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Originalfassung

DE BETRIEBSANLEITUNG

Übersetzung / Translation

EN USER MANUAL

ES MANUAL DE INSTRUCCIONES

FR MODE D'EMPLOI

SK Návod k použití

CZ NÁVOD K POUŽITÍ

SL NAVODILA ZA UPORABO

HR UPUTA ZA UPORABU

Stromerzeuger

Generator

Generador

Générateur

Elektrocentrála

Elektrocentrála

Generator

Električni generator



ZI-STE2800

EAN: 9120039231518



ZI-STE5500

EAN: 9120039232249



ZI-STE8000

EAN: 9120039231525



ZI-STE8004

EAN: 9120039231815



ACHTUNG: Öl kontrollieren!
Motor startet nicht bei Öl mindermenge!!



ATTENTION: Check Oil!
Engine don't start with low oil!!





11 PREFACE (EN)

Dear Customer!

This manual contains information and important instructions for the installation and correct use of the ZIPPER generators ZI-STE2800; ZI-STE5500, ZI-STE8000 and ZI-STE8004. Following the usual commercial name of the machine (see cover) is substituted in this manual with the name "machine".



This manual is part of the product and shall not be stored separately from the product. Save it for later reference and if you let other people use the product, add this instruction manual to the product.

Please read and obey the security instructions!

Due to constant advancements in product design, construction pictures and content may diverse slightly. However, if you discover any errors, inform us please.

Technical specifications are subject to changes!

Please check the product contents immediately after receipt for any eventual transport damage or missing parts.

Claims from transport damage or missing parts must be placed immediately after initial product receipt and unpacking before putting the product into operation.

Please understand that later claims cannot be accepted anymore.

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12 SAFETY

This section contains information and important notices for safe commissioning and handling of machine.



For your own safety, read these operating instructions carefully before putting the machine into operation. This will enable you to handle the machine safely and prevent misunderstandings as well as possible damage to property and persons. Also observe the symbols and pictograms used as well as the safety instructions and hazard warnings!

12.1 Intended use of the machine

The machine is intended exclusively for the following activities:

This power unit is designed exclusively for operating electric devices whose max. performance is within the specifications for the generator. A higher starting current of inductive loads must be considered. The generator is designed to operate from conventional resistive and inductive loads, such as Lights, electric hand tools (drills, electric chain saws, compressors) determined.

When connecting to stationary systems such as heating, house supply, air conditioning or for the power supply of mobile homes, an electrician and the heating manufacturer must be consulted regarding the connection and grounding.

ZIPPER-MASCHINEN assumes no responsibility or warranty for any other use or use beyond this and for any resulting damage to property or injury.

12.1.1 Technical Restrictions

The machine is intended for use under the following ambient conditions:

Relative humidity:	max. 65 %
Temperature (for operation)	+5° C bis +40° C
Temperature (for storage and/or transport)	-20° C bis +55° C

12.1.2 Prohibited Use / Forseeable Misuse

- Operation of the machine without adequate physical and mental aptitude
- Operating the machine without appropriate knowledge of the operating instructions (machine + motor).
- Changes in the design of the machine
- Operating the machine in wet and rainy conditions
- Operating the machine in a potentially explosive environment
- Operating the machine indoors or in closed areas
- Operation of the machine without functioning or missing guards
- Remove the safety markings attached to the machine.
- Modify, circumvent or disable the safety devices of the machine.

The prohibited/hazardous use or disregard of the information and instructions presented in this manual will result in the voiding of all warranty and damage claims against Zipper Maschinen GmbH.

12.2 User Requirements

The physical and mental suitability as well as knowledge and understanding of the operating instructions are prerequisites for operating the machine. Persons who, because of their physical, sensory or mental abilities or their inexperience or ignorance, are unable to operate the machinery safely must not use it without the supervision or instruction by a responsible person.

Please note that local laws and regulations may determine the minimum age of the operator and restrict the use of this machine!

Put on your personal protective equipment before working on the machine.

Work on electrical components or equipment may only be carried out by a qualified electrician or carried out under the guidance and supervision of a qualified Electrician.



12.3 Safety instructions

In order to avoid malfunctions, damage and health hazards when working with this machine, in addition to the general rules for safe working, the following measures in particular must be observed UNCONDITIONALLY:

- Check that the machine is in perfect condition before each use. Ensure that all guards are in place and working properly and that all nuts, bolts, etc. are securely tightened. Do not take the machine into operation if you notice that parts are missing or damaged!
- Ensure sufficient lighting conditions in the working and surrounding areas of the machine.
- Keep hands and feet away from moving machine parts and always ensure a safe stand when working.
- Ensure that the area to be tamped does not contain any electric cables, gas or water lines which could be damaged by vibration.
- Remove the adjustment tool from the machine before operation.
- Ensure that unauthorised persons maintain a safe distance from the machine and keep children away from the machine.
- The machine may only be operated, serviced or repaired by persons who are familiar with it and who have been informed of the dangers arising during this work.
- Always wear suitable personal protective equipment (eg. ear protection,..., etc.)!
- Do not work with the machine if you are tired, not concentrated or under the influence of medication, alcohol or drugs!
- Never operate the unit in the presence of flammable liquids or gases (danger of explosion!).
- Carry out maintenance, adjustment and cleaning work only when the engine is switched off.
- Only use spare parts and accessories recommended by Zipper machines.

12.4 Special safety instructions for the operation of the machine

- Do not use the generator if it is raining, wet or has high humidity. RISK OF ELECTRIC SHOCK. DANGER OF LIFE!
- Do not increase the regulated idle speed of the engine above 3,500 rpm. This could result in damage to the machine or personal injury.

12.5 Safety instructions for machines with combustion engine

- Do not touch the engine and/or muffler during operation or immediately after switching off! These areas become hot during operation and can cause burns.
- Do not touch the spark plug connector when the engine is running (electric shock!).
- Do not operate the unit in closed areas or in poorly ventilated rooms unless there is adequate ventilation through exhaust fans or hoses. (Risk of suffocation from carbon monoxide!)
- Do not smoke while the machine is in operation.
- Do not smoke when refuelling the machine.
- Refuel the machine only in a well ventilated area.
- Do not refuel the machine when the engine is running or the machine is still hot.
- Do not refuel the machine near naked flames.
- Do not spill fuel when refuelling.
- Do not crank a gas flooded engine as long as the spark plug is removed- fuel in the cylinder sprays out of the spark plug opening.
- Do not carry out an ignition spark test on engines if the engine is flooded or gas can be smelled. A stray spark could ignite the vapours.
- Do not use fuel to clean machine parts, especially indoors. Vapours from fuels may explode.
- Always keep the area around the muffler free of foreign substances such as leaves, paper, cardboard, etc. A hot muffler could ignite these substances and cause a fire.
- Close the filler cap after refuelling.
- Check the fuel line and tank regularly for leaks and cracks. Do not operate the machine if leaks in the fuel system are known.
- Store fuel only in designated and approved containers.



12.6 Hazard warnings

Despite intended use, certain residual risks remain. Due to the design and construction of the machine, hazardous situations may occur which are identified as follows in these operating instructions:

DANGER



A safety instruction designed in this way indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING



Such a safety instruction indicates a potentially hazardous situation which, if not avoided, may result in serious injury or even death.

CAUTION



A safety instruction designed in this way indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE



A safety note designed in this way indicates a potentially dangerous situation which, if not avoided, may result in property damage.

Irrespective of all safety regulations, their sound common sense and corresponding technical suitability/training are and remain the most important safety factor in the error-free operation of the machine. **Safe working depends first and foremost on you!**

13 ASSEMBLY

13.1 Check scope of delivery

After delivery, check the machine immediately for transport damage and missing Parts.

13.2 Assembly

13.2.1 ZI-STE2800




<p>1. Wheels assembly</p>  	<p>2. Handle assembly</p>  
<p>3. Assembly rubber feet</p>  	



13.2.2 ZI-STE5500

<p>1. Wheels assembly</p> 	<p>2. Handle assembly</p> 
<p>3. Assembly rubber feet</p> 	

13.2.3 ZI-STE8000 / ZI-STE8004

<p>5. Wheels assembly</p> 	<p>6. Handle assembly</p> <p>Fix the bracket to the frame using screws and nuts and then mount the handle in the bracket using bolts.</p> 
<p>7. Assembly rubber feet</p> 	

8. Battery assembly



Loosen the protective cover to get access to the battery.

- Mount the poles to the battery with screws, washers and nuts.
- Connect the red cable to the positive (+) terminal of the battery.
- The black cable is connected to the negative pole (-) of the battery.
- Disconnect and connect the battery in reverse order.

13.3 Checklist before each use

13.3.1 Checking the engine oil level

NOTICE



Too low an oil level will damage the engine and shorten the life of the machine. Therefore, check the engine oil level before every start and top up the engine oil if necessary.

	<ol style="list-style-type: none"> 1. To check the engine oil level, place the machine on a safe, level surface. Switch off the engine and allow the machine to stand for ten minutes so that the circulating oil can collect in the oil pan. 2. Unscrew the oil dipstick and wipe with a clean, lint-free cloth or a non-fibrous paper towel.
	<ol style="list-style-type: none"> 3. Push the dipstick into the opening, but do not screw it in. (Make sure that the dipstick has really been pushed in completely).
	<ol style="list-style-type: none"> 4. Pull out the oil dipstick again and read off the oil level. There are two markings for this - see illustration on the left. 5. If the oil level is low, refill the recommended oil up to the upper edge 6. Push in the oil dipstick again and tighten.



13.3.2 Checking the fuel tank level

NOTICE



Observe the safety regulations for fuel control. Filter the fuel during refuelling to prevent foreign particles from entering the combustion chamber. Wipe up leaked fuel.

1. Screw on the tank cap (sits on the fuel tank).
2. Level check in the form of a visual inspection or via display. If necessary, top up with fuel with the appropriate octane number (RON 95).
3. Close the fuel filler cap tightly after refuelling.

14 OPERATION

14.1 Information on Initial Start-up

NOTICE



Note that the machine is delivered without engine oil and fuel. Make sure that this equipment is filled up before the machine is put into operation for the first time.
ATTENTION: The machine does not start until the engine oil has been refilled to the upper limit.

14.1.1 Grounding

Before putting the machine into operation, have a grounding system installed by a qualified electrician!

Exact grounding instructions for portable generators depend on the jurisdiction of the country in which the generator is commissioned. Please observe them exactly.

14.1.2 Test Run Initial Start-up

- Let the machine run idle for about 3 minutes.
- Pay attention to abnormal noises.
- Pay attention to the exhaust fumes (too black, too white)?

14.1.3 Notes on the first 20 operating hours

In order to optimize the life expectancy of your machine, the following points should be observed:

- Do not operate the engine for the first 20 operating hours @ maximum load (this also applies to used engines after extensive maintenance). This means lower speed and lower maximum working load than during normal operation.
- Change the engine oil after the first 20 hours of operation.

14.2 Operating Instructions

14.2.1 Integration into an existing electricity grid

This machine is designed exclusively for the operation of electrical devices whose maximum power lies within the power specifications of the generator. A higher starting current from inductive loads must be taken into account. The generator is designed for the operation of conventional ohmic and inductive loads such as light chains, electric hand tools (drilling machines, electric chain saws, compressors).

When connecting to stationary systems such as heating, house supply, air conditioning or for the power supply of mobile homes, an electrician and the heating manufacturer must be consulted regarding connection and grounding.



14.2.2 Devices are connected to the AC terminals

- Before connecting a device on the AC socket you must control the perfect condition of the device.
- When you recognize that a connected device acts unusual you must stop the generator and disconnect the device. Control whether the device is damaged or if the generator was overloaded by the device.

ATTENTION: A short exceed of the normed power capacity of the generator is possible but if this happens oftener the life time of the generator will be shortened.

Please consider: Some devices, for instance cooling devices need up to 5 times more starting current than current during the operation.

14.2.3 Operation of the generator to over 1800m above sea level

- When is operating at high altitudes is due to the lower oxygen content in the air, the air / fuel mixture too dense. This leads to loss of power, increased fuel consumption and the rapid deterioration of the spark plugs and heavy start the engine.
- the generator is designed to operate at high altitudes, you should modify the carburetor in a certified service center. Nevertheless, it is a power drop of 3.5% per 300m altitudes to take slope into account.

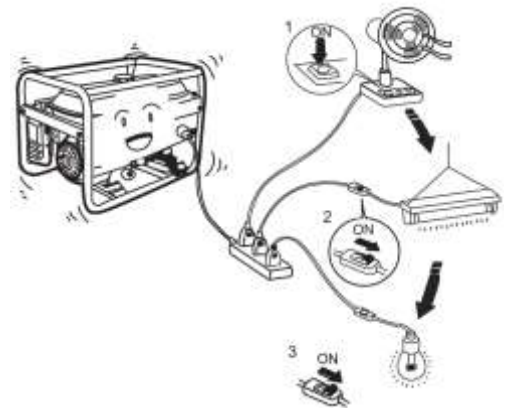
CAUTION: The operation of the generator with a modified carburetor at low altitude leads to overheating of the engine.

14.3 AC Operation

Connect the devices to the AC socket. The most devices need more power for starting than declared. A device with a rated power (1500kW) can temporarily load your generator (eg ZI-STE2800) to its maximum when switched on.

Always connect the devices in a falling chronology of their kW-consumption!

When the generator is overloaded the power supply gets interrupted. So turn off the generator and study the problem.



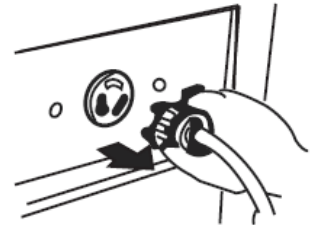


14.4 Operation

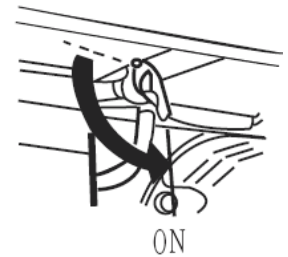
14.4.1 Start (for ZI-STE2800 and ZI-STE5500)

To start the generator, proceed as follows:

- Ensure that the generator is in a perfect condition.
- When there are some devices connected with the AC sockets you have to disconnect them.



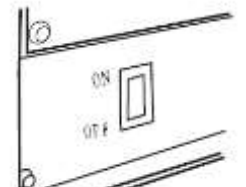
- Open the fuel tap.



- During a cold start close the choke lever, a warm start Choke open (ie engine warm, eg by lower operating break)



- Turn **ON** the engine switch.



- Start the machine by pulling the starter handle.



- If the choke lever is still closed, open it after a short warm-up phase. (refer to the illustration)

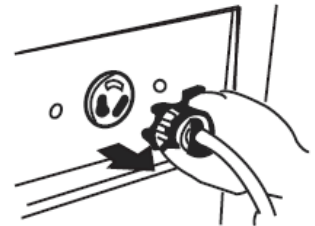




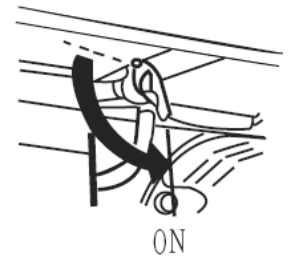
14.4.2 Start (for ZI-STE8000 and ZI-STE8004)

To start the generator, proceed as follows:

- Ensure that the generator is in a perfect condition.
- When there are some devices connected with the AC sockets you have to disconnect them.



- Open the fuel tap.



- Starting the generator with the remote control or with the start key

Key: Turn the key to the „START“ position.

Remote control

Press the „START“ button



Only in an emergency (insufficient battery load), the generator can also be started by recoil starter. To do so: The throttle valve must be operated manually (= choke), for starting close the throttle valve (position 0) after start open the throttle valve again (position I). It is necessary to disassemble the side guard.



Disassemble the side guard



Throttle valve to position 0 for starting. To Pos. I during operation.

14.4.3 Stop

- Turn off connected equipment and disconnect from the socket.
- To turn off the generator, move the power switch simply to the **OFF** position.
- Close the fuel tap.



15 MAINTENANCE

WARNING:

Lack of maintenance or improper maintenance and repair before using the appliance can result in serious injury or death! Take therefore the safety rules, operating and maintenance instructions very seriously.

Repairs only by qualified staff!

WARNING



Hot surfaces and rotating machine parts while the engine is running can cause serious injury or even death. Always stop the machine before carrying out any conversion, adjustment, cleaning or maintenance work and secure it against unintentional restarting.

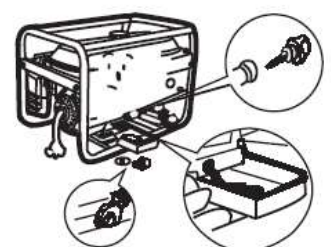
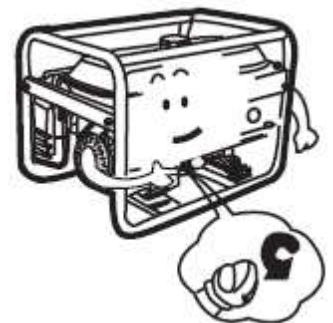
15.1 Maintenance plan

(1) Interval can vary according to the air quality (2) Only by specialists!		Prior to each start	(for new machine) after first Month or 20 operation hours	Every 3 months or every 50 operation hours	Every 6 months or every 100 operation hours	Every 2 years or every 300 operation hours
Engine oil	Control of the level	X				
	Changing		X		X	
Air filter	Controlling	X				
	Changing			X (1)		
Spark plug	Control				X	
	Change					X
Valve clearance	Control, adjustment					X(2)
Fuel tank and fuel tank filter	Clean	Yearly (2)				
Fuel pipe	Control	Every 2 years (2)				

15.1.1 Changing the engine oil

*Change the oil when it's still warm from the operation.
Ensure that the engine switch in the OFF position.*

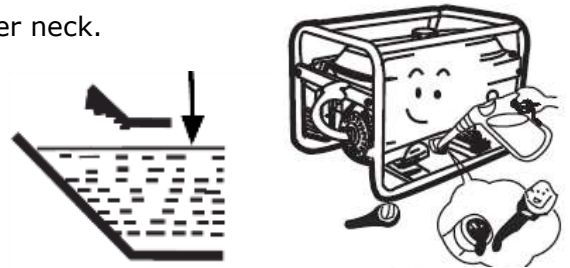
- Turn the switch to the **OFF position**, if set to ON.
- Unscrew the fixing screw of the side cover off, remove the cover. Unscrew the oil filler cap.
- Tilt the machine and let the oil flow into a box.





- Refill new engine oil to the lower edge of the oil filler neck.

ATTENTION: Dispose the old oil PROPERLY!!!
Pour it into a leak proofed box and bring it to a recycling center.

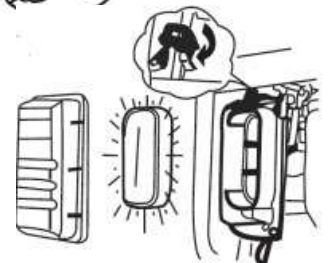


- Screw back the screw cap on the oil filler neck.



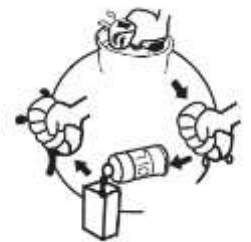
15.1.2 Air filter

- Remove the cover of the air filter.
- Take out the air filter.
- Clean it with water.
- Wring it out.
- Let the air filter become saturated with engine oil.
- Wring out the air filter.



Mount the air filter again.

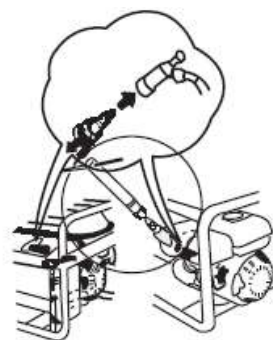
- Insert air filter
- Replace the cover
- Secure snap closure



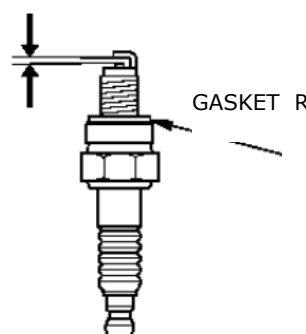
ATTENTION: NEVER OPERATE THE MACHINE WITHOUT OR A NOT MAINTAINED AIR FILTER!!!

15.1.3 Spark plug

- Remove the spark plug cap
- Screw out the spark plug.
- Optical Control: When the electrodes are battere damaged – change the spark plug!
- Clean the spark plug.
- Control the distance between the two electrodes: 0,6 – 0,7 mm!

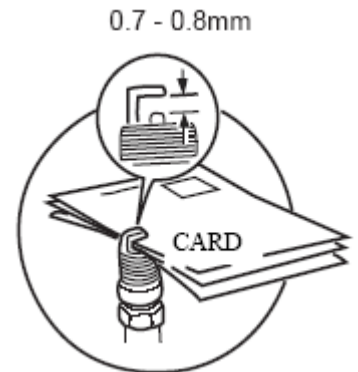


0,7 -0,8MM



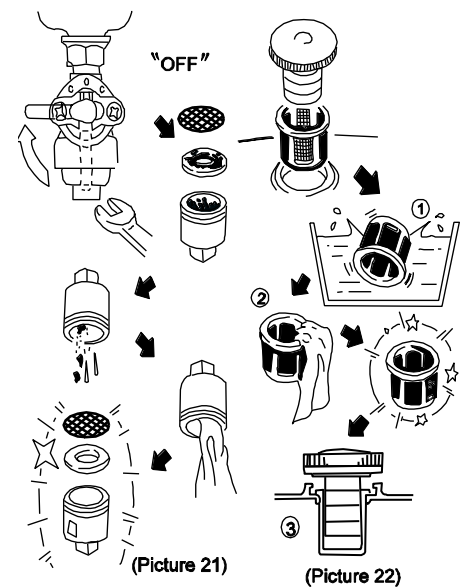


- The gasket ring should be in a good condition.
- When the spark plug gets changed you must screw it in with your hands. When you can't turn it any more you have to use the spark plug wrench to fasten it with half an round.



15.1.4 Fuel Tank & Filter Valve (every 150 hours)

- fuel cock lever to "OFF"
- In solution (with mild detergent)
- clean all parts.
- Put back together.
- Remove the engine tank filter
- In solution, clean (with mild detergent).
- Replanting.



15.2 Transport

- Let the machine get cold for 15 minutes.
- Do not lay the machine on the side during the transport. Oil or fuel leakage.
- Do not lay heavy or wet things onto the generator during transportation.

15.3 Storage

If the machine is not used for a longer period of time (>30 days):

1. Empty the oil tanks or fuel tank.
2. Remove the spark plug and pour a few drops of engine oil into the cylinder. Using a rope starter, turn the engine a few times so that the oil is well distributed inside the cylinder. Clean the spark plug and replace it.
3. Cover the cooled machine and store it out of the reach of children and unauthorised persons in a well-ventilated, dry and frost-free environment.

16 DISPOSAL



Do not dispose of your machine in residual waste. Contact your local authorities for information on available disposal options. If you buy a new vibratory plate or equivalent from your dealer, he is obliged in certain countries to dispose of your old machine properly.



17 TROUBLESHOOTING

WARNING



Hot surfaces and rotating machine parts while the engine is running can cause serious injury or even death. Always stop the machine before carrying out troubleshooting work and secure it against unintentional restarting.

Trouble	Reason	Shooting
The engine doesn't start	<ul style="list-style-type: none"> No fuel Turn engine switch to ON Reversing defective Check oil level Spark plugs contact Candle Air filter clogged Fuel tap clogged Faulty motor 	<ul style="list-style-type: none"> Filling the fuel tank switch to ON repair recoil add oil OIL LEVEL CONTROL! Check for real game 16.2.3 See Maintenance 16.2.2 refer to Maintenance refer to Maintenance Contact the retailer
Engine is difficult to start or runs bad	<ul style="list-style-type: none"> Too rich fuel mixture Carburetor incorrectly Faulty spark plug, dirty or misaligned 	<ul style="list-style-type: none"> Set choke to OPEN position Can make settings by authorized personnel Clean the spark plug, New Adjust or replace
Motor is too hot	<ul style="list-style-type: none"> Too little engine oil Cold air system restricted Dirty air filter Carburetor not adjusted properly 	<ul style="list-style-type: none"> Engine oil Clean fan guard, internal Clean the cooling fins Clean the air filter Let carburetor adjusted by authorized specialist
Motor too little power	<ul style="list-style-type: none"> Dirty air filter 	<ul style="list-style-type: none"> Clean the filter elements, possibly exchange
No power from the power outlets	<ul style="list-style-type: none"> Breaker is in position "OFF" Engine speed is too low 	<ul style="list-style-type: none"> Breaker to position "ON" Let engine speed of an authorized service set
Low output voltage under load	<ul style="list-style-type: none"> Too much load available 	<ul style="list-style-type: none"> Reduce Existing Load
Uneven Output voltage	<ul style="list-style-type: none"> Unbalanced load available 	<ul style="list-style-type: none"> Total load away. Then apply again individually to determine what causes the uneven loads the function.
Digital display "P-25"	<ul style="list-style-type: none"> P-25: Request to first oil change when a new device after 25 operating hours 	<ul style="list-style-type: none"> Change Engine Oil
Digital display "P-50"	<ul style="list-style-type: none"> P-50: Request to Change oil and clean the air filter every 50 operating hours 	<ul style="list-style-type: none"> Change the engine oil Clean the air filter
Digital display "P-100"	<ul style="list-style-type: none"> P-100: Request for cleaning the fuel and air filter and oil change every 100 operating hours 	<ul style="list-style-type: none"> Clean the fuel filter Clean the air filter Change the engine oil.