

Choosing the right processor for the job is important because the electrofusion processor is responsible for supplying a carefully regulated voltage to the fitting being fused.

Equally important is the AC power source you use with your electrofusion processor. The two types of power sources you can choose from are:

- **A Professionally wired, in-house, industrial, grade wall receptacle, or**
- **A well maintained and adequately sized portable AC generator**

Well maintained generators require regular care and maintenance that includes changing oil filters, air filters, fuel filters, and ignition system components to maintain the generators efficiency. It is also highly recommended to have the generators tested under a load and calibrated on an annual basis. Failure to do so may result in reduced or inconsistent generator voltage outputs.



If you are using the IntegriFuse I60 Processor you must have a generator capable of producing a minimum of 5,000 continuous watts and that has a 120 volt – 30-amp outlet with a 3 prong NEMA L5-30 120V/30A twist lock receptacle.



If you are using the IntegriFuse I105 Processor you must have a generator capable of producing a minimum of 6,500 continuous watts and that has a 240 volt – 30-amp outlet with a 4 prong NEMA L14-30 240V/30A twist lock receptacle.



**Dual Purpose Generators (welder/generators)** are **NOT ACCEPTABLE**. Even though dual purpose generators may have the appropriate outlets, units such as these typically supply only **raw, unfiltered and partially regulated power**. When placed under a load during the fusion process. their voltage output may not be “**clean**” enough to be used with sensitive equipment like electrofusion processors.



If the generator you are using has an outlet that supplies both **120v or 240v through the same outlet**, make sure the circuit breakers or the circuit relays are turned on and are in the correct position before plugging the processor in and turning it on. Failure to do so can result in an excessive voltage surge that can seriously damage



Under **NO** circumstances is it acceptable to use any kind of **plug adapter** or **pigtail** to plug an electrofusion processor into a generator when the appropriate outlets are not available. **Plug Adapter and Pigtails** are rated for 20 amps or less. The Electrofusion Processor requires a 30 Amp power draw. Modifications to the processors power cord or hard wiring the power cord to the generator should also **NEVER** be done!





Extension cords can be used, but they must not exceed the recommended lengths and be made of the appropriate gauge of wire. **25ft cords must be made of 10 ga. wire and 50ft cords must be made of 8 ga. wire.**

- **Do not** plug the electrofusion processor into the generator before starting it.
- **Do not** turn the generator on or off with the processor plugged in.

If the generator has a **manual throttle control**, make sure it is the “full throttle” position. If your generator is equipped with a “**auto throttle control**”, “**idle control**”, or “**econ**” switch; make sure that it is in the “**OFF**” position. If the throttle control switch is left on, the generator will try to compensate for changes in the current draw during the fusion process. This can trigger an improper voltage input error.



Make sure that the correct circuit breakers or circuit relays are turned on correctly before plugging the processor into the generator. Before turning the processor on, make sure that the correct breakers or circuit relays are turned on so that the proper voltage will be supplied to the outlet being used. Subjecting the processor to the wrong input voltage will trigger a “voltage out of range” error and if the breakers are suddenly turned on during the fusion process it can result in an excessive voltage surge that will result in serious damage to the processor.



Always remember that the electrofusion process requires a reliable, constant, and stable source of AC power. For that reason, generators are always going to be a potential source of electrofusion errors experienced in the field. This potential source can be minimized and controlled if the installer pays regular attention to:

- **The generators they choose**
- **The regular care and maintenance of the generator**
- **The verification and calibration of the generators output on an annual basis, and**
- **Following the proper operational protocol**