

VALIANT SIGNET V-8

The best all-around compact that anyone has come up with yet improves itself still further on top of what it already had on it

The Valiant, like most Chrysler products, is a more palatable car for enthusiasts than many of its Detroit counterparts. Chrysler's philosophy of ride and handling has traditionally resulted in cars that had more "feel" and quicker reflexes. Lately, to our somewhat wistful dismay, Chrysler has climbed on the Jet-Smooth Ride bandwagon and has begun to compromise their good suspension characteristics under pressure from the sales department. Fortunately, the Valiant and the Dodge Dart have managed to avoid most of these panic-inspired pitfalls and they remain surprisingly nice cars for the enthusiast driver.

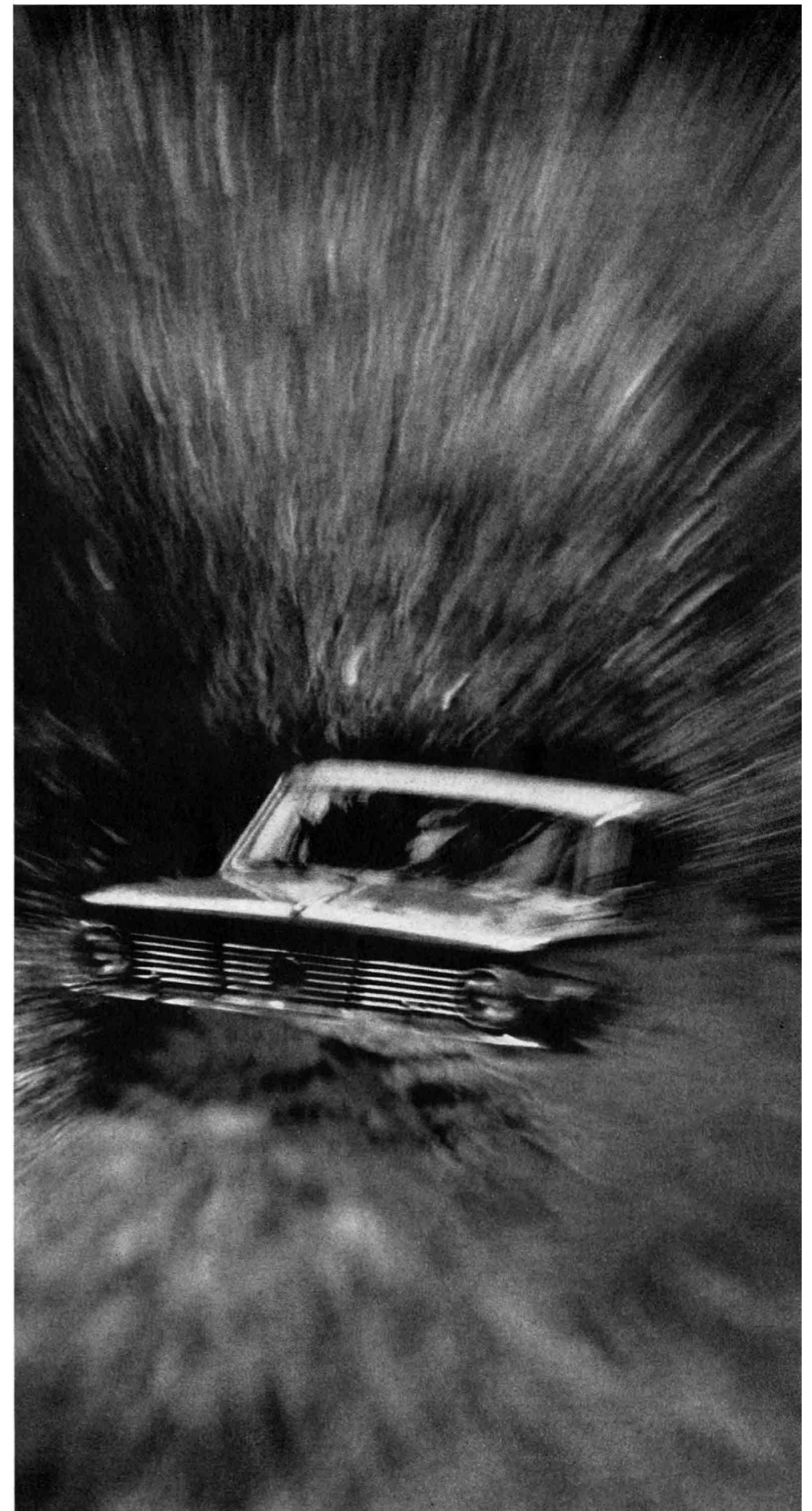
The Valiant is almost the only one of the original compacts, besides Corvair, that has managed to preserve its original personality, if not body. By 1963 all of the compacts except Corvair, Falcon, Rambler American, and Valiant had started to grow. Corvair and Falcon still retained their original bodies, which explains their dimensional constancy, but Valiant had a whole new body shell and it was *still* compact. We'd like it for that, even if it wasn't any good. The new body is quite European in concept, like its counterpart, the Dodge Dart, and we consider it quite handsome.

Now, Chrysler's engineers have come up with a Fairlane-like V-8 engine of 273 cubic inches. They claim the thinwall casting technique has resulted in an engine 55 lbs lighter than their 318-cu.-in. V-8 and only 50 lbs heavier than the optional 225-cu.-in. slant-six. The external dimensions of the new engine's block are identical with those of the 318, but more accurate control of wall thickness has saved 30 lbs from the 180-lb weight of the 318 block. Cylinder heads of a chromium alloy and a lightweight intake manifold save an additional 24 pounds.

The bore centers and stroke (but not the cam-actuating sequence) are also identical with the 318 engine, so it would be easy for Chrysler to shift the cylinder walls to get 318 cu. in. from the new engine, should the need arise.

The tune of this engine is very mild; a single-throat carburetor (1.4-inch bore, 1.06-inch venturi), 1.78-inch intake valves, 1.50-inch exhaust valves and an 8.8-to-one compression ratio yield only 180 bhp at 4200 rpm and 260 lbs/ft of torque at 1600 rpm.

In its present form the engine is understressed in the extreme and we can only wonder what marvelous things would happen if it was tweaked a little. Let's say a compres-



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sion ratio of around 11 to 1, a four-barrel carburetor, solid lifters and a sportier camshaft. Raise the power from its present ultra-conservative 180 to about 250—get the torque peak up around 2500—and they'd be getting somewhere.

Right now, the engine runs like a turbine. It supplies the power in a smooth, silent rush, and it never acts the least bit racy or coarse. This silent smoothness is the major improvement in the Valiant's V-8 installation. The car will cruise quite willingly at any speed up to a hundred miles per hour, and engine noise never intrudes on the privacy of the occupants of the automobile. Our test consisted of a three-day, 2500-mile run from Detroit to Los Angeles, in which we maintained an average of sixty miles per hour (not counting overnight stops) using the Interstate Highway System and Freeways as much as possible.

Our Signet coupe was equipped with front seats of the Detroit Bucket variety which not only positioned the driver correctly relative to the controls but also lent very firm support. Their construction is simple, consisting of a springy metal web stretched across the bottom and covered with foam. We found this much better than most coil-spring applications; it was not difficult to put in a solid 13 hours of driving without soreness or undue fatigue.

Chrysler's new four-speed transmission was designed with the drag-racing crowd in mind and is obviously meant to provide the best possible combination of bottom-end acceleration and top-end cruising, with ratios of 3.09 (first), 1.92 (second), 1.40 (third) and 1.00 (fourth). With the 2.93 rear axle ratio standard with the V-8 engine, speeds in the gears are: 1st—40, 2nd—67, 3rd—90 and fourth a theoretical 130 mph (it actually can't pull more than 120 mph in top). The effect is not unlike a two-speed transmission with a three-speed rear end; all the three upper ratios seem to do is vary the cruising speed. Nobody, except perhaps an entrant at Le Mans has any need for a Valiant geared to hit a hundred-and-twenty and we would therefore strongly recommend to anyone contemplating purchase of a V-8 Valiant ordering it with the optional 3.23 rear axle ratio (the shorter gearset that's standard on the sixes).

The Valiant Signet that we drove to Los Angeles was fitted with power steering and it was just about as worthwhile as a parachute in a row boat. A car as small as the Valiant

has absolutely no need for power steering, and certainly not for that power steering. It was too effortless, too free from road feel, too difficult to keep on center, and worst of all, unable to keep up with sudden steering wheel movements or sudden front wheel deflections caused by road surface irregularities. Unfortunately the only option is the manual steering which has 5.3 turns lock-to-lock compared to the power steering's 3.5, and is, if anything, worse. What the car needs is the power steering ratio without the power assist.

Handling with the V-8 installed is not as good as with the six, but it is still superior to most of the cars in its class. Chrysler engineers have, for the past ten years, tried to compromise between a cushiony turn-pike ride and good suspension control on secondary surfaces. This is unlike GM, whose suspension people shoot for the best possible ride on the super highway and give minimal concern to secondary surfaces, figuring most people don't drive on them that much anyhow. (Anybody who doesn't believe this should have seen Buick Riviera-mounted Jan P. Norbye traveling along about four feet above a back road in Pennsylvania.) We prefer the Chrysler ap-

proach because it gives better handling in all of their cars, not just those equipped with heavy-duty suspension options. Sadly enough, Chrysler is drifting away from this philosophy in their big-car lines, partially because of pressure from the market place for a pillow-soft ride, and partially because their engineering department's love affair with drag racing is leading them away from the paths of automotive righteousness.

Summing up, we'd describe the Valiant V-8 as the best of the remaining American compacts—that is those that haven't gone back to being "full-sized cars" in the American idiom. It is an excellent size, with good performance, adequate handling and first class ride. The brakes probably wouldn't take a series of five eighty-mile-an-hour panic stops, but then, who makes five eighty-mile-an-hour panic stops? Several friends, quite a few automotive journalists included, have decided to buy Valiants or Darts, and after 2500 hard miles, we can't blame them a bit. Taking all our criticisms into consideration, it's a pretty nice car, maybe the best thing your friendly neighborhood Chrysler-Plymouth dealer has to offer you. **cjo**

