

Installation Instructions:

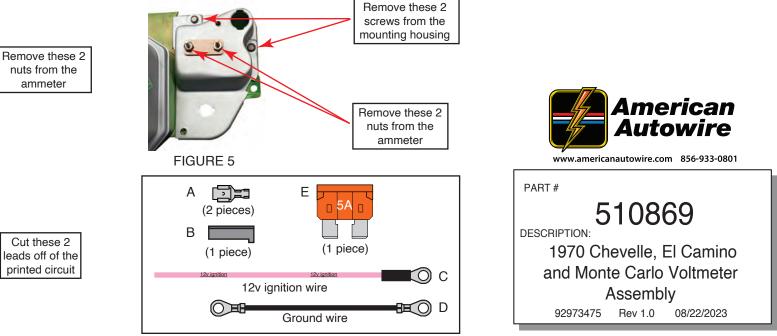
- 1. Disconnect the negative battery cable from the battery.
- 2. Unplug the printed circuit board connector from the back of your instrument cluster.
- 3. Remove the instrument cluster. If your vehicle has the original factory wiring, go to the next step. If the American Autowire Classic Update kit is installed or is being installed go to step 6.
- 4. If the vehicle has the original factory wiring, remove the black and black with white stripe wires at locations 3 and 4 from the printed circuit board connector (See Figure 1). Next, remove the black and the black/white striped wires at locations SD and TD from the dash bulkhead connector assembly at the firewall (See Figure 2)

Note: Terminals can be removed by depressing the terminal tang with a pick at the face of connector and pulling the wire terminal out the back of connector.

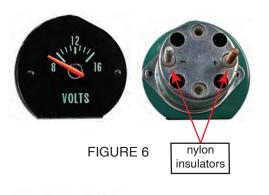
5. Cut the terminals off each of the wires, and tape the wire ends down to the trunk of the harness.

<u>CAUTION</u>: Failure to disconnect the black and black/white striped wires at the instrument cluster and bulkhead connectors could result in a short circuit and cause damage to your harnesses.

- 6. Locate and remove the two nuts and washers connected to the original ammeter in the upper LH corner of the instrument cluster circuit board (See Figure 3). Set the washers and nuts aside for future use.
- 7. Cut the two leads from the printed circuit that were connected to the ammeter studs (See Figure 4).
- 8. Remove the two screws from the mounting housing that contains the original ammeter from the instrument cluster housing (See Figure 5), then remove the mounting plate and ammeter from the cluster.
- 9. Remove the two nuts and the brown insulator that hold the ammeter into the mounting housing assembly. Remove the ammeter from the mounting housing assembly (See Figure 5).



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**FIGURE 7** 



Install pink (C), and black (D) wires onto the gauge studs as shown

Install the gauge

and housing assembly back

into the cluster with the 2

previously

removed screws

FIGURE 8



**Old Configuration** 



New Configuration

FIGURE 9

Installation Instructions Continued:

10. Install the new voltmeter into the mounting housing assembly being sure to align the two nylon insulators (See Figure 6) through the holes in the housing assembly.

**IMPORTANT:** Check that the two threaded studs do not come in contact the metal housing assembly.

11. Install the new brown insulator provided with the gauge by sliding it onto the voltmeter studs, and securing the voltmeter into the mounting housing assembly using the original nuts and washers.

12. Install the completed gauge and mounting housing assembly back into the instrument cluster housing using the two screws removed earlier (See Figure 7).

13. Connect the pink 12v ignition wire (C) ring terminal to the voltmeter's copper colored stud. Install and tighten the washer and nut removed previously. <u>Important:</u> Do not overtighten the nut (See Figure 8).

14. Connect the black wire (D) with the ring terminals on either end to the voltmeter's silver colored stud. Install and tighten the washer and nut removed previously. <u>Important</u>: Do not overtighten the nut (See Figure 8).

15. Figure 9 shows the old ammeter as it was installed, and the new voltmeter as it is now installed.

16. Install the instrument cluster back into the dash.

17. Plug the printed circuit board connector back into the instrument cluster and reconnect all other items that you disconnected to remove the cluster from the car.

18. Route and attach the loose end of the black wire (D) with ring terminal to a good known chassis ground.

19. Route and attach the loose end of the pink 12v Ignition wire (C) to the fuse box area. If installing into:

<u>Classic Update Kit with ATO fuses:</u> Cut wire to length and connect it to the Classic Update accessory connector, using the connector terminal (A) provided. You will also need to change the fuse for this circuit using the included 5 amp fuse (E). See Figure 10, Page 3 for instructions.

Original fuse panel with glass fuses: Cut wire to length and attach it to the fused ignition "IGN" blade on the fuse panel using connector (B) and terminal (A) provided. See Figure 11, Page 4 for instructions.

20. Reconnect your battery and turn your key to the "ON" position. Your voltmeter should read between 12 and 14 volts if your battery is fully charged. Your installation is now complete.



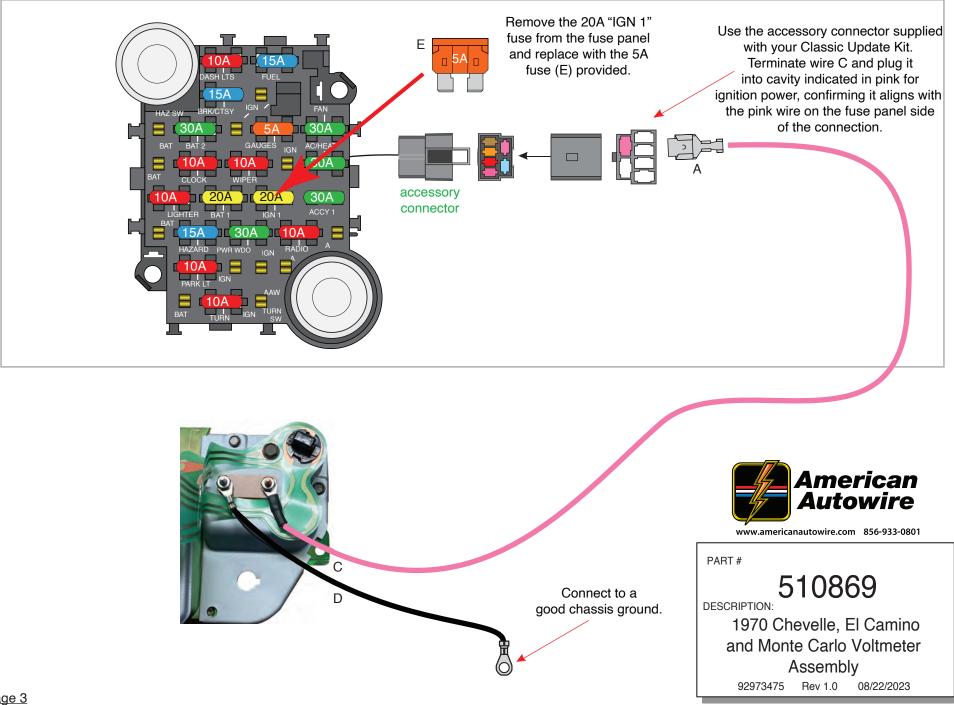
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PART #

510869 DESCRIPTION: 1970 Chevelle, El Camino and Monte Carlo Voltmeter Assembly 92973475 Rev 1.0 08/22/2023

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## FIGURE 10: Classic Update Kit Fuse Panel with ATO fuses:



## FIGURE 11: Original Fuse Panel with Glass Fuses:

