Avanti Repair

The unknown facts and history of the Avanti Dash Lighting from 1963-1985



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.



Red Dash Lights I get a lot of questions about the different dash light illumination that was used for 1963-1985 Avantis. I hear a lot of complaints about not being able to read the gauges at night on some of the Avantis produced from 1963-1985. There were four different illumination styles used from 1963-1985.

The illumination system for 1963-1973 with the chrome bezel gauges were the same.



Bulb Kit 1963-1973 with chrome bezels #BK \$25.00

Studebaker and Avanti Motors installed red bulbs in the eight gauges. The overhead switch panel has two red bulbs. The console control panel has two red bulbs. The auto transmission shifter has one red bulb along with the cigar lighter also has one red bulb.

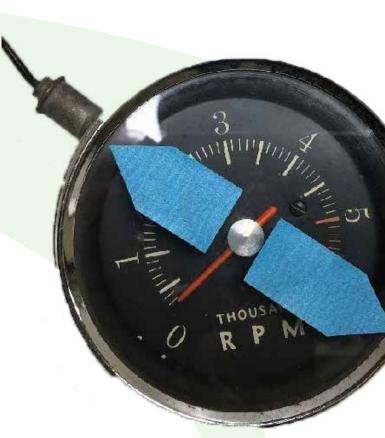
The style used in 1963-1973 was what I call gang lighting. The fuel and oil pressure gauges were in a case, pictured above, Illustration #1701, Part number 1557114 (which are available at \$15.00). This case had one hole for just one light bulb. The gauges have four small slits in the side to allow light in the gauge.

As you can see by the photo above, the light bulb is in the center of the two gauges. The case is painted white on the inside, to aid in the illumination. The temperature gauge and ammeter gauge were the same but with a different case, Illustration ration #1709 Part number 1557115 (also available at \$15.00). The clock and vacuum gauges each had their own bulb.



Both the 140 and 160 mile-per-hour speedometers had three holes for bulbs. The two top holes were for illumination of the gauge. The bottom hole is for the bright light indicator and this bulb was not red, but clear and not included in the bulb kits.

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The tachometer, above, has two holes, one at about eleven o'clock and the second at about the five o'clock position. Most light bulb changers don't know about the light bulb at eleven o'clock, and they often totally miss it when they change bulbs.



The 1963-1973 Avanti have a dash light resistor, Illustration #0615-6 Part number 1557964. \$90.00 that is controlled by the double overhead switch, Illustration #1615-4 Part number 1561930 \$110.00.

If your switches, resistor, and your car has a good ground on all the gauges and are all good, the light bulbs are probably the problem. The light bulbs, over time, get darker on the inside and may turn black. When the bulbs are red, the red becomes darker, so the bulbs omit less light.



Red /Clear bulb kit 1974-19831/2

The new black bezel gauges were first installed in the 1974 Avanti and continued through 1983¹/₂ and was also the first time that Avanti changed form a mechanical oil pressure gauge-which had a copper tube that carried engine oil to the dash gauge-to electric.



1700894 \$80.00 1700890 \$80.00 1702038 \$105.00

This new black bezel oil pressure gauge 1974-1983¹/₂, was now electric. It had an oil pressure sender located under the distributor. The tachometer was also changed to a totally electronic unit and did not have a sending unit, Part number 1701003R \$250.00, unfortunately these new gauges left something to be desired, when it came to night time lighting.

They used the same overhead switches and the same resistor.

Avanti Rec



Black bezel gauge with bezel removed



instrument resistor Illustration #0615-6 Part number 1557964 \$90.00 were no longer used, which made the dash lights very bright with no provision to dim the lighting



1702182 \$ 2.00 Instrument panel light bulb filter (boot) Red

The red dash gauge lighting was back, for 1984, but it was different than what was used from 1963-1973.

The light bulbs now had a little red booty installed. The booty gave a much better, uniform red lighting on all the gauges. Unfortunately, the little red booty would change color to more of a rust color with use. As these red booties aged they became very hard and brittle from the bulb heat and changed to a rust color, and the bulbs turn black faster. This was one of Steve Blake's many ideas, that was not well tested before putting into production.



1750836-3 \$75.00 1750863-4 \$75.00

The beautiful red light, some say sexy, overhead switch lighting and it's soft crash pad Illustration # 2180-6 was now gone for 1984 and '85. The crash pad and it's six switches were replaced by two different switch panels. One panel had three switches, headlights, rear deicer and heater blower motor, Illustration #2180-6 Part number 1750863-3 \$75.00. The other switch panel had four switches with the same three switches as the first, but the moon roof switch added Illustration #2180-6 Part number 1750863-4 \$75.00.

The soft crash pad, Illustration #2180-6 was replaced

with a leather, or vinyl covered, plastic bezel. These two new switch panels had very small clear light bulbs, that were not replaceable. You had to purchase a new three or four switch panel if you had non working bulbs. Fortunately, I still have some of these in stock.



Used bulb, that turned black

New, clear bulb

o, that lock

Unfortunately, as the bulbs are used, they will turn black on the inside, which imprisons the light, that's why Avanti owners can't read their gauges at night.

The gauge dial (above photo) seems to be too large in diameter for the size of the case, which doesn't allow

enough light to get around from the bulb in the back to the

dial face. When the bulbs are new, you can read all your

gauges, but as the bulbs age, they become darker.

You can forget trying to put new red bulbs in these gauges, as you will not be able to read some of the gauges at night. Avanti Motors changed about half way through the 1983 production run. Steve Blake made many, many changes, from about January 1983 through the 1985 Avanti. Unfortunately most were not well thought out and costly in the long run (more on these changes in future articles).

This was one of the very few Steve Blake ideas that actually improved the Avanti.

The new, for 1983¹/₂ gauges, were better lighted using the same light bulbs, but were also a little bit too bright. You could always turn your brightness down with the flip of your overhead light switch.

These new gauges also had the national insignia on the dial face—like a picture of a gas pump—the speedometer and tachometer had the new Avanti name plate on the dials.

The 1984 Avanti had many changes to the lighting of the gauges. The dash lighting was now too bright as the double throw, overhead instrument lamp switch illustration number #0615-4 Part number 1561930 \$90.00 and the