

VOLTMETER INSTALLATION INSTRUCTIONS

Thank you for purchasing our OEM styled Voltmeter gauge. This is an excellent upgrade to your dash cluster as it allows you to remove the troublesome and poorly designed high current (high energy) ammeter that when it fails can cause dash fires and worse.

In addition to removing a high energy/high heat source item from your dash cluster, you also get a gauge that many people find is a better indication of electrical system health of your vehicle. A lot of drivers find that Voltage is much easier to comprehend and relate to correct electrical system operation than Amps as displayed from the Ammeter.

Your voltmeter is not a Chrysler/Mopar product, but has been styled and faced to look as if it were a factory option so many years ago.

Installation is easy and can be done in a half hour. The following steps are written as a generic procedure but should be correct for virtually all installs. Some minor adjustments to this procedure may be required on the fly but if you follow what is outlined you will complete the upgrade quickly and efficiently.

- 1) Remove battery terminals so that there is no electrical energy present anywhere in the vehicle
- 2) Remove Dash cluster (sometimes it's easier to drop the steering column upper mount and let the steering column sit lowered down on the front seat. Start by removing the trim bezel and then work on getting the cluster loose so it can be removed when ready. Note: When removing your cluster watch for any hidden screws, if your cluster doesn't want to come out or move around in the opening then double check for any forgotten fasteners. The screw heads are always facing you and there should be nothing hidden from the rear.
- 3) Once cluster is ready to be removed, from under the dash disconnect the red and black ammeter wires from the posts on the back of the gauge using a 3/8 wrench or socket.
- 4) Now you can choose to do the rest of the work by either removing the cluster completely from the vehicle or if you are so inclined, you can do the upgrade to the voltmeter right in place.
- 5) (optionally) remove the main wiring harness connector(s) from the instrument cluster and any light bulbs sockets with wires to the dash harness and remove from the vehicle. Some vehicles may also have a 'Prindle' (PRNDL) cable that needs to be unhooked from the shifter linkage.
- 6) Remove the lens from the cluster by removing the screws or push pins as needed.
- 7) On some clusters the lens 'Mask' (part that blacks out the area around gauge faces) comes off with the lens on others you lift out after the lens is off.
- 8) Before you forget it's time to join the RED and BLACK ammeter wire terminals together. Use a #12 or 1/4-20 bolt and nut and TIGHTEN securely. Now insulate the connection so that nothing metal (bolts/wire terminals) can touch anything grounded and cause a short circuit. Electrical tape (buy 3M brand if possible) will do an excellent job, put lots on. When done you can even cable tie this connection safely up out of the way.

- 9) From the rear of the cluster, remove the two remaining 3/8" nuts on the ammeter so that the ammeter is now loose and can be removed out the front of the cluster. If you have a cluster with a plastic frame and your ammeter was overheating, this can be a bit more work than first imagined as the ammeter may be fused to the plastic housing with melted plastic. The only way to take out the ammeter is to completely remove the cluster from the vehicle and using a plumber's portable propane torch, heat up the screw terminals of the ammeter so that the plastic softens up and then tap the gauge out with a small hammer.
- 10) Once the ammeter has been removed simply replace it with the voltmeter in the same location. The voltmeter goes in from the front and uses the exact same mounting as the ammeter.
- 11) Tighten into place and then temporarily install lens Mask and Lens to ensure that the voltmeter is aligned properly, is straight and looks perfect. Once that has been assured, tighten the two nuts in the back of the cluster. You can go ahead and reassemble the rest of the cluster.
- 12) The last thing to do is install the two wires to provide power to the voltmeter. If you look closely the END of the voltmeter studs are painted red and black for + and ground. Using 20 gauge or heavier wire and ring terminals, run a wire from the red voltmeter post to SWITCHED +12Volts. This can be found in the fusebox quickly and easily. Run the other wire from the black voltmeter post to body metal ground.
- 13) Ensure all trim pieces/cluster bezels have been installed, double check that old ammeter wiring has been joined together and tucked out of the way and that steering column (if dropped) has been reattached as well.
- 14) Reconnect both battery terminals
- 15) Turn ignition key on and see the steady state of your battery and then start your vehicle to see your charging voltage. This completes the install.

We hope that you will find this a helpful upgrade and that you will get many years of use and enjoyment from it. On top of that you have eliminated one of the top fire hazards your dash! Thank you again for your purchase and supporting our business.

Should you have any questions or comments please feel free to contact us at Mr. Heaterbox / PremiumDashDecals.com 613-532-2587 or MrHeaterbox@kos.net