

MT RESEARCH road test

'55 Buick Century

Last year's bomb has become even more explosive with a vastly improved Dynaflow



We're off in a cloud of dust! If acceleration is what you want, you've found it. Century broke 10 seconds, 0 to 60

by Pete Molson

BUICK IS ONE OF THE FEW MAKERS to revive an honored name without using it on something totally different from the original. When its Century rejoined the front ranks of glamour cars in 1954, it was as a modern concept of the compact but big-engined original Century which lasted from 1936 to 1942. Now the new version has a year behind it. For '55 it incorporates a newsworthy parcel of improvements, plus major plastic surgery in lieu of a not-yet-needed basic styling change. Is the Century as much a standout as it was last year? Should it be your next car? Here are "just the facts" to help you make up your mind, which MT can't do for you.

Test car: Four-door sedan with new variable pitch Dynaflow, power steering, power brakes, sundry lesser items like search-tuning radio (with electric antenna), heater, power seat and windows, tinted glass, custom interior trim, various accessory groups.

Engine: Same big-but-light V8 as in '54, with overhead, inline valves at 45-degree

angles with cylinders' centerline. Higher piston domes have upped compression ratio to 9 to 1 with Dynaflow, while thicker head gaskets give 8.4 to 1 with synchromesh. Brake horsepower now 236 at 4600 rpm instead of 200 at 4100. Engine can breathe deeper with larger-throat, 4-barrel carburetor, redesigned manifold (larger cross-section inlet branches, streamlined exhaust ports), bigger exhaust valves (1 3/8 inches instead of 1 1/4), new camshaft for longer valve opening and .030-inch higher exhaust valve lift (Dynaflow models only). New slotted pistons; heavier main bearing caps to take higher compression.

Other options: Available without any of test car's extra equipment or with almost any combination thereof, plus air conditioning. Hard to get without Dynaflow. Standard-shift car preferable in mountainous country (because of coasting tendency of torque converter); resale value will be low. Power steering desirable to avoid heavy handling, power brakes (obtainable only on Dynaflow-equipped cars) to avoid harder pedal pressure. Standard interior less durable than custom trim of

test car. MT plans later test of bigger, heavier Super, with same engine and Dynaflow, power steering (standard).

What the car is like to drive: Entry and exit easy, driving position comfortable: steering wheel lower than earlier Buicks, seats deeper for long-legged drivers. Wrap-around windshield moves blind spot out of worst danger area, does not eliminate it. Top-notch visibility, but Century needs new wiper design of bigger models for adequate cleaning. Exclusive step-on parking brake easier than any other to set or release. Instrument panel design same as in '54 except round "redline" speedometer standard. Other 4 dials small and vague. Dynaflow quadrant on column down closer to panel. Glove compartment too far to right for convenient driver use. Someone forgot to allow space for cigarette lighter, which dangles under panel. Heat and vent unit does good job. Front vent windows produce wind noises. Accelerator pedal starting very quick; previous hard starting when hot now corrected. Engine satisfactorily quiet, especially so when warm.

Ease of handling: Up with last year's car; no constant vigilance needed in straight-line highway cruising. Handling in town in most cases, requiring little effort to perform any operation and benefiting from Dynaflow's improved response. Wheel requires quite hard tug at times (on crowned roads, or in false danger situations, when test car was deliberately thrown off pavement onto semisoft shoulder) before power boost cuts in, but retains controllability with engine stalled.

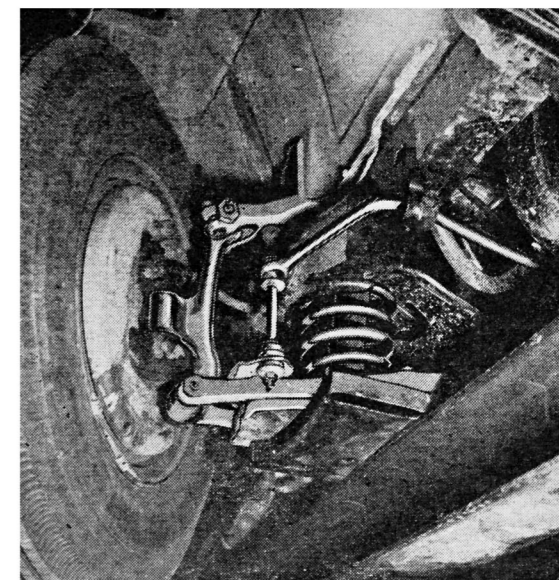
Acceleration: Near-phenomenal take-off: first MT test car to hit 60 mph from standing start in less than 10 seconds, leaving every '54 car behind; all-important highway passing acceleration equally remarkable (nearly 2 seconds faster than

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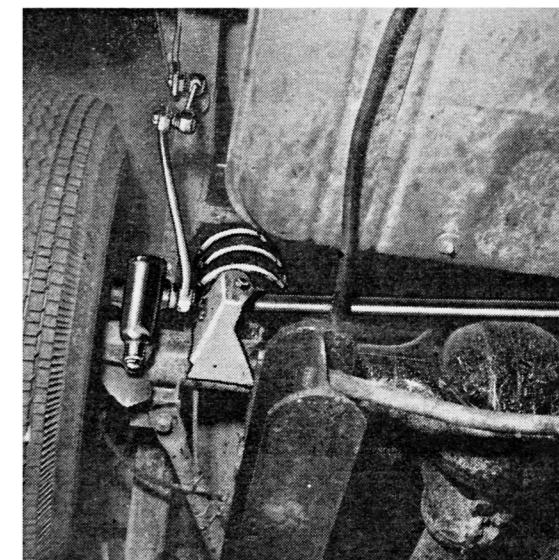
Roadability: Buick uses parallelogram-type steering system, designed to give better directional stability. To test this, we whipped wheel to one side, then other, at speeds of 50-60 mph; car quickly sought straightline course. Constant correction on straight road not required. Almost sports-car-like understeer characteristics thru fast corners: you find entire car crossing over white line (on inside turn) instead of rear end breaking loose to meet front. On fast choppy corner, there is some wallowing action. Steering wheel position good compromise between vertical and horizontal angles; comfortable for city or over-the-road driving. Finger-grips under steering wheel are helpful.

Ride: From 3 '55 Buicks we've driven it's evident that ride has been somewhat firmed up. Dips, bumps taken in stride, with oscillation, but not bounding action. Ride is steady on smooth road. More road noise than expected (test car not undercoated). Sidesway noticeable, not at all annoying, even around mountain curves taken at speeds up to 50 mph. Road shock transmitted to car in terms of hood shake, steering wheel vibration, but not thru front seat to driver.

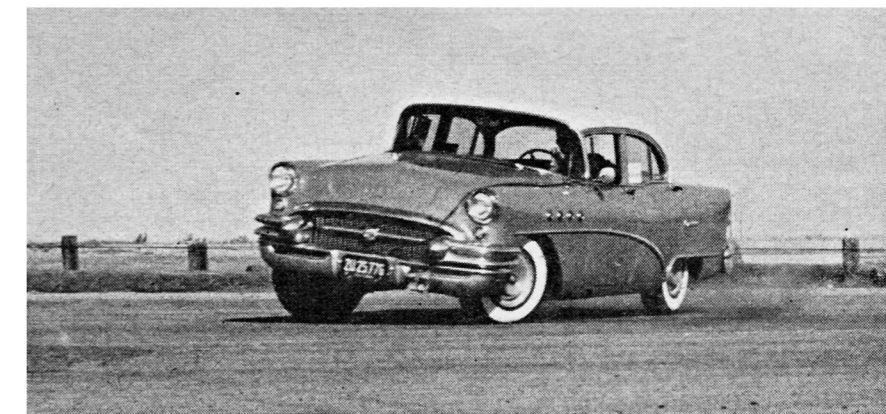
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Vertical shock absorbers within front coils give typical Buick ride, notable for that heavy feel its owners prefer



Buick clings to coils at rear also, plus lever-type shocks and torque-tube drive. Stability does not benefit from setup



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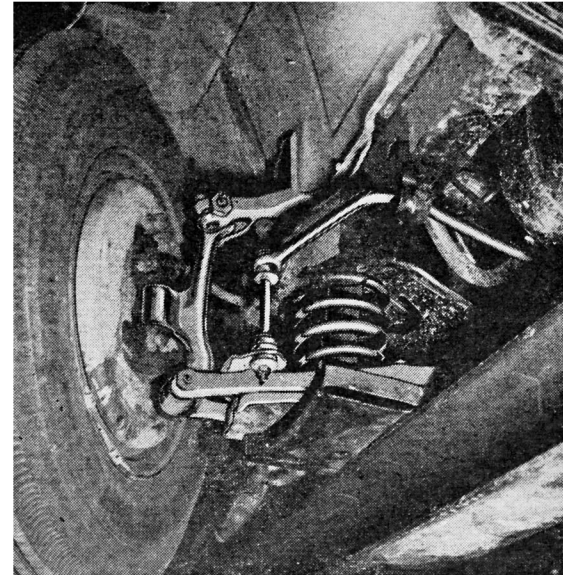
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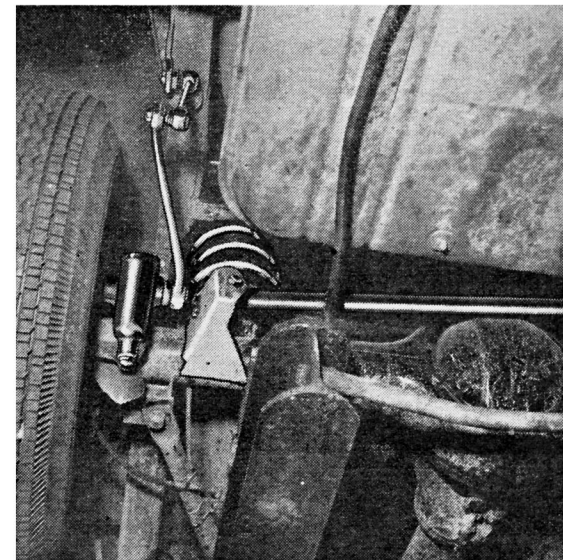
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'54 counterpart; beat even '54 Cadillac—last year's best—by full second). Quarter-mile tests slightly improved from '54 (still No. 1). Acceleration still smoother, even with 2 stator blade positions, than with any other automatic transmission. Hitting throttle to floorboard sets stator blades to take deeper bite of oil, hence gives not only definite acceleration boost but also not unpleasant, quiet zoom. Full throttle point is half-inch above floorboard; the extra pedal travel after full throttle changes stator blade angle, but owner or dealer can adjust linkage so high angle cuts in simultaneously with full throttle. Torque multiplication of converter now 2.1 at low angle and 2.5 at high angle, compared with last year's constant 2.45. Stall speed (highest that engine will rev up with driver's foot planted firmly on brake) now down from 1700 rpm to 1400 at low stator blade angle; in other words, acceleration no longer requires high revving, as with previous Dynaflo's. Or if you prefer, you can scream away at up to 2600 rpm (all speeds are for DRIVE range). Top speeds indicated wise de-emphasis of this factor: modest increase (just under 3 mph) more than satisfactory when compared with tremendous acceleration, especially in upper range.

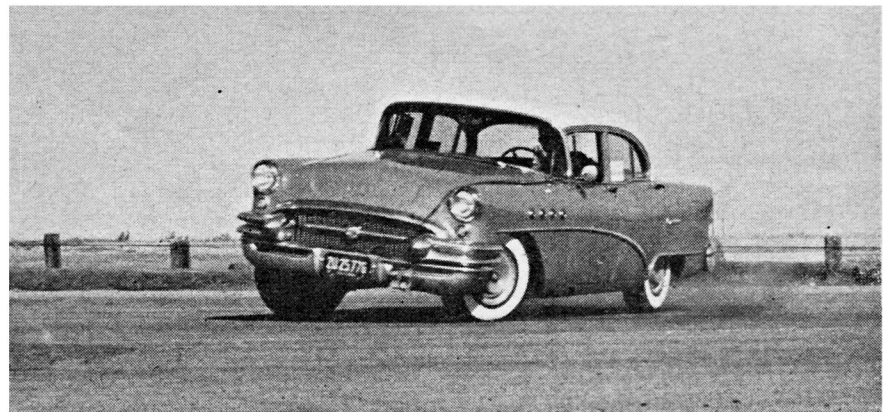
Braking: Higher power brake pedal has led to new higher accelerator for ease of pivoting on right heel. Wide pedal also positioned well for left-foot braking. Last year's electric vacuum pump abandoned. System now retains enough vacuum for about 2 powered stops after engine stalls; added leverage makes stops possible without "no brakes" feeling. Powerless con-



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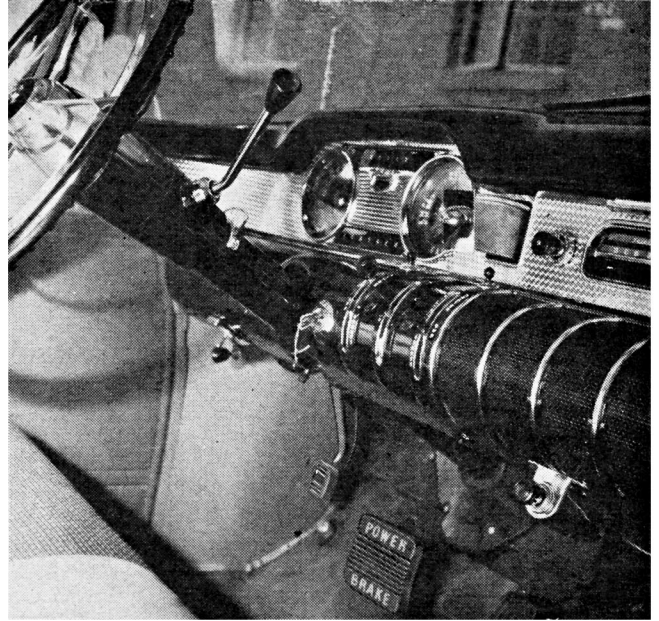
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'55 BUICK CENTURY continued



Century has done away with that irritating feature of even many expensive contemporary cars, a shoddily lined trunk



Front compartment is well arranged for comfortable driving. Buick retains '54 panel, fine foot-operated emergency brake

somehow persists despite hood shake, occasional road shock. Sidesway doesn't throw passengers about at any time. New deeper seats give longer-lasting comfort. Plenty of room in front and rear for heads, shoulders, backs, legs, toes. Interior attractive, practical. Typical well-finished GM product, bright and attractive, with few novel features. For its size, car is handy and pleasing to use on short hauls as well as longer ones. Doors open and shut easily; well-finished, average size (for '55) trunk. Inside rear door handles in-operative with lock buttons down.

Economy and Ease of Maintenance: Probable durability of engine and Dynaflow unit good (simplicity of transmission reduces service problems; variable stator blades do not complicate mechanism unduly); Dynaflow has cushioning effect on entire drive train, should increase period of new-car feel. Car well put together, body panels and doors fitting well and paint showing good surface. No squeaks or rattles developed during test except typical "wrap-around creak" and

complaint from front seat corner. Glove compartment lock difficult to operate. Small electrical difficulties: domelight and backup light switches failed, as did lighter socket. No problems that dealer could not correct easily during guarantee period.

Engine accessibility: Good for current V8s: all components accessible with minimum hassle except for distributor. Battery still same capacity; new smaller case clears exhaust manifold by wider margin for convenience and longer life. Simple servicing easily done at home. Not a car for hopping up (not that it needs it!) since engine has gone about as far as possible in stock form. No undue difficulties in way of servicing your Century.

Fuel economy: Slightly below that of last year's car at all steady speeds except 75; improved economy of Dynaflow shows up in improved tank mileage with moderate acceleration. Engine requires high-grade premium fuel (MT's usual Mobilgas Special produced no detonation even on simulated hillclimb of dynamometer).

GENERAL SPECIFICATIONS

ENGINE: Ohv V8. Bore 4.00 in. Stroke 3.20 in. Stroke/bore ratio 0.800:1. Compression ratio 9.0 to 1. Displacement 322 cu. in. Advertised bhp 236 @ 4600 rpm. Bhp per cu. in. 0.733. Piston travel @ max. bhp 2453 ft. per min. Max. bmep 154.5 psi. Max. torque 330 ft.-lb. @ 3000 rpm.

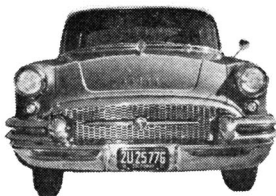
DRIVE SYSTEM: STANDARD transmission is three-speed synchromesh using helical gears. RATIOS: 1st 2.39, 2nd 1.525, 3rd 1.00, reverse 2.53. AUTOMATIC transmission Variable Pitch Dynaflow, 4-element torque converter with planetary gears. RATIOS: Drive 1.00 x converter ratio, Low 1.82 x converter ratio, reverse 1.82 x converter ratio. Maximum converter ratio at stall 2.1 (low stator angle) and 2.5 (high stator angle). OVERDRIVE transmission not available.

REAR AXLE RATIOS: Standard 3.9; Dynaflow 3.4.

DIMENSIONS: Wheelbase 122 in. Tread 59 front, 59 rear. Wheelbase/tread ratio 2.07:1. Overall width 76.0 in. Overall length 206.6 in. Overall height (empty) 62.3 in. Turning diameter 44.0 ft. Turns lock to lock 4.5. Test car weight 4300 lbs. Test car weight/bhp ratio 18.2:1. Weight distribution 55% front, 45% rear. Tire size 7.60 x 15 tubeless.

PRICES: (Including suggested retail price at main factory, federal tax, and delivery and handling charges, but not freight) CENTURY 4-door sedan \$2548, 2-door hardtop \$2482,* convertible \$2991, 4-door station wagon \$3175. (*List price; does not include excise tax, delivery, or handling charges.)

ACCESSORIES: Dynaflow \$193, radios \$93, \$114, \$122 and \$144, heater \$82, power steering \$108, power brakes \$39, power seat \$70 (\$45 on all convertibles except Special), power windows \$97, air conditioning \$591.



TEST CAR AT A GLANCE

'55 Buick Century with Dynaflow

REAR WHEEL HORSEPOWER

(Determined on Clayton chassis dynamometer. All tests are made under full load, which is similar to climbing a hill at full throttle. Observed hp figures not corrected to standard atmospheric conditions.)

67 road hp @ 1700 rpm and 24 mph
84 road hp @ 2000 rpm and 37 mph
93 road hp @ 2500 rpm and 58 mph
Max. 110 road hp @ 3100 rpm and 76 mph

TOP SPEED

(In miles per hour over surveyed 1/4-mile.)
Fastest 1-way run 107.3
Slowest 1-way run 105.5
Average of 4 runs 106.5

ACCELERATION

(In seconds, checked with 5th wheel and electric speedometer.)

Standing start 1/4-mile (78 mph) 17.5
0-30 mph 3.9
0-60 mph 9.8
10-30 mph 3.0
30-50 mph 4.4
50-80 mph 11.7

SPEEDOMETER ERROR

(Checked with 5th wheel and electric speedometer.)

Car speedometer read 33 @ true 30 mph
49 @ true 45 mph
65 @ true 60 mph
81 @ true 75 mph
116 @ top speed

FUEL CONSUMPTION

(In miles per gallon; checked with fuel flowmeter, 5th wheel, and electric speedometer. Mobilgas Special used.)

Steady 30 mph 19.3
Steady 45 mph 17.9
Steady 60 mph 16.0
Steady 75 mph 14.2
Stop-and-go driving over measured course 11.6
Tank average for 1148 miles 13.3

STOPPING DISTANCE

(To the nearest foot; checked with electrically actuated detonator.)

30 mph 44
45 mph 99
60 mph 163