

**Specifications
Form
Passenger Car**

1982

METRIC (U.S. Customary)

Manufacturer CHEVROLET MOTOR DIVISION GENERAL MOTORS CORPORATION	Car Line CAVALIER	
Mailing Address CHEVROLET ENGINEERING 30003 VAN DYKE WARREN, MICHIGAN 48090	Model Year 1982	Issued: 2-11-81 <hr/> Revised (*) APRIL, 1982

NOTE: Sheets revised - 2 Thru 17, 23, 25, 27.

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The General Specifications herein are those in effect at date of compilation and are subject to change without notice by the manufacturer.

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Table of Contents

1	Car Models
2	Power Teams
3-7	Engine
7	Exhaust System
8	Fuel System/Diesel Information
9	Cooling System
10, 11	Vehicle Emission Control
12, 13	Electrical
14-17	Drive Units
17	Tires and Wheels
18	Brakes
19	Steering
20	Suspension — Front and Rear
21	Body — Miscellaneous Information
21	Frame
22	Convenience Equipment
23	Vehicle Mass (Weight)
24	Optional Equipment Mass (Weight)
25-27	Car and Body Dimensions
28	Vehicle Fiducial Marks
29	Glass/Lamps and Headlamp
30-34	Car and Body Dimension Key Sheets
35	Index

NOTE:

1. This form uses both SI metric units and U.S. Customary units. The metric unit of measure is presented first, and the U.S. Customary unit follows in parentheses.
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.
 - c. All linear dimensions are in millimeters (inches), and all mass (weight) specifications are in kilograms (pounds).
3. The General Specifications herein are those in effect at date of completion and are subject to change without notice by the manufacturer.
4. A printed or computer tape supplement containing additional Car and Body Dimensions and/or drawings (based in part on SAE J1100a "Motor Vehicle Dimensions") may be available from the manufacturer.

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 10-81

Car Models

Model Description (Include Line Drawings of Vehicles, if Desired)	Make, Car Line, Series, Body Type (Mfg's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk/Cargo Load— Kilograms (Pounds)
	<u>MODEL NUMBER</u>	<u>FRONT/REAR</u>	
2-Door Notchback Coupe	1JD27	2/3	60.0 (132.3)
2-Door Hatchback Coupe	1JE77	2/3	72.0 (158.7)
4-Door Notchback Sedan	1JD69	2/3	61.8 (136.2)
4-Door Liftgate Wagon	1JD35	2/3	92.7 (204.4)

Note: Any specifications on following pages that are specific to California requirements are indicated accordingly.

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 4-82

Power Teams (Indicate whether standard or optional)
 SAE Net bhp (brake horsepower) and net torque corrected to 85° F and 29.38 in. Hg atmospheric pressure.

SERIES AVAILABILITY	ENGINE						TRANSMISSION	AXLE RATIO	
	Displ. Liters (in ³)	Carb. (Barrels)	Compr. Ratio	SAE Net at RPM		Exhaust System*		(std. first) (indicate A/C ratio)	
				kW (bhp)	Torque N - m (lb. ft.)			Base	Opt.
Base-All States	4 1.8 (112) (L46)	2-bb1	9.0:1	65.6 (88)	135.6 (100)	S	Man.4-Spd (3.53 low) - Base Auto'125c'-Avail	3.32:1***	--
Sed. & Coupe				@	@			4.10:1@	3.65:1%
Wagon				5100	2800			2.84:1**	2.84:1+
* - 1J027 model only - air conditioning and power steering not available.									
@ - Final drive ratio of 3.32:1.									
% - Final drive ratio of 2.96:1.									
@@ - Final drive ratio of 2.73:1.									
** - Final drive ratio of 2.84:1.									
+ - Final drive ratio of 3.18:1.									
% - Final drive ratio of 2.69:1.									

*S-Single D-Dual

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 4-82

Engine Description/Carb.
 Engine Code

1.8 LITER L-4 (112 CID)
 2-BBL CARBURETOR
 RPO L46

ENGINE - GENERAL

Type (inline, V and angle flat)		In line
Location (front,mid,rear)		Front
Engine installation position (transverse, longitudinal)		Transverse, front of engine faces right side of vehicle
Number of mtg. points	Front	Two
	Rear	Two
No. of cylinders		4
Bore		89.0 (3.50)
Stroke		74.0 (2.91)
Piston displacement cm ³ (in ³)		1841 (112)
Bore spacing (c/l to c/l)		99.0 (3.90)
Cylinder block material		Cast Iron
Cylinder block deck height		215.55 (8.49)
Deck clearance (minimum) (above or below block)		0
Cylinder head material		Cast iron
Cylinder head volume - cm ³		48.95 (2.99)
Head gasket thickness (compressed)		1.02-1.14 (.040-.045)
Head gasket volume - cm ³		--
Minimum combustion chamber volume - cm ³		46.5
Cyl. no. system (front to rear)**	L. Bank	1-2-3-4
	R. Bank	--
Firing order		1-3-4-2
Recommended fuel (leaded, unleaded)		Unleaded
Fuel antiknock index (R + M) 2		87
Total dressed engine mass (wt) dry*		136.38 kg (300.72 lbs.)

*Dressed engine mass (weight) includes to following:

**Rear of engine - drive takeoff.

View from drive takeoff end to determine left & right side of engine.

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 4-82

Engine Description/Carb.
 Engine Code

1.8 LITER L-4 (112 CID)
 2-BBL. CARBURETOR
 RPO L46

Engine - Pistons

Material		Aluminum Alloy	
Description and finish (flat, dished, dome, etc.)		Flat	
Mass. g (weight, oz.) - Piston Only		.468 Kg (1.03 lbs.)	
Clearance (limits)	Top land	.65-.80 (.026-.031)	
	Skirt	Top	.020-.046 (.0008-.0018) (a)
		Bottom	--
Ring groove diameter	No. 1 ring	79.295 (3.122)	
	No. 2 ring	79.295 (3.122)	
	No. 3 ring	78.29 (3.082)	

(a) - Measured 40.6 mm (1.60) from top of piston.

Engine - Piston Rings

Function (top to bottom)	No. 1, oil or comp.	Compression
	No. 2, oil or comp.	Compression
	No. 3, oil or comp.	Oil
Compression	Description - material, coating, etc.	Nodular cast iron, barrel face, .10 mm (.004) minimum molybdenum spray - (b)
	Width	1.475-1.490 (.058-.059) upper, 1.960-1.990 (.077-.078) Lower
	Gap	.25-.50 (.010-.020) upper & lower
Oil	Description - material, coating, etc.	.1 (.004) minimum chrome on two segments of flat spring steel, steel expander.
	Width	4.08 (.160) assembled
	Gap	.38-1.40 (.015-.055)
Expanders		In oil ring assembly

Engine - Piston Pins

Material		Carbonitrided steel	
Length		69 (2.717)	
Diameter		22.9937-23.0015 (.9053-.9056)	
Type	Locked in rod, in piston, floating, etc.	Locked in rod	
	Bushing	In rod or piston	--
		Material	--
Clearance	In piston	.0065-.0091 (.00026-.00036)	
	In rod	.019-.052 (.00075-.00205)	
Direction & amount offset in piston		1.50 (.059) major thrust side	

(b) - Upper ring, lower is cast iron, tapered face, lubrited, inside bevel.

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 4-82

Engine Description/Carb.
 Engine Code

1.8 LITER L-4 (112 CID)
 2-BBL. CARBURETOR
 RPO L46

Engine - Connecting Rods

Material		Forged steel
Mass, g (weight, oz.)		.675 Kg. (1.49 lbs.)
Length (center to center)		137.67-137.93 (5.42-5.43)
Bearing	Material & type	Steel, premium aluminum lining
	Overall length	21.26 (.837)
	Clearance (limits)	.025-.079 (.00098-.00311)
	End play	.10-.61 (.0039-.0240)

Engine - Crankshaft

Material		Nodular cast iron	
Vibration damper type		--	
End thrust taken by bearing (no.)		#4	
Crankshaft end play		.0511-.1780 (.002-.007)	
Main bearing	Material & type	Steel-aluminum alloy lining, lead alloy overplate, flash tin finish	
	Clearance	.036-.068 (.00142-.00268), #5; .015-.047 (.0006-.0018), #1,2,3&4	
	Journal dia. and bearing overall length	No. 1	63.340-63.364 (2.494-2.495)x18.60-18.85 (.732-.742)
		No. 2	63.340-63.364 (2.494-2.495)x18.60-18.85 (.732-.742)
		No. 3	63.340-63.364 (2.494-2.495)x18.60-18.85 (.732-.742)
		No. 4	63.340-63.364 (2.494-2.495)x23.88-23.93 (.940-.942)
		No. 5	63.340-63.364 (2.494-2.495)x20.83-21.09 (.820-.830)
		No. 6	--
No. 7		--	
Dir. & amt. cyl. offset		--	
No. bolts/main brg. cap		Two	
Crankpin journal diameter		50.775-50.800 (1.999-2.000)	

Engine - Camshaft

Location		In cylinder head	
Material		Cast iron	
Bearings	Material	GM3881-M, Steel backing	
	Number	5	
Type of drive	Gear, chain or belt		Chain
	Crankshaft gear or sprocket material		Steel, 20 teeth
	Camshaft gear or sprocket material		Sintered nickel steel, 40 teeth
	Timing chain	No. of links	58 - 2 roller chain
		--	
	Chain or belt	Width	19.05 (.750)
Pitch		9.525 (.375)	

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (•) 4-82

Engine Description/Carb.
 Engine Code

1.8 LITER L-4 (112 CID)
 2-BBL. CARBURETOR
 RPO L46

Engine - Valve System

Hydraulic lifters (std., opt., n.a.)		Hydraulic	
Valve rotator, type (intake, exhaust)		None	
Push rods (dia., length, material)		7.94 (.312), 181.25 (7.136), welded steel tubing	
Rocker ratio		1.5:1	
Operating tappet clearance (indicate hot or cold)	Intake	Zero	
	Exhaust	Zero	
Timing (based on top of ramp points)	Intake	Opens (*BTC)	30
		Closes (*BTC)	90
		Duration (deg.)	300
	Exhaust	Opens (*BTC)	69
		Closes (*BTC)	51
		Duration (deg.)	300
Valve open overlap (deg.)		86	
Intake valve	Material		Steel
	Overall length		119.39 (4.700)
	Actual overall head dia		40.51-40.77 (1.595-1.605)
	Angle of seat & face (deg)		46, 45
	Seat insert material		None
	Stem diameter		7.972-7.985 (.3139-.3144)
	Stem to guide clearance		.028-.066 (.001-.003)
	Lift (at zero lash)		9.9822 (.393)
	Outer spring press. & length	Valve closed - N at mm (lb. at in.)	356 (80) @ 40.9 (1.61)
		Valve open - N at mm (lb. at in.)	841 (189) @ 30.5 (1.20)
	Inner spring press. & length	Valve closed - N at mm (lb. at in.)	Damper
		Valve open - N at mm (lb. at in.)	Damper
Exhaust valve	Material		Steel
	Overall length		120.04 (4.726)
	Actual overall head dia		34.87-35.13 (1.373-1.383)
	Angle of seat & face (deg)		46, 45
	Seat insert material		None
	Stem diameter		7.947-7.965 (.3129-.3136)
	Stem to guide clearance		.035-.078 (.00138-.00307)
	Lift (at zero lash)		9.9822 (.393)
	Outer spring press. & length	Valve closed - N at mm (lb. at in.)	356 (80) @ 40.9 (1.61)
		Valve open - N at mm (lb. at in.)	841 (189) @ 30.5 (1.20)
	Inner spring press. & length	Valve closed - N at mm (lb. at in.)	Damper
		Valve open - N at mm (lb. at in.)	Damper

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 issued 2-11-81 Revised (*) 4-82

Engine Description/Carb.
 Engine Code

1.8 LITER L-4 (112 CID)
 2-BBL. CARBURETOR
 RPO L46

Engine - Lubrication System

Type of lubrication (splash, pressure, nozzle)	Main bearings	Pressure
	Connecting rods	Pressure
	Piston pins	Splash
	Camshaft bearings	Pressure
	Tappets	Pressure
	Timing gear or chain	Centrifugal
	Cylinder walls	Splash
Oil pump type	Gear	
Normal oil pressure-kPa (psi) at engine rpm	315 (45 @ 2200 RPM)	
Type oil intake (floating, stationary)	Stationary	
Oil filter system (full flow, part, other)	Full-flow	
Capacity of c/case, less filter-refill-L (qt.)	3.785 (4.0)	
Oil grade recommended (SAE viscosity and temperature range)	SF 5W-30	
Engine service reqmt. (SD, SE, etc.)	SF	

Engine - Exhaust System

Type (single, single with cross-over, dual, other)	Single	
Muffler no. & type (reverse flow, straight thru, separate resonator)	One reverse flow	
Resonator no. & type	None	
Exhaust pipe	Branch O.D. wall thickness	--
	Main O.D. wall thickness	(a)
	Material	2 generally concentric pipes-stainless steel outer, steel inner.
Inter-mediate pipe	O.D. & wall thickness	44.45
	Material	Aluminum coated steel
Tail pipe	O.D. & wall thickness	44.45
	Material	Aluminum coated steel

(a) 50.8 x .99 (2.0 x .039) outer
 44.45 x .83 (1.75 x .0325) inner

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 4-82

Engine Description/Carb.
 Engine Code

1.8 LITER L-4 (112 CID)
 2-BBL. CARBURETOR
 RPO L46

Engine — Fuel System (See supplemental page for details of Fuel injection, Supercharger, Turbocharger, etc. if used)

Induction type, carburetor, fuel injection system, etc		Carburetor (Computer Command Control)	
Fuel tank	Refill capacity — L (US gals)	53L (14 Gal.)	
	Filter location	R.H. rear quarter	
Fuel pump	Type (elec. or mech.)	Mechanical	
	Locations	Right - rear of cylinder block	
	Pressure range — kPa (psi)	31.0-41.4 (4.5-6.0)	
Carburetor	Mfg. & model	Rochester - (a)	
	Choke type	Electric	
	Intake manifold heat control (exhaust or water)	Water	
	Air cleaner type	Standard	Single snorkel to outside ducted air
		Optional	--
	Idle spd.-rpm (spec neutral or drive)	Manual	ECM controlled
		Propane (neu.)	--
Automatic		ECM controlled	
	Propane (neu.)	--	
Idle A/F mix.		--	

Engine — Diesel Information

Glow plug		Not
Injector nozzle	Type	Applicable
	Opening pressure—kPa. (psi)	
Pre-chamber design		
Fuel injection pump	Manufacturer	
	Type	
Supplementary vacuum source (type)		

(a) Manual Transmission - Model #17081601 Federal
 (17081701) California

Automatic Transmission - Model #17082300 Federal
 (17082306) California

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 4-82

Engine Description/Carb.
 Engine Code

1.8 LITER L-4 (112 CID)
 2-BBL. CARBURETOR
 RPO L46

Engine - Cooling System

Coolant recovery system (std., opt., none)		Standard	
Radiator cap relief valve pressure—kPa(psi)		103.4 (15)	
Circulation thermostat	Type (choke, bypass)	Choke	
	Starts to open at °C (°F)	91 (195)	
Water pump	Type (centrifugal, other)	Centrifugal	
	GPM 1000 pump rpm	13.5 @ 2000 RPM	
	Number of pumps	One	
	Drive (V-belt, other)	V-belt	
Bearing type		--	
By-pass recirculation type (inter., ext.)		Internal	
Radiator core type (cross-flow vertical, cellular, tube and fin, other)		Cross-flow	
Cooling system capacity	With heater—L(qt.)	9.0 (2.38)	
	Without heater—L(qt.)	--	
	Opt. equipment-specify—L(qt.)	9.3 (2.46) with A/C	
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	32 (1.26)
	Upper	Number and type (molded, straight)	One, Molded
		Inside diameter	32 (1.26)
	By-pass	Number and type (molded, straight)	None
		Inside diameter	
Radiator (core)	Standard	Width	305.0 (12.0)
		Height	387.5 (15.25)
		Thickness	25.0 (.98)
	A/C	Width	430.0 (16.9)
		Height	387.5 (15.25)
		Thickness	25.0 (.98)
	Heavy duty	Width	305.0 (12.0)
		Height	387.5 (15.25)
		Thickness	40.2 (1.58)
Fan (standard)	Number of blades & type - flex/solid		7 Blade, electric with rotating reinforcement ring
	Diameter		290 (11.42)
	Ratio — fan to crankshaft rev.		--
	Fan cutout type		--
	Drive type-number of fans		--
Fan (optional)	No. of blades and spacing		7 Blade, electric with rotating reinforcement ring, shrouded
	Diameter		386 (15.20)
	Ratio — fan to crankshaft rev		--
	Fan cut-out type		--
	Drive type-number of fans		--

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 4-82

Engine Description/Carb.
 Engine Code

1.8 LITER L-4 (112 CID)
 2-BBL. CARBURETOR
 RPO L46

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		Air injection with Computer Command Control (CCC)	
	Air Injection Pump	Type	--	
		Displacement—cm ³ (in ³)	--	
		Drive ratio	--	
		Drive type	V-Belt	
		Relief valve (type)	--	
		Filter (describe)	--	
	Air Injection System	Air distribution (head, manifold, etc.)		Exhaust ports, catalytic converter and air cleaner
		Point of entry		Exhaust Ports
		Injection tube i.d.		7.29 (.287)
		Check valve type		--
		Backfire protection (type)		--
	Exhaust Gas Recirculation System	Type (controlled flow, open orifice, other)		Controlled flow
		Valve type		Back pressure, vacuum modulated
		Valve location		Water outlet
		Control energy source		--
		Exhaust source		--
		Exhaust cooler type		--
		Orifice no. and size		--
		Point of exhaust injection (spacer, carburetor, manifold, other)		Head
Catalytic Converter System	Catalyst	Type	Platinum - Palladium	
		Volume—L (in ³)	2.786 (170)	
	Substrate type		Dual bed	
	Container location		Beneath Underbody	
Other				

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 4-82

Engine Description/Carb.
 Engine Code

1.8 LITER L-4 (112 CID)
 2-BBL CARBURETOR
 RPO L46

Vehicle Emission Control (continued)

Crankcase Emission Control	Type (ventilates to atmos. induction system, other)	Standard	Induction system	
		Optional	--	
	Control unit	Make and Model	A.C. CV778C	
		Location	Rocker cover	
		Energy source (manifold vacuum, carburetor, other)	Manifold Vacuum	
		Control method (variable orifice, fixed orifice, other)	Tapered pin	
	Complete system	Discharges (to intake manifold, other)	Intake Manifold	
		Air inlet (breather cap, other)	--	
		Flame arrestor (screen, other)	--	
	Evaporative Emission Control	Fuel tank	Thermal expansion volume—dm ³ (ft ³)	--
Relief pressure kPa (psi) and location			7.2 kPa (1.04 psi)	
Vacuum relief kPa (psi) and location			7.8 kPa (1.13 psi)	
Vapor-liquid separator type			--	
Vapor vented to (crankcase, canister, other)			Canister	
--		--		
Carbu- retor	Vapor vented to (crankcase, canister, other)	Canister	--	
Vapor storage	Storage provision (crankcase, canister, other)	Canister	--	
		--	--	
	Volume—dm ³ (ft ³) or capacity (grams)	1500 cm ³ (91.54 cu.in.)		
	Control valve type	Computer Command Control (CCC)		

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 4-82

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1.8 LITER L-4 (112 CID)
 2-BBL. CARBURETOR
 RPC L46

Electrical — Supply System

Battery	Make and model		Delco Freedom II
	Voltage rtg. — V — & total plates		12V
	SAE designation no. and/or capacity		75 min res. capacity
	Location		Engine compartment
Generator or alternator	Make		Delco Remy
	Model		1100169
	Type and rating		Diode rectified, 63 amps*
	Output at engine idle (neutral) A		--
	Ratio—gen. to crs rev.		--
Regulator	Make		Delco Remy
	Model		--
	Type		Integral with alternator
	Regu- lated	Voltage	--
		Current A	--
	Voltage test condi- tions	Temperature — °C (°F)	--
		Load A	--
Other		--	

Electrical — Starting System

Starting motor	Make		Delco Remy	
	Model		1109537	
	Engagement type		Solenoid	
Motor drive	Pinion engages from (front, rear)		Front	
	Number of teeth	Pinion	9	
		Flywheel	Manual	142
			Auto	142

* 70 amp for Hatchback Coupe.

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 4-82

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1.8 LITER L-4 (112 CID)
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 RPO L46

Electrical - Ignition System

Type	Conventional—std., opt., n.a.	Not Available	
	Transistorized—std., opt., n.a.	Not Available	
	Other (specify)	High Energy Ignition System (H.E.I.)	
Coil	Make	Delco Remy	
	Model	1115449	
	Current	Engine stopped - A	--
		Engine idling - A	--
Spark plug	Make	AC Spark Plug	
	Model	R42CTS	
	Thread (mm)	M14x1.25	
	Tightening torque—N-m (lb. ft.)	9-20 (7-15)	
	Gap	.9 (.035)	

Electrical - Suppression

Internal alternator capacitor, non-metallic high-tension cables, resistor spark plugs, ignition coil by-pass capacitor, internal AC blower motor by-pass capacitor & A/C compression diode, with radio provisions; hood grounding clip, engine to dash panel ground strap, fuse block capacitor and on "heater only" blower motors and coax capacitor.

Electrical - Instruments and Equipment

Speed-ometer	Type	Circular dial with pointer
	Trip odometer (std., opt., n.a.)	Standard
EGR maintenance indicator		Not Available
Charge indicator	Type	Tell-Tale
	Warning device	Not Available
Temperature indicator	Type	Tell-Tale, except 1JE77 model, gauge
	Warning device	Not Available
Oil pressure indicator	Type	Tell-Tale, except 1JE77 model, gauge
	Warning device	Not Available
Fuel indicator	Type	Electric gauge
	Warning device	Not Available
Wind-shield wiper	Type - standard	Electric 2-speed
	Type - optional	Intermittent windshield wiper system
	Blade length	403 (16.0)
	Swept area - cm ² (in. ²)	Coupes 4900 (759.7), sedan & wagon 4937 (765.4)
Wind-shield washer	Type - standard	Push-button
	Type - optional	Not Available
	Fluid level indicator	Not Available
Horn	Type	Vibrator
	Number used	One

Other

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 4-82

Engine Description/Carb.
 Engine Code

1.8 LITER L-4 (112 CID)
 2-BBL. CARBURETOR
 RPO L46

Drive Units - Clutch (Manual Transmission)

Make & type	Borg & Beck	
Type pressure plate springs	Diaphragm	
Total spring load—N (lb.)	5516 (1240)	
No. of clutch driven discs	One	
Clutch facing	Material	Molded type asbestos
	Manufacturer	Borg & Beck
	Part number	14049775
	Rivets/plate	36
	Rivet size	.143 x .213
	Outside & inside dia.	203.2x152.4 (8.0x6.0)
	Total eff. area-cm ² (in. ²)	142 (22.0)
	Thickness	8.128 (.320)
	Engagement cushion method	--
Release bearing	Type & method of lubrication	--
Torsional damping	Method: springs, friction material	--

Drive Units - Transmissions

Manual 3-speed (std., opt., n.a.)	Not Available
Manual 4-speed (std., opt., n.a.)	Standard
Manual 5-speed (std., opt., n.a.)	Not Available
Manual overdrive (std., opt., n.a.)	Not Available
Automatic (std., opt., n.a.)	Optional
Automatic overdrive (std., opt., n.a.)	Not Available

Drive Units - Manual Transmission

Number of forward speeds	4		
Transmission ratios	In first	3.53	
	In second	1.95	
	In third	1.24	
	In fourth	.81	
	In fifth	--	
	In overdrive	--	
	In reverse	3.42	
	Synchronous meshing, specify gears	All forward gears	
Shift lever location	Floor		
Lubricant	Capacity—L (pt.)	--	
	Type recommended	--	
	SAE viscosity number	Summer	--
		Winter	--
		Extreme cold	--

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 4-82

Engine Description/Carb.
 Engine Code

1.8 LITER L-4 (112 CID)
 2-BBL. CARBURETOR
 RPO L46

Drive Units — Automatic Transmission

Trade name		3-Speed Automatic
Type (describe)		3-Speed with Torque Converter Clutch
Selector	Location	Floor
	Ltr./No. designation	P-R-N-D-21
Gear ratios	R	2.07
	D	2.84-1.60-1.00
	L ₃	--
	L ₂	2.84-1.60
	L ₁	2.84
Max. upshift speed—drive range—km/h (mph)		--
Max. kickdown speed—drive range—km/h (mph)		--
Min. overdrive speed—km/h (mph)		--
Torque converter	Number of elements	--
	Max. ratio at stall	--
	Type of cooling (air, liquid)	Liquid
	Nominal diameter	245 (9.65)
Lubricant	Capacity—refill—L (pt.)	--
	Type recommended	Dexron II
Special transmission features		--

Drive Units — Axle or Front Wheel Drive Unit

Type (front, rear)		Front	
Description		Front differential with helical gears	
Limited slip differential, type		Not Available	
Drive pinion offset		--	
Drive pinion type		--	
No. of differential pinions		2	
Pinion adjustment (shim, other)		--	
Pinion bearing adj. (shim, other)		--	
Driving wheel bearing type		Sealed ball bearings	
Lubricant	Capacity—L (pt.)	--	
	Type recommended	--	
	SAE viscosity number	Summer	--
		Winter	--
		Extreme cold	--

Axle or Transaxle Ratio and Tooth Combinations (See "Power Teams" for axle ratio usage.)

Axle ratio or overall ratio		3.65	3.32	2.84	2.84	3.33	3.33	4.10
No. of teeth	Pinion	23	25	35	33	33	35	23
	Ring gear or gear	84	83	35	37	37	35	84
Ring gear O.D.		--	--	--	--	--	--	--
Transaxle	Transfer gear ratio	.81	.81	1.0	1.0	1.0	1.0	.81
	Final drive ratio	2.96	2.69	2.84	3.18	3.73	3.33	3.32

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 4-82

Engine Description/Carb.
 Engine Code

1.8 LITER L4 (112 CID)
 2-BBL. CARBURETOR
 RPO L46

Drive Units - Axle Shafts - Front Wheel Drive

Number used		Two		
Type (straight, solid bar, tubular, etc)	Left	Straight solid bar		
	Right	Straight solid bar (a)		
Outer diam x length* x wall thickness	Manual transmission	Left	23.8 x 320.8 (0.937 x 12.63)	
		Right	38 x 666 x 5 (1.496 x 26.22 x 0.197)	
	Automatic transmission	Left	23.8 x 320.8 (0.937 x 12.63)	
		Right	23.8 x 363 (0.937 x 14.29)	
	Optional transmission	Left	-	
		Right	-	
Slip yoke	Type	None		
	Number of teeth	None		
	Spline o.d.	None		
Universal joints	Make and mfg. no.	Inner	Saginaw	
		Outer	Saginaw	
	Number used	Two on each drive shaft		
	Type, size, plunge	Inner	Double offset - 51 mm plunge	
		Outer	Rzeppa - fixed	
	Attach (u-bolt, clamp, etc)	--		
Bearing	Type (plain, anti-friction)	Not Available		
	Lubric. (fitting, prepack)	Not Available		
Drive taken through (torque tube or arms, springs)		Wishbone lower control arm; Upper MacPherson strut		
Torque taken through (torque tube or arms, springs)		Engine mounting system		

*Centerline to centerline of universal joints, or to centerline of attachment.

(a) - Tubular R.H. shaft with manual transmission.

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 4-82

Engine Description/Carb.
 Engine Code

NOTCHBACK COUPE 1J027	HATCHBACK COUPE 1JF77	NOTCHBACK SEDAN 1J069	LIFTBACK WAGON 1J035
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Drive Units - Tires And Wheels (Standard)

Tires	Size, load range, ply		P175/80R-13BW		
	Type (bias, radial, etc.)		Glass Belted Radial		
	Inflation pressure (cold) for recommended max. vehicle load	Front-kPa (psi)	240 (35)		
		Rear-kPa (psi)	240 (35)		
Rev/mile—at 70 km/h (45 mph)					
Wheels	Type & material		Steel		
	Rim (size & flange type)		13x5.5	13x5	13x5.5
	Wheel offset		49.0 (1.93)		
	Attachment	Type (bolt or stud)	Stud		
		Circle diameter	100.0 (3.94)		
Number & size		5-M12 x 1.5 - 6H, THD. (metric)			
Spare tire and wheel (same or other)		T115/70D-14, Wheel Dia 14-width 4, Inflation 415 (60).			

Drive Units - Tires And Wheels (Optional)

Size, load range, ply		P175/80R-13WS		
Type (bias, radial, etc.)		Glass Belted Radial		
Wheel type & material		Steel		
Rim (size, flange type, and offset)		13x5.5	13x5	13x5.5
Size, load range, ply (+)		P195/70R-13 BW, WS, WL		
Type (bias, radial, etc.)		Steel Belted Radial		
Wheel type & material		Steel		
Rim (size, flange type, and offset)		13x5.5		
Size, load range, ply		--		
Type (bias, radial, etc.)		--		
Wheel type & material		Aluminum		
Rim (size, flange type, and offset)		13x5.5		
Size, load range, ply				
Type (bias, radial, etc.)				
Wheel type & material				
Rim (size, flange type, and offset)				
Spare tire and wheel (if configuration is different than road tire or wheel, describe optional spare tire and/or wheel)				

Brakes - Parking (+) Required with sport suspension, RPO F41.

Type of control		Grip handle		
Location of control		In console 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)	--		

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1987 Issued 2-17-87 Revised (*) 5-81
 10-81

Body Type And/Or
 Engine Displacement

ALL MODELS WITHOUT AUTO. TRANS. & AIR COND.	ALL MODELS WITH AUTO. TRANS. & AIR COND.
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Brakes -- Service

Brake type (std., opt., n.a.)	Drum	Front	Not available	
		Rear	Standard	
	Disc	Front	Standard	
		Rear	Not available	
Self-adjusting (std., opt., n.a.)			Standard	
Special valving	Type (proportion, delay metering, other)		Proportioning, Diagonal split circuit.	
Power brake (std., opt., n.a.)			Standard	
Booster type (remote, integral, vac., hyd., etc.)			Tandem vacuum	
Anti-skid device type (std., opt., n.a.)			Not available	
Effective area—cm ² (in. ²)*			309 (47.9)	
Gross lining area—cm ² (in. ² **			381 (59.1)	
Swept area—cm ² (in. ² ***			1624 (251.8)	
Rotor	Outer working diameter	F	247 (9.72)	
		R	--	
	Inner working diameter	F	--	
		R	--	
	Thickness	F	12.5 (0.49)	22.4 (0.88)
		R	--	
	Material & type (vented/solid)	F	Cast iron, solid	Cast iron, vented
		R	--	
Drum	Diameter (nominal)	200x45 (7.87x1.77)		
	Type and material	Cast iron, non-finned		
Wheel cylinder bore	Front	57 (2.24)		
	Rear	16 (.63)		
Master cylinder	Bore	22 (.866)		
	Stroke	33.88 (1.33)		
Pedal arc ratio			3.9:1	
Line pressure at 445 N (100 lb.) pedal load—kPa (psi)			--	
Lining clearance per shoe	Front	Self adjusting		
	Rear	--		
Brake lining	Front wheel	Bonded or riveted, rivets/seg		Riveted, In-board (a) Six rivets
		Rivet size		7.92x5.33 (0.312x0.21)
		Manufacturer		Delco Moraine
		Lining code		122 FF
		Material		Semi-metallic
		**** Primary or out-board		116.7x54.7x10.92 (4.594x2.157x.430)
	Rear wheel	Size Secondary or in-board		125x59x10.2 (4.92x2.32x0.4)
		Shoe thickness (no lining)		4.72 IB, 3.14 OB (.186 IB, 0.123 OB)
		Bonded or riveted, rivets/seg		Riveted, 8
		Manufacturer		Inland Division
		Lining code		235 FE
		Material		Organic
**** Primary or out-board		167.7x43.9x3.8 (6.60x1.73x.15)		
Size Secondary or in-board		167.7x43.9x4.8 (6.60x1.73x.19)		
Shoe thickness (no lining)		2.75 (.11)		

(a) - Integrally molded, outboard.

* Excludes rivet holes, grooves, chamfers, etc.
 ** Includes rivet holes, grooves, chamfers, etc.
 *** Total swept area for four brakes (Drum brake: Widest lining contact width for each brake x its contact circumference) (Disc brake: Square of Outer Working Dia. minus Square of Inner Working Dia. multiplied by Pi/2 for each brake)
 **** Size for drum brakes includes length x thickness

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 5-81

NOTCHBACK COUPE 1JD27	HATCHBACK COUPE 1JE77	NOTCHBACK SEDAN 1JD69	LIFTBACK WAGON 1JD35
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Steering

Manual (std., opt., n.a.)		Standard	
Power (std., opt., n.a.)		Optional (included with Z12 option)	
Adjustable steering wheel (tilt, swing, other)	Type and description	Tilt	
	(Std., opt., n.a.)	Optional	
Wheel diameter	Manual	375 mm (14.8 in.)	
	Power	375 mm (14.8 in.)	
Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)	--
		Curb to curb (l. & r.)	10.59 m (34.74 ft.)
	Inside rear	Wall to wall (l. & r.)	--
		Curb to curb (l. & r.)	--
Manual	Gear	Type	Rack and pinion
		Make	Saginaw
		Ratios	Overall 22.0:1
	No. wheel turns (stop to stop)		4.04
	Type (coaxial, linkage, etc.)		Rack & pinion with integral unit
Power	Gear	Make	Saginaw
		Type	Rack and pinion
		Ratios	Overall 16.0:1
	Pump driven by		Belt off crankshaft pulley
	No. wheel turns (stop to stop)		2.88
Linkage	Type		Center take-off tie rods, rack and pinion
	Location (front or rear of wheels, other)		Rear
	Drag links (trans. or longit.)		None
	Tie rods (one or two)		Two
Steering axis	Inclination at camber (deg.)		13.5°
	Bearings (type)	Upper	Ball bearing
		Lower	Ball joint
		Thrust	--
Steering spindle & joint type		--	
Wheel spindle	Diameter	Inner bearing	--
		Outer bearing	--
	Thread size		M20x1.5
	Bearing type		Integral double row ball, permanently lubricated
Wheel align at curb mass (wt.)	Service checking	Caster (deg.)	--
		Camber (deg.)	--
		Toe-in (outside track-mm (in.))	--
	Service reset	Caster	Not adjustable
		Camber	Not adjustable
		Toe-in	1/4° toe out
	Periodic M.V. inspection	Caster	--
		Camber	--
Toe-in		--	

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line **CAVALIER**
 Model Year **1987** Issued **11-81** Revised **10-81**

Body Type And/Or
 Engine Displacement

2-DOOR NOTCHBACK COUPE	2-DOOR HATCHBACK COUPE	4-DOOR NOTCHBACK SEDAN	4-DOOR LIFTGATE WAGON
------------------------------	------------------------------	------------------------------	-----------------------------

Suspension - General

Car leveling	Std./opt./n.a.	Not available
	Type (air, hyd., etc.)	--
	Manual/auto. controlled	--
Provision for brake dip control		Front suspension geometry
Provision for acc. squat control		Rear suspension geometry
Special provisions for car jacking		Body pickup at rocker panels
Shock absorber front & rear	Type	MacPherson strut - front; double acting hydraulic - rear
	Make	Delco
	Piston dia	--
Other special features		--

Suspension - Front

Type and description		MacPherson strut with coil springs
Travel	Full jounce	92 (3.62)
	Full rebound	86 (3.39)
Spring	Type (coil, leaf, other)	Coil
	Material	Steel
	Size (coil design height & i.d., bar length x dia.)	406.6 (16.0)x139.0 (5.47)x2932 (115.4)x12.9 (.5)
	Spring rate - N/mm (lb./in.)	16 (91)
Rate at wheel - N/mm (lb./in.)		15.3 (87.4)
Stabilizer	Type (link, linkless, frameless)	Link
	Material & bar diameter	Steel, 22.0 (.866)

Suspension - Rear

Type and description		Trailing crankarm with twisting beam
Drive and torque taken through		Not applicable
Travel	Full jounce	137 (5.39)
	Full rebound	68 (2.68)
Spring	Type (coil, leaf, other)	Progressive - rate coil
	Material	Steel
	Size (length x width, coil design height & i.d., bar length & dia.)	290 (11.42)x105 (4.13)x2626 (103.4)x13.6 (.54)
	Spring rate - N/mm (lb./in.)	23 (131) at curb weight condition
	Rate at wheel - N/mm (lb./in.)	12.6 (72)
	Mounting insulation type	Rubber - top & bottom
If leaf	No. of leaves	--
	Shackle (comp. or tens.)	--
Stabilizer	Type (link, linkless, frameless)	Linkless (optional usage only)
	Material & bar diameter	Steel
Track bar type		Not available

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 5-81
10-81

Body Type	NOTCHBACK COUPE 1JD27	HATCHBACK COUPE 1JE77	NOTCHBACK SEDAN 1JD69	LIFTBACK WAGON 1JD35
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Body - Miscellaneous Information

Type of finish (lacquer, enamel, other)	Acrylic lacquer or water base acrylic enamel	
Hood hinge location (front, rear)	Rear	
Hood counterbalance (type)	No	
Hood release control (internal, external)	Internal	
Vehicle ident. no location	Top left hand instrument panel pad	
Vent window control method (crank, friction pivot, power)	Front	None
	Rear	None (a)
Seat cushion type	Front	Polyurethane padding
	Rear	Polyurethane padding
	3rd seat	None
Seat back type	Front	Polyurethane padding
	Rear	Polyurethane padding
	3rd seat	None
Method of holding luggage compartment lid open	Torsion rods, sedan, notchback coupe. 2-telescoping gas strut rods, Hatchback coupe and Station Wagon.	
Position of spare tire storage	Flat under rear load floor	

(a) - Swing-out rear quarter windows (friction pivot) with remote controls optional for all models.

Passive Restraint System

Inflatable restraint system	Standard/optional	
	Type of charging system	
	Location (stg. whl. instru. panel, other)	
Passive seat belts	Standard/optional	
	Power/manual	
	2 or 3 point	
	Knee bar/lap belt	

Frame

Type and description (separate frame, unitized frame, partially-unitized frame)	Body - Frame integral
---	-----------------------

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1981 Issued 2-11-81 Revised (*) 10-81

Body Type	NOTCHBACK	HATCHBACK	NOTCHBACK	LIFTBACK
	COUPE	COUPE	SEDAN	WAGON
	1JD27	1JE77	1JD69	1JD35

Convenience Equipment

Power windows	Side windows	Optional
	Vent windows	Not Available
	Backlight or tailgate	Not Available
Power seats (specify type as well as availability)	Optional, six-way power seat - driver	
Reclining front seat back (r-l or both)	Standard - both	
Radio (specify type as well as availability)	Optional-AM/FM, AM/FM stereo, AM/FM stereo w/cassette tape, AM/FM stereo w/8 track tape, dual rear speakers (included w/stereo)(a)	
Rear seat speaker	Optional	
Power antenna	Not Available	
Clock	Not Available, Integral with radio digital clock	
Air conditioner (specify type)	Optional (manual control)	
Speed warning device	Not Available	
Speed control device	Optional	
Ignition lock lamp	Not Available	
Dome lamp	Standard	
Glove compartment lamp	(b)	
Luggage compartment lamp	(b)	
Underhood lamp	(b)	
Courtesy lamp	(b)	
Map lamp	Optional (2) in dome-lamp	
Cornering lamp	Not Available	
Rear window defroster electrically heated	Standard	
Rear window defogger	Not Available	
Theft protection—type	Lock mounted on steering column; locks steering wheel, transmission shift levers and ignition.	
	Plus: Anti-theft design door lock buttons, interior hood release, locking fuel filler door, lockable glovebox.	

(a) Digital clock integral with all radios.

(b) Available in optional lighting package only, consists of following:
 Headlamp "ON" warning buzzer.
 Rear compartment lamp
 Engine compartment lamp
 Glove compartment lamp
 Courtesy lamp
 Dome reading lamp
 Rear courtesy lamp on 35, 77 models

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 4-82

Vehicle Mass (weight)

Model	CURB MASS, kg. (weight, lb.)*			% PASS. MASS DISTRIBUTION				SHIPPING MASS, kg. (weight, lb.)**
	Front	Rear	Total	Pass. In Front		Pass. In Rear		
				Front	Rear	Front	Rear	
2-Door Notchback Coupe - 1JD27	692.6 (1527)	389.6 (859)	1082.2 (2386)					1050.8 (2317)
2-Door Hatchback Coupe - 1JE77	697.5 (1538)	418.8 (923)	1116.3 (2461)					1085.0 (2392)
4-Door Notchback Sedan - 1JD69	702.4 (1548)	406.4 (896)	1108.8 (2444)					1077.5 (2375)
4-Door Liftback Wagon - 1JD35	691.9 (1525)	443.4 (978)	1135.3 (2503)					1104.0 (2434)
Curb Weight - The calculated weight of a vehicle with standard equipment only as designed with the additional load of oils, lubes, coolants, and fuel filled to capacity.								
Shipping Weight - Same as base curb weight except 3 gallons of gasoline.								

* Reference - SAE J1100a, Motor vehicle dimensions, curb weight definition
 ** Shipping mass (weight) definition -

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*)

Equipment	Optional Equipment Differential Mass (weight)*			Remarks
	MASS, kg (weight, lb.)			
	Front	Rear	Total	
Air Conditioning	23.0 (+50.7)	1.0 (+2.2)	24.0 (+52.9)	
Mats, floor-front (Color Keyed)	2.0 (+ 4.4)	0.6 (+1.3)	2.6 (+ 5.7)	
Mats, floor-rear (Color Keyed)	0.4 (+ 0.8)	0.8 (+1.8)	1.2 (+ 2.6)	
Steering Power	7.4 (+16.3)	0.2 (+0.4)	7.6 (+16.7)	
Mirrors, Dual Sport Rear View (L.H.Remote,R.H. Manual Convex), Body Color.	0.4 (+ 0.8)	0 0	0.4 (+ 0.8)	
Power Door Lock System	0.6 (+ 1.3)	1.2 (+2.6)	1.8 (+ 3.9)	2-Door Models
	1.2 (+ 2.6)	1.8 (+4.0)	3.0 (+ 6.6)	4-Door Models
Power Windows	1.4 (+ 3.1)	2.2 (+4.9)	3.6 (+ 8.0)	2-Door Models
	1.8 (+ 4.0)	3.2 (+7.0)	5.0 (+11.0)	4-Door Models
Power Seat Six-Way-Driver	1.8 (+ 4.0)	1.8 (+4.0)	3.6 (+ 8.0)	
Remote Swing-Out Windows	0 0	0.4 (+0.8)	0.4 (+ 0.8)	1JD27
	0 0	0.8 (+1.8)	0.8 (+ 1.8)	1JE77
Removable Sun Roof	2.8 (+ 6.2)	2.8 (+6.2)	5.6 (+12.4)	All Except Wagon
Intermittent Windshield Wiper System	0.2 (+ 0.4)	0 0	0.2 (+ 0.4)	

* Also see Engine — General Section for dressed engine mass (weight)

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*)

Optional Equipment Differential Mass (weight)*

Equipment	MASS, kg (weight, lb)			Remarks
	Front	Rear	Total	
Quiet Sound Group	3.2 (+7.0)	4.6 (+10.1)	7.8 (+17.1)	1JD27
	2.6 (+5.7)	3.0 (+ 6.6)	5.6 (+12.3)	1JD35
	3.0 (+6.6)	4.0 (+ 8.8)	7.0 (+15.4)	1JD69
	2.6 (+5.7)	3.0 (+ 6.6)	5.6 (+12.3)	1JE77
Rear Window Wiper/Washer	-0.6 (-1.3)	3.0 (+ 6.6)	2.4 (+ 5.3)	1JD35
	-0.8 (-1.8)	4.4 (+ 9.7)	3.6 (+ 7.9)	1JE77
Cargo Area Security Cover	0 0	2.2 (+ 4.9)	2.2 (+ 4.9)	1JE77
Illuminated R.H. Visor Mirror	0.4 (+0.8)	0.2 (+ 0.4)	0.6 (+ 1.2)	
Sport Suspension	2.0 (+4.4)	1.4 (+ 3.1)	3.4 (+ 7.5)	
Rear Stabilizer	0 0	3.2 (+ 7.0)	3.2 (+ 7.0)	
Engine Block Heater (Canada)	0.2 (+0.4)	0 0	0.2 (+ 0.4)	
Automatic Speed Control	2.4 (+5.3)	0 0	2.4 (+ 5.3)	
Comfortilt Steering Wheel	0.2 (+0.4)	0 0	0.2 (+ 0.4)	
Aluminum Wheels	- 1.6 (-3.5)	- 1.6 (- 3.5)	- 3.2 (- 7.0)	
Battery Heavy Duty	5.8 (+12.8)	- 0.6 (- 1.3)	- 5.2 (+11.5)	
Special Instrumentation (Gage package with Tachometer)	0.4 (+0.8)	0.2 (+ 0.4)	0.6 (+ 1.2)	All except 77 model (Base)
Gage Package	0.4 (+0.8)	0.2 (+ 0.4)	0.6 (+ 1.2)	All except 77 model

* Also see Engine - General Section for dressed engine mass (weight).

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*)

Optional Equipment Differential Mass (weight)*

Equipment	MASS. kg. (weight, lb)			Remarks
	Front	Rear	Total	
Heavy Duty Cooling	1.4 (+3.1)	-0.2 (-0.4)	1.2 (+2.7)	
Bumper Guards	0.4 (+0.8)	0.4 (+0.8)	0.8 (+1.6)	All except 77 model
Multi-purpose Roof Carrier	1.4 (+3.1)	2.6 (+5.7)	4.0 (+8.8)	
Functional and Appearance Equipment (Level II Includes "CL" Emblem)	0.2 (+0.4)	0.2 (+0.4)	0.4 (+0.8)	
Radio AM/FM with Digital Clock	0.2 (+0.4)	0	0.2 (+0.4)	
Radio AM/FM Stereo with Digital Clock	0.6 (+1.3)	0	0.6 (+1.3)	
Radio AM/FM Stereo with 8-Track Tape and Digital Clock	1.6 (+3.5)	0.2 (+0.4)	1.8 (+3.9)	
Radio AM/FM Stereo with Cassette Tape and Digital Clock	1.6 (+3.5)	0.2 (+0.4)	1.8 (+3.9)	
Rear Seat Speaker	0	0.8 (+1.7)	0.8 (+1.7)	
Dual Rear Seat Speakers	0	1.8 (+4.0)	1.8 (+4.0)	
Automatic Transmission	23.0 (+50.7)	-2.4 (-5.3)	20.6 (+45.4)	

* Also see Engine - General Section for dressed engine mass (weight)

MVMA Specifications Form

Passenger Car

METRIC (U.S. Customary)

Car and Body Dimensions See Key Sheets for definitions

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 4-82

All dimensions to ground are for comparative purposes only. Dimensions are to be shown for all base body models of each car line.
 SAE Ref. No. refers to the definition published in SAE Recommended Practices.
 J1100a "Motor Vehicle Dimensions," unless otherwise specified.

Body Type

SAE Ref. No.	NOTCHBACK COUPE 1JD27	HATCHBACK COUPE 1JE77	NOTCHBACK SEDAN 1JD69	LIFTBACK WAGON 1JD35
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Width

SAE Ref. No.	NOTCHBACK COUPE 1JD27	HATCHBACK COUPE 1JE77	NOTCHBACK SEDAN 1JD69	LIFTBACK WAGON 1JD35
Tread - Front	W101	1406 (55.4)		
Tread - Rear	W102	1401 (55.2)		
Vehicle width	W103	1677 (66.0)	1685 (66.3)	
Body width at Sg RP - front	W117	1652 (65.0)		
Vehicle width - front doors open	W120	3684 (145.0)	3218 (126.7)	
Vehicle width - rear doors open	W121	--	2832 (111.5)	

Length

SAE Ref. No.	NOTCHBACK COUPE 1JD27	HATCHBACK COUPE 1JE77	NOTCHBACK SEDAN 1JD69	LIFTBACK WAGON 1JD35
Wheelbase	L101	2571 (101.2)		
Vehicle length	L103	4341 (170.9)	4406 (173.5)	4379 (172.4)
Overhang - front	L104	866 (34.1)	922 (36.3)	866 (34.1)
Overhang - rear	L105	904 (35.6)	913 (35.9)	942 (37.1)
Upper structure length	L123	2336 (92.0)	2799 (110.2)	2365 (93.1)
Rear wheel C/L "X" coordinate	L127	2354 (92.7)		2924 (115.1)
Cowl point "X" coordinate	L125	247 (9.7)		246 (9.7)

Height **

SAE Ref. No.	NOTCHBACK COUPE 1JD27	HATCHBACK COUPE 1JE77	NOTCHBACK SEDAN 1JD69	LIFTBACK WAGON 1JD35
Passenger Distribution (frt./rear)	PD1,2,3			**
Trunk/Cargo load				**
Vehicle height	H101	1321 (52.0)	1317 (51.9)	1369 (53.9)
Cowl point to ground	H114			
Deck point to ground	H138			
Rocker panel front to ground	H112	220 (8.7)		225 (8.9)
Bottom of door closed - front to grd.	H133	290 (11.4)		300 (11.8)
Rocker panel rear to ground	H111	214 (8.4)		226 (8.9)
Bottom of door closed - rear to grd.	H135	--	--	291 (11.5)

Ground Clearance **

SAE Ref. No.	NOTCHBACK COUPE 1JD27	HATCHBACK COUPE 1JE77	NOTCHBACK SEDAN 1JD69	LIFTBACK WAGON 1JD35
Front bumper to ground	H102	368 (14.5)	247 (9.7)	368 (14.5)
Rear bumper to ground	H104	347 (13.7)		337 (13.3)
Bumper to ground - front at curb mass (wt.)	H103	386 (15.2)	266 (10.5)	386 (15.2)
Bumper to ground - rear at curb mass (wt.)	H105	347 (14.7)		362 (14.3)
Angle of approach @ GVW	H106	28.4°		
Angle of departure @ GVW	H107	22.2°	19.2°	20.6°
Ramp breakover angle @ GVW	H147	16.4°		17.2°
Rear axle differential to ground	H153	--		
Min. running ground clearance	H156	172 (6.8)		184 (7.2)
Location of min. run. grd. clear.		Exhaust pipe		

All linear dimensions are in millimeters (inches) and all mass (weight) specifications are in kilograms (pounds).

** All vehicle height and ground clearances are made using EPA loaded vehicle weight, loading conditions.

*** A LOADED VEHICLE WEIGHT is the base vehicle weight plus all coolant and fluids necessary for operation plus 100% of the fuel capacity, plus weight of all options and accessories which weigh three pounds or more and which are sold on at least 33% of the car line, plus two occupants.

MVMA Specifications Form

Passenger Car

METRIC (U.S. Customary)

Car and Body Dimensions See Key Sheets for definitions

Car Line CAVALIER

Model Year 1982

Issued 2-11-81

Revised (*) 5-81

10-81

Body Type

SAE Ref. No.	NOTCHBACK COUPE LJD27	HATCHBACK COUPE LJE77	NOTCHBACK SEDAN LJD69	LIFTBACK WAGON LJD35
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Front Compartment

Sg RP front, "X" coordinate	L31	1113 (43.8)			
Effective head room	H61	957 (37.7)	955 (37.6)	979 (38.5)	973 (38.3)
Effective T Point head room	H75	956 (37.6)	949 (37.4)	979 (38.5)	973 (38.3)
Max. eff. leg room — accelerator	L34	1070 (42.1)		1072 (42.2)	1070 (42.1)
Sg RP — front to heel	H30	233 (9.2)		256 (10.1)	
Design H-point front travel	L17	192 (7.6)			192 (7.6)
Shoulder room	W3	1363 (53.7)			
Hip room	W5	1248 (49.1)		1241 (48.9)	
** Upper body opening to ground	H50	1242 (48.9)			1251 (49.3)
Steering Wheel Angle	H18	20°			
Back Angle	L40	25°			

Rear Compartment

Sg RP Point couple distance	L50	720 (28.3)	715 (28.1)	758 (29.8)	741 (29.2)
Effective head room	H63	927 (36.5)	926 (36.5)	961 (37.8)	954 (37.7)
Effective T Point head room	H76	922 (36.3)	920 (36.2)	961 (37.8)	956 (37.8)
Min. effective leg room	L51	792 (31.2)	785 (30.9)	870 (34.3)	840 (33.1)
Sg RP — second to heel	H31	250 (10.2)	254 (10.0)	271 (10.7)	259 (10.2)
Knee clearance	L48	20 (0.8)	21 (0.8)	18 (0.7)	5.0 (0.2)
Compartment room	L3	630 (24.8)	623 (24.5)	653 (25.7)	660 (26.0)
Shoulder room	W4	1334 (52.5)		1364 (53.7)	
Hip room	W6	1265 (49.8)	1247 (49.1)	1242 (48.9)	1244 (49.0)
** Upper body opening to ground	H51			1256 (49.5)	

Luggage Compartment

Usable luggage capacity — L(cu. ft.)	V1	374 (13.2)		386 (13.6)	
** Lifter height	H195	830 (32.7)	834 (32.8)	830 (32.7)	

All linear dimensions are in millimeters (inches).

** EPA LOADED VEHICLE WEIGHT, LOADING CONDITIONS

ALL INTERIOR DIMENSIONS ARE MEASURED WITH THE SEATING REFERENCE POINT (SgRP) _____ mm (1 SEAT ADJUSTER NOTCH) FORWARD OF REARMOSEST SEAT POSITION.

MVMA Specifications Form Passenger Car

METRIC (U.S. Customary)

Car and Body Dimensions See Key Sheets for definitions

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 4-82

Body Type	SAE Ref. No.	HATCHBACK	LIFTBACK
		COUPE 1JE77	WAGON 1JD35

Station Wagon - Third Seat

Shoulder room	W85	
Hip room	W86	NOT
Effective leg room	L86	APPLICABLE
Effective head room	H86	
Effective T-point head room	H89	
Seat facing direction	SD1	

Station Wagon - Cargo Space

Cargo length - open - front	L200		--
Cargo length - open - second	L201		--
Cargo length - closed - front	L202		1709 (67.3)
Cargo length - closed - second	L203		980 (38.6)
Cargo length at belt - front	L204		1581 (62.2)
Cargo length at belt - second	L205	NOT	837 (33.0)
Cargo width - wheelhouse	W201	APPLICABLE	944 (37.2)
Rear opening width at floor	W203		1226 (48.3)
Opening width at belt	W204		1206 (47.5)
Max rear opening width above belt	W205		970 (38.2)
Cargo height	H201		846 (33.3)
Rear opening height	H202		764 (30.1)
Tailgate to ground height	H250		553 (21.8)
Front seat back to load floor height	H197		--
Cargo volume index - m ³ (ft. ³)	V2		1823L (64.4 cu.ft.)**
Hidden cargo volume - m ³ (ft. ³)	V4		--

Hatchback - Cargo Space

Front seat back to load floor height	H197	595 (23.4)	
Cargo length at front seat back height	L208	1124 (44.3)	NOT
Cargo length at floor - front	L209	1621 (63.8)	APPLICABLE
Cargo volume index - m ³ (ft. ³)	V3	1089 (38.5)*	
Hidden cargo volume - m ³ (ft. ³)	V4	--	

A printed or computer tape supplement containing additional car and body dimensions and/or drawings (based in part on SAE J1100a "Motor Vehicle Dimensions") may be available from the manufacturer.

All dimensions are in millimeters (inches).

* V-11 - Hatchback, cargo volume index - second seat - up, 453 (16.0)

** V-10 - Station Wagon, cargo volume index - second seat - up, 965 (34.1)

MVMA Specifications Form

Passenger Car
METRIC (U.S. Customary)

Car and Body Dimensions See Key Sheets for definitions

Car Line CAVALIER
Model Year 1982 Issued 2-11-81 Revised (*) _____

Body Type

NOTCHBACK COUPE 1JD27	HATCHBACK COUPE 1JE77	NOTCHBACK SEDAN 1JD69	LIFTBACK WAGON 1JD35
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Vehicle Fiducial Marks

Fiducial Mark Number *	Define Coordinate Location		
Front	X	FIDUCIAL MARK TO VERTICAL BASE GRID LINE - FRONT, MEASURED HORIZONTALLY FROM BASE GRID LINE TO THE FRONT FIDUCIAL MARK LOCATED ON TOP OF FRONT SEAT ADJUSTER MOUNTING BOLT.	
	Y	FIDUCIAL MARK TO CENTERLINE OF CAR - FRONT, WIDTH MEASUREMENT MADE FROM CENTERLINE OF CAR TO THE FIDUCIAL MARK LOCATED ON TOP OF THE FRONT SEAT ADJUSTER MOUNTING BOLT	
	Z	FIDUCIAL MARK TO HORIZONTAL BASE GRID LINE - FRONT, MEASURED VERTICALLY FROM BASE GRID LINE TO FRONT FIDUCIAL MARK LOCATED ON TOP OF THE FRONT SEAT ADJUSTER MOUNTING BOLT.	
Rear	X	FIDUCIAL MARK TO VERTICAL BASE GRID LINE - REAR, MEASURED HORIZONTALLY FROM THE BASE GRID LINE TO REAR FIDUCIAL MARK LOCATED ON REAR UNDERBODY CROSSBAR.	
	Y	FIDUCIAL MARK TO CENTERLINE OF CAR - REAR, WIDTH MEASUREMENT MADE FROM CENTERLINE OF CAR TO FIDUCIAL MARK LOCATED ON REAR UNDERBODY CROSSBAR.	
	Z	FIDUCIAL MARK TO HORIZONTAL BASE GRID LINE - REAR, MEASURED VERTICALLY FROM BASE GRID LINE TO REAR FIDUCIAL MARK LOCATED ON REAR UNDERBODY CROSSBAR.	
Fiducial Mark Number			
Front	W21	504.5 (19.9)	504 (19.8)
	L54	2746 (108.1)	
	H81	246 (9.7)	
	H181	CURB 292.8 (11.5)	300.0 (11.8)
	** H183	EPA 270.7 (10.7)	278.1 (10.9)
Rear	W22	440 (17.3)	
	L55	4900 (192.9)	4951 (194.9)
	H82	362 (14.3)	
	H182	CURB 413.2 (16.3)	429.9 (16.9)
	** H164	EPA 386.9 (15.2)	405.2 (15.9)

* Reference — SAE Recommended Practice, J182a, A Motor Vehicle Fiducial Marks — September, 1973.
All linear dimensions are in millimeters (inches).

** EPA LOADED VEHICLE WEIGHT, LOADING CONDITIONS

MVMA Specifications Form Passenger Car

Car Line CAVALIER
 Model Year 1982 Issued 2-11-81 Revised (*) 10-81

METRIC (U.S. Customary)

Car and Body Dimensions See Key Sheets for definitions

Body Type	SAE Ref. No.	NOTCHBACK COUPE 1JD27	HATCHBACK COUPE 1JE77	NOTCHBACK SEDAN 1JD69	LIFTBACK WAGON 1JD35
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Glass

Backlight slope angle	H121	51.5°	70.0°	49.0°	35.5°
Windshield slope angle	H122	58.0°		55.0°	
Tumble-Home	W122	21.5°		21.0°	
Windshield glass exposed surface area - cm ² (in ²)	S1	7487.4(1160.8)			
Side glass exposed surface area - cm ² (in ²)	S2	10910.6(1691.6)	11477.9(1779.5)	11532.1(1787.9)	16955.2(2628.7)
Backlight glass exposed surface area - cm ² (in ²)	S3	4892.4(758.5)	8685.3(1346.6)	5691.1(882.3)	4892.4(758.5)
Total glass exposed surface area - cm ² (in ²)	S4	23290.4(3610.9)	27650.6(4286.9)	24697.4(3831.0)	29335.0(4548.0)
Windshield glass type		Curved - Laminated Plate			
Side glass type		Curved - Tempered Plate			
Backlight glass type		Curved - Tempered Plate			

Lamps and Headlamp Shape*

Height above ground to center of bulb or marker	Headlamp (H127)	Highest**	632.6 (24.9)	629.1 (24.8)	632.6 (24.9)	
		Lowest	--			
	Taillamp (H128)	Highest	721.4 (28.4)	649.9 (25.6)	721.4 (28.4)	565.6 (22.3)
		Lowest	--			
Sidemarker	Front	482.0 (19.0)				
	Rear					733.2 (28.9)
Distance from C/L of car to center of bulb	Headlamp	Inside				
		Outside**				
	Taillamp	Inside				
		Outside				
	Directional	Front				
		Rear				
Headlamp shape						

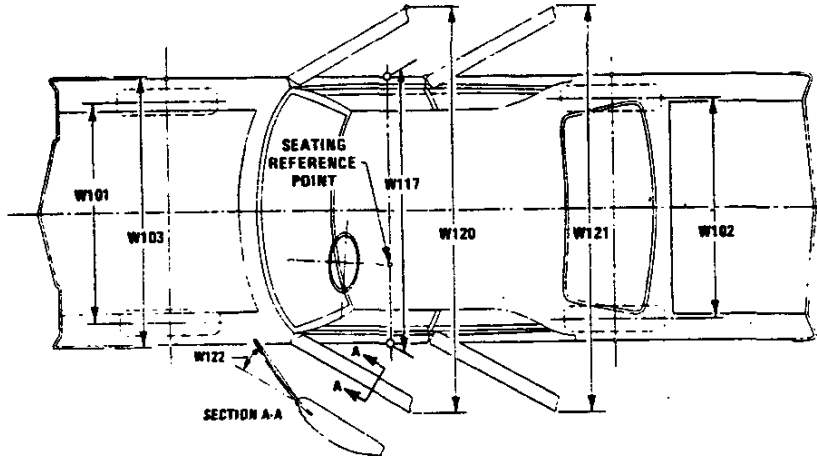
* Measured at curb mass (weight)

** If single headlamps are used enter here

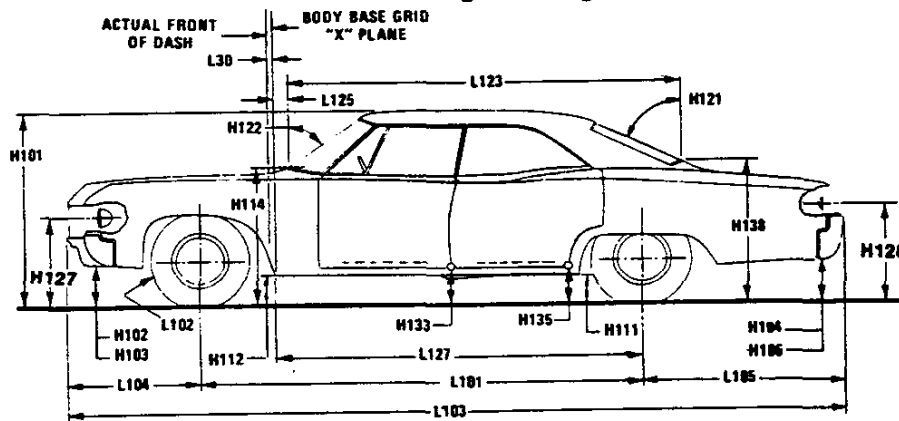
MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Exterior Car And Body Dimensions – Key Sheet

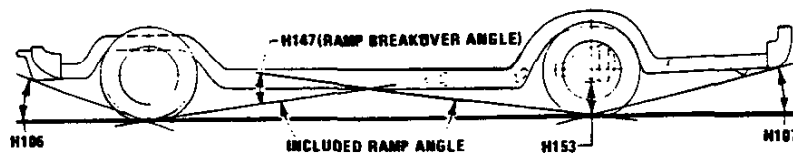
Exterior Width



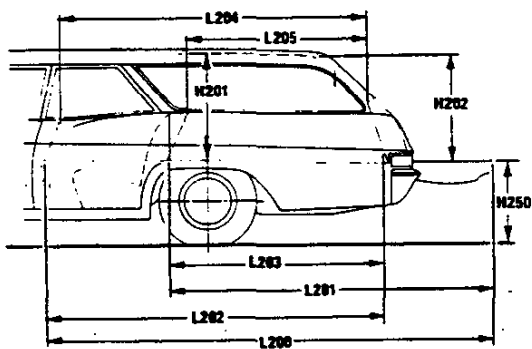
Exterior Length & Height



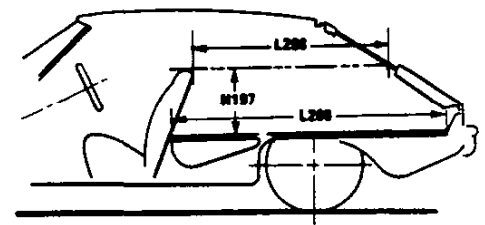
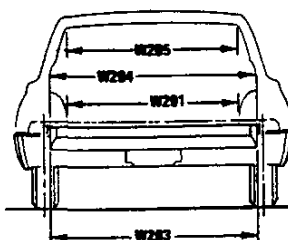
Exterior Ground Clearance



Cargo Space



Station Wagon

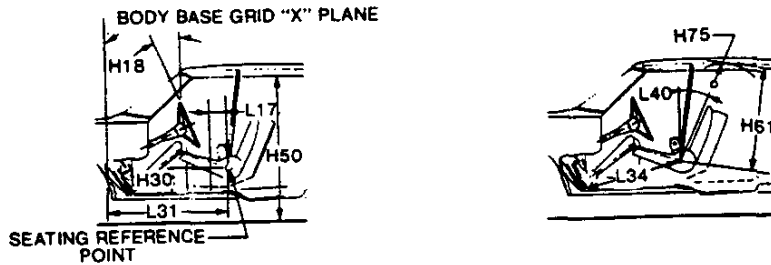


Hatchback

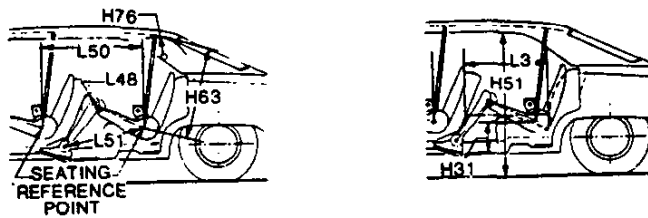
MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Interior Car And Body Dimensions — Key Sheet

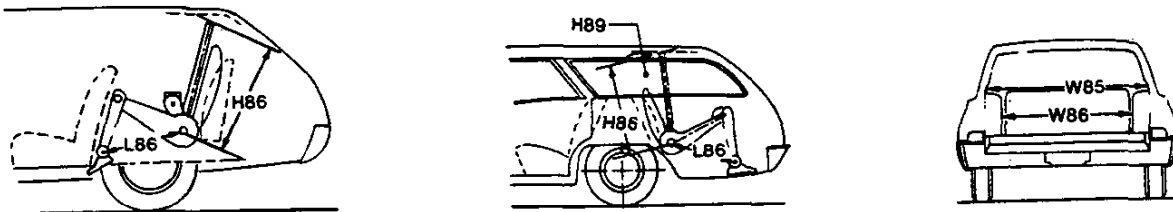
Front Compartment



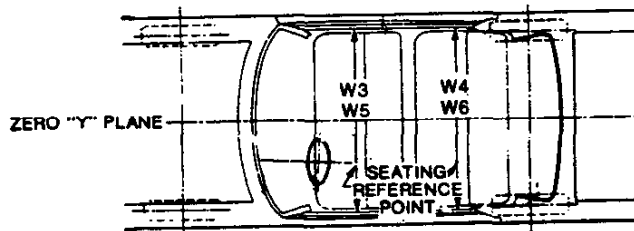
Rear Compartment



Third Seat



Interior Width



MVMA Specifications Form

Passenger Car

METRIC (U.S. Customary)

Exterior Car And Body Dimensions — Key Sheet

Dimensions Definitions

Seating Reference Point

SEATING REFERENCE POINT means the manufacturer's design reference point which —

- (a) Establishes the rearmost normal design driving or riding position of each designated seating position in a vehicle;
- (b) Has coordinates established relative to the design vehicle structure;
- (c) Simulates the position of the pivot center of the human torso and thigh; and
- (d) Is the reference point employed to position the two dimensional templates described in SAE Recommended Practice J826, "Manikins for Use in Defining Vehicle Seating Accommodations," November 1962.

Width Dimensions

- W101 TREAD—FRONT. The dimension measured between the tire centerlines at the ground.
- W102 TREAD—REAR. The dimension measured between the tire centerlines at the ground. In case of dual wheels, the dimension will be measured to the centerline of tire and wheel assemblies.
- W103 VEHICLE WIDTH. The maximum dimension measured between the widest point on the vehicle, excluding exterior mirrors, flexible mud flaps, marker lamps, but including bumpers, moldings, sheet metal protrusions or dual wheels, if standard equipment.
- W117 BODY WIDTH AT SgRP—FRONT. The dimension measured laterally between the widest points on the body at the SgRP-front, excluding door handles, applied moldings, or appliques.
- W120 VEHICLE WIDTH—FRONT DOORS OPEN. The dimension measured between the widest point on the front doors in maximum hold-open position.
- W121 VEHICLE WIDTH—REAR DOORS OPEN. The dimension measured between the widest point on the rear doors in maximum hold-open position. For vehicles with a rear door on only one side, this dimension is to the zero "Y" plane.
- W122 TUMBLE HOME. STRAIGHT SIDE GLASS. The angle measured from a vertical to the outside surface of the front door glass at the SgRP "X" plane.
CURVED SIDE GLASS. The angle measured from a vertical to a chord extending from the upper DLO to the lower DLO at the outside surface of the front door glass at the front SgRP "X" plane.

Length Dimensions

- L30 FRONT OF DASH "X" COORDINATE. A minus (-) dimension indicates actual front of dash in forward of the zero "X" plane.
- L101 WHEELBASE (WB). The dimension measured longitudinally between front and rear wheel centerlines. In case of dual rear axles, the dimension shall be to the midpoint of the centerlines of the rear wheels.
- L102 TIRE SIZE. As specified by the manufacturer.
- L103 VEHICLE LENGTH. The maximum dimension measured longitudinally between the foremost point and the rearmost point on the vehicle, including bumper, bumper guards, tow hooks and/or rub strips, if standard equipment.
- L104 OVERHANG—FRONT. The dimension measured longitudinally from the centerline of the front wheels to the foremost point on the vehicle including bumper, bumper guards, tow hooks and/or rub strips, if standard equipment.

- L105 OVERHANG—REAR. The dimension measured longitudinally from the centerline of the rear wheels; or in the case of dual rear axles, the dimension shall be the midpoint of the centerlines of the rear wheels, to the rearmost point on the vehicle, including rear bumpers, bumper guards, tow hooks and rub strips, if standard equipment.
- L123 UPPER STRUCTURE LENGTH. The dimension measured longitudinally from the cowl point to the deck point.
- L127 REAR WHEEL CENTERLINE "X" COORDINATE or in the case of dual rear axles, the coordinate shall be in the midpoint of the distance between the rear axle centerlines.
- L125 COWL POINT "X" COORDINATE.

Height Dimensions

- H101 VEHICLE HEIGHT. The dimension measured vertically from the highest point on the vehicle body to ground.
- H114 COWL POINT TO GROUND. Measured at zero "Y" plane.
- H138 DECK POINT TO GROUND. Measured at zero "Y" plane.
- H112 ROCKER PANEL—FRONT TO GROUND. The dimension measured vertically from the foremost point on the bottom of the rocker panels, excluding flanges, to ground.
- H132 BOTTOM OF DOOR OPEN—FRONT TO GROUND. The dimension measured vertically from the bottom outside corner of the door on the lock pillar side, in maximum hold-open position, to ground.
- H111 ROCKER PANEL—REAR TO GROUND. The dimension measured vertically from the bottom of the rocker or side quarter panel at the front of the rear wheel opening, excluding flanges, to ground.
- H134 BOTTOM OF DOOR OPEN—REAR TO GROUND. The dimension measured vertically from the bottom outside corner of the door on the lock pillar side, in maximum hold-open position, to ground.
- H135 BOTTOM OF DOOR CLOSED—REAR TO GROUND. The dimension measured vertically from the bottom outside corner of the door on the lock pillar side, in maximum closed position, to ground.
- H121 BACKLIGHT SLOPE ANGLE. The angle between the vertical reference line and the surface of backlight at vehicle zero "Y" plane. For curve backlight, the angle is to chord of backlight arc from lower DLO to upper DLO.
- H122 WINDSHIELD SLOPE ANGLE. The angle between the vertical reference line and a chord of the windshield are running from the lower DLO to the upper DLO at the vehicle zero "Y" plane. In the case of wrap over glass, the angle to be measured will be formed by a chord 18.0 in. (457 mm) long, drawn from the lower DLO to the intersecting point on the windshield.
- H127 HEADLAMP TO GROUND—CURB WEIGHT. The dimension measured vertically from the centerline of the lowest headlamp lens to ground.
- H128 TAILLAMP TO GROUND—CURB WEIGHT. The dimension measured vertically from the centerline of the upper bulb to ground.

Ground Clearance Dimensions

- H102 FRONT BUMPER TO GROUND. The minimum dimension measured vertically from the lowest point on the front bumper to ground, including bumper guards, if standard equipment.

MVMA Specifications Form

Passenger Car

METRIC (U.S. Customary)

Interior Car And Body Dimensions — Key Sheet

Dimensions Definitions

- H103 FRONT BUMPER TO GROUND—CURB WEIGHT. Measured in the same manner as H104.
- H104 REAR BUMPER TO GROUND. The minimum dimension measured vertically from the lowest point on the rear bumper to ground, including bumper guards, if standard equipment.
- H105 REAR BUMPER TO GROUND—CURB WEIGHT. Measured in the same manner as H104.
- H106 ANGLE OF APPROACH. The angle measured between a line tangent to the front tire static loaded radius are the initial point of structural interference forward of the front tire to ground. The limiting structural component shall be designated.
- H107 ANGLE OF DEPARTURE. The angle measured between a line tangent to the rear tire static loaded radius are the initial point of structural interference rearward of the rear tire to ground. The limiting component shall be designated.
- H147 REAR BREAKOVER ANGLE. The angle measured between two lines tangent to the front and rear tire static loaded radius and intersecting at a point on the underside of the vehicle which defines the largest ramp over which the vehicle can roll.
- H153 REAR AXLE DIFFERENTIAL TO GROUND. The minimum dimension measured from the rear axle differential to ground.
- H156 MINIMUM RUNNING GROUND CLEARANCE. The minimum dimension measured from the sprung vehicle to ground. Specify location.

Front Compartment Dimensions

- PD1 PASSENGER DISTRIBUTION—FRONT.
- L31 SgRP—FRONT "X" COORDINATED.
- H61 EFFECTIVE HEAD ROOM—FRONT. The dimension measured along a line 8 deg. rear of vertical from the SgRP—front to the headlining, plus 4.0 in. (102 mm).
- H75 EFFECTIVE T-POINT HEAD ROOM—FRONT. The minimum radius from the T-point to the headlining plus 30 in. (762 mm).
- L34 MAXIMUM EFFECTIVE LEG ROOM—ACCELERATOR. The dimension measured along a line from the ankle pivot center to the SgRP—front plus 10.0 in. (254 mm) measured with right foot on the un-depressed accelerator pedal. For vehicles with SgRP to heel (H30) greater than 18 in., the accelerator pedal may be depressed as specified by the manufacturer. If the accelerator is depressed, the manufacturer shall place foot flat on pedal and note the depression of the pedal.
- H30 SgRP—FRONT TO HEEL. The dimension measured vertically from the SgRP—front to the accelerator heel point.
- L17 DESIGN H-POINT—FRONT TRAVEL. The dimension measured horizontally between the design H-point—front in the foremost and rearmost seat trace positions.
- W3 SHOULDER ROOM—FRONT. The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the SgRP—front within the belt line and 10.0 in. (254 mm) above the SgRP—front.
- W5 HIP ROOM—FRONT. The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the SgRP—front within 1.0 in. (25 mm) below and 3.0 (76 mm) above the SgRP—front and 3.0 (76 mm) fore and aft of the SgRP—front.
- H150 UPPER BODY OPENING TO GROUND—FRONT. The dimension measured vertically from the trimmed body opening to the ground on the SgRP—front "X" plane.

- H18 STEERING WHEEL ANGLE. The angle measured from a vertical to the surface plane of the steering wheel.
- L40 BACK ANGLE—FRONT. The angle measured between a vertical line through the SgRP—front and the torso line. If the seatback is adjustable, use the normal driving and riding position specified by the manufacturer.

Rear Compartment Dimensions

- PD2 PASSENGER DISTRIBUTION—SECOND.
- L50 SgRP COUBLE DISTANCE. The dimension measured horizontally from the driver SgRP—front to the SgRP—second.
- H63 EFFECTIVE HEAD ROOM—SECOND. The dimension measured along a line 8 deg. rear of vertical from the SgRP to the headlining, plus 4.0 in. (102 mm).
- H76 EFFECTIVE T-POINT HEAD ROOM—SECOND. Measured in the same manner as H75.
- L51 MINIMUM EFFECTIVE LEG ROOM—SECOND. The dimension measured along a line from the ankle pivot center to the SgRP—second plus 10.0 in. (254 mm).
- H31 SgRP—SECOND TO HEEL. The dimension measured vertically from the SgRP—second to the two dimensional device heel point on the depressed floor covering.
- L48 KNEE CLEARANCE—SECOND. The minimum dimension measured from the knee pivot to the back of front seatback minus 2.0 in. (51 mm).
- L3 COMPARTMENT ROOM—SECOND. The dimension measured horizontally from the back of front seat to the front of the second seatback at a height tangent to the top of the second seat cushion.
- W4 SHOULDER ROOM—SECOND. The minimum dimension measured laterally between trimmed surfaces on the "X" plane through the SgRP—second within 10.0-16.0 in. (254-406 mm) above the SgRP—second.
- W6 HIP ROOM—SECOND. Measured in the same manner as W5.
- H51 UPPER BODY OPENING TO GROUND—SECOND. The dimension measured vertically from the trimmed body opening to the ground on the "X" plane 13.0 in. (330 mm) forward of the SgRP—second.

Luggage Compartment Dimensions

- V1 USABLE LUGGAGE CAPACITY—Total of volumes of individual pieces of standard luggage set plus H-boxes stowed in the luggage compartment in accordance with the procedure described in paragraph 8.2 of SAE-J1100a.
- H195 LIFTOVER HEIGHT. The dimension measured vertically from the luggage compartment lower opening at the zero "Y" plane to ground.

Station Wagon — Third Seat Dimensions

- PD3 PASSENGER DIRECTION—THIRD.
- W85 SHOULDER ROOM—THIRD. Measured in the same manner as W5.
- W86 HIP ROOM—THIRD. Measured in the same manner as W5.
- L86 EFFECTIVE LEG ROOM—THIRD. The dimension measured along a line from the ankle pivot center to the SgRP—third plus 10.0 in. (254 mm).
- H86 EFFECTIVE HEAD ROOM—THIRD. The dimension, measured along a line 8 deg. from the SgRP—third to the headlining rear of vertical plus a constant of 4.0 in. (102 mm).
- H89 EFFECTIVE T-POINT HEAD ROOM—THIRD. Measured in the same manner as H75.

MVMA Specifications Form

Passenger Car

METRIC (U.S. Customary)

Interior Car And Body Dimensions — Key Sheet

Dimensions Definitions

Station Wagon — Cargo Space Dimensions

- L200 CARGO LENGTH—OPEN—FRONT. The minimum dimension measured longitudinally from the back of the front seatback at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the open tailgate or cargo surface if the rear closure is a conventional door type tailgate, at the zero "Y" plane.
- L201 CARGO LENGTH—OPEN—SECOND. The dimension measured longitudinally from the back of the second seatback at the height of the undepressed floor covering on the open tailgate or cargo floor surface if the rear closure is a conventional door type tailgate, at the zero "Y" plane.
- L202 CARGO LENGTH—CLOSED—FRONT. The minimum dimension measured horizontally from the back of the front seat at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the closed tailgate or taildoor for station wagons, trucks and mpv's at the zero "Y" plane.
- L203 CARGO LENGTH—CLOSED—SECOND. The dimension measured horizontally from the back of the second seat at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the closed tailgate or taildoor for station wagons, trucks and mpv's at the zero "Y" plane.
- L204 CARGO LENGTH AT BELT—FRONT. The minimum dimension measured horizontally from the back of the front seatback at the seatback top to the foremost normal surface of the closed tailgate or inside surface of the cab back panel at the height of the belt, on the zero "Y" plane.
- L205 CARGO LENGTH AT BELT—SECOND. The minimum dimension measured horizontally from the back of the second seatback at the seatback top to the foremost normal surface of the closed tailgate at the height of the belt, on the zero "Y" plane.
- W201 CARGO WIDTH—WHEELHOUSE. The minimum dimension measured laterally between the trimmed wheelhousings at floor level. For any vehicle not trimmed, measure the sheet metal.
- W203 REAR OPENING WIDTH AT FLOOR. The minimum dimension measured laterally between the limiting interferences of the rear opening at floor level.
- W204 REAR OPENING WIDTH AT BELT. The minimum dimension measured laterally between the limiting interferences of the rear opening at belt height or top of pick up box.
- W205 REAR OPENING WIDTH ABOVE BELT. The minimum dimension measured laterally between the limiting interferences of the rear opening above the belt height.

- H201 CARGO HEIGHT. The dimension measured vertically from the top of the undepressed floor covering to the headlining at the rear wheel "X" coordinated on the zero "Y" plane.
- H202 REAR OPENING HEIGHT. The dimension measured vertically from the top of the undepressed floor covering to the upper trimmed opening on the zero "Y" plane with rear door fully open.
- H250 TAILGATE TO GROUND (CURB WEIGHT). The dimension measured vertically from the top of the undepressed floor covering on the lowered tailgate to ground on the zero "Y" plane.
- V2 STATION WAGON
Measured in inches:
$$\frac{W4 \times H201 \times L204}{1728} = \text{ft.}^3$$

Measured in mm:
$$\frac{W4 \times H201 \times L204}{10^9} = \text{m}^3(\text{cubic meter})$$
- V4 HIDDEN CARGO VOLUME. As specified by the manufacturer.

Hatchback — Cargo Space Dimensions

- All hatchback cargo dimensions are to be taken with the front seat in full down and rear position, and the rear seat folded down. The hatchback door is in the closed position. (For electrically adjusted seats, see the manufacturer's specifications for Design "H" Point).
- H197 FRONT SEATBACK TO LOAD HEIGHT. The dimension measured vertically from the horizontal tangent to the top of the seatback to the undepressed floor covering.
- L208 CARGO LENGTH AT FRONT SEATBACK HEIGHT. The minimum horizontal dimension from the "X" plane tangent to the rearmost surface of the driver's seatback to the inside limiting interference of the hatchback door on the vehicle zero "Y" plane.
- L209 CARGO LENGTH AT FLOOR—FRONT—HATCHBACK. The minimum horizontal dimension measured at floor level from the rear of the front seatback to the normal limiting interference of the hatchback door on the vehicle zero "Y" plane.
- V3 HATCHBACK.
Measured in inches:
$$\frac{L208 + L209}{2} \times W4 \times H197 = \text{ft.}^3$$

Measured in mm:
$$\frac{L208 + L209}{2} \times W4 \times H197 = \text{m}^3(\text{cubic meter})$$