Specifications Form

Passenger Car

1985

METRIC (U.S. Customary)

Manufacturer	Car Line	
Toyota Motor Corporation	MR2	
Mailing Address Toyota Motor Sales, U.S.A., Inc. 2055 West 190th Street Torrance, California 90504	Model Year 1985	Issued: Revised (*)

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Table of Contents

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 completion and are subject to change without notice by the manufacturer.
4. Additional Car and Body Dimensions and/or drawings (based in part on SAE J1100a "Motor Vehicle Dimensions") may be available from the manufacturer.

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

Car Models

Model Description	Introduction Date	Make, Car Line, Series, Body Type (Mfgr's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Truck/Cargo Load—Kilograms (Pounds)
5-speed M/T 2-door Coupe		AW11L-WCMQFA	2/0	Front: 15 Rear: 30

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

Power Teams (Indicate whether standard or optional)

SAE Net bhp (brake horsepower) and net torque corrected to 85° F and 29.38 in. Hg atmospheric pressure.

SERIES AVAILABILITY	ENGINE						TRANSMISSION	AXLE RATIO (std. first) (indicate A/C ratio)
	Displ. Liters (in^3)	Carb. (Barrels, FI, etc.)	Compr. Ratio	SAE Net at RPM		Exhaust System*		
				kW (bhp)	Torque N - m (lb. ft.)			
				kW/rpm	N-m/rpm			
AW11L-WCMQFA	1.587 ℓ	F.I.	9.4	84/ 6600	132/ 4800	Semi-dual	5-speed M/T	

* S—Single D—Dual

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2
Model Year 1985 Issued _____ Revised (*) _____

Engine Description/Carb. Engine Code	4A-GELC

ENGINE — GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, etc.)		Inline, flat, mid, transverse, DOHC, pentroof
No. of cylinders		4
Bore		81.0 mm
Stroke		77.0 mm
Bore spacing (c/l to c/l)		87.5 mm
Cylinder block material		Gray cast iron
Cylinder block deck height		191 mm
Deck clearance (minimum) (above or below block)		0
Cylinder head material		Aluminum alloy
Cylinder head volume (cm^3)		36.0 cm^3
Head gasket thickness (compressed)		1.2 mm
Minimum combustion chamber volume (cm^3)		47.2 cm^3
Cyl. no. system (front to rear)*	L. Bank	1-2-3-4
	R. Bank	–
Firing order		1-3-4-2
Recommended fuel (leaded, unleaded, diesel)		Unleaded
Fuel antiknock index $\frac{(R + M)}{2}$		87
Total dressed engine mass (wt) dry**		120

Engine — Pistons

Material	Aluminum alloy
Mass, g (weight, oz.) — Piston Only	305 g

Engine — Camshaft

Location		Over cylinder head
Material (kg., weight, lbs.)		Alloy cast iron
Mass (kg., weight, lbs.)		No.1 (In. 1.66) No.2 (Ex. 1.55)
Type of drive (chain or belt)	Width	Belt 19.1 mm
	Pitch	Belt 9.525 mm

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

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

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

Engine Description/Carb. Engine Code	4A-GELC

Engine — Valve System

Lifters (std., opt., n.a.)	Hydraulic	N.A.
	Solid	STD

Engine — Connecting Rods

Material & mass (kg., weight, lbs.)	Carbon steel, 0.456 kg

Engine — Crankshaft

Material (kg., weight, lbs.)	Carbon steel
Mass (kg., weight, lbs.)	1.15 kg
End thrust taken by bearing (no.)	#3

Engine — Lubrication System

Normal oil pressure [kPa (psi) at engine rpm]	392/6000 kPa/rpm
Type oil intake (floating, stationary)	Stationary
Oil filter system (full flow, part, other)	Full flow
Capacity of c/case, less filter-refill-L (qt.)	w/Filter: 3.7ℓ, *3.8ℓ w/o Filter: 3.0ℓ, *3.1ℓ

* with air conditioner

Engine — Diesel Information

Glow plug, current drain at 0°F		
Injector nozzle	Type	
	Opening pressure [kPa (psi)]	
Pre-chamber design		
Fuel injection pump	Manufacturer	
	Type	
Supplementary vacuum source (type)		

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2
Model Year 1985 Issued _____ Revised (*) _____

Engine Description/Carb. Engine Code	4A-GELC

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

Induction type: carburetor, fuel injection system, etc.			F.I.
Carburetor	Mfgr.		-
	Choke (type)		-
	Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	-
			-
		Automatic	-
			-
Idle A/F mix.			14.6
Fuel injection	Point of injection (no.)		4
	Constant, pulse, flow		Pulse
	Control (electronic, mech.)		Electronic
	System pressure [kPa (psi)]		250 kPa
Intake manifold heat control (exhaust or water) thermostatic or fixed			-
Air cleaner type	Standard		Dry, 1 element, None
	Optional		N.A.
Fuel pump	Type (elec. or mech.)		Electric motor
	Location (eng., tank)		In fuel tank
	Pressure range [kPa (psi)]		250 kPa

Fuel Tank

Capacity [refill L (gallons)]		41
Location (describe)		Front part under floor
Attachment		Band is used
Material		Lead & fin plating steel
Filler pipe	Location & material	Left wheel quater copper plating steel pipe
	Connection to tank	Rubber hose
Fuel line (material)		Copper plating steel
Fuel hose (material)		Rubber hose with intermediate blade
Return line (material)		Copper plating steel
Vapor line (material)		Copper plating steel (power painted)
Extended range tank	Opt., n.a.	N.A.
	Capacity [L (gallons)]	-
	Location & material	-
	Attachment	-
Auxiliary tank	Opt., n.a.	N.A.
	Capacity [L (gallons)]	-
	Location & material	-
	Attachment	-
	Selector switch or valve	-
	Separate fill	-

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2
Model Year 1985 Issued _____ Revised (*) _____

Engine Description/Carb. Engine Code	4A-GELC

Engine — Cooling System

Coolant recovery system (std., opt., n.a.)			STD
Coolant fill location (rad., bottle)			Exclusively with filler (right rear sub-tower)
Radiator cap relief valve pressure [kPa (psi)]			88.3 kPa (Filler cap, valve opening pressure)
Circulation thermostat	Type (choke, bypass)		Bypass
	Starts to open at °C (°F)		82°C
Water pump	Type (centrifugal, other)		Centrifugal
	GPM 1000 pump rpm		
	Number of pumps		1
	Drive (V-belt, other)		V-belt
	Bearing (type)		Sealed rubber, Ball bearing
By-pass recirculation [type (inter., ext.)]			Engine block outside
Radiator core [type (cross-flow vertical cellular tube and fin, other) and material]			Cross flow, tube fin, C2680RS (Tube) C1100RS-1/2H (Fin)
Cooling system capacity	With heater—L(qt.)		12.3ℓ (M/T)
	With air cond.—L(qt.)		12.5ℓ (M/T)
	Opt. equipment [specify—L(qt.)]		
Water jackets full length of cyl. (yes, no)			Yes
Water all around cylinder (yes, no)			No
Radiator core	Standard	Width	575
		Height	318
		Thickness	32
		Fins per inch	19.9
	A/C	Width	-
		Height	-
		Thickness	-
		Fins per inch	-
	Heavy duty	Width	-
		Height	-
		Thickness	-
		Fins per inch	-
Fan (standard)	Number of blades & type (flex, solid, material)		-
	Diameter & projected width		-
	Ratio (fan to crankshaft rev.)		-
	Fan cutout type		-
	Drive [type (direct, remote)]		-
	Fan shroud (material)		-
Fan (electric)	Diameter & projected width		ϕ280 x 88 (M/T)
	RPM at idle		2100 rpm
	Motor rating (wattage)		80 W
	Motor switch (type & location)		Thermoswith radiator
	Switch point (temp., pressure)		90°C
	Fan shroud (material)		Steel
Fan (optional)	No. of blades and spacing		
	Diameter & projected width		
	Ratio (fan to crankshaft rev.)		
	Fan cut-out (type)		
	Drive (type, direct, remote)		

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

Engine Description/Carb. Engine Code	4A-GELC

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		-
	Air Injection	Pump (type)	-
		Driven by	-
		Air distribution (head, manifold, etc.)	-
		Point of entry	-
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Controlled flow
		Exhaust source	Exhaust manifold
		Point of exhaust injection (spacer, carburetor, manifold, other)	Intake manifold
	Catalytic Converter	Type	3 way
		Number of	1
		Location(s)	Rearward engine room
		Volume (L (in^3))	1.3 ℓ
		Substrate type	Monolith
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Closed
	Energy source (manifold vacuum, carburetor, other)		Manifold loading pressure, Crankcase pressure
	Discharges (to intake manifold, other)		Intake manifold
	Air inlet (breather cap, other)		Throttle body
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	
		Carburetor	
	Vapor Storage provision (crankcase, canister, other)		Canister

Engine — Exhaust System

Type (single, single with cross-over, dual, other)		Semi dual
Muffler no. & type (reverse flow, straight thru, separate resonator)		1, Reverse flow
Resonator no. & type		-
Exhaust pipe	Branch o.d., wall thickness	42.7 mm, 2.0 mm
	Main o.d., wall thickness	48.6 mm, 2.0, 1.5 mm
	Material	Stainless steel
Intermediate pipe	o.d. & wall thickness	42.7 mm, 1.6 mm
	Material	Aluminum coated steel
Tail pipe	o.d. & wall thickness	31.8 mm, 1.2 mm
	Material	Aluminum coated steel

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2
Model Year 1985 Issued _____ Revised (*) _____

Engine Description/Carb. Engine Code	4A-GELC

Electrical – Supply System

Battery	Voltage rtg. (V & total plates)	12
	Minimum reserve cranking	–
	SAE capacity (amps)	60AH
	Location	Engine compartment left front
Generator or alternator	Type and rating	AC 60A
	Ratio (alt. crank/rev.)	1:2.17
	Optional (type & rating)	–
Regulator	Type	IC

Electrical – Starting System

Start. motor	Current drain at 0°F	–
Motor drive	Engagement type	Shift
	Pinion engages from (front, rear)	Right

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2
Model Year 1985 Issued _____ Revised (*) _____

Engine Description/Carb. Engine Code	4A-GELC

Electrical — Ignition System

Type	Conventional (std., opt., n.a.)		N.A.
	Transistorized (std., opt., n.a.)		
	Other (specify)		N.A.
Coil	Make		Nippon Denso
	Model		90919-02113
	Current	Engine stopped — A	
		Engine idling — A	
Spark plug	Make		Nippon Denso Nihon plug
	Model		ND PQ16R (90919-01121), NGK BCPR5EP11 (90919-01122)
	Thread (mm)		M14 x 19 mm
	Tightening torque [N-m (lb., ft.)]		17.7 N-m
	Gap		1.1 mm
Distributor	Make		ND
	Model		

Electrical — Suppression

Locations & type	Resistance built-in plug, Thermal spraying rotor, Resistance built-in high tension code

Electrical — Instruments and Equipment

Speed-ometer	Type	Needle type, round
	Trip odometer (std., opt., n.a.)	STD
EGR maintenance indicator		N.A.
Charge indicator	Type	Electrical
	Warning device	Lamp
Temperature indicator	Type	Electrical gauge
	Warning device	N.A.
Oil pressure indicator	Type	Electrical gauge
	Warning device	N.A.
Fuel indicator	Type	Electrical gauge
	Warning device	Lamp
Wind-shield wiper	Type (standard)	Motor, 3 steps
	Type (optional)	-
	Blade length	450 mm
	Swept area [cm^2(in.^{2})]	5950 cm^2
Wind-shield washer	Type (standard)	Electrical
	Type (optional)	-
	Fluid level indicator	N.A.
Horn	Type	Electrical flat type
	Number used	2
Other		

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

Engine Description/Carb. Engine Code	4A-GELC

Transmissions

Manual 3-speed (std., opt., n.a.)	-
Manual 4-speed (std., opt., n.a.)	-
Manual 5-speed (std., opt., n.a.)	STD
Manual overdrive (std., opt., n.a.)	-
Automatic (std., opt., n.a.)	-
Automatic overdrive (std., opt., n.a.)	-

Manual Transmission

Number of forward speeds			5
Transmission ratios	In first		3.166
	In second		1.904
	In third		1.310
	In fourth		0.969
	In fifth		0.815
	In overdrive		-
	In reverse		3.250
Synchronous meshing (specify gears)			All Forward Gears (1st, 2nd, 3rd, 4th, 5th)
Shift lever location			Floor
Lubricant	Capacity (L (pt.))		2.3 ℓ
	Type recommended		Multi purpose API GL-4
	SAE viscosity number	Summer	75W-90
		Winter	75W-90
		Extreme cold	75W-90

Clutch (Manual Transmission)

Make & type		Aisinseiki, Dry, single plate
Type pressure plate springs		Diaphragm spring
Total spring load [N (lb.)]		4214 N
No. of clutch driven discs		1
Clutch facing	Material	Semimold
	Manufacturer	Aisinkako or Nisshin boseki
	Part number	31256-17010
	Rivets/plate	16
	Rivet size	4 mm
	Outside & inside dia.	200 x 140 mm
	Total eff. area [cm^2 ($in.^2$)]	160 cm^2
	Thickness	3.5 mm
	Engagement cushion method	Cushion spring
Release bearing	Type & method of lubrication	Single line ball bearing, Grease sealing type
Torsional damping	Method: springs, friction material	Rubber

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

Engine Description/Carb. Engine Code	4A-GELC

Automatic Transmission

Trade name		
Type (describe)		
Selector	Location	
	Ltr./No. designation	
Gear ratios	R	
	D	
	L_3	
	L_2	
	L_1	
Max. upshift speed - drive range [km/h (mph)]		
Max. kickdown speed - drive range [km/h (mph)]		
Min. overdrive speed [km/h (mph)]		
Torque converter	Number of elements	
	Max. ratio at stall	
	Type of cooling (air, liquid)	
	Nominal diameter	
Lubricant	Capacity [refill L (pt.)]	
	Type recommended	
Special transmission features		

Axle or Front Wheel Drive Unit

Type (front, rear)			Rear wheel drive
Description			Helical gear
Limited slip differential (type)			N.A.
Drive pinion offset			-
Drive pinion (type)			Helical gear
No. of differential pinions			2
Pinion adjustment (shim, other)			-
Pinion bearing adj. (shim, other)			N.A.
Driving wheel bearing (type)			
Lubricant	Capacity [L (pt.)]		(2.3 ℓ)
	Type recommended		Multi purpose API GL-4
	SAE viscosity number	Summer	75W-90
		Winter	75W-90
		Extreme cold	75W-90

Axle or Transaxle Ratio and Tooth Combinations (See "Power Teams" for axle ratio usage.)

Axle ratio or overall ratio		4.312
No. of teeth	Pinion	16
	Ring gear or gear	69
Ring gear o.d.		-
Transaxle	Transfer gear ratio	-
	Final drive ratio	-

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2
Model Year 1985 Issued _____ Revised (*) _____

Engine Description/Carb. Engine Code	4A-GELC

Propeller Shaft — Conventional Drive

Type (straight tube, tube-in-tube, internal-external damper, etc.)			Tube-in-tube
Outer diam. x length* x wall thickness	Manual 3-speed trans		
	Manual 4-speed trans.		
	Manual 5-speed trans.		Left Ø 23.5 X 359.6 mm Right Ø 23.5 X 601.2 mm
	Overdrive		
	Automatic transmission		
Intermediate bearing	Type (plain, anti-friction)		
	Lubrication (fitting, prepack)		
Slip yoke	Type		
	Number of teeth		
	Spline o.d.		
Universal joints	Make and mfg. no.	Inner	Toyota 43403-32011
		Outer	Toyota 43405-17020
	Number used		4
	Type, size, plunge	Inner	Tripot, plunging
		Outer	Rzeppa, fixed
	Attach (u-bolt, clamp, etc.)		Snap ring
	Bearing — Type (plain, anti-friction)		-
	Bearing — Lubric. (fitting, prepack)		-
Drive taken through (torque tube, arms or springs)			
Torque taken through (torque tube, arms or springs)			

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

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2
Model Year 1985 Issued _____ Revised (*) _____

Engine Description/Carb. Engine Code	4A-GELC

Axle Shafts — Front Wheel Drive

Number used			
Type (straight, solid bar, tubular, etc.)		Left	
		Right	
Outer diam. x length * x wall thickness	Manual transmission	Left	
		Right	
	Automatic transmission	Left	
		Right	
	Optional transmission	Left	
		Right	
Slip yoke	Type		
	Number of teeth		
	Spline o.d.		
Universal joints	Make and mfg. no.	Inner	
		Outer	
	Number used		
	Type, size, plunge	Inner	
		Outer	
	Attach (u-bolt, clamp, etc.)		
	Bearing — Type (plain, anti-friction)		
	Bearing — Lubric. (fitting, prepack)		
Drive taken through (torque tube, arms or springs)			
Torque taken through (torque tube, arms or springs)			

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

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

Engine Description/Carb. Engine Code	4A-GELC

Tires And Wheels (Standard)

Tires	Size (load range, ply)		185/60R14 82H
	Type (bias, radial, etc.)		Radial
	Inflation pressure (cold) for recommended max. vehicle load	Front [kPa (psi)]	210
		Rear [kPa (psi)]	210
	Rev./mile—at 70 km/h (45 mph)		921
Wheels	Type & material		Steel
	Rim (size & flange type)		5 1/2-Jx14
	Wheel offset		39
	Attachment	Type (bolt or stud)	Nut
		Circle diameter	100
		Number & size	4, 12 (P=1.5)
Spare	Tire and wheel (same, if other describe)		TIRE: T125/70D14, WHEEL: 4T x 14
	Storage position & location (describe)		Front luggage room

Tires And Wheels (Optional)

Size (load range, ply)	185/60R14 82H
Type (bias, radial, etc.)	Radial
Wheel (type & material)	Aluminum
Rim (size, flange type and offset)	5 1/2-JJx14
Size (load range, ply)	-
Type (bias, radial, etc.)	-
Wheel (type & material)	-
Rim (size, flange type and offset)	-
Size (load range, ply)	-
Type (bias, radial, etc.)	-
Wheel (type & material)	-
Rim (size, flange type and offset)	-
Size (load range, ply)	-
Type (bias, radial, etc.)	-
Wheel (type & material)	-
Rim (size, flange type and offset)	-
Spare tire and wheel (if configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position)	-

Brakes — Parking

Type of control		-
Location of control		-
Operates on		-
If separate from service brakes	Type (internal or external)	N.A.
	Drum diameter	N.A.
	Lining size (length x width x thickness)	N.A.

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2
Model Year 1985 Issued _____ Revised (*) _____

Body Type And/Or Engine Displacement

AW11L-WCMQFA
4A-GELC

Brakes – Service

Description				–
Brake type (std., opt., n.a.)		Front (disc or drum)		Disc, STD
		Rear (disc or drum)		Disc, STD
Self-adjusting (std., opt., n.a.)				STD
Special valving	Type (proportion, delay, metering, other)			P & B valve
Power brake (std., opt., n.a.)				STD
Booster type (remote, integral, vac., hyd., etc.)				Direct, vacuum
Anti-skid device type (std., opt., n.a.)				N.A.
Effective area [cm^2(in.^{2})]*			Fr/Rr	172/136 cm^2
Gross lining area [cm^2(in.^{2})]**			Fr/Rr	172/136 cm^2
Swept area [cm^2(in.^{2})]***			Fr/Rr	1118/1067 cm^2
Rotor	Outer working diameter		F	243 mm
			R	240 mm
	Inner working diameter		F	147 mm
			R	147 mm
	Thickness		F	18 mm
			R	10 mm
	Material & type (vented/solid)		F	Cast iron, Ventirated
			R	Cast iron, Solid
Drum	Diameter (nominal)		F	N.A.
			R	N.A.
	Type and material			N.A.
Wheel cylinder bore	Front			51.10 mm
	Rear			36.51 mm
Master cylinder	Bore		Fr/Rr	22.22/22.22 mm
	Stroke		Fr/Rr	15.00/12.00 mm
Pedal arc ratio				4.0 mm
Line pressure at 445 N (100 lb.) pedal load [kPa (psi)]				9050 kPa (500 mmHg)
Lining clearance per shoe	Front			Self Adjusting
	Rear			Self Adjusting
Brake lining	Front wheel	Bonded or riveted (rivets/seg.)		Bonded
		Rivet size		–
		Manufacturer		Sumitomo
		Lining code		–
		Material		Resin molded
		**** Size	Primary or out-board	103.7 x 44.4 x 10 mm
			Secondary or in-board	103.7 x 44.4 x 10 mm
		Shoe thickness (no lining)		5.0 mm
	Rear wheel	Bonded or riveted (rivets/seg.)		Bonded
		Manufacturer		Nishimoto
		Lining code		–
		Material		Resin molded
		**** Size	Primary or out-board	82.0 x 44.5 x 10 mm
			Secondary or in-board	94.0 x 42.9 x 10 mm
		Shoe thickness (no lining)		O.B 5.0 mm I.B 6.0 mm

* 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 thickness.

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

Body Type And/Or Engine Displacement	2-door Coupe, 4A-GELC

Steering

Manual (std., opt., n.a.)				STD
Power (std., opt., n.a.)				N.A.
Adjustable steering wheel (tilt, swing, other)		Type and description		Tilt
		(Std., opt., n.a.)		STD
Wheel diameter		Manual		380 OPT: 384
		Power		-
Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)		10.4
		Curb to curb (l. & r.)		9.6
	Inside rear	Wall to wall (l. & r.)		5.3
		Curb to curb (l. & r.)		5.5
Manual	Gear	Type		Rack & Pinion
		Make		TOYOTA MOTOR CO.
		Ratios	Gear	∞
			Overall	18.0
	No. wheel turns (stop to stop)			3.2
Power	Type (coaxial, linkage, etc.)			-
	Make			-
	Gear	Type		-
		Ratios	Gear	-
			Overall	-
	Pump (drive)			-
	No. wheel turns (stop to stop)			-
Linkage	Type			Accarman
	Location (front or rear of wheels, other)			Rear of wheels
	Drag links (trans. or longit.)			N.A.
	Tie rods (one or two)			2
Steering axis	Inclination at camber (deg.)			12°05'
	Bearings (type)	Upper		Ball bearing
		Lower		Ball joint
		Thrust		
Steering spindle & joint type				
Wheel spindle	Diameter	Inner bearing		28.0
		Outer bearing		61.0
	Thread (size)			M20 x 1.5
	Bearing (type)			Double row angular ball bearing

MVMA Specifications Form
Passenger Car
(METRIC (U.S. Customary)

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

Body Type And/Or Engine Displacement

2-door Coupe , 4A-GELC

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	5°15' ± 45'
		Camber (deg.)	0°15' ± 45'
		Toe-in [outside track-mm (in.)]	1 ± 1
	Service reset*	Caster	5°15' ± 30'
		Camber	0°15' ± 45'
		Toe-in	1 ± 1
	Periodic M.V. inspection	Caster	5°15' ± 45'
		Camber	0°15' ± 45'
		Toe-in	1 ± 1
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	-45' ± 45'
		Toe-in [outside track-mm (in.)]	5 ± 1
	Service reset*	Camber	-45' ± 30'
		Toe-in	5 ± 1
	Periodic M.V. inspection	Camber	-45' ± 45'
		Toe-in	5 ± 1

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

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

Body Type And/Or Engine Displacement	2-door Coupe , 4A-GELC

Suspension — General

Car leveling	Std./opt./n.a.	N.A.
	Type (air, hyd., etc.)	-
	Manual/auto. controlled	-
Provision for brake dip control		-
Provision for acct. squat control		-
Special provisions for car jacking		-
Shock absorber (front & rear)	Type	Double acting cylinder
	Make	TOYOTA MOTOR CO.
	Piston diameter	ø30.2 , ø20
Other special features		

Suspension — Front

Type and description		Macpherson strut
Travel	Full jounce	75
	Full rebound	90
Spring	Type (coil, leaf, other)	Coil spring
	Material	SUP7
	Size (coil design height & i.d., bar length x dia.)	283.5 X Ø 118.9
	Spring rate [N/mm (lb./in.)]	17.6
	Rate at wheel [N/mm (lb./in.)]	19.6
Stabilizer	Type (link, linkless, frameless)	Link type
	Material & bar diameter	SUP6 , Ø 18.0

Suspension — Rear

Type and description			Macpherson strut
Drive and torque taken through			-
Travel	Full jounce		80
	Full rebound		90
Spring	Type (coil, leaf, other)		Coil type
	Material		SUP7
	Size (length x width, coil design height & i.d., bar length & dia.)		298.5 X (Ø87.1 Ø 117.1)
	Spring rate [N/mm (lb./in.)]		31.4
	Rate at wheel [N/mm (lb./in.)]		33.3
	Mounting insulation (type)		Insulation up and bottom
	If leaf	No. of leaves	-
		Shackle (comp. or tens.)	-
Stabilizer	Type (link, linkless, frameless)		Link type
	Material & bar diameter		SUP6 ø10
Track bar (type)			N.A.

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

Body Type	2-door Coupe

Body — Miscellaneous Information

Type of finish (lacquer, enamel, other)			Acrylic or Alkyd resins
Hood	Hinge location (front, rear)		Rear
	Type (counterbalance, prop)		Prop
	Release control (internal, external)		Internal
Trunk lid	Type (counterbalance, other)		Counter balance
	Internal release control (elec., mech., n.a.)		Mechanical
Bumper front	Bar material & mass (wt.)		Urethane 3.7
	Reinforcement material & mass (wt.)		Steel 8.2
Bumper rear	Bar material & mass (wt.)		Urethane 3.7
	Reinforcement material & mass (wt.)		Steel 10.1
Vent window control (crank, friction, pivot, power)		Front	-
		Rear	-
Seat cushion type		Front	Spring + foampad
		Rear	-
		3rd seat	-
Seat back type		Front	Spring + foampad
		Rear	-
		3rd seat	-
Vehicle ident. no. location			Instrument panel top left

Passive Restraint System

Inflatable restraint system	Standard/ optional	Standard
	Type of charging system	3-point, w/retractor
	Location (stg. whl., instru. panel, other)	3-point, 2 seats
Passive seat belts	Standard/ optional	N.A.
	Power/ manual	N.A.
	2 or 3 point	N.A.
	Knee bar/ lap belt	N.A.

Frame

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

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

Body Type	2-door Coupe

Convenience Equipment

Power windows	Side windows	OPT
	Vent windows	N.A.
	Backlight or tailgate	N.A.
Power seats (specify type as well as availability)		N.A.
Reclining front seat back (r-l or both)		Yes, Both
Radio (specify type as well as availability)		OPT: AM/FM MPX AM/FM MPX ETR W/Cassette
Premium sound system (specify)		N.A.
Rear seat speaker		N.A.
Power antenna		N.A.
Clock		STD
Air conditioner (specify type)		OPT
Speed warning device		N.A.
Speed control device		
Ignition lock lamp		STD
Dome lamp		STD
Glove compartment lamp		N.A.
Luggage compartment lamp		N.A.
Underhood lamp		N.A.
Courtesy lamp		N.A.
Map lamp		N.A.
Cornering lamp		N.A.
Rear window defroster electrically heated		STD
Rear window defogger		N.A.
T-bar roof (describe)		N.A.
Sun roof (describe)		OPT: Detachable type
Theft protection—type		

MVMA Specifications Form
Passenger Car

Car Line MR2

Model Year 1985 Issued _____ Revised (•) _____

FEATURE HIGHLIGHTS

(Manufacturers selected list of special vehicle features; indicate if new or model year introduced)

BODY:

CHASSIS:

ENGINE:

ELECTRICAL:

OTHER:

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

Model	Vehicle Mass (weight)							
	CURB MASS, kg. (weight, lb.)*			% PASS. MASS DISTRIBUTION				SHIPPING MASS, kg. (weight, lb.)**
				Pass In Front		Pass In Rear		
	Front	Rear	Total	Front	Rear	Front	Rear	
AW11L-WCMQFA	460	575	1035	46	54	-	-	1010

* Reference — SAE J1100a, Motor vehicle dimensions, curb weight definition.
** Shipping mass (weight) definition —

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

Equipment	Optional Equipment Differential Mass (weight)*			Remarks
	MASS, kg. (weight, lb.)			
	Front	Rear	Total	
Air conditioner	15.5	10.0	25.5	
Detachable moonroof	4.5	6.0	10.5	
Rear spoiler	-1	5.0	4.0	
Power window & Power door lock	1.5	1.5	3.0	
Cruise control	1.0	2.5	3.5	

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

MVMA Specifications Form
Passenger Car

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

METRIC (U.S. Customary)

Car and Body 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 car line.
SAE Ref. no. refers to the definition published in SAE Recommended Practice.
J1100a "Motor Vehicle Dimensions," unless otherwise specified.

Body Type	SAE Ref. No.	2-door Coupe
Width		
Tread (front)	W101	1440
Tread (rear)	W102	1440
Vehicle width	W103	1665
Body width at Sg RP (front)	W117	1650
Vehicle width (front doors open)	W120	3605
Vehicle width (rear doors open)	W121	-
Length		
Wheelbase	L101	2320
Vehicle length	L103	3925
Overhang (front)	L104	835
Overhang (rear)	L105	770
Upper structure length	L123	1585
Rear wheel C/L "X" coordinate	L127	2315
Cowl point "X" coordinate	L125	340
Height*		
Passenger distribution (frt./rear)	PD1.2.3	2
Trunk/cargo load		FR/RR 0/0
Vehicle height	H101	1235
Cowl point to ground	H114	830
Deck point to ground	H138	880
Rocker panel-front to ground	H112	155
Bottom of door closed-front to grd.	H133	260
Rocker panel-rear to ground	H111	155
Bottom of door closed-rear to grd.	H135	-
Ground Clearance*		
Front bumper to ground	H102	380
Rear bumper to ground	H104	380
Bumper to ground (front at curb mass (wt.))	H103	395
Bumper to ground (rear at curb mass (wt.))	H105	395
Angle of approach	H106	14.0°
Angle of departure	H107	20.0°
Ramp breakover angle	H147	14.0°
Rear axle differential to ground	H153	150
Min. running ground clearance	H156	130
Location of min. run. grd. clear.		Ex. pipe protector

All linear dimensions are in millimeters (inches) and all mass (weight) specifications are in kilograms (pounds).

* All vehicle height and ground clearances are made at the Manufacturer's Design Load Weight, unless otherwise specified. Manufacturers Design Load Weight is defined with indicated passenger distribution and trunk/cargo load.

MVMA Specifications Form
Passenger Car

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

METRIC (U.S. Customary)

Car and Body Dimensions See Key Sheets for definitions

Body Type	SAE Ref. No.	2-door Coupe

Front Compartment

Sg RP front, "X" coordinate	L31	D: 1335 mm P: 1305 mm
Effective head room	H61	D: 949 mm P: 946 mm
Max. eff. leg room (accelerator)	L34	D: 1093 mm P: *1155 mm
Sg RP (front to heel)	H30	D: 210 mm P: 214 mm
Design H-point front travel	L17	D: 179 mm P: 149 mm
Shoulder room	W3	D: 1352 mm P: 1352 mm
Hip room	W5	D: 1317 mm P: 1316 mm
Upper body opening to ground	H50	1140
Steering wheel angle	H18	
Back angle	L40	D: 23° P: 23°

Rear Compartment

Sg RP Point couple distance	L50	-
Effective head room	H63	-
Min. effective leg room	L51	-
Sg RP (second to heel)	H31	-
Knee clearance	L48	-
Compartment room	L3	-
Shoulder room	W4	-
Hip room	W6	-
Upper body opening to ground	H51	-

Luggage Compartment

Usable luggage capacity [L (cu. ft.)]	V1	220
Liftover height	H195	815

All linear dimensions are in millimeters (inches).

*: Measured at the position below.

MVMA Specifications Form
Passenger Car

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

METRIC (U.S. Customary)

Car and Body Dimensions See Key Sheets for definitions

Body Type	SAE Ref. No.	2-door Coupe

Station Wagon — Third Seat

Shoulder room	W85	–
Hip room	W86	–
Effective leg room	L86	–
Effective head room	H86	–
Effective T-point head room	H89	–
Seat facing direction	SD1	–

Station Wagon — Cargo Space

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	–
Max. 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 [m^3(ft.^{3})]	V2	–
Hidden cargo volume [m^3(ft.^{3})]	V4	–

Hatchback — Cargo Space

Front seat back to load floor height	H197	–
Cargo length at front seat back height	L208	–
Cargo length at floor (front)	L209	–
Cargo volume index [m^3(ft.^{3})]	V3	–
Hidden cargo volume [m^3(ft.^{3})]	V4	–

A printed or computer tape supplement containing additional car and body dimensions and/or drawings (based in part on SAE J1100a "Motor Vehicle Dimensions") may be available from the manufacturer.

All dimensions are in millimeters (inches).

MVMA Specifications Form
Passenger Car

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

METRIC (U.S. Customary)

Car and Body Dimensions See Key Sheets for definitions

Body Type	2-door Coupe

Vehicle Fiducial Marks

Fiducial Mark Number*		Define Coordinate Location
Front		Center of seat track outer installation hole (both RHD & LHD sides) on front floor cross member.
Rear		Center of the installation hole on the front floor (both RHD & LHD side)

Fiducial Mark Number		
Front	W21	W5 + 73
	L54	L19 + 55 (5)
	H81	H10 + 86
	H161	230
	H163	230
Rear	W22	W5 + 47
	L55	L24 + 50 (5)
	H82	H9 + 79
	H162	155
	H164	155

* Reference — SAE Recommended Practice, J182a, Motor Vehicle Fiducial Marks — September, 1973.
All linear dimensions are in millimeters (inches).

MVMA Specifications Form
Passenger Car

Car Line MR2

Model Year 1985 Issued _____ Revised (*) _____

METRIC (U.S. Customary)

Car and Body Dimensions See Key Sheets for definitions

	SAE Ref. No.	
Body Type		2-door Coupe

Glass

Backlight slope angle (deg.)	H121	20.5°
Windshield slope angle (deg.)	H122	60°
Tumble-Home (deg.)	W122	28.5°
Windshield glass exposed surface area [cm^2($in.^2$)]	S1	8,752
Side glass exposed surface area [cm^2($in.^2$)]	S2	6,328
Backlight glass exposed surface area [cm^2($in.^2$)]	S3	2,902
Total glass exposed surface area [cm^2($in.^2$)]	S4	17,982
Windshield glass (type)		Laminated glass
Side glass (type)		Tempered glass
Backlight glass (type)		"

Lamps and Headlamp Shape*

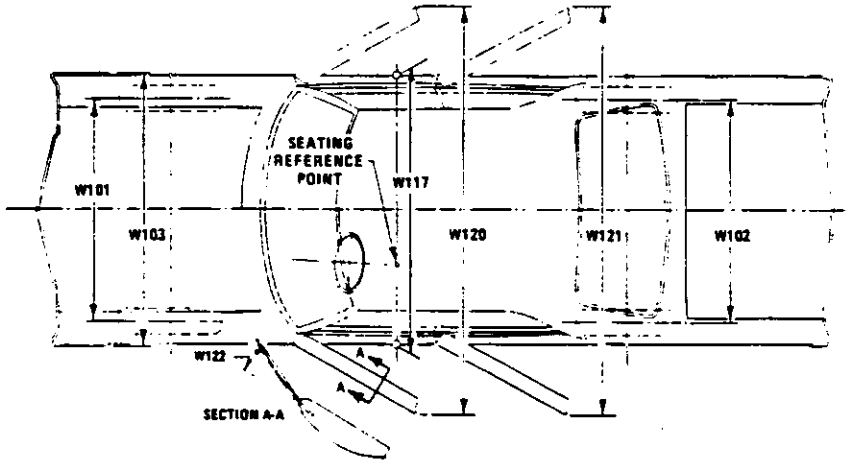
Height above ground to center of bulb or marker	Headlamp (H127)		680
	Taillamp (H128)		705
	Sidemarker	Front	450
		Rear	455
Distance from C/L of car to center of bulb	Headlamp		550
	Taillamp		600
	Directional	Front	505
		Rear	615
Headlamp shape			

* Measured at curb mass (weight).
** If single lamps are used enter here.

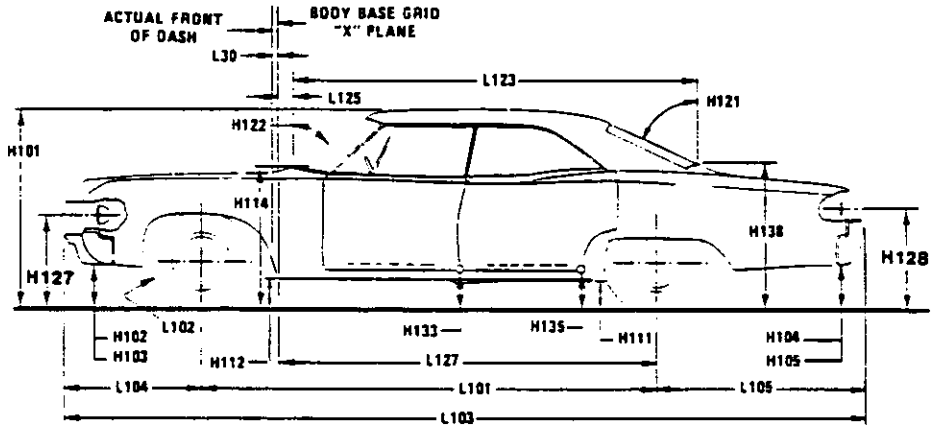
MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Exterior Car And Body Dimensions — Key Sheet

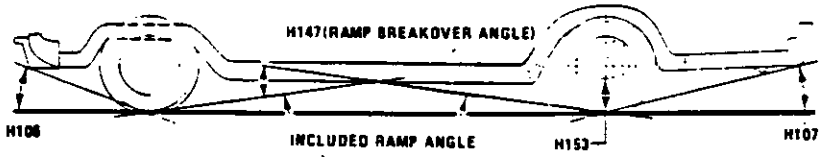
Exterior Width



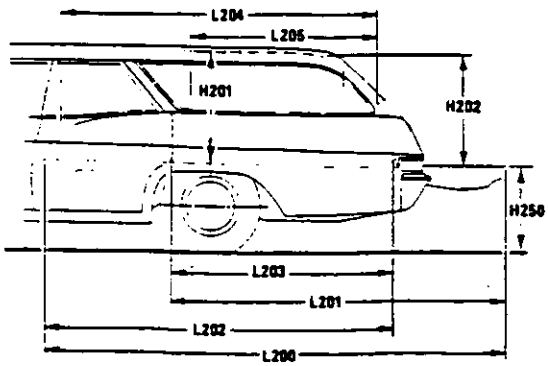
Exterior Length & Height



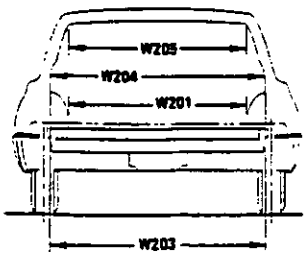
Exterior Ground Clearance

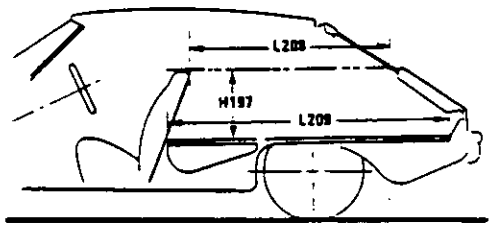


Cargo Space



Station Wagon



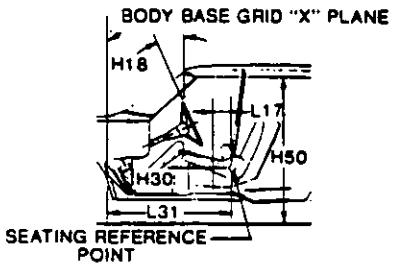


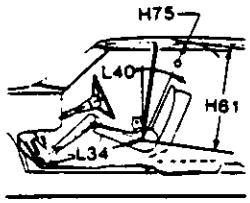
Hatchback

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

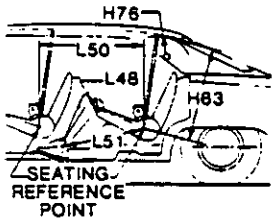
Interior Car And Body Dimensions — Key Sheet

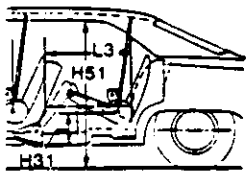
Front Compartment



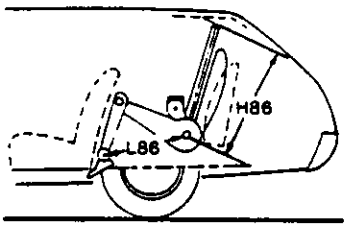


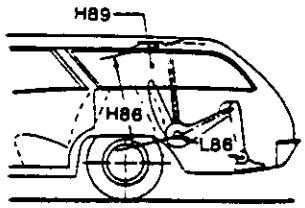
Rear Compartment

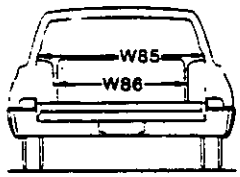




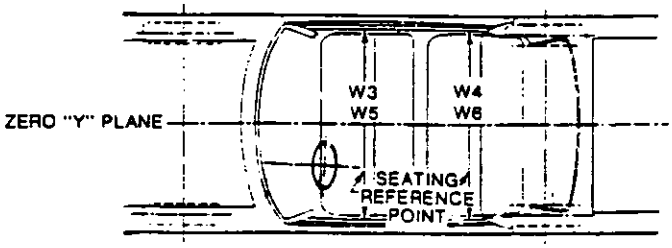
Third Seat







Interior Width



MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Exterior Car 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, "Manikins for Use in Defining Vehicle Seating Accommodations," November 1962.

Width Dimensions

W101 TREAD—FRONT. The dimension measured between the tire centerlines at the ground.

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

W103 VEHICLE WIDTH. The maximum dimension measured between the widest point on the vehicle, excluding exterior mirrors, flexible mud flaps, marker lamps, but including bumpers, moldings, sheet metal protrusions or dual wheels, if standard equipment.

W117 BODY WIDTH AT SgRP—FRONT. The dimension measured laterally between the widest points on the body at the SgRP-front, excluding door handles, applied moldings, or appliques.

W120 VEHICLE WIDTH—FRONT DOORS OPEN. The dimension measured between the widest point on the front doors in maximum hold-open position.

W121 VEHICLE WIDTH—REAR DOORS OPEN. The dimension measured between the widest point on the rear doors in maximum hold-open position. For vehicles with a rear door on only one side, this dimension is to the zero "Y" plane.

W122 TUMBLE HOME. STRAIGHT SIDE GLASS. The angle measured from a vertical to the outside surface of the front door glass at the SgRP "X" plane.
CURVED SIDE GLASS. The angle measured from a vertical to a chord extending from the upper DLO to the lower DLO at the outside surface of the front door glass at the front SgRP "X" plane.

Length Dimensions

L30 FRONT OF DASH "X" COORDINATE. A minus (-) dimension indicates actual front of dash in forward of the zero "X" plane.

L101 WHEELBASE (WB). The dimension measured longitudinally between front and rear wheel centerlines. In case of dual rear axles, the dimension shall be to the midpoint of the centerlines of the rear wheels.

L102 TIRE SIZE. As specified by the manufacturer.

L103 VEHICLE LENGTH. The maximum dimension measured longitudinally between the foremost point and the rearmost point on the vehicle, including bumper, bumper guards, tow hooks and/or rub strips, if standard equipment.

L104 OVERHANG—FRONT. The dimension measured longitudinally from the centerline of the front wheels to the foremost point on the vehicle including bumper, bumper guards, tow hooks and/or rub strips, if standard equipment.

L105 OVERHANG—REAR. The dimension measured longitudinally from the centerline of the rear wheels; or in the case of dual rear axles, the dimension shall be the midpoint of the centerlines of the rear wheels, to the rearmost point on the vehicle, including rear bumpers, bumper guards, tow hooks and rub strips, if standard equipment.

L123 UPPER STRUCTURE LENGTH. The dimension measured longitudinally from the cowl point to the deck point.

L127 REAR WHEEL CENTERLINE "X" COORDINATE or in the case of dual rear axles, the coordinate shall be in the midpoint of the distance between the rear axle centerlines.

L125 COWL POINT "X" COORDINATE.

Height Dimensions

H101 VEHICLE HEIGHT. The dimension measured vertically from the highest point on the vehicle body to ground.

H114 COWL POINT TO GROUND. Measured at zero "Y" plane.

H138 DECK POINT TO GROUND. Measured at zero "Y" plane.

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

H132 BOTTOM OF DOOR OPEN—FRONT TO GROUND. The dimension measured vertically from the bottom outside corner of the door on the lock pillar side, in maximum hold-open position, to ground.

H111 ROCKER PANEL—REAR TO GROUND. The dimension measured vertically from the bottom of the rocker or side quarter panel at the front of the rear wheel opening, excluding flanges, to ground.

H134 BOTTOM OF DOOR OPEN—REAR TO GROUND. The dimension measured vertically from the bottom outside corner of the door on the lock pillar side, in maximum hold-open position, to ground.

H135 BOTTOM OF DOOR CLOSED—REAR TO GROUND. The dimension measured vertically from the bottom outside corner of the door on the lock pillar side, in maximum closed position, to ground.

H121 BACKLIGHT SLOPE ANGLE. The angle between the vertical reference line and the surface of backlight at vehicle zero "Y" plane. For curve backlight, the angle is to chord of backlight arc from lower DLO to upper DLO.

H122 WINDSHIELD SLOPE ANGLE. The angle between the vertical reference line and a chord of the windshield are 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.

H127 HEADLAMP TO GROUND—CURB MASS (WT.). The dimensional measured vertically from the centerline of the lowest headlamp lens to ground.

H128 TAILLAMP TO GROUND—CURB MASS (WT.). The dimension measured vertically from the centerline of the upper bulb to ground.

Ground Clearance Dimensions

H102 FRONT BUMPER TO GROUND. The minimum dimension measured vertically from the lowest point on the front bumper to ground, including bumper guards, if standard equipment.

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Interior Car And Body Dimensions – Key Sheet
Dimensions Definitions

H103 FRONT BUMPER TO GROUND CURB MASS (WT.). Measured in the same manner as H104.

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

H105 REAR BUMPER TO GROUND—CURB MASS (WT.). Measured in the same manner as H104.

H106 ANGLE OF APPROACH. The angle measured between a line tangent to the front tire static loaded radius are the initial point of structural interference forward of the front tire to ground. The limiting structural component shall be designated.

H107 ANGLE OF DEPARTURE. The angle measured between a line tangent to the rear tire static loaded radius are the initial point of structural interference rearward of the rear tire to ground: The limiting component shall be designated.

H147 REAR BREAKOVER ANGLE. The angle measured between two lines tangent to the front and rear tire static loaded radius and intersecting at a point on the underside of the vehicle which defines the largest ramp over which the vehicle can roll.

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

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

Front Compartment Dimensions

PD1 PASSENGER DISTRIBUTION—FRONT.

L31 SgRP—FRONT "X" COORDINATED.

H61 EFFECTIVE HEAD ROOM—FRONT. The dimension measured along a line 8 deg. rear of vertical from the SgRP—front to the headlining plus 102 mm (4.0 in.).

H75 EFFECTIVE T-POINT HEAD ROOM—FRONT. The minimum radius from the T-point to the headlining plus 762 mm (30 in.).

L34 MAXIMUM EFFECTIVE LEG ROOM—ACCELERATOR. The dimension measured along a line from the ankle pivot center to the SgRP—front plus 254 mm (10.0 in.) measured with right foot on the undepressed accelerator pedal. For vehicles with SgRP to heel (H30) greater than 18 in., the accelerator pedal may be depressed as specified by the manufacturer. If the accelerator is depressed, the manufacturer shall place foot flat on pedal and note the depression of the pedal.

H30 SgRP—FRONT TO HEEL. The dimension measured vertically from the SgRP—front to the accelerator heel point.

L17 DESIGN H-POINT—FRONT TRAVEL. The dimension measured horizontally between the design H-point—front in the foremost and rearmost seat trace positions.

W3 SHOULDER ROOM—FRONT. The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the SgRP—front within the belt line and 254 mm (10.0 in.) above the SgRP—front.

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 the SgRP—front.

H150 UPPER BODY OPENING TO GROUND—FRONT. The dimension measured vertically from the trimmed body opening to the ground on the SgRP—front "X" plane.

H18 STEERING WHEEL ANGLE. The angle measured from a vertical to the surface plane of the steering wheel.

L40 BACK ANGLE—FRONT. The angle measured between a vertical line through the SgRP—front and the torso line. If the seatback is adjustable, use the normal driving and riding position specified by the manufacturer.

Rear Compartment Dimensions

PD2 PASSENGER DISTRIBUTION—SECOND.

L50 SgRP COUBLE DISTANCE. The dimension measured horizontally from the driver SgRP—front to the SgRP—second.

H63 EFFECTIVE HEAD ROOM—SECOND. The dimension measured along a line 8 deg. rear of vertical from the SgRP to the headlining, plus 102 mm (4.0 in.).

H76 EFFECTIVE T-POINT HEAD ROOM—SECOND. Measured in the same manner as H75.

L51 MINIMUM EFFECTIVE LEG ROOM—SECOND. The dimension measured along a line from the ankle pivot center to the SgRP—second plus 254 mm (10.0 in.).

H31 SgRP—SECOND TO HEEL. The dimension measured vertically from the SgRP—second to the two dimensional device heel point on the depressed floor covering.

L48 KNEE CLEARANCE—SECOND. The minimum dimension measured from the knee pivot to the back of front seatback minus 51 mm (2.0 in.).

L3 COMPARTMENT ROOM—SECOND. The dimension measured horizontally from the back of front seat to the front of the second seatback at a height tangent to the top of the second seat cushion.

W4 SHOULDER ROOM—SECOND. The minimum dimension measured laterally between trimmed surfaces on the "X" plane through the SgRP—second within 254-406 mm (10.0-16.0 in.) above the SgRP—second.

W6 HIP ROOM—SECOND. Measured in the same manner as W5.

H51 UPPER BODY OPENING TO GROUND—SECOND. The dimension measured vertically from the trimmed body opening to the ground on the "X" plane 330 mm (13.0 in.) forward of the SgRP—second.

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.

H195 LIFTOVER HEIGHT. The dimension measured vertically from the luggage compartment lower opening at the zero "Y" plane to ground.

Station Wagon – Third Seat Dimensions

PD3 PASSENGER DIRECTION—THIRD.

W85 SHOULDER ROOM—THIRD. Measured in the same manner as W5.

W86 HIP ROOM— THIRD. Measured in the same manner as W5.

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.).

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.).

H89 EFFECTIVE T-POINT HEAD ROOM—THIRD. Measured in the same manner as H75.

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Interior Car And Body Dimensions — Key Sheet
Dimensions Definitions

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 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 back panel at the height of the belt, on the zero "Y" plane.

L205 CARGO LENGTH AT BELT—SECOND. The minimum dimension measured horizontally from the back of the second seatback at the seatback top to the foremost normal surface of the closed tailgate at the height of the belt, on the zero "Y" plane.

W201 CARGO WIDTH—WHEELHOUSE. The minimum dimension measured laterally between the trimmed wheelhousings at floor level. For any vehicle not trimmed, measure 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.

H201 CARGO HEIGHT. The dimension measured vertically from the top of the undepressed floor covering to the headlining at the rear wheel "X" coordinated 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:

$$\frac{W4 \times H201 \times L204}{1728} = ft.^3$$

Measured in mm:

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

V4 HIDDEN CARGO VOLUME. As specified by the manufacturer.

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

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.

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. 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.

V3 HATCHBACK.

Measured in inches:

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

Measured in mm:

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

MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Index