

MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

1990

Manufacturer TOYOTA MOTOR CORPORATION	Vehicle Line TOYOTA SUPRA	
Mailing Address Toyota Motor Sales, U.S.A., Inc. 19001 Southwestern Avenue Torrance, Calif. 90509	Issued August, 1989	
	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

MVMA Specifications

METRIC (U.S. Customary)

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NOTE:

1. This form uses both SI metric units and U.S. Customary units. The metric unit of measure is presented first, and the U.S. Customary unit follows in parentheses.
2. UNLESS OTHERWISE INDICATED:
 - a. Specifications apply to standard models without optional equipment. Significant deviations are noted.
 - b. Nominal design dimensions are used throughout these specifications.
 - c. All linear dimensions are in millimeters (inches), and all mass (weight) specifications are in kilograms (pounds).
3. The General Specifications herein are those in effect at date of compilation and are subject to change without notice or incurring obligation by the manufacturer.
4. Additional Vehicle Dimensions (based in part on SAE J1100 "Motor Vehicle Dimensions") may be available from the manufacturer.

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line TOYOTA SUPRA
Model Year 1990 Issued Aug., '89 Revised (*)

Vehicle Origin

Design & development (company)	TOYOTA MOTOR CORPORATION
Where built (country)	JAPAN
Authorized U.S. sales marketing representative	Toyota Motor Sales, U.S.A., Inc.

Vehicle Models

Model Description & Drive (FWD / RWD / AWD / 4WD)*	Introduction Date	Make, Vehicle Models, Series, Body Type (Mfr's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk/Cargo Load-Kilograms (Pounds)
Supra				
7M-GE, 2-dr Liftback, 5M/T, RWD		MA70L-BLMVFA	2/2	56
7M-GE, 2-dr Liftback, 4A/T, RWD		MA70L-BLPVFA	2/2	56
7M-GE, 2-dr Liftback, 5M/T, w/sport roof, RWD		MA70L-BJMVFA	2/2	56
7M-GE, 2-dr Liftback, 4A/T, w/sport roof, RWD		MA70L-BJPVFA	2/2	56
7M-GTE, 2-dr Liftback, 5M/T, RWD		MA70L-BLMVZA	2/2	56
7M-GTE, 2-dr Liftback, 4A/T, RWD		MA70L-BLPVZA	2/2	56
7M-GTE, 2-dr Liftback, 5M/T, w/sport roof, RWD		MA70L-BJMVZA	2/2	56
7M-GTE, 2-dr Liftback, 4A/T, w/sport roof, RWD		MA70L-BJPVZA	2/2	56

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

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Power Teams

SAE J1349 Net bhp (brake horsepower) and Net Torque corrected to 77°F/25°C and 29.61 in. Hg/100 kPa atmospheric pressure.

		A	B	C	D	
ENGINE	Engine Code	7M-GE	7M-GE	7M-GTE	7M-GTE	
	Displacement Liters (in ³)	2.954	2.954	2.954	2.954	
	Induction system (F.I. Carb. etc.)	F.I.	F.I.	F.I.	F.I.	
	Compression ratio	9.2	9.2	8.4	8.4	
	SAE Net at RPM	Power kW (bhp)	149/6000	149/6000	173/5600	173/5600
		Torque N • m (lb. ft.)	255/3600	255/3600	344/3200	344/3200
	Exhaust single, dual	Semi dual	Semi dual	Single	Single	
TRANS	Transmission/ Transaxle	5-speed Manual	4-speed Automatic	5-speed Manual	4-speed Automatic	
	Axle Ratio (std. first)	4.300	4.300	3.727	3.727	

[illegible]

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METRIC (U.S. Customary)

Engine Description
Engine Code

7M-GE	7M-GTE
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ENGINE - GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-chamber, etc.)	Inline, front, longitudinal, DOHC, pent roof with Turbocharger	
Manufacturer	TOYOTA MOTOR CORPORATION	
No. of cylinders	6	
Bore	83.0 mm	
Stroke	91.0 mm	
Bore spacing (C / L to C / L)	90 mm	
Cylinder block material & mass kg (lbs.) (machined)	Gray cast iron, 7M-GE: 55.4 kg, 7M-GTE: 55.0 kg	
Cylinder block deck height	230.5 mm	
Cylinder block length	580.0 mm	
Deck clearance (minimum) (above or below block)	0 mm	
Cylinder head material & mass kg (lbs.)	Aluminum alloy, 16.5 kg	
Cylinder head volume (cm ³)	40.0 cm ³	
Cylinder liner material	N.A.	
Head gasket thickness (compressed)	1.35 mm	
Minimum combustion chamber total volume (cm ³)	60.1 cm ³	
Cyl. no. system (front to rear)*	L Bank	1-2-3-4-5-6
	R Bank	-
Firing order	1-5-3-6-2-4	
Intake manifold material & mass [kg (lbs.)]**	Aluminum alloy, 7M-GE: 7.3 kg, 7M-GTE: 5.5 kg	
Exhaust manifold material & mass [kg (lbs.)]**	Spheroidal graphite cast iron, 7M-GE: 8.1(Fed) 8.5(Cal), 7M-GTE: 7.0	
Fuel required unleaded, diesel, etc.	Unleaded	
Fuel antiknock index (R + M) + 2	87	91
Engine mounts	Quantity	
	Material and type (elastomeric, hydroelastic, hydraulic damper, etc.)	
	Added isolation (sub-frame, crossmember, etc.)	
Total dressed engine mass (wt) dry***	M/T: 199 kg, A/T: 191 kg	M/T: 212 kg, A/T: 203 kg

Engine - Pistons

Material & mass, g (weight, oz.) - piston only	Aluminum alloy, 380 g	Aluminum alloy, 372 g
--	-----------------------	-----------------------

Engine - Camshaft

Location	Over cylinder head	
Material & mass kg (weight, lbs.)	Alloy cast iron, In.: 2.3, Ex.: 2.3	
Drive type	Chain / belt	Belt
	Width / pitch	25.4/8.0

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

** Finished state.

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

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Engine Description
Engine Code

7M-GE

7M-GTE

Engine - Valve System

Hydraulic lifters (std., opt., NA)		N.A.
Valves	Number intake / exhaust	2/2
	Head O.D. intake / exhaust	32 mm/27.5 mm

Engine - Connecting Rods

Material & mass (kg., (weight, lbs.))*	Carbon steel, 0.710 kg
Length (axes & to & to) mm	

Engine - Crankshaft

Material & mass (kg., (weight, lbs.))*		Carbon steel, 26.3 kg
End thrust taken by bearing (no.)		#4 bearing
Length & number of main bearings		7
Seal (material, one, two piece design, etc.)	Front	Acryl, one piece
	Rear	Silicone, one piece

Engine - Lubrication System

Normal oil pressure (kPa (psi) at engine rpm)	265 kPa/2000 rpm	167 kPa/2000 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.)	4.1 L	4.3 L

Engine - Diesel Information

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

Turbo charger - manufacturer	-	TOYOTA MOTOR CORPORATION
Super charger - manufacturer	-	
Intercooler	-	Air cooled

* Finished State

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Engine Description
Engine Code

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Engine - Cooling System

Coolant recovery system (std., opt., n.a.)		Std.	
Coolant fill location (rad., bottle)		Radiator	
Radiator cap relief valve pressure (kPa (psi))		88 kPa	
Circulation thermostat	Type (choke, bypass)	Choke	
	Starts to open at °C (°F)	88°C	
Water pump	Type (centrifugal, other)	Centrifugal	
	GPM 1000 pump rpm	0.42 L/sec	
	Number of pumps	1	
	Drive (V-belt, other)	Belt	
	Bearing type	Sealed roller ball bearing	
	Impeller material	Steel sheet	
	Housing material	Aluminum alloy	
By-pass recirculation type (inter., ext.)		External	
Cooling system capacity	With heater - L/qt.)	M/T: 8.1L, A/T: 8.0L	M/T: 8.2L, A/T: 8.1L
	With air conditioner - L/qt.)	M/T: 8.1L, A/T: 8.0L	M/T: 8.2L, A/T: 8.1L
	Opt. equipment (specify - L/qt.)	N.A.	
Water jackets full length of cyl. (yes, no)		Yes	
Water all around cylinder (yes, no)		No	
Water jackets open at head face (yes, no)		No	
Radiator core	Std., A/C, HD	Std.	
	Type (cross-flow, etc.)	Vertical	
	Construction (fin & tube mechanical, braze, etc.)	Corrugated fin	
	Material, mass (kg (wgt., lbs.))	Copper, 4.6 kg	
	Width	648 mm	
	Height	375 mm	
	Thickness	32 mm	
Fan	Fins per inch	20	
	Radiator end tank material	Resin	
	Std., elec., opt.	Std.	
	Number of blades & type (flex, solid, material)	7, Solid, Resin	10, Solid, Resin
	Diameter & projected width	430 x 54.5 mm	430 x 64 mm
	Ratio (fan to crankshaft rev.)	1.25	1.32
	Fan cutout type	Fluid coupling	
Fan	Drive type (direct, remote)	Belt	
	RPM at idle (elec.)	-	
	Motor rating (wattage) (elec.)	-	
	Motor switch (type & location) (elec.)	-	
	Switch point (temp., pressure) (elec.)	-	
	Fan shroud (material)	Resin	

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Engine Description
Engine Code

All models

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		Aisan Industry Co., Ltd.
Carburetor no. of barrels		-
Idle A/F mix.		Preset at manufacturer
Fuel injection	Point of injection (no.)	6
	Constant, pulse, flow	Pulse
	Control (electronic, mech.)	Electronic
	System pressure (kPa (psi))	7M-GE: 284 kPa, 7M-GTE: 250 kPa
Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	Idle speed control
	Automatic	Idle speed control
Intake manifold heat control (exhaust or water thermostatic or fixed)		N.A.
Air cleaner type		Dry element, 1
Fuel filter (type/location)		Screen on fuel pump, cartridge in engine compartment
Fuel pump	Type (elec. or mech.)	Electromagnetic
	Location (eng., tank)	In fuel tank
	Pressure range (kPa (psi))	7M-GE: 284 kPa, 7M-GTE: 250 kPa
	Flow rate at regulated pressure (L (gal)/hr @ kPa (psi))	-

Fuel Tank

Capacity (refill L (gallons))		70L
Location (describe)		Rear part under floor
Attachment		Banded
Material & Mass (kg (weight lbs.))		Steel sheet
Filler pipe	Location & material	Right rear, steel pipe
	Connection to tank	Screw tightening
Fuel line (material)		Steel pipe
Fuel hose (material)		Rubber
Return line (material)		Steel pipe
Vapor line (material)		Steel pipe
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	-

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Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		EFI + O ₂ S + EGR + TWC	
	Air Injection	Pump or pulse	-	
		Driven by	-	
		Air distribution (head, manifold, etc.)	-	
		Point of entry	-	
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Exhaust back pressure	
		Exhaust source Point of exhaust injection (spacer, carburetor, manifold, other)	Cylinder head Intake manifold	
	Catalytic Converter	Type	3 way	
		Number of	1, 2(Cal)	2
		Location(s)	Fed=Forward under floor area Cal=ditto + engine compartment	Engine compartment, Forward under floor area
		Volume (L (in ³))	Fed=1.7 Cal=1.3 + 1.3	1.3 + 1.3
		Substrate type	Monolith	
		Noble metal type		
		Noble metal concentration (g/cm ³)		
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Closed	
	Energy source (manifold vacuum, carburetor, other)		Manifold vacuum	
	Discharges (to intake manifold, other)		Intake manifold	
	Air inlet (breather cap, other)		N.A.	
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	Charcoal canister	
		Carburetor	N.A.	
	Vapor storage provision		Charcoal canister	
Electronic system	Closed loop (yes/no)		Yes	
	Open loop (yes/no)		No	

Engine - Exhaust System

Type (single, single with cross-over, dual, other)		Semi dual	Single
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass (kg (weight lbs))		1. Reverse flow 1. Straight thru	
Resonator no. & type		N.A.	
Exhaust pipe	Branch o.d., wall thickness	dia.=42.7 mm, t=1.5 mm	N.A.
	Main o.d., wall thickness	dia.=60.5 mm, t=1.5 mm	
	Material & Mass (kg (weight lbs))	Stainless steel, 2.6 kg, Cal=2.0	Stainless steel, 2.0 kg
Intermediate pipe	o.d. & wall thickness	dia.=54 mm, t=1.5 mm	dia.=60.5 mm, t=1.5 mm
	Material & Mass (kg (weight lbs))	Stainless steel, 2.6 kg	Stainless steel, 3.0 kg
Tail pipe	o.d. & wall thickness	dia.=42.7 mm, t=1.0	
	Material & Mass (kg (weight lbs))	Stainless steel, 0.2 kg	

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

Manual 3-speed (manufacturer/country)	N.A.
Manual 4-speed (manufacturer/country)	N.A.
Manual 5-speed (manufacturer/country)	Std.
Automatic (manufacturer/country)	N.A.
Automatic overdrive (manufacturer/country)	Std.

Manual Transmission/Transaxle

Number of forward speeds		5	
Gear ratios	1st	3.285	3.251
	2nd	1.894	1.955
	3rd	1.275	1.310
	4th	1.000	1.000
	5th	0.783	0.753
	Reverse	3.768	3.180
Synchronous meshing (specify gears)		Full synchro	
Shift lever location		Floor	
Trans. case mat'l. & mass kg (lbs)*			
Lubricant	Capacity [L (pt.)]	2.4L	3.0L
	Type recommended	Multipurpose API GL-4	

Clutch (Manual Transmission)

Clutch manufacturer		AISIN SEIKI	
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)		Pedal Turnover	
Type pressure plate springs		Diaphragm	
Total spring load (nominal, new) N (lbs)		6374N	8090N
Clutch facing	Facing mfr. & material coding	Aisin kako 31256-30190	Aisin kako 31256-14040
	Facing material & construction	Semi mould	
	Rivets per facing	16	
	Outside x inside dia. (nominal)	236 x 150 mm	240 x 160 mm
	Total eff. area [cm ² (in. ²)]	260 cm ²	251 cm ²
	Thickness (pressure plate side/ty wheel side)	3.5 mm	
	Rivet depth (pressure plate side/ty wheel side)		
	Engagement cushion method	Cushion spring	
Release bearing type & method lub.		Single row ball bearing, sealed grease	
Torsional damping method, springs, hysteresis		Rubber	Coil spring + rubber

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

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☒ Automatic Transmission/Transaxle

Trade Name		A340E
Type and special features (describe)		Electronic controlled, normal/power mode, with lock-up clutch
Gear selector	Location (column, floor, other)	Floor
	Ltr./No. designation (e.g. PRND21)	P-R-N-D-2-L
	Shift interlock (yes, no, describe)	-
Gear ratios	1st	2.804
	2nd	1.531
	3rd	1.000
	4th	0.705
	Reverse	2.393
Max. upshift speed - drive range (km/h (mph)) *		1-2: 46/49, 2-3: 95/103, 3-4: 150/163
Max. kickdown speed - drive range (km/h (mph)) *		2-1: 40/44, 3-2: 88/96, 4-3: 144/158
Min. overdrive speed (km/h (mph))		3-4: 36, 4-3: 27
Torque converter	Number of elements	3 elements, 1 step, 2 phases
	Max. ratio at stall	2.100
	Type of cooling (air, liquid)	2.000
	Nominal diameter	254 mm
	Capacity factor "K"	
Lubricant	Capacity (refill L(pt.))	7.2L
	Type recommended	Dexron II
Oil cooler (std., opt., N.A., internal, external, air, liquid)		Std. integral with radiator
Transmission mass (kg (lbs)) & case material **		

*: Normal/Power

☒ All Wheel / 4 Wheel Drive

Description & type (part-time, full-time, 2/4 shift while moving, mechanical, elect., chain/gear, etc.)		-
Transfer case	Manufacturer and model	-
	Type and location	-
Low-range gear ratio		-
System disconnect (describe)		-
Center differential	Type (bevel, planetary, w or w/o viscous bias, torsen, etc.)	-
	Torque split (% front/rear)	-

* Input speed + $\sqrt{\text{Torque}}$

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

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Engine Code

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

Axle ratio (or overall top gear ratio)	4.300	3.727
Ring gear o.d.	205 mm	
No. of teeth		
Pinion	10	11
Ring gear	43	41

⊗ Rear Axle Unit

Description	Hypoid gear	
Limited slip differential (type)	Pre-load (Opt.)	Pre-load
Drive pinion	Type	Hypoid gear
	Offset	31.75 mm
No. of differential pinions	2, 4 (Opt.=LSD)	4
Pinion / differential	Adjustment (shim, etc.)	Shim
	Bearing adjustment	Collapsible sleeve
Driving wheel bearing (type)	Double row angular ball bearing	
Lubricant	Capacity [L (pt.)]	1.3L
	Type recommended	API GL-5, LSD=API GL-5 with friction modifier

⊗ Propeller Shaft - Rear Wheel Drive

Manufacturer Type (straight tube, tube-in-tube, internal-external damper, etc.)	No.1: Tublar shaft No.2: Internal damper	
Outer diam. x length* x wall thickness	Manual 3-speed transmission	-
	Manual 4-speed transmission	-
	Manual 5-speed transmission	No.1: 75.0 x 541 x 2.3 or 60.5 x 549 x 1.8 No.2: 82.6 x 558 x 2.0 or 82.6 x 583 x 1.8
	Overdrive	-
	Automatic transmission	No.1: 75.0 x 467 x 2.3 or 60.5 x 469 x 2.3 No.2: 82.6 x 558 x 2.0 or 82.6 x 583 x 1.8
Inter- mediate bearing	Type (plain, anti-friction)	Ball bearing
	Lubrication (fitting, prepack)	Sealed grease
Slip yoke	Type	Spline
	Number of teeth	5M/T: 21 4A/T: 23
	Spline o.d.	5M/T: 27.94 4A/T: 30.48
Universal joints	Make and mfg. no.	Front Rear
		TOYOTA MOTOR CORPORATION TOYOTA MOTOR CORPORATION
	Number used	3
	Type (ball and trunnion, cross)	Hooke's joint
	Rear attach (u-bolt, clamp, etc)	Flange
	Bearing	Type (plain, anti-friction) Lubrication (fitting, prepack)
		Needle roller bearing Pregreased
Drive taken through (torque tube, arms or springs)		Control arm
Torque taken through (torque tube, arms or springs)		Control arm

* Centerline to centerline of universal joints, or to centerline of rear attachment. Page 10
(Rear Wheel Drive)

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Engine Description
Engine Code

All models

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

Effective final drive ratio (or overall top gear ratio)			-
Transfer ratio and method (chain, gear, etc.)			-
Front drive unit	Ring gear o.d.		-
	No. of teeth	Pinion	-
		Ring gear	-

Front Drive Unit

Description (integral to trans., etc.)		-
Limited slip differential (type)		-
Drive pinion	Type	-
	Offset	-
No. of differential pinions		-
Pinion / differential	Adjustment (shim, etc.)	-
	Bearing adjustment	-
Driving wheel bearing (type)		-
Lubricant	Capacity (L (pt.))	-
	Type recommended	-
		-
		-
		-

Axle Shafts - ~~Front Wheel Drive~~ - Rear Drive Halfshafts

Manufacturer and number used			2
Type (straight, solid bar, tubular, etc.)		Left	SOLID BAR
		Right	SOLID BAR
Outer diam. x length* x wall thickness	Manual transaxle	Left	29.6 x 454.9 mm
		Right	29.6 x 454.9 mm
	Automatic transaxle	Left	29.6 x 454.9 mm
		Right	29.6 x 454.9 mm
	Optional transaxle	Left	-
		Right	-
Slip yoke	Type		-
	Number of teeth		-
	Spline o.d.		-
Universal joints	Make and mfg. no.	Inner	TOYOTA MOTOR CORPORATION
		Outer	TOYOTA MOTOR CORPORATION
	Number used		4
	Type, size, plunge	Inner	Tripod, Plunging
		Outer	Rzeppa, Fixed
	Attach (u-bolt, clamp, etc)		Flange
	Bearing	Type (plain, anti-friction)	-
		Lubrication (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.

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(~~Front Wheel Drive~~) (Rear Drive Halfshafts)

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Vehicle Line **TOYOTA SUPRA**
Model Year **1990** Issued **Aug., '89** Revised (+)

METRIC (U.S. Customary)

Body Type And/Or
Engine Displacement

7M-GE

7M-GTE

Suspension - General Including Electronic Controls

Car leveling	Standard/optional/not avail.	N.A.
	Manual/automatic control	-
	Type (air/hydraulic)	-
	Primary/assist spring	-
	Rear only/4 wheel leveling	-
	Single/dual rate spring	-
	Single/dual ride heights	-
	Provision for jacking	-
Shock absorber damping controls	Standard/option/not avail.	Option
	Manual/automatic control	Manual mode selection
	Number of damping rates	3
	Type of actuation (manual/electric motor/air, etc.)	Electric motor
	s e n s o r s	Lateral acceleration
		Deceleration
		Acceleration
		Road surface
Shock absorber (front & rear)	Type	Twin tube
	Make	KAYABA or TOKIKO
	Piston diameter	Fr.: 30.2 mm, Rr.: 25 mm
	Rod diameter	12.5 mm

Suspension - Front

Type and description		Double wishbone
Travel*	Full jounce	85 mm
	Full rebound	100 mm
Spring	Type (coil, leaf, other) & material	Coil, SUP7NV
	Insulators (type & material)	N.A.
	Size (coil design height & i.d.)	220 x 100 mm
	Spring rate (N/mm (lb./in.))	75.5 N/mm
	Rate at wheel (N/mm (lb./in.))	30.9 N/mm
Stabilizer	Type (link, linkless, frameless)	Torsion bar
	Material & bar diameter	ASB25N, 27.2 mm (tubular)

Suspension - Rear

Type and description		Double wishbone
Travel*	Full jounce	85 mm
	Full rebound	110 mm
Spring	Type (coil, leaf, other) & material	Coil, SUP7NV
	Size (length x width, coil design height & i.d.)	Normal roof: 217 x 111.6 mm, Sport roof: 217 x 111.7 mm
	Spring rate (N/mm (lb./in.))	34.3 N/mm
	Rate at wheel (N/mm (lb./in.))	29.4 N/mm
	Insulators (type & material)	N.A.
	If leaf	No. of leaves
		Shackle (comp. or tens.)
Stabilizer	Type (link, linkless, frameless)	Torsion bar
	Material & bar diameter	ASB25N, 21 mm (tubular)
Track bar (type)		N.A.

* Define load condition:

MVMA Specifications

Vehicle Line **TOYOTA SUPRA**
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METRIC (U.S. Customary)

Body Type And/Or
 Engine Displacement

All model

Brakes - Service

Description			-	
Manufacturer and brake type (std., opt., n.a.)	Front (disc or drum)		Disc, std.	
	Rear (disc or drum)		Disc, std.	
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	
Vacuum	Source (inline, pump, etc.)		Inline	
	Reservoir (volume in. ³)		-	
	Pump-type (elec, gear driven, belt driven)		-	
Traction control	Operational speed range		N.A.	
	Type engine intervention (electronic, mech.)		-	
Anti-lock device	Front / rear (std., opt., n.a.)		Opt. Front and Rear	
	Manufacturer		-	
	Type (electronic, mech.)		Electronic	
	Number sensors or circuits		3	
	Number anti-lock hydraulic circuits		3	
	Integral or add-on system		Integral	
	Yaw control (yes, no)		No	
Hydraulic power source (elec., vac. mtr., pwr. strg.)		Electric motor		
Effective area [cm ² (in. ²)]*			200 cm ² /144 cm ²	
Gross Lining area [cm ² (in. ²)]**(F/R)			200 cm ² /144 cm ²	
Swept area [cm ² (in. ²)]*** (F/R)			1566 cm ² /1187 cm ²	
Rotor	Outerworking diameter	F/R	299 mm/290 mm	
	Inner working diameter	F/R	198 mm/215 mm	
	Thickness	F/R	22.0 mm/18.0 mm	
	Material & type (vented/solid)	F/R	Cast iron, ventilated/Cast iron, ventilated	
Drum	Diameter & width	F/R	-	
	Type and material	F/R	-	
Wheel cylinder bore			Front: 60.33, Rear: 38.10	
Master cylinder	Bore/stroke	F/R	Bore: 25.40 mm/25.40 mm, Stroke: 16.60 mm/12.00 mm	
Pedal arc ratio			4.01	
Line pressure at 445 N(100 lb.) pedal load [kPa (psi)]			11700 kPa	
Lining clearance		F/R	Self adjusting/Self adjusting	
Brake lining	Front wheel	Bonded or riveted (rivets/seg.)		Bonded
		Rivet size		-
		Manufacturer		SUMITOMO
		Lining code*****		-
		Material		Resin molded
		****	Primary or out-board	112.5 x 51.5 x 10.0 mm
		Size	Secondary or in-board	112.5 x 51.5 x 10.0 mm
		Shoe thickness (no lining)		5.5 mm
	Rear wheel	Bonded or riveted (rivets/seg.)		Bonded
		Manufacturer		SUMITOMO
		Lining code*****		-
		Material		Resin molded
		****	Primary or out-board	109.0 x 35.5 x 10.0 mm
		Size	Secondary or in-board	109.0 x 35.5 x 10.0 mm
		Shoe thickness (no lining)		5.5 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 width x thickness. ***** Manufacturer I.D., catalog for formulation designation and coefficient of friction classification.

MVMA Specifications

Vehicle Line TOYOTA SUPRA

Model Year 1990 Issued Aug. '89 Revised (*)

METRIC (U.S. Customary)

Body Type And/Or
Engine Displacement

All models

Tires And Wheels (Standard)

Tires	Size (load range, ply)		225/50VR16
	Type (bias, radial, steel, nylon, etc.)		Radial
	Inflation pressure (cold) for recommended max. vehicle load	Front (kPa (psi))	220 kPa, 250 kPa (at high speed driving)
		Rear (kPa (psi))	220 kPa, 250 kPa (at high speed driving)
	Rev./mile-at 70 km/h (45 mph)		843.4
Wheels	Type & material		Aluminum alloy
	Rim (size & flange type)		16 x 7JJ
	Wheel offset		37 mm
	Attachment	Type (bolt or stud)	Nut
		Circle diameter	114.3 mm
Spare	Number & size		5-M12 x 1.5
	Tire and wheel		Tire : 205/55R16 Wheel: 16 x 7JJ
	Storage position & location (describe)		Trunk room

Tires And Wheels (Optional)

Tire size (load range, ply)	-
radial, steel, nylon, etc.)	-
Wheel (type & material)	-
Rim (size, flange type and offset)	-
Tire size (load range, ply)	-
Type (bias, radial, steel, nylon, etc.)	-
Wheel (type & material)	-
Rim (size, flange type and offset)	-
Tire size (load range, ply)	-
Type (bias, radial, steel, nylon, etc.)	-
Wheel (type & material)	-
Rim (size, flange type and offset)	-
Tire size (load range, ply)	-
Type (bias, radial, steel, nylon, etc.)	-
Wheel (type & material)	-
Rim (size, flange type and offset)	-
Spare tire and wheel size (if configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position)	-

Brakes - Parking

Type of control		Manual
Location of control		Floor tunnel side
Operates on		Rear wheels, drums integral in rotors
If separate from service brakes	Type (internal or external)	Internal
	Drum diameter	190.0 mm
	Lining size (length x width x thickness)	182.3 x 25.0 x 2.5 mm

MVMA Specifications

Vehicle Line **TOYOTA SUPRA**
 Model Year **1990** Issued **Aug., '89** Revised (+) _____

METRIC (U.S. Customary)

Body Type And/Or
 Engine Displacement

All models

Steering

Manual (std., opt., n.a.)			N.A.	
Power (std., opt., n.a.)			Std.	
Adjustable steering wheel/column (tilt, telescope, other)	Type		Tilt & Telescopic	
	Manufacturer		-	
	(std., opt., n.a.)		Std.	
Wheel diameter** (W9) SAE J1100	Manual		-	
	Power		380 mm	
Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)	11.6 mm	
		Curb to curb (l. & r.)	10.8 mm	
	Inside rear	Wall to wall (l. & r.)	6.2 m	
		Curb to curb (l. & r.)	6.4 m	
Scrub Radius*			-	
Manual	Gear	Type	-	
		Manufacturer		-
		Ratios	Gear	-
			Overall	-
	No. wheel turns (stop to stop)			-
Power	Type (coaxial, elec., hyd., etc.)		Hydraulic integral	
	Manufacturer		TOYOTA MOTOR CORPORATION	
	Gear	Type	R & P	
		Ratios	Gear	∞
			Overall	7M-GE: 16.5(Std.), 18.5(Opt.), 7M-GTE: 18.5
	Pump (drive)		V belt	
	No. wheel turns (stop to stop)		7M-GE: 3.0(Std.), 3.4(Opt.), 7M-GTE: 3.4	
Linkage	Type		R & P	
	Location (front or rear of wheels, other)		Front of wheels	
	Tie rods (one or two)		Two	
Steering axis	Inclination at camber (deg.)		11°	
	Bearings (type)	Upper	Ball joint	
		Lower	Ball joint	
		Thrust	-	
Steering spindle/knuckle & joint type			Ball joint	
Wheel spindle/hub	Diameter	Inner-bearing-	77 mm	
		Outer-bearing-		
	Thread (size)		M24 x 1.5 mm	
	Bearing (type)		Double row angular ball bearing	

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

** See Page 22.

MVMA Specifications

Vehicle Line TOYOTA SUPRA
Model Year 1990 Issued Aug., '89 Revised (*)

METRIC (U.S. Customary)

Body Type And/Or
Engine Displacement

All models

Wheel Alignment (Based on Vehicle height at unloaded)

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	7°40'±45'
		Camber (deg.)	-10'±45'
		Toe-in [outside track-mm (in.)]	0±2 mm
	Service reset*	Caster	7°40'±30'
		Camber	-10'±30'
		Toe-in	0±1 mm
	Periodic M.V. inspection	Caster	-
		Camber	-
		Toe-in	-
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	-45'±45'
		Toe-in [outside track-mm (in.)]	in 4±2 mm
	Service reset*	Camber	-45'±30'
		Toe-in	4±1 mm
	Periodic M.V. inspection	Camber	-
		Toe-in	-

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

Electrical - Instruments and Equipment

Speedometer	Type (analog, digital, std., opt.)	Analog, round
	Trip odometer (std., opt., n.a.)	Std.
EGR maintenance indicator		N.A.
Charge indicator	Type	Electrical gauge
	Warning device (light, audible)	Light
Temperature indicator	Type	Electrical gauge
	Warning device (light, audible)	N.A.
Oil pressure indicator	Type	Electrical gauge
	Warning device (light, audible)	N.A.
Fuel indicator	Type	Electrical gauge
	Warning device (light, audible)	Light
Wind-shield wiper	Type (standard)	Motor, 3-step
	Type (optional)	-
	Blade length	Dr: 500 mm, Pa: 458 mm
	Swept area (cm ² (in. ²))	6400 cm ²
Wind-shield washer	Type (standard)	Motor
	Type (optional)	-
	Fluid level indicator (light, audible)	-
Rear window wiper, wiper/washer (std., opt., n.a.)		-
Horn	Type	Electrical, disc type
	Number used	2
Other		AIR BAG Indicator (lamp)

MVMA Specifications

Vehicle Line **TOYOTA SUPRA**
 Model Year **1990** Issued **Aug., '89** Revised (+) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

7M-GE	7M-GTE
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Electrical - Supply System

MATUSITA DENCHI

Battery	Manufacturer	NIPPON DENCHI, YUASA DENCHI, SHINKOBE DENCHI, FURUKAWA DENCHI	
	Model, std., (opt.)	75D31L	
	Voltage	12V	
	Amps at 0°F cold crank	390	
	Minutes-reserve capacity	115	
	Amps/hrs.-20 hr. rate	70	
	Location	Left front of engine room	
Alternator	Manufacturer	NIPPONDENSO	
	Rating (idle/max. rpm)	70A	80A
	Ratio (alt. crank/rev.)	2.55	
	Output at idle (rpm, park)	-	
	Optional (type & rating)	-	
Regulator	Type	IC	

Electrical - Starting System

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

Electrical - Ignition System

Type	Electronic (std., opt., n.a.)	Std.	
	Other (specify)	N.A.	
Coil	Manufacturer	NIPPONDENSO CO., Ltd.	
	Model	-	
	Current	Engine stopped - A	-
		Engine idling - A	-
Spark plug	Manufacturer	NIPPONDENSO CO., Ltd. NGK SPARK PLUG CO., Ltd.	
	Model	ND: PQ16R, NGK: BCPR5EP11	ND: PQ20R-P8, NGK: BCPR6EP-N8
	Thread (mm)	M14.0 - 19.0 mm	
	Tightening torque (N·m (lb. ft))	17.7 N·m	
	Gap	1.1 mm	0.8 mm
	Number per cylinder	1	
Distributor	Manufacturer	NIPPONDENSO CO., Ltd.	
	Model	-	

Electrical - Suppression

Locations & type	Flame spray coated rotor Resistive high tension cords Resistive spark plugs	Resistive high tension cords Resistive spark plugs
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MVMA Specifications

Vehicle Line TOYOTA SUPRA
Model Year 1990 Issued Aug., '89 Revised (+) _____

METRIC (U.S. Customary)

Body Type

All models

Body

Structure

Monocoque

Bumper system
front - rear

Bar Material & Mass
Reinforcement
Material & Mass

Urethane, 6.0 kg/6.9 kg
Steel, 11.2 kg/13.2 kg

Anti-corrosion treatment

Body - Miscellaneous Information

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

MVMA Specifications

Vehicle Line TOYOTA SUPRA
 Model Year 1990 Issued Aug., '89 Revised (+) _____

METRIC (U.S. Customary)

Body Type

All models

Restraint System

Seating Position			Left	Center	Right
Active	Type & description (lap & shoulder belt, lap belt, etc.) Standard / optional	First seat	3-point, ELR, with retractor(Std.)	-	3-point, ELR, with retractor(Std.)
		Second seat	3-point, ELR, with retractor(Std.)	-	3-point, ELR, with retractor(Std.)
		Third seat	-	-	-
Passive	Type & description (air bag, motorized - 2-point belt, fixed belt, knee bolster, manual - lap belt) Standard / optional	First seat	N.A.	N.A.	N.A.
		Second seat	N.A.	N.A.	N.A.
		Third seat	N.A.	N.A.	N.A.

Glass	SAB Ref. No.	
Windshield glass exposed surface area (cm ² (in. ²))	S1	8819
Side glass exposed surface area (cm ² (in. ²)) - total 2-sides	S2	3885
Backlight glass exposed surface area (cm ² (in. ²))	S3	9464
Total glass exposed surface area (cm ² (in. ²))	S4	22168
Windshield glass (type)		Tinted laminated curved glass
Side glass (type)		Tempered curved glass
Backlight glass (type)		Tempered curved glass

Headlamps

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

Frame

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

Vehicle Line TOYOTA SUPRA
Model Year 1990 Issued Aug., '89 Revised (+) _____

METRIC (U.S. Customary)

Body Type

All models

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

Air conditioning (manual, auto, temp control)

Std. automatic

Clock (digital, analog)

Std. digital

Compass / thermometer

-

Console (floor, overhead)

Std. floor

Defroster, elec. backlight

Std.

Diagnostic monitor (integrated, individual)

Integrated

Instrument cluster (list instruments)

-

Keyless entry

-

Electronic

Tripminder (avg. spd., fuel)

-

Voice alert (list items)

-

Other

-

Fuel door lock (remote, key, electric)

Remote

Auto head on / off delay, dimming

N.A.

Cornering

N.A.

Courtesy (map, reading)

Std.

Door lock, ignition

Std.

Engine compartment

-

Lamps

Fog

Std.

Glove compartment

Std.

Trunk

Std.

Illuminated entry system (list lamps, activation)

-

Other

-

Day / night (auto, man.)

Manual

Mirrors

L.H. (remote, power, heated)

Power, heated

R.H. (convex, remote, power, heated)

Convex, power heated

Visor vanity (RH / LH, illuminated)

RH illuminated

Navigation system (describe)

-

Parking brake-auto release (warning light)

Warning light

MVMA Specifications

Vehicle Line TOYOTA SUPRA
 Model Year 1990 Issued Aug., '89 Revised (*) _____

METRIC (U.S. Customary)

Engine Description
 Engine Code

All models

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

Power equipment	Deck lid (release, pull down)		-
	Door locks (manual, automatic, describe system)		Manual
	Seats	2 - 4 - 6 way, etc.	Std.: 4-way Opt.: 12-way
		Reclining (R.H., L.H.)	
		Memory (R.H., L.H., present, recline)	
		Lumbar, hip, thigh, support	
		Heated (R.H., L.H., other)	
	Side windows		Std.
	Vent windows		N.A.
	Rear windows		N.A.
Radio systems	Antenna (location, whip, w / shield, power)		Std. power with diversity
	Standard	AM, FM, stereo, tape, compact disc, graphic equalizer, theft deterrent, radio prep package, headphone jacks, etc.	AM/FM W/cassette
	Optional		CD player
	Speaker (number, location)		6 (front door, quartertrim, luggage compartment)
	Roof: open air or fixed (flip-up, sliding, "T")		Open air for "Sport Roof"
Speed control device		Std.	
Speed warning device (light, buzzer, etc.)		N.A.	
Tachometer (rpm)		Std.	
Telephone system (describe)		-	
Theft deterrent system		Std.	

MVMA Specifications

Vehicle Line TOYOTA SUPRA

Model Year 1990 Issued Aug., '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.

All models

Width

Tread (front)	W101	1485 mm
Tread (rear)	W102	1485 mm
Vehicle width	W103	1745 mm
Body width at Sg RP (front)	W117	
Vehicle width (front doors open)	W120	
Vehicle width (rear doors open)	W121	-
Tumble-home (deg.)	W122	31.5°
Outside mirror width	W410	

Length

Wheelbase	L101	2595 mm
Vehicle length	L103	4620 mm
Overhang (front)	L104	960 mm
Overhang (rear)	L105	1065 mm
Upper structure length	L123	2681
Rear wheel C/L "X" coordinate	L127	599.6

Height*

Passenger distribution (front/rear)	PD1.2.3	Fr.: 2, Rr.: 1
Trunk/cargo load		0 kg
Vehicle height	H101	1300 mm
Cowl point to ground	H114	910 mm
Deck point to ground	H138	915 mm
Rocker panel-front to ground	H112	180 mm
Rocker panel-rear to ground	H111	175 mm
Windshield slope angle	H122	62.5°
Backlight slope angle	H121	72.5°

Ground Clearance*

Front bumper to ground	H102	405 mm
Rear bumper to ground	H104	365 mm
Bumper to ground (front at curb mass (wt.))	H103	410 mm
Bumper to ground (rear at curb mass (wt.))	H105	395 mm
Angle of approach (degrees)	H106	12.5°
Angle of departure (degrees)	H107	18.5°
Ramp breakover angle (degrees)	H147	12.0°
Axle differential to ground (front/rear)	H153	160 mm
Min. running round clearance	H156	140 mm
Location of min. run. grd. clear.		Fr.: Exhaust pipe

* 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 TOYOTA SUPRA
Model Year 1990 Issued Aug., '89 Revised (*)

METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for definitions

Body Type

All models

SAE
Ref.
No.

Front Compartment

SgRP front, "X" coordinate	L31	1570 mm
Effective head room	H81	Conventional roof: 953 mm, "Sport Roof": 954 mm
Max. eff. leg room (accelerator)	L34	1107 mm
SgRP to heel point	H30	189.5 mm
SgRP to heel point	L53	918 mm
Back angle	L40	23°
Hip angle	L42	96.5°
Knee angle	L44	137.5°
Foot angle	L46	93°
Design H-point front travel	L17	238.2 mm, 236.4 mm (Opt., power seat)
Normal driving & riding seat track trvl.	L23	238.2 mm, 236.4 mm (Opt., power seat)
Shoulder room	W3	1334 mm
Hip room	W5	1340 mm
Upper body opening to ground	H50	Conventional roof: 1191.5 mm, "Sport Roof": 1188.5 mm
Steering wheel maximum diameter*	W9	-
Steering wheel angle	H18	21°03'
Accel. heel pt. to steer. whl. cntr	L11	-
Accel. heel pt. to steer. whl. cntr	H17	-
Undepressed floor covering thickness	H67	44 mm

Rear Compartment

SgRP point couple distance	L50	5.50 mm
Effective head room	H63	Conventional roof: 860.5 mm, "Sport Roof": 861.5 mm
Min. effective leg room	L51	627 mm
SgRP (second to heel)	H31	251 mm
Knee clearance	L48	-185 mm
Shoulder room	W4	1281.5 mm
Hip room	W6	1206 mm
Upper body opening to ground	H51	Conventional roof: 1192.5 mm, "Sport Roof": 1189.6 mm
Back angle	L41	27°
Hip angle	L43	73.2°
Knee angle	L45	48.1°
Foot angle	L47	99.3°
Depressed floor covering thickness	H73	25.5 mm

Luggage Compartment

Usable luggage capacity [L (cu. ft.)]	V1	-
Liftover height	H195	830 mm

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.

MVMA Specifications

Vehicle Line TOYOTA SUPRA
Model Year 1990 Issued Aug., '89 Revised (•) _____

METRIC (U.S. Customary)

Vehicle Dimensions See Key Sheets for definitions

Body Type

All models

Station Wagon - Third Seat

SAB
Ref.
No.

Seat facing direction	SD1	-
SgRP couple distance	L85	-
Shoulder room	W85	-
Hip room	W86	-
Effective leg room	L86	-
Effective head room	H86	-
SgRP to heel point	H87	-
Knee clearance	L87	-
Back angle	L88	-
Hip angle	L89	-
Knee angle	L90	-
Foot angle	L91	-

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	-
Min. rear opening width above belt	W205	-
Cargo height	H201	-
Rear opening height	H202	-
Tailgate to ground height	H250	-
Front seat back to load floor height	H197	-
Cargo volume index (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

Cargo length at front seatback height	L208	1475 mm
Cargo length at floor (front)	L209	1525 mm
Cargo length at second seatback height	L210	567 mm
Cargo length at floor (second)	L211	948 mm
Front seatback to load floor height	H197	188.5 mm
Second seatback to load floor height	H198	320 mm
Cargo volume index (m ³ (ft. ³))	V3	0.362 m ³
Hidden cargo volume index (m ³ (ft. ³))	V4	0.311 m ³
Cargo volume index-rear of 2-seat	V11	0.311

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line TOYOTA SUPRA
 Model Year 1990 Issued Aug., '89 Revised (+) _____

Body Type

All models

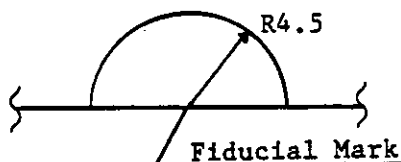
Vehicle Fiducial Marks

Number*

Define Coordinate Location

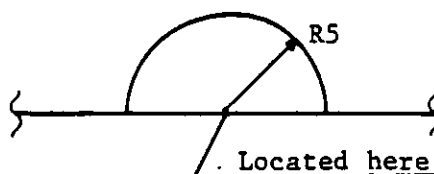
Front

Front semicircular notch of front jack-up point in rocker panel lower flange



Rear

Rear semicircular notch of rear jack-up point in rocker panel lower flange



Fiducial Mark Number

Front	W21*	W7 - 34.2 mm
	L54*	L17 + 8 mm
	H81*	H10 - 30 mm
	H161*	190 mm
	H163*	180 mm

Rear	W22*	W7 - 27.8 mm
	L55*	L31 + 2 mm
	H82*	H10 - 30 mm
	H162*	195 mm
	H164*	175 mm

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

METRIC (U.S. Customary)

Model Year 1990 Issued Aug., '89 Revised (•) _____

[illegible]

* Reference - SAE J1100 Motor vehicle dimensions, curb weight definition.

Refer to ETWC code legend below for test weight class.

ETWC LEGEND

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

SHIPPING MASS (weight) Calculation (Kg. (lbs.))

Shipping Mass (weight) = Curb Weight Less: **16**

METRIC (U.S. Customary)Model Year 1990 Issued Aug., '89 Revised (*) _____[illegible]

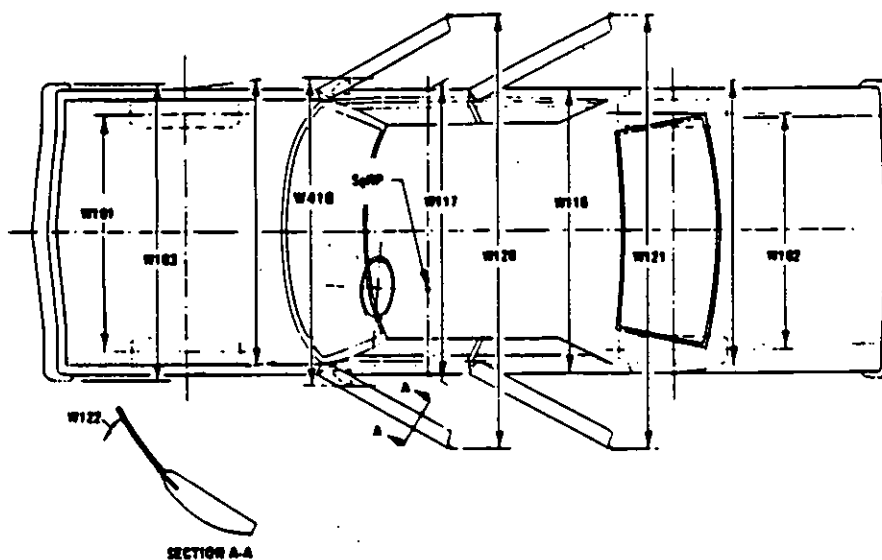
* Also see Engine - General Section for dressed engine mass (weight).

MVMA Specifications

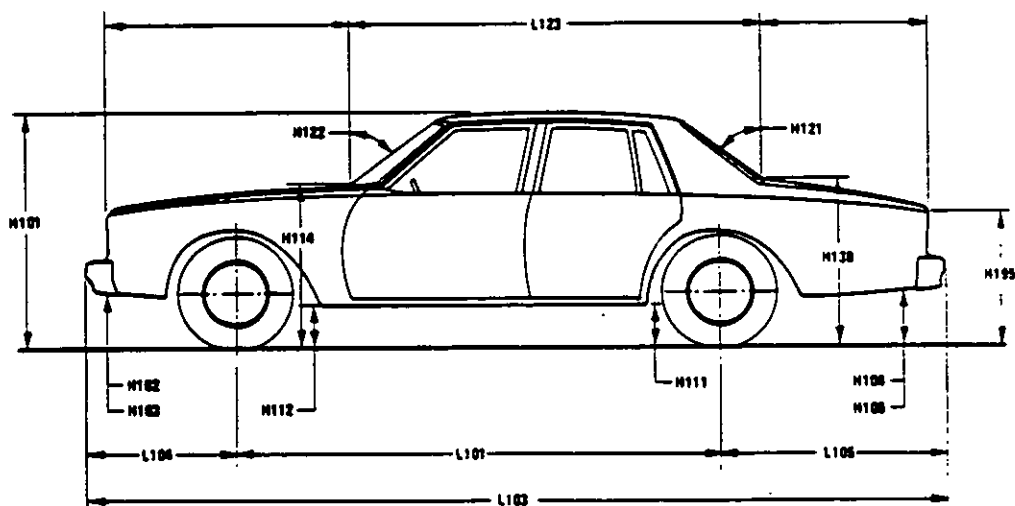
METRIC (U.S. Customary)

Exterior Vehicle And Body Dimensions - Key Sheet

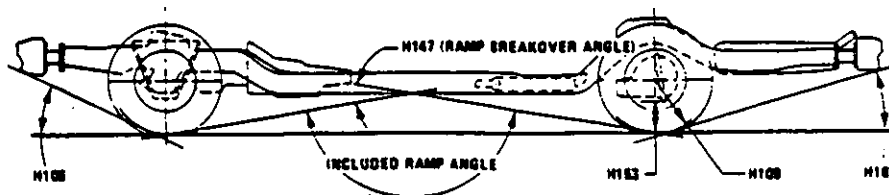
Exterior Width



Exterior Length & Height



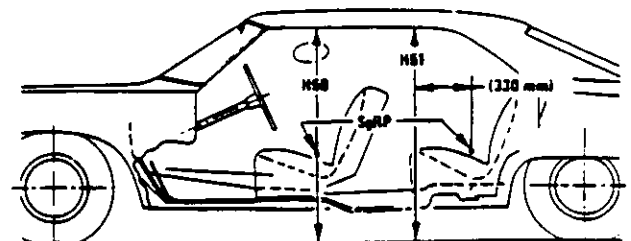
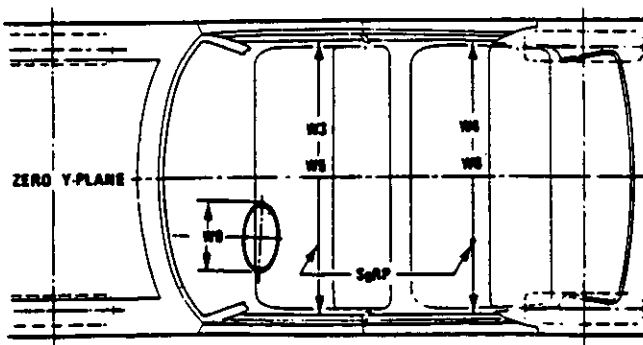
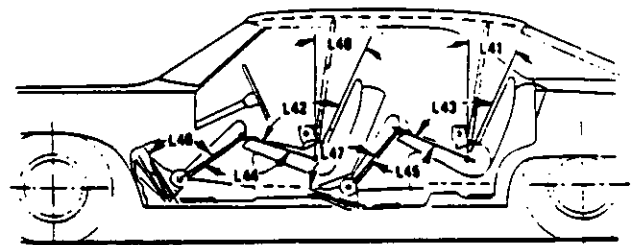
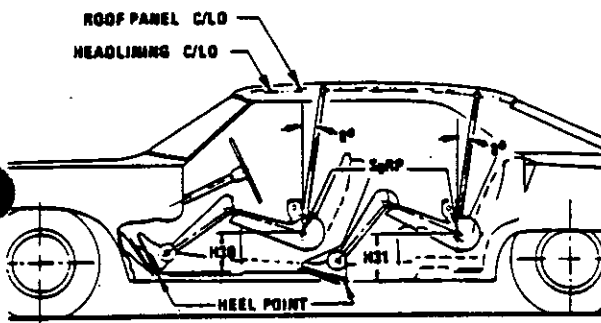
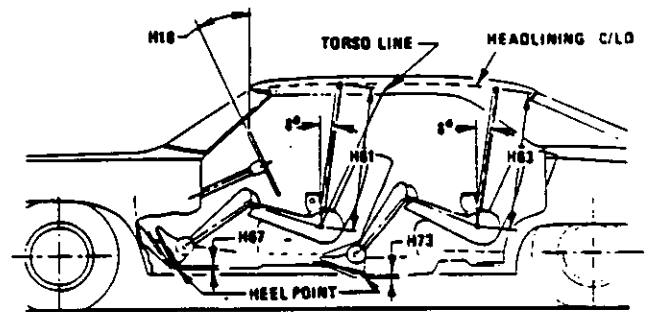
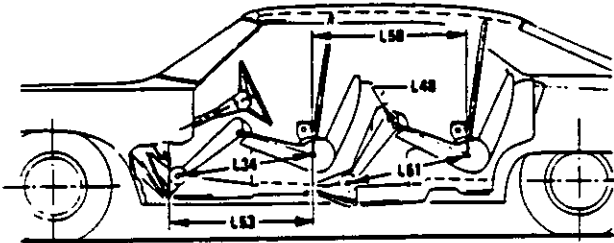
Exterior Ground Clearance



MVMA Specifications Form

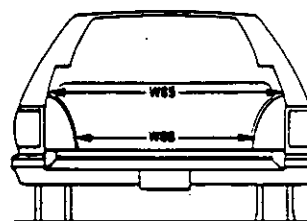
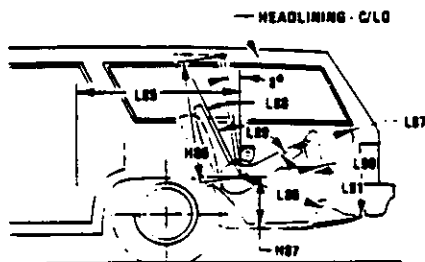
METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions - Key Sheet

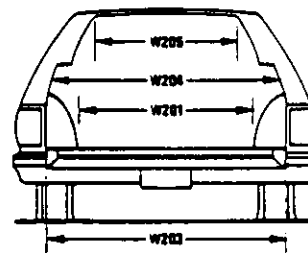
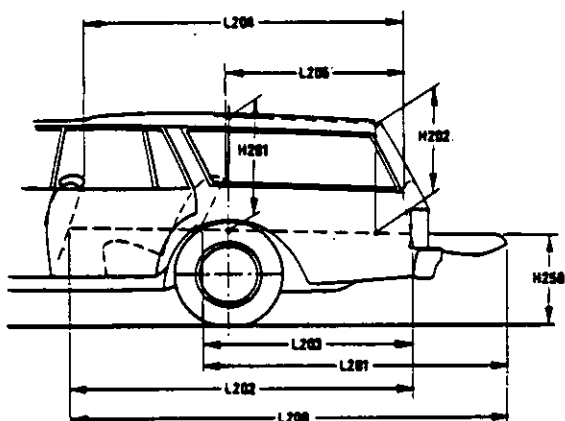


METRIC (U.S. Customary)

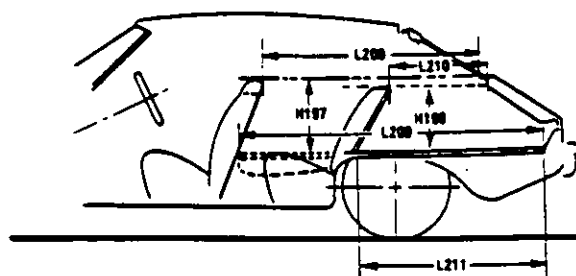
Third Seat



Cargo Space



Station Wagon



Hatchback

MVMA Specifications

METRIC (U.S. Customary)

Exterior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

Seating Reference Point

SEATING REFERENCE POINT means the manufacturer's design reference point which –

- (a) Establishes the rearmost normal design driving or riding position of each designated seating position in a vehicle;
- (b) Has coordinates established relative to the design vehicle structure;
- (c) Simulates the position of the pivot center of the human torso and thigh; and
- (d) Is the reference point employed to position the two dimensional templates described in SAE Recommended Practice J826, "Devices for Use in Defining and Measuring Vehicle Seating Accommodations."

Width Dimensions

- W101 TREAD – FRONT. The dimension measured between the tire centerlines at the ground.
- W102 TREAD – REAR. The dimension measured between the tire centerlines at the ground. In case of dual wheels, the dimension will be measured to the centerline of tire and wheel assemblies.
- W103 VEHICLE WIDTH. The maximum dimension measured between the widest point on the vehicle, excluding exterior mirrors, flexible mud flaps, marker lamps, but including bumpers, moldings, sheet metal protrusions or dual wheels, if standard equipment.
- W117 BODY WIDTH AT SgRP – FRONT. The dimension measured laterally between the widest points on the body at the SgRP-front, excluding door handles, applied moldings, or appliques.
- W120 VEHICLE WIDTH – FRONT DOORS OPEN. The dimension measured between the widest point on the front doors in maximum hold-open position.
- W121 VEHICLE WIDTH – REAR DOORS OPEN. The dimension measured between the widest point on the rear doors in maximum hold-open position. For vehicles with a rear door on only one side, this dimension is to the zero "Y" plane.
- W122 TUMBLE – HOME. STRAIGHT SIDE GLASS. The angle measured from a vertical to the outside surface of the front door glass at the SgRP "X" plane.
CURVED SIDE GLASS. The angle measured from a vertical to a chord extending from the upper DLO to the lower DLO at the outside surface of the front door glass at the front SgRP "X" plane.
- W410 OUTSIDE MIRROR WIDTH: The dimension between the widest point on the outside mirrors. The standard right and left mirror adjusted for normal driving will be shown unless otherwise noted. When only one outside mirror is standard, the dimension will be to the zero "Y" plane.

Length Dimensions

- L101 WHEELBASE (WB). The dimension measured longitudinally between front and rear wheel centerlines. In case of dual rear axles, the dimension shall be to the midpoint of the centerlines of the rear wheels.
- L103 VEHICLE LENGTH. The maximum dimension measured longitudinally between the foremost point and the rearmost point on the vehicle, including bumper, bumper guards, tow hooks and/or rub strips, if standard equipment.
- L104 OVERHAND – FRONT. The dimension measured longitudinally from the centerline of the front wheels to the foremost point on the vehicle including bumper, bumper guards, tow hooks and/or rub strips, if standard equipment.
- L105 OVERHANG – REAR. The dimension measured longitudinally from the centerline of the rear wheels; or in the case of dual rear axles, the dimension shall be the midpoint of the centerlines of the rear wheels, to the rearmost point on the vehicle including rear bumpers, bumper guards, tow hooks and rub strips, if standard equipment.

- L123 UPPER STRUCTURE LENGTH. The dimension measured longitudinally from the cowl point to the deck point.
- L127 REAR WHEEL CENTERLINE "X" COORDINATE or in the case of dual rear axles, the coordinate shall be the midpoint of the distance between the rear axle centerlines.

Height Dimensions

- H101 VEHICLE HEIGHT. The dimension measured vertically from the highest point on the vehicle body to ground.
- H111 ROCKER PANEL – REAR TO GROUND. The dimension measured vertically from the bottom of the rocker or side quarter panel at the front of the rear wheel opening, excluding flanges, to ground.
- H112 ROCKER PANEL – FRONT TO GROUND. The dimension measured vertically from the foremost point on the bottom of the rocker panels, excluding flanges, to ground.
- H114 COWL POINT TO GROUND. Measured at zero "Y" plane.
- H121 BACKLIGHT SLOPE ANGLE. The angle between the vertical reference line and the surface of backlight at vehicle zero "Y" plane. For curve backlight, the angle is to chord of backlight arc from lower DLO to upper DLO.
- H122 WINDSHIELD SLOPE ANGLE. The angle between the vertical reference line and a chord of the windshield arc running from the lower DLO to the upper DLO at the vehicle zero "Y" plane. In the case of wrap over glass, the angle to be measured will be formed by a chord 457 mm (18.0 in.) long drawn from the lower DLO to the intersecting point on the windshield.
- H138 DECK POINT TO GROUND. Measured at zero "Y" plane.
- H109 STATIC LOAD – TIRE RADIUS – REAR. Specified by the manufacturer in accordance with composite TIRE SECTION STANDARD.

Ground Clearance Dimensions

- H102 FRONT BUMPER TO GROUND. The minimum dimension measured vertically from the lowest point on the front bumper to ground, including bumper guards, if standard equipment.
- H103 FRONT BUMPER TO GROUND – CURB MASS (WT.). Measured in the same manner as H102.
- H104 REAR BUMPER TO GROUND. The minimum dimension measured vertically from the lowest point on the rear bumper to ground, including bumper guards, if standard equipment.
- H105 REAR BUMPER TO GROUND – CURB MASS (WT.). Measured in the same manner as H104.
- H106 ANGLE OF APPROACH. The angle measured between a line tangent to the front tire static loaded radius arc and the initial point of structural interference forward of the front tire to ground. The limiting structural component shall be designated.
- H107 ANGLE OF DEPARTURE. The angle measured between a line tangent to the rear tire static loaded radius arc and the initial point structural interference rearward of the rear tire to ground. The limiting component shall be designated.
- H147 RAMP BREAKOVER ANGLE. The angle measured between two lines tangent to the front and rear tire static loaded radius and intersecting at a point on the underside of the vehicle which defines the largest ramp over which the vehicle can roll.
- H153 REAR AXLE DIFFERENTIAL TO GROUND. The minimum dimension measured from the rear axle differential to ground.
- H156 MINIMUM RUNNING GROUND CLEARANCE. The minimum dimension measured from the sprung vehicle to ground. Specify location.

MVMA Specifications

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions - Key Sheet Dimensions Definitions

Glass Areas

- S1 Windshield area.
- S2 Side windows area. Includes the front door, rear door, vents, and rear quarter windows on both sides of the vehicle.
- S3 Backlight areas.
- S4 Total area. Total of all areas (S1 + S2 + S3).

Fiducial Mark Dimensions

- Fiducial Mark - Number 1**
- L54 "X" coordinate.
- W21 "Y" coordinate.
- H81 "Z" coordinate.
- H161 Height "Z" coordinate to ground at curb weight.
- H163 Height "Z" coordinate to ground.
- Fiducial Mark - Number 2**
- L55 "X" coordinate.
- W22 "Y" coordinate.
- W82 "Z" coordinate.
- H162 Height "Z" coordinate to ground at curb weight.
- H164 Height "Z" coordinate to ground.

Front Compartment Dimensions

- L11 ACCELERATOR HEEL POINT TO STEERING WHEEL CENTER. The dimension measured horizontally from the AHP to the intersection of the steering column centerline and a plane tangent to the upper surface of the steering wheel rim.
- L17 DESIGN H-POINT - FRONT TRAVEL. The dimension measured horizontally between the design H-point - front in the foremost and rearmost seat track positions. (See SAE J1100)
- L23 NORMAL DRIVING AND RIDING SEAT TRACK TRAVEL. The dimension measured horizontally between a point on the design H-point travel line from the SgRP to the displaced point on the design H-point travel line with the seat moved to the foremost seat position, but not to include seat track travel used for purposes other than normal driving and riding positions. (See SAE J1100).
- L31 SgRP - FRONT. "X" COORDINATED.
- L34 MAXIMUM EFFECTIVE LEG ROOM - ACCELERATOR. The dimension measured along a line from the ankle pivot center to the SgRP - front plus 254 mm (10.0 in.) measured with right foot on the undepressed accelerator pedal. For vehicles with SgRP to heel (H30) greater than 18 in., the accelerator pedal may be depressed as specified by the manufacturer. If the accelerator is depressed, the manufacturer shall place foot flat on pedal and note the depression of the pedal.
- L-40 BACK ANGLE - FRONT. The angle measured between a vertical line through the SgRP - front and the torso line. If the seatback is adjustable, use the normal driving and riding position specified by the manufacturer.
- L-42 HIP ANGLE - FRONT. The angle measured between torso line and thigh centerline.
- L44 KNEE ANGLE - FRONT. The angle measured between thigh centerline and lower leg centerline measured on the right leg.
- L46 FOOT ANGLE - FRONT. The angle measured between the lower leg centerline and a line tangent to the ball and heel of the bare foot flesh line measured on the right leg. Ref SAE J826.
- L53 SgRP - FRONT TO HEEL. The dimension measured horizontally from the SgRP - front to the accelerator heel point.
- W3 SHOULDER ROOM - FRONT. The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the SgRP - front at height between the belt line and 254 mm (10.0 in.) above the SgRP - front, excluding the door assist strap and attaching parts.

- W5 HIP ROOM - FRONT. The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the SgRP - front within 25 mm (1.0 in.) below and 76 mm (3.0 in.) above the SgRP - front and 76 mm (3.0 in.) fore and aft of the SgRP - front.
- W9 STEERING WHEEL MAXIMUM OUTSIDE DIAMETER. Define if other than round.
- H7 ACCELERATOR HEEL POINT TO THE STEERING WHEEL CENTER. The dimension measured vertically from the AHP - front to the intersection of the steering column centerline to a plane tangent to the upper surface of the steering wheel rim.
- H18 STEERING WHEEL ANGLE. The angle measured from a vertical to the surface plane of the steering wheel.
- H30 SgRP - FRONT TO HEEL. The dimension measured vertically from the SgRP - front to the accelerator heel point.
- H50 UPPER BODY OPENING TO GROUND - FRONT. The dimension measured vertically from the trimmed body opening to the ground on the SgRP - front "X" plane.
- H61 EFFECTIVE HEAD ROOM - FRONT. The dimension measured along a line 8 deg. rear of vertical from the SgRP - front to the headlining plus 102 mm (4.0 in.).
- H67 FLOOR COVERING THICKNESS - UNDEPRESSED - FRONT. The dimension measured vertically from the surface of the undepressed floor covering to the underbody sheet metal at the accelerator heel point.

Rear Compartment Dimensions

- L-41 BACK ANGLE - SECOND. The angle measured between a vertical line through the SgRP - second and the torso line.
- L43 HIP ANGLE - SECOND. The angle measured between torso line and thigh centerline.
- L45 KNEE ANGLE - SECOND. The angle measured between thigh centerline and lower leg centerline.
- L47 FOOT ANGLE - SECOND. The angle measured between the lower leg centerline and a line tangent to the ball and heel of the three-dimensional devices bare foot flesh line (Reference J826).
- L48 KNEE CLEARANCE - SECOND. The minimum dimension measured from the knee pivot center to the back of the front seatback minus 51 mm (2.0 in.).
- L50 SgRP COUPLE DISTANCE - SECOND. The dimension measured horizontally from the driver SgRP - front to the SgRP - second.
- L51 MINIMUM EFFECTIVE LEG ROOM - SECOND. The dimension measured along a line from the ankle pivot center to the SgRP - second plus 254 mm (10.0 in.).
- W4 SHOULDER ROOM - SECOND. The minimum dimension measured laterally between door or quarter trimmed surfaces on the "X" plane through the SgRP - second at height between 254-406 mm (10.0-16.0 in.) above the SgRP - second, excluding the door assist straps and attaching parts.
- W6 HIP ROOM - SECOND. Measured in the same manner as W5.
- H31 SgRP - SECOND TO HEEL. The dimension measured vertically from the SgRP - second to the two dimensional device heel point on the depressed floor covering.
- H51 UPPER BODY OPENING TO GROUND - SECOND. The dimension measured vertically from the trimmed body opening to the ground on the "X" plane 330 mm (13.0 in.) forward of the SgRP - second.
- H63 EFFECTIVE HEAD ROOM - SECOND. The dimension measured along a line 8 deg. rear of vertical from the SgRP to the headlining, plus 102 mm (4.0 in.).
- H73 FLOOR COVERING - DEPRESSED - SECOND. The dimension measured vertically from the heel point to the underbody sheet metal.

MVMA Specifications

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions - Key Sheet Dimensions Definitions

Luggage Compartment Dimensions

- V1 **USABLE LUGGAGE CAPACITY** - Total of volumes of individual pieces of standard luggage set plus H-boxes stowed in the luggage compartment in accordance with the procedure described in paragraph 8.2 of SAE-J1100a.

Interior Volumes (EPA Classification)

The Interior Volume Index is listed for each body style except two seaters. The Interior Volume Index estimates the space in a car. It is based on four measurements - head room, shoulder room, hip room, and leg room - for the front and rear seats, plus trunk capacity. The Interior Volume Index is an estimate of the size of the passenger compartment.

The Trunk/Cargo Index is an estimate of the size of the trunk/cargo space. In station wagons and hatchbacks it is an estimate of the space behind the second seat.

Station Wagon - Third Seat Dimensions

- L85 **SgRP COUPLE DISTANCE - THIRD**. The dimension measured horizontally from the SgRP - second to the SgRP - third.
- L86 **EFFECTIVE LEG ROOM - THIRD**. The dimension measured along a line from the ankle pivot center to the SgRP - third plus 254 mm (10.0 in.).
- L87 **KNEE CLEARANCE - THIRD**. The minimum dimension from the knee pivot center to the back of second seatback minus a constant of 51 mm (2.0 in.). With rear-facing third seat, dimension is measured to closure.
- L88 **BACK ANGLE - THIRD**. Measured in the same manner as L41.
- L89 **HIP ANGLE - THIRD**. Measured in the same manner as L43.
- L90 **KNEE ANGLE - THIRD**. Measured in the same manner as L45.
- L91 **FOOT ANGLE - THIRD**. Measured in the same manner as L47.
- W85 **SHOULDER ROOM - THIRD**. Measured in the same manner as W4.
- W86 **HIP ROOM - THIRD**. Measured in the same manner as W5.
- H86 **EFFECTIVE HEAD ROOM - THIRD**. The dimension, measured along a line 8 deg. from the SgRP - third to the headlining rear of vertical plus a constant of 102 mm (4.0 in.).
- H87 **SgRP - THIRD TO HEEL POINT**.
- SD1 **SEAT FACING DIRECTION - THIRD**.

Station Wagon - 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 undeepressed floor covering to the rearmost point on the undeepressed 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 undeepressed floor covering to the rearmost point on the undeepressed 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 undeepressed floor covering to the rearmost point on the undeepressed 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 undeepressed floor covering to the rearmost point on the undeepressed floor covering on the closed tailgate or taildoor for station wagons, trucks and mpv's at the zero "Y" plane.
- L204 **CARGO LENGTH AT BELT - FRONT**. The minimum dimension measured horizontally from the back of the front seatback at the seatback top to the foremost normal surface of the closed tailgate or inside surface of the cab backpanel at the height of the belt, on the zero "Y" plane.
- L205 **CARGO LENGTH AT BELT - SECOND**. The minimum dimension measured horizontally from the back of the second seatback at the seatback top to the foremost normal surface of the closed tailgate at the height of the belt, on the zero "Y" plane.
- W201 **CARGO WIDTH - WHEELHOUSE**. The minimum dimension measured laterally between the trimmed wheelhouseings at floor level. For any vehicle not trimmed, measure to the sheet metal.
- W203 **REAR OPENING WIDTH AT FLOOR**. The minimum dimension measured laterally between the limiting interferences of the rear opening at floor level.
- W204 **REAR OPENING WIDTH AT BELT**. The minimum dimension measured laterally between the limiting interferences of the rear opening at belt height or top of pick up box.
- W205 **REAR OPENING WIDTH ABOVE BELT**. The minimum dimension measured laterally between the limiting interferences of the rear opening above the belt height.
- H197 **FRONT SEATBACK TO LOAD FLOOR HEIGHT**. The dimension measured vertically from the horizontal tangent to the top of the seatback to the undeepressed floor covering.
- H201 **CARGO HEIGHT**. The dimension measured vertically from the top of the undeepressed floor covering to the headlining at the rear wheel "X" coordinate on the zero "Y" plane.
- H202 **REAR OPENING HEIGHT**. The dimension measured vertically from the top of the undeepressed 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 undeepressed floor covering on the lowered tailgate to ground on the zero "Y" plane.
- V2 **STATION WAGON**

Measured in inches:

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

Measured in mm:

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

MVMA Specifications

METRIC (U.S. Customary)

Interior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

V4 HIDDEN LUGGAGE CAPACITY – REAR OF FRONT SEAT. The total volumes of individual pieces of one set of standard luggage stowed in any hidden cargo area below the load floor rear of the front seat.

V5 TRUCKS AND MPV'S WITH OPEN AREA.

Measured in inches:

$$\frac{L506 \times W505 \times H503}{1728} = \text{ft}^3$$

Measured in mm:

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

V6 TRUCKS AND MPV'S WITH CLOSED AREA.

Measured in inches:

$$\frac{L204 \times W500 \times H505}{1728} = \text{ft}^3$$

Measured in mm:

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

V8 HIDDEN LUGGAGE CAPACITY – REAR OF SECOND SEAT. The total volume of individual pieces of one set of standard luggage stowed in any hidden cargo area below the load floor rear of the second seat.

V10 STATION WAGON CARGO VOLUME INDEX.

Measured in inches:

$$\frac{H201 \times L205 \times \frac{W4 + W201}{2}}{1728} = \text{ft}^3$$

Measured in mm:

$$\frac{H201 \times L205 \times \frac{W4 + W201}{2}}{10^9} = \text{m}^3 \text{ (cubic meter)}$$

Hatchback – Cargo Space Dimensions

All hatchback cargo dimensions are to be taken with the front seat in full down and rear position, and the rear seat folded down. The hatchback door is in the closed position. (For electronically adjusted seats, see the manufacturer's specifications for Design "H" Point).

L208 CARGO LENGTH AT FRONT SEATBACK HEIGHT. The minimum horizontal dimension from the "X" plane tangent to the rearmost surface of the driver's seatback to the inside limiting interference of the hatchback door on the vehicle zero "Y" plane.

L209 CARGO LENGTH AT FLOOR – FRONT – HATCHBACK. The minimum horizontal dimension measured at floor level from the rear of the front seatback to the normal limiting interference of the hatchback door on the vehicle zero "Y" plane.

L210 CARGO LENGTH AT SECOND SEATBACK HEIGHT – HATCHBACK. The minimum dimension measured from the "X" plane tangent to the rearmost surface of second seatback or the load floor which is stowed at least one half of the H198 dimension height above the rear load floor, to the rearmost inside limiting interference on the zero "X" plane.

L211 CARGO LENGTH AT FLOOR – SECOND HATCHBACK. The minimum horizontal dimension measured at floor level from the rear of the second seatback or load floor panel to the normal limiting interference of the hatchback door on the vehicle zero "Y" plane.

H197 FRONT SEATBACK TO LOAD HEIGHT. The dimension measured vertically from the horizontal tangent to the top of the seatback to the undepressed floor covering.

H198 SECOND SEATBACK TO LOAD FLOOR HEIGHT: The dimension measured vertically from the second seatback to the undepressed floor covering.

V3 HATCHBACK.

Measured in inches:

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

Measured in mm:

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

V4 HIDDEN LUGGAGE CAPACITY – REAR OF FRONT SEAT. The total volumes of individual pieces of one set of standard luggage stowed in any hidden cargo area below the load floor rear of the front seat.

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

Measured in inches:

$$\frac{\frac{L210 + L211}{2} \times W4 \times H198}{1728} = \text{ft}^3$$

Measured in mm:

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

MVMA Specifications

METRIC (U.S. Customary)

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