

NOSTALGIC MOTOR CARS UNLOCKS THE HISTORY & MYSTERIES OF THE 1963-1985 AVANTIS

Do you have a 1981 -1985 Avanti that the battery is always dead ?

By Dan Booth
Nostalgic Motor Cars

Dan Booth has over 47 years of exclusive, hands on Avanti sales, service, collision and parts, not Studebaker cars or trucks, just 1963-1985 Avantis.

Back before I purchased the Avanti Parts Division, from Avanti Motors on November 9, 1989, my only business was selling new and used Avantis, parts and service. I chose not to continue my new Avanti franchise agreement with Kelly or Cafaro. The state of Michigan cancelled my new car license, but I still did, and still do very well selling used Avantis. There was always 20 to 30 1963 to 1985 Avantis in my fenced lot waiting for service along with my used Avantis.

When Avantis were pulled in the shop for service, I always disconnected the battery. Back in about 1982, I had noticed that I had to jump start some of the Avantis that were stored in my fenced lot, for about a week. I assumed that something had been left on. I would charge the battery, but couldn't find anything that might cause the battery to go dead. The battery checked out OK under load and the alternators were charging correctly. This was driving me nuts. Some of these Avantis I sold new or they were Avantis that Avanti Motors sold and I did all the factory warranty work. Then one day, after charging a battery and working on the car, I got in and tried to start the car, it wouldn't start. I then remembered that I had forgotten to connect the battery cable. As I was getting out of the Avanti, my eyes look at the gauge cluster.

I noticed the volt gauge needle was off the chart—photos at right.

I connected the battery and the needle went up to about 12 volts

I started the Avanti and the needle went to about 14 volts—at right, below.

I started checking to see where the volt gauge orange 16 gauge wire went. It went directly to the fuse block with a 10 amp fuse and it was marked clock. Nothing else is on this circuit, to the best of my knowledge. Then it dawned on me, the volt gauge was hooked up to a circuit that had 12 volts at all times. The clocks that were put in automobiles were made with a switching device. The switching device sends a charge to wind a spring and then shut off and repeats the process. Then I checked other Avantis. The 1963 to 1973 had its clock on a separate circuit with a tan 18 gauge wire with a 2 amp fuse.



The 1974 to 1985 Avantis had an orange, 16 gauge wire with a 10 amp fuse.

I sold this Avanti new, and I was the only one to pull any type of service on it. The customer was out of town for a couple of weeks.

I pulled the 10 amp fuse and the needle dropped of the chart I put the Avanti back in the fenced area, for about a week, with the battery connected and the 10 amp fuse removed. After a week of sitting, with its battery connected, it started right up! I concluded the volt gauge was drawing current at all times, just like a light that was left on.

I called the customer, and explained the problem to him. I gave him choices:

1. I could leave it the way Avanti Motors built the car for him. It should not be a problem if he wanted to disconnect the battery if the Avanti was not going to be used for a couple of days.
2. I could remove the 10 amp fuse, and the volt gauge would not work.
3. I could remove the orange 16 gauge wire and tape up the eyelet on the end of the wire, and the gauge would not work.
4. I could disconnect the volt gauge orange 16 gauge wire, tape up the eyelet and remove the 10 amp fuse. I would then splice in a 16 gauge orange wire with a 10 amp in line fuse to a circuit that had 12 volts only when the key is turned on.

I could plug the orange fused wire into one of the spades on the front of the fuse block, which only had 12 volts with the key turned on.

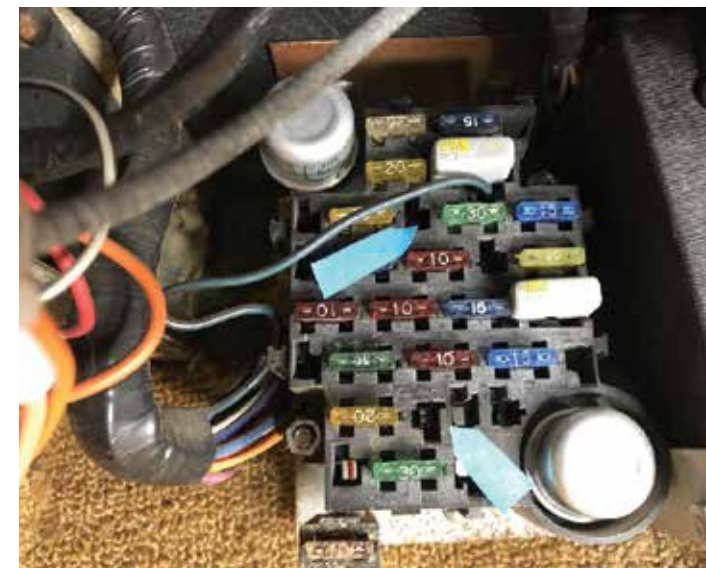
I told him, whatever his choice was, that it would be at no cost to him.

I suggested #4, as this modification would be very easy for somebody down the road, to figure out what the taped up orange wire was for.

For the 1963 to 1979 Avantis, since the volt gauge is much easier for the driver to understand just how much voltage the alternator is putting out or not. It's a very popular and wise choice to replace the clock, with a new volt gauge. The cost to do so, is very reasonable, it's also reversible if keeping the Avanti original is your preference.

You might think you don't need a volt gauge, as the Avantis from 1963 to 1985 have an ammeter (amp) gauge. The problem with the amp gauge is you know if the needle is to the right—positive side—of the center it's charging, but you don't know how much is being put back in the battery. I have seen amp gauges that show a needle way over to the right and some that are just barely moving to positive side.

As the Avantis from 1963-1980 have a 43 to 60 year old amp



The blue arrows show 2 different spades that a wire can be plugged into for 12 volts, with the key in the on position. Note: check to make sure the spades on your Avanti only have 12 volts with the key on.



1974-1980, about, Fuse Block, The blue arrow shows a spade that has 12 volts with the key on

Note: from 1974-1980 Avanti Motors had different labels showing different locations of the spades need for accessory. It should be in the same location, but test the spade before using.

gauge and possible an original alternator of the same age. For less than \$100 it just might be a good idea to replace a clock that doesn't work, with an Avanti Motors replacement volt gauge.

This replacement is totally reversible, and only takes about an hour or less. As always, if you have any questions on this gauge replacement, or anything else, just give me a call Dan Booth (248) 349-4884.

Under the Altman ownership, to the best of my knowledge, this is the only mistake or oversight that Avanti Motors never knew about to correct.

In their defense, I have sold a lot of Avanti Motors replacement gauges, over the last 40 or so years, and most mechanics would do the same, using the clock fuse circuit.

A few months ago I received a phone call from one of my customers, who purchased a complete replacement gauge kit for his 1963 from me. He asked me what I knew about those expensive Optima batteries. His was just not holding a charge. I stated I have had no problems with those batteries. I asked him to check

with his mechanic, to see if he hooked up the volt gauge to the clock circuit, as this was likely the problem.

As soon as he asked his mechanic if he used the fused clock circuit, for the volt gauge, his response was "bingo." He instantly knew his oversight.

Blake also never knew about this problem, as all of his production through the end of the 1985 Avanti still had the volt gauge connected to a 10 amp, hot all the time, clock circuit.

I have talked to this mechanic many times over the years, on the phone, and he is extremely knowledgeable. Using the clock circuit is just something that most installers would do, not thinking about the clock only drawing current on a controlled part time draw. So, if you have or had an Avanti that you were constantly jumping the battery or constantly replacing the alternator and/or battery until the auto parts store told you that they would not replace your alternator or battery anymore for free.

If you have had this problem, for all these years, maybe you have been getting your Avanti service questions answered at the wrong place. I have been instructing my customers, since 1982, when this question is asked, about a reoccurring dead battery problem. I gave the same options that are in this article.

When parts are ordered from Nostalgic Motor Cars, 99 percent of the time I answer the phone to take your order and I will answer your questions correctly with your purchase of our N.O.S Avanti parts. Nostalgic Motor Cars is the only seller of Avanti parts that has almost 50 years of exclusive Avanti service as my only job. Maybe you think I am bragging, or just maybe I am damn proud of stating I have almost 30 years more Avanti only, service experience, than Avanti Motors had from Altman's as an Avanti dealership in 1963 to 1985 until Blake end in 1985. That's their 22 years compared to my almost 50 years.

Also, there is one other problem that you might not be aware of, that might not allow your

Part number 157298RVOLT \$75"; Chrome bezel volt gauge with stainless spacer 1963 to 1973.



Avanti battery to fully charge. The alternator belt might be a little too loose. It won't be loose enough to allow the belt to squeal, against the pulley, but it'll be loose enough to allow the belt to slip on the pulley. When you're asking the alternator to keep up with a very low charged battery, and the demand on the alternator to run the accessories that are turned on.

1701797 \$90.00 Black bezel volt gauge 1974 to 1985



This is what I have been doing; with the ignition switch turned off and the car not running, I disconnect the negative battery cable. I put on some gloves and try very hard to turn the cooling fan and pulley on the alternator belt. If it slips, I tighten up the tension until the pulley no longer slips. //