COBRA Trailer Flat Four Conversion

For those of you about to pick up your gliders from the port and are planning to use a "flat four" type of trailer light plug, here is an easy way to make your trailer lights work CORRECTLY. Don't let the length of these instructions deter you, it probably takes longer to read them than to do the actual work.

Items required:

- 1. "Flat four" type plug
- 2. 4 crimp-style wire connectors (take a couple of spares, just in case....)
- 3. Wire cutter / stripper
- 4. Phillips head screwdriver
- 5. Fairly thin needle nose pliers
- 6. Utility (or pocket) knife
- 7. Roll of electric tape

Procedure:

- 1. Cut off the trailer plug, punt it into low orbit, or into your spare parts bin.
- 2. Strip back the outer insulation on the trailer wire bundle, exposing the white, yellow, brown, black, green, blue and red wires.
- 3. Strip off an appropriate amount of insulation (about 1/2 inch) from the ends of all but the red wire. You can snip off the red wire or bend it back; it doesn't matter, as you won't be using it.
- 4. Connect the white wire on the "flat four" plug to the white trailer wire.
- 5. Connect the yellow wire on the "flat four" plug to the yellow trailer wire.
- 6. Connect the green wire on the "flat four" plug to the green trailer wire.
- 7. Twist together the blue, black and brown trailer wires, then connect them to the brown wire on the "flat four" plug.
- 8. Wrap the wires with electrical tape, to tidy them up. Plug the trailer plug into your vehicle plug, and check the night lights, signal lights and brake lights on the trailer. All should be well, except you will notice that the signal and brake lights are amber instead of red. Go turn off the lights, get your Phillips head screwdriver and needle nose pliers, go to the rear of the trailer.
- 9. The rear light lenses are held on by two Phillips head screws each. Remove the screws, and remove the lenses. You will notice that the wires are connected to the light bulb sockets with spade connectors. Carefully reach in with your needle nose pliers, and pull the 2 spade connectors off the 2 sockets (one on each socket), and reverse them, That is, the spade connector which came off the top socket (amber light), must now be attached to the lower socket (red light). The wire from the lower socket might be too short to attach to the top socket, wire from the lower socket might be too short to attach to the top socket, but no matter, as it won't be used. You can wrap that (unattached) spade connector with electrical tape, or just push it back somewhere, it won't matter, as that one is powered by the red wire, which was not hooked up at the plug (remember?) Now, do the same thing on the other side
- 10. Reinstall both (left side and right side) lenses, then turn the lights on again. You will notice that now the red lights are working when you use turn signals and brakes.



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11. Reinstall both (left side and right side) lenses, then turn the lights on again. You will notice that now the red lights are working when you use turn signals and brakes.

It is now correct and legal to drive in the U.S.

Some of you may not want to use crimp connectors on the plug. Ok, get your mini propane powered soldering gear, shrink tubing, etc. and do it that way. Either way, the whole job can be done right at the port, as it only takes about five to ten minutes, depending on how focused you are on the task.

