MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

1990

Manufacturer	Vehicle Line	
TOYOTA MOTOR CORPORATION	TERCEL	
Mailing Address		
Toyota Motor Sales, U.S.A., Inc. 2055 West 190th Street Torrance, California 90504	Issued 1989	Revised

Direct questions concerning these specifications to the manufacturer listed above.

The information contained herein is prepared, distributed by, and is solely the responsibility of the vehicle manufacturing company to whose products it relates. This suggested specification form was developed by the vehicle manufacturing companies under the auspices of the Motor Vehicle Manufacturers Association of the United States, Inc.

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

FORM MVMA-90

MVMA Specifications

METRIC (U.S. Customary)

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Ø **Indicates Format Change From Previous Year**

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

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Vehicle Line TERCEL
Model Year 1990 Issued _____ 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 (Mfgr's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk/Cargo Load-Kilograms (Pounds)
2-Door Sedan	STD	EL31L-ZDHREA	2/3	25
2-Door Sedan	STD	EL31L-ZDHRSA	2/3	25
2-Door Sedan	STD	EL31L-ZDMRSA	2/3	25
2-Door Sedan	DLX	EL31L-ZDHDEA	2/3	25
2-Door Sedan	DLX	EL31L-ZDHDSA	2/3	25
2-Door Sedan	DLX	EL31L-ZDMDSA	2/3	25
3-Door Sedan	BASE	EL31L-ZGHBSA	2/3	25
3-Door Sedan	BASE	EL31L-ZGKBSA	2/3	25
3-Door Sedan	BASE	EL31L-NGKBSA	2/3	25
3-Door Sedan	STD	EL31L-ZGHREA	2/3	25
3-Door Sedan	STD	EL31L-ZGHRSA	2/3	25
3-Door Sedan	STD	EL31L-ZGMRSA	2/3	25

All models are FWD.

* 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		3E-E	3E	←	←	
	Displacement Liters (in³)		1457	←	←	←	
	Induction system (FI, Carb, etc.)		FI	Carburetor	←	←	
	Compression ratio		9.3	←	←	←	
	SAE Net at RPM	Power kW (bhp)	61/5200	58/6000	←	←	
		Torque N • m (lb. ft.)	121/4400	118/4400	←	←	
	Exhaust single, dual		Single	←	←	←	
TRANS	Transmission/ Transaxle		3 A/T	3 A/T	5 M/T	4 M/T	
	Axle Ratio (std. first)		3.722	3.722, 4.058	3.722	3.722	3.095
				B B' (Puerto Rico)		D	D1

Series Availability — Power Teams (A - B - C - D)

Model	Code	Standard	Optional
2-door Sedan STD	EL31L-ZDHREA	A	-
2-door Sedan STD	EL31L-ZDHRSA	B	B'
2-door Sedan STD	EL31L-ZDMRSA	C	-
2-door Sedan DLX	EL31L-ZDHDEA	A	-
2-door Sedan DLX	EL31L-ZDHDSA	B	B'
2-door Sedan DLX	EL31L-ZDMDSA	C	-
3-door Sedan BASE	EL31L-ZGHBSA	B	B'
3-door Sedan BASE	EL31L-ZGKBSA	D	-
3-door Sedan BASE	EL31L-NGKBSA	D1	-
3-door Sedan STD	EL31L-ZGHREA	B	B'
3-door Sedan STD	EL31L-ZGHRSA	B	B'
3-door Sedan STD	EL31L-ZGMRSA	C	-

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Engine Description / Engine Code	3E, 3E-E

ENGINE – GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-chamber, etc.)		Inline, front, transverse, SOHC, wedge
Manufacturer		TOYOTA MOTOR CORPORATION
No. of cylinders		4
Bore		73.0 mm
Stroke		87.0 mm
Bore spacing (C / L to C / L)		80.0 mm
Cylinder block material & mass kg (lbs.) (machined)		Gray cast iron, 25.6 kg
Cylinder block deck height		204.0 mm
Cylinder block length		352.5 mm
Deck clearance (minimum) (above or below block)		0 mm
Cylinder head material & mass kg (lbs.)		Alminum alloy cast, 7.0 kg
Cylinder head volume (cm^3)		30.2 cm^3
Cylinder liner material		N.A.
Head gasket thickness (compressed)		1.20 mm
Minimum combustion chamber total volume (cm^3)		43.9 cm^3
Cyl. no. system (front to rear)*	L. Bank	1-2-3-4
	R. Bank	–
Firing order		1-3-4-2
Intake manifold material & mass [kg (lbs.)]**		Aluminum alloy cast, 1.6 kg (3E), 2.9 kg (3E-E)
Exhaust manifold material & mass [kg (lbs.)]**		Spheroidal graphite cast iron, 2.9 kg
Fuel required unleaded, diesel, etc.		Unlead regular
Fuel antiknock index (R + M) ÷ 2		87
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: 98.0 kg, A/T: 92.0 kg (3E), 91.0 kg (3E-E)

Engine – Pistons

Material & mass, g (weight, oz.) - piston only	Aluminum alloy cast, 221 g

Engine – Camshaft

Location		Over cylinder head
Material & mass kg (weight, lbs.)		Alloy cast iron, 1.8 kg
Drive type	Chain / belt	Belt
	Width / pitch	24.0 mm/8.0 mm

* 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	All models

Engine – Valve System

Hydraulic lifters (std., opt., NA)		N.A.
Valves	Number intake / exhaust	8/4
	Head O.D. intake / exhaust	30.0 mm, 24.0 mm/31.0 mm

Engine – Connecting Rods

Material & mass [kg., (weight, lbs.)]*	Carbon steel for machine structral use, 380 g
Length (axes ℄ to ℄) mm	

Engine – Crankshaft

Material & mass [kg., (weight, lbs.)]*		Spheroidal graphite cast iron, 10.0 kg
End thrust taken by bearing (no.)		No.3
Length & number of main bearings		5
Seal (material, one, two piece design, etc.)	Front	Acrylic rubber, one piece
	Rear	Silicone rubber, one piece

Engine – Lubrication System

Normal oil pressure [kPa (psi) at engine rpm]	390 kPa/3000 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.)	2.9 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	N.A.
Super charger - manufacturer	N.A.
Intercooler	–

* Finished State

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Engine Description / Engine Code	3E, 3E-E

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)	Bypass
	Starts to open at °C (°F)	82°C
Water pump	Type (centrifugal, other)	Centrifugal
	GPM 1000 pump rpm	0.4 L/sec. at 1000 rpm
	Number of pumps	1
	Drive (V-belt, other)	V-ribbed belt
	Bearing type	Sealed, roller & ball
	Impeller material	Cold rolled carbon steel sheet
	Housing material	Aluminum alloy, die cast
By-pass recirculation (type (inter., ext.)]		External
Cooling system capacity	With heater – L(qt.)	5.2 L (3E), 5.6 L (3E-E)
	With air conditioner – L(qt.)	5.2 L (3E), 5.6 L (3E-E)
	Opt. equipment (specify – L(qt.)]	5.2 L (3E), 5.6 L (3E-E)
Water jackets full length of cyl. (yes, no)		Yes
Water all around cylinder (yes, no)		Yes
Water jackets open at head face (yes, no)		No.
Radiator core	Std., A/C, HD	Std.
	Type (cross-flow, etc.)	Vertical flow
	Construction (fin & tube mechanical, braze, etc.)	Corrugated fin
	Material, mass [kg (wgt., lbs.)]	Brass & copper, M/T: 3.2 kg, A/T: 3.6 kg(3E), 5.3 kg(3E-E)
	Width	668 mm
	Height	300 mm
	Thickness	16 mm, 32 mm (A/T)
	Fins per inch	20
Radiator end tank material		Nylon 66 (30% glass fiber)
Fan	Std., elec., opt.	Elec.
	Number of blades & type (flex, solid, material)	4, Solid, resin
	Diameter & projected width	300 mm, 34 mm
	Ratio (fan to crankshaft rev.)	-
	Fan cutout type	-
	Drive type (direct, remote)	-
	RPM at idle (elec.)	M/T: 2100, A/T: 2050, 2100 (Puerto Rico)
	Motor rating (wattage) (elec.)	M/T: 80, A/T: 120, 80 (Puerto Rico)
	Motor switch (type & location) (elec.)	Water temperature, water inlet
	Switch point (temp., pressure) (elec.)	85°C(3E), 90°C(3E-E)
	Fan shroud (material)	Polypropylene (30% glass fiber)

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Engine Description / Engine Code	3E	3E-E

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

Induction type: carburetor, fuel injection system, etc.		Caburetor	Fuel injection
Manufacturer		AISAN	AISAN
Carburetor no. of barrels		1	
Idle A/F mix.		Preset at manufacturer	Preset at manufacturer
Fuel injection	Point of injection (no.)	N.A.	4
	Constant, pulse, flow	N.A.	Pulse
	Control (electronic, mech.)	N.A.	Electronic
	System pressure [kPa (psi)]	N.A.	284 kPa
Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	700 rpm	-
	Automatic	900 rpm neutral	800 rpm neutral
Intake manifold heat control (exhaust or water thermostatic or fixed)		Water thermostatic, with PTC heater	-
Air cleaner type		Dry, 1-element, with hot air intake	Dry, 1-element
Fuel filter (type/location)			
Fuel pump	Type (elec. or mech.)	Mechanical	Electromagnetic
	Location (eng., tank)	Engine head, right	Fuel tank
	Pressure range [kPa (psi)]	21 kPa	284 kPa
	Flow rate at regulated pressure (L (gal)/hr @ kPa (psi))	-	-

Fuel Tank

Capacity [refill L (gallons)]		45L
Location (describe)		Under rear seat floor
Attachment		Band
Material & Mass [kg (weight lbs.)]		Steel sheet
Filler pipe	Location & material	Left wheel house, steel pipe
	Connection to tank	Rubber hose
Fuel line (material)		Steel pipe
Fuel hose (material)		Rubber hose
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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Engine Description / Engine Code			3E	3E-E
Vehicle Emission Control				
Exhaust Emission Control	Type (air injection, engine modifications, other)		Fed.: EGR+AS+O_2S+TWC+OC Cal.: EGR+AS+O_2S+TWC	EFI/EGR/O_2S/TWC
	Air Injection	Pump or pulse	Reed valve	-
		Driven by	-	-
		Air distribution (head, manifold, etc.)	Fed.: Catalytic converter Cal.: Exhaust manifold	-
		Point of entry	Fed.: Between TWC & OC, Cal.: #4 exhaust port	-
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Back pressure controlled	Back pressure controlled
		Exhaust source Point of exhaust injection (spacer, carburetor, manifold, other)	#2 exhaust port Intake manifold	#2 exhaust port Intake manifold
	Catalytic Converter	Type	Fed.: 3 way + Oxidation, Cal.: 3 way	3 way
		Number of	1	1
		Location(s)	Forward under floor area	Forward under floor area
		Volume [L (in³)]	Fed.: 1.3 + 0.7L, Cal.: 1.3L	1.3L
		Substrate type	Monolith	Monolith
		Noble metal type	-	-
		Noble metal concentration (g/cm³)	-	-
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Closed	Closed
	Energy source (manifold vacuum, carburetor, other)		Manifold vacuum	Manifold vacuum
	Discharges (to intake manifold, other		Caburetor heat insulator	Intake manifold
	Air inlet (breather cap, other)		Air cleaner	Intake air connector
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	Canister	Canister
		Carburetor	Canister	-
	Vapor storage provision		Canister	Canister
Electronic system	Closed loop (yes/no)		Yes	Yes
	Open loop (yes/no)		No	No

Engine – Exhaust System

Type (single, single with cross-over, dual, other)		Single
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass [kg (weight lbs)]		One, reverse flow
Resonator no. & type		N.A.
Exhaust pipe	Branch o.d., wall thickness	N.A.
	Main o.d., wall thickness	42.7 mm, 1.5 mm
	Material & Mass [kg (weight lbs)]	Stainless steel, 1.6 kg
Intermediate pipe	o.d. & wall thickness	42.7, 2.0 mm, 38.1, 1.2 mm
	Material & Mass [kg (weight lbs)]	Aluminum coated steel*
Tail pipe	o.d. & wall thickness	42.7 mm, 1.0 mm
	Material & Mass [kg (weight lbs)]	Stainless steel, 0.15 kg(2 Box), 0.3 kg(3 Box)

*: Fed.: 1.7 kg(2 Box), 1.8 kg(3 Box)
Cal.: 1.8 kg(2 Box), 1.9 kg(3 Box)

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Engine Description / Engine Code	3E

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

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

Manual Transmission/Transaxle		C140(EL31L-ZGKBSA)	C141(EL31L-NGKBSA)	C150(All 5M/T)
Number of forward speeds		4	4	5
Gear ratios	1st	3.545	3.545	3.545
	2nd	1.904	1.904	1.904
	3rd	1.310	1.233	1.310
	4th	0.969	0.885	0.969
	5th	-	-	0.815
	Reverse	3.250	3.250	3.250
Synchronous meshing (specify gears)		All forward gears	All forward gears	All forward gears
Shift lever location		Floor	Floor	Floor
Trans. case mat'l. & mass kg (lbs)*		-	-	-
Lubricant	Capacity [L (pt.)]	2.4L	2.4L	2.4L
	Type recommended	Multipurpose API GL-4	Multipurpose API GL-4	Multipurpose API GL-4
	SAE viscosity number	SAE 75W-90	SAE 75W-90	SAE 75W-90

Clutch (Manual Transmission)

Clutch manufacturer		AISIN SEIKI
Clutch type (dry, wet; single, multiple disc)		Single, dry
Linkage (hydraulic, cable, rod, lever, other)		-
Max. pedal effort (nom. spring load, new) N (lbs)	Depressed	-
	Released	-
Assist (spring, power/percent, nominal)		No adoption
Type pressure plate springs		Diaphragm
Total spring load (nominal, new) N (lbs)		3920N, 3528N (EL31L-NGKBSA)
Clutch facing	Facing mfgr. & material coding	NISSIN SPINNING, 31256-12080, 31256-12100(EL31L-NGKBSA)
	Facing material & construction	Semi mold
	Rivets per facing	16
	Outside x inside dia. (nominal)	190x132 mm, 212x140 mm (EL31L-NGKBSA)
	Total eff. area [cm^2(in.^{2})]	147 cm^2, 199 cm^2 (EL31L-NGKBSA)
	Thickness (pressure plate side/fly wheel side)	3.5 mm
	Rivet depth (pressure plate side/fly wheel side)	
	Engagement cushion method	Cushion spring
Release bearing type & method lub.		Single row ball bearing, sealed grease
Torsional damping method, springs, hysteresis		Rubber

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

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Engine Description / Engine Code	All models

∅ Automatic Transmission/Transaxle

Trade Name		A132L
Type and special features (describe)		Hydraulic controlled planetary gear, with lock-up clutch
Gear selector	Location (column, floor, other)	Floor
	Ltr./No. designation (e.g. PRND21)	PRND2L
	Shift interlock (yes, no, describe)	
Gear ratios	1st	2.810
	2nd	1.542
	3rd	1.000
	4th	-
	Reverse	2.296
Max. upshift speed - drive range [km/h (mph)]		1→2:58, 2→3:105
Max. kickdown speed - drive range [km/h (mph)]		2→1:41, 3→2:105
Min. overdrive speed [km/h (mph)]		-
Torque converter	Number of elements	3 elements, 1 step, 2 phases
	Max. ratio at stall	2.3
	Type of cooling (air, liquid)	-
	Nominal diameter	230 mm
	Capacity factor "K"*	-
Lubricant	Capacity (refill L(pt.)]	5.5L
	Type recommended	ATF DII
Oil cooler (std., opt., N.A., internal, external, air, liquid)		Std., integral with radiator
Transmission mass [kg (lbs)] & case material **		

∅ 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 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	18, 21 (EL31L-NGKBSA)
		Ring gear	67, 65 (EL31L-NGKBSA)

Front Drive Unit

Description (integral to trans., etc.)		Integral to transmission
Limited slip differential (type)		-
Drive pinion	Type	Helical gear
	Offset	-
No. of differential pinions		2
Pinion / differential	Adjustment (shim, etc.)	-
	Bearing adjustment	M/T: -, A/T: Collapsible sleeve
Driving wheel bearing (type)		Double angulaer ball bearing
Lubricant	Capacity [L (pt.)]	M/T: 2.4L, A/T: 1.4L
	Type recommended	M/T: Multi purpose API GL-4, A/T: ATF DII

Axle Shafts – Front Wheel Drive

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	22 x 379.9 mm
		Right	22 x 606.2 mm
	Automatic transaxle	Left	22 x 379.9 mm
		Right	22 x 606.2 mm
	Optional transaxle	Left	-
		Right	-
Slip yoke	Type		-
	Number of teeth		-
	Spline o.d.		-
Universal joints	Make and mfg. no.	Inner	TOYOTA MOTOR CORPORATION, 43403-10010
		Outer	TOYOTA MOTOR CORPORATION, 43405-16031
	Number used		4
	Type, size, plunge	Inner	Tripod, plunging
		Outer	Tripod, fixed
	Attach (u-bolt, clamp, etc)		Snap ring
	Bearing	Type (plain, anti-friction)	-
		Lubrication (fitting, prepack)	-
Drive taken through (torque tube, arms or springs)			Arm
Torque taken through (torque tube, arms or springs)			Engine mounting system

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

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Body Type And/Or Engine Displacement	All models

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.		–
	Manual/automatic control		–
	Number of damping rates		–
	Type of actuation (manual/ electric motor/air, etc.)		–
	sensors	Lateral acceleration	–
		Deceleration	–
		Acceleration	–
		Road surface	–
Shock absorber (front & rear)	Type		Fr. & Rr.: Gas pressurized twin tube
	Make		Fr.: TOYOTA, Rr.: KAYABA & TOKIKO
	Piston diameter		Fr.: 30 mm, Rr.: 25 mm
	Rod diameter		Fr.: 20 mm, Rr.: 12.5 mm

Suspension – Front

Type and description			MacPherson strut
Travel*	Full jounce		80 mm
	Full rebound		85 mm
Spring	Type (coil, leaf, other) & material		Coil, SUP12V, SUP7NV
	Insulators (type & material)		Rubber(upper)
	Size (coil design height & i.d.)		M/T: 353.5 x 104.2 - 113.8 mm A/T: 365.0 x 104.2 - 113.8 mm
	Spring rate [N/mm (lb./in.)]		17.7 N/mm
	Rate at wheel [N/mm (lb./in.)]		19.1 N/mm
Stabilizer	Type (link, linkless, frameless)		N.A.
	Material & bar diameter		N.A.

Suspension – Rear

Type and description			Trailing, torsion beam type
Travel*	Full jounce		90 mm
	Full rebound		90 mm
Spring	Type (coil, leaf, other) & material		Coil, SUP7
	Size (length x width, coil design height & i.d.)		343 x 73 mm
	Spring rate [N/mm (lb./in.)]		16.4 N/mm
	Rate at wheel [N/mm (lb./in.)]		18.2 N/mm
	Insulators (type & material)		Rubber (upper & lower)
	If leaf	No. of leaves	–
		Shackle (comp. or tens.)	–
Stabilizer	Type (link, linkless, frameless)		–
	Material & bar diameter		STKH13-2, Dia.: 24.2 mm, t: 2.3 mm
Track bar (type)			–

* Define load condition:

MVMA Specifications

Vehicle Line TERCEL
Model Year 1990 Issued _____ Revised (*) _____

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement	All models

Brakes – Service

Description			–
Manufacturer and brake type (std., opt., n.a.)	Front (disc or drum)		Disc, Std.
	Rear (disc or drum)		Drum, Std.
Valving type (proportion, delay, metering, other)			P. 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)		N.A.
	Pump-type (elec. gear driven, belt driven)		N.A.
Traction control	Operational speed range		–
	Type engine intervention (electronic, mech.)		–
Anti-lock device	Front / rear (std., opt., n.a.)		N.A.
	Manufacturer		–
	Type (electronic, mech.)		–
	Number sensors or circuits		–
	Number anti-lock hydraulic circuits		–
	Integral or add-on system		–
	Yaw control (yes, no)		–
	Hydraulic power source (elec., vac. mtr., pwr. strg.)		–
Effective area [cm²(in.²)]* (F/R)			176 cm²/204 cm²
Gross Lining area [cm²(in.²)]**(F/R)			176 cm²/204 cm²
Swept area [cm²(in.²)]***(F/R)			1127 cm²/339 cm²
Rotor	Outerworking diameter	F/R	243 mm/N.A.
	Inner working diameter	F/R	147 mm/N.A.
	Thickness	F/R	11.0 mm/N.A.
	Material & type (vented/solid)	F/R	Cast iron, Solid/N.A.
Drum	Diameter & width	F/R	N.A./180.0 mm
	Type and material	F/R	N.A./Cast iron
Wheel cylinder bore		F/R	48.10 mm/17.46 mm
Master cylinder	Bore/stroke	F/R	20.64 mm/14.00 mm
Pedal arc ratio			M/T: 4.24, A/T: 4.26
Line pressure at 445 N(100 lb.) pedal load [kPa (psi)]			–
Lining clearance		F/R	Self adjusting
Brake lining	Front wheel	Bonded or riveted (rivets/seg.)	Bonded
		Rivet size	–
		Manufacturer	NISSHINBO, AISIN, SUMITOMO, BENDIX
		Lining code*****	–
		Material	Resin molded
		**** Primary or out-board	103 x 43 x 10 mm
		Size Secondary or in-board	103 x 43 x 10 mm
		Shoe thickness (no lining)	5.0 mm
	Rear wheel	Bonded or riveted (rivets/seg.)	Bonded
		Manufacturer	NISSHINBO
		Lining code*****	–
		Material	Resin molded
		**** Primary or out-board	173 x 30 x 4 mm
		Size Secondary or in-board	173 x 30 x 4 mm
		Shoe thickness (no lining)	1.6 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 TERCEL

Model Year 1990 Issued _____ Revised (•) _____

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement	All models

Tires And Wheels (Standard)

Tires	Size (load range, ply)		155SR13, P145/80 R13 (4M/T)
	Type (bias, radial, steel, nylon, etc.)		Radial
	Inflation pressure (cold) for recommended max. vehicle load	Front [kPa (psi)]	193 kPa (28 psi), 220 kPa (32 psi)(4M/T)
		Rear [kPa (psi)]	193 kPa (28 psi), 220 kPa (32 psi)(4M/T)
	Rev./mile-at 70 km/h (45 mph)		919.8, 936.7 (4M/T)
Wheels	Type & material		Steel
	Rim (size & flange type)		4½-Jx13
	Wheel offset		45 mm
	Attachment	Type (bolt or stud)	Hub nut
		Circle diameter	100 mm
		Number & size	4, M12x1.5
Spare	Tire and wheel		T105/70D14
	Storage position & location (describe)		Trunk room

Tires And Wheels (Optional) (Except 4M/T)

Tire size (load range, ply)	155 SR13 AS
radial, steel, nylon, etc.)	Radial
Wheel (type & material)	Steel
Rim (size, flange type and offset)	4½-Jx13
Tire size (load range, ply)	155 SR13
Type (bias, radial, steel, nylon, etc.)	Radial
Wheel (type & material)	Steel
Rim (size, flange type and offset)	5-Jx13
Tire size (load range, ply)	155 SR13 AS
Type (bias, radial, steel, nylon, etc.)	Radial
Wheel (type & material)	Steel
Rim (size, flange type and offset)	5-Jx13
Tire size (load range, ply)	-
Type (bias, radial, steel, nylon, etc.)	-
Wheel (type & material)	-
Rim (size, flange type and offset)	-
Spare tire and wheel size (if configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position)	-

Brakes – Parking

Type of control		Hand operated
Location of control		Central tunnel between seats
Operates on		With rear service brake
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

Vehicle Line TERCEL

Model Year 1990 Issued _____ Revised (•) _____

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement	All models

Steering

Manual (std., opt., n.a.)					Std.
Power (std., opt., n.a.)					Opt., N.A.(EL31L-NGKBSA)
Adjustable steering wheel/column (tilt, telescope, other)			Type		-
			Manufacturer		-
			(std., opt., n.a.)		N.A.
Wheel diameter** (W9) SAE J1100			Manual		380 mm, 370 mm (DLX, STD Opt.)
			Power		380 mm, 370 mm (DLX, STD Opt.)
Turning diameter m (ft.)	Outside front		Wall to wall (l. & r.)		10.3 m
			Curb to curb (l. & r.)		9.5 m
	Inside rear		Wall to wall (l. & r.)		5.0 m
			Curb to curb (l. & r.)		5.2 m
Scrub Radius*					
Manual	Gear		Type		Rack & pinion
			Manufacturer		TOYOTA
		Ratios		Gear	∞
				Overall	20.9
	No. wheel turns (stop to stop)				3.7
Power	Type (coaxial, elec., hyd., etc.)				Hydraulic integral
	Manufacturer				TOYOTA
	Gear		Type		Rack & pinion
		Ratios		Gear	∞
				Overall	17.0
	Pump (drive)				V ribbed belt
	No. wheel turns (stop to stop)				3.1
Linkage	Type				Ackermann
	Location (front or rear of wheels, other)				Rear of wheels
	Tie rods (one or two)				2
Steering axis	Inclination at camber (deg.)				11°35'
	Bearings (type)		Upper		Ball bearing
			Lower		Ball joint
			Thrust		-
Steering spindle/knuckle & joint type					Ball joint
Wheel spindle/hub	Diameter		Inner bearing		38.0 mm
			Outer bearing		71.0 mm
	Thread (size)				M19 x 1.5
	Bearing (type)				Fr.: Double angular ball bearing, Rr.: Tapered roller 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 TERCEL
Model Year 1990 Issued _____ Revised (•) _____

METRIC (U.S. Customary)

Body Type And/Or Engine Displacement	All models

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	1°±45', 2°25'±45' (w/power steering)
		Camber (deg.)	0°±45'
		Toe-in [outside track-mm (in.)]	0±2 mm
	Service reset*	Caster	1°00'±30', 2°25'±30' (w/power steering): Pre-set
		Camber	0°±30': Pre-set
		Toe-in	0±1 mm: Adjustable
	Periodic M.V. inspection	Caster	1°00'±45', 2°25'±45' (w/power steering)
		Camber	0°±45'
		Toe-in	0±2 mm
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	0°±45'
		Toe-in [outside track-mm (in.)]	3.3±3.3 mm
	Service reset*	Camber	0°±45' Pre-set
		Toe-in	3.3±3.3 mm Pre-set
	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.)	Needle analog, round
	Trip odometer (std., opt., n.a.)	Std.
EGR maintenance indicator		N.A.
Charge indicator	Type	Electrical
	Warning device (light, audible)	Light
Temperature indicator	Type	Electrical gauge
	Warning device (light, audible)	N.A.
Oil pressure indicator	Type	Electrical
	Warning device (light, audible)	Light
Fuel indicator	Type	Electrical gauge
	Warning device (light, audible)	N.A., Light (Opt. for 2-Door DLX & 3-Door STD)
Windshield wiper	Type (standard)	Motor 2-speed
	Type (optional)	Motor 3-speed (DLX & EL31L-ZGHREA)
	Blade length	Dr.: 475 mm, Ps.: 450 mm
	Swept area (cm^2(in.²))	5730 cm^2
Windshield washer	Type (standard)	Electrical
	Type (optional)	-
	Fluid level indicator (light, audible)	N.A.
Rear window wiper, wiper/washer (std., opt., n.a.)		
Horn	Type	Electric disk type
	Number used	1
Other		

MVMA Specifications

Vehicle Line TERCEL
Model Year 1990 Issued _____ Revised (*) _____

METRIC (U.S. Customary)

Engine Description / Engine Code	All models

Electrical – Supply System

Battery	Manufacturer	GS, YB, KB, FU, NAT
	Model, std., (opt.)	M/T: 50D20L MF, 32C 24L, 55D 23L MF, A/T: 55D 23L MF, 32C 24L
	Voltage	12V
	Amps at 0°F cold crank	50D: 306A, 55D: 310A, 32C: 238A
	Minutes-reserve capacity	50D: 78, 55D: 90, 32C: 57
	Amps/hrs.-20 hr. rate	50D: 50AH, 55D: 60AH, 32C: 40AH
	Location	Left front of vehicle
Alternator	Manufacturer	
	Rating (idle/max. rpm)	AC, M/T: 50A, 55A(EL31L-NGKBSA), A/T: 55A, 60A(3E-E)
	Ratio (alt. crank/rev.)	2.54, 2.8(M/T except EL31L-NGKBSA)
	Output at idle (rpm, park)	
	Optional (type & rating)	M/T: 55A, A/T: 60A, N.A.(3E-E)
Regulator	Type	IC

Electrical – Starting System

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

Electrical – Ignition System

Type	Electronic (std., opt., n.a.)		Std.
	Other (specify)		-
Coil	Manufacturer		NIPPONDENSO CO., LTD.
	Model		-
	Current	Engine stopped – A	0 A
		Engine idling – A	0.9 A(3E), 0.8 A(3E-E)
Spark plug	Manufacturer		NIPPONDENSO CO., LTD., NGK SPARK PLUG CO., LTD.
	Model		W16EXR-U11, BPR5EY-11
	Thread (mm)		M14.0 - 19.0
	Tightening torque [N·m (lb. ft)]		17.7 N·m
	Gap		1.1 mm
	Number per cylinder		1
Distributor	Manufacturer		NIPPONDENSO CO., LTD
	Model		-

Electrical – Suppression

Locations & type	Frame spray coating rotor, Resistive spark plug, Resistive high-tension cord

MVMA Specifications

Vehicle Line TERCEL
Model Year 1990 Issued _____ Revised (•) _____

METRIC (U.S. Customary)

Body Type	All models

Body

Structure		Monocoque
Bumper system front - rear	Bar material & mass (kg)	Front: Urethane 3.2 kg Rear : Urethane 3.4 kg, 3.7 kg (2-Door)
	Reinforcement material & mass (kg)	Front: Steel 8.0 kg, 7.7 kg (EL31L-NGKBSA) Rear : Steel 10.9 kg, 11.2 kg (2-Door)
Anti-corrosion treatment		-

Body – Miscellaneous Information

Type of finish (lacquer, enamel, other)		Acryl
Hood	Material & mass	-
	Hinge location (front, rear)	Rear
	Type (counterbalance, prop)	Prop
	Release control (internal, external)	Internal
Trunk lid	Material & mass	-
	Type (counterbalance, other)	Counterbalance
	Internal release control (elec., mech., n.a.)	Mechanical (option)
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	Panel frame + formed pad
	Rear	Wire frame + formed pad
	3rd seat	-
Seat back type (e.g., 60/40, bucket, bench, wire, foam, etc.)	Front	Pipe frame + foamed pad
	Rear	Panel frame + foamed pad, board frame + foamed pad (2-Door)
	3rd seat	-

MVMA Specifications

Vehicle Line TERCEL

Model Year 1990 Issued _____ 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	N.A.	-	N.A.
		Second seat	Std.: 3-point NR(shoulder) ALR(lap)	Std.: 2-point, NR	Std.: 3-point NR(shoulder) ALR(lap)
		Third seat	-	-	-
Passive	Type & description (air bag, motorized - 2-point belt, fixed belt, knee bolster, manual - lap belt) Standard / optional	First seat	Std.: Manual 2-point Knee bar/lap belt	-	Std.: Manual 2-point Knee bar/lap belt
		Second seat	N.A.	N.A.	N.A.
		Third seat	-	-	-

Glass	SAE Rec. No.	
Windshield glass exposed surface area [cm^2(in.^{2})]	S1	8420 cm^2, 8108 cm^2(2-Door)
Side glass exposed surface area [cm^2(in.^{2})] - total 2-sides	S2	11890 cm^2, 9181 cm^2(2-Door)
Backlight glass exposed surface area [cm^2(in.^{2})]	S3	6589 cm^2, 7124 cm^2(2-Door)
Total glass exposed surface area [cm^2(in.^{2})]	S4	26899 cm^2, 24413 cm^2(2-Door)
Windshield glass (type)		Laminated glass
Side glass (type)		Tempered glass
Backlight glass (type)		Tempered glass

Headlamps

Description - sealed beam, halogen, replaceable bulb, etc.	-
Shape	Replacable bulb, 2E1 type (BASE)
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

MVMA Specifications

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METRIC (U.S. Customary)

Body Type	All models

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

Air conditioning (manual, auto. temp control)		Opt., N.A.(EL31L-NGKBSA)
Clock (digital, analog)		N.A., Opt.(EL31L-ZGHREA, -ZDMDSA, -ZDHDSA)
Compass / thermometer		-
Console (floor, overhead)		-
Defroster, elec. backlight		Opt., Std.(2-Door DLX)
Electronic	Diagnostic monitor (integrated, individual)	-
	Instrument cluster (list instruments)	-
	Keyless entry	-
	Tripminder (avg. spd., fuel)	-
	Voice alert (list items)	-
	Other	-
Fuel door lock (remote, key, electric)		-
Lamps	Auto head on / off delay, dimming	-
	Cornering	N.A.
	Courtesy (map, reading)	N.A.
	Door lock, ignition	N.A.
	Engine compartment	N.A.
	Fog	-
	Glove compartment	N.A.
	Trunk	Opt.
	Illuminated entry system (list lamps, activation)	-
	Other	-
Mirrors	Day / night (auto. man.)	-
	L.H. (remote, power, heated)	-
	R.H. (convex, remote, power, heated)	-
	Visor vanity (RH / LH, illuminated)	-
Navigation system (describe)		-
Parking brake-auto release (warning light)		-

MVMA Specifications

Vehicle Line TERCEL
Model Year 1990 Issued _____ 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)		-
	Seats	2 - 4 - 6 way, etc.	-
		Reclining (R.H., L.H.)	-
		Memory (R.H., L.H., present, recline)	-
		Lumbar, hip, thigh, support	-
		Heated (R.H., L.H., other)	-
	Side windows		N.A.
	Vent windows		N.A.
	Rear windows		N.A.
Radio systems	Antenna (location, whip, w / shield, power)		Power antenna: N.A.
	Standard		-
	Optional	AM, FM, stereo, tape, compact disc, graphic equalizer, theft deterrent, radio prep package, headphone jacks, etc.	AM 5-button 1-speaker AM/FM multi ETR 2-speaker AM/FM multi ETR 4-speaker
	Speaker (number, location)		Opt., rear
Roof: open air or fixed (flip-up, sliding, "T")			-
Speed control device			N.A.
Speed warning device (light, buzzer, etc.)			N.A.
Tachometer (rpm)			-
Telephone system (describe)			-
Theft deterrent system			Steering lock

MVMA Specifications

Vehicle Line TERCEL
Model Year 1990 Issued _____ 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.	2-Door Sedan	3-Door Sedan
Ø Width			
Tread (front)	W101	1385 mm	1385 mm
Tread (rear)	W102	1375 mm	1375 mm
Vehicle width	W103	1625 mm	1625 mm
Body width at Sg RP (front)	W117	1624 mm	1624 mm
Vehicle width (front doors open)	W120	3751 mm	3751 mm
Vehicle width (rear doors open)	W121	-	-
Tumble-home (deg.)	W122	23.7°	23.7°
Outside mirror width	W410		
Ø Length			
Wheelbase	L101	2380 mm	2380 mm
Vehicle length	L103	4235 mm	3995 mm
Overhang (front)	L104	835 mm	835 mm
Overhang (rear)	L105	1020 mm	780 mm
Upper structure length	L123	2461.3 mm	2618.4 mm
Rear wheel C/L "X" coordinate	L127	2380 mm	2380 mm
Ø Height*			
Passenger distribution (front/rear)	PD1.2.3	2/1	2/1
Trunk/cargo load		0	0
Vehicle height	H101	1315 mm	1335 mm
Cowl point to ground	H114	890 mm	890 mm
Deck point to ground	H138	910 mm	720 mm
Rocker panel-front to ground	H112	195 mm	195 mm
Rocker panel-rear to ground	H111	200 mm	200 mm
Windshield slope angle	H122	59°	56.5°
Backlight slope angle	H121	53.3°	47°
Ground Clearance*			
Front bumper to ground	H102	380 mm	380 mm
Rear bumper to ground	H104	365 mm	365 mm
Bumper to ground [front at curb mass (wt.)]	H103	400 mm	400 mm
Bumper to ground [rear at curb mass (wt.)]	H105	410 mm	405 mm
Angle of approach (degrees)	H106	21.5°	21.5°
Angle of departure (degrees)	H107	15°	21°
Ramp breakover angle (degrees)	H147	15°	15°
Axle differential to ground (front/rear)	H153	165 mm	165 mm
Min. running round clearance	H156	80 mm	80 mm
Location of min. run. grd. clear.		Front side member	Front side member

* All vehicle height and ground clearances are measured at the Manufacturer's Design Load Weight.
Manufacturers 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 TERCEL
Model Year 1990 Issued _____ Revised (•) _____

METRIC (U.S. Customary)
Vehicle Dimensions See Key Sheets for definitions

Body Type	SAE Ref. No.	2-Door Sedan	3-Door Sedan
∅ Front Compartment			
SgRP front, "X" coordinate	L31	1297 mm	1297 mm
Effective head room	H61	959.2 mm	976 mm
Max. eff. leg room (accelerator)	L34	1020 mm	1020 mm
SgRP to heel point	H30	267.8 mm	267.8 mm
SgRP to heel point	L53	772.1 mm	772.1 mm
Back angle	L40	21°	21°
Hip angle	L42	90°	90°
Knee angle	L44	118°	118°
Foot angle	L46	87°	87°
Design H-point front travel	L17	208.4 mm	208.4 mm
Normal driving & riding seat track trvl.	L23	208.4 mm	208.4 mm
Shoulder room	W3	1309 mm	1309 mm
Hip room	W5	1283 mm	1283 mm
Upper body opening to ground	H50	1202.4 mm	1221.3 mm
Steering wheel maximum diameter*	W9		
Steering wheel angle	H18	25°16'	25°16'
Accel. heil pt. to steer. whl. cntr	L11		
Accel. heel pt. to steer. whl. cntr	H17		
Undepressed floor covering thickness	H67	8.75 mm	8.75 mm
∅ Rear Compartment			
SgRP point couple distance	L50	682.5 mm	710 mm
Effective head room	H63	912.2 mm	930 mm
Min. effective leg room	L51	782.8 mm	816 mm
SgRP (second to heel)	H31	309 mm	314.5 mm
Knee clearance	L48	-90 mm	-34 mm
Shoulder room	W4	1287 mm	1308 mm
Hip room	W6	1255.6 mm	1079 mm
Upper body opening to ground	H51	-	-
Back angle	L41	27°	26°
Hip angle	L43	84.3°	91°
Knee angle	L45	70.6°	83°
Foot angle	L47	103.4°	108.5°
Depressed floor covering thickness	H73	8.75 mm	8.75 mm
Luggage Compartment			
Usable luggage capacity [L (cu. ft.)]	V1	-	-
Liftover height	H195	815 mm	750 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 TERCEL
Model Year 1990 Issued _____ Revised (*) _____

METRIC (U.S. Customary)
Vehicle Dimensions See Key Sheets for definitions

Body Type	SAE Ref. No.	2-Door Sedan	3-Door Sedan
Station Wagon – Third Seat			
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	–	956
Cargo length at floor (front)	L209	–	1447.6
Cargo length at second seatback height	L210	–	377.8, 303(w/headrest)
Cargo length at floor (second)	L211	–	764.4
Front seatback to load floor height	H197	–	651.9
Second seatback to load floor height	H198	–	479.9, 544.9(w/headrest)
Cargo volume index [m^3($ft.^3$)]	V3	–	1025
Hidden cargo volume index [m^3($ft.^3$)]	V4	–	0.346, 0.380(w/headrest)
Cargo volume index-rear of 2-seat	V11	–	0.346, 0.380(w/headrest)

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line TERCEL

Model Year 1990 Issued _____ Revised (*) _____

Body Type	2-Door Sedan	3-Door Sedan

Vehicle Fiducial Marks

Number*		Define Coordinate Location	
Front		Center of the installation hole of seat track outer on front floor cross-member, both sides	
Rear		Center of the front installation hole of rear seat belt retractor on center floor, both sides	
Fiducial Mark Number			
Front	W21*	W5 + 45.5 mm	W5 + 45.5 mm
	L54*	L19 + 56 mm	L19 + 56 mm
	H81*	H10 + 86 mm	H10 + 86 mm
	H161*	310 mm	280 mm
	H163*	280 mm	310 mm
Rear	W22*	W5 + 12.4 mm	W5 + 12.4 mm
	L55*	L30 + 44 mm	L30 + 44 mm
	H82*	H11 + 28 mm	H11 + 28 mm
	H162*	360 mm	325 mm
	H164*	325 mm	360 mm

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

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line TERCEL

Model Year 1990 Issued _____ Revised (•) _____

Code	Model	Vehicle Mass (weight)							
		CURB MASS. kg. (lb.)* lbs.			% PASS MASS DISTRIBUTION				ETWC** Code
					Pass in Front		Pass in Rear		
		Front	Rear	Total	Front	Rear	Front	Rear	
	EL31L-ZGKBSA	1210	780	1990	45	55	16	84	
	EL31L-ZGMRSA	1210	780	1990	45	55	16	84	
	EL31L-ZGHBSA	1290	760	2050	45	55	16	84	
	EL31L-ZGHRSA	1290	760	2050	45	55	16	84	
	EL31L-ZGHREA	1290	760	2050	45	55	16	84	
	EL31L-ZDMRSA	1215	805	2020	45	55	16	84	
	EL31L-ZDMDSA	1220	810	2030	45	55	16	84	
	EL31L-ZDHRSA	1290	780	2070	45	55	16	84	
	EL31L-ZDHREA	1290	780	2070	45	55	16	84	
	EL31L-ZDHDSA	1295	785	2080	45	55	16	84	
	EL31L-ZDODEA	1295	785	2080	45	55	16	84	
	EL31L-NGKBSA	1210	780	1990	45	55	16	84	

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

** ETWC – Equivalent Test Weight Class – basis for U.S. Environmental Protection Agency emission certifications. Refer to ETWC code legend below for test weight class.

ETWC LEGEND

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

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

Shipping Mass (weight) = Curb Weight Less: 65 lbs.

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line TERCEL

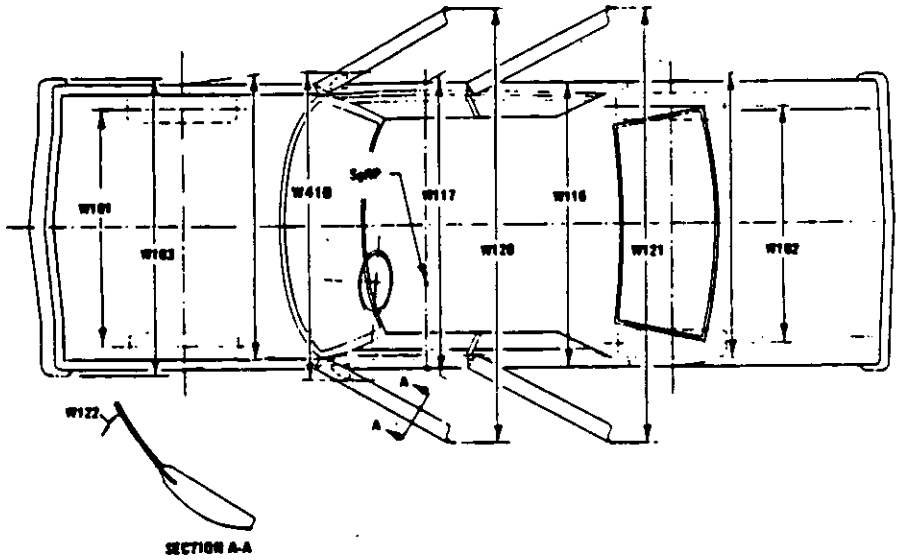
Model Year 1990 Issued _____ Revised (•) _____

Code	Equipment	Optional Equipment Differential Mass (weight)* MASS, kg. (lb.) Front	Rear	Total	Remarks Restrictions, Requirements
	Air conditioner	50	-5	45	Except EL31L-NGKBSA
	Power steering	25	0	25	Except EL31L-NGKBSA
	Cold area package	10	0	10	
	Package tray	0	10	10	Except 2-Door & EL31L-NGKBSA
	Rear wiper	0	5	5	Except 2-Door & EL31L-NGKBSA

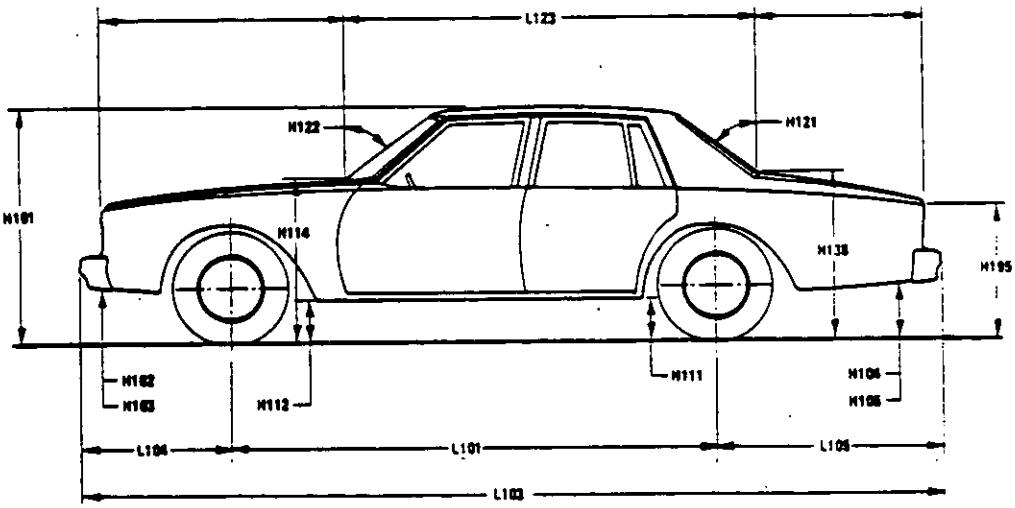
* Also see Engine - General Section for dressed engine mass (weight).

Exterior Vehicle And Body Dimensions – Key Sheet

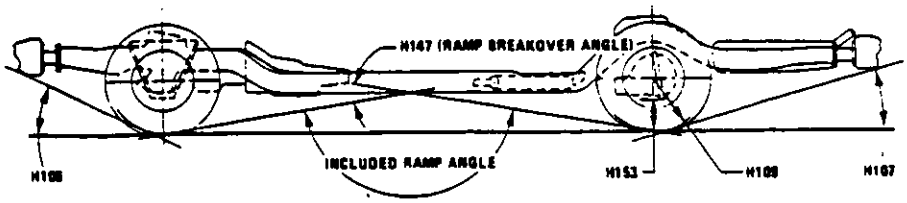
Exterior Width



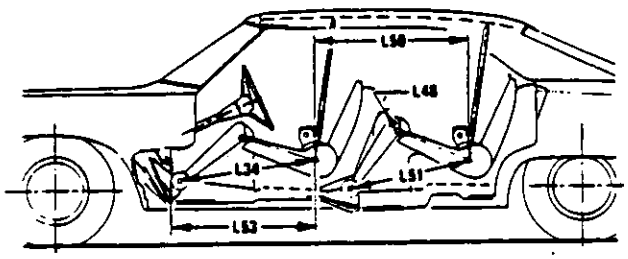
Exterior Length & Height

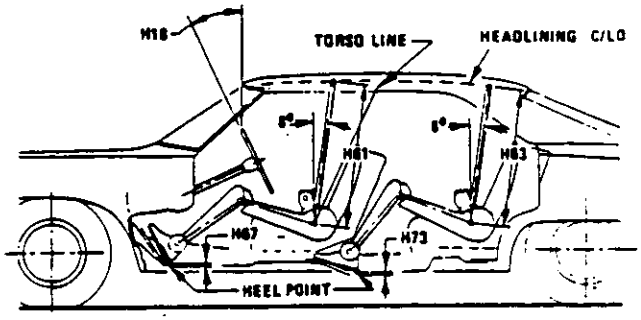


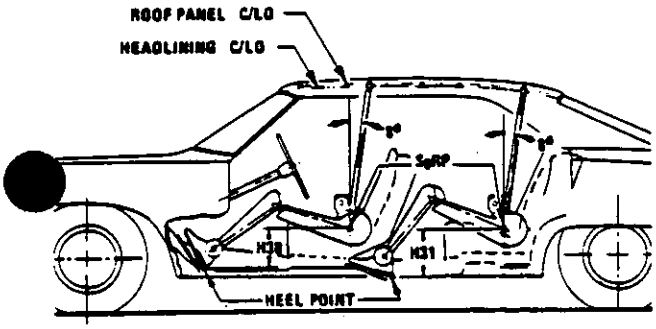
Exterior Ground Clearance

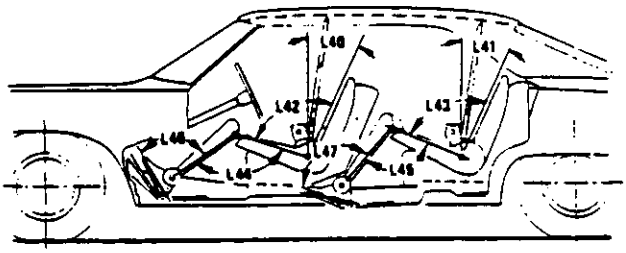


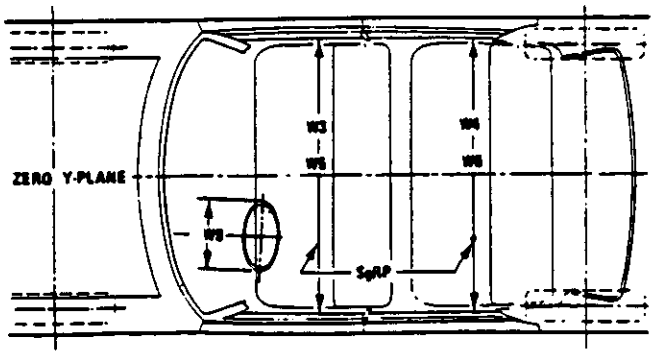
Interior Vehicle And Body Dimensions – Key Sheet

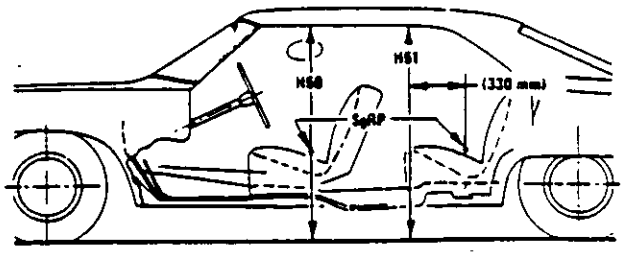






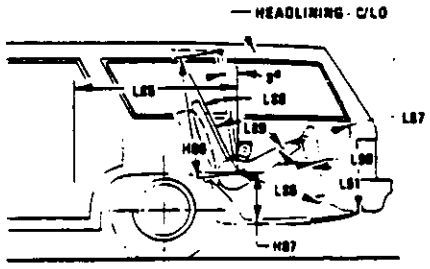


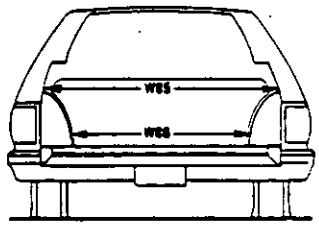




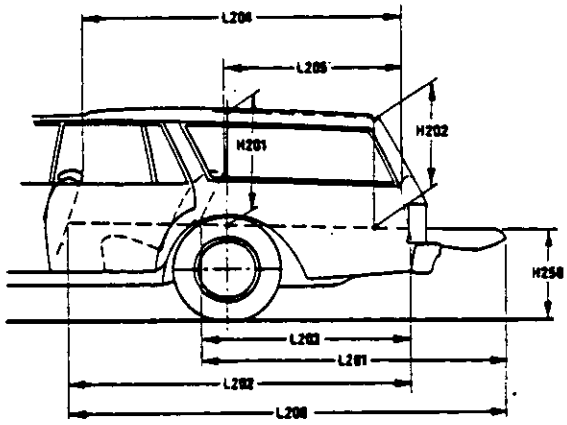
Interior Vehicle And Body Dimensions – Key Sheet

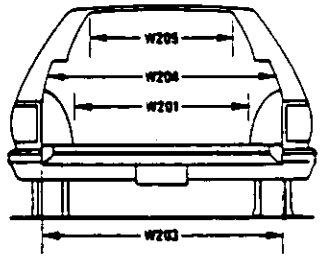
Third Seat



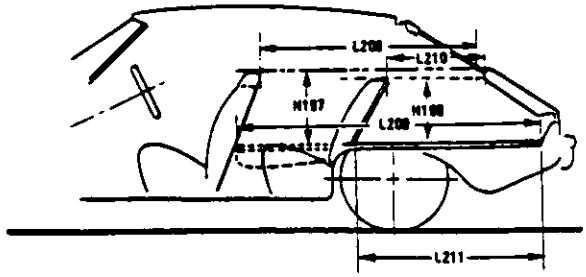


Cargo Space





Station Wagon



Hatchback

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.

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

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.

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 estiamtes the space in a car. It is based on four measurements – head room, shoulder room, hip room, and leg room – for the front and rear seats, plus trunk capacity. The Interior Volume Index is an estimate of the size of the passenger compartment.

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

Station Wagon – Third Seat Dimensions

L85 SgRP COUPLE DISTANCE – THIRD. The dimension measured horizontally from the SgRP – second to the SgRP – third.

L86 EFFECTIVE LEG ROOM – THIRD. The dimension measured along a line from the ankle pivot center to the SgRP – third plus 254 mm (10.0 in.).

L87 KNEE CLEARANCE – THIRD. The minimum dimension from the knee pivot center to the back of second seatback minus a constant of 51 mm (2.0 in.). With rear-facing third seat, dimension is measured to closure.

L88 BACK ANGLE – THIRD. Measured in the same manner as L41.

L89 HIP ANGLE – THIRD. Measured in the same manner as L43.

L90 KNEE ANGLE – THIRD. Measured in the same manner as L45

L91 FOOT ANGLE – THIRD. Measured in the same manner as 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 undepressed floor covering to the rearmost point on the undepressed floor covering on the open tailgate or cargo surface if the rear closure is a conventional door type tailgate at the zero "Y" plane.

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

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

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

L204 CARGO LENGTH AT BELT – FRONT. The minimum dimension measured horizontally from the back of the front seatback at the seatback top to the foremost normal surface of the closed tailgate or inside surface of the cab backpanel at the height of the belt, on the zero "Y" plane.

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

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

W203 REAR OPENING WIDTH AT FLOOR. The minimum dimension measured laterally between the limiting interferences of the rear opening at floor level.

W204 REAR OPENING WIDTH AT BELT. The minimum dimension measured laterally between the limiting interferences of the rear opening at belt height or top of pick up box.

W205 REAR OPENING WIDTH ABOVE BELT. The minimum dimension measured laterally between the limiting interferences of the rear opening above the belt height.

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

H201 CARGO HEIGHT. The dimension measured vertically from the top of the undepressed floor covering to the headlining at the rear wheel "X" coordinate on the zero "Y" plane.

H202 REAR OPENING HEIGHT. The dimension measured vertically from the top of the undepressed floor covering to the upper trimmed opening on the zero "Y" plane with rear door fully open.

H250 TAILGATE TO GROUND CURB MASS (WT.). The dimension measured vertically from the top of the undepressed floor covering on the lowered tailgate to ground on the zero "Y" plane.

V2 STATION WAGON

Measured in inches:

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

Measured in mm:

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

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:

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

Measured in mm:

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

V6 TRUCKS AND MPV'S WITH CLOSED AREA.
Measured in inches:

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

Measured in mm:

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

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:

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

Measured in mm:

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

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:

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

Measured in mm:

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

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:

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

Measured in mm:

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

MVMA Specifications

METRIC (U.S. Customary)

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