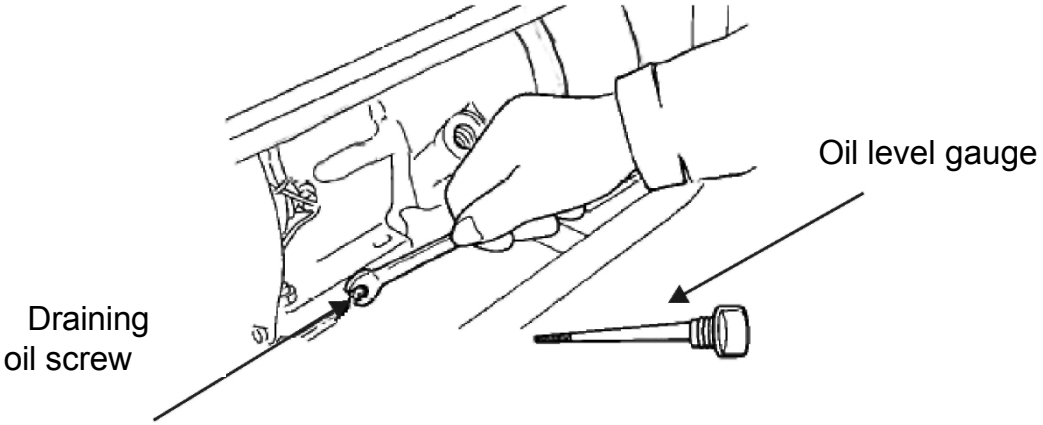
X(1) - More frequent replacement if necessary

X(2) - Performed only by qualified service personnel

7.1. Changing the engine oil

Be sure to warm up the power unit for about 5 minutes before starting the oil change (the oil in the engine must be warm so that it flows completely out of the engine).

1) Unscrew the oil dipstick.
2) Unscrew the oil drain screw and drain the worn oil into the container.



3) Screw back the drain screw
4) Top up the oil to the upper level (~ 0.6 L).
5) Screw in the oil dipstick one at a time.

Recommended oil: mineral SAE15W-40 e.g. Castrol, Mobil, Shell.

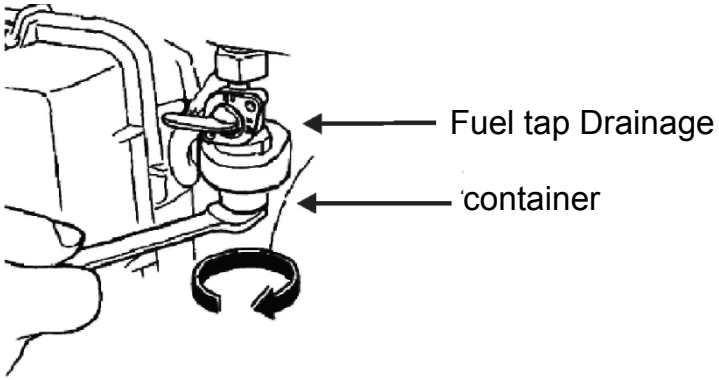
7.2. Air filter

When replacing the air filter, follow the same procedure as for cleaning the air filter. Sticker on the frame of the power pack.

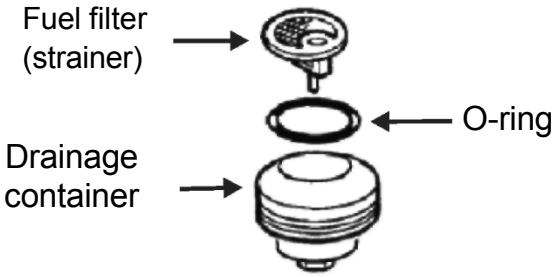
7.3. Cleaning the sump tank and fuel filter

Close the fuel tap before cleaning.

1) Unscrew the drain plug located under the fuel tap.



2) Clean the reservoir, strainer and O-ring.



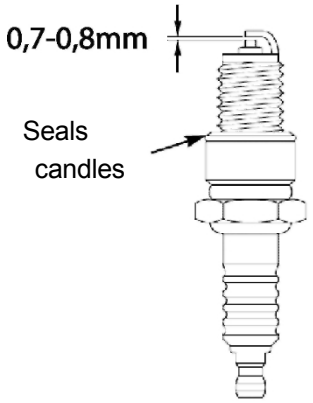
3) After cleaning, everything, leave the fuel tap in the ON position and check for any leaks.
4) Unscrew the fuel plug and clean the filter located in the filler neck. Do this with gently compressed air.
5) After cleaning, screw the fuel plug in thoroughly.

7.4. Spark plug

1) Remove the cable end from the spark plug.
2) Unscrew the spark plug (with a spark plug wrench).
3) Check the condition of the spark plug.
4) Clean the spark plug or replace it with a new one.
5) Check the distance between the electrodes. The correct distance is 0.7-0.8 mm
6) Screw in the spark plug with a torque of approx. 23 Nm, insert the cable end.

Replace the spark plug every 300 hours of engine operation. The efficiency of the spark plug gradually decreases and even a working spark plug after 300 hours of operation can cause the engine to malfunction.

If the engine was running, the muffler would be hot. Do not touch the shock absorber, there is a risk of burns.



Recommended spark plug:	
TORCH	F7RTC
Equivalents:	
ISKRA	FE85PRS
DENSO	W22EPR-U11
NGK	BPR7ES
BOSCH	W255TR30

8. Fuel

Use only clean, unleaded petrol and prevent dirt and water from entering the fuel tank.

Measures:

- gasoline is flammable and explosive,
- only refuel when the engine is switched off in a well-ventilated area.
- no smoking near petrol tanks, avoid situations where sparks can be generated
- Do not fill the tank above the maximum level (no petrol in the tank neck),
- be careful not to spill petrol from the tank, if spillages occur, wipe them up carefully.
- after refuelling the tank, make sure the fuel plug is screwed in properly,
- avoid inhalation of fumes and contact with gasoline.
- Store petrol out of reach of children and animals.

9. Oil alarm system

The oil alarm system is designed to prevent engine damage due to low oil levels in the oil pan. Before the oil level drops below a safe level, the system automatically shuts off the engine (ignition switch remains in the ON position).

If the engine stops and cannot be restarted, check the engine oil level. Never disconnect the oil level sensor. This can lead to engine damage (seizing).

10. Transport and storage, long-term storage

Store the power unit in a covered warehouse that protects it from direct exposure to atmospheric influences. To keep the equipment in good condition after work, clean it of dust and other dirt, then preserve it. If storage will last longer than one month, preservation of the power unit is necessary.

The motor and some elements of the power unit are hot and remain hot for a long time after the work is finished. Turn off the equipment and allow it to cool completely before cleaning, maintenance, storage and moving.

- During transport and storage, keep the unit horizontal (as during work) to prevent fuel spillage. Fuel spillage can cause a fire. Transporting the equipment in a manner other than that described in the instructions will cause engine oil to leak into the head and out of the engine. Attempting to start the engine after such transport will cause complete destruction of the engine, which is not covered by the warranty.
- Clean the power pack of dust and other dirt before storage. Inspect according to the inspection chart, repair any damage. Change the oil in the power pack. Store the equipment in a well-ventilated and dry room.
- Be not to drop the equipment during loading.
- Do not place heavy objects on the power pack.
- Prepare a level place for the equipment before loading.
- Secure the power pack against movement during transport, e.g. by using appropriate straps.

The warranty does not cover any damage caused by improper storage or transportation of the equipment and repair of damage will be paid for by the owner of the equipment. If the equipment has been used, allow it to cool before transporting or storing. Otherwise, storage or transportation may lead to burns, fire and even explosion. It may also cause damage to the equipment.

11. Possible problems and their solutions

11.1. Problems with starting the engine of the power plant.

Cause		Solution
No fuel in the tank	Empty tank.	Fill the fuel tank.
	Clogged carburettor or closed fuel tap	Clean the fuel system and carburettor, open the tap.
Spark plug damage	Soot	Clean the candle
	Damaged insulation	Replace the candle
	Incorrect electrode spacing.	Adjust the distance.
Low pressure of the fuel/air mixture in the cylinder (compression)	Air infiltration.	Tighten the spark plug.
	Air purge between cylinder and head.	Replace the engine head gasket.
	Worn ring or roller.	Replace the rings or motor block.
	A fried or cracked piston ring.	Remove deposits, replace rings.
Unsuitable engine oil		Change the oil

11.2. Incorrect engine speed (no load).

Cause	Solution
Incorrect engine speed (too low, too high)	Adjust the centrifugal speed controller, turn off the choke

11.3. Uneven engine operation.

Cause	Solution
High voltage wire fault.	Replace the spark plug cable, including the spark plug connector, with a new one.
Carbonized spark plug.	Clean the spark plug.
Clogged fuel line.	Clean the fuel lines.

11.4. The engine is too high.

Cause	Solution
Engine fins sealed.	Clean the engine fins.
Low octane gasoline.	Use a different fuel.
Insufficient oil lubrication.	Change the oil to the recommended one.

11.5. Automatic (automatic) engine stop.

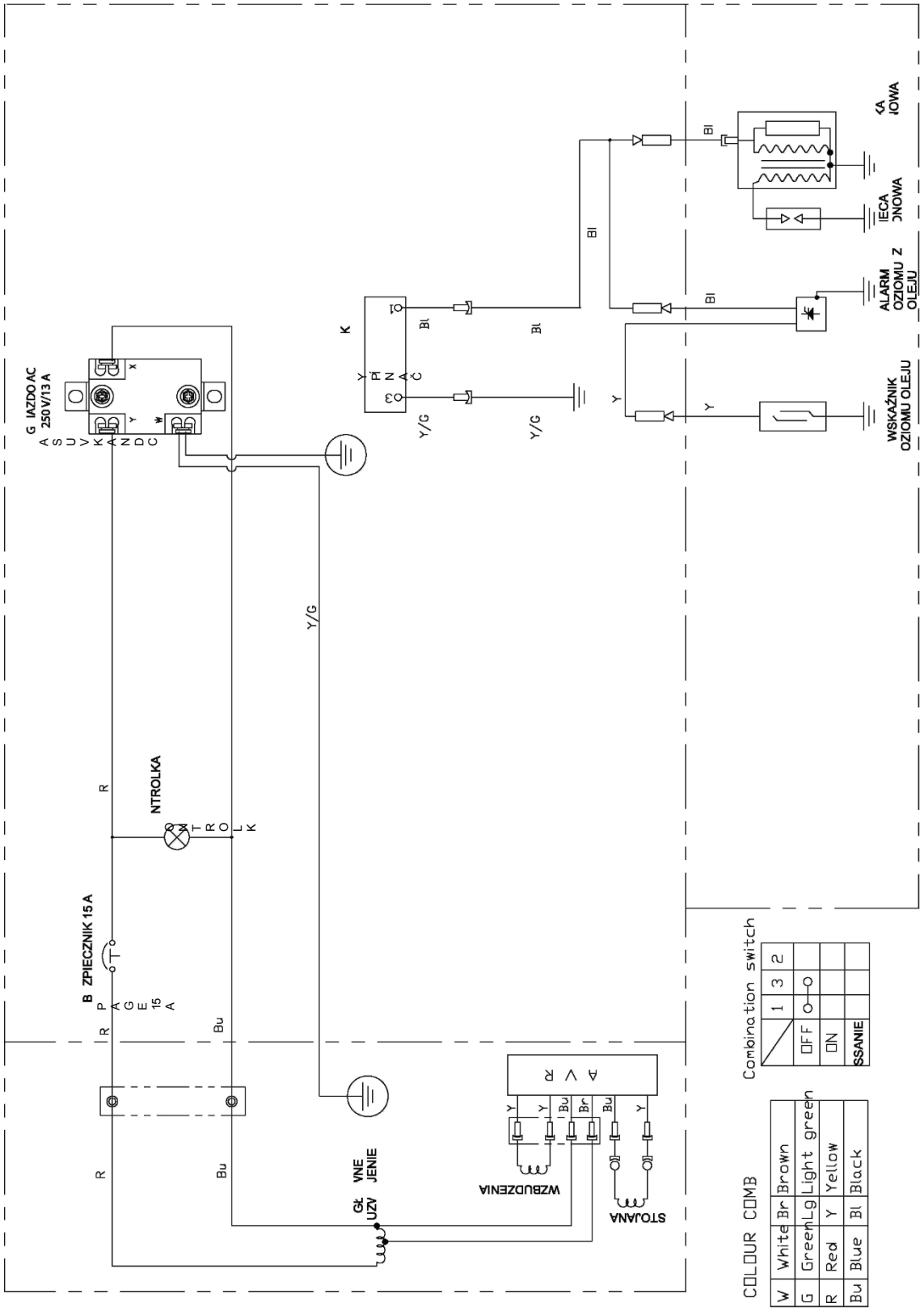
Cause	Solution
Low oil level.	Add oil.
We're out of fuel.	Refuel.
Fuel is not getting into the engine.	Clean the lines and carburettor.
Ignition malfunction.	Check the ignition.

12. Technical parameters

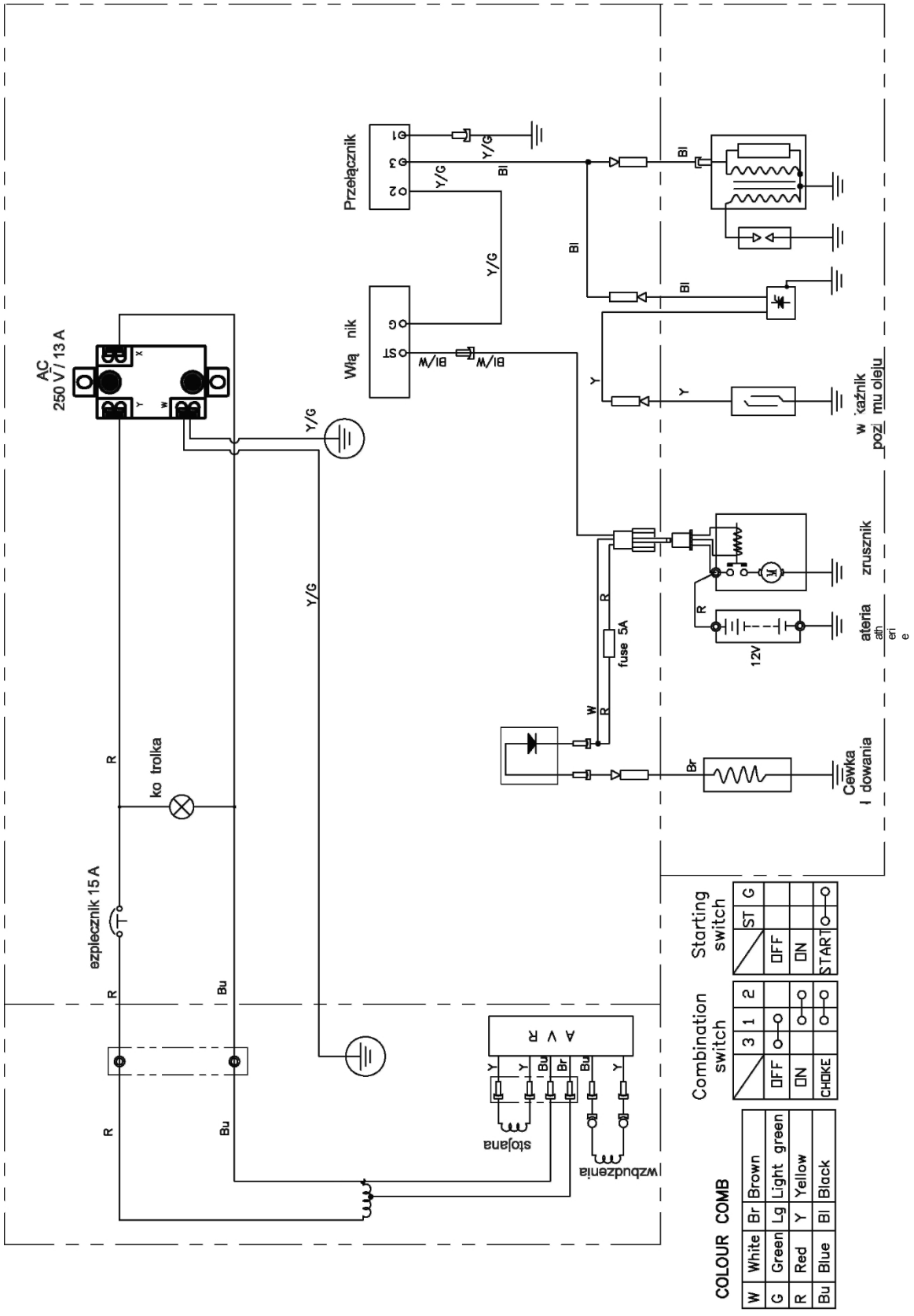
Model	HGG3100X	HGG3100E
Frequency	50 Hz	
Voltage	230 V	
Rated power / Starting power	3.0kVA/kW / 3.3kVA/kW	
Rated current	13A	
Effect	cosφ= 1.0	
Engine	single-cylinder, four-stroke, air-cooled	
Revolutions	3000 rpm	
Volume of the oil sump	0,6 L	
Spark plug	F7TC (N9YC)	
Starting	Manual	manual+ electric
Fuel tank volume	9,0 L	
Net weight	40 kg	44 kg
Dimensions	555x430x440 (mm)	

13. Electrical diagram

13.1. Model HGG3100X



13.2. Model HGG3100E



14. EC Declaration of Conformity

EC declaration of

Declaration of conformity number:
01/105491/2022

HAHN & SOHN

Updated on:
19/01/2022

He issued a declaration of conformity: Address of the issuer of the declaration of conformity:	**Hahn & Sohn GmbH** **Auf der Schanze 20 93413 Cham**
Notified person: Address of the notified person: Notified person number:	**TÜV RHEINLANG LGA Products GmbH Tillystrasse 2,** **90431 Nürnberg** **0197**

Device type **Power Plant**

Model/Type: **HGG3100X HGG3100E**

Measured sound power level:	**93.8± 0.5 dB/A**
~~**Guaranteed sound power level:**~~	~~**96 dB/A**~~

Hahn & Sohn GmbH, Auf der Schanze 20 93413 Cham, declares under its own responsibility that the equipment to which this declaration relates complies with the requirements set out in the Collection of Laws:

~~• no. 263 pos. 2202 Coll. of 21.12.2005~~	~~- Noise Directive 2000/14/EC, as amended by 2005/88/EC~~ *(conformity assessment according to Annex III)*
• No. 199 Coll. pos. 1228 of 21.10.2008	- Machinery Directive 2006/42/EC
• No. 806/2016 Coll. of 02.06.2016	- Low Voltage Directive 2014/35/EU
• No. 542/2016 Coll. of 13.4.2016	- Directive on electromagnetic compatibility 2014/30/EU
• No.2020 pos. 1339 Coll. of 04.08.2020	- Flue Gas Emissions Directive 2016/1628/EU

Thanks to the above compliance, the products have been put into on the European Union market

Person authorised to prepare and produce technical documentation: **Ing. Richard Janovský**

The EC Declaration of Conformity is no longer, if the equipment is modified, rebuilt used in a manner contrary to the instructions for use.

In Cham on 19.01.2022

VEDOUCÍ ODDĚLENÍ
TECHNICKÉ DOKUMENTACE
Ing. Richard Janovský
VEDOUCÍ ODDĚLENÍ
TECHNICKÉ DOKUMENTACE

CE

WARRANTY SHEET

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 200 motor hours from the time of purchase, whichever comes first. The warranty covers only manufacturing and material defects. The warranty does not include:

- *mechanical damage due to improper operation,*
- *repairs not carried out professionally or repairs carried out non-original spare parts,*
- *consumable parts such as: switches, capacitors, fuses, V-belts, etc.*

Have a professional company or a person with a current SEP licence connect the power generator and ATS to the grid. Failure to record the date, stamp, signature, including the SEP authorization number on the Warranty Certificate will void the equipment warranty. Claims will not be honoured in the event of the use of unsuitable engine oils and fuels. Overloading of the power unit risks damaging it. It is not permitted to overload the power unit by more than 75% of its rated capacity in continuous operation. Such action is unacceptable and will void the warranty.

In the event of equipment failure, it must be delivered to the **place of purchase or to the Warrantor's Service Centre**. The cost of transporting the equipment to the place of purchase or to the 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 warranty provider: Hahn & Sohn GmbH
Auf der Schanze 20 93413
Cham
Tel. +490 9944 890 9 896
Mob. +490 163 02 44 737
E-Mailinfo@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 continuation of the warranty on the power unit:

- *oil checks and top-ups daily or max. every 8 hours of operation,*
- *Oil and filter changes as described in the table on page 11, documented by an authorized service network of the Warrantor. The Warrantor reserves the right to refuse a claim if oils other than Castrol, Shell, Mobil, Aral, Quake, SAE15W-40 are used during the warranty period.*
- *changing the air filter and oil filter at the same time as the engine oil change,*
- *oil service during the warranty period is paid by the user.*

The absence of documented activities as described above deprives the buyer of warranty rights. Documentation of the above inspections, including a record of the types of oils, filters, and service stamp, must be made each time in the "Warranty Repairs and After Warranty Service" section of the Warrantor's Operator's Manual or the Machine Manufacturer's Operator'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 shall 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.

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carrying out the installation

INSPECTIONS, ADJUSTMENTS AND CHECKS

Description of inspection, adjustment or repair, scope of activities	Number of working hours	Date and signature of service technician

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Description of inspection, adjustment or repair, scope of activities	Number of working hours	Date and signature of service technician

Central distributor and warranty provider
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