



CAR LIFE ROAD TEST

how the much larger V-6 engine would show up in terms of smoothness and vibration—hence the manual transmission with no slippery fluid coupling to disguise engine performance.

Somewhat to our surprise the 225/155 V-6 Special engine remains just as smooth and quiet as the original 194/135 unit. As is well known, this engine has irregular firing and is not in perfect balance. At very low speed, 15 mph and 660 rpm, there is just a trace of flutter in high gear, but in truth we haven't found a single in-line 6-cyl. that will pull smoothly at much under 20 mph. And from 20 mph on up to over 90 mph this unusual engine is as smooth and quiet as most V-8s. Of course, the performance isn't quite as good, particularly in the upper speed ranges, but those buyers who elect the economy engine will be surprised; we recorded 20.3 mpg on one 300-mile run, cruising at 65-70 mph most of the time. From considerable experience with the 1961 and '62 aluminum V-8 models we can summarize the '64 V-6 in this way; performance virtually identical with that of the previous V-6, fuel consumption about the same as the previous V-8 or, in other words, down about 2 mpg because of the increased size and weight (both engine and vehicle).

With unit construction abandoned in favor of a perimeter-type frame, the new Special has gained some advantages on the road. Previous experience with all of the BOP in-between models showed a trace of road rumble—almost as if the drive line was slightly out of balance or the tire treads were of a noisy pattern. This sort of noise is difficult to insulate with unit construction and we can report that the 1964 Special is a big step forward in this department. But, while Buick doesn't give any figures, we feel that the new

frame and body construction isn't quite as rigid in torsion as it was before. This feel may possibly be due to the fact that the car is heavier, quieter inside, and more softly sprung. At any rate, the plus factors have it over the minus ones and the new Special is now even more closely comparable in luxury to its bigger and more expensive brothers.

All of our staff agreed that the softer suspension is not acceptable for high-speed driving. It's nice enough around town but on the road the marshmallow feel is close to the level which induces seasickness. Heavy-duty shocks will definitely be needed by the owner who drives long distances over undulating roads.

The brakes, too, are not as good as they were last year. Apparently the extra 400 lb. is just too much for there was some sign of fade during one all-on stop from 80 mph and almost no brakes at all on the second try. We also objected to the optional power assist and have the lumps to prove it. The boost is much too powerful and over-sensitive.

The V-6 has one important advantage over the V-8 model: because of the lighter engine the front wheels carry only 52% of the total weight, measured with driver aboard, as is our practice. Despite this our test car arrived with power steering. This of course makes parking much easier and is also advantageous on the highway because the power option includes quicker steering with the number of turns (lock to lock) reduced from 5.8 to 4.1.

The V-6 models carry an axle ratio of 3.08:1 with automatic transmission, or 3.23:1 with standard 3-speed, as on the test car. The 3.23 is a good ratio, chosen for economy even though the engine doesn't quite have enough

RALPH POOLE PHOTOS

Buick Special V-6

An Automatic Transmission is Recommended for the Bargain Buick

IN THE BUICK family, the name "Special" has long been used to designate the smallest car in the line. For 1964, however, the Special has been moved up in size and old-time auto buffs might wonder why this new model hasn't been called a "Super" after the old Series 50 model.

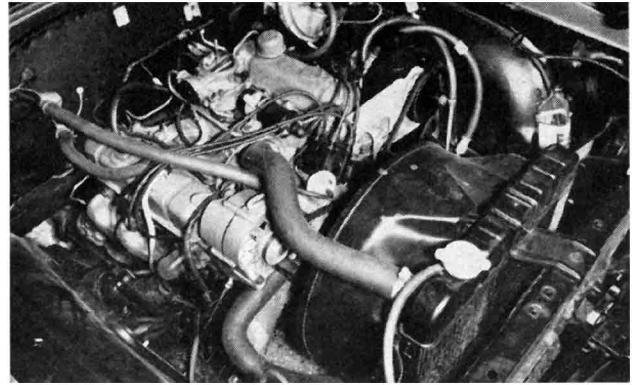
In short, the 1964 Special has been

moved up to the Super category, with a complete redesign from bumper to bumper. The all-new GM A-body gives it more length, more width, more room. The actual box volume from external dimensions has gone up by 15%, as compared with the 1960 model. Weight has gone up too, an average of about 12.5%. To offset this disad-

vantage the two engines have been increased in size: the V-6 by 13.6% and the V-8 by 39%.

For this test, *Car Life* elected to try the lowest priced model in the line: a V-6 with standard manual transmission. Our purpose was to compare the results with an earlier V-6 (*Car Life*, April 1962). We also wanted to see

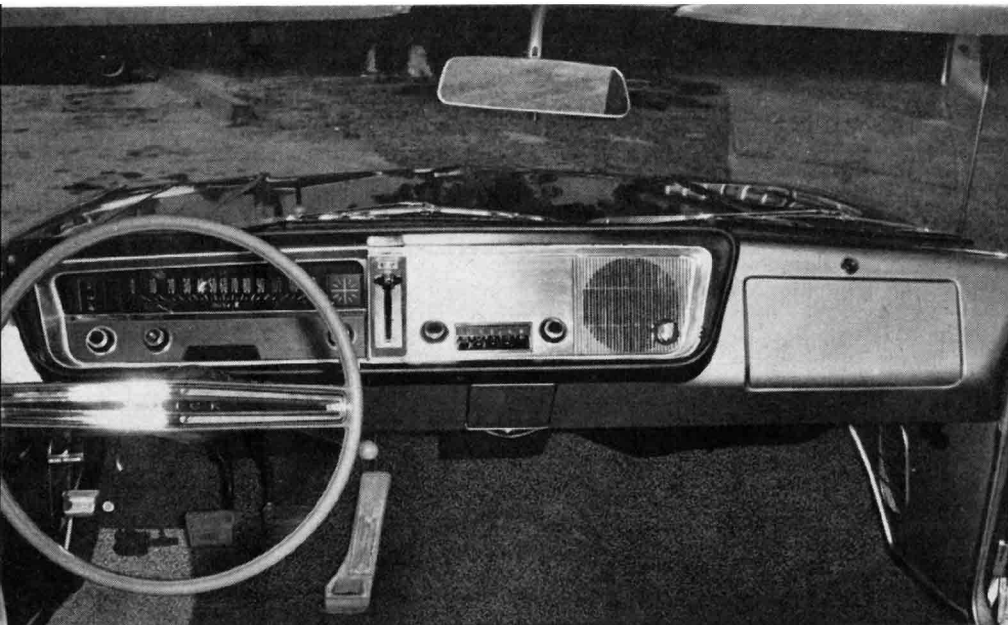




SHORT V-6 leaves plenty of access space.

Buick Special

TASTEFUL INTERIOR has convenient control location but only one gauge.

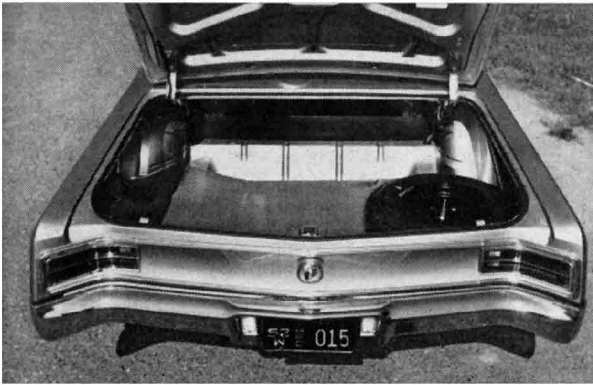


power at the top end to pull over 4100 rpm (93 mph). We also found that the engine went "flat" at about 4200 rpm even though the power is supposed to peak at 4400 rpm. Hence the shift points used for acceleration tests and given in the data panel are all at 4200 though the engine could go higher.

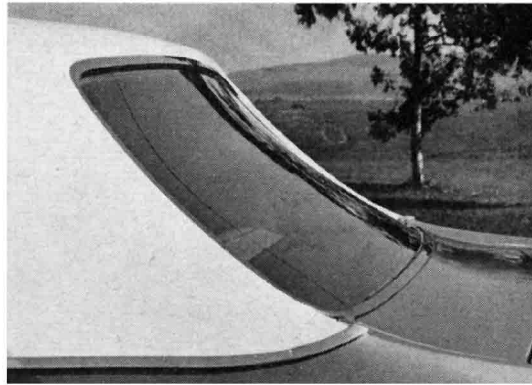
The 3-speed transmission is, in our opinion, far and above the worst feature of the car. In slightly over 1000 miles of driving it caused every one who drove it to dislike the car. It was so bad that one wonders whether the design wasn't evolved on purpose—to discourage the growing segment of car buyers who still insist on manual control of the transmission. There are two things wrong in this department, both serious. First, the controls: this is a column-shift model and one of the worst we've ever encountered. First and reverse positions work fairly well, but the shift to 2nd is accompanied by a loud clang as an internal spring makes the cross-over into the new gate. The GM servo-cam type synchronizers used for 2nd and high are very effective, but the levers and rods aren't strong enough to stand up under the pressure when a reasonably fast shift is attempted.

The second fault is the choice of gear ratios. In first gear, the overall ratio is only 8.33:1 and a car with this high a weight/power ratio needs a little more, perhaps closer to 10:1. Second gear is also poorly chosen, at 4.78:1 overall. This is in effect a good 3rd gear for a 4-speed transmission. The problem comes in traffic, where 15 mph in 2nd is almost the comfortable minimum and acceleration not too good. The answer might be a quick shift to first but not many owners can effect this maneuver without synchro-mesh. Even those who are familiar with the necessary double-clutch technique hesitate to do so because of the risk involved.

And, to cap the climax, neither the Special V-6 nor the V-8 is available with the 4-speed all-synchromesh transmission. Of course, the 1964 Buick Service Manual says "There is no ob-



HUGE TRUNK is side benefit of new body styling.



CONVEX CURVED glass is used for side windows, a concave panel helps sculpt the back.



jection to making starts in second gear on level ground." However, the V-6 won't start in 2nd gear without the clutch being slipped excessively. We tried it and not only is acceleration slow, but the clutch begins to smell within two blocks.

It therefore becomes obvious that

we cannot recommend the Buick Special V-6 with 3-speed manual transmission; it should only be ordered with the automatic transmission. But that adds \$200 to the price and probably puts a Buick out of reach for some buyers who might want one but can't afford that additional cost.

The overall level of finish and interior details was good, as might be expected from a firm with Buick's reputation. We left this car with a question: "What ever happened to that near-perfect 3-speed transmission that Buick used to use in the famous 60 series Century model?" ■

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1964 BUICK Special 4-door sedan

SPECIFICATIONS

List price	\$2542
Price, as tested	2888
Curb weight, lb	.....	3150
Test weight	.....	3450
distribution, %	.....	52/48
Tire size	.....	6.50-14
Tire capacity, lb	.....	3520
Brake swept area	.....	269
Engine type	.....	V-6, ohv
Bore & stroke	.....	3.75 x 3.40
Displacement, cu in	.....	225
Compression ratio	.....	9.00
Carburetion	.....	1 x 1
Bhp @ rpm	.....	155 @ 4400
equivalent mph	.....	99.5
Torque, lb-ft	.....	225 @ 2400
equivalent mph	.....	54.2

EXTRA-COST OPTIONS

Tinted glass, wsw tires, w.s. washer, remote control mirror, power brakes, power steering, radio.

DIMENSIONS

Wheelbase, in	.....	115.0
Tread, f and r	.....	58.0
Over-all length, in	.....	203.5
width	.....	73.4
height	.....	54.4
equivalent vol, cu ft	.....	470
Frontal area, sq ft	.....	22.2
Ground clearance, in	.....	5.8
Steering ratio, o/a (power)	.....	20.9
turns, lock to lock	.....	4.1
turning circle, ft	.....	40.8
Hip room, front	.....	60.3
Hip room, rear	.....	60.0
Pedal to seat back, max	.....	38.5
Floor to ground	.....	10.5
Luggage vol, cu ft	.....	18.3
Fuel tank capacity, gal	.....	20.0

GEAR RATIOS

4th () overall	.....
3rd (1.00)	.....	3.23
2nd (1.48)	.....	4.78
1st (2.58)	.....	8.33

PERFORMANCE

Top speed (4100), mph	.....	93
Shifts, @ mph (manual)		
3rd ( )	.....
2nd (4200)	.....	64
1st (4200)	.....	37

ACCELERATION

0-30 mph, sec	.....	4.9
0-40	.....	8.8
0-50	.....	12.0
0-60	.....	16.9
0-70	.....	23.7
0-80	.....	32.8
0-100	.....
Standing 1/4 mile, sec	20.5
speed at end, mph	65.5

FUEL CONSUMPTION

Normal range, mpg	18-21
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SPEEDOMETER ERROR

30 mph, actual	28.9
60 mph	57.7
90 mph	87.4

CALCULATED DATA

Lb/hp (test wt)	22.2
Cu ft/ton mile	.....	100
Mph/1000 rpm	.....	22.6
Engine revs/mile	.....	2650
Piston travel, ft/mile	.....	1505
Car Life wear index	.....	39.8

PULLING POWER

70 mph, (3rd) max. gradient, %	.....	7.0
50 (2nd)	.....	15.0
30 (1st)	.....	23.7
Total drag at 60 mph, lb	.....	150

