AMA-4UA

AMA Specifications—Passenger Car

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MANUFACTURER	CHRYSLER-PLYMOUTH DIVISION CHRYSLER CORPORATION	CAR NAME	PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA
MAILING ADDRESS	DETROIT, MICHIGAN 48231	MODEL YEAR	1966
		ISSUED:	7-6-65
		REVISED (•)	3-23-66

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	Convertible Coupe	2-Door Sports Hardtop	4-Door Sedan	2-Seat Station Wagon
SIX-CYLINDER MODELS						
Valiant 100	BV1-L-21				BV1-L-41	BV1-L-45
Valiant 200					BV1-H-41	BV1-H-45
Signet		BV1-H-23	BV1-H-27			
Barracuda				BV1-P-29		
V-8 MODELS						
Valiant 100	BV2-L-21				BV2-L-41	BV2-L-45
Valiant 200					BV2-H-41	BV2-H-45
Signet		BV2-H-23	BV2-H-27			
Barracuda				BV2-P-29		

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PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA

MAKE OF CAR PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA **MODEL YEAR** 1966 **DATE ISSUED** 7-6-65 **REVISED** (•) 10-25-65

GENERAL SPECIFICATIONS

(All dimensions in inches unless otherwise indicated)

MODEL		Additional Information Page No.:	BV1				BV2			
			21, 23, 41	27	45	29	21, 23, 41	27	45	29
Wheelbase (L101)			106.0							
Track	Front (W101)		55.9							
	Rear (W102)		55.6							
Maximum Overall Dimensions	Length (L103)		188.3		189.0		188.3		189.0	188.3
	Width (W103)		70.2							
	Height (H101)		53.1	53.4	53.3	53.0	53.4	53.7	53.6	53.3
Transmission (Specify trade name - opt., not available)	Manual - 3 speed	15	Std							
	Manual - 4 speed	15	NA				Opt			
	Overdrive	15	None							
	Automatic	16	Opt - TorqueFlite Six				Opt - TorqueFlite Eight			
Axle ratio	Manual - 3 speed	17	3.23				2.93			
	Manual - 4 speed	17	--				3.23 •			
	Overdrive	17	--							
	Automatic	17	BV1-L 2.93 • BV1-H 3.23		3.23 •		2.93			
Tire size		18	6.50 x 13				7.00 x 13			
Engine	Type, no. cyl., valve arr.	3	Six, In-Line, OHV				90° V-8			
	Fuel system (Carb., other)	10	1, 1-bbl carb				1, 2-bbl carb			
	Bore and stroke	3	3.4 x 3.125			3.4 x 4.125	3.63 x 3.31			
	Piston displ., cu. in.	3	170			225	273			
	Std. compression ratio	3	8.5			8.4	8.8			
	Max. bhp at engine rpm	3	101 @ 4400			145 @ 4000	180 @ 4200			
	Max. torque at rpm	3	155 @ 2400			215 @ 2400	260 @ 1600			

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PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA

MAKE OF CAR MODEL YEAR 1966 DATE ISSUED 7-6-65 REVISED (*)

GENERAL SPECIFICATIONS—DIMENSIONS

(All dimensions in inches unless otherwise indicated)
(Supplemental data available on request)

MODEL	SAE Ref. No.	BV1				BV2			
		21, 23, 41	27	29	45	21, 23, 41	27	29	45
FRONT COMPARTMENT									
Shoulder room	W3	54.2							
Hip room	W5	56.9							
Max. eff. leg room - accelerator	L34	40.7							
Effective head room	H61	38.6	39.6	38.3	38.2	38.6	39.6	38.3	38.2
H Point to Heel point	H30								
REAR COMPARTMENT									
Shoulder room	W4	54.4		52.6		54.4		52.6	54.4
Hip room	W6	57.0	46.4	56.4		57.0	46.4	56.4	57.0
Minimum effective leg room	L51	34.2		30.6		34.2		30.6	34.2
Effective head room	H63	37.3	37.6	36.8	37.7	37.3	37.6	36.8	37.7
LUGGAGE COMPARTMENT									
Usable luggage capacity	V1	14.1	11.6	5.7	--	14.1	11.6	5.7	--
Liftover height	H195	23.2		23.4	22.4	23.6		23.7	22.7
Position of spare tire storage		Well in trunk or cargo area floor							
Method of holding lid open		Torsion bar		(a)	--	Torsion bar		(a)	--
STATION WAGON—THIRD SEAT									
Hip room	W86	--							
Effective leg room	L86	--							
Effective head room	H86	--							
Seat facing direction		--							

STATION WAGON—CARGO SPACE

MODEL	SAE Ref. No.	BV1-L-45 BV1-H-45	BV2-L-45 BV2-H-45
Minimum distance between wheel houses at floor level	W201	43.5	
Rear end opening width at belt	W204	43.3	
Floor length from back of front seat at floor level to inside of closed tail gate	L202	83.8	
Minimum horizontal distance from top rear of front seat back to inside of tail gate at belt	L204	71.4	
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	26.1	
Cargo volume index (cu. ft.) $\frac{W4 \times L204 \times H201}{1728}$	V2	68.3	

(a) Latch in telescoping link

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MAKE OF CAR PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA MODEL YEAR 1966 DATE ISSUED 7-6-65 REVISED (*)

MODEL	BV1		BV2	
	Std, Exc. 29	Std - 29 Opt - All Others	Std	Opt (a)

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	
Publishing max. bhp* @ eng. RPM		101 @ 4400	145 @ 4000	180 @ 4200	235 @ 5200
Publishing 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	600 in neutral
	Automatic	550 in neutral, alternator charging		500 in neutral	600 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		.029 - .034	
	Skirt Top	.0005 - .0015			
	Skirt Bottom	--			
Ring groove depth	No. 1 ring	.179		.190	
	No. 2 ring	.179		.190	
	No. 3 ring	.181		.184	
	No. 4 ring	None			

*Max. bhp (brake horsepower) and max. torque corrected to 60° F and 29.92 in. Hg atmospheric pressure.

(a) Not available on station wagons; Std for Barracuda when equipped with Formula "S" package

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POWER TEAMS

(Indicate whether standard or optional)

MODEL AVAILABILITY		ENGINE					TRANSMISSION		AXLE RATIO (Std. first) (Indicate A/C ratio)
		Displ. cu. in.	Carburetor	Compr. Ratio	BHP @ RPM	Torque @ RPM			
BV1-L	• Std Exc. 45	170	1, 1-bbl	8.5	101 @ 4400	155 @ 2400	Manual 3-Speed		3.23*, 2.93*, 3.55
							Automatic		2.93, 3.23*, 3.55
	• Std 45						Manual 3-Speed		3.23*, 2.93*, 3.55
							Automatic		3.23*, 3.55
	Opt	225		8.4	145 @ 4000	215 @ 2400	Manual 3-Speed		3.23*, 3.55
							Automatic		2.93*, 3.23*, 3.55
BV1-H	• Std Exc. 29	170		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
							Automatic		2.93*, 3.23*, 3.55
BV2	Std	273	1, 2-bbl	8.8	180 @ 4200	260 @ 1600	Manual	3-Speed	2.93*, 3.23*, 3.55** •
								4-Speed	3.23*, 3.55**, 3.91** •
							Automatic		2.93*, 3.23*, 3.55** •
	Opt (NA on Sta Wag) (a)		1, 4-bbl	10.5	235 @ 5200	280 @ 4000	Manual 4-Speed		3.23*, 3.55**, 3.91** •
							Automatic		3.23*, 2.93, 3.55**, 3.91**

Note: All 3.55 rear axle ratios are available only in Sure-Grip. Ratios marked with an asterisk (*) also are available in Sure-Grip. Unle another ratio is underscored, the std ratio also is std with AC. Ratios marked with a double asterisk (**) are available only with Sure-Grip

(a) Standard engine in Formula "S" package for Barracuda

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MAKE OF CAR PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA MODEL YEAR 1966 DATE ISSUED 7-30-65 REVISED (e)

See Page 4 for Engine Usage

MODEL			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, 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, coating, etc.		Cast iron, single-piece	3-piece, two chrome-plated rails with stainless steel expander-spacer	
	Width		.186	Rails .024	
	Gap		.010 - .020	.015 - .055	
Expanders			(a)	Expander-spacer, oil ring only	
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		.0000 to .0005
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)		.0002 - .0022		
	End play		.006 - .012		.006 - .014 (2 rods)

(a) Low tension, hump-type. Oil ring only.

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PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA

MAKE OF CAR _____ MODEL YEAR 1966 DATE ISSUED 7-6-65 REVISED (*)

MODEL _____

See Page 4 for Engine Usage

ENGINE—CRANKSHAFT

			170 cu in. 225 cu in.	273 cu in.
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 nominal	
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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PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH

MAKE OF CAR BARRACUDA MODEL YEAR 1966 DATE ISSUED 7-6-65 REVISED (*)

MODEL

ENGINE—VALVE SYSTEM (cont.)

			See Page 4 for Engine Usage			
			170 cu in.	225 cu in.	273 cu in.	
			1, 1-bbl	1, 1-bbl	1, 2-bbl	1, 4-bbl
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° - 45.5°		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		47° - 47.5°		47°	
	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	

(Continued)

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MAKE OF CAR PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA MODEL YEAR 1966 DATE ISSUED 7-6-65 REVISED (*)

MODEL

See Page 4 for Engine Usage

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 - 65 @ 2000		50 @ 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 10W-30, SAE 20W-40, or SAE 30 Occasionally as low as -10F ..... SAE 10W-30 Consistently between +32F and -10F ... SAE 10W-30 or 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 crossover	
Muffler No. & type (reverse flow, straight thru, separate resonator)	One, reverse flow			One, reverse flow plus resonator
Exhaust pipe dia. (O.D., wall thickness) Branch	--		1.75 x 0.075	2.00 x .075
Exhaust pipe dia. (O.D., wall thickness) 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)	Breather 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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MAKE OF CAR PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA MODEL YEAR 1966 DATE ISSUED 7-6-65 REVISED (*) 3-23-66

MODEL

See Page 4 for Engine Usage							
1, 1-bbl 170 cu in.		1, 1-bbl 225 cu in.		1, 2-bbl 273 cu in.		1, 4-bbl 273 cu in.	
Manual	Auto.	Manual	Auto.	Manual	Auto.	Manual	Auto.

ENGINE—EXHAUST EMISSION CONTROL

Type (Air injection, engine modifications, other)			Engine Modifications						
Air Injection Pump	Type								
	Displacement								
	Drive ratio								
	Drive type								
	Relief valve (type)								
	Filter (describe)								
Air Injection System	Air distribution (head, manifold, etc.)		Not Applicable						
	Point of entry								
	Injection tube I.D.								
	Check valve type								
	Backfire protection (type)								
Carburetor	Make		See page 10						
	Model		"						
	Barrel size		"						
	Idle speed	Drive	NA						
		Neutral	700	650		700 (a)	650 (a)	700 (a)	650 (a) ●
Distributor	Aux. Adv. Systems (type)		Manifold vacuum actuated control valve						
	Make		Chrysler						Prestolite ●
	Model		2642349	2642342	2642354	2642329	2642356	2642346	2642358 ●
	Cent'fgal adv. in crank degrees @ eng. rpm.	Start (rpm)	See page 13a						
		Intermed. points deg. @ rpm	"						
		Max. deg. @ rpm.	"						
	Vacuum adv. in. crank degrees @ eng. rpm	Start (in Hg) Intermed. points deg. @ in. Hg Max. deg. @ in.	"						
	Vacuum Source		(b)						
Timing - Crank degrees @ rpm			5° ATC @ idle						
Cooling System (describe changes)			None		Larger diameter fan		Higher capacity fan; shroud added		
Exhaust System (describe changes)			None						

(a) When so equipped, air conditioner is turned on.

(b) From port in carburetor or direct from manifold as controlled by the auxiliary advance system.

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PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH

MAKE OF CAR BARRACUDA **MODEL YEAR** 1966 **DATE ISSUED** 7-6-65 **REVISED** (*) 3-23-66

MODEL	BV1	BV2

ENGINE—FUEL SYSTEM

(See supplemental page for Details of Fuel Injection, Supercharger, etc. if used)

Induction type: Carburetor, fuel injection, supercharger.			Carburetor	
Fuel Tank	Refill capacity (gals.)		18	
	Filler location		Left rear fender; station wagons - top of left rear fender	
Fuel Pump	Type (elec. or mech.)		Mechanical	
	Locations		Right, center	Right, front
	Pressure range		3.5 - 5 psi	5 - 7 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 cleaner type	Standard	Paper element	
		Optional	--	

CARBURETOR SUPPLEMENTARY INFORMATION

Model Usage	Engine Displ.	Transmission	Carburetors		No. Used and Type	Barrel Size
			Make	Model		
BV1	170	Manual	Ball and Ball	BBS-4099S	1, 1-bbl	1.56
		Automatic		BBS-4100S		1.69
	170 With CAP	Manual		BBS-4101S		1.56
		Automatic		BBS-4102S		1.69
	225	Manual	Holley	R-3271		
		Automatic		R-3272A		
	225 With CAP	Manual		R-3273A		
		Automatic		R-3274A		
BV2	273	Manual	Ball and Ball	BBD-4113S	1, 2-bbl	1.44
		Automatic		BBD-4114S		
	273 With CAP	Manual		BBD-4115S		
		Automatic		BBD-4116S		
	273	Manual	Carter	AFB-4119S	1, 4-bbl	P: 1.44 S: 1.56
		Automatic		AFB-4120S		
	273 With CAP	Manual		AFB-4121S		
		Automatic		AFB-4122S		

CAP - Cleaner Air Package.

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MAKE OF CAR PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA MODEL YEAR 1966 DATE ISSUED 7-12-65 REVISED (•)

See Page 4 for Engine Usage

MODEL

170 Cu In.	225 Cu In.		273 Cu In. 2-bbl		273 Cu In. 4-bbl	
Std	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		NA					
	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.)		Heater is std equipment					
	Opt. equipment-specify (qt.)		None	14		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)	Seven (c)	Four (a) / Seven (c)
	Diameter		16		17			
	Ratio-fan to crankshaft rev.		1.07:1		1.10:1	0.95:1	1.40:1	0.95:1
	Fan cutout type		None					
	Bearing type		Same as water pump					
*Drive belts (indicate belt used by letter)	Fan		A	E		F	H	F
	Generator or alternator		A	E		F	H	F
	Water Pump		A	E		F	H	F
	Power Steering		B	B	D	G		
	Air Conditioning		--	--	C	--	I	-- / I

* Drive Belt Dimensions	A	B	C	D	E	F	G	H	I	J	K
Angle of V											
Nominal length (SAE)	55.00	36.50	53.00	38.38	57.38	50.50	38.75	51.50	54.00		
Width	0.38		0.50	0.38			0.50	0.38	0.50		

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

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MAKE OF CAR PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA MODEL YEAR 1966 DATE ISSUED 7-6-65 REVISED (*)

MODEL

See Page 4 for Engine Usage

BV1		BV2	
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 (a)	
	SAE Designation & Amp Hr. Rtg.		9HCO, 38	9HC3, 48 (b)	
	Location		Left front fender shield		
	Terminal grounded		Negative		
Generator or Alternator	Make		Chrysler		
	Model		2098835	2098830	
	Type and rating		Three-phase, full-wave rectifier		
	Output at engine idle (neutral)				
	Ratio–Gen. to Cr/s rev.		2.45 to 1	2.18 to 1	
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	
	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	

With Trailer Towing Package:
(a) 12, 66
(b) 9HC3-A, 70

(Continued)

AMA Specifications—Passenger Car

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PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA — MODEL YEAR 1966 — DATE ISSUED 7-7-65 — REVISED (8)

MODEL

	BV1				BV2		
	170 cu in.		225 cu in.		2-bbl 273 cu in.		4-bbl 273 cu in.
	Manual	Auto.	Manual	Auto.	Manual	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	Manual	
			Auto.	
	Flywheel tooth face width		Manual	
			Auto.	

ELECTRICAL—IGNITION SYSTEM

Coil	Transistorized - Std., Opt., N.A.								
	Make								Chrysler
	Model								2444242 or 2444241
	Amps	Engine stopped							3.0
		Engine idling							1.9
Distributor	Make					Chrysler			Prestolite
	Model (a)		2444255	2444256	2444907	2444648	2642234	2642238	2642242
	Cent'fgal adv. in crankshaft degrees @ engine rpm (nominal)	Start (rpm)	See page 13a						
		Intermediate points deg. @ rpm.	See page 13a						
		Max. deg. @ rpm.	See page 13a						
	Vacuum adv. in crankshaft degrees @ in. Hg. (nominal)	Start (in. Hg.)	See page 13a						
		Intermediate points, deg. @ in. Hg.	See page 13a						
		Max. deg. in. Hg.	See page 13a						
	Breaker gap (in.)		.017 - .023				.014 - .019		
	Cam angle (deg.)		40 - 45				28 - 32		(b)
	Breaker arm tension (oz.)		17 - 20						17 - 21.5
Timing	Crankshaft deg. @ rpm.		5 BTC		2.5 BTC		5 BTC	10 BTC	
	Mark location		Water pump housing				Chain case cover		
Spark Plug	Make and Model	MoPar	P-6-6P						P-6-2P
		Champion	N-14Y						N-9Y
	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		

(a) CAP distributors	2642349	2642352	2642354	2642329	2642356	2642346	2642358

(b) Each breaker point set 27° - 31°; both sets 36° - 40°

(c) Synthetic rubber with Hypalon jacket

AMA Specifications—Passenger Car

Page 13a

MAKE OF CAR PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA MODEL YEAR 1966 DATE ISSUED 7-7-65 REVISED 3-23-66

DISTRIBUTOR DATA

Distributor		Crankshaft Degrees @ Engine rpm			
Model Number	Make	Start	Intermediate		Maximum
CENTRIFUGAL ADVANCE					
2444255	Chrysler	0 @ 750-1050	0- 5 @ 1050	16-20 @ 2020	25-29 @ 4400
2444256	Chrysler	0 @ 650- 950	0-14 @ 950	12-16 @ 1200	25-29 @ 4400
2444648	Chrysler	0 @ 650- 950	0- 5 @ 950	15-19 @ 1920	21-25 @ 4400
2444907	Chrysler	0 @ 650- 950	0- 5 @ 950	15-19 @ 1920	21-25 @ 4400
2642234	Chrysler	0 @ 600- 900	0- 5 @ 900	15-19 @ 1740	21-25 @ 3500
2642238	Chrysler	0 @ 650- 950	0- 4 @ 950	10-14 @ 1660	16-20 @ 3500
2642242	Prestolite	0 @ 650- 950	0- 6 @ 950	10-14 @ 1450	16-20 @ 3600
2642329	Chrysler	0 @ 650- 950	0-15 @ 950	18.5-22.5 @ 1320	31-35 @ 4400
2642346	Chrysler	0 @ 700-1000	0-14 @ 1000	22.5-26.5 @ 1470	31-35 @ 3800
2642349	Chrysler	0 @ 700-1000	0- 8 @ 1000	20.6-24.6 @ 1750	36-40 @ 5000
2642352	Chrysler	0 @ 650- 950	0-11 @ 950	20-24 @ 1500	36-40 @ 5000
2642354	Chrysler	0 @ 700-1000	0-8.4 @ 1000	19.4-23.4 @ 1700	31-35 @ 4400 ●
2642356	Chrysler	0 @ 700-1000	0-16 @ 1000	20.8-24.8 @ 1380	31-35 @ 3000
2642358	Prestolite	0 @ 700-1000	0-13 @ 1000	24.4-28.4 @ 1560	31-35 @ 4000 ●
VACUUM ADVANCE					
2444255	Chrysler	0 @ 5.0-7.1	8-14 @ 9.2		17-23 @ 12.0
2444256	Chrysler	0 @ 5.0-7.1	6-12 @ 8.5		12-17 @ 10.0
2444648	Chrysler	0 @ 4.9-7.1	6-10 @ 10.5		10.5-15.0 @ 13.0
2444907	Chrysler	0 @ 6.9-9.1	6-10 @ 12.5		10.5-15.0 @ 15.0
2642234	Chrysler	0 @ 5.0-8.0	10-16 @ 10.0		21-27 @ 13.5
2642238	Chrysler	0 @ 5.0-8.0	10-16 @ 10.0		21-27 @ 13.5
2642242	Prestolite	0 @ 5.0-8.0	10-16 @ 10.0		17-23 @ 12.0
2642329	Chrysler	0 @ 5.0-7.1	6-12 @ 8.5		12.0-17.0 @ 10.0
2642346	Chrysler	0 @ 7.0-9.0	12-18 @ 12.0		21.0-27.0 @ 15.0
2642349	Chrysler	0 @ 5.0-7.1	8-14 @ 9.2		17-23 @ 12.0
2642352	Chrysler	0 @ 5.0-7.1	6-12 @ 8.5		12-17 @ 10.0
2642354	Chrysler	0 @ 4.9-7.1	6-10.4 @ 10.5		10.5-15.0 @ 13.0 ●
2642356	Chrysler	0 @ 5.0-8.0	10-16 @ 10.0		21-27 @ 13.5
2642358	Prestolite	0 @ 5.0-8.0	10-16 @ 10.0		17-23 @ 12.0

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MAKE OF CAR PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA MODEL YEAR 1966 DATE ISSUED 7-30-65 REVISED (*)

See Page 4 for Engine Usage

MODEL	170 Cu In. - Std	170 Cu In. - Heavy Duty 225 Cu In. - Std	273 Cu In. - Std

ELECTRICAL—SUPPRESSION

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

ELECTRICAL—INSTRUMENTS AND EQUIPMENT

Speedometer	Make	King-Seely
	Trip odometer (yes, no)	Yes - Barracuda; No - All others
Charge indicator—type		Ammeter
Temperature indicator—type		Electric - thermal
Oil pressure indicator—type		Light
Fuel indicator—type		Electric - thermal
Other		None
Windshield wiper	Make	--
	Type—Standard	Electric, variable
	Type—Optional	None
	Vacuum booster provision	None
	Washer provision	Yes, Std
Horn	Type	Sea Shell
	Number used	Two
	Amp draw (each)	Spartan automotive 6-8 amp; Prestolite 8-10 amp

DRIVE UNITS—CLUTCH (Manual Transmission)

Make & type		Borg & Beck Dry plate	Borg & Beck or Auburn Dry plate		Auburn Dry plate
Type pressure plate springs		Coil			
Total spring load (lb.)		1288	1578	1375	1680
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		75.4
	Thickness	.125		.114	.125
	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			

AMA Specifications—Passenger Car

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PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA

MAKE OF CAR ____ MODEL YEAR 1966 DATE ISSUED 7-7-65 REVISED (*)

MODEL ____

	See Page 4 for Engine Usage			
	170 cu in.	225 cu in.	273 cu in. 1, 2-bbl	273 cu in. 1, 4-bbl

DRIVE UNITS—TRANSMISSIONS

Manual 3-speed (std. or opt.)	Std			NA
Manual 4-speed (std. or opt.)	NA		Opt	
Manual with overdrive (std. or opt.)	NA			
Automatic (std. or opt.)	Opt			

DRIVE UNITS— MANUAL TRANSMISSION

Number of forward speeds		3		3 or 4		4
Transmission ratios	In first	3.22	2.95	3.02	2.66	2.66
	In second	1.82	1.83	1.76	1.91	1.91
	In third	1.00	1.00	1.00	1.39	1.39
	In fourth	--	--	--	1.00	1.00
	In reverse	4.15	3.80	3.45	2.58	2.58
Synchronous meshing, specify gears		3-speed, 2nd and 3rd; 4-speed, all forward speeds				
Shift lever location		3-speed, steering column; 4-speed, floor or console				
Lubricant	Capacity (pt.)	3-speed - 6.5		3-speed - 6.0, 4-speed - 8.0		
	Type recommended	(a)				
	SAE viscosity number — Summer	(a)				
	SAE viscosity number — Winter	(a)				
	SAE viscosity number — Extreme cold	(a)				

DRIVE UNITS— MANUAL TRANSMISSION WITH OVERDRIVE

For transmission data see manual transmission section

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	
	SAE viscosity number — Winter	
	SAE viscosity number — Extreme cold	

(a) Three-speed: Automatic Transmission Fluid, Type AQ-ATF, Suffix "A" for all temperature ranges; Multipurpose Gear Lubricant, SAE 90 may be used in warm Climates.

Four-speed: When necessary, add Multipurpose Gear Lubricant SAE 140. During extremely cold weather, refill the transmission with Multipurpose Gear Lubricant SAE 80 or 90, or with Automatic Transmission Fluid, Type AQ-ATF, Suffix "A".

AMA Specifications—Passenger Car

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MAKE OF CAR PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA MODEL YEAR 1966 DATE ISSUED 7-7-65 REVISED (e)

MODEL

	See Page 4 for Engine Usage			
	170 cu in.	225 cu in.	273 cu in.	
			1, 2-bbl	1, 4-bbl

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)		Steering column-mounted. Floor- or console-mounted available as special equipment			
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			
	Max. ratio at stall	2.20			
	Type of cooling (air, liquid)	Water			
Lubricant	Capacity—refill (pt.)	16			
	Type recommended	Automatic Transmission Fluid, Type 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 3-speed transmission	2.75 x 51.61 x .065	NA
	Manual 4-speed transmission	NA	2.75 x 51.61 x .065
	Overdrive transmission	NA	
	Automatic transmission	2.75 x 51.61 x .065	

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

(Continued)

AMA Specifications—Passenger Car

MAKE OF CAR PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA MODEL YEAR 1966 DATE ISSUED 7-12-65 REVISED (*)

MODEL All Models

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)		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			Std: One-piece case Opt: Sure-Grip, two-piece case
Limited Slip differential, type			Torque-bias
Drive Pinion Offset			1.625
No. of differential pinions			Std 2, Sure-Grip 4
Ring gear O.D. (std. ratio)			7.25
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
	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 4 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

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MAKE OF CAR PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA MODEL YEAR 1966 DATE ISSUED 7-12-65 REVISED (*) 3-23-66

MODEL	BV1			BV2		
	Exc. 29, 45	29	45	Exc. 29, 45	29	45

DRIVE UNITS—WHEELS

Type & material			Disc, steel				
Rim (size and flange type)		Std.	13 x 4.5J				
		Opt.	14 x 4.5J (Std with disc brakes)				
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			7.00 x 13	
	Type - Nylon, etc.		Rayon				
Rev/mile at 50 mph.			847			831	
Inflation press. (cold)	Front		26	24			
	Rear		26	26	28	24	26	28
Optional tires - size and ply			7.00 x 13 6.95 x 14 6.95 x 14 Special			6.95 x 14 6.95 x 14 Special	

BRAKES—SERVICE

Type (duo-servo, disc, balanced, etc.)			Std - Duo-Servo; Opt - Front Disc, Rear 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.) *			Drum - 153.5 Disc - 102.3			Drum - 156.2 Disc - 102.3	
Gross lining area (sq. in.) **			153.5	102.3		156.2	102.3
Swept drum area (sq. in.) ***			254.5	314.7		251.3	314.7
Percent brake effectiveness—front			60				
Drum or Rotor	Diameter	Front	Drum - 9; Disc 11.16 x 7.03			Drum - 10; Disc 11.16 x 7.03	
		Rear	Drum - 9; Drum - 10			Drum - 10; Drum - 10	
	Type and material		Drum - Centrifuse or cast composite; Disc - Cast iron				
	Rotor (vented or solid)		Vented				
	No. pistons per caliper		Four				
Wheel cylinder bore	Front		Drum - 1.00; disc - 1.638			Drum - 1.1250; disc - 1.638	
	Rear		Drum .9125, disc .9375				
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 area 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, SIGNET, AND PLYMOUTH BARRACUDA MODEL YEAR 1966 DATE ISSUED 7-13-65 REVISED (*)3-23-66

MODEL	BV1		BV2	
	Exc. 45	45	Exc. 45	45

BRAKES—SERVICE (cont.)

Brake lining	Drum or Disc			Drum - Std, Disc - Opt			
	Bonded or riveted			Bonded			
	Front Wheel	Material		Molded asbestos			
		Size (length x width x thickness)	Prim. or outboard	Drum - 7.66 x 2.25 x .19 Disc - 4.82 x 1.84 x .4		Drum - 8.46 x 2.25 x .19 Disc - 4.82 x 1.84 x .4	
			Second. or inboard	Drum - 9.82 x 2.50 x .19 Disc - 4.82 x 1.84 x .4		Drum -11.06 x 2.25 x .19 Disc - 4.82 x 1.84 x .4	
		Segments per shoe		Two			
	Rear Wheel	Material		Molded asbestos			
		Size (length x width x thickness)	Prim. or outboard	Drum - 7.66 x 2.00 x .19 Drum/Disc - 8.46 x 1.75 x .19		Drum - 8.46 x 1.75 x .19 Drum/Disc - 8.46 x 1.75 x .19	
			Second. or inboard	Drum - 9.82 x 2.00 x .19 Drum/Disc - 11.06 x 1.75 x .19		Drum - 11.06 x 1.75 x .19 Drum/Disc - 11.06 x 1.75 x .19	
		Segments per shoe		Two			

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

Type and description (Separate frame, unitized frame, partially - unitized frame)	Unit construction

STEERING

Manual (std., opt., NA)				Std			
Power (std., opt., NA)				Opt			
Adjustable steering wheel (tilt, swing, other)		Type and description		NA			
		(std., opt., NA)		--			
Wheel diameter		Manual		16.0 x 16.4			
		Power		16.0 x 16.4			
Turning diameter	Outside front	Wall to wall (l. & r.)		39.9			
		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°				17.6°			
Manual	Gear	Type		Worm and ball nut			
		Make		Own			
		Ratios	Gear	24.0			
			Overall	28.9			
	No. wheel turns			5.3			

(Continued)

AMA Specifications—Passenger Car

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PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH

MAKE OF CAR BARRACUDA **MODEL YEAR** 1966 **DATE ISSUED** 7-13-65 **REVISED** (•) 3-23-66

MODEL

				BV1	BV2
STEERING (cont.)					
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	
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 at curb weight and preferred)	Caster (deg.)			Manual: -0.5 ± 0.25 Power: +0.75 ± 0.5	
	Camber (deg.)			Left side: +0.5 ± 0.25 Right side: +0.25 ± 0.25	
	Toe-in (outside track 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 - 24NEF-3	3/4 - 16UNF-3A •
	Bearing type			Roller	

AMA Specifications—Passenger Car

MAKE OF CAR PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA MODEL YEAR 1966 DATE ISSUED 7-13-65 REVISED (•)3-23-66

	BV1			BV2		
MODEL	21, 23, 27, 41	29	45	21, 23, 27, 41	29	45

SUSPENSION—GENERAL

(See Supplemental page 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	
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.)	85	90
Stabilizer	Type (link, linkless, frameless)	None	
	Material & bar diameter	--	

SUSPENSION—REAR

Type and description			Parallel, longitudinal leaf				
Drive and torque taken through			Rear springs				
Spring	Type		Semielliptical, asymmetrical				
	Material		Chromium alloy steel				
	Size (length x width, coil design height & 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	
	Mounting insulation type		Rubber				
	If leaf	No. of leaves	4 (a)	4.5	5	4.5 (b)	4.5 (c)	6
		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) 6 leaves with 4-bbl, 273-cu in. engine.

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MODEL	BV1						BV2					
	21	23	27	29	41	45	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 Indent. 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	FW (a)		ZZ	FW		FW (a)		ZZ	FW	
	Rear	FW		Coil		FW			Coil		FW	
	3rd seat	--										
Seat back type	Front	FW	FW (a)		ZZ	FW		FW (a)		ZZ	FW	
	Rear	FW		Coil		FW			Coil		FW	
	3rd seat	--										
Windshield glass type (i.e., single curved - laminated plate)		Single, curved, laminated, safety plate										
Side glass type (i.e., curved - tempered plate)		Flat, heat-treated safety sheet										
Backlight glass type (i.e., compound curved - tempered plate, three piece)		(b)		Plas-tic	(c)	(b)	(d)	(b)		Plas-tic	(c)	(b)	(d)
Windshield glass exposed surface area		995										
Side glass exposed surface area		1303	1344	1196	1268	1223	2345	1303	1344	1196	1268	1223	2345
Backlight glass exposed surface area		929		1000	2077	929	612	929		1000	2077	929	612
Total glass exposed surface area		3227	3268	3191	4340	3147	3952	3227	3268	3191	4340	3147	3952

LAMP HEIGHT AND SPACING

Height above ground to center of bulb	Headlamp	Highest *	25.4				24.9	25.8				25.3 •
		Lowest	--									•
	Tail	Highest										
		Lowest										
Distance from C/L of car to center of bulb	Headlamp	Inside	--									•
		Outside *	26.8									•
	Tail	Inside										
		Outside										
	Directional	Front	26.3									•
		Rear										

* If single headlamps are used enter here.

FW - Formed wire
ZZ - Zigzag

(a) Bucket seat options
(b) 1-piece, curved
(c) 1-piece, compound curved
(d) 1-piece, flat

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MAKE OF CAR PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH BARRACUDA MODEL YEAR 1966 DATE ISSUED 7-13-65 REVISED (*)

CONVENIENCE EQUIPMENT

(Indicate whether standard, optional or NA on each series)

MODEL	21	23	27	29	41	45
Power windows — Side Windows	NA					
Power windows — Vent Windows	NA					
Power windows — 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, AM					
Rear seat speaker						
Power Antenna	NA					
Clock	NA					
Air Conditioner (specify type and availability)	Opt - Front unit with integral heater or hang-on without heater					
Speed warning device	NA					
Speed control device	NA					
Ignition lock lamp	NA					
Back up lamp	Std					
Dome lamp	Std		NA			Std
Glove compartment lamp	Opt					
Prkg. brake signal lamp	Opt					
Luggage compartment lamp	Opt					
Underhood lamp	Opt					
Courtesy lamp	NA		Std			NA
Map lamp	NA		See Courtesy			NA
Auto. trans. quad. lamp	Std with automatic transmission					
Emergency flasher lamp	Opt					
Cornering light lamp	NA					
Instrument panel pad	Std					
Multi-speed wipers & washers	Std					
Seat belts - lap (4)	Std					
Seat belts - shoulder	Opt					
Outside rearview mirror	Std					

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PLYMOUTH VALIANT, SIGNET, AND PLYMOUTH

MAKE OF CAR BARRACUDA MODEL YEAR 1966 DATE ISSUED 7-13-65 REVISED (*) 3-23-66

WEIGHTS

SIX CYLINDER MODELS	CURB WEIGHT - POUNDS			% PASS. WEIGHT DISTRIBUTION				SHIPPING WEIGHT	
	Front	Rear	Total	Pass. In Front		Pass. In Rear			
				Front	Rear	Front	Rear		
Model VALIANT 100									
2-Door Sedan	1510	1210	2720	49.8	50.2	19.5	80.5	2600	•
4-Door Sedan	1510	1235	2745	49.8	50.2	19.5	80.5	2630	•
Station Wagon, 2-Seat	1480	1415	2895	49.8	50.2	19.5	80.5	2780	•
VALIANT 200									
4-Door Sedan	1510	1240	2750	49.8	50.2	19.5	80.5	2635	•
Station Wagon, 2-Seat	1480	1420	2900	49.8	50.2	19.5	80.5	2780	•
SIGNET									
2-Door Hardtop	1520	1230	2750	49.8	50.2	19.5	80.5	2635	•
Convertible Coupe	1565	1285	2850	49.8	50.2	19.5	80.5	2735	•
BARRACUDA									
Special 2-Door Hardtop	1580	1340	2920	49.8	50.2	22.9	77.1	2800	•
V-8 MODELS									
VALIANT 100									
2-Door Sedan	1685	1235	2920	49.8	50.2	19.5	80.5	2800	•
4-Door Sedan	1690	1260	2950	49.8	50.2	19.5	80.5	2840	•
Station Wagon, 2-Seat	1655	1445	3100	49.8	50.2	19.5	80.5	2970	•
VALIANT 200									
4-Door Sedan	1690	1265	2955	49.8	50.2	19.5	80.5	2820	•
Station Wagon, 2-Seat	1655	1450	3105	49.8	50.2	19.5	80.5	2985	•
SIGNET									
2-Door Hardtop	1695	1255	2950	49.8	50.2	19.5	80.5	2835	•
Convertible Coupe	1730	1320	3050	49.8	50.2	19.5	80.5	2925	•
BARRACUDA									
Special 2-Door Hardtop	1690	1375	3065	49.8	50.2	22.9	77.1	2930	•

Accessories & Equipment Differential Weights				Remarks	
Air Conditioner	+110	0	+110	6-cylinder models	
	+117	- 7	+110	V-8 models	•
Engine options - 225 cu in.	+ 41	+ 3	+ 44		
- 273 cu in.	+ 4	+12	+ 16	4-bbl carburetor	
Automatic transmission	+ 24	+ 6	+ 30	6-cylinder models	
	+ 8	- 8	0	V-8 models	
4-speed manual trans.	+ 35	+ 7	+ 42	With 273 cu in. engine	•
Power steering	+ 43	- 3	+ 40	6-cylinder models	
	+ 41	- 3	+ 38	V-8 models	
Power brakes	+ 11	+ 1	+ 12		
Power tail gate window	- 3	+ 9	+ 6	Station wagons only	
Radio	+ 7	0	+ 7		•
Luggage Rack	+ 1	+19	+ 20	Station wagons only	
Undercoat - Full	+ 13	+23	+ 36		
- Appearance	+ 18	0	+ 18		

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