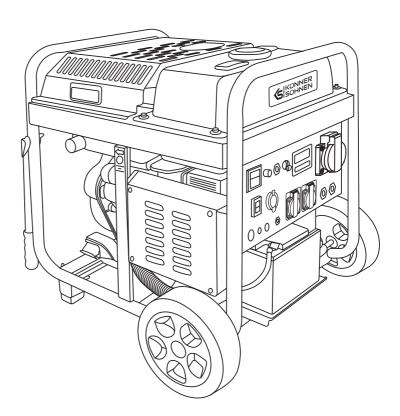


# Diesel inverter generator

KS 6100iDE ATSR KS 9500iDE ATSR



## INTRODUCTION



Thank you for choosing **Könner & Söhnen®** products. This manual provides a brief description of safety requirements, setup procedures, and operating instructions. More information is available in the support section at:konner-sohnen.com/pages/instructions

You can also download the manual by scanning the QR code or by visiting the official importer's website at www.konner-sohnen.com



## Please, read this manual carefully before use!

The manufacturer reserves the right to make changes that may not be reflected in this manual, including:

- The manufacturer reserves the right to make changes in the product design, configuration and construction.
- The images and drawings in this manual are for reference only and may differ from the actual components and inscriptions on the products.

Contact information that you are free to use in case of any problems can be found at the end of this manual. All information in this manual is correct to the best of our knowledge at the time of publication. The current list of service centers can be found on the official importer's website at **www.konner-sohnen.com** 



Failure to follow the recommendations marked with this sign may lead to serious injury or death of the operator or third parties.



IMPORTANT!



Useful information while operating the machine.

## **SAFETY INFORMATION**



IMPORTANT!



Carefully read this manual before starting to work with the generator

### WORKING AREA

- Please don't use the generator near flammable gases, liquids or dust. When using the generator exhaust system gets very hot. This may cause fire or explosion of these materials.
- Be sure to follow cleanliness and good lighting in the work area. Clutter and poor lighting may cause an injury.
- Do not let the presence of unauthorized persons, children or animals when working with generator. If necessary, make sure to fencing the working area.

## **ELECTRICAL SAFETY**

- The generator produces electricity that may lead to an electric shock while neglecting compliance regulations.
- In the high humidity level conditions generator exploit is prohibited. Keep the generator in a dry place only.
- Avoid direct contact with grounded surfaces (pipes, radiators, etc.).
- Be careful when working with power cables. Immediately replace it in case of damage, as damaged wire increases the risk of electric shock.
- All connecting the generator to the network must be made by certified electrician in accordance with all electrical rules and regulations.

- Connect the generator to the protective ground before operation.
- Do not connect or disconnect a generator to electricity consumers, which are placed in water on a wet or damp soil.
- Do not touch parts of the generator under voltage.
- Connect the generator to those customers only which meet the electrical characteristics and the rated power of the generator.
- Store all electrical equipment dry and clean. Wires with damaged or spoiled insulation should be replaced. You should also replace worn, damaged or rusty contacts.

## PERSONAL SAFETY

- Be careful. Do not operate the generator, if you are tired, under the influence of drugs or alcohol. Inattention may cause a serious injury.
- Avoid inadvertent start. Make sure to set the switch to Off when you turn off the generator.
- Make sure no outsider objects are on the generator when it is turned on.
- Always keep a stable position and balance when starting the generator.
- Do not overload the generator, use it only for the purpose.
- As exhaust gases contain poisonous carbon dioxide (CO<sub>2</sub>) and carbon monoxide (CO) gases which are dangerous for life, it is strictly forbidden to install the generator in residential buildings, premises connected to residential buildings by a common ventilation system, other rooms from which exhaust gases may enter living premises.

## OPERATING AND MAINTAINING THE GENERATOR

- Before you start checks before operating, make sure that the generator is on a flat level surface and the engine switch is set to OFF.
- Check the connection of moving parts, no damaged parts that affect the operation of the generator. If the generator is damaged, remove them before using.
- For repair and maintenance use only recommended oil fuel. Using other lubricants, spare parts and consumables deprives you of warranty apparatus.
- Servicing the generator should be carried out only by qualified personnel. The current list of service centers you can find at the website of official importer: **www.konner-sohnen.com**
- Keep the generator dry, well ventilated place if you are not using it.



The generator runs on automotive diesel fuel and conform to European quality standards not lower than Euro 5 emission standard. The generator runs on automotive diesel fuel. Do not use gasoline, kerosene, fuel oil as fuel. Diesel fuel type should correspond the operating

The use of low-grade fuel can lead to a degradation of the manufacturer's declared specifications or to engine failure. Do not add any chemical additives to diesel fuel and do not mix diesel fuel with used engine oil or fuel oil.

| Diesel fuel characteristics | Region of use  |
|-----------------------------|----------------|
| EN590:96                    | European Union |
| BS 2869-A1 or A2            | Great Britain  |

Keep the fuel tank and refueling accessories clean and neat and ensure that no foreign objects / debris get into the fuel tank when refueling the generator. Sulfur content should not exceed 0.5% (less than 0.05% is recommended). Sediment and water content in fuel should not exceed 0.05%. A cetane number of at least 45 must be ensured. For example, biodiesel fuel which is known under the B5 brand, is permitted. This type fuel should contain no more than 5% of fatty acid methyl esters (FAME) and 95% of mineral diesel fuel. Read more about the requirements for biodiesel in the full web version: **konner-sohnen.com/pages/instructions** 

# SAFETY SYMBOLS. DESCRIPTION OF SAFETY SYMBOLS WHEN OPERATING THE GENERATOR

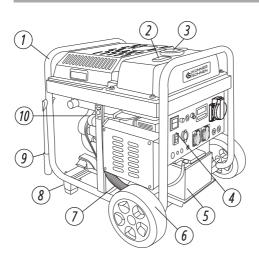


- **1.** Be careful when operating the device! Observe the safety instructions in this manual.
- **2.** Operate the generator only in well-ventilated indoor spaces or outdoors. Exhaust gases contain CO<sub>2</sub>, whose vapors are life threatening.
- **3.** Do not operate or store the device in highhumidity environments.
- **4.** Do not smoke while operating the generator!

- **5.** The device generates electricity. Observe safety precautions to avoid electric shock.
- **6.** Read this owner's manual carefully before operating the device.
- **7.** Do not touch the generator with wet or dirty hands.
- **8.** Observe fire safety regulations, do not operate the generator near open flame.

## **MAIN OVERVIEW**

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- 1. Reinforced steel frame
  - 2. Fuel level indicator
  - 3. Fuel tank cap
  - 4. Control panel
  - 5. Battery
  - 6. Wheels
  - 7. Fuel pump
  - 8. Antivibration supports
  - 9. Transport handle
  - 10. Engine



IMPORTANT!



Manufacturer reserves the right to make changes and/ or improvements in design, components set and technical attributes without notice and without incurring obligation. The pictures in this manual are schematical and may not match the parameters of original product.

## PACKAGE INCLUDE:

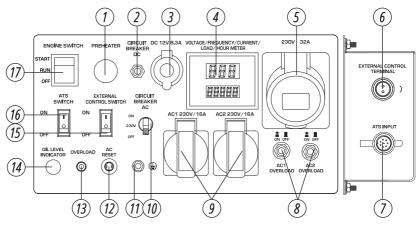
- Packaging
- Generator
- · Owner's manual
- 16A Plugs 2 pcs.
- 32A Plug 1 pc (for model KS 6100iDE ATSR)
- 63A Plug –1 pc (for model KS 9500iDE ATSR)
- Wheels 2 pcs.

- Wheel axles 2 pcs.
- Locking clamps for wheel axle -2 pcs.
- Washers for wheel axle 2 pcs.
- Handle bars 2 pcs.
- Antivibration supports 2 pcs.
- 12V Adapter to USB 1 pc
- Remote control (for model KS 9500iDE ATSR)

## **CONTROL PANEL**

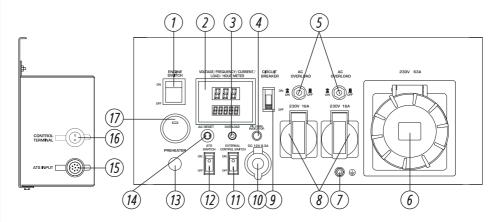
4

## MODEL KS 6100iDE ATSR



- 1. Preheater
- 2. Circuit breaker 12V
- 3. 12V/8.3A DC outlet
- 4. Multifunctional LED display
- 5. AC outlet CEE 230V 32A
- 6. Connection for external PF control contacts
- 7. ATS input
- 8. Circuit breakers 230V
- 9. AC outlets 2×Schuko 230V 16A

- 10. Circuit breaker 230V (16A)
- 11. Earthing bolt
- 12. Reset button
- 13. Overload indicator
- 14. Oil level indicator
- 15. External control switch
- 14. ATS switch
- 17. Engine switch



- 1. Engine switch
- 2. Multifunctional LED display
- 3. Overload indicator
- 4. Oil level indicator
- 5. Circuit breaker 230V
- 6. AC outlet CEE 230V 63A
- 7. Earthing bolt
- 8. AC outlets 2×Schuko 230V 16A
- 9. Circuit breaker 230V (16A)

- 10. 12V/8.3A DC outlet
- 11. External control switch
- 12. ATS switch
- 13. Preheater
- 14. Reset button
- 15. ATS input
- 16. Connection for external PF control contacts
- 17. START/STOP button

| Model                                    | KS 6100iDE ATSR                                     | KS 9500iDE ATSR                 |  |  |
|--|---|---------------------------------|--|--|
| Voltage                                  | 230 V 230 V   |                                 |  |  |
| Max power                                | 5,5 kW 10,0 kW                                      |                                 |  |  |
| Nominal power                            | 5,0 kW  | 9,5 kW                          |  |  |
| Frequency                                | 50 Hz   | 50 Hz                           |  |  |
| Current max                              | 23,9 A  | 43,5 A                          |  |  |
| Outlets                                  | 2×Schuko 230V 16A, CEE 230V 32A                     | 2×Schuko 230V 16A, CEE 230V 63A |  |  |
| Fuel tank volume                         | 18  | 181                             |  |  |
| 50% power working time*                  | 19 h  | 14 h                            |  |  |
| Multifunctional LED-display              | voltage, frequency, current, output power, hour     |                                 |  |  |
| Noise level (Lwa)                        | 97 dB   | 97 dB                           |  |  |
| Power output                             | 12V/8,3A  | 12V/8,3A                        |  |  |
| Engine model                             | KS 480iD  | KS 790iD                        |  |  |
| Engine type                              | diesel powered one-cylinder, four-stroke air-cooled |                                 |  |  |
| Engine power                             | 6,5 kW/8,8 hp                                       | 13 kW/17,7 hp                   |  |  |
| Crank case volume                        | 1,65  | 1,8                             |  |  |
| Engine cylinder volume                   | 456 cm <sup>3</sup>                                 | 762 cm <sup>3</sup>             |  |  |
| Preheater                                | +   | +                               |  |  |
| Engine start                             | manual/electric                                     | electric                        |  |  |
| Power factor                             | cosφ 1.0 (230V)                                     | cosφ 1.0 (230V)                 |  |  |
| Frame diameter                           | reinforced steel frame 28 mm                        |                                 |  |  |
| Battery                                  | 28 Ah   | 36 Ah                           |  |  |
| Output for ATS                           | +   | +                               |  |  |
| Dimensions (L×W×H)                       | 675×525×655 mm                                      | 820×555×745 mm                  |  |  |
| Net weight                               | 97 kg   | 130 kg                          |  |  |
| Protection class                         | IP23M   | IP23M                           |  |  |
| Altitude (MAX)                           | 1000 m  | 1000 m                          |  |  |
| Acceptable deviation of a current is 10% |   |                                 |  |  |

<sup>\*</sup>Fuel consumption depends on many factors, such as load, fuel quality, season, altitude, technical condition of the generator.

**LwA** is guaranteed sound power level. This indicator is measured in the immediate vicinity of the noise maker.

The optimum operating conditions are ambient temperature of 17°C – 25°C, barometric pressure of 0.1 MPa (760 mm Hg), and relative humidity of 50 - 60%. Under such ambient conditions, the generator can guarantee maximum performance in terms of the stated specifications. In case of deviations from the above ambient values, the performance of the generator can be different.

Please note that in order to preserve the lifespan of the generator, continuous loads should not exceed 80% of the rated power.

## TERMS OF USE

When starting operating the generator, it's recommended to ground it. Before starting the unit, remember that the total power of consumers connected should not exceed the rated capacity of the generator.

## TYPES OF CONSUMERS AND INRUSH CURRENT

Consumers (electrical devices connected to the generator) are divided into active and reactive ones. Active ones are those, which energy is converted into heat (heating devices).

Reactive are all consumers with electric motor. When you run the engine, starting currents occur briefly, the size of which depends on engine design and purpose. Please consider those starting currents when choosing a generator.

Most electric tools have starting current ratio 2-3. This means that when you turn such tools required generator power have 2-3 times more power load. The biggest factor of inrush current have such consumers as compressors, pumps, washing machines.

## **BEFORE STARTING**

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Fill to

here

The generator is supplied without fuel. Before the operation please fill the fuel. Guidelines for filling are below. Generators are supplied without motor oil. The generator casing may contain residues of oil after tests conducted during production.

Before starting to use the generator, be sure to pour oil. Recommendations on oil and it's filling process are below. Follow maintenance recommendations during the first month or twenty hours (whichever occurs first) contained in the "Maintenance" section.

## CHECK THE FUEL LEVEL

- 1. Remove the fuel tank cap and check the fuel level.
- 2. Fill fuel to the level of the fuel filter and make sure there is no air in the fuel system.
- 3. Screw the fuel tank cap back tightly.

### CHECK THE OIL LEVEL

- 1. Unscrew the oil level gage and clean it with clean cloth.
- 2. Put the oil gage back without screwing it.
- 3. Take the oil level gage out and check the oil level according to the mark on a gage.
- 4. Add oil if it's level is below the mark on a gage.
- 5. Screw the oil gage back.

For commissioning models with elektrostart please charge the battery. Please use additional battery charger (not included) to charge the battery or let the generator work at least one hour at 50% load at the first start.



IMPORTANT!



Diesel fuel type should correspond the operating season.

## STARTING TO WORK

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**Before starting the engine,** make sure that the rated power of power consumers matches with the power of generator. Do not exceed the nominal power of the generator. **Do not connect the device before starting the engine!** 





Do not change the configuration of the amount of fuel or speed controllers (this adjustment was made before the sale). Otherwise, there will be possible changes in the engine work or breakage. Any changes to the design of the generator will void the warranty service!



Do not let the generator work more than 30 minutes in range from nominal to maximum.

This material is for informational purposes only and is not an instruction how to install or connect equipment to the network. In practice, there are different options for supplying electricity and different rules for its connection. The decision on how to properly connect the equipment in each individual case must be made by a certified electrician who performs the installation and electrical connection of the equipment. The manufacturer is not responsible for improper connection of equipment, and is not responsible for possible material and physical damage that may occur as a result of improper installation, connection or operation of equipment.

## IN THE FIRST 20 OPERATING HOURS OF THE GENERATOR, THE FOLLOWING REQUIREMENTS SHOULD BE MET:

- 1. During commissioning, do not connect power consumers, the power of which exceeds 50% of the nominal (operating) power of the device.
- 2. After the first 20 operating hours, be sure to change the oil. It is better to drain oil while the engine is still hot after operation to ensure quick and complete oil draining.
- 3. Check and clean the air filter and fuel filter.

## MANUAL START (FOR MODEL KS 6100IDE ATSR)

- 1. Check the fuel level
- 2. Check the oil level
- 3. Do not connect any load to the generator prior to starting the
- 4. Attach the terminals to the battery, ensuring the correct polarity of "positive to positive" and "negative to negative."
- 5. Set the engine emergency shutdown lever (fig. 1) in the ON position.
- 6. Switch the ATS SWITCH button to the OFF position.
- 7. Pull the starter handle until you feel resistance.
- 8. There is an opening on the top cover of the generator. Through this opening, press the decompression lever (fig. 2), located at the top of the cylinder head, to reduce cylinder pressure and facilitate engine starting.
- 9. Switch the ENGINE SWITCH button to the RUN position.
- 10. Sharply pull the starter handle; the engine will start.
- 11. Do not allow the starter handle to snap back into the engine. To prevent damage of the starter, return it to its initial position gently.
- 12. Let the generator work for 1-2 minutes, then flip the circuit breaker (emergency stop switch) to the ON (UP) position.

### **ELECTRIC START**

- 1. Check the fuel level
- 2. Check the oil level
- 3. Do not connect any load to the generator prior to starting the engine.
- 4. Attach the terminals to the battery, ensuring the correct polarity of "positive to positive" and "negative to negative."
- 5. Set the engine emergency shutdown lever (fig. 1) to the ON position.
- 6. Switch the ATS SWITCH button to the OFF position.
- 7. There is an opening on the top cover of the generator. Through this opening, press the decompression lever (fig. 2), located at the top of the cylinder head, to reduce cylinder pressure and facilitate engine starting.
- 8. For the KS 6100iDE ATSR model, move the Engine Switch to the START position and hold it there for a few seconds until the engine starts. Release the button and it will automatically return to the RUN position.
- 9. For the KS 9500iDE ATSR model, move the Engine Switch to the ON position and press the START button, engine will start.
- 10. If the engine does not start after holding the START button for 5 seconds, wait 15 seconds before attempting to start again. Prolonged use of the starting system can deplete the battery.
- 11. Let the generator work for 1-2 minutes, then flip the circuit breaker (emergency stop switch) to the ON (UP) position. konner-sohnen.com 1 8







IMPORTANT!



If engine does not start after three or four attempts, it may mean that the fuel system has some air inside. Remove the air from the fuel system (drain the diesel fuel, with the fuel there will be excess of air).



ATTENTION - DANGER!



Do not let the simultaneous connection of two or more devices. Start of many devices requires large power capacity

Devices are to be connected in turns, according to its maximum allowed power. Do not connect the consumers in first 1-2 minutes after the generator start. Do not stop the generator, if there are any devices connected. This may result to generator breakdown.

Before turning the generator on, verify that the connected devices are in working order. If the connected device suddenly stops running – turn the power off by means of an emergency switch, disconnect the device and check it



IMPORTANT!



DISCONNECT ALL DEVICES BEFORE STOPPING THE GENERATOR! Do not stop the generator with the devices turned on. This may disable the generator or devices connected to it!

### STARTING WITH ELECTRIC STARTER IN THE COLD SEASON

- When the air temperature is lower than +5oC it is necessary to use the "Preheater" function when starting.
- Turn the ENGINE SWITCH button to the ON position (for model KS 9500iDE ATSR) or RUN position (for model KS 6100iDE ATSR) and press the PREHEATER button. While holding it, press START.



IMPORTANT!



Do not hold the button "Preheater" more than 10 seconds, it may cause the failure of incandescent candles

## DURING GENERATOR OPERATION:

- You can use the generator if the voltmeter shows 230±10% (50 Hz).
- Watch the voltage meter and in case of excessive indices values, stop the generator operation.
- Upon accumulator unit recharge, it is mandatory to verify the polarity correctness ( + to +, to -).
- Charging device wires have to be at first connected to the accumulator unit and only then to the generator itself. All "generator to network" connections are to be carried out by a certified electrician. Any mistakes may result in serious equipment damage.
- It is forbidden to use 12V voltage simultaneously with 230V.

#### ENGINE SHUTDOWN PROCEDURE

- 1. Disconnect all devices connected to the generator.
- 2. Allow the generator to run for 3 minutes without load to cool down.
- 3. For the KS 9500iDE ATSR model, press the round START/STOP button and move the ENGINE SWITCH to the OFF position.
- 4. For the KS 6100iDE ATSR model, move the ENGINE SWITCH to the OFF position.
- 5. Set the protective circuit breaker on the panel of the generator to the OFF position.
- 6. The engine emergency shutdown lever (see fig. 1) should only be used to stop the engine in cases of extreme necessity.

#### CONNECTING DEVICES

Do not let the generator work more than 30 minutes in range from nominal to maximum. After switching on the generator, make sure that the voltmeter reading corresponds to the nominal values (230 V ±10% at 49.5-50.5 Hz).

#### OPERATION OF THE GENERATOR WITH THE EXTERNAL ATS UNIT

The ENGINE SWITCH must be switched on (ON position) to connect the generator's 12V onboard voltage. The ATS switch on the generator must be switched on to transfer generator control to the external ATS unit. The internal controller remains deactivated.

The main switch on the ATS unit should be switched on to activate the ATS unit's control electronics. The SUMMER/WINTER switch position should correspond to the season. We recommend using the WINTER position in colder outdoor temperatures.

Suitable ATS unit: KS ATS 4/63D-Inverter



IMPORTANT!



Via the ATS connector, individual components of the generator are controlled. It is strictly forbidden to connect external control devices to the ATS connector.

#### OPERATION IN EXTERNAL CONTROL MODE

In EXTERNAL CONTROL mode, the generator starts when the CONTROL TERMINAL contacts are closed and stops when they are opened. This mode allows the generator to be optimally integrated into various power supply systems through external control by devices equipped with potential-free "dry, significantly expanding the range of applications.

To activate the EXTERNAL CONTROL mode, set the ENGINE SWITCH on the control panel to the ON position. The ATS switch must be turned off. The EXTERNAL CONTROL switch must be turned on.



IMPORTANT!



The generator's control electronics consume a small amount of power as soon as the ENGINE SWITCH is turned on. We recommend charging the generator's starter battery at least once a month if the generator is used infrequently while the EXTERNAL CONTROL mode is activated.



IMPORTANT!



External control must be potential-free and may only be installed by qualified personnel.

## **TECHNICAL MAINTENANCE WORKS**

Works, specified in "Technical maintenance" section, are to be regularly performed. If the the generator user has no possibility to perform regular maintenance independently, it is necessary to address the official service center to registrate an order for such works performance.



IMPORTANT!



In case of any damages, occurred due to non-performance of regular maintenance works, the manufacturer bears no responsibility for such damages.

#### SUCH DAMAGES ARE ALSO:

- Damages occurred as a result of using non original spare parts;
- Corrosion damages and other results of improper equipment storage;
- Damages occures as a result of maintenance performance by inexperienced and unauthorized specialists.

### MANUAL COMPLIANCE

Technical maintenance, operation and Könner & Söhnen® generator storage are to be performed according to this manual recommendations. Manufacturer bears no responsibility for damages and losses, caused by incompliance to safety requirements and technical maintenance rules.

## FIRST OF ALL THIS APPLIES TO:

- use of lubricants, gasoline and motor oils, forbidden by the manufacturer;
- device technical alterations;
- equipment operations against its intended use;
- indirect damages, caused by operating faulty equipment;

This manual compliance! You can find a list of service center addresses on the website of exclusive importer:

## www.konner-sohnen.com

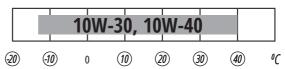
#### **TECHNICAL MAINTENANCE WORKS**

| Node        | Service type    | Every start | Commissioning<br>(first 20 hours) | Each 3 months<br>or after<br>50 working hrs | Each 6 months<br>or after<br>100 working<br>hrs |
|-------------|-----------------|-------------|-----------------------------------|---|---|
| Motor oil   | Check the level | <b>③</b>    |                                   |   |   |
| MOTOL OIL   | Replace         |             | <b>⊘</b>                          | <b>③</b>                                    |   |
| Air filter  | Check/Clean out |             | <b>⊘</b>                          | <b>⊘</b>                                    |   |
| Air iliter  | Replace         |             |                                   |   | Ø   |
| Oil filter  | Clean out       |             | <b>⊘</b>                          | <b>⊘</b>                                    |   |
| Fuel tank   | Check the level | Ø           |                                   |   |   |
| ruei tank   | Check/Clean out |             | Ø                                 |   | <b>Ø</b>  |
| Fuel filter | Check/Clean out |             | Ø                                 | Ø   |   |
| ruei IIItei | Replace         |             |                                   |   | <b>Ø</b>  |

## **RECOMMENDED OILS**

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Motor oil has a serious impact on performance characteristics and is a major attribute, defining its service life. Use oils designed for four-stroke cycle vehicle engines SAE 10W-30, SAE 10W-40, since such oils contain cleaning additives, which comply or even exceed SE standards according to API classification (or equivalent). Motor oils with other viscosity levels, may be used only if the average air temperature in your region does not exceed the limits of the temperature range, specified in the table. Oil viscosity according to SAE standards or service category, are specified on the API capacity sticker.



## ENGINE OIL REPLACEMENT OR ADDING

Upon oil level decrease it is necessary to add the required quantity in order to provide the correct generator operation. It is necessary to check the oil levels according to technical maintenance schedule. When changing the oil, remove the oil filter, flush it with gasoline and install it back.

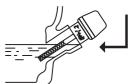
#### TO DRAIN THE OIL:

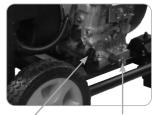
- 1. Place a drain oil holding tank under the engine.
- 2. Turn the drain cap, located under the oil-depth gage cap in the engine, by means of a 10mm hexagon spanner.
- Wait till the oil drains.
- 4. Put the drain cap back and tighten it well.

## OIL FILLING:

- 1. Make sure that the generator is set on flat level surface.
- 2. Unscrew the oil gage cap on the engine.
- 3. By means of a funnel, pour the advanced purification engine oil to the crankcase. The funnel is not included. Oil level after filling has to be close to the upper part of oil filler.





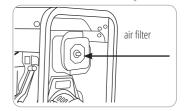


Oil gage cap

Crank case

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It is necessary to check the air filter from time to time and clean any contaminations. Regular air filter maintenance is necessary to maintain sufficient carburetor air inflow. The air filter should be cleaned more often when using generator in dusty conditions.





Never run the engine with the air filter removed or without the filter. Otherwise dirt and dust lead to rapid breakage of engine parts. Failure in this case will not be repaired.



IMPORTANT!



Air filter replacement is to be performed each 50-100 hours of the generator operation (every 10 hours in unusually dusty conditions).

## **FUEL FILTER TECHNICAL MAINTENANCE**

There are two kinds of fuel filters in Könner & Söhnen® diesel generators. They prevent the ingress of contaminants from diesel fuel to the engine.

## COARSE CLEANING FUEL FILTER

Remove the filter after the possible hard particles hit every 500 operating hours. Never use water for purification the filter.

- 1. Remove the fuel cap.
- Remove the fuel filter.
- 3. Use diesel fuel to clean the filter.
- 4 Put the filter back to the fuel tank

## THE FUEL FILTER IN THE FUEL SUPPLY PIPFLINE

This filter has to be replaced every 100 operating hours. It's located under the fuel tank on the fuel hose through which fuel enters the engine from the tank. To replace it:

- 1. Loosen the metal hose clamps, located next to the fuel valve to drain the fuel.
- 2. Drain the fuel to some special volume.
- 3. Loosen metal staples on both sides of the fuel filter.
- 4. Remove the filter.
- 5. Install new filter, paying attention to the arrow shown. The filter should be installed in the fuel passage
- 6. Tighten the bracket on the fuel hose.



Keep an eye on the position of the fuel filter, it should be located to the maximum upright.



fuel filter

## In **Könner & Söhnen®** models with electric start you should periodically perform battery voltage checks. The generator battery has a voltage of 12V and if the voltage is lower, you should perform battery charging with the help of an external charger.

To avoid discharging the battery, it is recommended to run the generator at least once a month for 30 minutes. If the generator is not used for a long time, please disconnect the battery from the terminals. The battery that comes with the generator does not require additional maintenance and filling of electrolyte.

The generator battery is not subject to service. If the generator is not used for a long time, the battery may fail. To prolong battery life it is recommended to do battery charging with an external device (not included) every three months.

Battery warranted - three months from the date of purchase of the generator.

## **GENERATOR STORAGE**

Storage room has to be dry and free from dust deposits. Storage room also has to be locked away from children.



IMPORTANT!



Warning! Generator is to remain ready for operation at all times. Therefore in case of device malfunctions, they are to be repaired before dismounting the generator for storage.

### LONG-TERM STORAGE

If you do not plan to use the generator for a long time, we recommend:

- Drain the fuel from the tank.
- Drain the oil from the engine.
- Pull the manual starter until you feel light resistance so that the intake and exhaust valves are closed.
- Remove the negative terminal of the battery for the electric start models.
- Clean generator from dirt and dust.

When starting the generator after long storage, follow all procedures in reverse order.



IMPORTANT!



Pay attention to the fact that upon failed attempts to launch the generator by means of an electric start, the accumulator units may turn out de-energized, therefore prior to operation start it may be necessary to perform full accumulator unit charging.

## **BATTERY AND GENERATOR DISPOSAL**

To prevent environment damage generator and battery should be separated from ordinary waste. Please recycle them in the safest way, passing it to special place for disposal.

| Typical failures  | Possible reason  | Solution  |  |
|---|--|---|--|
|   | Engine starting swich set to OFF position              | Set the engine starting switch to ON                    |  |
| Engine does not<br>start  | No fuel  | Add fuel  |  |
|   | Low-quality or dirty<br>fuel is in engine              | Change the fuel   |  |
|   | Dirt in fuel tank                                      | Clean the fuel tank                                     |  |
| Low engine power /<br>heavy starting                                  | Air filter is dirty                                    | Change the air filter                                   |  |
|   | Water or air in the fuel line                          | Pump the fuel line                                      |  |
| Engine is overheated  | Cooling fins are dirty                                 | Clean the cooling fins                                  |  |
|   | Air filter is dirty                                    | Change the air filter                                   |  |
| No voltage while engine is working                                    | Circuit breaker is active                              | Turn on the circuit breaker                             |  |
|   | Connected cables are corrupted                         | Check the cables; if using extension cord, change it    |  |
|   | Plugged device failure                                 | Try to connect other devices                            |  |
| Connected devices<br>are not working<br>while generator is<br>running | Generator is overloaded                                | Unplug some devices to reduce load                      |  |
|   | Short circuit occurred in one of the devices connected | Unplug that device to restore the stability of a system |  |
|   | Air filter is dirty                                    | Change the air filter                                   |  |
|   | Repetitions of an engine are lower than nominal        | Contact the service center                              |  |

| Povice                    | Average nerver verge W |
|---------------------------|------------------------|
| Device                    | Average power usage, W |
| Iron                      | 500-1100               |
| Air hair dryer            | 450-1200               |
| Coffee machine            | 800-1500               |
| Electric cooking stove    | 800-1800               |
| Toaster                   | 600-1500               |
| Air heater                | 1000-2000              |
| Vacuum cleaner            | 400-1000               |
| Radio                     | 50-250                 |
| BBQ Grill electric device | 1200-2300              |
| Oven                      | 1000-2000              |
| Refrigerator              | 100-150                |
| TV set                    | 100-400                |
| Hammer drill              | 600-1400               |
| Drill                     | 400-800                |
| Freezer                   | 100-400                |
| Grinding machine          | 300-1100               |
| Circular saw              | 750-1600               |
| Angle grinder             | 650-2200               |
| Electro jigsaw            | 250-700                |
| Electro planer            | 400-1000               |
| Compressor                | 750-3000               |
| Water pump                | 750-3900               |
| Electric sawing machine   | 1800-4000              |
| Electric lawn             | 750-3000               |
| Electric powered engines  | 550-5000               |
| Electric fan              | 750-1700               |
| High pressure machine     | 2000-4000              |
| Air conditioner           | 1000-5000              |

## **WARRANTY SERVICE TERMS**

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The international manufacturer warranty is 1 year or 1000 hours (whichever comes first). The warranty period starts from the date of purchase. In cases when warranty period is longer than 1 year according to local legislation please contact your local dealer. The Seller which sells the product is responsible for granting the warranty. Please contact the Seller for warranty. Within the warranty period, if the product fails because of defects in the production process, it will be exchanged on the same product or repaired.

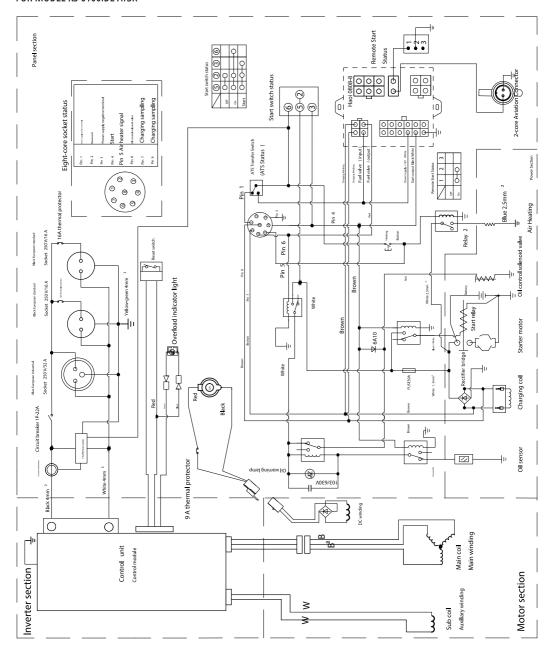
The warranty card should be kept throughout the warranty period. In case of warranty card loss, a second one will not be provided. The customer must provide the warranty card and buyer`s check during request for repair or exchange. Otherwise, the warranty service will not be provided. The warranty card, attached to the product during sale, should be correctly and fully completed by the retailer and customer, signed and stamped. In other cases, warranty is not considered as valid.

Provide clean product to the service center. Parts, that must be replaced, are the property of the service center.

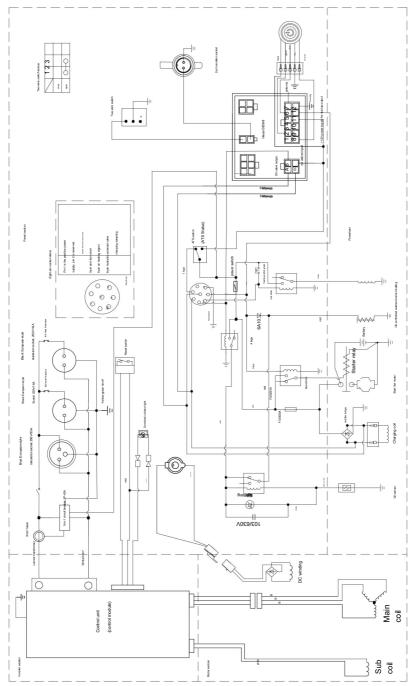
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## FOR MODEL KS 6100iDE ATSR



## FOR MODEL KS 9500iDE ATSR





## **EC Declaration of Conformity**

Nr. 184

The following products have been tested by us with the listed standards and found in compliance with the European Community Machinery Directive 2006/42/EC, Electromagnetic compatibility Directive (EMC) 2014/30/EC, Noise Directive 2000/14/EC.

Manufacturer: DIMAX INTERNATIONAL GmbH

Address: Flinger Broich 203, 40235 Duesseldorf, Germany

Product: Diesel inverter generator "Könner & Söhnen"

Type / Model: KS 6100iDE ATSR, KS 9500iDE ATSR

The statement is based on a single evaluation of above mentioned products. It does not imply an assessment of the whole production and does not permit the use of the test lab. logo. The manufacturer should ensure that all product in series production are in conformity with the product sample detailed in this report. The applicant should hold the whole technical report at disposal of the competent all the right.

Applied EC Directives: 2006/42/EC Machinery Directive

2014/30/EC Electromagnetic compatibility Directive (EMC)

2000/14/EC Noise Directive

(EU) 2016/1628 Non-Road mobile machinery emissions

Applied Standards: EN ISO 8528-13:2016,

ISO 8528-10:1998 EN ISO 3744:1995,

EN 55012:2007+A1:2009

Diesel engines KS 480iD, KS 790iD correspond to European Emission Standard Euro V (STAGE V). This is confirmed by EU TYPE-APPROVAL CERTIFICATE issued by department of transport of Madrid, Spain. Technical service responsible for carrying out the test -IDIADA. Date of test reports 22/11/2022

## 2000/14/EG 2005/88/EG Annex VI

For model KS 6100iDE ATSR Noise measured Lwa = 94 dB (A), guaranteed Lwa = 97 dB (A) For model KS 9500iDE ATSR Noise measured Lwa = 95 dB (A), guaranteed Lwa = 97 dB (A)

CE

Issued Date:
Place of issue:
Director:

2024-03-20 Duesseldorf

Fomin P.

DIMAX

International GmbH Flinger Broich 203 40235 Düsseldorf USt-ID DE296177274 koenner-soehnen.com

We DIMAX INTERNATIONAL GmbH hereby declare that specified above conforms covering European Parliament and Council Directives, 2006/42/EC of 17 May 2006 Machinery Directive, Electromagnetic compatibility Directive (EMC) 2014/30/EC of 26 February 2014, Noise Directive 2000/14/EC of 8 May 2000. The CE mark above can be used under the responsibility of manufacturer. After completion of an EC declaration of Conformity and compliance with all relevant FC directives.



## **CONTACTS**

#### Deutschland:

Importeur und Vertreter in Deutschland:
DIMAX International GmbHFlinger Broich 203, 40235
Düsseldorf, Deutschland. Produziert in VRC.
amazon@dimaxgroup.com
www.konner-sohnen.com

## European Union:

amazon@dimaxgroup.com www.konner-sohnen.com

amazon@dimaxgroup.com www.konner-sohnen.fr

#### España:

Fabricado bajo licencia y control de DIMAX International GmbH, Flinger Broich 203, 40235 Düsseldorf, Alemania.

Importador y representante en España de DIMAX International Poland Ltd, Południowa 8 st, 05-830 Stara Wieś, Polonia.

Ensamblado en la República Popular China. amazon@dimaxgroup.com

www.konner-sohnen.es

amazon@dimaxgroup.com www.konner-sohnen.pl

www.konner-sohnen.com.ua