AMA-40A

AMA Specifications – Passenger Car

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MANUFACTURER	CAR NAME	
CHRYSLER-PLYMOUTH DIVISION CHRYSLER CORPORATION	PLYMOUTH VALIANT	
MAILING ADDRESS	MODEL YEAR	ISSUED: 7-10-64
DETROIT, MICHIGAN 48231	1965	REVISED (•) 3-29-65

NOTES:

1. The Specifications herein are those in effect at date of compilation and are subject to change without notice by the manufacturer.
2. UNLESS OTHERWISE INDICATED:
   a. Specifications apply to standard models without optional equipment. Significant deviations are noted.
   b. Nominal design dimensions are used throughout these specifications.

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BODY—TYPES AND STYLE NAMES— Body type, number of passenger & style names; use manufacturer's code for series & body style.

	2-Door Sedan	2-Door Hardtop	Conv. Coupe	2-Door Sports Hardtop	4-Door Sedan	Station Wagon (6-Pass.)
SIX-CYLINDER MODELS						
Valiant 100	AV1-L-21				AV1-L-41	AV1-L-45
Valiant 200	AV1-H-21		AV1-H-27		AV1-H-41	AV1-H-45
Valiant Signet		AV1-P-23	AV1-P-27			
Barracuda				AV1-P-29		
V-8 MODELS						
Valiant 100	AV2-L-21				AV2-L-41	AV2-L-45
Valiant 200	AV2-H-21		AV2-H-27		AV2-H-41	AV2-H-45
Valiant Signet		AV2-P-23	AV2-P-27			
Barracuda				AV2-P-29		

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GENERAL SPECIFICATIONS

(All dimensions in inches unless otherwise indicated)

MODEL			Additional Information Page No.:	AV1				AV2				
				21, 23, 41	27	45	29	21, 23, 41	27	29	45	
Wheelbase (L101)			23	106.0								
Tread	Front (W101)		22	55.9								
	Rear (W102)		22	55.6								
Maximum Overall Dimensions	Length (L103)		23	188.2		188.8		188.2			188.8	•
	Width (W103)		22	70.1								
	Height (H101)		24	53.5	54.0	52.9	53.8	53.7	54.3	54.0	53.3	•
Transmission—(Specify trade name – opt., not available)	Manual	3-Speed	15	Std.								
		4-Speed	16	Opt - see page 3				Opt				
	Automatic		16	Opt								
Axle ratio	Manual	3-Speed	17	3.23				2.93				
		4-Speed	17	3.23				2.93				
	Automatic		17	3.23				2.93				
Tire size			18	6.50 x 13, 2-ply				7.00 x 13, 2-ply				
Engine	Type, no. cyl., valve arr.		2	Six, in-line, OHV				90° V-8				
	Fuel system (Carb., other)		8	1, 1-bbl Carb.				1, 2-bbl Carb.				
	Bore and stroke		2	3.4 x 3.125			3.4 x 4.125	3.63 x 3.31				•
	Piston displ., cu.in.		2	170			225	273				•
	Std. compression ratio		2	8.5			8.4	8.8				•
	Max. bhp at engine rpm		2	101 @ 4400			145 @ 4000	180 @ 4200				•
	Max. torque at rpm		2	155 @ 2400			215 @ 2400	260 @ 1600				•

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MODEL	AV1		AV2	
	Std, Exc. 29	Std - 29 Opt - Others	Std	Opt (b) •

ENGINE—GENERAL

Type, no. cyls., valve arr.		Six, in-line, OHV		90° V-8	
Bore and stroke (nominal)		3.4 x 3.125	3.4 x 4.125	3.63 x 3.31	
Piston displacement, cu. in.		170	225	273	
Bore spacing (C/L to C/L)		3.98 (1-2, 3-4, 5-6); 4.0 (2-3, 4-5)		4.46	
No. system (front to rear)	L. Bank	---		1-3-5-7	
	R. Bank	---		2-4-6-8	
Firing order		1-5-3-6-2-4		1-8-4-3-6-5-7-2	
Compres. ratio (nominal)		8.5	8.4	8.8	10.5
Cylinder Head Material		Cast iron			
Cylinder Block Material		Cast iron			
Cylinder Sleeve-Wet, dry, none		None			
Number of mounting points	Front	Two			
	Rear	One			
Engine installation angle		1.25° left, 3° up		1° left, 3° up	
Taxable horsepower $\frac{Dia.^2 \times No. Cyl.}{2.5}$		27.7		42.2	
Published max. bhp* @ eng. RPM		101 @ 4400	145 @ 4000	180 @ 4200	235 @ 5200
Published max. torque* (lb. ft. @ RPM)		155 @ 2400	215 @ 2400	260 @ 1600	280 @ 4000
Recommended fuel regular - premium		Regular			Premium
Idle speed (spec. neutral or drive)	Manual	550 in neutral, alternator charging		500 in neutral	
	Automatic	550 in neutral, alternator charging		500 in neutral	

ENGINE—PISTONS

Material			Aluminum Alloy		
Description and finish			Closed slipper-type, steel strut, elliptically-turned, tin-plated		
Weight (piston only) oz.			16.4	18.7	20.1
Clearance (limits)	Top land		.025 - .030	.028 - .033	
	Skirt	Top	.0005 - .0015 specified, .00075 - .00125 desired		(a)
		Bottom	- - -		
Ring groove depth	No. 1 ring		.179	.188	
	No. 2 ring		.179	.188	
	No. 3 ring		.181	.186	
	No. 4 ring		None		

* Max. bhp (brake horsepower) and max. torque corrected as defined by SAE Engine Test Code.

(a) .00025 - .00125 specified
.0005 - .0010 desired

(b) Not available on station wagons

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POWER TEAMS
(Indicate whether standard or optional)

MODEL AVAILABILITY		ENGINE					TRANSMISSION		AXLE RATIO (Std. first) * Also with Sure-Grip
		Displ. cu. in.	Carburetor	Compr. Ratio	BHP @ RPM	Torque @ RPM			
AV1	Std	170	1, 1-bbl	8.5	101 @ 4400	155 @ 2400	Manual 3-Speed		3.23*, 2.93*, 3.55
							Automatic		3.23*, 3.55
	Std - 29 • Opt - Others	225		8.4	145 @ 4000	215 @ 2400	Manual	3-Speed	3.23*, 3.55
								4-Speed	3.23*, 2.93*, 3.55
							Automatic		2.93*, 3.23*, 3.55
AV2	Std	273	1, 2-bbl	8.8	180 @ 4200	260 @ 1600	Manual	3-Speed	2.93*, 3.23*, 3.55
								4-Speed	2.93*, 3.23*, 3.55
							Automatic		2.93*, 3.23*, 3.55
	Opt		1, 4-bbl	10.5	235 @ 5200	280 @ 4000	Manual	3-Speed	3.23*, 2.93*, 3.55
								4-Speed	3.23*, 2.93*, 3.55
							Automatic		3.23*, 2.93*, 3.55

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MODEL			See Page 2 for Engine Usage		
			170 Cu In.	225 Cu In.	273 Cu In.
ENGINE—RINGS					
Function (top to bottom)	No. 1, oil or comp.		Compression		
	No. 2, oil or comp.		Compression		
	No. 3, oil or comp.		Oil		
	No. 4, oil or comp.		None		
Compression	Description - material, type, coating, etc.		# 1 - Cast iron, taper-twist, tin-plated # 2 - Cast iron, reverse twist, taper face, lubrite coated		
	Width		.078		
	Gap		.010 to .020		
Oil	Description - material, type, coating, etc.		Cast iron, single-piece	3-piece, two chrome-plated rails with stainless steel expander-spacer	3-piece, steel rail, chrome face
	Width		.186		Rails .025
	Gap		.010 to .020		.015 to .055
Expanders			(a)	None	
ENGINE—PISTON PINS					
Material			High-Manganese Steel		
Length			2.965		2.815
Diameter			.9008		.9842
Type	Locked in rod, in piston, floating, etc.		Press-fit in rod		Floating
	Bushing	In rod or piston	None		Rod
		Material	- - -		Bronze on steel
Clearance	In piston		.00045 to .00075		.0000 to .0005
	In rod		.0007 to .0014 interference		.0001 to .0006
Direction & amount offset in piston			Right .06		
ENGINE—CONNECTING RODS					
Material			Drop-forged steel		
Weight (oz.)			25.7	26.8	25.6
Length (center to center)			5.71	6.70	6.12
Bearing	Material & Type		Lead-base babbitt on steel, removable, precision		Bi-metal grid
	Overall length		.985		.843
	Clearance (limits)		.0005 - .0015		
	End play		.006 - .012		.006 - .014 (2 rods)

(a) Oil ring only: low-tension, hump type

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See Page 2 for Engine Usage

MODEL			170 Cu In. 225 Cu In.	273 Cu In.

ENGINE—CRANKSHAFT

Material			Drop-forged steel	
Vibration damper type			Non-adhesion, rubber, dynamic	
End thrust taken by bearing (No.)			Three	
Crankshaft end play			.002 to .007	
Main bearing	Material & type		Lead-base babbitt on steel, removable, precision; # 3 only: tin-base babbitt on steel	
	Clearance		.0002 to .0022 specified; .0005 to .0015 desired	
	Journal dia. and bearing overall length	No. 1	2.750 x 1.034	2.500 x 0.872
		No. 2	2.750 x 1.034	2.500 x 0.872
		No. 3	2.750 x 1.254	2.500 x 1.151
		No. 4	2.750 x 1.034	2.500 x 0.872
		No. 5	- - -	2.500 x 1.562
		No. 6	- - -	
		No. 7	- - -	
	Dir. & amt. cyl. offset		None	
Crankpin journal diameter			2.187	2.125

ENGINE—CAMSHAFT

Location			Right side	Center of "V" above crankshaft
Material			Hardenable cast iron; oil pump and distributor drive cast integrally	
Bearings	Material		Lead-base babbitt on steel	
	Number		Four	Five
Type of Drive	Gear or chain		Chain	
	Crankshaft gear or sprocket material		Malleable cast iron or sintered iron (Super-Oilite)	
	Camshaft gear or sprocket material		Cast iron	
	Timing chain	No. of links	50	68
		Width	.88	.637
		Pitch	.50	.38

ENGINE—VALVE SYSTEM

Hydraulic lifters (Std, opt, NA)		NA	
Valve rotator, type (intake, exhaust)		Low-friction lock on exhaust	
Rocker ratio		1.5	
Operating tappet clearance (indicate hot or cold)	Intake	.010 Hot	.013 Hot
	Exhaust	.020 Hot	.021 Hot
Timing marks on flywheel, damper, other		Stationary indicator on water pump housing	Stationary indicator on chain case cover

(Continued)

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See Page 2 for Engine Usage

MODEL			170 Cu In. 1, 1-bbl	225 Cu In. 1, 1-bbl	273 Cu In. 1, 2-bbl	273 Cu In. 1, 4-bbl
ENGINE—VALVE SYSTEM (cont.)						
Timing	Intake	Opens (°BTC)	8	10	14	14
		Closes (°ABC)	44	50	46	54
		Duration - deg.	232	240	240	248
	Exhaust	Opens (°BBC)	48	50	58	56
		Closes (°ATC)	TDC	6	2	12
		Duration - deg.	228	236	240	248
	Valve opening overlap		8	16	16	26
Intake	Material		SAE 1041			
	Overall length		4.77		5.00	
	Actual overall head dia.		1.62		1.78	
	Angle of seat & face		45°			
	Seat insert material		None			
	Stem diameter		.37			
	Stem to guide clearance		.001 - .003			
	Lift (@ zero lash)		.371	.394	.395	.415
	Outer spring press. and length	Valve closed (lb. @ in.)	53 @ 1.69			83 @ 1.69 •
		Valve open (lb. @ in.)	143.5 @ 1.31			177 @ 1.31 •
	Inner spring press. and length	Valve closed (lb. @ in.)	None			
		Valve open (lb. @ in.)	None			
Exhaust	Material		21-4N			
	Overall length		4.80		5.00	
	Actual overall head dia.		1.36		1.50	
	Angle of seat & face		45° - 47°		45°	
	Seat insert material		None			
	Stem diameter		.37			
	Stem to guide clearance		.002 - .004			
	Lift (@ zero lash)		.364	.390	.405	.425
	Outer spring press. and length	Valve closed (lb. @ in.)	53 @ 1.69			83 @ 1.69 •
		Valve open (lb. @ in.)	143.5 @ 1.31			177 @ 1.31 •
	Inner spring press. and length	Valve closed (lb. @ in.)	None			
		Valve open (lb. @ in.)	None			

ENGINE—LUBRICATION SYSTEM

Type of lubrication (splash, pressure, nozzle)	Main bearings	Pressure
	Connecting rods	Pressure
	Piston pins	Metered Jet Spray
	Camshaft bearings	Pressure
	Tappets	Splash / Pressure
	Timing gear or chain	Jet
	Cylinder walls	Metered Jet Spray

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See Page 2 for Engine Usage

MODEL	170 Cu In.	225 Cu In.	273 Cu In. 2-bbl	273 Cu In. 4-bbl

ENGINE—LUBRICATION SYSTEM (cont.)

Oil pump type	Rotary
Normal oil pressure (lb. @ engine rpm)	45 to 65 @ 2000
Oil pressure sending unit (elect. or mech.)	Electric
Type oil intake (floating, stationary)	Stationary
Oil filter system (full flow, partial, other)	Full flow
Filter replacement (element, complete)	Complete
Capacity of crankcase, less filter-refill (qt.)	4
Oil grade recommended (SAE viscosity and temperature range)	Consistently above + 32F . . . . . SAE 20W-40 or SAE 30 Occasionally as low as -10F . . . . . SAE 10W-30 Consistently between + 32F and -10 F . . SAE 10W Consistently below + 10F . . . . . SAE 5W-20
Engine Service Requirement (MM, MS, etc.)	MS

ENGINE—EXHAUST SYSTEM

Type (single, single with cross-over, dual, other)		Single	Single with cross-over	
Muffler No. & type (reverse flow, straight thru, separate resonator)		One, reverse flow		One, straight through with resonator
Exhaust pipe dia. (O.D. wall thickness)	Branch	- -	1.75 x 0.075	1.875 x .075
	Main	1.75 x 0.075	2.00 x 0.075	2.50 x .075
Tail pipe diameter (O.D. & wall thickness)		1.50 x 0.048	1.88 x 0.048	2.25 x .048

ENGINE—CRANKCASE VENTILATION SYSTEM

Type (ventilates to atmos., induction system, other)		Standard	Induction system
		Optional	- -
Control unit	Make and model		Chicago Screw (a)
	Location		Cylinder head cover outlet
	Energy source (manifold vacuum, carburetor air stream, other)		Manifold vacuum
	Control method (variable orifice, fixed orifice, other)		Variable orifice
Complete system	Discharges (to intake manifold, carb. air intake, air cleaner intake, other		Intake manifold, at or through base of carburetor
	Air inlet (breather cap, carburetor air cleaner, other)		Std. : Breather cap Spec. : Tube from carburetor air filter intake horn to oil filler cap
	Flame arrestor (screen, check valve, other)		Check valve

(a) Part numbers: 170 cu in. engine, 2463553; all other engines, 2463554.

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MODEL	AV1		AV2	
	Except Station Wagon	Station Wagon	Except Station Wagon	Station Wagon

ENGINE—FUEL SYSTEM

(See Supplement to Page 8 for Details of Fuel Injection, Supercharger, etc. if used)

Induction type: Carburetor, fuel injection, supercharger.			Carburetor			
Fuel Tank	Capacity (gals.)		18			
	Filler location		(a)	(b)	(a)	(b)
Fuel Pump	Type (elec. or mech.)		Mechanical			
	Locations		Right, center		Right, front	
	Pressure range		4 - 5.5 psi		6 - 7.5 psi	
Vacuum booster (std., optional, none)			None			
Fuel Filter	Type		Fuel tank, plastic; fuel line, paper			
	Locations		In fuel tank and in-line between fuel pump and carburetor			
Carburetor	Choke type		Automatic, separate			
	Intake manifold heat control (exhaust or water)		Exhaust			
	Air clnr. type	Standard	Paper element			
		Optional	- - -			

CARBURETOR SUPPLEMENTARY INFORMATION

Model Usage	Engine Displ.	Transmission	Carburetors		No. Used and Type	Barrel Size
			Make	Model		
AV1	170 Std	Manual	Ball and Ball	BBS-3833S	1, 1-bbl	1.56
			Holley	R-3053A		
		Automatic	Ball and Ball	BBS-3834S		1.69
			Holley	R-3054A		
	225 Opt	Manual	Ball and Ball	BBS-3837S		
			Holley	R-3057A		
		Automatic	Ball and Ball	BBS-3838S		
			Holley	R-3058A		
AV2	273 Std	Manual	Ball and Ball	BBD-3843S	1, 2-bbl	1.44
			Stromberg	WW3-248		
		Automatic	Ball and Ball	BBD-3844S		
			Stromberg	WW3-249		
	273 Opt	Manual	Carter	AFB-3853S	1, 4-bbl	P: 1.44 S: 1.56
		Automatic	Carter	AFB-3854S		

(a) Left rear fender. (b) Top of left rear fender

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MODEL

	See Page 2 for Engine Usage							
	170 Cu In.		225 Cu In.		273 Cu In. 2-bbl		273 Cu In. 4-bbl	
	Std	W/AC	Std	W/AC	Std	W/AC	Std	W/AC

ENGINE—COOLING SYSTEM

Type system (pressure, pressure vented, atmospheric, other)			Pressure-Vent					
Radiator cap relief valve pressure			Std 14, with AC 16					
Circulation thermostat	Type (choke, bypass)		Choke, pellet					
	Starts to open at (°F)		177 to 184					
Water pump	Type (centrifugal, other)		Centrifugal					
	GPM @ 1000 pump rpm							
	Number of pumps		One					
	Drive (V-belt, other)		V-Belt					
	Bearing type		Ball, permanently sealed					
By-pass recirculation type (internal, external)			External					
Radiator core type (cellular, tube and fin, other)			Tube and spacer					
Cooling system capacity	With heater (qt.)		12		13		18	
	Without heater (qt.)		11		12		17	
	Opt. equipment-specify (qt.)		None					
Water jackets full length of cylinder (yes, no)			No					
Water all around cylinder (yes, no)			Yes					
Radiator hose	Lower	Number and type (molded, straight)	One, molded					
		Inside diameter	1.50					
	Upper	Number and type (molded, straight)	One, molded					
		Inside diameter	1.50					
	By-pass	Number and type (molded, straight)	One, straight					
		Inside diameter	0.68					
Fan	Number of blades & Spacing		Four (a)	Six (b)	Four (a)	Six (b)		Seven (c)	Six (b)	Seven (c)
	Diameter		16	17	16	17				
	Ratio-fan to crankshaft rev.		1.07:1	1.10:1	1.07:1	1.10:1	0.95:1	1.30:1	0.95:1	1.30:1
	Fan cutout type		None							
	Bearing type		Same as water pump							
*Drive belts (indicate belt used by letter)	Fan		A		E		F	H	F	H
	Alternator		A		E		F	I	F	I
	Water Pump		A		E		F	H	F	H
	Power Steering		B	D	B	D	G			
	Air Conditioning		- -	C	- -	C	- -	I	- -	I

* Drive Belt Dimensions	A	B	C	D	E	F	G	H	I
Angle of V									
Nominal length (SAE)	55.00	36.50	53.00	38.38	57.38	48.50	38.75	37.25	59.25
Width	0.38		0.50	0.38			0.50	0.38	0.47

(a) 76° - 104° (b) 54° - 50° - 76° (c) 60° - 45° - 59° - 47° - 54° - 50° - 45°

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See Page 2 for Engine Usage

MODEL	AV1		AV2	
	170 Cu In.	225 Cu In.	2-bbl 273 Cu In.	4-bbl 273 Cu In.

ELECTRICAL—SUPPLY SYSTEM

Battery	Make and Model		MoPar		
	Voltage Rtg. & Total Plates		12, 42	12, 54	
	SAE Designation & Amp Hr. Rtg.		9HCO, 38	9HC3, 48	
	Location		Left front fender shield		
	Terminal grounded		Negative		
Alternator	Make		Chrysler		
	Model		2098835	2098830	•
	Type		Three-phase, full-wave rectifier		
	Ratio—Gen. to Cr/s rev.		2.45 to 1	2.18 to 1	•
	Gen. cut-in (hot) —engine rpm		Not applicable		
Regulator	Make		Chrysler		
	Model		2098300		
	Type		Voltage Control		
	Cutout relay	Closing voltage @ generator rpm	- -		
		Reverse current to open	- -		
	Regulated	Voltage	12		
		Current	- -		
	Voltage test conditions	Temperature	70 F		
		Load	- -		
		Other	Run 15-min. at 1250 engine rpm with 15-amp load		

ELECTRICAL—STARTING SYSTEM

Starting motor	Make		Chrysler	
	Model		2098500	2095150
	Rotation (drive end view)		Clockwise	
	Engine cranking speed		NA	
	Test conditions		NA	
	Lock test	Amps	340 - 420	400 - 450
		Volts	4	
		Torque (lb. ft.)	NA	
	No load test	Amps	90	
		Volts	11	
		RPM (min.)	2950	1925 - 2400
Motor control	Switch (solenoid, manual)		Solenoid	
	Starting procedure		With transmission in neutral, depress accelerator pedal one-third, turn ignition key beyond "Ignition On" position	

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MODEL	AV1				AV2		
	170 Cu In.		225 Cu In.		2-bbl 273 Cu In.		4-bbl 273 Cu In.
	Man.	Auto.	Man.	Auto.	Man.	Auto.	All

ELECTRICAL—STARTING SYSTEM (cont.)

Motor Drive	Engagement type		Solenoid, with reduction gear				
	Pinion meshes (front, rear)		Front				
	Number of teeth	Pinion	10				
		Flywheel	122		130		
	Flywheel tooth face width		.340				

ELECTRICAL—IGNITION SYSTEM

Coil	Make		Chrysler					
	Model		2444242 or 2444241					
	Amps	Engine stopped	3.0					
		Engine idling	1.9					
Distributor	Make		Chrysler					Prestolite
	Model		2444255	2444256	2444907	2444648	2444794	2444795	IBS - 4013
	Cent'fgal adv. in crankshaft degrees @ engine rpm (nominal)	Start (rpm)	See page 11 A					
		Intermediate points deg. @ rpm	"					
		Max deg. @ rpm	"					
	Vacuum adv. in crankshaft degrees @ in. Hg. (nominal)	Start (in Hg)	"					
		Intermediate points, deg @ in Hg	"					
		Max. deg. in. Hg.	"					
	Breaker gap (in.)		.017 - .023				.014 - .019	
	Cam angle (deg.)		40 - 45				28 - 33	(a)
	Breaker arm tension (oz.)		17 - 20					17 - 21.5
Timing	Crankshaft deg. @ rpm.		2.5 BTC @ idle				5 BTC (b)	10 BTC @ idle
	Mark location		Water pump housing				Chain case cover	
	Cylinder numbering system (see page 2)		Front to rear				Left Bank 1-3-5-7 Right Bank 2-4-6-8	
	Firing order (see page 2)		1-5-3-6-2-4				1-8-4-3-6-5-7-2	
Spark Plug	Make and model		MoPar P-6-6P or Champion N-14Y					(d) •
	Thread (mm)		14-mm					
	Tightening torque (lb. ft.)		30-32					
	Gap		.035					
Cable	Conductor type		Resistor					
	Insulation type		Synthetic rubber with Neoprene jacket				(c)	
	Spark plug protector		Hypalon				Silicone	

ELECTRICAL—SUPPRESSION

Locations & type	Resistance-type leads to coil and spark plugs

(a) Each breaker point set 27° - 31°; both sets 36° - 40°
(b) At idle
(c) Synthetic rubber with Hypalon jacket
(d) MoPar P-6-2P or Champion N-9Y

MAKE OF CAR PLYMOUTH VALIANT MODEL YEAR 1965 DATE ISSUED 7-10-64 REVISED (•)

SUPPLEMENTARY INFORMATION

DISTRIBUTOR

CENTRIFUGAL ADVANCE
(Crankshaft degrees at engine rpm)

	2444255	2444256	2444648	2444794
Start	0 @ 750 - 1050	0 @ 650 - 950	0 @ 650 - 950	0 @ 600 - 900
Intermediate	0 - 5 @ 1050 16 - 20 @ 2020	0 - 14 @ 950 12 - 16 @ 1200	0 - 5 @ 950 15 - 19 @ 1920	0 - 5 @ 900 15 - 19 @ 1740
Maximum	25 - 29 @ 4400	25 - 29 @ 4400	21 - 25 @ 4400	21 - 25 @ 3500

	2444795	2444907	IBS-4013
Start	0 @ 650 - 950	0 @ 650 - 950	0 @ 650 - 950
Intermediate	0 - 4 @ 950 10 - 14 @ 1660	0 - 5 @ 950 15 - 19 @ 1920	0 - 4 @ 950 8 - 12 @ 1500
Maximum	16 - 20 @ 3500	21 - 25 @ 4400	16 - 20 @ 4600

VACUUM ADVANCE
(Crankshaft degrees at inches of mercury)

	2444255	2444256	2444648	2444794
Start	0 @ 5.0 - 7.1	0 @ 5.0 - 7.1	0 @ 4.9 - 7.1	0 @ 7.0 - 9.0
Intermediate	8 - 14 @ 9.2	6 - 12 @ 8.5	6 - 10 @ 10.5	12 - 18 @ 12.0
Maximum	17 - 23 @ 12.0	12 - 17 @ 10.0	10.5 - 15 @ 13.0	21 - 27 @ 15.0

	2444795	2444907	IBS - 4013
Start	0 @ 7.0 - 9.0	0 @ 6.9 - 9.1	0 @ 7.0 - 9.0
Intermediate	12 - 18 @ 12.0	6 - 10 @ 12.5	8 - 14 @ 11.0
Maximum	21 - 27 @ 15.0	10.5 - 15 @ 15.0	17 - 23 @ 13.5

AMA Specifications – Passenger Car

MAKE OF CAR PLYMOUTH VALIANT MODEL YEAR 1965 DATE ISSUED 7-10-64 REVISED (•)

MODEL AV1, AV2

ELECTRICAL—INSTRUMENTS AND SWITCHES

Speedometer	Make	- -
	Trip odometer (yes, no)	No
Charge indicator—type		Ammeter
Temperature indicator—type		Electric, thermal
Oil pressure indicator—type		Light
Fuel indicator—type		Electric, thermal
Other		None
Ignition switch	Identify positions in order and circuits controlled	Center position . . . . . Off 1st position clockwise . . . . . Ignition and accessory circuit 2nd position clockwise . . . . . Starter and ignition circuit 1st position counterclockwise . . . . . Acessory circuit
	Provision for illumination	Yes
	Location	Right of steering column
Main lighting switch	Identify positions and lamps controlled	Full in . . . . . Off 1st position out . . . Instruments, tail, parking and license plate lamps Full out . . . . . Instruments, tail, head, and license plate lamps
Other light switches	Locations and lamps controlled	- - -
Other switches	Locations and devices controlled	- - -
Windshield wiper	Make	- -
	Type	Electric
	Vacuum booster provision	None
	Washer provision	Yes, opt
Horn	Type	Sea Shell
	Number used	Two
	Amp draw (each)	- -

AMA Specifications – Passenger Car

MAKE OF CAR PLYMOUTH VALIANT MODEL YEAR 1965 DATE ISSUED 7-10-64 REVISED (•)

MODEL All Models

ELECTRICAL—LAMP BULBS

Give quantity used and trade number, e.g., Headlamp 2-5400 S, dual headlight 2-4001, 2-4002.

Headlamps & arrangement		2 - 6012
Headlamp beam indicator		1 - 158
Parking		2 - 1034 (A)
Tail		2 - 1034 (B)
Stop		Same as (B)
Direction signal	Front	Same as (A)
	Rear	Same as (B)
	Indicator	1 - 158
License Plate		1 - 67
Oil pressure indicator		1 - 158
Charge indicator		Same as (C)
Instrument		3 - 158 (C)
Clock		- -
Radio		1 - 1393

Indicate also whether the following lamp assemblies are standard equipment, optional, or NA.

Ignition lock	Stray light
Back up	2 - 1073 Opt
Dome	1 - 1004 Std
Glove compartment	1 - 1891 Opt (Dealer-installed)
Prkg. brake signal	1 - 57 Opt
Luggage compartment	1 - 1004 Opt
Underhood	1 - 1004 Opt (Dealer-installed)
Courtesy	- -
Map	1 - 90 Opt
Trans. Gear Selector	1 - 1445 Opt
Console Gear Selector	1 - 53X Opt

MAKE OF CAR PLYMOUTH VALIANT MODEL YEAR 1965 DATE ISSUED 7-10-64 REVISED (e) 3-29-65

MODEL	AV1			AV2		
	21, 23, 27, 41	29	45	21, 23, 27, 41	29	45

ELECTRICAL—FUSE & CIRCUIT BREAKER DATA

Use trade number of fuse, e.g., SFE-10. Indicate circuit breaker by ampere capacity suffixed by letters "C.B.", e.g., 30 C.B. Where fuse or circuit breaker protects multiple circuits indicate first use by a letter and repeat the same letter for all units protected by the same fuse or circuit breaker, e.g., Parking lamp SFE-10 (a), Direction indicator same as (a).

Headlamp	15 C B (A)
Headlamp beam indicator	Same as (A)
Parking lamp	A G C 20 (B)
Tail lamp	Same as (B)
Stop lamp	Same as (B)
Direction indicator	Not fused
License plate lamp	Same as (B) •
Instrument lamp	A G C 2 (C)
Ignition lamp	- -
Back up lamp	Same as C B for windshield wiper
Dome lamp	Same as (B)
Clock	None
Clock lamp	- -
Radio	A G C 5
Glove compartment lamp	A G C 20 (D)
Trunk compartment	Same as (D)
Parking brake indicator	Same as (D)
Cigar lighter	A G C 20
Heater	A G C 20
Air conditioner	A G C 20
Windshield wiper	6 CB •

ELECTRICAL—LOCATION OF OUTSIDE LAMPS

Height above ground to center of bulb	Tail	Lowest	- - -					
		Highest	27.4	27.6	19.7	27.7	27.8	20.0
	Stop		Same as tail lamp					
	Backup		22.1	22.3	19.7	22.4	22.5	20.1
	License, rear		11.1	11.2	11.7	11.4	11.6	12.0
	Directional	Front	13.5	24.0	14.1	13.9	24.3	14.4
		Rear	Same as tail lamp					
	Headlamp	Inside	- - -					
		Outside*	23.8	23.9	24.3	24.1	24.2	24.6
Distance from C/L of car to center of bulb	Tail	Inside	- - -					
		Outside	29.6		26.4	29.6		26.4
	Stop		Same as tail lamp					
	Backup		29.5		29.8	29.5		29.8
	License, rear		0					
	Directional	Front	21.8	26.0	21.8		26.0	21.8
		Rear	Same as tail lamp					
	Headlamp	Inside	- - -					
		Outside*	28.0					

* If single headlamps are used enter here.

AMA Specifications – Passenger Car

MAKE OF CAR PLYMOUTH VALIANT MODEL YEAR 1965 DATE ISSUED 7-10-64 REVISED (•) 3-29-65

MODEL	AV1				AV2
	170 Cu In.		170 & 225 Cu In.		273 Cu In.
	Std Equip. Optional		Spec Equip. Optional		Std Equip.

DRIVE UNITS—CLUTCH (Manual Transmission)

Make & type		Borg and Beck or Auburn dry plate				Auburn dry plate
Type pressure plate springs		Coil				
Effective plate pressure (lb.) (a)		1183	1340	1475	1595	1650
No. of clutch driven discs		One				
Clutch facing	Material	Woven asbestos				
	Outside & inside dia.	9.12 x 6.12		9.25 x 6.00		9.50 x 6.50
	Total eff. area (sq.in.)	71.8		77.8		75.8
	Thickness	.125	.114	.125	.114	
	Engagement cushioning method	Flat wave springs				
Release bearing	Type & method of lubrication	Ball bearing, permanently-lubricated				
Torsional damping	Methods: springs, friction material	Coil springs and friction washers				

DRIVE UNITS—TRANSMISSIONS

Manual	3-Speed	Std	
	4-Speed	NA	Opt. (b)
Automatic (std. or opt.)		Opt	

DRIVE UNITS—MANUAL TRANSMISSION

Number of forward speeds		Three (170 cu in.)	Three (225)	Three (273)	Four (all)	
Transmission ratios	In first	3.22	2.95	3.02	3.09	•
	In second	1.84	1.83	1.76	1.92	•
	In third	1.00	1.00	1.00	1.40	•
	In fourth	- - -	- - -	- - -	1.00	•
	In reverse	4.15	3.80	3.45	3.00	•
Synchronous meshing, specify gears		3-speed, 2nd and 3rd; 4-speed, all forward speeds				
Shift lever location		3-speed, steering column; 4-speed, floor-mounted				
Lubricant	Capacity (pt.)	6	6		7	
	Type recommended	(c)	(d)			
	SAE viscosity number — Summer	(c)	(d)			
	SAE viscosity number — Winter	(c)	(d)			
	SAE viscosity number — Extreme cold	(c)	(d)			

(a) At 2500 rpm.
(b) Not available for 170 cu in. engine.
(c) Automatic Transmission Fluid, Type AQ-ATF, Suffix (A) for all anticipated temperature ranges, Multipurpose Gear Lubricant SAE 90 may be used in warm climates.
(d) Multipurpose Gear Lubricant SAE 140, SAE 80, SAE 90, or Automatic Transmission Fluid, Type AQ-ATF, Suffix (A) may be used during continuous extremely cold weather.

AMA Specifications – Passenger Car

MAKE OF CAR PLYMOUTH VALIANT **MODEL YEAR** 1965 **DATE ISSUED** 7-10-64 **REVISED** (•)

	AV1		AV2	
MODEL	170 Cu In.	225 Cu In.	2-bbl 273 Cu In.	4-bbl 273 Cu In.

DRIVE UNITS—MANUAL TRANSMISSION WITH OVERDRIVE

For transmission data see manual transmission section

Overdrive	Type (planetary or other)						
	Manual lockout (yes, no)						
	Downshift accelerator control (yes, no)						
	Minimum cut-in speed						
	Gear ratio						
	Lubricant	Capacity (pt.) (Overdrive only)					
		Separate filler (yes, no)					
		Type recommended					
		SAE viscosity number	Summer				
			Winter				
			Ext. cold				

DRIVE UNITS—AUTOMATIC TRANSMISSION

Trade name	TorqueFlite Six		TorqueFlite Eight	
Type describe	Torque converter with automatically-operated planetary gear transmission			
Method of Selection (Lever, Push Button or other)	Selector lever - console-mounted for Signet and Barracuda, steering column-mounted all others.			
Selector Pattern	P-R-N-D-2-1			
List gear ratios Selector Pattern and indicate which are used in each selector position	R- 2.20 D- 2.45 - 1.45 - 1.00 2- 2.45 - 1.45 1- 2.45			
Max. upshift speeds—drive range	40 - 70		45 - 80	45 - 70
Max. kickdown speeds—drive range	62	65	70	65
Torque convertor: Number of elements	Three			
Torque convertor: Max. ratio at stall	2.20			
Torque convertor: Type of cooling (air, water)	Water			
Lubricant: Capacity—refill (pt.)	17			
Lubricant: Type recommended	Automatic Transmission Fluid, AQ-ATF, Suffix "A"			
Special transmission features	- - -			

DRIVE UNITS—PROPELLER SHAFT

Number used	One					
Type (exposed, torque tube)	Exposed					
Outer diameter x length* x wall thickness	Manual Transmission	3-Speed	2.75 x 53.40 x .065	3.00 x 53.40 x .065	2.75 x 53.40 x .065	3.00 x 53.40 x .065
		4-Speed	NA	3.00 x 53.40 x .065	2.75 x 53.40 x .065	3.00 x 53.40 x .065
	Automatic transmission		2.75 x 53.40 x .065	3.00 x 53.40 x .065	2.75 x 53.40 x .065	3.00 x 53.40 x .065

*Center to center of universal joints, or to centerline of rear attachment.

(Continued)

AMA Specifications – Passenger Car

MAKE OF CAR PLYMOUTH VALIANT MODEL YEAR 1965 DATE ISSUED 7-10-64 REVISED (•) 3-29-65

MODEL	AV1		AV2	
	170 Cu In.	225 Cu In.	2-bbl 273 Cu In.	4-bbl 273 Cu In.

DRIVE UNITS—PROPELLER SHAFT (cont.)

Intermediate bearing	Type (plain, anti-friction)		- - -
	Lubrication (fitting, prepack)		- - -
Universal joints	Make		Own
	Number used		Two
	Type (ball and trunnion, cross, other)		Front - Ball and Trunnion Rear - Cross and Roller
	Bearing	Type (plain, anti-friction)	Anti-friction
		Lubric. (fitting, prepack)	Prepack
Drive taken through (torque tube or arms, springs)			Rear Springs
Torque taken through (torque tube or arms, springs)			Rear Springs

DRIVE UNITS—REAR AXLE

Description (see instructions)			Std: One-piece case Opt: Sure-grip, two-piece case			
Limited Slip differential, type			Torque-bias			
Drive Pinion Offset			1.625		Std 1.625; Opt 1.5	•
No. of differential pinions			Std 2, Sure-grip 4			
Gear ratios (Std. equip.)	Manual Trans.	3-Speed	3.23		2.93	3.23
		4-Speed	- -	3.23	2.93	3.23
	Automatic transmission		3.23	2.93		3.23
Ring gear O.D. (std. ratio)			7.25		Std 7.25; Opt 8.75	•
Pinion adjustment (shim, other)			Solid shim (washer)			
Pinion bearing adj. (shim, other)			Solid shim (washer)			
Wheel bearing type			Ball bearing			
Lubricant	Capacity (pt.)		2.0		Std 2.0; Opt 4.0	•
	Type recommended		Multipurpose Gear Lubricant			
	SAE viscosity number	Summer	Above -10 F: SAE 90			
		Winter	Between -10 F and -30 F: SAE 80			
		Extreme cold	Below -30 F: SAE 75			

REAR AXLE RATIO TOOTH COMBINATIONS

(See page 3 for axle ratio usage)

Axle ratio		2.93	3.23	3.55
No. of teeth	Pinion	14	13	11
	Ring gear	41	42	39

AMA Specifications – Passenger Car

MAKE OF CAR PLYMOUTH VALIANT MODEL YEAR 1965 DATE ISSUED 7-10-64 REVISED (*)

MODEL	AV1			AV2		
	Exc 29, 45	29	45	Exc 29, 45	29	45

DRIVE UNITS—WHEELS

Type & material			Disc, steel				
Rim (size and flange type)		Std.	4.5 J				
		Opt.	- -				
Attachment	Type (bolt or stud)		Stud				
	Circle diameter		4.0				
	Number and size		Five, 7/16 - 20NF				

DRIVE UNITS—TIRES

Standard (List option below)	Size & ply		6.50 x 13, 2			7.00 x 13, 2	
	Type - Nylon, etc.		Rayon				
Rev/mile at 50 mph.			847			831	
Inflation press.(cold)	Front		24				22
	Rear	24	26	24	22	24	
Optional tires - size and ply			7.00 x 13, 2			- -	

BRAKES—SERVICE

Type (duo-servo, disc, balanced, etc.)			Duo-servo			Duo-servo	
Self adjusting (std., opt., N.A.)			Std				
Hydraulic system type (single, dual, etc.)			Single				
Power brake make & type (remote, integral, etc.)			Integral				
Effective area (sq. in.)*			153.5			156.2	
Gross lining area (sq. in.)**			153.5			156.2	
Swept drum area (sq. in.)***			254.5			251.3	
Percent brake effectiveness—front			60				
Drum	Diameter	Front	9" Std; 10" Opt			10	
		Rear	9" Std; 10" Opt			10	
	Type and material						
Wheel cylinder bore	Front		1.00			1.1250	
	Rear		.9125				
Master cylinder bore			1.00				
Available pedal travel			6.2 (a)				
Line pressure at 100 lb. pedal load			930 (b)				
Shoe clearance adjustment			No major adjustment required				

(Continued)

* Excludes rivet holes, grooves, chamfers, etc.
** Includes rivet holes, grooves, chamfers, etc.
*** Total swept areas for four brakes:
Widest lining contact width for each brake x its drum circumference.

(a) 4.3 with power brakes.
(b) 1080 with power brakes.

AMA Specifications–Passenger Car

MAKE OF CAR PLYMOUTH VALIANT MODEL YEAR 1965 DATE ISSUED 7-10-64 REVISED (•)

MODEL	AV1	AV1, AV2

BRAKES—SERVICE (cont.)

Brake lining	Bonded or riveted				Bonded	
	Front Shoe	Material			Molded asbestos	
		Size (length x width x thickness)	Front wheel	7.66 x 2.25 x .19	8.46 x 2.25 x .19	
			Rear wheel	7.66 x 2.00 x .19	8.46 x 1.75 x .19	
		Segments per shoe		One		
	Rear Shoe	Material		Molded asbestos		
		Size (length x width x thickness)	Front wheel	9.82 x 2.50 x .19	11.06 x 2.25 x .19	
			Rear wheel	9.82 x 2.00 x .19	11.06 x 1.75 x .19	
		Segments per shoe		One		

BRAKES—PARKING

Type of control		T-handle
Location of control		Under left end of instrument panel
Operates on		Rear wheels
If separate from service brakes	Type (internal or external)	- -
	Drum diameter	- -
	Lining size (length x width x thickness)	- -

FRAME or UNITIZED CONSTRUCTION

Type and description	Unit construction

SUSPENSION—GENERAL (See Supplemental page 19 for details on Air Suspension)*

Provision for car leveling		Manual adjustment at torsion bar anchor bolt
Provision for brake dip control		By inclined upper control arms and asymmetrical rear springs
Provision for acc. squat control		Asymmetrical rear springs
Special provisions for car jacking		None
Shock absorber front & rear	Type	Direct
	Make	Own
	Piston dia.	1.0
Other special features		- -

SUSPENSION—FRONT

Type and description	Independent, lateral, non-parallel control arms with torsion bars

* Air Suspension:
Air spring type
Compressor data
type
make
drive ratio
Normal operating pressures
spring rates
leveling data

(Continued)

MAKE OF CAR PLYMOUTH VALIANT MODEL YEAR 1965 DATE ISSUED 7-10-64 REVISED (•) 3-29-65

	AV1		AV2	
MODEL	Exc. 45	45	Exc. 45	45

SUSPENSION FRONT (cont.)

Spring	Type	Torsion Bar				
	Material	Chromium alloy steel				
	Size (coil design height & I.D.; bar length x dia.)	35.8 x 0.83		35.8 x 0.85		
	Spring rate (lb. per in.)	NA				
	Rate at wheel (lb. per in.)	90		100		
	Design load (lb. @ design height)	NA				
Stabilizer	Type (link, linkless, frameless)	Std None, Opt Link				•
	Material & bar diameter	- -				

STEERING

Manual (std., opt., NA)				Std			
Power (std., opt., NA)				Opt			
Adjustable steering wheel (tilt, swing, other)		Type and description		None			
		(std., opt., NA)		- -			
Wheel diameter		Manual		16.0 x 16.4 oval			
		Power		16.0 x 16.4 oval			
Turning diameter	Outside front	Wall to wall (l. & r.)		39.7			
		Curb to curb (l. & r.)		37.1			
	Inside rear	Wall to wall (l. & r.)	21.4	21.5	21.4	21.5	
		Curb to curb (l. & r.)		22.0			
Outside wheel angle with inside wheel at 20°							
Manual	Gear	Type		Worm and ball nut			
		Make		Own			
		Ratios	Gear	24.0			
			Overall	28.9			•
	No. wheel turns			5.3			
Power	Type (coaxial, linkage, etc.)			Integral			
	Make			Own			
	Gear	Type		Rack and sector			
		Ratios	Gear	15.7			
			Overall	18.9			•
	Pump driven by			Belt from crankshaft pulley			
	Number wheel turns			3.5			
Linkage	Type			Trailing, parallel idler arms, equal-length tie rods			
	Location (front or rear of wheels, other)			Rear			
	Drag link (trans. or longit.)			Transverse center link			
	Tie rods (one or two)			Two			

(Continued)

MAKE OF CAR PLYMOUTH VALIANT MODEL YEAR 1965 DATE ISSUED 7-10-64 REVISED (•)3-29-65

MODEL	AV1			AV2		
	21, 23, 27, 41	29	45	21, 23, 27, 41	29	45

STEERING (cont.)

Steering Axis	Inclination at camber (deg.)		7.5° @ 0					
	Bearings (type)	Upper	Ball joint					
		Lower	Ball joint					
		Thrust	Oil-impregnated sintered metal					
Wheel alignment (range and preferred)	Caster (deg.)		Manual -0.5° ± 0.5° Power +0.75° ± 0.5°					
	Camber (deg.)		Left side + 0.5° ± 0.25° Right side + 0.25° ± 0.25°					
	Toe-in (outside tread-inches)		3/32 - 5/32					
Steering spindle & joint type			Ball joint					
Wheel spindle	Diameter	Inner bearing	1.0619					
		Outer bearing	0.6869					
	Thread size		11/16-24 NEF-3					
	Bearing type		Roller					

SUSPENSION—REAR

Type and description			Parallel, longitudinal leaf					
Drive and torq. taken through (see page 17)			Rear springs					
Spring	Type		Semielliptical, asymmetrical					
	Material		Chromium alloy steel					
	Size (length x width, coil design height and I.D.; bar length & dia.)		55 x 2.5					
	Spring rate (lb. per in.)		85		110	85		110
	Rate at wheel (lb. per in.)		105		135	105		135
	load (lb. at design height) (c)		560	620	760	620		800
	Mounting insulation type		Rubber					
	If leaf	No. of leaves	4(a)	4.5	5	4.5 (b)	4.5 (b)	6
		Inserts Type and size	4, 3.50		5, 3.50	4, 3.50		7, 3.50
		Inserts Material	Plastic					
		Shackle (comp. or tens.)	Compression					
Stabilizer	Type (link, linkless, frameless)		None					
	Material		- -					
Track bar type			None					

(a) 5 leaves with 225 cu in. engine.

(b) 5.5 leaves with 4-bbl 273 cu in. engine.

(c) Checking load at -0.375 opening.

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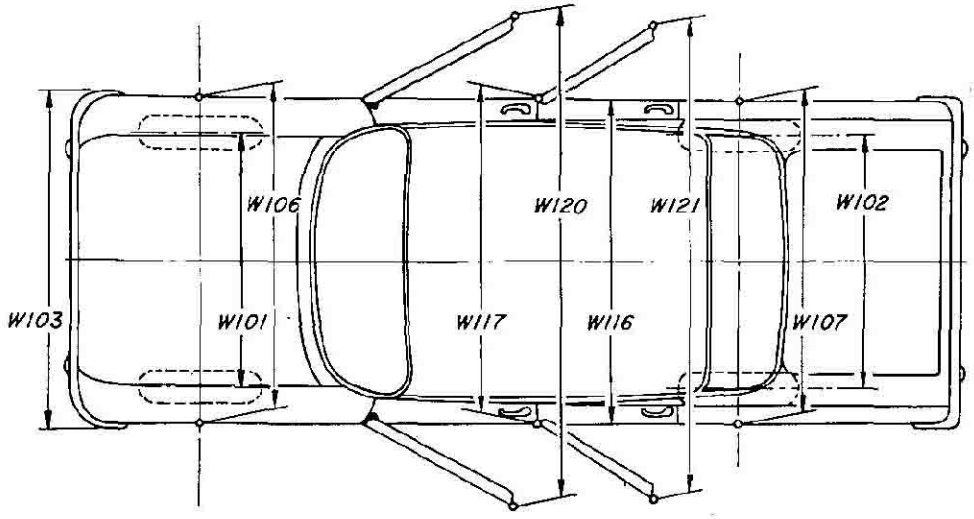
CAR AND BODY DIMENSIONS—GENERAL

Dimensions herein are those adopted by the Society of Automotive Engineers. Brief descriptions of these dimensions are listed on pages 34-36. Complete definitions are listed in section E-1 of the SAE Aeronautical - Automotive Drawing Standards.
The dimensions are developed from the following basic points:

1. Body dimensions are for all body styles.
2. All interior dimensions are taken with manikin 15.0 inches outboard of car centerline unless otherwise stated.
3. All interior dimensions are measured with the front seat in the lowest and rearmost position.
4. Unless otherwise specified, all exterior height dimensions are taken with a full design load which consists of 5 passengers, 300 lbs. front, 450 lbs. rear; includes spare wheel, tire and tools, and full complement of gas, oil, water and tires to recommended pressure, etc.
5. The SAE manikin with 90th percentile leg length will be used for recording purposes.
6. The H Point is the pivot center of the manikin's torso and thigh.
7. The D Point is the point of tangency of a horizontal line and the lowest point of the manikin.
8. The Torso Line is a line parallel to the small of manikin's back and extending through the H Point.

EXTERIOR WIDTH DIMENSIONS



MODEL	Ref. No.	AV1, AV2		
		21, 23, 27, 29	41	45
Tread - front	W101	55.9		
Tread - rear	W102	55.6		
Maximum overall car width	W103	70.1		
Maximum overall body width	W116	69.8		69.0
Maximum body width at #2 pillar	W117	67.8		
Front fender overall width	W106	69.0		
Rear fender overall width	W107	69.8		68.8
Maximum overall car width - front doors open	W120	150.5	139.2	
Maximum overall car width - rear doors open	W121	- -	127.5	

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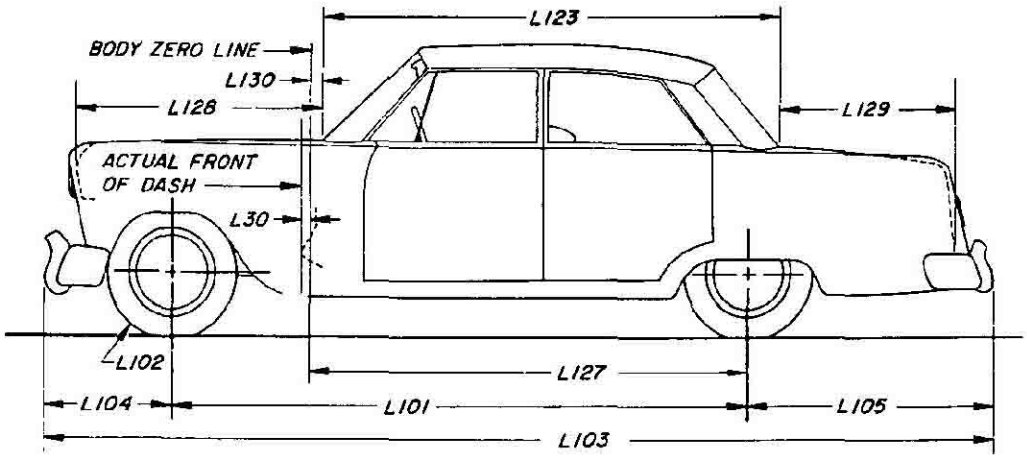
EXTERIOR LENGTH DIMENSIONS

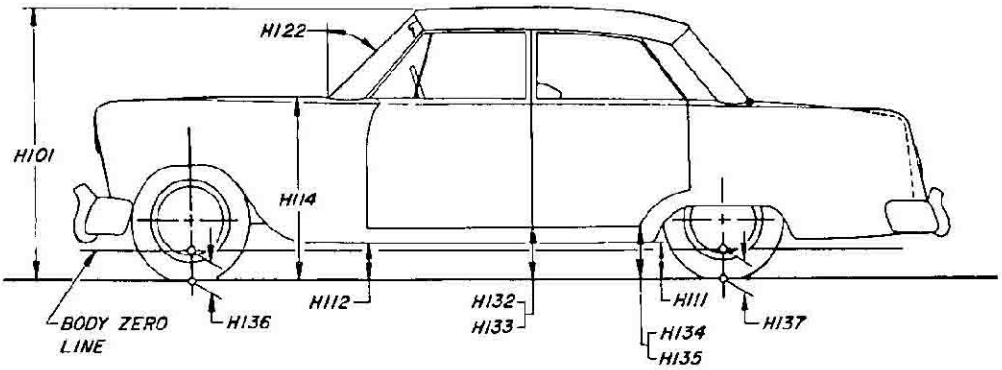


MODEL	Ref. No.	AV1, AV2			
		21, 23, 41	27	29	45
Body zero line to actual front of dash	L30	0.48			
Wheelbase	L101	106.0			
Overhang - front	L104	33.0			
Overhang - rear	L105	49.2			49.8
Overall length	L103	188.2			188.8
Hood length at car centerline	L128	54.3			
Body upper structure length at car centerline	L123	96.5	- -	108.9	- -
Deck length at car centerline	L129	33.7	- -	21.3	- -
Body zero line to centerline of rear wheels	L127	94.2			
Body zero line to windshield cowl point	L130	11.2			
Tire size	L102	AV1- 6.50 x 13 , AV2- 7.00 x 13			

AMA Specifications– Passenger Car

MAKE OF CAR PLYMOUTH VALIANT MODEL YEAR 1965 DATE ISSUED 7-10-64 REVISED (•)

EXTERIOR HEIGHT DIMENSIONS

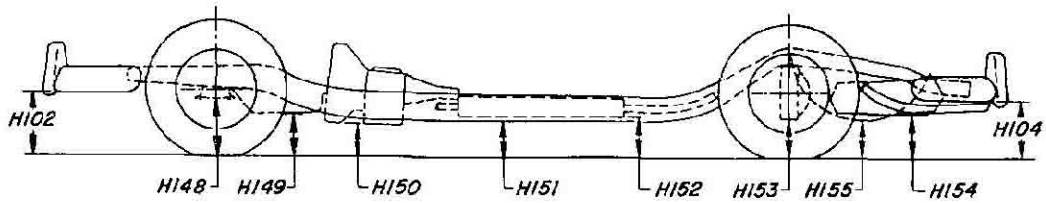


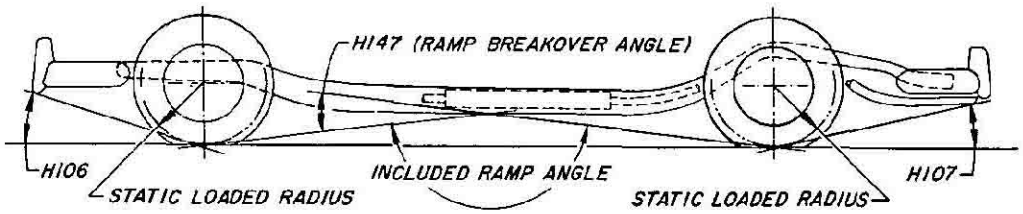
MODEL	Ref. No.	AV1					AV2				
		21, 23	27	29	41	45	21, 23	27	29	41	45
Overall height	H101	53.5	54.0	53.8	53.5	52.9	53.7	54.3	54.0	53.7	53.3
Hood at rear to ground	H114	36.8		36.9	36.8	37.0	37.1		37.2	37.1	37.2
Rocker panel to ground - front	H112	7.4		7.5	7.4	7.5	7.7		7.8	7.7	7.8
Rocker panel to ground - rear	H111	7.0		7.1	7.0	6.4	7.2		7.4	7.2	6.8
Bottom of door to ground, open - front	H132	12.8				12.6	13.1				13.0
Bottom of door to ground, closed - front	H133	11.7		11.8	11.7	11.4	12.0		12.1	12.0	11.7
Bottom of door to ground, open - rear	H134	- -			11.9	11.4	- -			12.2	11.8
Bottom of door to ground, closed - rear	H135	- -			11.6	11.1	- -			11.8	11.4
Windshield slope angle	H122	53°									
Body zero to ground - front	H136	11.71		11.86	11.71	12.05	12.05		12.17	12.05	12.32
Body zero to ground - rear	H137	11.10		11.25	11.10	10.43	11.36		11.49	11.36	10.78

AMA Specifications--Passenger Car

MAKE OF CAR PLYMOUTH VALIANT MODEL YEAR 1965 DATE ISSUED 7-10-64 REVISED (•)

GROUND CLEARANCE DIMENSIONS





MODEL	Ref. No.	AV1			AV2		
		21, 23, 27, 41	29	45	21, 23, 27, 41	29	45
Front bumper to ground	H102	14.4	14.5	14.9	14.7	14.8	15.2
Rear bumper to ground	H104	15.1	15.3	12.5	15.3	15.5	12.9
Angle of approach	H106	21.7°	21.9°	22.9°	22.3°	22.7°	23.4°
Angle of departure	H107	13.6°	13.9°	9.9°	14.1°	14.2°	10.4°
Ramp breakover angle	H147	12.6°					
Front suspension to ground	H148	5.9	6.1	6.4	6.3	6.4	6.7
Oil pan to ground	H149	5.8	5.9	6.1		6.2	6.3
Flywheel housing to ground	H150	5.8	6.0		6.1	6.2	6.3
Frame structure to ground	H151	5.5	5.7	5.5	5.8	6.0	5.8
Exhaust system to ground	H152	5.2	5.4	5.2	5.6	5.7	5.5
Rear axle differential to ground	H153	6.8		6.5	7.0	7.1	6.9
Fuel tank to ground	H154	6.4	6.6	5.6	6.7	6.8	5.9
Spare tire well to ground	H155	10.6	10.8	9.7	10.9	11.0	10.1
Minimum running ground clearance	H156	5.2	5.4	5.2	5.6	5.7	5.5

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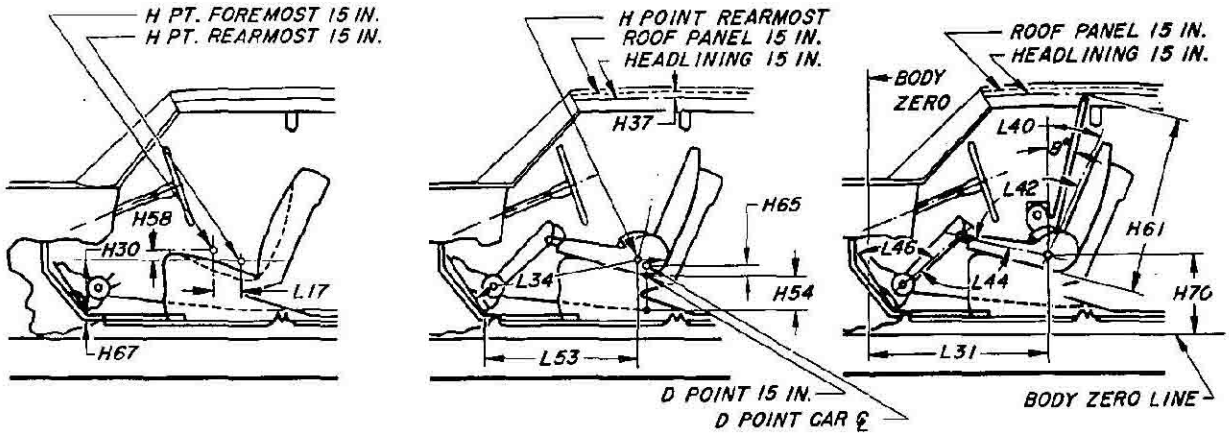
FRONT COMPARTMENT DIMENSIONS

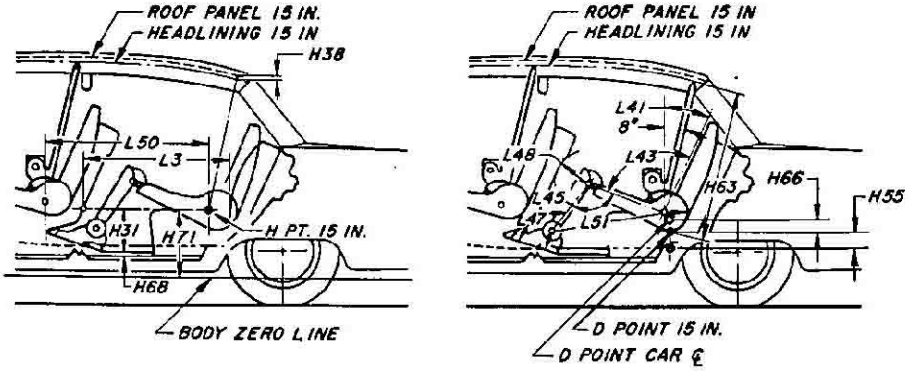


MODEL	Ref. No.	AV1, AV2					
		Bench Seats			Bucket Seats		
		21, 23, 41	27	45	23	27	29
H Point to body zero line	L31	43.4			43.3		42.3
H Point to body zero line - front	H70	7.1			6.9		6.8
Effective head room	H61	38.2	39.6	38.2	38.4	39.9	38.5
Headlining to roof height	H37	0.7	0	0.7		0	0.7
Maximum effective leg room - accelerator	L34	40.7			40.6		40.6
H Point to heel point	H30	8.0			7.8		7.8
Depressed floor covering thickness	H67	0.38					
Back angle	L40	24°			22°		
Hip angle	L42	91°			88°		85°
Knee angle	L44	121°			120°		113.5°
Foot angle	L46	82°			79.5°		76°
D Point differential, side to center	H65	0.6					
D Point to tunnel	H54	1.5					1.4
H Point to accelerator floor point	L53	33.3			33.1		32.2
H Point travel	L17	4.5					
H Point rise	H58	1.2			0.7		

AMA Specifications – Passenger Car

MAKE OF CAR PLYMOUTH VALIANT MODEL YEAR 1965 DATE ISSUED 7-10-64 REVISED (•) 3-29-65

REAR COMPARTMENT DIMENSIONS



MODEL	Ref. No.	AV1, AV2					
		Bench Seats			Bucket Seats		
		21, 23, 41	27	45	23	27	29
H Point couple distance	L50	32.1			32.2		28.6 •
H Point to body zero line - rear	H71	7.8			7.8		6.5
Effective head room	H63	37.2	37.0	37.6	37.2	37.6	36.7
Headlining to roof height	H38	0.8	0	0.8	0.8	0	36.7
Minimum effective leg room	L51	34.2			34.8		31.1
H Point to heel point	H31	11.6					10.3
Depressed floor covering thickness	H68	0.38					
Minimum knee room	L48	3.1			3.2		1.0
Rear compartment room	L3	26.5		26.3	26.6		23.8 •
Back angle	L41	24°					23°
Hip angle	L43	84°			86°		74°
Knee angle	L45	94°			87°		72°
Foot angle	L47	112°			113°		97°
D Point differential, side to center	H66	0.5					1.4
D Point to tunnel	H55	1.6					

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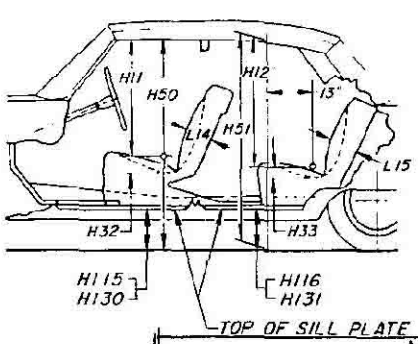
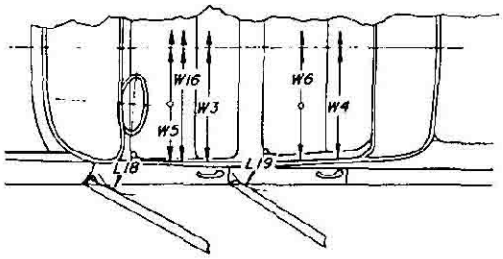
MAKE OF CAR PLYMOUTH VALIANT MODEL YEAR 1965 DATE ISSUED 7-10-64 REVISED(•)_____

SEAT AND ENTRANCE DIMENSIONS





	Ref. No.	AV1 (See Page 28A For AV2 Data)						
		Bench Seats				Bucket Seats		
		21	41	27	45	23	27	29
Shoulder room – front	W3	54.2						
Hip room – front	W5	56.9						
Seat width – front	W16	52.0				23.8 each		
Upper body opening to ground – front	H50	49.0		- -	48.8	49.0	- -	49.1
Entrance height – front	H11	30.5		- -	30.5	30.7	- -	30.7
Step height – front (design load)	H115	12.4						12.6
Step height – front (curb load)	H130	14.4			14.5	14.4		14.2
Entrance foot clearance – front	L18	13.7				14.8		
Seat cushion deflection – front	H32	4.1				3.4		
Seat back thickness – front	L14	5.5				5.4		
Shoulder room – rear	W4	54.4						52.6
Hip room – ream	W6	57.0		46.4	57.0		46.4	56.4
Upper body opening to ground – rear	H51	48.9		- -	48.5	- -		
Entrance height – rear	H12	29.8		- -	29.8	30.0	- -	30.4
Step height – rear (design load)	H11a	12.3	12.2	12.3	11.9	12.3		12.4
Step height – rear (curb load)	H131	14.5	14.6	14.5	14.8	14.5		14.2
Entrance foot clearance – rear	L19	8.0	11.0	8.0	11.0	7.4		
Seat cushion deflection – rear	H33	4.3						
Seat back thickness – rear	L15	5.6			5.0	5.6		

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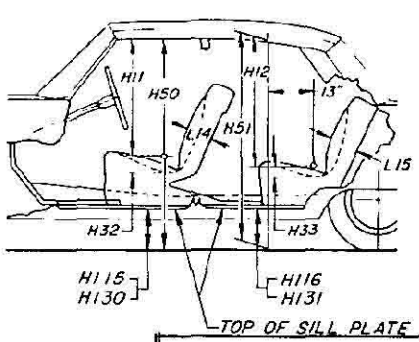
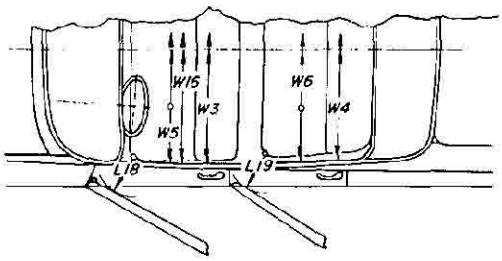
AMA Specifications – Passenger Car

MAKE OF CAR PLYMOUTH VALIANT MODEL YEAR 1965 DATE ISSUED 7-10-64 REVISED(*) 3-29-65

SEAT AND ENTRANCE DIMENSIONS





	Ref. No.	AV2						
		Bench Seats				Bucket Seats		
		21	41	27	45	23	27	29
Shoulder room – front	W3	54.2						
Hip room – front	W5	56.9						
Seat width – front	W16	52.0				23.8 each		
Upper body opening to ground – front	H50	49.3		- -	49.1	49.3	- -	49.5
Entrance height – front	H11	30.5		- -	30.5	30.7	- -	30.7
Step height – front (design load)	H115	12.8			12.7	12.8		12.9
Step height – front (curb load)	H130	14.6			14.7	14.6		14.4
Entrance foot clearance – front	L18	13.7				14.8		
Seat cushion deflection – front	H32	4.1				3.4		
Seat back thickness – front	L14	5.5				5.4		
Shoulder room – rear	W4	54.4						52.6
Hip room – ream	W6	57.0		46.4	57.0		46.4	56.4
Upper body opening to ground – rear	H51	48.9		- -	48.5	- -		
Entrance height – rear	H12	29.8		- -	29.8	- -		
Step height – rear (design load)	H116	12.5		12.6	12.2	12.5	12.6	12.7
Step height – rear (curb load)	H131	14.8			15.0	14.8		14.4
Entrance foot clearance – rear	L19	8.0	11.0	8.0	11.0	7.4		
Seat cushion deflection – rear	H33	4.3						
Seat back thickness – rear	L15	5.6			5.0	5.6		

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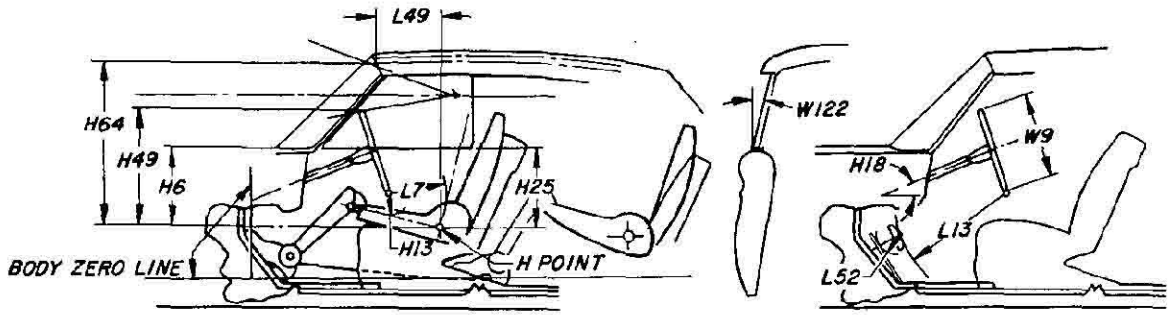
VISION AND CONTROL DIMENSIONS



MODEL	Ref. No.	AV1, AV2					
		Bench Seats			Bucket Seats		
		21, 23, 41	27	45	23	27	29
H Point to windshield bottom DLO	H6	19.3			19.5		19.3
H Point to windshield upper DLO	H64	31.1			31.3		31.8
H Point to windshield upper DLO	L49	16.3			15.8		14.0
Belt height – front	H25	16.9			17.1		17.2
Steering wheel center to centerline of car	W7	13.8					
Steering wheel maximum outside diameter	W9	16.0 x 16.4 oval					
Steering column angle – horizontal	H18	23.9°					
H Point to top of steering wheel	H49	22.9			23.1		23.2
Steering wheel torso clearance	L7	12.1					11.3
Steering wheel thigh clearance	H13	3.0			3.2		3.1
Brake pedal knee clearance	L13	24.7					
Brake pedal to accelerator	L52	2.5					
Tumble-home	W122	12.5°					

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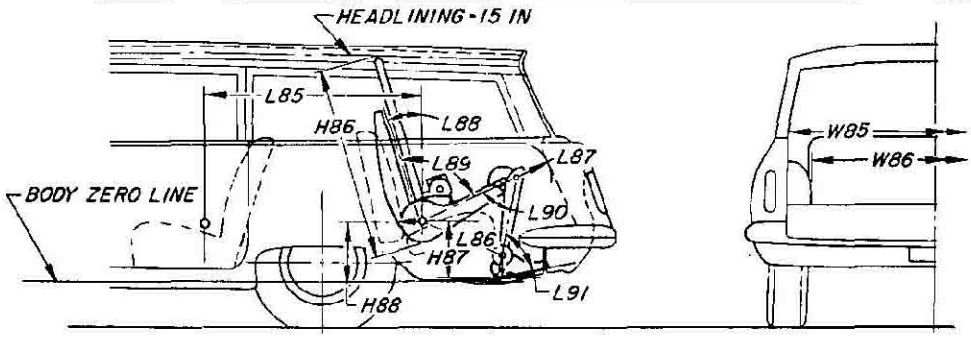
LUGGAGE COMPARTMENT

MODEL	Ref. No.	AV1				AV2			
		21, 23, 41	27	29	45	21, 23, 41	27	29	45
Usable luggage capacity (See instructions)		14.1	11.6	5.7 (a)	- - -	14.1	11.6	5.7 (a)	- - -
Liftover height	H195	24.6		24.7	21.2	24.8		25.0	21.8
Position of spare tire storage		In well							
Method of holding lid open		Torsion bar (b)							

THIRD SEAT DIMENSIONS



MODEL	Ref. No.
Seat facing direction	
Shoulder room	W85
Hip room	W86
H Point couple distance	L85
H Point to body zero line - third seat	H88
Effective head room	H86
Effective leg room	L86
H Point to heel point	H87
Knee room	L87
Back angle	L88
Hip angle	L89
Knee angle	L90
Foot angle	L91

(a) Security panel down - 14.1 cu ft; second seat down - 23.4 cu ft.

(b) Barracuda trunk lid held open by latch in telescoping link.

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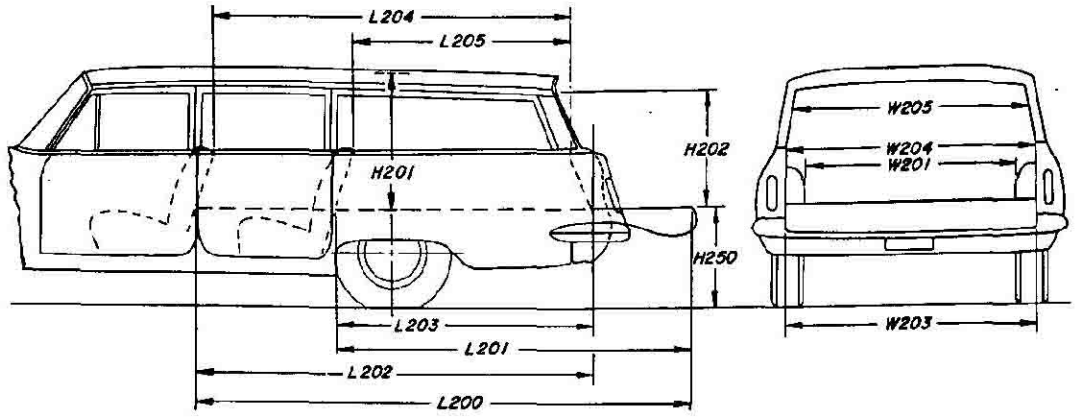
STATION WAGON—CARGO SPACE DIMENSIONS



MODEL	Ref. No.	AV1, AV2
Floor length from back of front seat at floor level to end of lowered tail gate or floor	L200	105.3
Floor length from back of second seat at floor level to end of lowered tail gate or floor	L201	74.9
Floor length from back of front seat at floor level to inside of closed tail gate	L202	83.8
Floor length from back of second seat at floor level to inside of closed tail gate	L203	51.8
Minimum horizontal distance from top rear of front seat back to inside of tail gate at belt	L204	71.4
Minimum horizontal distance from top rear of second seat back to inside of tail gate at belt	L205	38.6
Maximum width of cargo space at floor - specify location	W200	52.6 (a)
Minimum distance between wheel houses at floor level	W201	43.5
Rear end opening width at floor	W203	44.3
Rear end opening width at belt	W204	43.3
Maximum width of rear opening above belt	W205	42.8
Maximum height - floor covering to headlining at centerline of rear axle	H201	30.4
Maximum height of rear opening - tail and lift gates open	H202	21.2 •
Platform height from ground to top of tail gate floor covering at rear most edge of tail gate - curb weight	H250	26.4
Rear end closure (e.g., one piece door, hinged left - sliding glass, drop tail gate)		Sliding glass, drop tail gate
Cargo volume index (cu. ft.) $\frac{W4 \times L204 \times H201}{1728}$		68.3

(a) Immediately forward of wheelhouse.

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MODEL	AV1, AV2					
	21	23	27	29	41	45

BODY—MISCELLANEOUS INFORMATION

Drs. hinged (front, rear)	Front doors	Front				
	Rear doors	Front				
Type of finish (lacquer, enamel, other)		Buffable acrylic enamel				
Hood counterbalanced (yes, no)		Yes				
Hood release control (internal, external)		External				
Vehicle (Serial) No. Location		Left front door hinge post				
Engine No. Location		Not applicable				
Theft protection – type		Ignition key start, ignition switch terminal block, door locks				
Vent window control method (crank, friction pivot)	Front	Friction pivot				
	Rear	None				
Seat cushion type	Front	FW	ZZ	FW (a)	FW	
	Rear	FW		Coil	FW	
	3rd seat	- -				
Seat back type	Front	FW	ZZ	FW (a)	FW	
	Rear	FW		Coil	FW	Coil
	3rd seat	- -				
Windshield glass type (i.e., single curved – laminated plate)		Single, curved, laminated, Safety plate •				
Backlight glass type (i.e., compound curved – tempered plate, three piece)		1-piece, curved		Plastic	1-piece, compound curved	1-piece, curved	1-piece, flat
Side glass type (i.e., curved – tempered plate)		Flat, heated safety sheet				
Side glass exposed surface area		1303	1344	1196	1268	1223	2345
Windshield glass exposed surface area		995				
Backlight glass exposed surface area		970		1000	2077	970	612
Total glass exposed surface area		3268	3309	3191	4340	3188	3952

BODY—CONVENIENCE EQUIPMENT (Indicate whether standard, optional or NA on each series)

Power windows	Side Windows	NA				
	Vent Windows	NA				
	Backlight or tailgate	NA				Opt
Power seats (specify type as well as availability)		NA				
Reclining front seat back		NA				
Front seat headrest		NA				
Radios (specify type as well as availability)		Opt, 2-Watt				
Rear seat speaker		NA				
Power Antenna		NA				
Clock		NA				
Air Conditioner (specify type and availability)		Factory-installed: Heater-air conditioner combination Dealer-installed : Recirculating				

FW - Formed wire ZZ - Zigzag

(a) Signet and Barracuda - Coil

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WEIGHTS

SIX CYLINDER		CURB WEIGHT - POUNDS			% PASS. WEIGHT DISTRIBUTION				SHIPPING * WEIGHT
		Front	Rear	Total	Pass. In Front		Pass. In Rear		
					Front	Rear	Front	Rear	
Model VALIANT 100 AV1-L									
2-Door Sedan	21	1480	1200	2680	51.0	49.0	19.8	80.2	2560
4-Door Sedan	41	1490	1215	2705	51.0	49.0	19.8	80.2	2590
Station Wagon	45	1455	1410	2865	51.0	49.0	19.8	80.2	2750
VALIANT 200 AV1-H									
2-Door Sedan	21	1480	1205	2685	51.0	49.0	19.8	80.2	2570
Convertible Coupe	27	1535	1270	2805	51.0	49.0	19.8	80.2	2695
4-Door Sedan	41	1490	1220	2710	51.0	49.0	19.8	80.2	2605
Station Wagon	45	1455	1415	2870	51.0	49.0	19.8	80.2	2755
SIGNET AV1-P									
2-Door Hardtop	23	1495	1235	2730	51.1	48.9	19.8	80.2	2620
Convertible Coupe	27	1540	1290	2830	51.1	48.9	19.8	80.2	2725
BARRACUDA AV1-P									
2-Door Sports Hardtop	29	1540	1340	2880	51.1	48.9	21.2	78.8	2725
V-8									
VALIANT 100 AV2-L									
2-Door Sedan	21	1640	1240	2880	51.0	49.0	19.8	80.2	2740
4-Door Sedan	41	1645	1265	2910	51.0	49.0	19.8	80.2	2770
Station Wagon	45	1605	1455	3060	51.0	49.0	19.8	80.2	2930
VALIANT 200 AV2-H									
2-Door Sedan	21	1640	1245	2885	51.0	49.0	19.8	80.2	2750
Convertible Coupe	27	1695	1305	3000	51.0	49.0	19.8	80.2	2875
4-Door Sedan	41	1645	1270	2915	51.0	49.0	19.8	80.2	2795
Station Wagon	45	1605	1460	3065	51.0	49.0	19.8	80.2	2935
SIGNET AV2-P									
2-Door Hardtop	23	1655	1275	2930	51.1	48.9	19.8	80.2	2820
Convertible Coupe	27	1705	1325	3030	51.1	48.9	19.8	80.2	2905
BARRACUDA AV2-P									
2-Door Sports Hardtop	29	1655	1375	3030	51.1	48.9	21.2	78.8	2930

Accessories & Equipment Differential Weights				Remarks
Automatic Transmission	+ 25	+ 5	+ 30	6-Cyl
Automatic Transmission	0	0	0	V-8
Air Conditioner	+ 110	- 5	+ 105	6-Cyl
Air Conditioner	+ 95	- 5	+ 90	V-8
Power Steering	+ 45	- 5	+ 40	
Power Brakes	+ 10	0	+ 10	
Radio	+ 5	0	+ 5	
Washer and Wiper	+ 5	0	+ 5	
Appearance Undercoat	+ 15	0	+ 15	
Full Undercoat	+ 5	+ 30	+ 35	

* These are weights that are reported to states for licensing purposes.

DIMENSION DEFINITIONS

W3 SHOULDER ROOM - FRONT. The minimum lateral dimension between the door garnish moldings or nearest interference. Measured at H Point station.

W4 SHOULDER ROOM - REAR. Measured in the same manner as W3.

W5 HIP ROOM - FRONT. The lateral dimension through H Point to trimmed surfaces.

W6 HIP ROOM - REAR. Measured in the same manner as W5.

W7 STEERING WHEEL CENTER TO CENTERLINE OF CAR. Measured horizontally from steering wheel center to centerline of car. The point at steering wheel center is located in the surface plane of wheel.

W9 STEERING WHEEL MAXIMUM OUTSIDE DIAMETER. Define if other than round.

W16 SEAT WIDTH - FRONT. The maximum trimmed width of front seat cushion.

W85 SHOULDER ROOM - THIRD SEAT. Measured in the same manner as W3.

W86 HIP ROOM - THIRD SEAT. Measured in the same manner as W5.

W101 TREAD - FRONT. Measured at centerline of tires, with nominal camber, at ground.

W102 TREAD - REAR. Measured at centerline of tires at ground.

W103 MAXIMUM OVERALL CAR WIDTH. Include bumpers, moldings, or sheet metal protrusions.

W106 FRONT FENDER OVERALL WIDTH. Measured at centerline of front wheels, excluding moldings.

W107 REAR FENDER OVERALL WIDTH. Measured at centerline of rear wheels, excluding moldings.

W116 MAXIMUM OVERALL BODY WIDTH. Measured across body, excluding hardware and applied moldings, but including fenders when integral with body.

W117 MAXIMUM BODY WIDTH AT #2 PILLAR. Measured across body at #2 pillar, excluding hardware and applied moldings.

W120 MAXIMUM OVERALL CAR WIDTH, FRONT DOORS OPEN. Measured with front doors in maximum hold-open position.

W121 MAXIMUM OVERALL CAR WIDTH, REAR DOORS OPEN. Measured in same manner as W120.

W122 TUMBLE-HOME. The angle from vertical to the front door glass outer surface or the chord of a curved door glass, measured at the front H Point station.

L3 REAR COMPARTMENT ROOM. The horizontal dimension from the back of front seat to front of rear seat back at a height tangent to the top of rear seat cushion.

L7 STEERING WHEEL TORSO CLEARANCE. The minimum distance from the back edge of steering wheel, in straight-ahead position, to the Torso Line.

L13 BRAKE PEDAL KNEE CLEARANCE. The minimum dimension from the lower edge of the steering wheel to the brake pedal face centerline.

L14 SEAT BACK THICKNESS - FRONT. The maximum thickness of the seat back, excluding bolsters.

L15 SEAT BACK THICKNESS - REAR. Measured in the same manner as L14.

L17 H POINT TRAVEL. The horizontal dimension between the H Point in the most forward and rearward seat positions.

L18 ENTRANCE FOOT CLEARANCE - FRONT. The minimum horizontal dimension between seat and normal line of door or pillar at a height between the sill plate bead and 4.0 inches above the bead. Door should be in the maximum hold-open position.

L19 ENTRANCE FOOT CLEARANCE - REAR. Measured in the same manner as L18 on four-door models. On two-door styles, the minimum dimension between rear corner of front seat, with front seat back tilted forward, and trimmed lock pillar, built-in quarter armrest panel, or rear seat cushion at a height between the sill plate bead and 4.0 inches above the bead.

L30 BODY ZERO LINE TO ACTUAL FRONT OF DASH. If actual Front of Dash is to the rear of Body Zero Line, it is identified by a minus (-) sign.

L31 H POINT TO BODY ZERO LINE - FRONT. Horizontal dimension.

L34 MAXIMUM EFFECTIVE LEG ROOM - ACCELERATOR. Measured along a diagonal line from ankle pivot center to H Point plus a constant of 10.0 inches. Measured with the right foot on accelerator pedal.

L40 BACK ANGLE - FRONT. The angle between a vertical line through the H Point and the Torso Line.

L41 BACK ANGLE - REAR. Measured in the same manner as L40.

L42 HIP ANGLE - FRONT. The angle between Torso Line and a line extending from knee pivot center to H Point.

L43 HIP ANGLE - REAR. Measured in the same manner as L42.

L44 KNEE ANGLE - FRONT. The angle between a line from H Point to knee pivot center and a line from the knee pivot center to the ankle pivot center.

L45 KNEE ANGLE - REAR. Measured in the same manner as L44.

L46 FOOT ANGLE - FRONT. The angle between a line extended from the knee pivot center through the ankle pivot center and a line tangent to the sole and heel of manikin bare foot.

L47 FOOT ANGLE - REAR. Measured in the same manner as L46.

L48 MINIMUM KNEE ROOM - REAR. The minimum dimension from the knee pivot center to the back of front seat back.

L49 H POINT TO WINDSHIELD UPPER DLO. The horizontal dimension from H Point to the point of tangency of horizontal line of vision (described in dimension H64) with body upper structure.

DIMENSION DEFINITIONS (cont.)

L50 H POINT COUPLE DISTANCE. The horizontal dimension from the front seat H Point to the rear seat H Point.

L51 MINIMUM EFFECTIVE LEG ROOM - REAR. Measured along a diagonal line from ankle pivot center to H Point plus a constant of 10.0 inches. Measured with the foot positioned to nearest interference between seat structure and toe, instep or lower leg.

L52 BRAKE PEDAL TO ACCELERATOR. The minimum dimension from center of brake pedal face to accelerator. Measured in the side view.

L53 H POINT TO ACCELERATOR FLOOR POINT. The horizontal dimension from intersection of accelerator and depressed floor covering to the H Point.

L85 H POINT COUPLE DISTANCE - THIRD SEAT. The horizontal dimension from the second seat H Point to the third seat H Point.

L86 EFFECTIVE LEG ROOM - THIRD SEAT. Measured in the same manner as L51. With rear-facing third seat,foot is positioned in foot well or to nearest interference with rear end or rear closure.

L87 KNEE ROOM - THIRD SEAT. Measured in the same manner as L48. With rear-facing third seat,dimension is measured to rear closure.

L88 BACK ANGLE - THIRD SEAT. Measured in the same manner as L40.

L89 HIP ANGLE - THIRD SEAT. Measured in the same manner as L42.

L90 KNEE ANGLE - THIRD SEAT. Measured in the same manner as L44.

L91 FOOT ANGLE - THIRD SEAT. Measured in the same manner as L46.

L101 WHEELBASE.

L102 TIRE SIZE.

L103 OVERALL LENGTH. Include bumper guards if standard equipment.

L104 OVERHANG - FRONT. Measured from C/L of front wheels to front of car, including bumper guards if standard equipment.

L105 OVERHANG - REAR. Measured from C/L of rear wheels to rear of car, including bumper guards if standard equipment.

L123 BODY UPPER STRUCTURE LENGTH AT CAR CENTERLINE. The horizontal dimension from the theoretical intersection of extended windshield glass plane and normal cowl surface to the theoretical intersection of extended back window glass plane and normal deck surface; or in the case of a Fastback roof or Station Wagon, to back glass lower reveal molding, or rubber when molding is not used.

L127 BODY ZERO LINE TO CENTERLINE OF REAR WHEELS. A horizontal dimension.

L128 HOOD LENGTH AT CAR CENTERLINE. The horizontal dimension from the foremost point on sheet metal hood surface, excluding series identification or ornamentation, to the theoretical intersection of extended windshield glass plane and normal cowl surface.

L129 DECK LENGTH AT CAR CENTERLINE. The horizontal dimension from the rearmost point of the body sheet metal (visible above bumper), excluding series identification or ornamentation, to the theoretical intersection of extended back window glass plane and normal deck surface.

L130 BODY ZERO LINE TO WINDSHIELD COWL POINT. The horizontal dimension from body zero line to the theoretical intersection of extended windshield glass plane and normal cowl surface.

H6 H POINT TO WINDSHIELD BOTTOM DLO. Vertical dimension.

H11 ENTRANCE HEIGHT - FRONT. The vertical dimension from H Point to upper trimmed body opening.

H12 ENTRANCE HEIGHT - REAR. The vertical dimension from H Point to the upper trimmed body opening at a section 13.0 inches forward of the H Point.

H13 STEERING WHEEL THIGH CLEARANCE. The minimum dimension from the bottom of steering wheel, in straight-ahead position, to centerline of thigh.

H18 STEERING COLUMN ANGLE - HORIZONTAL. The angle the centerline of steering column makes with the horizontal.

H25 BELT HEIGHT - FRONT. The vertical dimension from H Point to bottom of side window DLO.

H30 H POINT TO HEEL POINT - FRONT. The vertical dimension from the H Point to the manikin accelerator heel point on the depressed floor covering.

H31 H POINT TO HEEL POINT - REAR. The vertical dimension from the H Point to the manikin heel point on the depressed floor covering.

H32 SEAT CUSHION DEFLECTION - FRONT. The vertical dimension from a point on the undepressed seat cushion to the depressed seat cushion. Measured at the H Point station.

H33 SEAT CUSHION DEFLECTION - REAR. Measured in the same manner as H32.

H37 HEADLINING TO ROOF HEIGHT - FRONT. The dimension from the intersection of the headlining and the extended effective head room line to the roof panel. Measured perpendicularly to the roof panel.

H38 HEADLINING TO ROOF HEIGHT - REAR. Measured in the same manner as H37.

H49 H POINT TO TOP OF STEERING WHEEL. The vertical dimension from the H Point to top of steering wheel, in straight-ahead position.

H50 UPPER BODY OPENING TO GROUND - FRONT. The vertical dimension from a point on the trimmed body opening to the ground. Measured at the H Point station.

H51 UPPER BODY OPENING TO GROUND - REAR. The vertical dimension from a point on the trimmed body opening to the ground. Measured 13.0 inches forward of the H Point.

DIMENSION DEFINITIONS (cont.)

H54 D POINT TO TUNNEL – FRONT. The vertical dimension from the D Point, at car centerline, to top of tunnel.

H55 D POINT TO TUNNEL – REAR. Measured same manner as H54.

H58 H POINT RISE. The vertical dimension between the H Point in the most forward and rearward seat position.

H61 EFFECTIVE HEAD ROOM – FRONT. The dimension from H Point to the headlining, plus a constant of 4.0 inches. Measured along a line 8° to rear of vertical.

H63 EFFECTIVE HEAD ROOM – REAR. Measured same as H61.

H64 H POINT TO WINDSHIELD UPPER DLO. Vertical dimension from H Point to highest horizontal line of vision through windshield at 15 inch section.

H65 D POINT DIFFERENTIAL, SIDE TO CENTER – FRONT. Vertical dimension from side occupant to center occupant D Point.

H66 D POINT DIFFERENTIAL, SIDE TO CENTER – REAR. Measured in the same manner as H65.

H67 DEPRESSED FLOOR COVERING THICKNESS – FRONT. The vertical dimension from manikin accelerator heel point normally to underbody sheet metal immediately below heel point.

H68 DEPRESSED FLOOR COVERING THICKNESS – REAR. Measured same as H67.

H70 H POINT TO BODY ZERO LINE – FRONT. Vertical dimension.

H71 H POINT TO BODY ZERO LINE – REAR. Vertical dimension.

H86 EFFECTIVE HEAD ROOM – THIRD SEAT. Measured in the same manner as H61.

H87 H POINT TO HEEL POINT – THIRD SEAT. Measured in the same manner as H31.

H88 H POINT TO BODY ZERO LINE – THIRD SEAT. Vertical dimension.

H101 OVERALL HEIGHT. Measured with full design load.

H102 FRONT BUMPER TO GROUND. Minimum dimension

H104 REAR BUMPER TO GROUND. Minimum dimension.

H106 ANGLE OF APPROACH. The angle between the ground and a line tangent to the front tire static loaded radius arc and the first point of interference, i.e. bumper, guard, gravel deflector, fender or other interfering component, excluding license plate.

H107 ANGLE OF DEPARTURE. The angle between the ground and a line tangent to the rear tire static loaded radius arc and the first point of interference, i.e. bumper, guard, gravel deflector, tail pipe, fender or other interfering component, excluding license plate.

H111 ROCKER PANEL TO GROUND – REAR. The vertical dimension from ground to bottom of rocker panel, exluding flanges. Measured at front of rear wheel opening.

H112 ROCKER PANEL TO GROUND – FRONT. The vertical dimension from ground to bottom of rocker panel, excluding flanges. Measured at foremost point of rocker panel.

H114 HOOD AT REAR TO GROUND. Measured from hood opening line on shroud, exclusive of moldings.

H115 STEP HEIGHT – FRONT (DESIGN LOAD). The vertical dimension from top of sill plate bead, at C/L of front door sill plate, to ground.

H116 STEP HEIGHT – REAR (DESIGN LOAD). Measured in same manner as dimension H115.

H122 WINDSHIELD SLOPE ANGLE. The angle between a vertical line and the windshield surface at car centerline. On compound-curved windshields the chord of the arc is used and limited to that section of the windshield comprehended by an 18-inch chord.

H130 STEP HEIGHT – FRONT (CURB LOAD). The vertical dimension from top of sill plate, at C/L of front door sill plate, to ground.

H131 STEP HEIGHT – REAR (CURB LOAD). Measured same as H130.

H132 BOTTOM OF DOOR TO GROUND, OPEN – FRONT. Measured from bottom outside corner of door with door in maximum hold-open position.

H133 BOTTOM OF DOOR TO GROUND, CLOSED – FRONT. Same point on door as H132 dimension, with door closed.

H134 BOTTOM OF DOOR TO GROUND, OPEN – REAR. Measured in same manner as H132.

H135 BOTTOM OF DOOR TO GROUND, CLOSED – REAR. Measured in same manner as H133.

H136 BODY ZERO TO GROUND – FRONT. A vertical dimension measured at front wheel centerline.

H137 BODY ZERO TO GROUND – REAR. A vertical dimension measured at rear wheel centerline.

H147 RAMP BREAKOVER ANGLE. Supplement of included ramp angle (180° minus included ramp angle) over which car can pass without interference; measured with car sitting on a level surface, using lines tangent to arcs of front and rear static loaded radii and intersecting at point on underside of car which defines the smallest angle.

H148 FRONT SUSPENSION TO GROUND. Minimum clearance from lower control arm inner shaft or lowest point on the car centerline.

H149 OIL PAN TO GROUND. Minimum clearance measured from sheet metal or drain plug.

H150 FLYWHEEL/CONVERTER HOUSING AND TRANSMISSION ASSEMBLY TO GROUND. Minimum clearance.

H151 FRAME STRUCTURE TO GROUND. Minimum clearance measured approximately midway between front and rear axles. In this measurement, cross bars and X-members shall be considered part of frame.

H152 EXHAUST SYSTEM TO GROUND. Minimum clearance. Specify location.

H153 REAR AXLE DIFFERENTIAL SYSTEM TO GROUND. Minimum clearance.

H154 FUEL TANK TO GROUND. Minimum clearance measured from sheet metal or drain plug, but excluding supports or straps.

H155 SPARE TIRE WELL TO GROUND. Minimum clearance.

H156 MINIMUM RUNNING GROUND CLEARANCE. Location of measurement on the car is to be clearly recorded.

H195 LIFTOVER HEIGHT. Vertical dimension from luggage compartment lower opening to ground.

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