

# MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

# 1994

Manufacturer SUZUKI MOTOR CORPORATION	Vehicle Line Geo METRO	
Mailing Address GENERAL MOTORS CORPORATION CHEVROLET CENTRAL OFFICE 30007 VAN DYKE WARREN, MI 48090-9065	Issued SEPTEMBER, 1993	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.

## MVMA

Motor Vehicle Manufacturers Association  
of the United States, Inc.

Blank 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 Geo METRO  
 Model Year 1994 Issued 9-93 Revised(\*) \_\_\_\_\_

**METRIC (U.S. Customary)**

## Vehicle Origin

Design & development (company)	Suzuki Motor Corporation
Where built (country)	Canada
Authorized U.S. Sales marketing representative	Chevrolet/Geo

## 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)
<b>Geo METRO</b>				
2-Door Hatchback Coupe (FWD)	1MR08	2/2	40 (88)	46/50, Man. 36/39, Auto.
4-Door Hatchback Sedan (FWD)	1MR68	2/2	40 (88)	46/50, Man. 36/39, Auto.
<b>Geo METRO XFi</b>				
2-Door Hatchback Coupe (FWD)	1MS08	2/2	40 (88)	53/58, Man.

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

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## METRIC (U.S. Customary) Power Teams

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

		<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	
<b>E N G I N E</b>	Engine Code	LP2	LP2	LP2		
	Displacement Liters (cu. in.)	1.0 (61)	1.0 (61)	1.0 (61)		
	Induction system (FI, Carb, etc.)	Electronic Fuel Injection	Electronic Fuel Injection	Electronic Fuel Injection		
	Compression ratio	9.5:1	9.5:1	9.5:1		
	SAE Net at RPM	Power kW(bhp)	41 (55) @ 5700	41 (55) @ 5700	36 (49) @ 4700	
		Torque Newton meters (lb.ft.)	79 (58) @ 3300	79 (58) @ 3300	79 (58) @ 3300	
	Exhaust Single, dual	Single	Single	Single		
<b>T R A N S</b>	Transmission/ Transaxle	Manual 5-Speed	Auto 3-Speed	Manual 6-Speed		
	Effective Final Drive/Axle Ratio (std. first)	4.10	3.87	3.79		

\* - Fuel Economy Version

<b>Series Availability</b>		<b>Power Teams (A - B - C - D)</b>	
<b>Model</b>	<b>Code</b>	<b>Standard</b>	<b>Optional</b>
<b>Geo METRO</b>			
2-Dr. Hatchback Coupe	1MR08	A	B
4-Dr. Hatchback Sedan	1MR68	A	B
<b>Geo METRO XFi</b>			
2-Dr. Hatchback Coupe	1MS08	C	-

# MVMA Specifications

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## METRIC (U.S. Customary)

Engine Description	1.0 LITER L3 (61 CID)
Engine Code	ELECTRONIC FUEL INJECTION RPO LP2

### ENGINE - GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-chamber, etc.)	Inline, Front, SOHC Transverse	
Manufacturer	Suzuki Motor Corporation	
No. of cylinders	3	
Bore	74 mm (2.91 in.)	
Stroke	77 mm (3.03 in.)	
Bore spacing (C/L to C/L)	84 mm (3.31 in.)	
Cyl block matl & mass kg(lbs.) (machined)	Aluminum Alloy, 11.85 (26.12)	
Cylinder block deck height	186.8 mm (7.35 in.)	
Cylinder block length	288 mm (11.34 in.)	
Deck clearance (minimum) (above or below block)	0.4 mm (0.02 in.), Above	
Cyl. head material & mass kg (lbs.)	Aluminum Alloy, 5.12 (11.29)	
Cylinder head volume cu. cm. (cu. in.)	30.2 (1.84)	
Cylinder liner material	Cast Iron	
Head gasket thickness (compressed)	1.2 mm (0.05 in.)	
Minimum combustion chamber total volume cu. cm. (cu. in.)	38.96	
Cyl. no. system (front to rear)*	L. Bank	1-2-3
	R. Bank	---
Firing order	1-3-2	
Intake manifold matl & mass kg(lbs.)**	Aluminum Alloy, 1.66 (3.66)	
Exh. manifold matl & mass kg (lbs.)***	Cast Iron, 3.37 (7.43)	
Knock sensor (number & location)	Not Applicable	
Fuel required unleaded, diesel, etc.	Unleaded	
Fuel antiknock index (R + M) / 2	86 + Octane	
Engine mounts	Quantity	3
	Matl and type (elastomeric, hydroelastic, hydraulic damper, etc.)	Rubber, Elastomeric (M/T Model) Rubber, Hydroelastic (A/T Model)
	Added isolation (sub-frame, crossmember, etc.)	None
Total dressed engine mass (wt) dry***	MT: 61.0 (134.5), AT: 56.5 (124.6)	

### Engine - Pistons

Material & mass, g (weight, oz.) - piston only	Aluminum Alloy, 218 g. (7.69 oz.) [220 g. (7.76 oz.) XFi Models]
--	---

### Engine Camshaft

Location	Cylinder Head	
Material & mass kg (weight, lbs.)	Cast Iron, 1.24 (2.73)	
Drive type	Chain/belt	Belt
	Width/pitch	19.1/9.525 mm (.75/0.38 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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## METRIC (U.S. Customary)

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 Engine Code

1.0 LITER L3 (61 CID)  
 ELECTRONIC FUEL INJECTION RPO LP2

### Engine - Valve System

Hydraulic lifters (std., opt., n.a.)	Standard	
Valves	Number intake/exhaust	3/3
	Head O.D. intake/exhaust	35/28 mm (1.38/1.10 in.)

### Engine - Connecting Rods

Material & mass kg., (weight, lbs.)*	Forged Steel, 0.415 (0.915), [0.36 (0.794) XFi Models]
Length (axes centerline to centerline)	120 mm (4.72 in.)

### Engine - Crankshaft

Material & mass kg., (weight, lbs.)*	Nodular Iron, 6.66 (14.7), [5.90 (13.0) XFi Models]	
End thrust taken by bearing (no.)	2	
Length & number of main bearings	18 mm (0.71 in.) x 4	
Seal (material, one, two piece design, etc.)	Front	Rubber, One Piece
	Rear	Rubber, One Piece

### Engine - Lubrication System

Normal oil pressure kPa(psi) @ eng rpm	333 (392) @4,000
Type oil intake (floating, stationary)	Stationary
Oil filter sys. (full flow, part, other)	Full Flow
Capacity of c/case, less filter-refill-L (qt.)	3.1 (3.3)

### Engine - Diesel Information

(NOT APPLICABLE)

Diesel engine manufacturer		
Glow plug, current drain at 0 deg. F		
Injector Nozzle	Type	
	Opening pressure kPa(psi)	
Pre-chamber design		
Fuel injection pump	Manufacturer	
	Type	
Fuel in, 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 APPLICABLE)

Turbo charger - manufacturer	
Super charger - manufacturer	
Intercooler	

\* Finished State

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Engine Code	ELECTRONIC FUEL INJECTION RPO LP2

Engine - Cooling System		MANUAL TRANS.	AUTOMATIC TRANS.
Coolant recovery system (std. opt. n.a.)		Standard	
Coolant fill location (rad., bottle)		Bottle	
Radiator cap relief valve pressure kPa (psi)		88.3 (12.8)	
Circulation thermostat	Type (choke, bypass)	Choke	
	Starts to open @ deg's C(F)	88 (190), [92 (198) XFI Models]	
Water Pump	Type (centrifugal, other)	Centrifugal	
	GPM 1000 pump rpm	15 liters (4.0 gallon) / min.	
	Number of pumps	1	
	Drive (V-belt, other)	V Ribbed Belt	
	Bearing type	Ball & Ball	
	Impeller material	Steel	
Housing material		Aluminum Alloy	
By-pass recirculation type (inter., ext.)		External	
Cooling system capacity	With heater - L (qt.)	3.9 (4.1)	4.0 (4.2)
	With air conditioner-L(qt.)	3.9 (4.1)	4.0 (4.2)
	Opt. equip. specify-L(qt.)	---	
Water jackets full length of cyl(yes,no)		Yes	
Water all around cylinder (yes, no)		Yes	
Water jackets open at head face (yes,no)		Yes	
Radiator core	Std., A/C, HD	Standard	
	Type (cross-flow, etc.)	Vertical - Flow	
	Construction (fin & tube mechanical, braze, etc.)	Fin & Tube	
	Matl., mass kg (wgt., lbs.)	Copper & Brass, 2.1(4.6)	3.0 (6.6)
	Width	358 mm (14.09 in.)	328 mm (12.91 in.)
	Height	350 mm (13.78 in.)	325 mm (12.80 in.)
	Thickness	16 mm (0.63 in.)	32 mm (1.26 in.)
Fins per inch		10	
Radiator end tank material		Plastic	
Fan	Std., elec., opt.	Standard, Electric	
	Number of blades & type (flex, solid, material)	4, Solid, Plastic	
	Number & location (front, rear of radiator)	1, Rear of Radiator	
	Diameter & projected width	300 mm (11.81 in.)	
	Ratio(fan to crnkshft.rev.)	Not Applicable	
	Fan cutout type	--	
	Drive type (direct, remote)	Direct	
	RPM at idle (elec.)	2,100 rpm	
	Motor rating(wattage)(elec)	80	
	Motor switch (type & location/elec.)	Bimetal Type, On Thermostat Case	
	Switch point (temp.,/ pressure/elec.)	ON/OFF: 98/93 (208/199); 102/97 (216/207), XFI Models	
	Fan shroud (material)	Plastic	Steel



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

Induction type: carburetor, fuel injection system, etc.		Fuel Injection
Manufacturer		NIPPON DENSO CO. LTD.
Carburetor no. of barrels		Not Applicable
Idle A/F mix.		14.6
Fuel Injection	Point of inj. (no.)	Throttle Body, One
	Constant, pulse, flow	Pulse
	Control (elec., mech.)	Electronic
	Sys. press. kPa (psi)	180 (26)
Idle spd. -rpm (spec. neutral or drive and propane if used)	Manual	800 (Neutral), [700 (Neutral) XFi Models]
	Automatic	850 (Neutral)
Intake manifold heat control (exhaust or water thermostatic or fixed)		Water (Coolant)
Air cleaner type		Replaceable Nonwoven Fabric Element, Single Snorkel
Fuel filter (type/location)		Paper/Fuel Tank Side
Fuel pump	Type (elec. or mech.)	Electric
	Location (eng., tank)	Tank
	Press. range kPa (psi)	180 (26)
	Flow rate at regulated pressure (L (gal)/hr @ kPa (psi))	50 @ 220 (13.2 @ 32)

### Fuel Tank

Capacity refill L (gallons)		40 (10.6)
Location (describe)		Under Floor - Rear
Attachment		Bolt
Material & Mass kg (weight lbs.)		Steel, 8.6 (18.9)
Filler pipe	Location & material	Left Side Rear Quarter Panel, Steel
	Connection to tank	Kevlar Reinforced Rubber Hose
Fuel line (material)		Steel
Fuel hose (material)		FKM/CHC/CHC (Main Hose), FSM/NBR/CHC (RTN Hose)
Return line (material)		Steel
Vapor line (material)		Steel
Extended range tank	Opt., n.a.	Not Applicable
	Capacity L (gallons)	"
	Location & material	"
	Attachment	"
Auxiliary tank	Opt., n.a.	Not Applicable
	Capacity L (gallons)	"
	Location & material	"
	Attachment	"
	Sictr switch or valve	"
	Separate fill	"

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## METRIC (U.S. Customary)

Engine Description 1.0 LITER L3 (61 CID)  
 Engine Code ELECTRONIC FUEL INJECTION RPO LP2

## Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		Feedback Fuel Injection + 3 Way Catalyst + EGR	
	Air injection	Pump or pulse	Not Applicable	
		Driven by	"	
		Air distribution (head, manifold, etc.)	"	
		Point of entry	"	
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Backpressure Controlled	
		Exhaust source		
	Catalytic Converter	Point of exh.inj. (spacer, carb., manifold, other)	Manifold	
		Type	3-Way	
		Number of	1	
		Location(s)	Under Floor	
		Volume L (cu.in)	Fed. MT - 0.9 (54.9), Cal. AT & MT, Fed. AT - 1.02 (62.2)	
Substrate type		Monolith		
Noble metal type		Platinum (Pt), Rhodium (Rh)		
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Induction System	
	Energy source (manifold vacuum, carburetor, other)		Manifold Vacuum	
	Discharges to (intake manifold, other)		Intake Manifold	
	Air int.(breather cap, other)		Air Cleaner	
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	Canister	
		Carburetor	---	
Electronic System	Vapor storage provision		Canister	
	Closed loop (yes/no)		Yes	
		Open loop (yes/no)		Yes

## 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.)		1, Reverse Flow
Resonator no. & type		1, Straight Thru.
Exhaust pipe	Branch o.d., wall thickness	Not Applicable
	Main o.d., wall thickness	48.6-1.6/38.1-1.2 mm
	Matl. & Mass kg (wght.lbs.)	Inner: Stainless Steel, Outer: Aluminum Coated Steel
Inter-mediate pipe	o.d. & wall thickness	41.3 - 1.2 / 38.1 - 1.2 mm
	Matl. & Mass kg (wght.lbs.)	Inner: Stainless Steel, Outer: Aluminum Coated Steel
Tail pipe	o.d. & wall thickness	38.1-1.2 mm
	Matl. & Mass kg (wght.lbs.)	Aluminum Coated Steel

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

Manual 4-speed (manufacturer/country)	Not Applicable
Manual 5-speed (manufacturer/country)	Standard, Suzuki Motor Corporation/Japan
Manual 6-speed (manufacturer/country)	Not Applicable
Automatic (manufacturer/country)	AISIN SEIKI/JAPAN
Auto. overdrive (manufacturer/country)	Not Applicable

### Manual Transmission/Transaxle

Number of forward speeds	5	
Gear ratios	1st	3.42
	2nd	1.89
	3rd	1.28
	4th	0.91
	5th	0.76
	6th	-
	Reverse	3.27
Synchronous meshing (specify gears)	All Forward Gears	
Shift lever location	Floor Mounted	
Trans. case mat'l. & mass kg (lbs)*	Aluminum Die-Cast, 7.7 (16.9)	
Lubricant	Capacity L (pt.)	2.4 (5.1)
	Type recommended	Suzuki Gear Oil FN75W

### Clutch (Manual Transmission)

Clutch manufacturer	DCC (Canada)	
Clutch type (dry, wet; single, multiple disc)	Dry, Single	
Linkage (hyd., cable, rod, lever, other)	Cable	
Max. pedal effort (nom. spring load) N (lbs.)	Depressed	78 (17.5)
	Released	50 (11.2)
Assist (spring, power/percent, nominal)	Nominal	
Type pressure plate springs	Diaphragm	
Total spring load (nominal) N (lbs.)	2,550 (573.3)	
Clutch facing	Facing mfr. & mat'l. coding	F.C.C. Co., LTD.
	Facing mat'l. & construction	Semi-Mold
	Rivets per facing	16
	Outside x inside dia. (nom.)	170 x 110 mm (6.69 x 4.33 in.)
	Total eff. area sq cm (sq in)	132 (20.5)
	Thickness (pressure plate side/fly wheel side)	3.0/3.0 mm (0.12/0.12 in.)
	Rivet depth (pressure plate side/fly wheel side)	Min. 0.9/0.9 mm (0.04/0.04 in.)
Engagement cushion method	Separate Cushion Type	
Release bearing type & method lub.	Automatic Center Adjusting Type With Grease Lubrication	
Torsional damping method, springs, hysteresis	Springs	

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

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Engine Description  
 Engine Code

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 ELECTRONIC FUEL INJECTION RPO LP2

### Automatic Transmission/Transaxle

Trade Name		3-Speed Automatic
Type and special features (describe)		Torque Converter With Planetary Gears
Shift mechanics		Electronic Control
Gear selector	Location (column, floor, other)	Floor Mounted On Console
	Ltr./No. designation (e.g. PRND21)	P-R-N-D-2-L
	Shift interlock (yes, no, describe)	Yes
Gear ratios	1st	2.81
	2nd	1.55
	3rd	1.00
	4th	Not Applicable
	5th	"
	6th	"
	Reverse	2.30
Final drive ratio		3.947
Max. upshift vehicle speed - drive range km/h (mph)		1 - 2 = 52 (32.3) 2 - 3 = 97 (60.3)
Max. upshift engine speed RPM		6000 RPM
Max. kickdown speed - drive range km/h (mph)		2 - 1 = 37 (23.0) 3 - 2 = 82 (50.9)
Min. overdrive speed km/h (mph)		Not Applicable
Torque converter	Type	3 Elements, 1 Stage, 2 Phases
	Torus design	
	Number of elements	3
	Max. ratio at stall	2.1
	Type of cooling (air, liquid)	Liquid
	Nominal diameter	210 mm (8.27 in.)
Capacity factor "K"		1.2 x 10 <sup>-6</sup>
Pump type		Trochoid Pump
Lubricant	Capacity refill L (pt.)	4.9 (10.4)
	Type recommended	Dexron II
Oil cooler (std., opt., N.A., internal, external, air, liquid)		Standard, Integral With Radiator
Trans. mass kg (lbs) & case matl.**		Aluminum Die-Cast, 51 (112.4)

### All Wheel / 4 Wheel Drive

(NOT APPLICABLE)

Desc. & type (part-time, full-time, 2/4 shift while moving, mech., elect., chain/gear, etc.)		
Transfer	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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## METRIC (U.S. Customary)

### Engine Description

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### Engine Code

### Axle Ratio and Tooth Combinations

(See 'Power Teams' for axle ratio usage)

Effec. final drv. ratio (or overall top gear ratio)		AT: 3.87	Base MT: 4.10	XFi MT: 3.79
Transr ratio and method(chain, gear, etc)		Not Available		
Front drive unit	Ring gear o.d.	188.12 mm	184.70 mm	186.98 mm
	No. of teeth	19	19	19
	Pinion	75	78	72

### Front Drive Unit

Description (integral to trans., etc.)		Front Differential With Helical Gears And Ball Bearing
Limited slip differential (type)		None
Drive pinion	Type	Helical Gear
	Offset	Not Applicable
No. of differential pinions		2
Pinion/ differential	Adjustment (shim, etc.)	Shim
	Bearing adjustment	Not Applicable
Driving wheel bearing (type)		Ball Bearing
Lubricant	Capacity L (pt.)	Not Applicable
	Type recommended	Automatic Transmission Fluid

### Axle Shafts - Front Wheel Drive

Manufacturer and number used		NTN Corporation, 2		
Type (straight, solid bar, tubular, etc.)		Left	Solid Bar	
		Right	Solid Bar	
Outer diam. x length* x wall thickness	Manual transaxle	Left	22 x 455.7 (0.87 x 17.94 in.)	
		Right	22 x 546.5 (0.87 x 21.52 in.)	
	Automatic transaxle	Left	19.4 x 410.1 mm (0.76 x 16.15 in.)	
		Right	19.4 x 591.6 mm (0.76 x 23.29 in.)	
	Optional transaxle	Left	None	
		Right	None	
Slip yoke	Type	None		
	Number of teeth	"		
	Spline o.d.	"		
Universal joints	Make and mfg. no.	Inner	NTN Corporation	
		Outer	"	
	Number used		4	
	Type, size, plunge	Inner	Tripod, TJ75	
		Outer	Rzeppa, BJ75	
	Attach (u-bolt, clamp, etc.)		Serration	
Bearing	Type (plain, anti-friction)	Anti-Friction		
	Lubrication (fitting, prepack)	Prepacked		
Drive taken through (torque tube, arms or springs)		Lower - Control Arm, Upper - MacPherson Strut		
Torque taken through (torque tube, arms or springs)		Engine Mounting System		

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

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Body Type And/Or  
 Engine Displacement

COUPE	SEDAN
-------	-------

## Suspension - General Including Electronic Controls

Car leveling	Std./opt./not avail.	Not Applicable	
	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.	Not Applicable	
	Manual/automatic control		
	Number of damping rates		
	Type of actuation (manual/ electric motor/air, etc.)		
	s e n s o r	Lateral acceleration	
		Deceleration	
		Acceleration	
Road surface			
Shock absorber (front & rear)	Type	Front: MacPherson, Rear: MacPherson, Double Acting Hydraulic	
	Make	Front: SHOWA, Rear: TOKICO	
	Piston diameter	Front: 25 mm (0.984 in.), Rear: 25 mm (0.984 in.)	
	Rod diameter	Front: 18 mm (0.71 in.), Rear: 18 mm (0.71 in.)	

## Suspension - Front

Type and description		MacPherson Strut With Coil Spring
Travel	Full bounce (define load condition)	100 mm (3.94 in.)
	Full rebound	50 mm (1.97 in.)
Spring	Type (coil, leaf, other & matl)	Coil, Steel
	Insulators (type & matl)	Rubber (Top Only)
	Size (Leaf: length & width; Coil: design height & i.d.; Bar: length & diameter)	301 x 125.6 mm
	Spring rate N/mm (lb./in.)	17.2
	Rate @ wheel N/mm (lb./in.)	17.2
Stabilizer	Type (link, linkless, frmlss)	Not Applicable
	Material & O.D. bar/tube, wall thickness	

## Suspension - Rear

Type and description		MacPherson Strut, Separate Coil Spring	
Travel	Full bounce (define load condition)	120 mm (4.71 in.)	
	Full rebound	50 mm (1.97 in.)	
Spring	Type (coil, leaf, other) & matl	Coil, Steel	
	Size (Leaf: length & width; Coil: design height & i.d.; Bar: length & diameter)	258 x 95 mm                      262 x 95 mm	
	Spring rate [N/mm (lb/in)]	45.1 (257.5)	
	Rate @ wheel [N/mm (lb/in)]	17.6 (100.5)	
	Insulators (type & material)		Rubber
	If leaf	No. of leaves	Not Applicable
Shackle (comp or tens)		"	
Stabilizer	Type (link, linkless, frmlss)	None	
	Material & O.D. bar/tube, wall thickness		
Track bar (type)		"	

# MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line Geo METRO  
 Model Year 1994 Issued 9-93 Revised(\*) \_\_\_\_\_

Model Code/Description And/Or  
 Engine Code/Description  
**Brakes - Service**

COUPE & SEDAN

Description		Hydraulic, Front - Floating Caliper Type. Rear - Leading Trailing Shoe Type			
Manufacturer and brake type (std., opt., n.a.)	Front (disc or drum)	AISIN SEIKI, Disc			
	Rear (disc or drum)	NISHINBO, Drum			
Valving type(prop, delay, metering, other)		Proportion			
Power brake (std., opt., n.a.)		Standard			
Booster type(rmt, intgr, vac., hyd., etc.)		Vacuum			
Vacuum	Source (inline, pump, etc.)	Inline (Intake Manifold)			
	Reservoir (volume cu. in.)	Not Applicable			
	Pump-type	"			
Traction assist	Operational speed range	"			
	Type (engine or brake intervention)	"			
Antilock device	Front/rear (std., opt., n.a.)	"			
	Manufacturer	"			
	Type (electronic, mech.)	"			
	Number sensors or circuits	"			
	No. antilock hyd. circuits	"			
	Integral or add-on system	"			
	Yaw control (yes, no)	"			
Hydraulic power source		"			
Effective area sq. cm. (sq. in.)*		143/172 (22.2/26.7)			
Gross Lng area sq. cm. (sq. in.)**(F/R)		148/172 (22.9/26.7)			
Swept area sq. cm. (sq. in.)**(F/R)		869/282 (134.7/43.7)			
Rotor	Outer working diameter	F/R	213/---mm (8.39 in.)		
	Inner working diameter	F/R	130/-- mm (5.12 in.)		
	Thickness	F/R	10/--- mm (0.39 in.)		
	Matl & type (vented/std)	F/R	Cast Iron, Solid		
Drum	Diameter & width	F/R	---/180 x 25 mm (---/7.09 x 0.98 in.)		
	Type and material	F/R	---/Cast Iron		
Wheel cylinder bore		48.1/15.8 mm (1.89/0.62 in.)			
Master cylinder	Bore/stroke	F/R	20.6/28.5 mm (0.81/1.12 in.)		
Pedal arc ratio		4.1 : 1			
Line pressure at 445 N (100 lb.) pedal load kPa (psi)		---			
Lining clearance		F/R	Self-Adjusting/Self-Adjusting		
Brake lining	Front wheel	Bonded or riveted		Bonded	
		Rivet size		Not Applicable	
		Manufacturer		AKEBONO BRAKE INDUSTRY	
		Lining code *****		AK V3016 EE	
		Material		Resin Mold Including Metal	
		****	Pri. or out-brd	103x40x10 mm (4.06x1.57x0.39 in.)	
		****	Size	104x40x10 mm (4.09x1.57x0.39 in.)	
	Shoe thcknss.(no lng)		5 mm (0.20 in.)		
	Rear wheel	Bonded or riveted		Bonded	
		Manufacturer		NISSHIN SPINNING	
		Lining code *****		NBK D9007 FF	
		Material		Resin Mold	
		****	Pri. or out-brd	172.7 x 25 x 4.3 mm (6.80 x 0.98 x 0.17 in.)	
		****	Size	172.7 x 25 x 4.3 mm (6.80 x 0.98 x 0.17 in.)	
Shoe thcknss (no lng)		1.8 mm (0.07 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. X 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 Geo METRO  
 Model Year 1994 Issued 9-93 Revised(\*) \_\_\_\_\_

METRIC (U.S. Customary)

Model Code/Description And/Or  
 Engine Code/Description

COUPE & SEDAN

## Tires And Wheels (Standard)

Tires	Size (service description)		P145/80R12, All Season
	Type (bias, radial, etc.)		Radial
	Inflation pressure (cold) for recommended max. vehicle load	Front kPa (psi)	220
		Rear kPa (psi)	220
Rev/mile—at 70 km/h(45mph)		985	
Wheels	Type & material		5 deg. Drop Center Rim Contours, Steel
	Rim (size & flange type)		12 x 4.00B
	Wheel offset		45
	Attachment	Type (bolt or stud & nut)	Stud & Lug Nut
		Circle diameter	114.3
Number & size		4 - M10	
Spare	Tire and wheel		T105/80D13, 13 x 4T
	Storage position & location (describe)		Flat Under Rear Load Floor

## Tires And Wheels (Optional)

(NOT APPLICABLE)

Tire size (service description)	
Type (bias, radial, steel, nylon, etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Tire size (service description)	
Type (bias, radial, steel, nylon, etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Tire size (service description)	
Type (bias, radial, steel, nylon, etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Tire size (service description)	
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	Lever - Hand Operated	
Location of control	Between Front Seat	
Operates on	Rear Service Brakes	
If separate from service brakes	Type (internal or external)	Not Applicable
	Drum diameter	"
	Lining size (length x width x thickness)	"



# MVMA Specifications

Vehicle Line Geo METRO  
 Model Year 1994 Issued 9-93 Revised(\*) \_\_\_\_\_

## METRIC (U.S. Customary)

Model Code/Description And/Or  
 Engine Code/Description

COUPE	SEDAN
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### Steering

Manual (std., opt., n.a.)		Standard		
Power (std., opt., n.a.)		Not Applicable		
Speed-sensitive (std., opt., n.a.)		Not Applicable		
4-wheel steering (std., opt., n.a.)		Not Applicable		
Adjustable steering wheel/ column (tilt, telescope, other)	Type	"		
	Manufacturer	"		
	(std., opt., n.a.)	"		
Wheel diameter ** (W) SAE J1100	Manual	375 mm (14.76 in.)		
	Power	Not Applicable		
Turning diameter m (ft.)	Out-side front	Wall to wall (l. & r.)	10.4 (34.1)	
		Curb to curb (l. & r.)	9.6 (31.5)	
	In-side rear	Wall to wall (l. & r.)	Not Applicable	
		Curb to curb (l. & r.)	"	
Scrub Radius *		-1		
Manual	Gear	Type	Rack And Pinion	
		Manufacturer	Suzuki Motor Corporation	
		Ratios	Gear Overall	Not Applicable 18:1
	No. wheel turns(stop to stop)		3.6	
	Type (coaxial, elec. hyd., etc.)		Not Applicable	
Power	Manufacturer		"	
	Gear	Type	"	
		Ratios	Gear Overall	"
			Pump (drive)	
	No. wheel turns(stop to stop)		"	
Linkage	Type		Not Applicable	
	Location (front or rear of wheels, other)			
Tie Rods (one or two)		2		
Inclination at camber (deg.)		26.8		
Steering axis	Bear-ings (type)	Upper	Ball Bearing	
		Lower	Rubber Bushing	
		Thrust	Not Applicable	
Steering spindle/knuckle & joint type		Serrated Shaft		

\* 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)

Vehicle Line Geo METRO  
 Model Year 1994 Issued 9-93 Revised(\*) \_\_\_\_\_

Model Code/Description And/Or  
 Engine Code/Description

ALL

## Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	3
		Camber (deg.)	0
		Toe-in outside track - mm (in.)	0
	Service reset*	Caster (deg.)	Not Adjustable
		Camber (deg.)	"
		Toe-in - mm (in.)	Adjustable
Periodic M.V. in-spection	Caster (deg.)	3 (+/-) 2	
	Camber (deg.)	0 (+/-) 1	
	Toe-in - mm (in.)	0 (+/-) 2 mm	
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	0
		Toe-in outside track - mm (in.)	2mm
	Service reset*	Camber (deg.)	Not Adjustable
		Toe-in - mm (in.)	Adjustable
	Periodic M.V. in-spection	Camber (deg.)	0 (+/-) 1
		Toe-in - mm (in.)	2 (+/-) 2 mm

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

## Electrical - Instruments and Equipment

Speedometer	Type (analog, digital, std., opt.)	Analog
	Trip odometer (std., opt., n.a.)	Optional (Standard On Up-Level Model)
Head-up display	Std., opt., not avail.	Not Available
	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		None
Charge indicator	Type	Not Applicable
	Warning device (light, audible)	Tell-Tale Warning Light
Temperature indicator	Type	Analog Gauge With Pointer
	Warning device	None
Oil pressure indicator	Type	Not Applicable
	Warning device	Tell-Tale Warning Light
Fuel indicator	Type	Analog Gauge With Pointer
	Warning device	None
Windshield wiper	Type (standard)	Electric 2-Speed
	Type (optional)	Intermittent
	Blade length	Dr: 500 mm (19.68 in.), AS: 450 mm (17.72 in.)
	Swept area sq cm (sq in)	6,161 (955)
Windshield washer	Type (standard)	Electric, Push-Button On Instrument Panel
	Type (optional)	None
	Fluid level indicator	None
Rear window wiper, wiper/washer (std., opt., n.a.)		Optional
Horn	Type	Electric Resonator
	Number used	1
Other		Service & Parking Brake Failure Warning Light, Seat Belt Warning Light And Buzzer, Headlamp High Beam Indicating Light, Check Engine Indicating Light, Turn Signal Indicating Light, Shift-Up Indicator (M/T).

# MVMA Specifications

Vehicle Line Geo METRO  
 Model Year 1994 Issued 9-93 Revised(\*) \_\_\_\_\_

METRIC (U.S. Customary)

Engine Code/Description	1.0 LITER L3 (61 CID) ELECTRONIC FUEL INJECTION RPO LP2
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## Electrical - Supply System

	MANUAL TRANS.	AUTOMATIC TRANS.
Battery	Manufacturer	Delco Remy
	Model, std., (opt.)	52381580
	Voltage	12
	Amps at 0 deg F cold crnk	400
	Minutes-reserve capacity	70
	Amps/hrs. - 20 hr. rate	45
	Location	Left Hand Side Of Engine Compartment
Alternator	Manufacturer	Mitsubishi Electric
	Rating (idle/max. rpm)	55 A (2,500 rpm)
	Ratio (alt. crank/rev.)	2.36:1
	Output at idle (rpm, park)	25 A (750 rpm) <span style="float: right;">31 A (850 rpm)</span>
	Optional (type & rating)	None
Regulator	Type	Integral With Alternator

## Electrical - Starting System

Motor	Manufacturer	Mitsubishi Electric
	Current drain deg C (F)	200 A
	Power rating kw (hp)	0.8 (1.1) <span style="float: right;">1.2 (1.6)</span>
Motor drive	Engagement type	Positive Shift Solenoid <span style="float: right;">Reduction</span>
	Pinion engages from (front, rear)	Front

## Electrical - Ignition System

Type	Electronic (std, opt, n.a.)	Electronic Spark Advance
	Other (specify)	High Energy Ignition
Coil	Manufacturer	Mitsubishi Electric
	Model	---
	Current	Engine stopped - A: 0 Engine idling - A: 1.5 A
Spark plug	Manufacturer	NGK ND AC
	Model	BPR6ES-11 W20EPR-U11 R42XLS
	Thread (mm)	14
	Tightening torque Newton meters (lb. ft.)	24.5
	Gap	1.1 mm (0.04 in.)
	Number per cylinder	1
Distributor	Manufacturer	NIPPON DENSO
	Model	---

## Electrical - Suppression

Locations & type	Internal Alternator Capacitor, Resistor High-Tension Ignition Cables, Resistor Spark Plugs, Ignition Coil By-Pass Capacitor, Flame Spraying Rotor Distributor
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# MVMA Specifications

Vehicle Line Geo METRO  
 Model Year 1994 Issued 9-93 Revised(\*) \_\_\_\_\_

METRIC (U.S. Customary)

Model Code/Description	COUPE	SEDAN
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## Body

Structure	Unitized Frame
Bumper System Front - Rear	Front Bumper System Is Composed Of Energy Absorption Formed Polypropylene, Steel Member And Polypropylene Cover. Rear Bumper System Is Composed Of Energy Absorption Polypropylene With Glass Fiber And Polypropylene Cover.
Anti-Corrosion Treatment	<ol style="list-style-type: none"> <li>1. Use Of Surface Treated Steel In Major Body Components</li> <li>2. Application Of Vinyl Chloride Coating To Floor Bottom &amp; Side Sill Outer</li> <li>3. Application Of Corrosion Protection Oil To Side Sill Inner Surface</li> </ol>

## Body - Miscellaneous Information

Type of finish (lacquer, enamel, other)	Enamel	
Hood	Material & mass	Steel
	Hinge location (front, rear)	Rear
	Type (counterbalance, prop)	Prop
	Release control (int., ext.)	Internal And External
Trunk lid	Material & mass	Not Applicable
	Type (counterbalance, other)	"
	Internal release control (elec., mech., n.a.)	"
Hatch-back lid	Material & mass	Steel
	Type (counterbalance, other)	Gas Dumper Stay
	Internal release control (elec., mech., n.a.)	Mechanical
Tailgate	Material & mass	Not Applicable
	Type (drop, lift, door)	"
	Internal release control (elec., mech., n.a.)	"
Vent window control (crank, friction, pivot, power)	Front	Not Applicable
	Rear	Pivot Not Applicable
Window regulator type (cable, tape, flex drive, etc.)	Front	X Arm
	Rear	Not Applicable Cable
Seat cushion type (e.g., 60/40, bucket, bench wire, foam, etc.)	Front	Bucket Type, Steel Plate Press Frame, Urethane Mold
	Rear	Bench Type, Steel Wire Frame, Urethane Mold
	3rd seat	Not Applicable
Seat back type (e.g., 60/40, bucket, bench, wire, foam, etc.)	Front	Bucket Type, Steel Tube And Press Frame, Urethane Mold
	Rear	Bench Type, Steel Tube And Press Frame, Urethane Mold
	3rd seat	Not Applicable

## Frame

Type and description (separate frame, unitized frame, partially-unitized frame)	Unitized Frame.
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# MVMA Specifications

Vehicle Line Geo METRO  
 Model Year 1994 Issued 9-93 Revised(\*) \_\_\_\_\_

METRIC (U.S. Customary)

Model Code/Description

COUPE

SEDAN

## Restraint System

Seating Position		Left	Center	Right
Active	Type & description (lap & shoulder belt, lap belt, etc.)	First seat		
		Second seat	Lap & Shoulder Belt, ELR-ALR, Standard	Lap & Shoulder Belt, ELR-ALR, Standard
	Standard/optional	Third seat		
Passive	Type & description (air bag, motorized-2-point belt, fixed belt, knee bolster, manual-lap belt)	First seat	3-Point Fixed Belt, Std.	3-Point Fixed Belt, Standard
		Second seat		
	Standard/optional	Third seat		

Glass	SAE	COUPE	SEDAN
	Ref No		
Windshield glass exposed surface area sq. cm. (sq. in.)	S1	8,281 (1,284)	8,620 (1,336)
Side glass exposed surface area sq. cm. (sq. in.) - total 2- sides	S2	12,384 (1,920)	13,166 (2,041)
Backlight glass exposed surface area sq. cm. (sq. in.)	S3	4,071 (631)	3,882 (602)
Total glass exposed surface area sq. cm. (sq. in.)	S4	24,736 (3,834)	25,668 (3,979)
Windshield glass (type/thickness)		Laminated Glass, 4.89 mm (0.19 in.)	
Side glass (type/thickness)		Tempered Glass, 3.5 mm (0.14 in.)	
Backlight glass (type/thickness)		Tempered Glass, 3.5 mm (0.14 in.)	
Tinted (yes/no, location)		Yes - Windshield Glass, Side Glass, Backlight Glass	
Solar control (yes/no, coated/batched, location)		No	

## Headlamps

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

# MVMA Specifications

Vehicle Line Geo METRO  
 Model Year 1994 Issued 9-93 Revised \_\_\_\_\_

**METRIC (U.S. Customary)**

Engine Code/Description

ALL

## Climate Control System

Air conditioning (std., opt., man., auto.)		Optional, Manual
Condenser	Type	Corrugated Fin
	Eff. face area (sq. mm.)	158,400
	Fins per inch	8.5
Evaporator	Type	Single Tank Laminated
	Eff. face area (sq. mm.)	44,120
	Fins per inch	7.3
Heater Core	Material	Copper
	Eff. face area (sq. mm.)	24,990
	Fins per inch	12.7
Compressor	Type	Swash
	Displacement (cc)	81.6
	Manufacturer	Nippon Denso Co., Ltd.
	A/C pulley ratio	1.4
Accumulator	Type	Not Applicable
	Height (mm.)	"
	Diameter (mm.)	"
Receiver	Type	Dryer, Sight Glass, Safety Device
	Height (mm.)	167
	Diameter (mm.)	60
Refrigerant control (CCOT, TVS, etc.)		Thermostatic Expansion Valve
Heater water valve (yes / no)		No
Refrigerant (R - 12, R - 134a, etc.)		R-134a
Charge level (lbs. - oz.)		1.1 lbs.
Cold engine lockout switch (yes / no)		No
Wide open throttle cutout switch (yes / no)		Yes

# MVMA Specifications

Vehicle Line Geo METRO  
 Model Year 1994 Issued 9-93 Revised(\*)

METRIC (U.S. Customary)

Model Code/Description

ALL

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

	Clock (digital, analog)	Optional, Digital, Integral With Radio
	Compass / thermometer	Not Applicable
	Console (floor, overhead)	Optional, Floor
	Defroster, electric windshield	Not Applicable
	Defroster, electric backlight	Optional
Electronic	Diagnostic monitor (integrated, individual)	Not Applicable
	Instrument cluster (list instruments)	Not Applicable
	Keyless entry	Not Applicable
	Tripminder (avg. spd. fuel)	Not Applicable
	Voice alert (list items)	Not Applicable
	Other	
	Fuel door lock (remote, key, electric)	Not Applicable
Lamps	Auto head on/off delay, dimming	Not Applicable
	Cornering	"
	Courtesy (map, reading)	"
	Door lock, ignition	"
	Engine compartment	"
	Fog	"
	Glove compartment	"
	Trunk	"
	Illuminated entry system (list lamps, activation)	"
Other	"	
Mirrors	Day / night (auto, man.)	Manual
	L.H. (remote, pwr., heated)	Remote
	R.H. (convex, rmt, pwr, htd)	Convex
	Visor vanity (RH/LH illum.)	Optional, RH
	Navigation system (describe)	Not Applicable
	Prkg. brake-auto release (warn. light)	Not Applicable

# MVMA Specifications

Vehicle Line Geo METRO  
 Model Year 1994 Issued 9-93 Revised(\*)

## METRIC (U.S. Customary)

Model Code/Description

ALL

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

Power equipment	Deck lid (release, pull down)		Not Applicable
	Door locks (manual, auto., describe system)		Automatic (Front Door Only)
	Seats	2 - 4 - 6 way, etc.	Not Applicable
		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		"
	Vent windows		"
Rear windows		"	
Radio systems	Antenna (location, whip, w/shield, power)		Left Front Pillar, Whip
	Stan.		Antenna Only
	Opt.	AM, FM, stereo, tape, compact disc, graphic equalizer, theft deterrent, radio prep package, headphone jacks, etc.	AM/FM Stereo AM/FM Stereo With Cassette
	Speaker (number, location)		Optional 2: I.P. Mounted, 2: Back Door Trim
Roof: open air or fixed (flip-up, sliding, "T")			Not Applicable
Speed control device			"
Speed warn. dev. (light, buzzer, etc.)			"
Tachometer (rpm)			"
Telephone system (describe)			"
Theft deterrent system			Steering Lock Type

### Trailer Towing

Towing capable	Yes / No	No
Engine/transmission/axle	Std / Opt	Not Applicable
Tow class (I, II, III)*	Std / Opt	"
Max. gross trailer wgt. (lbs.)	Std / Opt	"
Max. trailer tongue load (lbs.)	Std / Opt	"
Towing package available	Yes / No	"

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



# MVMA Specifications

Vehicle Line Geo METRO  
 Model Year 1994 Issued 9-93 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.

#### Model Code/Description

COUPE	SEDAN
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#### Width

#### SAE Ref. No.

Tread (front)	W101	1365 (53.74)	
Tread (rear)	W102	1340 (52.76)	
Vehicle width	W103	1575 (62.00)	[1592 (62.68) With Body Side Molding]
Body width at Sg RP (front)	W117	1575 (62.00)	[1592 (62.68) With Body Side Molding]
Vehicle width (front doors open)	W120	3590 (141.34)	3250 (127.95)
Vehicle width (rear doors open)	W121	---	2990 (117.71)
Tumble-home (deg.)	W122	22.5	22.0
Outside mirror width	W410		

#### Length

Wheelbase	L101	2265 (89.17)	2365 (93.11)
Vehicle length	L103	3745 (147.44)	3845 (151.38)
Overhang (front)	L104	785 (30.91)	
Overhang (rear)	L105	695 (27.36)	
Upper structure length	L123	2618 (103.07)	2600 (102.36)
Rear wheel C/L 'X' coordinate	L127	2810 (110.63)	2910 (114.57)

#### Height \*\*

Passenger distribution (front/rear)	PD1,2,3	2/2	
Trunk/cargo load		---	
Vehicle height	H101	1330 (52.36)	1360 (53.54)
Cowl point to ground	H114	871 (34.29)	
Deck point to ground	H138	---	
Rocker panel-front to ground	H112	193 (7.60)	
Rocker panel-rear to ground	H111	205 (8.07)	207 (8.15)
Windshield slope angle (deg.)	H122	60	59
Backlight slope angle (deg.)	H121	51.5	44

#### Ground Clearance \*\*

Front bumper to ground	H102	205 (8.07)	200 (7.87)
Rear bumper to ground	H104	240 (9.45)	245 (9.65)
Bumper to ground front at curb mass (wt.)	H103	220 (8.66)	220 (8.66)
Bumper to ground rear at curb mass (wt.)	H105	265 (10.43)	270 (10.63)
Angle of approach (deg.)	H106	20.5	20
Angle of departure (deg.)	H107	22	22.5
Ramp breakover angle (deg.)	H147	17	
Axle differential to ground (front/rear)	H153	---	
Min. running ground clearance	H156	155 (6.10)	
Location of min. run. grd. clear.		Catalyst Case	

\*\* 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.

All Linear Dimensions Are In Millimeters (Inches)

# MVMA Specifications

Vehicle Line Geo METRO  
 Model Year 1994 Issued 9-93 Revised(\*)

## METRIC (U.S. Customary) Vehicle Dimensions

See Key Sheets for Definitions

Body Type

COUPE

SEDAN

### Front Compartment

SAE Ref. No. [ ]: Pass.

SgRP front, 'X' coordinate	L31	1850 (72.83)	
Effective head room	H81	860 (37.80)	986 (38.82)
Max. eff. leg room (accelerator)	L34	1079 (42.48)	
SgRP to heel point	H30	240 (9.45)	
SgRP to heel point	L53	882 (34.72) [845 (25.39)]	
Back angle (deg.)	L40	25	
Hip angle (deg.)	L42	87.5 [88.7]	
Knee angle (deg.)	L44	129 [107.3]	
Foot angle (deg.)	L46	87 [140]	
Design H-point front travel	L17	210 (8.27)	
Normal driving & riding seat track trvl.	L23	210 (8.27)	
Shoulder room	W3	1310 (51.57)	
Hip room	W5	1298 (51.10)	
*** Upper body opening to ground	H50	1230 (48.43)	1253 (49.33)
Steering wheel maximum diameter*	W9	375 (14.76)	
Steering wheel angle (deg.)	H18	25.7	
Accel. heel pt. to steer. whl. cntr	L11	452 (17.80)	
Accel. heel pt. to steer. whl. cntr	H17	615 (24.21)	
Undepressed floor covering thickness	H67	30 (1.18)	

Front Compartment Int. Dim. Are Measured With The Seating Ref. Pt  
 (SgRP) 0 mm Forward And 0 mm Upward of Rearmost Position.

### Rear Compartment

SgRP point couple distance	L50	660 (25.98)	735 (28.94)
Effective head room	H83	928 (36.54)	865 (37.99)
Min. effective leg room	L51	757 (29.80)	829 (32.64)
SgRP (second to heel)	H31	266 (10.47)	
Knee clearance	L48	-73 (-2.87)	-14 (-0.55)
Shoulder room	W4	1282 (50.47)	1285 (50.59)
Hip room	W6	1080 (42.52)	1085 (42.72)
*** Upper body opening to ground	H51	---	1262 (49.88)
Back angle (deg.)	L41	25	
Hip angle (deg.)	L43	78	79.5
Knee angle (deg.)	L45	66.5	78
Foot angle (deg.)	L47	112	120
Depressed floor covering thickness	H73	20 (0.79)	

### Luggage Compartment

Usable luggage capacity L (cu. ft.)	V1	158.9 (5.6)	175.7 (6.2)
*** Liftover height	H195	769 (30.28)	

### Interior Volumes (EPA Classification)

Vehicle class		Subcompact	
Interior volume index (cu. ft.)**		89.1	94.9
Trunk / cargo index (cu. ft.)		10.3	10.5

\* 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 Geo METRO  
 Model Year 1994 Issued 9-93 Revised(\*)

## METRIC (U.S. Customary)

### Vehicle Dimensions

See Key Sheets for Definitions

#### Model Code/Description

COUPE

SEDAN

#### Station Wagon / MPV\*\*

##### - Third Seat

SAE Ref. No.

(NOT APPLICABLE)

Seat facing direction	SD1	
SgRP couple distance	L85	
Shoulder room	W85	
Hip Room	W86	
Effective leg room	L88	
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 / 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

Cargo length at front seatback height	L208	1102 (43.34)	1197 (47.13)
Cargo length at floor (front)	L209	1018 (40.88)	1043 (41.06)
Cargo length at second seatback height	L210	460 (18.11)	452 (17.80)
Cargo length at floor (second)	L211	600 (23.62)	625 (24.61)
Front seatback to load floor height	H197	455 (17.91)	
Second seatback to load floor height	H198	427 (16.81)	
Cargo volume index cu. m. (cu. ft.)	V3	0.618 (21.8)	0.653 (23.1)
Hidden cargo vol. index cu. m. (cu. ft.)	V4	0.390 (13.8)	0.413 (14.6)
Cargo volume index-rear of 2-seat	V11	0.290 (10.2)	0.295 (10.4)

\* EPA Loaded Vehicle Weight, Loading Conditions

\*\* MPV - Multipurpose Vehicle

All Linear Dimensions Are In Millimeters (Inches)

# MVMA Specifications

Vehicle Line Geo METRO  
 Model Year 1994 Issued 8-93 Revised(\*)           

METRIC (U.S. Customary)

Model Code/ Description	COUPE	SEDAN
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## Vehicle Fiducial Marks

Fiducial Mark Number*	Define Coordinate Location		
Front	Front Suspension Strut Upper Center		
Rear	Burring Hole Center Of Rear Floor Side Member At Rearmost Bottom Surface		
NOTE: Provide 3 of 4 Fiducial Mark Locations			
Front	W21**	512 (20.16)	
	L54**	569 (22.40)	
	H81**	525 (20.67)	
	*** H181**	755 (29.72)	
	*** H183**	738 (27.06)	737 (29.02)
Rear	W22**	463 (18.23)	
	L55**	3260 (128.35)	3360 (132.28)
	H82**	159 (6.26)	
	*** H182**	413 (16.26)	
	*** H184**	390 (15.35)	391 (15.99)

- \* Reference - SAE Recommended Practice, J182, 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)

# MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line Geo METRO

Model Year 1994 Issued 9-93 Revised(\*) \_\_\_\_\_

		VEHICLE MASS (weight)				% PASS MASS DISTRIBUTION				
Code	Model	CURB MASS, kg. (lb.)*			SHIPPING MASS kg (lb) ***	ETWC** Code	PASS IN FRONT		PASS IN REAR	
		Front	Rear	Total			Front	Rear	Front	Rear
Geo METRO (1MR08)		435	315	750	724					
2-Door Hatchback Coupe (M/T)		(957)	(693)	(1650)	(1593)	I	47	53	13	87
(1MR68)		445	325	770	744					
4-Door Hatchback Sedan (M/T)		(979)	(715)	(1694)	(1637)	I	48	53	13	87
Geo METRO XFI (1MS08)		432	305	737	711					
2-Door Hatchback Coupe (M/T)		(950)	(671)	(1621)	(1584)	H	47	53	13	87

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

\*\*\* Shipping Mass (weight) = Curb Weight Less:  
 \_\_\_\_\_  
 26 (57)  
 \_\_\_\_\_  
 \_\_\_\_\_

# MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line Geo METRO  
 Model Year 1994 Issued 9-93 Revised(\*)           

		Optional Equipment Differential Mass (weight)*			
Code	Equipment	MASS, kg. (lb.)			Remarks Restrictions, Requirements
		Front	Rear	Total	
B37	Floor Piece Mat	2.0 (4.4)	2.0 (4.4)	4.0 (8.8)	
C25	Rear Window Washer & Wiper	0 (0)	1.3 (2.9)	1.3 (2.9)	
C49	Air Conditioning	20.3 (44.8)	-2.0 (-4.4)	18.3 (40.3)	
D35	OSRV Mirror (RH)	0.6 (1.3)	0.5 (1.1)	1.1 (2.4)	
MX1	Automatic Transmission	26.0 (57.3)	-3.0 (-6.6)	23.0 (50.7)	
PB2	Full Wheel Cover	0.77 (1.69)	0.77 (1.69)	1.54 (3.39)	
UM6	AM/FM Stereo W/Cassette Deck	2.0 (4.4)	0.7 (1.5)	2.7 (6.0)	
UM7	Radio - AM/FM Stereo	2.0 (4.4)	0.7 (1.5)	2.7 (6.0)	
U66	Radio Speakers - Dual Rear	0.9 (2.0)	0.9 (2.0)	1.8 (4.0)	
VH4	Front and Rear Mud Guard	0.5 (1.1)	0.7 (1.5)	1.2 (2.6)	

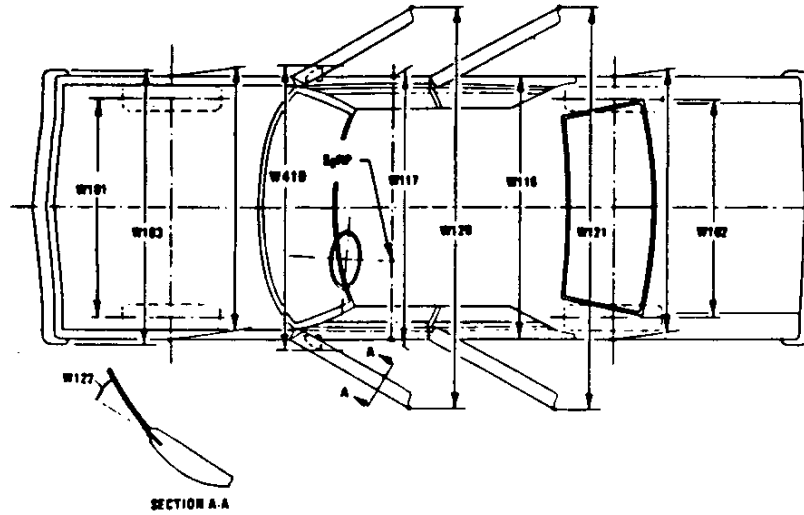
\* Also see Engine - General Section for dressed engine mass (weight).

# MVMA Specifications

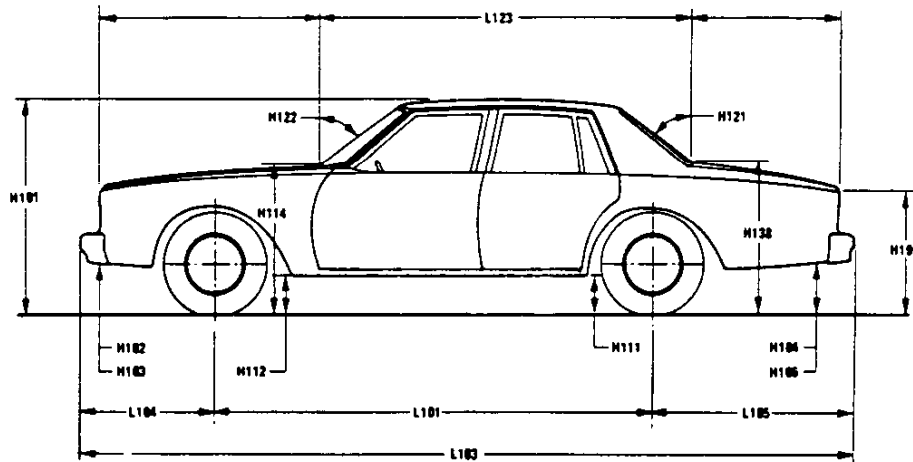
## METRIC (U.S. Customary)

### Exterior Vehicle And Body Dimensions – Key Sheet

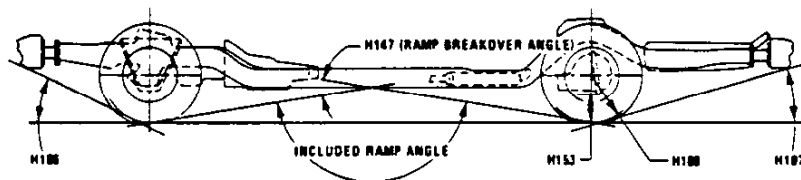
#### Exterior Width



#### Exterior Length & Height



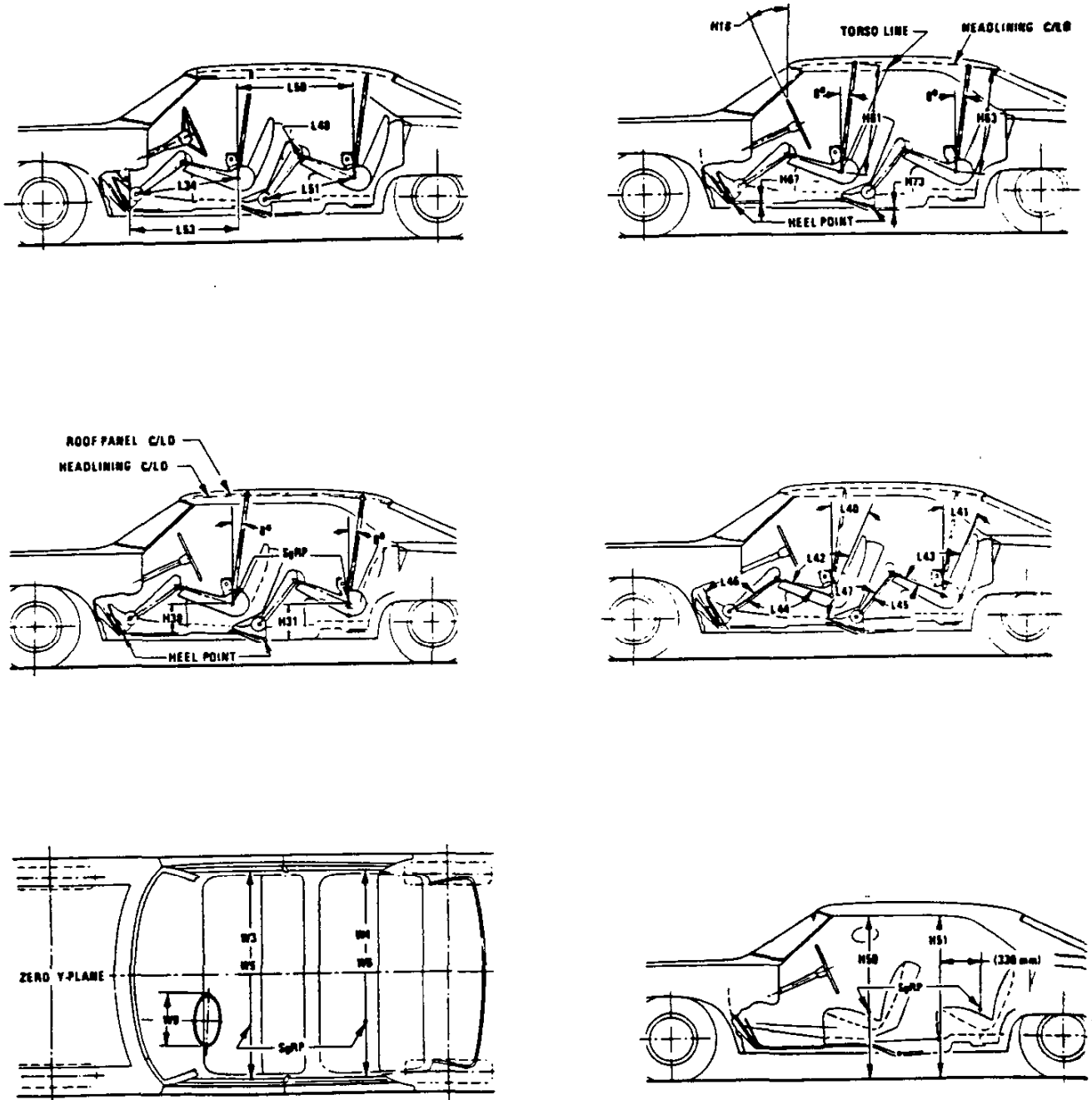
#### Exterior Ground Clearance



# MVMA Specifications Form

## METRIC (U.S. Customary)

### Interior Vehicle And Body Dimensions – Key Sheet

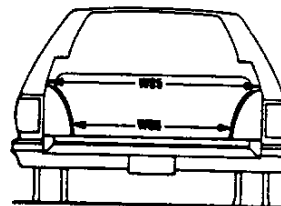
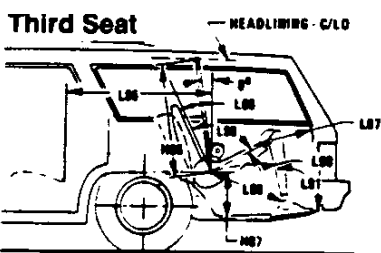




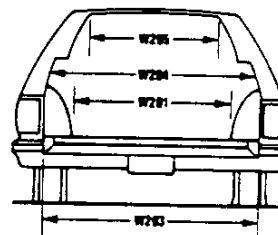
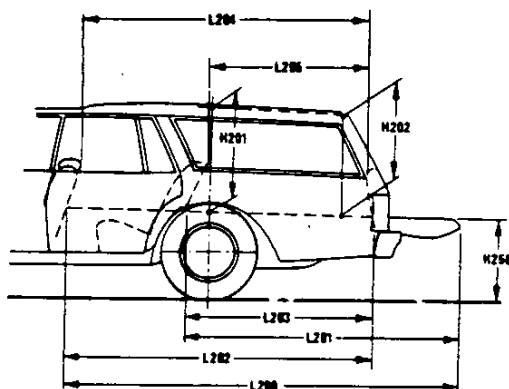
# MVMA Specifications

METRIC (U.S. Customary)

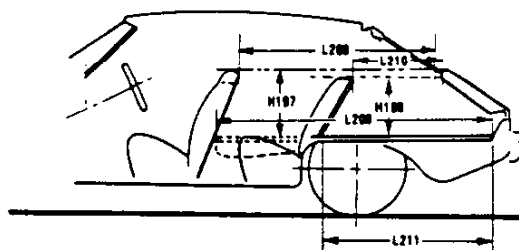
## Interior Vehicle And Body Dimensions – Key Sheet



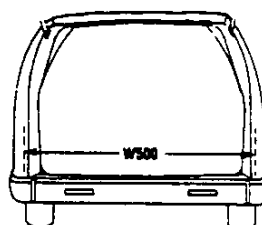
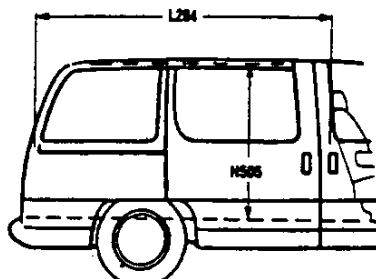
**Cargo Space**



**Station Wagon**



**Hatchback**



**Multipurpose Vehicle**

# 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 of 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.
- H161 Height "Z" coordinate to ground at curb weight.
- H163 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.
- L-40 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.
- L-42 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 HEAD ROOM – 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

- L-41 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 SgRPCOUPLE 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 undepressed floor covering to the rearmost point on the undepressed floor covering on the open tailgate or cargo surface if the rear closure is a conventional door type tailgate at the zero "Y" plane.

L201 CARGO LENGTH - OPEN - SECOND. The dimension measured longitudinally from the back of the second seatback at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the open tailgate or cargo floor surface if the rear closure is a conventional door type tailgate, at the zero "Y" plane.

L202 CARGO LENGTH - CLOSED - FRONT. The minimum dimension measured horizontally from the back of the front seat at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the closed tailgate or taildoor for station wagons, trucks and mpv's at the zero "Y" plane.

L203 CARGO LENGTH - CLOSED - SECOND. The dimension measured horizontally from the back of the second seat at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the closed tailgate or taildoor for station wagons, trucks and mpv's at the zero "Y" plane.

L204 CARGO LENGTH AT BELT - FRONT. The minimum dimension measured horizontally from the back of the front seatback at the seatback top to the foremost normal surface of the closed tailgate or inside surface of the cab backpanel 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 undepressed floor covering.

H201 CARGO HEIGHT. The dimension measured vertically from the top of the undepressed 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 undepressed 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 undepressed 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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