

VALIANT: A HERICK INC.
DESIGN - BROADBENT
DESIGN - THE HERICK
DESIGN - THE HERICK

The story of Valiant



a new Chrysler Corporation automobile

Not one inch too long nor a pound too heavy

For 25 years Chrysler Corporation has been engaged in a continuous program of "small car" research and design. But, it was not until May of 1957 that the decision was made to bring such a car to market. This date marked the beginning of Project A-901, the development of a remarkable automobile that two years later would be named Valiant.

Valiant is a car totally new to the American scene. Almost three years of intensive work, and literally millions of miles of testing, at Chrysler Corporation's Engineering Proving Grounds, have gone into its making.

Valiant is nobody's kid brother. It stands on its own four tires and challenges every other car, foreign or domestic, to match it: inch for inch, pound for pound, dollar for dollar.

NO COMPROMISE

The men who built Valiant were committed to demanding goals: to build a car completely honest in its beauty, neither one inch too long nor a pound too heavy, an automobile that would comfortably seat a family of six (with room for their luggage), be considerably more economical to buy and operate than conventional cars, and provide the riding comfort, safety, and response demanded by American motorists.

As you will see, on this and the following pages, there has been no compromise with these goals. Valiant *is* such a car.

UNITIZED BODY

Valiant is a tough car. The old-fashioned method of bolting body and frame together has been discarded. In Valiant, body and frame are *welded* together to form a one piece shell of exceptional strength and rigidity. Over 5300 spot and seam welds completely eliminate body squeaks and rattles.

With the help of a structurally exact three-eighths scale model, and a giant electronic computer, road loads and stress were accurately pre-measured and planned for. The rugged box sections of the lower body distribute driving, braking, and suspension loads to broad areas of the car. Every square inch of steel bears load, carries stress. None "goes along for the ride."

To prevent destructive rust and corrosion the body is dipped a total of seven times in special cleansing, rinsing, and coating baths. (See illustration on next page.) The entire lower third is immersed to a depth of 11 to 15 inches, assuring thorough and uniform application of the protective coatings to both interior and exterior surfaces. Protection for the upper body is provided during the dipping procedures by a series of six high pressure sprays.

In the first stage the body is dipped for three full minutes in a tank of alkaline cleaner. The second and third dips are *hot*, clear rinses. Then the body is lowered for one minute in a special chemical solution that deposits a protective coating of high

purity phosphate. This is followed by two more rinsings. The body is then dried and cooled to room temperature.

After the seventh and final dip, in a newly developed zinc-rich emulsion primer, the inner surfaces of the sills are coated with a high melting point wax. Then the body is dried again, wet sanded (by hand), primed for the second time, and painted. Each coat of the Lustre-Bond finish enamel is oven-baked and carefully inspected.

Valiant is a very quiet automobile. Chrysler Corporation engineers took great pains to eliminate annoying vibrations which create undesirable noises in the passenger compartments of many cars. Special care has been taken to cushion and muffle the natural road vibrations found in all automobiles.

For instance, the dash panel is covered by a felt liner and a one inch sheet of fiber glass. Underneath the floor covering there is a jute silencer pad, a combination felt and mastic pad, and a liberal coating of fluid deadener. In addition, fluid deadener is also sprayed on the insides of doors, quarter panels, and wheel housings. The roof is insulated by a thick fiber blanket, which extends down into the critical rear post areas.

TORSION-AIRE

A special version of Chrysler Corporation's famous Torsion-Aire suspension has been designed for Valiant. This remarkable system of torsion bars, ball joints, Oriflow shock absorbers, and asymmetrical leaf springs provides a superbly controlled



To guard against rust and corrosion the entire lower third of the Valiant unitized body is dipped seven times in cleansing washes and special, protective chemical baths.

ride, taking full advantage of the unitized body's unusual strength and rigidity. The car corners exceedingly well, with little lean, and remains almost perfectly level during acceleration and braking.

Outstandingly maneuverable, Valiant has a curb-to-curb turning circle of only 37.1 feet. It is easy and quick to park. Each moving part of the steering gear is mounted either on ball or needle bearings. Friction is kept to an absolute minimum.





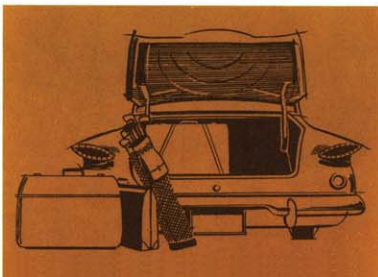
Valiant is not a scaled down version of any other automobile. Many interior space measurements actually exceed those of standard size cars. You can get in and out easily. Study this photograph. (The doors

have been removed to give you a better look, when in place they open a full 70°.) Notice the comfortable height of the seats from the floor. Notice the ample head room and full leg support.

Room for a lively family of six

Valiant is two feet shorter than most cars have been for 20 years. Three feet shorter than some. You will find it easy to park. And inside there is room for a lively family of six.

Almost 1000 pounds lighter than conventional cars, Valiant equals or exceeds previous automotive standards of comfort. The dimensions are impressive no matter what the measure. With the driver seated, there is almost 40 inches of front head



room. Seat height (an important comfort consideration) is over 11 inches in front, and more than 13 inches in the rear. (For complete interior dimensions, see back page).

FULL COMFORT

The full-width, bench-type seats, both front and rear, have been scientifically contoured to the natural curve of your body. Deep-deflection springs, and thickly padded cushions, give you proper, comfortable support.

The front seat adjusts quickly and easily. Mounted on a curved track, it tilts back slightly when moved to the rear so that any driving position you select is a comfortable one.

Trunk space in Valiant is almost unbelievably large: 24.9 cubic feet of it! Plenty of room for a family's vacation luggage. Easy to load; the spare tire has been stowed in a hidden compartment beneath the trunk floor completely out of the way.



This is one of the three (also in blue, and red 'n black) interior color combinations available in V-200 models. Fabric and trim wear well, and are simple to keep clean. Seat material is nylon-faced, bolsters and door trims a combination of smooth grained and pebbled vinyl.

You can get in and out of Valiant easily. The unitized body construction allows front and rear door openings to be extended up into the roof line, without sacrifice of structural strength. Each door is fitted with a safety lock latch. Exterior handles are easy-to-use, push-button type.

QUALITY INTERIORS

Valiant interiors are modern. Quality is immediately apparent in materials and workmanship. Fabric and trim combinations are beautiful, but more important they will wear well under heavy family use, and are easy to keep clean. Bright metal and chrome, both inside and out, have been used with restraint. Large, functionally-shaped windows give you a clear, safe view to the front, side, and rear.



This smart interior was selected to harmonize with all V-100, 4-door sedan exterior paint colors. It combines beautifully with green, silver, blue, white, or black. Full-width, bench-type seats provide plenty of room for a family of six. Even on long trips.

You will find the instrument panel simple and sensible. All controls are logically grouped in front of the driver. Instrument faces, recessed in twin dials, are easily seen through the steering wheel: speedometer and odometer on the left, temperature, oil, fuel, and ammeter on the right.





Inside—72 cubic feet of cargo space Outside—two feet less car to park

Valiant station wagons (there are four "Suburban" models) are versatile. The perfect car for a growing, active family. They handle and park easily, provide plenty of seating capacity and load space. Work or fun, Valiant is made for it!

Each wagon, both two and three seat models in both series, offers four doors at no premium in price. You enter the rear facing third seat of the three seat models simply by dropping the tailgate, and using the convenient entry steps mounted on the rear bumper. All wagons are built on exactly the same wheelbase as the sedans, 106.5 inches.

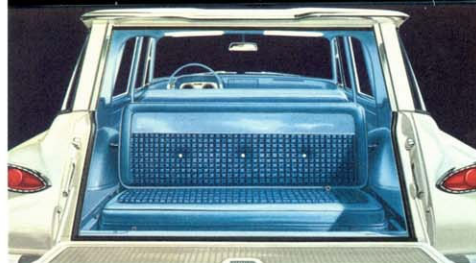
ROOM FOR WORK OR PLAY

The three seat models are highly efficient. The third seat, facing the rear, increases passenger capacity without any sacrifice of roominess or comfort.

All rear seats, on both two and three seat models, fold down for maximum utility. An ingenious folding mechanism for the second seat permits you to extend the cargo floor right up to the back of the front seat. The result? *A full 72 cubic feet of cargo space!* Enough load room for any family, and many commercial uses. And there is two feet less car to park.

An unusual combination of good looks and utility is found in all Valiant station wagon interiors. Fabrics, bolsters, and trim are highly wearable and cleanable. An exceptionally long wearing gray and black breathable-vinyl seat material is exclusive in the V-100 Suburban models.

The V-200 Suburbans offer you the same interior trim treatments as the V-200 sedans, in blue, green, or a striking combination of red and black. The cargo compartment is trimmed in either red, blue, or green, to harmonize with the interior.



Full-size folks as well as kids love to ride in this rear-facing seat. It is fully-cushioned, like all Valiant seats. When not in use it folds down flush with the floor. Power operated tailgate window and Captive-Air tires are standard equipment on all 3-seat models.



Good looking? You bet. But more important, wearable and cleanable. This practical interior is exclusive on V-100 Suburbans, both 2-seat and 3-seat models. A rugged combination of patterned and grained vinyl, it will take plenty of beating and come up for more.



How's this for cargo space? A full 72 cubic feet of it. The seats fold out of the way into the floor in half-a-shake. No wrestling. No tugging. In seconds you're ready for a trip to the lumber yard or lake. And the folded seats go with you, no annoying removal and storage problem.

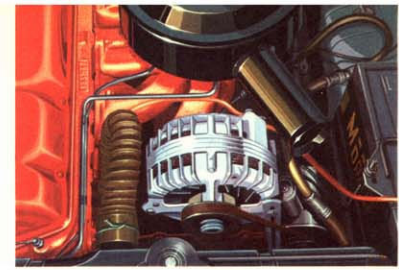


Take your pick of three V-200 wagon interiors; blue, green, or red and black. Material is nylon-faced rayon. Very easy to keep clean. Because it allows air to circulate between you and the seat, you'll never get that sticky feeling even in the clammiest weather.

The optional comfort and convenience innovations are many: an electric tailgate window that operates at the touch of a switch from either the driver's seat or the tailgate (standard on 3-seat models); a hidden luggage compartment that can

be locked to prevent pilferage; tires that hold air even when punctured. Never let you down "flat". They are called Captive-Air and are standard equipment on all three seat models, optional on two seaters, with locking luggage compartment.





A 3-speed automatic, push-button operated transmission is optional for every model. Push-button operation is simple and direct. From a stand-still you *always* start out in low gear. Shifts are made automatically without lurch or hesitation. The transmission automatically down-shifts as road conditions require—and will also shift into passing gear when you floor the accelerator under 60 miles an hour. The Valiant automatic transmission was specifically designed with three forward speeds. Tests proved this type to be more economical to operate than conventional two speed automatics. In addition, when the “1” and “2” buttons are pressed Valiant will stay in low or second gear respectively. This is especially useful in mountainous driving or when other conditions make it advisable. As a special safety feature, Valiant shifts harmlessly into neutral if the reverse button is accidentally pushed above 15 M.P.H. A special “park” lever locks the transmission when you are parked.

For the first time in a standard production automobile, an *Alternator* is used to generate electricity instead of the conventional generator. It is standard equipment on all models. Unlike the old-fashioned generator, an *Alternator* will keep the battery charged even at idle speeds. This is especially helpful in heavy traffic and other stop and go situations. The *Alternator* maintains charge at any speed. Your battery will last noticeably longer, provide quick starts even during the coldest weather. Included with the new *Alternator* electrical system is a fully readable instrument panel ammeter.

An extraordinary combination of power and economy

Dozens of existing engine layouts were considered for Valiant; in-line 4s, V-6s, pancake eights, diesels, even radial aircraft designs. None satisfied the demanding requirements.

To deliver the much sought-after combination of miles-per-gallon economy, and high levels of performance, a completely new engine had to be built. It is a six cylinder power plant

inclined 30 degrees to the right, an engine of a basic layout that has never been found in any passenger car.

This unique engine, mounted up front, adds to the inherent good balance of the car, provides the handling characteristics you expect. There are no new steering techniques to learn when you own a Valiant.

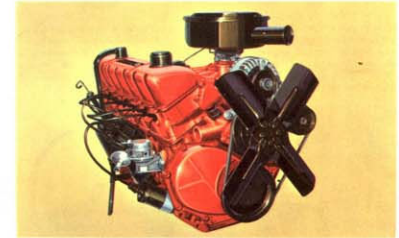
GASOLINE MISER

When *you* drive Valiant you'll find it hard to believe that such a responsive engine, one that literally refuses to wear out, can miser gasoline the way this one does. The Valiant *inclined* engine, in highway driving, can get 30 miles to a gallon of regular gasoline. When the factors of speed, driver skill, temperature, and road surface are favorable, it can do even better.

Many features contribute to miles-per-gallon economy, and overall engine efficiency. For one thing, aluminum has been used extensively to cut weight. For another, *inclining* the engine makes possible intake and exhaust manifold of very high efficiency. The aluminum intake manifold has six individual branches which feed an even fuel mixture to each cylinder. The exhaust manifold has long radius curves permitting exhaust gases to leave cylinders with a minimum of back pressure. An aluminum muffler and tailpipe, which will last up to twice as long as ordinary exhaust systems, are standard equipment on all models.

“EXTRA” ROOM

By *inclining* the engine, it has been possible to mount the water pump off to one side, rather than in front. A small thing, you say? Not when you consider this simple maneuver saves almost 4 inches in engine length. This “extra” room is used to great advantage in the passenger compartment and trunk. In addition, the *inclined* block provides a clean, uncluttered engine compartment. All components are easy to get at. Servicing is a cinch.



The Valiant *inclined* engine provides a never before attained combination of economy and performance. Astonishingly strong, this new power plant was tested at wide open throttle long enough to drive a Valiant completely around the world, non-stop! Upon examination, it showed no undue stress, and an unusually small amount of wear. *You'll* never drive a Valiant that hard, that long. And remember, Valiant runs at its very best on regular gasoline.



The Valiant 3-speed manual transmission is lightweight and compact. It was engineered and tested as an integral unit of the new *inclined* engine. The shift lever, mounted on the floor, is close to the transmission housing for short positive linkage. The control, seat cushion high, is convenient to the driver's right hand. Shifting is fast and clean. Blocker-ring synchronizers on “second” and “high” make it all but impossible to clash gears even on quick shifts. The transmission itself (like the 3-speed automatic) is rotated 30 degrees to the left helping to reduce the floor “hump”.

Optional equipment for your added pleasure and convenience

Valiant is a complete car: equipped for your pleasure, and ready to drive. Such things as electric windshield wipers, turn signals, and oil filters are standard on all models. However, the needs and desires of people vary, mainly because of local driving conditions and climate. Many prefer a manual transmission, while others would rather have the convenience of a

push-button automatic. As a result, a selected list of optional equipment items is offered. Each item has been designed and engineered specifically for Valiant. Your Valiant dealer will be glad to help you select, from the ones illustrated on this page and the others listed below, those which best satisfy your individual preferences and driving needs.

PUSH-BUTTON AUTOMATIC TRANSMISSION. Designed for the new Valiant inclined engine. Three speeds forward plus reverse and "Park" position. Push-buttons are illuminated for night driving.



POWER BRAKES. Valiant's standard hydraulic brakes provide easy straight line stops. But many drivers, particularly women, have come to rely on the assist of power brakes. They are available on all models.



PUSH-BUTTON HEATER-DEPROSTER. Valiant owners in cooler climates will want this high output heater-defroster. Push-button controls match and are directly opposite automatic transmission buttons.



FULL-TIME POWER STEERING. Recirculating-ball steering is standard on all models. However, for even greater turning and parking ease Full-Time Power Steering is available on all models.



PUSH-BUTTON TRANSISTORIZED RADIO. Tunes fast with plenty of undistorted volume. Transistorized for very low power drain on battery. Centered in the instrument panel for easy reach.



WHITEWALL TIRES AND WHEEL RINGS. These two options are strictly for good looks. They add an undeniably dramatic finishing touch to the classic Valiant design. Available on all models.



Factory installed optional equipment you will want to consider includes:

Safety padded instrument panel • safety padded sun visors • 4-ply whitewall tires (sedans and 2-seat station wagons) • set of 4 Captive-Air whitewall tires (3-seat station wagons and 2-seat wagons with locking luggage compartment) • undercoating including underhood pad • spare tire well cover (sedans) • wheel trim rings • windshield washer • variable speed windshield wipers • power operated tailgate window (2-seat station wagons) • left side, outside mounted rear view mirror • prismatic inside rear view mirror • locking luggage compartment (2-seat station wagons—includes blackwall Captive-Air tires) • lock for station wagon spare tire compartment (2-seat models) • back-up lights • Solex safety glass • rear bumper guards (sedans and 2-seat station wagons) • front bumper grille guard • 3.23:1 axle ratio (with automatic transmission only).

Optional on V-200 models only: bright side-window reveal mouldings • two-tone, deluxe steering wheel with horn ring • color matched carpeting in blue, green, or black (sedans only).

Optional on V-100 models only: front door arm-rests • cigarette lighter • glove-box lock • right side, sun visor • dual horns • front bumper guards.

Some cars illustrated in this catalog are shown with items of optional equipment available at extra cost.



Valiant Red, V-200 4-door sedan



Valiant Green Metallic, V-200 3-seat suburban



Valiant Black, V-200 2-seat suburban



Valiant Blue Metallic, V-100 4-door sedan



Valiant Silver Metallic, V-100 2-seat suburban



Valiant White, V-100 3-seat suburban

THE CAR YOU'D WANT AT ANY PRICE . . . Your dealer has a car waiting for your inspection. Accept his invitation. Drive Valiant. Investigate this new automobile thoroughly. Measure what it offers against its sensible price tag, against the car you now own. Prove to your own satisfaction, Valiant is *nobody's* kid brother—Valiant is the car you'd want at *any* price.



Below is a run-down of Valiant vital statistics. The figures tell you only part of the story. After you read about Valiant, see your nearest Valiant dealer . . . and drive it!

EXTERIOR DIMENSIONS

Wheelbase	106.5"
Tread, front	56.0"
Tread, rear	55.5"
Length, overall (sedans and 2-seat wagons)	184"
Length, overall (3-seat wagons)	185.1"
Width, overall	70.4"
Height, overall (sedans)	53.3"
Height, overall (wagons)	53.4"

INTERIOR DIMENSIONS

	Sedans	Wagons
Headroom—Front	33.6 inches	33.6 inches
Rear	33.4 inches	33.5 inches
Legroom—Front	44.4 inches	44.4 inches
Rear	38.9 inches	38.1 inches
Hiproom—Front	57.0 inches	57.0 inches
Rear	56.9 inches	57.0 inches
Seat Height—Front	11.4 inches	11.4 inches
Rear	13.4 inches	13.0 inches
Kneeroom—Rear	28.0 inches	27.2 inches
Trunk Volume—Sedans	24.9 cu. ft.	

STATION WAGON CARGO COMPARTMENT DIMENSIONS

Length—rear seat up, tailgate up	51.0 inches
Width max.—52.6 inches, between wheel housings—	42.6 inches
Height max.—31.3 inches (floor to ceiling)	
Rear opening width—41.0 inches (maximum)	
Rear opening height—27.4 inches	
Cubic ft. load space, all seats flat	72.3 feet

ENGINE

Type	in-line, OHV
Location and position	front, inclined 30° to right
Cylinders	six
Cooling System	liquid
Displacement	170 cu. in.
Bore	3.40"
Stroke	3.125"

Compression Ratio	8.5 to 1
Horsepower	101 at 4400 R.P.M.
Torque	155 ft. lbs. at 2400 R.P.M.
Pistons	aluminum alloy, 3 ring
Carburetor	downdraft
Thermostat	180°
Battery	12v, 6-cell, 50 amp hr
Air Cleaner	replaceable element type
Oil Filter	throw away type

MANUAL TRANSMISSION

Type	3-speed floor shift
Ratios	2.71; 1.83; 1.0; 3.49 (reverse)
Clutch	9¼" dia. dry disc.

AUTOMATIC TRANSMISSION

Type	3-speed push-button control, 1 piece aluminum housing, water-cooled, lever-actuated parking sprag
Ratios	2.45; 1.45; 1.0; 2.2 (reverse)
Torque Converter	10¾" dia., 3-element

BRAKES

Type	hydraulic, duo-servo
Linings	riveted, 9x2½" front, 9x2" rear
Total lining area	153.5 inches
Parking Brake	foot pedal operated, activates both shoes of each rear wheel

REAR AXLE

Type	7¼" dia., 2 pinion differential
Ratio	3.55 manual and automatic 3.23 optional on automatic

TIRES

Size	6.50 x 13.0"
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SUSPENSION

Front	torsion bars and ball joints
Rear	asymmetrical leaf springs

CAPACITIES

Fuel tank	13 gallons
Cooling System	13 quarts
Engine Crankcase	.4 quarts

The policy of Chrysler Corporation is one of continual improvement in design and manufacture wherever possible to assure a still finer car. Hence, specifications, equipment, and prices are subject to change without notice.