ROAD & TRACK

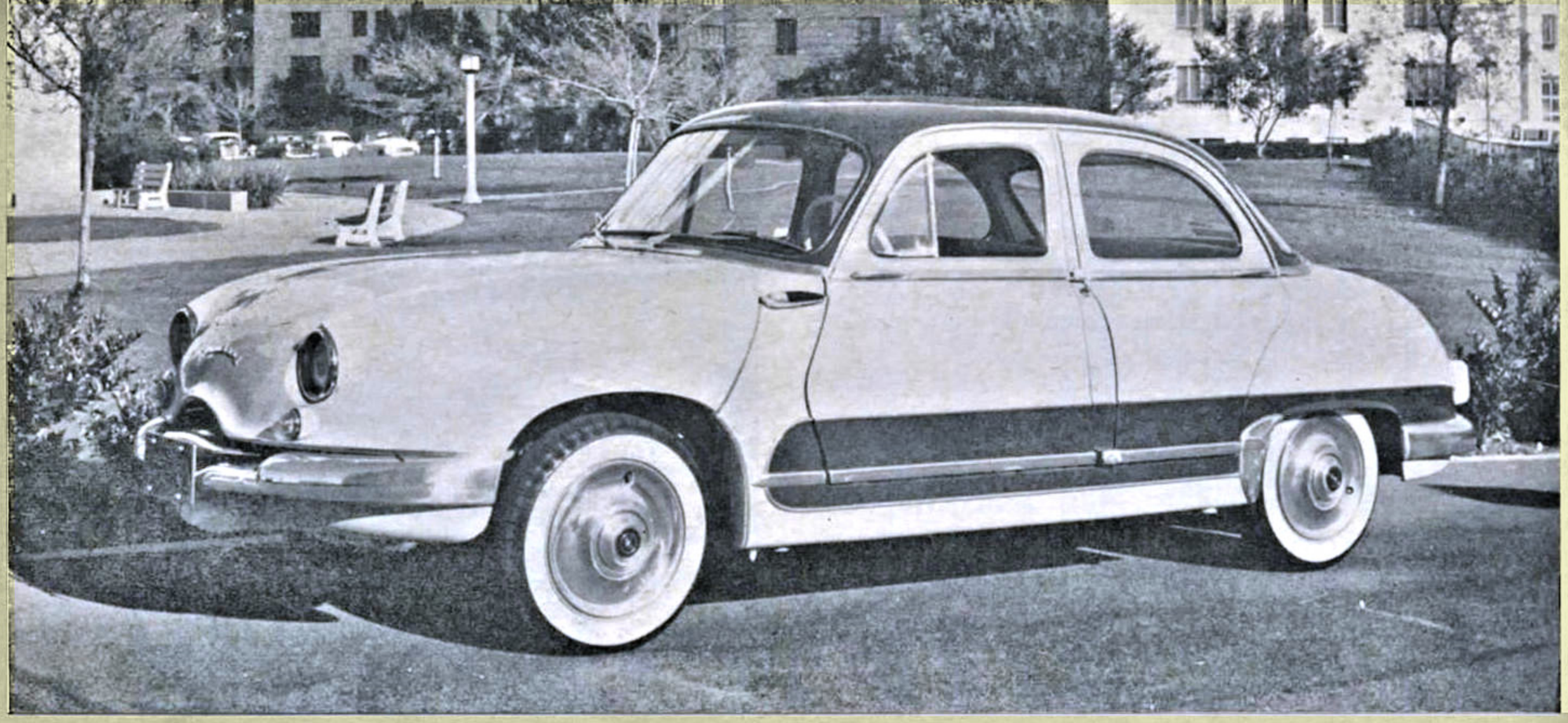
PRICE ONE DOLLAR

ROAD TEST ANNUAL

TESTS CONDUCTED IN 1959

Authoritative Reports on the American Compacts, Sports Cars, Imported Family Sedans, Economy Small Cars, Classic Cars

1960



ROAD TEST DYNA-PANHARD

The Radical Daughter of a Rich Old Pioneer Family

TWO AND A HALF years ago, when we last tested a Panhard sedan, we were pleased by how well it lived up to its slogan, "The car that makes sense." At the same time, we were somewhat concerned about the success of so mundane an approach.

But a lot has happened since then. Almost every American knows that the automobile market is not only changing but already very different from what it was in 1956. As for the imported sedans, the Volkswagen is no longer in undisputed top spot everywhere, and the new buyers who have come into this market may do practically anything. Broadly, they may settle on a conventional product—in effect, an American car scaled down—or something unusual.

This month we are re-examining a French product in each category. The story after this one is about a late bloomer, the Simca. It is, of course, the conventional one of the two, and it is considered by the Chrysler Corporation to have such a good future that it has been officially adopted. The present story is about a car that was top news when it was introduced more than five years ago; it was then unconventional in the extreme, and today it is hardly less so. It has not been particularly popular here, but that could well change in the months ahead.

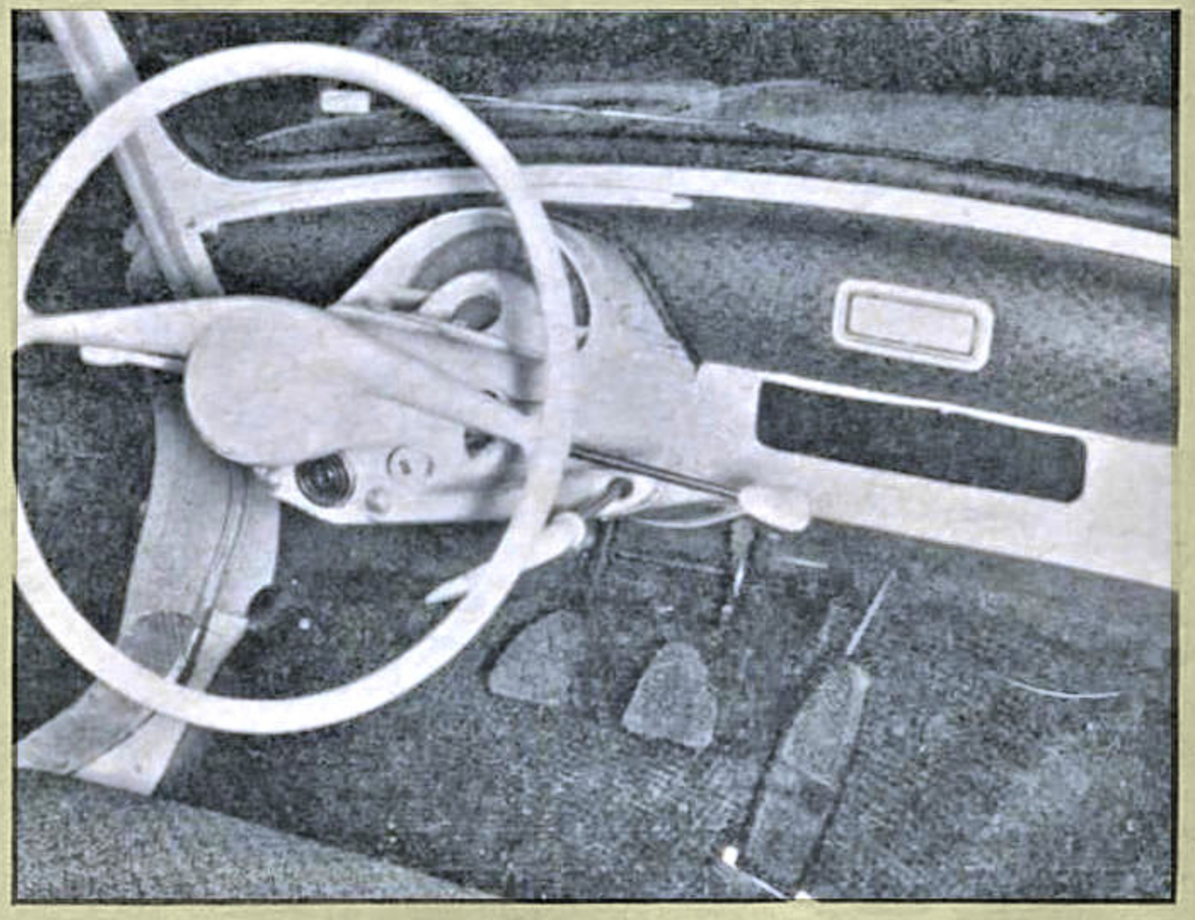
It could change because Americans have now demonstrated that they do not always behave as the motivation studies indicate. In the last year or so, they have proved and re-proved that they will not only put up with real or imagined disadvantages to get the cars they want to drive; they will even laugh at themselves and their choices, which they used not to do.

The Panhard is a most unusual package. A description can make it sound like the U.S. car of the future, or like something best forgotten. It is compact, yet astonishingly roomy for passengers and baggage. It is dramatically economical. It is satisfactorily lively in traffic and can cruise all day at high speeds without strain. Taking the other tack,

When closed, Dyna's derrière is almost conventional.

PHOTOGRAPHY: POOLE

Plastics in great variety glow, shimmer, and even smell.



it is noisy; it vibrates; and it has several truly exasperating features, though some of these have been deleted from the latest model.

Our first objection is the doors. Some factors of car design, it seems to us, should be consigned permanently to oblivion; prominent among them is front-opening doors, with their tendency to blow open, smack you smartly on the rear while you are entering, or even squash a child. They are not very heavy, and they have good three-position door checks, but they are a major disadvantage.

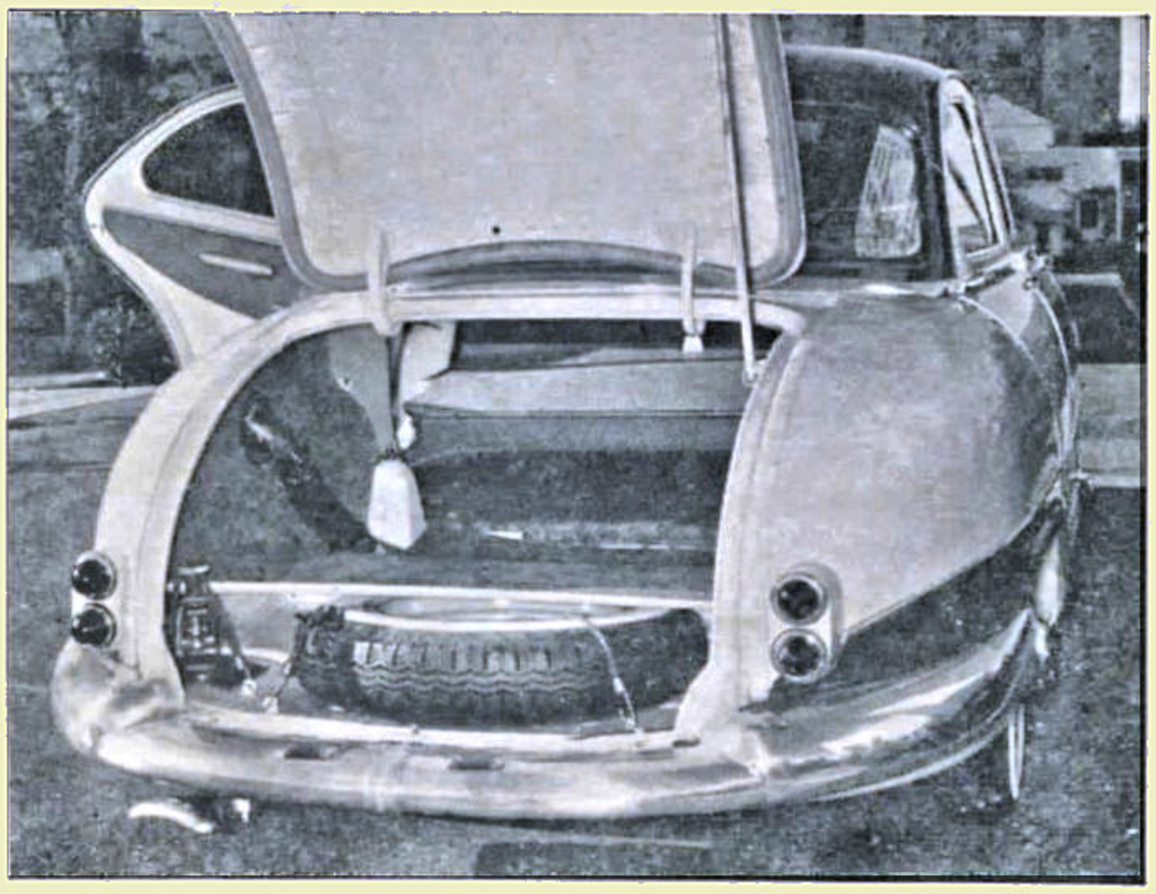
It's a deep step-down into either front or rear compartment, and a broad, flat floor indicates the absence of a driveshaft. All interior surfaces are washable, from the plastic seats to the perforated acoustic headliner, which is a near-necessity with a 2-cylinder, air-cooled engine.

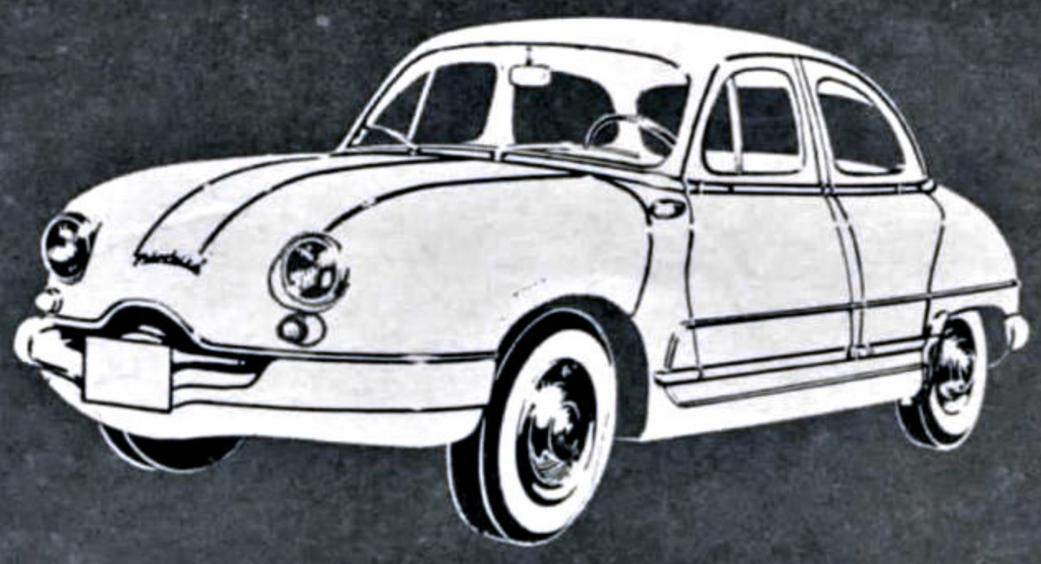
As one looks about, the conclusion is inescapable that someone was very ingenious but didn't know when to stop: there are three glove compartments, but all are sharp edged and small; one could accommodate only keys and a pencil stub. Plastic has been used with a theatrical touch (the instrument panel is evidently a small replica of the Hollywood Bowl) and quite attractively; but the panel would have been better without its rosy glow, which reflects abominably in the windshield at night. (This same windshield had a patch of distortion square in front of the driver; we trust it was a defect only of this particular car, but it's something to watch for.)

An ignition key starter, though it still must be operated through or under the wheel, is a vast improvement over its awkward predecessor. (A battery cut-off switch beside the ignition will be appreciated by the owner/tinkerer.) The short-stroke opposed twin pops to life enthusiastically with the brief aid of the choke; it seemed to us that it ran much more smoothly than on previous models, or rather that it *could be made* to run more smoothly. Shivers and thumps seemed fairly persistent on the early versions, but here a change of gear or just throttle opening worked wonders.

The clutch is sudden but smooth, and the gearbox a maze of contradictions. First and 2nd gears were always easy to engage. Third—a fine ratio for fast-moving traffic—is hampered by a fuzzy path through neutral. Synchromesh operated well on 2nd and 3rd, but not at all on 4th, which is an overdrive in the French manner: you shift into it with the aid of the clutch, as you do into any other gear; there are no buttons or switches. Third (direct drive) is silent, but 4th is not, though it never becomes obtrusive. Reverse, positioned next to the wheel "beside" 2nd, is not at all difficult to engage. As a safety measure, one must pull the lever straight out first. This straight-cut gear makes a great

A demi-wagon is available by folding the rear seat back.





'59 DYNA-PANHARD

SPECIFICATIONS

List price	$1995
Curb weight	1880
Test weight	2220
distribution, %	57/43
Dimensions, length	180
width	65.4
height	61.0
Wheelbase	101.2
Tread, f and r	51.2
Tire size, m m	145-400
Brake lining area	101
Steering, turns	2.3
turning circle	33
Engine type	2 cyl, ohv
Bore & stroke	3.35 x 2.95
Displacement, cu in	51.9
cc	850
Compression ratio	7.25
Bhp @ rpm	42 @ 5000
equivalent mph	75.4
Torque, lb-ft	51 @ 2250
equivalent mph	33.9

PERFORMANCE

Top speed (4th), mph	79.0
best timed run	80.4
3rd (5500)	64
2nd (5600)	43
1st (5600)	24

FUEL CONSUMPTION

Normal range, mpg	30/34

ACCELERATION

0-30 mph, sec	6.8
0-40 mph	10.4
0-50 mph	16.8
0-60 mph	24.0
0-70 mph	41.0
0-80 mph	
0-90 mph	
0-100 mph	
Standing ¼ mile	23.7
speed at end, mph	59

GEAR RATIOS

O/d (n.a.), overall	
4th (.766)	4.71
3rd (1.00)	6.15
2nd (1.49)	9.16
1st (2.68)	16.5

TAPLEY DATA

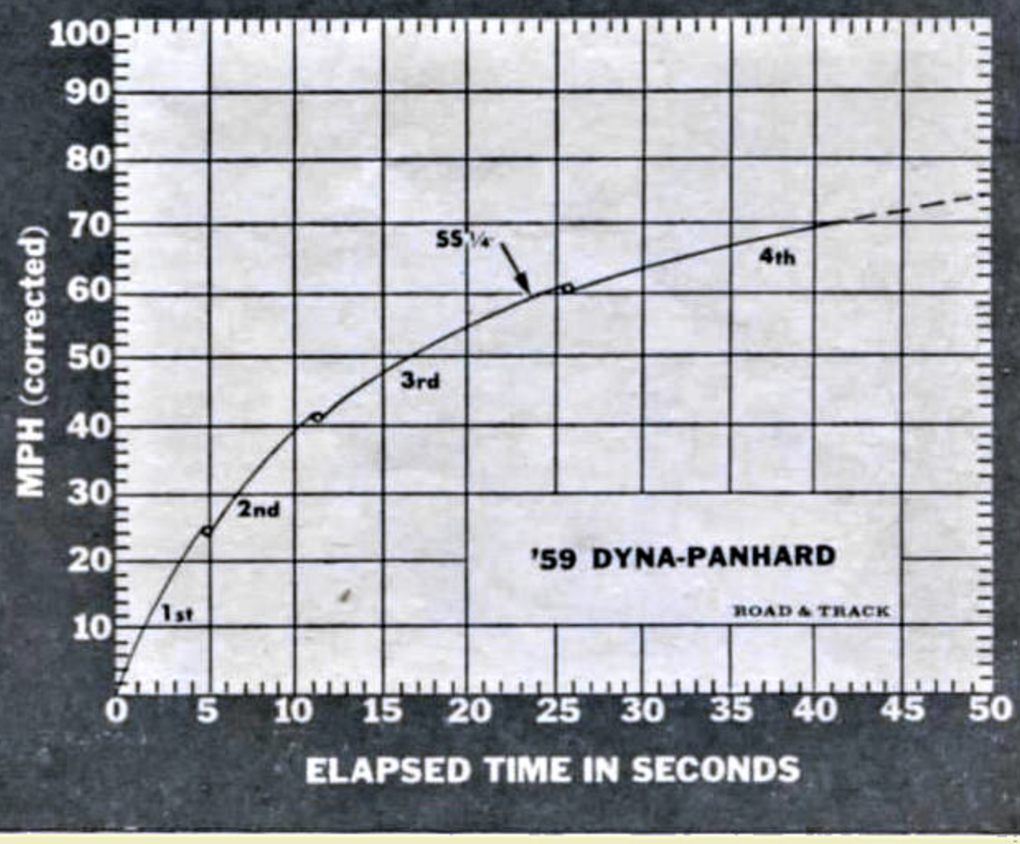
4th, lb/ton @ mph	125 @ 40
3rd	165 @ 35
2nd	250 @ 26
1st	350 @ 20
Total drag at 60 mph, lb	94

CALCULATED DATA

Lb/hp (test wt)	52.9
Cu ft/ton mile	53.8
Mph/1000 rpm (4th)	15.1
Engine revs/mile	3980
Piston travel, ft/mile	1960
Rpm @ 2500 ft/min	5190
equivalent mph	78.1
R&T wear index	78.0

SPEEDOMETER ERROR

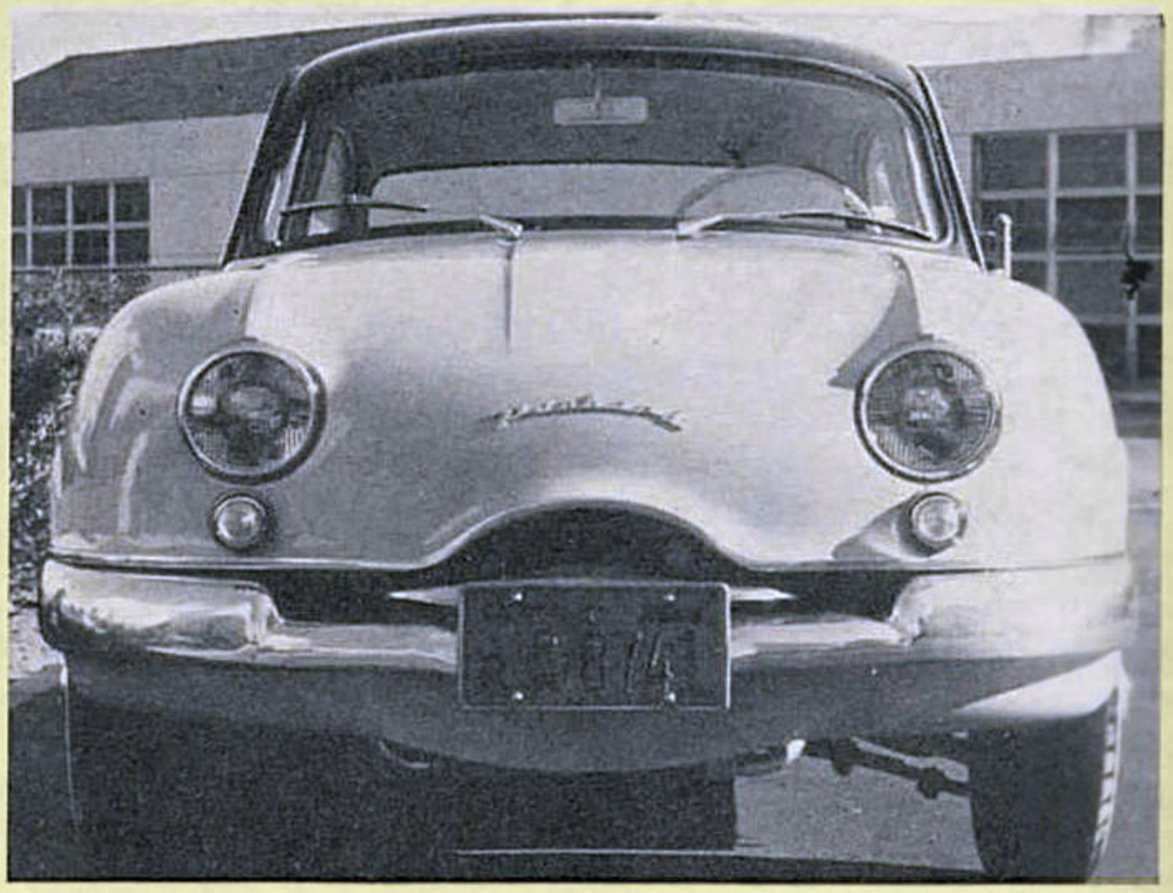
30 mph	actual 30.0
40 mph	38.3
50 mph	46.0
60 mph	55.0
70 mph	64.5
80 mph	74.2
90 mph	
100 mph	



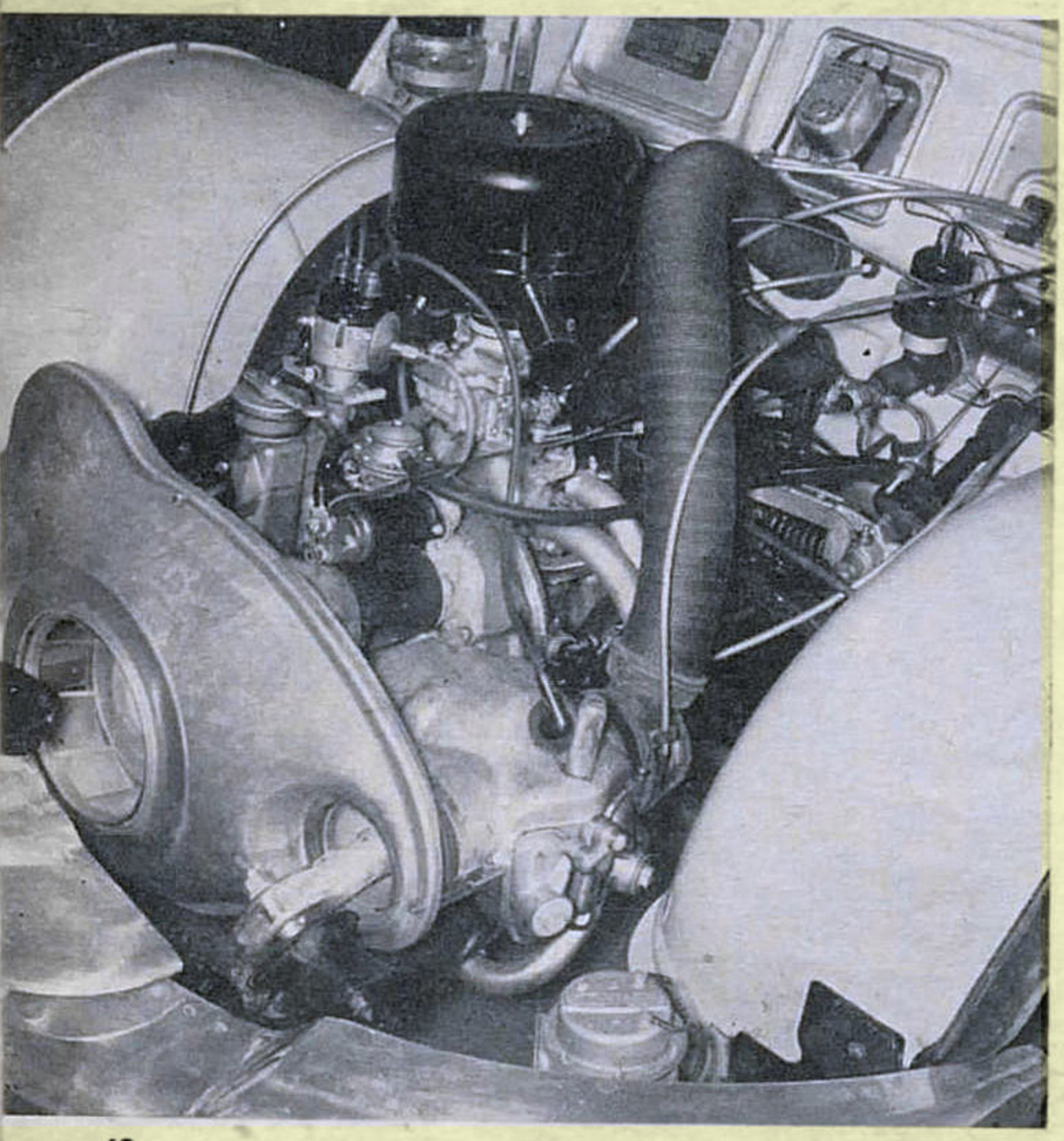
clatter. Instead of an additional complication, a dash or steering column gear lever is frequently the easiest solution on a front-drive car. It seems no easier, though, to solve the problem of three parallel planes without the lever's having a limp wrist. We hope the short, stubby Citroen gearshift will find its way into the Panhard, as a portion of the oleo-pneumatic suspension has.

The front transverse springs and rear axle with torsion bars remain, but shock absorbers now operate on the Citroen principle and give a better-controlled, all-around good ride. Wheelbase helps somewhat, but the smoothness of the Dyna's ride is far ahead of most small cars, and particularly those that carry so little weight.

Handling is great fun. Response to the wheel is immediate (as is response to all other controls except the sometimes willowy gearshift) and understeer never becomes unmanageable. Big brakes (10-inch drums in front, 9½ in rear) have extremely soft pedal pressure but retain their



Distinguishable from earlier models by a two-toned paint job, the '59 model has no oval fog light, though the switch remains on the instrument panel. Once the gas station attendant has been revived, you may explain to him that there is no radiator and that each of the 2 cylinders has overhead valves inclined at 45° in hemispherical combustion chambers; the valves use torsion bars instead of conventional springs. The noise level is lower this year.



efficiency even when the car is being hurled about. A mechanical parking brake operates on the front wheels by means of an awkward plastic handle.

One of the Dyna's most endearing features is its ability to become a load carrier in a moment. A latch (it can be locked, but doesn't have to be) holds the rear seat back in position for passengers, but it slides forward to the floor or can be removed entirely if you want to make a small station wagon out of the car.

Though considerable attention has been paid this year to silencing the inherently noisy powerplant, the success of this undertaking will be obvious mainly to those who have known earlier models. Fan noise is now cut by an enveloping shroud, replacing the "squirrel cage" of earlier cars. Tappet noise has been cleverly eliminated by holding the rocker arms in constant contact with pushrods and valve stems, with engine oil under pressure. Conventional valve springs have been eliminated with an adjustable torsion bar arrangement. The engine is almost entirely aluminum, with finned cylinders, each of which is a single casting with a cast-iron liner. Ingenious? Well, of course. An improvement over an in-line, water-cooled 4? That's a little harder to prove, especially for use in the U.S. With the present rarity of Panhard service, it could be a liability to the wrong kind of owner. A lover of ingenuity, which the Dyna certainly represents, would be willing to put up with some difficulties for the sake of owning so rare a combination of qualities, not the least of which is stable, unlabored high-speed cruising.