

GENERAL

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MODEL IDENTIFICATION

VEGA 2300

MODEL 14111 2-DOOR SEDAN, 4-PASSENGER
MODEL 14177 2-DOOR HATCHBACK COUPE, 4-PASSENGER
MODEL 14115 2-DOOR KAMMBACK WAGON, 4-PASSENGER
MODEL 14105 2-DOOR PANEL EXPRESS, 1-PASSENGER

SERIAL NUMBERS AND IDENTIFICATION

ONLY BASIC DESIGNATIONS SHOWN

VEHICLE SERIAL NUMBER

4-Cylinder Example:

Model	Model Year	Assembly Plant (Lordstown)	Unit Number (1st Unit)
14111	1	U	100001

Thus: The 1st model built at Lordstown would be serial number 141111U100001

ASSEMBLY PLANT

U - Lordstown

Starting unit number 100001 and up at each assembly plant regardless of series
 Location Stamped on plate attached to left hand windshield pillar

TRANSMISSION IDENTIFICATION

● Example: O1E01

Type Designation	Source Designation	Model Year	Production ^o Month & Date
ZA	(Opel)	1	E01D*

● ZA	3-Speed	L-4 engine	Opel
● ZB	4-Speed	L-4 engine	Opel
ZC	Torque-Drive	L-4 engine	A - Cleveland
ZD	Powerglide	L-4 engine	C - Cleveland
			E - Mc Kinnon Ind.

● Location:
 3 & 4-speed Stamped on pan.
 Powerglide and Torque-Drive Stamped on right hand side of pan.

^oMonth: E denotes May; 01 denotes 1st day.

-Alpha Characters used in identifying the Calendar Month

A - January	D - April	K - July	R - October
B - February	E - May	M - August	S - November
C - March	H - June	P - September	T - December

● *The letter "D" or "N" following the date numerals indicates day or night shift, on automatic only.

ENGINE IDENTIFICATION

Example: T1210CHC

Source Designation	Production* Month & Date	Type Designation
T (Tonawanda)	1210	CHC

140 Cubic Inch L-4, Base Engine

CHC - Regular production engine, 3-speed, 1-bbl. carb.
 CHA - Regular production engine, Torque Drive, 1-bbl. carb.
 CHA - Regular production engine, Powerglide, 1-bbl. carb.
 CHC - Regular production engine, 4 speed, 1-bbl. carb.

140 Cubic Inch L-4 (RPO L11)

CHD - Optional, 3-speed, 2-bbl. carb.
 CHB - Optional, Torque-Drive, 2-bbl. carb.
 CHB - Optional, Powerglide, 2-bbl. carb.
 CHD - Optional, 4-speed, 2-bbl. carb.

Location:
 4-Cylinder engine Stamped opposite the number three cyl. on the right side of case.

*-Month: December, 12; 10th day of December, 10.

REAR AXLE IDENTIFICATION

Location, Identification Number

Bottom left or right of axle tube adjacent to carrier housing.

See Power Train Section for additional information.

EXTERIOR EQUIPMENT

STANDARD AND OPTIONAL APPEARANCE EQUIPMENT

FRONT	14111	14177	14115	14105
Windshield Reveal Molding	X	X	X	X
Argent Painted Plastic Radiator Grille	X	X	X	X
Parking Lamps in Valance Panel, Amber Lens	X	X (a)	X (a)	X
Headlamp Bezel, Painted Ring	X	X	X	X
Grille Header Panel Nameplate-- "Chevrolet Vega 2300"	X	X	X	X
Dual Exposed Windshield Wipers	X	X	X	X

SIDE

Front Fender Amber Marker Lamp	X	X	X	X
Front Door and Rear Quarter Window Bright Frame Moldings		X	X	
Flush Type Front Door Handles	X	X	X	X
Rectangular Outside L.H. Rear View Mirror	X	X	X	X
Hub Caps	X	X	X	X
Rear Quarter Panel Red Marker Lamp	X	X	X	X
Sail Panel or Rear Quarter Louvers	X	X	X	X
Fixed Rear Quarter Window with Painted Moldings	X	X	X	
Metal Rear Quarter Window Panels with Black Rubber Moldings				X
Roof Drip Molding Bright	X	X	X	

REAR

Deck Lid Louvers	X	X		
Rear Quarter Louvers			X	X
Rear End Panel Nameplate, "Chevrolet Vega 2300"	X	X		
Tailgate Nameplate, "Chevrolet Vega 2300"			X	X
Tailgate "Kammback" Decal			X	
Rear Window or Tailgate Window Reveal Moldings	X	X	X	X
Dual Tail and Back-Up Lamps, Bright Rings	X	X		
Single Tail Lamp with Back-Up Lamp, Bright Bezels			X	X
Swing Up Deck Lid and Rear Window		X	X	X

(a) RPO Z29 includes clear lens

EXTERIOR - INTERIOR EQUIPMENT

EXTERIOR - INTERIOR TRIM OPTIONS

Option	CONTENTS	MODELS
RPO B84	Body Side Upper Molding	All
RPO B93	Door Edge Guards	All
RPO YE4	Bright Window Scalp Moldings Carpeting Adjustable Passenger Seat	14111
RPO ZJ1	Adjustable Passenger Seat Floor Carpet	14111
	Perforated-Deluxe Vinyl Seat Trim Deluxe Door and Rear Quarter Trim Deluxe Instrument Panel Pad and Assist Handle Acoustic Package Inside Tilt Rear View Mirror	All Exc. 14105
	Load Floor Carpet	14177
RPO ZJ2	Body Side Lower Molding (Black Paint Fill) Front and Rear Wheel Opening Moldings Black Painted Rocker Panel Outside Door Handle Colored Insert	All Exc. 14105
	Bright Window Frame Scalp Moldings Bright Belt Reveal Molding	14111 14177
RPO Z29	Parking Lamp Clear Lens, Amber Bulb	14115 14177
	Bright Belt Reveal Molding	14177
	Body Side Lower Molding (Black Paint Fill) Black Grille, Bright Molding Deluxe Instrument Panel Pad and Assist Handle Special Gauge Instrument Cluster, Clock and Wood-Grain Trim Special 4-Spoke Vinyl Steering Wheel 2-Position Adjustable Driver Seat Front Fender "GT" Emblem Black Painted Rocker Panel Outside Door Handle Colored Insert Trim Rings (RPO P06) Four Spoke Stamped Wheels	14115 14177
RPO D88	Body Paint Striping—Header and Hood Hood, Deck and Rear End Panel or Tail Gate	14115 or 14177 With Z29 Only

INTERIOR EQUIPMENT

STANDARD AND OPTIONAL APPEARANCE EQUIPMENT

	14111	14177	14115	14105
SEATS AND FLOOR COVERING				
High Back Front Bucket Seats, Foam Pattern Vinyl	X (a)	X	X	X (b)
Folding-Rear Seat Cushion, Foam Pattern Vinyl	X (e)	X	X	
Package Shelf Cover, Embossed Board	X			
Folding Front Seat Back Lock, Bright	X	X	X	
Floor Mat, Vinyl Coated Rubber	X			X (c)
Stowage Compartment, Painted Metal	X	X	X	X
Rear Seat Back, Painted and Ribbed Textured Metal		X	X	
Load Compartment Floor, Rubber Mat		X		X (d)
Load Compartment Floor, Carpet			X	
Floor Covering, Carpet		X	X	
Seat Belts, 2-Front, 2-Rear with Shoulder Harness	X	X	X	X (b)
Front Seat Integral Head Restraints	X	X	X	
Transmission Shift Console, Floor Mounted	X	X	X	X
Front Stowage Compartment, Painted Metal				X
Shoulder Belts, 2-Front	X	X	X	X (b)

INSTRUMENT PANEL AND STEERING WHEEL

Instrument Panel Knobs, Bright Beads	X	X	X	X
Black Inserts, Graphic	X	X	X	X
Heater Control Levers, Bright	X	X	X	X
Instrument Panel Pad, Upper	X	X	X	X
Clock Hole Cover	X	X	X	X
Ash Tray Faceplate Black-Painted	X	X	X	X
2-Speed Electric Windshield Wipers, and Push-Button Manual Washers	X	X	X	X
Vent Control Knobs, Cowi Kick Pad	X	X	X	X
Steering Wheel, Black Plastic	X	X	X	X
Black Foam Padded Steering Wheel Shroud	X	X	X	X
Turn Signal Knob, Black Plastic	X	X	X	X
Steering Column Ignition Lock	X	X	X	X
Instrument Panel Map Pocket (Without A/C)	X	X	X	X
Cigarette Lighter	X	X	X	

- (a) Driver seat adjustable, passenger seat fixed
- (b) Driver seat only (Chevy-Van seat, without head Restraint)
- (c) Front floor mat only
- (d) Painted metal
- (e) Fixed seat

INTERIOR EQUIPMENT

STANDARD AND OPTIONAL APPEARANCE EQUIPMENT

ROOF AND PILLARS	14111	14177	14115	14105
Headlining, Formed Fiberglass	X	X	X	
Windshield Pillar and Garnish Moldings, Colored Plastic	X	X	X	X
Center Pillar Molding, Colored Plastic	X	X		X
Rear Quarter Window Moldings, Colored Plastic	X	X		X
Rear Window Molding, Colored Plastic	X	X	X	
Roof Side Rail Garnish Moldings, Colored Plastic	X	X	X	X (a)
Sunshades, Dual Padded Vinyl	X	X	X	X (b)
Coat Hooks, Colored Plastic	X	X	X	
Center Dome Lamp	X	X	X	X
Rear View Mirror, Windshield Mounted	X	X	X	X
Front Door Jamb Switch	X	X	X	X
Rear Door Hinge Cover, Painted Plastic			X	

DOOR AND QUARTER PANEL

Form Molded Plastic Door Trim Panel With Integral Map Pocket, Armrest and Door Handle Release Pocket	X	X	X	X
Form Molded Plastic Rear Quarter Trim Panel	X	X	X	
Bright Remote Door Handle	X	X	X	X
Bright Window Regulator Handle	X	X	X	X
Deck Lid Panel, Colored Plastic		X		
Tail Gate/Deck Lid Garnish Moldings, Colored Plastic		X	X	
Door Lock Buttons, Bright Plastic	X	X	X	X
Fuel Emission Cover (R.H. Only)				X

(a) Forward of "B" pillar only

(b) Driver side only

EXTRA COST EQUIPMENT

EQUIPMENT	RPO
STYLING	
Body Glass - Tinted	A01
Auxiliary Seat	A61
Body Side Moldings	B84
Door Edge Guards	B93
Hood, Decklid and Rear End Panel Paint Stripes	D88*
Wheel Trim Ring	P06
Electric Clock	U35
Front and Rear Bumper Guards	V30
Deluxe Interior and Exterior	YE4*
Custom Interior	ZJ1*
Custom Exterior	ZJ2*
Special GT Equipment	Z29

BODY

Drivers Adjustable Seat Back (4° Tilt)	AN6*
Rear Seat Shoulder Harness	ASS*
Rear Window Electro Clear Defogger	C49
Air Conditioning	C60
Day-Night Inside Rear View Mirror (8" Glare Proof)	D31
AM Radio	U63
AM-FM Radio	U69
Windshield Antenna	U76
Auxiliary Speaker	U80*

* Except 14105

EXTRA COST EQUIPMENT

EQUIPMENT	RPO
POWER TRAIN	
Rear Axle - 2.92 Ratio - Type A	GX9
Rear Axle - 3.36 Ratio - Type A	G76
Rear Axle - Positraction	G80
110 Horsepower L-4 Engine	L11
Torque Drive Transmission	MB1
4-Speed Transmission	M20
Powerglide Transmission	M35
Heavy Duty Radiator	V01
CHASSIS	
Special Performance Front and Rear Suspension	F41*
Power Steering	N40
A70-13 Bias Belted, Blackwall with White Letters	PJ5
A78-13 Bias Belted, Whitewall	PJ6
A78-13 Bias Belted, Blackwall	PJ7
A78-13 Bias, Blackwall	PJ8
A78-13 Whitewall	PJ9
* Except 14105	-

AIR CONDITIONING

FOUR SEASON (RPO C60)

Integral air cooling and heater system. Manually controlled by three vertical levers on instrument control panel, plus 4-speed fan switch. Left lever operates compressor and air selector doors; center lever controls air flow from instrument panel outlets; right lever directs air to defroster outlets.

BASIC COMPONENTS

Control panel, evaporator, blower, condenser, receiver-dehydrator, refrigerant (freon) tank, air intake assembly and duct assembly for both systems.

EQUIPMENT (Used in addition to or in place of base equipment)

CHASSIS

Rear Axle Ratio - Refer Power Trains Section

POWER TRAINS

Fan	5 Flex-blade, plastic
Crankshaft Pulley	Dual
Compressor & Crankshaft Belt	One
Generator	55 Ampere
Radiator	Heavy duty

BODY

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ELPO PAINT PROCESS

Major advances in the painting process of Vega 2300 bodies contribute significantly to elimination of rust and corrosion. The new technique, called "Elpo", paints the bodies by electricity. Technically the name is "Electrophoretic Deposit of Polymers". It applies a smooth, even, and continuous prime coat to the entire body including hidden inner surfaces and corners automatically without conventional spraying.

Elpo deposits prime coat to the complete body surface by submerging it into a large tank filled with a solution composed of paint particles suspended in water. The paint primer particles are given a negative electrical charge by the tank which also serves as a cathode, with the body itself receiving a positive electrical charge. As the body is submerged, charged primer particles are attracted to the metal surfaces through a principle known as "Electrophoresis".

A six-stage zinc phosphate rustproofing process is given the body before it reaches the Elpo installation. A conveyor then transports the bodies downward into a tank for the primer coating. The body is submerged for about two minutes and upon emerging goes through a rocking movement to carry away excess liquid.

The electro-coating process causes even the most remote inner surfaces to be coated with red primer, and all edges and complex shapes coated with the same thickness as exposed flat surfaces.

The new primer paint system replaces the spray gun and paint booth priming operations.

Subsequent stages of the paint process include baking, wet sanding and sealer coating, ending with a topcoat of long lasting acrylic lacquer which is baked in an oven at 300 degrees.

EXTERIOR-INTERIOR COLORS

VEGA 2300 14100 SERIES

SERIES	MODELS				Type Seat	INTERIOR TRIM COLORS & CODE NUMBERS					
	11	77	15	05		Trim	Black	Dark Green	Medium Saddle	Light Sandalwood	Dark Blue
Standard	X	X	X		Bucket	Vinyl	873	878	883		
	X	X	X	X			873	878			
	X	X					873	878	883	888	
Deluxe	X	X	X				874	879	884		
	X	X					874	879	884		892

CODE	EXTERIOR COLORS					
11	Antique White	X	X	X	X	X
13	Nevada Silver	X				X
25	Mediterranean Blue	X			X	X
29	Command Blue	X		X	X	X
43	Lime Green	X	X			
49	Antique Green	X	X	X	X	
52	Sunflower Yellow	X	X			
61	Sandalwood	X	X	X	X	X
63	Mesa Sand	X			X	X
75	Cranberry Red	X		X	X	

BODY CONSTRUCTION AND GLASS AREA

GENERAL

Construction Body-frame integral, using large individual body panels welded together forming complete sub-assemblies. All major sub-assemblies are double panel construction except underbody and rear end panel. The full roof panel subassembly is formed to provide front and rear headers and side rails. Exterior front end sheet metal panels are removable with bolt on fenders. Main front end structure is welded to body proper and forms the base for attachment of engine, front suspension, steering and front end sheet metal. The flush-dry rocker panel system, plastic valance panels and the Elpo paint process provide corrosion protection to the entire body.

HEADLIGHTS

Type 7" Power Beam single headlamps

HOOD

Type Double panel construction, front hinged, over-center type locking support on right side, holds hood open to (70°) position for engine compartment access.

Release Internal, lever located under instrument panel, left of steering column.

VENTILATION

High Level Air Intake for Passenger

Compartment Double wall plenum chamber, providing washing and air drying of rocker panels for corrosion resistance.

Powered System Positive, low blower speed activated thru ignition switch. Air is exhausted from passenger compartment via rear deck or rear quarter louvers.

WINDSHIELD WIPERS AND WASHERS

Type Dual 2-speed electric with 16" blades

Linkage Parallel acting

Washer System Manually operated, dual spray

DOORS

Type Double panel construction, hinged at front. Side guard beams. Standard spring loaded hold-open feature with single position detent. Welded-on strap type hinges.

Handles Flush lift bars

Glass Full, curved ventless

REAR END COVER

Model Availability Coupe and station wagon hatch, with torque rods counter balanced to aid in opening and closing with positive hold open links.

Sedan Trunk Lid Counter balanced torque rods

SEATS

Type Bucket seats, full foam molded construction with integral head restraints. Coupe and station wagon models folding second seats standard equipment.

Belts Three-point seat belt and shoulder harness

BODY GLASS

Type, Windshield Curved thin laminated plate

Sides and Rear Curved tempered safety plate

Rear Quarter Windows Curved stationary

STOWAGE WELL (Sedan Delivery)

Location Rear of driver seat

SPARE TIRE MOUNT

Location

Sedan In well in truck floor

Remainder Under floor of luggage compartment

Tools Bumper jack with combination lever handle and wheel nut wrench.

BODY GLASS VISIBILITY AREA

	MODELS			
	11	77	15	05
Windshield	1116.2	1143.9		1116.2
Front Door	956.4	846.2		956.4
Rear Quarter	589.0	488.2	1105.6	-
Rear Window	973.8	1071.3		662.5
Total Area (Sq.In.)	3635.4	3549.6	3840.7	2735.1

DIMENSIONS AND WEIGHTS

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INTERIOR DIMENSIONS

CODE	DESCRIPTION	2-DOOR	2-DOOR	2-DOOR	2-DOOR
		SEDAN	COUPE	WAGON	PANEL
		14111	14177	14115	14105

Front Compartment

L17	"H" point travel		5.0		
L34	Maximum effective legroom	42.4	42.8	42.4	42.7
L40	Back angle		26.0		
L42	Hip angle		100.0		
L44	Knee angle	131.9	131.9	131.9	135.0
L46	Foot angle	89.1	87.5	87.5	91.3
W3	Shoulder room		51.6		
W5	Hip room	49.1	49.4	49.1	49.4
W17	Hat room	48.9	50.2		48.9
H3	Seat cushion height	11.6	10.1	11.4	11.6
H11	Entrance height		30.0		
H13	Steering wheel thigh clearance	3.7	4.7		3.7
H26	Metal to metal at Q car	36.6	34.8		36.6
H27	Metal to metal at Q occupant	44.9	43.2	44.9	45.0
H30	"H" point to heel point	9.3	8.1	9.3	7.8
H61	Effective headroom	38.3	37.6	38.3	39.3

Rear Compartment

L3	Rear compartment room	23.8	24.3	25.0	
L41	Back angle	23.0	26.0	23.0	
L43	Hip angle	80.5	74.4	79.7	
L45	Knee angle	89.6	77.4	87.8	
L47	Foot angle	115.2	111.8	113.0	
L48	Knee clearance	1.8	1.0	1.6	
L50	"H" point couple distance	30.2	28.4	29.9	
L51	Minimum effective legroom	33.2	30.8	31.8	
W4	Shoulder room		49.5		
W6	Hip room		42.5		
W18	Hat room	47.4	49.2	48.0	
H8	Seat cushion height	12.1	11.1	12.1	
H12	Entrance height	30.3	30.8	30.3	
H31	"H" point to heel point	11.2	9.4	11.2	
H63	Effective headroom	37.4	36.6	37.7	

Luggage Capacity (Cu. Ft.)

V1	Usable luggage capacity	8.7	9.3*	50.2†	50.2@
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Station Wagon - Cargo Space

L202	Cargo Length at floor - Front Seat			67.4	67.4
L204	Cargo Length at Belt - Front Seat			60.5	60.5
W201	Cargo Width at Wheel House			42.6	42.6
W204	Opening Width at Belt			47.4	47.4
H201	Max. Cargo Height			28.9	28.9
H202	Rear Opening Height			26.1	26.1
L200	Max. Cargo Length at Front Seat			67.4	67.4
L203	Cargo Length at Floor - Second Seat			37.5	-
L205	Cargo Length at Belt - Second Seat			30.0	-
H250	Tailgate to ground			22.8	22.8
L201	Max. Cargo Length - Second Seat			37.5	-
W203	Opening Width at Floor - Rear			42.1	42.1
W205	Rear Opening Width above Belt			38.0	38.0
V2	Total Cargo Volume (Cu.Ft.)			50.2	50.2**

*With rear seat up, 18.9 seat down
 **68.7 includes front seat floor area

†Rear seat folded
 @68.7 includes front seat floor area

EXTERIOR DIMENSIONS

CODE	DESCRIPTION	2-DOOR	2-DOOR	2-DOOR	2-DOOR
		SEDAN	COUPE	WAGON	PANEL
		14111	14177	14115	14105
Length					
L30	"O" line to dash			0.13	
L101	Wheelbase			97.0	
L102	Tire size (Standard)			A78 x 13 (a)	
L103	Overall length			169.7	
L104	Overhang - front			31.5	
L105	Overhang - rear			41.2	
L123	Body upper structure length	91.7	93.7		106.3
L127	"O" line to ϕ rear wheels			86.0	
L128	Hood length at ϕ			52.8	
L129	Deck length at ϕ	21.5	19.5	-	-
L130	"O" line to w/s cowl point			12.6	

Width					
W101	Tread - front			55.1	
W102	Tread - rear			54.1	
W103	Maximum overall width			65.4	
W106	Front fender overall width			65.3	
W107	Rear fender overall width			65.3	
W116	Maximum overall width of body			65.4	
W117	Maximum overall body width @ No. 1 pillar			64.6	
W120	Maximum overall width - front door open			146.8	
W121	Maximum overall width - rear door open			-	

● Height					
H101	Overall height	51.9	50.0		52.0
H102	Front bumper to ground		18.3		18.2
H104	Rear bumper to ground		18.5		17.8
H111	Rocker panel to ground - rear			6.0	
H112	Rocker panel to ground - front			6.3	
H114	Hood at rear to ground			35.4	
H115	Step height - front (design)			11.4	
H116	Step height - rear (design)			-	
H122	Windshield slope angle	55.0	57.5		55.0
H125	Headlamp to ground	26.0	25.9		26.0
H126	Tail lamp to ground	24.8	24.9		27.7
H136	Body "O" line to ground - front			5.0	
H137	Body "O" line to ground - rear			5.0	
H158	Roof thickness	4.3	3.7		4.4
H159	DLO height	13.7	12.5		13.7
H160	Body thickness			27.6	

● Clearances					
H106	Angle of approach		27.1°		26.6°
H107	Angle of departure		17.5°		17.6°
H147	Ramp to breakover angle		11.2		11.4
H148	Front suspension to ground			5.6	
H149	Oil pan to ground			4.8	
H150	Flywheel housing/trans. assy. to ground			4.8	
H151	Frame to ground		4.8		4.9
H152	Exhaust system to ground		5.6		5.9
H153	Rear axle differential			6.7	
H154	Fuel tank to ground		8.0		8.3
H156	Minimum ground clearance			4.8	

(a) A70-13

VEHICLE WEIGHTS

VEGA 2300

MODEL SYMBOL 4-Cyl.	VEHICLE TYPE Description	SHIPPING WEIGHT			CURB WEIGHT		
		Front	Rear	Total	Front	Rear	Total
14111	2-Door Sedan	1196	950	2146	1182	1020	2202
14177	2-Door Coupe	1220	970	2190	1206	1040	2246
14115	2-Door Wagon	1210	1020	2230	1196	1090	2286
14105	2-Door Panel	1180	972	2152	1166	1042	2208

SHIPPING WEIGHT: Weight of basic vehicle with regular equipment, including grease, oil and (3) gallons of gasoline, and engine coolant to capacity.

CURB WEIGHT: Shipping weight plus gasoline to capacity.

For total shipping, and curb, weights of vehicles equipped with the following options, add to, or deduct from, the base vehicle weight (lbs.).

OPTIONAL EQUIPMENT

RPO	OPTION	WITH	WEIGHT
A61	Auxiliary Seat		+ 25
C60	Air Conditioning		+ 85
F41	Spec Perf Frt-Rr Suspension		+ 16
N40	Power Steering		+ 32
PH6	Tire		+ 7
PJ5	Tire		+ 12
PJ6	Tire		+ 16
U63	AM Pushbutton Radio		+ 8
U69	AM-FM Pushbutton Radio		+ 8
YE4	Deluxe Interior & Exterior		+ 10
ZJ1	Custom Interior		+ 8
Z29	Special GT Coupe		+ 15
-	140 Cu.In. L-4 Engine (90 HP)	Torque Drive	+ 44
		Powerglide	+ 53
		4-Speed Manual	+ 6
L11	140 Cu.In. L-4 Engine (110 HP)	Torque Drive	+ 44
		Powerglide	+ 53
		4-Speed Manual	+ 6

CHASSIS

FRONT SUSPENSION	2-3
REAR AXLE AND SUSPENSION	4-5
BRAKES	6
STEERING, WHEELS, TIRES	7
BULBS AND LAMPS	8
FUSES AND CIRCUIT BREAKERS	9

FRONT SUSPENSION

FRONT SUSPENSION

Description	Independent, SLA type, coil springs with center mounted shock absorbers, spherical joint steering knuckle.
Wheel Travel (design)	
Total	6.04
Jounce	2.56
Rebound	3.48
Wheel to spring travel ratio	1.956

CONTROL ARMS

Description	Reinforced steel stamping with pre-loaded steel encased rubber bushings at pivot.
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STEERING KNUCKLES

Description	Cast nodular iron with pressed-in spindle, integral brake caliper mounting pads and integral steering knuckle arm.
Spindle Diameters	
Inner bearing	1.25
Outer bearing	0.6875
Spindle Thread Size	3/4-20 NEF-3 (modified)
Wheel Bearings	
Type, inner & outer	Taper roller

SPHERICAL JOINTS

Type	Ball stud
Upper	Compression
Lower	Tension
Bearing Surfaces	
Upper & Lower	Sintered iron

SHOCK ABSORBERS

Type	Direct, double acting, hydraulic
Piston Diameter	1.00

FRONT WHEEL ALIGNMENT (Design)

Caster (degrees)	N1-3/4 to P1/4
Camber (degrees)	N1-1/4 to P1-1/4
Toe-In (total)	3/16 to 5/16

STABILIZER BAR (RPO F41)

Type	Link
Material	HR steel
Diameter	0.875
Bushing Material	Rubber

GENERAL SUSPENSION PROVISIONS

Anti-dive control	Angle of front upper control arm
-------------------	----------------------------------

FRONT SUSPENSION

FRONT SPRINGS

Selected from a family of springs by Electronic Data Processing which identifies the correct springs for the weight of the vehicle including optional equipment ordered by the customer.

FRONT SPRING SPECIFICATIONS

Part Number	Assy. Code	Cut-Off Length	Wire Dia.	Total Coils	Deflection Rate (lbs/inch)	Heights	
						Free	Working (In. @ lbs.)
3988071	HA	91.00	.548	7.0	325	11.56	8.70 @ 910
3988072	HB	91.04	.548	7.0	325	11.84	8.70 @ 1000
3988073	HC	91.08	.548	7.0	325	12.11	8.70 @ 1090
3988074	HD	104.37	.574	8.0	325	12.39	8.70 @ 1180
3988075	HG	104.40	.574	8.0	325	12.67	8.70 @ 1270

REAR AXLE AND SUSPENSION

REAR SUSPENSION

Description	Salisbury rear axle with coil springs; parallel lower control arms, biased upper control arms
Wheel Travel (Design)	
Total	7.05
Jounce	2.95
Rebound	4.10
Wheel to spring, travel ratio	0.96:1

AXLE SHAFT

Description	Forged and hardened steel with integral drive flange
Wheel Bearings	Single row cylindrical roller
Oil Seal	Steel encased, spring loaded synthetic rubber

RING AND PINION GEAR TOOTH COMBINATIONS

Ring Gear Diameter - 6.50"

Axle Ratio	
2.53	38, 15
2.92	38, 13
3.36	37, 11

REAR AXLE

Description	Three-piece housing includes integral cast iron differential carrier and housing with two pressed-in and welded steel tubes. Semi-floating axle shafts. Differential carrier contains hypoid overhung pinion and ring gear. Drive pinion supported by two taper roller bearings.
Drive Pinion Vertical Offset	1.50
Drive Pinion Bearing Adjustment	Shim
Lubricant	
Type	Military spec. MIL-L-2105B
Viscosity	SAE-80
Capacity (pints)	2.3

DRIVELINE

Propeller Shaft	Tubular
Number Used	One
Diameter (O.D.)	
Manual Transmission	3.25
Automatic Transmission	2.75
Wall Thickness	0.065
Length (C/L of U joints)	
3-Speed Manual	56.75
4-Speed Manual	55.92
Automatic	49.56
Universal Joints	
Type	Cross
Number Used	Two
Bearings	Prepacked, anti-friction

REAR AXLE AND SUSPENSION

REAR SPRINGS

Selected from a family of springs by Electronic Data Processing which identifies the correct springs for the weight of the vehicle including optional equipment ordered by the customer.

REAR SPRING SPECIFICATIONS

Part Number	Assy. Code	Cut-Off Length	Wire Dia.	Total Coils	Deflection Rate (lbs/inch)	Heights	
						Free	Working (In. @ lbs.)
3988077	HL	109.54	.475	7.59	105	13.59	10.24 @ 350
3988078	HP	109.61	.475	7.59	105	14.07	10.24 @ 400
3988079	HR	109.68	.475	7.59	105	14.55	10.24 @ 450
3988080	HS	107.06	.499	7.39	130	12.95	10.24 @ 350
3988081	HT	107.11	.499	7.39	130	13.34	10.24 @ 400
3988082	HW	107.17	.499	7.39	130	13.72	10.24 @ 450

BRAKES

SERVICE BRAKES

Type Front disc brakes, rear drum brakes (leading, trailing type). Dual circuit brake system, pressure differential and parking brake warning light. Self adjusting front brake shoes. Rear automatically adjust when parking brake is applied. Integral hub and disc with self adjusting single caliper units mounted on steering knuckle.

Line Pressure @ 100 Lb. Pedal Load1270

Braking Ratios

Pedal 6.6

Hydraulic 4.47

Overall 29.5:1

FRONT DISC BRAKE

Construction Single rotor integral with hub

Material Cast iron

Diameter 10 inches

Brake Lining

Material Molded asbestos

Size 3.64 x 1.60 x 0.376

Method of Attachment Integral bonding

Total Eff. Area (Sq.In.) 20.4

Wheel Cylinders

Number Per Wheel One

Piston Diameter 1.875

REAR DRUM BRAKES

Diameter 9.0 inches

Construction Composite, web casting rim

Material

Web H.R. steel

Rim Cast iron alloy

Brake Lining

Material Full molded asbestos composition

Size (Length x Width x Thickness)

Primary 9.58 x 1.18 x 0.18

Secondary 9.58 x 1.18 x 0.18

Method of Attachment Bonded

Total Eff. Area (Sq.In.) 48.0

Wheel Cylinder

Piston Diameter 0.75

Master Cylinder

Piston Diameter 0.75

Piston Travel 1.12

Foot Pedal Travel 7.5 inches

PARKING BRAKE

Type Mechanical, pull rods and cables operate and adjust two rear service brakes.

Total Eff. Area (Sq.In.) 75.0

Control Lever, floor mounted in center console

BULBS AND LAMPS

BULBS AND LAMPS	NUMBER REQUIRED AND TRADE NUMBER	CANDLE POWER PER LAMP
Automatic transmission quadrant	1-194	2
Back-up	2-1156	32
Brake warning	1-194	2
Directional signal indicators	2-194	2
Dome	1-211	12
Generator indicator	1-194	2
Headlamp	2-6014	High beam 60W Low beam 50W
Headlamp hi-beam indicator	1-194	2
Instrument cluster	4-168	3
License plate, rear	1-67	4
Oil pressure indicator	1-194	2
Parking		
Park	2-1157	3
Turn		32
Radio	1-1816	3
Rear window defogger	1-194	2
Side marker - front	2-194	2
Side marker - rear	2-194	2
Tail		
Tail	2-1157	3
Stop & turn		32
Temperature indicator	1-194	2

FUSES AND CIRCUIT BREAKERS

CIRCUIT	TYPE OF PROTECTION	LOCATION AND CIRCUIT*
Air Conditioning	30 amp fuse	In line
	25 amp fuse	Fuse panel
Back-up lamps	20 amp fuse	Fuse panel (a)
Brake warning lamp	20 amp fuse	Fuse panel (a)
Cigarette lighter	20 amp fuse	Fuse panel (d)
Clock	20 amp fuse	Fuse panel (d)
Direction signal indicator lamps	20 amp fuse	Fuse panel (a)
Dome lamp	20 amp fuse	Fuse panel (d)
Electric fuel pump	20 amp fuse	Fuse panel
Fuel gauge	20 amp fuse	Fuse panel (a)
Generator indicator lamp	20 amp fuse	Fuse panel (a)
Headlamps	Circuit breaker	Light switch
Headlamp hi-beam indicator lamp	20 amp fuse	Fuse panel
Heater	25 amp fuse	Fuse panel
Heater control lamp	4 amp fuse	Fuse panel (b)
Idle stop solenoid gage	10 amp fuse	Fuse panel (f)
Instrument cluster lamps	4 amp fuse	Fuse panel (b)
License plate lamp	20 amp fuse	Fuse panel
Oil pressure indicator lamp	20 amp fuse	Fuse panel (a)
Park and turn lamp	20 amp fuse	Fuse panel (e)
Radio	10 amp fuse	Fuse panel
Radio lamp	4 amp fuse	Fuse panel (b)
Side marker lamps	20 amp fuse	Fuse panel (e)
Tail, stop, turn lamps	20 amp fuse	Fuse panel (e)
Tachometer	20 amp fuse	Fuse panel (a)
Temperature gauge	20 amp fuse	Fuse panel (a)
Temperature indicator lamp	20 amp fuse	Fuse panel (a)
Traffic hazard indicator	20 amp fuse	Fuse panel (c)
Transmission control spark gage	10 amp fuse	Fuse panel (f)
Windshield wiper	25 amp fuse	Fuse panel

* Letter suffix indicates same circuit



POWER TRAINS

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POWER TEAM COMBINATIONS

ENGINE	TRANSMISSION	MODEL APPLICATION	AXLE RATIO*		
			STD.	OPTION	A/C
140 Cubic Inch L-4 90 HP Standard	3-Speed (3.24:1 low)	All Models ●	2.53:1	2.92:1	2.92:1
	4-Speed (3.43:1 low)		2.92:1	3.36:1	3.36:1
	Torque-Drive			NA	2.92:1
	Powerglide				

140 Cubic Inch L-4 110 HP RPO L11	3-Speed (3.24:1 low)	All Models ●	2.92:1	NA	2.92:1
	4-Speed (3.43:1 low)		3.36:1		3.36:1
	Torque-Drive				
	Powerglide				

*Positraction axles available optionally for all ratios shown

MULTIPLICATION FACTORS

WITH MANUAL TRANSMISSIONS

ENGINE	CARBURETION	TRANSMISSION	TOTAL GEAR REDUCTION					AXLE RATIO
			1st	2nd	3rd	4th	Rev.	
140 Cu.In. L-4 90 HP Standard	Single Barrel	3-Speed	8.20	4.25	2.53	-	8.78	2.53
		4-Speed	10.01	6.31	4.00	2.92	9.69	2.92
140 Cu.In. L-4 110 HP RPO L11	2-Barrel	3-Speed	9.46	4.91	2.92	-	10.13	2.92
		4-Speed	11.52	7.26	4.60	3.36	11.16	3.36

WITH AUTOMATIC TRANSMISSION

ENGINE	TRANSMISSION	SELECTOR POSITION	TOTAL TORQUE MULTIPLICATION	AXLE RATIO
140 Cu.In. L-4 90 HP Standard	Torque-Drive and Powerglide	Drive	11.15:1 - 2.92:1	2.92:1
		Low & Reverse	11.15:1 - 5.31:1	
140 Cu.In. L-4 110 HP RPO L11	Torque-Drive ●	Drive	12.83:1 - 3.36:1	3.36:1
		Low & Reverse	12.83:1 - 6.12:1	
140 Cu.In. L-4 110 HP RPO L11	Powerglide	Drive	12.83:1 - 3.36:1	3.36:1
		Low & Reverse	12.83:1 - 6.12:1	

ENGINE DATA AND RATINGS

GENERAL DATA

Engine Type	L4 In-Line OHC	
Piston Displacement (Cu.In.)	140	
Availability	Standard	RPO L11
Number of Cylinders	Four	
Bore and Stroke (nominal)	3.501 x 3.625	
Compression Ratio	8.00:1	
Taxable (SAE) Horsepower	19.6	
Firing Order	1-3-4-2	
Idling Speed	Manual (In Neutral)	700 RPM
	Automatic (In Drive)	550 RPM
Compression Press. (PSI) @	150	
Cranking Speed, Engine Hot		
Power Plant Mounting	Two front and one rear	
Measurements	Length	32.07
	Height	22.46
	Width	21.32

ADVERTISED ENGINE RATING

Engine	Standard	Option RPO L11
Gross Brake HP @ RPM	90 @ 46-4800	110 @ 4800
Gross Torque @ RPM (lb-ft)	136 @ 2400	138 @ 3200
Net Brake HP @ RPM	80 @ 4400	93 @ 4800
Net Torque HP @ RPM (lb-ft)	121 @ 24-2800	121 @ 28-3200

ENGINE SPEED AND PISTON TRAVEL

Engine	Standard				Option RPO L11			
	3-Spd.	4-Spd.	P/G	T/D	3-Spd.	4-Spd.	P/G	T/D
Rear Axle Ratio	2.53		2.92		2.92	3.36		3.36
Tire Size	A78 x 13							
Crankshaft Revolutions per Mile	2244.4		2590.0		2590.0	2980.3		2980.3
Crankshaft RPM @ MPH	Low	115.9	148.1	78.6	139.9	170.4	90.4	90.4
	Second	62.8	76.6		72.5	107.3		
	Third	37.4	59.1		43.2	68.1	49.7	49.7
	Fourth		43.2	43.2		49.7		
	Reverse	129.8	143.3	78.6		149.8	164.9	90.4	90.4
Piston Travel (Ft/Mile)	1355.8		1564.8		1564.8	1800.6		1800.6

VEHICLE PERFORMANCE FACTORS

ENGINE	BASE 140 CU.IN. 90 HP	BASE 140 Cu.IN. 90 HP	BASE 140 CU.IN. 90 HP	BASE 140 CU.IN. 90 HP	RPO L11 140 CU.IN. 110 HP	RPO L11 140 CU.IN. 110 HP
MODEL	14111	14115	14177	14105	14111	14177

3-SPEED TRANSMISSION

Performance Weight (pounds)	2780	2868	2830	2798	2780	2830
Pounds per Gross Horsepower	30.89	31.87	31.44	31.09	25.27	25.73
Pounds per Cu.In. Displacement	19.86	20.49	20.21	19.96	19.86	20.21
Gross HP per Cu.In. Displacement	.642	.642	.642	.642	.786	.786
Power Displacement (cu.ft./mile)	90.91	90.91	90.91	90.91	104.92	104.92
Displacement Factor (cu.ft./ton mile)	65.40	63.57	64.48	64.94	75.48	73.89

4-SPEED TRANSMISSION

Performance Weight (pounds)	2786	2874	2836	2804	2786	2836
Pounds per Gross Horsepower	30.96	31.93	31.51	31.16	25.33	25.78
Pounds per Cu.In. Displacement	19.90	20.53	20.26	20.03	19.90	20.36
Gross HP per Cu.In. Displacement	.642	.642	.642	.642	.786	.786
Power Displacement (cu.ft./mile)	104.92	104.92	104.92	104.92	120.73	120.73
Displacement Factor (cu.ft./ton mile)	75.48	72.86	73.88	74.94	86.86	85.02

POWERGLIDE

Performance Weight (pounds)	2833	2921	2883	2851	2833	2883
Pounds per Gross Horsepower	31.48	32.45	32.03	31.68	25.75	26.21
Pounds per Cu.In. Displacement	20.24	20.86	20.59	20.36	20.24	20.59
Gross HP per Cu.In. Displacement	.642	.642	.642	.642	.786	.786
Power Displacement (cu.ft./mile)	104.92	104.92	104.92	104.92	120.73	120.73
Displacement Factor (cu.ft./ton mile)	73.89	71.86	72.86	73.89	85.02	83.84

TORQUE-DRIVE

Performance Weight (pounds)	2824	2912	2874	2842	2824	2874
Pounds per Gross Horsepower	31.38	32.36	31.93	31.57	25.67	26.13
Pounds per Cu.In. Displacement	20.18	20.80	20.53	20.30	20.18	20.53
Gross HP per Cu.In. Displacement	.642	.642	.642	.642	.786	.786
Power Displacement (cu.ft./mile) ●	104.92	104.92	104.92	104.92	120.73	120.73
Displacement Factor (cu.ft./ton mile) ●	74.41	71.86	72.86	73.88	85.60	83.84

GLOSSARY

Performance Weight	Curb Weight plus 600 Lb (weight of four 150 lb passengers)
Power Displacement	$\frac{\text{Crankshaft Revs/Mi} \times \text{Piston Displacement}}{2 \times 1728}$
Displacement Factor	$\frac{\text{Power Displacement}}{\text{Performance Wt (tons)}}$

PRINCIPAL COMPONENTS

CAMSHAFT

Location In cylinder head
 Material Cast alloy iron
 Drive Fiberglass reinforced rubber timing belt with sintered iron drive sprockets

Sprocket
 Diameter 5.676-5.681
 Width 1.24
 Teeth (number) 36

Timing belt
 Width 1.031
 Teeth (number) 91
 Pitch 500

Bearings 5; steel backed babbitt

VALVE TRAIN

Type Completely contained within cylinder head. Direct-action; cam lobes drive tappets that contain lash adjusters indirect contact with valve stems

Valve tappets Mechanical with adjusting screw for valve lash

Valve Lash
 Cold015 Intake; .030 Exhaust
 Running015 Intake; .016 Exhaust

Valve and Lobe Lift
 Base engine4199 Inlet; .4302 Exhaust
 RPO L114366 Inlet and Exhaust

VALVE SPRINGS

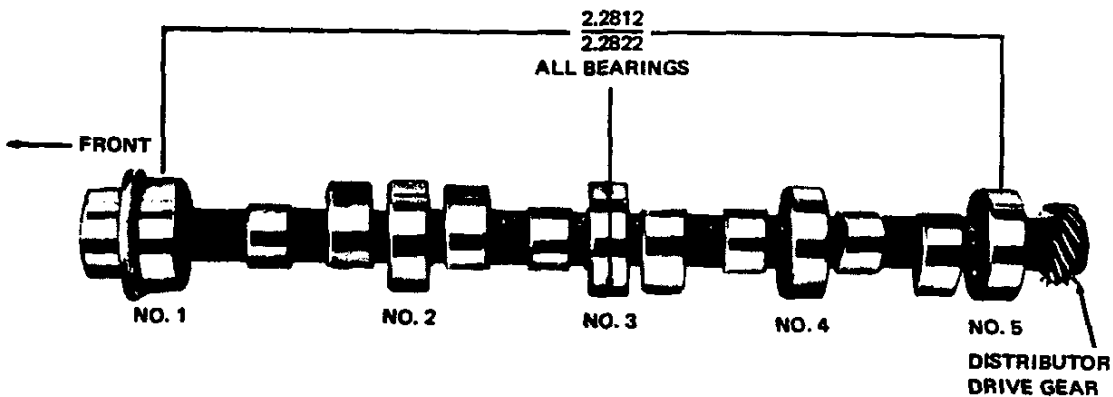
Type Single spring with flat inner damper
 Diameter (I.D.)842
 Free length 2.03
 Installed Length (lb. @ in.)
 Valves closed 71-79 @ 1.746
 Valves opened 183-197 @ 1.310
 Damper Flat steel, 4.5 coils

VALVE TIMING (Crankshaft Degrees)

Base Engine	Excluding Ramps	Including Ramps
Inlet Valve (opens with .015 lash)		
Opens-BTC	22°	80°
Closes-ABC	58°	116°
Duration	260°	376°
Exhaust Valve (opens with .030 lash)		
Opens-BBC	92°	154°
Closes-ATC	48°	110°
Duration	320°	444°

RPO L11	Excluding Ramps	Including Ramps
Inlet Valve (opens with .015 lash)		
Opens-BTC	25°	81°
Closes-ABC	71°	127°
Duration	276°	388°
Exhaust Valve (opens with .030 lash)		
Opens-BBC	101°	167°
Closes-ATC	55°	121°
Duration	336°	468°

CAMSHAFT AND BEARINGS



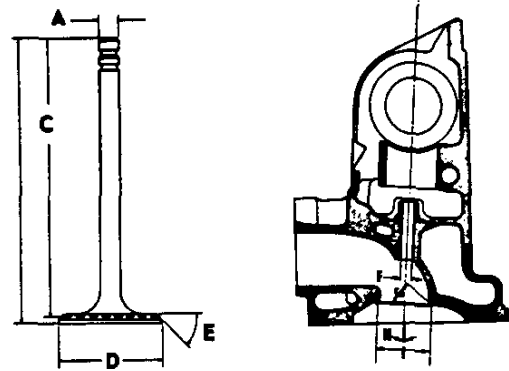
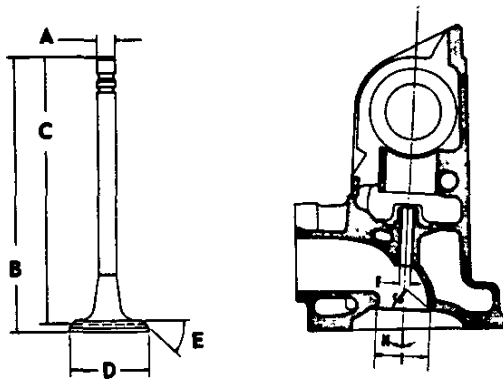
PRINCIPAL COMPONENTS

VALVES - INLET

Material Alloy steel
with stellite face

VALVE - EXHAUST

Material High alloy steel with stellite
face, chrome flash stem



A - Stem Diameter	.....	.3410-.3417
B - Overall Length	.....	4.578-4.598
C - Gage Length	.....	4.503-4.513
D - Overall Head Diameter	.....	1.615-1.625
E - Angle of Face	.....	45°
F - Guide Diameter	.....	.3427-.3437
G - Angle of Seat	.....	46°
H - Valve Angle	.....	4°
I - Valve Seat Diameter	.....	1.575

A - Stem Diameter	.....	.3410-.3417
B - Overall Length	.....	4.576-4.596
C - Gage Length	.....	4.488-4.498
D - Overall Head Diameter	.....	1.370-1.380
E - Angle of Face	.....	45°
F - Guide Diameter	.....	.3427-.3437
G - Angle of Seat	.....	46°
H - Valve Angle	.....	4°
I - Valve Seat Diameter	.....	1.319

PRINCIPAL COMPONENTS

PISTONS

Material	Cast aluminum alloy
Head type	Flat
Skirt	Iron plated open skirt
Top land clearance	.0300-.0460
Skirt clearance	.0018-.0028
Compression ring groove depth	.1800-.1865
Oil ring groove depth	.2050-.2110
Pin bore offset	.055-.065
Compression height	1.498-1.502

PISTON PINS

Material	Chromium steel
Pin mounting	Locked in rod by shrink fit
Length	2.740-2.760
Diameter	.9270-.9273
Clearance in piston	.00030-.00040

CONNECTING RODS

Material	Drop forged steel
Length (center to center)	5.695-5.705

CONNECTING ROD BEARINGS

Material	Steel backed with copper lead alloy lining
Type	Precision removable
Clearance	.0007-.0027
Theoretical diameter	2.0017
Effective length	.807
End play	.0009-.0014

COMPRESSION RINGS – UPPER

Material	Cast alloy iron
Type	Straight edge inside of ring
Face	Barrel
Coating	Chrome plated
Width	.0775-.0780
Wall thickness	.154-.164
Gap	.010-.030

COMPRESSION RINGS – LOWER

Material	Cast alloy iron
Type	Inside bevel (top of ring 30 degrees to piston vertical axis)
Face	Barrel
Coating	Chrome flash
Width	.0775-.0780
Wall thickness	.154-.164
Gap	.010-.030

OIL CONTROL RINGS

Type	Multi-piece (two rails and one spacer)
Material	
Rails	Steel
Spacer	Stainless steel
Width (assembled)	.1870-.1890
Wall thickness	.154-.160
Rail coatings	Chrome plated
Gap	.010-.030

FUEL AND EXHAUST AND VENTILATION SYSTEM

FUEL SYSTEM

FUEL TANK

Capacity (gal.) 11 (approximately)
Location In recessed well of rear underbody
Filler Location Behind hinged rear license plate

FUEL FILTERS - DUAL

In fuel tank Mesh strainer
Carburetor Inlet
Standard engines Paper element
RPO L11 Sintered bronze element

FUEL PUMP

Type Electric
Location Mounted in fuel tank
● Pressure Range 3-4-1/2 PSI @ 12.6 volts

AIR CLEANER

Type One press-welded unit
Filter element Oil-wetted paper

CHOKE

Type Automatic

CARBURETORS

Standard engine Rochester; single barrel; Mono-jet
RPO L11 Rochester, two barrel; downdraft
SAE Flange Size
Standard engine 1.50
Optional engine 1.25
Throttle bore 1.44
Venturi Diameter
Standard engine 1.22
Optional engine 1.09
Carburetor hot air Exhaust manifold
heat stove and heat riser tube to air cleaner air
horn. Thermostatically controlled mixing valve
in air horn.

EXHAUST AND VENTILATION SYSTEM

TYPE Single exhaust system
with transverse muffler

MUFFLERS

Type Oval, reverse flow
Construction Heads and body joined
by rolled lock seam construction
Head048 sheet steel aluminized
Shell036 sheet steel aluminized
Wrap030 indented asbestos sheet
Cover036 sheet steel aluminized
Baffles 3; .036 sheet steel aluminized
Length - body 17.90
Height (I.D.) 5.00
Width (I.D.) 9.25

EXHAUST PIPE

Material Seamless steel tubing
O.D. and wall thickness 1.75 x .064

TAIL PIPE

Material Steel tubing aluminum coated
O.D. and wall thickness 1.75 x .069

EXHAUST AND EVAPORATIVE EMISSION CONTROLS

Positive Crankcase Ventilation Center mounted
fitting on the intake manifold supplies constant
vacuum through hose to orifice in the front
camshaft cover. Clean air supplied by metal pipe
from air cleaner to rear of camshaft cover.
Controlled Combustion System Increases
combustion efficiency through leaner carburetor
mixtures and revised distributor calibration.
Special thermostatically controlled damper, in
the air cleaner snorkel maintains warm air intake
to carburetor.
Transmission Controlled Spark Prevents engine
vacuum spark advance in all forward gears
except hi-gear.
Evaporative Emission Control Reduces fuel vapor
emission that normally vents atmospherically
from gasoline tank and carburetor fuel bowl.

LUBRICATION AND COOLING SYSTEM

LUBRICATION SYSTEM

GENERAL

Type	Controlled full pressure
Main Bearings	Pressure
Piston Pins	Splash
Cylinder walls	Splash
Camshaft bearings	Pressure
Tappets	Splash
Connecting Rods	Pressure
Oil pressure sending unit	Electric opens or closes circuit @ 2 to 6 PSI
Oil Filler	
Cap	Positive seal
Location	Top left front of crankshaft cover

OIL PUMP

Type	Eccentric inside-outside gear; driven by crankshaft
Regulator valve	Opens between 40-45 lbs.
Oil Pressure (lbs. @ engine RPM)	40 PSI @ 1000
Intake type	Fixed pickup with screen
Capacity (GPM @ engine RPM)	4.5 gals. @ 2000 RPM

OIL FILTER

Type	Full flow throwaway type
Location	Lower front-left side
Capacity	One pint
By pass valve	Opens between 9 to 11 PSI drop in pressure

LUBRICANT GRADES AND TEMPERATURES

20°F and above	20W, 10W-30, 10W-40, 20W-40
0° to 60°F	10W, 5W-30, 10W-30, 10W-40
Below 20°F	5W, 5W-20, 5W-30

OIL PAN

Capacity	
Refill	3 Quarts
Refill with filter change	4 Quarts
Type of drain plug	Hex head
Drain plug location	Right side bottom rear of pan

COOLING SYSTEM

GENERAL

Type	Liquid, pressurized
Capacity (with heater)	6.5 Qts.

RADIATOR

Type	Tube and center; cross flow
Distance between fins	.20
Distance between tubes	.55
Thickness of core	1.26
Frontal area (sq.in.)	144.2
Radiator cap relief valve	Opens at approximately 15 PSI

THERMOSTAT

Type	Pellet
Begins to open	192°-198°
Fully opened	227°

RADIATOR HOSE

Outlet, Lower (Radiator to Water Pump)	
Type	One, molded; 1.75 I.D.
Inlet, Upper (Thermostat Housing)	
Type	One, molded; 1.28 I.D.

FAN

Number of Blades	
With manual transmission	5; Plastic
With automatic transmission	4; Steel
Diameter	16.0

WATER PUMP

Type	Centrifugal, die cast aluminum housing
Capacity	16 GPM @ 2000 RPM
Water pump/fan drive	Multiple "V" drive in back side of camshaft timing belt

DRAIN LOCATIONS

Radiator	Petcock; bottom left side rear face
Engine block	Plug; left side center of block

ELECTRICAL SYSTEM

SUPPLY SYSTEM

BATTERY

Type	Sealed side terminal
Voltage	12
Cranking Power @ 0° F	2300 watts
Total number of plates	54
Capacity (SAE) @ 20 hr. rate	45 amp. hr.
Number of Cells	6
Terminal Grounded	Negative
Location	Right hand front side of engine compartment

GENERATOR

Type	Diode rectified with integral regulator
Rating	
Amps	32
Volts	10-15
Drive	By fan belt
Pulley Pitch Diameter	2.70
● Ratio (Gen to Engine Speed)	2.73:1

REGULATOR

Type	Micro-circuit unit, integral with generator
Voltage Regulator	
Voltage	13.8-14.8 @ 85° F

STARTING SYSTEM

STARTING MOTOR

Rotation (Drive End View)	Clockwise
Test Conditions	Engine at operating temperature
No Load Test	
Amps	NA
Volts	NA
RPM	NA
Motor Drive	
Engagement	Solenoid
Pinion Meshes at	Rear
Pinion Tooth No.	9
Flywheel Tooth No.	153
Mounting	Bolted to clutch housing

IGNITION SYSTEM

DISTRIBUTORS Refer to chart below

COIL

Type	12 Volt
Amperes Drawn	
Engine Stopped	4.0
Engine Idling	1.8

SPARK PLUGS

Make & Type	ACR42TS
Thread Size (mm)	14
Gap	.033-.038
Torque	25 lb. ft.

CABLE Linen core impregnated with electrical conducting material and insulation of rubber with neoprene jacket

DISTRIBUTORS	Base - 90 HP		Option - 110 HP	
	Manual Transmission	Automatic Transmission	Manual Transmission	Automatic Transmission
Model	1110492		1110435	
Type	Single breaker			
Cam Angle	31° - 34°			
Breaker Gap	.019 (new)			
Breaker Arm Tension	19 - 23 oz.			
Centrifugal Advance Begins (RPM)	1615		2380	
Max Degrees @ RPM	24 @ 4000		20 @ 4000	
Vacuum Advance Begins (In. Hg)	7.00			
Max Degrees @ In. Hg	24 @ 15			
Timing (Initial Design Setting)	6 BTC @ 700	6 BTC @ 550	6 BTC @ 700	10 BTC @ 550
Crankshaft Degrees @ RPM (with vacuum spark line disconnected)				
Timing Mark Location	Torsional Damper			

CLUTCHES AND TRANSMISSIONS

CLUTCHES

Engine		Standard	Option L11	
Clutch for		3 and 4-Speed		
Type		Single dry disc centrifugal		
Clutch cover & pressure plate	Eff. plate load, lbs.	1350 - 1450		
	Press. plate matl.	Cast iron		
	Clutch spring type	Diaphragm, bent finger design		
	Clutch spring matl.	Heat treated spring steel		
Driven plate	Type	Single disc with two friction surfaces		
	Cushions	Flat spring steel between friction rings		
	Dampers	8 coil springs (4 sets of two)		
	Friction rings	OD	8.00	9.12
		ID	6.00	6.12
		Total area sq. in.	43.98	71.82
Material		Woven type asbestos		
Flywheel	Flywheel Material	Nodular iron		
	Ring gear	Material	Heat treated HR steel	
		No. of teeth	153	
		PD	12.75	
Bearings	Release	Type	Shrink fit	
		Lubrication	Single row ball	
	Pilot	Type	None, prepacked	
		Lubrication	Bronze bushing	
Controls	Clutch fork	Drop forged steel, pivot mounted on ball		
	Pedal mounting	Pendant, from brace on dash		
	Lubrication	Crossover shaft		
Clutch housing material		Aluminum alloy		

3-SPEED AND 4-SPEED TRANSMISSIONS

Transmission Type		3-Speed	4-Speed	
Case material		Aluminum		
Gear Shift	Type	Remote		
	Control	Lever		
	Location	Floor, mounted between seats		
Gears	Type	Helical		
	Material	Forged steel, hardened		
	Synchronization	All forward gears		
	Constant mesh gear	All forward gears		
	Sliding gears	Reverse		
	Ratios	First	3.24	3.43
		Second	1.68	2.16
		Third	1.00	1.37
Fourth			1.00	
Reverse		3.47	3.32	
Lubricant	Type	Meeting Military Specifications MIL-L-2105-B		
	Capacity (pts)	2.4	3	
Extension	Material	Aluminum		
	Oil Seal	Steel encased double seal of spring loaded rubber or felt		

POWERGLIDE TRANSMISSION

Engines			Standard	Option L11
General data	Type	Automatic hydraulic torque converter with planetary gear system for low and reverse		
	Selector lever	Location	Floor mounted	
		Operation	Actuates manual valve in hydraulic control system	
		Quadrant pattern	P-R-N-D-L	
	Parking lock	Type	Pawl and gear (on planetary)	
		Operation	Applied by selector lever thru spring loaded linkage	
	Method of cooling	Water		
Flywheel assembly	Steel stamping with welded on ring gear			
Hydraulic	Manual valve type	Spool		
	Press, regulator valve type	Spool		
	Pressure @ Idle (a)	Drive	31	
		Low	91	
		Reverse	102	
Converter assembly	Type	Three element		
	Pump	Inner and outer sheet steel shells separated by sheet steel vanes. Outer shell is pump housing which is welded to converter housing.		
	Turbine	Inner and outer shells separated by sheet steel vanes. Assembly supported in converter cover.		
	Stator	Operation independent of cover and pump housing. Aluminum air foil supported on a stationary sleeve by an over-running clutch of cam and roller design.		
	Stall torque ratio	2.10		
	Stall speed (RPM)	2230		2150
	Diameter (nominal)	11.75		
Planetary gear set	Type	Compound planetary		
	Range	Drive	1.82 to 1.00	
		Low	1.82	
		Reverse	1.82	
	Low band	Three linked circular segments		
Low band servo	Piston with release spring and inner cushion spring			
Case	Material	Aluminum (one piece)		
High clutch	Type	Multi-disk		
	Drive plates	Description	Waved steel with bonded organic facings	
		Number	3	
	Driven plates	Description	Flat steel	
Number		4		
Reverse clutch	Type	Multi-disk		
	Drive plates	Description	Flat steel with bonded organic facings	
		Number	4	
	Reaction plates	Description	Flat steel	
Number		4		
Torque multiplication	Maximum overall ratio	3.82:1		
	Low and reverse	3.82:1 to 1.82:1		
Lubricant	Type	A suffix A		
	Capacity (pts)	Dry	17	
		Refill	6	
Governor	Type	Centrifugal		
	Operation	Regulates pump oil pressure to automatic shift control valve		
	Drive	Mounted on output shaft		
Oil Pump	Location	In extension		
	Type	Internal-external gear		
	Number	One, front		
	Function	To supply pressure		
	Drive	Converter pump		

(a) Conditions: 450 RPM input @ 25 inches Hg vacuum

TRANSMISSIONS

TORQUE-DRIVE TRANSMISSION

Engine			Standard	Option L11
General data	Type	Automatic hydraulic torque converter with planetary gear system for low and reverse		
	Selector lever	Location	Floor mounted	
		Operation	Actuates manual valve in hydraulic control system	
		Quadrant pattern	Park - R - N - Hi - 1st	
	Parking lock	Type	Pawl and gear (on planetary)	
		Operation	Applied by selector lever thru spring loaded linkage	
	Method of cooling	Air and Water		Water
Flywheel assembly	Steel stamping with welded on ring gear			
Hydraulic controls	Manual valve type	Spool		
	Pressure regulator valve type	Spool		
	Pressure @ Idle (a)	Drive	51	
		Low	91	
Reverse		102		
Converter assembly	Type	Three element		
	Pump	Inner and outer sheet steel shells separated by sheet steel vanes. Outer shell is pump housing which is welded to converter housing.		
	Turbine	Inner and outer shells separated by sheet steel vanes. Assembly supported in converter cover. Operation independent of cover and pump housing.		
	Stator	Aluminum air foil supported on a stationary sleeve by an over-running clutch of cam and roller design.		
	Stall torque ratio	2.40		
	Stall speed (RPM)	2150		2230
	Diameter (nominal)	11.0		
Planetary gear set	Type	Compound planetary		
	Range	Drive	1.82:1	
		Low	1.82	
		Reverse	1.82	
	Low band	Three linked circular segments		
Low band servo	Piston with release spring and inner cushion spring			
Case	Material	Aluminum (one piece)		
High clutch	Type	Multi-disk		
	Drive plates	Description	Waved steel with bonded organic facings	
		Number	3	
	Driven plates	Description	Flat steel	
Number		4		
Reverse clutch	Type	Multi-disk		
	Drive plates	Description	Flat steel with bonded organic facings	
		Number	4	
	Reaction plates	Description	Flat steel	
Number		4		
Torque Multiplication	Maximum overall ratio	4.37		
	Low and reverse	4.37:1 to 1.82:1		
Lubricant	Type	A suffix A		
	Capacity (pts)	Dry	17	
		Refill	6	
Oil pump	Type	Internal-external gear		
	Number	One; front		
	Function	To supply pressure		
	Drive	Converter pump		

(a) Conditions: 450 RPM input at 25 inches Hg vacuum

1971 AMA SPECIFICATIONS FORM ... Passenger Car

MANUFACTURER Chevrolet Motor Division General Motors Corporation	CAR NAME VEGA 2300				
FILE COPY ONLY	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; vertical-align: top;"> MODEL YEAR 1971 </td> <td style="width: 40%; vertical-align: top;"> ISSUED 9/70 </td> </tr> <tr> <td></td> <td style="vertical-align: top;"> REVISED (●) 12/70 </td> </tr> </table>	MODEL YEAR 1971	ISSUED 9/70		REVISED (●) 12/70
MODEL YEAR 1971	ISSUED 9/70				
	REVISED (●) 12/70				

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NOTES:

1. The General 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.

AMA Specifications Form—Passenger Car

MAKE OF CAR VEGA 2300 MODEL YEAR 1971 DATE ISSUED 9/70 REVISED ^(*)

BODY MODEL	Body type, number of passengers, and style names; use manufacturer's code for series & body style.	Model Number
2-Door Sedan, 4-Passenger		14111
2-Door Coupe, 4-Passenger		14177
2-Door Station Wagon, 2-Seat		14115
2-Door Panel Delivery, 1-Passenger		14105

MAKE OF CAR VEGA 2300 MODEL YEAR 1971 DATE ISSUED 9/70 REVISED ⁽⁴⁾12/70

CAR AND BODY DIMENSIONS

See Pages 27, 28 for SAE Dimension Definitions

(All dimensions in inches unless otherwise indicated)

All dimensions to ground are for comparative purposes only. Dimensions are to be shown for:
4-Dr. Sedan, 2-Dr. H.T., 4-Dr. H.T., Convertible and Station Wagon.

MODEL	SAE Ref. No.	2-Door Sedan	2-Door Coupe	Station Wagon	Panel Delivery
-------	--------------	--------------	--------------	---------------	----------------

WIDTH

Track - Front	W101			55.1	
Track - Rear	W102			54.1	
Maximum overall car width	W103			65.4	
Body width at No. 2 pillar	W117			64.6	

LENGTH

Body "O" to front of dash	L 30			0.13	
Wheelbase	L101			97.0	
Overall car length	L103			169.7	
Overhang - front	L104			31.5	
Overhang - rear	L105			41.2	
Body upper structure length	L123	91.7	93.7		106.3
Body "O" line to ϕ of rear wheel	L127			86.0	
Body "O" line to w. s. cowl point	L130			12.6	

HEIGHT

Passenger Distribution (front & rear)			2-2		1-0
Trunk/Cargo load (lbs.)				+200 lb.	
Overall height	H101	51.9	50.0		52.0
Cowl height	H114			35.4	
Deck height	H138	4.3	3.7		4.4
Rocker panel - front	To ground ●			6.3	
	From front wheel ϕ				
Rocker panel - rear	To ground ●			6.0	
	From rear wheel ϕ				
Windshield slope angle	H122	55.0	57.5		55.0

GROUND CLEARANCE

Bumper to ground - front	H102	18.0			17.9
Bumper to ground - rear	H104	18.0			16.1
Angle of approach	H106	27.1°			26.6°
Angle of departure	H107	17.5°			17.6°
Ramp breakover angle	H147	11.2			11.4
Min. running clearance (Specify) ●	H156			4.8	

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MAKE OF CAR VEGA 2300 MODEL YEAR 1971 DATE ISSUED 9/70 REVISED ^(#)

CAR AND BODY DIMENSIONS

See Pages 27, 28 for SAE Dimension Definitions
(All dimensions in inches unless otherwise indicated)

MODEL	SAE Ref. No.	2-Door Sedan	2-Door Coupe	Station Wagon	Panel Delivery
-------	--------------	--------------	--------------	---------------	----------------

FRONT COMPARTMENT

Effective head room	H61	38.3	37.6	38.3	39.3
Max. eff. leg room - accelerator	L34	42.4	42.8	42.4	42.7
H Point to Heel point	H30	9.3	8.1	9.3	7.8
H Point travel	L17	5.0			
Shoulder room	W 3	51.6			
Hip room	W 5	49.1	49.4	49.1	49.4
Upper body opening to ground	H50				

REAR COMPARTMENT

H Point couple distance	L50	30.2	28.4	29.9	
Effective head room	H63	37.4	36.6	37.7	
Min. effective leg room	L51	33.2	30.8	31.8	
H Point to Heel point	H31	11.2	9.4	11.2	
Min. knee room	L48	1.8	1.0	1.6	
Rear Compartment room	L 3	23.8	24.3	25.0	
Shoulder room	W 4	49.5			
Hip room	W 6	42.5			
Upper body opening to ground	H51				

LUGGAGE COMPARTMENT

Usable luggage capacity	V 1	8.7	9.3*	50.2†	50.2@
Liftover height	H195				
Position of spare tire storage		Flat, in recessed area of compartment floor.			
Method of holding lid open		Torsion rods			

STATION WAGON - THIRD SEAT

Shoulder Room	W85	NOT			
Hip room	W86				
Effective leg room	L86				
Effective head room	H86	AVAILABLE			
Seat facing direction					

STATION WAGON - CARGO SPACE

Cargo length at floor - front seat	L202	67.4	67.4
Cargo length at belt - front seat	L204	60.5	60.5
Cargo width - Wheelhouse	W201	42.6	42.6
Opening width at belt	W204	47.4	47.4
Maximum cargo height	H201	28.9	28.9
Rear opening height	H202	26.1	26.1
Cargo volume index (cu. ft.) W4 x L204 x H201 1928	V2	50.2	50.2**

* With rear seat up, 18.9 seat down.
** 68.7 includes front seat floor area.

† Rear seat folded.
@ 68.7 includes front seat floor area.

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POWER TEAMS

(Indicate whether standard or optional)

(Gross bhp (brake horsepower) and gross torque corrected to 60° F and 29.92 in. Hg atmospheric pressure.)

(Net bhp (brake horsepower) and net torque corrected to 85° F and 29.00 in. Hg atmospheric pressure.)

MODEL AVAILABILITY	ENGINE							TRANSMISSION	AXLE RATIO ** (Std. first)		
	D. spl. cu. in.	Cyls	Compr. Ratio	BHP @ RPM		Torque @ RPM			(Indicate A/C ratio)		
				Gross	Net	Gross	Net		Std.	Opt.	A/C
11 Models	140 L-4 (Base)	One; 1-bbl	8.00:1	90	80	136	121	3-Spd. Manual (3.24:1 low)	2.53:1	2.92:1	2.92:1
				@	@	@	@	2-Spd; semi-auto*	2.92:1		2.92:1
				46-	4400	2400	24-	2-Spd. automatic*			
				4800		2800		4-Spd. Manual * (3.43:1 low)	2.92:1	3.36:1	3.36:1
	140 L-4 L-11*	One; 2-bbl	8.00:1	110	93	138	121	3-Spd. Manual (3.24:1 low)	2.92:1	NA	2.92:1
				@	@	@	@	2-Spd. semi-auto*			
				4800	4800	3200	28-	2-Spd. Automatic*	3.36:1	NA	3.36:1
							3200	4-Spd. Manual* (3.43:1 low)			
* - Optional											
** - Positraction available optionally for all ratios											

AMA Specifications Form—Passenger Car

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MODEL _____

ENGINE - GENERAL

Type, no. cyls., valve arr.	In-line 4 overhead camshaft	
Bore and stroke (nominal)	3.501 x 3.625	
Piston displacement, cu. in.	140	
Bore spacing (C to C)	4.00	
No. system (front to rear)	L. Bank	1-2-3-4
	R. Bank	In-line
Firing order	1-3-4-2	
Compres. ratio (nominal)	8.00:1	
Cylinder Head Combustion Chamber Volume (cc)	82.59	
Cylinder Head Material	High chrome cast alloy iron	
Cylinder Block Material	Die cast high-silicon aluminum alloy	
Cyl. Sleeve-Wet, dry, none	None	
Number of mtg. points	Front	Two
	Rear	One
Engine installation angle	3°50'	
Taxable horsepower	Dia ² xNo. Cyl.	19.6
Recommended fuel regular - premium	Regular	

ENGINE - PISTONS

Material	Cast aluminum alloy		
Description and finish	Flat head; iron plated open skirt		
Weight (piston only) oz.	19.86		
Clearance (limits)	Top land	.0300 - .0460	
	Skirt	Top	.0018 - .0028 (a)
		Bottom	
Ring groove diameter	No. 1 ring	3.130 - 3.140	
	No. 2 ring	3.130 - 3.140	
	No. 3 ring	3.080 - 3.090	
	No. 4 ring		

(a) Measured 1.50 from top of piston

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MODEL _____

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 - Upper material, coating, etc. Lower	Cast alloy iron, barrel face; chrome plated Cast alloy iron, barrel face, inside bevel; chrome flash
	Width	.0775-.0780
	Gap	.009-.019
Oil	Description - material, coating, etc.	Multi-piece (2 rails and 1 spacer expander) Rails-steel, chrome plated OD; expander-stainless steel
	Width	.1870-.1890 (assembled)
	Gap	.010-.030
Expanders		In oil ring assembly

ENGINE - PISTON PINS

Material	Chromium steel		
Length	2.740-2.760		
Diameter	.9270-.9273		
Type	Locked in rod, in piston, floating, etc.	Locked in rod	
	Bush- ing	In rod or piston	None
		Material	None
Clearance	In piston	.00030-.00040	
	In rod		
Direction & amount offset in piston	Major thrust side .060		

ENGINE - CONNECTING RODS

Material	Drop forged steel	
Weight (oz.)	1.92	
Length (center to center)	5.695-5.705	
Bearing	Material & Type	Steel backed with lining of sintered material (copper lead alloy)
	Overall length	.807
	Clearance (limits)	.0007-.0027
	End play	.0009-.0014

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MODEL _____

ENGINE - CRANKSHAFT

Material		Cast nodular iron	
Vibration damper type		<input checked="" type="radio"/> Rubber mounted inertia-with optional engine (L11) only	
End thrust taken by bearing (No.)		4	
Crankshaft end play		.002-.008	
Main bearing	Material & type	Steel backed insert; copper lead alloy lining Precision removable	
	Clearance	.0003-.0029	
	Journal dia. and bearing overall length	No. 1	2.3004 x .752
		No. 2	2.3004 x .752
		No. 3	2.3004 x .752
		No. 4	2.3004 x .752
		No. 5	2.3004 x .760
		No. 6	None
		No. 7	None
Dir. & amt. cyl. offset	None		
No. bolts/main brg. cap	10 & 5		
Crankpin journal diameter		1.999 - 2.000	

ENGINE - CAMSHAFT

Location		In cylinder head	
Material		Cast alloy iron	
Bearings	Material	Steel backed babbitt	
	Number	5	
Gear or chain		Fiberglass reinforced timing belt	
Type of Drive	Crankshaft gear or sprocket material	Sintered iron sprocket	
	Camshaft gear or sprocket material	Sintered iron sprocket	
	Timing chain	No. of links	91 teeth
		Width	1.031
Pitch		.500	

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MODEL 90 HP 110 HP

ENGINE - VALVE SYSTEM

Hydraulic lifters (Std., opt., NA) NA

Valve rotator, type (intake, exhaust) None

Rocker ratio None

Operating tappet clearance (indicate hot or cold)	Intake	<u>.015 (cold) .015 (running)</u>
	Exhaust	<u>.030 (cold) .016 (running)</u>

Timing (based on top of ramp points)	Intake	Opens (°BTC)	<u>22°</u>	<u>25°</u>
		Closes (°ABC)	<u>58°</u>	<u>71°</u>
		Duration - deg.	<u>260°</u>	<u>276°</u>
	Exhaust	Opens (°BBC)	<u>92°</u>	<u>101°</u>
		Closes (°ATC)	<u>48°</u>	<u>55°</u>
		Duration - deg.	<u>320°</u>	<u>336°</u>
Valve opening overlap		<u>70°</u>	<u>80°</u>	

Intake	Material		<u>Alloy steel with stellite face</u>	
	Overall length		<u>4.578 - 4.598</u>	
	Actual overall head dia.		<u>1.615 - 1.625</u>	
	Angle of seat & face		<u>46° (seat) 45° (face)</u>	
	Seat insert material		<u>None</u>	
	Stem diameter		<u>.3410-.3417</u>	
	Stem to guide clearance		<u>.0010-.0027</u>	
	Lift (- zero lash)		<u>.4199</u>	<u>.4366</u>
	Outer spring press. & length	Valve closed (lb. in.)	<u>71-79@1.746</u>	
		Valve open (lb. in.)	<u>183-197@1.310</u>	
	Inner spring press. & length	Valve closed (lb. in.)	<u>Spring damper</u>	
		Valve open (lb. in.)	<u>Spring damper</u>	

Exhaust	Material		<u>High alloy steel with stellite face, chrom flash stem</u>	
	Overall length		<u>4.576-4.596</u>	
	Actual overall head dia.		<u>1.370-1.380</u>	
	Angle of seat & face		<u>46° (seat) 45° (face)</u>	
	Seat insert material		<u>None</u>	
	Stem diameter		<u>.3410-.3417</u>	
	Stem to guide clearance		<u>.0010-.0027</u>	
	Lift (- zero lash)		<u>.4302</u>	<u>.4366</u>
	Outer spring press. & length	Valve closed (lb. in.)	<u>71-79@1.746</u>	
		Valve open (lb. in.)	<u>183-197@1.310</u>	
	Inner spring press. & length	Valve closed (lb. in.)	<u>Spring damper</u>	
		Valve open (lb. in.)	<u>Spring damper</u>	

AMA Specifications Form—Passenger Car

MAKE OF CAR VEGA 2300 MODEL YEAR 1971 DATE ISSUED 9/70 REVISED (a)

MODEL _____

ENGINE – LUBRICATION SYSTEM

Type of lubrication (splash, pressure, nozzle)	Main bearings	Pressure
	Connecting rods	Pressure
	Piston pins	Splash
	Camshaft bearings	Pressure
	Tappets	Splash
	Timing gear or chain	None
	Cylinder walls	Splash
Oil pump type	Eccentric inside-outside gear; driven by crankshaft	
Normal oil pressure (lb. @ engine rpm)	40 PSI @ 1000	
Oil press. sending unit (elect. or mech.)	Electric	
Type oil intake (floating, stationary)	Stationary	
Oil filter system (full flow, part., other)	Full flow	
Filter replacement (element, complete)	Complete	
Capacity of c/case, less filter-refill (qt.)	3	
Oil grade recommended (SAE viscosity and temperature range)	20°F and above-20W, 10W-30, 10W-40, 20W-40	
	0° to 60°F 10W, 5W-30, 10W-30, 10W-40	
	Below 20°F 5W, 5W-20, 5W-30	
Engine Service Reqmt. (MM, MS, etc.)	MS	

ENGINE – EXHAUST SYSTEM

Type (single, single with cross-over, dual, other)	Single	
Muffler No. & type (reverse flow, straight thru, separate resonator)	One, reverse flow	
Exhaust pipe dia. (O.D., wall thick.)	Branch	None
	Main	1.75 x .064
Tail pipe dia. (O.D. & wall thickness)	1.75 x .069	

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MODEL _____

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 (U.S. gals.)	11 (approximately)					
	Filter location	Behind hinged rear license plate					
Fuel Pump	Type (elec. or mech.)	Electric					
	Locations	Mounted in fuel tank					
	Pressure range	3-4 1/2 PSI @ 12.5 Volts					
booster (std., optional, none)		None					
Filter	Type	Mesh plastic strainer in fuel tank and paper element in Carburetor inlet for 90 HP & sintered bronze element for 110 HP					
	Locations	Automatic					
Carburetor	Choke type	Automatic					
	Intake manifold heat control (exhaust or water)	Exhaust					
	Air cleaner type	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">Standard</td> <td rowspan="2" style="text-align: center;">One piece welded unit containing oil-wetted paper element</td> </tr> <tr> <td>Optional</td> <td style="text-align: center;">None</td> </tr> </table>	Standard	One piece welded unit containing oil-wetted paper element	Optional	None	
	Standard	One piece welded unit containing oil-wetted paper element					
Optional	None						
Idle speed (spec. neutral or drive)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">Manual</td> <td style="text-align: center;">700 in neutral</td> </tr> <tr> <td>Automatic</td> <td style="text-align: center;">550 in drive</td> </tr> <tr> <td>Idle A/F mix.</td> <td style="text-align: center;">Not specified</td> </tr> </table>	Manual	700 in neutral	Automatic	550 in drive	Idle A/F mix.	Not specified
Manual	700 in neutral						
Automatic	550 in drive						
Idle A/F mix.	Not specified						

CARBURETOR SUPPLEMENTARY INFORMATION

Model Usage	Engine Displ.	Transmission	Carburetors		No. Used and Type	Barrel Size
			Make	Model		
All Models	140	Manual	Rochester	7041023	One; 1-bbl	1.44
	Std.	Automatic		7041024		
	140	Manual	Rochester	7041181	One; 2-bbl	1.44
	Opt. L11	Automatic		7041182		

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MODEL _____

ENGINE - COOLING SYSTEM

Type system (pressure, pressure vented, atmospheric, other)	Liquid pressurized			
Radiator cap relief valve pressure	15± 1 PSI			
Circulation thermostat	Type (choke, bypass)	Choke		
	Starts to open at (°F)	192° - 198°		
Water pump	Type (centrifugal, other)	Centrifugal		
	GPM 1000 pump rpm	16 GPM @ 2000 engine RPM		
	Number of pumps	One		
	Drive (V-belt, other)	Multiple 'V' drive in back side of camshaft timing belt		
Bearing type	---			
By-pass recirculation type (inter., ext.)	Internal			
Radiator core type (cellular, tube and fin, other)	Tube and center; cross flow			
Cooling system capacity	With heater (qt.)	6.5		
	Without heater (qt.)	5.7		
	Opt. equipment-specify (qt.)	-		
Water jackets full length of cyl. (yes, no)	Yes			
Water all around cylinder (yes, no)	Yes			
Radiator hose	Lower	Number and type (molded, straight)	One, molded	
		Inside diameter	1.75	
	Upper	Number and type (molded, straight)	One, molded	
		Inside diameter	1.28	
	By-pass	Number and type (molded, straight)	None	
		Inside diameter	None	
Fan	Number of blades & spacing	5 blade, plastic, staggered-with manual transmission*		
	Diameter	14.0		
	Ratio-fan to crankshaft rev. ●	1.165:1		
	Fan cutout type	None		
	Bearing type	None		
*Drive belts (indicate belt used by letter)	Fan	Multiple 'V' drive in back side of camshaft timing belt (A)		
	Generator or alternator	B		
	Water Pump	A		
	Power Steering	C		
	Air Conditioning	D		

*4-blade, steel staggered-with automatic transmission

* Drive Belt Dimensions	A	B	C	D	E	F	G	H	I	J	K
Angle of V	52#	← 38° →				#6	grooves				
Nominal length (SAE)	45.50	36.00	53.25	35.25							
Width	1.031	← .380 →									

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MAKE OF CAR VEGA 2300 MODEL YEAR 1971 DATE ISSUED 9/70 REVISED (e)

MODEL _____

VEHICLE EMISSION CONTROL

Exhaust Emission Control	Type (Air injection, engine modifications, other)		Engine modifications	
	Air Injection Pump	Type	NOT APPLICABLE	
		Displacement		
		Drive ratio		
		Drive type		
		Relief valve (type)		
	Filter (describe)			
	Air Injection System	Air distribution (head, manifold, etc.)		
		Point of entry		
		Injection tube i.d.		
Check valve type				
Backfire protection (type)				
Crankcase Emission Control	Type (ventilates to atmos., induction system, other)	Standard Optional	Induction system --	
	Control Unit	Make and model	AC Spark Plug	
		Location	Front camshaft cover	
		Energy source (manifold vacuum, carburetor, other)	Manifold vacuum	
	Complete system	Control method (variable orifice, fixed orifice, other)	Variable orifice	
		Discharges (to intake manifold, other)	Intake manifold	
		Air inlet (breather cap, other)	Carburetor air cleaner	
		Flame arrestor (screen, other)	Screen	
	Evaporative Emission Control	Fuel Tank	Refill Capacity (U.S. gallons)	11 approximately
			Thermal expansion volume (cu. ft.)	.0410
Pressure relief location (lbs.)			Filler cap, 25-35" of water	
Vacuum relief location (lbs.)			Filler cap, 5-14" of water	
Vapor-liquid separator type			Stand pipe	
Vapor vented to (crankcase, cannister, other)			Cannister	
Carburetor		Vapor vented to (crankcase, cannister, other)	Atmosphere	
		Vapor Storage	Cannister	
Storage		Storage provision (crankcase, cannister, other)	Cannister	
		Volume (cu. ft.) or capacity (grams)	50-130 grams	
	Control valve type	Vacuum diaphragm, controlled constant orifice		

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MODEL _____

ELECTRICAL — SUPPLY SYSTEM

Battery	Make and Model		Delco-Remy 1980141 sealed side terminal
	Voltage Rtg. & Total Plates		12 volts-54 plates
	SAE Designation & Amp. Hr. Rtg.		45 amp. hr. @ 20 hr. rate
	Location		Right side front of engine compartment
	Terminal grounded		Negative
Generator or Alternator	Make		Delco-Remy
	Model		110092
	Type and rating		Diode rectified with integral regulator-32 amps
	Output at engine idle (neutral)		
Ratio-Gen. to Cr/s rev.		2.73:1	
Regulator	Make		Delco-Remy
	Model		
	Type		Micro-circuit unit, integral with generator
	Cutout relay	Closing voltage generator rpm	None
		Reverse current to open	None
	Regu- lated	Voltage	13.8-14.8@85°F
		Current	--
	Voltage test conditions	Temperature	Operating
Load		3.8 amperes	
Other		None	

ELECTRICAL — STARTING SYSTEM

Starting Motor	Make		Delco Remy
	Model		1108195
	Rotation (drive end view)		Clockwise
Motor control	Switch (solenoid, manual)		Solenoid
	Starting procedure		Manual-Place gearshift lever in neutral, depress clutch Automatic-place gearshift lever, in N or P position Initial Start-press accelerator to floor and release; turn ignition to start, release as soon as engine starts.
Motor Drive	Engagement type		Positive shift solenoid
	Pinion meshes (front, rear)		Rear
	Number of teeth	Pinion	9
		Flywheel	Manual
	Auto.		153
Flywheel tooth face width		Manual .4010-.4130 Auto. .4010-.4130	

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	90 HP	110 HP
--	-------	--------

ELECTRICAL - IGNITION SYSTEM - DISTRIBUTOR

Breaker gap (in.)	.019		
Cam angle (deg.)	31-34		
Breaker arm tension	19-2302		
Distributor	Manual	1110492	
	Automatic	1110435	
Timing	Manual	6° BTC @ 700	6° BTC @ 700
	Automatic	6° BTC @ 550	10° BTC @ 550

Distributor Model	CENTRIFUGAL ADVANCE Crankshaft Degrees at Engine RPM			VACUUM ADVANCE Crankshaft Deg. In. of Mercury	
	Start	Intermediate	Max.	Start	Max.
1110492	1615	-	24 @ 4000	7.00	24 @ 15
1110435	2380	-	20 @ 4000	7.00	24 @ 15

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MODEL _____

ELECTRICAL – IGNITION SYSTEM

Type	Conventional – Std., Opt., N.A.	Standard	
	Transistorized – Std., Opt., N.A.	NA	
	Other (specify)	None	
Coil	Make	Delco-Remy	
	Model	1115428	
	Amps	Engine stopped	40
		Engine idling	18
Spark Plug	Make	AC Spark Plug	
	Model	ACR42TS	
	Thread (mm)	14	
	Tightening torque (lb. ft.)	25	
	Gap	.033-.038	
Cable	Conductor type	Linen core impregnated with electrical conducting material	
	Insulation type	Rubber with neoprene jacket	
	Spark plug protector	Neoprene	

ELECTRICAL – SUPPRESSION

Locations & type	Non-metallic high ignition cables
------------------	--------------------------------------

ELECTRICAL – INSTRUMENTS AND EQUIPMENT

Speed-ometer	Type	In-line with pointer
	Trip odometer (std. opt., N.A.)	No
Charge indicator – type		Tell-tale
Temperature indicator – type		Tell-tale
Oil pressure indicator – type		Tell-tale
Fuel indicator – type		Electric gauge
Wind-shield wiper	Type – Standard	Electric 2-speed
	Type – Optional	None
Wind-shield washer	Type – Standard	Push button-manual
	Type – Optional	None
Horn	Type	Vibrator
	Number used	One
	Amp draw (each)	4.5-6.0 @ 12.5 volts
Other		

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MAKE OF CAR VEGA 2300 MODEL YEAR 1971 DATE ISSUED 9/70 REVISED (*)

MODEL _____ 90 HP _____ 110 HP _____

DRIVE UNITS – CLUTCH (Manual Transmission)

Make & type		Chevrolet, single dry disc	
Type pressure plate springs		Diaphragm	
Total spring load (lb.)		1350-1450	
No. of clutch driven discs		One	
Clutch facing	Material	Woven type asbestos	
	Outside & inside dia.	8.00 x 6.00	9.12 x 6.12
	Total eff. area (sq.in.)	43.98	71.82
	Thickness	.135	
	Engagement cushioning method	Flat spring steel between facings	
Release bearing	Type & method of lubrication	Single row ball, packed and sealed	
Torsional damping	Methods: springs, friction material	Coil springs	

DRIVE UNITS – TRANSMISSIONS

Manual 3-speed (std., opt. N.A.)	Standard
Manual 4-speed (std., opt. N.A.)	Optional
Automatic (std., opt. N.A.)	Optional

DRIVE UNITS – MANUAL TRANS.

Number of forward speeds		3-Speed	4-Speed	
Transmission ratios	In first	3.24	3.43	
	In second	1.68	2.16	
	In third	1.00	1.37	
	In fourth	-	1.00	
	In reverse	3.47	3.32	
Synchronous meshing, specify gears		All forward gears		
Shift lever location		Floor mounted		
Lubricant	Capacity (pt.)	2.4	3	
	Type recommended	Meeting military specs MIL-L-2105B		
	SAE viscosity number	Summer	SAE 80	
		Winter	SAE 80	
		Extreme cold	SAE 80	

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MODEL _____

DRIVE UNITS – AUTOMATIC TRANSMISSION

Trade name	Torque-Drive	Powerglide
Type describe	Torque converter with planetary gears	
Selector location	Floor mounted	
List gear ratios Selector Pattern and indicate which are used in each selector position	P-Park R-Reverse N-Neutral Hi-1.82-1.00 1st-1.82	P-Park R-Reverse N-Neutral D-1.82-1.00 L-1.82
Max. upshift speed-drive range	60 (90 HP engine)	57 (110 HP engine)
Max. kickdown speed-drive range	55 (90 HP engine)	53 (110 HP engine)
Torque converter	Number of elements	3
	Max. ratio at stall	2.40
	Type of cooling (air, liquid)	Air & Water
	Nominal diameter	11.00
Lubricant	Capacity-refill (pt.)	6
	Type recommended	Dexron A suffix A
Special transmission features	--	

DRIVE UNITS – PROPELLER SHAFT

Number used	One	
Type (straight tube, tube-in-tube, internal-external damper, etc.)	Straight tube	
Outer diam. x length* x wall thickness	Manual 3-speed trans.	3.25x56.75x0.065
	Manual 4-speed trans.	3.25x55.92x0.065
	Overdrive transmission	Not available
	Automatic transmission	2.75x49.56x0.065

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

(Continued)

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MODEL _____

DRIVE UNITS – PROPELLER SHAFT (cont.)

Inter-mediate bearing	Type (plain, anti-friction)	None
	Lubrication (fitting, prepack)	- -
Slip Yoke	Type	Yoke
	Number of teeth	27
	Spline O.D.	1.1755-1.1765
Universal joints	Make and Mfg. No.	Chevrolet-3868649 (front); 3975546 (rear)
	Number used	Two
	Type (ball and trunnion, cross)	Cross
	Rear attach. (u-bolt, clamp, etc.)	U-bolt
	Bearing	Type (plain, anti-friction)
Lubric. (fitting, prepack)		Pre-pack
Drive taken through (torque tube or arms, springs)		Rear suspension control arms
Torque taken through (torque tube or arms, springs)		Rear suspension control arms

DRIVE UNITS – AXLE

Type (front, rear)	Rear		
Description	Semi-floating with hypoid overhung pinion gear		
Limited Slip differential, type	L.50 vertical		
Drive Pinion Offset	Two		
No. of differential pinions	None		
Pinion adjustment (shim, other)	Shim		
Pinion bearing adj. (shim, other)	Single roll. cylindrical roller		
Wheel bearing type	2.3		
Lubricant	Capacity (pt.)	Meeting Military Specs MIL-L-2105-B	
	Type recommended	SAE 80	
	SAE viscosity number	Summer	SAE 80
		Winter	SAE 80
	Extreme cold		

AXLE RATIO TOOTH COMBINATIONS

(See page 3 for axle ratio usage)

axle ratio	2.53	2.92	3.36
No. of teeth	Pinion	15	13
	Ring gear	38	38
Ring Gear O.D.	6.50		

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MODEL _____

DRIVE UNITS - WHEELS

Type & material		Short spoke spider, steel	
Rim (size & flange type)	Std.	13 x 5	
	Opr.	13x6 (with A70x13 tires)	
Attachment	Type (bolt or stud)	Stud	
	Circle diameter	4.00	
	Number and size	4 hex nuts 7/16 - 20 UNF-2B	

MODEL _____

DRIVE UNITS - TIRES

Standard	Size, ply rating, & ply		A 78x13 B (2 ply, 4 ply rating)	
	Type (bias, radial, etc.)		Non-belted	
	Full rated Inflation Press.	Front	24	
		Rear	24-Sedans & Coupes; 28-station wagons	
Rev./Mile at 50 MPH		891		
Optional	45		A78x13 B (W/W)-Non-belted	
	Size, ply rating, & ply		A78x13 B (B/W)-belted	
			A78x13 B (W/W)-belted	
			A70x13 B (W/White lettering)-belted	

BRAKES - PARKING

Type of control		Grip handle
Location of control		On tunnel between front seats
Operates on		Rear service brakes
If separate from service brakes	Type (internal or external)	- -
	Drum diameter	- -
	Lining size (length x width x thickness)	- -

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MODEL _____

BRAKES—SERVICE

Type (drum) or (disc & no. of pistons)		Disc-front; drum-rear		
Self adjusting (std., opt., N.A.)		Standard		
Special Valving	Type (proportion, delay, metering, other)	Metering and proportion		
Power brake make & type (remote, int., etc.)	Std.	Not available		
	Opt.	Not available		
Effective area (sq. in.) *		67.2		
Gross lining area (sq. in.) **		67.2		
Swept area (sq. in.) ***		228.4		
Front to Rear Effectiveness Relationship		70% Front, 30% Rear		
Drum	Diameter (nominal)	Front	-	
		Rear	9.0	
Type and material		Composite, cast iron rim & steel web		
Disc	Outer working diameter		9.64	
	Inner working diameter		6.40	
	Working width		1.60	
	Material & type (vented/solid)		Cast iron-solid, integral with hub	
Wheel cylinder bore	Front	1.875		
	Rear	0.75		
Master Cylinder	Bore	0.75		
	Stroke	1.16		
Pedal arc ratio		6.6:1		
Line pressure at 100 lb. pedal load		1270		
Shoe Clearance	Front	Self-adjusting		
	Rear	Self-adjusting		
Anti-skid device type (std., opt., N.A.)		Not available		
Brake lining	Bonded or riveted		Bonded	
	Front Wheel	Material		Molded asbestos
		Size (length x width x thickness)	Prim. or out-board	3.64x1.60x0.376
			Second. or in-board	--
		Segments per shoe		One
	Rear Wheel	Material		Molded asbestos
		Size (length x width x thickness)	Prim. or out-board	9.58x1.18x0.18
			Second. or in-board	9.58x1.18x0.18
Segments per shoe		One		

* 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 contact circumference.)

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MODEL
STEERING

Manual (std., opt., NA)		Standard	
Power (std., opt., NA)		Optional	
Adjustable steering wheel (tilt, swing, other)	Type and description (std., opt., NA)	Not available	
		--	
Wheel diameter	Manual	15.25 x 14.75	
	Power	15.25 x 14.75	
Turning diameter (feet)	Outside front	Wall to wall (l. & r.)	34.7
		Curb to curb (l. & r.)	33.0
	Inside rear	Wall to wall (l. & r.)	--
		Curb to curb (l. & r.)	--
Manual	Gear	Type	Semi-reversible, recirculating anti-friction bearings
		Make	Saginaw Steering
	Ratios	Gear	20.9:1
		Overall	22.5:1
	No. wheel turns (stop to stop)		4.4
Type (coaxial, linkage, etc.)		Integral with vane type pump	
Power	Make		Saginaw Steering
	Gear	Type	Same as manual
		Ratios	Gear	16.0:1-13.0:1
	Overall		16.6:1
	Pump driven by		Belt form crankshaft pulley
No. wheel turns (stop to stop)		3.25	
Linkage	Type		Parallelogram
	Location (front or rear of wheels, other)		Front
	Drag link (trans. or longit.)		Transverse
	Tie rods (one or two)		Two
Steering Axis	Inclination of camber (deg.)		8.55
	Bearings (type)	Upper	Sintered steel spherical
		Lower	Sintered steel spherical
	Thrust		None
Whl. Align. (range at curb wt. & preferred)	Caster (deg.)		-3/4 ± 1
	Camber (deg.)		+1/4 ± 1
	Toe-in (outside track, inches)		3/16 to 5/16
Steering spindle & joint type		Spherical joint steering knuckle pivots	
Wheel Spindle	Diameter	Inner bearing	1.25
		Outer bearing	0.687
	Thread size		3/4-20 NEF-3 (modified)
	Bearing type		Taper roller

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MODEL _____

SUSPENSION – GENERAL

(See Supplement page for details on Air Suspension)

Provision for car leveling	None
Provision for brake dip control	Front suspension geometry
Provision for occ. squat control	Rear suspension geometry
Special provisions for car jacking	Position jack in bumper notch on lower face of front and rear bumper
Shock absorber front & rear	Type Make Piston dia.
	Direct, double acting hydraulic Delco Products 1.00
Other special features	----

SUSPENSION – FRONT

Type and description	Independent, SLA type, coil springs with center mounted shock absorbers, spherical joint steering knuckle pivots
Spring	Type
	Material
	Size (coil design height & I.D., bar length x dia.)
	Spring rate (lb. per in.)
	Rate at wheel (lb. per in.)
Stabilizer (option)	Type (link, linkless, frameless)
	Material & bar diameter

SUSPENSION – REAR

Type and description	Salisbury rear axle with coil springs
Drive and torque taken through	Control Arms
Spring	Type
	Material
	Size (length x width, coil design height & I.D., bar length & dia.)
	Spring rate (lb. per in.)
	Rate at wheel (lb. per in.)
	Mounting insulation type
	If leaf
Stabilizer (option)	Type (link, linkless, frameless)
	Material
Track bar type	

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MODEL
FRAME

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

Integral Body-Frame

BODY - MISCELLANEOUS INFORMATION

		Sedan	Coupe	Station Wagon	Panel Delivery
Drs. hinged (front, rr.)	Front doors			Front	
	Rear doors			None	
Type of finish (lacquer, enamel, other)		Acrylic, Lacquer			
Hood counterbalanced (yes, no)		No			
Hood release control (internal, external)		Internal			
Vehicle Ident. No. location		Top left hand of instrument and panel pad			
Engine No. location		Pad; upper left hand corner on right side of cylinder case opposite number three cylinder.			
Theft protection - type		Lock, mounted on steering column; locks steering wheel, transmission shift levers and ignition			
Vent window control method (crank, friction pivot)	Front	None			
	Rear	--			
Seat cushion type	Front	Formed wire and Full foam construction			
	Rear	Formed wire and Full foam construction			
	3rd seat	---			
Seat back type	Front	Formed wire and Full foam construction			
	Rear	Formed wire and Full foam construction			
	3rd seat	---			
Windshield glass type (i.e., single curved - laminated plate)		Curved-laminated plate			
Side glass type (i.e., curved - tempered plate)		Curved-tempered plate			
Backlight glass type (i.e., compound curved - tempered plate, three piece)		Curved-tempered plate			
Windshield glass exposed surface area		1116.2	1143.9	1116.2	1116.2
Side glass exposed surface area		1545.4	1334.4	2062.0	956.4
Backlight glass exposed surface area		973.8	1071.3	662.5	662.5
Total glass exposed surface area		3635.4	3549.6	3840.7	2735.1

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MAKE OF CAR VEGA 2300 MODEL YEAR 1971 DATE ISSUED 9/70 REVISED (*)12/70

MODEL _____

CONVENIENCE EQUIPMENT

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

Power windows	Side windows	NA
	Vent windows	NA
	Backlight or tailgate	NA
Power seats (specify type as well as availability)		NA
Reclining front seat back (R-L or both)		NA
Front seat head restrainer (R-L or both)		Integral with head seats
Radios (specify type as well as availability)		Optional - push button AM
		Optional - push button AM/FM
Rear seat speaker		Optional (except panel delivery)
Power antenna		NA
Clock		Optional
Air conditioner (specify type and availability)		Optional - four season
Speed warning device		NA
Speed control device		NA
Ignition lock lamp		NA
Dome lamp		Standard
Glove compartment lamp		NA
Luggage compartment lamp		NA
Underhood lamp		NA
Courtesy lamp		NA
Map lamp		NA
Auto. trans. quad. lamp		Standard
Cornering light lamp		NA
Windshield Antenna		Available with factory installed radio
Tinted Body Glass		Optional
Swing out rear gtr. wind.		Optional with coupe & sedan only
Auxiliary Seat		Optional with panel delivery
Rear window elec. defogger		Optional

LAMP HEIGHT AND SPACING		2-Door Sedan	2-Door Coupe	Station Wagon	Panel Delivery
Height above ground to center of bulb or marker	Headlamp	Highest ●	26.0	25.9	26.0
		Lowest			
	Tail	Highest ●	24.8	24.9	27.7
		Lowest			
Distance from C L of car to center of bulb	Headlamp	Inside			
		Outside *			
	Tail	Inside			
		Outside			
Directional	Front				
	Rear				

* If single headlamps are used enter here.

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VEHICLE WEIGHTS

Model	CURB WEIGHT * POUNDS			% PASS. WEIGHT DISTRIBUTION				LIQUID WEIGHT	
	Front	Rear	Total	Pass. In Front		Pass. In Rear		Fuel	Coolant
				Front	Rear	Front	Rear		
2-Door Sedan. 14111	1182	1020	2202	44.6	55.4	16.7	83.3	67	14
2-Door Coupe. 14177	1206	1040	2246	44.6	55.4	16.7	83.3	67	14
2-Door Sta. Wgn. 14115	1196	1090	2286	44.6	55.4	16.7	83.3	67	14
2-Door Panel Del. 14105	1166	1042	2208	44.6	55.4	---	---	67	14

*Reference - SAE Aerospace-Automotive drawing standards, Section E 1.02 (d).

AMA Specifications Form—Passenger Car

MAKE OF CAR VEGA 2300 MODEL YEAR 1971 DATE ISSUED 9/70 REVISED (*)

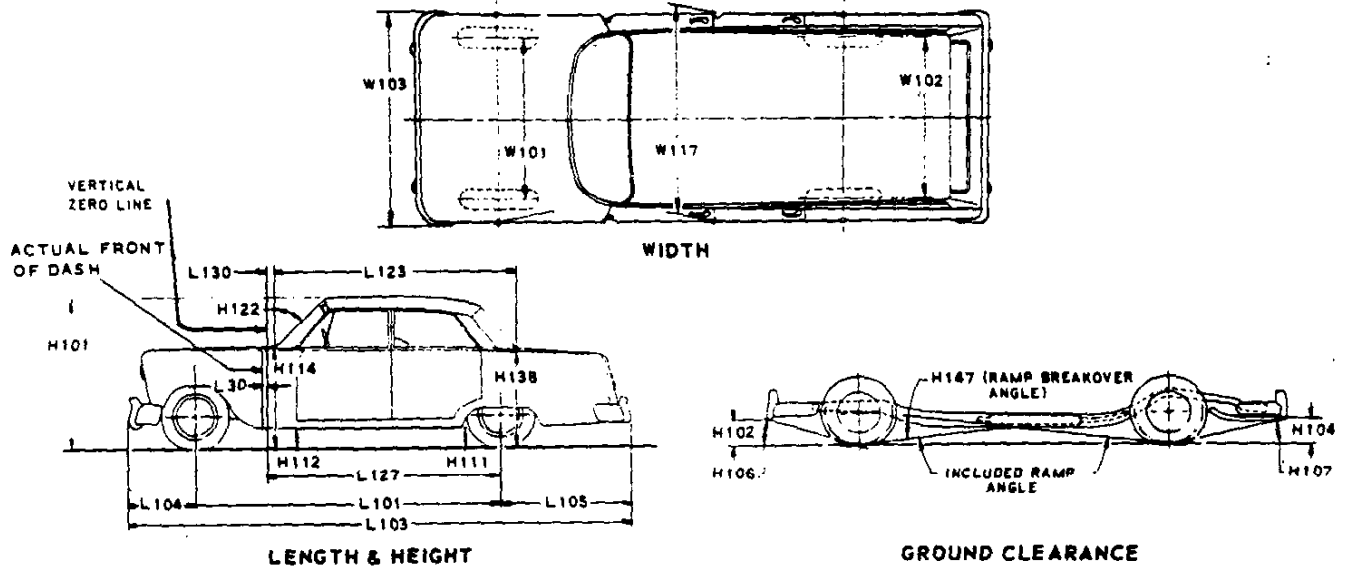
OPTIONAL EQUIPMENT WEIGHTS

Equipment Differential Weights	WEIGHT POUNDS			Remarks
	Front	Rear	Total	
Auxiliary seat - 14105	11.0	14.0	+25	
Air conditioning	78.0	7.0	+85	
Torque-drive trans	37.0	7.0	+44	
Powerglide trans	44.0	9.0	+53	
4-speed trans	4.0	2.0	+6	
Power steering	31.0	1.0	+32	
Push button radio AM	6.0	2.0	+8	
Push button radio AM/FM	6.0	2.0	+8	
Deluxe Interior & Exter.	5.0	5.0	+10	
Custom interior	3.0	5.0	+8	
Special GT coupe	6.0	9.0	+15	
Spec Perf Frt-Rr Susp	8.0	8.0	+16	

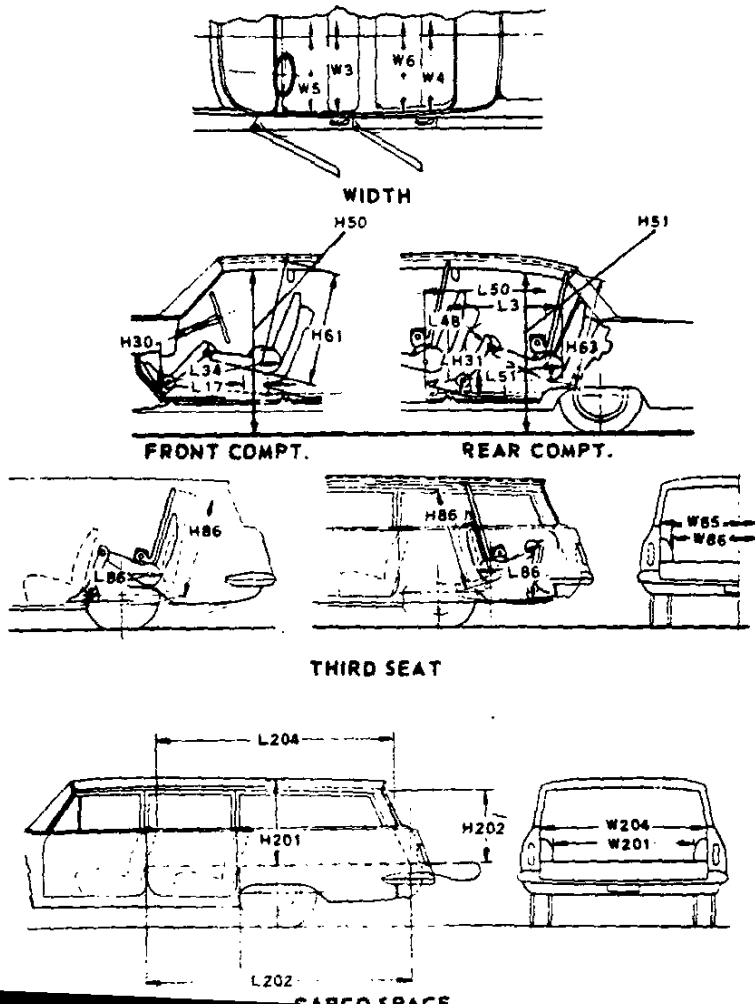
CAR AND BODY DIMENSIONS

KEY SHEET

EXTERIOR CAR AND BODY DIMENSIONS



INTERIOR CAR AND BODY DIMENSIONS



CAR AND BODY DIMENSIONS

KEY SHEET

DIMENSION DEFINITIONS

EXTERIOR WIDTH DIMENSIONS

- W101 WHEEL TREAD - FRONT. Measured at centerline of tires, with nominal camber, at ground.
 W102 WHEEL TREAD - REAR. Measured at centerline of tires at ground.
 W103 MAXIMUM OVERALL CAR WIDTH. Include bumpers, moldings, or sheet metal protrusions. Measured to outside of metal.
 W117 MAXIMUM BODY WIDTH AT #2 PILLAR. Measured across body at #2 pillar, excluding hardware and applied moldings.

EXTERIOR LENGTH DIMENSIONS

- L 30 VERTICAL 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.
 L101 WHEELBASE.
 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 Cowl Point to the Deck Point.
 L127 VERTICAL ZERO LINE TO CENTERLINE OF REAR WHEELS. A horizontal dimension.
 L130 VERTICAL ZERO LINE TO WINDSHIELD COWL POINT. The horizontal dimension from the vertical zero line to the theoretical intersection of extended windshield glass plane and normal cowl surface.

EXTERIOR HEIGHT DIMENSIONS

- H101 OVERALL HEIGHT - DESIGN. Measured with the vehicle in Manufacturer's Design Weight attitude.
 H114 COWL POINT TO GROUND. Measured at vehicle centerline.
 H138 DECK POINT TO GROUND. Measured at vehicle centerline.
 H112 ROCKER PANEL TO GROUND - FRONT. The vertical dimension from ground to bottom of rocker panel, excluding flanges. Measured to the outside of sheet metal at foremost point of rocker panel.
 H111 ROCKER PANEL TO GROUND - REAR. The vertical dimension from ground to bottom of rocker panel, excluding flanges. Measured to the outside of sheet metal at front of rear wheel opening.
 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.

GROUND CLEARANCE DIMENSIONS

- H102 BUMPER TO GROUND - FRONT. Minimum dimension, includes bumper guards.
 H104 BUMPER TO GROUND - REAR. Minimum dimension, includes bumper guards.
 H106 ANGLE OF APPROACH. The angle between 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 component, excluding license plate. This dimension may be determined graphically for reporting purposes.
 H107 ANGLE OF DEPARTURE. The angle between 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 component, excluding license plate. This dimension may be determined graphically for reporting purposes.
 H147 RAMP BREAKOVER ANGLE. The 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.
 H156 MINIMUM RUNNING GROUND CLEARANCE. Location of measurement on the car is to be clearly recorded.

FRONT COMPARTMENT DIMENSIONS

- H 61 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.
 L 34 MAXIMUM EFFECTIVE LEG ROOM - ACCELERATOR. Measured along a diagonal line from the Manikin ankle pivot center to the H Point plus a constant of 10.0 inches. For treadle type accelerator pedals, the leg room is measured with the Manikin's right foot on the accelerator pedal and the Manikin Heel Point at Accelerator Heel Point. All other types of accelerator pedals will be measured with the Manikin foot angle set at 87° and the shoe touching the pedal.
 H 30 H POINT TO HEEL POINT - FRONT. The vertical dimension from the H Point to the Accelerator Heel Point.
 L 17 H POINT TRAVEL. The horizontal dimension between the H Point in the most forward and rearward seat positions.

FRONT COMPARTMENT DIMENSIONS (Cont.)

- W 3 SHOULDER ROOM - FRONT. The minimum lateral dimensions between the door garnish moldings or nearest interference, measured at the H Point station.
 W 5 HIP ROOM - FRONT. The lateral dimension through the H Point to trimmed body surfaces. Depress loose side wall cloth to trim foundation or other obstruction if such construction exists.
 H 50 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.

REAR COMPARTMENT DIMENSIONS

- L 50 H POINT COUPLE DISTANCE. The horizontal dimension from the front seat H Point to the rear seat H Point.
 H 63 EFFECTIVE HEAD ROOM - REAR. The dimension from the H Point to the headlining, plus a constant of 4.0 inches, measured along a line 8° to rear of vertical.
 L 51 MINIMUM EFFECTIVE LEG ROOM - REAR. Measured along a diagonal line from the ankle pivot center to the H Point plus a constant of 10.0 inches, with the foot positioned to the nearest interference between the seat structure and toe, instep or lower leg.
 H 31 H POINT TO HEEL POINT - REAR. The vertical dimension from the H Point to the Manikin Heel Point on the depressed floor covering.
 L 48 MINIMUM KNEE ROOM - REAR. The minimum dimension from the Manikin knee pivot center to the back of the front seat back.
 L 3 REAR COMPARTMENT ROOM. The horizontal dimension from the back of front seat to front of rear seat back at height tangent to the top of rear seat cushion.
 W 4 SHOULDER ROOM - REAR. The minimum lateral dimension between the door garnish molding or nearest interference. Measured at H Point station.
 W 6 HIP ROOM - REAR. The lateral dimension through H Point to trimmed body surfaces. Depress loose side wall cloth to trim foundation or other obstruction when such construction exists.
 H 51 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.

LUGGAGE COMPARTMENT DIMENSIONS

- V 1 LUGGAGE CAPACITY - USABLE. The total luggage compartment luggage capacity in cubic feet with the tire and tools in place.
 H195 LIFTOVER HEIGHT. Vertical dimension from the highest point on the luggage compartment lower opening to ground, excluding corner radii.

STATION WAGON - THIRD SEAT DIMENSIONS

- W 85 SHOULDER ROOM - THIRD SEAT. The minimum lateral dimension between the door garnish moldings or nearest interference. Measured at H Point station.
 W 86 HIP ROOM - THIRD SEAT. The lateral dimension through H Point to trimmed surfaces.
 L 86 EFFECTIVE LEG ROOM - THIRD SEAT. Measured along a diagonal line from ankle pivot center to H Point plus a constant of 10.0 inches. With rear-facing third seat, foot is positioned in foot well or to nearest interference with rear end or rear closure.
 H 86 EFFECTIVE HEAD ROOM - THIRD SEAT. The dimension from H Point to the headlining, plus a constant of 4.0 inches. Measured along a line 8° to rear of vertical.

STATION WAGON - CARGO SPACE DIMENSIONS

- L202 CARGO LENGTH AT FLOOR - FRONT SEAT. The horizontal dimension, measured at the floor level from the rear of the front seat back to the normal inside limiting interference on the tailgate, on the car centerline.
 L204 CARGO LENGTH AT BELT - FRONT SEAT. The horizontal dimension measured from the top rear of front seat back to a vertical extension line from the normal inside limiting interference at the top of the tailgate, on the car centerline.
 W201 CARGO WIDTH - WHEELHOUSE. The minimum horizontal dimension, measured between wheelhouses at floor level.
 W204 OPENING WIDTH AT BELT. The minimum horizontal dimension, measured between the nearest normal inside limiting interferences of the rear opening at the top of the tailgate.
 H201 MAXIMUM CARGO HEIGHT. The maximum vertical dimension, measured from the top of the floor covering to the headlining, on the car centerline.
 H202 REAR OPENING HEIGHT. The vertical dimension measured from the top of the floor covering to the normal inside limiting interference at the top of the rear opening, on the car centerline, with both tail and liftgates fully open.
 V 2 CARGO VOLUME INDEX BEHIND FRONT SEAT. The total volume in cubic feet above the normal load floor and behind the front seat with the liftgate and tailgate closed.

W4xL204xH201

1779

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