The story of Valiant

a new Chrysler Corporation automobile

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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 an 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. Valiant is a tight 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 threeeighths 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 ovenbaked 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 entire 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



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.

shock absorbers, and asymmetrical leaf springs provides a superbly controlled 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. It is 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). Trunk space is almost unbelievably large: 24.9 cubic feet of it! Plenty of room for a family's vacation luggage.

FULL COMFORT

The full-width, bench-type seats, both front and rear, have been scientifically contoured to the natural curve of your body. Deepdeflection springs, and thickly padded cushions, give you proper, comfortable support. The front seat adjusts quickly and easily to each driving position. Mounted on a curved track, it tilts back slightly when moved to the rear, so that any position you select is a comfortable one.



This is one of the three (also in blue, and red 'n black) interior color combinations available in V-200 models. Fabric and tim 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 easyto-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



This smart interior was selected to harrowize with all V-100, 4-door sedan exterior paint abors it combines beautifully with green, silver, blue, while, or black. Fulwidth, bench-type seats provide plenty of room for a family of six. Even on long trips.

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.

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.





72 cubic feet of cargo space 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.

EXTRA CONVENIENCE

The optional comfort and convenience innovations are many: an electric tailgate



Full-size folks as well as kids lave to ride in this rearfocing seat. It is fully-cushioned, like all Vollont 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.

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



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



Take your pick of three V-200 wagon interiors; blue, green, or red and block. 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.

locked to prevent pilferage; tires that hold air even when punctured. Never let you down "flat". They are called Captive-Air and are standard on three seat models.





An extraordinary combination of power and economy

Many 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-pergallon economy, and overall engine effi-



A 3-speed automatic, push-button operated transmission is optional for every model. 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 two speed automatics. In addition, when the "1" and "2" buttons are pressed Valiant will stay in low or second gear. 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.

ciency. For one thing aluminum has been used extensively to cut weight. For another, inclining the engine makes possible intake and exhaust manifolding 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 aluminized 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.



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 an instrument panel ammeter.



The Valiant inclined engine provides a new combination of economy and performance. This new power plant was tested at wide open throttle long enough to drive a Valiant completely around the world! You'll never drive a Valiant that hard; that long.



The Valiant 3-speed manual transmission shift lever is mounted on the floor, close to the transmission housing for short positive linkage. It is convenient to the driver's right hand. The transmission itself 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. Many prefer a manual transmission, while

PUSH-BUTTON AUTOMATIC FULL-TIME POWER STEER-TRANSMISSION. Designed ING. Recirculating-ball steerspecifically for the new Valiant ing is standard on all models. inclined engine. Three speeds However, for even greater forward, plus reverse and ease, Power Steering is avail-"Park" position.



POWER BRAKES. Valiant's PUSH-BUTTON TRANSISstandard hydraulic brakes pro- TORIZED RADIO. Tunes fast vide easy straight line stops, with plenty of undistorted vol-But many drivers, particularly ume. Transistorized for very



PUSH-BUTTON HEATER. WHITEWALL TIRES AND DEFROSTER, Valiant owners WHEEL RINGS. These two in cooler climates will want options are strictly for good this high output heater- looks. They add an undeniably defroster. Push-button controls dramatic finishing touch to the for your convenience.



classic Valiant design.



others would rather have the convenience of an automatic. As a result, a selected list of optional equipment items is offered. Your Valiant dealer will be glad to help you select from those illustrated, and the others listed below, the ones which best satisfy your individual preferences and driving needs

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 • glovebox 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



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... drive it, at your nearest Valiant dealer!

EXTERIOR DIMENSIONS

Wheelbase
Tread, front
Tread, rear
Length, overall
(sedans and 2-seat wagons)
Length, overall (3-seat wagons) 185.1"
Width, overall
Height, overall (sedans)
Height, overall (wagons)

INTERIOR DIMENSIONS

	Sedans	Wagons
Headroom—Front	33.6 in.	33.6 in.
Rear	33.4 in.	33.5 in.
Legroom — Front	44.4 in.	44.4 in.
Rear	38.9 in.	38.1 in.
Hiproom — Front	57.0 in.	57.0 in.
Rear	56.9 in.	57.0 in.
Seat Height—Front	11.4 in.	11.4 in.
Rear	13.4 in.	13.0 in.
Kneeroom — Rear	28.0 in.	27.2 in.
Trunk Volume-Seda	ns 24.9 cu	1. 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

Typein-line, OHV
Location and position front, inclined 30°
Cylinderssix
Cooling Systemliquid
Displacement
Bore
Stroke

Compression Ratio	
Horsepower 101 at 4400 R.P.M.	
Torque	
Pistons aluminum alloy, 3 ring	
Carburetor	
Thermostat	
Battery 12v, 6-cell, 50 amp hr	
Air Cleaner replaceable element type	
Oil Filter throw away type	

MANUAL TRANSMISSION

Type \dots 3-speed floor shift Ratios \dots 2.71; 1.83; 1.0; 3.49 (reverse) Clutch \dots 9¹/4" 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....10³/4" dia., 3-element

BRAKES

Typehydraulic, duo-servo Linings....riveted, 9x2¹/₂" front, 9x2" rear Total lining area......153.5 inches Parking Brakefoot pedal operated, activates both shoes of each rear wheel

REAR AXLE

TIRES

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.