AS ANY higher priced car must, Buick bases its primary appeal on luxury. And the Buick concept of luxuriousness is conventional: size, plenty of quiet power, smooth speed, and a soft interior surrounded by glass and chrome put together with good quality. The final touch, which again is conventional, is unique gadgets that lend an air of advanced design.

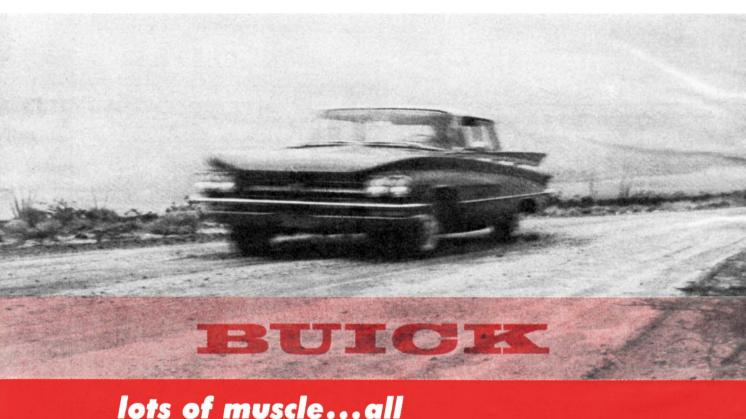
All these things have some value. They do not, of course, make a complete car. Some more vital factors unfortunately have not been given equal effort.

The 1960 model tested for this report was a four-door hardtop of the Invicta series. Since Buick changed the names of all its series in 1959, this may still require some explanation for readers not accustomed to the new designations. The Invicta is the current equivalent of the earlier and highly popular Century, which

so is the carburetion, and the rear-axle ratio remains at 3.23. The only switch that conceivably might affect performance has been elimination of separate mufflers in the dual exhaust and the installation of a single muffler mounted crosswise at the rear.

The purpose of the single-muffler system is not, however, performance, but maximum silencing. Exhaust gases from each bank are routed to one pipe at the right hand side of the engine. Since the diameter of the pipe, extending aft to the muffler is quite large, the exhaust system probably compares favorably with duals.

The 1960 Invicta averaged three mpg better than the similar version of the preceding year. The range quoted in the accompanying data box is 12 to 17 mpg. The actual and exact tank average obtained in more than 2,000 miles of city and highway testing was 15.4 mpg, and much of this distance was covered at



lots of muscle...all bound up in quiet clothes

gained much of its reputation in the area of performance and in accelerating ability in particular.

What gave the Century an edge in performance was the fact that it was the smaller Buick body driven by the bigger Buick engine. The Invicta continues this tradition. While it shares its body size with Le Sabre, it borrows the standard Electra engine of 401 cubic inches delivering 325 hp. The test Invicta's engine was called the Wildfire 445—the digits in that suggestive name are derived from the torque rating, which apparently sound more impressive than the lower horsepower figures.

Although there was a big difference in one set of test figures in comparison with last year, when an almost identical Invicta was road tested, there have been no major changes in the power train. The compression is .25 less, the transmission is the same,

maximum speeds in the mountain-desert regions of California, Arizona and Nevada. This is a commendable improvement in a high-performance car that weighs over 2½ tons.

In the other category of performance, the change from 1959 was not so marked. The test car accelerated, after some wheel spinning, from zero to 60 mph in nine seconds, which is threetenths of a second quicker than a year ago. The Invicta is well into the hot class.

Buick has relatively few options to alter the foregoing gas consumption or speed characteristics. Naturally, there is the milder 364-cubic-inch engine in the Le Sabre series with two-barrel carburetion, lesser compression ratios and "slower" 3.07 back axle gearing for stretching mileage. But the fastest axle with the twin-turbine variable pitch torque converter transmission

**BIG, SOFT, ROUND** lines of the Buick are a good key to car's whole personality. Engineers seem to have stressed quiet qualities rather than the quick. In many cases the soft, silent ride will give the speeding motorist a deceiving sense of security.

is the 3.23, although a 3.9 is listed for the Le Sabre's manual box.

With all of the talk today of compact cars and fuel economy, the Buick still makes a good case for a high performance car. It cruises easily at high speeds and there's punch left in the throttle for fast passing that's not to be discounted. Size is a factor in traffic maneuverability—but so is quick engine response and a power reserve. These the Invicta has and some to spare.

Flint engineers obviously have lavished more than the customary amount of care on effortless performance and easy control. While the Buick is light to the touch, they may have done their job too well. The driver is so insulated from the sensation of speed and road conditions that excessive rates of travel are likely. The buzzer that sounds at preset speeds is an important accessory.

It is fortunate, therefore, that all Buicks contain this performance potential with good stopping power in the form of a brake that is the best design on any Detroit car. They are the finned and air-cooled drums formed of aluminum in front and cast iron in the rear used in conjunction with 15-inch wheels. They do their job well.

Handling the Buick with power assists places no physical strain on the driver. It is at its best on the straightaway, being quite stable and steady. Around sharp bends there is a discernible body shift and lean, but nothing like the Buicks of two or more years ago. Springing still is too soft, for the sake of ride, but the suspension holds the mass on a relatively even keel.

The Invicta is too big for good maneuverability in close quarters, but its size is close to the average for its class. There are, in fact, some lower priced cars that are both longer and wider.

Yet like so many Detroit cars, the Buick's ample exterior dimensions do not benefit the interior passenger capacity. Although it will carry six, it is comfortable only for four adults. Anyone who has to sit in the middle of either the front or rear seat, at least for any distance, suffers. It is not only a matter of insufficient legroom, caused by the transmission hump in front and the driveshaft in the rear, but the inadequate cushioning over the driveline where it passes beneath the seats. The situation has been relieved somewhat from 1959 conditions by a re-engineered frame and floor, but it still is a major defect in the car.

Visible changes in the 1960 Buicks are the rounding and softening of last year's sharp styling, a new grille treatment and an entirely new dash layout. The improvement in the exterior is debatable, but the dash is neater and less opulent. Its major new feature is a tilting mirror that reflects the instruments to different eye levels—a clever device and of some help. Of greater benefit would have been replacement of the bar-type speedometer with a needle pointer and the retention of gauges for generator, oil pressure and water temperature, instead of warning lights.

Quality of the Invicta, particularly in assembly, was good. Materials were fair, not at levels of earlier Buicks. The solid feel adds to the impression of smoothness and quiet operation, even in upper speed ranges. A further contribution is the twinturbine automatic transmission that transmits no harsh shift points and is hooked to an enclosed driveshaft that further reduces noise and vibration. Of course the variable pitch feature, which comes into play when the throttle is fully depressed, "shifts" the torque converter ratio like shifting into a lower transmission gear.

In brief, everything that gives the car push has been hushed. It's one version of luxury. •

## MOTOR LIFE TEST DATA

## 1960 BUICK

TEST CAR: Buick Invicta
BODY TYPE: four-door hardtop
BASE PRICE: \$3515

Car

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OVERALL LENGTH: 218 inches
OVERALL WIDTH: 80 inches
OVERALL HEIGHT: 58.8 inches
WHEELBASE: 123 inches
TRAD, FRONT/REAR: 62.4 and 60 inches
TEST WEIGHT: 4.480 lbs.

WEIGHT DISTRIBUTION: 54 per cent on front wheels STERING: 4 turns lock-to-lock TURNING CIRCLE: 44 feet curb-to-curb GROUND CLEARANCE: 6 inches

SEATING CAPACITY: four to six FRONT SEAT— HEADROOM: 34.7 inches WIDTH: 65.4 inches LEGROOM: 44 inches

TRUNK CAPACITY: 14.9 useable cubic feet

TYPE: ohv V-8
DISPLACEMENT: 401 cubic inches
BORE & STROKE: 4.18 x 3.64
CGMPRESSION RATIO: 10.25-to-1
CARBURETION: single four-barrel
HORSEPOWER: 325 @ 4400 rpm
TORQUE: 445 lb.-ft. @ 2800 rpm
TRANSMISSION: twin turbine automatic
REAR AXLE RATIO: 3.23

GAS MILEAGE: 12 to 17 mpg.

ACCELERATION: 0-30 mph in 3.8 seconds, 0-45 mph in 6.3 seconds and 0-60 mph in 9 seconds

SPEEDOMETER ERROR: indicated 30, 45 and 60 mph are actual 26, 41 and 53 mph respectively

POWER-WEIGHT RATIO: 13.78 lbs. per horsepower HORSEPOWER PER CUBIC INCH: 81

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