

MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

1990

Manufacturer		Vehicle Line	
	Suzuki Motor Co., Ltd.		
		GEO METRO	
Maihng Address	Chevrolet-Pontiac-Canada Group		
	Engineering Center		
Ì	General Motors Corporation	issued	Revised
	30003 Van Dyke	June, 1989	September, 1989
	Warren, Michigan 48090-9060		1

Direct questions concerning these specifications to the manufacturer listed above.

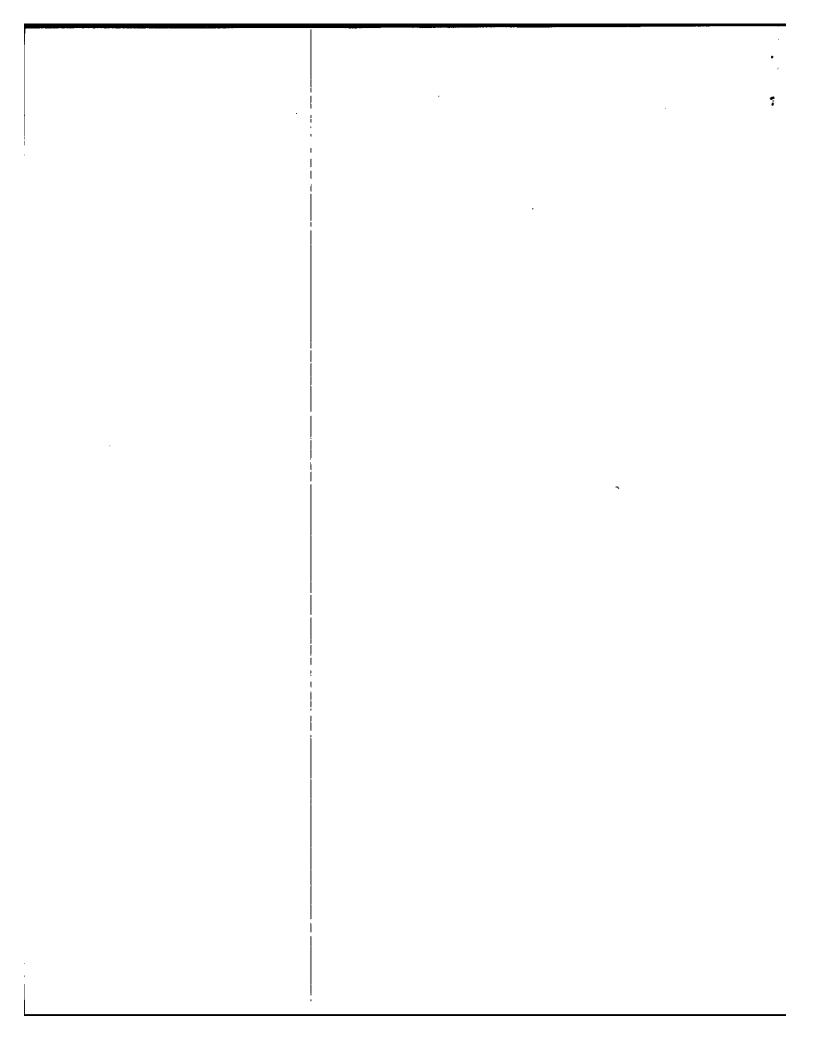
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The General Specifications herein are those in effect at date of compilation and are subject to change without notice or incurring obligation by the manufacturer.



Motor Vehicle Manufacturers Association of the United States, Inc.

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METRIC (U.S. Customary)

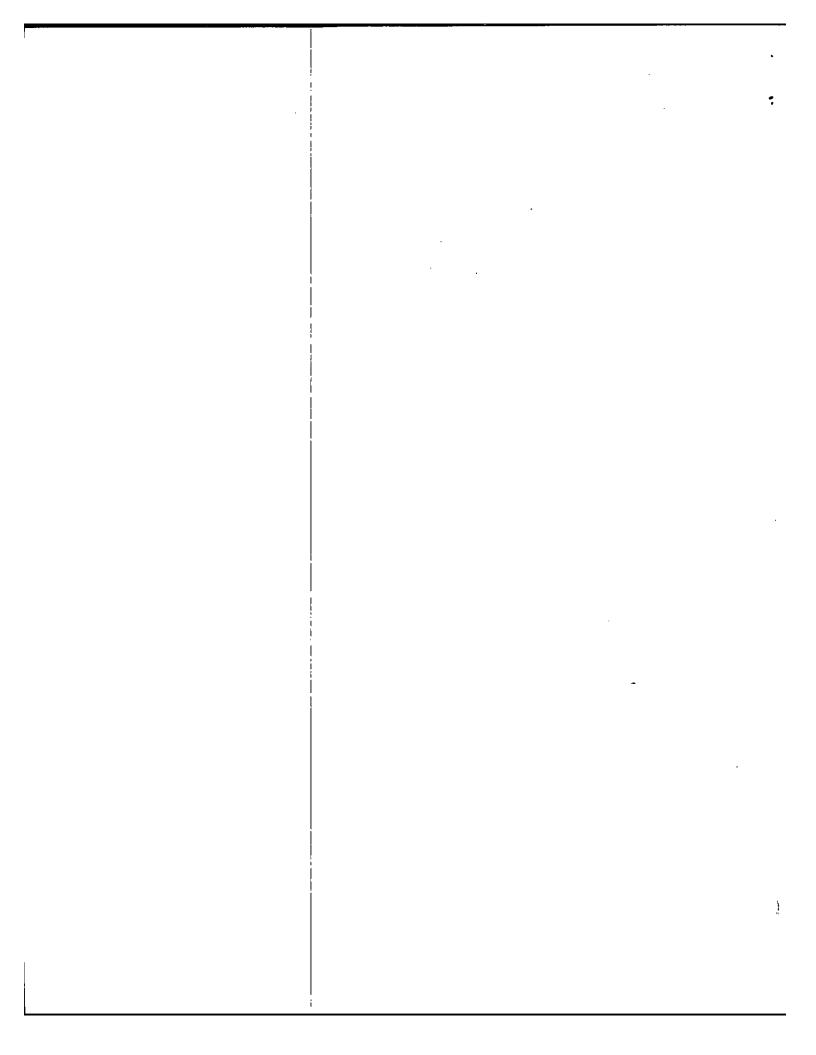
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MOTE

- This form uses both SI matric units and U.S.Customery units. The matric unit of measure is presented first, and the U.S. Customery 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 idlograms (pounds).
- 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.
- Additional Vehicle Dimensions (based in part on SAE J1100 "Motor Vehicle Dimensions") may be available from the manufacturer.

FORM MVMA-90



 Vehicle Line
 Geo METRO

 Model Year
 1990
 Issued 6-89
 Revised(*)
 9-89

METRIC (U.S. Customary)

o Vehicle Origin

Design & development (company)	SUZUKI MOTOR CO., LTD
Where built (country)	JAPAN/CANADA
Authorized U.S. Sales marketing representative	Geo

o Vehicle Models

Model Description & Drive (FWD/RWD/AWD/4WD)*	Introduction Date	Make, Vehicle Models, Series, Body Type (Migr's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk/Cargo Load-Kilograms (Pounds)
Geo METRO				
2-Door Hatchback Coup	e (FWD)	1MR08	2/2	40 (88)
2-Door Convertible (FWI)	1MR67	2/2	4 0 (88)
4-Door Hatchback Sedar	(FWD)	1MR68	2/2	40 (88)
Geo METRO XFI				
2-Door Hatchback Coup-	e (FWD)	1MS08	2/2	40 (88)

М	VI	ΛN	Sp	eci	fic	ati	O	ns
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Vehicle Line	Geo	METRO				
Model Year	1990	Issued _	6-89	Revised(*)	9-89	

METRIC (U.S. Customary)
Power Teams

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

			Α	В	C +	D
	Engine	Code	LP2	LP2	LP2	
	Displa Liters	cement (cu. in.	1.0 (61)	1 0 (61)	1.0 (61)	
EN	Induct (FI, Ca	ion syste rb, etc.	Electronic Fuel Injection	Electronic Fuel Injection	Electronic Fuel Injection	
G	Compr	ession	9.5:1	9:5:1	9.5:1	
N E	SAE Net	Power kW (bhp)	41 (55) @ 5700	41 (55) @ 5700	36(49) @ 4700	
	at RPM	Torque Newton me (lb.ft.)	79 (58) @ 3300	79 (58) @ 3300	79 (58) @ 3300	
	Exhaust Single, dual		Single	Single	Single	
T R	Transm Transa	nission/ xle	Manual 5-Speed	Automatic 3-Speed	Manual 5-Speed	
A N S	Axle Ratio (std. first)		4.10	3!87	3.79	

^{*} Fuel Economy Version

Series Avail	ability	Power Teams $(A - B - C - D)$			
Model	Code	Standard	Optional		
Geo METRO					
2-Dr. Hatchback Coupe	1MR08	A	В		
2-Dr. Convertible	1MR67	A	В		
4-Dr. Hatchback Sedan	1MR68	Α	В		
Geo METRO XFI					
2-Dr. Hatchback Coupe	1MS08	С	-		
	ļ				

Vehicle Line Geo METRO Model Year _ 1990 Issued 6-89 Revised(*) 9-89

METRIC (U.S. Customary)

Engine Description **Engine Code**

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

ENGINE - GENERAL

ENGINE	<u> </u>	LIIAL	
Type & desc flat, location transverse, i	i, front, mid, ongitudinal,	a, V, angle, rear, sohc, dohc, :hamber, etc.)	
env, numi, w	ve age, pre-c	mamper, etc.;	Inline, Front, SOHC
			Transverse, Front Of Engine Faces Right Side Of Vehicle
Manufacture	ir		Suzuki
No. of cylind	ers		3
Bore			74 mm (2.91 in.)
Stroke			77 mm (3.03 in.)
Bore spacing	(C/L to C/I		84 mm (3.31 in.)
		lbs.(machined)	Aluminum Alloy, 11.85 (26.12)
Cylinder blo			186.8 mm (7.35 in.)
Cylinder blo		<u></u>	288 mm (11.34 in.)
7,			
Deck clearar above or be		n)	
ADOVE DI DE	ilow block)		0.4 mm (0.02 in.), Above
Cyl. head mi	aterial & mas	is kg (lbs.)	Aluminum Alloy, 5.12 (11.29)
Cylinder hea	ed volume (c	u. cm.)	1,896
Cylinder line	r material		Cast Iron
Head gaske: (compresse:			4.0 mm (0.00 in)
			1.2 mm (0.05 in.)
Minimum co	mbustion ch	namber	
total volume	(cm. cu.)		38.96
Cyl. no. syst	tem	L. Bank	1-2-3
(front to rea	r)	A. Bank	+
Firing order			1-3-2
	-	nass[kg(lbs.)]**	Aluminum Alloy, 1.66 (3.66)
		iss (kg (lbs.))***	Cast Iron, 3.37 (7.43)
			Unleaded
Fuel required unleaded, diesel, etc. Fuel antiknock index (R + M) / 2			86 Or More
	Quantit		3
		d type (elastomeric,	
Engine	hydros	lastic, hydraulic	•
mounts	damper	, #1c. <i>j</i>	Rubber, Elastomeric
		isolation (sub-frame, ember, etc.)	None
Total dress		ess (wt) dry	MT: 61.0 (134.5), AT: 58.5 (124.6)

Engine - Pistons

Aluminum Alloy, Material & mass, g (weight, cz.) – piston only 233 g.

Engine Camshaft

Engine	Camanan	
Location		In Cylinder Head
Material &	mass kg (weight, ibs.)	
		Cest Iron, 1.24 (2.73)
Drive	Chain/belt	Beh
type	Width/pitch	19.1/9.525 mm (.75375 in.)

[&]quot;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:

MVMA	Specifica	ations	,	/ehicle Line	Geo N	METRO				_
	-р		. !	viodel Year	1990	_ issued _	6-89	Revised(*) _	9-89	
METRIC (I	U.S. Customa	ary)								
Engine Desc	rintion		10	LITER L3 (61	CID)					\neg
Engine Code	•		1	CTRONIC FUE		ON RPO LI	P2			- 1
_			<u> </u>							_
	Valve Systen	<u>n</u>	T =:	<u> </u>				·		_
Hydraulic lifters			Stand	lard i				7.5		_
Valves -	Number intake/e		3/3	 14 29/4 4/	n in 1					
	Head O.D. intake	e/exnaust	35/20	mm (1.38/1.10	J ITI.)	-				—
Engine - (Connecting F	Rods				•				
	[kg., (weight, lbs.)]*		Forge	d Steel, 0.36 (0.794)	•				_
	terline to centerline)mm		nn (4.72 in.)						_
Engine - (Crankshaft		,	İ						
L	[kg., (weight, lbs.)]*		Nodu	iar Iron, 5.90 (1	13.004)					_
	by bearing (no.)		2	i		*		•		_
Length & numbe	r of main bearings		18 mr	n (0.71 in.) x 4						
Sea! (material, or		Front	One f	Piece				· · · · · · · · · · · · · · · · · · ·		_
piece design, etc)	Rear	One I	Piece				· · · · ·		_
Engine – L	_ubrication S	System		[
	ure(kPa(psi) @ eng r		333 (3	92) @4,000						
	loating, stationary)		Statio	1				· · · ·		_
	I flow,part, other)		Full F	low					· ·	_
Capacity of c/ca filter-refill-L (qt	se,less)		3.1 (3	.3)						
Engine - [Diesel Inform	nation	(NOT	APPLICABLE)						_
Diesel engine ma			1	1				" 		_
Glow plug, curre	nt drain at 0 deg. F				· ·					_
Injector Nozzle	Туре		J	1						_
	Opening pressure	(kPa(psi))	1	<u> </u>					· · · · · ·	_
Pre-chamber de			 	<u> </u>						
Fuel in- jection pump	Manufacturer			<u>;</u> 1						_
Fuelisi aves de	Type		 	<u> </u>				· · · · · · · · · · · · · · · · · · ·		
	ive (belt,chain,gear) /acuum source (type		╁	1					·	—
Fuel heater (yes		'	1	<u>:</u> i						_
Water separator (std., opt.)				: :						_
Turbo manufacti	urer		1	<u>:</u> ¦						_
	ail to engine coolen	t;						- · · · · · · · · · · · · · · · · · · ·		_
Oil filter										_
Engine - Intake System (NOT			APPLICABLE)						_	
Turbo charger -	manufacturer									
Super charger -	manufacturer			<u> </u>						
Intercooler			J	<u> </u>						_
*Finished State										
] 				•		
MVMA-90				Pag	ge 4					

Vehicle Line

Geo METRO

Vehicle Line	Geo	METRO				
Model Year	1990	Issued	6-89	Revised(*)	9-89	

METRIC (U.S. Customary)

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

Type (choke, bypass) Starts to open @ deg's C(F) Type (centrifugal, other) GPM 1000 pump rpm Number of pumps Drive (V-belt, other) Bearing type Impeller material		MANUAL TRANS.	AUTOMATIC TRANS.
		Standard	
	polant recovery system (std, opt, n.a.) polant fill location (rad., bottle) diator cap relief valve pressure a (psi)) Type (choke, bypass) Starts to open @ deg's C(F) Type (centrifugal, other) GPM 1000 pump rpm Number of pumps Drive (V-belt, other) Bearing type Impeller material Housing material Housing material With air conditioner-L(qt.) Opt. aquip.(specify-L(qt.)) ter jackets full length of cylkyes,no) ter all around cylinder (yes, no) ter jackets open at head face (yes,no) Std., A/C, HD Type (cross-flow, etc.) Construction (fin & tube machanical, braze, etc.) diator Matl., mass (kg(wgt.,lbs.)) Width Height Thickness Fins per inch diator end tank material Std., elec., opt. Number of blades & type (flex, solid, material) Diameter & projected width Ratio(fan to crikshftrev.) Fan cutout type	Bottle	
Radiator cap re [kPa (psi)]	alief valve pressure	88.3 (12.8)	
	Type (choke, bypass)	Choke	
Circulation thermostat	Starts to open @ deg's C(F)	92 (198)	
	Type (centrifugal, other)	Centrifugal	
	GPM 1000 pump rpm	15 1/min.	
	Number of pumps	1	
doubant fill location adiator cap relief (Pa (psi)) irculation nermostat Vater ump ly-pass recirculation xi.]) cooling yatem apacity Vater jackets full in Vater jackets open	Drive (V-belt, other)	V Ribbed Belt (3PK)	
	Bearing type	Ball & Bail	
	Impelier material	Steel	
	Housing material	Aluminum Alloy	
By-pass recirc ext.)]	culation (type (inter.,	Ехт	
	With heater - L (ot.)	3.9 (4.1)	4.0 (4.2)
Cooling		3.9 (4.1)	4.0 (4.2)
capacity			
Water jackets		Yes	
		Yes	
Water all around cylinder (yes, no) Water jackets open at head face (yes,no)		Yes	
erater jackets		Standard	
		Vertical - Flow	
	Construction (fin & tube	Fin & Tube	
Radiator core	Matt., mass (kofwotlbs.))	Copper & Brass, 2.1(4.6)	3.0 (6.6)
Radiator cap relie kPa (psi)) Circulation hermostat Water lump Cooling lapacity Water jackets full Water jackets ope Radiator core Radiator end tank		358 mm (14.09 in.)	328 mm (12.91 in.)
		350 mm (13.78 in.)	325 mm (12.80 in.)
		16 mm (0.63 in.)	32 mm (1.26 in.)
	a (psi)) culation remotate Type (choke, bypass) Starts to open @ deg's C(F) Type (centrifugal, other) GPM 1000 pump rpm Number of pumps Drive (V-belt, other) Bearing type Impeller material Housing material -pass recirculation (type (inter.,	10	
Radiator and t		Plastics	
		Standard, Elec.	
	Number of blades & type	4, Solid, Plastics	
	Diameter & projected width	300 mm (11.81 in.)	
•		Not Applicable	
Fan			
		Electric Motor Drive	
		2,100 rpm (Electric)	
		80	
	Motor switch ftwo &	Birnetal Type, On Thermostat Case	
	Switch point (temp., pressure) (elec.)	ON/OFF: 98/93 (208/199), 102/97 (216/207)	
	Fen shroud (material)	Plastics	Steel

MVMA	Specifications
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 Vehicle Line
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METRIC (U.S. Customary)

Engine Description
Engine Code

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

Induction type: car injection system, s		(First Interfere				
		Fuel Injection NIPPON DENSO CO. LTD.				
Manufacturer						
Carburator no. of b	parrels	Not Applicable				
dle A/F mix.		14.6 '				
	Point of inj. (no.)	Intake Manifold (1)				
Fuel njection	Constant, pulse, flow	Not Applicable				
	Control (elec., mech.)	Electronic				
	Sys. press. [kPa (psi))	180 (26)				
dle spdrpm	Manual	700 (Neutral)				
spec, neutral or drive and						
oropane if	Autometic					
iseu)						
ntake manifold he or water thermosts	at control (exhaust atic or fixed)	Water (Coolants)				
Air cleaner type	-	Replaceable Nonwoven Fabric Element,				
		Single Snorkel				
Fuel filter (type/loc	cation)	Paper/Fuel Tank Side				
	Type (elec. or mech.)	Elec.				
	Location (eng., tank)	Tank				
Fue! Sump	Press. range [kPa(psi)]	180 (26)				
•	Flow rate at regulated pressure (L (gal)/hr & kPa (psi)	50 @ 180 (13.2 @ 26)				
Fuel Tank	pations)]	40 (10.6)				
Location (describe		Under Floor - Rear				
Attachment	·	Bott				
Material & Mass [k	a (weight (bs.))	Steel, 8.6 (18.9)				
Filler	Location & material	Left Side Rear Quarter Panel, Steel				
pipe	Connection to tank	Keylar Reinforced Rubber Hose				
Fuel line (material)		Steel				
Fuel hose (materia	n	FKM/CHC/CHC				
Return line (materi		Steel				
Vapor line (materia		Steel				
And ma function		Not Applicable				
Extended	Opt., n.a. Capacity (i. (galions))					
range tank	Location & material					
	Attachment	Not Applicable				
	Opt., n.a.	RUI Applicatio				
A - 49	Capacity (L (gallons))					
Auxiliary tank	Location & material					
	Attachment	•				
	Sictr switch or valve	•				
	Separate fill					

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METRIC (U.S. Customary)

_					
Engine Description Engine Code				1.0 LITER L3 (61 CID)	
Engine Co	de			ELECTRONIC FUEL INJECTION RPO LP2	OALIES THE S
Vehicle !	Emission (Contro	11	FEDERAL	CALIFORNIA & FUEL ECONOMY VERSION
V10	1				Feedback Fuel Injection
	Type (air injec modifications	ction, engi i, other)	ine	Feedback Fuel Injection + 3 Way Cata.	+ 3 Way Catalyst + EGR
		Pump o	or pulse	Not Applicable	Not Applicable
	Air	Driven	by	H	•
	Air injection	Air distribution (head, manifold, etc.,)			•
			of entry	100	25
	Exhaust Gas	flow, D	controlled ipen , other)	Not Applicable	Backpressure Controlled
	Recircu- lation	_	st source		
Exhaust Emission Control		Point o	of exh.inj. r, carb., old, other)	,	Manifold
		Type	· · · · · ·	Single Bed	Single Bed
		Numbe	er of	1	1
					Under Floor
	Catalytic	Locatio		Under Floor 0.95 (58.0)	0.95 (58.0)
	Converter		e [L(cu.in)]	0.95 (58.0) Monolith	Monolith
			matal type	Platinum (Pt), Rhodium (Rh)	Platinum (Pt), Rhodium (Rh)
		Noble metal type Noble metal concentration (g/cu.cm.)			
	Type (ventilat atmosphere, system, othe	tes to industion	·	Induction System	Induction System
Crankcase Emission Control	Energy source vacuum, carb	e (manifol		Manifold Vacuum	Manifold Vacuum
	Discharges (manifold, oth	to intake ier)		intake Mmanifold	Intake Manifold
	Air init(breati	her cap,ot	her)	Air Cleaner	Air Cleaner
Evapora-	Vapor vented		Fuel tank	Canister	Canister
tive Emission	crankcase, canister,othe	21)	Carburetor		
Control	Vapor storag	e provisio	10	Canister	Canister
Electron-	Closed loop	(yes/no)		Yes	Yes
System	Open loop (y	es/no)		No	No
Epel	_ Euberra	Cunt			
Type (single, dual, other)		ayste		Single	
Mutter no. 4	& type (reverse fi	low,		Single :	
Material & M	lass (kg (weight)	(bs.))		1. Straight Thru.	
Resonator n				1. Straight Thru.	
Exhaust	Branch o.d.,			Not Applicable	
pipe	Main o.d., w	_		48.6-1.6/38.1-1.2 mm Inner: Stainless Steel, Outer: Aluminum Coated S	teel
leter	Mati. & Mass		L108.]]	45,0-1.6/35.0-1.2 mm	
Inter- mediate pipe	o.d. & wall to Mati. & Mass		t.lbs.N	Inner: Stainless Steel, Outer: Aluminum Coated S	iteel
Tail	o.d. & wall ti		111	38.1-1.2 mm	
pipe	Mati. & Mass		t.(bs.)]	Aluminum Coated Steel	

MVM	A Specificati	ions	Vehicle Line Model Year	Geo 1990	METRO Issued	6-89	Revised(*)	9-89		
METRIC (U.S. Customary)			110001100	1000		0-03		0.03		
Engine D Engine C	Description Gode		1.0 LITER L3 (6 ELECTRONIC FU		ION RPO LI	P2		· · · · · · · · · · · · · · · · · · ·		
Transmissions/Transaxie (Std., Opt.,		., N.A.) MANUAL	TRANS.			AUTOMATIC TE	RANS.			
Manual 3-speed (manufacturer/country)		Not Applicable								
Manual 4-s	peed (manufacturer/country	1	j.							
Manual 5-s	peed (manufacturer/country	·)	Std., SUZUKI MOT	OR COL, L	TD./JAPAN					
Automatic (manufacturer/country)		Not Applicable				Opt., AISIN SEI	KI/JAPAN		
Auto, overd	drive (manufacturer/country)	· ·	Not Applicable		· · · · · · · · · · · · · · · · · · ·		· .			
Manual	Transmission/Tr	ansayle								
	forward speeds		15						_	
NDIII DEI OI	151		3.42							
	2nd		1.89							
Gear ratios	370		1.28	· · · · · · · · · · · · · · · · · · ·						
	4th		0.91							
	51h	•	0.76							
	Reverse		3.27							
£			All Forward Gears					-7	_	
	us meshing (specify gears)		Floor Mounted						_	
Shift lever				1 77/160	1			·····		
Irans, case	mat'i, & mass kg (lbs)*		Aluminum Die-Cast, 7.7 (16.9)							
Lubricant	Capacity (L (pt.))		2.4 (5:1) Hypord Gear Oil							
	Type recommended									
Clutch	(Manual Transmi:	sion)								
Clutch man	ufacturer		F.C.C. Co., LTD.					- · · · · · · · · · · · · · · · · · · ·		
Clutch type disc)	e (dry, wet; single, multiple		Dry, Single							
Linkage (hy	d., cable, rod, lever,other)	·-	Cable							
Max. pedal	effort (nom,	Depressed	78 (17.5)							
spring load,	, new) Ñ (lbs.)	Released	50 (11.2)							
Assist (sprin	ng, power/percent, nominal		Nominal				···			
	ure plate springs		Diaphragm							
Total spring load (nominal, new) N(Ibs)		2,550 (573.3)								
	Facing mfgr. & matl. co	ding	F.C.C. Co., LTD., F	CC505						
	Facing mati. & constru		Semi-Mold							
	Rivets per facing		16 !							
	Outside x inside dia. (n	om.)	170 x 110 mm (6.89 x 4.33 in.)							
Clutch	Total off.area[sq cm(sc		132 (20.5)							
facing	Thickness (pressure pl side/fly wheel side)		3.0/3.0 mm (0.12/0).12 in.)						
	Rivet depth (pressure side/fly wheel side)	Rivet depth (pressure plate side/fly wheel side)		04/0 04 in	`					

Engagement cushion method

Release bearing type & method lub. Torsional damping method, springs, hysteresis Automatic Center Adjusting Type With Grease Lubrication

Min. 0.9/0.9 mm (0.04/0.04 in.) Separate Cushion Type

Springs

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

Vehicle Line Geo METRO Model Year 1990 6-89 Revised(*) 9-89 Issued

METRIC (U.S. Customary)

Engine Description **Engine Code**

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

o <u>Automatic</u>	Transmission/Transax	le	FUEL ECONOMY VERSION
Trade Name		3-Speed Automatic	Not
Type and speci	al features (describe)	Torque Converter With Planetary Gears	Applicable
	Location (column, floor, other)	Floor Mounted On Console	
Gear selector	Ltr./No. designation (e.g. PRND21)	P-R-N-D-2-L	
	Shift interlock (yes, no, describe)	Yes	
	151	2.81	
	2nd	1.55	
Ģear Fatios	3rd	1.00	
	4th	Not Applicable	
	Reverse	2.30	
Max. upshift sp	peed - drive range	1 - 2: 52 (32.3)	
[km/h (mph)]		2 - 3: 97 (60.3)	
Max. kickdown	speed ~ drive range	2 - 1: 37 (23.0)	
[km/h (mph)]		3 - 2: 82 (50.9)	
Min. overdrive	speed [km/h (mph)]	Not Applicable	
	Number of elements	3	
	Max. ratio at stall	2.1	
Torque converter	Type of cooling (air, liquid)	Liquid	
	Nominal diameter	210 mm (8.27 in.)	
	Capacity factor "K"	1.2 x 10-6	
	Capacity (refill L(pt.))	4.9 (10.4)	
Lubricant	Type recommended	DEXRON	
Oil cooler (std., external, air, lic	opt., N.A., internal, juid)	Standard Integral With Radiator	
Trans. mass [kg	g(lbs)) & case mati.**	Aluminum Die-Cast, 51 (112.4)	
o All Whee	I / 4 Wheel Drive	(NOT APPLICABLE)	
Desc. & type (p 2/4 shift while chain/gear, etc	eart-time, full-time, moving, mech., elect., c.)		
	Manufacturer and model		
Transfer case	Type and location		
Low-range ger	ar ratio		
System discon	nnect (describe)		
Center differential	Type (bevel, planetary, w or w/o viscous bias, torsen, etc.)		
	Torque split(% frt/rear)		

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

MVMA Specifications METRIC (U.S. Customary)			Venicle Line Model Year	1990 Issued	6-89 Rev	rised(*) 9-89			
			i i i i i i i i i i i i i i i i i i i	133000	1.00				
METRIC	(U.S. Cus	stomary)		·					
Engine Des Engine Cod	•			1.0 LITER L3 (61 ELECTRONIC FUE	CID) EL INJECTION RPO LPA	2			
Axie Rati	o and To	oth Combin	ations	(See Power Tear	ns' for axle ratio usage)				
Effec, final dri gear ratio)				Reduction Gear -	0.98 Final Gear -	3.95			
Trnsfr ratio an	d method(cha	in,gear,etc)		Not Applicable					
-	Ring gear o.	d.		186.98 mm (7.36 in.	}				
Front drive	No. of	Pinion			51,	20	<u></u> -		
unit	teeth	Ring gear			50,	79			
Front Dri	ve Unit								
Description (in	ntegral to trans	s., etc.)		Front Differential Wi	th Helical Gears And Bal	l Bearing			
Limited slip di	ifferential (typ	e)		None					
Daine grown	Туре	,		Helical Gear					
Drive pinion	Drive pinion Offset		Not Applicable						
No. of differen	ntial pinions			2					
Pinion/ differential	Adju	stment (shim, etc.)		Shim			.		
	Bear	ing adjustment		Not Applicable					
Driving wheel	bearing (type))		Ball Bearing					
Lubricant	Capacity [L			Not Applicable	nion Elvid				
	Type recom	mended		Automatic Transmis	sion rivia				
					<u> </u>				
Avia Cha	Ho - Ero	nt Wheel Dr	lva.						
				NTN TOYO BEARIN	IG CO LTD 2				
Manufacturer		360	Left	Solid Bar					
Type (straight tubular, etc.)	, solid bar,		Right	Solid Bar		·			
	T		Left	23 x 455.7 mm (0.9	1 x 17.94 in.)				
Outer diam. x	Manual tran	saxle	Right	23 x 546.5 mm (0.9					
length*x wall			Left	19.4 x 410.1 mm (0	.76 x 16.15 in.)				
thickness	Automatic t	ransaxie	Right	19.4 x 591.6 mm (0					
	-	<u></u>	Left	None					
	Optional tra	insaxle	Aight	None					
	Туре			None					
Slip yoke	Number of	teeth		*			<u> </u>		
	Spline o.d.			● 1		<u>-</u>			
		- 4	Inner	NTN TOYO BEARI	NG CO., LTD.				
	Make and n	ntg. no.	Outer	•		 			
	Number us	ed		4					
	Type, size,	ohiose	taner	Tripod, TJ75					
Universal	1700, 5120,	p.u.g.	Outer	Rzeppa, BJ75					
joints	Attach (u-t	oolt, clamp, etc.)		Serration					
		Type (plain, anti-friction)		Anti-Friction					
	Bearing	Lubrication (fitting, prepack)		Prepacked					
Drive taken to arms or spring	hraugh (torqu gs)	e tube,		Lower - Control Ar	m, Upper - McPherson S	Strut			
Torque taken arms or sprin	through (torq gs)	ue tube,	÷.	Engine Mounting S					
			English Mountaing System						

^{*} Centerline to centerline of universal joints, or to centerline of attachment.

ΜνΜΔ	MVMA Specifications		Vehicle Line							
IAI A IAIW	. J	,compations	Model Year	1990	Issued	6-89	Revised(*)	9-89		
METRIC	W.S.	Customary)								
Body Type	•		COUPE,							
Engine Dis			CONVERTIBLE				SEDAN			
=	-	- General Including I	Electronic Control	•						
Suspens	_		Not		•					
		./opt./not avail.	Applicable							
	-	e (air/hydraulic)	пррисавие	-	· · · ·					
Car		nary/assist spring			·					
leveling	_	ir only/4 wheel leveling								
	-	ple/dual rate spring								
		ple/dual ride heights								
		vision for jacking								
	_	ndard/option/not avail.	Not							
		nual/automatic control	Applicable							
	-	mber of damping rates								
Shock	Тур	e of actuation (manual/								
absorber damping	0100	ctric motor/air, etc.)								
controls	•	Lateral acceleration								
	n	Deceleration								
	*	Acceleration								
	ľ	Road surface								
	Тур	e	Front: McPherson, Rear: McPherson, Double Acting Hydraulic							
Shock absorber	Mai	ke	Front: SHOWA, Rear: TOKICO							
(front & rear)	Pist	ton diameter	Front: 25 mm (0.98	34 in.), Rea	r; 25 mm (0.9	84 in.)				
	Roc	diameter	Front: 18 mm (0.71	in.), Rear:	18 mm (0.71	in.)				
Suspens	ion -	Ezont								
Suspens	31011 -	- 110111	<u> </u>				***			
Type and des	cription		McPherson Strut V	Vith Coil St	orina					
	E	Ijounce	100 mm (3.94 in.)		·····9					
Travel*	_	rebound	50 mm (1.97 in.)	-						
	+	e,(coil,leaf,other)&mati	Coil, Steel							
		ulators (type & mati)	Rubber Top Only							
Spring		e (coil design height								
Opg	8.1.		301 x 125.6 mm		•					
	Spr	ing rate (N/mm(ib./in.))	17.2							
	<u> </u>	te @ wheel [N/mm(lb./in)]	17.2							
		oe (link,inkless,frmless)	Not Applicable						_	
Stabilizer		terial & bar diameter	Not Applicable							

Suspens	sion ·	- Kear								
Type and dea	scription	1	McPherson Strut,	Separate C	coll Spring					
	· E	li i a u a a	120 mm (4.72 in.)	ooparate C	on opinig			·		
Travel*		Il jounce	50 mm (1.97 in.)							
	_	pe(coil,leaf,other)&mati	Coll, SUP 7 or SU	P 12V						
		e (length x width, coil						•		
		sign height & i.d.)	258 x 95 mm				262 x 95 mm			
Spring		ring rate (N/mm (lb/in))	45.1 (257.5)				50.5 (288.4)			
- Sprinig		te wheel [N/mm (lb/in)]	17.6 (100.5)				19.6 (111.9)			
	-	ulatora(type & material)	Rubber Top Only							

No. of leaves Shackle(comp or tens)

Type(link,inkless,frmless)

Material & bar diameter

Track bar (type)

Stabilizer

Not Applicable

None

None

^{*} Define load condition:

MVMA Specifications				Vehicle Line Geo METRO Model Year 1990 Issued 6-89 Revised(*) 9-89					
METRIC (U.S. Customary)				1000 100 1000 0-00 (10000) 3-00					
	Body Type And/Or								
Engine Dis		ent		ALL					
Brakes -	-								
		•							
Description				Hydraulic, Front - Floating Caliper Type. Rear - Leading Trailing Shoe Type					
Manufacturer brake type (st		Front (disc or drum)		AISIN SEIKI, Disc					
opt., n.a.) Rear (disc or drum)				NISHINBO, Drum					
Valving type(p	Valving type(prop,delay,metering,other)			Proportion					
Power brake (std., opt., n.a.)				Standard					
Booster type(rmt,intgrl,vac.,hyd.,etc.)				Vacuum					
		inline, pump, etc.)		Inline (Intake Manifold)					
Vacuum		ir (valume cu. in.)		Not Applicable					
Traction	Pump-ty			Pi .					
Control		inal speed range		*					
***	Type engine intervention Front/rear (std., opt., n.e)			#					
	Manufac		•	#					
		ectronic, mech.)		*					
Anti-lock		sensors or circuits		#					
device		-lock hyd. circuits		*					
		or add-on system		*					
	Yaw control (yes, no)			*					
	Hydraul	c power source		Mi					
Effective area	sq. cm. (1	ig. in.)]*		143/172 (22.2/26.7)					
Gross Lng are	a [sq cm (s	q in)) **(F/R)		148/172 (22.9/26.7)					
Swept area (s	q cm (sq in)]*** (F/R)	,	869/282 (134.7/43.7)					
	Outer w	orking diameter	F/R	213/mm (6.39 in.)					
Rotor	Inner wo	rking diameter	F/R	130/ mm (5.12 in.)					
	Thickne	88	F/R	10/ mm (0.39 in.)					
-	Mati & t	/pe (vented/sld)	F/R	Cast Iron, Solid					
Drum		r & width	F/R	/180 x 25 mm (/7.09 x 0.98 in.)					
Minanianhada		d material	F/R	/Cast fron					
Wheel cylinds		Bore/stroke	F/A	48.1/15.8 mm (1.89/0.62 in.) 20.6/28.5 mm (0.81/1.12 in.)					
Master cylind Pedal arc ratio		1 Botelations	Jr7⊓	4.1:1					
Line pressure		00 ib) pedal		9,1,1					
load (kPa (psi))	00 10., pa 02.		 					
Lining clearen	ce		F/R	Self-Adjusting/Self-Adjusting -					
		Bonded or riveted		Bonded					
		Rivet size		Not Applicable					
	Ì	Manufacturer		AKEBONO BRAKE INDUSTRY					
	Front	Lining code		AK V3016 EE					
	wheel	Material		Resin Mold Including Metal					
		Pri.or out-brd		103x40x10 mm (4.06x1.57x0.39 in.)					
		Size Sec. or in-brd		104x40x10 mm (4.09x1.57x0.39 in.)					
Brake lining		Shoe thcknss.(no ing)		5 mm (0.20 in.)					
		Bonded or riveted		Bonded					
	_	Manufacturer		NISSHIN SPINNING					
	Rear wheel	Lining code		NBK D9007 FF					
		Material Pri. or out-brd		Resin Mold 172.7, x 25 x 4.3 mm (6.80 x 0.98 x 0.17 in.)					
		Size Sec. or in-brd		172.7; x 25 x 4.3 mm (6.80 x 0.88 x 0.17 in.)					
		Shoe thokess (no lng)		1.8 mm (0.07 in.)					

^{*} Excludes rivet holes, grooves, chamfers, etc.

**Total swept area for four brakes. (Drum brake: Widest kining contact width for each brake xits contact circum.)

(Diac brake: Square of Outer Working Dia. — Square of inner Working Dia. X P/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	<u> </u>	<u> </u>	
NI A IAIW	Specific	alio	113	Model Year	19 90	Issued	6-89	Revised(*)	9-8 9
IETRIC (I	J.S. Custon	nary)							
ody Type A ngine Dispi				ALL					
1res And	Wheels (S	tanda	rd)				_		
	Size (load rang		<u> </u>	P145/80R12			· ·		
	Type (bias, rad	lial, etc.)		Radial					
ir es	inflation pres- sure (cold) for recommended		Front [kPa(psi)]	220					
	max, vehicle load		Rear [kPa(psi)]	220					
	Rev/mile-at 7	D & ex / h / 4	[985					
	Type & materia		Valp 117	5 deg. Drop Center	Rim Conte	ours, Steel		• •	
	Rim (size & fla)	12 x 4.00B		,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	Wheel offset		45						
Vheels		Type(t	oolt,stud)	Stud					
	Attachment		diameter	114.3					
		Numbe	er & size	4 - M10					
	Tire and wheel			T105/80D13, 13 x 4	Τ	-			
pare	Storage positi location (desc			Flat Under Rear Los	ad Floor				
· · · · · · · · · · · · · · · · · · ·									
Tires And	Wheels (0	ption	al)	(NOT APPLICABLE)				
ire size (load r	inge, ply)								
ype (bias, radi	ai, steel, nylon, et	c.)							
Vheel (type & r				 					
	e type and offset)								
fire size (load r									
	al, steel, nylon, et	c.)							
Wheel (type & r Pim /eize, flanc	e type and offset)								
Tire size (load r		<u>'</u>	•					*- *- *	
	al, steel, nylon, et	(c.)						 	
Wheel (type & I									
	e type and offset)	-						
Fire size (load r			,				-		
	al, steel, nylon, et	tc.)				·· ·			
Wheel (type &		•							
	e type and offset)							
Spare tire and	- 					:			
road tire or wh	n is different than eel, describe opti or wheel location n)	onal		·					
Brakes -	Parking								
Type of contro				Lever - Hand Oper	ated				
, y - y . +b11410				Between Ernet See					

Brakes -	Parking		
Type of control Location of control Operates on		Lever - Hand Operated	
		Between Front Seat	
		Rear Service Brakes	
	Type(internal or external)	Not Applicable	
if separate from	Drum diameter	H	
service brakes	Lining size (length x width x thickness)	N .	

Vehicle Line	Geo	METRO				
Model Year	1990	Issued	6-89	Revised(*)	9-89	

METRIC (U.S. Customary)

Body T	ype And/Or
Engine	Displacement

COUPE, SEDAN CONVERTIBLE

-								
Steerin	g							
Manual (std	l., opt., n.a.;)	•	Standard				
Power (std.	, opt., n.a.)		<u> </u>	Not Applicable				
Adjustable	Adjustable Type							
steering wheel/ column (tilt, telescope, other)		Manufact	urer	•				
		(std., opt	, n.a.)	•				
Wheel		Manual		375 mm (14.76 in.)				
diameter ** (W9) SAE J	1100	Power		Not Applicable				
	Out-	Wall to w	hii (i. & r.)	10.0				
Turning	side front	Curb to c	urb (l. & r.)	9.2 9.6				
diameter m (ft.)	In-	Wall to w	all (i. & r.)	Not Applicable				
	side rear	Curb to c	urb (l. & r.)	"				
Scrub Radio	us "			-1				
	T	Type		Rack And Pinion				
	1_	Manufact	urer	Suzuki Motor Co., Ltd.				
Manual	Gear	Ratios	Gear	Not Applicable				
			Overall	18:1				
	No. whe	el turna(sto	p to stop)	3.6 !				
	Type (h	Type (hydraulic, elec., etc.)		Not i				
	Manufa	cturer		Applicable				
		Type		*				
Power	Gear		Gear	9				
		Ratios	Overall	7				
	Pump (drive)			H I				
	No. wheel turns(stop to stop)		p to stop)	"				
	Type							
				*				
Linkage	of whee	n (front or re ils, other)	ar					
	Tie Rod	s (one or tw	0)	2				
	Inclinati	on at cambe	r (deg.)	25.7				
Steering		Upper		Ball Bearing				
axis	Bear- ings	Lower		Rubber Bushing				
	(type)	Thrust		Not Applicable				
Steering sp	indie/knucl	kle & ipint ty	rDe	Serrated Shaft				
	Dia-	Inner be		Inner Dia 35 mm, Outer Dia 62 mm				
Wheel spindle/	meter	Outer b	<u>-</u>	Inner Dia 35 mm, Outer Dia 62 mm				
hub	Thread		.	M18 x 1.5				
	Bearing	· /		Ball Bearing				

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

Vehicle Line	Geo	METRO		,		
Model Year	1990	Issued	6-89	Revised(*)	9-89	

METRIC (U.S. Customary)

Body Type And/Or
Engine Displacement

ALL				

,	1	Caster (deg.)	3	
	Service	Camber (deg.)	0	
	checking	Toe-in [outside track-mm (in.)]	0	
Front wheel at		Caster (deg.)	Not Adjustable	
urb mass wt.)	Service reset*	Camber (deg.)		
	:	Toe-in (deg.)	Adjustable	
		Caster (deg.)	3 (+/-) 2	
	Periodic M.V. in- spection	Camber (dep.)	0 (+/-) 1	
		Toe-in (deg.)	0 +/2 mm	
		Camber (deg.)	0	
Rear	Service checking	Toe-in [outside track-mm (in.)]	2 mm	
rheel at urb mass	Service	Camber (deg.)	Not Adjustable	
(wt.)	reset*	Toe-in (deg.)	Adjustable	
	Periodic	Camber (deg.)	0 (+/-) 1	
	M.V. in-	Toe-in (deg.)	2 (+/-) 2 mm	

^{*} Indicates pre-set, adjustable, trend set or other.

Electrical - Instruments and Equipment

Speed-	Type (analog, digital, std., opt.)	Analog				
ometer	Trip odometer (std., opt., n.a.)	Standard				
EGR maintenan	ce indicator	Not Applicable				
_	Туре	Tell-Tale Warning Light				
Charge indicator	Warning device (light, audible)	Light				
Temperature	Туре	Electric Gauge With Pointer				
indicator	Warning device	None				
Oil	Туре	Tell-Tale Warning Light				
pressure indicator	Warning device	Light				
Fuel	Туре	Electic Gauge With Pointer				
indicator	Warning device	None				
	Type (standard)	Electric 2-Speed				
Wind	Type (optional)	Intermittent				
shield wiper	Blade length	Dr: 500 mm (19.68 in.), AS: 450 mm (17.72 in.)				
	Swept area (sq cm (sq in))	6,161 (955)				
	Type (standard)	Electric, Push-Button On Instrument Panel				
Wind- shield	Type (optional)	None				
washer	Fluid level indicator	None				
Rear window v (std., opt., n.a.)	viper, wnper/washer	Optional				
	Туре	Electric Resonator				
Horn	Number used	1				
Other		Service & Parking Brake Faiture 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	Specif	fications	i i	ehicle Line		METRO				
	· .	•		odel Year	1990	Issued _	6-89	Revised(*)	9-89	
METRIC (U.S. Cust	tomary)	į							
Engine Desc	ription		1.0 ,L	ITER L3 (61	CID)					
Engine Code	-		ELEC	TRONIC FUE	EL INJECTI	ON RPO L	P2			
			FUEL I	ECONOMY						
Electrical	 Supply 	/ System	VERS	ON		MAN	UAL TRANS		AUTOMATIC TRANS	
	Manufactu	irer	FURU	KAWA BATTE	RY CO., L1	TD./DELCO	REMY, DEL	CO REMY*		
	Model, std., (opt.)		55B24	R-MF (55B24	S-MF)/198	2035, 52 36	590*			
	Voltage		12							
Battery	Amps at 0	deg F cold crnk	400 !							
	Minutes-re	eserve capacity	70				i		<u> </u>	
	Amps/hrs.	- 20 hr. rate	45							
	Location		Left Ha	and Side Of E	ngine Com	partment				
	Manufactu	rer	NIPPO	N DENSO, M	ITSUBISH	ELECTRIC	<u> </u>	-		
	Rating (idle	s/max. rpm)	50 A (2	2,500 rpm), 55	5A (2,500 rp	om)*				
Atternator	Ratio (alt. c	crank/rev.)	2.36:1							
	Output at it	die (rpm, park)	18 A (7	750 rpm)		25 A	(750 rpm)*		23 A (850 rpm)	
	Optional (t)	ype & rating)	None						31 A (850 rpm)*	
Regulator	Туре		Integra	l With Alterna	ator					
Electrical	- Startin	g System	Ì							
	Manufacturer		NIPPON DENSO, MITSUBISHI ELECTRIC*							
Motor	Current drain deg F		200 A	200 A						
	Power ratin	Power rating [kw (hp)]		0.8 (1.1) 1.0 (1.3)						
**	Engageme	Engagement type		Positive Shift Solenoid 1.2 (1.6)*						
Motor drive	Pinion engi from (front		Front							
Electrical	- Ignitior	n System	i I							
	Electronic	(std, opt,n.a.)	Standa	ırd		Not A	pplicable			
Туре	Other (spe	cify)	High E	nergy Ignition	1		** <u>-</u>			
	Manufactu	rer	NIPPO	N DENSO						
- -0	Model									
Coil	C	Engine stopped-A	0				• -			
	Current	Engine idling – A	1.5 A							
	Manufactu	rer	NGK!	or		ND				
	Model		BPR6E	S-11		W201	PR-U11			
Spark	Thread (mr	m)	14			14				
plug	Tightening (Newton m	torque leters (ib. ft.)]	24.5			24.5				
	Gap		1.1 mn							
	Number pe	r cylinder	1			1	•			
	Manufactu	rer	NIPPON DENSO							
Distributor	Model									
Electrical	- Suppre	ession								
Electrical - Suppression Locations & type			Cables	al Alternator C s, Resistor Sp Spraying Rot	ark Plugs, I	igniton Coil i	•			
			Meta	t Indicatos C	ARAI Dradus	ntion				

MVMA-90

MVMA	Specifications

 Vehicle Line
 Geo METRO

 Model Year
 1990
 Issued
 6-89
 Revised(*)
 9-89

METRIC (U.S. Customary)

Body Type	COUPE, CONVERTIBLE	SEDAN	
Body			
Structure	Unitized Frame		
			
Bumper System Front - Rear	Bumper System is Composed Of El Polypropylene, Steel Member And I	= :	
	Use Of Surface Treatment Steel	In Major Body Components	
	2. Application Of Vinyl Chloride Co		
Anti-Corrogion Treatment	3 Applicable Of Tipping Coating To	o Side Sill Outer Surface	

4. Application Of Corrosion Protection Oil To Side Sill Inner Surface

Body - Miscellaneous Information

Type of finis	th (lacquer, ename), other	r)	Enamel
	Material & mass		Steel
Hood	Hinge location (front, rear)		Rear
Hood	Type (counterbalance,	prop)	Prop
·	Release control (int., e	xt.)	Internal And External
·	Material & mass		Not Applicable
Trunk	Type (counterbalance,	other)	N
id	Internal release contro (elec., mech., n.a.)	ı	•
	Material & mass		Steel
Hatch-	Type (counterbalance,	other)	Gas Dumper Stay
back lid	internal release contro elec., mech., n.a.)	ıf	Mechanical
	Material & mass		Not Applicable
	Type (drop, lift, door)		
Tailgate	internal release contro (elec., mech., n.a.)	ol .	•
Vent windo	w control (crank,	Front	Not Applicable
friction, piv	ot, power)	Rear	Pivot Not Applicable
Window reg	ulator type	Front	X Arm
(cable, tape etc.)	, flex drive,	Rear	Cable
		Front	Bucket Type, Steel Plate Press Frame, Urethane Mold
Seat cushio (e.g., 60/40,	bucket, bench	Rear	Bench Type, Steel Wire Frame, Urethane Mold
wire, foam,	etc.)	3rd seat	Not Applicable
		Front	Bucket Type, Steel Tube And Press Frame, Urethane Mold
Seat back t (e.g., 60/40,	bucket,	Rear	Bench Type, Steel Tube And Press Frame, Urethane Mold
bench, wire	, foam, etc.)	3rd seat	Not Applicable
-			
		1	

				; 1	_				
MVMA Specifications				Vehicle Line Model Year	1990	METRO	6-89	Revised(*)	9-89
METRIC	(U.S. Customa	ry)		. — !					· <u>-</u>
Body Type				JPE, NVERTIBLE				SEDAN	
Restrain	t Svstem			Ţ		-			
Seating Positi				Left		Cer	ter	•	Right
	Type & description (lap & shoulder belt, lap belt,	First seat							
Active	etc.)	Second seat		oulder Belt, Standard				1 '	oulder Belt, t, Standard
	Standard/ optional	Third seat] ;]]					
	Type & description (air bag, motorized-2-point belt.	First seat	3-Point Fi	xed Belt,				3-Point F Standard	,
Passive	fixed belt, knee bolster, manual- tap belt)	Second seat] 					
	Standard/ optional	Third seat							
Glass		SAE Ref No	COUPE		(ONVERTIBLE		SEDAN	
Windshield gi surface area (: in.))	lass exposed sq. cm. (sq.	\$1	8,281 (1,2	 84)	ħ	IOT AVAILABI	.E	8,620 (1,3	36)
Side glass exp area [sq. cm. (total 2- sides	posed surface sq. in.]] –	52	12,384 (1,	920)				13,166 (2,	041)
Backlight glar surface area ((sq. in.)]	ss exposed sq. cm.	S 3	4,071 (63°	i 1)				3,882 (602)
Total glass ex area [sq. cm. (posed surface [sq. in.)]	S4	24,736 (3,	834)				25,668 (3,	979)
Windshield gl	lass (type)		Laminated	Glass		····			
Side glass (ty	pe)		Tempered	Glass					<u> </u>
Backlight glad	ss (type)		Tempered	Glass					
Headlam	nps								
Description - kalogen, repli	sealed beam, aceable bulb, etc.		Halogen,	Replaceable E	Bulb				
Shape			Flush						· · · · · · · · · · · · · · · · · · ·
Lo-beam type 2C1, etc.)	e (2A1, 2B1,		Flush						
Quantity			2	<u> </u>					
Hi-beam type 2C1, etc.)	e (1A1, 2A1, 1C1,		Flush				·		
Quantity			2	<u> </u>				· · · · · · · · · · · · · · · · · · ·	
Frame				!					

Unitized Frame

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

MVMA	Specifications	Venicle Line	_	METRO			· · · · · · · · · · · · · · · · · · ·			
	,	Model Year	1990	Issued	6-89	Revised(*) _	9-89			
METRIC ((U.S. Customary)									
Body Type		ALL	ALL							
Convenie	ence Equipment (standard	d, optional, n.a.)								
Air conditionin auto, temp con	g (manual, irol)	Optional, Manual C	ontrol							
Clock (digital,	anaioo)	Optional, Digital, Int		Radio						
Compass / the		Not Applicable								
Console (floor		Optional, Floor								
Defroster, ele	c. backlight	Optional								
	Diagnostic monitor (integrated, individual)	Not Applicable								
	instrument cluster (list instruments)	Not Applicable								
	Keyless entry						•			
Electronic	Tripminder (avg. spd. fuel)							·		
	Voice alert (list items)		·							
	Other					•				
Fuel door lock	(remote, key, electric)	Not Applicable				· · · -				
	Auto head on/off delay, dimming									
	Cornering									
	Courtesy (map, reading)				,					
	Door lock, ignition									
	Engine compartment									
Lamps	Fog									
	Glove compartment									
	Trunk									
	Illuminated entry system (list lamps, activation)									
	Other									
	Day / night (auto. man.)	Manual								
	L.H. (remote, pwr., heated)	Remote								
Mirrors :	R.H.(convex, rmt, pwr, htd)	Convex		:						
	Visor vanity (RH/LH illum.)	RH (Up-Level Mod	e Only)							
Navigation sys	stem (describe)	Not Applicable								

Not Applicable

Prkg. brake-auto release (warn. light)

MVMA Specifications		'	Vehicle Line		METRO					
		1	Model Year _	1990	Issued _	6-89	Revised(*) _	9-89		
METRIC	(U.S. 0	Customary)		1						
Engine De Engine Co	-	1	ALL							
Conveni	ence E	quipment (standare	d, optio	nal, n.a.)	NOT APPL	CABLE)				
	•	(release, pull down)								
		cks (manual, auto., e system		!						
		2 - 4 - 6 way, etc.								
	i .	Reclining(R.H., L.H.)		1						
		Memory (R.H., L.H., preset, recline)		•				• , .		
Power equipment	Seats	Lumber, hip, thigh, support								
		Heated (R.H., L.H., other)								
				<u> </u>						
	Side wi	ndows								
	Vent wi	Vent windows		<u> </u>						
	Rear wi	ndows		<u> </u>						
	Antenna w/shiel	Antenna (location, whip, w/shield, power)		 - ront Pillar, W	'hip					
	Stan.	Stan.	Ante	nna Only						
Radio systems	Opt.	AM, FM, stereo, tape, compact disc, graphic equalizer, theft deterrent, radio prep package, headphone jacks, etc.	1	FM Stereo FM Stereo Wit	th Cassette					
	Speaker (number, location)		Optio	onal 2: I.P. Mo	ounted, 2: E	ack Door Tri	m			
Roof: open air or fixed (flip-up, säding, T')		Not /	Applicable		_					
Speed contr	ol device			*						
Speed warn.	dev. (light	, buzzer, etc.)								
Tachometer	(rpm)	•		onal (Standar	d On Turbo	Model)				
Telephone s	ystem (des	cribe)		Applicable	·	=				
Theft deterr	ent system		Stee	nng Lock Typ	<u>e</u>		-			
									=	

 Vehicle Line
 Geo METRO

 Model Year
 1990
 Issued
 6-89
 Revised(*)
 9-89

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	COUPE, CONVERTIBLE	SEDAN

Width	SAE Ref. I	No.	
Tread (front)	W101	1365 (53.74)	
Tread (rear)	W102	1340 (52.76)	
Vehicle width	W103	1575 (62.00)	[W/Body Side Molding 1592 (62.68)]
Body width at Sg RP (front)	W117	1575 (62.00)	[W/Body Side Molding 1592 (62.68)]
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	Suzuki Mirrors	

o Length			
Wheelbase	L101	2265 (89.17)	2365 (93.11)
Vehicle length	L103	3710 (146.06)	3810 (150.00)
Overhang (front)	L104	767 (30.20)	
Overhang (rear)	L105	678 (26.69)	
Upper structure length	L123	2618 (103.07)	2709 (106.65)
Rear wheel C/L 'X' coordinate	L127	2810 (110.63)	2910 (114.57)

PD1,2,3	2/2	**	
		**	
H101	1330 (52.36)		1360 (53.54)
H114	871 (34.29)		
H138			
H112	193 (7.60)		
H111	205 (8.07)		207 (8.15)
H122	60		59
H121	51.5		44
	H101 H114 H138 H112 H111 H122	H101 1330 (52.36) H114 871 (34.29) H138 H112 193 (7.60) H111 205 (8.07) H122 60	H101 1330 (52.36) H114 871 (34.29) H138 H112 193 (7.60) H111 205 (8.07) H122 60

Front bumper to ground	H102	218 (8.58)	215 (8.46)
Rear bumper to ground	H104	260 (10.24)	263 (10.35)
Bumper to ground [front at curb mass (wt.)]	H103	235 (9.25)	233 (9.17)
Bumper to ground [rear at curb mass (wt.)]	H105	283 (11.14)	285 (11.22)
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)

` B.	IVMA Specifications	1	icle Line	Geo METR		Davice d/#1	0-90	
IV	TAMIN Specifications	Mo	del Year	1990 Iss	ued <u>6-89</u>	_Revised(*)	9-89	
М	ETRIC (U.S. Customary)	ļ						
	ehicle Dimensions See Key Shee	ats for D	efinitions					
		۰۲	COUPE		CONVERTIBLE		SEDAN	
B	ody Type	- i [COUPE		- CONTENTIBLE	<u> </u>		
o F	ront Compartment sa	AE Ref.	No. []: Pa	ass,				
-	RP front, 'X' coordinate	L311	1850 (72.83)		<u>-</u>			
_	fective head room	M61	960 (37.80)		Not Available		986 (38.82)	
_	ax. eff. leg room (accelerator)	L34	1079 (42.48)	<u> </u>				
_	RP to heel point	H30	240 (9.45)					
_	RP to heel point	L53	882 (34.72)	[645 (25.39)]				
_	ack angle (deg.)	L40	25					
	p angle (deg.)	L42	97.5 [88.7]					
_	see angle (deg.)	L44	129 [107.3]					
_	oot angle (deg.)	L46	87 [140]					—
	esign H-point front travel	L17	210 (8.27)					
_	ormal driving & riding seat track trvl.	L23	210 (8.27)					
_	houlder room	W3 ¹	1310 (51.57))	Not Available			
H	proom	W5	1298 (51.10))				
U	pper body opening to ground	H50	1230 (48.43))			1253 (49.33)	
_	teering wheel maximum diameter*	W9	375 (14.76)					
_	leering wheel angle (deg.)	H18	25.7					
A	ccel, heel pt. to steer, whi, cntr	Lii	452 (17.80)	<u> </u>				
A	ccel. heel pt. to steer, whi, ontr	H17	615 (24.21)					
U	ndepressed floor covering thickness	H67	30 (1.18)					
					m. Are Measured V	ith The Sea	ung Het. PL	
0 <u>R</u>	lear Compartment			mm Forward	And 0 mm Up	vard of Real	most Position. 735 (28.94)	
5	gRP point couple distance	L50	660 (25.98)		Al-a A tlable	 _	965 (37.99)	
E	ffective head room	H63	928 (36.54)		Not Available		829 (32.64)	
	lin, effective leg room	L51	757 (29.80)				629 (32.04)	
5	gRP (second to heel)	H31	266 (10.47)				-14 (-0.55)	
K	nes clearance	148	-73 (-2.67)		Not Available		1285 (50.59)	
<u>s</u>	houlder room	W4	1282 (50.47		NOI AVAIIADIE		1085 (42.72)	
<u>H</u>	lip room	W6	1080 (42.52	<u></u>			1262 (49.88)	
** <u>U</u>	pper body opening to ground	H51					1202 (40.00)	
E	lack angle (deg.)	L41	25				79.5	
±	fip angle (deg.)	L43	76		_		78	
*	inee angle (deg.)	L45	66.5				120	
<u> </u>	oot angle (deg.)	L47	112		-		120	
<u> </u>	Depressed floor covering thickness	H73	20 (0.79)					
		i						
!	uggage Compartment		1 450 5 45 5		Not Available		175.7 (6.2)	
	Jeable luggage capacity [L (cu. ft.)]	V1	158.9 (5.6)		14AT VASHITOIG			
***	littover height	H195	769 (30.28)					
		.						
	Interior Volumes (EPA Classification	11 -	Louis					
3	Vehicle class	-1	Subcompa	ICI		<u></u>	84.4	
9	Interior volume index (cu. ft.)**	- - 	78.8				10.5	
	Touck / carno index (cu. ft.)	1 1	10.3					

Vehicle Line

Geo METRO

^{*}See page 14. **mctudes passenger and trunk / cargo index - see definition page 32.

^{***} EPA Loaded Vehicle Weight, Loading Conditions All Linear Dimensions Are in Millimeters (inches)

Vehicle Line Geo METRO 9-89 1990 6-89 Revised(*) Model Year Issued

SEDAN

METRIC (U.S. Customary)

Vehicle Dimensions

Body Type

See Key Sheets for Definitions

Body Type	CONVERTIBLE		SEDAN		
Station Wagon - Third Seat	SAE Ref.	No.	(NOT APPLICABLE)		
Seat facing direction	SD1		•		
SgRP couple distance	L85	-			
Shoulder room	W85				
Hip Room	W86				
Editarius inn sana					

COUPE,

Effective leg room Effective head room H65 SgRP to heel point H87 L87 Knee clearance Back angle LBB L89 Hip angle L90 Knee angle L91 Foot angle

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 1197 (47.13) L208 1102 (43.34) Cargo length at front seatback height 1043 (41.06) Cargo length at floor (front) L208 1018 (40.68) L210 460 (18.11) 452 (17.80) Cargo length at second seatback height L211 600 (23.62) 625 (24.81) Cargo length at floor (second) H187 455 (17.91) Front seatback to load floor height 427 (16.81) H198 Second seatback to load floor height 0.853 (23.1) Cargo volume index [cu. m. (cu. ft.]] V3 0.618 (21.8) Hidden cargo vol. index [cu.m.(cu.ft.)] V4 0.390 (13.8) 0.413 (14.6) V11 0.290 (10.2) 0.295 (10.4) Cargo volume index-rear of 2-seat

^{*} EPA Loaded Vehicle Weight, Loading Conditions All Linear Dimensions Are in Millimeters (inches)

MVMA Specifications			Vehicle Line	Geo	METRO					
IMI A IMI	, Sh	echications	Model Year _	1990	Issued	6-8 9	Revised(*)	9-89		
METRIC	(U.S. (Customary)	,							
Body Type		COUPE, CONVERTIBLE					SEDAN			
Vehicle i	Fiducia	al Marks								
Number*		<u>-</u>	Def	ine Coordinat	Location		•			
			<u>i</u>							
Front		Front Suspension Strut Upper	Center							
Fiducial Mark Number		Burring Hole Center Of Rear Flo	por Side Membe	er At Rearm	ost Bottom S	Surface				
	W21"	512 (20.16)					****			
	L54°	569 (22.40)	į.							
Front	H81*	525 (20.67)	I							
	H161"	755 (29.72)	!					-		
**	H163*	738 (27.06)	1			73	7 (29.02)			
,	W22*	463 mm (18.23 in.)					CO (400 CO)			
1	L55°	3260 (128.35)			 -	33	60 (132.28)			
Rear	H82*	159 (6.26)								
	H162*	413 (16.26)								
**	H164*	390 (15.35)				39	1 (15.99)			
		During table Maker Vakinle	Educial Marks		. <u>.</u>	<u>.</u>				
* EPA Load	led Vehi	mmended Practice, J182, Motor Vehicle cle Weight, Loading Conditions ons Are in Millimeters (Inches)	· [
MVMA-90	•			age 24						

IVIA Specifications Model Year

Vehicle Line	Geo MET	RO				
Model Year _	1990	Issued	6-89	Revised(*)	9-89	

METRIC	ľU.S.	Customary	١

				V	ehicle M	ass (we	lght)		
		CURB MASS, kg. (lb.)*			% PASS MASS DISTRIBUTION				
					Pass in	Front	Pass in	Rear]
Code	Model	Front	Rear	Total	Front	Rear	Front	Rear	ETWC=
Geo METI	30	430	305	735	47	53	13	87	Н
1MR08	2-Door Hatchback Coupe	(948)	(672)	(1620)	ļ				<u> </u>
1MR67	2-Door Convertible					İ			
		442	326	768	48	52	13	87	11
1MR68	4-Door Hatchback Sedan	(974)	(719)	(1693)				<u> </u>	-
Geo MET		428	305	733	47	53	13	87	Н
1MS08	2-Door Hatchback Coupe	(944)	(672)	(1616)		<u> </u> 	<u> </u>	1	
		<u> </u>		 		<u> </u>		<u> </u>	
]					_	
			,						
							,		
<u> </u>			 	 					
	<u></u>								
								<u> </u>	
				 					
				<u> </u>					

Curb Mass - The calculated mass of a vehicle with standard equipment only as designed with the additional load of oil, lubes, coolants, and fuel all filled to capacity.

Shipping Mass - Same as base curb weight, except 3 gallons of gasoline.

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

A = 1000	·

Vehicle Line

Geo METRO

Model Year 1990

Issued

Revised(*)

6-89

METRIC (U.S. Customary)

	į	Op	tional E	quipment D	Differential Mass (welght)*	
			MASS, kp. (I	9a		
ode	Equipment :	Front	Rear	Total	Remarks Restrictions, Requirements	
	Electric Rear Window Defogger	0	0.10	0.10		
	Air Conditioning	20.3	-2.0	18.3		
	Tachometer	0.085	0	0.085		
	Rear Window Washer & Wiper	0	1.30	1.30		
	Passenger Assist Grip (2 Dr H/B) (4 Dr H/B)	0.02	0.03 0.11	0.05 0.15		
	Split Folding Rear Seat Back	0	0.4	0.4		
	Intermittent Wiper	0.02	0	0.02		
	Custom Trim Seat					
	Large Arm Rest (2 Dr H/B)	0.76	0	0.76		
<u> </u>	(4 Dr H/B)	0.72	0.55	1.27		
	Custom Door Trim	0	0	0		
	Quarter Window Trim (2 Dr H/B)	0.1	0.4	0.5		
	(4 Dr H/B)	0.06	0.67	0.73		
	Body Side Molding (2 Dr H/B) (4 Dr H/B)	0.34 0.36	0.34 0.36	0.68 0.72		

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

 Vehicle Line
 Geo METRO

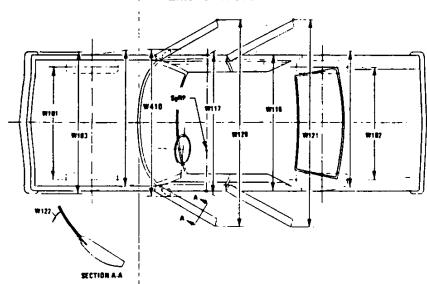
 Model Year
 1990
 Issued
 6-89
 Revised(*)

METRIC (U.S. Customary)

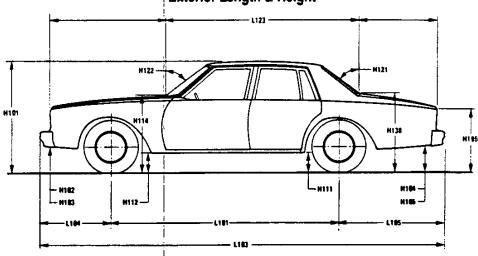
		Ор	tional E	quipment	Differential Mass (weight)*		
<u> </u>			MASS, kg. (II	b.)			
Code	Equipment	Front	Rear	Total	Remarks Restrictions, Requirements		
···	OSRV Mirror (RH)	0.6	0.5	1.1			
	Radio AM/FM Stereo						
	AM/FM Stereo w/Cassette Deck	2.0	0.7	2.7	<u> </u>		
	Radio Speakers - Dual Rear	0.9	0.9	1.8			
	Floor Piece Mat	2	2	4			
	Engine Block Heater			ŀ			
	Full Wheel Cover	0.77	0.77	1.54			
	Front and Rear Mud Guard	0.49	0.68	1.17			
	Automatic Transmission	26.0	-3.0	23.0			
	Console Box	0.43	0.20	0.63	_		
	4.478						
		-					

^{*}Also see Engine – General Section for dressed engine mass (weight).

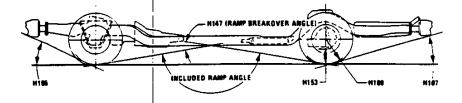
Exterior Width



Exterior Length & Height



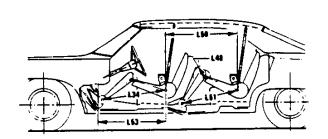
Exterior Ground Clearance

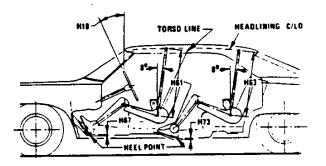


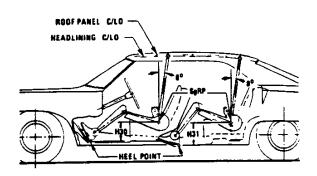
MVMA Specifications Form

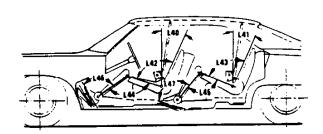
METRIC (U.S. Customary)

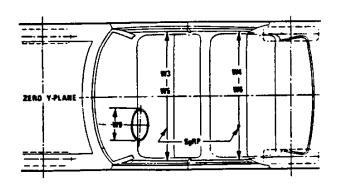
Interior Vehicle And Body Dimensions — Key Sheet

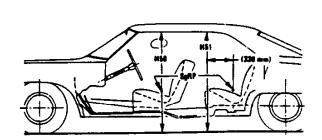








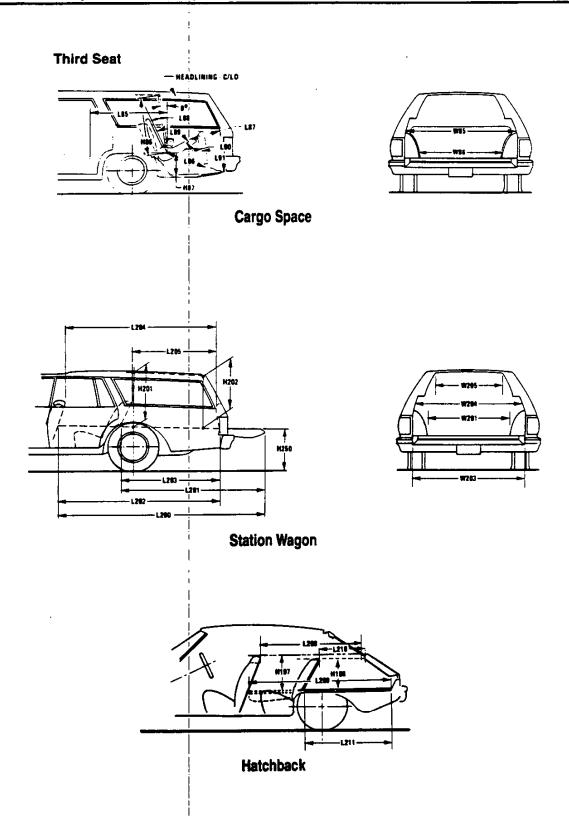




MVMA Specifications Form

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions - Key Sheet



Page 29

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.

TREAD - REAR. The dimension measured between the tire W102 centerlines at the ground. In case of dual wheels, the dimension will be measured to the centerline of tire and wheel assemblies.

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.

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

VEHICLE WIDTH - FRONT DOORS OPEN. The dimension measured between the widest point on the front doors in maximum hold-open position.

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.

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

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.

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.

OVERHAND – FRONT. The dimension measured longitudi-L104 nally 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.

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.
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.

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.

ROCKER PANEL - FRONT TO GROUND. The dimension H112 measured vertically from the foremost point on the bottom of the rocker panels, excluding flanges, to ground.

COWL POINT TO GROUND, Measured at zero "Y" plane.

BACKLIGHT SLOPE ANGLE. The angle between the

H114

H121 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.
WINDSHIELD SLOPE ANGLE. The angle between the H122 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.

DECK POINT TO GROUND. Measured at zero "Y" plane. STATIC LOAD - TIRE RADIUS - REAR. Specified by the H₁₀₉ manufacturer in accordance with composite TIRE SECTION STANDARD.

Ground Clearance Dimensions

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

FRONT BUMPER TO GROUND-CURB MASS (WT.). H103 Measured in the same manner as H102.

REAR BUMPER TO GROUND. The minimum dimension H104 measured vertically from the lowest point on the rear bumper to ground, including bumper guards, if standard eauipment.

REAR BUMPER TO GROUND-CURB MASS (WT.). H105

Measured in the same manner as H104.

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.

ANGLE OF DEPARTURE. The angle measured between a H107 line tangent to the rear tire static loaded radius arc and the initial point structural interference rearward of the rear tire

to ground. The limiting component shall be designated.

RAMP BREAKOVER ANGLE. The angle measured between two lines tangent to the front and rear tire static baded radius and intercenting of a linear 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.

REAR AXLE DIFFERENTIAL TO GROUND. The minimum H153 dimension measured from the rear axle differential to

MINIMUM RUNNING GROUND CLEARANCE. The mini-H156 mum dimension measured from the sprung vehicle to ground. Specify location.

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions - Key Sheet **Dimensions Definitions**

Glass	Areas
S1	Windshield area.
S 2	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).
Fiduc	lat Mark Dimensions
	Fiducial Mark - Number 1
L54	"X" coordinate.
W21	"Y" coordinate.

H81 "Z" coordinate. Height "Z" coordinate to ground at curb weight. Height "Z" coordinate to ground. H161 H163

Fiducial Mark - Number 2 L55 'X" coordinate. "Y" coordinate. W22 W82 "Z" coordinate. Height "Z" coordinate to ground at curb weight. H162 Height "Z" coordinate to ground. H164

Front Compartment Dimensions

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.

DESIGN H-POINT - FRONT TRAVEL. The dimension meas-L17 ured horizontally between the design H-point - front in the foremost and rearmost seat track positions. (See SAE

NORMAL DRIVING AND RIDING SEAT TRACK TRAVEL. L23 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).

SgRP - FRONT. "X" COORDINATED.

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.

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.
HIP ANGLE - FRONT. The angle measured between torso L-42 tine and thigh centerline.

KNEE ANGLE-FRONT. The angle measured between L44 thigh centerline and lower leg centerline measured on the

right leg.
FOOT ANGLE - FRONT. The angle measured between the L46 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.**

SGRP-FRONT TO HEEL. The dimension measured L53 horizontally from the SgRP-front to the accelerator heel

SHOULDER ROOM-FRONT. The minimum dimension W3 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.
STEERING WHEEL MAXIMUM OUTSIDE DIAMETER.

W9 Define if other than round

ACCELERATOR HEEL POINT TO THE STEERING WHEEL **H7** 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

STEERING WHEEL ANGLE. The angle measured from a H18

H30

vertical to the surface plane of the steering wheel.

SgRP-FRONT TO HEEL. The dimension measured vertically from the SgRP-front to the accelerator heel point UPPER BODY OPENING TO GROUND-FRONT The dimension measured vertically from the trimmed body opening to the ground on the SGRP-front Visiones. **H50** opening to the ground on the SgRP – front X" plane.

EFFECITVE HEAD ROOM – FRONT. The dimension meas-

H61 ured along a line 8 deg. rear of vertical from the SgRP - front

to the headlining plus 102 mm (4.0in.). FLOOR COVERING THICKNESS - UNDEPRESSED -H67 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

BACK ANGLE-SECOND. The angle measured between L-41 a vertical line through the SgRP – second and the torso line. HIP ANGLE – SECOND. The angle measured between

1.43 torso line and thigh centerline.

KNEE ANGLE - SECOND. The angle measured between

145

thigh centerline and lower leg centerline.
FOOT ANGLE - SECOND. The angle measured between L47 the lower leg centerline and a line tangent to the ball and heel of the three-dimensional devices bare foot flesh line (Reference J826). KNEE CLEARANCE - SECOND. The minimum dimension

L48 measured from the knee pivot center to the back of the front seatback minus 51 mm (2.0 in.).

SQRP COUPLE DISTANCE - SECOND. The dimension L50 measured horizontally from the driver SgRP-front to the SoRP - second

MINIMUM EFFECTIVE LEG ROOM-SECOND. The di-L51 mension measured along a line from the ankle pivot center

to the SgRP – second plus 254 mm (10.0 in.).
SHOULDER ROOM – SECOND. The minimum dimension **W4** 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.
HIP ROOM-SECOND. Measured in the same manner as W6

SgRP-SECOND TO HEEL. The dimension measured vertically from the SgRP-second to the two dimensional device heel point on the depressed floor covering.

UPPER BODY OPENING TO GROUND-SECOND. The H31

H51 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. EFFECTIVE HEAD ROOM - SECOND. The dimension

H63 measured along a line 8 deg. rear of vertical from the SgRP to the headlining, plus 102 mm (4.0 in.).
FLOOR COVERING - DEPRESSED - SECOND. The di-

H73 mension measured vertically from the heel point to the underbody sheet metal.

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 tisted for each body style except two seaters. The Interior Volume Index estiamtes 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 Interior Volume Index is an estimate of the size of the passenger compartment.

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 - 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
- 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 SQRP THIRD TO HEEL POINT.
- SD1 SEAT FACING DIRECTION THIRD.

Station Wagon - Cargo Space Dimensions

- L200 CARGO LENGTH OPEN FRONT. The minimum dimension measured longitudinally from the back of the front seatback at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the open tailgate or cargo surface if the rear closure is a conventional door type tailgate at the zero "Y" plane.
- L201 CARGO LENGTH OPEN SECOND. The dimension measured longitudinally from the back of the second seatback at the height of the undepressed floor covering 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 tallgate 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.
- 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.
- V2 STATION WAGON

Measured in inches:

W4 x H201 x L204

Measured in mm:

 $\frac{\text{W4 x H201 x L204}}{10^9} = \text{m}^3 \text{ (cubic meter)}$

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions — Key Sheet Dimensions Definitions

- 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.
- floor rear of the front seat.
 V5 TRUCKS AND MPV'S WITH OPEN AREA.

Measured in inches:

Measured in mm:

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

V6 TRUCKS AND MPV'S WITH CLOSED AREA.

Measured in inches:

Measured in mm:

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

- 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:

Measured in mm:

H201 x L205 x
$$\frac{W4 + W201}{2}$$
 = m³ (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-HATCHBACK.
- L209 CARGO LENGTH AT FLOOR-FRONT HATCHBACK.
 The minimum horizontal dimension measured at floor level from the rear of the front seatback to the normal limiting interference of the hatchback door on the vehicle zero "Y" plane.

- L210 CARGO LENGTH AT SECOND SEATBACK HEIGHT—HATCHBACK. 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 HATCHBACK.

 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:

$$\frac{\frac{1208 + 1209}{2} \times W4 \times H197}{2} = ft^3$$

Measured in mm:

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

- V4 HIDDEN LUGGAGE CAPACITY REAR OF FRONT SEAT. The total volumes of individual pieces of one set of standard luggage stowed in individual pieces of one set of standard flow report of the front seat.
- floor rear of the front seat.

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

Measured in inches:

$$\frac{L210 + L211}{2} \times W4 \times H198$$
= ft³

Measured in mm:

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

METRIC (U.S. Customary)

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