

Voltage Regulator Hookup

Voltage in Mexico is unreliable. It can put your appliances and electronics at risk. You can use a voltage protector (This is not just a surge protector) to prevent too low or too high a voltage getting through, or you can use a voltage regulator. Or even both. Low voltage is actually more dangerous to your electronics, than high. This makes it superior to the Hughes autoformer which only corrects low.

Voltage regulators are available in Mexico for about \$275 US. There may be a slightly higher charge to cover pay pal commissions and/or delivery to an RV park. That is about the same price as a voltage protector, but you have to also add the cost of the 30 amp extension you will also need. This unit is also available in 50 amp, but RV 50 Amp is different so it is not compatible, plus Mexico is 30 amp max in nearly all locations. They are heavier as well. The 4 KVA version will handle microwaves & Air Conditioners. They will jack up low voltage and reduce high voltage, making hook-ups usable most of the time. Gabriel can source these out and hopefully have them delivered at our first stop in San Carlos. You will have to prepay us \$275 US, if you want one. We set this up via pay pal. They can also be ordered on Mercado Libre which is like Mexican Amazon and obtainable at some dealers.

The ISB regulator is quite robust. Mine survived a 3 roll tumble when I took my trailer off the road in June 2018. A couple of dents and it still works fine.

The hard part is you have wire them up yourself. To do this you need to bring a few items from the US with you.

IMPORTANT: Please note that pedestals are frequently miss-wired in Mexico. Open grounds are common. Use a tester on an outlet before plugging in. Plugging this device into a miss-wired pedestal can damage both it, and your RV electronics.

You should carry both 15 to 30 amp adapters and 30 to 15 amp, plus an outlet tester. You will need the one on the left to test 30 amp pedestals with your tester.





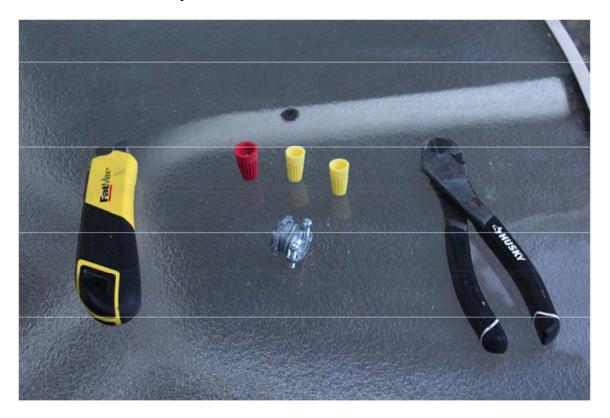
Here are the instructions on hook-up:

1) A 30 amp extension cord, at least 25 ft long, with male & female 30 amp plug-ins on either end. You can buy these in RV supply stores.





2) You need a pair of side cutters, a box cutter, a red marette and a electrical knockout insert to protect the wire. The last 2 items you can get at home depot. The red marette is for splicing 3 wires together. The are color coded by size, I pictured some yellows to show the diference. Red is what you need. 3 or 4 tie wraps are also useful to tidy up the install. You will also need a fairly thin bladed slotted screw driver to hook up the 3 wires inside the unit and a Philips to remove the 4 black cover screws.



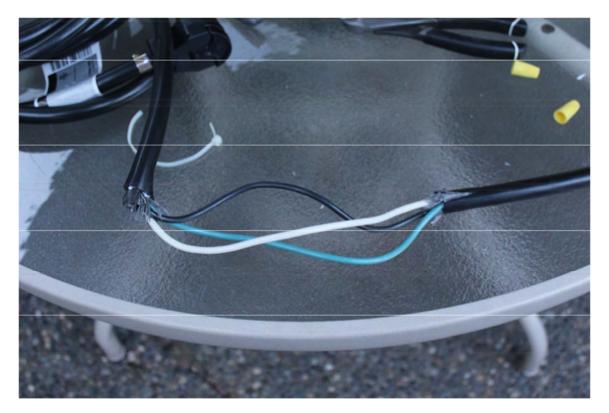


3) You also need to find a milk crate (mine is stolen) or other container that size (a 1 foot square cube) to carry this in



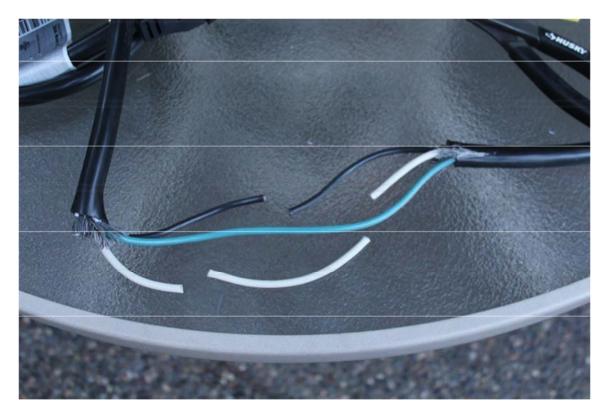


4) Slice open the 30 amp extension with the box cutter a starting a foot from the FEMALE end. You need to cut open about 24-30 inches. Since you will be plugging the male from your RV into the female of the extension, the female end can be kept short. You want a long male piece (like mine, LOL)



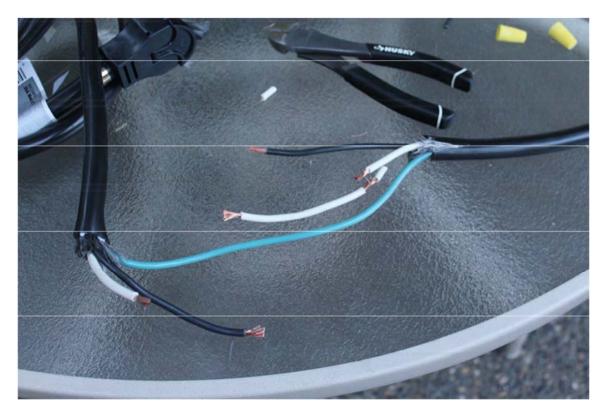


5) Cut the black wire at the halfway point and cut the white wire 6 - 8 inches from each end so you have at least a 6 inch piece. You need 8 inches for sure. You do not have to cut the green wire. If you can manage it on site or when you get home it is a good idea to ground the green wire to the case of the regulator. Note in my photos I was a bit short, and had to raid my scrap bin. Make sure your initial slice open is at least 24 inches and you will be fine.



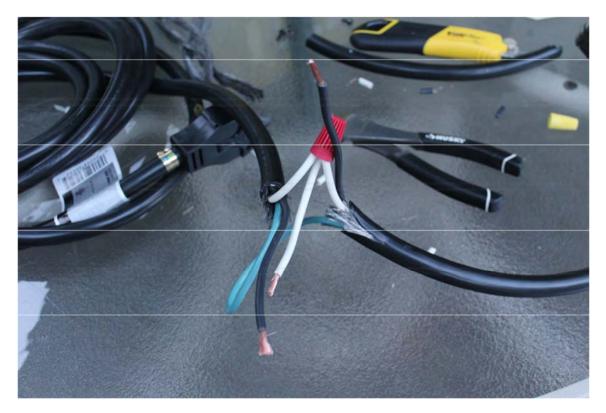


6) Strip each wire end about 1/2 inch





7) Use the marette to tie together 3 white wires, 2 from the cable, and one end of the piece you cut out





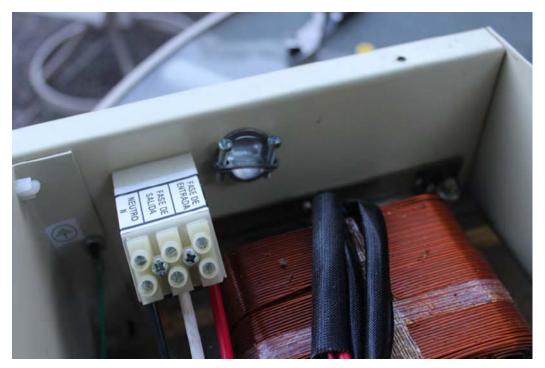
8) Remove the 4 screws from the device, take off the lid and remove the round knockout in the side





9) Install the sleeve

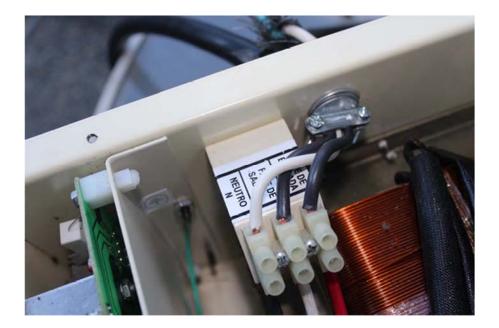






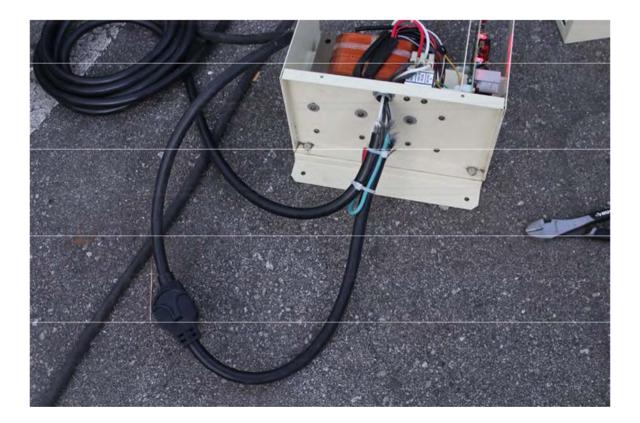
10) Push the white & 2 black wires through, leaving the green loop outside. Hook up the black wire from the FEMALE end to the terminal marked "Fase de Salida" and the black wire from the MALE end to the terminal marked "Fase de Entrada. Hook the white to "Nuetro". Note the colors will not match.







11) You may want to tie together the wires on the outside using tie wraps. Replace the lid.





12) You can now plug in the male long end of the extension to the pedestal and plug the cord from your RV into the short female end. 2 red LED's should be lit. The unit should be placed in its container and pushed under the RV to protect it from dew or rain. I stand

mine on a levelling block since with heavy rain, the ground under the rig can get wet. If you are handier with electrical, you may want to consider hooking a utility box to the case to hide your splices, but as long as you keep this dry, you should be fine. You should probably at least wrap it up with electricians tape.





13) The base of unit has 2 small & 2 larger mounting holes. It is possible to get the shaft of a padlock through one of them and hook it to Kyrptonite cable and then lock it to a bumper or skid bar or something to prevent theft. See photo below





14) The unit is not light, and if you have nowhere to store it in transit, simply put in the rig on the floor inside while in transit, and transfer it outside when camped.



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