MANUFACTURERS MOTOR VEHICLE SPECIFICATIONS

METRIC (U.S. Customary)

1995

Manufacturer	Vehicle Line	
FORD MOTOR COMPANY	FORD CONTOUR	
Mailing Address		
P.O. BOX 2053 DEARBORN, MICHIGAN 48121	Issued FEBRUARY 28, 1994	Revised

Direct questions concerning these specifications to the manufacturer listed above.

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

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

mvma

Motor Vehicle Manufacturers Association
of the United States, Inc.
Forms Provided by Technical Affairs Division

FORM MVMA-95

MVMA Specifications

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∅ **Indicates Format Change From Previous Year**

NOTE:

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

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Vehicle Origin

Design & development (company)	Ford Motor Company
Where built (country)	U.S.A.
Authorized U.S. sales marketing representative	Ford Division, Ford Motor Company

Vehicle Models

Model Description & Drive (FWD/RWD/AWD/4WD)*	Introduction Date	Make, Vehicle Models, Series, Body Type (Mfgr's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk/Cargo Load-Kilograms (Pounds)	EPA Fuel Economy (City/Hwy)
FRONT WHEEL DRIVE (FWD)					
CONTOUR GL					
4-Door Sedan	9/29/94	65FA	2/3	68 (150)	
CONTOUR LX					
4-Door Sedan	9/29/94	66FA	2/3	68 (150)	
CONTOUR SE					
4-Door Sedan	9/29/94	67FA	2/3	68 (150)	

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

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Power Teams

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

			A	B	C	D
ENGINE	Engine Code		993	993	99L	99L
	Displacement Liters (in^3)		2.0 (121)	2.0 (121)	2.5 (155)	2.5 (155)
	Induction System (FI, Carb, etc.)		Sequential Electronic Port Fuel Injection	Sequential Electronic Port Fuel Injection	Sequential Electronic Port Fuel Injection	Sequential Electronic Port Fuel Injection
	Compression Ratio		9.6:1	9.6:1	9.7:1	9.7:1
	SAE Net at RPM	Power kW (bhp)	93 (125) @ 5500	93 (125) @ 5500	127 (170) @ 6250	127 (170) @ 6250
		Torque N•m (lb. ft.)	176 (130) @ 4000	176 (130) @ 4000	224 (165) @ 4250	224 (165) @ 4250
	Exhaust single, dual		Single	Single	Single	Single
TRANS	Transmission/ Transaxle		5-Spd. Man. MTX-75 Transaxle	4-Spd. Auto. CD4E Transaxle	5-Spd. Man. MTX-75 Transaxle	4-Spd. Auto. CD4E Transaxle
	Effective Final Drive/ Axle Ratio (std. first)		3.82:1	3.92:1	4.06:1	3.77:1

Series Availability		Power Teams (A - B - C - D)	
Model	Code	Standard	Optional
GL 4-Door Sedan		A	B,C,D
LX 4-Door Sedan		A	B,C,D
SE 4 Door Sedan		C	D

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Engine Description	2.0L
Engine Code	

ENGINE – GENERAL

Type and description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-chamber, etc.)		Inline, Front Transverse, (DOHC) Dual Overhead Camshaft, Multi-Valve, 4-Valves Per Combustion Chamber
Manufacturer		Ford Motor Company
No. of cylinders		Four
Bore		84.8 (3.34)
Stroke		88.0 (3.46)
Bore spacing (C/L to C/L)		91.8 (3.61)
Cylinder block material & mass kg (lbs.) (machined)		Cast Iron and 36.8 (81.21)
Cylinder block deck height		215.3 (8.48)
Cylinder block length		395.0 (15.55)
Deck clearance (minimum) (above or below block)		
Cylinder head material & mass kg (lbs.)		Aluminum & 13.2 (29.1)
Cylinder head volume cm^3 ($inches^3$)		47.7 (2.91)
Cylinder liner material		N/A
Head gasket thickness (compressed)		1.66 (0.66)
Minimum combustion chamber total volume cm^3 ($inches^3$)		47.7 (2.91)
Cyl. no. system (front to rear)*	L. Bank	1, 2, 3, 4
	R. Bank	N/A
Firing order		1, 3, 4, 2
Intake manifold material & mass kg (lbs.)**		Fiberglass Reinforced Nylon Resin & 3.07 (6.7)
Exhaust manifold material & mass kg (lbs.)**		Cast Iron & 4.7 (10.4)
Knock sensor (number & location)		One & Cylinder Block
Fuel required unleaded, diesel, etc.		Unleaded
Fuel antiknock index (R + M) ÷ 2		87 Minimum
Engine mounts	Quantity	Four – 2 Torque-Roll Axis & 2 Roll-Restrictors
	Material and type (elastomeric, hydroelastic, hydraulic damper, etc.)	Elastomeric
	Added isolation (sub-frame, crossmember, etc.)	Isolated Front Subframe
Total dressed engine mass (wt) dry ***		114.0 (251.0)

Engine – Pistons

Material & mass, g (weight, oz.) - piston only	High Silicon Aluminum & 177 (0.97) For Four

Engine – Camshaft

Location		Overhead (Dual)
Material & mass kg (weight, lbs.)		Chilled Cast Iron & 2.18 (4.8)
Drive type	Chain/belt	Belt
	Width/pitch	

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

** Finished state.

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

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Engine Description **Engine Code**	2.5L

ENGINE – GENERAL

Type and description (inline, V, angle, flat, location, front, mid, rear, transverse, longitudinal, sohc, dohc, ohv, hemi, wedge, pre-chamber, etc.)		V-6, 60°, Front Transverse, (DOHC) Dual Overhead Camshafts Per Cylinder Head, Multi-Valve 24-Valves, Combustion Chambers, Variable Induction Intake with Dual Tuned Runners for Each Cylinder
Manufacturer		Ford Motor Company
No. of cylinders		Six
Bore		82.4 (3.24)
Stroke		79.5 (3.13)
Bore spacing (C/L to C/L)		102.0 (4.02)
Cylinder block material & mass kg (lbs.) (machined)		Aluminum
Cylinder block deck height		208 (8.19)
Cylinder block length		396 (15.6)
Deck clearance (minimum) (above or below block)		0.415 (0.016) Below to 0.115 (0.0045) Above
Cylinder head material & mass kg (lbs.)		Aluminum & 10.2 (22.5) – RH and 10.56 (23.3) – LH
Cylinder head volume cm^3 ($inches^3$)		44.5 (2.72) Above Head Gasket
Cylinder liner material		Cast Iron
Head gasket thickness (compressed)		1 (0.034)
Minimum combustion chamber total volume cm^3 ($inches^3$)		45.1 (2.76)
Cyl. no. system (front to rear)*	L. Bank	4, 5, 6
	R. Bank	1, 2, 3
Firing order		1, 4, 2, 5, 3, 6
Intake manifold material & mass kg (lbs.)**		Aluminum
Exhaust manifold material & mass kg (lbs.)**		Stamped Steel
Knock sensor (number & location)		One & on RH Rear Side of Block
Fuel required unleaded, diesel, etc.		Unleaded
Fuel antiknock index (R + M) ÷ 2		87 Minimum
Engine mounts	Quantity	Four – 2 Torque-Roll Axis & 2 Roll-Restrictors
	Material and type (elastomeric, hydroelastic, hydraulic damper, etc.)	Elastomeric
	Added isolation (sub-frame, crossmember, etc.)	Isolated Front Subframe
Total dressed engine mass (wt) dry ***		167 (368)

Engine – Pistons

Material & mass, g (weight, oz.) - piston only	Hi-Silicon Aluminum & 305 (10.8)

Engine – Camshaft

Location		Overhead, (Dual) on Each Cylinder Head
Material & mass kg (weight, lbs.)		Forged Steel Lobes Assembled to Steel Tube
Drive type	Chain/belt	Chain
	Width/pitch	14.69 (0.59) 9.375 (0.375)

* Rear of engine – drive takeoff. View from drive takeoff end to determine [illegible] side of engine.

** Finished state.

*** Dressed engine mass (weight) includes the following: Most engine mounted components such as: throttle body, RH exhaust/catalyst, power steering pump & bracket, partial engine mount, alternator, A/C compressor, automatic transmission flex plate and linkshift bracket.

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Engine – Valve System

Hydraulic lifters (std., opt., n.a.)		Standard	
Valves	Number intake/exhaust	8/8	12/12
	Head O.D. intake/exhaust	32 (1.26) / 28 (1.102)	32 (1.26) / 26 (1.02)

Engine – Connecting Rods

Material & mass kg., (weight, lbs.)*	Sintered Powder	Powered Metal
Length (axes C/L to C/L)	136.2 (5.36)	138.1 (5.44)

Engine – Crankshaft

Material & mass kg., (weight, lbs.)*		Cast Iron & 13.2 (29.1)	Forged Steel & 13.95 (30.75)
End thrust taken by bearing (no.)		#3	#4
Length & number of main bearings		24.45 (0.96) Width & Five	17.8 (0.70) & Four
Seal (material, one, two piece design, etc.)	Front	Fluoroelastomer – One Piece	Dual Lip Fluorocarbon – One Piece
	Rear	Fluoroelastomer – One Piece	Single Lip Fluorocarbon – One Piece

Engine – Lubrication System

Normal oil pressure kPa (psi) at engine rpm		310 (45.0) – 448 (65.0) @ 4500 rpm
Type oil intake (floating, stationary)	Stationary	
Oil filter system (full flow, part, other)	Full Flow	
Capacity of c/case, less filter-refill-L (qt.)	3.75 (3.96) Plus Oil Filter	5.2 (5.5) with Filter

Engine – Diesel Information (NOT OFFERED)

Diesel engine manufacturer	
Glow plug, current drain at 0°F	
Injector nozzle – Type	
Injector nozzle – Opening pressure kPa (psi)	
Pre-chamber design	
Fuel injection pump – Manufacturer	
Fuel injection 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 (NOT OFFERED)

Turbo charger - manufacturer	
Super charger - manufacturer	
Intercooler	

* Finished state.

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Engine – Cooling System

		2.0L	2.5L
Coolant recovery system (std., opt., n.a.)		Standard	
Coolant fill location (rad., bottle)		Bottle	
Radiator cap relief valve pressure kPa (psi)			126 – 158 (18.3 – 22.9)
Circulation thermostat	Type (choke, bypass)		Bypass
	Starts to open at °C (°F)		82 (180)
Water pump	Type (centrifugal, other)	Centrifugal	
	GPM 1000 pump rpm		8.5
	Number of pumps	One	
	Drive (V-belt, other)	V-Belt	Poly-V-Belt, Three Rib
	Bearing type		Roller and Ball
	Impeller material		Plastic (PPS)
	Housing material	Cast Iron	Aluminum
By-pass recirculation type (inter., ext.)		External	
Cooling system capacity	With heater – L(qt.)		
	With air conditioner – L(qt.)		
	Opt. equipment specify – L(qt.)		
Water jackets full length of cyl. (yes, no)		Yes	No
Water all around cylinder (yes, no)		No	Yes
Water jackets open at head face (yes, no)			No
Radiator core	Std., A/C, HD	Standard	Standard, A/C
	Type (cross-flow, etc.)	Cross-flow	
	Construction (fin & tube mechanical, braze, etc.)	Fin & Tube, Brazed, w/ Plastic Tanks	
	Material, mass kg (wgt., lbs.)		Aluminum, 4 (8.82)
	Width		620 (24.4)
	Height		396.8 (15.6)
	Thickness		26 (1.02)
	Fins per inch		21
Radiator end tank material		Plastic (Glass Filled Nylon)	
Fan	Std., elec., opt.	Standard, Electric	
	Number of blades & type (flex, solid, material)		Six & Glass Filled Nylon
	Number & location (front, rear of radiator)	One & Rear of Radiator	One (Two Speed) & Rear of Radiator
	Diameter & projected width		Approx. 386 (15.2) & 45 to 75 (1.77 to 2.95)
	Ratio (fan to crankshaft rev.)	N/A	
	Fan cutout type		
	Drive type (direct, remote)	Remote	
	RPM at idle (elec.)		2480
	Motor rating (wattage/elec.)		240
	Motor switch (type & location/elec.)		
	Switch point (temp./pressure/elec.)		Temperature & A/C Status
	Fan shroud (material)	Plastic	

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

Induction type: carburetor, fuel injection system, etc.		Sequential Electronic Port Fuel Injection System	
Manufacturer		Ford Motor Company	
Carburetor no. of barrels		N/A	
Idle A/F mix.		Closed Loop Adaptive (Stoichiometric)	TBD
Fuel Injection	Point of injection (no.)	Intake Ports (4)	Intake Ports (6)
	Constant, pulse, flow	Timed Pulse	
	Control (electronic, mech.)	Electronic	
	System pressure kPa (psi)	270 (40)	
Idle spd.-rpm (spec. neutral or drive and propane if used)	Manual	850	725 – A/C Off; 750 – A/C On
	Automatic	650	725 – A/C Off; 750 – A/C On
Intake manifold heat control (exhaust or water thermostatic or fixed)		Water Thermostatic	N/A
Air cleaner type		Paper Element	
Fuel filter (type/location)		Stainless Steel Case w/ Paper Element on Fuel Tank	
Fuel Pump	Type (elec. or mech.)	Electric	
	Location (eng., tank)	In Fuel Tank	
	Pressure range kPa (psi)	207 – 310 (30 – 45) Running; 241 – 310 (35 – 45) Not Running	
	Flow rate at regulated pressure L (gal)/hr @ kPa (psi)	80 (21) / Hr. @ 310 (45)	

Fuel Tank

Capacity refill L (gallons)		55.0 (14.5)
Location (describe)		In Front of Rear Suspension
Attachment		Straps
Material & Mass kg (weight lbs.)		Hi-Density, Poly Ethylene & 9.4 (20.7)
Filler pipe	Location & material	RH Rear Quarter Panel & Hi-Density, Poly Ethylene
	Connection to tank	Mechanically Restrained Rubber Grommet
Fuel line (material)		Steel
Fuel hose (material)		Nylon
Return line (material)		Steel / Nylon
Vapor line (material)		Steel / Nylon
Extended range tank	Opt., n.a.	N/A
	Capacity L (gallons)	—
	Location & material	—
	Attachment	—
Auxiliary tank	Opt., n.a.	N/A
	Capacity L (gallons)	—
	Location & material	—
	Attachment	—
	Selector switch or valve	—
	Separate fill	—

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Vehicle Emission Control

Exhaust Emission Control	Type (air injection, engine modifications, other)		Engine Modifications	N/A
	Air Injection	Pump or pulse	N/A	
		Driven by	—	
		Air distribution (head, manifold, etc.)	—	
		Point of entry	—	
	Exhaust Gas Recirculation	Type (controlled flow, open orifice, other)	Controlled Flow	
		Exhaust source	—	RH Exhaust Manifold
		Point of exhaust injection (spacer, carburetor, manifold, other)	Manifold	Intake Manifold
	Catalytic Converter	Type		
		Number of	One	Three
		Location (s)	Close-Coupled To Manifold	2 – Close-Coupled to Manifold 1 – Underbody
		Volume L (in³)		RH – 0.47 (29), LH – 0.65 (40); UB – 2 x 0.92 (60)
		Substrate type		Monolith
		Noble metal type		
		Noble metal concentration (g/cm³)		
Crankcase Emission Control	Type (ventilates to atmosphere, induction system, other)		Vents to Induction	Closed
	Energy source (manifold vacuum, carburetor, other)		Manifold Vacuum	
	Discharges to (intake manifold, other)		Intake Manifold	
	Air inlet (breather cap, other)			Air Hoses
Evaporative 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)		Single With Flex Coupling	Single with Crossover and Flex Coupling (A/T Variants)
Muffler no. & type (reverse flow, straight thru, separate resonator) Material & Mass kg (weight lbs)		One, Reverse Flow	TBD
Resonator no. & type		N/A	
Exhaust pipe	Branch o.d., wall thickness	N/A	
	Main o.d., wall thickness		
	Material & Mass kg (weight lbs)		
Intermediate pipe	o.d. & wall thickness	50.8 (2.00)	TBD
	Material & Mass kg (weight lbs)		
Tail pipe	o.d. & wall thickness		
	Material & Mass kg (weight lbs)		

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

Manual 4-speed (manufacturer/country)	N/A
Manual 5-speed (manufacturer/country)	Standard (Ford / Germany)
Manual 6-speed (manufacturer/country)	N/A
Automatic (manufacturer/country)	N/A
Automatic overdrive (manufacturer/country)	Optional 4-Speed (Ford / U.S.A.)

Manual Transmission/Transaxle

Number of forward speeds		Five
Gear ratios	1st	3.42
	2nd	2.14
	3rd	1.45
	4th	1.03
	5th	0.77
	6th	—
	Reverse	3.46
Synchronous meshing (specify gears)		All Forward Gears
Shift lever location		Floor
Trans. case mat'l. & mass kg (lbs)*		Die Cast Aluminum
Lubricant	Capacity L (pt.)	2.6 (5.5)
	Type recommended	ESD-M2C186-A

Clutch (Manual Transmission)

Clutch manufacturer		F + S	
Clutch type (dry, wet; single, multiple disc)		Single Disc, Dry Plate	
Linkage (hydraulic, cable, rod, lever, other)		Hydraulic	
Max. pedal effort (nom. spring load) N (lbs)	Depressed	90 (20.2)	100 (22.5)
	Released	90 (20.2)	100 (22.5)
Assist (spring, power/percent, nominal)			
Type pressure plate springs		Diaphragm	
Total spring load (nominal) N (lbs)			4700 (1057)
Clutch facing	Facing mfgr. & material coding	Birel	
	Facing material & construction	Non-Asbestos	
	Rivets per facing	8	
	Outside x inside dia. (nominal)	240 (9.45) x 170 (6.69)	
	Total eff. area cm^2 ($in.^2$)		
	Thickness (pressure plate side/fly wheel side)	12 (0.47)	
	Rivet depth (pressure plate side/fly wheel side)		
	Engagement cushion method		
Release bearing type & method lub.			
Torsional damping method, springs, hysteresis			

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

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Automatic Transmission/Transaxle

Trade Name		(CD4E) Transaxle	
Type and special features (describe)		4-Speed, Electronic Controlled with Overdrive, Lock-Up Torque Converter and Synchronous Shift	
Shift mechanics		1 to 2 Non-Synchronous, 2 to 3 Synchronous, 3 to 4 Non-Synchronous	
Gear selector	Location (column, floor, other)	Floor	
	Ltr./No. designation (e.g. PRND21)	P R N (D) 2 1	
	Shift interlock (yes, no, describe)	Yes, Locks Selector in "Park" Position Until Service Brakes are Applied	
Gear ratios	1st	2.89	
	2nd	1.57	
	3rd	1.00	
	4th	0.70	
	Reverse	2.31	
	Final drive ratio	3.92	
Max. upshift vehicle speed - drive range km/h (mph)		(a)	(b)
Max. upshift engine speed RPM		6600	6400 1 to 2, 2 to 3; 6200 3 to 4
Max. kickdown speed - drive range km / h (mph)		145 (90) 4 to 3 93 (58) 3 to 2	153 (95) 4 to 3 97 (60) 3 to 2
Min. overdrive speed km / h (mph)		48 (30)	
Torque converter	Type	Modulated Lock-Up Capable	
	Torus design	20% Squashed	
	Number of elements	Three	
	Max. ratio at stall	1.98:1	2.15:1
	Type of cooling (air, liquid)	Liquid	
	Nominal diameter	235 (9.25)	260 (10.25)
	Capacity factor "K"	234	209
Pump type		Gear and Crescent	
Lubricant	Capacity refill L (pt.)	8.4 (17.8)	9.5 (20.0)
	Type recommended	ESP-M2C166-H (Mercon® for Service)	
Oil cooler (std., opt., N.A., internal, external, air, liquid)		Standard, External, Oil to Engine Coolant	
Transmission mass kg (lbs) & case material**		Aluminum & 80 (177.0)	Aluminum & 84 (185.0)

All Wheel / 4 Wheel Drive (NOT OFFERED)

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

* Input speed ÷ $\sqrt{\text{torque}}$

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

(a) 51 (32) 1 to 2, 103 (64) 2 to 3, 153 (95) 3 to 4

(b) 64 (40) 1 to 2, 114 (71) 2 to 3, 173 (108) 3 to 4

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Engine Description / Engine Code	2.0L	2.5L

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

Effective final drive ratio (or overall top gear ratio)			3.82 (3.25)	3.92 (2.45)	4.06 (3.03)	3.77 (2.45)
Transfer ratio and method (chain, gear, etc.)			3.82 (Gear)	(Chain)	(Gear)	(Chain)
Front drive unit	Ring gear o.d.					
	No. of teeth	Pinion				
		Ring gear				

Front Drive Unit

Description (integral to trans., etc.)		Integral to Transmission
Limited slip differential (type)		N/A
Drive pinion	Type	Bevel Gear
	Offset	
No. of differential pinions		Two
Pinion / differential	Adjustment (shim, etc.)	
	Bearing adjustment	
Driving wheel bearing (type)		Tapered Roller Bearing
Lubricant	Capacity L (pt.)	Part of Transmission Lubricant – 2.6 (5.5)
	Type recommended	ESD-M2C786-A (Mercon® for Service)

Axle Shafts — Front Wheel Drive

Manufacturer and number used			GKN, Two – One Each, LH and RH Sides
Type (straight, solid bar, tubular, etc.)		Left	Straight
		Right	Straight
Outer diam. x length* x wall thickness	Manual transaxle	Left	
		Right	
	Automatic transaxle	Left	
		Right	
	Optional transaxle	Left	
		Right	
Slip yoke	Type		Integral with C.V. Joint
	Number of teeth		N/A
	Spline o.d.		N/A
Universal joints	Make and mfg. no.	Inner	GKN
		Outer	GKN
	Number used		4
	Type, size, plunge	Inner	
		Outer	
	Attach (u-bolt, clamp, etc.)		
	Bearing	Type (plain, anti-friction)	Anti-Friction
		Lubrication (fitting, prepack)	Prepack
Drive taken through (torque tube, arms or springs)			
Torque taken through (torque tube, arms or springs)			

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

MVMA Specifications

Vehicle Line CONTOUR
Model Year 1995 Issued 2/28/94 Revised (•)

METRIC (U.S. Customary)

Model Code/Description And/Or Engine Code/Description

ALL MODELS EXCEPT SE MODEL		SE MODEL
w/ STD. 2.0L	w/OPT. 2.5L	w/STD. 2.5L

Suspension – General Including Electronic Controls

Car leveling	Standard/optional/not avail.		N/A
	Manual/automatic control		—
	Type (air/hydraulic)		—
	Primary/assist spring		—
	Rear only/4 wheel leveling		—
	Single/dual rate spring		—
	Single/dual ride heights		—
	Provision for jacking		—
Shock absorber damping controls	Standard/option/not avail.		N/A
	Manual/automatic control		—
	Number of damping rates		—
	Type of actuation (manual/ electric motor/air, etc.)		—
	sensors	Lateral acceleration	—
		Deceleration	—
		Acceleration	—
		Road surface	—
Shock absorber (front & rear)	Type		Combined Strut / Gas-Pressurized / Hydraulic
	Make		Tokico
	Piston diameter		Front – 48 (1.89); Rear – 45 (1.77)
	Rod diameter		Front – 22 (0.87); Rear – 22 (0.87)

Suspension – Front

Type and description		Independent Strut-Type with Lower A-Arms, Strut-Mounted Coil Springs and Sta-Bar All Steering and Suspension Components are Connected to Rubber-Mounted Subframe (a)		
Travel	Full jounce (define load condition)	80 (3.15)		
	Full rebound	100 (3.94)		
Spring	Type (coil, leaf, other & material)	Coil, Helical		
	Insulators (type & material)	N/A		
	Size (Leaf: length & width; Coil: design height & i.d.; Bar: length & diameter)	185 (7.28) & 51 (2.0)	182 (7.17) & 51 (2.0)	178 (7.0) & 51 (2.0)
	Spring rate [N/mm (lb./in.)]	18 (159.3)	20 (177.0)	24 (212.0)
	Rate at wheel [N/mm (lb./in.)]	18.8 (166.4)	20.6 (182.3)	24.3 (215.1)
Stabilizer	Type (link, linkless, frameless)	Link		
	Material & O.D. bar/tube, wall thickness	Steel & 20 (0.79) Bar		

Suspension – Rear

Type and description		Independent Quadralinks with Struts, Strut-Mounted Coil Springs and Sta-Bar Mounted to a Rigidly Mounted Subframe		
Travel	Full jounce (define load condition)	100 (3.94)		
	Full rebound	130 (5.12)		
Spring	Type (coil, leaf, other & material)	Coil, Conical		
	Size (Leaf: length & width; Coil: design height & i.d.; Bar: length & diameter)	234 (9.20) & 85 (3.35)		223 (8.78) & 85 (3.35)
	Spring rate [N/mm (lb./in.)]	16 (142)		21 (186)
	Rate at wheel [N/mm (lb./in.)]	16.3 (144.3)		22.4 (198.3)
	Insulators (type & material)	N/A		Sleeve & Plastic (b)
	If leaf: No. of leaves	N/A		
	If leaf: Shackle (comp. or tens.)	—		
Stabilizer	Type (link, linkless, frameless)	Link		
	Material & O.D. bar/tube, wall thickness	Steel & 16 (0.63) Bar	Steel & 17 (0.67) Bar	Steel & 18 (0.71) Bar
Track bar (type)		N/A		

(a) Lower A-arms are connected with hydromount bushings
(b) Polyurethane plastic

MVMA Specifications

Vehicle Line CONTOUR
Model Year 1995 Issued 2/28/94 Revised (•) _____

METRIC (U.S. Customary)

Model Code/Description And/Or Engine Code/Description

GL, LX MODELS w/Std. 2.0L
(See Page 12A for Models w/Opt. 2.5L)

Brakes — Service

Description			Four Wheel Hydraulic Actuated System
Manufacturer and brake type (std., opt., n.a.)	Front (disc or drum)		Disc, Standard
	Rear (disc or drum)		Drum, Standard (Disc Included w/ Opt. 2.5L Engine)
Valving type (proportion, delay, metering, other)			Proportion
Power brake (std., opt., n.a.)			Standard
Booster type (remote, integral, vac., hyd., etc.)			Vacuum
Vacuum	Source (inline, pump, etc.)		Inline
	Reservoir (volume in.³)		311 cm³ (19)
	Pump-type (elec, gear driven, belt driven)		N/A
Traction assist	Operational speed range		All Speeds
	Type (engine or brake intervention)		Brake and Engine Intervention
Anti-lock device	Front / rear (std., opt., n.a.)		Optional
	Manufacturer		Bendix
	Type (electronic, mech.)		Electronic
	Number sensors or circuits		4
	Number anti-lock hydraulic circuits		4
	Integral or add-on system		Integral
	Yaw control (yes, no)		No
	Hydraulic power source (elec., vac. mtr., pwr. strg.)		Electric
Effective area cm²(in.²)*			152 (23.6) Front / 260 (40.3) Rear
Gross lining area cm²(in.²)**(F/R)			200 (31.0) / 260 (40.3)
Swept area cm²(in.²)***(F/R)			1252 (194.0) / 472 (73.2)
Rotor	Outer working diameter	F/R	260 (10.23) / N/A
	Inner working diameter	F/R	161 (6.34) / N/A
	Thickness	F/R	24 (0.94) / N/A
	Material & type (vented/solid)	F/R	Grey Cast Iron & Vented / N/A
Drum	Diameter & width	F/R	N/A / 203 (8.0) & 37 (1.50)
	Type and material	F/R	N/A / Cast Iron
Wheel cylinder bore			22.2 (0.87)
Master cylinder	Bore/stroke	F/R	25.4 (1.0) / 32.0 (1.26) Non-ABS, 34.0 (1.34) ABS
Pedal arc ratio			3.7:1
Line pressure at 445 N(100 lb.)pedal load [kPa (psi)]			9170 (1330)
Lining clearance		F/R	0.3 (0.012) ± 0.1 (0.004) / 0.15 to 1.1 (0.006 to 0.043)
Brake lining — Front wheel	Bonded or riveted (rivets/seg.)		Bonded
	Rivet size		N/A
	Manufacturer		Textar, Ferodo or Galfer
	Lining code*****		TX 4027FF, FER 3432F FF or GL G3227 FF, No. 4
	Material		Low Metallic, Non-Asbestos
	**** Size	Primary or out-board	58 (3.54)
		Secondary or in-board	58 (3.54)
	Shoe thickness (no lining)		5.5 (0.22)
Brake lining — Rear wheel	Bonded or riveted (rivets/seg.)		Bonded
	Manufacturer		Mintex Don or Ferodo
	Lining code*****		DON 8212 FF or FER 3615F FF, No. 38
	Material		Reinforced Glass Fibre Bound in Resin, Non-Asbestos
	**** Size	Primary or out-board	43 (2.62)
		Secondary or in-board	22 (1.34)
	Shoe thickness (no lining)		2 (0.07)

* Excludes rivet holes, grooves, chamfers, etc. **Includes rivet holes, grooves, chamfers, etc.
*** Total swept area for four brakes. (Drum brake: Widest lining contact width for each brake x its contact circumference.)
(Disc brake: Square of Outer Working Dia. minus Square of Inner Working Dia. multiplied by Pi/2 for each brake.)
**** Size for drum brakes includes length x width x thickness. *****Manufacturer I.D., catalog for formulation designation and coefficient of friction classification.

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line CONTOUR
Model Year 1995 Issued 2/28/94 Revised (•)

Model Code/Description And/Or Engine Code/Description

SE MODEL and GL MODEL w/ OPT. 2.5L

Brakes — Service

Description				Four Wheel Hydraulic Actuated System
Manufacturer and brake type (std., opt., n.a.)	Front (disc or drum)			Disc, Standard
	Rear (disc or drum)			Disc, Standard
Valving type (proportion, delay, metering, other)				Proportion
Power brake (std., opt., n.a.)				Standard
Booster type (remote, integral, vac., hyd., etc.)				Vacuum
Vacuum	Source (inline, pump, etc.)			Inline
	Reservoir (volume in.^{3})			311 cm^3 (19)
	Pump-type (elec. gear driven, belt driven)			N/A
Traction assist	Operational speed range			All Speeds
	Type (engine or brake intervention)			Brake Intervention
Anti-lock device	Front / rear (std., opt., n.a.)			Optional / Optional
	Manufacturer			Bendix
	Type (electronic, mech.)			Electronic
	Number sensors or circuits			4
	Number anti-lock hydraulic circuits			4
	Integral or add-on system			Integral
	Yaw control (yes, no)			No
	Hydraulic power source (elec., vac. mtr., pwr. strg.)			Electric
Effective area cm^2(in.^{2})*				152 (23.6) Front / 92 (14.3) Rear
Gross lining area cm^2(in.^{2})**(F/R)				200 (31.0) / 111 (17.2)
Swept area cm^2(in.^{2})***(F/R)				1252 (194.0) / 912 (141.0)
Rotor	Outer working diameter		F/R	260 (10.24) / 251 (9.88)
	Inner working diameter		F/R	161 (6.34) / 177 (6.97)
	Thickness		F/R	24 (0.94) / 20 (0.79)
	Material & type (vented/solid)		F/R	Grey Iron & Vented / Grey Iron & Vented
Drum	Diameter & width		F/R	N/A
	Type and material		F/R	—
Wheel cylinder bore				
Master cylinder	Bore/stroke		F/R	25.4 (1.0) / 32.0 (1.26) Non-ABS, 34.0 (1.34) ABS
Pedal arc ratio				3.7:1
Line pressure at 445 N(100 lb.)pedal load [kPa (psi)]				9170 (1330)
Lining clearance			F/R	0.3 (0.012) ± 0.1 (0.004) / 0.23 (0.009) ± 0.07 (0.003)
Brake lining	Front wheel	Bonded or riveted (rivets/seg.)		Bonded
		Rivet size		N/A
		Manufacturer		Textar, Ferodo or Galfer
		Lining code*****		TX 4027FF, FER 3432F FF or GL G3227 FF, No. 4
		Material		Low Metallic, Non-Asbestos
		****	Primary or out-board	58 (3.54)
		Size	Secondary or in-board	58 (3.54)
		Shoe thickness (no lining)		5.5 (0.22)
	Rear wheel	Bonded or riveted (rivets/seg.)		Bonded
		Manufacturer		Mintex Don
		Lining code*****		DON 8106 FF
		Material		Non Metallic Molded Resin, Non-Asbestos
		****	Primary or out-board	25 (1.53)
		Size	Secondary or in-board	25 (1.53)
		Shoe thickness (no lining)		5 (0.197)

* Excludes rivet holes, grooves, chamfers, etc. **Includes rivet holes, grooves, chamfers etc.
*** Total swept area for four brakes. (Drum brake: Widest lining contact width for each brake x its contact circumference.)
(Disc brake: Square of Outer Working Dia. minus Square of Inner Working Dia. multiplied by Pi/2 for each brake.)
**** Size for drum brakes includes length x width x thickness. *****Manufacturer I.D. catalog for formulation designation and coefficient of friction classification.

MVMA Specifications

Vehicle Line CONTOUR
Model Year 1995 Issued 2/28/94 Revised (•) _____

METRIC (U.S. Customary)

Model Code/Description And/Or Engine Code/Description

(GL and LX MODELS) w/Std. 2.0L	(GL and LX MODELS) w/ OPT. 2.5L

Tires And Wheels (Standard)

Tires	Size (service description)		185/70R14	195/65R14
	Type (bias, radial, steel, nylon, etc.)		Steel Belted Radial	
	Inflation pressure (cold) for recommended max. vehicle load	Front kPa (psi)	234 (34)	
		Rear kPa (psi)	234 (34)	
	Rev./mile-at 70 km/h (45 mph)		864	869
Wheels	Type & material		Disc & Semi Styled Steel	
	Rim (size & flange type)		14" x 5.5"	
	Wheel offset		47.5 (1.87)	
	Attachment	Type (bolt or stud & nut)	Stud & Nut	
		Circle diameter	108 (4.25)	
		Number & size	Four	
Spare	Tire and wheel		Temporal, T135/80R15	
	Storage position & location (describe)		Luggage Compartment	

Tires and Wheels (Optional)

Tire size (service description)	
Type (bias, radial, steel, nylon, etc.)	
Wheel (type & material)	Disc & Aluminum Alloy
Rim (size, flange type and offset)	14" x 5.5", Offset 47.5 (1.87)
Tire size (service description)	
Type (bias, radial, steel, nylon, etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Tire size (service description)	
Type (bias, radial, steel, nylon, etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Tire size (service description)	
Type (bias, radial, steel, nylon, etc.)	
Wheel (type & material)	
Rim (size, flange type and offset)	
Spare tire and wheel size (if configuration is different than road tire or wheel, describe optional spare tire and/or wheel location & storage position)	

Brakes — Parking

Type of control		Hand Operated — Manual Release
Location of control		Between Front Seats
Operates on		Rear Service Brakes
If separate from service brakes	Type (internal or external)	N/A
	Drum diameter	—
	Lining size (length x width x thickness)	—

MVMA Specifications

Vehicle Line CONTOUR
Model Year 1995 Issued 2/28/94 Revised (•)

METRIC (U.S. Customary)

Model Code/Description And/Or Engine Code/Description

SE MODEL

Tires And Wheels (Standard)

Tires	Size (service description)		205/60R15
	Type (bias, radial, steel, nylon, etc.)		Steel Belted Radial
	Inflation pressure (cold) for recommended max. vehicle load	Front kPa (psi)	214 (31)
		Rear kPa (psi)	234 (34)
	Rev./mile-at 70 km/h (45 mph)		845
Wheels	Type & material		Disc & Aluminum Alloy
	Rim (size & flange type)		15" x 6.0"
	Wheel offset		49.5 (1.95)
	Attachment	Type (bolt or stud & nut)	Stud & Nut
		Circle diameter	108 (4.25)
		Number & size	Four
Spare	Tire and wheel		Temporal, T135/80R15
	Storage position & location (describe)		Luggage Compartment

Tires and Wheels (Optional) (Not Offered)

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

Brakes — Parking

Type of control		Hand Operated — Manual Release
Location of control		Between Front Seats
Operates on		Rear Service Brakes
If separate from service brakes	Type (internal or external)	N/A
	Drum diameter	—
	Lining size (length x width x thickness)	—

MVMA Specifications

Vehicle Line CONTOUR
Model Year 1995 Issued 2/28/94 Revised (•)

METRIC (U.S. Customary)

Model Code/Description And/Or Engine Code/Description

(GL and LX MODELS) w/Std. 2.0L	SE AND GL / LX MODELS w/Opt. 2.5L

Steering

Manual (std., opt., n.a.)					N/A	
Power (std., opt., n.a.)					Standard	
Speed-sensitive (std., opt., n.a.)					N/A	
4-wheel steering (std., opt., n.a.)					N/A	
Adjustable steering wheel/column (tilt, telescope, other)		Type			Tilt Column	
		Manufacturer			Ford	
		(std., opt., n.a.)			Standard	
Wheel diameter** (W9) SAE J1100		Manual			N/A	
		Power			376 (14.8)	
Turning diameter m (ft.)	Outside front	Wall to wall (l. & r.)			11.7 (38.4)	11.9 (39.0)
		Curb to curb (l. & r.)			11.1 (36.5)	11.4 (37.3)
	Inside rear	Wall to wall (l. & r.)			6.2 (20.3)	6.5 (21.2)
		Curb to curb (l. & r.)			6.2 (20.6)	6.5 (21.4)
Scrub Radius*					-9.8 (-0.39) w/2.0L; -8.4 (-0.33) w/2.5L	-12.1 (-0.48)
Manual	Gear	Type			N/A	
		Manufacturer			—	
		Ratios	Gear		—	
			Overall		—	
	No. wheel turns (stop to stop)				—	
Power	Type (coaxial, elec., hyd., etc.)				Integral Hydraulic	
	Manufacturer				Ford	
	Gear	Type			Rack and Pinion	
		Ratios	Gear		48.9 (1.92) of Rack Travel / Pinion Revolution	
			Overall		14.52:1; (14.54:1 w/2.5L)	14.54:1
	Pump (drive)				Belt	
	No. wheel turns (stop to stop)				2.78	2.71
Linkage	Type				N/A	
	Location (front or rear of wheels, other)				Rear of Wheels in Subframe Crossmember	
	Tie rods (one or two)				2 – Integral with Gear	
Steering axis	Inclination at camber (deg.)				13.4°	13.56°
	Bearings (type)	Upper			Ball Bearing at Upper Spring Seat	
		Lower			Ball Joint	
		Thrust			N/A	
Steering spindle/knuckle & joint type					Ball Joint	

* The horizontal distance in the front elevation between wheel centerline and kingpin (ball joint) axis at ground.
** See Page 23.

MVMA Specifications

Vehicle Line CONTOUR
Model Year 1995 Issued 2/28/94 Revised (•)

METRIC (U.S. Customary)

Model Code/Description And/Or Engine Code/Description

ALL MODELS EXCEPT SE	SE MODEL

Wheel Alignment

Front wheel at curb mass (wt.)	Service checking	Caster (deg.)	+2.3° ± 1.0°	+2.4° ± 1.0°
		Camber (deg.)	- 0.46° ± 1.25°	-0.55° ± 1.25°
		Toe-in outside track-mm (in.)	- 2.0 ± 1.0(a)	
	Service reset*	Caster (deg.)	+2.3° ± 1.0°	+2.4° ±.1.0°
		Camber (deg.)	- 0.46° ± 1.25°	-0.55° ± 1.25°
		Toe-in - mm (in.)	- 2.0 ± 1.0(a)	
	Periodic M.V. inspection	Caster (deg.)	+2.3° ± 1.0°	+2.4° ±.1.0°
		Camber (deg.)	- 0.46° ± 1.25°	-0.55° ± 1.25°
		Toe-in - mm (in.)	- 2.0 ± 1.0(a)	
Rear wheel at curb mass (wt.)	Service checking	Camber (deg.)	- 0.4 ± 1.0°	- 0.53° ± 1.0°
		Toe-in outside track-mm (in.)	1.9 ± 2(a)	
	Service reset*	Camber (deg.)	- 0.4 ± 1.0°	- 0.53° ± 1.0°
		Toe-in - mm (in.)	1.9 ± 1.2(a)	
	Periodic M.V. inspection	Camber (deg.)	- 0.4 ± 1.0°	- 0.53° ± 1.0°
		Toe-in - mm (in.)	1.9 ± 1.2(a)	

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

(a) NOTE: Toe-in mm apply at wheel rim

Electrical – Instruments and Equipment

Speedometer	Type (analog, digital, std., opt.)		Analog, Standard
	Trip odometer (std., opt., n.a.)		Standard
Head-up display	Standard, optional, not available		N/A
	Type	Secondary, opto-electronic	—
	Speedometer	Digital	—
	Status / warning indicators	Turn signals, high beam, low fuel, check gauges	—
	Brightness control	Day / night mode, adjustable	—
EGR maintenance indicator			
Charge indicator	Type		N/A
	Warning device (light, audible)		Light, Standard
Temperature indicator	Type		Gauge, Standard
	Warning device (light, audible)		N/A
Oil pressure indicator	Type		N/A
	Warning device (light, audible)		Warning Light, Standard
Fuel indicator	Type		Gauge, Standard
	Warning device (light, audible)		N/A
Windshield wiper	Type (standard)		Two-Speed Electric, Variable Timed Interval Wiper
	Type (optional)		N/A
	Blade length		530 (26.9) w/ Driver Side; 500 (19.7) w/ Passenger Side
	Swept area cm^2(in.^{2})		7878 (1221)
Windshield washer	Type (standard)		Electric Pump, Standard
	Type (optional)		N/A
	Fluid level indicator (light, audible)		N/A
Rear window wiper, wiper/washer (std., opt., n.a.)			N/A
Horn	Type		Electric
	Number used		Two, One Hi-Pitch and One Lo-Pitch — Standard
Other			See Page 15A

Electrical — Instruments and Equipment: (Cont'd)

- Directional Turn Signal Lights
- Emergency Flashers
- Hi-Beam Indicator Light
- Child Proof Rear Door Locks
- Steering Wheel with Driver Air Bag and Center Horn Blow

- Instrument Panel Warning Lights – Standard:
  - — Brake System and/or Parking Brake
  - — Air Bag
  - — Check Engine
  - — Low Oil Level
  - — Fasten Seat Belt and Signal
  - — Low Coolant, Optional w/ 2.0L, Standard w/ 2.5L
  - — (ABS) Anti-Lock Brake System, Optional
  - — Traction Control, Optional

MVMA Specifications

Vehicle Line CONTOUR
Model Year 1995 Issued 2/28/94 Revised (•)

METRIC (U.S. Customary)

Engine Code/Description | ALL MODELS

Electrical – Supply System

Battery	Manufacturer	Johnson Controls Inc. or GNB	
	Model, (std., opt.)	Standard	Optional (Included with 2.5L and Auto. Transmission)
	Voltage	12	
	Amps at 0°F cold crank	590	650
	Minutes-reserve capacity	95	120
	Amps/hrs.-20 hr. rate	55	68
	Location	Front L.H. Engine Compartment	
Alternator	Manufacturer	Ford	
	Rating (idle/max. rpm)	130 Amp.	
	Ratio (alt. crank/rev.)	2.35	
	Output at idle (rpm, park)	45 Amp @ 650 (55 Amp @ 700)	
	Optional (type & rating)	N/A	
Regulator	Type	Electronic Integral with Alternator	

Electrical – Starting System

Motor	Manufacturer	Ford
	Current drain -20 (°F)	
	Power rating kw (hp)	
Motor drive	Engagement type	
	Pinion engages from (front, rear)	

Electrical – Ignition System

			(w/2.0L Engine)	(w/2.5L Engine)
Type	Electronic (std., opt., n.a.)		Standard	
	Other (specify)		EDIS	
Coil	Manufacturer		Ford	
	Model			
	Current	Engine stopped – A		
		Engine idling – A		
Spark plug	Manufacturer			Autolite
	Model			AWSF-32 (PG, P, PP)
	Thread (mm)			14
	Tightening torque N•m (lb.-ft)			9 – 20 (6.6 – 14.8)
	Gap		1.3 – 1.4 (0.052 – 0.056)	1.35 (0.054)
	Number per cylinder		One	
Distributor	Manufacturer		N/A	
	Model		—	

Electrical – Suppression

Locations & type	Resistor Spark Plugs and Resistance Ignition Wires; Capacitor Mounted On Ignition Coil; Three Grounding Straps — Hood to Body, Engine to Body and Transmission to Body

MVMA Specifications

Vehicle Line CONTOUR

Model Year 1995 Issued 2/28/94 Revised (*)

METRIC (U.S. Customary)

Model Code/Description	ALL MODELS

Body

Structure	Unitized All-Steel Welded Body and Energy-Absorbing Front and Rear Structures
Bumper system front - rear	Front – Polypropylene Fascia over Bonded BOP Rear – Polycarbonate Bonded BOP Front/Rear – 5 MPH Bumpers — Ford Requirements
Anti-corrosion treatment	• Two Sided Galvanized Steel on Major Panels • E-Coat • Phosphate Spray

Body – Miscellaneous Information

Type of finish (lacquer, enamel, other)		Enamel (Acrylic)
Hood	Material & mass	Steel
	Hinge location (front, rear)	Rear
	Type (counterbalance, prop)	Prop
	Release control (internal, external)	Internal
Trunk lid	Material & mass	Steel
	Type (counterbalance, other)	Counterbalance – Gas Cylinders
	Internal release control (elec., mech., n.a.)	Mechanical
Hatch-back lid	Material & mass	N/A
	Type (counterbalance, other)	—
	Internal release control (elec., mech., n.a.)	—
Tailgate	Material & mass	N/A
	Type (drop, lift, door)	—
	Internal release control (elec., mech., n.a.)	—
Vent window control (crank, friction, pivot, power)	Front	N/A
	Rear	—
Window regulator type (cable, tape, flex drive, etc.)	Front	Cable
	Rear	Cable
Seat cushion type (e.g., 60/40, bucket, bench, wire, foam, etc.)	Front	Bucket
	Rear	60/40 Bench
	3rd seat	N/A
Seat back type (e.g., 60/40, bucket, bench, wire, foam, etc.)	Front	Bucket
	Rear	60/40 Split Fold-Down (Single Fixed with GL)
	3rd seat	N/A

Frame

Type and description (separate frame, unitized frame, partially-unitized frame)	Unitized Construction with Separate Front and Rear Subframe

MVMA Specifications

Vehicle Line CONTOUR

Model Year 1995 Issued 2/28/94 Revised (•)

METRIC (U.S. Customary)

Model Code/Description ALL MODELS

Restraint System

Seating Position			Left	Center	Right
Active	Type & description (lap & shoulder belt, lap belt, etc.) Standard / optional	First seat	Type 2; 3-Point Lap and Shoulder Belt w/D-Ring Height Adjuster, Standard	N / A	Type 2; 3-Point Lap and Shoulder Belt w/D-Ring Height Adjuster, Standard
		Second seat	Type 2; 3-Point Lap and Shoulder Belt, Standard	Type 1 & Lap Only – Standard (without Retractors)	Type 2; 3-Point Lap and Shoulder Belt, Standard
		Third seat	N / A	N / A	N / A
Passive	Type & description (air bag, motorized - 2-point belt, fixed belt, knee bolster, manual lap belt) Standard / optional	First seat	Supplemental Air Bag (Inflated with Nitrogen Gas), Standard	N / A	Supplemental Air Bag (Inflated with Nitrogen Gas), Standard
		Second seat	N / A	N / A	N / A
		Third seat	N / A	N / A	N / A

Glass	SAE Ref. No.	
Windshield glass exposed surface area $cm^2(in.^2)$	S1	9843.5 (1525.7)
Side glass exposed surface area $cm^2(in.^2)$ - total 2-sides	S2	10595.8 (1642.4)
Backlight glass exposed surface area $cm^2(in.^2)$	S3	6909 (1070.9)
Total glass exposed surface area $cm^2(in.^2)$	S4	27348.3 (4239)
Windshield glass (type / thickness)		Solar Tint, 5.1 (0.20)
Side glass (type / thickness)		Solar Tint, 3.2 (0.13)
Backlight glass (type / thickness)		Solar Tint, 3.8 (0.15)
Tinted (yes / no, location)		Yes
Solar control (yes / no, coated / batched, location		Yes, Batched All Glass

Headlamps

Description (sealed beam, halogen, replaceable bulb, etc.)	Aero Halogen, Replaceable Bulb (9006 / 9005)
Shape	Single, Rectangular
Lo-beam type (2A1, 2B1, 2C1, etc.)	N/A
Quantity	Two (Combined Two Headlamp System)
Hi-beam type (1A1, 2A1, 1C1, 2C1, etc.)	N/A
Quantity	Two (Combined Two Headlamp System)

MVMA Specifications

Vehicle Line CONTOUR
Model Year 1995 Issued 2/28/94 Revised (•) _____

METRIC (U.S. Customary)

Engine Code/Description	2.0L	2.5L

Climate Control System

Air conditioning (std., opt., man., auto.)		Optional, Manual Temperature Control	
Condenser	Type	Mechanically Assembled Aluminum	
	Eff. face area (sq. mm.)	210535	
	Fins per inch	22	
Evaporator	Type	Plate Fin, Vacuum Brazed Aluminum	
	Eff. face area (sq. mm.)	39600	
	Fins per inch	14	
Heater core	Material	Flux Brazed Aluminum	
	Eff. face area (sq. mm.)	28300	
	Fins per inch	22	
Compressor	Type	ES10 Reciprocating Piston	
	Displacement (cc.)	110	154
	Manufacturer	Ferco	
	A/C pulley ratio	1.06:1	1.24:1
Accumulator	Type	Domed	
	Height (mm.)	200	
	Diameter (mm.)	92	
Receiver	Type	N/A	
	Height (mm.)	—	
	Diameter (mm.)	—	
Refrigerant control (CCOT, TVS, etc.)		CCOT	
Heater water valve (yes / no)		No	
Refrigerant (R - 12, R - 134a, etc.)		R-134a	
Charge level (lbs. - oz.)		1 lbs. – 10 oz.	
Cold engine lockout switch (yes / no)		No	
Wide open throttle cutout switch (yes / no)		Yes	

– Environment Inside Car
MicronAir® Filtration System (Standard w/LX, SE Models, Optional w/GL Model)
Filters Out Most Particles Larger Than Three Microns (0.003)

MVMA Specifications

Vehicle Line CONTOUR
Model Year 1995 Issued 2/28/94 Revised (•)

METRIC (U.S. Customary)

Model Code/Description	ALL MODELS

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

Clock (digital, analog)		Standard, Digital
Compass / thermometer		N/A
Console (floor, overhead)		Floor, Offset Handbrake, Cupholder, Cassette Stowage
Defroster, electric windshield		N/A
Defroster, electric backlight		Optional
Electronic	Diagnostic monitor (integrated, individual)	N/A
	Instrument cluster (list instruments)	N/A
	Keyless entry	Optional
	Tripminder (avg. spd., fuel)	N/A
	Voice alert (list items)	N/A
	Other	
	Redundant Radio Controls	N/A
Fuel door lock (remote, key, electric)		Standard, Remote
Lamps	Auto head on / off delay, dimming	Optional
	Cornering	N/A
	Courtesy (map, reading)	Standard
	Door lock, ignition	Optional
	Engine compartment	Standard
	Fog	Standard on LX and SE Models
	Glove compartment	Optional
	Trunk	Optional
	Illuminated entry system (list lamps, activation)	Optional
	Other	
Mirrors	Day / night (auto., man.)	Standard, Manual
	L.H. (remote, power, heated)	Standard w/GL, Remote; Standard w/LX & SE (Opt. w/GL), Power, Heated
	R.H. (convex, remote, power, heated)	Standard w/GL, Convex Remote; Standard w/LX & SE (Opt. w/GL), Power, Heated
	Visor vanity (RH/LH, illuminated)	Standard, RH/LH Illuminated
Navigation system (describe)		N/A
Parking brake-auto release (warning light)		N/A

MVMA Specifications

Vehicle Line CONTOUR
Model Year 1995 Issued 2/28/94 Revised (•)

METRIC (U.S. Customary)

Model Code/Description ALL MODELS

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

Power equipment	Deck lid (release, pull down)		Standard, Remote Release
	Door locks (manual, automatic, describe system)		Optional, Power Door Locks
	Seats	2 - 4 - 6 way, etc.	Optional, 6-Way Driver Only; Opt. w/GL & LX, 10-Way Driver with Recliner & Lumbar
		Reclining (R.H., L.H.)	Optional w/GL and LX; LH
		Memory (R.H., L.H., preset recline)	N/A
		Support (lumbar, hip, thigh, etc.)	Optional w/GL and LX; Lumbar LH
		Heated (R.H., L.H., other)	N/A
	Side windows		Optional
	Vent windows		N/A
	Rear windows		N/A
Radio systems	Antenna (location, whip, w/shield, power)		Standard, Whip, Rear Quarter
	Standard	AM, FM, stereo, tape, compact disc, graphic equalizer, theft deterrent, radio prep package, headphone jacks, etc.	Electronic AM/FM Stereo
	Optional		– Electronic AM/FM Stereo with Cassette – Electronic AM/FM Stereo with Cassette and Premium Sound – Electronic AM/FM Stereo with Compact Disc Player and Premium Sound
	Speaker (number, location)		Standard, Four, One in Each Door
Roof: open air or fixed (flip-up, sliding, "T")			Optional, Power Sliding Sun Roof
Speed control device			Optional
Speed warning device (light, buzzer, etc.)			N/A
Tachometer (rpm)			Standard with LX and SE (Included with optional 2.5L)
Telephone system (describe)			N/A
Theft deterrent system			N/A
MicronAir® Filtration System			Standard with LX and SE; Optional with GL

Trailer Towing

Towing capable	Yes/No	Yes
Engine/transmission/axle	Std/Opt	Standard
Tow class (I, II, III)*	Std/Opt	Class I
Max. gross trailer wgt. (lbs.)	Std/Opt	1000 Lbs.
Max. trailer tongue load (lbs.)	Std/Opt	100 Lbs.
Towing package available	Yes/No	No

* Class I – 2,000 lbs. Class II – 3,500 lbs. Class III – 5,000 lbs.

MVMA Specifications

Vehicle Line CONTOUR
Model Year 1995 Issued 2/28/94 Revised (•)

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

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

Model Code/Description	SAE Ref. No.	ALL MODELS
Width		
Tread (front)	W101	1503 (59.2)
Tread (rear)	W102	1487 (58.5)
Vehicle width	W103	1755 (69.1)
Body width at Sg RP (front)	W117	1751 (68.9)
Vehicle width (front doors open)	W120	3649 (143.7)
Vehicle width (rear doors open)	W121	3487 (137.3)
Tumble-home (degrees)	W122	23.3°
Outside mirror width	W410	1931 (76.0)
Length		
Wheelbase	L101	2704 (106.5)
Vehicle length	L103	4672 (183.9)
Overhang (front)	L104	929 (36.5)
Overhang (rear)	L105	1039 (40.9)
Upper structure length	L123	2845 (112.0)
Rear wheel C/L "X" coordinate	L127	4451 (175.0)
Height*		
Passenger distribution (front/rear)	PD1,2,3	2/3
Trunk/cargo load		
Vehicle height	H101	1385 (54.5)
Cowl point to ground	H114	899 (35.4)
Deck point to ground	H138	992 (39.0)
Rocker panel-front to ground	H112	183 (7.2)
Rocker panel-rear to ground	H111	182 (7.17)
Windshield slope angle (degrees)	H122	62°
Backlight slope angle (degrees)	H121	65.6°
Ground Clearance*		
Front bumper to ground	H102	207.0 (8.15)
Rear bumper to ground	H104	248.0 (9.76)
Bumper to ground front at curb mass (wt.)	H103	229.0 (9.02)
Bumper to ground rear at curb mass (wt.)	H105	315.0 (12.4)
Angle of approach (degrees)	H106	16.3°
Angle of departure (degrees)	H107	16°
Ramp breakover angle (degrees)	H147	
Axle differential to ground (front/rear)	H153	
Min. running ground clearance	H156	
Location of min. run. grd. clear.		

* All vehicle height and ground clearances are measured at the Manufacturer's Design Load Weight.
Manufacturer's Design Load Weight is defined with indicated passenger distribution and trunk/cargo load, unless otherwise specified.
All linear dimensions are in millimeters (inches) unless otherwise noted.

MVMA Specifications

Vehicle Line CONTOUR
Model Year 1995 Issued 2/28/94 Revised (•)

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

Model Code/Description ALL MODELS

Front Compartment	SAE Ref. No.	
SgRP front, "X" coordinate	L31	300 (11.8)
Effective head room	H61	990 (39.0)
Max. eff. leg room (accelerator)	L34	1076 (42.4)
SgRP to heel point	H30	249 (9.8)
SgRP to heel point	L53	874 (34.4)
Back angle (degrees)	L40	24°
Hip angle (degrees)	L42	96.8°
Knee angle (degrees)	L44	122.8°
Foot angle (degrees)	L46	87°
Design H-point front travel	L17	210 (8.3)
Normal driving & riding seat track trvl.	L23	195 (7.7)
Shoulder room	W3	1370 (53.9)
Hip room	W5	1287 (50.7)
Upper body opening to ground	H50	1247 (49.1)
Steering wheel maximum diameter*	W9	376 (14.8)
Steering wheel angle (degrees)	H18	22.8°
Accel. heel pt. to steer. whl. cntr	L11	483 (19.0)
Accel. heel pt. to steer. whl. cntr	H17	624 (24.6)
Undepressed floor covering thickness	H67	31 (1.2)

Rear Compartment		
SgRP point couple distance	L50	770 (30.3)
Effective head room	H63	932 (36.7)
Min. effective leg room	L51	872 (34.3)
SgRP (second to heel)	H31	292 (11.5)
Knee clearance	L48	6 (0.24)
Shoulder room	W4	1355 (53.3)
Hip room	W6	1156 (45.5)
Upper body opening to ground	H51	1257 (49.5)
Back angle (degrees)	L41	28°
Hip angle (degrees)	L43	87.3°
Knee angle (degrees)	L45	84.9°
Foot angle (degrees)	L47	120.6°
Depressed floor covering thickness	H73	23 (0.9)

Luggage Compartment		
Usable luggage capacity L (cu. ft.)	V1	394 (13.9)
Liftover height	H195	655 (25.8)

Interior Volumes (EPA Classification)	
Vehicle class	Compact
Interior volume index including trunk/cargo (cu. ft.)**	103.3
Trunk/cargo index (cu. ft.)	13.9

* See page 14.
** See definition page 33.
All linear dimensions are in millimeters (inches) unless otherwise noted.

MVMA Specifications

Vehicle Line CONTOUR
Model Year 1995 Issued 2/28/94 Revised (•)

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

Model Code/Description

Station Wagon/MPV* – Third Seat	SAE Ref. No.	(NOT APPLICABLE)
Seat facing direction	SD1	
SgRP coupte distance	L85	
Shoulder room	W85	
Hip room	W86	
Effective leg room	L86	
Effective head room	H86	
SgRP to heel point	H87	
Knee clearance	L87	
Back angle (degrees)	L88	
Hip angle (degrees)	L89	
Knee angle (degrees)	L90	
Foot angle (degrees)	L91	

Station Wagon/MPV* – Cargo Space		(NOT APPLICABLE)
Cargo length (open front)	L200	
Cargo length (open second)	L201	
Cargo length (closed front)	L202	
Cargo length (closed second)	L203	
Cargo length at belt (front)	L204	
Cargo length at belt (second)	L205	
Cargo width (wheelhouse)	W201	
Rear opening width at floor	W203	
Opening width at belt	W204	
Min. rear opening width above belt	W205	
Cargo height	H201	
Rear opening height	H202	
Tailgate to ground height	H250	
Front seatback to load floor height	H197	
Cargo volume index $m^3(ft.^3)$	V2	
Hidden cargo volume index $m^3(ft.^3)$	V4	
Cargo volume index-rear of 2-seat	V10	
Cargo volume index*	V6	
Cargo width at floor*	W500	
Maximum cargo height*	H505	

Hatchback – Cargo Space		(NOT APPLICABLE)
Cargo length at front seatback height	L208	
Cargo length at floor (front)	L209	
Cargo length at second seatback height	L210	
Cargo length at floor (second)	L211	
Front seatback to load floor height	H197	
Second seatback to load floor height	H198	
Cargo volume index $m^3(ft.^3)$	V3	
Hidden cargo volume index $m^3(ft.^3)$	V4	
Cargo volume index-rear of 2-seat	V11	

All linear dimensions are in millimeters (inches) unless otherwise noted.
* MPV - Multipurpose Vehicle

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line CONTOUR

Model Year 1995 Issued 2/28/94 Revised (*)

Model Code/ Description

Vehicle Fiducial Marks

Fiducial Mark Number*	Define Coordinate Location
Front(1)	
Front(2)	
Rear(1)	
Rear(2)	

Note: Provide 3 of 4 Fiducial Mark Locations

Front	W21**	
	L54**	
	H81**	
	H161**	
	H163**	
Rear	W22**	
	L55**	
	H82**	
	H162**	
	H164**	

* Reference – SAE Recommended Practice, J182a, Motor Vehicle Fiducial Marks
** Reference – SAE Recommended Practice, J1100 - Motor Vehicle Dimensions
All linear dimensions are in millimeters (inches) unless otherwise noted.

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line CONTOUR

Model Year 1995 Issued 2/28/94 Revised (•)

Code	Model	Vehicle Mass (weight) CURB MASS, kg. (lb.)* Front	Rear	Total	SHIPPING MASS kg(lb)***	ETWC** Code	% PASS MASS DISTRIBUTION Pass in Front Front	Rear	Pass in Rear Front	Rear
2.0L Engine — Code 993/										
5-Spd. Man. Trans. — Code 445										
993/445										
GL Model		785	471	1256	1207	R				
		(1731)	(1038)	(2769)	(2660)					
LX Model		791	483	1274	1225	R				
		(1743)	(1065)	(2808)	(2699)					
2.0L Engine — Code 993/										
4-Spd. Auto. Trans. — Code 44T										
993/44T										
GL Model		855	473	1328	1278	S				
		(1885)	(1043)	(2928)	(2818)					
LX Model		861	485	1346	1296	S				
		(1898)	(1069)	(2967)	(2857)					
2.5L Engine — Code 99L/										
5-Spd. Man. Trans. — Code 445										
99L/445										
SE Model		886	472	1358	1309	T				
		(1953)	(1041)	(2994)	(2885)					
2.5L Engine — Code 99L/										
4-Spd. Auto. Trans. — Code 44T										
99L/44T										
SE Model		889	490	1379	1329	T				
		(1960)	(1080)	(3040)	(2930)					

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

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

ETWC LEGEND

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

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

49 (108.8) w/ manual transmission

50 (109.7) w/ automatic transmission

MVMA Specifications

METRIC (U.S. Customary)

Vehicle Line CONTOUR
Model Year 1995 Issued 2/28/94 Revised (•)

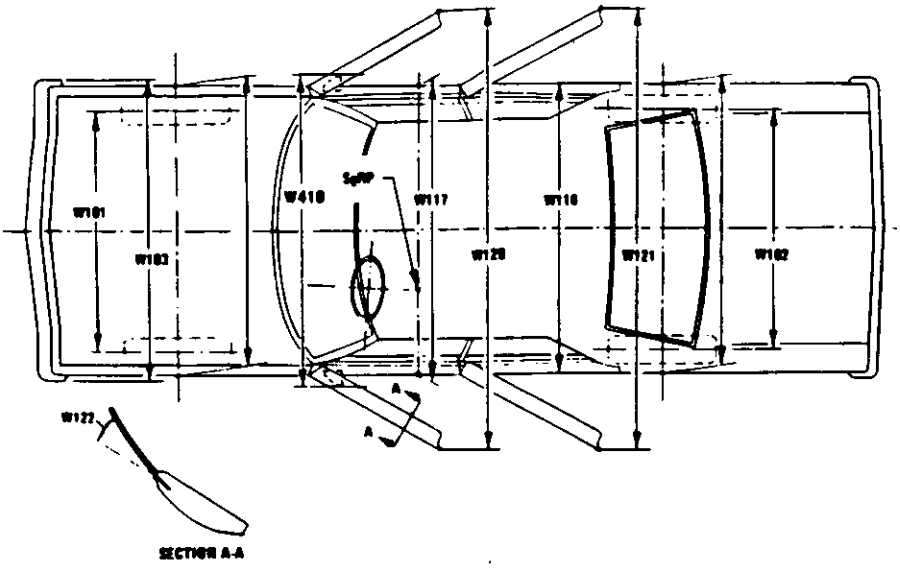
Optional Equipment Differential Mass (weight)*

Code	Equipment	MASS, kg. (lb.) Front	Rear	Total	Remarks Restrictions, Requirements
Miscellaneous Options:					
572	Air Conditioning — Manual	16.3	0	16.3	
	Temperature Control	(35.9)	(0)	(35.9)	
525	Speed Control	1.3	1.0	2.3	
		(2.9)	(2.2)	(5.1)	
902	Power Door Locks	0.4	0.3	0.7	
		(0.8)	(0.7)	(1.5)	
13B	Sunroof, Power	8.3	8.5	16.8	
		(18.3)	(18.7)	(37)	
—	AM/FM Electronic Stereo	0.4	0.2	0.6	
	w/ Cassette	(0.9)	(0.4)	(1.3)	
913	AM/FM Electronic Stereo	-0.3	4.7	4.4	
	w/ Cassette, and	(-0.7)	(10.5)	(9.8)	
	Premium Sound				
917	AM/FM Electronic Stereo	1.6	0.5	2.1	Does Not Include a Cassette Player
	w/ Compact Disc Player	(3.55)	(1.06)	(4.61)	
	and Premium Sound				
552	Anti-Lock Brakes (ABS)	6	3	9	
		(13.2)	(6.6)	(19.8)	
553	Traction Assist System	1.7	1.3	3	Requires Anti-Lock Brakes (ABS)
		(3.7)	(2.9)	(6.6)	

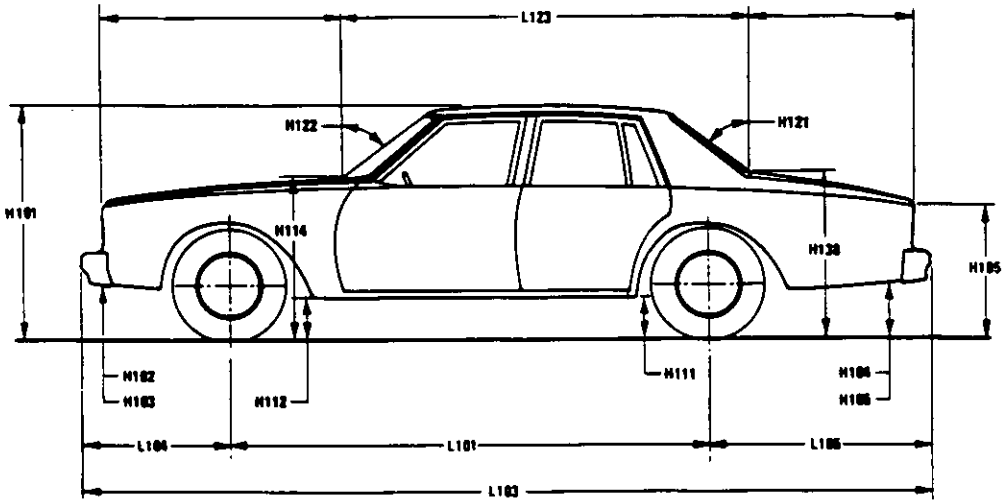
* Also see Engine - General Section for dressed engine mass (weight).

Exterior Vehicle And Body Dimensions – Key Sheet

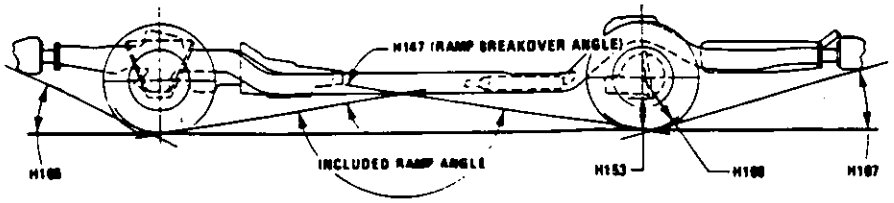
Exterior Width



Exterior Length & Height



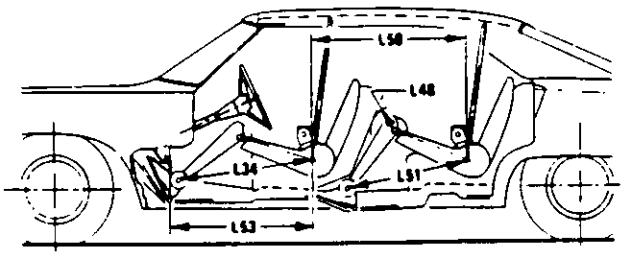
Exterior Ground Clearance

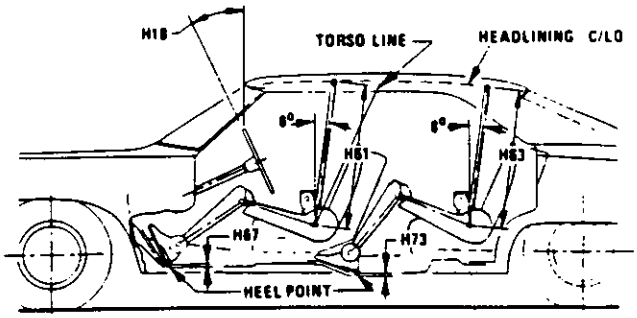


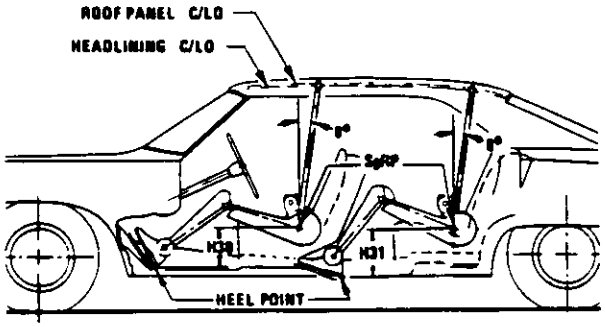
MVMA Specifications Form

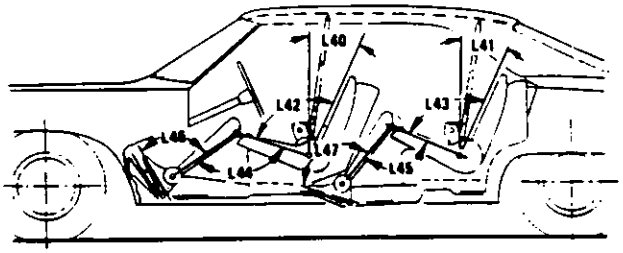
METRIC (U.S. Customary)

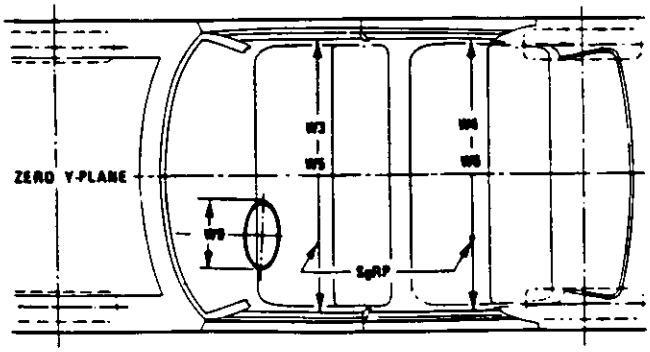
Interior Vehicle And Body Dimensions – Key Sheet

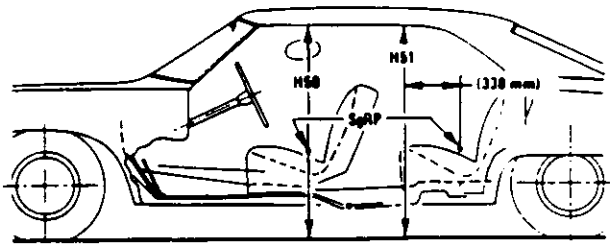






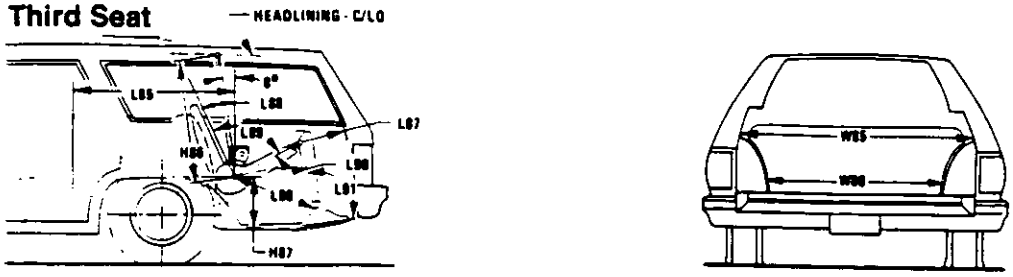




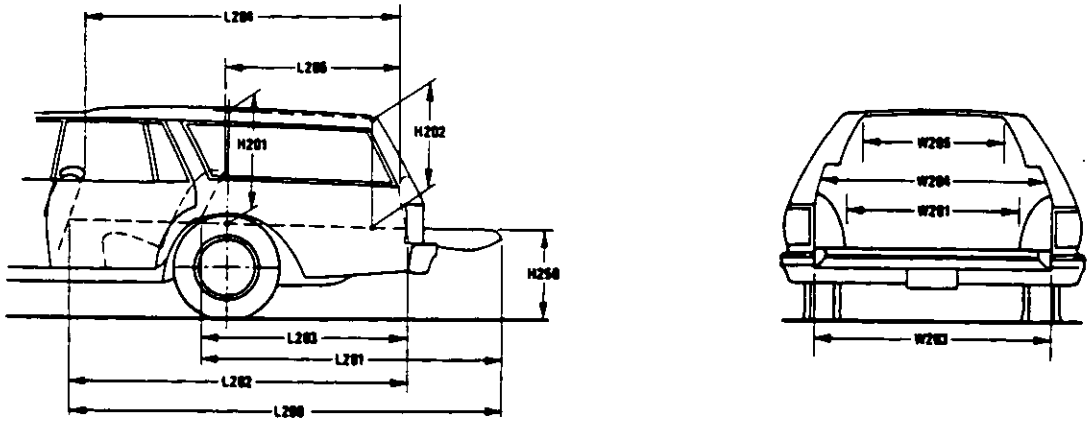


Interior Vehicle And Body Dimensions – Key Sheet

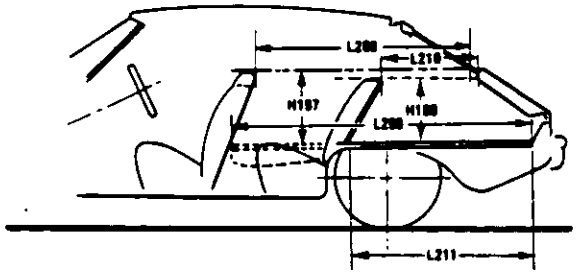
Third Seat



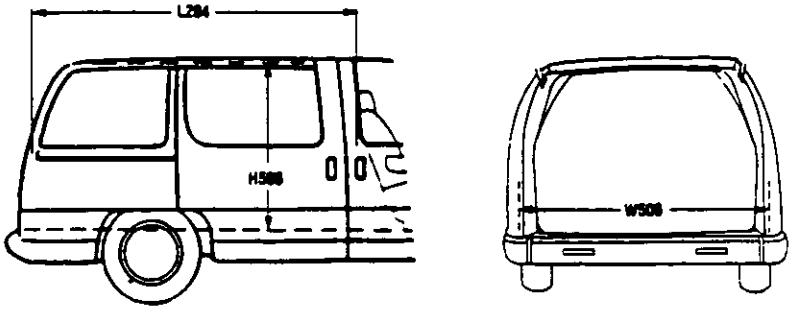
Cargo Space



Station Wagon



Hatchback



Multipurpose Vehicle

MVMA Specifications

METRIC (U.S. Customary)

Exterior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

Seating Reference Point

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

Width Dimensions

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

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

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

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

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

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

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

W410 OUTSIDE MIRROR WIDTH: The dimension between the widest point on the outside mirrors. The standard right and left mirror adjusted for normal driving will be shown unless otherwise noted. When only one outside mirror is standard, the dimension will be to the zero "Y" plane.

Length Dimensions

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

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

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

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

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

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

Height Dimensions

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

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

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

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

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

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

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

H109 STATIC LOAD – TIRE RADIUS – REAR. Specified by the manufacturer in accordance with composite TIRE SECTION STANDARD.

Ground Clearance Dimensions

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

H103 FRONT BUMPER TO GROUND – CURB MASS (WT.). Measured in the same manner as H102.

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

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

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

H107 ANGLE OF DEPARTURE. The angle measured between a line tangent to the rear tire static loaded radius arc and the initial point 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.

Interior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

Glass Areas

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

Fiducial Mark Dimensions

Fiducial Mark – Number 1

L54 "X" coordinate.
W21 "Y" coordinate.
H81 "Z" coordinate.
H161 Height "Z" coordinate to ground at curb weight.
H163 Height "Z" coordinate to ground.

Fiducial Mark – Number 2

L55 "X" coordinate.
W22 "Y" coordinate.
W82 "Z" coordinate.
H162 Height "Z" coordinate to ground at curb weight.
H164 Height "Z" coordinate to ground.

Front Compartment Dimensions

L11 ACCELERATOR HEEL POINT TO STEERING WHEEL CENTER. The dimension measured horizontally from the AHP to the intersection of the steering column centerline and a plane tangent to the upper surface of the steering wheel rim.

L17 DESIGN H-POINT – FRONT TRAVEL. The dimension measured horizontally between the design H-point – front in the foremost and rearmost seat track positions. (See SAE J1100)

L23 NORMAL DRIVING AND RIDING SEAT TRACK TRAVEL. The dimension measured horizontally between a point on the design H-point travel line from the SgRP to the displaced point on the design H-point travel line with the seat moved to the foremost seat position, but not to include seat track travel used for purposes other than normal driving and riding positions. (See SAE J1100).

L31 SgRP – FRONT. "X" COORDINATED.

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

L-40 BACK ANGLE – FRONT. The angle measured between a vertical line through the SgRP – front and the torso line. If the seatback is adjustable, use the normal driving and riding position specified by the manufacturer.

L-42 HIP ANGLE – FRONT. The angle measured between torso line and thigh centerline.

L44 KNEE ANGLE – FRONT. The angle measured between thigh centerline and lower leg centerline measured on the right leg.

L46 FOOT ANGLE – FRONT. The angle measured between the lower leg centerline and a line tangent to the ball and heel of the bare foot flesh line measured on the right leg. Ref SAE J826.

L53 SgRP – FRONT TO HEEL. The dimension measured horizontally from the SgRP – front to the accelerator heel point.

W3 SHOULDER ROOM – FRONT. The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the SgRP – front at height between the belt line and 254 mm (10.0 in.) above the SgRP – front, excluding the door assist strap and attaching parts.

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

W9 STEERING WHEEL MAXIMUM OUTSIDE DIAMETER. Define if other than round.

H7 ACCELERATOR HEEL POINT TO THE STEERING WHEEL CENTER. The dimension measured vertically from the AHP – front to the intersection of the steering column centerline to a plane tangent to the upper surface of the steering wheel rim.

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

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

H50 UPPER BODY OPENING TO GROUND – FRONT. The dimension measured vertically from the trimmed body opening to the ground on the SgRP – front "X" plane.

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

H67 FLOOR COVERING THICKNESS – UNDEPRESSED – FRONT. The dimension measured vertically from the surface of the undepressed floor covering to the underbody sheet metal at the accelerator heel point.

Rear Compartment Dimensions

L-41 BACK ANGLE – SECOND. The angle measured between a vertical line through the SgRP – second and the torso line.

L43 HIP ANGLE – SECOND. The angle measured between torso line and thigh centerline.

L45 KNEE ANGLE – SECOND. The angle measured between thigh centerline and lower leg centerline.

L47 FOOT ANGLE – SECOND. The angle measured between the lower leg centerline and a line tangent to the ball and heel of the three-dimensional devices bare foot flesh line (Reference J826).

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

L50 SgRP COUPLE DISTANCE – SECOND The dimension measured horizontally from the driver SgRP – front to the SgRP – second.

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

W4 SHOULDER ROOM – SECOND. The minimum dimension measured laterally between door or quarter trimmed surfaces on the "X" plane through the SgRP – second at height between 254-406 mm (10.0-16.0 in.) above the SgRP – second, excluding the door assist straps and attaching parts.

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

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

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

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

H73 FLOOR COVERING – DEPRESSED – SECOND The dimension measured vertically from the heel point to the underbody sheet metal.

MVMA Specifications

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Interior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

Luggage Compartment Dimensions

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

Interior Volumes (EPA Classification)

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

The 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 / MPV – Third Seat Dimensions

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

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

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

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

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

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

L91 FOOT ANGLE – THIRD. Measured in the same manner as L47.

W85 SHOULDER ROOM – THIRD. Measured in the same manner as W4.

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

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

H87 SgRP – THIRD TO HEEL POINT.

SD1 SEAT FACING DIRECTION – THIRD.

Station Wagon / MPV – Cargo Space Dimensions

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

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

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

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

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

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

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

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

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

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

W500 CARGO WIDTH AT FLOOR. The maximum dimension measured laterally between the limiting interferences at the floor level. This dimension shall include ribs and pillars, but will exclude wheelhouses.

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

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

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

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

H505 MAXIMUM CARGO HEIGHT. The maximum vertical dimension rear of the front seat from the cargo floor to roof bow or headlining at the zero "Y" plane.

Interior Vehicle And Body Dimensions – Key Sheet Dimensions Definitions

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

V5 TRUCKS AND MPV'S WITH OPEN AREA.

Measured in inches:

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

Measured in mm:

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

V6 TRUCKS AND MPV'S WITH CLOSED AREA.

Measured in inches:

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

Measured in mm:

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

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

V10 STATION WAGON CARGO VOLUME INDEX.

Measured in inches:

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

Measured in mm:

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

Hatchback – Cargo Space Dimensions

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

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

L209 CARGO LENGTH AT FLOOR – FRONT. 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. The minimum dimension measured from the "X" plane tangent to the rearmost surface of second seatback or the load floor which is stowed at least one half of the H198 dimension height above the rear load floor, to the rearmost inside limiting interference on the zero "X" plane.

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

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

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

V3 HATCHBACK.

Measured in inches:

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

Measured in mm:

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

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

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

Measured in inches:

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

Measured in mm:

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

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