

## GENERATORS – Problems & Remedies

<u>1) The generator will NOT DELIVER any current</u>	
1a) Alternator de-energised	- Re-energise
1b) After re-energising, the generator still does NOT DELIVER any current	- Replace the condenser and repeat the re-energising operations
1c) Stator or Rotor have blown. Short circuit caused by current return from a (230Vac) mains outlet, due to a missing or incorrectly installed Mains Switch (CR)	- Replace the alternator and check the electric wiring throughout.
<u>2) The generator keeps operating the starter motor although the motor is already running.</u>	
2a) Check if the green LED is flashing on the Control Panel. If it is NOT flashing, check:	
- the 8-pole connector for oxidised pins	- Clean the connector with an anti-oxidation spray
- the control panel for faults	- Replace with a new control panel
- the 12 V diode bridge for faults (pin faults)	- Replace the diode bridge
- the diode bridge for oxidised contacts	- Clean contacts
- the orange cable (12V handshake signal to panel) for breaks	- Restore the broken contact
<u>3) The generator suddenly stops</u>	
3a) No oil: the (oil level) red LED on the control panel is lit.	- Top up to the right oil level.
3b) No fuel. If the fuel probe had not been connected to the control panel, the “?” indicator only lights up, instead of the level indicator.	- Top up with fuel.
3c) Motor overheating, temperature indicator on the control panel is lit.	- Check if the generator has been installed in an enclosed compartment without the necessary openings to take in fresh air from the outside and let out hot air.
3d) Overheating indicator is lit but the generator is well ventilated and stops working after a few minutes from power-on.	- High temperature probe is faulty. Replace the probe. Grounding system short circuit involving the (blue) probe connecting lead.
3e) Diode bridge failure (pin 9 on control panel). The Panel is no longer receiving a signal confirming alternator delivery and switches off the motor for safety reasons.	- Turn OFF the panel. When the panel is turned back ON, the motor will start but the green LED will remain off and the starter motor will carry out repeated starting attempts. Replace the diode bridge and check the wiring.
3f) Alternator condenser failure (9)	- Replace the condenser.
<u>4) The generator is operating but 230Volt voltage and current delivery is discontinued.</u>	

4a) Thermal cut-out open. This safety switch opens in case of a generator overload.	- Wait a few minutes (to let the cut-out cool down), then press the switch (11) even if the motor is running.
<b>5) The generator will NOT START and the “?” indicator on the control panel lights up.</b>	
5a) If the starter motor has already completed its full cycle of 4 starting attempts:	- Check the fuel level
	- Excessive amount of oil in the (petrol) engine, with subsequent vacuum pump locking
	- Dirty carburettor or clogged nozzle
	- Locked choke
	- Dirty fuel filter
	- (Gas) Starter solenoid valve oxidised and locked
	- (Diesel) stop electric magnet locked in closed position
	- (Diesel) electric fuel pump failure.
5b) If the starter motor will not start	- Relay (3) controlling the (Diesel) electric fuel pump not working.
	- Starter battery is flat or too small.
	- Connecting leads to the battery are too thin.
	- Starter relay failure.
	- Starter motor failure.
<b>6) The generator WILL NOT stop when the control switch is turned OFF.</b>	
6a) The AUT/MAN starter switch is on MAN (petrol)	- In this case, the generator can also be started from the control panel but the power-off and alarm functions will be inhibited. Turn the switch back to AUT.
6b) The START/STOP relay (4 petrol) (3 Diesel) is not working or has oxidised contacts.	- Clean the relay contacts or replace the relay.
6c) 9 pin connector is oxidised.	- Clean the contacts.
6d) Electric stop magnet (14 Diesel) is locked open.	- Replace the electric stop magnet (14)
6f) Control panel failure.	- Replace the panel (1).
<b>7) Generator Low Power</b>	
7a) This problem is caused by incorrect MOTOR operation.	- Dirty carburettor.
	- Dirty air filter.
	- Dirty fuel filter.
	- Spark plug to be replaced.
	- Old fuel.

	- (GAS) pressure reducer failure.
	- Motor RPM control tampered with or locked.
	- Slack motor/alternator driving belt (Diesel).

7 NOTE: For Diesel engines, it is important that the user does NOT start or stop the generator with connected loads. Otherwise, the electromechanical engine RPM control system might become damaged and decrease the power supply.

For petrol generators, it is also important to always use FRESH (not old ) fuel. If petrol is left in the tank for several months, its chemical composition might change and the resulting deposit lining the carburettor walls or the valves could affect good system efficiency.