

MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

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1990

Manufacturer Mazda Motor Corporation	Vehicle Line Mazda 323	
Mailing Address 3-1, Shinchu, Fuchu-cho Akigun, Hiroshima, Japan	Issued Oct. / '89	Revised

Direct questions concerning these specifications to the manufacturer listed above.

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



Motor Vehicle Manufacturers Association
of the United States, Inc.

Forms Provided by Technical Affairs Division

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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

METRIC (U.S. Customary)

Vehicle Line _____
Model Year 190 Issued Oct./1989 Revised (•) _____

Vehicle Origin

Design & development (company)	Mazda Motor Corporation
Where built (country)	Japan
Authorized U.S. sales marketing representative	Mazda Motor of America, Inc.

Vehicle Models

Model Description & Drive (FWD / RWD / AWD / 4WD)*	Introduction Date	Make, Vehicle Model, Series, Body Type (Mazda Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk/Cargo Load-Kilograms (Pounds)
<u>Mazda 323 (FWD)</u>				
3-door Hatchback			2/3	
4-door Sedan			2/3	
<u>Mazda 323 (4WD)</u>				
4-door Sedan			2/3	

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

MVMA Specifications

Vehicle Line _____
Model Year 190 Issued Oct./'89 Revised (+) _____

METRIC (U.S. Customary)

Engine Description
Engine Code

B6E	BPE	BPD
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ENGINE - GENERAL

Type & description (inline, V, angle, lift, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hami, wedge, pre-chamber, etc.)	SOHC-8V In-line, 4-cyl.	SOHC-16V In-line, 4-cyl.	DOHC-16V In-line, 4-cyl.
Manufacturer	Mazda	←	←
No. of cylinders	4	4	4
Bore	78 mm	83 mm	←
Stroke	83.6 mm	85 mm	←
Bore spacing (C/L to C/L)	86 mm	91 mm	←
Cylinder block material & mass kg (lbs.) (machined)	Cast iron	←	←
Cylinder block deck height	206.5 mm	←	←
Cylinder block length	373.5 mm	393.5 mm	←
Deck clearance (minimum) (above or below block)	—	—	—
Cylinder head material & mass kg (lbs.)	Cast aluminum alloy	←	←
Cylinder head volume (cm³)	36.9	46.58	50.8
Cylinder liner material	—	—	—
Head gasket thickness (compressed)	1.25 mm	0.75 mm	←
Minimum combustion chamber total volume (cm³)	47.65	56.9	57.0
Cyl. no. system (front to rear)*	L Bank	—	—
	R Bank	—	—
Firing order	1-3-4-2	←	←
Intake manifold material & mass (kg (lbs.))**	Cast aluminum alloy	←	←
Exhaust manifold material & mass (kg (lbs.))**	Cast iron	←	←
Fuel required unleaded, diesel, etc.	Unleaded	←	←
Fuel antiknock index (R + M) + 2	—	—	—
Engine mounts	Quantity	—	—
	Material and type (elastomeric, hydroelastic, hydraulic damper, etc.)	—	—
	Added isolation (sub-frame, crossmember, etc.)	—	—
Total dressed engine mass (wt) dry***	—	—	—

Engine - Pistons

Material & mass, g (weight, oz.) - piston only	Cast aluminum alloy 268 g	←	←
--	------------------------------	---	---

Engine - Camshaft

Location	Over head	←	←
Material & mass kg (weight, lbs.)	Cast iron	←	←
Drive type	Chain / belt	←	←
	Width / pitch	22.0/8.007	←

* 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 Specifications

Vehicle Line Mazda 323
Model Year '90 Issued Oct./'89 Revised (*)

METRIC (U.S. Customary)

Engine Description
Engine Code

B6E	BPE	BPD
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Engine - Valve System

Hydraulic lifters (std., opt., NA)	Std.	←	←
Valves	Number Intake / exhaust	1/1	2/2
	Head O.D. Intake / exhaust	∅38/∅32	∅30/∅25
			∅33/∅28

Engine - Connecting Rods

Material & mass (kg., (weight, lbs.))*	Carbon steel	←	←
Length (axes & loc) mm	132-9 mm	←	←

Engine - Crankshaft

Material & mass (kg., (weight, lbs.))*	Nodular graphite cast iron	Carbon steel
End thrust taken by bearing (no.)	2	←
Length & number of main bearings	—	—
Seal (material, one, two piece design, etc.)	Front	—
	Rear	—

Engine - Lubrication System

Normal oil pressure (kPa (psi) at engine rpm)	343-411 kPa (3000rpm)	←	←
Type oil Intake (floating, stationary)	Stationary	←	←
Oil filter system (full flow, part, other)	full flow	←	←
Capacity of oil case, less filter-refill-L (qt.)	—	—	—

Engine - Diesel Information

NA

Diesel engine manufacturer	
Glow plug, current drain at 0°F	
Injector nozzle	Type
	Opening pressure (kPa (psi))
Pre-chamber design	
Fuel In-jection pump	Manufacturer
	Type
Fuel injection 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

NA

Turbo charger - manufacturer	
Super charger - manufacturer	
Intercooler	

* Finished State

MVMA Specifications

Vehicle Line Mazda 320
Model Year 1990 Issued Oct. / 1989 Revised (-)

METRIC (U.S. Customary)

Engine Description
Engine Code

B6E	BPE	BPD
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Engine - Cooling System

Coolant recovery system (std., opt., n.a.)	std.	←	←
Coolant fill location (rad., bottle)	Rad.	←	←
Radiator cap relief valve pressure (kPa (psi))	74-103 kPa	←	←
Circulation	Type (choke, bypass)	BY PASS	←
Thermostat	Starts to open at °C (°F)	Sub 85°C, MAIN 88°C	←
	Type (centrifugal, other)	Centrifugal	←
	GPM 1000 pump rpm	—	←
	Number of pumps	1	←
Water pump	Drive (V-belt, other)	V-belt	←
	Bearing type	Ball bearing	←
	Impeller material	STEEL	←
	Housing material	ALUMINUM	←
By-pass recirculation (type (inter., ext.))	EXH	←	←
Cooling system capacity	With heater - L (qt.)	MT:5.0 AT:6.0	←
	With air conditioner - L (qt.)	—	←
	Opt. equipment (specify - L (qt.))	—	←
Water jackets full length of cyl. (yes, no)	YES	←	←
Water all around cylinder (yes, no)	NO	←	←
Water jackets open at head face (yes, no)	—	←	←
	Std., A/C, HD	std.	←
	Type (cross-flow, etc.)	Down-flow	←
Radiator core	Construction (fin & tube mechanical, brazed, etc.)	Corrugated fin	←
	Material, mass (kg (wgt., lbs.))	—	←
	Width	MT:568 AT:647	MT:AT:647
	Height	MT:400 AT:390	MT:AT:390
	Thickness	MT:16 AT:25	←
	Fins per inch	MT:1.25 AT:1.3	MT:AT:1.3
Radiator and tank material	—	←	←
	Std., elec., opt.	elec.	←
	Number of blades & type (flex, solid, material)	4	←
	Diameter & projected width	320 mm	←
	Ratio (fan to crankshaft rev.)	—	←
Fan	Fan cutout type	—	←
	Drive type (direct, remote)	remote	←
	RPM at idle (elec.)	—	←
	Motor rating (wattage) (elec.)	80 W	MT 80W AT 160W
	Motor switch (type & location) (elec.)	Thermo switch	←
	Switch point (temp., pressure) (elec.)	97 °C	MT 97°C, AT Low 97°C, High 105°C
	Fan shroud (material)	PP-R	←

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Vehicle Line 190 Issued Oct./'89 Revised (•) _____

METRIC (U.S. Customary)

Engine Description
Engine Code

B6E	BPE	BPD
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Engine - Fuel System (See supplemental page for details of Fuel Injection, Supercharger, Turbocharger, etc. if used)

Induction type: carburetor, fuel injection system, etc.		Fuel injection	←	←
Manufacturer		NIPPON DENSO	←	←
Carburetor no. of barrels		NA	←	←
Idle A/F mix.		—	—	—
Fuel injection	Point of injection (no.)	4	←	←
	Constant, pulse, flow	—	—	—
	Control (electronic, mech.)	Elec.	←	←
	System pressure (kPa (psi))	—	—	—
Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	750, Neutral	←	←
	Automatic	750, P-range	←	←
Intake manifold heat control (exhaust or water thermostatic or fixed)		—	—	—
Air cleaner type		Wet	←	←
Fuel filter (type/location)		—	—	—
Fuel pump	Type (elec. or mech.)	Elec.	←	←
	Location (eng., tank)	Tank	←	←
	Pressure range (kPa (psi))	—	—	—
	Flow rate at regulated pressure (L (gal)/hr @ kPa (psi))	—	—	—
Fuel Tank		4 x 2	4 x 4	4 x 4
		4SD	3HB	4SD
Capacity (refill L (gallons))		55 L (14.5)	50 L (13.2)	60 L (15.9)
Location (describe)		Under floor of rear seat	←	←
Attachment		Strap	←	←
Material & Mass (kg (weight lbs.))		Steel	←	←
Filler Pipe	Location & material	Left rear fender	←	←
	Connection to tank	Rubber hose	←	←
Fuel line (material)		Steel pipe & Rubber hose	←	←
Fuel hose (material)		Rubber	←	←
Return line (material)		Steel pipe & Rubber hose	←	←
Vapor line (material)		Steel pipe & Rubber hose	←	←
Extended range tank	Opt., n.a.	NA	←	←
	Capacity (L (gallons))	—	—	—
	Location & material	—	—	—
	Attachment	—	—	—
Auxiliary tank	Opt., n.a.	NA	←	←
	Capacity (L (gallons))	—	—	—
	Location & material	—	—	—
	Attachment	—	—	—
	Selector switch or valve	—	—	—
	Separate fill	—	—	—

MVMA Specifications

Vehicle Line _____ Model Year '90 Issued Oct. / '89 Revised (+) _____

METRIC (U.S. Customary)

Engine Description
Engine Code

2WD (FF)			4WD
B6E 1.6	BPE 1.8	BPD 1.8	BPE
DHC			

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		Three way catalyst + Feed back control			
	Air Injection	Pump or pulse	NA	←	←	←
		Driven by	NA	←	←	←
		Air distribution (head, manifold, etc.)	NA	←	←	←
		Point of entry	NA	←	←	←
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	NA	←	←	←
		Exhaust source Point of exhaust injection (spacer, carburetor, manifold, other)	NA	←	←	←
	Catalytic Converter	Type	TWC	←	←	←
		Number of	1	←	←	←
		Location(s)	Under floor	←	←	←
		Volume (L (in ³))	1.6	1.8	←	2.1
		Substrate type	Monolith	←	←	←
		Noble metal type	Pt/Rh = 5/1	←	←	←
		Noble metal concentration (g/cm ³)	0.0016	←	←	←
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Induction	←	←	←
	Energy source (manifold vacuum, carburetor, other)		Manifold-vacuum	←	←	←
	Discharges (to intake manifold, other)		Intake-manifold	←	←	←
	Air inlet (breather cap, other)		NA	←	←	←
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank				
		Carburetor				
Electronic system	Vapor storage provision					
	Closed loop (yes/no)					
	Open loop (yes/no)					

Engine - Exhaust System

Type (single, single with cross-over, dual, other)		Single	←	←	←
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass (kg (weight lbs))		1 / Reverse Flow	←	←	←
Resonator no. & type		1 / Expansion	←	1 / Absorption	1 / Expansion
Exhaust pipe	Branch o.d., wall thickness	-	-	-	-
	Main o.d., wall thickness	50.8 x 2.0 mm	←	←	←
	Material & Mass (kg (weight lbs))	Stainless	←	←	←
Inter-mediate pipe	o.d. & wall thickness*	* 48.6 x 1.6 mm	←	←	←
	Material & Mass (kg (weight lbs))	Al coated steel	←	←	←
Tail pipe	o.d. & wall thickness	38.1 x 1.2 mm	42.7 x 1.2 mm	31.8 x 1.2 mm	45 x 1.2 mm
	Material & Mass (kg (weight lbs))	Al coated stainless	←	←	←

* 42.7 x 1.6 - 45 x 2.0 - 45 x 1.6 mm

MVMA Specifications

Vehicle Line Mazda 323
Model Year '90 Issued Oct./'89 Revised (-)

MÉTRIC (U.S. Customary)

Engine Description
Engine Code

2WD (FF)			4WD
B6F	BPE	BPD	BPE

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

Manual 3-speed (manufacturer/country)	NA	←	←	←
Manual 4-speed (manufacturer/country)	NA	←	←	←
Manual 5-speed (manufacturer/country)	Std.	←	←	←
Automatic (manufacturer/country)	Opt.	←	←	←
Automatic overdrive (manufacturer/country)	-	-	-	-

Manual Transmission/Transaxle

Number of forward speeds		5	←	←	←
Gear ratios	1st	3.416	←	3.307	←
	2nd	1.842	←	1.833	←
	3rd	1.290	←	1.310	1.233
	4th	0.918	←	1.030	0.914
	5th	0.731	←	0.795	0.717
	Reverse	3.214	←	3.166	←
Synchronous meshing (specify gears)		All forward gears	←	←	←
Shift lever location		Floor	←	←	←
Trans. case mat'l. & mass kg (lbs)*		Aluminum	←	←	←
Lubricant	Capacity [L (pt.)]	2.68 L	←	3.35 L	2.6-L
	Type recommended	75W-90	←	ATF	75W-90 or
			ATF (DEXRON II, M II)		ATF (DEXRON II, M II)

Clutch (Manual Transmission)

Clutch manufacturer		DAIKIN MFG. CO., LTD			
Clutch type (dry, wet; single, multiple disc)		Dry single plate	←	←	←
Linkage (hydraulic, cable, rod, lever, other)		Hydraulic	←	←	←
Max. pedal effort (nom. spring load, new) N (lbs)	Depressed	-	-	-	-
	Released	-	-	-	-
Assist (spring, power/percent, nominal)		-	-	-	-
Type pressure plate springs		Diaphragm	←	←	←
Total spring load (nominal, new) N (lbs)		370 kg	440 kg	392 kg	←
Clutch facing	Facing mfg. & material coding	LALQUA / NK50	←	←	VALEO / F202
	Facing material & construction	Semimold	←	←	←
	Rivets per facing	16	←	←	←
	Outside x inside dia. (nominal)	190 x 132 mm	200 x 132 mm	215 x 150 mm	225 x 150 mm
	Total eff. area (cm ² (in. ²))	147	181	186	220
	Thickness (pressure plate side/ly wheel side)	3.5 / 3.5 mm	3.8 / 3.5 mm	←	4.1 / 3.5 mm
	Rivet depth (pressure plate side/ly wheel side)	1.4 / 1.4 mm	1.7 / 1.4 mm	←	2.0 / 1.4 mm
	Engagement cushion method	Cushion spring	←	←	←
Release bearing type & method lub.		Ball bearing & grease			
Torsional damping method, springs, hysteresis		Rubber			

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

Vehicle Specifications

METRIC (U.S. Customary)

Vehicle Line Mazda 323
Model Year 190 Issued Oct./'89 Revised (-)

Engine Description
Engine Code

2WD (FF)				4WD
B6E	BPE	BPD		BPE

Automatic Transmission/Transaxle

Trade Name		Transaxle (F4A)	←	←	EC-AT (G4A-EL)
Type and special features (describe)		Lock-up Torque converter	←	←	Elec. Control
Gear selector	Location (column, floor, other)	Floor	←	←	←
	Ltr./No. designation (e.g. PRND21)	PRNDSL	←	←	←
	Shift interlock (yes, no, describe)	Yes	←	←	←
Gear ratios	1st	2.800	←	←	←
	2nd	1.540	←	←	←
	3rd	1.000	←	←	←
	4th	0.700	←	←	←
	Reverse	2.333	←	←	←
Max. upshift speed - drive range (km/h (mph))		1-2 92 - 58 2-3 92 - 100 3-4 135 - 166 4-5 162 - 192	56 - 62 99 - 107 168 - 178 153 - 163	59 - 65 101 - 109 167 - 177 155 - 165	50 93 148 138
Max. kickdown speed - drive range (km/h (mph))		3-2 82 - 90 2-1 42 - 48	88 - 96 42 - 48	94 - 102 52 - 58	90 39
Min. overdrive speed (km/h (mph))		25 - 35	25 - 35	25 - 35	40
Torque converter	Number of elements	3	←	←	←
	Max. ratio at stall	2.2	2.1	←	2.7
	Type of cooling (air, liquid)	Liquid	←	←	←
	Nominal diameter	236 mm	←	←	←
	Capacity factor "K"	258	234	←	←
Lubricant	Capacity (refill L (pt.))	5.8 L	←	←	260
	Type recommended	ATF M-III	←	←	6.6 L
Oil cooler (std., opt., N.A., internal, external, air, liquid)		-	-	-	←
Transmission mass (kg (lbs)) & case material **		-	-	-	-

All Wheel / 4 Wheel Drive

		MT	AT
Description & type (part-time, full-time, 2/4 shift while moving, mechanical, elect., chain/gear, etc.)		Full time	←
Transfer case	Manufacturer and model	Mazda / G5MX	Mazda / G4EX
	Type and location	Incorporated in transaxle	←
Low-range gear ratio		NA	←
System disconnect (describe)		NA	←
Rear differential	Type (bevel, planetary, w or w/o viscous bias, torsen, etc.)	Double planetary pinion	←
	Torque split (% front/rear)	50 / 50	←

* Input speed + torque

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

MYMA Specifications

Vehicle Line

Model Year

'90

Issued

Oct. / '89

Revised (-)

METRIC (U.S. Customary)

Engine Description

Engine Code

2WD (FF)			4WD
B6E	BPE	BPD	BPE

Axle Ratio and Tooth Combinations (See 'Power Teams' for axle ratio usage)

Effective final drive ratio (or overall top gear ratio)		MT/AT	3,850/3,736	3,619/3,476	4,105/3,736	4,388/3,842
Transfer ratio and method (chain, gear, etc.)			-	-	-	1,000
Front drive unit	Ring gear o.d.		ø202.5 h10	ø197.4 h10	ø202.5 h10	ø205.0 h10
	No. of teeth		19	21	19	18
	Pinion		78	76	78	79

Front Drive Unit

Description (Integral to trans., etc.)		Incorporated in transaxle			
Limited slip differential (type)		NA	←	←	←
Drive pinion	Type	-	-	-	-
	Offset	-	-	-	-
No. of differential pinions		2	←	←	←
Pinion / differential	Adjustment (shim, etc.)	-	-	-	-
	Bearing adjustment	Shim	←	←	←
Driving wheel bearing (type)		-	-	-	-
Lubricant	Capacity [L (pt.)]	-	-	-	-
	Type recommended	-	-	-	-

Axle Shafts - Front Wheel Drive

Manufacturer and number used			NTN / 2	NSK / 2	NTN / 2	←
Type (straight, solid bar, tubular, etc.)			Left	←	←	←
			Right	←	←	←
Outer diam. x length* x wall thickness	Manual transaxle	Left	ø21.5x385.2 mm	ø23x382.5 mm	ø23x365.5 mm	ø23x308 mm
		Right	ø21.5x663.7 mm	ø23x668.5 mm	ø23x427.5 mm	ø23x388.0 mm
	Automatic transaxle	Left	ø21.5x385.2 mm	ø23x382.5 mm	ø23x387 mm	ø23x331.6 mm
		Right	ø21.5x663.7 mm	ø23x668.5 mm	ø23x427.5 mm	ø23x388.0 mm
	Optional transaxle	Left	-	-	-	-
		Right	-	-	-	-
Slip yoke	Type		-	-	-	-
	Number of teeth		-	-	-	-
	Spine o.d.		-	-	-	-
Universal joints	Make and mfg. no.	Inner	-	-	-	-
		Outer	-	-	-	-
	Number used		-	-	-	-
	Type, size, plunge	Inner	Tripod joint	←	←	Double offset joint
		Outer	Ball joint	←	←	
	Attach (u-bolt, clamp, etc)		-	-	-	-
	Bearing	Type (plain, anti-friction)	-	-	-	-
		Lubrication (tinting, grease)	-	-	-	-
Drive taken through (torque tube, rms or springs)			-	-	-	-
Torque taken through (torque tube, rms or springs)			-	-	-	-

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

METRIC (U.S. Customary)

Engine Description
Engine Code

BPE (4x4, 4-door Sedan)

⊗ Axle Ratio and Tooth Combinations (See 'Power Teams' for axle ratio usage)

Axle ratio (or overall top gear ratio)		3.909
Ring gear o.d.		162.16
No. of teeth	Pinion	11
	Ring gear	43

⊗ Rear Axle Unit

Description		IRS
Limited slip differential (type)		NA
Drive pinion	Type	Hypoid gear
	Offset	25
No. of differential pinions		2
Pinion / differential	Adjustment (shim, etc.)	-
	Bearing adjustment	-
Driving wheel bearing (type)		-
Lubricant	Capacity [L (pt.)]	0.65 l
	Type recommended	API GL-4 (SAE 90, SAE 80), GL-5 (SAE 90, SAE 80)

⊗ Propeller Shaft - Rear Wheel Drive

Manufacturer Type (straight tube, tube-in-tube, internal-external damper, etc.)			Mazda Straight tube	
Outer diam. x length* x wall thickness	Manual 3-speed transmission		NA	
	Manual 4-speed transmission		NA	
	Manual 5-speed transmission		① $\phi 75 \times 834 \text{ mm} \times 1.6 \text{ mm}$ ③ $\phi 57 \times 437 \text{ mm} \times 1.6 \text{ mm}$ ② $\phi 57 \times 634 \text{ mm} \times 1.6 \text{ mm}$	
	Overdrive		NA	
	Automatic transmission-		① $\phi 75 \times 836 \text{ mm} \times 1.6 \text{ mm}$ ③ $\phi 57 \times 437 \text{ mm} \times 1.6 \text{ mm}$ ② $\phi 57 \times 634 \text{ mm} \times 1.6 \text{ mm}$	
Inter- mediate bearing	Type (plain, and-friction)		-	
	Lubrication (filling, prepack)		-	
Slip yoke	Type		Spline	
	Number of teeth		MT : 23 , AT : 19	
	Spline o.d.		MT : 26.07 , AT : 22.42	
Universal joints	Make and mfg. no.	Front	HIKARI SEIKO CO. M003-25-060	
		Rear	HIKARI SEIKO CO. M003-25-060	
	Number used		3	
	Type (ball and trunnion, cross)		MT : VJ + Hook joint AT : DOJ + Hook joint	
	Rear attach (u-bolt, clamp, etc)		Flange	
	Bearing	Type (plain, and-friction)	Needle bearing	
		Lubrication (filling, prepack)	Sealed grease	
Drive taken through (torque tube, arms or springs)			-	
Torque taken through (torque tube, arms or springs)			-	

**Body Type And/Or
Engine Displacement**

2WD (FF)		4WD
B6E	BPE & BPD	BPE

Car levelling	Standard/optional/not avail.		N. A	←	←
	Manual/automatic control		-	—	—
	Type (air/hydraulic)		-	—	—
	Primary/assist spring		-	—	—
	Rear only/4 wheel levelling		-	—	—
	Single/dual rate spring		-	—	—
	Single/dual ride heights		-	—	—
	Provision for jacking		-	—	—
Shock absorber damping controls	Standard/option/not avail.		N. A	↑	←
	Manual/automatic control		-	—	—
	Number of damping rates		-	—	—
	Type of actuation (manual/ electric motor/air, etc)		-	—	—
	s a n s o r s	Lateral acceleration	-	—	—
		Deceleration	-	—	—
		Acceleration	-	—	—
		Road surface	-	—	—
Shock absorber (front & rear)	Type	Cylindrical Double-Acting	←	←	
	Make	TOKIKO, KAYABA	←	←	
	Piston diameter		—	—	
	Rod diameter	φ 20	←	←	

Type and description		Strut	←	←
Travel*	Full bounce	85	←	←
	Full rebound	90	←	←
Spring	Type (coil, leaf, other) & material	Coil	←	←
	Insulators (type & material)	-	-	-
	Size (coil design height & i.d.)	-	-	-
	Spring rate (N/mm (lb./in.))	-	-	-
	Rate at wheel (N/mm (lb./in.))	-	-	-
Stabilizer	Type (link, linkless, frameless)	-	Link	←
	Material & bar diameter	-	BPE: $\phi 19.1$ BPD: $\phi 22$	$\phi 19$

Type and description		Strut	←	←	
Travel	Full bounce	100	←	←	
	Full rebound	120	←	←	
Spring	Type (coil, leaf, other) & material	Coil	←	←	
	Size (length x width, coil design height & I.d.)	—	—	—	
	Spring rate (N/mm (lb/in.))	—	—	—	
	Rate at wheel (N/mm (lb/in.))	—	—	—	
	Insulators (type & material)	—	—	—	
	If leaf	No. of leaves	—	—	—
		Shackle (comp. or tens.)	—	—	—
Stabilizer	Type (link, linkless, frameless)	Link	←	←	
	Material & bar diameter	Ø 20	BPE: Ø20 , BPD: Ø21	Ø19.1	
Track bar (type)					

M'VMA-90

MYMA Specifications

Vehicle Line Mazda 323
Model Year '90 Issued Oct./'89 Revised (-)

METRIC (U.S. Customary)

Body Type And/Or
Engine Displacement

B6E & BPE (4 x 2)

BPD & BPE (4 x 4)

Brakes - Service

Description			Four wheel hydraulic actuated system	←
Manufacturer and brake type (std., opt., n.a.)	Front (disc or drum)		Disc (Std.)	←
	Rear (disc or drum)		Drum (Std.)	Disc (Std.)
Valving type (proportion, delay, metering, other)			Proportion	←
Power brake (std., opt., n.a.)			Std.	←
Booster type (remote, integral, vac., hyd., etc.)			Vac.	←
Vacuum	Source (inline, pump, etc.)		Inline	←
	Reservoir (volume in. ³)		-	-
	Pump-type (elec. gear driven, belt driven)		-	-
Traction control	Operational speed range		-	-
	Type engine intervention (electronic, mech.)		-	-
Anti-lock device	Front / rear (std., opt., n.a.)		NA	←
	Manufacturer		-	-
	Type (electronic, mech.)		-	-
	Number sensors or circuits		-	-
	Number anti-lock hydraulic circuits		-	-
	Integral or add-on system		-	-
	Yaw control (yes, no)		-	-
	Hydraulic power source (elec., vac., mtr., pwr., strg.)		-	-
Effective area [cm ² (in. ²)]*			-	-
Gross lining area [cm ² (in. ²)]**(F/R)			38 x 4 / 66 x 4	43 x 4 / 26 x 4
Swept area [cm ² (in. ²)]*** (F/R)			501 / 215	639 / 432
Rotor	Outerworking diameter	F/R	235 / 228.6	257 / 251
	Inner working diameter	F/R	144(in), 146(out) / NA	← / 152
	Thickness	F/R	22 / NA	← / 9
	Material & type (vented/solid)	F/R	Vented / NA	Vented / Solid
Drum	Diameter & width	F/R	NA / 228.6 x 30	NA / NA
	Type and material	F/R	-	NA
Wheel cylinder bore			654 / 617.4	← / 30.2
Master cylinder	Bore/stroke	F/R	622.2 x 30	←
Pedal arc ratio			4.1	←
Line pressure at 445 N(100 lb.) pedal load (kPa (psi))			MT:1.0 x 10 ³ , AT:1.2 x 10 ³	←
Lining clearance		F/R	Self adjusting	←
Brake lining	Front wheel	Bonded or riveted (rivets/seg.)	Bonded	←
		Rivet size	-	-
		Manufacturer	NIHON BRAKE	←
		Lining code*****	JB KC80 FF	←
		Material	Resin mould	←
		**** Primary or out-board	91.1 x 49 x 10	91.1 x 54.5 x 10
		Size Secondary or in-board	91.1 x 49 x 10	91.1 x 54.5 x 10
		Shoe thickness (no lining)	-	-
	Rear wheel	Bonded or riveted (rivets/seg.)	Bonded	←
		Manufacturer	NIHON BRAKE	←
		Lining code*****	JB NT 60 FF	JB ND83 FF
		Material	Resin mould	←
		**** Primary or out-board	191.9 x 25 x 5	99 x 31.5 x 8
		Size Secondary or in-board	191.9 x 25 x 5	99 x 31.5 x 8
Shoe thickness (no lining)		-	-	

* Excludes rivet holes, grooves, chamfers, etc.

** Includes rivet holes, grooves, chamfers, etc.

*** Total swept area for four brakes. (Drum brake: Widest lining contact width for each brake x its contact circumference.) (Disc brake: Square of Outer Working Dia. minus Square of Inner Working Dia. multiplied by $\pi/2$ for each brake.)

**** Size for drum brakes includes length x width x thickness. ***** Manufacturer I.D., catalog for formulation designation and coefficient of friction classification.

MVMA Specifications

Vehicle Line Mazda 323
Model Year '90 Issued Oct. / '89 Revised (+)

METRIC (U.S. Customary)

Body Type And/Or
Engine Displacement

B6E	1.6	BPE	1.9	BPD	1.8 DoHC
-----	-----	-----	-----	-----	----------

Tires And Wheels (Standard)

Tires	Size (load range, ply)		P155/80R13 79S	P175/80R13 82S	P185/60R14 82H
	Type (bias, radial, steel, nylon, etc.)		Steel radial	←	←
	Inflation pressure (cold) for recommended max. vehicle load	Front (kPa (psi))	216 (32)	←	←
		Rear (kPa (psi))	216 (32)	←	←
	Rev./mile-at 70 km/h (45 mph)		-	-	-
Wheels	Type & material		WDC / Steel	Steel, Alloyed	←
	Rim (size & flange type)		13 x 5J	←	14 x 5 1/2 JJ
	Wheel offset		45 mm	←	←
	Attachment	Type (bolt or stud)	Nut	←	←
		Circle diameter	100	←	←
		Number & size	4	←	←
Spare	Tire and wheel		T115/70 D14/14x4-T	←	←
	Storage position & location (describe)		In trunk room	←	←

Tires And Wheels (Optional)

Tire size (load range, ply)		P175/70R13 82S	P185/60R14 82H	-
radial, steel, nylon, etc.)		Steel radial	←	-
Wheel (type & material)		Steel	Steel, Alloyed	-
Rim (size, flange type and offset)		5 J-13	5 1/2 JJ-14	-
Tire size (load range, ply)				
Type (bias, radial, steel, nylon, etc.)				
Wheel (type & material)				
Rim (size, flange type and offset)				
Tire size (load range, ply)				
Type (bias, radial, steel, nylon, etc.)				
Wheel (type & material)				
Rim (size, flange type and offset)				
Tire size (load range, ply)				
Type (bias, radial, steel, nylon, etc.)				
Wheel (type & material)				
Rim (size, flange type and offset)				
Spare tire and wheel size (If configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position)				

Brakes - Parking

Type of control		Hand operated	←	←
Location of control		Between front seats	←	←
Operates on		Rear service brake	←	←
If separate from service brakes	Type (internal or external)	NA	←	←
	Drum diameter	NA	←	←
	Lining size (length x width x thickness)	NA	←	←

MVMA Specifications

Vehicle Line 190 Model Year 1990 Issued Oct. / '89 Revised (v)

METRIC (U.S. Customary)

Body Type And/or
Engine Displacement

3-door Hatchback & 4-door Sedan	
FF	4WD

Steering

Manual (std., opt., n.a.)			Std.	←	
Power (std., opt., n.a.)			Opt.	←	
Adjustable steering wheel/column (tilt, telescope, other)	Type		Tilt	NA	
	Manufacturer (std., opt., n.a.)		NIHON SEIKO	←	
			Opt.	Std.	
Wheel diameter** (W8) SAE J1100			ø 370 mm	←	
			ø 370 mm	←	
Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)	-	-	
		Curb to curb (l. & r.)	4.82 m (3HB) , 4.91 m (4NB)	5.14 m (3HB) , 5.23 m (4NB)	
	Inside rear	Wall to wall (l. & r.)	-	-	
		Curb to curb (l. & r.)	-	-	
Scrub Radius*			-	-	
Manual	Gear	Type	Rack & pinion	NA	
		Manufacturer		NIHON POWER STEERING	NA
		Ratios	Gear	23.72	NA
		Overall	-	NA	
	No. wheel turns (stop to stop)		4.30	NA	
Power	Type (coaxial, elec., hyd., etc.)		Hyd.	←	
	Manufacturer		NIHON POWER STEERING	←	
	Gear	Type	Rack & Pinion	←	
		Ratios	Gear	16.95	←
		Overall	-	-	
	Pump (drive)		-	-	
	No. wheel turns (stop to stop)		3.07	2.76	
Linkage	Type		-	-	
	Location (front or rear of wheels, other)		-	-	
	Tie rods (one or two)		-	-	
Steering axis	Inclination at camber (deg.)		-	-	
	Bearings (type)	Upper	-	-	
		Lower	-	-	
		Thrust	-	-	
Steering spindle/knuckle & joint type			-	-	
Wheel spindle/hub	Diameter	Inner bearing	-	-	
		Outer bearing	-	-	
	Thread (size)		-	-	
	Bearing (type)		-	-	

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

** See Page 22.

MVMA Specifications

Vehicle Line Mazda 323
Model Year 190 Issued Oct./'89 Revised (*)

METRIC (U.S. Customary)

Body Type And/OR
Engine Displacement

2WD (FF)	4WD
----------	-----

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	2° 05'	2° 40'
		Camber (deg.)	-0° 05'	-0° 39'
		Toe-in (outside track-mm (in.))	2	←
	Service reset*	Caster	-	-
		Camber	-	-
		Toe-in	-	-
	Periodic M.V. inspection	Caster	-	-
		Camber	-	-
		Toe-in	-	-
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	-	-
		Toe-in (outside track-mm (in.))	-0° 20'	←
	Service reset*	Camber	-	-
		Toe-in	-	-
	Periodic M.V. inspection	Camber	-	-
		Toe-in	-	-

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

Electrical - Instruments and Equipment

Speedometer	Type (analog, digital, std., opt.)	Analog
	Trip odometer (std., opt., n.a.)	Std.
EGR maintenance indicator		
Charge indicator	Type	NA
	Warning device (light, audible)	Light
Temperature indicator	Type	Gauge
	Warning device (light, audible)	NA
Oil pressure indicator	Type	NA
	Warning device (light, audible)	NA
Fuel indicator	Type	Gauge
	Warning device (light, audible)	Light
Windshield wiper	Type (standard)	2 speed with intermittent
	Type (optional)	NA
	Blade length	-
	Swept area (cm ² (in. ²))	-
Windshield washer	Type (standard)	Elec. pump
	Type (optional)	NA
	Fluid level indicator (light, audible)	NA
Rear window wiper, wiper/washer (std., opt., n.a.)		Std.
Horn	Type	Elec.
	Number used	2
Other		

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line Mazda 323
Model Year '90 Issued Oct. / '89 Revised (*) _____

Engine Description
Engine Code

B6E	BPE	BPD
-----	-----	-----

Electrical - Supply System

Battery	Manufacturer			
	Model, std., (opt.)			
	Voltage	12V-50AH	←	←
	Ampe at 0°F cold crank			
	Minutes-reserve capacity			
	Amps/hrs.-20 hr. rate			
	Location			
Alternator	Manufacturer			
	Rating (idle/max. rpm)			
	Ratio (sl. crank/rev.)			
	Output at idle (rpm, park)			
	Optional (type & rating)			
Regulator	Type			

Electrical - Starting System

Motor	Manufacturer			
	Current drain _____ °F			
	Power rating [kw (hp)]			
Motor drive	Engagement type			
	Pinion engages from (front, rear)			

Electrical - Ignition System

Type	Electronic (std., opt., n.a.)			
	Other (specify)			
Coil	Manufacturer			
	Model			
	Current	Engine stopped - A		
		Engine idling - A		
Spark plug	Manufacturer	NGK/NIPPON DENSO	←	←
	Model	#1	#2	#3
	Thread (mm)			
	Tightening torque (N·m (lb. ft))			
	Gap	1.1 mm	←	←
	Number per cylinder	1	←	←
Distributor	Manufacturer			
	Model			

Electrical - Suppression

Locations & type			
------------------	--	--	--

*1 BPR5ES11, BPR6ES11 / W16EXR-U11, W20EXR-U11

*2 BKR5ES11, BKR6ES11 / K16PR-U11, K20PR-U11

*3 BKR5E11, BKR6E11, BKR7E11 / K16PR-U11, K20PR-U11, K22PR-U11

MVMA Specifications

Vehicle Line Mazda 323
Model Year '90 Issued Oct. / '89 Revised (•) _____

METRIC (U.S. Customary)

Body Type

All models

Body

Structure

Utilized all steel welded body with energy absorbing front and rear structures.

Bumper system
front • rear

5 MPH bumper (front & rear)

Anti-corrosion treatment

Major exterior and structural sheet metal components.

Body - Miscellaneous Information

Type of finish (lacquer, enamel, other)		Lacquer
Hood	Material & mass	Steel
	Hinge location (front, rear)	Rear
	Type (counterbalance, prop)	Prop
	Release control (internal, external)	Internal
Trunk lid	Material & mass	Steel
	Type (counterbalance, other)	Counterbalance
	Internal release control (elec., mech., n.a.)	Mech.
Hatch-back lid	Material & mass	Steel
	Type (counterbalance, other)	Counterbalance
	Internal release control (elec., mech., n.a.)	Mech.
Tailgate	Material & mass	NA
	Type (drop, lift, door)	-
	Internal release control (elec., mech., n.a.)	-
Vent window control (crank, friction, pivot, power)	Front	NA
	Rear	NA
Window regulator type (cable, tape, flex drive, etc.)	Front	NA
	Rear	NA
Seat cushion type (e.g., 60/40 bucket, bench, wire, foam, etc.)	Front	Bucket
	Rear	Bench
	3rd seat	NA
Seat back type (e.g., 60/40, bucket, bench, wire, foam, etc.)	Front	Bucket
	Rear	Bench
	3rd seat	NA

MVMA Specifications

Vehicle Line PM222 000
 Model Year '90 Issued Oct./'89 Revised (v) _____

METRIC (U.S. Customary)

Body Type

All models

Restraint System

Seating Position			Left	Center	Right
Active	Type & description (lap & shoulder belt, lap belt, etc.)	First seat	Lap belt	NA	Lap belt
		Second seat	Lap & Shoulder belt		Lap & Shoulder belt
		Third seat	NA	NA	NA
Passive	Type & description (air bag, motorized 2-point belt, fixed belt, knee bolster, manual lap belt)	First seat	Motorized-2-point belt	NA	Motorized-2-point belt
		Second seat	NA	NA	NA
		Third seat	NA	NA	NA

Glass	SAE Ref. No.	
Windshield glass exposed surface area (cm ² (in. ²))	S1	-
Side glass exposed surface area (cm ² (in. ²)) - total 2-sides	S2	-
Rearlight glass exposed surface area (cm ² (in. ²))	S3	-
Total glass exposed surface area (cm ² (in. ²))	S4	-
Windshield glass (type)		
Side glass (type)		
Rearlight glass (type)		

Headlamps

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

Frame

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

METRIC (U.S. Customary)

Vehicle Line Mazda 323
Model Year '90 Issued Oct. / '89 Revised (*) _____

Body Type

All models

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

Air conditioning (manual, auto, temp control)		Manual (Opt.)
Clock (digital, analog)		Digital (Opt.)
Compass / thermometer		NA
Console (floor, overhead)		Floor (Std.)
Defroster, elec. backlight		Defroster (Std.)
Electronic	Diagnostic monitor (integrated, individual)	NA
	Instrument cluster (list instruments)	NA
	Keyless entry	NA
	Tripfinder (avg. spd., fuel)	NA
	Voice alert (list items)	NA
	Other	Headlamp on reminder buzzer
Fuel door lock (remote, key, electric)		Remote
Lamps	Auto head on / off delay, dimming	NA
	Cornering	NA
	Courtesy (map, reading)	Opt.
	Door lock, ignition	Ignition (Opt.)
	Engine compartment	NA
	Fog	NA
	Glove compartment	Std.
	Trunk	Opt.
	Illuminated entry system (list lamps, activation)	NA
	Other	-
Mirrors	Day / night (auto, man.)	Manual
	L.H. (remote, power, heated)	Power (Opt.)
	R.H. (convex, remote, power, heated)	Convex (Std.) , Power (Opt.)
	Visor vanity (RH / LH, illuminated)	Opt. / Opt.
Navigation system (describe)		NA
Parking brake auto release (warning light)		NA

MVMA Specifications

Vehicle Line Mazda 323
Model Year '90 Issued Oct / '89 Revised (v) _____

METRIC (U.S. Customary)

Engine Description
Engine Code

All models

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

Power equipment	Deck lid (release, pull down)		NA
	Door locks (manual, automatic, describe system)		Automatic (Opt.)
	Seats	2 - 4 - 8 way, etc.	NA
		Reclining (R.H., L.H.)	NA
		Memory (R.H., L.H., present, recline)	NA
		Lumber, hip, thigh, support	NA
		Heated (R.H., L.H., other)	NA
	Side windows		Opt.
	Vent windows		NA
Rear windows		NA	
Radio systems	Antenna (location, whip, w / shield, power)		Manual
	Standard	AM, FM, stereo, tape, compact disc, graphic equalizer, theft deterrent, radio prep package, headphone jacks, etc.	None
	Optional		AM/FM radio with stereo cassette tape player.
	Speaker (number, location)		2 : Front door , 2 : Rear quarter trim
Roof: open air or fixed (flip-up, sliding, "T")		Sliding sun-roof (Opt.)	
Speed control device		Opt.	
Speed warning device (light, buzzer, etc.)		NA	
Tachometer (rpm)		None : L & LX grade , Std. : GLX & GT grade	
Telephone system (describe)		NA	
Theft deterrent system		NA	

MVMA Specifications

Vehicle Line Mazda 323
Model Year '90 Issued Oct. / '89 Revised (-)

METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for definitions

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

Body Type	SAE Ref. No.	3-door Hatchback	4-door Sedan	
			2WD	4WD
Width				
Tread (front)	W101	1435	←	←
Tread (rear)	W102	1435	←	←
Vehicle width	W103	1675	←	←
Body width at Sq RP (front)	W117	1662	1656	←
Vehicle width (front doors open)	W120	3920	3421	←
Vehicle width (rear doors open)	W121	—	3430	←
Tumble-home (deg.)	W122	22.5°	22°	←
Outside mirror width	W410			

Length

Wheelbase	L101	2450	2500	←
Vehicle length	L103	4155	4355	←
Overhang (front)	L104	856	←	←
Overhang (rear)	L105	851	999	←
Upper structure length	L123	2737	2602	←
Rear wheel C/L "X" coordinate	L127	2450	2500	←

Height*

Passenger distribution (front/rear)	P01.2.3	2 / 1	←	←
Trunk/cargo load		—	—	—
Vehicle height	H101	1345	1340	1355
Cowl point to ground	H114	889	883	903
Deck point to ground	H138	856	943	952
Rocker panel-front to ground	H112	158	←	178
Rocker panel-rear to ground	H111	158	←	171
Windshield slope angle	H122	58.5°	←	←
Backlight slope angle	H121	53.5°	56°	←

Ground Clearance*

Front bumper to ground	H102	203	203	227
Rear bumper to ground	H104	266	←	273
Bumper to ground (front at curb mass (wt.))	H103	—	—	—
Bumper to ground (rear at curb mass (wt.))	H105	—	—	—
Angle of approach (degrees)	H106	16.5°	16.5°	17.5°
Angle of departure (degrees)	H107	17°	15°	15.5°
Ramp breakover angle (degrees)	H147	—	—	—
Axle differential to ground (front/rear)	H153	—	—	—
Min. running round clearance	H158	130	130	135
Location of min. run. gnd. clear.		Eng. Mounting Member	←	←

* All vehicle height and ground clearances are measured at the Manufacturer's Design Load Weight. Manufacturer's Design Load Weight is defined with indicated passenger distribution and trunk/cargo load, unless otherwise specified. All linear dimensions are in millimeters (inches) unless otherwise noted.

MVMA Specifications

Vehicle Line

Mazda 323

Model Year

'90

Issued

Oct. / '89

Revised (*)

METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for definitions

Body Type

3-door Hatchback

4-door Sedan

2WD

4WD

SAE
Ref.
No.

Front Compartment

SgRP front, "X" coordinate	L31	1325	←	←
Effective head room	H61	N/R 981 / S/R 946	N/R 975 / S/R 938	←
Max. eff. leg room (accelerator)	L34	1058	←	←
SgRP to heel point	H30	254	←	←
SgRP to heel point	L53	850	←	←
Back angle	L40	20°	←	←
Hip angle	L42	90.6°	←	←
Knee angle	L44	123°	←	←
Foot angle	L48	87°	←	←
Design H-point front travel	L17	220	←	←
Normal driving & riding seat track trvl.	L23	210	←	←
Shoulder room	W3	1361	1365	←
Hip room	W5	1304	1292	←
Upper body opening to ground	H50	1221	1218	1234
Steering wheel maximum diameter*	W9	370	←	←
Steering wheel angle	H18	23.8°	←	←
Accel. heel pt. to steer. whl. ctr	L11	469	←	←
Accel. heel pt. to steer. whl. ctr	H17	633	←	←
Undepressed floor covering thickness	H67	23	←	←

Rear Compartment

SgRP point couple distance	L50	756	768	←
Effective head room	H63	N/R 954 / S/R 918	N/R 942 / S/R 919	N/R 923 / S/R 899
Min. effective leg room	L51	869	880	886
SgRP (second to heel)	H31	300	295	315
Knee clearance	L48	+15	+28	+19
Shoulder room	W4	1356	1364	←
Hip room	W8	1210	1307	1291
Upper body opening to ground	H51	—	1225	1239
Back angle	L41	27°	26°	←
Hip angle	L43	87°	86°	88.5°
Knee angle	L45	84.5°	86.5°	87.5°
Foot angle	L47	121°	123°	122°
Depressed floor covering thickness	H73	10	←	←

Luggage Compartment

Usable luggage capacity [L (cu. ft.)]	V1	—	370	309
Litover height	H195	—	—	—

Interior Volumes (EPA Classification)

Vehicle class		—	—	—
Interior volume index (cu. ft.)**		—	—	—
Trunk / cargo index (cu. ft.)		—	—	—

* See page 14.

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

N/R : Normal Roof

S/R : With Sun Roof

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for definitions

Vehicle Line _____
Model Year '90 Issued Oct. 1, 89 Revised (•) _____

Body Type

3-door Hatchback

4-door Sedan

2WD

4WD

Station Wagon - Third Seat		SAE Ref. No.	NA	NA	NA
Seat facing direction	SD1				
SqRP couple distance	L85				
Shoulder room	W85				
Hip room	W86				
Effective leg room	L86				
Effective head room	H86				
SqRP to heel point	H87				
Knee clearance	L87				
Back angle	L88				
Hip angle	L89				
Knee angle	L90				
Foot angle	L91				

Station Wagon - Cargo Space		NA	NA	NA
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	H187			
Cargo volume index (m ³ (ft. ³))	V2			
Hidden cargo volume index (m ³ (ft. ³))	V4			
Cargo volume index-rear of 2-seat	V10			

Hatchback - Cargo Space		NA	NA
Cargo length at front seatback height	L208	-	
Cargo length at floor (front)	L209	-	
Cargo length at second seatback height	L210	443	
Cargo length at floor (second)	L211	816	
Front seatback to load floor height	H197	-	
Second seatback to load floor height	H198	522	
Cargo volume index (m ³ (ft. ³))	V3	-	
Hidden cargo volume index (m ³ (ft. ³))	V4	-	
Cargo volume index-rear of 2-seat	V11	0.446	

Body Type

3-door Hatchback

4-door Sedan

2WD

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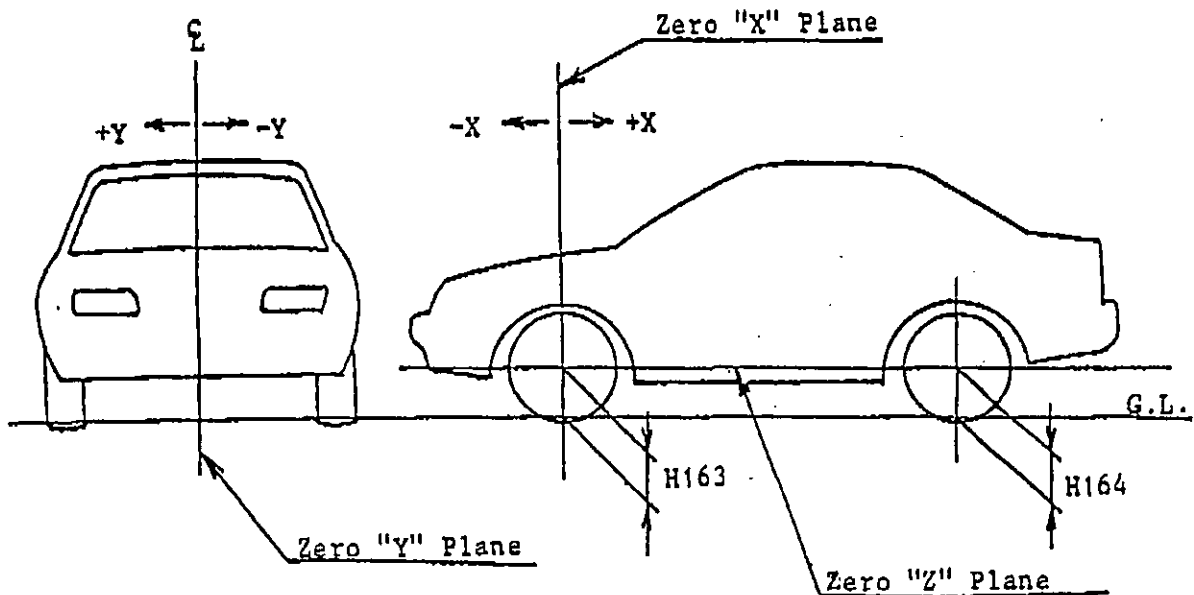
Vehicle Fiducial Marks

Number*

Define Coordinate Location

Front

Rear

Fiducial
Mark
Number

"Z" Plane is horizontal plane which contain the front and rear wheel center at design load weight.

Front	W21*	-	-	-
	L54*	-	-	-
	H81*	-	-	-
	H161*	-	-	-
	H163*	266	-	272
Rear	W22*	-	-	-
	L55*	-	-	-
	H82*	-	-	-
	H162*	-	-	-
	H164*	266	-	272

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

Revised (•)

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Model Year '90 Issued Oct. / '89 Revised (•) _____[illegible]

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