

METRIC (U.S. Customary)

1979



Specifications Form Passenger Car

Manufacturer	FORD MOTOR COMPANY		Car Line	GRANADA	
Mailing Address	P.O. BOX 2053 DEARBORN, MICHIGAN 48121		Model Year	1979	Issued: Sept., 1978
					Revised (*)

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

MVMA Specifications Form

Passenger Car

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NOTE:

1. This form uses both SI metric units and U.S. Customary units. The Metric unit of measurement 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 millimetres (inches), and all mass (weight) specifications are in kilograms (pounds).
3. The General Specifications herein are those in effect at date of completion and are subject to change without notice by the manufacturer.
4. A printed or computer tape supplement containing additional Car and Body Dimensions and/or drawings (based in part on SAE J1100a "Motor Vehicle Dimensions") may be available from the manufacturer.

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Car Line GRANADA
 Model Year 1979 Issued 9-78 Revised (*) _____

Car Models

Model Description (Include Line Drawings of Vehicles, if Desired)	Make, Car line, Series, Body Type (Mfgr's Model Code)	No. of Designated Seating Positions (Front/Rear)	Max. Trunk/Cargo Load— Kilograms (Pounds)
2-Door Sedan	66H	2/3	45.4 (100)
4-Door Sedan	54H	2/3	45.4 (100)
Ghia 2-Door Sedan	*	2/3	45.4 (100)
Ghia 4-Door Sedan	*	2/3	45.4 (100)
ESS 2-Door Sedan	*	2/3	45.4 (100)
ESS 4-Door Sedan	*	2/3	45.4 (100)

* Released as Option Package

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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	Displ. litres (in ³)	Carb.	ENGINE			Exhaust System*	TRANSMISSION	AXLE RATIO (Std. first) (Indicate A/C ratio)	
			Compr Ratio	SAE Net at RPM				Std.	
				kw (bhp)	Torque N-m (lb. ft.)				
All (Standard)	4.1L (250) IL-6	1V	49 STATES			S	Man. 4-Speed Overdrive	Std.	3.00:1
			8.6	72 (97) @ 3200	285 (210) @ 1400			Opt.	N.A.
						Auto. 3-Speed	A/C	3.00:1	
							Locking	— N.A.	
All (Optional)	5.0L (302) V-8	2V	8.4	102 (137) @ 3600	329 (243) @ 2000	S	Man. 4-Speed Overdrive	Std.	— 3.00:1
								Opt.	— N.A.
						Auto. 3-Speed	A/C	— 3.00:1	
							Locking	— N.A.	
Calif. All (Standard)	4.1L (250) IL-6	1V	CALIFORNIA			S	Auto. 3-Speed	Std.	— 2.79:1
			8.6	72 (97) @ 3200	285 (210) @ 1400			Opt.	— N.A.
							A/C	— 2.79:1	
							Locking	— N.A.	
All (Optional)	5.0L (302) V-8	VV *	8.4	103 (138) @ 3800	324 (239) @ 2200	S	Auto. 3-Speed	Std.	— 2.79:1
								Opt.	— N.A.
								A/C	— 2.79:1
								Locking	— N.A.
* Variable Venturi									

*S—Single D—Dual

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Engine Description/Carb.

4.1L-1V (250 CID)	5.0L-2V (302 CID)
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Engine — General

Total dressed engine mass (wt) dry*	212(659)Man@, 195(429)Auto	242(533)Man@, 217(478)Auto
Type (inline, V, Flat)	In-Line OHV	90° V, OHV
No. of cylinders	Six	Eight
Bore	93.47 (3.68)	10.16 (4.00)
Stroke	99.31 (3.91)	7.62 (3.00)
Piston Displacement cm ³ (in ³)	4100 (250)	5000 (302)
Bore Spacing (C/L to C/L)	103.63 (4.08)	111.25 (4.38)
Cyl. No. system		
(front to rear)	L Bank R Bank	5-6-7-8 1-2-3-4
Firing Order	1-5-3-6-2-4	1-5-4-2-6-3-7-8
Cylinder Head Material	Cast Iron	
Cylinder Block Material	Cast Iron	
Cylinder block deck height	240.51 (9.469)	208.43 (8.206)
Number of mtg. points	Front Rear	Two One (Transmission)
Engine installation angle	40°35'	
Recommended fuel Leaded, unleaded	Unleaded	
Fuel antiknock index (R + M) 2		
Cylinder Head Volume — cm ³	57.25-60.25	67.5-70.5
Head Gasket Thickness (Compressed)	0.381 (0.015)	11.938 (0.047)
Head Gasket Volume — cm ³	2.76	10.10
Deck clearance (minimum) (above or below block) (a)	2.69 (0.106)	0.013 (0.0005)
Minimum Combustion Chamber Volume — cm ³	82.3	78.9

Engine — Pistons

Material	Aluminum Alloy with Steel Struts				
Description and finish	Cast, Autothermic, Slipper Skirt, Cam Ground, and Tin Plated				
Mass, g (weight, oz.)—Piston Only	493.86(17.42)		522.22(20.56)		
Clearance (limits)	Top land	0.762-1.087(0.030-0.0428)		0.874-1.067(0.0344-0.042)	
		Skirt	Top	0.033-0.053(0.0013-0.0021)	
	Bottom				
Ring groove diameter	No. 1 ring	83.033-82.779(3.269-3.259)		90.119-90.373(3.548-3.558)	
	No. 2 ring	83.033-82.779(3.269-3.259)		90.119-90.373(3.548-3.558)	
	No. 3 ring	83.033-82.779(3.269-3.259)		91.237-91.491(3.592-3.602)	

*Dressed engine mass (weight) includes the following: Engine Assembly Except Alternator & Starter.

(a) Below Cylinder Head Face

@ Includes Clutch Components.

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Engine Description/Carb.

4.1L-1V (250 CID)	5.0L-2V (302 CID)
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Engine — Piston Rings

Function (top to bottom)	No. 1, oil or comp.	Compression
	No. 2, oil or comp.	Compression
	No. 3, oil or comp.	Oil Control
Compress# sion	Description— #1	Cast Iron Alloy, Straight Face, Inside Bevel, Moly. Filled Groove. 302 = Cast Iron Alloy, Barrel Face, Molybdenum Filled Groove. Cast Iron Alloy, Straight Face, Scraper Groove, Phosphate Coated
	Material, coating, #1	
	etc. #2	
	Width	
	Gap	0.203-0.406 (0.008-0.016) 0.254-0.508(0.010-0.020)
Oil	Description— #3	Multi-piece: Two rails and one spacer-expander. Rails: Steel (SAE-1070) Chrome Plated, Black Oxide Coated Spacer-Expander: Steel (AISI-C-1075)
	material, coating, etc.	
	Width	
	Gap	0.381-1.397(0.015-0.055) Rails Only
Expanders	Part of Oil Ring Assembly	

Engine — Piston Pins

Material	Steel (SAE-5015) Heat Treated		
Length	77.216-76.454(3.040-3.010)		
Diameter	23.175-23.162(0.9124-0.9119) Select Fit		
Type	Locked in rod, in piston, floating, etc.	Press Fit in Rod	
	Bushing	In rod or piston	None
		Material	-
Clearance	In piston	0.0076-0.0127(0.0003-0.0005) 0.0051-0.0102(0.0002-0.0004)	
	In rod	Press Fit	
Direction & amount offset in piston	2.29(0.090) Right	1.588(0.0625) Right	

Engine — Connecting Rods

Material	Forged Steel SAE-1541-H; Optional SAE 1151M	
Mass, g (weight, oz.)	539.78(19.04)	498.86-509.78(19.64-20.07)
Length (center to center)	149.35(5.88)	149.48-129.32(5.885-5.0915)
Bearing	Material & Type	Plated Copper-Lead Alloy on Steel Back Replaceable Insert. Aluminum Tin (Unplated)
	Overall length	23.11-20.07(0.810-0.790) 18.44-17.93(0.726-0.706)
	Clearance (limits)	0.0203-0.0610(0.0008-0.0024) 0.178-0.051(0.0007-0.002)
	End Play	0.089-0.267(0.0035-0.0105) 0.254-0.508(0.010-0.020)

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Engine Description/Carb.

4.1L-1V (250 CID)	5.0L-2V (302 CID)
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Engine — Crankshaft

Material	Nodular Cast Iron Alloy, Precision Molded		
Vibration damper type	Tuned, Elastic Suspended, Inertia Member		
End thrust taken by bearing (No.)	Five	Three	
Crankshaft end play	0.102-0.203(0.004-0.008)		
Main bearing	Material & type (a)	Lead Base Babbitt on Steel Back.	
	Clearance	0.0127-0.0559(0.0005-0.0022) (b)	
	Journal dia. and bearing overal length	No. 1	60.92x24.511(2.399x0.965) 57.114x22.352(2.249x0.880)
		No. 2	60.924x24.511(2.399x0.965) 57.114x22.352(2.249x0.880)
		No. 3	60.924x24.511(2.399x0.965) 57.114x28.753(2.249x1.132)
		No. 4	60.924x24.511(2.399x0.965) 57.114x22.352(2.249x0.880)
		No. 5	60.924x30.328(2.399x1.194) 57.114x22.352(2.249x0.880)
		No. 6	60.924x24.511(2.399x0.965) -
No. 7		60.924x24.511(2.399x0.965) -	
Dir. & amt. cyl. offset	None	R. B. Leads 17.92(0.84)	
No. bolts/main brg. cap	2		
Crankpin journal diameter	53.939(2.1236)	53.929(2.1232)	

Engine — Camshaft

Location	In Block		
Material	Special Alloy Iron, Precision Molded, Induction Hardened, Phosphate Coated.		
Bearings	Material	Lead Base Babbitt on Steel Back, Replaceable Inserts	
	Number	Four Five	
Type of Drive	Gear, chain or belt	Chain	
	Crankshaft gear or sprocket material	Sintered Iron (Steel Optional)	
	Camshaft gear or sprocket material	Sintered Iron Aluminum Die Cast Body, Molded Nylon Teeth	
	Timing chain	No. of links	56 58
Chain or Belt	Width	28.27(1.113) 18.44-19.05(0.726-0.750)	
	Pitch	9.525(0.375)	

(a) Replaceable Inserts.

(b) No. 1 = 0.0025-0.0508(0.0001-0.0020); Nos. 2-5 = 0.0127-0.0610(0.0005-0.0024)

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Engine Description/Carb.

4.1L-1V (250 CID)	5.0L-2V (302 CID)
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Engine — Valve System

Hydraulic lifters (Std., opt., NA)		Standard			
Valve rotator, type (intake, exhaust)		Ford Free Turn Intake and Exhaust	Positive on Exhaust 2-Piece on Intake		
Push rods (dia., length, material)		7.899/174.75(0.311/6.88) Steel			
Rocker ratio		1.52:1 (Int.), 1.51:1 (Exh.) 1.61:1			
Operating tappet clearance (Indicate hot or cold)	Intake	Zero			
	Exhaust	Zero			
Timing (based on top of ramp points)	Intake	Opens (°BTC)	18	16	
		Closes (°ABC)	54	48	
		Duration (deg.)	252	244	
	Exhaust	Opens (°BBC)	57	57	
		Closes (°ATC)	17	19	
		Duration (deg.)	254	256	
	Valve open overlap (deg.)		35	35	
Intake Valve	Material		Steel (SAE-1547), Aluminized Head		
	Overall length		108.20(4.26)	128.78(5.07)	
	Actual overall head dia.		44.70-44.25(1.760-1.742)	45.21(1.78)	
	Angle of seat & face (deg.)		Seat 45°, Face 45°		
	Seat insert material		None		
	Stem diameter		7.892-7.874(0.3107-0.3100)	8.64(0.34)	
	Stem to guide clearance		0.020-0.064(0.0008-0.0025)	0.025-0.069(0.0010-0.0027)	
	Lift (at zero lash)		9.322	9.525(0.375)	
	Outer spring press. & length	Valve closed— N at mm (lb. at in.)	254 @ 40.1 (57 @ 1.58)	356 @ 43.2 (80 @ 1.7)	
		Valve open— N at mm (lb. at in.)	694 @ 30.5 (156 @ 1.20)	890 @ 33.0 (200 @ 1.37)	
	Inner spring press. & length	Valve closed— N at mm (lb. at in.)	None		
		Valve open— N at mm (lb. at in.)	None		
	Exhaust Valve	Material		Cast Austenitic Steel, Aluminized Head (b)	
		Overall length		108.20(4.26)	126.7(4.99)
Actual overall head dia.		35.535-35.077(1.399-1.381)	36.83(1.45)		
Angle of seat & face (deg.)		Seat 45°, Face 45°			
Seat insert material		None	Induction Hardened		
Stem diameter		7.887-7.869(0.3105-0.3098)	8.682-8.664(0.3418-0.3411)		
Stem to guide clearance		0.025-0.069(0.0010-0.0027)	0.152-0.081(0.0015-0.0032)		
Lift (at zero lash)		9.322(0.367)	9.931(0.391)		
Outer spring press. & length		Valve closed— N at mm (lb. at in.)	254 @ 40.1 (57 @ 1.58)	356 @ 40.6 (80 @ 1.6)	
		Valve open— N at mm (lb. at in.)	694 @ 30.5 (156 @ 1.20)	890 @ 30.5 (200 @ 1.2)	
Inner spring press. & length		Valve closed— N at mm (lb. at in.)	None		
	Valve open— N at mm (lb. at in.)	None			

(b) Forged 21-4N Steel, Alum. Head, Chrome Plated Stem.

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Engine Description/Carb.

4.1L-1V (250 CID)	5.0L-2V (302 CID)
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Engine — Lubrication System

Type of lubrication (splash, pressure, nozzle)	Main bearings	Pressure
	Connecting rods	Pressure
	Piston pins	Oil Mist & Splash
	Camshaft bearings	Pressure
	Tappets	Pressure
	Timing gear or chain	Splash
	Cylinder walls	Oil Mist & Splash
Oil pump type	Rotor	
Normal oil pressure - kPa (lb.) at engine rpm	275.8-413.7(40-60) @ 2000	
Type oil intake (floating, stationary)	Stationary Shrouded Screen in Sump	
Oil filter system (full flow, part, other)	Full Flow	
Capacity of oil case, less filter-refill-L (qt.)	3.8(4.0)	
Oil grade recommended (SAE viscosity and temperature range)	* See Below	
Engine service reqmt. (SD, SE, etc.)	SE (Ford Specification ESE-M2C-101-C)	

Engine — Exhaust System

Type (single, single with cross-over, dual, other)	Single	Single With Crossover
Muffler No. & Type (reverse flow, straight thru, separate resonator)	One Reverse Flow Muffler with Separate Resonator	
Resonator No. & type	One - Reverse Flow	
Exhaust Pipe	Branch O.D., wall thickness	50.8x2.01(2.0x0.079) Lam.
	Main O.D., wall thickness	57.2x1.37(2.25x0.054) Sol. Al
	Material	(See Above)
Inter-mediate Pipe	O.D. & wall thickness	57.2x1.75(2.25x0.069) Solid
	Material	Low Carbon Steel (L. C.)
Tail Pipe	O.D. & wall thickness	57.2x1.75(2.25x.069) Solid [Kick Up] ; 50.8x1.75(2.0x.069)
	Material	L. C. Alum. Coated

* Multi-Viscosity - or - Single Viscosity

+10°F & Above-SAE 20W-40	+60°F & Above-SAE 40
-10°F to +90°F-SAE 10W-30 or 40	+32°F to +90°F-SAE 30
-32°F to +32°F-SAE 5W-30	+10°F to +60°F-SAE 20-20W
	-10°F to +32°F-SAE 10-10W

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Car Line GRANADA
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Engine Description/Carb.

4.1L-1V (250 CID)	5.0L-2V (302 CID)
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Engine — Fuel System (See supplemental page for Details of Fuel Injection, Supercharger, etc. if used)

Induction type: Carburetor, fuel injection, supercharger.		Carburetor (Downdraft)		
Fuel Tank	Refill capacity—L (U.S. gals.)	68.1(18.0) Approx.		
	Filler location	Rear Center of Car		
Fuel Pump	Type (elec. or mech.)	Mechanical		
	Locations	Left Side of Engine		
	Pressure range—kPa (psi)	37.9-44.8(5.5-6.5)	27.6-41.4(4.0-6.0)	
Fuel Filter	Type (2 Req'd.)	#1 Woven Poly-Chloride Cloth, #2 Nylon and Monel Cloth with Magnet		
	Locations	#1 In Fuel Tank (Serviceable) #2 In-Line at Carburetor		
Carburetor	Choke type	Automatic		
	Intake manifold heat control (exhaust or water)	Automatic Hot and Cold Air Control Exhaust		
	Air cleaner type	Standard	Dry Replaceable Element	
		Optional	None	
	Idle spd.—rpm (spec. neutral or drive)	Manual	800 (Neutral)	500 (Neutral)
Automatic		600 (Drive)	550 (Drive)	
Idle A/F mix.				

Carburetor Supplementary Information

Model Usage	Piston Displ.—L (in.³)	Transmission	Carburetors		No. Used and Type	Barrel Size
			Make	Model		
				-9510-		
All (49S)-Non A/C	4.1L	Manual	Carter - YFA	D9DE-EA	One 1V	45.9(1.69)
All (49S)-A/C	4.1L	Manual	Carter - YFA	D9DE-EA	One 1V	45.9 (1.69)
All (49S)-Non A/C	4.1L	Automatic	Carter - YFA	D9DE-DA	One 1V	45.9 (1.69)
All (49S)-A/C	4.1L	Automatic	Carter - YFA	D9DE-CA	One 1V	45.9 (1.69)
All (Calif)-Non A/C	4.1L	Automatic	Carter - YFA	D9DE-BA	One 1V	45.9 (1.69)
All (Calif)-A/C	4.1L	Automatic	Carter - YFA	D9DE-AA	One 1V	45.9 (1.69)
All (49S)-Non A/C	5.0L	Manual	Ford 2150A	D9DE-KA	One 2V	39.6 (1.56)
All (49S)-A/C	5.0L	Automatic	Ford 2150A	D84E-TA	One 2V	39.6 (1.56)
All (Calif)-A/C	5.0L	Automatic	Ford 2700	D9DE-HA	One VV*	39.6 (1.56)
All (49S)-Non A/C	5.0L	Automatic	Ford 2150A	D84E-UA	One 2V	39.6 (1.56)
All (Altd)-Non A/C	5.0L	Automatic	Ford 2150A	D8ME-BA	One 2V	39.6 (1.56)
All (Altd)-A/C	5.0L	Automatic	Ford 2150A	D8ME-AA	One 2V	39.6 (1.56)
All (49S)-A/C	5.0L	Manual	Ford 2150A	D9DE-JA	One 2V	39.6 (1.56)
All (Calif)-Non A/C	5.0L	Automatic	Ford 2700	D9BE-AFA	One VV*	39.6 (1.56)

* Variable Venturi

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Engine Description/Carb.

4.1L-1V (250 CID)	5.0L-2V (302 CID)
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Engine — Cooling System

Coolant recovery system (std., opt., none)		Std.		
Radiator cap relief valve pressure—kPa (psi)		97-124(14-18)		
Circulation thermostat	Type (choke, bypass)	Choke — Poppet or Sleeve Valve		
	Starts to open at °C (°F)	(193°-200°) Fully Open @ 221°F		
Water pump	Type (centrifugal, other)	Centrifugal		
	GPM 1000 pump rpm	15	16	
	Number of pumps	One		
	Drive (V-belt, other)	V-Belt		
	Bearing type	Double Row, Sealed, Ball and Ball		
By-pass recirculation type (inter., ext.)		Integral	External	
Radiator core type (cross-flow, vertical, cellular, tube and fin, other)		Crossflow, Tube and Slit Fin		
Cooling System Capacity	With heater—L (qt.)	9.9(10.5)49S M/T;10.1(10.7)Cal & All A/T	13.4(14.2)	
	Without heater—L (qt.)	9.1(9.7)49S M/T;9.4(9.9)Cal & All A/T	12.6(13.3)	
	Opt. equipment—specify—L (qt.)	A/C:10.0(10.6)49S M/T;10.2(10.8) A/T	13.5(14.3)	
Water jackets full length of cyl. (yes, no)		Yes		
Water all around cylinder (yes, no)		Yes		
Radiator hose	Lower	Number and type (molded, straight)	One, Molded	
		Inside diameter mm(in)	38.1(1.50) at Radiator 47.5(1.87) at Water Pump	
	Upper	Number and type (molded, straight)	One, Molded	
		Inside diameter mm(in)	38.1(1.50) at Radiator 38.1(1.50) at Water Pump	
	By-pass	Number and type (molded, straight)	None	One, Molded
		Inside diameter mm(in)	-	15.6(0.615)
Radiator	Standard	Width mm(in)	622.3(24.5)	
		Height mm(in)	452.1(17.8)	
		Thickness mm(in)	20.57(0.81)	
	A/C	Width mm(in)	622.3(24.5)	
		Height mm(in)	452.1(17.8)	
		Thickness mm(in)	20.57(0.81)	
	Heavy duty	Width mm(in)	622.3(24.5)	
		Height mm(in)	452.1(17.8)	
		Thickness	37.85(1.49)	
Fan (Standard)	Number of blades & spacing	4 Uneven	2 Uneven	
	Diameter mm(in)	444.5(17.5)	469.9(18.5)	
	Ratio—fan to crankshaft rev.	1.04:1	0.96:1	
	Fan cutout type	None	None	
Fan (optional)	No. of blades and spacing	7 Uneven	5 Uneven	
	Diameter	444.5(17.5)	469.9(18.5)	
	Ratio—fan to crankshaft rev.	1.18:1	1.08:1	
	Fan cut-out type	Flex Blade	Flex Blade	

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Engine Description/Carb.

4.1L-1V (250 CID)	5.0L-2V (302 CID)
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Vehicle Emission Control

	Type (Air injection, engine modifications, other)		Vehicle and Engine Modifications Plus Exhaust Gas Recirculation, Air Injection [a] [b]	
	Air Injection Pump	Type	Vane	
Displacement—cm ³ (in ³)		311(19) [Constant Displacement]		
Drive ratio		1.13:1	1.34:1	
Drive type		V-Belt		
Relief valve (type)		None		
Filter (describe)		Centrifugal		
Air Injection System	Air distribution (head, manifold, etc.)	External Air Manifold	Cyl. Head	
	Point of entry [a]	Multiple or Single Entry to Man.		
	Injection tube i.d.	6.35(0.25) Multiple 17.27(0.680) Single		
	Check valve type	Diaphragm		
	Backfire protection (type)	Check Valve	Bypass Valve	
Exhaust Emission Control	Exhaust Gas Recirculation System	Type (controlled flow, open orifice, other)	Controlled Flow	
		Valve type [a]	Poppet or Tapered Stem	
		Valve location	Carburetor Spacer	Int. Manifold
		Control energy source	Carburetor Spark Port Vacuum	
		Exhaust source	Exhaust Manifold	Int. Man. Crossover
		Exhaust cooler type	None	
		Orifice no. and size [a]	3.18-11.43(0.125-0.450)	6.35-15.75(0.250-0.620)
		Point of exhaust injection (spacer, carburetor, manifold, other)	Carburetor Spacer	Intake Manifold
Catalytic Converter System	Catalyst	Type	Clamshell(49S); Monolith(Calif.)	
		Volume—L (in ³)	1.6(95)[49S], 2.4(1.50)[Cal]	1.5(92)[49S], 2.4(1.50)[Cal.]
	Substrate type	Monolith		
	Container location	Right Hand Side Mid-Ship of Vehicle		
	Converter Size	88.9x177.8x132.1(3.5x5.2)49S[c]		
	No. of Converters	One		
Other				

- [a] Exact Components Vary According to Engine Calibration
- [b] Air Injection Not used on 4.1L and 5.0L with Automatic Transmission (49S Only)
- [c] 88.9x177.8x304.8(3.5x7x12) for California.

**MVMA Specifications Form
Passenger Car**

Car Line GRANADA
 Model Year 1979 Issued 9-78 Revised (*) _____

Engine Description/Carb.

4.1L-1V (250 CID)	5.0L-2V (302 CID)
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Vehicle Emission Control (Continued)

Crankcase Emission Control	Type (ventilates to atmos., induction system, other)	Standard Optional	Induction (Closed) System None		
	Control Unit	Make and model	6A666-	Ford	
		Location		Rocker Arm Cover	
		Energy source (manifold vacuum, carburetor, other)		Manifold Vacuum	
		Control method (variable orifice, fixed orifice, other)		Variable Orifice	
	Complete System	Discharges (to intake manifold, other)		Carburetor Spacer and/or Carburetor Air Cleaner	Intake Manifold
		Air inlet (breather cap, other)		Carburetor Air Cleaner	
Flame arrestor (screen, other)			Emission Valve and Air Cleaner Filter		
Evaporative Emission Control	Fuel Tank	Thermal expansion volume—dm ³ (ft ³)	11.3(0.4) Approx.		
		Relief Pressure kPa (psi) and location	Orifice Assembly in Tank Plus Valve in Filler Cap with 11.0 (1.6) Min. Opening Pressure		
		Vacuum relief kPa (psi) and location	Orifice Assembly in Tank Plus Valve in Filler Cap with 3.5 (0.5) Max. Opening Pressure		
		Vapor-liquid separator type	Valve Assembly in Top of Fuel Tank		
		Vapor vented to (crankcase, canister, other)	Carbon Canister		
	Carbu- retor	Vapor vented to (crankcase, canister, other)		Externally Vented to	Externally Vented to Carbon Canister
				Carbon Canister	Internally Vented to Air Cleaner
	Vapor Storage	Storage provision (crankcase, canister, other)		Carbon Canister	
		Volume—dm ³ (ft ³) or capacity (grams)		925 ml. Carbon per Canister (2)	
		Control valve type		Purge	

MVMA Specifications Form Passenger Car

Car Line GRANADA
 Model Year 1979 Issued 9-78 Revised (*) _____

Engine Description/Carb.	4.1L-1V (250 CID)	5.0L-2V (302 CID)
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Electrical — Supply System

Battery	Make and Model -10655-(a)	D8BF-AA		
	Voltage Rtg. — V — & Total Plates	12V , 54P		
	SAE Designation No. and/or capacity	36 A. H.		
	Location	Right Front Engine Compartment		
Generator or Alternator	Make	Motorcraft		
	Model -10300-(a)	D8ZF-AA (40A)		
	Type and rating	3 Phase, Full Wave Bridge Rectified, Self Limiting		
	Output at engine idle (neutral) A			
	Ratio—Gen. to Cr/s rev.	2.6:1	2.5:1 (3.0:1 W/PS)	
Regulator	Make	13.5		
	Model	Not Applicable		
	Type			
	Regulated	Voltage		
		Current A		
	Voltage test conditions	Temperature—°C (°F)	—	
Load A		5 Amps		
Other		14.15-14.55 @ 50°F, 14.0-14.4 @ 75°F, 13.66-14.1 @ 125°F		

Electrical — Starting System

Starting Motor	Make	(Motorcraft)		
	Model - 11001 -	D8OF-AA		
Motor Drive	Engagement Type	Positive (Electro-Mechanical)		
	Pinion engages from (front, rear)	Front		
	Number of teeth	Pinion	9	
		Flywheel	Manual	157
Auto	164			

(a) Base Car Requirements — For Complete Applications See Page 12A.

**MVMA Specifications Form
Passenger Car**

Car Line GRANADA
Model Year 1979 Issued 9-78 Revised (●) _____

ELECTRICAL (Continued)

BATTERY APPLICATIONS (-10655-)

<u>ENGINE</u>	<u>TRANSMISSION</u>	<u>STANDARD</u>	<u>OPTIONAL</u>
4.1L-1V (250)	Man. & Auto.	D8BF-AA (36 A. H.)	D8AF-AA (54 A. H.) (a)
5.0L-2V (302)	Man. & Auto.	D8BF-AA (36 A. H.)	D8AF-AA (54 A. H.) (a)

(a) Cold Weather Option, Heavy Duty Option, or Heavy Duty Battery.

ALTERNATOR APPLICATIONS (-10300-)

<u>ENGINE</u>	<u>STANDARD</u>	<u>RATIO</u>	<u>A/C</u>	<u>RATIO</u>
4.1L-1V (250)	D8ZF-AA (40) Std.	2.60	D8ZF-BA (60)	2.72
	D8ZF-EA (40) PS	2.60	D8BF-CA (65)(e) (f)	2.72
	D8ZF-CA (60) (c)(e)(f) No PS	2.60	D9DF-AA (70) (c)	2.48
	D8ZF-BA (60) (c)(e)(f) PS	2.72		
5.0L-2V (302)	D8ZF-AA (40) Std.	2.50	D8ZF-CA (60)	3.00
	D8ZF-AA (40) PS	3.00	D8ZF-HA (65)(c)(e)(f)	3.00
	D8ZF-CA (60)(c)(e)(f)	2.50		
	D8ZF-CA (60)(c)(e)(f) PS	3.00		

(c) Mandatory with Electric Rear Window Defroster

(d) Mandatory with Rear Window Defogger

(e) Mandatory with Cold Weather Group

(f) Mandatory with Heavy Duty Group

MVMA Specifications Form
Passenger Car

Car Line GRANADA
 Model Year 1979 Issued 9-78 Revised (*) _____

Engine Description/Carb.	4.1L-1V (250 CID)	5.0L-2V (302 CID)
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Electrical — Ignition System — Distributor

Distributor	Manual	D8BE-JA (49S) N. A. (Calif.)	D9BE-CA (49S) N. A. (Calif.)
	Automatic	D9DE-CA (49S) D8DE-CA (Calif.)	D97E-CA (49S) D7DE-AA(Alt) D8DE-EA (Calif.)
Timing	Manual	4° BTDC (49S) N. A. (Calif.)	12° BTDC (49S) N. A. (Calif.)
	Automatic	10° BTDC (49S) 6° BTDC (Calif.)	8° BTDC (49S) 12° BTDC (Calif.)

Distributor Model	CENTRIFUGAL ADVANCE Crankshaft Degrees at Engine RPM			VACUUM ADVANCE Crankshaft Deg. at kPa (in. of Hg.)	
	Start	Intermediate	Maximum	Start	Maximum
D8BE-JA	0-2 @ 1100	11-15 @ 2100	15-21 @ 5000	0-2 @ 3.5 0-6 @ 5.5	13.5-18.5 @ 43.8 (13)
D9DE-CA	0-2 @ 2000	2-6 @ 1200	7-13 @ 5000	0-2 @ 3 0-5 @ 4	17.5-22.5 @ 38.7(11.5)
D8DE-CA	0-2 @ 950	2-6 @ 1200	13-18 @ 5000	0-2 @ 2 0-6 @ 3.2	21.5-26.5 @ 36.4(10.8)
D8DE-EA	0-2 @ 900	6-10 @ 1200	19-24.5 @ 5000	0-2 @ 3 0-5 @ 4	21.5-26.5 @ 47.2(14)
D7DE-AA	0-2 @ 1050	3.5-8 @ 1500	19-25 @ 5000	0-2 @ 3 0-8 @ 4	25.5-30.5 @ 37.1(11)
D9BE-CA	0-2 @ 1400	8 @ 2200	15 @ 5000	0-2 @ 4	24 @ 47.2(14)
D97E-CA	0-2 @ 900	6-10 @ 1200	20-26 @ 5000	0-2 @ 4	15-17@43.8(13)

MVMA Specifications Form

Passenger Car

Car Line GRANADA
 Model Year 1979 Issued 9-78 Revised (*) _____

Engine Description/Carb.	4.1L-1V (250 CID)	5.0L-2V (302 CID)
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Electrical — Ignition System

Type	Conventional — Std., Opt., N.A.	N. A.		
	Transistorized — Std., Opt., N.A.	Breakerless Duraspark II		
	Other (specify)	None		
Coil	Make	Motorcraft		
	Model	D5AE-AB	D5AE-AB (D7AE-AA) (Calif.)	
	Current	Engine stopped — A	5.0	5.0 (0.0 Calif.)
		Engine idling — A	2.5	2.5 (1.0 Calif.)
Spark Plug	Make	Autolite		
	Model	BSF-82	ASF-52 (ASF-52-6 Calif.)	
	Thread (mm)	18	14	
	Tightening torque — N-m (lb. ft.)	20-27(15-20)	14-20 (10-15)	
	Gap	1.27(0.050)	1.27(0.050), 1.52(0.060) Cal.	

Electrical — Suppression

Locations & type	Capacitor in Alternator and Solid-State Ignition Module, Capacitor Attached to Voltage Regulator, Resistance Core Ignition Cable, Hood Bond, Engine to Dash Ground Cable, Instrument Panel RF Ground Strap, and Tailpipe To Cross Member Ground Strap.
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Electrical — Instruments and Equipment

Speedometer	Type	Pointer
	Trip odometer (std., opt., N.A.)	N. A.
EGR maintenance indicator		N. A.
Charge Indicator	Type	Warning Light
	Warning device	
Temperature Indicator	Type	Warning Light (a)
	Warning device	
Oil pressure Indicator	Type	Warning Light (a)
	Warning device	
Fuel Indicator	Type	Electric Gauge (45° Pointer)
	Warning device	Low Fuel Warning Light (Opt. in Console)
Windshield Wiper	Type — standard	Two-Speed Electric (Turn Signal Lever Mounted Actuator)
	Type — optional	Intermittent Wipe
	Blade length	406.4(16)
Windshield Washer	Swept area — cm ² (in. ²)	5129(795)
	Type — standard	Electric Pump (Impeller Type)
	Type — optional	N. A.
Horn	Fluid level indicator	N. A.
	Type	Air-Electric
	Number used	One (Two, with Sedan Decor Opt.)
Other	Current draw (A) per horn	6.2 Amps. (Max.)
		Brake System Warning Light, Emerg. Flasher, Dir. Signal Light, H/Beam Indicator, Fasten Belts. A Low Fuel Warning Indicator Is Available With The Console Option. Headlamp "ON" Warning Buzzer (Opt.)

(a) Combined as "Engine Warning Light"

MVMA Specifications Form

Passenger Car

Car Line GRANADA
 Model Year 1979 Issued 9-78 Revised (*) _____

Engine Description/Carb.

4.1L-1V (250 CID)	5.0L-2V (302 CID)
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Drive Units — Clutch (Manual Transmission)

Make & type	Semi-Centrifugal, Single Disc, Dry Plate		
Type pressure plate springs	Coil		
Total spring load—N (lb.)	6245(1404)		
No. of clutch driven discs	One		
Clutch facing	Material	Woven Asbestos	
	Manufacturer	Porter	
	Part Number		
	Rivets/Plate	32	
	Rivet size	9/64 x 7/32	
	Outside & inside dia.	254x158.8(10x6.25)	254x171.5(10x6.75)
	Total eff. area—cm ² (in. ²)	617.5(95.7)	551.6(85.5)
	Thickness	3.18(0.125)	
Release bearing	Engagement cushion-method	Torbend Disc	
	Type & method of lubrication	Angular Contact, Prepacked	
Torsional damping	Methods: springs, friction material	Steel Coil Springs	

Drive Units — Transmissions

Manual 3-speed (std., opt., N.A.)	N. A.
Manual 4-speed (std., opt., N.A.)	Std. (With Overdrive 4th Gear)
Manual 5-speed (std., opt., N.A.)	N. A.
Manual overdrive (std., opt., N.A.)	(See Manual 4-Speed)
Automatic (std., opt., N.A.)	Opt.

Drive Units — Manual Transmissions

Number of forward speeds	Four			
Transmission ratios	In first	3.29:1	3.07:1	
	In second	1.84:1	1.72:1	
	In third	1.00:1	1.00:1	
	In fourth	0.81:1 (Overdrive)	0.70:1 (Overdrive)	
	In fifth	-	-	
	In reverse	3.29:1	3.07:1	
Synchronous meshing, specify gears	1-2-3-4			
Shift lever location	Floor			
Lubricant	Capacity—L (pt.)	2.13(4.5)		
	Type recommended	ESP-M2C83-C		
	SAE viscosity number	Summer	80	
		Winter	80	
Extreme cold				

MVMA Specifications Form

Passenger Car

Car Line GRANADA
 Model Year 1979 Issued 9-78 Revised (*) _____

Engine Description/Carb.	4.1L-1V (250 CID)	5.0L-2V (302 CID)
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Drive Units—Automatic Transmission

Trade name	Selectshift Cruise-O-Matic	
Type (describe)	Torque Converter with Planetary Gears	
Selector location	Column, Floor Optional (P-R-N-D-2-1)	
Gear Ratios	P (Trans)	C-4/JATCO
	R	2.8:1
	N	
	D	1.00:1
	L2	1.46:1
	L1	2.46:1
Max. upshift speed—drive range—km/h (mph)	117 (73)	113 (70)
Max. kickdown speed—drive range—km/h (mph)	105 (65)	97 (60)
Torque Converter	Number of elements	Three
	Max. ratio at stall	2.3:1
	Type of cooling (air, liquid)	Liquid Passed Through Heat Exchanger in Radiator
	Nominal diameter	304.8 (12.0)
Lubricant	Capacity—refill—L (pt.)	9.1 (19.0)
	Type recommended	Transmission Fluid — ESW-M2C33F (Type F)
Special transmission features	Transmission Can Be Locked in "1" or "2" range, Vacuum Controlled Throttle Valve.	

Drive Units—Axle

Type (front, rear)	Rear		
Description	Stamped Center, Straddle Mounted Pinion		
Limited Slip differential, type	N.A.		
Drive Pinion Offset	38.1 (1.50)		
No. of differential pinions	Two		
Pinion adjustment (shim, other)	Shim		
Pinion bearing adj. (shim, other)	Collapsible Spacer		
Wheel bearing type L	Ball Bearing		
Lubricant	Capacity—L (pt.)	2.1 (4.5)	
	Type recommended	Hypoid — M2C 105-A	
	SAE viscosity number	Summer	SAE 90
		Winter	SAE 90
		Extreme cold	SAE 90

Axle Ratio Tooth Combinations (See "Power Teams" for axle ratio usage.)

Axle Ratio	2.79:1	3.00:1
No. of teeth	Pinion	15
	Ring gear	41
Ring Gear O. D.	203.2 (8.0)	203.2 (8.0)

MVMA Specifications Form

Passenger Car

Car Line GRANADA
 Model Year 1979 Issued 9-78 Revised (*) _____

Engine Description/Carb.

4.1L-1V (250 CID)	5.0L-2V (302 CID)
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Drive Units—Propeller Shaft

Number used		One	
Type (straight tube, tube-in-tube, internal-external damper, etc.)		Slip Yoke Tuned Damper	
Outer diam. x length* x wall thickness	Manual 3-speed trans.	N. A.	
	Manual 4-speed trans.	69.9 x 1333.2 x 1.65 (2.75 x 52.49 x 0.065)	69.9 x 1356.9 x 1.65 (2.75 x 53.42 x 0.065)
	Manual 5-speed trans.	N. A.	
	Overdrive Trans.	(Std. Manual 4-Speed Has O.D. 4th Gear)	
	Automatic transmission	69.9 x 1327.2 x 1.65 (2.75 x 52.5 x 0.065) (a)	69.9 x 1351.3 x 1.65 (2.75 x 53.20 x 0.065)
Intermediate bearing	Type (plain, anti-friction)		
	Lubrication (fitting, prepack)		
Slip Yoke	Type		
	Number of teeth	28	
	Spline O. D.	31.0 (1.22) Max	
Universal joints	Make and Mfg. No.	1310	
	Number used	Two	
	Type (ball and trunnion, cross)	Cross	
	Rear attach (u-bolt, clamp, etc.)	U-Bolts	
	Bearing	Type (plain, anti-friction)	Anti-Friction
Lubric. (fitting, prepack)		Prepacked	
Drive taken through (torque tube or arms, springs)		Springs	
Torque taken through (torque tube or arms, springs)		Springs	

*Center to center of universal joints, or to centerline of rear attachment.

(a) C-4 Transmission; 69.9x1333.2x1.65 (2.75x52.49x0.065) JATCO Transmission

MVMA Specifications Form

Passenger Car

Car Line GRANADA
 Model Year 1979 Issued 9-78 Revised (*) _____

Engine Description/Carb.

	4.1L-1V (250 CID)	5.0L-2V (302 CID)
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Drive Units—Tires And Wheels (Standard)

TIRES	Size, load range, ply		DR78-14/B BSW (WSW Opt.)
	Type (bias, radial, etc.)		Steel Belted Radial
	Inflation pressure (cold); for recommended max. vehicle load	Front—kPa (psi)	179(26)
		Rear—kPa (psi)	193(28)
Rev./mile—at 70 km/h (45 mph)		825	
WHEELS	Type & material		Disc-Stamped Steel
	Rim (size & flange type)		356x152(14x6.0)JJ
	Wheel offset		Zero
	Attachment	Type (bolt or stud)	Stud
		Circle diameter	114, 3(4, 5)
		Number & size	Five, 1/2-20
Spare wheel (same or other)		Same (D78-14/B Bias Inflatable Temporary Spare Opt.)	

Drive Units—Tires And Wheels (Optional)

Size, load range, ply	ER78-14/B BSW (WSW); F78-14/B Inflatable Spare Opt.
Type (bias, radial, etc.)	Steel Belted Radial
Wheel type & material	Disc-Stamped Steel
Rim (size, flange type, and offset)	356x152(14x6.0)JJ, Zero Offset
Size, load range, ply	FR78-14/B BSW (WSW) (W WSW); F78-14/B Inflatable Spare Opt.
Type (bias, radial, etc.)	Steel Belted Radial
Wheel type & material	Disc - Stamped Steel
Rim (size, flange type, and offset)	356x152(14x6.0)JJ, Zero Offset
Size, load range, ply	
Type (bias, radial, etc.)	
Wheel type & material	Aluminum (Lacy Spoke) - Use DR78, ER78, or FR78
Rim (size, flange type, and offset)	356x152(14x6.0)JJ, Zero Offset
Size, load range, ply	
Type (bias, radial, etc.)	
Wheel type & material	Styled Steel — Use DR78, ER78, or FR78
Rim (size, flange type, and offset)	356x152(14x6.0)JJ, Zero Offset
Size, load range, ply	
Type (bias, radial, etc.)	
Wheel type & material	
Rim (size, flange type, and offset)	

Brakes—Parking

Type of control	Foot Operated/Manual Release (Auto. Vac. Rel. Opt.)	
Location of control	Suspended Left of Steering Column	
Operates on	Rear Service Brakes	
If separate from service brakes	Type (internal or external)	-
	Drum diameter	-
	Lining size (length x width x thickness)	-

MVMA Specifications Form

Passenger Car

Car Line GRANADA
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Body Type And/Or Engine Displacement

ALL

Brakes—Service

Brake Type (Std., Opt., N.A.)	Drum	Front	N. A.	
		Rear	Std.	
	Disc	Front	Std. Manual (Single Piston)	
		Rear	N. A.	
Self-adjusting (std., opt., N.A.)			Std.	
Special Valving	Type (proportion, delay, metering, other)		Pressure Differential and Proportioning Valve	
Power Brake (std., opt., N.A.)			Optional	
Booster Type (remote, integral, vac., hyd., etc.)			229(9.0) Single Diaphragm, Integral Vacuum	
Anti-skid device type (std., opt., N.A.)			N. A.	
Effective area—cm ² (in. ²)*			642.6(99.6)	
Gross lining area—cm ² (in. ²)**			727.1 (112.7)	
Swept area—cm ² (in. ²)***			2246.9(348.2)	
Rotor	Outer working diameter	F	280.2(11.03)	
		R	270.8(10.66)	
	Thickness	F	22.1(0.870)	
		R	24.0(0.945)	
	Material & type (vented/solid)	F	C. I. Vented	
		R	C. I. Vented	
Drum	Diameter (nominal)	Front	-	
		Rear	254.0(10.0)	
	Type and material		Composite, Finned, CI.-Steel	
Wheel cylinder bore	Front	66.0(2.6)		
	Rear	23.8(0.938)		
Master Cylinder	Bore	23.8(0.938)		
	Stroke	31.8(1.25)Man., 33.5(1.32)Pwr		
Pedal arc ratio			6.32:1 Man., 3.8:1 Pwr	
Line pressure at 445 N (100 lb.) pedal load—MPa (psi)				
Lining Clearance Per Shoe	Front	0.25(0.010)		
	Rear	0.38(0.015)		
Brake Lining	Front Wheel	Bonded or riveted, rivets/seg.		Riveted
		Rivet size		9/64
		Manufacturer		Bendix
		Lining Code		BX-XL-FF
		Material		Molded Asbestos
		Size	Prim. or out-board	152.4x46.7x10.34(6.00x1.84x0.407)
			Second or in-board	133.1x53.3x10.52(5.24x2.10x0.414)
	Shoe thickness (no lining)			4.17(0.164) Outer, 4.83(0.190) Inner
	Rear Wheel	Bonded or riveted, rivets/seg.		Riveted
		Manufacturer		Bendix
		Lining Code		BX-RW-FF, BX-DV-GF
		Material		Molded Asbestos
		Size	Prim. or out-board	217.2x50.8x4.75 (8.55x2.00x0.187)
			Second or in-board	265.4x50.8x6.15 (10.45x2.00x0.242)
Shoe thickness (no lining)			1.71(0.0673)	

* 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 π/2 for each brake.)

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

MVMA Specifications Form

Passenger Car

Car Line GRANADA
 Model Year 1979 Issued 9-78 Revised (*) _____

ALL

Steering

Manual (std., opt., N.A.)		Standard	
Power (std., opt., N.A.)		Optional	
Adjustable steering wheel (tilt, swing, other)	Type and description	Tilt-5 Position	
	(Std., opt., N.A.)	Opt. (N. A. with Floor Shift)	
Wheel diameter mm (in.)	Manual	38.1 (15.0) with 6.35 (0.25) upper offset	
	Power	38.1 (15.0) with 6.35 (0.25) upper offset	
Turning diameter m(feet)	Outside front	Wall to wall (l. & r.)	
		Curb to curb (l. to r.)	11.9 (39.0); 12.0 (39.4) with Power Steering
	Inside rear	Wall to wall (l. to r.)	
		Curb to curb (l. to r.)	
Manual	Gear	Type	Recirculating Ball and Nut
		Make	Ford Pump, Bendix Booster, Ford Gear (c)
		Ratios	Gear 22.0:1 Overall 29.4:1
	No. wheel turns (stop to stop)		5.18
	Type (coaxial, linkage, etc.)		Linkage Booster
Power	Gear	Make	Ford Pump -- Bendix Booster -- Ford Gear
		Type	Recirculating Ball and Nut
		Ratios	Gear 16.0:1 Overall 21.3:1
	Pump driven by		V-Belt off Crankshaft Pulley (Lube M2C-33F)
	No. wheel turns (stop to stop)		3.7
Linkage	Type		Parallelogram with Cross Link
	Location (front or rear of wheels, other)		Rear
	Drag links (trans. or longlt.)		Transverse
	Tie rods (one or two)		Two
Steering Axis	Inclination at camber (deg.)		6.75°
	Bearings (type)	Upper	Ball Joint
		Lower	Ball Joint
		Thrust	Upper: Polyethylene; Lower: Sintered Iron
Steering spindle & joint type		Integral Assembly with Ball Socket Joints	
Wheel Spindle	Diameter	Inner bearing -mm(in.)	34.97 (1.3767) I. D.
		Outer bearing -mm(in.)	21.96 (0.8647) I. D.
	Thread size		13/16-20 UNEF 2A Right Hand Thread
	Bearing type		Tapered Roller
Wheel Align at curb mass (wt.)	Service checking	Caster (deg.)	-1.25 to +0.25 (a)
		Camber (deg.)	-0.5 to +1.0 (a)
		Toe-in [outside track-mm (in.)]	0 to 6 (0.24) (b)
	Service reset	Caster	-1.25 to +0.25 (a)
		Camber	-0.5 to +1.0 (a)
		Toe-in mm (in.)	0 to 6 (0.24) (b)
	Periodic M.V. Inspection	Caster	-2.5 to +1.5
		Camber	-1.25 to +1.5
		Toe-in mm (in.)	-12 (0.5) to +6 (0.24)

- (a) Max. Caster & Camber Diff. Bet. Wheels not to Exceed 0.75°.
 (b) Strg. Wheel Spokes to be +10° of Horiz. After Toe Setting.
 (c) Saginaw pump on 5.0L (30Z) with A/C.

**MVMA Specifications Form
Passenger Car**

Car Line GRANADA
 Model Year 1979 Issued 9-78 Revised (*) _____

Body Type And/Or Engine Displacement

ALL

Suspension — General

(See Supplement page for details on Air Suspension)

Provision for car leveling		None
Provision for brake dip control		Tilted Upper Control Arm Anti-Drive Front Suspension
Provision for acc. squat control		Asymmetrical Type Rear Spring Mounting
Special provisions for car jacking		Notched Rocker Panel Positions Front and Rear
Shock absorber front & rear	Type	Direct Acting, Rebound Stop — Front
	Make	Motorcraft
	Piston dia. mm (In.)	25.4 (1.00) Standard & Heavy Duty
Other special features		Staggered Rear Shock Absorbers

Suspension — Front

Type and description		Independent Short/Long Arm w/Ball Joints & Coil Springs
Travel	Full Jounce	108.0 (4.25) at Wheel
	Full Rebound	116.3 (4.58) at Wheel
Spring	Type (coil, leaf, other)	Coil
	Material	SAE-5160-H
	Size (coil design height & I.D., bar length x dia.) mm (In.)	265.4x98.3; 3281.6x14.7 Bar Dia. (10.45x3.87; 129.2x0.577 Bar Dia.)
	Spring rate — N/mm (lb./in.)	39.4 (225)
	Rate at wheel — N/mm (lb./in.)	15.41 (88)
Stabilizer	Type (link, linkless, frameless)	Link Type
	Material & bar diameter mm (in.)	SAE-1090 or SAE-5160 Steel; 17.5(0.69) Dia. or 24 (0.95) Dia. with V8 or A/C

Suspension — Rear

Type and description		Hotchkiss Drive
Drive and torque taken through		Rear Springs
Travel	Full Jounce	86.4 (3.40)
	Full Rebound	118.1 (4.65)
Spring	Type (coil, leaf, other)	Semi-Elliptical Leaf
	Material	SAE 5160 Steel
	Size (length x width, coil design height & I.D., bar length & dia.)	1397x63.5 (55.0x2.50)
	Spring rate — N/m (lb./in.)	16.99 (97); 28.19 (161) H. D.
	Rate at wheel — N/m (lb./in.)	18.03 (103); 28.55 (163) H. D.
	Mounting insulation type	Rubber Bushings, Isoclamp Center Mounting
If leaf	No. of leaves	4, Heavy Duty:5
	Shackle (comp. or tens.)	Compression
Stabilizer	Type (link, linkless, frameless)	None
	Material & bar diameter	-
Track bar type		-

**MVMA Specifications Form
Passenger Car**

Car Line GRANADA
 Model Year 1979 Issued 9-78 Revised (*) _____

Body Type

ALL

Body — Miscellaneous Information

Type of finish (lacquer, enamel, other)	Acrylic Enamel	
Hood counterbalanced (yes, no)	No (Prop Rod)	
Hood release control (internal, external)	Internal, Secondary External	
Vehicle Ident. No. Location	Left Front Side Between W/Shield and Instrument Panel Pad	
Vent window control method (crank, friction pivot, power)	Front	None
	Rear	Stationary Quarter
Seat cushion type	Front	Coil Suspended Flat Mat -- Foam Pads
	Rear	Formed Wire Springs, Urethane Pads
	3rd Seat	—
Seat back type	Front	Stamped Frame, Urethane Pads
	Rear	Steel Frame, Urethane Pads
	3rd seat	—
Method of holding luggage compart. lid open	Torsion Bar	
Position of spare tire storage	Flat on the Floor, Right Side (Opt. inflatable spare mounted vertically on right side)	

Frame

Type and description (Separate frame, unitized frame, partially-unitized frame) **Unitized Construction**

MVMA Specifications Form
Passenger Car

Car Line GRANADA
 Model Year 1979 Issued 9-78 Revised (*) _____

Body Type

ALL

Convenience Equipment

Power windows	Side Windows	Opt.
	Vent windows	N. A.
	Backlight or tailgate	N. A.
Power seats (specify type as well as availability)		Opt. 4-Way Bench; W/Buckets, 4-Way Drivers Only
Reclining front seat back (R-L or both)		Std. - (with Bucket Seats Only)
Radios (specify type as well as availability)		Opt. - AM, AM Tape, AM/FM Mon, AM/FM/MPX, AM/FM/MPX Tape, AM/FM/MPX/Search, AM/FM/MPX/Quad, AM/FM/MPX Cass.
Rear seal speaker		Std. with All Except AM (Two Required)
Power antenna		N. A.
Clock		Opt. Digital
Air conditioner (specify type)		Optional, Integral in Instrument Panel (Manual or ATC)
Speed warning device		N. A.
Speed control device		Opt.
Ignition lock lamp		N. A.
Dome lamp		Std.
Glove compartment lamp		Opt.
Luggage compartment lamp		Opt.
Underhood lamp		Opt.
Courtesy lamp		Opt.
Map lamp		Opt.
Cornering lamp		Opt.
Rear window defroster electrically heated		Opt.
Rear window defogger		Opt. (Mandatory in New York)
Theft protection - type		
Pwr. Door Locks		Opt.
Conven. Equip. Gr.		Opt. (Cigar Lighter, Control Outside Rear View Mirror)
Illuminated Entry		Opt.

**MVMA Specifications Form
 Passenger Car**

Car Line GRANADA

Model Year 1979

Issued 9-78

Revised (*) _____

Model	Vehicle Mass (Weights)							SHIPPING MASS, Kg. (Weight, lb.)**
	CURB MASS, kg. (Weight, lb.)*			% PASS. WEIGHT DISTRIBUTION				
	Front	Rear	Total	Pass. In Front		Pass. In Rear		
				Front	Rear	Front	Rear	
4.1L-IV, Manual Trans.								
2-Dr. Sedan (66H)	772 (1704)	673 (1485)	1445 (3189)					1384 (3054)
4-Dr. Sedan (54H)	777 (1716)	685 (1512)	1462 (3228)					1401 (3093)

*Reference — SAE J1100a, Motor Vehicle Dimensions. Curb Weight Definition.
 **Shipping Mass (Weight) definition— Curb Mass less fuel and coolant — 61 kg (135).

MVMA Specifications Form
Passenger Car

Car Line GRANADA
 Model Year 1979 Issued 9-78 Revised (*)

Equipment Differential Mass (Weights)	Optional Equipment Mass (Weights)*			Remarks
	MASS, kg. (Weight, lb.)			
	Front	Rear	Total	
Engines-Man. Trans.				Over 4.1L-1V, Man. Trans.
5.0L-2V	29.5 (65)	2.7 (6)	32.2 (71)	
Engines-Auto. Trans.				Over 4.1L-1V, Man. Trans.
4.1L-1V	2.3 (5)	0 (0)	2.3 (5)	
5.0L-2V	30.9 (68)	5.4 (12)	36.3 (80)	
Power Steering	9.1 (20)	-0.4 (-1)	8.6 (19)	4.1L Engine
	13.6 (30)	-0.4 (-1)	13.2 (29)	5.0L Engine
Power Disc Brakes	1.8 (4)	0.4 (1)	2.3 (5)	
Air Conditioning	51.3 (113)	-3.6 (-8)	47.7 (105)	Auto. Temp. Control
	50.4 (111)	-3.6 (-8)	46.8 (103)	Man. Temp. Control
Rear Window Elect. Def.	0.9 (2)	0.4 (1)	1.4 (3)	
Heavy Duty Susp.	1.8 (4)	6.4 (14)	8.2 (18)	
Power Windows	2.3 (5)	2.7 (6)	5.0 (11)	Model 66H
	5.0 (11)	5.0 (11)	10.0 (22)	Model 54H
Power Seat-4 Way Bench	3.2 (7)	3.2 (7)	6.4 (14)	Model 66H
	4.1 (9)	4.1 (9)	8.2 (18)	Model 54H
Radios-AM	1.8 (4)	0.9 (2)	2.7 (6)	
-AM/FM Mon.	2.3 (5)	1.8 (4)	4.1 (9)	
-AM/FM/MPX	2.7 (6)	2.3 (5)	5.0 (11)	
-AM/FM/MPX/Tape	3.6 (8)	2.7 (6)	6.4 (14)	
-AM/Tape	3.6 (8)	2.7 (6)	6.4 (14)	
-AM/FM/MPX Search	3.6 (8)	2.7 (6)	6.4 (14)	
-AM/CB-40 Ch.	0.4 (1)	1.8 (4)	2.3 (5)	
-AM/FM/MPX/Q8, or Cassette	3.6 (8)	2.7 (6)	6.4 (14)	

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

MVMA Specifications Form Passenger Car

Car Line GRANADA
 Model Year 1979 Issued 9-78 Revised (*)

Equipment Differential Mass (Weights)	Optional Equipment Mass (Weights)*			Remarks
	MASS, kg. (Weight, lb.)			
	Front	Rear	Total	
Tires				Over Std. DR78-14 BSW Radial Ply
DR78-14 WSW	0.4	0.4	0.9	Radial Ply
	(1)	(1)	(2)	
ER78-14 BSW	1.4	1.8	3.2	Radial Ply
	(3)	(4)	(7)	
ER78-14 WSW	1.4	2.7	4.1	Radial Ply
	(3)	(6)	(9)	
FR78-14 BSW	2.7	4.5	7.2	Radial Ply
	(6)	(10)	(16)	
FR78-14 WSW	3.2	4.5	7.7	Radial Ply
	(7)	(10)	(17)	
Wire Wheel Covers	2.7	2.7	5.4	
	(6)	(6)	(12)	
Sun Roof-Glass	9.5	14.1	23.6	Requires Vinyl Roof
	(21)	(31)	(52)	
ESS Group	7.2	16.4	23.6	Model 66H
	(16)	(36)	(52)	
	9.1	16.8	25.9	Model 54H
	(20)	(37)	(57)	
Ghia Group	6.8	9.5	16.4	Model 66H
	(15)	(21)	(36)	
	5.4	10.0	15.4	Model 54H
	(12)	(22)	(34)	
Speed Control	1.8	0.9	2.7	
	(4)	(2)	(6)	Requires Auto. Transmission

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

MVMA Specifications Form

Passenger Car

Car Line GRANADA
 Model Year 1979 Issued 9-78 Revised (*)

Car and Body Dimension

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.	2-Door Sedan 66H	4-Door Sedan 54H
--------------	---------------------	---------------------

Width

SAE Ref. No.	2-Door Sedan 66H	4-Door Sedan 54H
Tread — Front	W101	1499 (59.0)
Tread — Rear	W102	1466 (57.7)
Vehicle width	W103	1880 (74.0)
Body width at Sg RP — front	W117	1808 (71.2)
Vehicle width — front doors open	W120	
Vehicle width — rear doors open	W121	

Length

SAE Ref. No.	2-Door Sedan 66H	4-Door Sedan 54H
Wheelbase	L101	2791 (109.9)
Vehicle length	L103	5024 (197.8)
Overhang — front	L104	1021 (40.2)
Overhang — rear	L105	1031 (40.6)
Upper structure length	L123	2494 (98.2)
Rear wheel C/L "X" coordinate	L127	2377 (93.6)
Cowl point "X" coordinate	L125	142 (5.6)

Height*

SAE Ref. No.	2-1	2-2
Passenger Distribution (frt./rear)	PD1,2,3	
Trunk/Cargo load		
Vehicle height	H101	1351 (53.2)
Cowl point to ground	H114	947 (37.3)
Deck point to ground	H138	968 (38.1)
Rocker panel front to ground	H112	201 (7.9)
Bottom of door closed - front to grd.	H133	
Rocker panel rear to ground	H111	173 (6.8)
Bottom of door closed - rear to grd.	H135	
Windshield slope angle	H122	

Ground Clearance*

Front bumper to ground	H102	317 (12.5)
Rear bumper to ground	H104	262 (10.3)
Bumper to ground — front at curb mass (wt.)	H103	335 (13.2)
Bumper to ground — rear at curb mass (wt.)	H109	330 (13.0)
Angle of approach	H106	19.8°
Angle of departure	H107	13.5°
Ramp breakover angle	H147	10.8°
Rear axle differential to ground	H153	152.6 (6.01)
Min. running ground clearance	H156	112 (4.41)
Location of min. run. grd. clear.		Converter Glass Shield

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

MVMA Specifications Form
Passenger Car

Car Line GRANADA
Model Year 1979 Issued 9-78 Revised (*) _____

Car and Body Dimensions See Key Sheets for definitions

Body Type

SAE Ref. No.	2-Door Sedan 66H	4-Door Sedan 54H
--------------	---------------------	---------------------

Front Compartment

SAE Ref. No.	2-Door Sedan 66H	4-Door Sedan 54H
Sg RP front, "X" coordinate	L31	1085 (42.7)
Effective head room	H61	965 (38.0)
Effective T Point head room	H75	—
Max. eff. leg room—accelerator	L34	1031 (40.6)
Sg RP — front to heel	H30	236 (9.3)
Design H-point front travel	L17	127 (5.0)
Shoulder room	W3	1417 (55.8)
Hip room	W5	1420 (55.9)
Upper body opening to ground	H50	1232 (48.5)
Steering Wheel Angle	H18	23.3°
Back Angle	L40	25.0°

Rear Compartment

SAE Ref. No.	2-Door Sedan 66H	4-Door Sedan 54H
Sg RP Point couple distance	L50	792 (31.2)
Effective head room	H63	927 (36.5)
Effective T Point head room	H76	—
Min. effective leg room	L51	861 (33.9)
Sg RP— second to heel	H31	277 (10.9)
Knee clearance	L48	5 (0.2)
Compartment room	L3	—
Shoulder room	W4	1382 (54.4)
Hip room	W6	1280 (50.4)
Upper body opening to ground	H51	—

Luggage Compartment

SAE Ref. No.	2-Door Sedan 66H	4-Door Sedan 54H
Usable luggage capacity—L (cu. ft.)	V1	436 (15.4*)
Liftover height	H195	706 (27.8)

* With RPO Inflatable Spare 459 (16.2)

MVMA Specifications Form
Passenger Car

Car Line GRANADA
 Model Year 1979 Issued 9-78 Revised (+) _____

Car and Body Dimensions See Key Sheets for definitions—mm (in.)

Body Type

SAE Ref. No.	
--------------	--

Station Wagon — Third Seat

Shoulder room	W85	
Hip room	W86	
Effective leg room	L86	
Effective head room	H86	
Effective T Point head room	H89	
Seat facing direction	SD1	

Station Wagon — Cargo Space

Cargo length—open—front	L200	
Cargo length—open—second	L201	
Cargo length—closed—front	L202	
Cargo length—closed—second	L203	
Cargo length at belt—front	L204	
Cargo length at belt—second	L205	
Cargo width—wheelhouse	W201	
Rear opening width at floor	W203	
Opening width at belt	W204	
Max. rear opening width above belt	W205	
Cargo height	H201	
Rear opening height	H202	
Tail gate to ground height	H250	
Front seat back to load floor height	H197	
Cargo volume index—m ³ (ft. ³)	V2	
Hidden cargo volume—m ³ (ft. ³)	V4	

Hatchback — Cargo Space

Front seat back to load floor height	H197	
Cargo length at front seat Back Height	L208	
Cargo length at floor—front	L209	
Cargo volume index—L (ft. ³)	V3	
Hidden cargo volume—L (ft. ³)	V4	

A printed or computer tape supplement containing additional car and body dimensions and/or drawings (based in part on SAE J1100a "Motor Vehicle Dimensions") may be available from the manufacturer.

MVMA Specifications Form

Passenger Car

Car Line GRANADA
 Model Year 1979 Issued 9-78 Revised (*) _____

Car and Body Dimensions See Key Sheets for definitions

Body Type

ALL

Vehicle Fiducial Marks

Fiducial Mark Number*	Define Coordinate Location										
Front 1 & 2	<p>The front vertical edge of the master control notch on the under side of the front door rocker panels locates the "X" coordinate relative to body grid.</p> <p style="margin-left: 40px;"> X = 482.6 (19.0) Y = N. A. Z = N. A. </p>										
3 & 4 Rear 5 & 6	<p>The intersection of the horizontal-vertical surfaces on the rocker panel door rabbet locates the "Y" and "Z" coordinates relative to body grid at particular fore-aft inch lines. The fore-aft location can be determined by the reference dimension from — Fiducial Mark 1 & 2</p>										
Fiducial Mark Number											
3 & 4 Front	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; border: none;">W21</td> <td style="border: none;">780.29 (30.72)</td> </tr> <tr> <td style="border: none;">L54</td> <td style="border: none;">508.00 (20.00)</td> </tr> <tr> <td style="border: none;">H81</td> <td style="border: none;">29.34 (1.155)</td> </tr> <tr> <td style="border: none;">H161</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">H163</td> <td style="border: none;"></td> </tr> </table>	W21	780.29 (30.72)	L54	508.00 (20.00)	H81	29.34 (1.155)	H161		H163	
W21	780.29 (30.72)										
L54	508.00 (20.00)										
H81	29.34 (1.155)										
H161											
H163											
5 & 6 Rear	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; border: none;">W22</td> <td style="border: none;">780.03 (30.71)</td> </tr> <tr> <td style="border: none;">L55</td> <td style="border: none;">1511.30 (59.50)</td> </tr> <tr> <td style="border: none;">H82</td> <td style="border: none;">25.15 (0.99)</td> </tr> <tr> <td style="border: none;">H162</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">H164</td> <td style="border: none;"></td> </tr> </table>	W22	780.03 (30.71)	L55	1511.30 (59.50)	H82	25.15 (0.99)	H162		H164	
W22	780.03 (30.71)										
L55	1511.30 (59.50)										
H82	25.15 (0.99)										
H162											
H164											

*Reference — SAE Recommended Practice, J182a, A Motor Vehicle Fiducial Marks September, 1973.

MVMA Specifications Form
Passenger Car

Car Line GRANADA
Model Year 1979 Issued 9-78 Revised (*) _____

Car and Body Dimensions See Key Sheets for definitions

Body Type

SAE Ref. No.	2-Door Sedan	4-Door Sedan
	66H	54H

Glass

Backlight slope angle	H121	54.0°	55.5°
Windshield slope angle	H122	56.7°	
Tumble-Home	W122	20.6°	
Windshield glass exposed surface area—cm ² (in. ²)	S1	7971.08 (1235.5)	
Side glass exposed surface area—cm ² (in. ²)	S2	7525.15 (1166.4)	9095.21 (1409.8)
Backlight glass exposed surface area—cm ² (in. ²)	S3	5955.08 (923.0)	6967.73 (1080.0)
Total glass exposed surface area—cm ² (in. ²)	S4	21451.31 (3324.9)	24034.0 (3725.3)
Windshield glass type		Compound Curved, Float Laminated	
Side glass type		Curved, Tempered Float	
Backlight glass type		Compound Curved, Tempered Float	

Lamps and Headlamp Shape*

Height above ground to center of bulb or marker	Headlamp (H125)	Highest**	723.1 (28.47)
		Lowest	—
	Tail (H126)	Highest	665.2 (26.19)
		Lowest	—
Sidemarker	Front	600.7 (23.65)	
	Rear	665.2 (26.19)	
Distance from C/L of car to center of bulb	Headlamp	Inside	—
		Outside**	589.5 (23.21)
	Tail	Inside	712.0 (28.84)
		Outside	816.3 (32.14)
	Directional	Front	640.0 (25.20)
		Rear	518.1 (20.40)
Headlamp Shape		Rectangular	

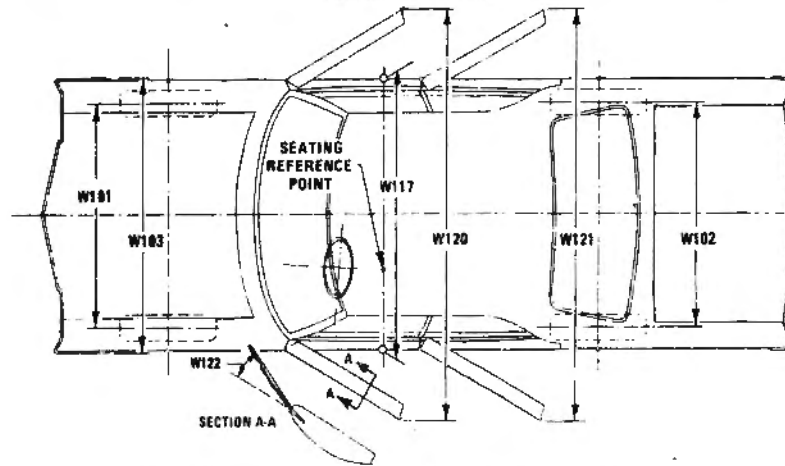
*Measured at curb mass (weight).

**If single headlamps are used enter here

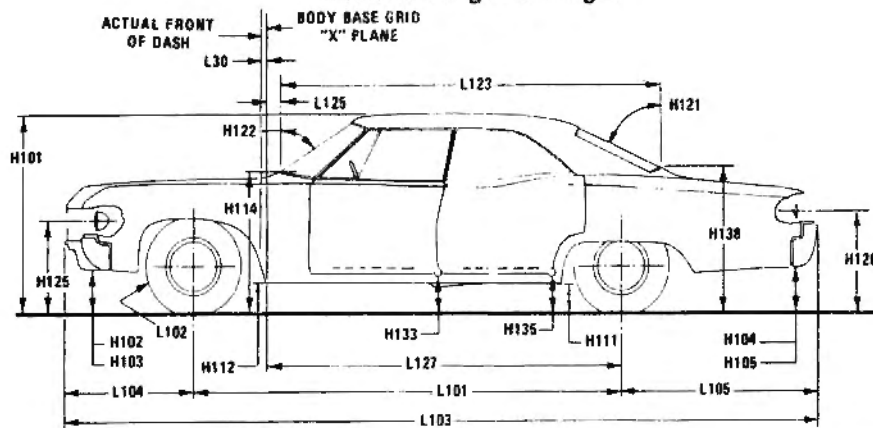
MVMA Specifications Form Passenger Car

Exterior Car And Body Dimensions — Key Sheet

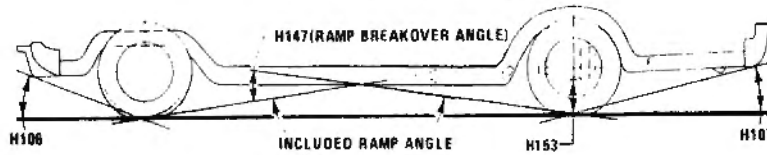
Exterior Width



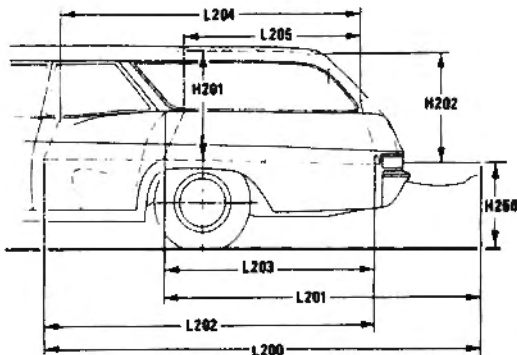
Exterior Length & Height



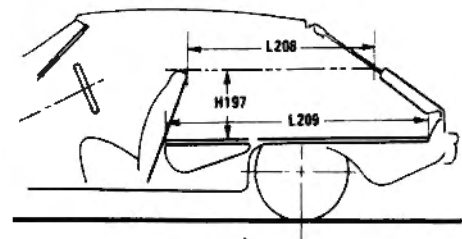
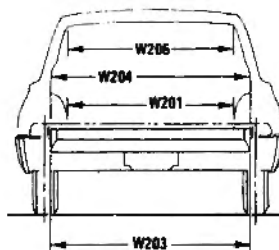
Exterior Ground Clearance



Cargo Space



Station Wagon

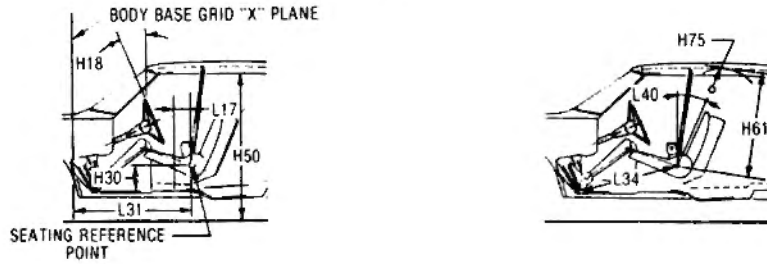


Hatchback

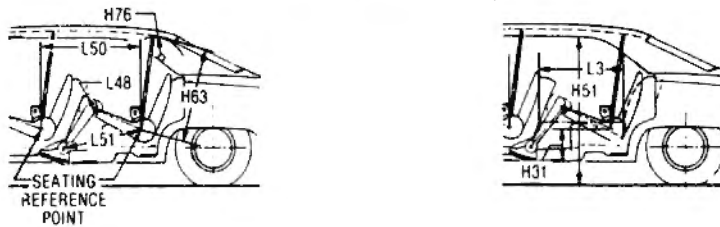
MVMA Specifications Form Passenger Car

Interior Car And Body Dimensions — Key Sheet

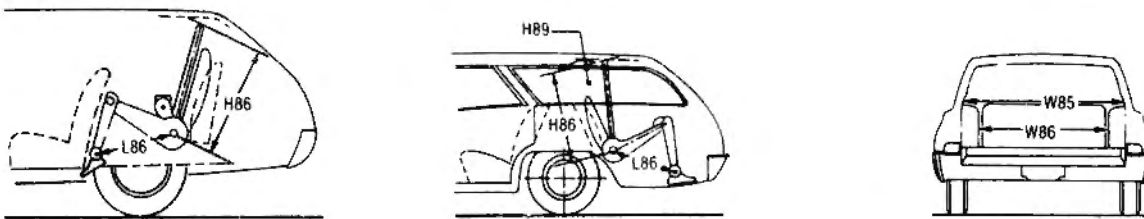
Front Compartment



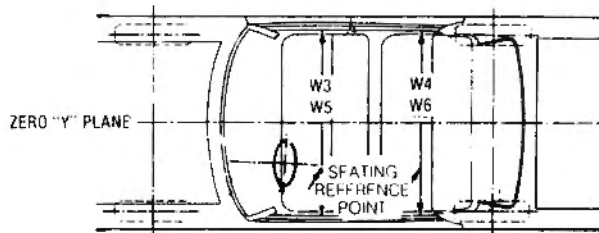
Rear Compartment



Third Seat



Interior Width



MVMA Specifications Form

Passenger Car

Exterior Car And Body Dimensions — Key Sheet

Dimension 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 designed 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 is 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 18.0 in. (457 mm) long, drawn from the lower DLO to the intersecting point on the windshield.

H125 HEADLAMP TO GROUND. The dimension measured vertically from the centerline of the lowest headlamp lens to ground.

H126 TAILLAMP TO GROUND. 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.

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Passenger Car

Interior Car And Body Dimensions — Key Sheet

Dimension Definitions

- H103 FRONT BUMPER TO GROUND — CURB WEIGHT. 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 WEIGHT. 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 headline, plus 4.0 in. (102 mm).
- H75 EFFECTIVE T-POINT HEAD ROOM — FRONT. The minimum radius from the T-point to the headlining plus 30 in. (762 mm).
- L34 MAXIMUM EFFECTIVE LEG ROOM — ACCELERATOR. The dimension measured along a line from the ankle pivot center to the SgRP - front plus 10.0 in. (254 mm) 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 track positions.
- W3 SHOULDER ROOM — FRONT. The minimum dimension measured laterally between the trimmed surfaces on the "X" plane through the SgRP - front within the belt line and 10.0 in. (254 mm) 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 1.0 in. (25 mm) below and 3.0 (76 mm) above the SgRP - front and 3.0 (76 mm) fore and aft of 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 COUPLE 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 - second to the headlining, plus 4.0 in. (102 mm).
- 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 10.0 in. (254 mm).
- 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 2.0 in. (51 mm).
- 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 10.0-16.0 in. (254-406 mm) 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 13.0 in. (330 mm) 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 10.0 in. (254 mm).
- 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 4.0 in. (102 mm).
- 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

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Interior Car And Body Dimensions — Key Sheet

Dimension Definitions

- 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 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 WEIGHT). 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:

$$\frac{W4 \times H201 \times L204}{1728} = \text{Ft.}^3$$
 Measured in mm:

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

$$\frac{\frac{L208 + L209}{2} \times W4 \times H197}{1728} = \text{Ft.}^3$$
 Measured in mm:

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

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