Pedal enclosure instructions

The first few steps are bog-standard in board-assembly and then I go into the enclosure assembly steps with pictures. It is recommended to use a metal enclosure to make grounding easier and to use 20G wiring. I'll attempt to write this to be a bit more friendly to newbie builders. Please read all of the instructions before starting.

1. Solder in all resistors and diodes.
2. Solder in IC Sockets. Add in ICs now if you wish. Can be done later.
3. Solder in all capacitors.
4. Space out the boards and jacks to get a rough idea where everything will go and if there will be enough space to breathe.
5. Print out 1 or 2 drill hole images. Set your printer settings to A4. If you're in the US, it scales just fine even if you are printing on regular letter.
    1. Make sure the physical board aligns with the printout for size.
    2. Cutting off the excess paper is a good idea as the easiest way to drill the holes through the paper on the diagram is through the inside out of the case.
6. If in mono, all 3 pots are to be done.
7. If in stereo, each board needs a time knob drilled. One board will have a feedback knob drilled and the other will have the dry/wet knob drilled.
    1. I prefer to keep my dry/wet knobs on the rights of my layouts so I had to keep in mind stuff is upside down.
    2. Give the pots a bit of jiggle room.
8. Screw in the pots to the casing and make sure the teeth insert into the boards. Do not solder in yet. The teeth of the pots will go onto the opposite side of the components.
    1. If in stereo, the outer row of pot teeth on the feedback and dry/wet knob will be outside of the board. This is intentional(unless you just want 2 separate mono boards in 1 case, at which point go nuts with 6 pots).
9. Now is a good time to drill holes for the jack sockets and power as well. Make sure the sleeve connections of the jack sockets are making contact with the casing. If one is not, be ready to daisy chain somewhere.
    1. If you are using a plastic case, the m3 screw holes on 2 of the corners of the PCBs are a great spot to tap for GND.
    2. All Jack socket Sleeve connections need to be grounded to the – terminal on power.
    3. As long as the boards are grounded once then only tips need to be wired to the jacks. I use only the CV input on each board as my GND connection while Audio is wired only to the T/R parts of the jack sockets.
10. Measure out your wiring, cut, and have the wires exit on the same side as the components.
    1. If in stereo this is where the Feedback and DryWet pot wiring gets SILLY. 1 board will have wires going from the empty holes of the Wet to the outer rungs of the dry wet pot and the same for the feedback. Keep them in respective order. If you keep the middles to the middles then there's a 50% chance you got it right and a 50% chance the channels will feedback or mix opposite of one another.
11. Solder in the wires to the boards.
12. Solder the boards to the pots now. The bunny logo should be facing the pots.
13. Solder the wires to their target destinations.
    1. Start with the Wet/Dry and Feedback pots first.
14. Check power supply polarity. Red to + and Black to – is standard nomenclature.

15. If in stereo, the board that you assign as the “right” will need to go to the “ring” connection of a TRS jack socket, while the “left” will go to “tip”. Applies to both input and output respectively.
16. If you want to check your work, Check pin 1 of the 2399 chip to be around 5V to GND, Pin [] of the TL072 to be 9V to GND, and Pin [] of the TL072 to be 4.5V to GND.