

Trailer wiring

Posted by rd7839 - 15 Jul 2011 16:36

Trying to make my car hauler a little more civilized and one of the projects is adding wiring for 110 volts but I'm not sure how. Does anybody have experience doing this and what is the easiest and safest way. I only want to add 2 outlets and some overhead lights to go with my 12 volt lights. I'll be running it mostly from an inverter/generator like the little Honda's or Yamaha. Occasionally I'll have access to a power pedestal at some tracks and campgrounds so it'll need to be compatible with those as well.

Thanks in advance!

Re: Trailer wiring

Posted by 944Racer72 - 15 Jul 2011 17:39

Ron, you can take a look at mine at TH if you want. It is factory wired for 110V and has its own breaker box.

Re: Trailer wiring

Posted by JerryW - 16 Jul 2011 07:59

And I ran all my own - You can also look at mine for a home built version. (I started by looking at Steve's install first). I'm not finished with my installs as I keep changing my mind.

You'll need:

Fuse box - Standard commercial from Home Depot/Lowes

Input Wiring + plug - Something large enough to provide input with no drop.

Outbound circuits - plan out what you want to provide and how many drops. I think you will probably want at least 3 circuits 1 - lights, 2- switched power 3 - unswitched power.

Re: Trailer wiring

Posted by Big Dog - 16 Jul 2011 11:21

Great topic for all of us. Ideas include:

Small breaker box for 2 circuits (Note, lights and plugs can run on the same circuit) It would be wise to have a GFI on the plug outlets for protection. Generally, small generators do not have enough power to need more than 2 circuits. Plugging into a hard wired source will generally only provide power for one full 20 amp circuit anyway.

Wire a male pigtail into the circuit box to use to get power into it from an extension cord to the generator or hard wired source.

One weatherproof outlet on the outside to plug into.

Install a way to plug in a battery charger to recharge the 12 volt battery that is in the trailer.

Install a plug strip on the wall of the trailer to allow for multiple cords to plug in. The power strips that are used with electronics work great.

To simplify lights, use a pull string fixture so you do not need to run a switch.

Wiring should be in steel tube to be "legal". Metal "BX" could work too. It might not be "legal" but is much easier to install and does protect the wiring.

Big Dog

Re: Trailer wiring

Posted by rd7839 - 16 Jul 2011 16:02

What about grounding? The frame doesn't sound too wise because it could energize the whole trailer.

Re: Trailer wiring

Posted by Big Dog - 16 Jul 2011 21:28

If you plug into a hard wired outlet, you will have a ground through the cord so, YES, you do ground to the frame. I am not sure about using a generator, however. I assume that there is no ground there but I do not know what you could do about that. Grounding the trailer would be difficult to impossible for a weekend, especially on asphalt.

That is why GFI outlets are helpful as well.

Big Dog

=====