HYUNDAI

DIESEL GENERATOR

Model DHY12000SEV2

User Manual

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1. SAFETY.

1.1. The operator of the machine is;

1.1.1. Responsible for and has a duty of care in making sure that the machine is operated safely and in accordance with the instructions in this user manual.

1.1.2. Should never be left it in a condition which would allow an untrained or unauthorised person/s to operate this machine.

1.1.3. All due care and diligence should be taken by the operator for the safety of and with regard to those around whilst using the machine, to include but not limited to;

1.1.3.1. Elderly, children, pets, livestock and property.

1.2. Some or all of the following PPE, Warning Signs and symbols may appear throughout this manual and you must adhere to their warning/s. Failure to do so may result in personal injury.

Personal Protective clothing (PPE)

Warning Signs and Symbols				
DANGER	CAUTION	WARNING	NOTE	
EXPLOSION	KICKBACK	HOT SURFACE	SHOCK	MOVING PARTS
	FIRE		TOXIC FUMES	

1.3. Carbon Monoxide

1.3.1. Carbon monoxide is a colourless and odourless gas breathing in this gas can cause death as well as serious long term health problems such as brain damage.

1.3.2. The symptoms of Carbon monoxide poisoning can include the following;

1.3.2.1. Headaches, Dizziness, Nausea, Breathlessness, Collapsing or Loss of consciousness.

1.3.2.2. Carbon monoxide symptoms are similar to flu, food poisoning, viral infections and simply tiredness. That's why it's quite common for people to mistake this very dangerous poisoning for something else.

1.3.3. To avoid Carbon monoxide poisoning DO NOT Use Petrol/Diesel powered equipment inside a home or garage even if doors and windows are open.

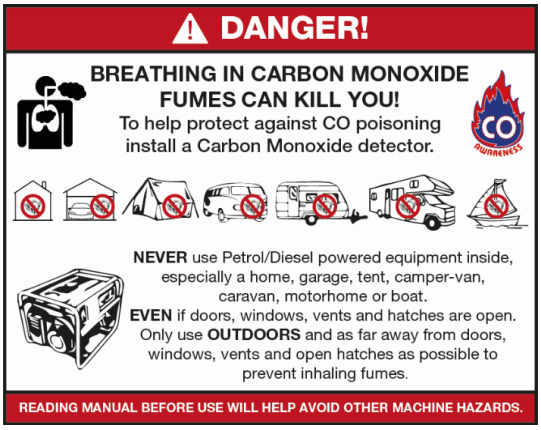
1.3.4. If you think you or someone around you has been affected by carbon monoxide poisoning;

1.3.4.1. Get fresh air immediately.

1.3.4.2. Open doors and windows, turn off machine and leave the affected area.

1.3.4.3. See your doctor immediately or go to hospital - let them know that you suspect carbon monoxide poisoning.

1.3.5. **DO NOT** use in an enclosed area or a moving vehicle.



1.4. General fuel safety.

1.4.1. Fuel Safety additional information can be obtained from the Health and Safety Executive (HSE) document SR16.

1.4.2.

All fuels are Flammable.

1.4.3. Keep away from all ignition sources i.e. Heaters, Lamps, sparks from Grinding or welding.

1.4.4. Hot work on tanks that have contained fuel is extremely dangerous and should not be carried out.

1.4.5. Keep work area clean and tidy.

1.4.6. Clean up all spills promptly using correct methods i.e. absorbent granules and a lidded bin.

1.4.7. Dispose of waste fuels correctly.

1.4.8. Diesel safety.

1.4.8.1. Always fuel and defuel in well-ventilated area.

1.4.8.2. Always wear correct, suitable and fit for purpose Personal Protective Equipment (PPE), suggested items are as follows, but are not limited too.

1.4.8.3. Hand protection.

1.4.8.4. Protective clothing.

1.4.8.5. Respiratory protective equipment should be used when in an unventilated area.

1.4.8.6. When defueling always use a propriety fuel retriever.

1.4.8.7. Always carry fuel in the correct and clearly marked container.

1.4.9. Petrol safety.

1.4.9.1. Always fuel and defuel in well-ventilated area.

1.4.9.2. Always wear correct, suitable and fit for purpose Personal Protective Equipment (PPE), suggested items are as follows, but are not limited too.

1.4.9.3. Hand protection.

1.4.9.4. Protective clothing.

1.4.9.5. Respiratory protective equipment should be used when in an unventilated area.

1.4.9.6. When defueling always use a propriety fuel retriever.

1.4.9.7. Always carry fuel in the correct and clearly marked container.

1.4.10. Electrical Safety.

1.4.10.1. Electricity can kill - never work on LIVE/ENERGISED equipment.

1.4.10.2. Identify electrical isolation method and always isolate all electrical supplies, prior to carrying out any maintenance work.

1.4.10.3. Prior to use and with all electrical supplies isolated check all electrical cables, plugs and connections for the following.

1.4.10.3.1. Are intact and have no signs of damage, to include but not limited to bare wires, chaffing, cuts and loose wiring. If there are any signs of damage, the damaged item should be taken out of service until the damage has been repaired by an electrically competent person.

1.4.10.4. All trailing cables should be routed so as not to cause any kind of trip hazard.

1.4.10.5. Never work on or near electricity with wet hands, wet clothing, and wet gloves.

1.4.10.6.

Batteries present a risk if they become damage by the possible leaking of electrolyte. This electrolyte is an acid and can cause serious injuries. Care should be taken when working on or near them.

1.4.10.6.1. Should you come into contact with acid you should;

1.4.10.6.1.1. Remove all clothing contaminated with acid.

1.4.10.6.1.2. Get medical assistance as soon as possible.

1.4.10.6.1.3. Use fresh running water to wash off excess acid, continue this until medical assistance arrives.

1.4.10.6.1.4. If acid come into contact with Eyes the acid needs to be immediately washed away. Make sure that you do not wash the acid to another part of the face or body.

1.4.10.6.1.5. Gasses from charging batteries are highly flammable and great care should be taken to charge in well ventilated areas.

1.5. <u>Additional Safety guidelines'</u>

1.5.1. To prevent fire.

1.5.1.1. Never add fuel to the fuel tank whilst the engine is running. Wipe away any spilt fuel or oil with a clean cloth before operating. Keep explosives and any other flammable products away from the machine at all times.

1.5.1.2. To prevent fire and to provide adequate ventilation, keep the generator at least one metre away from buildings and other equipment during operation.

1.5.1.3. Operate the generator on level ground. - Do not place the generator indoors whilst the engine is still hot.

1.5.2. To prevent inhaling exhaust fumes.

1.5.2.1. Exhaust gas contains poisonous carbon monoxide which is harmful to health and can kill.

1.5.2.2. For this reason, never use the generator in a closed area or areas with poor ventilation.

1.5.3. To prevent burns.

1.5.3.1. The muffler and the engine body becomes very hot whilst the engine is running or just after running.

1.5.3.2. To prevent any burns, do not touch these parts during these times.

1.5.4. Electric Shocks, Short Circuits.

1.5.4.1. To avoid electric shocks or short circuits, do not touch the generator if your hands are wet.

1.5.4.2. This generator is not waterproof and should not be used in an area which is exposed to rain, snow or water sprays.

1.5.4.3. The use of this generator in a wet place can cause short circuits and electric shocks during operation.

1.5.4.4. The generator should be grounded to prevent electric shocks from faulty appliances.

1.5.4.5. Connect a length of heavy cable between the generator's ground terminal and an external ground source.

1.5.4.6. Do not connect tools or other appliances to the generator before it has been started.

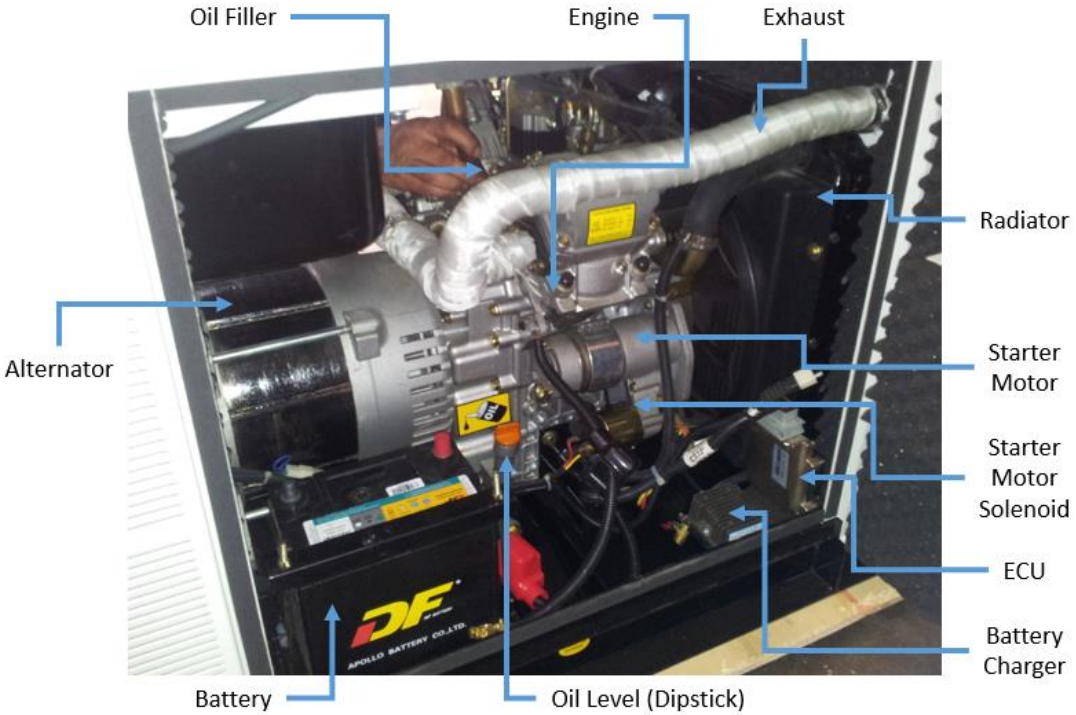
1.5.4.7. If equipment is connected starting the generator may cause sudden movements of the equipment, resulting in accidents or injuries. It may also damage the alternator.

⚠ CAUTION	• DO NOT Connect the generator to Mains AC sockets in your building – commonly known as 'back feeding' it is extremely dangerous and illegal. • Most electric motors require up to 3 times the rated wattage to start. • Do not exceed the specified current limit of any socket.

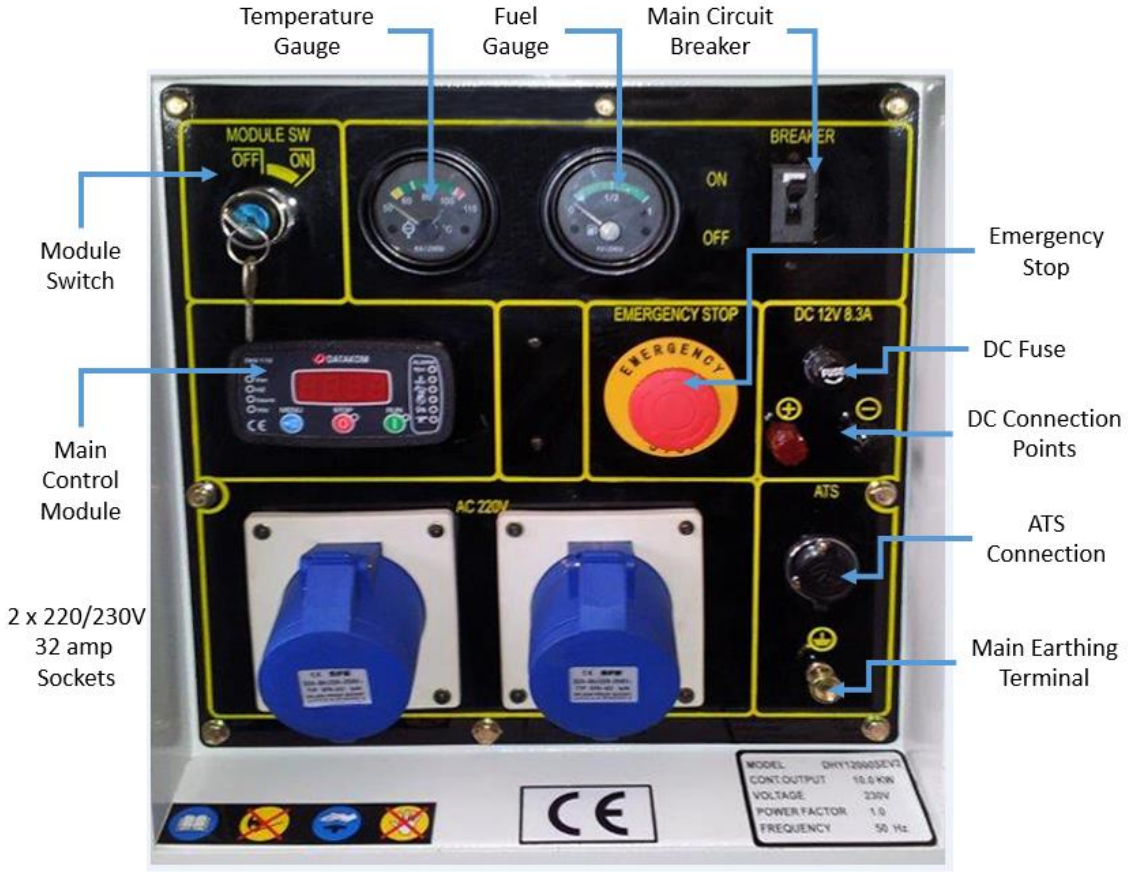
2. MACHINE LAYOUT

2.1. Main Unit.

2.2. Inside Main Unit.



2.3. Main Control Panel.



2.4. Control Module.

2.4.1. The Control Module only becomes active when the Module switch on the Control panel is turned ON.

2.4.2. It can (where present) display the following faults;

2.4.2.1. Low Oil pressure,

2.4.2.2. High Temperature,

2.4.2.3. Over-Speed,

2.4.2.4. Engine Fault,

2.4.2.5. High/Low Volts and

2.4.2.6. Emergency STOP button activated.

2.5. Control Module Functions.

2.5.1. The Control Module only becomes active when the Module switch on the Control panel is turned ON.

2.5.2. After each successive press of the MENU button the Module will display the following information;

2.5.2.1. Volts,

2.5.2.2. Frequency,

2.5.2.3. Hours RUN and

2.5.2.4. DC Battery Voltage.

Volts

Frequency

Hours Run

DC Volts

3. PREPARATION for STARTING

⚠ WARNING	• DO NOT refill tank while engine is running or HOT. • Do not smoke or allow flames or sparks in the area where the engine is refuelled or where the fuel is stored. • Do not overfill the diesel tank and make sure the filler cap is securely closed after refuelling. • Take care not to spill fuel when refuelling. If any fuel is spilled, make sure the area is clean and dry before starting the engine.
⚠ CAUTION	• Wear suitable PPE, suggested but not limited too

3.1. Selection and handling of fuel.

3.1.1. Selection of fuel.

3.1.1.1. Only use standard specification diesel, this can be red or white.

3.1.1.2. Keep dust and water out of the fuel.

3.1.1.3. When filling the fuel tank from drums, make sure that no dust or water enters the fuel. This can cause serious damage to the fuel injection pump or the injector nozzle.

3.1.1.4. Do not overfill. Overfilling can potentially be very dangerous. Diesel can expand in hot weather and overflow

3.1.1.5. Always leave a 25mm gap above the fuel level.

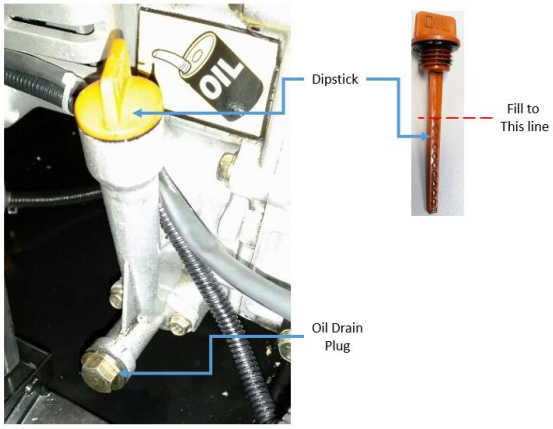
⚠ WARNING	• Always check the engine oil level with the generator on a flat, level surface before starting or refilling the machine. • If an insufficient amount of engine oil is used, damage to the engine may result. • Do not overfill the engine with oil. • This generator is equipped with a low oil pressure switch this system will stop the engine automatically when the oil pressure falls below the minimum pressure required. • This helps prevents damage such as bearing seizures etc. However, this should not be relied upon and the engine oil level should be checked and topped up if required, daily.
⚠ CAUTION	• Wear suitable PPE, suggested but not limited too

3.2. Check and refill the engine oil.

3.2.1. To ensure the generator maintains an optimum performance and the life of the generator is as long as possible, it is important to use the correct engine oil – SAE10W/30 – SAE15W/40 (**API CH-4/CF/SJ/SL diesel engine oil or higher grade)** and **change after the first 20 hours, then every 100 hours.**

3.2.2. If the correct engine oil is not used, or the engine oil is not replaced every 100 hours, as required, the risk of crankshaft bearing failure, piston seizure, piston ring sticking and accelerated wear of the cylinder liner, main bearing and failure of other moving components increases significantly. The generator lifespan will be greatly reduced if oil level and oil changes are reduced.

3.2.3. Remove dipstick and check engine oil level.



3.2.4. If oil level is below the lower level line, refill with SAE API CH-4/CF/SJ/SL diesel engine oil on dipstick, or to the top of filler neck. N.B. do not screw oil filler in the oil filler cap when checking oil level.

3.2.5. Change contaminated oil.

3.3. Fill with coolant and antifreeze to the level marked.

3.4. Checking the Generator before start up.

⚠ WARNING	• Be sure to turn off the main breaker switch before starting. The generator should be earthed to prevent electric shocks. • Turn off the main breaker switch and remove all loads.
⚠ CAUTION	• Before starting the engine, be sure to switch OFF any appliances connected to it.

3.5. Running-in periods of Operation.

3.5.1. The first 20 hours are the break-in period of the engine. For this reason, it is important to follow the following instructions during this period.

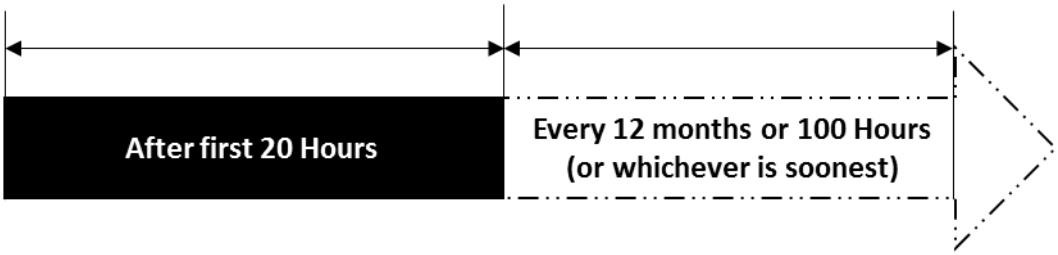
3.5.1.1. Warm up the engine 5 minutes after the initial starting, before applying load.

3.5.1.2. Avoid applying loads above 3kw during the first 20 hours of operation.

3.5.1.3. It is important to replace the engine oil on time.

3.5.1.4. Drain the engine oil whilst the engine is warm.

3.5.1.5. Ensure that old engine oil is drained out completely.



3.6. Battery.

⚠ WARNING	• Do not connect tools or any other appliances to the generator before starting.
⚠ CAUTION	• Explosive gases are emitted when the battery is charging. • Only charge in a well-ventilated area, away from sparks and naked flames. • Before charging, if possible, remove the cap from each cell of the battery and ensure the electrolyte level is correct.(Does not apply to sealed batteries).

3.6.1. Battery.

3.6.1.1. When you first install the battery, ensure that the battery's polarity is the same as the generator's battery leads - Black = negative, Red = positive.

3.6.1.2. Using the control module check that the battery voltage is between 12.5v and 13.6v.

3.6.1.3. The battery will be re-charged whilst the engine is running.

3.6.1.4. Make sure battery is free from damage and is not leaking. If battery shows signs of damage or leaking – DO NOT continue to use. Instead replace battery immediately.

3.6.1.5. Make sure that all battery acid spills are correctly cleaned up straight away.

3.6.1.6. The battery should be stored in a charged condition.

3.6.1.7. The battery is a 12 volt 36Ah sealed lead acid battery and requires no maintenance other than;

3.6.1.7.1. Ensure battery terminals are;

3.6.1.7.2. Kept clean.

3.6.1.7.3. Kept tight.

3.6.1.7.4. Covered to prevent short circuiting.

3.6.1.8. If the battery voltage is too low, it will require charging before use.

3.6.1.9. Keep the battery in a cool, dry place. It is important to clean the battery every three months and charge every six months.

4. OPERATING THE GENERATOR

⚠ WARNING	• This generator should be grounded to Earth using a Ground earth spike – tested to the current Electrical Regulations
⚠ CAUTION	• If the engine has been running, the exhaust will become very hot. Be careful not to touch the muffler until it has had time to fully cool down. • Never refuel the fuel tank whilst the engine is still running. • This generator features a low oil pressure warning system. This is activated by low oil pressure or engine oil shortage. In these cases the engine will stop automatically. The machine will not restart without refilling the engine oil. Check the oil level and refill. • DO NOT RELY ON THIS. Check oil daily. • Do not loosen or readjust either the engine speed limiting bolt or the fuel injection limiting bolt as this will cause the performance of the generator to be affected.
⚠ NOTE	• The fuel system is gravity fed to the fuel filter and pump.

4.1. Starting.

4.1.1. Make sure that the machine has, fuel, water and oil

4.1.2. Make sure the emergency STOP switch is out (turn anti-clockwise).

4.1.3. Turn the Module Switch to ON, the display and the two gauges will light up.

4.1.4. Press the green RUN button, the machine will begin to crank and will start.

4.1.5. If the fuel has been changed or run out. The starting method will be to press the RUN button and when machine begins to crank press the red STOP button, repeat this three times. Then press green RUN button and let machine start as normal.

4.1.6. Run machine for five minutes before applying load

4.1.7. Insert the plug into the socket you are about to use.

4.1.8. Turn the main AC switch to the 'ON' position and turn the electrical appliance ‘ON’.

4.1.9. Do not overload the generator. This maximum output is 10kw, with maximum continuous rating of 9kw. It is recommended that for long life, the load should be between 40% and 80% of the maximum rating.

4.1.10. The generator is fitted with an overload breaker. This will overload (trip/break) when the load on the generator reaches maximum. Avoid overloading the generator.

4.2. Checks whilst generator is running.

4.2.1. After each use make sure that there are no abnormal sounds or vibration.

4.2.2. Check that the engine is running smoothly normally.

4.2.3. Check that there is no excessive smoke form the exhaust after 10 minutes of running, and the engine has reached working temperature

4.2.4. Check that there are no oil or fuel leaks.

⚠ NOTE	• If you notice any issues, stop the engine and locate the fault. • Please contact Genpower for assistance if required.

5. LOAD

⚠ CAUTION	• Start appliances one-by-one. Do not start 2 or more appliances simultaneously- start them one by one. • Induction loads, such as appliances with electric motors, especially air compressors and pressure washers take up to 4 times the rated wattage to start their motors. For example a 3hp (2200w/ 2.2kw) air compressor can take up to 8800w/8.8kw to start it! • Do not use floodlights together with other appliances

5.1. 230 Volt AC use.

5.1.1. With engine running, switch ON the main breaker switch;

5.1.1.1. Check the Voltage reading when in 'Voltage Mode' (see 2.5. Control Module Functions). It should read 230v ± 5%.

Volts

5.1.2. Check the Frequency reading when in 'Frequency Mode' (see 2.5. Control Module Functions). It should read 50Hz.

Frequency

5.1.3. Connect the equipment to the generator in correct order.

5.1.4. Connecting the loads with the largest motor first, then the smaller items.

5.1.5. If the generator is overloaded the main breaker will trip.

5.1.6. To reset the breaker do the following;

5.1.6.1. Turn OFF and disconnect all loads.

5.1.6.2. Reset breaker, and add load onto the circuit to within 50% to 75% of rated output.

5.1.7. Wait a few minutes before resuming operation.

5.1.8. Electrical appliances, particularly motor driven equipment, will have a very high start-up current. The table below provides reference for connecting these appliances to the generator.

Type	Wattage		Typical appliance	Example		
	Starting	Rated		Appliance	Starting	Rated
Lighting **Heating Appliance**	x 1	x 1	Incandescent lamp or heating appliance	Incandescent lamp 1000 watts	100 vA	100 vA
Fluorescent Lamp	x 2	x 1 to x 1.5	Fluorescent Lamp	Fluorescent Lamp	80 vA	40 to 60 vA
Motor Driven Equipment	x 3.5	x 1 to 2	Refrigerator, Electric fan, Compressor or grinder	Refrigerator 150 watts	450 to 750 vA	150 to 30 vA

5.2. 12v DC use.

⚠ WARNING	• Connect the positive and negative charging lead clips to the correct poles of the battery. • If you try to charge a large capacity battery, which is at a low voltage, excessive current flow may occur. This may result in the fuse for the 12v DC blowing. • Do not use 12V DC and 230V AC at the same time.

5.2.1. DC terminals are only for charging 12V batteries.

5.2.2. Set the main AC breaker switch to the 'OFF' position whilst charging.

5.2.3. If you undertake regular battery charging, it is advisable to use a 230v battery charger run from the 230v circuit, for a more efficient charge.

6. STOPPING MACHINE

⚠ WARNING	• Do not stop the engine suddenly or whilst under load. • This can damage the AVR and cause damage to the alternator through overheating.

6.1. Switch OFF equipment connected to the generator.
6.2. Turn off the main breaker switch.
6.3. Run the generator without load for three minutes.
6.4. Press the STOP button.
6.5. Once machine has stopped turn OFF the Module Switch.

7. PERIODIC MAINTENANCE

⚠ WARNING	• Ensure the engine is off before performing any service. • If the engine must be run, make sure that the area is well ventilated. • The exhaust contains poisonous carbon monoxide gas.

7.1. Maintenance chart.

7.1.1. All work/s should be carried out by a suitable qualified person.
7.1.1.1. If you need technical advice please contact Genpower.

Item	Daily	First Month or 20 hours	Six Months or 250 hours	Six Months or 500 hours	Every Year or 1000 hours
Check and refill with diesel	●				
Change engine oil		● First Time	●		
Check and refill engine oil	●				
Check for oil leakage	●				
Check and tighten fastening parts	●			●	
Replace engine oil filter			●		
Replace air cleaner element – *Service more frequently in dusty areas*				●	
Replace fuel filter				●	
Check fuel pipes					● Replace as required
Adjust clearance of intake/exhaust valves					●
Grind intake/exhaust valves					●
Check physical condition of battery			●		
Check battery voltage		●			
Check carbon brushes and slip rings				●	

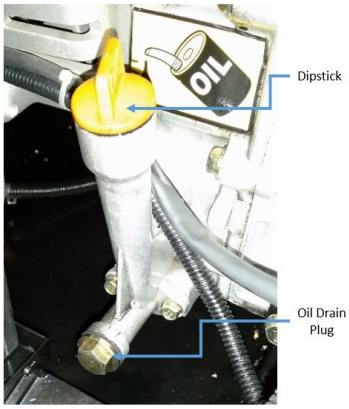
7.2. Replacing engine oil.

⚠ CAUTION	• After engine has been run prior to changing the oil will be very hot. Wear correct PPE minimum of gloves and overalls. • DO NOT allow any dust, dirt or any other debris enter oil or crankcase.

7.2.1. Loosen the Oil Filler Cap.

Oil Filler Cap

7.2.2. Remove the Oil Drain Plug and drain the old oil while the engine is still warm.



7.2.3. Fit new copper washer as required.

7.2.4. After draining, re-tighten the drain plug and refill with the recommended oil **API CH-4/CF/SJ/SL diesel engine oil or higher grade.**

7.2.5. Clear up any spillages.

7.2.6. Tighten the Oil Filler Cap.

7.3. Replacing oil filter.

Oil Filter

7.3.1. Loosen the Oil Filler Cap.
7.3.2. Remove the Oil Drain Plug and drain the old oil while the engine is still warm.
7.3.3. After draining, re-tighten the drain plug.
7.3.4. Remove old filter and replace with new. Fit new copper washer as required.
7.3.5. Refill with the recommended oil **API CH-4/CF/SJ/SL diesel engine oil or higher grade.**

7.4. Servicing the Air Filter.

⚠ WARNING	• Do not wash air filter – blow out any dust from housing using a low pressure air-line. • Replace the air filter if the engine output decreases or excessive exhaust smoke is noticed. • Never run the generator without the air filter, otherwise rapid engine wear will result.

7.4.1. Open access door to right of control panel.
7.4.2. Air filter is mounted low and to the left
7.4.3. Undo the two clips and remove the air filter cover and take out the air filter.
7.4.4. Clean the air filter.
7.4.5. Reverse this process to re-install filter.

Second clip Fitted on opposite side

7.5. Clean and Replace Fuel Filter.

⚠ CAUTION	• Never run the generator without the fuel filter.

7.5.1. Drain out the fuel from the fuel tank.
7.5.2. Replace filter.

Mounted under Alternator

7.6. Engine maintenance and Tighten cylinder head bolts.

⚠ WARNING	• Do not perform the injection nozzle test near an open fire or any other kind of fire. • The fuel spray may ignite. • Do not expose bare skin to the fuel spray, the fuel may penetrate the skin and cause severe injury or death. • Always keep your body away from the nozzle.
⚠ CAUTION	• Engine maintenance and Tightening of the cylinder head bolt requires special tools. Contact Genpower for assistance.

7.7. Check and charge the battery.

⚠ WARNING	• The battery electrolyte contains sulphuric acid. • Protect your eyes, skin and clothing. • In case of contact, flush thoroughly with water and get immediate medical attention, especially if it has made contact with your eyes. • The battery vents can give off hydrogen gas, which can be highly explosive. • Do not smoke or allow flames or sparks near the battery, especially during charging. • Wear correct PPE minimum of gloves and overalls.

7.7.1. When you first install the battery, ensure that the battery's polarity is the same as the generator's positive and negative leads (Red to positive, black to negative).
7.7.2. Check the voltage is above 12.3V, if not the battery should be charged.
7.7.3. Check the voltage, once a month. The voltage of a standard battery is 12.5v-13.6v.
7.7.4. If the battery voltage is too low, it should be removed and re-charged.
7.7.5. Keep the battery in a cool, dry place. It is important to clean the battery every three months and re-charge every 6 months.

7.8. Check the alternator carbon brushes and slip rings.

7.8.1. Check the generators carbon brushes and slip rings regularly.
7.8.2. Replace if there is a poor contact or the brushes are worn.

8. LONG TERM STORAGE

⚠ WARNING	• After running the engine the oil will be very hot. • Wear correct PPE minimum of gloves and overalls.

8.1. If storing the generator for long periods of time, make the following operations.

8.1.1. Operate the engine for 10 minutes and then stop.

8.1.2. Stop the engine.

8.1.3. Drain the engine oil whilst the engine is still warm and refill with fresh oil.

8.1.4. Turn the engine for 2-3 seconds with the decompression lever set at the non-compression position and the starting key set at the 'START' position. (Do not start the engine.)

8.1.5. Wipe off the oil and dirt from the engine and store in a dry place.

8.1.6. Dis-connect the battery and store in a dry place.

8.1.7. Repair and replace any known faulty items.

9. TROUBLESHOOTING.

9.1. Troubleshooting - N.B. all corrective actions should be carried out by suitably qualified person/s.

Problem	Possible fault/cause	Remedy
The Diesel engine will not start	Emergency STOP button activated (depressed)	Re-set emergency STOP button
	Insufficient fuel	Refill with fuel
	The start motor turns slowly	Check battery performance and all connections
	The battery is flat	Charge or replace with a new one
	Fuel injection pump does not deliver fuel or delivers insufficient fuel	Remove the injector pump and have it tested
	Check the engine oil level	The specified oil level should be to the upper lever
	The injector has severe carbon build-up	Clean the injector
The generator is not producing power	Main breaker switch has not been turned ON	Turn the main breaker to the ON position
	The contact in the socket is not good	Make sure plugs are fully inserted into sockets
	The rated speed is too HIGH or too LOW	Adjust engine speed to produce 52 Hz with no load
	AVR is damaged	Replace AVR
	Alternator brushes worn	Replace the brushes
Engine stops on low oil pressure	Low oil level	Fill with oil to correct level
	Faulty oil switch	Replace Switch
	Oil filter blocked	Replace Filter

10. SPECIFICATIONS

DHY12000SEV2	
Rated Frequency	50 Hz
Rated Output	9 kW
Maximum Output	10 kW
Voltage	230 VAC
Max Current	43.48
Rated Speed	3000 RPM
Number of Phases	Single Phase
Power Factor	1 cos$^{\phi}$
Excitation Method	Self-excitation and Constant voltage AVR
Engine Model	EV80 with electronic governor
Engine Type	Two cylinder, V-Type, Water cooled, Four Stroke
Cylinder bore x stroke mm	80 x 79
Displacement cc	794
Compression Ratio	23:1
Rated Power (HP/RPM)	16.5/3000
Ignition System	Compression Ignition
Cooling System	Water Cooled
Lubrication System	Pressure/Splash
Starting Method	Electric Start
Fuel	Diesel
Fuel Tank Capacity	45 Litres
Lubrication Oil	SAE15W/40 (API CH-4/CF/SJ/SL diesel engine oil or higher grade)
Lubrication Oil Capacity (Litres)	2.24
Starting Motor Capacity	12 V 1.4 kW
Charging Generator Capacity	12 V 20 A
Battery Capacity	12 V 36 Ah
Overall Dimensions	1275 mm x 740 mm x 790 mm
Net Weight	260 Kg
Gross Weight	280 Kg

11. SERVICE RECORD SHEET

Date	Hours	Maintenance undertaken	Name

12. GENPOWER CONTACT DETAILS

12.1. Postal address;

Genpower Limited, Isaac Way, Pembroke Dock,
Pembrokeshire, SA72 4RW, UK.

12.2. Telephone and Fax contact numbers;

Office +44 (0) 1646 687880

12.3. Email contact;

Technical service@genpower.co.uk

12.4. Web site;

www.hyundaipowerequipment.co.uk

13. DECLARATIONS OF CONFORMITY

13.1. Genpower Ltd confirms that these Hyundai products conform to the following CE Directives;

13.1.1. 2006/42/EC Machinery Directive

13.1.2. 2004/108/EC EMC Directive

13.1.3. 2000/14/EC Noise Emissions Directive

13.1.4. 97/68/EC NRMM Emissions Directive

13.1.5. 2006/95/EC Low Voltage Directive

EC DECLARATION OF CONFORMITY

The undersigned, as authorised by:	**Genpower Ltd**

Declares that the following equipment manufactured under licence by Hyundai Korea

Conforms to the Directive: -

2000/14/EC (as amended)

of the European Parliament and of the council on the approximation of the laws of the Member States relating to the noise emission in the environment by equipment for use outdoors.

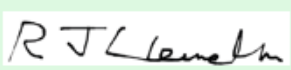
Equipment Category:	**Generator**
Product Name/Model:	**Hyundai DHY12000SEV2**
Type/Serial No:	**Diesel Generator**
Net installed power:	**10 kW**
The technical documentation is kept by:	**Roland Llewellin, Genpower Ltd, Isaac Way, Pembroke Dock, Pembrokeshire, SA72 4RW.**

The conformity assessment procedure followed was in according with annex **VI** of the Directive.

Notified Body:	**AV TECHNOLOGY, Avtech House, Arkle Avenue, Stanley Green Trading Estate, Handforth, Cheshire, SK9 3RW Certification nº GB/1067/4359/13 Issue 1**
Measured Sound Power Level:	**97 dB(A)**
Guaranteed Sound Power Level:	**97 dB(A)**

A copy of this certificate has been submitted to the European Commission and to EU Member State United Kingdom.

Place of Declaration:	**Pembroke Dock, SA72 4RW**
Date:	**28/06/2013**
Signed by:	**Roland Llewellin**
Position in Company:	**Director**
Name and address of manufacturer or Authorised representative:	**Genpower Ltd, Isaac Way, Pembroke Dock, Pembrokeshire, SA72 4RW.**



HYUNDAI

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