

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

How to Cool Off a 1963-1985 Avanti in an Emergency

Back in the 1970s & 80' Avanti Motors didn't want to purchase used Avantis, but they would take them in trade, towards a new Avanti. So when an Avanti owner, or a dealer that took an Avanti in trade wanted to sell an Avanti, Avanti Motors would refer them to Nostalgic Motor Cars.

My Wife, Betty and I would drive or fly to where the Avanti was located, our Daughter, Angela, would answer the phone and ship parts. This is when the Avantis were fairly new, and dependable.

In about 1987, we flew to Los Angeles, to drive back a 1985 Avanti. Back then you could carry some tools and extra parts on the airplane. On the return trip in Arizona, the temperature was about 105 -110 degrees, we had the A/C on and the temperature gauge started climbing. I turned off the A/C and opened the heater control valve, but the temperature was still climbing. Avanti Motors installed dual electric fans for most of the 1984 and all the 1985 production. The electric fans were not a well thought out idea and had no testing (like the Altman's would have done). Before they were installed on the Avantis, Blake just switched to them when he installed the 305 H.O. motor. There were two different style electric fan motors, for 1984 and 1985.

I had one of each style motor, in my tool box. Just in case I needed one, but that was not the problem. Both the electric fan motors were working, they just couldn't cool the Avanti, in that kind of heat. I knew I had to come up with a solution, if we were going to continue the drive back to Wixom, Michigan.

I took a 3/4-inch open end wrench and a screw driver and removed illustration number 1622-73, part number 1356117, which is the hood dove tail and locknut in illustration #1622-73 part #G124934, from the hood. I backed off the nut so I still had enough threads sticking out of the dove tail to secure them on both sides. I reinstalled them back on the hood. When I closed the hood down, it left a space between the hood and the top of the cowl panel, but this would allow the hood to move up and down and possibly break the hood.

I then took about a 1/3-inch to 1/2-inch roll of toilet paper I borrowed from the gas station. I wrapped the toilet paper in a wash cloth, so it wouldn't unravel, placed it in between the hood, and the top of the cowl and pushed the hood down to latch it. This worked fantastic, as the toilet paper forced the center of the hood up, and crated a very nice gap, so the hot air could leave the engine compartment as we were driving.

I could hear the coolant boiling in the radiator, as I was doing these repairs, but would it cool down the engine? I left the a/c off, windows down and the heater control valve open. Hoping for

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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.

the temperature gauge to start dropping. After about 5 or 10 miles, the gauge started dropping. We drove the balance of that 1st day, with the windows down, a/c off and the heater control valve closed. I didn't want to drive with the windows up and the A/C on, as I was concerned about engine fumes, coming in the air vents on top of the cowl panel that might have carbon monoxide.

The next morning, it was cooler, for the second day's drive, I readjusted the hood back to normal, so we could have the A/C on. I kept a close watch on the temperature gauge, knowing I could pull over and reinstall the roll of toilet paper and adjust the hood up again.

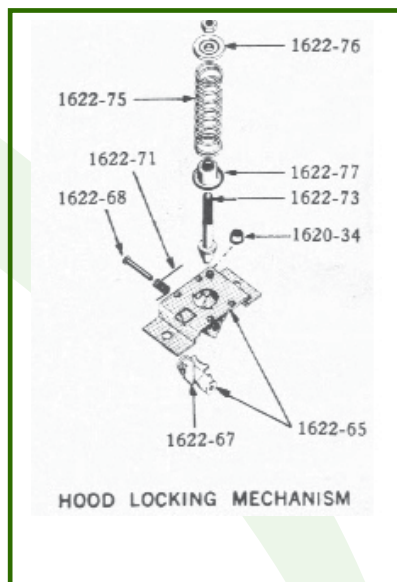
My suggestion is that you take a 3/4-inch open end wrench and a screw driver, slide the open end of wrench between the upper spring retainer and the hood and break loose the lock nut, unscrew the assembly and make sure the lock nut is free on the threaded shaft. Oil the threads and reinstall both hood lock dove tails.

Why I am suggesting this is the 1963-1985 Avantis are now 38-60 years old and the threads might be rusted together where you can't remove the hood dove tail, from the hood.

Now if you carry a 3/4-inch open end wrench, and a slotted screw driver, along with a roll of toilet paper and wash cloth (or something else you can close in the hood) you might be able to finish your drive, if you are experiencing a hot running Avanti.

I thought it might be appropriate, to share some of my ticks, I have taught myself, over the last 60 years of working on the Avantis.

Since most of the Avanti nut plates for the hinges and brackets are made from a steel plate with nuts welded to them, which is then riveted to the fiberglass body. Some of these nut plates are located in an area that you can not get to with penetrating oil. Such is the case with the Avanti hoods, from 1963-1985. So I suggest that you read this, before you start your removal of anything, from your Avanti.



This is a little trick I thought of after a bolt broke off, when I was removing a hood about 30 years ago, and it has worked every time, since then.



Hood Dove Tail



Hood Support



Hood Hinge



The blue arrows, above, are pointing to 1/8-inch holes I drilled in the fiberglass hood inner support panel. These holes are in line with the bolt threads, sticking out of the top of the nut, which is welded to a plate. This assembly is called a nut plate.

The holes allow you to spray your favorite penetration oil (with a straw on the can) on the threads (below photo). I push the can straw into the hole, until I hit the threads and give a small squirt of penetration oil. I do this on the 4 hood hinge bolt threads, 2 hood support bolt threads and the 2 hood lock dovetail threads. I now close the hood to keep the oil on the threads and nuts. I do this quite a few times over a couple of days.

When I am removing a bolt after about 1/2 turn I will run the bolt back in. Squirt a shot of penetrating oil back on the threads. I keep doing this until the bolt is out. After the bolt is out, I clean and oil the threads. I then run a tap in the nut plate, for each hole.



When you have the hood off. If the nut plate is a little loose from the fiberglass or missing any pop rivets. I install the bolts to hold the nut plate firm to the hood fiberglass. Drill out the old pop rivets and replace them with new pop rivets unfortunately you will have small pieces of the old pop rivets that will remain inside. You can drill a larger hole to retrieve those pieces, or just leave them there. You will normally only hear them when you close the hood.

The 1963-1985 Avanti had a large assortment of different styles and sizes of nut plates. I have most of them in stock or I can make them up for you.

Since the 1963-1985 Avantis are now 38-60 years old, the nut plates are simply rusted away and you might have to replace them. Most of the nut plates on the 63-85 Avantis are very easy to replace. If you read my article, in the Avanti Magazine, issue #192, page 44-46 or go to our web site, NostalgicMotorCars.net and click on "Tech Articles". I have showed you how to replace the front seat front nut plates. This would be the same procedure, for replacing any of the hood nut plates and most of the other Avanti nut plates. The article shows that you have to grind a slot, large enough to slide the old nut plate out, and the new one in.



This picture, above, shows the end view, of a hood hinge nut plate with a broken bolt. This is the profile of the slot that must be made to replace the broken nut plate.

A slot for a hinge nut plate can be cut into the vertical front of the hood inner support. The slot will reassemble the old nut plate with a notch in that slot for the welded nut and the broken bolt to come out. After you remove the old hinge nut plate, insert the new nut plate and align the 4 pop rivet holes. Install the bolts and tighten them down. Install the new pop rivets and then repair the fiberglass. See "Nostalgic Motor Cars Unlocks the History and the Mysteries of the 1963-1985" in issue #192, page 44, of the Avanti Magazine, or go to our web site: NostalgicMotorCars.net, click on "Tech Articles", twice.

This would be the same procedure, for repairing the hood support, nut plate or the hood locking dove tail nut plates.

As always, if you need any nut plates, or if You have any questions, please just call me, Dan Booth 248-349-4884



TOP AND MIDDLE: : Nut plate that is riveted inside the hood.

ABOVE: Inside the hood showing the nut plate that the hood hinges bolt to.