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

Some 1963-1985 Avanti Wheels Could Be Unsafe?

Are your 60-49 year old 5x15-inch steel wheel that were factory installed from 1963-1975 really safe to have radial tires mounted on them? Do you have a set of black mesh aluminum wheel that are on a 1984-85 Ayanti?

This article is shedding light on a couple of safety issues that you may not be aware of, and some very simple and inexpensive solutions. I will also discuss all the different wheels that were installed on 1963-1985 Avantis by Studebaker and Avanti Motors.

Illust #1402-1 P#1557724p

The standard wheel that was installed by Studebaker and Avanti Motors from about 1965 to 1975 was a 5x15-inch steel wheel. The problem is, most tire companies recommend a 5½-by-7½-inch wheel for their radial tires. The tire size on the Studebaker Avantis and most early Avantis was a 670 x 15-inch bias ply, which cross references to a radial tire of 205-75 x 15-inches



These are the new, high quality aluminum wheels, top right, and spinners, sold by Nostalgic Motor Cars.



Plain 3 bar high polished clear coated spinner \$50 ea for the 2011 Halibrand Reproduction



Halibrand 3 bar high polished spinner \$120 each.

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.



Reproduction aluminum 2011 Halibrand high polished/clear coated 6"x15" Wheels \$250 each.

HALIBRAND SPINNERS



TORRANCE, CALIFORNIA VERSION



CLUVER CITY CALLEGENIA VERSION (PAINT NOT DEM)

From the AOAI Avanti Authenticity Manual, this shows the two types of wheel spinners sold by Studebaker dealers.

The spinner at top showing "Torrance Calif" is an earlier type, before Halibrand moved to a new facility in Culver City.

Avanti Repair



This picture shows two reproduction 2011 Halibrand wheels that are being sold today.

The one on the left, with the tire mounted is one type of reproduction which has a machined finish.

The one on the right sold by Nostalgic Motors; if you study the picture you can see that it has two more steps in the production process which is highly polished instead of machined, and is clear coated so you don't have to polish them. These two steps cost more to produce, but you get a better looking wheel, that cost more to manufacture for less money.

Studebaker offered a magnesium 5x15-inch wheels from the dealer with two different types of spinners for the original Halibrand style 2011 for the center hole. These original Halibrand magnesium 2011 wheel are very rare and expensive.

If you do a little research, on 60-year-old magnesium wheels, you might discover the better alternative is buying the newer reproduction Halibrand 2011 aluminum high polished clear coated 6x15-inch wheels. They have the correct offset and will bolt on all 1963-1985 Avantis and most Studebakers that had a 15-inch wheels, they are an incredible bargain, when you get four for \$1000, plus shipping. See the ads in this issue of the Avanti Magazine or go to nostalgicmotorcars.net and click on ads.

Continued, next page

This is a picture below of an original Halibrand real magnesium style 2011 wheel that I purchased years go as a set of four so that you can compare them to the high polished clear coated reproductions.





From the AOAI's Avanti Authenticity Manual, this vintage Studebaker ad

2 AVANTI Magazine Fall/Winter 2023 Issue 204 Fall/Winter 2023 Issue 204 AVANTI Magazine 23

Avanti Repair

My memory is cloudy on if Avanti Motors might have installed some 5 1/2-inch x 15-inch steel wheel prior to 1975, if they did they probably used the same part number, used for the 5x15-inch steel wheel, which is 1557724P.

In 1975 Avanti Motors started installing a new black 6x15-inch steel wheel, above, on the new Avantis. This new one-inch wider steel was for use on the new steel belted tires common in the 1970s, part number 1701300 and 1701301.

This 6x15-inch black steel wheel, illustration number 1402-1 and part number 1701232 was installed as the standard wheel from about 1976-1985.



6x15-inch 1701232 Black steel wheel N.O.S. \$160 ea.

Sometime in 1985 Avanti added a 61/2x15-inch black steel wheel but used the same part number of 1701232.



1701232 (6½) Reconditioned 6½x15-inch \$99 ea.

In April of 1967, Avanti Motors for the first time, offered as a option the great looking 6x15-inch magnum 500 chrome steel wheel Illustration number 1402-1 and part number 1700594. The first four Avantis to be ordered, with this option were RQA-0134, RQA-0143, ROA-0148 and ROA-0155

They also had custom Mag 500 Chrome Wheels 15x6-inch spinners and were all

\$300 each. shipped to Madrid, Spain. I don't have any pictures of what the spinners looked like, sorry. No part number was assigned, to the best of my knowledge.

Later, in 1967, Avanti Motors now offered the magnum 500 Chrome Bullet. Illust#1402-1 #1700595 N.O.S. \$75 ea to the option list with the custom spinner. The magnum 500 wheels were offered from 1967 -1984 but in 1984 they were removed from the option list without informing me as a dealer, as a new Avanti dealership I used to set up for the 10 day long Detroit New Car Auto Show, Now



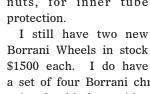
know as: "The North American International Auto Show" This January 1984 show was held inside Cobo Hall, in downtown Detroit. Avanti Motors would send a factory salesman for the first Saturday and Sunday and the other eight days I would be there by myself. Avanti Motors would pay for the space and I, Nostalgic Motor Cars would pay all the other expenses, including the two Avantis which I ordered and owned. The factory was always pleased with my sales. At the 1984 show I broke my old record of 3 new Avanti in the 1983 show. The 1984 show I sold 4 new Avanti one of those to be ordered would have mag 500 wheels. Maybe I am bragging, but the 3 new Avantis, that I sold at the 1983 show was a factory record. No dealer ever sold that many Avantis at a show, and I topped that record for 1984.

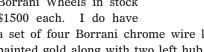
Avanti Repair

After the show. I called the four new car orders into Avanti Motors. The factory called me back and said that they didn't offer the Magnum 500 wheels for the 1984 model.

I called my customer and informed him of no Magnum 500 wheels for his 1984 Avanti ordered. After talking to his wife, he said they decided they would cancel the order. I called the factory to cancel the order, within 30 minutes, the factory called back and said they would build the 1984 with the Magnum 500 wheels. So there was only one 1984 Avanti, with factory magnum 500 wheels, built to the best of my knowledge.

In 1972, Avanti Motors put on their option list, the Borrani Chrome knock off wire wheels. These 6x15-inch steel wire wheels had a chrome rim and hub with chrome nipples and spokes. It was a tube type wheel, so it had a rubber liner, like a big rubber band, that covered up the nipple nuts, for inner tube protection.





These new Borrani Chrome Wire Wheels were a real knock off wheel. The inside of the wheel centers were splined. The hubs bolted directly to the rotors and/ or brake drums, with the original ½"-20 lug nuts. Each hub has a male spline that the splined wheel slides onto. The wheel is held on to the hub with a large threaded



Chrome nut caps, above, left or right hand threads \$125 each.

3 pound, lead hammer \$35: Part number 1701310 Wrench \$125 N.O.S.



Borrani 72 spoke illustration number 1402-1, part number 1701310 N.O.S. \$1500 each.

a set of four Borrani chrome wire knock off wheels that are painted gold along with two left hub adapters and chrome nut caps and two right hub adapters and chrome nut caps. They are used in outstanding condition please call for pricing.



Hub & Nut P#1701310 \$600

chrome octagon nut cap.

Using a special large boxed end wrench and a three pound lead hammer, you simply beat the wrench with the lead hammer, until the nut is tight.



The chrome nut caps have arrows, showing which way is to remove the nuts with the word "off".

There were two different hubs and nuts. Each hub had the words "sinistra" (left hand threads) or "destra" (right hand threads) inscribed with a electric pencil on them. The special large nuts were either a right handed thread or a left handed thread.

I am not going to tell you which side of the Avanti required the left handed threaded nuts and hubs I will tell you that Chrysler Corporation, in about the 1950s or 1960s used right and left handed lug nuts on their car, so that should tell you which side should have the left handed "sinistra" hub and nut installed. If the hubs and nuts are installed incorrectly, on the wrong side. the wheels can come of, as you are driving.

In 1978, I had a local lease company that owned five new 1978 Avantis. I did all the factory warranty work on all five Avantis. All five Avantis were sent to me every spring and fall for normal service. Three of the five had two sets of wheels and tires. The summer got the Borrani wire wheels and tires. The winter got the black steel wheels, tires and original wheel covers.

In about 1982 one of the customers chose to have new tires installed on the Borrani wire wheels at his local tire shop. When leaving the tire store, to his surprise. He just got on the freeway, and the left front Borrani wheel with it's new tire came off the hub. He stood on the brakes and watch the wheel and tire continue rolling down the freeway. Then he saw a man and a pickup truck, pick up the Borrnei wheel and tire then just drive off. He never saw the chrome Borrani with it's new tire or the pickup truck again.

Luckily he was not physically hurt and there wasn't any body damage to the Avanti. The rotor and dust shield had a very large flat spot ground on from the concrete roadway.

I only had to replace the rotor, dust shield, wheel bearings, hub and nut and shims to the indicate the new rotor to the caliper and of course the Borrani wheel and tire. I had all the parts need in stock except the tire.

The Borranis were offered by Avanti Motors, as a new car option, from 1973 to about 1978.

These wheels had their problems, besides sinistr and destra being installed on the wrong side of the car.

The Borrani chrome wire wheel were made up with a chrome center hub, chrome rim and chrome spokes and nipples. Rust was a real problem around the nipples on the rim. The chrome plated spokes would flex and crack the chrome. Which then rusted and peeled. As the 6x 15-inch tube type wheels aged, the chrome plating on the inside of the rim would start peeling and start cutting through the rubber liner (rubber band) into the tube. You guessed it, now you would have flat tires! Between 1973 and 1978 I, under factor warranty, installed new Borranis that were replacing problem Borrani wheel on three or four cars, for the factory.

A very big problem was when the Borrani wheels were removed for service. The special wrench and lead hammer were not put back in the trunk, so when the Avanti owner had a flat tire, alongside the road, the spare could not be installed, as the special wrench was not there to remove the Borrani wheel. I did, and still do, stock these special wrenches.

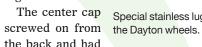
Continued, next page

AVANTI Magazine Fall/Winter 2023 Issue 204 Fall/Winter 2023 Issue 204 **AVANTI Magazine**

Avanti Repair

In about late 1978, or early 1979, Avanti Motors stopped offering the Borrani chrome wire wheels and switched to 6x15-inch chrome wire wheels by Dayton. The new Dayton 6x15-inch wheels were tube type, which required the rubber liner (large rubber band) to protect the tube. They had a chrome

plated hub and rim. The spokes and nipples were stainless, the wheel was a direct bolt on with exposed chrome plated lug nuts.



the back and had

a hex shape, to simulate a knock off.

The chrome plated special lug nuts were soon replaced with stainless, as rust and peeling chrome became a real problem.

> Special lug wrench, at right, for the Dayton lug nuts \$15 in stock.



Center Cap \$25 for the Dayton wire wheel in stock.

Special stainless lug nut/washer \$15 each in stock for



7" x 15" Dayton.



Borrani wrench 1701310w \$125 in stock.



These 6x15-inch chrome wire wheels had some of the same problems as the Borranis. Rust and peeling chrome was a problem on the rim behind the spokes and center hubs, which was very hard to keep clean. They also had the same chrome peeling on the inside slowly cutting through the rubber liner which caused a flat tire. I do have some used wheels 6x15-inch wire wheels available. Call for details.



Rusted 6" wire wheel

In about 1983 Avanti again made a change to a 7x15-inch chrome wire wheel that was tubeless. This wheel had the chrome rim and hub with stainless spokes, nipples, lug nuts and washers. This wheel had eliminated all the problems that the other two developed, except rust. I do have some used

In the last part of the 1983 production, Avanti Motors started producing only the 1983 Anniversary Edition Avanti, there were 25 built with serial numbers from RQB-3801 RQB3825 and one prototype RQB-3650, now owned by, my friend and customer, Randy Cunningham.

Aluminum black center mesh design 7x15-inch wheel. Call for pricing.



7x15-inch wheels call

for details.

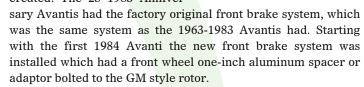
Avanti Repair

The 26 Anniversary cars were all black with out any chrome and were all identical. They had a number on the glove box door stating editions 1 through 25. A new 7x15-inch aluminum wheel with a black center mesh design was chosen. This wheel was also standard on the first 50 1984 Avantis were called Touring Coupes. They were also available for the balance of 1984-85 production, which was called the Touring Coupe wheel option and the Touring Coupe option. Avanti Motors also sold them over the parts counter and in 1984, I purchased their entire remaining stock to sell to my customers.

John Ronanye purchased five new black mesh aluminum

wheels from me about 40 years ago. To this day he still has the 1978 Avanti with those wheels on it. His wife, Kandy Ronanye, didn't purchase the black mesh aluminum wheel for her 1978 Avanti, which I sold for her about 12 years ago. These two customers have over the last 40 years become two of my friends.

These wheels only had one problem, which Avanti Motors created. The 25 1983 Anniver-



If you missed my safety article I wrote for the Avanti Magazine Issue #194 about the safety of these aluminum adaptor spacers that were installed on 1984 Avantis, you can go to my website, NostalgicMotorCars.net, and click on Tech Articles. You will see I have written over 50 articles for this magazine. Find the article about the safety of the Aluminum Adaptor/space on how they could break. Avanti Motors found out the hard way, that the front tires stuck out too far and on some turns, the front tires were making contact with the front fenders, which caused breakage to the fenders.

What they did to correct this problem was to shave from 7/8-inch thick down to ½-inch thick the center of the wheel which in turn required shorter lug nuts.

The safety problem is that they only shaved the two front wheels, but you might say that is not a problem, as all 1984 Touring coupes had the "Nostalgic Stance" with smaller tires 215-60 x 15 on the front and 245-60 x15 tires on the rear. The problem is nobody, including me, was informed that only the front wheels were only ½-inch thick with shorter lug nuts and the rear wheels were 7/8-inch thick with longer lug nuts. The safety problem is when four new tires are installed and most owners and mechanic, would assume that the front and rear wheels and lug nuts are the same, because all 4 wheels were 7x15-inch but if the rear 7/8-inch thick aluminum wheels are installed with short lug nuts, your front tire can now possibly break your front fenders and the shorter lug nuts don't cover the majority of the depth of the five drilled lug nut holes.

If the ½-inch thick wheels are installed with the longer lug nuts, the lug nuts bottom out on the 1-inch aluminum or steel adaptor/spacer or rear brake drums. You can torque the lug nuts, but they are bottoming out and the wheels are not tight!!

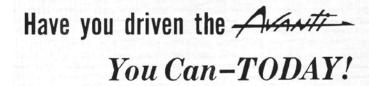
Sometimes, if you are lucky, you may hear (or feel) a funny hammering noise that has not been heard or felt before. What is happening is the aluminum wheel is moving back and forth, on the lug nut shoulders and lug studs, which will elongate the holes in the aluminum wheel, or worse yet, something will break and the wheel will come off.

Over the last 38 or 39 years, I have sold about seven or eight new aluminum factory wheels, to replace damaged wheels. I also sold replacement wheels where parts broke and the wheel came off.

To solve the problem correctly, Avanti Motors had part number 1702204 \$135 a 11/16-inch thick space/adaptor made to replace the one-inch thick steel spacer part #1702205 \$135. It was no longer necessary to shave the wheels. I don't know how many Avantis were produced that only two wheels were shaved. a lot of the Avantis had four shaved wheels.

Sorry but I sold all the new black mesh aluminum wheels that I had in stock but I do have some used black mesh aluminum wheels with ½-inch thick centers and 7/8-inch thick centers, call for details. I have always read that what makes one vehicle stand out, compared to another vehicle is the stance and the wheels and tires choice, which I agree with. I have always sold a lot of non-factory wheels, that look good on the Avantis.

Please see my ad for replacement wheels for your Avanti or Studebaker. All the wheels I have advertised in these ads are in stock, they're also on the website. They all have the correct backspacing to fit all 1963-1985 Avantis and many Studebakers that had 15-inch wheels. //



Don't deprive yourself of this thrilling experience...we have Avanti Demonstrators, serviced and ready at all times. Come in or call now...we'll be happy to let you test drive Avanti...then you can see for yourself what it's really like! America's most advanced car!



AVANTI Magazine AVANTI Magazine Fall/Winter 2023 Issue 204 Fall/Winter 2023 Issue 204