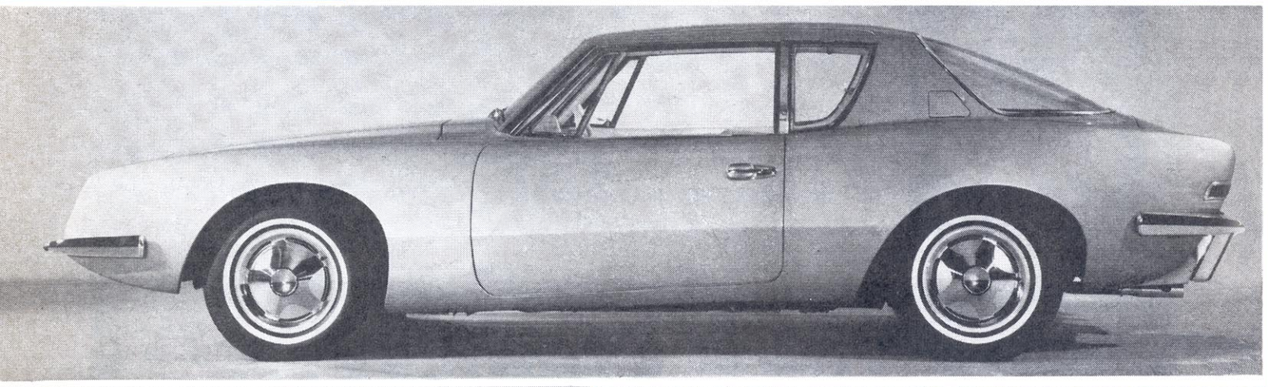
Motor Trend
July 1962



Road Test

by Chuck Nerpel

Avanti

Forward! . . . Studebaker challenges their high performance competitors with an all American Grand Turisimo coupe

AVANTI, freely translated from Italian means . . . forward!, whch is just where Studebaker's president Sherwood Egbert hopes to lead his company with an exciting new 1963 automobile. From "doodle-to-drawing-board-to-prototype" in less than a year is quite an accomplishment for any automobile maker who is designing a production car, but Studebaker was able to push this program and still incorporate into the Avanti several major "firsts" for the industry.

Egbert knew what he wanted and "doodled" some styling concepts which were used as a guide for stylist Raymond Lowey, who once before had put Studebaker back in sales competition with his "which way are they going" designs of 1953. This was in March of 1961 and by February 1962, the Molded Fiber Glass Body Co., of Ashtabula, Ohio, was ready to deliver body shells to the South Bend, Indiana, Studebaker plant.

Engineering, in the meantime, was working to improve engine performance and chassis handling, using as a base the 289-cubic-inch Hawk engine and the 109-inch wheelbase Lark Daytona chassis. By early April, just about every detail with the exception of some minor trim and interior appointments had been tested and finalized to a point where MOTOR TREND could begin some South Bend proving ground tests.

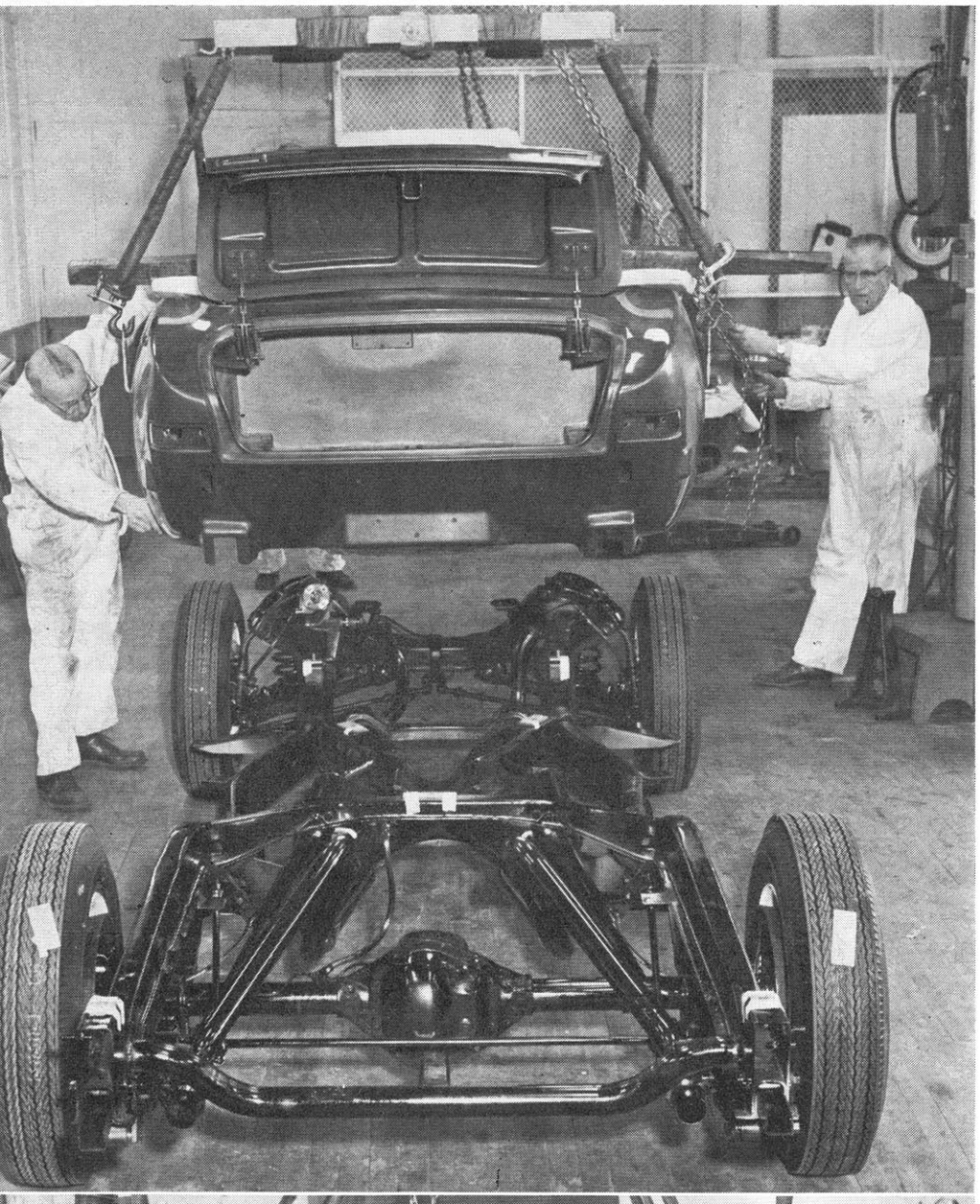
Knowing full well that an entirely new engine and chassis were out of the question because of cost and the accelerated Avanti program, the engineers did a remarkable job improving the solid and reliable basic components they had to work with.

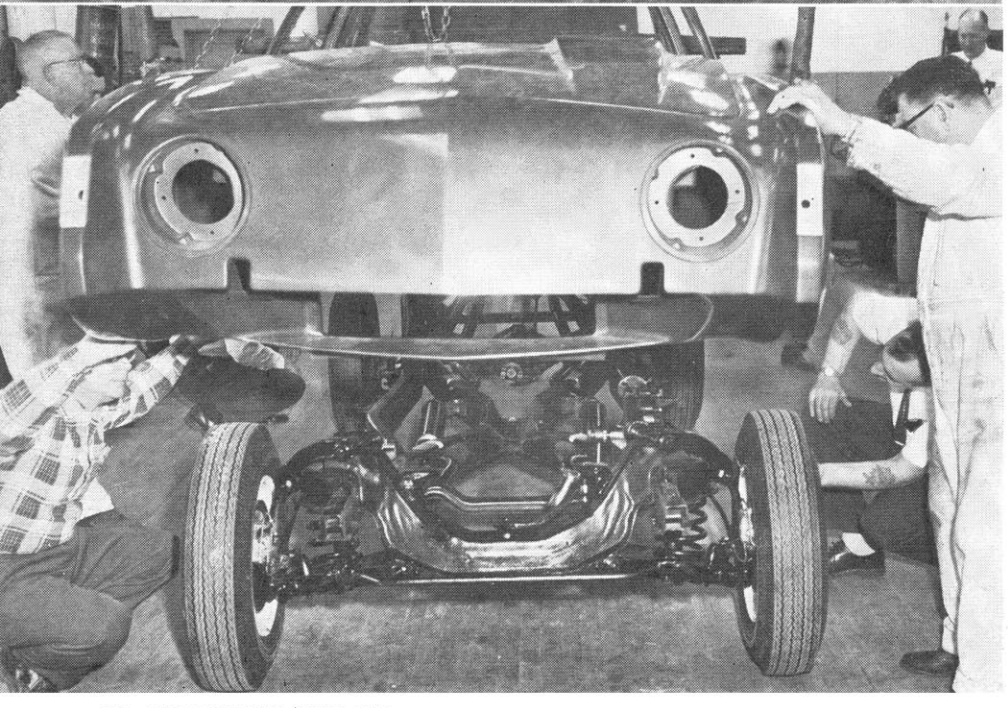
Just to sweeten things up and hand them a big gob of extra performance the acknowledged easy way, Studebaker acquired, through purchase, Paxton Products, manufacturers of the well known Paxton centrifugal supercharger. Andy Granatelli, head man at Paxton, was included in the deal, and the full force of his knowledge of high performance engines and superchargers was immediately channeled into Studebaker's Avanti program.

Styling is such a matter of personal opinion that we are reluctant to express anything except just that, our personal opinion. But, our first reaction to the Avanti, before we even drove it, was "we liked it." We liked it because it represented something entirely different in the industry. Not a rehash of something else, the Avanti does not follow the current Detroit styling trend although it might well start a new one.

For power the reliable 289-cubic-inch Hawk V-8 engine is modified with a high lift cam, 10:1 compression ratio, a little better breathing, four barrel carburetor, and dual exhaust system employing low back pressure mufflers of aluminized steel, glass-packed. The supercharged engine is identical except for a lower 9:1 compression ratio and Granatelli is in the final phase of tests on a super-tuned and blown engine to be offered as an ultra high performance option.

Egbert does not want to become in-





Avanti

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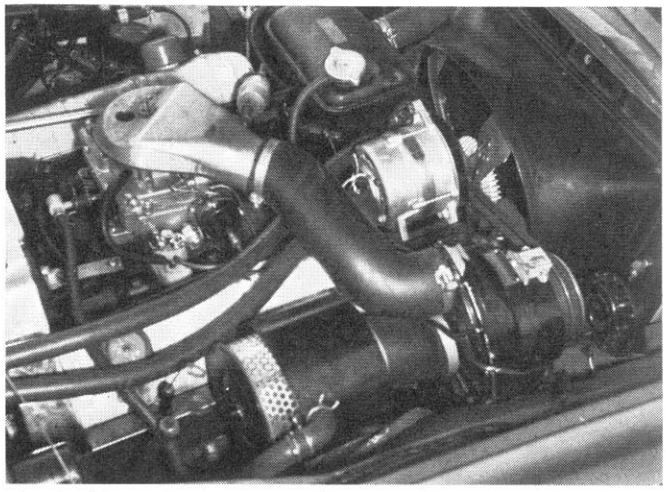
volved in a horsepower race but intends to supply exactly what the customer wants, so horsepower figures have not been released and can only be estimated. The unblown engine should be good for an honest 215 to 225 hp, while the supercharged model which has five pounds of manifold boost at 5000 rpm, is capable of a reliable 280 hp. By this we mean an engine that will keep a good state of tune and not eat up spark plugs under normal driving conditions. At this stage of development on the super engine, no horsepower figures are available but clocked experimental speed runs indicate that this car, with its low 3100 pound overall weight, slippery aerodynamic body shape and super engine, could certainly take home a hatful of Bonneville records in the supercharged C-gas coupe and sedan class.

The MOTOR TREND test car was equipped with the supercharged engine and three-speed manually controlled automatic transmission. Studebaker's mildly banked test track at South Bend is not exactly a modern facility. This course was one of the first in the country and has been little improved since, so any car that handles at speed on this wavy black top oval can handle anywhere. At speeds in the 120 to 130 mph range, which this version of the Avanti is capable of on the short straight of the test course, braking and cornering were of prime importance. Coming off the straight into a rolly and mildly banked turn required a quick hard jab on the brakes, twice each lap. An hour of this type of driving produced no noticeable effect on the Bendix produced Dunlop caliper front brakes or the Lockheed finned drum type rear brakes, although over 60% of the braking loads are handled by the front brakes.

A very light body weight which aids in lowering the center of gravity, the rigidly stabilized independent coil spring front suspension, and a similarly stabilized longitudinal leaf spring and solid axle rear suspension, minimize body roll and keep the weight on all the wheels, which allows for some very fast, stable, and flat cornering without tire squeal. It is hard to believe that under the sleek fiber glass body is a basic Lark Daytona chassis, tuned to sports car perfection, but producing a smooth, quiet, jar-proof ride.

Completed body delivered from Molded Fiber Glass Body Co., is dropped on modified Lark Daytona chassis. All doors and deck lids are fitted at the body plant, final assembly is a quick simple job of interior trim.

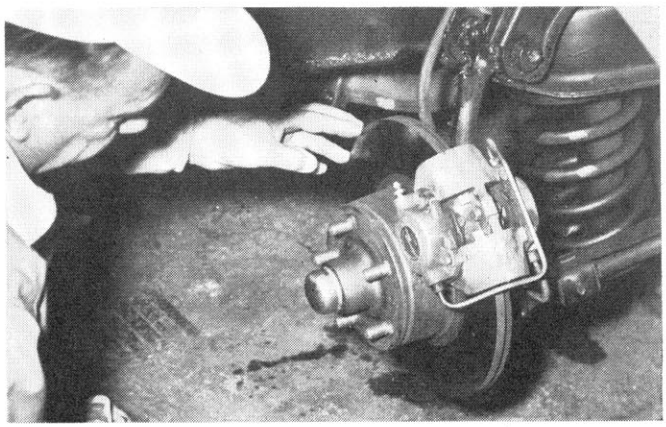
Avanti engine compartment is easily accessible even on optional supercharged model but leaves little room for other engine compartment accessories. For this reason,



air conditioned cars will not be available with supercharged engines. Engine features fluid coupled fan with dual belt driven blower, alternator, cross flow radiator.

MAJOR FORCE BEHIND THE AVANTI IS STUDEBAKER'S PRESIDENT SHERWOOD EGBERT, LEFT, SHOWN WITH DESIGNER RAYMOND LOWEY.

Rear luggage compartment is small but all space is usable with spare tire located below floor area. Tool stowage and upholstery rivals that of some high quality imports.



Dual piston caliper spot brakes, manufactured by Bendix under Dunlop license, are used on Avanti front wheels, provide constant and uniform fade-free stopping power.

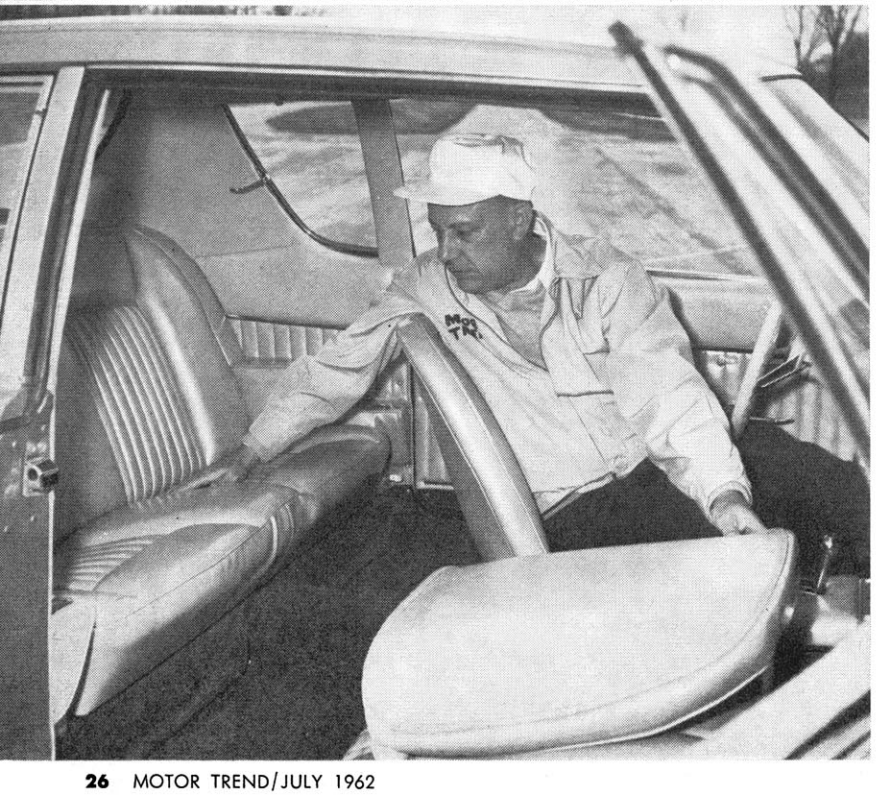
Avanti *continued*

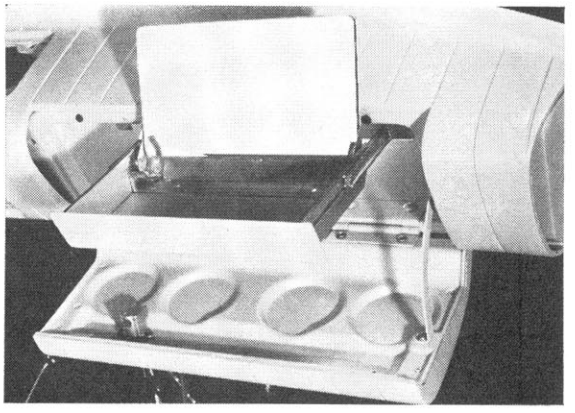
Pulling a 3.73:1 rear axle gear and manually shifting the Borg-Warner stick-on-the-floor three speed automatic transmission, acceleration times for both 0-60 and the quarter mile are very good. Punching the throttle at 60 mph, it takes but 12 seconds to hit 100 mph. Hardest thing to do with the Avanti is keep the engine revs under 6000 rpm in any gear as it just wants to keep going and this was a redline imposed by Studebaker engineering who still had some tests to finish on this car.

Seating is excellent, with a pair of body contoured buckets in the front and a bench type rear seat that can hold three but is best over the long haul for two adults. The rear seat is raised slightly to give these passengers a view ahead, and, to provide adequate head room, the entire car is almost four inches higher than some of its low slung competitors. Styling, with the upswept fast back and minimum overhang, and long sloping hood with long front overhang, conceal the actual overall vehicle height.

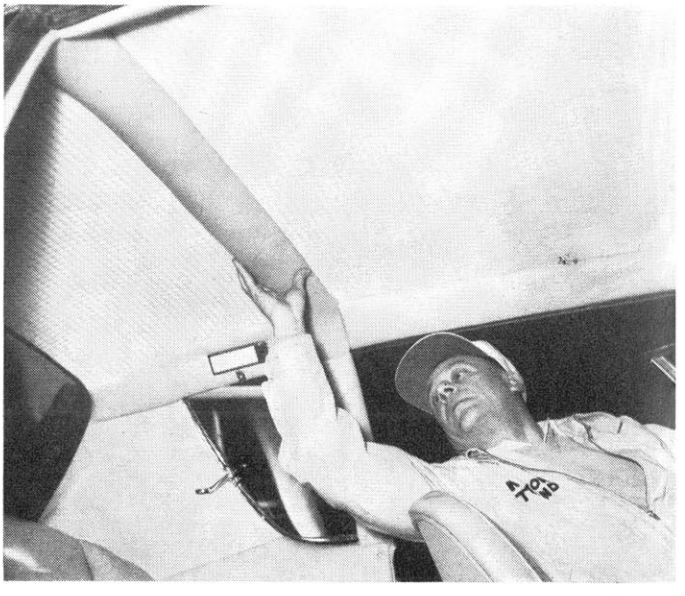
Another industry first for the Avanti is a built-in roll bar. Running from the heavy box section frame side rails, a flat section high tensile steel tube is built right into the top just behind the front seats. Well concealed with padded upholstering, the roll bar is designed for maximum protection.

Plans for the Avanti call for limited production and a $4000 plus price tag. Studebaker can produce as high as 1000 per month and are hoping demand will make this necessary. One thing is sure, this car will focus more consumer attention on the entire Studebaker Hawk and Lark line which are also due for some 1963 face lifts of major proportions. /MT





Overhead switch panel, left, controls lighting by a finger tip touch, leaves dashboard free for instruments only. Prototype glove box is in experimental stage, features extra pull out tray and mirror to aid ladies on-the-road make-up chores. Dash will have safety crash padding.



Wide doors and full width rear seat, left, aid easy use of this area for extra passengers. The front seats fold flat, have latex foam padding. Built-in roll bar is high tensile steel tube fastened to frame and padded into head liner.

Stable on soft gravel or hard pavement, the Avanti has quick steering response, can be turned in 33 foot circle.

STUDEBAKER AVANTI

4-5-passenger sport hardtop

OPTIONS ON CAR TESTED: Supercharger, automatic transmission, radio heater

ODOMETER READING AT START OF TEST: 3000 miles

RECOMMENDED ENGINE RED LINE: 6000 rpm

PERFORMANCE

ACCELERATION (2 aboard)

0-30 mph.....3.1 secs.
0-45 mph.....5.2
0-60 mph.....8.0

Standing start ¼-mile 15.8 secs. and 91 mph

Speedometer Error on Test Car

Car's speedometer reading	30	45	50	60	70	80
Weston electric speedometer	30	45	50	60	70	80

Observed miles per hour per 1000 rpm in top gear .....22 mph

Stopping Distances — from 30 mph, 19 ft.; from 60 mph, 149 ft.

SPECIFICATIONS FROM MANUFACTURE

Engine
Ohv 90° V-8
Bore: 3 $^{7}/_{16}$ ins.
Stroke: 3 $^{5}/_{8}$ ins.
Displacement: 289 cubic inches
Compression ratio: 9:1
Horsepower: 280 @ 4800 rpm
Ignition: Battery-coil

Gearbox
3-speed automatic, floor selector
3-speed manual (standard)
4-speed manual (optional)

Driveshaft
Exposed tubular with Spicer anti-friction prepacked needle bearing U-joints front and rear

Suspension
Front: Independent, coil springs, adjustable tubular shocks, ¾" stabilizer bar
Rear: Longitudinal asymmetrical leaf springs with radius rods, adjustable tubular shocks, solid axle

Differential
Hypoid ring and pinion (twin traction)
Standard ratio 3.73:1
Optional 3.31, 4.09, 4.55

Wheels and Tires
Pressed steel disc wheels
15" 6.70 x 15 nylon 4-ply tires

Brakes
Power assisted pedal
Front: Caliper with dual pistons, shaped pads, 11½" disc
Rear: Finned composite iron drum 11" diameter with 2" wide bonded lining

Body and Frame
Double drop box section frame rails, ladder type with X member
Wheelbase 109 ins.
Track, front 57.37 ins., rear 56.56 ins.
Overall length 192.43 ins.
Dry weight 3100 lbs.

Twin traction differential gives both wheels good bite while accelerating on any type of slick or dry pavement.