

**Example Emergency Generator Inspection and Testing Log
Based on NFPA 110, 2005 Edition**

Test performed by: _____

Weekly: (W) Monthly: (M) Annually: (A)

Fill in the appropriate readings:

30% Load Target: _____

Date														
(W) 1. Engine Temp Cold														
(W) 2. Room Temp														
(W) 3. Battery Level/Voltage														
(W) 4. Oil Level														
(W) 5. Coolant Level														
(W) 6. Fuel Level														
(W) 7. Hour Meter														
(W) 8. Mode														
(M) 9. Battery Specific Gravity														
(M) 10. Initiate – Start Test (time)														
(M) 11. T/D Start														
(M) 12. T/D Transfer														
(M) 13. AC Voltage														
(M) 14. Hz														
(M) 15. AC Amperage														
a. A phase														
b. B phase														
c. C phase														
(M) 16. Oil Pressure														
(M) 17. DC Amps/volts														
(M) 18. Water Temp														
(M) 19. Restore to Normal (time)														
(M) 20. T/D Retransfer														
(M) 21. Oil Pressure														
(M) 22. DC Amps/volts														
(M) 23. Water Temp														
(M) 24. AC Voltage														
(M) 25. Hz														
(M) 26. T/D Stop														
(M) 27. Mode														
(A) 28. Circuit Breaker														
(A) 29. Fuel Test														

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Item: **Weekly**

1. Measure the temperature of the engine before you start it.
2. If the generator is inside of a building, measure the temperature of the room before starting the engine.
3. Check the electrolyte level or the voltage of the cranking battery.
4. Check the oil level before you start the engine.
5. Check the coolant level before you start the engine.
6. Fuel level
7. Record the hour meter reading.
8. Make sure all appropriate control switches are in the automatic mode.

Monthly

9. Check and record the battery electrolyte specific gravity.
10. Start the generator. Enter the time you initiate the test. You may turn off the power to the automatic transfer switch or just operate the test feature on the automatic transfer switch. Either way you do this, the generator must be on line and carrying the load within 10 seconds. All transfer switches including manual switches must be operated to connect the load to the alternate source.
11. Enter the lapse time from when you initiate the test to the time the engine starts.
12. The automatic transfer switch **may have** a time delay on transfer or “warm-up timer”. Enter the lapse time from when the engine starts to the time the switch actually transfers the load to the generator. The time should not exceed 10 seconds from the time you initiate a start until the switch transfers to the generator.

Take the following readings from the generator control panel. Hz should be around 60. AC amperage will read zero until the automatic transfer switch switches the load to the generator.

13. Record the AC Voltage
14. Record the Hz (frequency)
15. Record the AC Amperage—read all phases. Use the phase selector switch to toggle between phases.
16. Record the Oil pressure
17. Record the DC amperage here means the battery charging alternator on the engine. Record either the amperage or voltage depending on the kind of gauge you have in the generator control panel.
18. Record the coolant temperature.
19. Restore to normal. Record the time you restore power to the automatic transfer switch or restore the test control back to normal.
20. Enter the time lapse from the moment you restored power to the automatic transfer switch or restored the test control back to normal and the time the automatic transfer switch transfers back to the normal source. Check the time you started the test. The system should run under load for 30 minutes—minimum.
21. Record the oil pressure.
22. Record the DC amperage/voltage.
23. Record the water temperature.
24. Record the AC voltage.
25. Record the Hz.
26. Enter the time lapse from the retransfer in Item 19 to the time the engine stops. This is referred to as the “cool-down” time.
27. Confirm the system’s control switches have been restored to the “Automatic” mode.
28. Test generator circuit breakers with the generator turned off annually.
29. Have the fuel quality tested to ASTM standards annually.

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