10KW GENERAC GENERATOR / SUBARU 18 HP ENGINE

Notes from Gordon Gibby June 2018

USE THIS GENERATOR AT YOUR OWN RISK



10 KW rated power generator	
12.5 KW Surge	
Gasoline operated	
Electric key start	Leaving "on" will drain the battery.
Manual choke	
Carburetor	

WARNINGS

- 1. If you leave the key "ON" with the generator not running....you will drain the battery.
- 2. The "ON" position keeps a solenoid positioned so that gas reaches the engine.
- 3. The battery charging circuit has been replaced by a walmart battery maintainer that isn't fully waterproof; protect it from rain and pay attention to it if it shows LOW or 60%; it should basically show either 90%, FULL or just a green bar indicating a 12V battery. This charger is a "smart charger" and CANNOT CHARGE a fully dead battery --- it can't sense whether it is a 6V or 12V battery --- you will need to jump charge the battery a bit to get the charger to work...
- 4. Generator may require full choke to start, and possibly even a tiny bit to run at times.

THERE IS NO VOLTAGE REGULATOR ON THIS GENERATOR OTHER THAN THE SPEED GOVERNOR --- THE SPEED OF THE GENERATOR SETS BOTH THE FREQUENCY AND THE OUTPUT VOLTAGE.

READ THE GENERATOR MANUAL. IT IS POSTED HERE: http://qsl.net/nf4rc/2018/GENERAC GEN IPL 01339-0.pdf

- 1. Starting: Make sure that both gas shutoffs (one right under the gas tank and one just before the carburetor) are open (their blades inline with the fuel tubing rather than at right angles to it), that there is good gasoline (NOT DIESEL) in the tank, that the tank is securely closed, close the carburetor choke fully by pulling the finger ring outward, and turn the start key to start; as soon as it starts, release the key to allow it to settle in the ON position, and then slowly release some of the choke to find a good running setting.
- 2. Operating: Be certain that the generator does not run low on OIL. Add 30W, 10-40W or other suitable oil carefully through the fill inlet at the cylinder head until the oil just reaches the top of the two marks on the dip stick.
- 3. The orange light is there to remind you the solenoid is using electricity to keep fuel flowing to the carburetor. If you stop the generator by shutting off fuel, or running out of fuel, and don't turn the key OFF, you will drain the battery in a few hours.
- 4. DO NOT REFUEL A HOT HOT GENERATOR. Allow it to cool for a few minutes to reduce the chance of fire. Fuel carefully with a fire extinguisher available.
- 5. BE CAREFUL WITH ELECTRICITY, especially in the rain.
- 6. The generator now includes two load measuring solid state monitors, which are not fully weatherproofed. Try to avoid them being exposed to a driving, drenching rain. The instructions for resetting the "elapsed energy" are complicated and will not be repeated here. In general, the measurements indicate VA (volts x amps) which will be inappropriately high if the load is inductive (air conditioners) and thus has a powerfactor less than 1.0 The true power being utilized may be lower, but the current draw on the generator is the same.
- 7. This generator does its voltage regulation by always spinning at 3600 RPM. Do not adjust the governor and cause the voltage to go high or low.

8.

ALTERNATING CURRENT 120/240 VAC OUTPUTS

The following photo shows all the AC outputs. The standard house-type receptacles are NOT both on the same circuit. Arbitrarily the top outlet has been designaed as "Line 1" and the bottom as "Line 2" of a 2 line, 120-neutral-120 (240 total) SINGLE PHASE two-line generator. This is exactly analogous to the wiring of a standard house service panel.

BALANCE THE LOAD by placing approximately half the load on one line output, and the other half on the other line output. This can be done by carefully choosing which outputs are chosen.

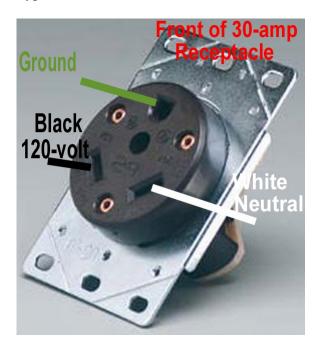
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RECEPTACLES: SEE https://commons.wikimedia.org/wiki/File:NEMA_simplified_pins.svg

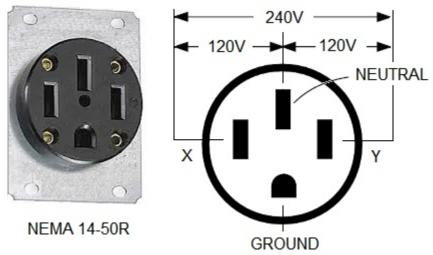
RECEPTACLES	VOLTAGE AVAILABLE	COMMENT
NEMA 5-15 Line 1	110-120 VAC	standard house outlet, top
NEMA 5-15 Line 2	110-120 VAC (line 2)	standard house outlet, bottom
L5-20R, Line 1	110-120VAC	L = "locking" R= "receptacle" 20 = 20 amperes
L5-30R, Line 2	110-120 VAC	
L14-30R	NOTE 240VAC PRESENT 120-neutral-120, ground, both line 1 and line 2 present	
NEMA 14-50	NOTE 240VAC PRESENT 120-neutral-120, ground; both line 1 and line 2 present	The Valterra MightyCord 50A Male to 30A RV TT adapter which I have, picks off 120V LINE 1 and does not utilize LINE 2



Typical RV Travel Trailer 30A connector:



Typical trailer 50A service wiring:



GENERATOR LABELING

