

CAR LIFE ROAD TEST



ECONOMY CADILLAC

Image Incarnate With Climate Control

FABLED IN SONG and story, surrounded by the golden aura of excellence, desirability and success, Cadillac is at once the admiration, the outrage and the despair of its luxurious competitors. Cadillac is reputation rampant, image incarnate, mystique multi-fold—a promoter's dream—a product so overwhelmingly accepted that its popularity is now self-sustaining in what amounts to a psychological chain reaction. Everyone knows that it is one of the most expensive cars built in the United States—or is it? No, actually it is not; not necessarily. A Cadillac can become quite a bargain when compared with semi-prestige cars from the next-lower price stratum.

The bottom-of-the-line Calais model, Cadillac's nod to the increasingly affluent middle and working classes, retails for just \$4955 (f.o.b. factory). This is no more than a 1-carat stone's throw, or a few monthly payments, away from the upper echelons of Buick, Oldsmobile, Chrysler and Thunderbird, and is well below the price of Cadillac's direct competitors, Continental and Imperial.

For an accurate cost comparison, however, it is necessary to pile the scales high with the wealth of accessories Cadillac supplies without additional charge, but which are extra-cost options on many cars. Even on the Calais this includes such attractive and

useful devices as a heater and defroster, electric clock, Hydra-Matic transmission, center-front armrest, power brakes, power steering, extra lights for every conceivable purpose from cornering to trunk loading, remote-control side mirror, retractable seat belts both front and rear, 429-cu. in. V-8 engine, and variable-speed windshield wipers and washer, to name only the more substantial items. And all at no additional cost. Installation of this cornucopia of creature comforts in a lesser car would cost at least \$1200. Without doubt, membership in the prestigious Cadillac club has its benefits.

Each of the above mechanical ameni- ▶

CADILLAC

lies adds its mite to the overall impression of silky-smooth, utterly obedient power and luxury that has become as much a Cadillac trademark as the name itself. It is a road tester's cliché by now to describe in dazzled awe the Splendid Sensations of Driving a Cadillac—and yet the car's silence, responsiveness and sheer comfort exist and must be recognized. The goal of its designers obviously is to create the grand and ultimate expression of mobile luxury, and every year they come closer to doing it.

At steady freeway speeds of 70-75 mph, the overriding sensations for both driver and passengers are ease, quiet and safety. The car never seems

taxed or even extended—for example, while running at 75 mph for several hours on a hot day, and with the air conditioner on, the engine-temperature needle never left the bottom third of its range. The Calais simply never lost its cool.

When engaged in a car-brag, one of the Cadillac owner's most satisfying ploys is a sort of rich man's poor-mouth, earnestly maintaining that he buys his cars only for their economy. His usual evidence ranges from the extraordinary gas mileage he gets with that great big engine to the incredible distance those good, big 9.00-15s will go before the nibs wear off. Oddly enough, although his examples are un-

sound, he does have a point, a very good point.

The real economies in Cadillac ownership lie in mechanical reliability and sustained resale value. Initial cost is substantial, but the dependability, the promise of luxury and consequent high trade-in diminish very slowly, giving their final glow of consumer satisfaction at trade-in time—consequently predisposing the buyer toward purchasing another Cadillac, of course.

Prominent among the niceties of driving the 1966 Calais is a benefit poetically referred to in the descriptive brochures as "a subtle feel at the steering wheel." It turned out that this romantic phrase referred to a very practical and effective development by GM's Saginaw Steering Gear Division called "variable-ratio power steering," which is standard this year in all Cadillacs.

Simply stated, in this system the steering ratio changes to either side of center, with road-wheel lateral direction changing more rapidly as the steering wheel moves toward its rotational limits. This is accomplished through modifications to the shape of the Pitman shaft gear teeth: Shortening the side teeth gives a faster turning rate to right or left of center.

The variable-ratio steering system has two big advantages. First, the engineer can use a ratio which will give the driver desirable "road feel" in the middle of the steering range, where nearly all highway driving is done, without worrying about the effect this choice of ratio may have on the rest of the steering. Second, more rapid steering change may be given to the extremes of the range, used mainly for parking and slow cornering, where drivers of large cars like the Cadillac have always gone through their awkward exercise of endlessly winding and rewinding the steering wheel. Variable-ratio steering has reduced the number of steering wheel turns lock-to-lock from 3.6 turns in 1965 to 2.4 in 1966.

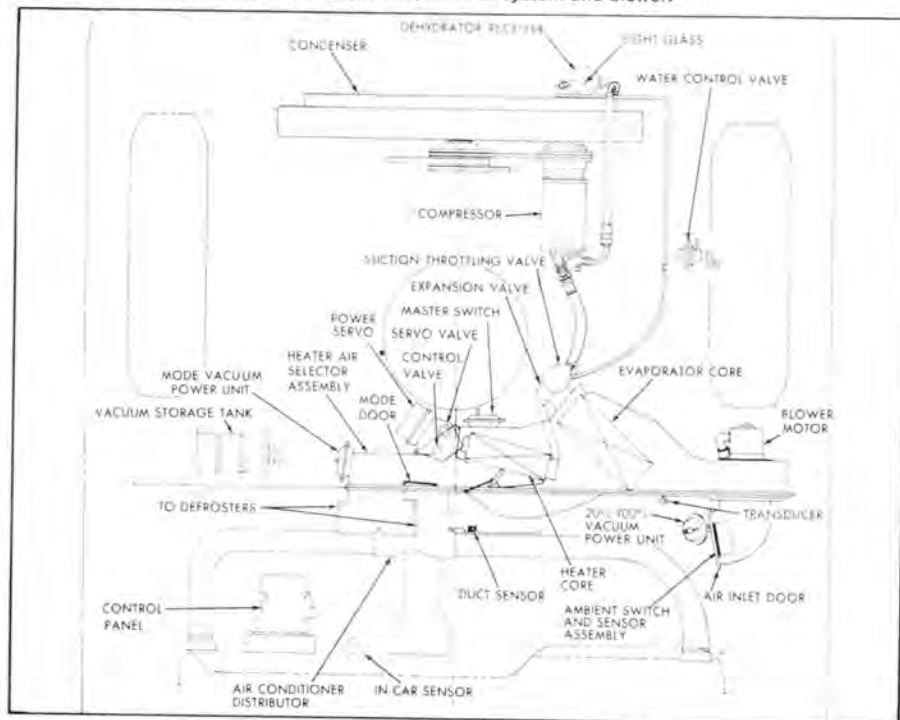
THE GREAT range of adjustments allowed by the "tilt and telescope" steering wheel and the 6-way power seat, two optional accessories, permit almost any driver to find a relaxed but authoritative driving position. The wheel can be tilted up and down through six stops, and can be slid in and out over a 3-in. span, even while the car is in motion (hardly to be recommended in traffic), and the seat can be raised, lowered, moved fore or aft and tilted forward or backward, all at the touch of the appropriate lever.

Basic engineering changes in the 1966 Cadillacs are as conservative as usual, consisting primarily of a new perimeter frame and revisions in front and

SET IT and forget it. The Cadillac Climate Control maintains a pre-set temperature, dialed in with the knob, left, and with lever at automatic.



TEMPERATURE SENSOR inside car transmits signals which open vents, valves, switches and ducts that regulate compressor, vacuum system and blower.



rear suspension components for ride and handling improvements. Silence and smoothness are refined by modified engine and body mounts, and a 2-piece propeller shaft with constant-velocity joints.

Cadillac's Moraine & Bendix vacuum-boosted hydraulic brakes have a dual-reservoir master cylinder which actuates the front and rear brakes separately, making it most unlikely the car will ever be entirely without brakes. Neither freeways nor mountains brought any signs of fade under normal driving. However, during the consecutive 80-0 brake-life tests, there was definite evidence of fade during the second all-out stop. Admittedly, it will take a set of remarkable brakes to bring the over-5000-lb. Cadillacs to repeated smooth and safe halts, but such systems are available, and on Cadillac's competitors.

One of the most impressive accessories on today's automotive market, both in cost (\$484.15) and operation,

is Cadillac's automatic Climate Control (formerly called Comfort Control), which combines heating and air conditioning functions into a single system. The appearance of the control panel for the unit is deceptively simple, with just two settings necessary: A thermostat dial that reads from 65° to 85° and a lever that can be positioned at either "automatic" or "defrost."

TO PUT Climate Control into action, one sets the desired temperature on the thermostat, then selects the mode of operation with the lever: That is all. The system then supplies dehydrated air, either warmed or cooled, to bring the interior of the car's air into the specified temperature range. Everything is automatic—individual temperature sensors located about the car transmit their messages back to the power-servo mode and selector centers, which in turn open and close the vents, valves, switches and ducts which control the operation of the compressor,

vacuum system, blower motor and air distribution chambers.

In addition, the Climate Control system almost seems to have a degree of free choice. If turned on when the car is started up on a cold morning, it simply waits until heat is available to it from the engine coolant before going into operation. And, too, when interior temperatures are completely out of line with its instructions, it attacks them with impatient vigor, supplying extra-hot or icy air under full blast from the blower until matters are under control, then throttles itself back to a silent, contented and masterful maintenance of the status quo.

Among the many optional accessories which naturally are provided for the gilding of Cadillacs are various am/fm and stereo radio combinations, bucket seats with headrests and a reclining mechanism, a rear-window defogger, power door locks, power window vents and the like. Within the long list, however, are several items



CHAN BUSH PHOTOS





CRISP, CLEAN and finless, the Cadillac Calais' lines lead in unbroken sweep from vertical front to vertical rear. The smooth side expanse is broken only by the rectangular cornering light on the front fender and the slimmest of chromium accent stripes.

which have that certain touch of devil-may-care elegance and flair. One of these is the seat warmer, a device which makes use of an electrically conductive carbon yarn developed by Union Carbide Corporation. The yarn is woven with insulating glass yarn into a high-strength, high-electrical-resistance cloth, which is installed in the seat backs and cushions. The activating current is disconnected by a

thermal switch when heater water reaches a temperature of 150° F, allowing use of the regular heating system.

Another accessory of special interest is the automatic level control, which brings the car back to an even keel with up to 500 lb. in the trunk or rear seat. Trailer buffs will covet this feature on their own cars, recognizing its ability to compensate for tongue weight.

And, approaching drivers at night will pass more safely when low beams have not been cocked up by a trunkful into the high-beam position.

Blanking out old memories of lacquered dorsal fins cavorting in a frothy sea of chrome, the present-day simplicity, good taste and permanence of Cadillac styling are prominent among the factors that make its cars a good buy. In the 1966 models this relative

1966 CADILLAC CALAIS COUPE



DIMENSIONS

Wheelbase, in.....	129.5
Track, f/r, in.....	62.5/62.5
Overall length, in.....	224.0
width.....	80.0
height.....	54.6
Front seat hip room, in.....	62.0
shoulder room.....	59.7
head room.....	38.5
pedal-seatback, max.....	43.0
Rear seat hip room, in.....	55.0
shoulder room.....	60.6
leg room.....	38.2
head room.....	37.6
Door opening width, in.....	43.5
Floor to ground height, in.....	14.0
Ground clearance, in.....	6.0

PRICES

List, fob factory.....	\$4955
Equipped as tested.....	6077
Options included: Air conditioning, door-edge guards, emission control, tinted glass, am radio with power antenna and rear speakers, 6-way power seat, tilt and telescope steering wheel, whitewalls, power windows.	

CAPACITIES

No. of passengers.....	6
Luggage space, cu. ft.....	17.1
Fuel tank, gal.....	26.0
Crankcase, qt.....	5.0
Transmission/diff., pt.....	6.0/5.0
Radiator coolant, qt.....	18.2

CHASSIS/SUSPENSION

Frame type.....	perimeter
Front suspension type: Independent by short and long control arms, coil springs, telescopic shock absorbers, link-type stabilizer.	
ride rate at wheel, lb./in.....	86
anti-roll bar dia., in.....	0.815
Rear suspension type: Live axle with 4-link location, coil springs, telescopic shock absorbers.	
ride rate at wheel, lb./in.....	115
Steering system: Concentric gear, variable-ratio power steering with parallel drag-link and spherical spindle joints.	
gear ratio.....	variable
overall ratio.....	n.a.
turns, lock to lock.....	2.4
turning circle, ft. curb- curb.....	44.7
Curb weight, lb.....	4760
Test weight.....	5150
Weight distribution, % f/r.....	52/48

BRAKES

Type: Dual-line hydraulic, duo-servo shoes in composite drums.	
Front drum, dia. x width, in.....	12 x 2.5
Rear drum, dia. x width.....	12 x 2.5
total swept area, sq. in.....	377.0
Power assist..... vacuum, integral line psi @ 100 lb. pedal.....	930

WHEELS/TIRES

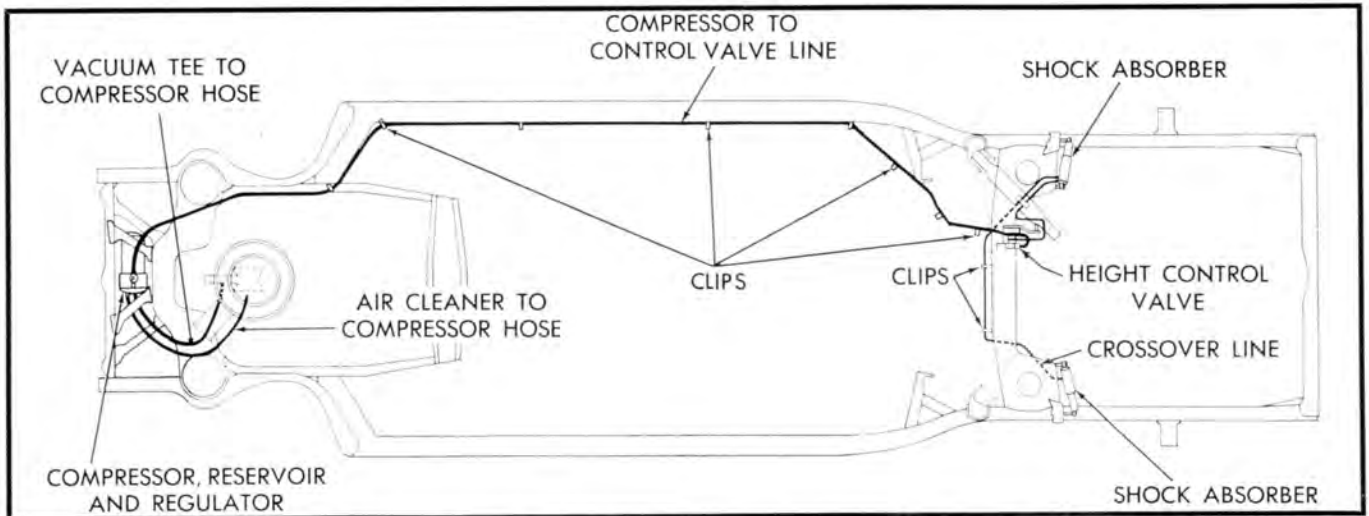
Wheel size.....	15 x 6JK
optional size available.....	none
bolt no./circle dia., in.....	5/5.5
Tires: UniRoyal Laredo	
size.....	9.00-15
recommended inflation, psi.....	24
capacity rating, total lb.....	5680

ENGINE

Type, no. cyl.....	V-8, ohv
Bore x stroke, in.....	4.13 x 4.00
Displacement, cu. in.....	429
Compression ratio.....	10.5
Rated bhp @ rpm.....	340 @ 4600
equivalent mph.....	120
Rated torque @ rpm.....	480 @ 3000
equivalent mph.....	78
Carburation.....	Carter AFB, 1x4 barrel dia., pri./sec... 1.4375/1.6875
Valve operation: Hydraulic lifters, pushrods and overhead rockers.	
valve dia., int./exh.....	1.875/1.50
lift, int./exh.....	0.427/0.466
timing, deg.....	34-102, 89-63
duration, int./exh.....	290/332
opening overlap.....	97
Exhaust system: Single, co-axial resonator.	
pipe dia., exh./tail.....	2.5/2.25
Lubrication pump type.....	spur gear
normal press. @ rpm.....	30 @ 1300
Electrical supply.....	alternator
ampere rating.....	55
Battery, plates/amp. rating.....	13/73

DRIVE-TRAIN

Transmission type: Variable vane torque converter, planetary gearbox.	
Gear ratio 4th () overall.....	
3rd (1.00).....	3.21
2nd (1.48).....	4.76
1st (2.48).....	7.64
1st x t. c. stall (2.00).....	15.28
synchronous meshing.....	planetary
Shift lever location.....	column
Differential type: Hypoid with cone clutch limited slip.	
axle ratio.....	3.21



OPTIONAL WITH Cadillac cars is this automatic leveling control which maintains the car on an even keel with up to 500 lb. in the luggage compartment. Motor-driven compressor supplies regulated air pressure to special rear shock absorbers.

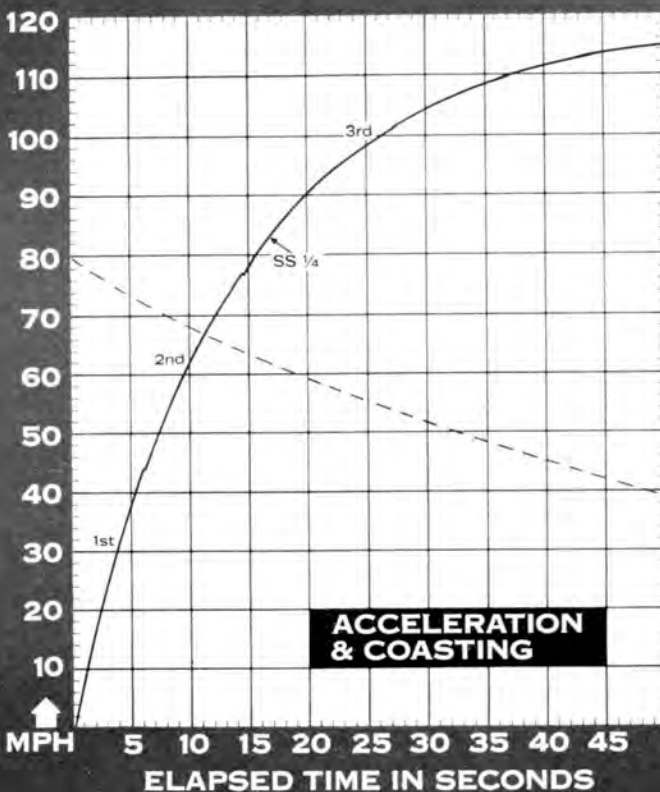
understatement extends all the way from the front grille through the instrument panel and back to the rear bumper. The front and rear ends profit both from design simplification and the omission of chrome from around the headlights and the side-fender cornering lights, from the tops of the fenders, and even from painting the lower half of the rear bumper in the car's body color.

The instruments are few, obvious in purpose and natural to use. As on the Climate Control panel, functions have been combined wherever possible, a welcome relief from unnecessarily proliferating knobs, handles, levers, switches and buttons. Careful, effective design like this is difficult, but highly rewarding to the customer.

In discussing the possibility that a Cadillac, particularly the Calais model,

may under some circumstances be considered a bargain, we have deliberately omitted Cadillac's greatest stock in trade: Pride of ownership. Each buyer must weigh for himself the intangible value of seeing a Cadillac each morning when he opens the garage. But pride aside, pound for pound and function for function, the Calais is good value in any automotive marketplace. ■

CAR LIFE ROAD TEST



CALCULATED DATA

Lb./bhp (test weight)	15.1
Cu. ft./ton mile	112
Mph/1000 rpm (high gear)	26.0
Engine revs/mile (60 mph)	2310
Piston travel, ft./mile	1540
Car Life wear index	35.5
Frontal area, sq. ft.	24.3
Box volume, cu. ft.	567

SPEEDOMETER ERROR

30 mph, actual	29.3
40 mph	38.9
50 mph	47.8
60 mph	57.1
70 mph	66.7
80 mph	76.2
90 mph	86.4

MAINTENANCE INTERVALS

Oil change, engine, mo.	2
transmission/diff., miles	24,000
Oil filter change	6000
Air cleaner service, mo.	6
Chassis lubrication	as req.
Wheelbearing re-packing	as req.
Universal joint service	as req.
Coolant change, mo.	24

TUNE-UP DATA

Spark plugs	AC-44
gap, in.	0.035
Spark setting, deg./idle rpm	5/400
cent. max. adv., deg./rpm	9/2000
vac. max. adv., deg./in. Hg.	12/20
Breaker gap, in.	0.016
cam dwell angle	28-32
arm tension, oz.	19-23
Tapet clearance, int./exh.	0/0
Fuel pump pressure, psi	5.3-6.5
Rad. cap relief press., psi	13.5-16.5

PERFORMANCE

Top speed (4400), mph	115
Shifts (rpm) @ mph	
3rd to 4th ()	
2nd to 3rd (4400)	77
1st to 2nd (4200)	44

ACCELERATION

0-30 mph, sec.	4.0
0-40 mph	5.4
0-50 mph	7.3
0-60 mph	9.4
0-70 mph	12.3
0-80 mph	15.6
0-90 mph	19.8
0-100 mph	26.2
Standing 1/4-mile, sec.	17.0
speed at end, mph	83
Passing, 30-70 mph, sec.	8.3

BRAKING

(Maximum deceleration rate achieved from 80 mph)	
1st stop, ft./sec./sec.	23
fade evident?	none
2nd stop, ft./sec./sec.	21
fade evident?	definite

FUEL CONSUMPTION

Test conditions, mpg	11.6
Normal cond., mpg	12-15
Cruising range, miles	312-390

GRADABILITY

4th, @ grade @ mph	
3rd	12 @ 65
2nd	19 @ 55
1st	28 @ 35

DRAG FACTOR

Total drag @ 60 mph, lb.	155
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