

MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

1992

Manufacturer SATURN CORPORATION GENERAL MOTORS CORPORATION	Vehicle Line COUPE SC	
Mailing Address SATURN CORPORATION 1420 STEPHENSON HWY. MAILDROP 39 TROY, MI 48007-7025	Issued OCTOBER, 1991	Revised

Direct questions concerning these specifications to the manufacturer listed above.

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



Motor Vehicle Manufacturers Association
of the United States, Inc.

Forms Provided by Technical Affairs Division

MVMA Specifications

METRIC (U.S. Customary)

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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 compilation and are subject to change without notice or incurring obligation by the manufacturer.
4. Additional Vehicle Dimensions (based in part on SAE J1100 "Motor Vehicle Dimensions") may be available from the manufacturer.

MVMA Specifications

Vehicle Line COUPE SC
 Model Year 1992 Issued 10-91 Revised _____

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Vehicle Origin

Design & development (company)	SATURN CORPORATION/GENERAL MOTORS CORPORATION
Where built (country)	U.S.A.
Authorized U.S. Sales marketing representative	SATURN CORPORATION

Vehicle Models

Model Description & Drive (FWD/RWD/AWD/4WD)*	Make, Vehicle Models, Series, Body Type (Mfg's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk/Cargo Load-Kilograms (Pounds)	EPA Fuel Economy (City/Hwy)
Saturn Two-Door Coupe (FWD) SC	ZZB27	4 (2/2)	52.0 kg. (115 lbs.)	24/33 (M5) 23/32 (A4)

* FWD - Front Wheel Drive RWD - Rear Wheel Drive AWD - All Wheel Drive 4WD - Four Wheel Drive

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Power Teams

SAE J1349 Net bhp (brake hrspwr) and Net Torque corrected to 77 deg. F / 25 deg. C and 29.61 in. Hg/100 kPA atmos. press.

		A	B	C	D	
E N G I N E	Engine Code	DOHC (LLO)	DOHC (LLO)			
	Displacement Liters (cu. in.)	1.9L (116.03)	1.9L (116.03)			
	Induction system (FI, Carb, etc.)	Port Fuel Injection	Port Fuel Injection			
	Compression ratio	9.5:1	9.5:1			
	SAE Net at RPM	Power kW (bhp)	92.5 (124) @ 6,000	92.5 (124) @ 6,000		
		Torque Newton meters (lb. ft.)	166 (122) @ 4,800	166 (122) @ 4,800		
Exhaust Single, dual	Single	Single				
T R A N S	Transmission/ Transaxle	Manual Transmission 5-Speed	Automatic Transmission 4-Speed			
	Axle Ratio (std. first)	4.060	4.133			

[illegible]

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Engine Description
Engine Code

1.9L L4 DOHC (116 CID) 16-VALVE
PORT FUEL INJECTION

ENGINE - GENERAL

Type & description (inline, V, angle,
flat, location, front, mid, rear,
transverse, longitudinal, sohc, dohc,
ohv, hemi, wedge, pre-chamber, etc.)

Inline, Front, Transverse, DOHC

Manufacturer	Saturn Corporation/General Motors Corporation	
No. of cylinders	4	
Bore	82 mm (3.23 in.)	
Stroke	90 mm (3.54 in.)	
Bore spacing (C/L to C/L)	94 mm (3.70 in.)	
Cyl block matl & mass kg (lbs.) (machined)	319M Cast Aluminum W/Iron Cylinder Liners, 23.53 Kg. (51.88 lbs.)	
Cylinder block deck height	219.88 mm (8.66 in.)	
Cylinder block length	420.80 mm (16.57 in.)	
Deck clearance (minimum) (above or below block)	None	
Cyl. head material & mass kg (lbs.)	319M Aluminum Alloy, 12.47 Kg. (27.50 lbs.)	
Cylinder head volume cu. cm. (cu. in.)	43.00 cu. cm (2.62 cu. in.)	
Cylinder liner material	Iron	
Head gasket thickness (compressed)	1.36 mm (.054 in.)	
Minimum combustion chamber total volume cu. cm. (cu. in.)	55.91 (3.41 cu. in.)	
Cyl. no. system (front to rear)*	L. Bank	1-2-3-4
	R. Bank	
Firing order	1-3-4-2	
Intake manifold matl & mass kg (lbs.)**	Cast Aluminum, 5.40 Kg. (11.90 lbs.)	
Exh. manifold matl & mass kg (lbs.)**	409 Stainless Steel, 3.35 Kg. (7.39 lbs.)	
Knock sensor (number & location)	1 Between Cylinders 2 & 3	
Fuel required unleaded, diesel, etc.	Unleaded	
Fuel antiknock index (R + M) / 2	87	
Engine mounts	Quantity	2
	Matl and type (elastomeric, hydroelastic, hydraulic damper, etc.)	Torque Axis Elastomeric
	Added isolation (sub-frame, crossmember, etc.)	None
Total dressed engine mass (wt) dry***	96.88 Kg. (213.62 lbs.)	

Engine - Pistons

Material & mass, g
(weight, oz.) - piston only

Hypereutectic Aluminum Alloy, 283 g. (9.99 oz.)

Engine Camshaft

Location	Cylinder Head	
Material & mass kg (weight, lbs.)	G.M. 120M Grey Cast Iron; 2.01 Kg. Intake (4.43 lbs.); 2.00 Kg. Exhaust (4.41 lbs.)	
Drive type	Chain/belt	Chain
	Width/pitch	9.52 mm Pitch (.374 in.)

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

**Finished state.

***Dressed engine mass (weight) includes the following:

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PORT FUEL INJECTION

Engine - Valve System

Hydraulic lifters (std., opt., n.a.)	Standard
Valves	Number intake/exhaust 8/8
	Head O.D. intake/exhaust 32.3 mm (1.27 in.)/27.5 mm (1.08 in.)

Engine - Connecting Rods

Material & mass kg., (weight, lbs.)*	Forged, Heat Treated, SAE 1141 Steel, .58 Kg. each (1.28 lbs.)
Length (axis centerline to centerline)	145 mm (5.71 in.)

Engine - Crankshaft

Material & mass kg., (weight, lbs.)*	Cast Nodular Iron W/Deep Rolled Fillets All Journals, 11.38 Kg. (25.09 lbs.)
End thrust taken by bearing (no.)	3
Length & number of main bearings	481.46 mm (18.96 in.)/5 Bearings
Seal (material, one, two piece design, etc.)	Front Molded One-Piece Lip Seal W/Garter Spring
	Rear Molded One-Piece Lip Seal W/Garter Spring

Engine - Lubrication System

Normal oil pressure kPa (psi) @ eng rpm	N/A
Type oil intake (floating, stationary)	Stationary
Oil filter sys. (full flow, part, other)	Full Flow
Capacity of c/case, less filter-refill-L (qt.)	3.79 L (4.00 qt.)

Engine - Diesel Information

(Not Available)

Diesel engine manufacturer	
Glow plug, current drain at 0 deg. F	
Injector	Type
Nozzle	Opening pressure kPa (psi)
Pre-chamber design ¹	
Fuel injection pump	Manufacturer
	Type
Fuel inj. pump drive (bel, chain, gear)	
Supplementary vacuum source (type)	
Fuel heater (yes/no)	
Water separator, description (std., opt.)	
Turbo manufacturer	
Oil cooler-type (oil to engine coolant; oil to ambient air)	
Oil filter	

Engine - Intake System

(Not Available)

Turbo charger - manufacturer	
Super charger - manufacturer	
Intercooler	

* Finished State

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PORT FUEL INJECTION

Engine - Cooling System

Coolant recovery system (std, opt, n.e.)		Standard Pressurized Spelling Reservoir System
Coolant fill location (rad., bottle)		At Pressurized Bottle
Radiator cap relief valve pressure kPa (psi)		124.11 - 137.9 kPa (18-20 psi) Pressure Cap at Reservoir
Circulation thermostat	Type (choke, bypass)	Bypass
	Starts to open @ deg's C(F)	85 deg. C (185 deg. F)
Water Pump	Type (centrifugal, other)	Centrifugal
	GPM 1000 pump rpm	Approximately 10 GPM through Radiator, Heater
	Number of pumps	1.0
	Drive (V-belt, other)	Multi-Vee Drive Belt
	Bearing type	Double Row Ball Integral W/Pump
	Impeller material	Stamped Steel
	Housing material	Stamped Steel
By-pass recirculation type (inter., ext.)		Internal
Cooling system capacity	With heater - L (qt.)	6.70 L (7.08 qt.)
	With air conditioner - L (qt.)	6.70 L (7.08 qt.)
	Opt. equip. specify - L (qt.)	
Water jackets full length of cyl (yes, no)		Yes
Water all around cylinder (yes, no)		No
Water jackets open at head face (yes, no)		Yes
Radiator core	Std., A/C, HD	Standard A/C
	Type (cross-flow, etc.)	Cross Flow
	Construction (fin & tube mechanical, braze, etc.)	Fin & Tube Aluminum
	Matl., mass kg (wgt., lbs.)	Aluminum, 7.83 Kg. (17.26 lbs.); A/C & Automatic, 9.08 Kg. (19.91 lbs.)
	Width	600 mm (23.62 in.)
	Height	360 mm (14.17 in.)
	Thickness	16 mm (.63 in.) Core
	Fins per inch	2.5 K Constant Fin Density
Radiator end tank material		Plastic
Fan	Std., elec., opt.	Standard Electrically Driven
	Number of blades & type (flex, solid, material)	Non-A/C, 6 Blades, Rotating Ring A/C, 5 Blades, Scalloped Ring
	Diameter & projected width	Non-A/C: 300 mm (11.81 in.); A/C: 373 mm (14.69 in.)
	Ratio (fan to crankshft. rev.)	N/A
	Fan cutout type	N/A
	Drive type (direct, remote)	Electric
	RPM at idle (elec.)	1800 RPM to 2000 RPM
	Motor rating (wattage/elec.)	100 Watt Non-A/C; 150 Watt A/C
	Motor switch (type & location/elec.)	Non-A/C, Switch-off Coolant Temp. A/C, Switch-off Coolant Temp. or A/C Request
	Switch point (temp.,/ pressure/elec.)	Coolant 105 deg. C (221 deg. F) A/C Request is by Customer Demand
	Fan shroud (material)	Nylon 66

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PORT FUEL INJECTION

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

Induction type: carburetor, fuel injection system, etc.		Port Fuel Injection
Manufacturer		AC Rochester
Carburetor no. of barrels		N/A
Idle A/F mix.		Preset-No Adjustment Provided
Fuel Injection	Point of inj. (no.)	Intake Port (4)
	Constant, pulse, flow	Pulse
	Control (elec., mech.)	Electronic
	Sys. press. kPa (psi)	300 kPa (43.50 psi)
Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	850 (A/C off)
		850 (A/C on)
	Automatic	Drive: 750 Neutral: 850 (A/C off)
		Drive: 775 Neutral: 875 (A/C on)
Intake manifold heat control (exhaust or water thermostatic or fixed)		
Air cleaner type		Replaceable Element (Washable)
Fuel filter (type/location)		Replaceable Stainless Steel W/Paper Element, Located in Engine Compartment
Fuel pump	Type (elec. or mech.)	Electric
	Location (eng., tank)	Fuel Tank
	Press. range kPa (psi)	Pressure Depends on Flow Rate
	Flow rate at regulated pressure (L (gal)/hr @ kPa (psi))	85 @ 300 (22.10 @ 43.5)

Fuel Tank

Capacity, refill L (gallons)		48.5 L (12.8 gal.)
Location (describe)		Rear Center
Attachment		Underbody Straps, 7.74 Kg. (17.03 lbs.)
Material & Mass kg (weight lbs.)		Polymer HDPE
Filler pipe	Location & material	Left Rear Quarter, Steel
	Connection to tank	Rubber Hose
Fuel line (material)		Polymer
Fuel hose (material)		Rubber
Return line (material)		Polymer
Vapor line (material)		Polymer, Steel, Rubber
Extended range tank	Opt., n.s.	N/A
	Capacity L (gallons)	
	Location & material	
	Attachment	
Auxiliary tank	Opt., n.s.	N/A
	Capacity L (gallons)	
	Location & material	
	Attachment	
	Slew switch or valve	
	Separate fill	

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PORT FUEL INJECTION**

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		N/A
	Air injection	Pump or pulse	N/A
		Driven by	N/A
		Air distribution (head, manifold, etc.,)	N/A
		Point of entry	N/A
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Vacuum-Activated Back Pressure Controlled
		Exhaust source	Cylinder Head
	Catalytic Converter	Point of exh. inj. (spacer, carb., manifold, other)	Inlet Manifold
		Type	Single Bed, Three-Way Converter
		Number of	1
		Location(s)	Underbody
		Volume L (cu.in.)	1.8 L (109.84 cu. in.)
		Substrate type	Ceramic Monolith
		Noble metal type	Platinum, Rhodium
		Noble metal concentration (g/cu. cm.)	0.001 g/cu. cm.
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Ventilates to Induction System
	Energy source (manifold vacuum, carburetor, other)		Manifold Vacuum
	Discharges to (intake manifold, other)		Intake Manifold
	Air inlet (breather cap, other)		Induction System
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	Canister
		Carburetor	
	Vapor storage provision		Canister
Electronic System	Closed loop (yes/no)		Yes
	Open loop (yes/no)		No

Engine - Exhaust System

Type (single, single with cross-over, dual, other)		Single
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass kg (weight lbs.)		One, Reverse Flow, 409 Stainless Steel Total Assembly: 15.089 Kg. (33.26 lbs.)
Resonator no. & type		1, Straight Through
Exhaust pipe	Branch o.d., wall thickness	41.3 o.d./1.35 to 1.50 mm Wall (1.65 in./0.054 to .060 in. Wall)
	Main o.d., wall thickness	57.15 o.d./1.35 to 1.50 mm Wall (2.29 in./0.054 to .060 in. Wall)
	Matl. & Mass kg (wght.lbs.)	409 Stainless Steel
Inter-mediate pipe	o.d. & wall thickness	44.45 o.d./1.14 to 1.30 mm Wall (1.78 in./0.048 to .0516 in. Wall)
	Matl. & Mass kg (wght.lbs.)	409 Stainless Steel
Tail pipe	o.d. & wall thickness	50.08 o.d./1.14 to 1.30 mm Wall (2.00 in./0.046 to .0516 in. Wall)
	Matl. & Mass kg (wght.lbs.)	409 Stainless Steel

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O Transmissions/Transaxle (Std., Opt., N.A.)

Manual 4-speed (manufacturer/country)	N/A
Manual 5-speed (manufacturer/country)	Standard, Saturn Corporation/U.S.A.
Manual 6-speed (manufacturer/country)	N/A
Automatic (manufacturer/country)	N/A
Auto. overdrive (manufacturer/country)	Optional, Saturn Corporation/U.S.A.

Manual Transmission/Transaxle

O Gear ratios	Number of forward speeds	5
	1st	3.25
	2nd	2.055
	3rd	1.423
	4th	1.032
	5th	.730
	6th	
	Reverse	2.923
Synchronous meshing (specify gears)		All Forward Gears
Shift lever location		Floor
Trans. case mat'l. & mass kg (lbs)*		Aluminum 4.98 Kg. (9.01 lbs.)
Lubricant	Capacity L (pt.)	2.50 L (5.25 pt.)
	Type recommended	ATF-Dexron II

Clutch (Manual Transmission)

Clutch manufacturer		LUK, Inc.
Clutch type (dry, wet; single, multiple disc)		Dry, Single, Disc
Linkage (hyd., cable, rod, lever, other)		Hydraulic
Max. pedal effort (nom. spring load) N (lbs.)	Depressed	106.3 N (23.9 lbs.)
	Released	N/A
Assist (spring, power/percent, nominal)		N/A
Type pressure plate springs		Diaphragm
Total spring load (nominal) N (lbs.)		5050 N (1135.34 lbs.)
Clutch facing	Facing mfg. & mat'l. coding	Valeo F202
	Facing mat'l. & construction	Non-Abestos; Woven
	Rivets per facing	8
	Outside x inside dia. (nom.)	210 x 134 mm (8.27 x 5.27 in.)
	Total eff. area sq cm (sq in.)	410.6 sq. cm. (63.74 sq. in.)
	Thickness (pressure plate side/fly wheel side)	3.12/3.12 mm (.12/.12 in.)
	Rivet depth (pressure plate side/fly wheel side)	1.20/1.20 mm (.05/.05 in.)
	Engagement cushion method	Driven Plate Wave Spoke Springs
Release bearing type & method hub.		Self-Centering, Single Seal
Torsional damping method, springs, hysteresis		Single Stage

* Includes shift linkage, lubricant, and clutch housing. If other specify.

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PORT FUEL INJECTION

Automatic Transmission/Transaxle

Trade Name

Type and special features (describe)

4-Speed Automatic, Close Ratio Electronic Control Automatic Transmission

Gear selector	Location (column, floor, other)	Floor
	Ltr./No. designation (e.g. PRND21)	PRND 32
	Shift interlock (yes, no, describe)	Yes
Gear ratios	1st	2.526
	2nd	1.556
	3rd	1.030
	4th	.700
	5th	
	6th	
	Reverse	1.905
Max. upshift speed - drive range km/h (mph)		1-2 = 62 (39) 2-3 = 108 (67) 3-4 = 162 (101)
Max. kickdown speed - drive range km/h (mph)		4-3 = 135 (84) 3-2 = 100 (62) 2-1 = 45 (28)
Min. overdrive speed km/h (mph)		50 (31)
Torque converter	Number of elements	3
	Max. ratio at stall	2.25
	Type of cooling (air, liquid)	Liquid
	Nominal diameter	225 mm (8.86 in.)
	Capacity factor "K"	226
Lubricant	Capacity refill L (pt.)	3.6 L (7.5 qt.)
	Type recommended	G.M. Dexron II
Oil cooler (std., opt., N.A., internal, external, air, liquid)		Standard Integral W/Radiator
Trans. mass kg (lbs) & case mat. ⁼⁼		66.60 Kg. (146.85 lbs.) & Aluminum

All Wheel / 4 Wheel Drive

Desc. & type (part-time, full-time, 2/4 shift while moving, mech., elect., chain/gear, etc.)

Transfer case	Manufacturer and model	
	Type and location	
Low-range gear ratio		
System disconnect (describe)		
Center differential	Type (bevel, planetary, w or w/o viscous bias, torsen, etc.)	
	Torque split(% fr/rear)	

⁼⁼ Input speed / square root of torque.

⁼⁼ Dry weight including torque converter. If other, specify.

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PORT FUEL INJECTION

Axle Ratio and Tooth Combinations

(See 'Power Teams' for axle ratio usage)

Effective final drive ratio (or overall top gear ratio)		4.06 M5
		4.13 A4
Transfer ratio and method (chain, gear, etc.)		N/A
Front drive unit	Ring gear o.d.	197 mm (7.75 in.) M5; 183.55 mm (7.226 in.) A4
	No. of teeth	Pinion 16 M5; 15 A4
	Ring gear	65 M5; 62 A4

Front Drive Unit

Description (integral to trans., etc.)		Integral to Transmission
Limited slip differential (type)		N/A
Drive pinion	Type	Straight Bevel Gear
	Offset	N/A
No. of differential pinions		2
Pinion differential	Adjustment (shim, etc.)	N/A
	Bearing adjustment	N/A
Driving wheel bearing (type)		Cartridge
Lubricant	Capacity L (pt.)	N/A
	Type recommended	ATF-Dexron II

Axle Shafts - Front Wheel Drive

Manufacturer and number used			Saginaw	
Type (straight, solid bar, tubular, etc.)		Left	Solid	
		Right	Solid	
Outer diam. x length* x wall thickness	Manual transaxle	Left	23.5 mm x 364 mm Long (.94 in. x 14 in.)	
		Right	23.5 mm x 364 mm Long (.94 in. x 14 in.)	
	Automatic transaxle	Left	23.5 mm x 364 mm Long (.94 in. x 14 in.)	
		Right	23.5 mm x 364 mm Long (.94 in. x 14 in.)	
	Optional transaxle	Left	N/A	
		Right	N/A	
Slip yoke	Type		Tripot	
	Number of teeth		Three Lobe	
	Spline o.d.		N/A	
Universal joints	Make and mfg. no.	Inner	Tripot	
		Outer	RZEPPA	
	Number used		One Each, Left & Right	
	Type, size, plunge	Inner	N/A	
		Outer	N/A	
	Attach (u-bolt, clamp, etc.)			
	Bearing	Type (plain, anti-friction)	N/A	
		Lubrication (fitting, prepack)	N/A	
Drive taken through (torque tube, arms or springs)			Drive Axle Assembly	
Torque taken through (torque tube, arms or springs)			Transaxle and Wheel Spindle	

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

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Model Code/Description And/Or

Engine Code/Description

1.9L L4 DOHC (116 CID) 16-VALVE
PORT FUEL INJECTION

Suspension - General Including Electronic Controls

Car leveling	Std./opt./not avail.	N/A
	Manual/automatic control	
	Type (air/hydraulic)	
	Primary/assist spring	
	Rear only/4 wheel leveling	
	Single/dual rate spring	
	Single/dual ride heights	
	Provision for jacking	
Shock absorber damping controls	Standard/opt./not avail.	N/A
	Manual/automatic control	
	Number of damping rates	
	Type of actuation (manual/electric motor/air, etc.)	
	a Lateral acceleration	
	n Deceleration	
	a Acceleration	
Shock absorber (front & rear)	r Road surface	
	Type	Non-Pressurized MacPherson Strut Type
	Make	Delco Products
	Piston diameter	28.0 mm (Nominal)
	Rod diameter	28.0 MM (nOMINAL)

Suspension - Front

Type and description		Independent MacPherson Strut Type
Travel ¹	Full jounce	81.0 mm (3.19 in.) Full Effective Travel
	Full rebound	96.5 mm (3.80 in.) Full Effective Travel
O Spring	Type (coil, leaf, other & matl)	Coil, Steel, SAE 5160 Modified
	Insulators (type & matl)	Rubber Over Steel Top Mount
	Size (Leaf: length & width; Coil: design height & i.d.; Bar: length & diameter)	146.28 mm (5.76 in.) at Design; 123.50 mm (4.86 in.) i.d.
	Spring rate N/mm (lb./in.)	22.0 N/mm (125.6 lbs./in.)
	Rate @ wheel N/mm (lb./in.)	
O Stabilizer	Type (link, linkless, frmlless)	Tension Strut & Stabilizer Bar Linkless
	Matl. & O.D. bar/tube, wall thickness	Steel 10B21; 28.6 mm (1.1 in.)/4.50 mm (0.2 in.) Wall Thickness

Suspension - Rear

Type and description		Independent Tri-Link Type
Travel	Full jounce (define load condition)	90.0 mm (3.54 in.) Full Effective Travel
	Full rebound	83.2 mm (3.27 in.) Full Effective Travel
O Spring	Type (coil, leaf, other & matl)	Coil, Steel, SAE 5160 Modified MacPherson Str't
	Size (Leaf: length & width; Coil: design height & i.d.; Bar length & diameter)	373.4 mm x 130.4 mm (11.9 in. x 5.1 in.) 248.2 mm (9.7 in.) at Design; 105 mm (4.1 in.) i.d.
	Spring rate N/mm (lb./in.)	22.5 N/mm (128.5 lbs./in.)
	Rate @ wheel N/mm (lb./in.)	25.5 N/mm
	Insulators (type & material)	Rubber Over Steel Top Mount
	If leaf	No. of leaves
		Shackle (comp or tens)
O Stabilizer	Type (link, linkless, frmlless)	Link
	Matl. & O.D. bar/tube, wall thickness	Steel SAE 1090; 15.0 mm (.60 in.)
Track bar (type)		N/A

MVMA Specifications

Vehicle Line COUPE SC

Model Year 1992 Issued 10-91 Revised _____

METRIC (U.S. Customary)

Model Code/Description And/Or

Engine Code/Description

1.9L L4 DOHC (116 CID) 16-VALVE
PORT FUEL INJECTION

Brakes - Service

Description			Power Assisted Vented Disc (Front)
			Power Assisted Drum (Rear)
Manufacturer and brake type (std., opt., n.a.)	Front (disc or drum)		Disc
	Rear (disc or drum)		Drum (Disc Included With ABS Option)
Valving type(prop, delay, metering, other)			Fixed Proportioning
Power brake (std., opt., n.a.)			Standard
Booster type(rmt, int, gr, vac, hyd., etc.)			Single Vacuum
Vacuum	Source (inline, pump, etc.)		Inline
	Reservoir (volume cu. in.)		None
	Pump-type		None
Traction Control	Operational speed range		N/A
	Type (engine or brake intervention)		N/A
Anti-lock device	Front/rear (std., opt., n.a.)		Optional
	Manufacturer		Delco Chassis Division General Motors/Saturn Corporation
	Type (electronic, mech.)		Electronic
	Number sensors or circuits		4
	No. anti-lock hyd. circuits		3
	Integral or add-on system		Integral
	Yaw control (yes, no)		No
	Hydraulic power source		Electric
Effective area sq. cm. (sq. in.) ¹			Front: 175 (27); Rear: 230 (36); Rear Disc: 122 (19)
Gross Lng area sq. cm. (sq. in.) ² (F/R)			Front: 175 (27); Rear: 230 (36); Rear Disc: 122 (19)
Swept area sq. cm. (sq. in.) ³ (F/R)			Front: 1157 (179); Rear Disc: 1030 (160)
Rotor	Outer working diameter	F/R	Front: 250.5 mm (9.9 in.); Rear Disc: 245 mm (9.6 in.)
	Inner working diameter	F/R	Front: 161 mm (6.3 in.); Rear Disc: 165 mm (6.5 in.)
	Thickness	F/R	Front: 18 mm (0.7 in.); Rear Disc: 11 mm (0.4 in.)
	Matl & type (vented/sld)	F/R	Front: Cast Iron, Vented; Rear: Cast Iron, Solid
Drum	Diameter & width	F/R	200 mm x 30 mm (7.9 in. x 1.2 in.)
	Type and material	F/R	Cast Iron
Wheel cylinder bore			Front: 51 (2.0); Rear: 19 (.75); Rear Disc: 32 (1.3)
Master cylinder	Bore/stroke	F/R	Bore 22.2 mm (0.9 in.)
Pedal arc ratio			4.0:1
Line pressure at 445 N (100 lb.) pedal load kPa (psi)			N/A
Lining clearance			F/R Self Adjusting/Self Adjusting
Brake lining	Front wheel	Bonded or riveted	Bonded
		Rivet size	
		Manufacturer	Delco Chassis Division General Motors/Saturn Corporation
		Lining code	DM 8087
		Material	Semi-Metallic
		Area, Pri. or out-brd	40.3 sq. cm. x 10 mm (Area x Thickness) (6.2 sq. in. x 0.4 in.)
		Area, Sec. or in-brd	40.3 sq. cm. x 10 mm (Area x Thickness) (6.2 sq. in. x 0.4 in.)
		Shoe thickness (no lng)	6 mm (0.2 in.)
	Rear wheel	Bonded or riveted	Front: Bonded; Rear Disc: Bonded
		Manufacturer	Delco Chassis Division General Motors/Saturn Corporation
		Lining code	Disc: DM 9102; Drum: DM 8090
		Material	Semi-Metallic
		Area, Pri. or out-brd	114.7 sq. cm. x 3.5 mm Drum (17.8 x 0.1); 30.3 sq. cm. x 9 mm (4.7 x 0.3)
		Area, Sec. or in-brd	114.7 sq. cm. x 3.5 mm Drum (17.8 x 0.1); 30.3 sq. cm. x 9 mm (4.7 x 0.3)
		Shoe thickness (no lng)	1.6 mm (0.6 in.) Rim; 5 mm (0.2 in.)

¹ Excludes rivet holes, grooves, chamfers, etc.

² Includes rivet holes, grooves, chamfers, etc.

³ Total swept area for four brakes. (Drum brake: Widest lining contact width for each brake x its contact circum.)

(Disc brake: Square of Outer Working Dia. - Square of inner Working Dia. multiplied by Pi/2 for each brake.)

⁴ Size for drum brake includes length x width x thickness.

⁵ Manufacturer I.D., catalog for formulation designation and coefficient of friction classification.

MVMA Specifications

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METRIC (U.S. Customary)

Model Code/Description And/Or
 Engine Code/Description

**1.9L L4 DOHC (116 CID) 16-VALVE
 PORT FUEL INJECTION**

Tires And Wheels (Standard)

Tires	Size (load range, ply)		P195/60R15, Blackwall, SL
	Type (bias, radial, etc.)		All Season, Steel Belted Radial
	Inflation pressure (cold) for recommended max. vehicle load	Front kPa (psi)	210 kPa (30 psi)
		Rear kPa (psi)	180 kPa (26 psi)
	Rev/mile-at 70 km/h (45mph)		862
Wheels	Type & material		Road Wheel-Cast Aluminum
	Rim (size & flange type)		15 x 6J
	Wheel offset		50 mm
	Attachment	Type (bolt, stud)	Stud
		Circle diameter	100 mm
Spare	Tire and wheel		T115/70R14 14 x 4J x 55
	Storage position & location (describe)		Lays Flat Under Trunk Floor

Tires And Wheels (Optional)

Tire size (load range, ply)	
Type (bias, radial, steel, nylon, etc.)	
Wheel type & material	
Rim (size, flange type and offset)	
Tire size (load range, ply)	
Type (bias, radial, steel, nylon, etc.)	
Wheel type & material	
Rim (size, flange type and offset)	
Tire size (load range, ply)	
Type (bias, radial, steel, nylon, etc.)	
Wheel type & material	
Rim (size, flange type and offset)	
Tire size (load range, ply)	
Type (bias, radial, steel, nylon, etc.)	
Wheel type & material	
Rim (size, flange type and offset)	
Spare tire and wheel size	
(If configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position)	

Brakes - Parking

Type of control	Hand Lever Application, Push-Button Release
Location of control	Center Console
Operates on	Both 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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METRIC (U.S. Customary)

Model Code/Description And/Or
Engine Code/Description

1.9L L4 DOHC (116 CID) 16-VALVE
PORT FUEL INJECTION

Steering

Steering				N/A		
Manual (std., opt., n.s.)				Standard		
Power (std., opt., n.s.)				Standard		
○ Speed-sensitive (std., opt., n.s.)				Standard		
○ 4-wheel steering (std., opt., n.s.)				N/A		
Adjustable steering wheel/ column (tilt, telescope, other)		Type	Adjustable Rake			
		Manufacturer				
		(std., opt., n.s.)	Standard			
Wheel diameter = (W9) SAE J1100		Manual				
		Power				
Turning diameter in (ft.)	Out-side front	Wall to wall (l. & r.)	Left: 11.5 M (38.0 ft.); Right: 11.6 M (38.3 ft.)			
		Curb to curb (l. & r.)	Left: 11.3 M (37.3 ft.); Right: 11.3 M (37.3 ft.)			
	In-side rear	Wall to wall (l. & r.)	Left: 6.6 M (21.8 ft.); Right: 6.6 M (21.8 ft.)			
		Curb to curb (l. & r.)	Left: 6.8 M (22.4 ft.); Right: 6.8 M (22.4 ft.)			
Scrub Radius *				14 mm (15 in.); 11 mm (14 in.)		
Manual	Gear	Type	Rack and Pinion			
		Manufacturer	Saginaw			
		Ratios	Gear	N/A		
			Overall	N/A		
	No. wheel turns(stop to stop)			4.0		
Power	Type (coaxial,elec.hyd.,etc.)			Hydraulic		
	Manufacturer			Saginaw		
	Gear	Type	Rack and Pinion			
		Ratios	Gear	N/A		
			Overall	16.3:1		
			Pump (drive)			
	No. wheel turns(stop to stop)			2.7		
Linkage	Type			N/A		
	Location (front or rear of wheels, other)			Rear of Wheels		
	Tie Rods (one or two)			Two		
Steering axis	Inclination at camber (deg.)					
	Bear-ings (type)	Upper				
		Lower				
		Thrust				
Steering spindle/knuckle & joint type				Steering Knuckle With Spherical Joints		

* The horizontal distance in the front elevation between wheel centerline and kingpin (ball joint) axis at ground.
See Page 22.

MVMA Specifications

METRIC (U.S. Customary)

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Engine Code/Description

Vehicle Line COUPE SC
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1.9L I4 DOHC (116 CID) 16-VALVE
PORT FUEL INJECTION

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	1.5 +/- .60
		Camber (deg.)	0.0 +/- 1.0
		Toe-in outside track - mm (in.)	0.1 +/- .10
	Service reset*	Caster (deg.)	1.5 +/- .60
		Camber (deg.)	0.0 +/- 1.0
		Toe-in - mm (in.)	0.1 +/- .10
	Periodic M.V. inspection	Caster (deg.)	1.5 +/- .60
		Camber (deg.)	0.0 +/- 1.0
		Toe-in - mm (in.)	0.1 +/- .10
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	-.60 +/- .65
		Toe-in outside track - mm (in.)	0.1 +/- .10
	Service reset*	Camber (deg.)	-.60 +/- .65
		Toe-in - mm (in.)	0.1 +/- .10
	Periodic M.V. inspection	Camber (deg.)	-.60 +/- .65
		Toe-in - mm (in.)	0.1 +/- .10

* Indicates pre-set, adjustable, tread set or other.

Electrical - Instruments and Equipment

Speedometer	Type (analog, digital, std., opt.)	Analog Standard
	Trip odometer (std., opt., n.a.)	Standard
Head-up display	Std., opt., not avail.	N/A
	Type - Secondary, Opto-electronic	
	Speedometer	Digital
	Status/warn. indicators - Turn signals, high beam, low fuel, check gauges	
	Brightness control	Day/night mode, adi.
	EGR maintenance indicator	N/A
Charge indicator	Type	Warning Light
	Warning device (light, audible)	Warning Light
Temperature indicator	Type	Electric Gage
	Warning device	Warning Light
Oil pressure indicator	Type	Electric Gage
	Warning device	Warning Light
Fuel indicator	Type	Electric Gage
	Warning device	N/A
Windshield wiper	Type (standard)	Two-Speed Manual Wipers W/Separate Mist Function & Three Intermittent Speeds
	Type (optional)	N/A
	Blade length	55 cm. (22 in.) Driver's Side; 53 cm. (21 in.) Passenger Side
	Swept area - sq cm (sq in.)	7078.2 sq. cm. (1097.0 sq. in.)
Windshield washer	Type (standard)	Standard, Hood Mounted Nozzles
	Type (optional)	N/A
	Fluid level indicator	N/A
Rear window wiper, wiper/washer (std., opt., n.a.)		N/A
Horn	Type	Vibrator-Sea Shell
	Number used	1
Other		

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METRIC (U.S. Customary)

Engine Code/Description

1.9L I4 DOHC (116 CID) 16-VALVE
PORT FUEL INJECTION

Electrical - Supply System

Battery	Manufacturer	Delco Remy
	Model, std., (opt.)	90-525, Standard
	Voltage	12
	Amps at 0 deg F cold crnk	525
	Minutes-reserve capacity	90
	Amps/hrs. - 20 hr. rate	54
	Location	Under Hood; Left & Mid-Compartment
Alternator	Manufacturer	Delco Remy
	Rating (idle/max. rpm)	85 Amp (30 Amp @ Idle)
	Ratio (alt. crank/rev.)	2.54:1
	Output at idle (rpm, park)	
	Optional (type & rating)	None
Regulator	Type	Electronic, Integral W/Alternator

Electrical - Starting System

Motor	Manufacturer	Delco Remy
	Current drain -29 deg C (F)	Automatic Transmission = 375 Amps; Manual Transmission = 235 Amps
	Power rating kw (hp)	Automatic = 1.4 kw (1.87 hp); Manual = 0.8 kw (1.07 hp)
Motor drive	Engagement type	Positive Sheet Solenoid
	Pinion engages from (front, rear)	Rear

Electrical - Ignition System

Type	Electronic (std, opt, n.a.)	Standard
	Other (specify)	Distributorless
Coil	Manufacturer	Delco Electronics
	Model	Integral W/Electronics
	Current	Engine stopped-A 0
		Engine idling - A 7.5 A Maximum
Spark plug	Manufacturer	AC Rochester
	Model	SOHC: FR4LS; DOHC: FR3LS
	Thread (mm)	14 x 1.25 mm I.S.O. 8470
	Tightening torque Newton meters (lb. ft.)	27 +/- 3 Nm (20 +/- 2 lbs. ft)
	Gap	0.040 in.
	Number per cylinder	1
Distributor	Manufacturer	None
	Model	None

Electrical - Suppression

Locations & type	Resistor Spark Plugs Resistor Ignition Cable
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METRIC (U.S. Customary)

Model Code/Description

1.9L L4 DOHC (116 CID) 16-VALVE
PORT FUEL INJECTION

Body

Structure

Welded Steel Structure W/Bolt-in Front of Dash and Roof.
Welded Door Inner Structure, Hood Inner and Outer and Decklid Inner.

Bumper system front - rear

Front Bumper System: Two-Piece Injection Molded Fascia;
Honeycomb Energy Management; Aluminum Back-up Beam.
Rear Bumper System: Injection Molded Fascia; Hydraulic Energy
Absorbers; Aluminum Back-up Beam.

Anti-corrosion treatment

Galvanized Metals; Elpo Uni-Prime for Body Structure, Door
Structure, Decklid, Roof, Hood and Cockpit Structure.

Body - Miscellaneous Information

Type of finish (lacquer, enamel, other)		Water-Borne Enamel Basecoat & Two-Component Urethane Clearcoat
Hood	Material & mass	Steel
	Hinge location (front, rear)	Rear
	Type (counterbalance, prop)	Prop
	Release control (int., ext.)	Internal
Trunk lid	Material & mass	Steel Inner and Outer/Thermoplastic Applique on Rear Vehicle Show Surface
	Type (counterbalance, other)	Counter Balance
	Internal release control (elec., mech., n.s.)	Mechanical
Hatch-back lid	Material & mass	N/A
	Type (counterbalance, other)	N/A
	Internal release control (elec., mech., n.s.)	N/A
Tailgate	Material & mass	N/A
	Type (drop, lift, door)	N/A
	Internal release control (elec., mech., n.s.)	N/A
Vent window control (crank, friction, pivot, power)	Front	N/A
	Rear	N/A
Window regulator type (cable, tape, flex drive, etc.)	Front	Cross Arm
	Rear	Tape Drive
Seat cushion type (e.g., 60/40, bucket, bench wire, foam, etc.)	Front	Bucket Frame, Foam, Flex Suspension
	Rear	Bench, 2 Passenger, Wire Frame, Foam, Console
	3rd seat	N/A
Seat back type (e.g., 60/40, bucket, bench wire, foam, etc.)	Front	Bucket, Tube Frame, Foam
	Rear	Split, 60/40, Plastic Frame, Foam
	3rd seat	

Frame

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

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Model Code/Description

1.9L L4 DOHC (116 CID) 16-VALVE
PORT FUEL INJECTION

Restraint System

Seating Position			Left	Center	Right
Active	Type & description (lap & shoulder belt, lap belt, etc.)	First seat			
		Second seat	Lap and Shoulder Belt	Lap Belt	Lap and Shoulder Belt
	Standard/optional	Third seat	Motorized 2-Point Shoulder Belt and Manual Lap Belt		Motorized 2-Point Shoulder Belt and Manual Lap Belt
Passive	Type & description (air bag, motorized 2-point belt, fixed belt, knee bolster, manual-lap belt)	First seat			
		Second seat			
	Standard/optional	Third seat			
SAE Ref No					

Glass

Windshield glass exposed surface area sq. cm. (sq. in.)	S1	12,238.2 sq. cm. (1,896.93 sq. in.)
Side glass exposed surface area sq. cm. (sq. in.) - total 2-sides	S2	Quarter = 3,781.14 sq. cm. (586.08 sq. in.) Door = 6,732.96 sq. cm. (1,043.61 sq. in.)
Backlight glass exposed surface area sq. cm. (sq. in.)	S3	9,506.52 sq. cm. (1,473.51 sq. in.)
Total glass exposed surface area sq. cm. (sq. in.)	S4	32,258.82 sq. cm. (5,000.13 sq. in.)
Windshield glass (type)		Three-PLY Laminated W/Encapsulation Moldings on All Edges
Side glass (type)		Tempered Plate-Barrelled Shape
Backlight glass (type)		Tempered Plate-Barrelled Shape

Headlamps

Description - sealed beam, halogen, replaceable bulb, etc.	Sealed Beam
Shape	Rectangular
Lo-beam type (CA1, 2B1, 2C1, etc.)	2E1-Halogen
Quantity	2
Hi-beam type (1A1, 2A1, 1C1, 2C1, etc.)	2E1-Halogen
Quantity	2

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METRIC (U.S. Customary)

Vehicle Line	COUPE SC		
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Engine Code/Description

1.9L L4 DOHC (116 CID) 16-VALVE
PORT FUEL INJECTION

o Climate Control System

Air conditioning (std., opt., man., auto.)		Optional, Manual
Condenser	Type	Serpentine
	Eff. face area (sq. mm.)	365 x 611 mm = 223,015 sq. mm
	Fins per inch	17 FPI
Evaporator	Type	Tube and Fin
	Eff. face area (sq. mm.)	52,260 sq. mm (81 sq. in.)
	Fins per inch	14 FPI
Heater Core	Material	Aluminum Alloy
	Eff. face area (sq. mm.)	33,550 sq. mm (52 sq. in.)
	Fins per inch	30 FPI
Compressor	Type	Variable Displacement Rotary Vane
	Displacement (cc)	142 cc
	Manufacturer	Zexel
	A/C pulley ratio	1.3:1
Accumulator	Type	
	Height (mm.)	
	Diameter (mm.)	
Receiver	Type	Pick-up Tube
	Height (mm.)	159 mm
	Diameter (mm.)	76 mm
Refrigerant control (CCOT, TVS, etc.)		Expansion Valve - R-D
Heater water valve (yes / no)		No
Refrigerant (R-12, R-134a, etc.)		R/2
Charge level (lbs. - oz.)		2 lbs. 4 oz.
Cold engine lockout switch (yes / no)		No
Wide open throttle cutout switch (yes / no)		Yes, PCM

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METRIC (U.S. Customary)

Model Code/Description

1.9L L4 DOHC (116 CID) 16-VALVE
PORT FUEL INJECTION

Convenience Equipment (standard, optional, n.a.)

Clock (digital, analog)		Digital Clock Display Integrated W/Radio - Standard All Models
Compass / thermometer		N/A
Console (floor, overhead)		Front - Standard; Rear - Standard
Defroster, elec. backlight		Standard
Electronic	Diagnostic monitor (integrated, individual)	
	Instrument cluster (list instruments)	Speedometer, Tachometer, RPM Gage, Fuel Gage, Temperature Gage, Oil Pressure Gage
	Keyless entry	N/A
	Tripminder (avg. spd. fuel)	N/A
	Voice alert (list items)	N/A
	Other	
Fuel door lock (remote, key, electric)		Remote
Lamps	Auto head on/off delay, dimming	N/A
	Cornering	N/A
	Courtesy (map, reading)	Standard
	Door lock, ignition	N/A
	Engine compartment	N/A
	Fog	N/A
	Glove compartment	N/A
	Trunk	Standard
	Illuminated entry system (list lamps, activation)	N/A
	Other	
Mirrors	Day / night (auto, man.)	Standard, Manual Day/Night, Inside Rear View Mirror
	L.H. (remote, pwr., heated)	Manual Remote (Standard)
	R.H. (convex, rmt. pwr. htd)	Manual Remote (Standard); Electric (Optional)
	Visor vanity (RH/LH illum.)	Passenger Side (Std.), Non-Illuminated; Drivers Side (Opt.). Non-Illuminated
Navigation system (describe)		N/A
Pkg. brake-auto release (warn. light)		Manual Release, Warning Light

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METRIC (U.S. Customary)

Model Code/Description

1.9L L4 DOHC (116 CID) 16-VALVE
 PORT FUEL INJECTION

Convenience Equipment (standard, optional, n.a.)

Power equipment	Deck lid (release, pull down)		N/A
	Door locks (manual, auto., describe system)		Manual - Standard Electric - Optional
	Seats	2 - 4 - 6 way, etc.	
		Reclining (R.H., L.H.)	
		Memory (R.H., L.H., preset; recline)	
		Support (lumbar, hip, thigh, etc.)	
		Heated (R.H., L.H., other)	
	Side windows		Electric - Optional
	Vent windows		N/A
	Rear windows		Electric - Optional
Radio systems	Antenna (location, whip, w/shield, power)		
	Stan.	AM, FM, stereo, tape, compact disc, graphic equalizer, theft deterrent, radio prep package, headphone jacks, etc.	AM/FM Stereo Radio
	Opt.		AM/FM Stereo\Cassette AM/FM Stereo\Cassette\Equalizer AM/FM Stereo\Compact Disc\Equalizer
	41		
	Speaker (number, location)		Four Speakers (2 Door Mounted/2 Package Shelf Mounted)
Roof: open air or fixed (flip-up, sliding, "T")			
Speed control device			
Speed warn. dev. (light, buzzer, etc.)			
Tachometer (rpm)			8,000 RPM
Telephone system (describe)			
Theft deterrent system			

Trailer Towing

Towing capable	Yes / No	Yes
Engine/transmission/axle	Std / Opt	LLO / MP3 / 3.25 Standard; MP7/2.52 Optional
Tow class (I, II, III)*	Std / Opt	I
Max. gross trailer wgt. (lbs.)	Std / Opt	1,000
Max. trailer tongue load (lbs.)	Std / Opt	150
Towing package available	Yes / No	No

* Class I - 2,000 lbs. Class II - 3,500 lbs. Class III - 5,000 lbs.

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METRIC (U.S. Customary)

Vehicle Dimensions

See Key Sheets for definitions

All dimensions to ground are for comparative purposes only. Dimensions are to be shown for all base body models of each vehicle line. SAE Ref. no. refers to the definition published in SAE Recommended Practice J1100 "Motor Vehicle Dimensions," unless otherwise specified.

Model Code/Description

1.9L L4 DOHC (116 CID) 16-VALVE
PORT FUEL INJECTION

Width	SAE Ref. No.	
Tread (front)	W101	1443.0 (56.8)
Tread (rear)	W102	1422.4 (56.0)
Vehicle width	W103	1716.0 (67.5)
Body width at Sg RP (front)	W117	1668.0 (65.7)
Vehicle width (front doors open)	W120	3817.0 (150.3)
Vehicle width (rear doors open)	W121	N/A
Turn-borne (deg.)	W122	24 degrees
Outside mirror width	W410	1872.0 (73.7)

Length		
Wheelbase	L101	2519.7 (99.2)
Vehicle length	L103	4465.2 (175.8)
Overhang (front)	L104	1054.5 (41.5)
Overhang (rear)	L105	891.0 (35.1)
Upper structure length	L123	2572.0 (101.2)
Rear wheel C/L 'X' coordinate	L127	4278.1 (168.4)

Height **		
Passenger distribution (front/rear)	PD1,2,3	**
Trunk/cargo load		**
Vehicle height	H101	1286.0 (50.6)
Cowl point to ground	H114	897.0 (35.3)
Deck point to ground	H138	968.0 (38.1)
Rocker panel-front to ground	H112	194.0 (7.6)
Rocker panel-rear to ground	H111	199.0 (7.8)
Windshield slope angle (deg.)	H122	65 degrees
Backlight slope angle (deg.)	H121	69 degrees

Ground Clearance **		
Front bumper to ground	H102	193.7 (7.6)
Rear bumper to ground	H104	256.8 (10.1)
Bumper to ground front at curb mass (wt.)	H103	214.4 (8.4)
Bumper to ground rear at curb mass (wt.)	H105	271.3 (10.7)
Angle of approach (deg.)	H106	13.7 degrees
Angle of departure (deg.)	H107	18.0 degrees
Ramp breakover angle (deg.)	H147	14.5 degrees
Axle differential to ground (front/rear)	H153	155.2 (6.1)
Min. running ground clearance	H156	142.1 (5.6)
Location of min. run. grd. clear.		Front Edge of Flex Pipe Flange x = 1822.9 (71.8)

** All Vehicle Height And Ground Clearance Are Made Using EPA Loaded Vehicle Weight, Loading Conditions.

EPA Loaded Vehicle Weight is the Base Vehicle Weight Plus All Coolant and Fluids Necessary For Operation Plus 100% Of The Fuel Capacity, Plus The 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

Vehicle Line COUPE SC
Model Year 1992 Issued 10-91 Revised _____

METRIC (U.S. Customary) Vehicle Dimensions

See Key Sheets for Definitions

Model Code/Description

1.9L 14 DOHC (116 CID) 16-VALVE
PORT FUEL INJECTION

Front Compartment

SAE Ref. No.

SgRP front, "X" coordinate	L31	3108.0 (122.4)
Effective head room	H61	952.0 (37.5)
Max. eff. leg room (accelerator)	L34	1081.0 (42.5)
SgRP to heel point	H30	210.0 (8.3)
SgRP to heel point	L53	891.0 (35.1)
Back angle (deg.)	L40	26 degrees
Hip angle (deg.)	L42	97 degrees
Knee angle (deg.)	L44	129 degrees
Foot angle (deg.)	L46	87 degrees
Design H-points front travel	L17	198.0 (7.8)
Normal driving & riding seat track trvl.	L23	178.0 (7.0)
Shoulder room	W3	1364.0 (53.7)
Hip room	W5	1304.0 (51.3)
*** Upper body opening to ground	H50	1167.0 (45.9)
Steering wheel maximum diameter**	W9	371.0 (14.6)
Steering wheel angle (deg.)	H18	19.2 degrees
Accel. heel pt. to steer. whl. ctr	L11	528.0 (20.8)
Accel. heel pt. to steer. whl. ctr	H17	604.0 (23.8)
Undepressed floor covering thickness	H67	26.0 (1.0)

Front Compartment Int. Dim. Are Measured With The Seating Ref. Pt.

(SgRP) 20 mm (1 Seat Adjuster Notch) Forward of Rearmost Seat Position.

Rear Compartment

SgRP point couple distance	L50	612.0 (24.1)
Effective head room	H63	888.0 (35.0)
Min. effective leg room	L51	672.0 (26.4)
SgRP (second to heel)	H31	241.0 (9.5)
Knee clearance	L48	-136.0 (15.3)
Shoulder room	W4	1304.0 (51.3)
Hip room	W6	1251.0 (49.2)
*** Upper body opening to ground	H51	N/A
Back angle (deg.)	L41	26 degrees
Hip angle (deg.)	L43	77 degrees
Knee angle (deg.)	L45	75 degrees
Foot angle (deg.)	L47	117 degrees
Depressed floor covering thickness	H73	13.0 (0.5)

Luggage Compartment

Usable luggage capacity (L (cu. ft.))	V1	308.7L (10.9 cu. ft.)
*** Lifter height	H195	641.0 (25.2)

Interior Volumes (EPA Classification)

Vehicle class		Sub-Compact
Interior volume index (cu. ft.)**		76.4 (3.0)
Trunk / cargo index (cu. ft.)		10.9 (0.4)

** See page 14.

** Includes passenger and trunk / cargo index - see definition page 32.

*** EPA Loaded Vehicle Weight, Loading Conditions.

All Linear Dimensions Are In Millimeters (Inches).

MVMA Specifications

Vehicle Line COUPE SC
Model Year 1992 Issued 10-91 Revised _____

METRIC (U.S. Customary)

Vehicle Dimensions

See Key Sheets for Definitions

Model Code/Description

1.9L L4 DOHC (116 CID) 16-VALVE
PORT FUEL INJECTION

Station Wagon / MPV**

- Third Seat

	SAE Ref. No.	(Not Applicable)
Seat facing direction	SD1	
S _g RP couple distance	L85	
Shoulder room	W85	
Hip Room	W86	
Effective leg room	L86	
Effective head room	H86	
S _g RP to heel point	H87	
Knee clearance	L87	
Back angle (deg.)	L88	
Hip angle (deg.)	L89	
Knee angle (deg.)	L90	
Foot angle (deg.)	L91	

Station Wagon / MPV** - Cargo Space

(Not Applicable)

Cargo length (open front)	L200	
Cargo length (open second)	L201	
Cargo length (closed front)	L202	
Cargo length (closed second)	L203	
Cargo length at belt (front)	L204	
Cargo length at belt (second)	L205	
Cargo width (wheelhouse)	W201	
Rear opening width at floor	W203	
Opening width at belt	W204	
Min. rear opening width above belt	W205	
Cargo height	H201	
Rear opening height	H202	
• Tailgate to ground height	H250	
Front seat back to load floor height	H197	
Cargo volume index cu. m (cu. ft.)	V2	
Hidden cargo vol. index cu. m (cu. ft.)	V4	
Cargo volume index-rear of 2-seat	V10	
○ Cargo volume index ^{***}	V6	
○ Cargo width at floor ^{***}	W500	
○ Maximum cargo height ^{***}	H505	

Hatchback - Cargo Space

(Not Applicable)

Cargo length at front seatback height	L208	
Cargo length at floor (front)	L209	
Cargo length at second seatback height	L210	
Cargo length at floor (second)	L211	
Front seatback to load floor height	H197	
Second seatback to load floor height	H198	
Cargo volume index cu. m (cu. ft.)	V3	
Hidden cargo vol. index cu. m (cu. ft.)	V4	
Cargo volume index-rear of 2-seat	V11	

* EPA Loaded Vehicle Weight, Loading Conditions

** MPV - Multipurpose Vehicle

All Linear Dimensions Are In Millimeters (Inches).

MVMA Specifications

Vehicle Line COUPE SC
Model Year 1992 Issued 10-91 Revised _____

METRIC (U.S. Customary)

Model Code/Description 1.9L L4 DOHC (116 CID) 16-VALVE
PORT FUEL INJECTION

Vehicle Fiducial Marks

Fiducial Mark Number ^a	Define Coordinate Location
Front	X - Fiducial Mark To Vertical Zero Grid Line - Front Measured Horizontally, From The Zero Grid Line To The Front Fiducial Mark Located On Top Of The Front Seat Adjuster Mounting Bolt.
	Y - Fiducial Mark To Centerline Of Car - Front, Width Measurement Made From Centerline Car To Fiducial Mark Located On Top Of The Front Seat Adjuster Mounting Bolt.
	Z - Fiducial Mark To Horizontal Zero Grid Line - Front, Measured Vertically From Zero Grid Line To Front Fiducial Mark Located On Top Of The Front Seat Adjuster Mounting Bolt.
Rear	X - Fiducial Mark To Vertical Zero Grid Line - Rear, Measured Horizontally From The Zero Grid Line To Rear Fiducial Mark Located On The Rail (Compartment Pan - Longitudinal).
	X - Fiducial Mark To Centerline Of Car - Rear, Width Measurement Made From Centerline Of Car To Fiducial Mark Located On The Rail (Compartment Pan - Longitudinal).
	Z - Fiducial Mark To Horizontal Zero Grid Line - Rear, Measured Vertically From The Zero Grid Line To Rear Fiducial Mark Located On The Rail (Compartment Pan - Longitudinal).
NOTE: Provide 3 of 4 Fiducial Mark Locations	
Front	W21 ^{**} -535
	L54 ^{**} 2813
	H81 ^{**} 427.9
	H161 ^{**} 253
	*** H163 ^{**} 235
Rear	W22 ^{**} 441.8
	L55 ^{**} 4811.2
	H82 ^{**} 598
	H162 ^{**} 424
	*** H164 ^{**} 410

* Reference - SAE Recommended Practice, J182a, Motor Vehicle Fiducial Marks.

** Reference - SAE Recommended Practice J1100 - Motor Vehicle Dimensions.

*** EPA Loaded Vehicle Weight, Loading Conditions.

All linear dimensions are in millimeters (inches).

METRIC (U.S. Customary)

Model Year 1992

Issued 10-91

Revised

- * Reference - SAE J1100 Motor vehicle dimensions, curb weight definition.
- ETWC - Equivalent Test Weight Class - basis for U.S. Environmental Protection Agency emission certifications.
Refer to ETWC code legend below for test weight class.

A	=	1000	I	=	2000	Q	=	3000	4000	Y	=	4000
B	=	1125	J	=	2125	R	=	3125	4250	Z	=	4250
C	=	1250	K	=	2250	S	=	3250	4500	AA	=	4500
D	=	1375	L	=	2375	T	=	3375	4750	AB	=	4750
E	=	1500	M	=	2500	U	=	3500	5000	AC	=	5000
F	=	1625	N	=	2625	V	=	3625	5250	CD	=	5250
G	=	1750	O	=	2750	W	=	3750	5500	EE	=	5500
H	=	1875	P	=	2875	X	=	3875	5750	FF	=	5750

27.2 (60.0 lbs.)

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line COUPE SC
Model Year 1992 Issued 10-91 Revised _____

		Optional Equipment Differential Mass (weight)*			
Code	Equipment	MASS, kg. (lb.)			Remarks Restrictions, Requirements
		Front	Rear	Total	
AB5	Power Door Locks	0.2 (0.4)	0.2 (0.4)	0.4 (0.8)	Requires HAA Option
A31	Power Windows	0.6 (1.3)	0.6 (1.3)	1.2 (2.6)	Requires HAA Option
CF5	Sunroof - Glass - Electric	5.6 (12.3)	5.5 (12.2)	11.1 (24.5)	
C60	Air Conditioning	17.6 (38.8)	-1.6 (-3.5)	16.0 (35.3)	
DC0	Mirror - O/S Electric - R.H.	0.9 (2.0)	0.2 (0.4)	1.1 (2.4)	Requires HAA Option
HAA	Power Convenience Package	1.7 (3.8)	1.0 (2.2)	2.7 (6.0)	Includes Power Locks, Windows and Electric R.H. Mirror
JL9	Anti-Lock Brakes	8.7 (19.2)	1.5 (3.5)	10.3 (22.7)	
K34	Cruise Control	1.0 (2.2)	0.1 (0.2)	1.1 (2.4)	
MP7	Automatic Transmission (4-Speed)	13.3 (29.3)	0.0 (0.0)	13.3 (29.3)	
UM6	Radio - SK\ASTE\CLK\ETR	0.6 (1.3)	0.1 (0.2)	0.7 (1.5)	
UU6	Radio - SK\ASTE\CLK\EQ\ETR	1.6 (3.5)	1.6 (3.5)	3.2 (7.0)	
U1C	Radio - SK\DISC\CLK\EQ\ETR	1.8 (4.0)	1.7 (3.7)	3.5 (7.7)	

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

METRIC (U.S. Customary)

Model Year 1992 Issued 10-91 Revised

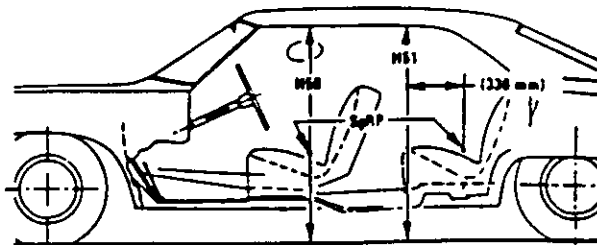
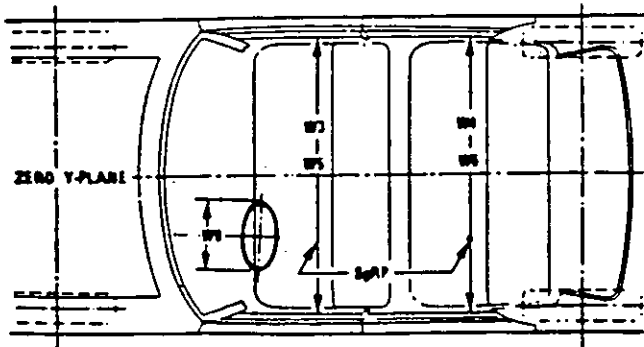
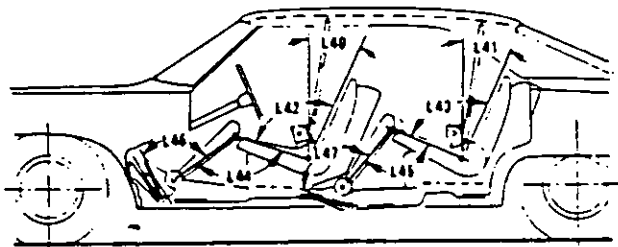
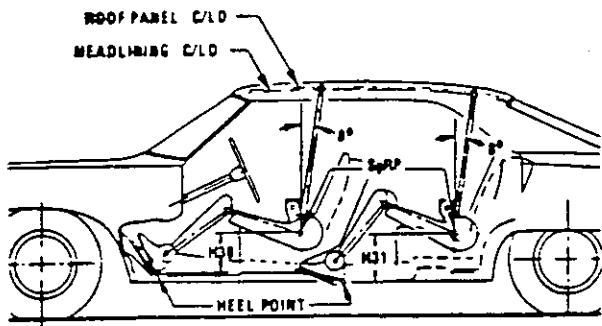
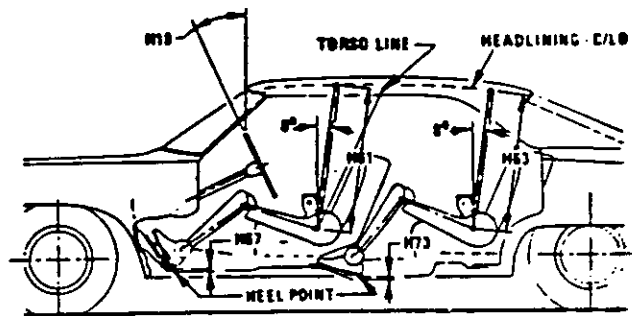
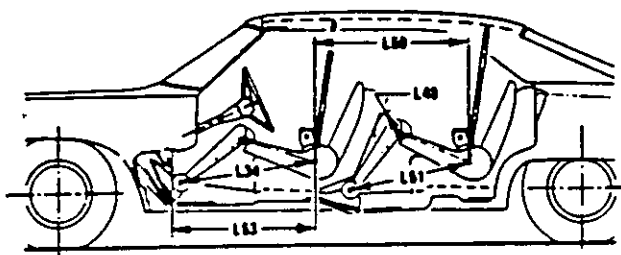
* Also see Engine - General Section for dressed engine mass (weight).

METRIC (U.S. Customary)

Technical drawing of a car side profile with dimensions. The drawing shows a side view of a car with various dimensions labeled. The overall length is L123. The overall height is M191. The front wheel is labeled M114. The rear wheel is labeled M130. The front wheel offset is M102. The front wheel hub offset is M103. The front wheel hub offset is M112. The rear wheel offset is M111. The rear wheel hub offset is M104. The rear wheel hub offset is M105. The overall width is L101. The overall width is L106. The overall width is L103.

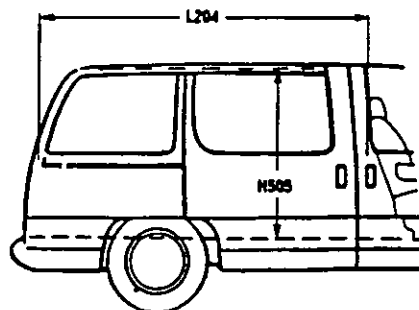
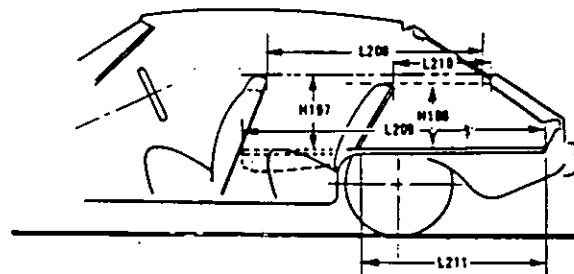
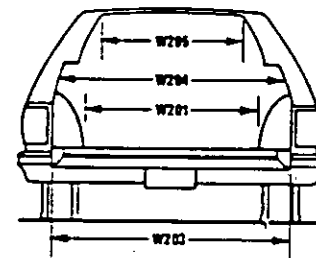
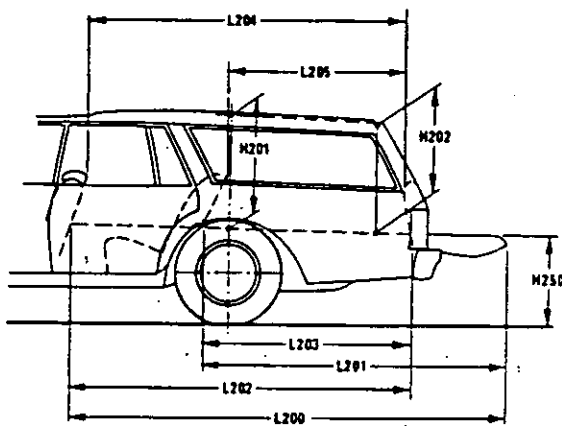
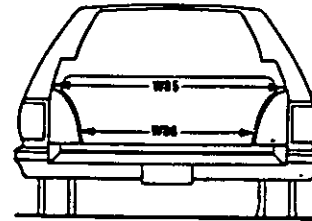
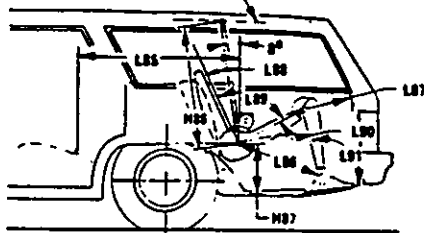
MVMA Specifications Form
METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions – Key Sheet



METRIC (U.S. Customary)

← HEADLINING - C/O



MVMA Specifications

METRIC (U.S. Customary)

Exterior Vehicle 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, "Devices for Use in Defining and Measuring Vehicle Seating Accommodations."

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.
- W410 OUTSIDE MIRROR WIDTH. The dimension between the widest point on the outside mirrors. The standard right and left mirror adjusted for normal driving will be shown unless otherwise noted. When only one outside mirror is standard, the dimension will be to the zero "Y" plane.

Length Dimensions

- 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.
- 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 OVERHAND – 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 the midpoint of the distance between the rear axle centerlines.

Height Dimensions

- H101 VEHICLE HEIGHT. The dimension measured vertically from the highest point on the vehicle body 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.
- 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.
- H114 COWL POINT TO GROUND. Measured at zero "Y" plane.
- 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 arc 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 457 mm (18.0 in.) long drawn from the lower DLO to the intersecting point on the windshield.
- H138 DECK POINT TO GROUND. Measured at zero "Y" plane.
- H109 STATIC LOAD – TIRE RADIUS – REAR. Specified by the manufacturer in accordance with composite TIRE SECTION STANDARD.

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.
- H103 FRONT BUMPER TO GROUND – CURB MASS (WT.). Measured in the same manner as H102.
- 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 MASS (WT.). 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 arc and 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 arc and the initial point structural interference rearward of the rear tire to ground. The limiting component shall be designated.
- H147 RAMP 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.

MVMA Specifications

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions - Key Sheet Dimensions Definitions

Glass Areas

- S1 Windshield area.
- S2 Side windows area. Includes the front door, rear door, vents, and rear quarter windows on both sides of the vehicle.
- S3 Backlight areas.
- S4 Total area. Total of all areas (S1 + S2 + S3).

Fiducial Mark Dimensions

- Fiducial Mark - Number 1
- L54 "X" coordinate.
- W21 "Y" coordinate.
- H81 "Z" coordinate.
- H181 Height "Z" coordinate to ground at curb weight.
- H183 Height "Z" coordinate to ground.
- Fiducial Mark - Number 2
- L55 "X" coordinate.
- W22 "Y" coordinate.
- W82 "Z" coordinate.
- H162 Height "Z" coordinate to ground at curb weight.
- H164 Height "Z" coordinate to ground.

Front Compartment Dimensions

- L11 ACCELERATOR HEEL POINT TO STEERING WHEEL CENTER. The dimension measured horizontally from the AHP to the intersection of the steering column centerline and a plane tangent to the upper surface of the steering wheel rim.
- L17 DESIGN H-POINT - FRONT TRAVEL. The dimension measured horizontally between the design H-point - front in the foremost and rearmost seat track positions. (See SAE J1100)
- L23 NORMAL DRIVING AND RIDING SEAT TRACK TRAVEL. The dimension measured horizontally between a point on the design H-point travel line from the SgRP to the displaced point on the design H-point travel line with the seat moved to the foremost seat position, but not to include seat track travel used for purposes other than normal driving and riding positions. (See SAE J1100).
- L31 SgRP - FRONT. "X" COORDINATED.
- L34 MAXIMUM EFFECTIVE LEG ROOM - ACCELERATOR. The dimension measured along a line from the ankle pivot center to the SgRP - front plus 254 mm (10.0 in.) measured with right foot on the undepressed 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.
- 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.
- L42 HIP ANGLE - FRONT. The angle measured between torso line and thigh centerline.
- L44 KNEE ANGLE - FRONT. The angle measured between thigh centerline and lower leg centerline measured on the right leg.
- L46 FOOT ANGLE - FRONT. The angle measured between the lower leg centerline and a line tangent to the ball and heel of the bare foot flesh line measured on the right leg. Ref SAE J826.
- L53 SgRP - FRONT TO HEEL. The dimension measured horizontally from the SgRP - front to the accelerator heel point.
- W3 SHOULDER ROOM - FRONT. The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the SgRP - front at height between the belt line and 254 mm (10.0 in.) above the SgRP - front, excluding the door assist strap and attaching parts.

- W5 HIP ROOM - FRONT. The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the SgRP - front within 25 mm (1.0 in.) below and 76 mm (3.0 in.) above the SgRP - front and 76 mm (3.0 in.) fore and aft of the SgRP - front.
- W9 STEERING WHEEL MAXIMUM OUTSIDE DIAMETER. Define if other than round.
- H7 ACCELERATOR HEEL POINT TO THE STEERING WHEEL CENTER. The dimension measured vertically from the AHP - front to the intersection of the steering column centerline to a plane tangent to the upper surface of the steering wheel rim.
- H18 STEERING WHEEL ANGLE. The angle measured from a vertical to the surface plane of the steering wheel.
- H30 SgRP - FRONT TO HEEL. The dimension measured vertically from the SgRP - front to the accelerator heel point.
- H50 UPPER BODY OPENING TO GROUND - FRONT. The dimension measured vertically from the trimmed body opening to the ground on the SgRP - front "X" plane.
- H61 EFFECTIVE HEADROOM - FRONT. The dimension measured along a line 8 deg. rear of vertical from the SgRP - front to the headlining plus 102 mm (4.0 in.).
- H67 FLOOR COVERING THICKNESS - UNDEPRESSED - FRONT. The dimension measured vertically from the surface of the undepressed floor covering to the underbody sheet metal at the accelerator heel point.

Rear Compartment Dimensions

- L41 BACK ANGLE - SECOND. The angle measured between a vertical line through the SgRP - second and the torso line.
- L43 HIP ANGLE - SECOND. The angle measured between torso line and thigh centerline.
- L45 KNEE ANGLE - SECOND. The angle measured between thigh centerline and lower leg centerline.
- L47 FOOT ANGLE - SECOND. The angle measured between the lower leg centerline and a line tangent to the ball and heel of the three-dimensional devices bare foot flesh line (Reference J826).
- L48 KNEE CLEARANCE - SECOND. The minimum dimension measured from the knee pivot center to the back of the front seatback minus 51 mm (2.0 in.).
- L50 SgRP COUPLE DISTANCE - SECOND. The dimension measured horizontally from the driver SgRP - front to the SgRP - second.
- L51 MINIMUM EFFECTIVE LEG ROOM - SECOND. The dimension measured along a line from the ankle pivot center to the SgRP - second plus 254 mm (10.0 in.).
- W4 SHOULDER ROOM - SECOND. The minimum dimension measured laterally between door or quarter trimmed surfaces on the "X" plane through the SgRP - second at height between 254-406 mm (10.0-16.0 in.) above the SgRP - second, excluding the door assist straps and attaching parts.
- W6 HIP ROOM - SECOND. Measured in the same manner as W5.
- 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.
- H51 UPPER BODY OPENING TO GROUND - SECOND. The dimension measured vertically from the trimmed body opening to the ground on the "X" plane 330 mm (13.0 in.) forward of 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 102 mm (4.0 in.).
- H73 FLOOR COVERING - DEPRESSED - SECOND. The dimension measured vertically from the heel point to the underbody sheet metal.

MVMA Specifications

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

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.

Interior Volumes (EPA Classification)

The Interior Volume Index is listed for each body style except two seaters. The Interior Volume Index estimates the space in a car. It is based on four measurements – head room, shoulder room, hip room, and leg room – for the front and rear seats, plus trunk capacity.

The Trunk/Cargo Index is an estimate of the size of the trunk/cargo space. In station wagons and hatchbacks it is an estimate of the space behind the second seat.

Station Wagon / MPV – Third Seat Dimensions

- L85** **SgRP COUPLE DISTANCE – THIRD.** The dimension measured horizontally from the SgRP – second to the SgRP – third.
- L86** **EFFECTIVE LEG ROOM – THIRD.** The dimension measured along a line from the ankle pivot center to the SgRP – third plus 254 mm (10.0 in.).
- L87** **KNEE CLEARANCE – THIRD.** The minimum dimension from the knee pivot center to the back of second seatback minus a constant of 51 mm (2.0 in.). With rear-facing third seat, dimension is measured to closure.
- L88** **BACK ANGLE – THIRD.** Measured in the same manner as L41.
- L89** **HIP ANGLE – THIRD.** Measured in the same manner as L43.
- L90** **KNEE ANGLE – THIRD.** Measured in the same manner as L45.
- L91** **FOOT ANGLE – THIRD.** Measured in the same manner as L47.
- W85** **SHOULDER ROOM – THIRD.** Measured in the same manner as W4.
- W86** **HIP ROOM – THIRD.** Measured in the same manner as W5.
- 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 102 mm (4.0 in.).
- H87** **SgRP – THIRD TO HEEL POINT.**
- SD1** **SEAT FACING DIRECTION – THIRD.**

Station Wagon / MPV – 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 undeepressed floor covering to the rearmost point on the undeepressed 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 undeepressed floor covering to the rearmost point on the undeepressed 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 undeepressed floor covering to the rearmost point on the undeepressed 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 undeepressed floor covering to the rearmost point on the undeepressed 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 backpane 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 to 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.
- W500** **CARGO WIDTH AT FLOOR.** The maximum dimension measured laterally between the limiting interferences at the floor level. This dimension shall include ribs and pillars, but will exclude wheelhouses.
- H197** **FRONT SEATBACK TO LOAD FLOOR HEIGHT.** The dimension measured vertically from the horizontal tangent to the top of the seatback to the undeepressed floor covering at the rear wheel "X" coordinate on the zero "Y" plane.
- H201** **CARGO HEIGHT.** The dimension measured vertically from the top of the undeepressed floor covering to the headlining at the rear wheel "X" coordinate on the zero "Y" plane.
- H202** **REAR OPENING HEIGHT.** The dimension measured vertically from the top of the undeepressed floor covering to the upper trimmed opening on the zero "Y" plane with rear door fully open.
- H250** **TAILGATE TO GROUND CURB MASS (WT.).** The dimension measured vertically from the top of the undeepressed floor covering on the lowered tailgate to ground on the zero "Y" plane.
- H505** **MAXIMUM CARGO HEIGHT.** The maximum vertical dimension rear of the front seat from the cargo floor to roof bow or headlining at the zero "Y" plane.

MVMA Specifications

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

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 LUGGAGE CAPACITY – REAR OF FRONT SEAT.

The total volumes of individual pieces of one set of standard luggage stowed in any hidden cargo area below the load floor rear of the front seat.

V5 TRUCKS AND MPV'S WITH OPEN AREA.

Measured in inches:

$$\frac{L506 \times W505 \times H503}{1728} = \text{ft}^3$$

Measured in mm:

$$\frac{L506 \times W500 \times H503}{10^9} = \text{m}^3 \text{ (cubic meter)}$$

V6 TRUCKS AND MPV'S WITH CLOSED AREA.

Measured in inches:

$$\frac{L204 \times W500 \times H505}{1728} = \text{ft}^3$$

Measured in mm:

$$\frac{L204 \times W500 \times H505}{10^9} = \text{m}^3 \text{ (cubic meter)}$$

V8 HIDDEN LUGGAGE CAPACITY – REAR OF SECOND SEAT.

The total volume of individual pieces of one set of standard luggage stowed in any hidden cargo area below the load floor rear of the second seat.

V10 STATION WAGON CARGO VOLUME INDEX.

Measured in inches:

$$\frac{H201 \times L205 \times \frac{W4 + W201}{2}}{1728} = \text{ft}^3$$

Measured in mm:

$$\frac{H201 \times L205 \times \frac{W4 + W201}{2}}{10^9} = \text{m}^3 \text{ (cubic meter)}$$

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 electronically adjusted seats, see the manufacturer's specifications for Design "H" Point).

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. 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.

L210 CARGO LENGTH AT SECOND SEATBACK HEIGHT. The minimum dimension measured from the "X" plane tangent to the rearmost surface of second seatback or the load floor which is stowed at least one half of the H198 dimension height above the rear load floor, to the rearmost inside limiting interference on the zero "X" plane.

L211 CARGO LENGTH AT FLOOR – SECOND SEATBACK. The minimum horizontal dimension measured at floor level from the rear of the second seatback or load floor panel to the normal limiting interference of the hatchback door on the vehicle zero "Y" plane.

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.

H198 SECOND SEATBACK TO LOAD FLOOR HEIGHT. The dimension measured vertically from the second seatback to the undepressed floor covering.

V3 HATCHBACK.

Measured in inches:

$$\frac{\frac{L208 + L209}{2} \times W4 \times H197}{1728} = \text{ft}^3$$

Measured in mm:

$$\frac{\frac{L208 + L209}{2} \times W4 \times H197}{10^9} = \text{m}^3 \text{ (cubic meter)}$$

V4 HIDDEN LUGGAGE CAPACITY – REAR OF FRONT SEAT. The total volumes of individual pieces of one set of standard luggage stowed in any hidden cargo area below the load floor rear of the front seat.

V11 HATCHBACK CARGO VOLUME INDEX. Usable luggage (one (1) stand and luggage set) below floor:

Measured in inches:

$$\frac{\frac{L210 + L211}{2} \times W4 \times H198}{1728} = \text{ft}^3$$

Measured in mm:

$$\frac{\frac{L210 + L211}{2} \times W4 \times H198}{10^9} = \text{m}^3 \text{ (cubic meter)}$$

MVMA Specifications

METRIC (U.S. Customary)

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