CHEVROLET

NOVA

Specifications Form

1985

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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.

   Additional Car and Body Dimensions and/or drawings (based in part on SAE J1100a "Motor Vehicle Dimensions") may be available from the manufacturer.

Car Line NOVA

Model Year 1985 Issued _____ Revised (*) _____

Car Models

Model Description	Introduction Date	Make, Car Line Series, Body Type (Mfgr's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Truck/Cargo Load—Kilograms (Pounds)
4-Door Sedan Base		AE82L-FEMDCA	2/3	45(100)
4-Door Sedan Base		AE82L-FEHDCA	2/3	45(100)
4-Door Sedan CL		AE82L-FEMNCA	2/3	45(100)
4-Door Sedan CL		AE82L-FEHNCA	2/3	45(100)

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Power Teams (indicate whether standard or optional)

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

SERIES AVAILABILITY	ENGINE						TRANSMISSION	AXLE RATIO (std first) (indicate A/C ratio)
	Displ Liters (in^3)	Carb (Barrels, Fl. etc.)	Compr Ratio	SAE Net at RPM (bhp)	SAE Net at RPM Torque (lb. ft.)	Exhaust System*		
		Barrels						
AE82L-FEMDCA	1.587	2	9.0	70 hp @ 4800 rpm	85/ 2800	Single	5-Speed Manual	3.722
AE82L-FEHDCA	1.587	2	9.0	70 hp @ 4800 rpm	85/ 2800	Single	3-Speed Automatic	3.421
AE82L-FEMNCA	1.587	2	9.0	70 hp @ 4800 rpm	85/ 2800	Single	5-Speed Manual	3.722
AE82L-FEHNCA	1.587	2	9.0	70 hp @ 4800 rpm	85/ 2800	Single	3-Speed Automatic	3.421

* S—Single D—Dual

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Engine Description/Carb. Engine Code	4A-LC

ENGINE – GENERAL

Type & description (inline, V, angle, flat - location front, mid, rear, transverse, longitudinal, etc.)	In-line, Front, Transverse, SOHC
No. of cylinders	4
Bore	81.0 mm (3.19 inches)
Stroke	77.0 mm (3.03 inches)
Bore spacing (c/l to c/l)	88 mm (3.46 inches)
Cylinder block material	Grey cast iron
Cylinder block deck height	191.0 mm (7.52 inches)
Deck clearance (minimum) (above or below block)	0.00 mm
Cylinder head material	Aluminum alloy
Cylinder head volume (cm^3)	32.7 (2.00 $in.^3$)
Head gasket thickness (compressed)	1.20 mm (0.05 inches)
Minimum combustion chamber volume (cm^3)	50.1 (3.06 $in.^3$)
Cyl. no. system (front to rear)*	1-2-3-4
	-
Firing order	1-3-4-2
Recommended fuel (leaded, unleaded, diesel)	Unleaded
Fuel antiknock index $\frac{(R + M)}{2}$	87
Total dressed engine mass (wt) dry**	111 kg (Manual) 102 kg (Automatic) 244.2 pounds (manual) 224.4 pounds (automatic)

Engine – Pistons

Material	Aluminum alloy
Mass, g (weight, oz) – Piston Only	268 g (0.59 pounds)

Engine – Camshaft

Location		Over cylinder head
Material		Grey cast iron
Mass (kg, weight, lbs)		2.38 kg (5.24 pounds)
Type of drive (chain or belt)	Width	19.05 (belt)
	Pitch	9.525 (belt)

* Rear of engine – drive takeoff. Viewed from drive takeoff end to determine left & right side of engine

** Dressed engine mass (weight) includes the following

PRELIMINARY

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Engine Description/Carb. Engine Code	4A-LC

Engine — Valve System

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

Engine — Connecting Rods

Material & mass (kg., weight, lbs.)	Carbon steel, 0.275 kg (0.6[illegible] lbs.)

Engine — Crankshaft

Material	Spheroidal cast iron
Mass (kg., weight, lbs.)	9.44 kg (20.77 lbs.)
End thrust taken by bearing (no.)	#3

Engine — Lubrication System

Normal oil pressure (kPa (psi) at engine rpm)	235/2000 (34.1 psi/2000)
Type oil intake (floating, stationary)	Stationary
Oil filter system (full flow, part, other)	Full-flow
Capacity of c/case less filter-refill-L (qt.)	3.3L (w/ filter) 3.0L (w/o filter)

Engine — Diesel Information

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

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Engine Description/Carb. Engine Code	4A-LC

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

Induction type: carburetor, fuel injection system, etc			Carburetor
Carburetor	Mfgr		Aisan Industry Co., Ltd.
	Choke (type)		Electric heating type
	Idle spd -rpm (spec neutral or drive and propane if used)	Manual	650
		Automatic	800
Idle A/F mix			Preset at manufacturer
Fuel injection	Point of injection (no.)		-
	Constant pulse, flow		-
	Control (electronic, mech.)		-
	System pressure (kPa (psi))		-
Intake manifold heat control (exhaust or water) thermostatic or fixed			Exhaust type
Air cleaner type	Standard		Dry type, 1 element with HAI
	Optional		NA
Fuel pump	Type (elec. or mech.)		Diaphragm type
	Location (eng., tank)		Cylinder Head, Rear
	Pressure range (kPa (psi))		24.5 kPa (3.5 psi)

Fuel Tank

Capacity (refill L (gallons))		50L (13.3 gal.)
Location (describe)		Under rear seat floor
Attachment		Band type
Material		Steel plate
Filler pipe	Location & material	Left wheel house, Steel
	Connection to tank	Rubber hose
Fuel line (material)		Steel pipe
Fuel hose (material)		Rubber
Return line (material)		Steel pipe
Vapor line (material)		Steel pipe
Extended range tank	Opt., n.a	NA
	Capacity (L (gallons))	-
	Location & material	-
	Attachment	-
Auxiliary tank	Opt., n.a	NA
	Capacity (L (gallons))	-
	Location & material	-
	Attachment	-
	Selector switch or valve	-
	Separate fill	-

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Engine Description/Carb. Engine Code	4A-LC

Engine – Cooling System

Coolant recovery system (std., opt., n.a.)			STD
Coolant fill location (rad., bottle)			Radiator
Radiator cap relief valve pressure (kPa (psi))			88.3 kPa
Circulation thermostat	Type (choke, bypass)		Bypass type
	Starts to open at °C (°F)		82° - 95°C (180°F - 203°F)
Water pump	Type (centrifugal, other)		Centrifugal type
	GPM 1000 pump rpm		0.38L (0.4 qt.)
	Number of pumps		1
	Drive (V-belt, other)		V-ribbed belt
	Bearing (type)		Sealed type, roller and ball bearing
By-pass recirculation (type (inter., ext.))			External
Radiator core (type (cross-flow vertical cellular tube and fin, other) and material)			Vertical flow, corrugated fin, brass and copper
Cooling system capacity	With heater – L(qt.)		6
	With air cond – L(qt.)		NA
	Opt. equipment (specify – L(qt.))		NA
Water jackets full length of cyl. (yes, no)			Yes
Water all around cylinder (yes, no)			No
Radiator core	Standard	Width	666.4 mm (26.2 in.)
		Height	325 mm (12.8 in.)
		Thickness	16 mm (0.6 in.)
		Fins per inch	16.9 (Manual) 22.6 (Automatic)
	A/C	Width	–
		Height	–
		Thickness	–
		Fins per inch	
	Heavy duty	Width	–
		Height	–
		Thickness	–
		Fins per inch	
Fan (standard)	Number of blades & type (flex, solid, material)		–
	Diameter & projected width		–
	Ratio (fan to crankshaft rev.)		–
	Fan cutout type		–
	Drive (type (direct, remote))		–
	Fan shroud (material)		–
Fan (electric)	Diameter & projected width		290 mm x 41 mm (11.4 in. x 1.6 in.)
	RPM at idle		1900 ± 150
	Motor rating (voltage)		50
	Motor switch (type & location)		Water temperature, lower tank
	Switch point (temp., pressure)		90°C (194°F)
	Fan shroud (material)		Resin
Fan (optional)	No. of blades and spacing		–
	Diameter & projected width		–
	Ratio (fan to crankshaft rev.)		–
	Fan cutout (type)		–
	Drive (type direct, remote)		–

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Engine Description/Carb. Engine Code	4A-LC

Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		EGR+AS+Oxygen Sensor+TWC+OC, EGR+AS+Oxygen Sensor+TWC*
	Air injection	Pump (type)	Read valve
		Driven by	NA
		Air distribution (head, manifold, etc.)	Catalytic converter, Exhaust manifold*
		Point of entry	Between TWC and OC, #3 branch*
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Controlled flow
		Exhaust source	Exhaust manifold
		Point of exhaust injection (spacer, carburetor, manifold, other)	Intake manifold
	Catalytic Converter	Type	3-way + Oxidation, 3-way*
		Number of	1
		Location(s)	Forward under floor area
		Volume (L (in^3))	(1.3+0.7), 1.3L*
		Substrate type	Monolith
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Closed type
	Energy source (manifold vacuum, carburetor, other)		Manifold vacuum, crankcase pressure
	Discharges (to intake manifold, other)		Intake manifold
	Air inlet (breather cap, other)		Air cleaner
Evaporative Emission Control	Vapor vented to (crankcase, canister, other)	Fuel tank	Canister
		Carburetor	Canister
	Vapor Storage provision (crankcase, canister, other)		Canister

*....California spec.

Engine – Exhaust System

Type (single, single with cross-over, dual, other)			Single
Muffler no. & type (reverse flow, straight thru, separate resonator)			1, Reverse flow
Resonator no. & type			-
Exhaust pipe	Branch o.d. wall thickness		-
	Main o.d. wall thickness		42.7 mm, 2.0 mm (1.7 in., 0.08 in.)
	Material		stainless steel
Intermediate pipe	o.d. & wall thickness		42.7 mm x 1.6 mm 38.1 mm x 1.2 mm (1.7 in. x 0.06 in.)
	Material		Alminum-coated steel (1.5 in. x 0.05 in.)
Tail pipe	o.d. & wall thickness		38.1 mm x 1.2 mm (1.5 in. x 0.05 in.)
	Material		Alminum-coated steel

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Engine Description/Carb. Engine Code	4A-LC

Electrical – Supply System

Battery	Voltage rtg (V & total plates)	12V
	Minimum reserve cranking	90 minutes
	SAE capacity (amps)	60 AH
	Location	Left front in engine compartment
Generator or alternator	Type and rating	Alternating, 60A
	Ratio (alt crank/rev)	1:2.36
	Optional (type & rating)	-
Regulator	Type	Integrated circuit type

Electrical – Starting System

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

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Engine Description/Carb. Engine Code	4A-LC

Electrical — Ignition System

Type	Conventional (std. opt. n.a.)		NA
	Transistorized (std. opt. n.a.)		STD
	Other (specify)		NA
Coil	Make		Nippondenso Co., Ltd.
	Model		4A-LC (I.I.A.)
	Current	Engine stopped — A	0
		Engine idling — A	0.9
Spark plug	Make		Nippondenso Co., Ltd., Nihon Tokushu Togyo Co.
	Model		*
	Thread (mm)		M14 x 19.0
	Tightening torque (N·m (lb. ft))		1.77 ± 0.29 N·m (1.31 ± 0.2 lb/ft)
	Gap		1.1 mm (0.043 in.)
Distributor	Make		Nippondenso Co., Ltd.
	Model		4A-LC (I.I.A.)

*....FED: W16EXR-U11, W14EXR-U11, BPR4EY11, BPR5EY11
CAL: W16EXR-U11, [redacted] BPR5EY11

Electrical — Suppression

Locations & type	Resistive cord, Resistive spark plug

Electrical — Instruments and Equipment

Speedometer	Type	Analogue, Round
	Trip odometer (std., opt., n.a.)	STD
EGR maintenance indicator		Non
Charge indicator	Type	Electrical
	Warning device	Lamp
Temperature indicator	Type	Electrical gauge
	Warning device	Non
Oil pressure indicator	Type	Electrical
	Warning device	Lamp
Fuel indicator	Type	Electrical gauge
	Warning device	STD
Windshield wiper	Type (standard)	Motor, 2-Speed
	Type (optional)	Motor, 3-Speed (17.7 in.)
	Blade length	Driver's side: 450 mm Passenger's side: 425 mm (16.7 in.
	Swept area (cm²(in.²))	5880 cm² (911.6 in.²)
Windshield washer	Type (standard)	Motor
	Type (optional)	-
	Fluid level indicator	-
Horn	Type	Electrical, Disc type
	Number used	1
Other		-

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Engine Description/Carb. Engine Code	4A-LC

Transmissions

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

Manual Transmission

Number of forward speeds			5
Transmission ratios	In first		3.545
	In second		1.904
	In third		1.233
	In fourth		0.885
	In fifth		0.725
	In overdrive		-
	In reverse		3.250
Synchronous meshing (specify gears)			All forward gears (1st, 2nd, 3rd, 4th, and 5th)
Shift lever location			Floor
Lubricant	Capacity (L (pt.))		2.6L
	Type recommended		Multi purpose API GL-4
	SAE viscosity number	Summer	SAE 75W-90
		Winter	SAE 75W-90
		Extreme cold	SAE 75W-90

Clutch (Manual Transmission)

Make & type		Aisin Seiki Co., Ltd., Dry single plate
Type pressure plate springs		Diaphragm spring
Total spring load (N (lb.))		3432N
No. of clutch driven discs		1
Clutch facing	Material	Semi-mold
	Manufacturer	Nissin spinning Co., Ltd.
	Part number	31256-01010
	Rivets/plate	16
	Rivet size	ϕ4 mm
	Outside & inside dia.	200 mm x 140 mm (7.9 in. x 5.5 in.)
	Total eff. area (cm² (in.²))	160 cm² (24.8 in.²)
	Thickness	3.5 mm (0.14 in.)
	Engagement cushion method	Cushion spring
Release bearing	Type & method of lubrication	Single row ball bearing, Sealed grease
Torsional damping	Method springs friction material	Rubber

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Engine Description/Carb. Engine Code	4A-LC

Automatic Transmission

Trade name		A131L
Type (describe)		Hydraulic pressure controlled planetary gear
Selector	Location	Floor
	Ltr /No designation	PRND2L
Gear ratios *1	1st	2.810
	2nd	1.549
	3rd	1.000
	Rev.	2.296
		-
Max upshift speed - drive range (km/h (mph))		1 → 2: 37 mph 2 → 3: 67 mph
Max kickdown speed - drive range (km/h (mph))		2 → 1: 29 mph 3 → 2: 65 mph
Min overdrive speed (km/h (mph))		-
Torque converter	Number of elements	3 elements, 1 step, 2 phases
	Max ratio at stall	2.100
	Type of cooling (air liquid)	Water-cooled
	Nominal diameter	230 mm (9.1 in.)
Lubricant	Capacity (refill L (pt))	5.5L
	Type recommended	ATF Dexron II
Special transmission features		*2 Lockup clutch: 37 mph (operate) 34 mph (release)

*1...Counter gear ratios: 0.945
*2...Under the throttle opening range of 20%

Axle or Front Wheel Drive Unit

Type (front rear)			Front wheel drive
Description			Helical gear
Limited slip differential (type)			NA
Drive pinion offset			-
Drive pinion (type)			Helical gear
No of differential pinions			2
Pinion adjustment (shim other)			-
Pinion bearing adj (shim other)			NA
Driving wheel bearing (type)			Double row, angular ball bearing
Lubricant	Capacity (L (pt))		2.6L, 1.4L* (2.8 qt., 1.5 qt.*)
	Type recommended		Multi purpose API GL-4, ATF Dexron II*
	SAE viscosity number	Summer	SAE 75W-90, - *
		Winter	SAE 75W-90, - *
		Extreme cold	SAE 75W-90, - *

*...Automatic transmission models

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

Axle ratio or overall ratio		3.722, 3.421*
No of teeth	Pinion	18, 19*
	Ring gear or gear	67, 65*
Ring gear o.d.		-
Transaxle	Transfer gear ratio	-
	Final drive ratio	-

*...Automatic transmission models

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Engine Description/Carb. Engine Code	4A-LC

Propeller Shaft — Conventional 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		–
Intermediate 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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Engine Description/Carb. Engine Code	4A-LC

Axle Shafts — Front Wheel Drive

Number used			2
Type (straight, solid bar, tubular etc.)		Left	Solid shaft
		Right	Hollow shaft
Outer diam. x length * x wall thickness	Manual transmission	Left	23.8 mm x 338.0 mm (0.94 in. x 13.3 in.)
		Right	38.0 mm x 627.6 mm x 5.0 mm (1.5 in. x 24.7 in. x 0.2 in.)
	Automatic transmission	Left	23.8 mm x 338.0 mm (0.94 in. x 13.3 in.)
		Right	38.0 mm x 627.6 mm x 5.0 mm (1.5 in. x 24.7 in. x 0.2 in.)
	Optional transmission	Left	
		Right	
Slip yoke	Type		–
	Number of teeth		–
	Spline o.d.		–
Universal joints	Make and mfg. no.	Inner	GM S.S.G. make, 43403-01010
		Outer	GM S.S.G. make, 43405-01010
	Number used		4
	Type, size, plunge	Inner	Tripot (pluging)
		Outer	Rzeppa (fixed)
	Attach (u-bolt, clamp etc.)		Snap ring
	Bearing — Type (plain, anti-friction)		
	Bearing — Lubric. (fitting, prepack)		–
Drive taken through (torque tube, arms or springs)			
Torque taken through (torque tube, arms or springs)			–

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

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Engine Description/Carb. Engine Code	4A-LC

Tires And Wheels (Standard)

Tires	Size (load range, ply)		P155/80 R13
	Type (bias radial etc.)		Radial
	Inflation pressure (cold) for recommended max. vehicle load	Front (kPa (psi))	193 kPa (28 psi)
		Rear (kPa (psi))	193 kPa (28 psi)
	Rev./mile—at 70 km/h (45 mph)		913
Wheels	Type & material		Wide rim with deep bottom, Steel
	Rim (size & flange type)		5-Jx13
	Wheel offset		45 mm (1.8 in.)
	Attachment	Type (bolt or stud)	Nut
		Circle diameter	100 mm (3.9 in.)
		Number & size	4, 12P=1.5
Spare	Tire and wheel (same, if other describe)		Tire: T115/70D14 Wheel: 4-Tx14
	Storage position & location (describe)		Trunk room

Tires And Wheels (Optional)

Size (load range, ply)	P175/70 R13
Type (bias radial etc.)	Radial
Wheel (type & material)	Aluminum
Rim (size, flange type and offset)	5-Jx13
Size (load range, ply)	
Type (bias radial etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Size (load range, ply)	
Type (bias radial etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Size (load range, ply)	
Type (bias radial etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Spare tire and wheel (if configuration is different than road tire or wheel describe optional spare tire and/or wheel location & storage position)	Tire: T115/70D14 Wheel: 4-Tx14

Brakes — Parking

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

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Body Type And/Or Engine Displacement	All Models

Brakes — Service

Description			
Brake type (std., opt., n.a.)	Front (disc or drum)		Disc, Std.
	Rear (disc or drum)		Drum, Std.
Self-adjusting (std., opt., n.a.)			STD
Special valving	Type (proportion., delay, metering, other)		Proportioning valve
Power brake (std., opt., n.a.)			STD
Booster type (remote integral vac., hyd., etc.)			Direct vacuum
Anti-skid device type (std., opt., n.a.)			NA
Effective area [cm^2(in ^{2})]*			Front: 164 cm^2 (25 in.) Rear: 232 cm^2 (36.0 in.)
Gross lining area [cm^2(in ^{2})]**			Front: 164 cm^2 Rear: 232 cm^2 (36.0 in.)
Swept area [cm^2(in ^{2})]***			Front: 1076 cm^2 Rear: 377 cm^2 (Fr-166.8 in., Rr-58.4 in)
Rotor	Outer working diameter	F	243 mm (9.6 in.)
		R	NA
	Inner working diameter	F	147 mm (5.8 in.)
		R	NA
	Thickness	F	13.5 mm (0.5 in.)
		R	NA
	Material & type (vented/solid)	F	Cast iron, Solid
		R	NA
Drum	Diameter (nominal)	F	NA
		R	200.0 mm (7.9 in.)
	Type and material		Cast iron
Wheel cylinder bore	Front		51.10 mm (2.0 in.)
	Rear		17.46 mm (0.7 in.)
Master cylinder	Bore		Front: 22.22 mm Rear: 22.22 mm (Fr-0.87 in., Rr-0.87 in.)
	Stroke		Front: 14.00 mm Rear: 14.00 mm (Fr-0.55 in., Rr-0.55 in.)
Pedal arc ratio			4.15
Line pressure at 445 N (100 lb.) pedal load [kPa (psi)]			9273 kPa (1344.9 psi)
Lining clearance per shoe	Front		Self adjusting
	Rear		Self adjusting
Brake lining — Front wheel	Bonded or riveted (rivets/seg.)		Bonded
	Rivet size		-
	Manufacturer		Bendix
	Lining code		-
	Material		Resin molded
	**** Size — Primary or out-board		102 mm x 42 mm x 10 mm (4.0 in. x 1.7 in. x 0.4 in.)
	**** Size — Secondary or in-board		102 mm x 42 mm x 10 mm (4.0 in. x 1.7 in. x 0.4 in.)
	Shoe thickness (no lining)		5.0 mm (0.2 in.)
Brake lining — Rear wheel	Bonded or riveted (rivets/seg.)		Bonded
	Manufacturer		Nissin Spinning Co., Ltd.
	Lining code		-
	Material		Resin molded
	**** Size — Primary or out-board		192 mm x 30 mm x 4 mm (7.6 in. x 1.2 in. x 0.2 in.)
	**** Size — Secondary or in-board		192 mm x 30 mm x 4 mm (7.6 in. x 1.2 in. x 0.2 in.)
	Shoe thickness (no lining)		1.6 mm (0.1 in.)

* Excludes rivet holes, grooves, chamfers, etc

** Includes rivet holes grooves chamfers etc

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

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

Car Line NOVA

Model Year 1985 Issued _____ Revised (*) _____

PRELIMINARY

Body Type And/Or Engine Displacement	All Models

Steering

Manual (std., opt., n.a.)				STD
Power (std., opt., n.a.)				OPT
Adjustable steering wheel (tilt, swing, other)		Type and description		Tilt
		(Std., opt., n.a.)		STD for CL models only
Wheel diameter		Manual		380 mm (15.0 in.)
		Power		380 mm (15.0 in.)
Turning diameter m (ft.)	Outside front	Wall to wall (l & r.)		10.2 m (33.6 ft.)
		Curb to curb (l & r.)		9.4 m (manual) 9.6 m (power) 31.0 ft(man) 31.6 ft(pwr)
	Inside rear	Wall to wall (l & r.)		5.0 m (manual) 5.3 m (power) 16.4 ft(man) 17.4 ft(pwr)
		Curb to curb (l & r.)		5.3 m (manual) 5.5 m (power) 17.4 ft(man) 18.1 ft(pwr)
Manual	Gear	Type		Rack and pinion
		Make		Toyota Motor Corporation
		Ratios	Gear	∞
			Overall	22.67
	No. wheel turns (stop to stop)			4.0
Power	Type (coaxial, linkage, etc.)			Integral
	Make			Toyota Motor Corporation
	Gear	Type		Rack and pinion
		Ratios	Gear	∞
			Overall	18.97
	Pump (drive)			V-ribbed belt
	No. wheel turns (stop to stop)			3.35
Linkage	Type			Accar man
	Location (front or rear of wheels, other)			Rear of wheels
	Drag links (trans. or longit.)			NA
	Tie rods (one or two)			2
Steering axis	Inclination at camber (deg.)			12°35'
	Bearings (type)	Upper		Ball bearing
		Lower		Ball joint
		Thrust		-
Steering spindle & joint type				
Wheel spindle	Diameter	Inner bearing		38 mm (1.5 in.)
		Outer bearing		74 mm (2.9 in.)
	Thread (size)			M19 x 1.5 mm (0.06 in.)
	Bearing (type)			Double row, angular ball bearing

Car Line NOVA

Model Year 1985 Issued _____ Revised (*) _____

Body Type And/Or Engine Displacement	All Models

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	0°53' ± 45'
		Camber (deg.)	-30' ± 45'
		Toe-in (outside track-mm (in.))	0 ± 4 mm (0.16 in.)
	Service reset*	Caster	0°53' ± 30'
		Camber	-30' ± 30'
		Toe-in	0 ± 1 mm (0.04 in.)
	Periodic MV inspection	Caster	0°53' ± 45'
		Camber	-30' ± 45'
		Toe-in	0 ± 4 mm (0.16 in.)
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	-31' ± 45'
		Toe-in (outside track-mm (in.))	3.8 ± 4 mm (0.15 in. ± 0.16 in.)
	Service reset*	Camber	-31' ± 30'
		Toe-in	3.8 ± 2 mm (0.15 in. ± 0.08 in.)
	Periodic MV inspection	Camber	-31' ± 45'
		Toe-in	3.8 ± 4 mm (0.15 in. ± 0.16 in.)

* Indicates pre-set adjustable (rear set or other)

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

Body Type And/Or Engine Displacement	All Models

Suspension — General

Car leveling	Std /opt./n a	NA
	Type (air, hyd., etc.)	–
	Manual/auto controlled	–
Provision for brake dip control		–
Provision for acc/ equal control		–
Special provisions for car jacking		–
Shock absorber (front & rear)	Type	Double-acting telescopic tube
	Make	Front: DELCO Rear: Kayaba
	Piston diameter	Front: 32 mm Rear: 25 mm (Fr - 1.3 in., Rr - 1.0 in.)
Other special features		Rod diameter: 20 mm (front) 18 mm (rear) (0.8 in.) (0.7 in.)

Suspension — Front

Type and description		MacPherson strut
Travel	Full jounce	80 mm (3.1 in.)
	Full rebound	85 mm (3.3 in.)
Spring	Type (coil, leaf, other)	Coil
	Material	SUP7
	Size (coil design height & i.d., bar length x dia.)	(14.8 in. x 4.6 in.) (15.1 in. x 4.7 in.) M/T: 375mm x 117.9mm, 383.5mm x 118.2mm (Air conditioned) A/T: 383.5mm x 118.2mm, 392mm x 117.7mm (Air conditioned) (15.1 in. x 4.7 in.) (15.4 in. x 4.6 in.)
	Spring rate (N/mm (lb./in.))	17.6 N/mm (100.5 lbs./in.)
	Rate at wheel (N/mm (lb./in.))	18.6 N/mm (106.2 lbs./in.)
Stabilizer	Type (link, linkless, frameless)	NA
	Material & bar diameter	–

Suspension — Rear

Type and description			MacPherson strut
Drive and torque taken through			–
Travel	Full jounce		85 mm (3.3 in.)
	Full rebound		100 mm (3.9 in.)
Spring	Type (coil, leaf, other)		Coil
	Material		SUP7
	Size (length x width, coil design height & i.d., bar length & dia.)		Sedan: 325.5mm x (88.8-118.8)mm Liftback: 331mm x (88.7-118.7)mm
	Spring rate (N/mm (lb./in.))		18.6 N/mm (106.2 lbs./in.)
	Rate at wheel (N/mm (lb./in.))		20.6 N/mm (117.6 lbs./in.)
	Mounting insulation (type)		Insulator (top and bottom)
	If leaf	No. of leaves	–
		Shackle (comp. or tens.)	–
Stabilizer	Type (link, linkless, frameless)		NA
	Material & bar diameter		–
Track bar (type)			NA

Car Line NOVA

Model Year 1985 Issued _____ Revised (*) _____

Body Type	All Models

Body — Miscellaneous Information

Type of finish (lacquer, enamel, other)		Acryl
Hood	Hinge location (front, rear)	Rear
	Type (counterbalance, prop)	Prop
	Release control (internal, external)	Internal
Trunk lid	Type (counterbalance, other)	Counter balance
	Internal release control (elec., mech., n.a.)	NA(Base), Mechanical(CL)
Bumper front	Bar material & mass (wt.)	Urethane(cover) PE(honeycomb), 3.3 kg (7.3 lbs.)
	Reinforcement material & mass (wt.)	Steel, 10.1 kg
Bumper rear	Bar material & mass (wt.)	Urethane(cover) PE(honeycomb), 4.4 kg (9.7 lbs.)
	Reinforcement material & mass (wt.)	Steel, 11.4 kg
Vent window control (crank, friction, pivot, power)	Front	-
	Rear	-
Seat cushion type	Front	Panel frame + Foam pad
	Rear	Wire frame + Foam pad
	3rd seat	
Seat back type	Front	Spring + Foam pad
	Rear	Board + Foam pad*1 Panel frame + Foam pad*2
	3rd seat	
Vehicle ident. no. location		Instrument panel upper left side

*1 ... Sedan
*2 ... Liftback

Passive Restraint System

Inflatable restraint system	Standard/ optional	NA
	Type of charging system	NA
	Location (stg whl, instru panel, other)	NA
Passive seat belts	Standard/ optional	NA
	Power/ manual	NA
	2 or 3 point	NA
	Knee bar/ lap belt	NA

Frame

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

Car Line NOVA

Model Year 1985 Issued _____ Revised (*) _____

Body Type	All Models

Convenience Equipment

Power windows	Side windows	NA
	Vent windows	NA
	Backlight or tailgate	NA
Power seats (specify type as well as availability)		NA
Reclining front seat back (r-l or both)		Yes, both
Radio (specify type as well as availability)		Std: NA, Opt: AM, AM/FM ETR(Electronic Tuning Radio) 4-speaker Opt: AM/FM ETR(Electronic Tuning Radio) 4-speaker w cassette tape player
Premium sound system (specify)		-
Rear seat speaker		Std: NA, Opt: As a set of 4-speaker system
Power antenna		NA
Clock		NA
Air conditioner (specify type)		OPT
Speed warning device		NA
Speed control device		OPT
Ignition lock lamp		NA
Dome lamp		STD
Glove compartment lamp		NA
Luggage compartment lamp		NA(base models) STD(CL models)
Underhood lamp		NA
Courtesy lamp		NA
Map lamp		NA
Cornering lamp		-
Rear window defroster electrically heated		OPT
Rear window defogger		-
T-bar roof (describe)		NA
Sun roof (describe)		NA
Theft protection—type		Steering lock

Car Line NOVA

Model Year 1985 Issued _____ Revised (*) _____

FEATURE HIGHLIGHTS

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

BODY:

CHASSIS:

ENGINE:

ELECTRICAL:

OTHER:

Car Line NOVA

Model Year 1985 Issued _____ Revised (*) _____

Model	Vehicle Mass (weight)							
	CURB MASS, kg (weight, lb.)*			% PASS MASS DISTRIBUTION				SHIPPING MASS kg (weight lb.)**
				Pass in Front		Pass in Rear		
	Front	Rear	Total	Front	Rear	Front	Rear	
AE82L-FEMDCA	597	384	981	45	55	16	84	954
	(1313.4)	(844.8)	(2158.2)					(2098.8)
AE82L-FEHDCA	611	384	995	45	55	16	84	978
	(1344.2)	(844.8)	(2189.0)					(2151.6)
AE82L-FEMNCA	603	388	991	45	55	16	84	974
	(1326.6)	(853.6)	(2180.2)					(2142.8)
AE82L-FEHNCA	616	388	1004	45	55	16	84	987
	(1355.2)	(853.6)	(2208.8)					(2171.4)

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

Car Line NOVA

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Optional Equipment Differential Mass (weight)*

Equipment	MASS kg (weight, lb.)			Remarks
	Front	Rear	Total	
Air conditioner	22 (48.4)	0	22 (48.4)	
Power steering	8 (17.6)	0	8 (17.6)	
AM/FM multi 4-speaker w/cassette	2.9 (6.38)	1.7 (3.74)	4.6 (10.12)	
Electro-magnetic lock	0.5 (1.1)	1.1 (2.42)	1.6 (3.52)	
Cruise Control	1.5 (3.3)	0	1.5 (3.3)	
Outer mirror (Right hand)	0.8 (1.76)	0.2 (0.44)	1.0 (2.2)	
Side protective moulding	0.2 (0.44)	0.5 (1.1)	0.7 (1.54)	"Base" grade models

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

Car Line NOVA

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Car and Body Dimensions See Key Sheets for definitions

All dimensions to ground are for comparative purposes only. Dimensions are to be shown for all base body models of each car line.
SAE Ref. no. refers to the definition published in SAE Recommended Practice.
J1100a "Motor Vehicle Dimensions," unless otherwise specified

Body Type	SAE Ref. No.	All Models
Width		
Tread (front)	W101	1425 mm (56.1 in.)
Tread (rear)	W102	1405 mm (55.3 in.)
Vehicle width	W103	1635 mm (64.4 in.)
Body width at Sg RP (front)	W117	1625 mm (64.0 in.)
Vehicle width (front doors open)	W120	3275 mm (128.9 in.)
Vehicle width (rear doors open)	W121	3150 mm (124.0 in.)
Length		
Wheelbase	L101	2430 mm (95.7 in.)
Vehicle length	L103	4225 mm (166.3 in.)
Overhang (front)	L104	845 mm (33.3 in.)
Overhang (rear)	L105	950 mm (37.4 in.)
Upper structure length	L123	2475 mm (sedan) (97.4 in.)
Rear wheel C/L "X" coordinate	L127	2430 mm (95.7 in.)
Cowl point "X" coordinate	L125	395 mm (15.6 in.)
Height*		
Passenger distribution (frt/rear)	PD1.2.3	Front: 0 Rear: 1
Trunk/cargo load		0 kg
Vehicle height	H101	1340 mm (52.8 in.)
Cowl point to ground	H114	895 mm (35.2 in.)
Deck point to ground	H138	960 mm (37.8 in.)
Rocker panel-front to ground	H112	195 mm (7.7 in.)
Bottom of door closed-front to grd	H133	275 mm (10.8 in.)
Rocker panel-rear to ground	H111	190 mm (7.5 in.)
Bottom of door closed-rear to grd	H[illegible]	275 mm (10.8 in.)
Ground Clearance*		
Front bumper to ground	H102	380 mm (15.0 in.)
Rear bumper to ground	H[illegible]	350 mm (13.8 in.)
Bumper to ground (front at curb mass (wt.))	H[illegible]3	395 mm (15.6 in.)
Bumper to ground (rear at curb mass (wt.))	H105	400 mm (15.7 in.)
Angle of approach	H[illegible]06	19.0 degree
Angle of departure	H107	17.0 degree
Ramp breakover angle	H147	14.5 degree
Rear axle differential to ground	H153	-
Min. running ground clearance	H156	135 mm (5.3 in.)
Location of min. grd clear		Federal: Air suction pipe California: Converter

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

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

Car Line NOVA

Model Year 1985 Issued _____ Revised (*) _____

Car and Body Dimensions See Key Sheets for definitions

Body Type	SAE Ref. No.	All Models
Front Compartment		
Sg RP front, "X" coordinate	L31	1350 mm (53.1 in.)
Effective head room	H61	963 mm (37.9 in.)
Max eff leg room (accelerator)	L34	1078 mm (42.4 in.)
Sg RP (front to heel)	H30	278 mm (10.9 in.)
Design H-point front travel	L17	209 mm (8.2 in.)
Shoulder room	W3	1366 mm (53.7 in.)
Hip room	W5	1273 mm (50.1 in.)
Upper body opening to ground	H50	1235 mm (46.6 in.)
Steering wheel angle	H18	25°
Back angle	L40	21°
Rear Compartment		
Sg RP Point couple distance	L50	695 mm (27.3 in.)
Effective head room	H63	928 mm (sedan) (36.5 in.)
Min effective leg room	L51	812 mm (31.9 in.)
Sg RP (second to heel)	H31	321 mm (12.6 in.)
Knee clearance	L48	-34 mm
Compartment room	L3	604 mm (23.7 in.)
Shoulder room	W4	1366 mm (sedan) (53.7 in.)
Hip room	W6	1312 mm (sedan) (51.6 in.)
Upper body opening to ground	H51	1241 mm (49.0 in.)
Luggage Compartment		
Usable luggage capacity (L (cu ft))	V1	0.39 m^3
Liftover height	H195	585 mm (sedan) (23.0 in.)

All linear dimensions are in millimeters (inches)

Car Line NOVA

Model Year 1985 Issued _____ Revised (*) _____

Car and Body Dimensions See Key Sheets for definitions

Body Type	All Models

Vehicle Fiducial Marks

Fiducial Mark Number*		Define Coordinate Location
Front		Center of the installation hole (front floor cross-member x seat track outer), both sides
Rear		Center of the front installation hole (rear floor rear seatbelt x retractor), both sides

Fiducial Mark Number		
Front	W21	W5 + 79 mm (3.1 in.)
	L54	L20 mm (0.8 in.)
	H81	H10 + 8[illegible] mm (0.03 in.)
	H161	275 mm (10.8 in.)
	H163	305 mm (12.0 in.)
Rear	W22	W5 + 3 mm (0.1 in.)
	L55	L30 + 35 mm (1.4 in.)
	H82	H1[illegible] + 23 mm (0.9 in.)
	H162	315 mm (12.4 in.)
	H164	360 mm (14.2 in.)

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

Car Line NOVA

Model Year 1985 Issued _____ Revised (*) _____

Car and Body Dimensions See Key Sheets for definitions

Body Type	SAE Ref. No.	4-Door Sedan		

Glass

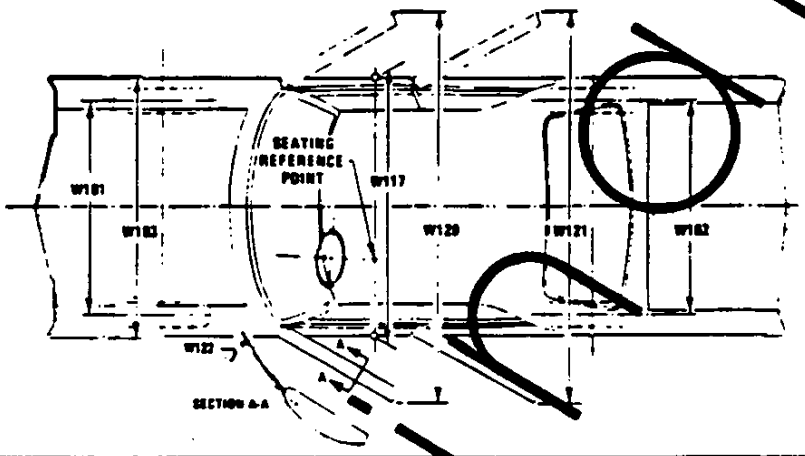
Backlight slope angle (deg.)	H121	57°	
Windshield slope angle (deg.)	H122	56.8°	
Tumble-Home (deg.)	W122	20.8°	
Windshield glass exposed surface area (cm^2 (in^2))	S1	8750 cm^2 (1357 $in.^2$)	
Side glass exposed surface area (cm^2 (in^2))	S2	12395 cm^2 (1922 $in.^2$)	
Backlight glass exposed surface area (cm^2 (in^2))	S3	6560 cm^2 (1017 $in.^2$)	
Total glass exposed surface area (cm^2 (in^2))	S4	27705 cm^2 (4295 $in.^2$)	
Windshield glass (type)		Laminated glass	
Side glass (type)		Tempered glass	
Backlight glass (type)		Tempered glass	

Lamps and Headlamp Shape*

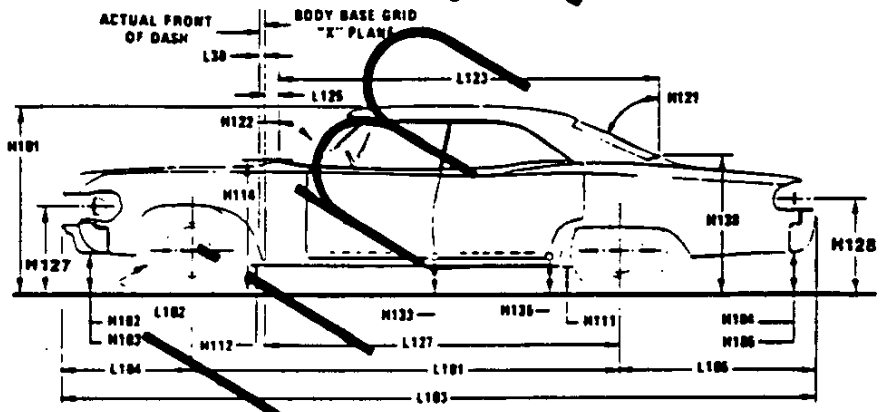
Height above ground to center of bulb or marker	Headlamp (H127)	Highest**	630 mm (24.8 in.)	
		Lowest	-	
	Taillamp (H128)	Highest**	840 mm (33.1 in.)	
		Lowest	-	
	Sidemarker	Front	625 mm (24.6 in.)	
		Rear	655 mm (25.7 in.)	
Distance from C/L of car to center of bulb	Headlamp	Inside	415 mm (16.3 in.)	
		Outside**	592 mm (23.3 in.)	
	Taillamp	Inside	560 mm (22.0 in.)	
		Outside**	-	
	Directional	Front	527 mm (20.7 in.)	
		Rear	668 mm (26.2 in.)	
Headlamp shape			Rectangular, 4 lamps	

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

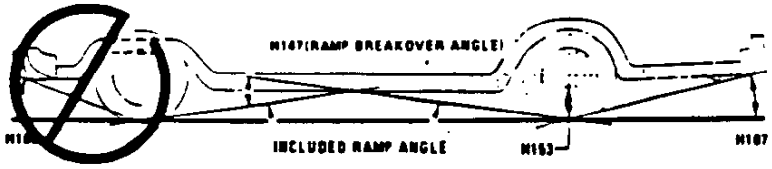
Exterior Width



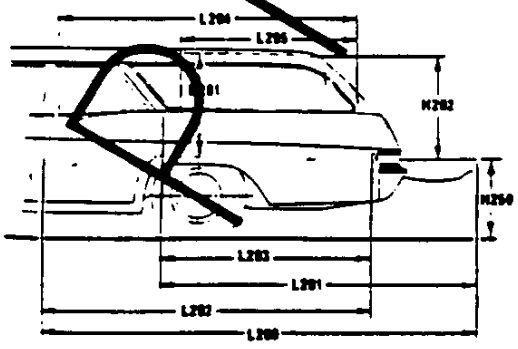
Exterior Length & Height



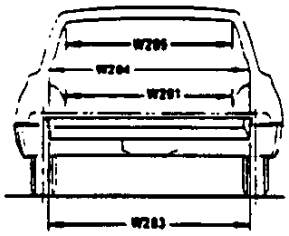
Exterior Ground Clearance

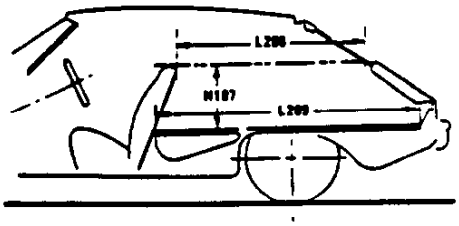


Cargo Space



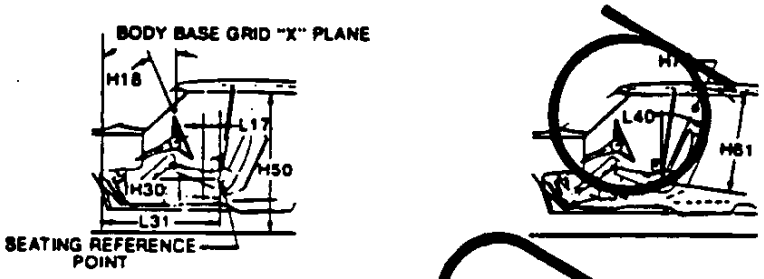
Station Wagon



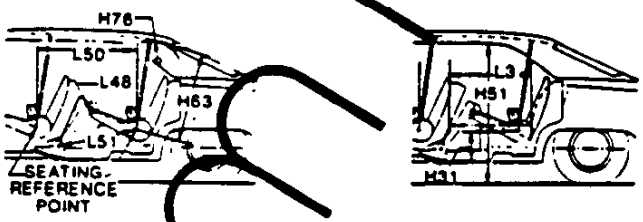


Hatchback

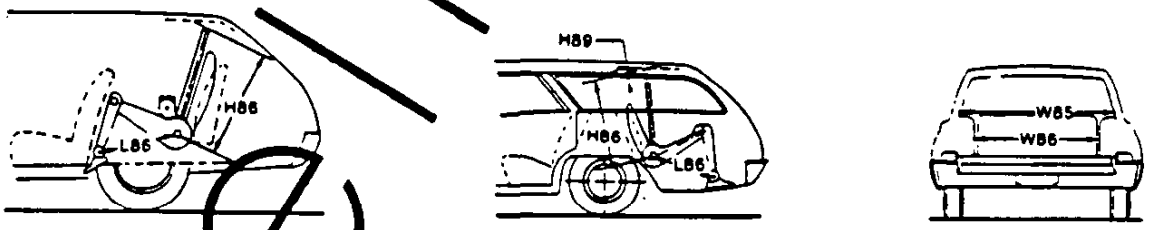
Front Compartment



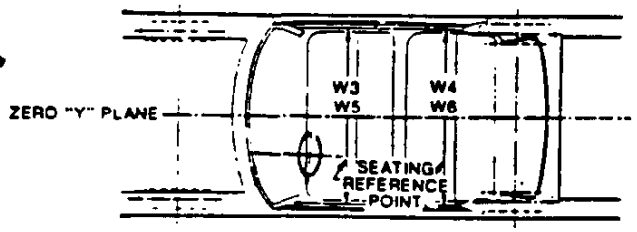
Rear Compartment



Third Seat



Interior Width



Exterior Car And Body Dimensions — Key Sheet Dimensions Definitions

Seating Reference Point

SEATING REFERENCE POINT means the manufacturer's design reference point which —
(a) Establishes the rearmost normal design driving or riding position of each designated seating position in a vehicle;
(b) Has coordinates established relative to the design vehicle structure;
(c) Simulates the position of the pivot center of the human torso and thigh, and
(d) Is the reference point employed to position the two dimensional templates described in SAE Recommended Practice J826, "Manikins for Use in Defining Vehicle Seating Accommodations," November 1962.

Width Dimensions

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

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

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

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

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

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

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

Length Dimensions

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

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

L102 TIRE SIZE As specified by the manufacturer

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

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

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

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

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

L125 COWL POINT "X" COORDINATE

Height Dimensions

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

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

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

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

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

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

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

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

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

H122 WINDSHIELD SLOPE ANGLE. The angle between the vertical reference line and a chord of the windshield are running from the lower DLO to the upper DLO at the vehicle zero "Y" plane In the case of wrap over glass, the angle to be measured will be formed by a chord 457 mm (18.0 in) long drawn from the lower DLO to the intersecting point on the windshield

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

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

Ground Clearance Dimensions

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

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

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

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

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

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

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

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

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

Front Compartment Dimensions

PD1 PASSENGER DISTRIBUTION—FRONT.

L31 SgRP—FRONT "X" COORDINATED

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

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

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

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

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

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

W5 HIP ROOM—FRONT The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the SgRP—front within 25 mm (1.0 in.) below and 76 mm (3.0 in.) above the SgRP—front and 76 mm (3.0 in.) fore and aft the SgRP—front

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

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

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

Rear Compartment Dimensions

PD2 PASSENGER DISTRIBUTION—SECOND

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

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

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

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

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

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

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

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

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

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

Luggage Compartment Dimensions

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

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

Station Wagon — Third Seat Dimensions

PD3 PASSENGER DIRECTION—THIRD

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

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

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

H86 EFFECTIVE HEAD ROOM—THIRD The dimension, measured along a line 8 deg from the SgRP—third to the headlining rear of vertical plus a constant of 102 mm (4.0 in.)

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

Station Wagon – Cargo Space Dimensions

L200 CARGO LENGTH—OPEN—FRONT The minimum dimension measured longitudinally from the back of the front seatback at the height of the undepressed floor covering to the rearmost point on the undepressed floor covering on the open tailgate or cargo surface if the rear closure is a conventional door type tailgate, at the zero "Y" plane.

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

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

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

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

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

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

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

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

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

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

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

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

V2 STATION WAGON
Measured in inches:

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

Measured in mm:

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

V4 HIDDEN CARGO VOLUME As specified by the manufacturer.

Hatchback – Cargo Space Dimensions

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

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

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

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

V3 HATCHBACK
Measured in inches:

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

Measured in mm:

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

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