CAR LIFE ROAD TEST

BUICK INVICTA

A Buick convertible represents indulgent luxury afforded only by the affluent; for those fortunate few the Invicta promises even more—stunning performance.

THERE'S A CERTAIN added something that sets a convertible apart from the ordinary, every-day automobile. Psychologists will tell you that men seek the collapsing-top automobile as a mistress, a luxury symbol, or the ultimate in carsmanship. Convertible and Buick go hand-in-hand, then, for Buick has always stood for modest luxury in the changing order of U.S. cars. A Buick convertible is the sort of thing a banker can buy as a "personal" car without worrying too much whether the community will cluck its collective tongue. It is, in a way, an ideal, a goal. Although the *Car Life* crew has yet to reach any such status, it was with a misty gleam in its eyes that it happily accepted the task of testing Buick's latest, and best yet, convertible; somewhere in each of our backgrounds, we've had yearnings, too.

Buick's line-up for 1962 includes only one engine (in two horsepowers) and two (in effect) chassis. The compact Special is a separate entity, fully divorced from the "big" cars and requiring separate evaluation. The big Buicks have three series: LeSabre, Invicta and Electra 225. The LeSabre and Invicta share the same 123-in. wheelbase; the Electra 225 is 126 in. The LeSabre has a 280-bhp V-8 engine, the Invicta and Electra a 325-bhp version of the same unit. The Invicta, however, is a de luxe version of the LeSabre but is available only as a 4-door hardtop, a convertible or 2 station wagons. There also is a convertible in the Electra series, but we venture to say that the slightly less expensive Invicta will be the better seller.

There is much to recommend the Invicta, and a few things that don't. High on the list of attributes are outstandingly superior brakes, really excellent performance and good over-all finish; at the other end are skitterish handling, feel-nothing power steering and our old friend, the weak shock absorber waltz.

Since the "small" cars (Chevrolet, Ford, Plymouth) of the past few years have become inflated and enlarged and the "large" cars have shrunk some, we can only say the Invicta is of "average" size. Although our tastes run a bit toward the dimensions of the Special, we found the Invicta didn't really feel 2 ft. larger and 6 in. wider. It does, however, feel (and handle like) a ton heavier, which it is. (On a crooked road, bet on the Special.) There's a big, easy-to-service engine compartment in front and a mammoth trunk in back, but room for only 4½ passengers between. Taking into consideration that this is a convertible, the back seat is necessarily a little less roomy than that of a 2-door hardtop; there's enough space for two adults. In front, Buick has reduced the transmission bulge to almost nothing, by the simple expedient of moving the engine and transmission 4 in. farther forward. This makes the flattest floor in the (big car) industry. So what happened to the space for the middle-of-the-front-seat passenger? Buick's interior stylists negated this nice piece of engineering by extending a console out from the dash which leaves foot-room . . . but no knee-room. The console on our test car carried, amid lavish chrome-plating, radio controls, a nicely thought-out and easy-to-reach ash tray and lighter swing-out, and a Kleenex dispenser—this latter being the straw that cracks the knee-cap.

While inside, we might add that controls and dials are all within easy reach and legibly marked although a somewhat more functional grouping could be asked. We particularly liked the Safety Buzzer system that warns you if you overstep a pre-selected speed (it sang like a bee in the geraniums when we did our 0-to-'s). The power seat option also was appreciated, in that it allowed fore-aft, up-down and rake adjustments—something we'd like in all cars. The seating position thus was comfortable to all who tried

the car; the only complaint was that one tended to slide down-seat rather too easily under exuberant cornering, something that easily could be remedied with a bucket-seat option. We might note here, too, that the Buick engineers seem to have mastered the tricky art of top design: The one on our car neither rattled nor leaked nor let in cold drafts of air. And it gloriously lowered and raised again with the mere flick of a switch, suitably impressing all those in attendance.

Both interior and exterior finish seemed above average. Since the advent of the sculpted look, most of the larger cars have become quite eye-pleasing and it is a happy note that the Buick Invicta has a clean, purposeful yet elegant line to its over-all design. All that remains of the finny days is a keel-like ridge down hood and trunk lid. Vestigial portholes remain, three on each side for the Invicta and LeSabre, four for the Electra, for those who crave traditional recognition.

Buick has in its entire lineup some of the best engine and transmission combinations (see V-6 comments, page 8) available from Detroit. They are smooth, surprisingly powerful and quiet. The mating of the 325-bhp V-8 and

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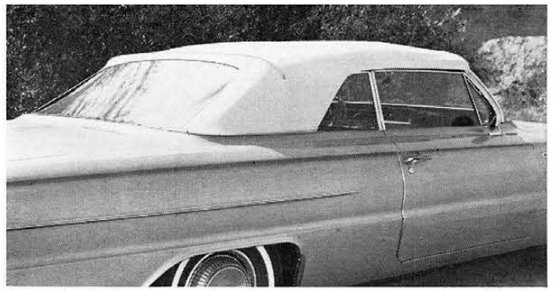
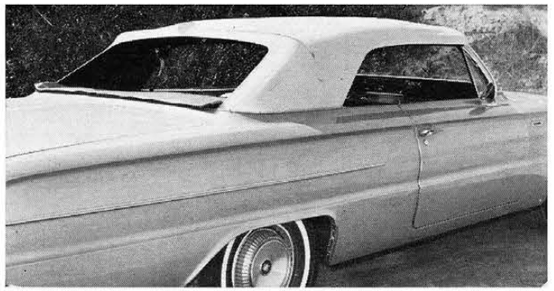


THE JOYS OF A CONVERTIBLE TOP: ALL BUTTONED UP . . .



SURREY EFFECT FOR HOT WEATHER . . .

BUICK INVICTA *continued*

the Turbine Drive transmission is an especially happy union. The big V-8 produces a very husky 445 ft./lb. of torque at only 2800 rpm and plenty of horsepower all the way from idle up to the peak at 4400 rpm. The transmission does some nice things with these factors and produces outstanding performance all along the way.

Test weight of our Invicta was 4770 lb. (with two people and a full tank of gas). Yet it accomplished standing-start quarter-miles in 16-17 sec. and, more amazingly, hit 100 mph within 26 sec. Performance in the 40-90 mph range rates among the best of the strictly stock cars we've tested and its only "speed" equipment is a single 4-barrel carburetor atop that 401-cu.-in. (4.187 in. bore, 3.64 in. stroke) engine, 10.25:1 compression ratio and that magic transmission. A brief explanation of its workings, therefore, is in order.

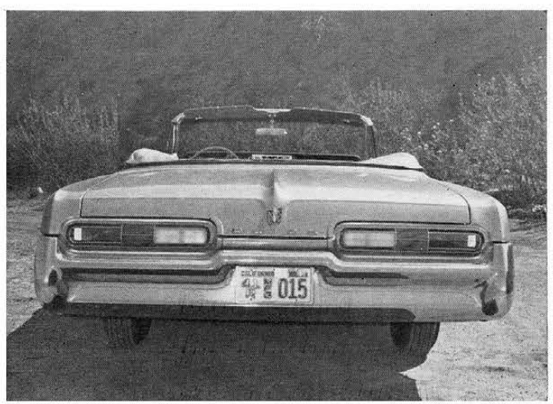
Buick's unique Turbine Drive is well known for its exceptional smoothness. The reason there are no bumps during shifting is simple; there are no shifts. There are gears in the unit, of course, and with the control lever in D, starts are effected by one turbine driving through gears. But at around 20 mph a second turbine picks up the drive and, from that point on up to about 75 mph, changes in torque multiplication are effected by variable pitch stator blades with no intervening gears. However, Lo range can be selected, and in this position a gear ratio of 1.82:1 is held at all times. Use of Lo gear does not affect the car's initial breakaway performance at all, this being near-perfect, with enough torque to produce tire squeak but not so much as to cause excessive wheelspin. The car will just top 60 mph in low and our 0 to 60 time of 8.5 seconds was obtained in this manner. The same test in Drive range takes about 2 seconds longer than in low.

Another interesting facet of the Turbine Drive transmission is its exceptional efficiency. The old Dyna-Flow was notoriously heavy on fuel consumption, but the modern Buick torque converter is very good in this respect, especially when we consider the size of the engine (401 cu. in.).

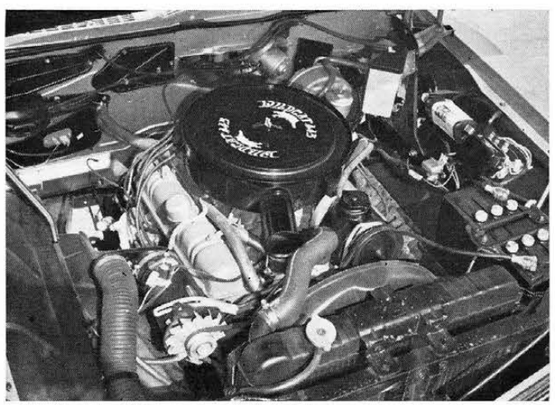
Hand-in-hand with engine and transmission development at Buick has been brake research; if what goes up must come down, then what goes fast must also stop quickly. We gave the Invicta our usual preliminary brake test of one all-out stop from 80 mph. And stop it did, with no fuss, muss or bother; just one enormous howl as the tires protested the treatment. The car tracked a straight line, didn't fish-tail or lock up a wheel and didn't show a sign of fade. Another such stop a minute later verified it: Buick has the best brakes of any American car. Buick obviously appreciates the rapid-heat-dissipation theory of gaining powerful and lasting brakes. It uses 12-in. finned drums front and rear, the front pair being of aluminum with cast iron liners, the rear made entirely of cast iron. Swept area (total of all four brakes) is a generous 320.49 sq. in. The brakes are activated by a vacuum booster system and are a bit touchy if suddenly jammed on—they lock all the wheels—and therefore require a bit of preliminary learning by the new owner.

Because Buick has clung to its big brakes, it also has had to stick with 15-in. wheels while the rest of the industry has stampeded to 14 and even 13 in., seeking the ever-softer ride. Bully for Buick, we say! Our only regret is that Buick doesn't equip the car with a wider tire than the standard 7.60-15 low profiles. With the power available and speed obtainable in this car, it seems under-tired and the optional 8.00-15s would be worth the cost. The smaller tires break traction at the least provocation during hard acceleration. A little more patch area on the ground would help that situation and also add more resistance to understeer skidding at the front.

REAR STYLING SHOWS DEFINITE IMPROVEMENT.



401 CU. IN. ENGINE IS 4 IN. FARTHER FORWARD.



TOP DOWN FOR AIR CONDITIONING.

The basic handling of the car is good, but could be better. A limited-slip "Positive Traction" differential is available and helps; it is particularly worthwhile for buyers in inclement regions. Almost-but-not-quite shock absorbers provide adequate about-town damping qualities, but here again there's a bit more needed for high speed cruising. Eliminating the old torque tube driveline and substituting the torque arm and track bar type of location seems to have helped Buick's handling immensely. Oversteering tendencies have been cut down by this system, and if you remember to turn into the corner before you get to it (thereby getting everything all leaned over and into shape to hold a good line through the corner), you can go through surprisingly fast. If you wait until you're at or into the corner before you start turning, then you merely get a great porridge of understeer and have to hack your way through.

The differential ratio on the Invicta is 3.23:1, a ratio designed to give high-speed cruising with low-speed engine noise. This gives just over 25 mph per 1000 rpm; or 100 mph at an unthrashed 4000 rpm. At maximum torque, the car is cruising nicely along at 70 mph; at maximum bhp, 110. The Electra also carries a 3.23:1 ratio, but 8.00-15 tires, so the engine turns a bit slower to propel its extra 150 lb.

Our test Invicta was an early production-line model and as such developed a few squeaks and groans we didn't expect; however, this sort of thing is usually taken care of (by reputable dealers, at least) and doesn't rate criticism. Otherwise the body was tight and the panels fit well, two facts that enhance Buick's reputation as a builder of better cars.

When you come right down to it, Buick has built a better car for 1962—better in performance and better in finish and material quality. The Invicta will enhance anyone's driveway. ■

TRUNK HAS LARGE, USABLE VOLUME.

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BUICK INVICTA

SPECIFICATIONS

List price	$3286
Price, as tested	3853
Curb weight, lb	4420
Test weight	4770
distribution, %	54.7/45.3
Tire size	7.60-15
Tire capacity, lb	5240
Brake swept area, sq in.	320
Engine type	V-8, ohv
Bore & stroke	4.19 x 3.64
Displacement, cc	6574
cu in.	401
Compression ratio	10.25
Bhp @ rpm	325 @ 4400
equivalent mph	110.5
Torque, lb-ft	445 @ 2800
equivalent mph	70.3

GEAR RATIOS

2nd (1.00)	3.23
1st (1.82)	5.88
1st (1.82 x 3.4)	20.0

DIMENSIONS

Wheelbase, in.	123.0
Tread, f and r	62/61
Over-all length, in	214.1
width	78.0
height	56.3
equivalent vol, cu ft.	545
Frontal area, sq ft.	24.4
Ground clearance, in.	7.0
Steering ratio, o/a	19.9
turns, lock to lock	3.5
turning circle, ft.	46
Hip room, front	63.3
Hip room, rear	56.0
Pedal to seat back, max.	43
Floor to ground	13
Luggage vol, cu ft.	n.a.

PERFORMANCE

Top speed (est), mph	115
best timed run	
3rd ( )	
2nd ( )	
1st (4500)	62

FUEL CONSUMPTION

Normal range, mpg	12/15

ACCELERATION

0-30 mph, sec.	3.1
0-40	4.5
0-50	6.2
0-60	8.5
0-70	11.5
0-80	15.6
0-100	26.0
Standing ¼ mile	16.7
speed at end	82.5

PULLING POWER

2nd	530 @ 45
1st	off scale
Total drag at 60 mph, lb.	150

SPEEDOMETER ERROR

30 mph, actual	26.2
60 mph	54.8
90 mph	85.0

CALCULATED DATA

Lb/hp (test wt)	14.6
Cu ft/ton mile	116.5
Mph/1000 rpm	25.1
Engine revs/mile	2390
Piston travel, ft/mile	1450
Car Life wear index	34.6

ACCELERATION & COASTING