



With Rallye suspension and Ram Air Stage I power, the GS-455 offers a superb combination of luxury and performance, conservatively wrapped in a sano shell. Dual muff air cleaner mates to hood scoops which are, unfortunately, mounted too far back and low on the hood for an effective performance boost. It doesn't take much to light up the fiberglass belted tires. Big mill is under rated.

## CARS ROAD TEST

# STAGE 1 GS-455 SPEAKS SOFTLY AND CARRIES A BIG STICK

Buick's adult supercar offers everything you could ask for as far as street luxury and performance are concerned, plus sub-12-second strip potential

#### BY THE CARS STAFF

ATELY it has become very fash-Lionable to be down on supercars, specifically, and high-performance cars, in general. Legislators, insurance company management, safety experts, aspiring politicians and law enforcement types are all doing the anti-supercar thing. While this is not a new-for-'70-thing, it seems that the super big-inch ponycars and super-

cars are raising havoc in these ranks. Since they all have been feeling this way since factories started putting 400-inch engines in supercars and ponycars, you can imagine what went on in their ivory towers when General Motors went the 454 and 455 route in its supercars and up to 427 inches in its ponycars. Both Chrysler and Ford are also in this league with over-400-inch machines. However, the sad part of it all is that these holierthan-thou and in most cases uninformed persons who are threatening the very existence of the high performance street machine-via legislation and insurance rate scalpinghave probably never driven a wellengineered supercar. So how can they pass judgment?



Buick has never really been that popular with the street crowd, even after they became aware of the car's performance. The Gran Sport is a little on the heavy side (although you really don't notice it with 455 inches up front), a little on the expensive

brothers or a low-ball price tag, but

what it does have is clean sano styl-

ing, power to spare, a smooth, super-

efficient automatic and excellent ride

and handling characteristics. And, it

offers Buick class combined with all

the street performance you could ask

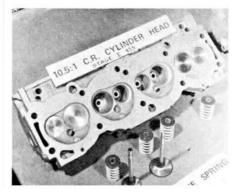
side and basically too quiet and classy for the mass supercar market. Also, Buick dealers have never been known for their rapport with the street set. With the Stage I option Buick should become more popular in this area, especially if some dealers get out and sponsor some stock class drag cars. Once the enthusiasts start seeing Gran Sports doing some winning, Buick interest will grow. There are some well prepared Buicks doing the job on the West Coast, but not enough on the national scene to get the message across.

Since '67 we've been pretty impressed with the job Buick's been doing in the supercar ranks. They've never had the hottest machinery on the street—it's not their thing. But since '67 the GS has been a good runner, combining luxury, handling and performance all wrapped in a rather conservative shell. For '70 it's a dynamite machine, but it still won't run with the super diggers because that still isn't Buick's thing. But the '70 Stage I GS 455 is the quickest, fastest and best looking in Buick's supercar history and it does have the potential of being a sub-12-second street/strip machine. In pretty much stock shape it'll trip the clocks in the mid 90's with et's in the low to mid

To make the GS 455 competitive in the super-competitive youth supercar market, Buick revamped its Stage I modification program and offered a ready-to-drive, out-of-theshowroom model with lots of good stuff bolted in. You don't have to buy parts and build it yourself as was the case in the past with super performance packages. The Stage I GS 455 comes stock from Flint with low-restriction duals, a .490-inch lift, 316duration hydraulic cam with a highrev valve train, a new oil pump with a 60 psi regulator spring in place of the 40 psi stocker, 3.46 Posi gears and, when ordered with automatic, it comes with a special high-shift-point Turbo Hydro. Because of the nature of the product, automatic seems to be the route to take, even in Stage I trim.

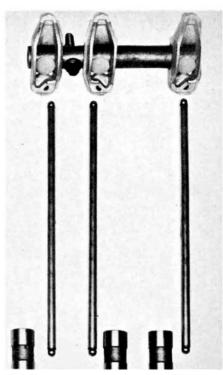
While the GS 455 is a nimble, roadable GT type car, it's obvious that it's the product of a luxury car builder. There's lots of padding, excellent soundproofing and luxury touches throughout. All this is, of course, at the expense of additional weight and a higher tariff. It may only be a 112-inch supercar, but it does tip the scales at 4000 pounds. And it takes a lot of horsepower to pull 4000 pounds through the traps in the low 14's. The GS 455's ride is of a compromise-type with a sizable concession made to comfort. The bench seating is acceptable, but the buckets really do the job. They're good—for a domestic supercar. The suspension is compromise, but everything works out thanks to the 7/8-inch rear sway bar which is part of the rallye package. The average street strip digger would probably change the shocks to get a firmer ride, as the car does have some boulevard tendencies.

Resting under the functionally and tastefully scooped hood rests an example of the new breed of supercar engine. There are gobs and gobs of torque and cubes with tame camming and simple carburetion. The basics are there just waiting to be exploited. The Stage I heads—originally planned to work out for a 10.5-to-1 compression ratio—are set up for a 10.0-to-1 squeeze and are fitted with 2.13-inch intakes and 1.75-inch exhausts along with higher rev springs and lightweight aluminum rockers. The intake chores are handled by the old faithful Rochester Quadrajet breathing through a dual muff air cleaner which butts up against the



Pre-production heads were designed for a higher 10.50-to-1 compression ratio.

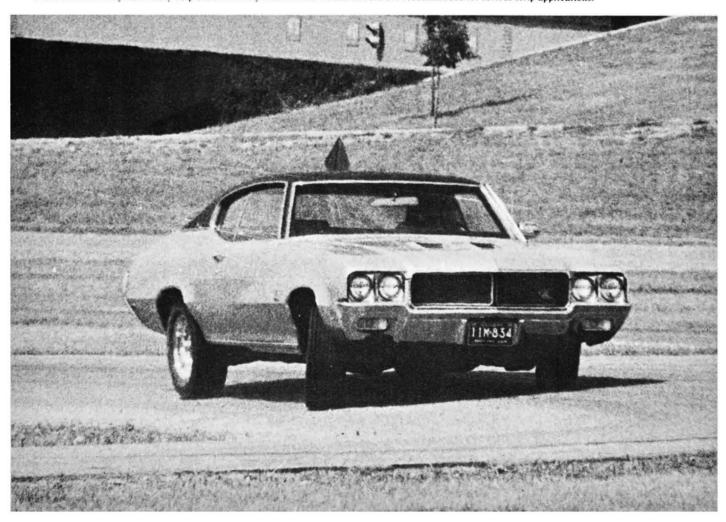
cold air intake in the hood. On paper it's dynamite. Unfortunately, the scoops are set back too far and are poorly designed for any appreciable performance boost. This is true for many of the supercar scoop setups used today. However, they offer mucho status and they look good. And, when you buy a Buick you're really not looking for the extra boost from cold air induction—especially if you know it's rarely ever effective below the century mark. The big-inch torquer throws off 510 foot-pounds of solid torque at 2800 rpm and 360



New high rev valve train goodies include lightweight aluminum rockers super springs.

hp at 4600 rpm. The figures speak for themselves. The torque range has been dialed into the camming to

Front and rear sway bars really help out on a twisty road course. Firmer shocks are recommended for serious strip applications.



make super power available at low-to-mid range rpm, something the solid-cammed HP stocker owners only dream about. With automatic and high three-series gearing you don't have to worry about the big boys at a traffic light.

It's also pretty obvious that the horsepower rating is a little deceptive, as the big wedge is still making horsepower over 5000 rpm. In fact, it's still pretty effective almost up to 5500 rpm.

Our test car started out life as a normal Stage I model with optional disc binders and the standard 3.64 gearing along with a Turbo Hydro high-upshift transmission. However, when the car was set up for a road test in SUPERCARS '70½, it was fitted with an optional 3.91 gear set and incorrectly listed in the book as standard 3.64 gearing. When we received the car for more extensive testing, we made a couple of minor changes. The distributor was swapped for a custom-calibrated M/P-Mallory Super/Spark model and the shocks were swapped for super stiff M/P Super Bite jobs.

With the stock shocks the car handled well but became slightly mushy when the going got really rough on a twisty road course. The changeover to the Super Bite shocks was immediately noticeable, as the ride became extremely stiffer. Handling was improved, but gone were the boulevard type ride characteristics we had learned to love under normal driving conditions. The basic suspension is a good one for the car, considering the type of person the car is aimed at.

The 3.91 gears—available from the factory—work out like Gangbusters when mated to the good Turbo Hydro. The torque is right there. All you have to do is summon it with your right foot. We tried a variety of methods of getting off the line and, as usual with the late-model hot stockers, the best method was to drive out of the hole at slightly over idle and then get into it. We tried warming up the G-78-14 Goodyear glass-belted tires and driving off at 1500 rpm but a lot of horsepower went up in smoke every time we tried it. The best route was driving out at 1000 rpm. Average times ran around 99-101 mph with et's in the 14.10-14.30 range. Truly impressive performance for a luxurious 4000-pound auiet machine.

There was little we could actually find fault with. Handling and ride

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### 1970 BUICK STAGE I GS 455 SPECIFICATIONS

#### ENGINE

EN	GINE
Туре	
Displacement	455 cubic-inches
Compression Ratio	19.09-te-1
Carburetien	Rechester Quadrajet
Camshaft	Hydraulic
Hersepower	360 @ 4600
Torque	NA
	Dual
Ignition	M/P-Mallory
TRANS	MISSION
Make	Turbo-Hydro
Control	Floor shift

#### REAR END

Туре	HD	Positraction
Ratio		3.91-to-1

#### BRAKES

Front	. 11-inch power-assisted discs
Rear	.5-inch power-assisted drums

#### SUSPENSION

Front	HD independent coil springs
Rear	HD coil springs
Steering	Power
Overall Ratio	Variable

#### GENERAL

List Price	\$3400
Price As Tested	4450
Weight	3940
Wheelbase	112 inches
Overall Length	200.7 inches
Tire Size	. G-78-14 Geedyear
0 to 30 mph	3.0 seconds

#### **PERFORMANCE**

8 to 60 mph	7.0 seconds
Standing ¼ mile	1 <b>66</b> mph
Elapsed Time	14.20 seconds
Tep Speed	110 mph (EST)
Fuel Consumption	9-15 mpg



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#### CHALLENGER

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2.47; Second gear-1.77; Third gear -1.34; and Fourth gear—1.00.

The rallye suspension, with front and rear sway bars, is used on the T/A. Heavy-duty shocks are standard. Rear spring camber will be special to provide necessary clearance for side exhaust and G-60 super wide rear tires.

The standard steering setup is manual with a 24-to-1 ratio. Quick ratio power steering is optional. Quick ratio manual steering is available as a dealer-installed option. Front and rear tires are not the same size. E-60 x 15 tires are used up front and G-60 x 15 shoes are used on the rear. Black 15 x 7-inch wheels with hub caps and chrome trim rings. The standard 8 3/4 inch rear axle sports a 3.55-to-1 gear set. A Sure-Grip axle is optional.

The hood is a fiberglass job and boasts a special fresh air intake scoop and competition-type hood pins. The black painted grille is the same as that used on R/T models. The rear deck sports a new "duck-tail" type crossdeck spoiler. There will also be front "chin whisker" spoilers.

The left, body-colored racing type mirror is standard as are the pop-up gas filler cap and the collapsible spare. A special side-stripe with block letters "T/A" provides additional exterior identification.

The Challenger T/A is expected to make its competitive debut at Lime Rock on April 25th in the first Sports Car Club of America event in the 1970 Trans-Am series. The car will be prepared by Sam Posey. The Posey-Caldwell car will be painted a highvisibility light green. Watch out Chevrolet, the Dodge boys mean business.

#### **DOMINATOR 4500**

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ready. However, with Edelbrock covering the Chevy market and Shelby the Ford market, it won't be long before 4500's start turning up on the street. You can bet your last set of jets that the street racing boys will be the first to capitalize on this gem.

#### **BUICK STAGE I**

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were great, the variable ratio power steering (12.4 to 16-to-1) was great, the discs worked out and the overall package is quiet, good looking and strong. Its styling is quiet and tasteful, yet groovy enough to turn heads. A good instrumentation package is optional, so you can keep an eye on the engine if you want to. Fuel consumption ranged from 9 to 15 mpg which is certainly par for the course.

Judging by the potential packed into the Stage I GS 455, we think the factory is missing the boat by not promoting some factory-influenced racing, as is the practice of other GM divisions, which are also governed by the same "no racing" rules and regulations. A lightweight GS 455 with Holley carb, more radical camming, good headers and some high fourseries gearing just might cause youth market traffic jams at Buick agencies. Isn't that what it's all about?

#### A.J. FOYT

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most spectacular accidents in Riverside history. The car, completely flattened, broke in two before the wrecker could set it safely off the track. Young, thanks to a sturdy roll cage, received only a mild concussion and a bruised arm.

In the second major accident, 48 year old Jim Cook of Norwalk, California, a veteran driver and father of six was not so fortunate. Cook, who had started in 32nd position apparently went into turn nine abreast with the faster David Pearson. He was in the top groove and appeared to veer off the track, possibly to avoid hitting or obstructing Pearson. He smacked into the hay bales and crashed on into the end of the boiler plate which guards the outside of the turn at an estimated speed of 140 mph. He was taken to the Riverside Community Hospital where his condition is still critical.

Sam Posey, who will drive Dodge's Trans-Am cars this year gave the spectators on the front straight a thrill when his Dodge Charger threw a rod through the pan, ignited the oil and turned the car into a Roman Candle. The young Sharon, Conn. driver wisely turned his flaming machine out onto the first wide dirt apron and the resulting skid extinguished the flames.

The race, of course, was not without its heartbreaks. Only 19 of the 44 starters finished. Dan Gurney, who for a decade "owned" Riverside, had his new Plymouth bird shot down on lap four with brake and suspension trouble. He sat out seven laps, pitted 15 times, was never a serious contender and finally spun-out for keeps

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