

MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

1991

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, 1990	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.

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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) specs. 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 SATURN COUPE
 Model Year 1991 Issued 10-90 Revised(*)

METRIC (U.S. Customary)

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 (Mfr'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.)	24/34 (M5) 23/32 (A4)

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

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Vehicle Line COUPE SC

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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)		3.250	2.526		

[illegible]

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Model Year 1991 Issued 10-90 Revised(*)

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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)		.008 Above Block
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.)		55.88 cu. cm. (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 (yes / no)		Yes
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.)	Elastomeric W/One Damping Element
	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, 280 g. each (9.92 oz.)
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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:

Throttle control cable, A/C compressor brackets/attach, air cleaner/attach, air inlet ducts/attach, power steering pulley, P/S pump brackets/attach, powertrain stiffener bracket/attach, water pump pulley, backside idle pulley, belts.

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Vehicle Line SEDAN SC
Model Year 1991 Issued 10-90 Revised(*)

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Engine Description

Engine Code

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

Engine - Valve System

Hydraulic lifters (std., opt., n.a.)	Standard
Valves	Number intake/exhaust
	Head O.D. intake/exhaust

Engine - Connecting Rods

Material & mass kg., (weight, lbs.)*	Forged, Heat Treated, SAE 1141 Steel, .58 Kg. each (1.28 lbs.)
Length (axes 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
	Rear

Engine - Lubrication System

Normal oil pressure kPa (psi) @ eng rpm	NA
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 Nozzle	Type
	Opening pressure kPa (psi)
Pre-chamber design	
Fuel in-jection pump	Manufacturer
	Type
Fuel inj. pump drive (belt, 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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Engine Description

Engine Code

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

Engine - Cooling System

Coolant recovery system (std, opt, n.a.)		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	Approx. 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.)	6.75 L (7.13 qt.)
	With air conditioner-L(qt.)	6.75 L (7.13 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 9.03 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	1.9 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, Scaloped Ring
	Diameter & projected width	Non-A/C: 300 mm (11.81 in.); A/C: 373 mm (14.69 in.)
	Ratio(fan to crnkshft.rev.)	NA
	Fan cutout type	NA
	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 Collant 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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Engine Description
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1.9L L4DOHC (116 CID) 16-VALVE
 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		NA
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	
	Automatic	
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)		50.0 (13.2)
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.a.	NA
	Capacity L (gallons)	
	Location & material	
	Attachment	
Auxiliary tank	Opt., n.a.	NA
	Capacity L (gallons)	
	Location & material	
	Attachment	
	Sictr switch or valve	
	Separate fill	

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 PORT FUEL INJECTION

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		NA
	Air injection	Pump or pulse	
		Driven by	
		Air distribution (head, manifold, etc.)	
		Point of entry	
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Vacuum Activated Back Pressure Controlled
		Exhaust source	Cylinder Head
		Point of exh. inj. (spacer, carb., manifold, other)	Inlet manifold
	Catalytic Converter	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/cm3
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 int.(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)		One, Reverse Flow, 409 Stainless Steel
Material & Mass kg (weight lbs.)		Total Assembly 12.49 Kg. (31.95 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
Intermediate pipe	o.d. & wall thickness	44.45 o.d./1.14 to 1.29 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	44.45 o.d./1.14 to 1.29 mm Wall (1.78 in./0.048 to .0516 in. Wall)
	Matl. & Mass kg (wght.lbs.)	409 Stainless Steel

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PORT FUEL INJECTION

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

Manual 3-speed (manufacturer/country)	NA
Manual 4-speed (manufacturer/country)	NA
Manual 5-speed (manufacturer/country)	Standard, Saturn Corporation/U.S.A.
Automatic (manufacturer/country)	NA
Auto. overdrive (manufacturer/country)	Optional, Saturn Corporation/U.S.A.

Manual Transmission/Transaxle

Number of forward speeds		5
Gear ratios	1st	3.25
	2nd	2.055
	3rd	1.423
	4th	1.032
	5th	.730
	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	NA
Assist (spring, power/percent, nominal)		NA
Type pressure plate springs		Diaphragm
Total spring load (nominal) N (lbs)		5050 N (1,135.34 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 lub.		Self-Centering, Sealed
Torsional damping method, springs, hysteresis		Single Stage

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

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Engine Description
 Engine Code

1.9L L4 DOHC (116 CID) 16-VALVE
 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)	PRND32
	Shift interlock (yes, no, describe)	Yes
Gear ratios	1st	2.526
	2nd	1.556
	3rd	1.030
	4th	.700
	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.)	8.00 L (16.9 pt.)
	Type recommended	GM Dexron II
Oil cooler (std., opt., N.A., internal, external, air, liquid)		Standard Integral W/Radiator
Trans. mass kg (lbs) & case matl.**		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(% frt/rear)	

* Input speed / square root of torque.
 ** Dry weight including torque converter. If other, specify.

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Engine Description

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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 4.133 A4
Transr ratio and method(chain,gear,etc)		NA
Front drive unit	Ring gear o.d.	197 mm (7.75 in.) M5; 183.55 mm (7.226 in.) A4
	No. of teeth	16 M5; 15 A4
	Pinion	65 M5; 62 A4

Front Drive Unit

Description (integral to trans., etc.)		Integral to Trans.
Limited slip differential (type)		NA
Drive pinion	Type	Straight Bevel Gear
	Offset	NA
No. of differential pinions		2
Pinion/differential	Adjustment (shim, etc.)	NA
	Bearing adjustment	NA
Driving wheel bearing (type)		Cartridge
Lubricant	Capacity L (pt.)	NA
	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	NA	
		Right	NA	
Slip yoke	Type		Tripot	
	Number of teeth		Three Lobe	
	Spline o.d.		NA	
Universal joints	Make and mfg. no.	Inner	Tripot	
		Outer	RZEPPA	
	Number used		1 Each, Left & Right	
	Type, size, plunge	Inner	NA	
		Outer	NA	
	Attach (u-bolt, clamp, etc.)			
	Bearing	Type (plain, anti-friction)	NA	
		Lubrication (fitting, prepack)	NA	
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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Body Type And/Or

Engine Displacement

1.9L L4 DOHC (116 CID) 16-VALVE

PORT FUEL INJECTION

Suspension - General Including Electronic Controls

Car leveling	Std./opt./not avail.	NA
	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/option/not avail.	NA
	Manual/automatic control	
	Number of damping rates	
	Type of actuation (manual/electric motor/air, etc.)	
	s e n s o r s	Lateral acceleration
		Deceleration
		Acceleration
		Road surface
Shock absorber (front & rear)	Type	Non-Pressurized MacPherson Strut Type
	Make	Delco Products
	Piston diameter	28.0 mm (Nominal)
	Rod diameter	20.0 mm (Nominal)

Suspension - Front

Type and description		Independent MacPherson Strut Type
Travel*	Full jounce	98.0 mm (3.85 in.)
	Full rebound	100.0 mm (3.9 in.)
Spring	Type (coil, leaf, other & matl)	Coil, Steel SAE 5160 Modified
	Insulators (type & matl)	Rubber Over Steel Top Mount
	Size (coil design height & i.d.)	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.)	
Stabilizer	Type (link, linkless, frmless)	Tension Strut & Stabilizer Bar Linkless
	Material & bar diameter	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	90 mm (3.5 in.)
	Full rebound	87.01 mm (3.4 in.)
Spring	Type (coil, leaf, other & matl)	Coil, Steel SAE 5160 Modified McPherson Strut
	Size (length x width, coil design height & i.d.)	373.4 x 130.4 mm (11.9 x 5.1 in.); 248.2 mm (9.7 in.) at Design; 105.0 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)	
	Insulators (type & material)	Rubber Over Steel Top Mount
	If leaf	No. of leaves
		Shackle (comp or tens)
Stabilizer	Type (link, linkless, frmless)	Link
	Material & bar diameter	Steel SAE 1090, 15.0 mm (.60 in.)
Track bar (type)		NA

* Define load condition:

MVMA Specifications

Vehicle Line COUPE SC
Model Year 1991 Issued 10-90 Revised(*)

METRIC (U.S. Customary)

Body Type And/Or

Engine Displacement

Brakes - Service

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

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 W/ABS Option)	
Valving type(prop, delay, metering, other)			Fixed Proportioning	
Power brake (std., opt., n.a.)			Standard	
Booster type(rmt, intgrl, vac., hyd., etc.)			Single Vacuum	
Vacuum	Source (inline, pump, etc.)		Inline	
	Reservoir (volume cu. in.)		None	
	Pump-type		None	
Traction Control	Operational speed range		NA	
	Type engine intervention		NA	
Anti-lock device	Front/rear (std., opt., n.a.)		Optional	
	Manufacturer		Delco Moraine Division G.M. / 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.)*			Front 175 (27); Rear 230 (36) Drum; Rear 122 (19) Disc	
Gross Lng area sq cm (sq in)** (F/R)			Front 175 (27); Rear 230 (36) Drum; Rear 122 (19) Disc	
Swept area sq cm (sq in)*** (F/R)			Front 1157 (179); Rear Disc 1030 (160)	
Rotor	Outer working diameter	F/R	Front 250.5 mm (9.9 in.); Rear 245 mm (9.6 in.) Disc	
	Inner working diameter	F/R	Front 161 mm (6.3 in.); Rear 165 mm (6.5 in.) Disc	
	Thickness	F/R	Front 18 mm (.7 in.); Rear 11 mm (.4 in.) Disc	
	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) Drum; Rear 32 (1.3) Disc	
Master cylinder	Bore/stroke	F/R	Bore 22.2 mm (.9 in.)	
Pedal arc ratio			4.0 : 1	
Line pressure at 445 N (100 lb.) pedal load kPa (psi)			NA	
Lining clearance			F/R Self Adjusting / Self Adjusting	
Brake lining	Front wheel	Bonded or riveted		Bonded
		Rivet size		
		Manufacturer		Delco Moraine Division G.M. / Saturn Corporation
		Lining code *****		DM 8087
		Material		Semi-Metallic
		****	Pri. or out-brd	40.3 sq. cm x 10 mm (Area x Thickness) (6.2 sq. in. x .4 in.)
		Size	Sec. or in-brd	40.3 sq. cm x 10 mm (Area x Thickness) (6.2 sq. in. x .4 in.)
		Shoe thcknss.(no lng)		6 mm (.2 in.)
	Rear wheel	Bonded or riveted		Front-Bonded; Rear-Bonded Disc
		Manufacturer		Delco Moraine Division G.M. / Saturn Corporation
		Lining code *****		Disc-DM 9102; Drum-DM 8090
		Material		Semri-Metallic
		****	Pri. or out-brd	114.7 sq. cm x 3.5 mm Drum; 30.3 sq. cm x 9 mm (17.8 x .1); (4.7 x .3)
		Size	Sec. or in-brd	114.7 sq. cm x 3.5 mm Drum; 30.3 sq. cm x 9 mm (17.8 x .1); (4.7 x .3)
		Shoe thcknss (no lng)		1.6 mm (0.6 in.) Rim; 5 mm (.2 in.)

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

**** Size for drum brakes includes length x width x thickness.

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

MVMA Specifications

Vehicle Line COUPE SC
 Model Year 1991 Issued 10-90 Revised(*)

METRIC (U.S. Customary)

Body Type And/Or
 Engine Displacement

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	Number & size		4 Bolts M12 x 1.5
	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)	

MVMA Specifications

Vehicle Line COUPE SC
Model Year 1991 Issued 10-90 Revised(*)

METRIC (U.S. Customary)

Body Type And/Or
Engine Displacement

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

Steering

Manual (std., opt., n.a.)			NA		
Power (std., opt., n.a.)			Standard		
Adjustable steering wheel/ column (tilt, telescope, other)		Type	Adjustable Rack		
		Manufacturer			
		(std., opt., n.a.)	Standard		
Wheel diameter ** (W9) SAE J1100		Manual			
		Power			
Turning diameter m (ft.)	Out-side front	Wall to wall (l. & r.)	l. 11.5 m (38.0 ft.); r. 11.6 m (38.3 ft.)		
		Curb to curb (l. & r.)	l. 11.3 m (37.3 ft.); r. 11.3 m (37.3 ft.)		
	In-side rear	Wall to wall (l. & r.)	l. 6.6 m (21.8 ft.); r. 6.6 m (21.8 ft.)		
		Curb to curb (l. & r.)	l. 6.8 m (22.4 ft.); r. 6.8 m (22.4 ft.)		
Scrub Radius *			14 mm (15 in.); 11 mm (14 in.)		
Manual	Gear	Type	Rack		
		Manufacturer			
		Ratios	Gear	NA	
			Overall	NA	
	No. wheel turns(stop to stop)		NA		
Power	Type (coaxial,elec.hyd.,etc.)		Hydraulic		
	Manufacturer		Saginaw		
	Gear	Type	Rack & Pinion		
		Ratios	Gear	NA	
			Overall	16.3 : 1	
	Pump (drive)				
	No. wheel turns(stop to stop)		2.7		
Linkage	Type		NA		
	Location (front or rear of wheels, other)				
	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 W/Spherical Joints		

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

o **MVMA Specifications**

Vehicle Line COUPE SC
 Model Year 1991 Issued 10-90 Revised(*)

METRIC (U.S. Customary)

Body Type And/Or
 Engine Displacement

1.9L L4 DOHC (118 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.)	-.6 +/- .65
		Toe-in - mm (in.)	0.1 +/- .10
	Periodic M.V. inspection	Camber (deg.)	-.6 +/- .65
		Toe-in - mm (in.)	0.1 +/- .10

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

o **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.	NA
	Type - Secondary, Opto-electronic	
	Speedometer	Digital
	Status/warn. indicators - Turn signals, high beam, low fuel, check gauges	
	Brightness control	Day/night mode, adj.
	EGR maintenance indicator	NA
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	NA
Wind-shield wiper	Type (standard)	Two-Speed Manual Wipers W/Separate Mist Function & Three Intermittent Speeds
	Type (optional)	NA
	Blade length	55 cm. (22 in.) Driver's Side; 53 cm. (21 in.) Passenger Side
	Swept area sq cm (sq in)	7,078.2 sq. cm. (1,097.0 sq. in.)
Wind-shield washer	Type (standard)	Standard, Hood Mounted Nozzles
	Type (optional)	NA
	Fluid level indicator	NA
Rear window wiper, wiper/washer (std., opt., n.a.)		NA
Horn	Type	Vibrator-Sea Shell
	Number used	1
Other		

MVMA Specifications

Vehicle Line COUPE SC
 Model Year 1991 Issued 10-90 Revised(*)

METRIC (U.S. Customary)

Engine Description
 Engine Code

1.9L L4 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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MVMA Specifications

Vehicle Line COUPE SC
 Model Year 1991 Issued 10-90 Revised(*)

METRIC (U.S. Customary)

Body Type

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

Body

Structure	Welded Steel Spaceframe 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/2 Component Urethane Clear Coat
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.a.)	Mechanical
Hatch-back lid	Material & mass	NA
	Type (counterbalance, other)	NA
	Internal release control (elec., mech., n.a.)	NA
Tailgate	Material & mass	NA
	Type (drop, lift, door)	NA
	Internal release control (elec., mech., n.a.)	NA
Vent window control (crank, friction, pivot, power)	Front	NA
	Rear	NA
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	NA
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	

MVMA Specifications

Vehicle Line COUPE SC
 Model Year 1991 Issued 10-90 Revised(*)

METRIC (U.S. Customary)

Body Type

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			
Passive	Type & description (air bag, motorized-2-point belt, fixed belt, knee bolster, manual-lap belt)	First seat	Motorized 2-Point Shoulder Belt and Manual Lap Belt		Motorized 2-Point Shoulder Belt and Manual Lap Belt
		Second seat			
	Standard/ optional	Third seat			

Glass

	SAE Ref No	
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 (2A1, 2B1, 2C1, etc.)	2E1-Halogen
Quantity	2
Hi-beam type (1A1, 2A1, 1C1, 2C1, etc.)	2E1-Halogen
Quantity	2

Frame

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

Vehicle Line COUPE SC
 Model Year 1991 Issued 10-90 Revised(*)

METRIC (U.S. Customary)

Body Type

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

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

Air conditioning (manual, auto, temp control)		
Clock (digital, analog)		
Compass / thermometer		
Console (floor, overhead)		
Defroster, elec. backlight		Standard
Electronic	Diagnostic monitor (integrated, individual)	
	Instrument cluster (list instruments)	Speedometer, Tachometer, RPM Gage, Temperature Gage, Oil Pressure Gage
	Keyless entry	NA
	Tripminder (avg. spd. fuel)	NA
	Voice alert (list items)	NA
	Other	
Fuel door lock (remote, key, electric)		Remote
Lamps	Auto head on/off delay, dimming	
	Cornering	
	Courtesy (map, reading)	
	Door lock, ignition	
	Engine compartment	
	Fog	NA
	Glove compartment	
	Trunk	
	Illuminated entry system (list lamps, activation)	
	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-Standard, Non-Illum.; Driver's Side-Optional, Non-Illum.
Navigation system (describe)		
Prkg. brake-auto release (warn. light)		

MVMA Specifications

Vehicle Line COUPE SC
 Model Year 1991 Issued 10-90 Revised(*)

METRIC (U.S. Customary)

Engine Description

Engine Code

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

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

Power equipment	Deck lid(release, pull down)		NA
	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		NA	
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
	Speaker (number, location)		4 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	1
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.

MVMA Specifications

Vehicle Line COUPE SC
Model Year 1991 Issued 10-90 Revised(*)

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.

Body Type

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 (67.5)
Body width at Sg RP (front)	W117	1668 (65.7)
Vehicle width (front doors open)	W120	3817 (150.3)
Vehicle width (rear doors open)	W121	NA
Tumble-home (deg.)	W122	24 deg.
Outside mirror width	W410	1872 (73.7)

Length

Wheelbase	L101	2519.7 (99.2)
Vehicle length	L103	4465.2 (175.8)
Overhang (front)	L104	1054.46 (41.5)
Overhang (rear)	L105	891 (35.1)
Upper structure length	L123	2572 (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 (50.6)
Cowl point to ground	H114	897 (35.3)
Deck point to ground	H138	968 (38.1)
Rocker panel-front to ground	H112	194 (7.6)
Rocker panel-rear to ground	H111	199 (7.8)
Windshield slope angle (deg.)	H122	65 deg.
Backlight slope angle (deg.)	H121	69 deg.

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.)	H108	13.7 deg.
Angle of departure (deg.)	H107	18 deg.
Ramp breakover angle (deg.)	H147	14.5 deg.
Axle differential to ground (front/rear)	H153	155.17 (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 1991 Issued 10-80 Revised(*)

METRIC (U.S. Customary) Vehicle Dimensions

See Key Sheets for Definitions

Body Type

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

Front Compartment

SAE Ref. No.

SgRP front, 'X' coordinate	L31	3108 (122.4)
Effective head room	H61	852 (37.5)
Max. eff. leg room (accelerator)	L34	1081 (42.5)
SgRP to heel point	H30	210 (8.3)
SgRP to heel point	L53	891 (35.1)
Back angle (deg.)	L40	26 (1.0)
Hip angle (deg.)	L42	97 (3.8)
Knee angle (deg.)	L44	129 (5.1)
Foot angle (deg.)	L46	87 (3.4)
Design H-point front travel	L17	198 (7.8)
Normal driving & riding seat track trvl.	L23	178 (7.0)
Shoulder room	W3	1346 (53.0)
Hip room	W5	1304 (51.3)
*** Upper body opening to ground	H50	1167 (45.9)
Steering wheel maximum diameter*	W9	371 (14.6)
Steering wheel angle (deg.)	H18	19.2 (.75)
Accel. heel pt. to steer. whl. cntr	L11	528 (20.8)
Accel. heel pt. to steer. whl. cntr	H17	604 (23.8)
Undepressed floor covering thickness	H67	26 (1.0)

Front Compartment Int. Dim. Are Measured With The Seating Ref. Pt.
(SgRP) 20 mm Forward And 2.6 mm Upward of Rearmost Position.

Rear Compartment

SgRP point couple distance	L50	612 (24.1)
Effective head room	H63	888 (35.0)
Min. effective leg room	L51	672 (26.4)
SgRP (second to heel)	H31	241 (9.5)
Knee clearance	L48	-136 (-5.3)
Shoulder room	W4	1304 (51.3)
Hip room	W6	1251 (49.2)
*** Upper body opening to ground	H51	NA
Back angle (deg.)	L41	26 deg.
Hip angle (deg.)	L43	77 deg.
Knee angle (deg.)	L45	75 deg.
Foot angle (deg.)	L47	117 deg.
Depressed floor covering thickness	H73	13 (.5)

Luggage Compartment

Usable luggage capacity [L (cu. ft.)]	V1	308.7 L (10.9)
*** Liftover height	H195	641 (25.2)

Interior Volumes (EPA Classification)

Vehicle class		87.3 (3.4)
Interior volume index (cu. ft.)**		76.4 (3.0)
Trunk / cargo index (cu. ft.)		10.9 (.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 1991 Issued 10-90 Revised(*)

METRIC (U.S. Customary)

Vehicle Dimensions

See Key Sheets for Definitions

Body Type

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

Station Wagon - Third Seat

SAE Ref. No.

(Not Applicable)

Seat facing direction	SD1	
SgRP couple distance	L85	
Shoulder room	W85	
Hip Room	W88	
Effective leg room	L86	
Effective head room	H86	
SgRP 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 - 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	

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

All Linear Dimensions Are in Millimeters (Inches).

MVMA Specifications

Vehicle Line COUPE SC
 Model Year 1991 Issued 10-90 Revised(*)

METRIC (U.S. Customary)

Body Type

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

Vehicle Fiducial Marks

Fiducial Mark Number*		Define Coordinate Location
Number 1		X - Fiducial Mark To Vertical Zero Grid Line - Measured Horizontally, From The Zero Grid Line To The Fiducial Mark Located On The Theoretical Center Of The Face Of The Front Outboard Seat Adjuster Mounting Bolt.
		Y - Fiducial Mark To Centerline Of Car - Width Measurement Made From Centerline Of Car To The Fiducial Mark Located On The Theoretical Center Of The Face Of The Front Outboard Seat Adjuster Mounting Bolt.
		Z - Fiducial Mark To Horizontal Zero Grid Line - Measured Vertically From Zero Grid Line To Front Fiducial Mark Located On The Theoretical Center Of The Face Of The Front Outboard Seat Adjuster Mounting Bolt.
Number 2		Symmetrically Opposite to Number 1.
Number 1	W21*	-535
	L54*	2813
	H81*	427.9
	H181*	253
	H183*	235
Number 2	W22*	535
	L55*	2813
	H82*	427.9
	H182*	253
	H184*	235

* Reference - SAE Recommended Practice, J182, Motor Vehicle Fiducial Marks.

** EPA Loaded Vehicle Weight, Loading Conditions.

All linear dimensions are in millimeters (inches).

○ MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line COUPE SC

Model Year	1991	Issued	10-90	Revised(*)
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[illegible]

* 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.**

ETWC LEGEND

A	1000	I	2000	Q	3000	4000	Y	4000
B	1125	J	2125	R	3125	4125	Z	4250
C	1250	K	2250	S	3250	4250	AA	4500
D	1375	L	2375	T	3375	4375	BB	4750
E	1500	M	2500	U	3500	5000	CC	5000
F	1625	N	2625	V	3625	5250	DD	5250
G	1750	O	2750	W	3750	5500	EE	5500
H	1875	P	2875	X	3875	5750	FF	5750

*** Shipping Mass (weight) = Curb Weight Less:

28.3 Kg. (62.4 lbs.)

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line

COUPE SC

Model Year

1991

Issued

10-90

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)	0.3 (0.7)	0.5 (1.1)	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	6.0 (13.2)	6.0 (13.2)	12.0 (26.4)	
C60	Air Conditioning	20.5 (45.2)	-2.7 (-6.0)	17.8 (39.2)	
DC0	Mirror-O/S Electric-R.H.	1.0 (2.2)	0.2 (0.4)	1.2 (2.6)	Requires HAA Option
HAA	Power Convenience Package	1.8 (4.0)	1.1 (2.4)	2.9 (6.4)	Includes Power Locks, Windows and Electric R.H. Mirror
JL9	Anti-Lock Brakes	6.2 (13.7)	4.3 (9.5)	10.5 (23.1)	
K34	Cruise Control	0.9 (1.0)	0.2 (0.4)	1.1 (2.4)	
MP7	Automatic Transmission-4 Speed	13.6 (30.0)	0 (0)	13.6 (30.0)	
UM6	Radio-SK\ASTE\CLK\ETR	0.4 (0.9)	0.3 (0.7)	0.7 (1.5)	
UU6	Radio-SK\ASTE\CLK\EQL\ETR	1.7 (3.7)	1.6 (3.5)	3.3 (7.3)	
U1C	Radio-SK\DISC\CLK\EQL\ETR	1.8 (4.0)	1.7 (3.7)	3.5 (7.7)	

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