

MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC(U.S. Customary)

Passenger Car

1986

Manufacturer Toyota Motor Corporation	Car Line CELICA	
Mailing Address Toyota Motor Sales, U.S.A., Inc. Torrance, California	Issued 1986	Revised

Questions concerning these specifications should be directed to the manufacturer whose address is shown above.

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

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Motor Vehicle Manufacturers Association
of the United States, Inc.

MVMA Specifications Form

Passenger Car

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 completion and are subject to change without notice by the manufacturer.
4. Additional Car and Body Dimensions (based in part on SAE J1100 "Motor Vehicle Dimensions") may be available from the manufacturer.

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Car Line CELICA
Model Year 1986 Issued _____ Revised (e) _____

Car Models

Model Description & Drive (FWD/RWD)	Introduction Date	Make, Car Line, Series, Body Type (Mfr's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk Cargo Load—Kilograms (Pounds)
Celica ST Sport Coupe		ST161L-BCMSEA	2/2	56
Celica ST Sport Coupe		ST161L-BCPSEA	2/2	56
Celica GT Sport Coupe		ST161L-BCMVEA	2/2	56
Celica GT Sport Coupe		ST161L-BCPVEA	2/2	56
— Celica GT-S Sport Coupe		ST162L-BCMVFA	2/2	56
— Celica GT-S Sport Coupe		ST162L-BCPVFA	2/2	56
Celica GT Liftback		ST161L-BLMVEA	2/2	56
Celica GT Liftback		ST161L-BLPVEA	2/2	56
— Celica GT-S Liftback		ST162L-BLMVFA	2/2	56

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Power Teams (Indicate whether standard or optional)

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

SERIES AVAILABILITY	ENGINE					E x h a u s t S/D	TRANSMISSION TRANSAXLE	AXLE RATIO (std. first)
	Displ. Liters (in ³)	Ccarb. (Barrels, Fl. etc.)	Compr. Ratio	SAE Net at RPM				
				kW (bhp)	Torque N·m (lb. ft.)			
ST161L-BCMSEA	1.995	FI	8.7	72/ 4400	160/ 4000		5 M/T	3.736
ST161L-BCPSEA	1.995	FI	8.7	72/ 4400	160/ 4000		4 A/T	3.737
ST161L-BCMVEA	1.995	FI	8.7	72/ 4400	160/ 4000		5 M/T	3.736
ST161L-BCPVEA	1.995	FI	8.7	72/ 4400	160/ 4000		4 A/T	3.737
ST162L-BCMVFA	1.998	FI	9.2	101/ 6000	170/ 4800		5 M/T	4.176
ST162L-BCPVFA	1.998	FI	9.2	101/ 6000	170/ 4800		4 A/T	3.944
ST161L-BLMVEA	1.995	FI	8.7	72/ 4400	160/ 4000		5 M/T	3.736
ST161L-BLPVEA	1.995	FI	8.7	72/ 4400	160/ 4000		4 A/T	3.737
ST162L-BLMVFA	1.998	FI	9.2	101/ 6000	170/ 4800		5 M/T	4.176

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Model Year 1986 Issued _____ Revised (•) _____

Engine Description/Carb.
Engine Code

2S-E

3S-GE

ENGINE - GENERAL

Type & description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sonic, dohc, drv, hemi, wedge, pre-camber, etc.)	Inline, front, vertical, SOHC, wedge	Inline, front, vertical, DOHC, pent roof
Manufacturer		
No. of cylinders	4	
Bore	84.0 mm	86.0 mm
Stroke	90.0 mm	86.0 mm
Bore spacing (C/L to C/L)	93.5-96.5-93.5	
Cylinder block material & mass kg (lbs.)	Gray cast iron	
Cylinder block deck height	216.0 mm	
Deck clearance (minimum) (above or below block)	0.40 mm	0.10 mm
Cylinder head material & mass kg (lbs.)	Aluminum casting alloy	
Cylinder head volume (cm ³)	45.2 cm ³	50.8 cm ³
Head gasket thickness (compressed)	1.25 mm	
Minimum combustion chamber total volume (cm ³)	64.77 cm ³	60.84 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 (weight, lbs.))		
Exhaust manifold material & mass (kg (weight, lbs.))		
Recommended fuel (leaded, unleaded, diesel)	Unleaded	
Fuel antiknock index (R + M) 2	87	
Total dressed engine mass (wt) dry**	M/T: 118 kg A/T: 108 kg	M/T: 139 kg A/T: 131 kg

Engine - Pistons

Material & mass, g (weight, oz.) - piston only	Aluminum casting alloy 330 g	Aluminum casting alloy 372 g
--	---------------------------------	---------------------------------

Engine - Camshaft

Location		Over cylinder head	
Material & mass kg (weight, lbs.)		2.23 kg	Alloy cast iron 1.56 kg
Drive type	Chain / belt	Belt	
	Width / pitch	25.40/9.525 mm	25.40/8.000 mm

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

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

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3S-GE

Engine - Valve System

Hydraulic lifters (std., opt., NA)

Std.

N.A.

Valves

Number intake / exhaust

Head O.D. intake / exhaust

Engine - Connecting Rods

Material & mass (kg., (weight, lbs.))

0.640 kg

Steel 0.445 kg

Engine - Crankshaft

Material & mass (kg., (weight, lbs.))

Spheroidal graphite cast iron 13.2 kg.

Steel 16.8 kg

End thrust taken by bearing (no.)

No. 3

Number of main bearings

Seal (material,
one, two piece
design, etc.)

Front

Rear

Engine - Lubrication System

Normal oil pressure (kPa (psi) at engine rpm)

343 kPa/ 2500 rpm

Type oil intake (floating, stationary)

Stationary

Oil filter system (full flow, part, other)

Full flow

Capacity of oil case, less filter-refill-L (qt.)

*4.0/3.6 l

*3.9/3.6 l

* with filter/without filter

Engine - Diesel Information

Diesel engine manufacturer

Glow plug, current drain at 0°F

Injector

Type

Nozzle

Opening pressure (kPa (psi))

Pre-chamber design

Fuel in-

Manufacturer

jection pump

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

Super charger - manufacturer

Charge cooler

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Engine Description/Carb.
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All models

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)	
	Number of pumps	1
	Drive (V-belt, other)	Belt
	Bearing type	Sealed ball bearing
	Impeller material	
	Housing material	
Bypass recirculation (type (inter., ext.))		External
Cooling system capacity	With heater—L (qt.)	7.0 l
	With air cond.—L (qt.)	N.A.
	Opt. equipment (specify—L (qt.))	N.A.
Water jackets full length of cyl. (yes, no)		No
Water all around cylinder (yes, no)		No
Water jackets open at head face (yes, no)		
Radiator core	Std., A/C, HD	
	Type (cross-flow, etc.)	Vertical flow
	Construction (fin & tube mechanical, braze, etc.)	Tube & fin
	Material, mass (kg (wgt. bs.))	Copper alloy
	Width	668 mm
	Height	325 mm
	Thickness	16 mm
	Fins per inch	M/T: 8.5 mm 2S-E A/T: 11.3 mm 3S-GE A/T: 9.8 mm
Radiator end tank material		
Fan	Std., elec., opt.	elec.
	Number of blades & type (flex, solid, material)	N.A.
	Diameter & projected width	M/T: 300, 80 mm A/T: 300, 88 mm
	Ratio (fan to crankshaft rev.)	N.A.
	Fan cutout type	N.A.
	Drive type (direct, remote)	N.A.
	RPM at idle (elec.)	M/T: 1900 A/T: 2100
	Motor rating (wattage) (elec.)	M/T: 45W A/T: 80W
	Motor switch (type & location) (elec.)	Water temperature control, water inlet
	Switch point (temp., pressure) (elec.)	Temp. 90°C
	Fan shroud (material)	Cold rolled steel sheet

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Engine Description/Carb.
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										
Carburetor	<table> <tr> <td>Mfr.</td><td></td></tr> <tr> <td>Choke (type)</td><td></td></tr> <tr> <td>Idle spd. (rpm (spec. neutral or drive and propane if used))</td><td> <table> <tr> <td>Manual</td><td></td></tr> <tr> <td>Automatic</td><td></td></tr> </table> </td></tr> </table>	Mfr.		Choke (type)		Idle spd. (rpm (spec. neutral or drive and propane if used))	<table> <tr> <td>Manual</td><td></td></tr> <tr> <td>Automatic</td><td></td></tr> </table>	Manual		Automatic	
Mfr.											
Choke (type)											
Idle spd. (rpm (spec. neutral or drive and propane if used))	<table> <tr> <td>Manual</td><td></td></tr> <tr> <td>Automatic</td><td></td></tr> </table>	Manual		Automatic							
Manual											
Automatic											
Idle A/F mix.	Preset at manufacturer										
Fuel injection	<table> <tr> <td>Point of injection (no.)</td><td>4</td></tr> <tr> <td>Constant, pulse, flow</td><td>Pulse</td></tr> <tr> <td>Control (electronic, mech.)</td><td>Electronic</td></tr> <tr> <td>System pressure (kPa (psi))</td><td>250 kPa</td></tr> </table>	Point of injection (no.)	4	Constant, pulse, flow	Pulse	Control (electronic, mech.)	Electronic	System pressure (kPa (psi))	250 kPa		
Point of injection (no.)	4										
Constant, pulse, flow	Pulse										
Control (electronic, mech.)	Electronic										
System pressure (kPa (psi))	250 kPa										
Intake manifold heat control (exhaust or water thermostatic or fixed)	N.A.										
Air cleaner type	<table> <tr> <td>Standard</td><td>Dry 1, without hot air intake</td></tr> <tr> <td>Optional</td><td>N.A.</td></tr> </table>	Standard	Dry 1, without hot air intake	Optional	N.A.						
Standard	Dry 1, without hot air intake										
Optional	N.A.										
Fuel pump	<table> <tr> <td>Type (elec. or mech.)</td><td>Electric motor</td></tr> <tr> <td>Location (eng., tank)</td><td>In fuel tank</td></tr> <tr> <td>Pressure range (kPa (psi))</td><td>250 kPa</td></tr> </table>	Type (elec. or mech.)	Electric motor	Location (eng., tank)	In fuel tank	Pressure range (kPa (psi))	250 kPa				
Type (elec. or mech.)	Electric motor										
Location (eng., tank)	In fuel tank										
Pressure range (kPa (psi))	250 kPa										

Fuel Tank

Capacity (refill L (gallons))	60 l												
Location (describe)	Rear part under floor												
Attachment	Band is used												
Material & Mass (kg (weight (lbs)))	Steel plate												
Filler pipe	<table> <tr> <td>Location & material</td><td>Left rear quarter steel pipe</td></tr> <tr> <td>Connection to tank</td><td>Screw tightening</td></tr> </table>	Location & material	Left rear quarter steel pipe	Connection to tank	Screw tightening								
Location & material	Left rear quarter steel pipe												
Connection to tank	Screw tightening												
Fuel line (material)	Steel												
Fuel hose (material)	Rubber												
Return line (material)	Steel												
Vapor line (material)	Steel												
Extended range tank	<table> <tr> <td>Opt., n.a.</td><td>-</td></tr> <tr> <td>Capacity (L (gallons))</td><td>-</td></tr> <tr> <td>Location & material</td><td>-</td></tr> <tr> <td>Attachment</td><td>-</td></tr> </table>	Opt., n.a.	-	Capacity (L (gallons))	-	Location & material	-	Attachment	-				
Opt., n.a.	-												
Capacity (L (gallons))	-												
Location & material	-												
Attachment	-												
Auxiliary tank	<table> <tr> <td>Opt., n.a.</td><td>-</td></tr> <tr> <td>Capacity (L (gallons))</td><td>-</td></tr> <tr> <td>Location & material</td><td>-</td></tr> <tr> <td>Attachment</td><td>-</td></tr> <tr> <td>Selector switch or valve</td><td>-</td></tr> <tr> <td>Separate fill</td><td>-</td></tr> </table>	Opt., n.a.	-	Capacity (L (gallons))	-	Location & material	-	Attachment	-	Selector switch or valve	-	Separate fill	-
Opt., n.a.	-												
Capacity (L (gallons))	-												
Location & material	-												
Attachment	-												
Selector switch or valve	-												
Separate fill	-												

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Car Line CELICA
Model Year 1986 Issued _____ Revised (•) _____

Engine Description/Carb.
Engine Code

2S-E

3S-GE

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		EFI/O ₂ S/EGR/TWC	
	Air Injection	Pump or pulse	N.A.	
		Driven by	N.A.	
		Air distribution (head, manifold, etc.)	N.A.	
		Point of entry	N.A.	
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Controlled flow	
		Exhaust source	#4 Cylinder head Ex. port	#1 Cylinder head Ex. port
		Point of exhaust injection (spacer, carburetor, manifold, other)	Surge tank	
	Catalytic Converter	Type	3 way	
		Number of	1	
		Location(s)	Forward under floor area	
		Volume (L/in ³)	1.7L	
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Closed	
	Energy source (manifold vacuum, carburetor, other)		Manifold vacuum	
	Discharges (to intake manifold, other)		Surge tank	
	Air inlet (breather cap, other)		Head cover	
Evapora- tive Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	Canister	
		Carburetor	N.A.	
	Vapor storage provision		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	
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass (kg (weight lbs))		Reverse flow	1
		Straight flow	1
Resonator no. & type		N.A.	
Exhaust pipe	Branch o.d., wall thickness	ø38.1, t1.5	ø42.7, t1.5
	Main o.d., wall thickness	ø42.7, t1.2	ø50.8, t1.2
	Material & Mass (kg (weight lbs))	Stainless steel	
Inter- mediate pipe	o.d. & wall thickness	ø42.7, t1.6	ø50.8, t1.5, ø48.6, t1.6
	Material & Mass (kg (weight lbs))	Aluminum coated steel	Stainless steel, Aluminum coated steel
Tail pipe	o.d. & wall thickness	ø42.7, t1.2, ø48.6, t1.2	ø48.6, t1.2, ø42.7, t1.2
	Material & Mass (kg (weight lbs))	Aluminum coated steel	Aluminum coated steel, Stainless steel

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2S-E

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Transmissions/Transaxle

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

Manual Transmission/Transaxle

Number of forward speeds		5
Transmission ratios	In first	3.285
	In second	2.041
	In third	1.322
	In fourth	1.028
	In fifth	0.820
	In overdrive	-
	In reverse	3.153
Synchronous meshing (specify gears)		All forward gears (1st, 2nd, 3rd, 4th and 5th)
Shift lever location		Floor
Lubricant	Capacity [L (pt.)]	2.6 l
	Type recommended	ATF DEXRON II
	SAE viscosity number	Summer -
		Winter -
		Extreme cold -

Clutch (Manual Transmission)

Make, type, engagement (describe) - (hydraulic, cable, rod)		Aishinseiki, single dry plate	
Assist (yes, no percent)			
Type pressure plate springs		Diaphragm	
Total spring load [N (lb.)]		3920 N	4410 N
No. of clutch driven discs		1	
Clutch facing	Material	Semimold	
	Manufacturer	Aishinkako	
	Part number	31256-22060	31256-35040
	Rivets plate	16	
	Rivet size	4 mm	
	Outside & inside dia.	ø224 x ø150 mm	
	Total eff. area (cm ² (in. ²))	217 cm ²	
	Thickness	3.5 mm	
Engagement cushion method		Cushion spring	
Release bearing	Type & method of lubrication	Single line ball bearing, grease sealing type	
Torsional damping	Method: springs, friction material	Rubber	

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3S-GE

Automatic Transmission/Transaxle

Trade name	A140L	A140E
Type and special features (describe)	Hydraulic control planetary gear	Electrical control planetary gear
Selector	Location	Floor
	Ltr. No. designation	P R N D 2 L
Gear ratios	R	2.296
	D	0.706
	L ₃	1.000
	L ₂	1.549
	L ₁	2.810
Max. upshift speed - drive range (km/h (mph))		53, 96 km/h *1 52,101,155(normal) 63,114,182(power) km/h
Max. kickdown speed - drive range (km/h (mph))		44, 93 km/h *1 45,95,147(normal) 45,109,174(power) km/h
Min. overdrive speed (km/h (mph))		18 22
Torque converter	Number of elements	3 elements 1 step 2 phases
	Max. ratio at stall	1.920
	Type of cooling (air, liquid)	Water cooling
	Nominal diameter	254 mm
Lubricant	Capacity (refill L (pt.))	6.0 l (except differential gear)
	Type Recommended	ATF Dexron II
Oil cooler (std., opt., NA, internal, external, air, liquid)		

Axle or Front Wheel Drive Unit

*1: 3rd is held where fully opened.

Type (front, rear)		Front	
Description		Helical gear	
Limited slip differential (type)		-	
Drive pinion offset		-	
Drive pinion (type)			
No. of differential pinions		2	
Pinion / differential adjustment (shim, other)		-	
Pinion / differential bearing adjustment (shim, other)		-	
Driving wheel bearing (type)		Double row angular bearing	
Lubricant	Capacity [L (pt.)]	1.6 l (A/T)	
	Type recommended	ATF Drxron II	
	SAE viscosity number	Summer	-
		Winter	-
		Extreme cold	-

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

Axle ratio (or overall top gear ratio)		M/T: 3.064, A/T: 2.493	M/T: 3.424, A/T: 2.631
No. of teeth	Pinion	19	M/T: 17, A/T: 18
	Ring gear or gear	71	
Ring gear o.d.		M/T: - , A/T: 202.3 mm	M/T: - , A/T: 204.3 mm
Transaxle	Transfer gear ratio	0.945 (A/T)	
	Final drive ratio	3.736	M/T: 4.176, A/T: 3.944

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Axle Shafts - Front Wheel Drive

Number used		2	
Type (straight, solid bar, tubular, etc.)		Left	Solid bar
		Right	Solid bar
Outer diam. x length x wall thickness	Manual transmission	Left	ø27 x 364.9
		Right	ø27 x 364.9
	Automatic transmission	Left	ø22.8 x 364.9
		Right	ø23 x 368.6
	Optional transmission	Left	ø22.8 x 364.9
		Right	ø23 x 368.6
Slip yoke	Type	-	
	Number of teeth	-	
	Spline o.d.	-	
Universal joints	Make and mtg. no.	Inner	TOYOTA 43403-32011
		Outer	TOYOTA 43405-32012
	Number used	4	
		Type, size, plunge	Inner
	Outer		Birfield, fixed
	Attach (u-bolt, clamp, etc.)		Snap ring
	Bearing	Type (plain, anti-friction)	Ball bearing
		Lubrication (fitting, prepack)	Grease
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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Propeller Shaft - Rear Wheel Drive

Type (straight tube, tube-in-tube, internal-external damper, etc.)		
Outer diam. x length* x wall thickness	Manual 3-speed trans.	
	Manual 4-speed trans.	
	Manual 5-speed trans.	
	Overdrive	
	Automatic transmission	
Inter-mediate bearing	Type (plain, anti-friction)	
	Lubrication (fitting, prepack)	
Slip yoke	Type	
	Number of teeth	
	Spline o.d.	
Universal joints	Make and mfg. no.	Front
		Rear
	Number used	
	Type (ball and trunnion, cross)	
	Rear attach (u-bolt, clamp, etc.)	
	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 rear attachment.

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Body Type And/Or
Engine Displacement

2S-E ST	2S-E GT	3S-GE
------------	------------	-------

Suspension - General

Car leveling	Std. opt. n.a.	N.A.
	Type (air, hyd., etc.)	N.A.
	Manual/auto. controlled	N.A.
Provision for brake dip control		-
Provision for accel. squat control		-
Provisions for car jacking		-
Shock absorber (front & rear)	Type	Double acting cylinder
	Make	Fr.: TOYOTA, Rr.: KAYABE, TOKIKO
	Piston diameter	ø32
	Rod diameter	ø22

Suspension - Front

Type and description		Macpherson strut			
Drive and torque taken through					
Travel	Full bounce	80 mm			
	Full rebound	90 mm			
Sprng	Type (coil, leaf, other) & material	Coil, SUP7NV or SUP12V			
	Insulators (type & material)				
	Size (coil design height & i.d., bar length & dia.) (mm)	380.5 x 127.6 (M/T)	361.5 x 127.5 (M/T)	369.0 x 127.3 (M/T)	
		389.0 x 127.4 (A/T)	369.0 x 127.3 (A/T)	376.5 x 127.2 (A/T)	
	Sprung rate (N/mm (lb./in.))	17.6 N/mm	19.6 N/mm		
	Rate at wheel (N/mm (lb./in.))	16.6 N/mm	18.4 N/mm		
Stabilizer	Type (link, linkless, frameless)	Link			
	Material & bar diameter	STKM15A ø25.4 x 3.0		S45C or S48C ø24	

Suspension - Rear

Type and description		Macpherson strut			
Drive and torque taken through					
Travel	Full bounce	85 mm			
	Full rebound	100 mm			
Sprng	Type (coil, leaf, other) & material	Coil, SUP7 or SUP7NV			
	Size (length x width, coil design height & i.d., bar length & dia.)	317 x (ø88.7~ø118.7)	328 x (ø88.7~ø118.7)	317 x (ø88.4~ø118.4) (Coupe)	324.5 x (ø88.3~ø118.3) (Liftback)
	Sprung rate (N/mm (lb./in.))	19.6 N/mm	18.6 N/mm	20.6 N/mm	
	Rate at wheel (N/mm (lb./in.))	18.5 N/mm	17.6 N/mm	19.4 N/mm	
	Insulators (type & material)	Upper & Lower cushion, Rubber			
	No. of leaves	-			
	Shackle (comp. or tens.)	-			
Stabilizer	Type (link, linkless, frameless)	Link			
	Material & bar diameter	SUP6 ø13			
Track bar (type)		N.A.			

MVMA Specifications Form Passenger Car

METRIC (U.S. Customary)

Car Line CELICA
Model Year 1986 Issued _____ Revised (e) _____

Body Type And/Or
Engine Displacement

2S-E

3S-GE

Brakes - Service

Description		-	
Brake type (std., opt., n.a.)	Front (disc or drum)	Disc std.	
	Rear (disc or drum)	Drum std.	Disk std.
Self-adjusting (std., opt., n.a.)		Std.	
Special 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.)		N.A.	
Vacuum reservoir (volume in. ³)		N.A.	
Vacuum pump-type (elec. gear driven, belt driven, if other so state)		N.A.	
Anti-skid device type (std., opt., n.a.) (F/R)		N.A./N.A.	
Effective area (cm ² /in. ²)*	(F/R)	172/268 cm ²	172/128 cm ²
Gross lining area (cm ² /in. ²)**(F/R)		172/268 cm ²	172/128 cm ²
Swept area (cm ² /in. ²)**(F/R)		1070/440 cm ²	1152/1019 cm ²
Rotor	Outer working diameter	F/R 243/ - mm	258/269 mm
	Inner working diameter	F/R 147/ - mm	162/193 mm
	Thickness	F/R 22/ - mm	22/10 mm
	Material & type (vented/solid)	F/R Cast iron ventilated/ -	Cast iron ventilated/Cast iron solid
Drum	Diameter & width	F/R - /200.0 mm	-
	Type and material	F/R Cast iron	-
Wheel cylinder bore	F/R	54.00/19.05 mm	54.00/31.75 mm
Master cylinder Bore/stroke	F/R	Bore: 23.81/23.81 mm, stroke: 14.00/14.00 mm	
Pedal arc ratio		4.112	
Line pressure at 445 N(100 lb.) pedal load (kPa (psi))		11200 kPa	
Lining clearance	F/R	Self adjusting/Self adjusting	
Brake lining	Front wheel	Bonded or riveted (rivets, seg.)	Bonded
		Rivet size	-
		Manufacturer	AKEBONO
		Lining code*****	-
		Material	Resin molded
		**** Primary or out-board	104 x 44 x 10 mm
		Size Secondary or in-board	104 x 44 x 10 mm
		Shoe thickness (no lining)	5.0 mm
	Rear wheel	Bonded or riveted (rivets, seg.)	Bonded
		Manufacturer	NISHINBO AKEBONO
		Lining Code*****	-
		Material	Resin molded
		**** Primary or out-board	192 x 35 x 4 mm 95 x 34 x 10 mm
		Size Secondary or in-board	192 x 35 x 4 mm 95 x 34 x 10 mm
		Shoe thickness (no lining)	1.6 mm 5.0 mm

*Excludes rivet holes, grooves, chamfers, etc.

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

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

****Size for drum brakes includes length x width x thickness.

*****Manufacturer (I.D., catalog or formulation designation and coefficient of friction classification).

MVMA Specifications Form Passenger Car

METRIC (U.S. Customary)

Car Line CELICA
Model Year 1986 Issued _____ Revised (e) _____

Body Type And/Or
Engine Displacement

2S-E ST	2S-E GT	3S-GE
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Tires And Wheels (Standard)

Tires	Size (load range, ply)		165SR13	185/70SR13	205/60R14 87H
	Type (bias, radial, etc.)		Radial		
	Inflation pressure (cold) for recommended max. vehicle load	Front (kPa (psi))	210 kPa	180 kPa	
		Rear (kPa (psi))	180 kPa		
Wheels	Rev./mile—at 70 km/h (45 mph)		895	892	886
	Type & material		Steel		Aluminum alloy
	Rim (size & flange type)		5-J x 13	5 1/2-J x 13	6-JJ x 14
	Wheel offset		45 mm	39 mm	
	Attachment	Type (bolt or stud)	Nut		
		Circle diameter	100.0 mm		
Number & size		4, M12 x 1.5		5, M12 x 1.5	
Spare	Tire and wheel (same, if other describe)		165SR13 5-J	185/70SR13 5 1/2-J	205/60R14 87H 6-JJ
	Storage position & location (describe)		Luggage compartment		

Tires And Wheels (Optional)

Size (load range, ply)	185/70SR13	
Type (bias, radial, etc.)	Radial	
Wheel (type & material)	Steel	Aluminum alloy
Rim (size, flange type and offset)	5 1/2-J x 13 (offset: 39)	5 1/2-JJ x 13 (offset: 39)
Size (load range, ply)		185/70R13 86T
Type (bias, radial, etc.)		Radial
Wheel (type & material)		Aluminum alloy
Rim (size, flange type and offset)		5 1/2-JJ x 13 (offset: 39)
Size (load range, ply)		
Type (bias, radial, etc.)		
Wheel (type & material)		
Rim (size, flange type and offset)		
Size (load range, ply)		
Type (bias, radial, etc.)		
Wheel (type & material)		
Rim (size, flange type and offset)		
Spare tire and wheel (if configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position)	185/70SR13 Steel, 5 1/2-J x 13 luggage compartment	

Brakes - Parking

Type of control	-	
Location of control	-	
Operates on	-	
If separate from service brakes	Type (internal or external)	-
	Drum diameter	-
	Lining size (length x width x thickness)	-
		Drum in disc
		170 mm
		163 x 30 x 2 mm

MVMA Specifications Form Passenger Car

METRIC (U.S. Customary)

Car Line CELICA
Model Year 1986 Issued _____ Revised (●) _____

Body Type And/Or
Engine Displacement

2S-E ST	2S-E GT	3S-GE
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Steering

Manual (std., opt., n.a.)		Std.			
Power (std., opt., n.a.)		Std.			
Adjustable steering wheel (tilt, swing, other)	Type and description	Tilt			Tilt & Telescope
	(Std., opt., n.a.)	N.A.	Opt.	Std.	Opt. Std.
Wheel diameter (W9) SAE J1100	Manual				
	Power	380 mm			
Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)	11.8 mm		
		Curb to curb (l. & r.)	10.8 m		
	Inside rear	Wall to wall (l. & r.)	6.4 m		
		Curb to curb (l. & r.)	6.6 m		
Scrub Radius*					
Manual	Gear	Type			
		Make			
		Ratios	Gear	Overall	
	No. wheel turns (stop to stop)				
Power	Type (coaxial, linkage, etc.)		Hydraulic integral type		
	Make		TOYOTA		
	Gear	Type	Rack & pinion		
		Ratios	Gear	∞	
		Overall	16.81		
	Pump (drive)		Poly-V belt		
No. wheel turns (stop to stop)		2.87			
Linkage	Type				
	Location (front or rear of wheels, other)				
	Tie rods (one or two)				
Steering axis	Inclination at camber (deg.)		13°30'		
	Bearings (type)	Upper	Ball bearing		
		Lower	Ball joint		
		Thrust	N.A.		
Steering spindle & joint type					
Wheel spindle	Diameter	Inner bearing	38.0 mm		
		Outer bearing	74.0 mm		
	Thread (size)		M19 x 1.5		
	Bearing (type)		Double row angular bearing		

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

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METRIC (U.S. Customary)

Car Line CELICA
Model Year 1986 Issued _____ Revised (e) _____

Body Type And/Or
Engine Displacement

All models	2S-E GT (OPT)
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Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	$1^{\circ}10' \pm 45'$
		Camber (deg.)	$-10' \pm 45'$
		Toe-in (outside track-mm (in.))	$0 \pm 2 \text{ mm}$
	Service reset*	Caster	$1^{\circ}10' \pm 30'$
		Camber	$-10' \pm 30'$
		Toe-in	$0 \pm 1 \text{ mm}$
	Periodic M.V. in- spection	Caster	$1^{\circ}10' \pm 45'$
		Camber	$-10' \pm 45'$
		Toe-in	$0 \pm 2 \text{ mm}$
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	$-45' \pm 45'$
		Toe-in (outside track-mm (in.))	$5 \pm 2 \text{ mm}$
	Service reset*	Camber	$-45' \pm 30'$
		Toe-in	$5 \pm 1 \text{ mm}$
	Periodic M.V. in- spection	Camber	$-45' \pm 45'$
		Toe-in	$5 \pm 2 \text{ mm}$

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

Electrical - Instruments and Equipment

Speed- ometer	Type	Analog type, round	Digital
	Top odometer (std., opt., n.a.)	Std.	
EGR maintenance indicator		N.A.	
Charge indicator	Type	Electrical gauge	N.A.
	Warning device	Lamp	
Temperature indicator	Type	Electrical gauge	Electric display
	Warning device	N.A.	
Oil pressure indicator	Type	Electrical gauge	Electrical
	Warning device	N.A.	Lamp
Fuel indicator	Type	Electrical gauge	Electric display
	Warning device	Lamp	
Wind- shield wiper	Type (standard)	Motor 3-spd.	
	Type (optional)	-	
	Blade length	Dr 475 mm Pa 450 mm	
	Sweep area (cm ² (in. ²))	6030 cm ²	
Wind- shield washer	Type (standard)	Motor	
	Type (optional)	-	
	Fluid level indicator	N.A.	
Horn	Type	Electrical flat type	
	Number used	2	
Other			

MVMA Specifications Form Passenger Car

METRIC (U.S. Customary)

Car Line CELICA
Model Year 1986 Issued _____ Revised (e) _____

Engine Description/Carb.
Engine Code

2S-E

3S-GE

Electrical - Supply System

Battery	Make (OPT)	*G, Y, K, N, F (G, Y, K)	
	Model, std., (opt.)	55D23L [Opt. 32C24L (N40L)]	
	Voltage	12	
	Amps at 0°F cold crank (OPT)	310 (200)	
	Minutes-reserve capacity (OPT)	90 (50)	
	Amps/hrs. - 20 hr. rate (OPT)	60 (40)	
	Location	Engine compartment left front	
Generator or alternator	Type and rating	AC 70A	AC 60A
	Ratio (alt. crank/rev.)	1:2.55	1:2.36
	Optional (type & rating)	-	
Regulator	Type	IC	

*G: Nippon Denchi Y: Yuasa Denchi K: Shin Kobe Denki
N: Matsushita Denchi F: Furukawa Denchi

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

Electrical - Ignition System

Type	Electronic (std., opt., n.a.)	Std.	
	Other (specify)	N.A.	
Coil	Make	ND	
	Model	-	
	Current	Engine stopped - A	0
		Engine idling - A	0.9 1.2
Spark plug	Make	*ND, NGK	
	Model	ND: W16EXR-U11, NGK: BPR5EY11 ND: P016R, NGK: BCPR5EP11	
	Thread (mm)	M14.0, 19.0 mm	
	Tightening torque (N·m (lb. ft))	17.7 N·m	
	Gap	1.1 mm	
	Number per cylinder		
Distributor	Make	ND	
	Model	-	

*ND: Nippon Denso NGK: Nihon Tokushu Togyo

Locations & type	Resistance built-in spark plug, resistance built-in high tension code, plated rotor distributor
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MVMA Specifications Form Passenger Car

METRIC (U.S. Customary)

Car Line CELICA
Model Year 1986 Issued _____ Revised (e) _____

Body Type

All models

Body

Structure

Bumper system
front - rear

*Bar material & mass: Urethane, 4.2 kg/3.9 kg
(Liftback: 4.6 kg)
Reinforcement material & mass: Iron, 9.0 kg/10.7 kg
(Liftback: 12.3 kg)

Anti-corrosion treatment

Body - Miscellaneous Information * Front/Rear

Type of finish (lacquer, enamel, other)	Acrylic	
Hood	Hinge location (front, rear)	Rear
	Type (counterbalance, prop)	Prop
	Release control (internal, external)	Internal
Trunk lid	Type (counterbalance, other)	Counterbalance
	Internal release control (elec., mech., n.a.)	Mechanical
Hatch-back lid	Type (counterbalance, other)	
	Internal release control (elec., mech., n.a.)	
Vent window control (crank, friction, pivot, power)	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	Board, foam pad (ST). Panel frame, foam pad
	3rd seat	-

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

Car Line CELICA
 Model Year 1986 Issued _____ Revised (#) _____

Body Type

COUPE

LIFTBACK

Restraint System

Active restraint system	Standard/optional	STD
	Type and description	3-point or 2-point, Fr.: with retractor (ELR) Rr.: with retractor (ALR)
	Location	Fr.: 3-point, 2 seats Rr.: 2-point, 2 seats
Passive seat belts	Standard/optional	N.A.
	Power/manual	N.A.
	2 or 3 point	N.A.
	Knee bar/lap belt	N.A.

Frame

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

Glass	SAE Ref. No.		
Windshield glass exposed surface area (cm ² /in. ²)	S1	8681 cm ²	
Side glass exposed surface area (cm ² /in. ²) - total 2-sides	S2	7669 cm ²	8951 cm ²
Backlight glass exposed surface area (cm ² /in. ²)	S3	7362 cm ²	7360 cm ²
Total glass exposed surface area (cm ² /in. ²)	S4	23712 cm ²	24992 cm ²
Windshield glass (type)		Tinted, laminated, curved	
Side glass (type)		Tempered, curved	
Backlight glass (type)		Tempered, curved	

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METRIC (U.S. Customary)

Car Line CELICA
 Model Year 1986 Issued _____ Revised (•) _____

Body Type

2S-E ST	2S-E GT	3S-GE
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Convenience Equipment (standard, optional, n.a.)

Air conditioning (manual, auto, temp control)		Opt.	
Clock (digital, analog)		Std.	
Compass / thermometer			
Console (floor, overhead)			
Defroster, elec. backlight		N.A.	
Electronic	Diagnostic warning (integrated, individual)		
	Instrument cluster (list instruments)		
	Keyless entry		
	Trupminder (avg. spd., fuel)		
	Voice alert (list items)		
	Other		
Fuel door lock (remote, key, electric)			
Lamps	Auto head on / off delay, dimming		
	Coming	N.A.	
	Courtesy (map, reading)	Std.	
	Door lock, ignition	N.A.	Std.
	Engine compartment		
	Fog		
	Glove compartment	Std.	
	Trunk	N.A.	Std.
Mirrors	Day/night (auto, man.)		
	L.H. (remote, power, heated)		
	R. H. (convex, remote, power, heated)		
	Visor vanity (RH / LH, illuminated)		
Parking brake-auto release (warning light)			
Power equipment	Door locks / deck lid - specify		
	Seat (2-4-6 way) heated (driver, pass, other) lumbar, hip, thigh support (power, manual) reclining (driver, pass) memory (1-2 preset, recline)	N.A.	Std. Lumber support Side support
	Side windows	N.A.	Opt. Std.
	Vent windows	N.A.	
	Rear window		
Radio systems	Antenna (location, wnto, w/shield, power)	Opt.	Std. (power)
	AM, FM, stereo, tape, CB	Opt.: AM/FM ETR	Std.: AM/FM ETR, Opt.: AM/FM ETR w/cassette
	Speaker (number, location) Premium sound	Opt. 4	Std. 4
Roof open air/fixed (flip-up, sliding, "T")			
Speed control device		N.A.	Opt.
Speed warning device (light, buzzer, etc.)		N.A.	
Tachometer (rpm)			
Theft protection-type		Steering lock	

MVMA Specifications Form

Passenger Car

Car Line CELICA
Model Year 1986 Issued _____ Revised (•) _____

METRIC (U.S. Customary)

Car and Body Dimensions See Key Sheets for definitions

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

Body Type	SAE Ref. No.	COUPE ST	COUPE GT, GT-S	LIFTBACK
Width				
Tread (front)	W101	1460/1470 mm *1	1470 mm	
Tread (rear)	W102	1425/1435 mm *2	1435 mm	
Vehicle width	W103	1690/1710 mm *3	1710 mm	
Body width at Sq RP (front)	W117	1661.6 mm		
Vehicle width (front doors open)	W120	3763.6 mm		
Vehicle width (rear doors open)	W121	—		
Front fender overall width	W106			
Rear fender overall width	W107			
Turn-in angle (deg.)	W122	30°		
Length				
		*1 *2: 165SR13/185/70SR13	*3: w/o P. MOULDING/w/P. MOULDING	
Wheelbase	L101	2525 mm		
Vehicle length	L103	4410 mm		4365 mm
Overhang (front)	L104	960 mm		
Overhang (rear)	L105	925 mm		880 mm
Upper structure length	L123	2368.5 mm		2662.3 mm
Rear wheel C/L "X" coordinate	L127	2158 mm		
Cowl point "X" coordinate	L125	44 mm		
Front end length at centerline	L126			
Rear end length at centerline	L129			
Height*				
Passenger distribution (front/rear)	PO1.2.3	2/1		
Trunk/cargo load		0		
Vehicle height	H101	1265 mm		
Cowl point to ground	H114	900 mm		
Deck point to ground	H138	915 mm		905 mm
Rocker panel-front to ground	H112	195 mm		
Bottom of door closed-front to grd.	H133	285 mm		
Rocker panel-rear to ground	H111	190 mm		
Bottom of door closed-rear to grd.	H135	—		
Windshield slope angle	H122	61.9°		
Backlight slope angle	H121	57.3°		69.1°
Ground Clearance*				
Front bumper to ground	H102	395 mm		
Rear bumper to ground	H104	350 mm		355 mm
Bumper to ground (front at curb mass (wt.))	H103	405 mm		
Bumper to ground (rear at curb mass (wt.))	H105	390 mm		395 mm
Angle of approach (degrees)	H106	14.5°		
Angle of departure (degrees)	H107	16.5° (ST162L: 16°)		
Ramp breakover angle (degrees)	H147	12.5°		
Axle differential to ground (front/rear)	H153	—		
Min. running ground clearance	H156	135 mm		
Location of min. run. grd. clear.		Sub muffler		

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

MVMA Specifications Form

Passenger Car

METRIC (U.S. Customary)

Car and Body Dimensions See Key Sheets for definitions

Car Line CELICA

Model Year 1986

Issued

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Body Type

SAE
Ref.
No.

All models

Front Compartment

Sg RP front, "X" coordinate	L31	1389 mm
Effective head room	H61	960, 927 mm*
Max. eff. leg room (accelerator)	L34	1129 mm
Sg RP to heel point	H30	203 mm
Sg RP to heel point	L53	
Back angle	L40	23°
Hip angle	L42	
Knee angle	L44	
Foot angle	L46	
Design H-point front travel	L17	240 mm
Normal driving & riding seat track trvl.	L23	
Shoulder room	W3	1323 mm
Hip room	W5	1298 mm
Upper body opening to ground	H50	1162 mm
Steering wheel maximum diameter	W9	
Steering wheel angle	H18	
Accel. heel pt. to steer. whl. cntr	L11	
Accel. heel pt. to steer. whl. cntr	H17	
Steering wheel to C/L of thigh	H13	
Steering wheel torso clearance	L7	
Headlining to roof panel (front)	H37	
Undepressed floor covering thickness	H67	

Rear Compartment

*: with sun roof

Sg RP Point couple distance	L50	633 mm
Effective head room	H63	897.5 mm
Min. effective leg room	L51	709 mm
Sg RP (second to heel)	H31	264 mm
Knee clearance	L48	-126 mm (ST162L: -133 mm)
Compartment room	L3	568 mm (ST162L: 565 mm)
Shoulder room	W4	1294 mm
Hip room	W6	1220 mm
Upper body opening to ground	H51	
Back angle	L41	
Hip angle	L43	
Knee angle	L45	
Foot angle	L47	
Headlining to roof panel (second)	H38	
Depressed floor covering thickness	H73	

Luggage Compartment

Usable luggage capacity (L (cu. ft.))	V1	338 ℓ (Liftback: 307 ℓ)
Liftover height	H195	795 mm (Liftback: 810 mm)

Interior Volumes (EPA Classification)

Vehicle class (subcompact, compact, etc.)		
Interior volume index (cu. ft.)		
Trunk/cargo index (cu. ft.)		

MVMA Specifications Form

Passenger Car

METRIC (U.S. Customary)

Car and Body Dimensions See Key Sheets for definitions

Car Line CELICA

Model Year 1986

Issued _____

Revised (e) _____

Body Type

SAE
Ref.
No.

COUPE

LIFTBACK

Station Wagon - Third Seat

Sg RP couple distance	L85	
Shoulder room	W85	
Hip room	W86	
Effective leg room	L86	
Effective head room	H86	
Sg RP to heel point	H87	
Knee clearance	L87	
Seat facing direction	SD1	
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	
Max. rear opening width above belt	W205	
Cargo height	H201	
Rear opening height	H202	
Tailgate to ground height	H250	-
Front seat back to load floor height	H197	
Cargo volume index (m ³ (ft. ³))	V2	
Hidden cargo volume (m ³ (ft. ³))	V4	
Cargo volume index-rear of 2-seat	V10	

Hatchback - Cargo Space

Cargo length at front seatback height	L208	-	1280 (ST162L: 1391)
Cargo length at floor (front)	L209	-	1479 (ST162L: 1472)
Cargo length at second seatback height	L210		
Cargo length at floor (second)	L211		
Front seatback to load floor height	H197	-	400 (ST162L: 339)
Second seatback to load floor height	H198		
Cargo volume index (m ³ (ft. ³))	V3	-	0.714 (ST162L: 0.628)
Hidden cargo volume (m ³ (ft. ³))	V4	-	0.445
Cargo volume index-rear of 2-seat	V11		

Aerodynamics*

Wheel lip to ground, front	
Wheel lip to ground, rear	
Frontal area (m ² (ft. ²))	
Drag coefficient (Cd)	

* EPA Loaded Vehicle Weight, Loading Conditions

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

Car Line CELICA
 Model Year 1986 Issued _____ Revised (a) _____

Body Type

All models

Vehicle Fiducial Marks

Fiducial Mark Number*	Define Coordinate Location										
Front	Flange part front end location for jack-up under rocker.										
Rear	Flange part rear end location for jack-up under rocker.										
Fiducial Mark Number											
Front	<table> <tr><td>W21</td><td>W6 +63</td></tr> <tr><td>L54</td><td>L15 + 62</td></tr> <tr><td>H81</td><td>H10 - 15</td></tr> <tr><td>H161</td><td>200 mm</td></tr> <tr><td>H163</td><td>180 mm</td></tr> </table>	W21	W6 +63	L54	L15 + 62	H81	H10 - 15	H161	200 mm	H163	180 mm
W21	W6 +63										
L54	L15 + 62										
H81	H10 - 15										
H161	200 mm										
H163	180 mm										
Rear	<table> <tr><td>W22</td><td>W6 + 70</td></tr> <tr><td>L55</td><td>L30 + 61</td></tr> <tr><td>H82</td><td>H10 - 15</td></tr> <tr><td>H162</td><td>210 mm</td></tr> <tr><td>H164</td><td>180 mm</td></tr> </table>	W22	W6 + 70	L55	L30 + 61	H82	H10 - 15	H162	210 mm	H164	180 mm
W22	W6 + 70										
L55	L30 + 61										
H82	H10 - 15										
H162	210 mm										
H164	180 mm										

* Reference - SAE Recommended Practice, J182, Motor Vehicle Fiducial Marks.
 All linear dimensions are in millimeters (inches).

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

Car Line CELICA
 Model Year 1986 Issued _____ Revised (e) _____

Body Type

COUPE	LIFTBACK
-------	----------

Lamps and Headlamp Shape*

Height above ground to center of bulb or marker	Headlamp (SAE - H127)	Highest**	720 mm	
		Lowest	-	
	Tail lamp (SAE - H128)	Highest**	715 mm	750 mm
		Lowest	-	
	Sidemarkers	Front	480 mm	
		Rear	530 mm	745 mm
Distance from C.L. of car to center of bulb	Headlamp	Inside	-	
		Outside**	532 mm	
	Tail lamp	Inside	360 mm	455 mm
		Outside**	520 mm	620 mm
	Directional	Front	707 mm	
		Rear	635 mm	695 mm
Halogen headlamp (std., opt., n.a.)	Lo beam			
	Hi beam			
	Replaceable bulb			
	Shape			
Headlamp other than above	Lo beam			
	Hi beam			
	Replaceable			
	Shape			
	Type			

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

METRIC (U.S. Customary)

Model Year 1986 Issued Revised (•)

* Reference - SAE J1100 Motor vehicle dimensions, curb weight definition.
** Shipping mass (weight) definition -

METRIC (U.S. Customary)

Model Year 1986 Issued Revised (•)

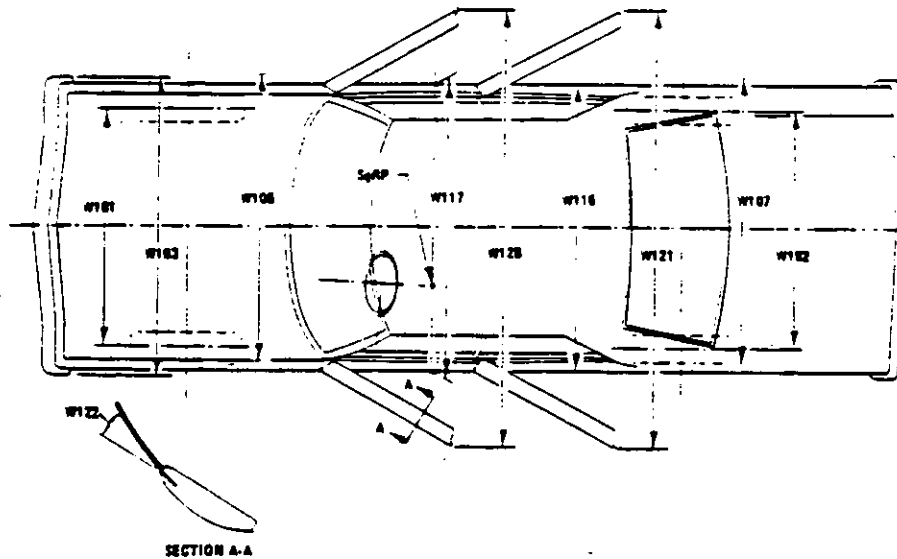
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*Also see Engine - General Section for dressed engine mass (weight).

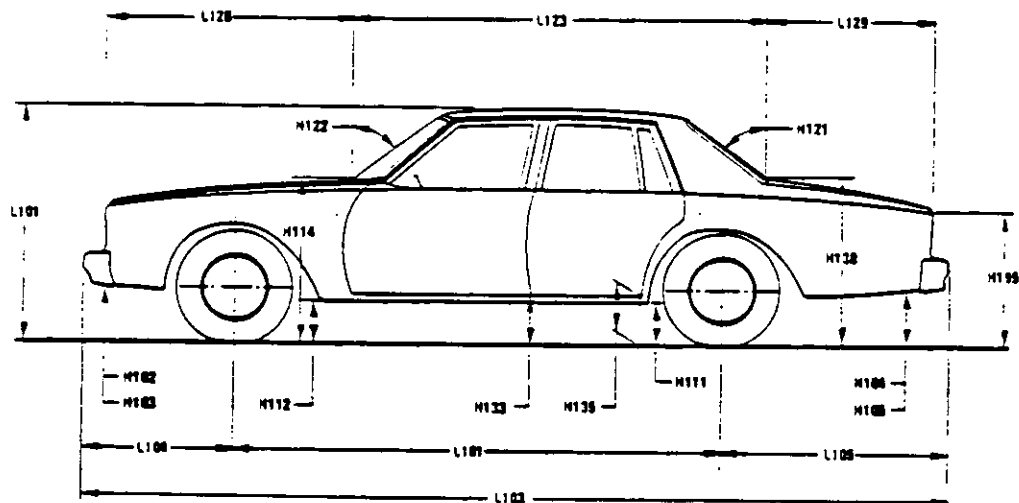
MVMA Specifications Form
Passenger Car
METRIC (U.S. Customary)

Exterior Car And Body Dimensions – Key Sheet

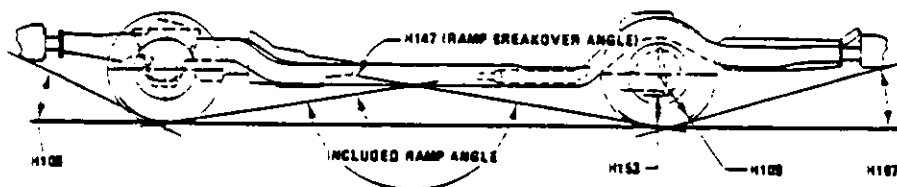
Exterior Width



Exterior Length & Height



Exterior Ground Clearance

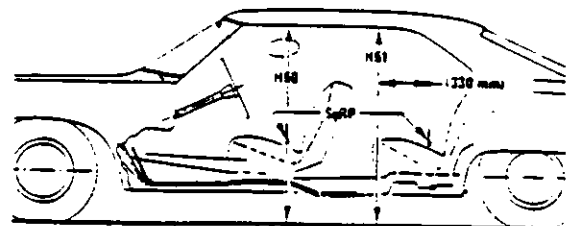
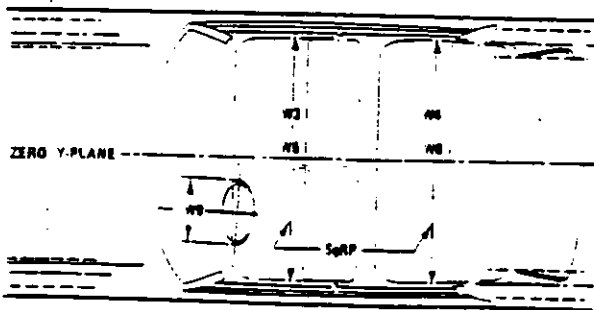
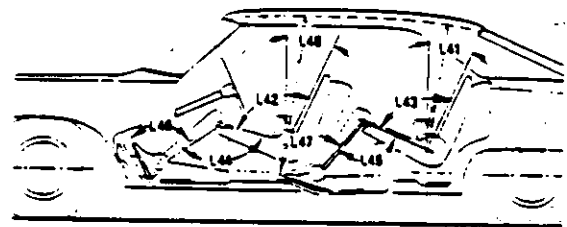
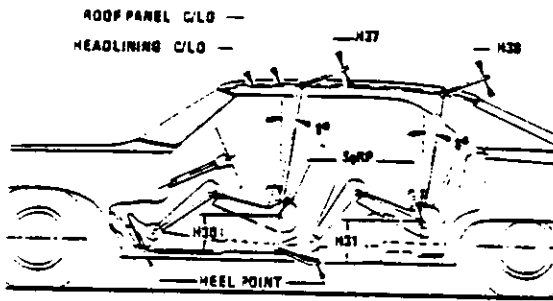
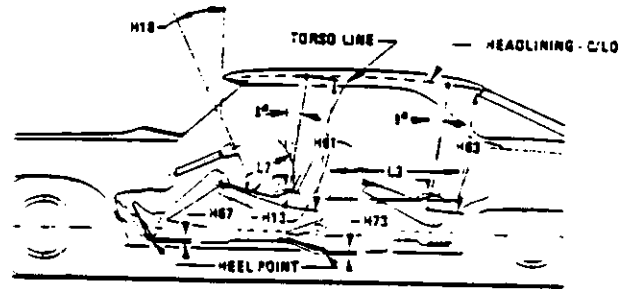
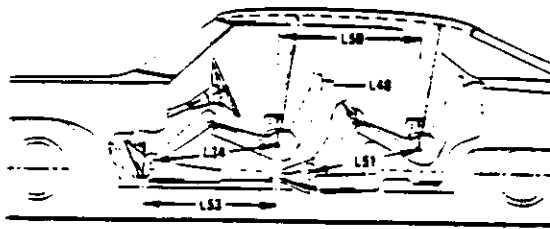


MVMA Specifications Form

Passenger Car

METRIC (U.S. Customary)

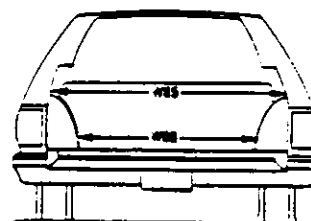
Interior Car And Body Dimensions – Key Sheet



MVMA Specifications Form

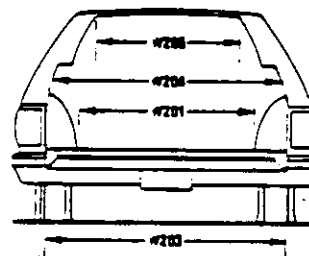
Passenger Car

Interior Car And Body Dimensions – Key Sheet



Technical drawing of a car body in side profile. The drawing includes the following dimensions:

- L204**: Overall length from the front of the hood to the rear of the trunk.
- L206**: Length of the rear section from the rear window to the back of the trunk.
- H201**: Height of the rear window line.
- H202**: Height of the rear roofline.
- L203**: Wheelbase (distance between front and rear axles).
- L207**: Distance from the front axle to the rear of the trunk.
- L202**: Distance from the front of the hood to the front axle.
- L200**: Overall length from the front of the hood to the front of the trunk.



Technical drawing of a car chassis showing dimensions: L208, L210, M197, L200, M198, and L211.

MVMA-C-88

MVMA Specifications Form

Passenger Car

METRIC (U.S. Customary)

Exterior Car And Body Dimensions - Key Sheet

Dimensions Definitions

Seating Reference Point

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

- (a) Establishes the rearmost normal design driving or riding position of each designated seating position in a vehicle;
- (b) Has coordinates established relative to the design vehicle structure;
- (c) Simulates the position of the pivot center of the human torso and thigh; and
- (d) Is the reference point employed to position the two dimensional templates described in SAE Recommended Practice J826, "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.
- W106 FRONT FENDER WIDTH. The dimension measured between the widest points at the front wheel centerline, excluding moldings.
- W107 REAR FENDER WIDTH. The dimension measured between the widest points at the rear wheel centerline, excluding moldings.
- W117 BODY WIDTH AT SgRP—FRONT. The dimension measured laterally between the widest points on the body at the SgRP-front, excluding door handles, applied moldings, or appliques.
- W120 VEHICLE WIDTH—FRONT DOORS OPEN. The dimension measured between the widest point on the front doors in maximum hold-open position.
- W121 VEHICLE WIDTH—REAR DOORS OPEN. The dimension measured between the widest point on the rear doors in maximum hold-open position. For vehicles with a rear door on only one side, this dimension is to the zero "Y" plane.
- W122 TUMBLE—HOME. STRAIGHT SIDE GLASS. The angle measured from a vertical to the outside surface of the front door glass at the SgRP "X" plane.
CURVED SIDE GLASS. The angle measured from a vertical to a chord extending from the upper DLO to the lower DLO at the outside surface of the front door glass at the front SgRP "X" plane.

Length Dimensions

- 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 OVERHANG—FRONT. The dimension measured longitudinally from the centerline of the front wheels to the foremost point on the vehicle including bumper, bumper guards, tow hooks and/or rub strips, if standard equipment.
- L105 OVERHANG—REAR. The dimension measured longitudinally from the centerline of the rear wheels; or in the case of

dual rear axles, the dimension shall be the midpoint of the centerlines of the rear wheels, to the rearmost point on the vehicle including rear bumpers, bumper guards, tow hooks and rub strips, if standard equipment.

- L123 UPPER STRUCTURE LENGTH. The dimension measured longitudinally from the cowl point to the deck point.
- L125 COWL POINT "X" COORDINATE.
- L126 FRONT END LENGTH. The dimension measured longitudinally from the cowl point to the foremost point on the vehicle at the zero "Y" plane excluding ornamentation or bumpers. In cases where bumpers and/or grills are integrated with the profile, measurement is made at the foremost point of front end contour.
- 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.
- L129 REAR END LENGTH. The dimension measured longitudinally from the deck point to the rearmost visible point of the body sheet metal at the zero "Y" plane, excluding ornamentation or bumpers.

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.
- H127 HEADLAMP TO GROUND—CURB MASS (WT.). The dimension measured vertically from the centerline of the lowest headlamps to ground.
- H128 TAILLAMP TO GROUND—CURB MASS (WT.). The dimension measured vertically from the centerline of the upper bulb to ground.
- H133 BOTTOM OF DOOR CLOSED—FRONT TO GROUND. The dimension measured vertically from the bottom outside corner of the door on the lock pillar side, in maximum closed position, to ground.
- H135 BOTTOM OF DOOR CLOSED—REAR TO GROUND. The dimension measured vertically from the bottom outside corner of the door on the lock pillar side, in maximum closed position, to ground.
- H138 DECK POINT TO GROUND. Measured at zero "Y" plane.

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.

MVMA Specifications Form

Passenger Car

METRIC (U.S. Customary)

Interior Car And Body Dimensions - Key Sheet

Dimensions Definitions

- 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 of 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.

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.
- H61 "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

- L7 STEERING WHEEL TORSO CLEARANCE. The minimum dimension measured in the side view from the rearmost edge of the steering wheel, with front wheels in the straight ahead position, to the torso line.
- 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.
- L23 NORMAL DRIVING AND RIDING SEAT TRACK LEVEL. 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.
- 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.
- L40 BACK ANGLE-FRONT. The angle measured between a vertical line through the SgRP-front and the torso line. If the seatback is adjustable, use the normal driving and riding position specified by the manufacturer.
- L42 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 beltline 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.
- H13 STEERING WHEEL TO CENTERLINE OF THIGH. The minimum dimension measured from the bottom of steering wheel, with front wheels in the straight position, to the thigh centerline.
- H17 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.
- H37 HEADLINING TO ROOF PANEL-FRONT. The dimension measured from the intersection of the headlining and the extended effective head room line normal to the sheet metal.
- 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.
- PD1 PASSENGER DISTRIBUTION-FRONT.

Rear Compartment Dimensions

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

MVMA Specifications Form

Passenger Car

METRIC (U.S. Customary)

Interior Car And Body Dimensions - Key Sheet

Dimensions Definitions

- L41 **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 front seat-back 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 254mm (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.
- H38 **HEADLINING TO ROOF PANEL-SECOND.** The dimension measured from the intersection of the headlining and the extended effective head room line normally to the roof sheet metal.
- 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.
- PD2 **PASSENGER DISTRIBUTION-SECOND.**

Luggage Compartment Dimensions

- V1 **USABLE LUGGAGE CAPACITY-**Total of volumes of individual pieces of standard luggage set plus H-boxes stowed in the luggage compartment in accordance with the procedure described in paragraph 8.2 of SAE-J1100.
- H195 **LIFTOVER HEIGHT.** The dimension measured vertically from the luggage compartment lower opening at the zero "Y" plane to ground.

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 51mm (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. rear from the SgRP-third to the headlining rear of vertical plus a constant of 102 mm (4.0 in.).
- PD3 **PASSENGER DISTRIBUTION-THIRD.**
- 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 seat-back 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 mov'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 mov's at the zero "Y" plane.
- L204 **CARGO LENGTH AT BELT-FRONT.** The minimum dimension measured horizontally from the back of the front seat-back 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.

MVMA Specifications Form Passenger Car

METRIC (U.S. Customary)

Interior Car And Body Dimensions - Key Sheet Dimensions Definitions

- 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:

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

$$\frac{L506 \times W500 \times H503}{1728} = \text{ft}^3$$
 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 electrically 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 "Y" 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 undeepressed floor covering.
- H198 SECOND SEATBACK TO LOAD FLOOR HEIGHT. The dimension measured vertically from the second seat back to the undeepressed 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 Form

Passenger Car

METRIC (U.S. Customary)

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