

1975 PLYMOUTH Valiant Custom 225-1 bbl MPG = 13.3 City

Written by Double Dragon

Monday, 09 May 2011 13:51 - Last Updated Saturday, 08 October 2016 15:26

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Metric= 3.7 L engine- 18.6 L/100km City



GAS MILEAGE OF THE 1975 VALIANT WHEN NEW= 19 MPG Overall.

The EPA estimated EPA for the Plymouth Valiant at 18 City/ 23 Hwy MPG. This beat the 17 City/ 23 Hwy MPG for a 1975 Dodge Dart with a 225-1 barrel. Correcting to the modern revised EPA standards would knock about 1 MPG off those figures. The Dart is the 'big brother' to the Valiant. It has a 3 inch longer wheelbase and weighs a bit more, hence lower city mileage than baby brother Plymouth.

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Thomas McCahill tested a 1975 Dart SE in the Jan, 1975 issue of MECHANIX ILLUSTRATED. The SE is a luxury version of the four door Dart, making it the Dodge equivalent of the Valiant Custom. The curb weight wasn't too bad at 3,372 pounds which included plusher seats and carpets, the V8 318, front disc brakes (required with V8), air conditioning and cruise control. The Dart had E78x14 radials and a low 2.45:1 axle. McCahill said if driven gingerly at 50 MPH it will net 20 MPG.

WORLD CARS 1975 estimated Valiant MPG at 14.3 using the 95 HP 225 engine. WC calculated a top speed of 99 MPH with the manual three speed and 2.76 axle. The top speed would be lower with the automatic installed in the OCCC Valiant. The 1975 WC figures are closer to real life 'as tested' speeds than the very low estimates provided in the WC 1974 edition, so presumably the MPG figures are more accurate as well.

The Oct 1974 issue of POPULAR MECHANICS predicted that a 1975 Plymouth Valiant with 225 and automatic running through a 2.76:1 axle was good for 16.5 MPG overall. The PS figures are likely closer to reality than EPA which operates under ideal conditions. The EPA figure back then was derived from a 31 minute stop start 'city cycle' on dynamometer averaging 20 MPH and a 'highway' run of 12 minutes at an average of 49 MPH.

LEMON AID 1981 EDITION says a 4 door Valiant with 6 cylinder 225 engine, automatic transmission and radio weighs around 3,125 pounds. LA estimated MPG to be 19 MPG using unleaded fuel. LA doesn't specify if the MPG is overall average but does say that the MPG quoted is what the car is optimally capable of under ideal conditions.

LEMON-AID lists earlier Valiant models at 3,000 pounds and even lighter as years roll back. LA says that a 1974 Valiant using unleaded fuel gets 19 MPG, but the 1973 using leaded fuel is credited with 21 MPG. LA states that the 1972 manages 20 MPG, while the 1971 turned in an amazing 22 MPG.

OCCC 1975 VALIANT CUSTOM CITY MPG= 12.6

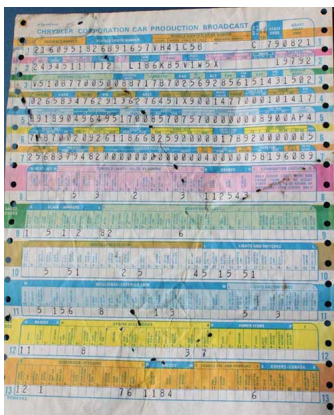
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Over a distance of 5,633.6 miles the Valiant used 445.2 gallons of gas (the first 7.3 gallon fill was not counted) which is an average City MPG of 12.6.

The first owner of the OOC 1975 four door Valiant drove it to and from work for over a decade. The Valiant was bought from the Lakeview Chrysler Plymouth Ltd car dealership in New Westminster, BC, Canada just as the new 1976 models were being released. The build date for the Valiant is 8-75C which translates to late August in the Hamtramck, Michigan assembly plant (indicated by the letter B in the seventh position of the VIN).



The August 21, 1975 broadcast sheet lists quite a few options. The VIN second digit indicates a high price vehicle (H). This Valiant has rear armrests, interior map lights, ashtray lamps, trunk lights and dress up items like vinyl roof, wheel moldings and pinstripes. It has the Fuel Pacer light mounted on the driver's fender as well as power steering and automatic transmission. The Valiant also has front and rear bumper guards. Being a Canadian car it doesn't have A/C.

Like the first owner, the second owner lives in New Westminster, BC. Owner Two needed cheap transportation and parked the car outside. He didn't invest beyond bare necessities. To read the entertaining story of a road trip he took in this car see the ROLLING ROCK 2005 CALIFORNIA story in the Destinations area of the Travel Section of this site. To see more detail on the history of the OOC Valiant consult the 20 YEARS PLUS section of this site for a complete history.

The OOC Valiant is all original with only absolutely necessary maintenance items attended to. The engine has never been apart, nor has the transmission. The one barrel 225 slant six engine

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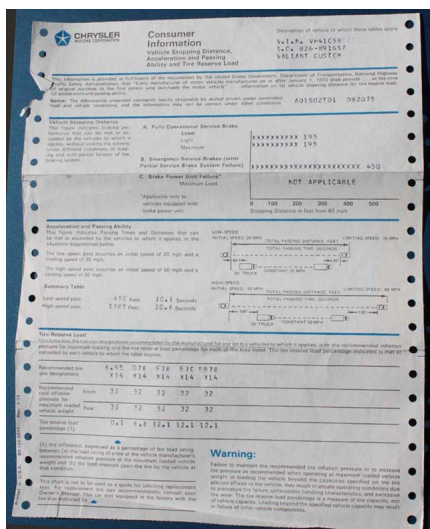
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is famous for being one of the toughest engines out there. The slant design allows the carburetor runners to extend a great long distance without restrictive turns which helps with power and gas mileage. The car has single exhaust and this is the first year of the catalytic converter which creates backpressure and hurts performance. The rear axle is the standard 2.76:1 unit.

1975 was a major year for emissions standards and the necessary add-ons sap engine power and MPG. The automatic transmission also saps some efficiency. The car also must contend with more weight than earlier Valiants. Not only does it have emissions equipment, but safety items such as the 5 MPH bumpers add weight. The marketing guys pushed the compacts into a luxury direction resulting in much more content in this car than a typical Valiant which again equals more weight.

The OCCC Valiant was driven in stop and go traffic conditions by a careful driver. Once in awhile for fun he goes the gas pedal just to see the driver's side fender mounted orange fuel pacer light up. This optional light works like a vacuum gauge alerting you to actions that use a lot of gasoline. The trunk has about 100- 150 pounds of cargo and a full tank of gas most days. The driver weight and occasional passenger weight averages out to about 300 pounds taken overall. The correct size radial tires were kept at 32 PSI. Below is the original customer information sheet listing stopping distances, tire sizes and tire pressures. This is the original paperwork with just the significant VIN sequence removed.



The Consumer Information tells us that a 1975 Valiant with fully operational brakes stops from

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60 MPH in 195 feet regardless of whether the car is lightly or heavily loaded. A low speed pass required 10.1 seconds and 450 feet. High speed passing took 20.6 seconds and 1,785 feet. The standard 6.95x 14 inch tires offer a scary 0.1% tire load reserve. That is cutting things right to the bone! Moving up to a D78x 14 creates 6.8% reserve. The E sized tires all have 12.1% reserve. All tires require a 32 PSI inflation. This departure from manufacturer's traditional soft pressures around 24 PSI traces to the new CAFE standards coming into effect. By 1978 the overall production of U.S. cars needed to average 18 MPG. Higher tire inflation reduces rolling resistance and boosts mileage.

Because of run-on issues the OCCC Valiant usually enjoys 89 to 91 octane gasoline with an occasional infusion of Chevron 94 octane gas. Chevron 94 is ethanol free which provides more energy per gallon of gas than 10% ethanol laced gasoline. A modern 15W40 low friction blend of oil is used.

The weather encountered in this log was fall, winter and spring ranging from cold down around the freezing mark for several months to a mild high in the 40s. The MPG varies from 12 to about 14 depending on temperatures encountered. The electrical system sees heavy use with wipers, defrost fan, rear defroster which drains a smidgen of power from the engine. An aftermarket cassette player was constantly running for the start of the entries, but was later removed.

Adding up the individual entries in the first section of logs and dividing by the number of entries produces an overall average of 13.1 MPG. Taking the overall distance of 3,214.8 miles and 249 gallons of gas (minus the first fill of 7.3) means it took 241.7 gallons to cover the distance which translates to 13.3 overall MPG which closely matches the other calculation method.

Odometer	Gallons	MPG (uncorrected)
100,402	7.3	N.A. MPG
100,513.5	6.5	17.1 MPG
100,688.7	9.5	18.4 MPG
100,753.7	5.4	12.0 MPG
100,850.7	7.9	12.2 MPG
100,963.1	9.1	12.3 MPG
101,075.5	9.5	11.8 MPG
101,178.8	8.1	12.7 MPG
101,287.7	8.4	12.9 MPG
101,365	6.2	12.4 MPG
101,441.4	6.0	12.6 MPG
101,574.8	9.7	13.8 MPG

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101,677.9	1.9	N.A. MPG
101,689.5	7.4	12.3 MPG
101,770	6.6	12.1 MPG
101,852.6	6.1	13.6 MPG
102,069	11.4	18.9 MPG
102,137.2	5.6	12.1 MPG
102,244.5	8.7	12.4 MPG
102,312.3	5.0	13.4 MPG
102,411.7	7.5	13.3 MPG
102,503.4	6.4	14.2 MPG
102,615.9	8.0	14.1 MPG
102,709.9	7.0	13.4 MPG
102,847	9.2	14.8 MPG
102,938.1	6.4	14.2 MPG
103,033.5	8.5	11.2 MPG
103,172.3	9.5	14.5 MPG
103,282.5	7.6	14.6 MPG
103,397.3	6.8	16.7 MPG
103,,439.2	5.2	8.0 MPG
103,502.4	4.2	15.0 MPG
103,616.4	8.7	13.1 MPG
103,728.3	7.7	14.5 MPG

The section of logs below were recorded in fall and winter weather which dropped from 40 degrees F to plateau down around 34 degrees F in winter. Most days were rainy with occasional light snow. All entries were Chevron brand.

Odometer	Gallons	Full tank?	MPG (uncorrected)
109,219.2	3.7	Not filled	N.A. MPG
109,273.0	9.1	Full tank	N.A. MPG
109,471.4	5.7	Not filled	N.A. MPG

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109,532.0 9.4 Not filled N.A. MPG

109,640.8 9.2 Full tank 15.1 MPG

109,744.1 9.2 Not filled N.A. MPG

109,843.9 9.1 Not filled N.A. MPG

109,918.3 6.9 Not filled N.A. MPG

110,044.5 10.5 Not filled N.A. MPG

110,150.9 5.3 Full tank 12.4 MPG

110,224.4 8.0 Full tank 9.1 MPG

110,304.6 3.4 Not filled N.A. MPG

110,348.0 6.7 Full tank 12.2 MPG

110,441.2 4.3 Not filled N.A. MPG

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110,452.7 4.3 Not filled N.A. MPG

Adding up the individual entries and dividing by the number of entries produces an overall average of 11.8 MPG. Taking the overall distance of 1,233.5 miles and 104.3 gallons of gas (minus the first fill of 3.7) means it took 100.6 gallons to cover the distance which translates to 12.2 overall MPG in cold wet weather.

The entries below were recorded during spring and summer weather with temperatures rising from 50 degrees F to as high as 80 degrees F. Weather was occasionally rainy but not as heavy as in the fall/ winter logs. All entries were Chevron brand except for one which is indicated as Co- Op brand which was a local station using a re branded variant of national gasoline.

Odometer Gallons Full tank? MPG (uncorrected)

110,551.9 8.3 Not filled N.A. MPG

110,610.1 4.1 Not filled N.A. MPG

110,680.5 8.4 Not filled N.A. MPG

110,820.0 4.2 Not filled N.A. MPG

110,833.3 4.2 Not filled N.A. MPG

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110,875.2 6.7 Not filled N.A. MPG

110,934.0 4.9 Full tank 11.8 MPG

111,001.1 3.9 Not filled N.A. MPG

111,027.0 1.5 Not filled N.A. MPG

111,086.2 4.5 Not filled N.A. MPG (Co- Op brand)

111,174.9 4.8 Not filled N.A. MPG

111,222.8 3.2 Not filled N.A. MPG

111,251.0 3.1 Full tank 15.0 MPG

111,279.9 1.6 Not filled N.A. MPG

111,321.8 3.2 Not filled N.A. MPG

111,360.1 3.9 Full tank 12.5 MPG

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111,402.2 3.7 Full tank 11.3 MPG

111,447.0 4.0 Full tank 11.2 MPG

111,522.2 5.6 Full tank 13.4 MPG

111,593.0 5.3 Full tank 13.3 MPG

111,653.4 5.1 Not filled N.A. MPG

111,737.2 5.0 Full tank 16.7 MPG (some highway)

Adding up the individual entries and dividing by the number of entries produces an overall average of 13.1 MPG. Taking the overall distance of 1,185.3 miles and 99.2 gallons of gas (minus the first fill of 8.3) means it took 90.9 gallons to cover the distance which translates to 13.0 overall MPG during the warmer weather. The car was driven under similar loads and routes but mileage improved 0.8 MPG due to the drier, warmer weather.

