

BASIC MAINTENANCE CHECK LIST FOR A STANDBY GENERATING SET

WEEKLY	Annually or every 250 HOURS	PERIODIC TEST RUN
Visually inspect engine, generator & control panel.	Repeat weekly procedure.	
Fuel System 1. Check level in fuel tank(s). 2. Check operation of hand and /or electric transfer pumps, including float control system (if applicable).	Fuel System 1. Change fuel filters.* Cooling System 1. Change water filters - if fitted.* 2. Check anti -freeze solution - change annually or top up if condition is good.	1. To ensure that the generating set is ready to start and accept load when required, it is recommended that a test run be carried out at monthly intervals but as a minimum annually. 2. It is strongly recommended that the generating set should be 'ON' load for not less than one hour as this ensures that the lubricating oil is rased to a temperature to burn off acids, ideally up to 4 hours. 3. 'On Load' running is considered to be at least 80% of the full load capacity of generating set. 4. Do not run your generator either 'off load' or on loads of 30% of full load or less for extended periods , as appreciative contamination of the engine will occur. 5. If 'OFF' load testing is used, the length of test should be ten minutes to minimise the carbonising of injectors, heads and valves, and reduce the distribution of oil acids. 6. Before starting, the normal static / weekly checks should be carried out. 7. Select the MANUAL OR TEST position on the control panel. Press the START pushbutton if present. This will initiate a complete automatic start cycle of the generating set. The generating set has a repeat start facility and will make further starts, if the first attempt does not start the generating set. 8. As soon as possible after the set starts, the oil pressure gauge should be inspected. Oil pressure should not be less than 30 psi. Normal oil pressure varies from engine to engine. If the oil pressure does not reach the required minimum in approximately 20 seconds, the set must be shut down. The automatic fault protection system should provide a forced shutdown in less than this time period. At the end of the test run stop the set by pressing the STOP pushbutton, then return the DUTY CONTROL SWITCH to the AUTOMATIC position.
Cooling System 1. Check coolant level and top up as necessary. 2. Check coolant air to generator room is not obstructed. 3. Check condition of fanbelts. 4. Check condition of hoses. 5. Check engine jacket heater operative. 6. Check radiator fins are not blocked.	Lubricating System 1. Change Lube oil. 2. Change Lube oil filters.* 3. Clean crankcase breather.	
Lubricating System 1. Check lube oil level and top up as necessary.	Air System 1. Check condition of air filter. Blow down / change as required.*	
Batteries and Charging System 1. Check condition of batteries and that they are charged.	Alternator 1. Inspect terminals. 2. Inspect coupling. 3. Blow out dust and dirt with compressed air if applicable.	
Exhaust System 1. Check general condition and condensate trap for moisture.	Engine Safety Controls 1. Check alarm and safety devices.	
Control Panel 1. Check, clean, dry and free of foreign material. 2. Visual inspection of insulation. 3. Check doors are closed securely.	Control Panel / Circuit Breaker 1. Check all cable connections are tight. (Control Cables)	*Special Notes: 1. Ensure the correct grade of engine oil is used. 2. Coolant is not water! It is a mixture of water, anti freeze and additives. Please use the correct type. 3. Contaminated fuel or fuel with excessive water / bacteria levels will cause catastrophic failure to modern fuel pumps and injectors. PLEASE ENSURE YOUR FUEL IS CLEAN.
General 1. Run set as per the periodic test run. 2. Check for leaks, temperature, pressure and general noise. 3. Allow set to run 'off load' for 5 mins to cool turbo-charger before shutting down. 4. Set control system to 'standby condition'. 5. Check any motorised louvres for operation.	<i>* Some engines do not require the filters changing at 250 hours. Please contact FW Power for guidance.</i>	FW Power offer full service & maintenance contracts and load test runs. Please email service@fwpower.co.uk for a quote or call 01270 821419.

Please note this is a basic guide and should only be used by fully competent engineers.